

## **Porirua Proposed District Plan (PDP)**

### **Hearing Stream 3 – Natural Hazards**

#### **Response to s42A Officer's Report**

**Submitter 156: Heriot Drive Ltd (7 Heriot Drive) and**

**Submitter 157: Raiha Properties Ltd (15 Raiha Street)**

**Statement of evidence of Rodney David Witte.**

#### **INTRODUCTION**

1. My full name is Rodney David Witte. I am retired. I hold the qualifications Bachelor of Arts, Bachelor of Town Planning and was for many years a Member of the New Zealand Planning Institute. I have over 40 years resource management experience in New Zealand including as Director Resource Management, Nelson City Council 1994 -2005. From 2007 until my retirement in 2020 I was Senior RMA Policy Planner, National Office, Department of Conservation. I have previously been an accredited planning hearing commissioner, but that accreditation has now lapsed.
2. In the preparation of the technical mapping and analysis of the Greater Wellington Regional Council Natural Hazards Strategy aspects of this evidence I have been assisted by Colin John Garnett who holds a Bachelor of Engineering and has held many and various positions including 7 years as a Soil and Water Engineer at the South Canterbury Catchment Board.
3. The submitters, Heriot Drive Ltd and Raiha Properties Ltd are owned by separate property syndicates. Mr Garnett and I are minor proportional owners of both properties. My evidence is therefore not independent.

4. While I could have chosen to present to the hearing panel as a submitter, I have prepared this evidence at this time in order to enable the officer who prepared the s42A RMA report to consider the points I wish to make which are more detailed and specific than in the original submissions but in my opinion are within the scope of those submissions. In respect of natural hazards submissions 156 and 157 are identical, broad in scope, and relate to all PDP provisions concerning natural hazards and fault rupture zones and specifically opposed “the introduction of the Fault Rupture Zones and associated rules”.

#### **The affected sites**

5. 7 Heriot Drive (Lot 1 DP 325615, valuation reference 1556311812) is a 1.162ha site containing a 5746 m<sup>2</sup> building built in 2009 as a bulk retail store and repurposed/refitted to office areas in 2016/17. It is currently zoned Industrial and is proposed to be zoned Large Format Retail which zoning provides for a wide range of uses including offices.
6. 15 Raiha Street ((Lot 105 DP 32785 Valuation reference 1556319200) is a 0.7565 ha site with a 3537 m<sup>2</sup> industrial building originally erected circa 1971 with extensions added circa 2006, 2008 and 2016. It is currently zoned Industrial and is proposed to be included in the General Industrial zone.
7. The proposed Ohariu Fault Rupture Zone impinges on both properties. It traverses the south-east corner of 7 Heriot Drive and approximately half the southern end of 15 Raiha Street.
8. Under the operative district plan both sites fall within the seismic overlay that covers the majority of the CBD and much of the wider urban and rural

areas of the city but is does not have the attendant restrictive rules of the proposed Porirua District Plan (PDP).

### **Comments on the s42A staff report**

9. Over the course of my career I have dealt with numerous plan reviews and plan changes and am therefore well aware of the complexities of reconciling submissions and cross submissions and drafting officer reports and recommendations in respect of them. Accordingly, the comments that follow are by way of observation rather than criticism.
10. The s42A RMA report at pages 10-11 in Appendix B (Recommended responses to Submissions and Further Submissions) indicates the officer recommendation is “accept in part” submission points 156.2-156.6 and 157.2-157.6 and indicated “yes” to recommended amendments to the PDP. However, I have been unable to identify the recommended amendments.
11. I also find it somewhat confusing that in respect of submission points 156.7 – 156.11 (Heriot Drive) the officer has indicated “yes” to recommended amendments to the Proposed District Plan (PDP), yet in respect of identical submission points 157.7-157.11 (Raiha Properties) the recommendation is “no”. Again, I have been unable to identify the recommended amendments to the PDP.
12. It is also difficult to reconcile submission points 156.12-156.16 and 157.12-157.16 (also identical) which have an Officer’s recommendation of “allow in part” with a “no” to recommended amendments to the PDP.

### **Greater Wellington Regional Council Natural Hazard Strategy**

13. In February 2017 the Greater Wellington Regional Council published its Natural Hazard Management Strategy which sets out guidelines for the

management of all seismic risks including fault avoidance, liquefaction and slope failure and recommends that these all be identified and mapped.

14. Whereas the operative Porirua District Plan Seismic Hazard Areas represent places where one or more of these hazards (ground shaking, active faulting, liquefaction, and slope failure) may be present, this approach has not been carried into the PDP. Instead, the proposed plan states in the introduction to the Natural Hazards chapter (at page 134) that those risks will be managed by other legislation including the Building Act 2004. It is not immediately clear from a reading of the PDP why fault rupture is managed by way of mapping, policies and rules but other earthquake related risks are managed other than by RMA instruments.

#### **APP10 Natural Hazard Risk Assessment Table 1 Risk Assessment**

15. Appendix 10 sets out the risk assessment for the various natural hazards identified in the PDP. Under Table 1 “Likelihood Guidance” the Ohariu Fault (recurrence class II >2000 to <3500 years – Annual Exceedance Probability (AEP) range 0.04% (1:501 year event) - 0.2% (1:2500 year event) is given a likelihood ranking of “very unlikely or extremely unlikely”. It is not apparent from the PDP why the Ohariu fault with such a low AEP is then ranked as a “High Hazard area” in Table 3 of Appendix 10.
16. The explanation in the s42A report (para 133) is that risk “is a product of both the consequences and the likelihood from a natural hazard” and “while the likelihood of the Ohariu Fault rupturing is “very unlikely” .... the consequences of it rupturing are severe.”
17. I have difficulty reconciling the “High” hazard assessment for the Ohariu fault (with its AEP range of 0.04% - 0.2%) with the hazard ranking given to tsunami hazards in Table 4 of Appendix 10. In Table 4 a Tsunami Hazard

with a 1:1000 year inundation extent event (i.e. more than twice as likely as a rupture of the Ohariu fault) is classified as a “Low” Hazard area. I would have thought the consequences of major tsunami would be at least as severe as an earthquake rupture.

18. I recognize that unlike an earthquake there is generally warning of a tsunami and therefore less likelihood of loss of life. However policy NH-P1 also requires consideration of property damage and post event recovery and in my view in those respects there is little difference between an earthquake and a tsunami.

### **Terminology**

19. In her 20 October 2021 statement of evidence referred to in the s42A Officer report, Dr Litchfield uses the term “Fault Avoidance Zone (FAZ)”. Footnote 4 to her paragraph 21 indicates that the fault avoidance zone has been derived by “1) construct a likely fault rupture zone from the available data, 2) Add a 20m buffer setback zone either side. The combined zone is in my opinion the FAZ.”
20. As discussed below I have not been able to align the approach described above with the provisions of the PDP which refer only to a “Fault Rupture Zone”. There seems to be an inconsistent use of the term “Fault Rupture Zone” as used in the PDP and as defined by Dr Litchfield.

### **Interpretation and construction of Appendix 10 Table 3 and Natural Hazard rules**

21. Appendix 10 Table 3 in respect of the Ohariu (and other) Faults differentiates between:

- a. The Fault Rupture Zone 20m or closer either side of the Ohariu fault (my emphasis) where the hazard area is classified as “high” and
  - b. The Fault Rupture Zone excluding 20m either side of the Ohariu fault (my emphasis) where the hazard area is classified as “low”.
22. Similar wording occurs in Rule NH-R6 b. “Any building and activities within the ... Ohariu Fault Rupture Zone are located no closer than 20m from (the) fault” (my emphasis).
23. In my opinion the use of the word “fault” is significant. It suggests to me that the drafter of the table had in mind a single fault line. Support for this interpretation can be found in the recommendation of the s42A reporting officer to insert a note to rule NH-R6 in relation to the Moonshine Fault – “there are areas that will be outside of 20m either side of the Fault Line” (my emphasis).
24. The construction of Appendix 10 Table 3 and NH-R6 makes clear that the “Fault Rupture Zone” is not the same as the “fault”. In my opinion the logical interpretation is that there exists in the centre of the “Fault Rupture Zone” an assumed “fault line” (the fault). 20 metres either side of that line the hazard risk is assessed as “high”. Further than 20 metres away from that “fault line” but still within the “Fault Rupture Zone” the risk is assessed as “low”.
25. Support for the interpretation that there is a single fault line within a fault rupture zone can be found in the publicly accessible Porirua City Council Geographic Information System (GIS) “Earthquake Hazards” pages. Attached as an Appendix are figures 1 and 2 which are screenshots from the council GIS showing the Fault line and Fault Rupture Zone as they affect 7 Heriot Drive and 15 Raiha Street.

26. Currently fault lines are not delineated on the PDP planning maps. Without a defined fault line the provisions of Appendix 10 Table 3 and Rule NH-R6 and particularly the word “fault” cannot be reconciled. Such uncertainty creates potential for significant legal challenge in any future resource consent application.
27. In my opinion to reconcile Appendix 10 Table 3 and the relevant Natural Hazard rules the following amendments need to be made to the planning maps:
1. A single fault line for at least the Ohariu Fault (and preferably also the Pukerua and Moonshine faults) should be placed on the relevant planning maps. As noted above those fault lines can already be found as a layer on the publicly available Porirua City Council geographic information system (GIS). Consistent with the council GIS I would expect those fault lines to be in the centre of the delineated “Fault Rupture Zone”.
  2. Either side of the fault line the planning maps should show a 20m wide band (i.e. 40m total width) and identify this in the plan legend as a “High Hazard Area”. Without access to the council GIS, Mr Garnett has, with limited resources, plotted an approximately 20m band either side of the fault line to represent how it might appear in the planning maps. (Appendix figures 1 and 2). Obviously, it would be more accurately plotted if done on the GIS.
  3. The remainder of the “Fault Rupture Zone” (i.e. outside of the 20m wide “High Hazard Area” band either side of the fault line) should be identified in the map legend as “Low Hazard Area”.

## Policies

28. I support Policy NH-P1 which establishes a risk-based approach to the management of subdivision, use and development in identified and mapped natural hazard overlays and adopts a risk assessment which includes the sensitivity of the activity to loss of life and the level of risk presented to people.
29. Policy NH-P2 sets out the relevant district plan matters that a decision maker may have regard to when determining a resource consent application for a non-complying activity in a High Hazard Area. Policy NH-P2 as recommended to be amended in the s42A officer report states:

### ***“NHP2 Hazard Sensitive Activities and Potentially-Hazard-Sensitive Activities within the High Hazard Areas***

*Avoid the establishment of Hazard-Sensitive Activities and Potentially-Hazard-Sensitive Activities within the High Hazard Areas of the Natural Hazard Overlay unless it can be demonstrated that:*

- 1. The resulting risk to people’s lives and wellbeing will be low;*
- 2. The activity incorporates mitigation measures that minimise the risk of damage to buildings;*
- 3. People can safely evacuate the property during a natural event;*  
*and*
- 4. The risk to the activity and surrounding properties is either avoided, or is low due to site-specific factors and/or the scale, location and design of the activity*



5. *Other than within the Commercial and Mixed Use Zones, the General Industrial Zone and the Hospital Zone, the activity has an operational and functional need to locate within the High Hazard Area and locating outside the High Hazard (sic) is not a practicable option”*

30. In respect of policy NH-P2 and the recommended amendments I have the following concerns:

1. Drafting errors. A district plan is a legal document with the force of a statutory regulation. In my opinion the “and” which joins items 3 and 4 above needs to be relocated to join 4 and 5 to clarify that all 5 criteria apply. A semicolon also needs to be inserted at the end of 4. Furthermore “Area” needs to be inserted after “High Hazard” in criterion 5 (where I have added “sic”)
2. Internal inconsistencies and unintended consequences. 7 Heriot Drive is proposed to be zoned “Large Format Retail”. Recommended criterion 5 above presumably does not apply to properties in the large format zone that are also in the high hazard area in the natural hazard overlay, such as 7 Heriot Drive which was originally constructed and used as a large format retail store. That creates the inconsistency and unintended consequence that because the “large format retail” zone is presumably created specifically for large format retail and is relatively confined in area, it would be nonsensical to have to demonstrate for a resource consent application why a large format retail activity has an operational need to be in the zone specifically created for it and could not practicably be located outside of that specific zone.

## Definitions

31. With respect to Hazard-Sensitive activities I support the list of activities, as recommended to be amended in the officer report (at para 153). I consider the categorisation of those activities gives effect to Policy NH-P2 in that activities where people can be expected to be for long periods of time, especially at night, such as residential units and visitor accommodation, or are dependent on others for evacuation, such as hospitals, childcare centres and retirement villages are classified as “Hazard sensitive”.
32. With regard to the list of potentially-hazard-sensitive activities in my opinion it would be appropriate to remove commercial, commercial service, offices and industrial activities from that list and reclassify as less-hazard-sensitive. Unlike the other activities in the potentially-hazardous-activities list, such as entertainment and major sports facilities and large format retail activities where the public are invited to enter, the public will not usually have access to commercial, office and industrial premises. Importantly the people in commercial, office and industrial buildings will for the most part be staff who are familiar with the exits, can evacuate quickly and moreover will be subject to employer duties to identify and manage risk under the Health and Safety at Work Act 2015 including mandatory 6 monthly trial evacuations. Accordingly, I consider commercial and commercial service activities, offices and industrial activities should be reclassified Less-Hazard-Sensitive activities.
33. I find support for my opinion in the Officer’s s42A report where at para 153 it is recommended that “buildings and structures that do not have habitable rooms or are used for commercial purposes” be added to the list of less-hazard sensitive activities. If the officer recommendation is

accepted, as I believe it should, it would in my opinion create significant future plan interpretation issues and potential legal challenge if commercial and commercial service activities and offices were to remain classified as potentially-hazard-sensitive whereas buildings and structures used for commercial purposes were classified as less-hazard sensitive.

#### **Natural Hazard Rule NH-R6 and NH-R8**

34. Both rule NH-R6 (activities and buildings in Low Hazard Areas) and NH-R8 (activities and buildings in High Hazard Areas) fail to distinguish between Hazard-Sensitive Activities and Potentially-Hazard Sensitive Activities. This is despite Policy NH-P1 and the emphasis on people-based risk assessment, and the detailed definitions and classification of activities into hazard sensitive and potentially- hazard-sensitive. In my opinion there is a significant mismatch between the policy intent and the rules.
35. I would have expected that for the policy intent to be carried forward into the rules that potentially- hazard-sensitive activities would be accorded a less onerous activity status than hazard-sensitive activities in both the high hazard and in the low hazard areas.
36. In my opinion, consistent with policy NH-P1, rule NH-R6 (Low Hazard Area), at least in respect of the Fault Rupture Zone, should be amended as follows:
  1. Hazard-sensitive activity (as defined) – restricted discretionary, precluded from public or limited notification, with the matters of discretion restricted to the matters in NH-P4. (i.e. no change to the PDP in respect of hazard- sensitive activities in the low hazard area).  
  
However, I do query in a practical sense how the matters of discretion

under NH-P4 such as avoiding the risk to people's lives and building damage could be framed as conditions without straying into areas more properly the realm of the Building Act 2004.

2. Potentially-hazard-sensitive activities – amend from restricted discretionary precluded from public or limited notification to controlled activity with matters of control limited to conditions in relation to measures to mitigate risk to people's lives. However, I again note in a practical sense that a decision maker on such a consent application would need to walk a narrow path indeed to avoid crossing into matters more properly the ambit of the Building Act 2004.

37. Activities in the high hazard 40m band within the Fault Rupture Zone.

If my analysis of the intended plan provisions that there is intended to be in the centre of the Fault Rupture Zone a delineated fault line either side of which is a 20m "High Hazard zone" is accepted (refer para 27 above) and consistent with policy NH-P1 including making clearer distinctions between managing the risk of hazard-sensitive and potentially-hazard-sensitive activities then in my opinion the following changes are required to the PDP:

1. Hazard-sensitive activities (as defined). Reduce the activity status in rule NH-R8 from non-complying to discretionary precluded from public or limited notification. Non-complying is an extremely high bar. The proposed Ohariu (and other) Fault Rupture Zones extend over extensive areas of Porirua City affecting many scores, if not hundreds, of existing properties including residential, commercial, retail and industrial. While reducing the width of the high hazard area to 40 metres as discussed above will reduce the number of affected properties it will still in my

opinion impose an unreasonable and disproportionate constraint on redevelopment, or alternative uses, consistent with the operative and proposed zonings, of those sites. Property owners and prospective tenants will be reluctant to commit to the cost and uncertainty of a potentially publicly notified resource consent application for a non-complying activity to redevelop an existing building or site or to change the use including to one that creates greater employment and local economic opportunity and/or reduces adverse environmental effects.

2. Rule NH-R4. Whereas rule NH-R8 establishes the activity as a trigger for a non-complying activity, rule NH-R4 creates a second threshold whereby a hazard-sensitive or potentially-hazard-sensitive activity in the high hazard area that increases the building footprint by more than 20 square metres triggers a non-complying activity. I consider that rule is also unreasonably restrictive. Given that the building at 7 Heriot Drive has a footprint of 5746 square metres it is very difficult to understand the rationale that an addition little more than the size of a single carparking space would trigger the need for the grant of a non-complying resource consent application. Any threshold trigger in relation to building additions should, in my opinion, be a percentage increase in the building footprint. Within the high hazard area, for hazard-sensitive activities I consider the percentage increase should be at least 15% and at least 25% for potentially-hazard-sensitive activities noting that any building additions will be subject to the seismic standards of the Building Act 2004 and amendments, and therefore potentially more seismic resistant than the building or structure that is being added to. In my opinion the activity status for such additions

should be discretionary precluded from public or limited notification for building additions associated with high-hazard activities and restricted discretionary, precluded from public or limited notification with the matters of discretion restricted to NH-P4 for additions to buildings associated with potentially-high-hazard activities.

Comment - it is difficult to reconcile the non-complying activity status under both rule NH-R6d and rule NH-R8 with the PDP strategic direction of:

*“The City has a hierarchy of accessible, vibrant and viable centres that:*

- 1. Are the preferred location for shopping, leisure, cultural, entertainment and social experiences;*
  - 2. Provide for the community’s employment and economic needs;*
  - 3. Contribute to the community’s housing needs; and*
  - 4. Contribute to the City’s social wellbeing and prosperity.”*
3. Potentially-hazard-sensitive activities (as defined but with the reclassification of commercial and commercial service activities, offices and industrial activities as less-hazard-sensitive activities) in the high hazard (40m band) of the fault rupture zone – in my opinion the appropriate activity status for this category of activities is restricted discretionary, precluded from public or limited notification with the matters of discretion restricted to NH-P4. Rule NH-R8 should be amended accordingly.

38. With respect to Less-hazardous-sensitive activities (as defined with the addition of commercial and commercial service activities, offices and industrial activities – refer paras 32 and 33 above) in the high hazard area

(40m band) of the Fault Rupture Zone – in accordance with rule NH-R4b.

the activity status should remain permitted.

Signed

A handwritten signature in black ink, appearing to read 'Rodney David Witte', with a long horizontal flourish extending to the right.

Rodney David Witte

22 November 2021

## Appendix

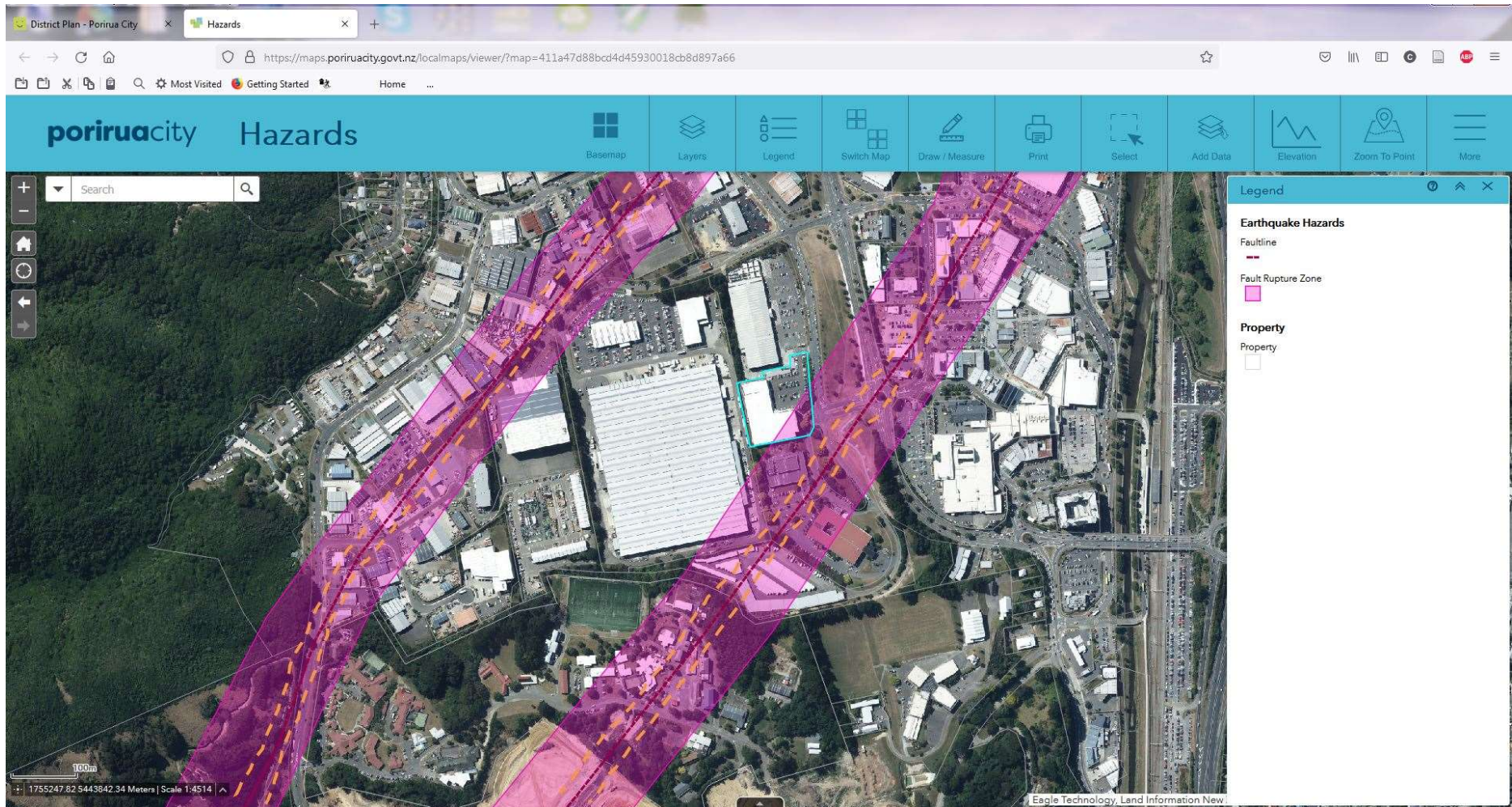


Figure 1: Submitter 156 – screenshot from Porirua City Council GIS showing fault line and fault rupture zone in relation to 7 Heriot Drive with the addition of a 20m high hazard band plotted in orange either side of the fault line (refer paras 25 and 27.2 of evidence)



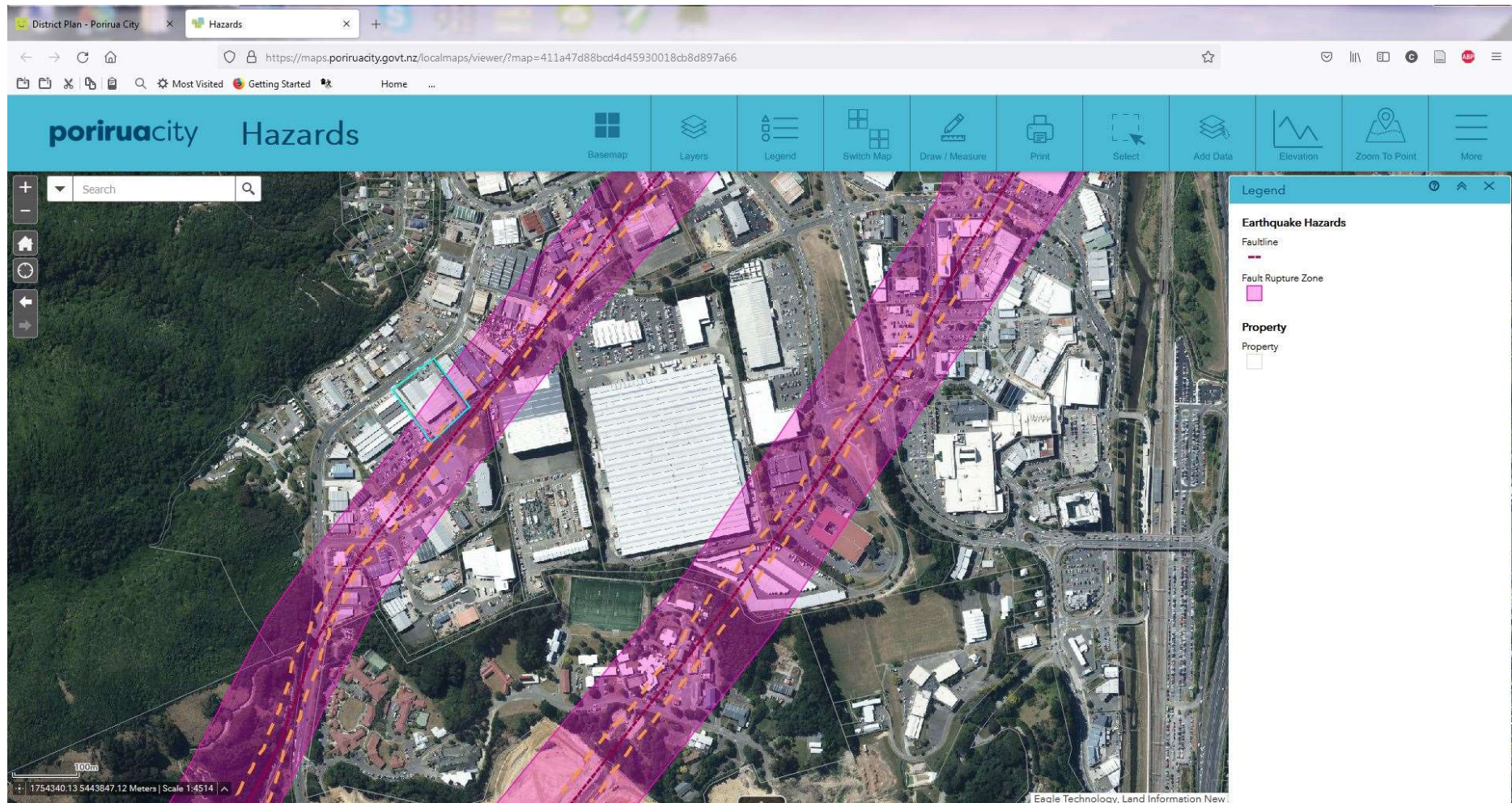


Figure 2: Submitter 157 – screenshot from Porirua City Council GIS showing fault line and fault rupture zone in relation to 15 Raiha Street with the addition of a 20m high hazard band plotted in orange either side of the fault line (refer paras 25 and 27.2 of evidence)