

**Before the Wellington City Council Proposed District Plan Hearings
Panel**

Under the Resource Management Act 1991 (the Act)

In the matter of the Wellington City Council Proposed District Plan–
Hearing Stream 6:
Special Purpose Zones and Development Areas

Between **Wellington City Council**
Local authority

And **Horokiwi Quarries Limited**
Submitter 271 and Further Submitter FS28

Response to Panel Minute 43 - Hearing Stream 6 Procedural Issues

Pauline Mary Whitney for Horokiwi Quarries Limited

Dated 29 February 2024

1 Panel Request

1.1. In the Hearing Panel issued Minute 43 Direction, the Hearings Panel requested:

(1) A contour plan or multi-layer viewer showing the Horokiwi Quarry area including:

(a) the area occupied by current quarrying operations

(b) notified zone and overlay boundaries;

(c) amendments to those boundaries sought by Horokiwi Quarries Ltd;

(d) the area covered by the existing use certificate she had tabled, and any resource consents held by Horokiwi Quarries Limited;

(e) the two areas whose zoning is in contention; and

(2) A statement of Horokiwi Quarries Limited's position on the potential option of an expansion to the existing Quarry Zone subject to a Restricted Discretionary Activity rule applying in the additional area(s) for quarrying activities.

1.2. The above matters are addressed in this response.

1.3. Although not stipulated in the minute, in response to the verbal request from the panel at the hearing, also attached are:

- a. Two assessments showing options for quarry expansions, and
- b. An activity status summary table

Item 1. Multi Layer Viewer Plan

1.4. The following provides a link to the multi layer viewer map. Instructions are included. The various layers can be displayed together.

<https://experience.arcgis.com/experience/32815ed94b064c49bf9a379ae83fc170>

Included in the map layers are

- a. The existing quarry operation, landholdings and legal description. Note, to view the LINZ parcel legal descriptions, please zoom in.

- b. The notified PDP zones (Special Purpose Quarry zone, Natural Open Space zone and General Rural zone) and overlays (Coastal Environment line, Special Amenity Landscape, and Significant Natural Area)
- c. The amendments sought in the Horokiwi submission to the Coastal Environment line overlay and Significant Natural Area overlay (to be addressed at subsequent hearings).
- d. The areas covered by the existing use certificate.
- e. The area covered by resource consents held by Horokiwi Quarries Limited as referenced in the Section 42A Report
 - Resource consent approval (2015) for overburden disposal area Pt Sec 16 Harbour District – Area in yellow. SR No. 367514, and extensions 467780 (2020) and 534204 (2023)
 - Resource consent approval 2019 for Cleanfill for overburden area (Lots 2 and 4 DP 415604, Lot 5 DP 28139, Lot 4 DP 28139).
 - Resource consent approval 2017 for extension and modification of an overburden disposal area at the existing (Lots 2 and 4 DP 415604, Lot 1 DP 58444, Pt Sec 16 Harbour District, Sec 1 SO 23514, Lot 1 DP 6640, Pt Sec 18 Harbour District, Lot 4 DP 28139). Hayley can you please shade these legal description areas. Refer yellow area
- f. The three sites whose zoning is in contention and amendments are sought to the zoning boundary to zone the areas Special Purpose Quarry Zone.
- g. Site contours.

Item 2. Restricted District Activity Status

- 1.5. Horokiwi Quarries Ltd would accept a Restricted Discretionary Activity Status for Quarrying activities should the area zoned Natural Open Space in the PDP (being Part Sec 16 Harbour District) be rezoned Quarry Zone. It is assumed the matters of discretion would reflect the matters of control within QUARZ-R3.

Item 3. Other Quarry Options Reports

- 1.6. Attached as Appendix A are two reports, the first being a high-level assessment of other potential quarry sites in the Wellington Region, and the second relating to the issues and rationale for an extension to the existing Horokiwi Quarry.

Item 4. Activity Status Table

- 1.7. Attached as Table 1. is a table summarising the activity status for activities within the relevant zones and overlays. It is noted the PDP does not define 'existing', 'extension' or 'new' quarrying activities.

Table 1. Activity Status Table

| | Quarry Zone | General Rural Zone | Natural Open Space Zone | Coastal Environment Overlay | Significant Natural Areas Overlay | Special Landscape Amenity Overlay |
|-------------------------|--|---|---|---|---|---|
| Operative District Plan | - | Rural Zone Rule 15.4.1 Dis activity | Conversation zone Rural 19.4.1 Dis activity | - | - | - |
| Proposed District Plan | QUARZ-R3 Controlled activity (Quarrying activity ¹) | GRUZ-R12 Discretionary activity (Quarrying or mining activity) | NOSZ-R11 Discretionary activity (default rule) | CE-R10 Restricted Discretionary activity (extension of existing mining and quarrying activities) CE-R11 Non-complying activity (new mining and quarrying activities) | ECO-R1.4 or .5 Restricted Discretionary activity (general rule for trimming, pruning and removal of vegetation within a SNA) ECO-R1.6 Non-complying activity (general rule for trimming, pruning and removal of vegetation within a SNA where is not a permitted activity and contains any matters identified in Policy 11(a) of the New Zealand Coastal Policy Statement 2010 where located within the Coastal Environment). | NFL-R5 Permitted activity (operation of existing quarry activity within SAL) NFL-R6 Discretionary activity (extension of existing quarry activity within SAL) NFL-R7 Non-complying activity (new quarry activity within SAL) |

¹ PDP: Quarrying –means the extraction, processing (including crushing, screening, washing, and blending), transport, storage, sale and recycling of aggregates (clay, silt, rock, sand), the deposition of overburden material, rehabilitation, landscaping and cleanfilling of the quarry, and the use of land and accessory buildings for offices, workshops and car parking areas associated with the operation of the quarry.

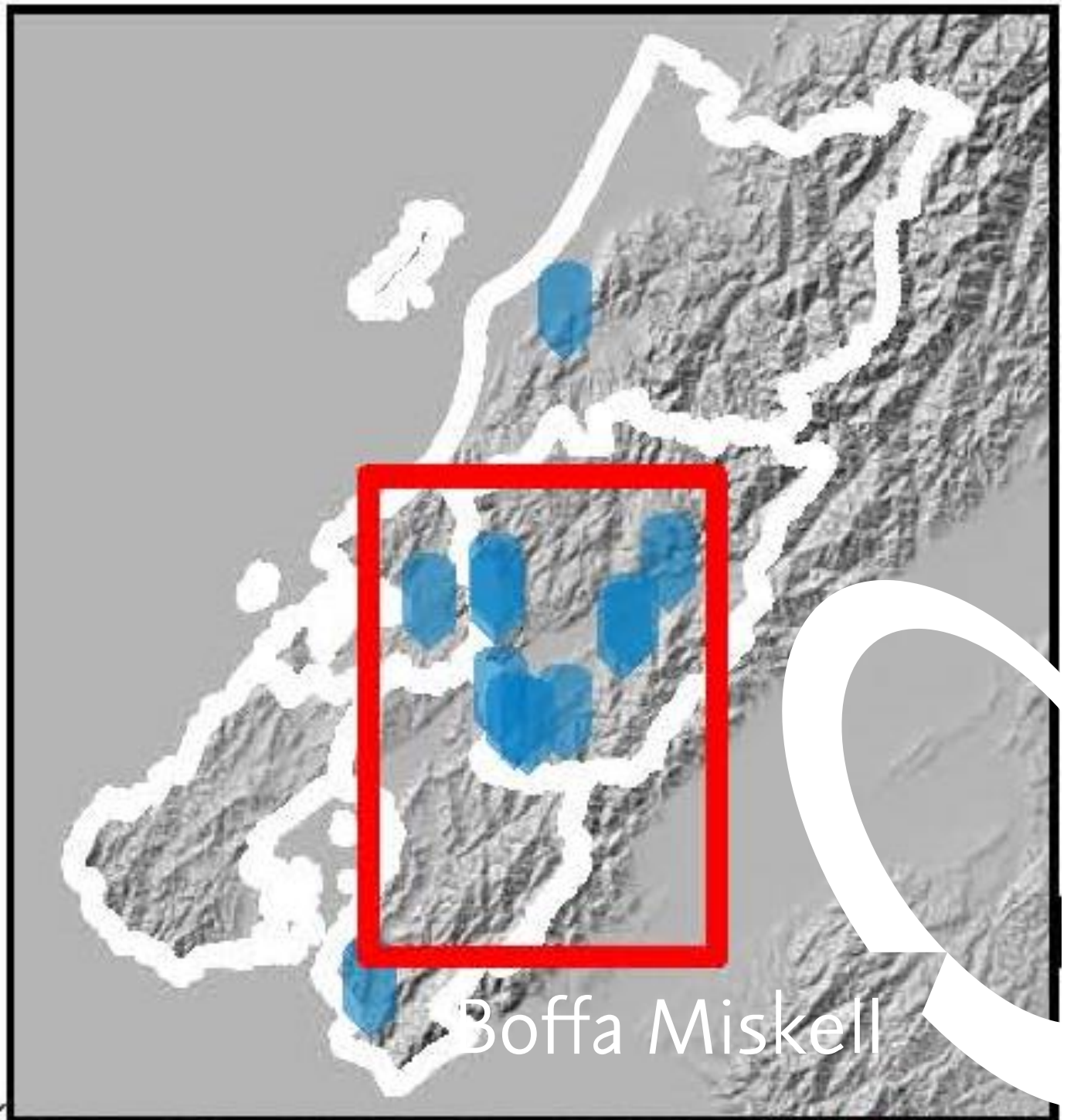
Appendix A
Other Quarry Options Reports

New Quarry Site

DRAFT

Potential New Quarry Site Identification
Prepared for Horokiwi Quarries Ltd

8 August 2018



Boffa Miskell

Document Quality Assurance

| | | |
|---|---|---------------------------|
| Bibliographic reference for citation: Boffa Miskell Ltd New Quarry Site: Potential New Quarry Site Identification. Report prepared by Boffa Miskell Ltd for Horokiwi Quarries Ltd. | | |
| Prepared by: | Pauline Whitney Principal / Senior Planner Boffa Miskell Ltd | [Insert signature here] |
| Reviewed by: | [Firstname Lastname] [Title / Position] Boffa Miskell Limited | [Insert signature here] |
| Status: [DRAFT] | Revision / version: [0] | Issue date: 8 August 2018 |
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1.0 Overview

Boffa Miskell Ltd understand Horokiwi Quarries Ltd (“Horokiwi”) are wishing to further expand the quarry resources within the Wellington Region.

The two primary options that Horokiwi wish to explore in the first instance are:

1. A new quarry site within the Wellington region
2. The expansion of the existing Horokiwi Quarry

The following assessment outlines addresses Option 1, and outlines the process for, and identification of, potential new quarry sites within the Greater Wellington Region.

2.0 Brief

The instructions to Boffa Miskell Ltd for Option 1 were to identify any new potential quarry sites within the Wellington Region, with planning, landscape and ecological constraints to form the basis of the site identification process.

The output is a series of maps showing potential ‘focus areas’, and within these areas, identification of specific potential ‘focus sites’ to which we recommend Horokiwi further investigate.

3.0 Process

The evaluation and assessment process involved identification of potential sites through a Sieve Mapping exercise using GIS digital information. The sieve mapping was undertaken at two levels:

- Level one was the initial sieve exercise and involved layering district plan zoning, lot size (being lots greater than 100ha, and lots between 50 and 100ha), landscape areas (being council identified landscape areas), roading (main access roads), and public land (such as DoC, reserve, open space land) to identify unconstrained areas (called Focus Areas);
- Level two was the follow up sieve exercise and involved layering land ownership, specific geological and archaeological sites, and water catchment areas, over the level one unconstrained areas to further identify the constraints and opportunities within the focus areas, to identify ‘focus sites’.

4.0 Identification of Focus Areas

Through an initial sieve mapping exercise, three potential focus areas were identified. The information layers used to identify unconstrained area included:

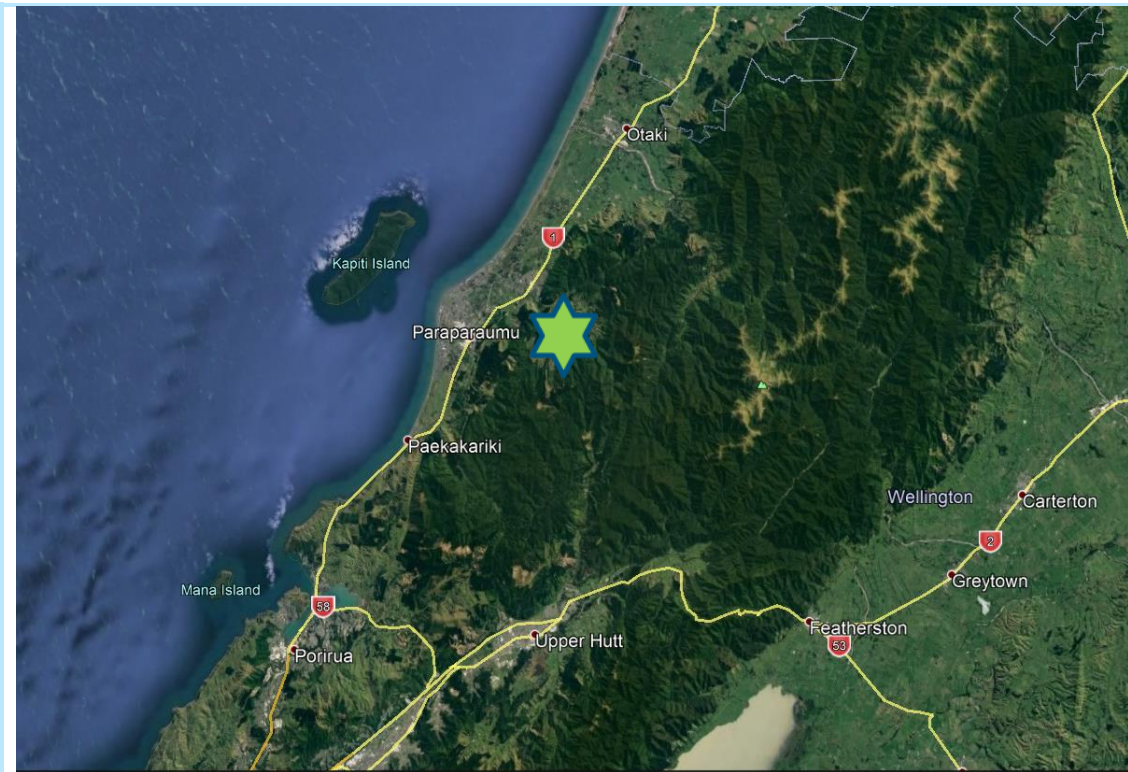
- Lots zoned Rural.
- Areas not subject to landscape features (being Outstanding natural features and landscapes, Significant amenity landscapes, Natural character areas). It is noted that the majority of landscape features in the Wellington Region are either in draft or proposed form and may therefore change in extent and level of protection as the features go through the formal planning process.
- Areas featuring lot sizes of between 50-100ha, and lots greater than 100ha area (either individual lots or lots which are owned by the same owner).
- Areas within reasonable proximity of a main road.
- Land not owned by the Department of Conservation, not zoned Open Space or identified a reserve land.

Areas discounted from the review exercise included those within close proximity of developed urban areas (due to reverse sensitivity and access issues); the Wairarapa (given access issues and distance from primary markets); Baring Head (due to access issues along Coast Road requires transit through residential and rural lifestyle properties, and distance from primary markets); and the southern and eastern coast around Wellington (given access issues and distance from primary markets);

From the above sieve mapping exercise, three potential areas have been identified being:

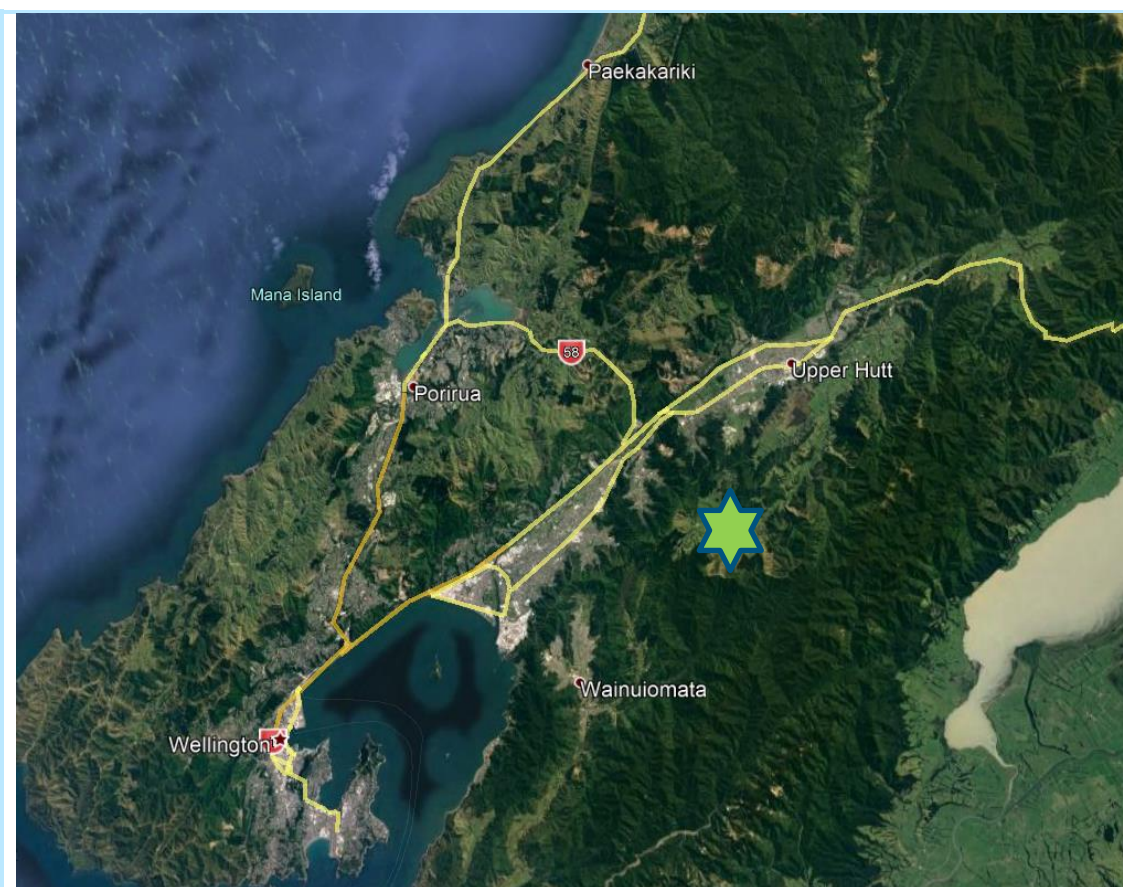
- Waikanae East
- Pinehaven in Upper Hutt
- Haywards in Upper Hutt

Focus Area One - Reikorangi, Waikanae



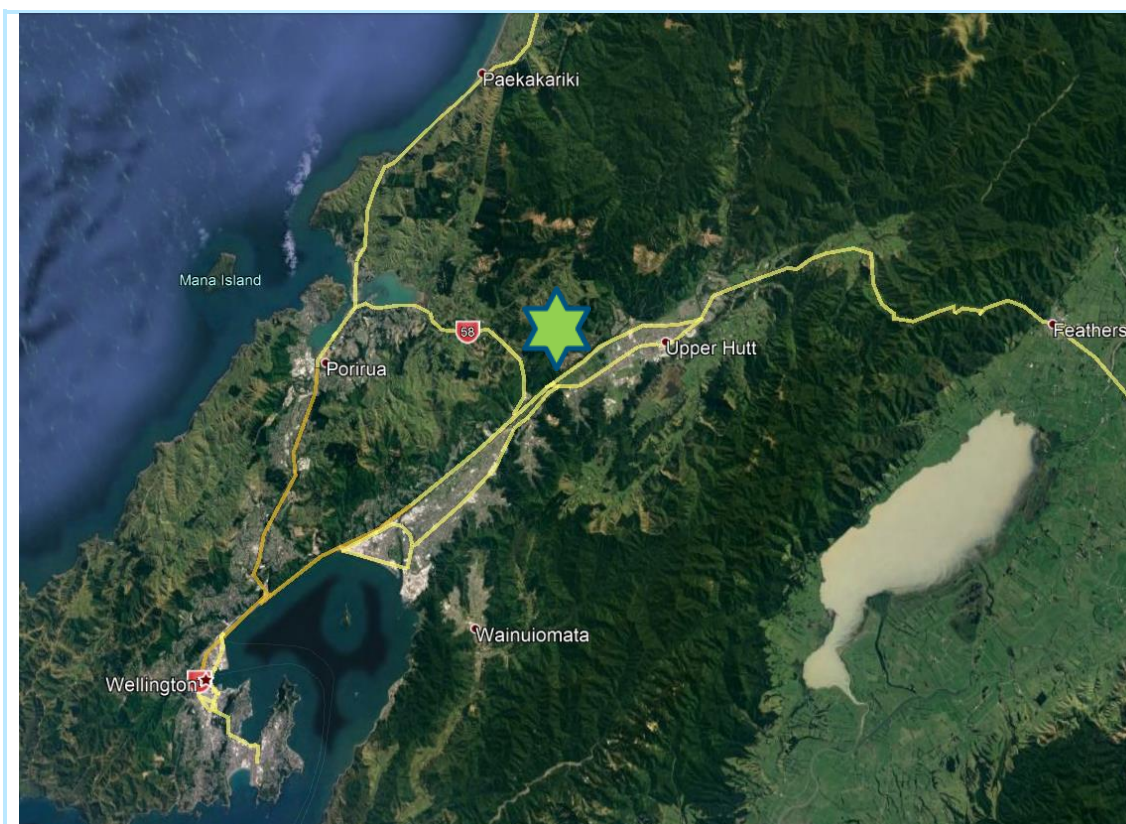
| | |
|----------------------|---|
| Advantages | Larger lots, away from any growth areas, forested areas |
| Disadvantages | Further distance to Wellington, access onto Reikorangi Road and then onto State Highway requiring access through rural residential properties |

Focus Area Two - Pinehaven, Upper Hutt



| | |
|----------------------|---|
| Advantages | Larger lots, away from any growth areas, topography will allow screening |
| Disadvantages | Access onto SH2 will require access through residential areas and large number of lifestyle lots. |

Focus Area Three - Haywards, Upper Hutt

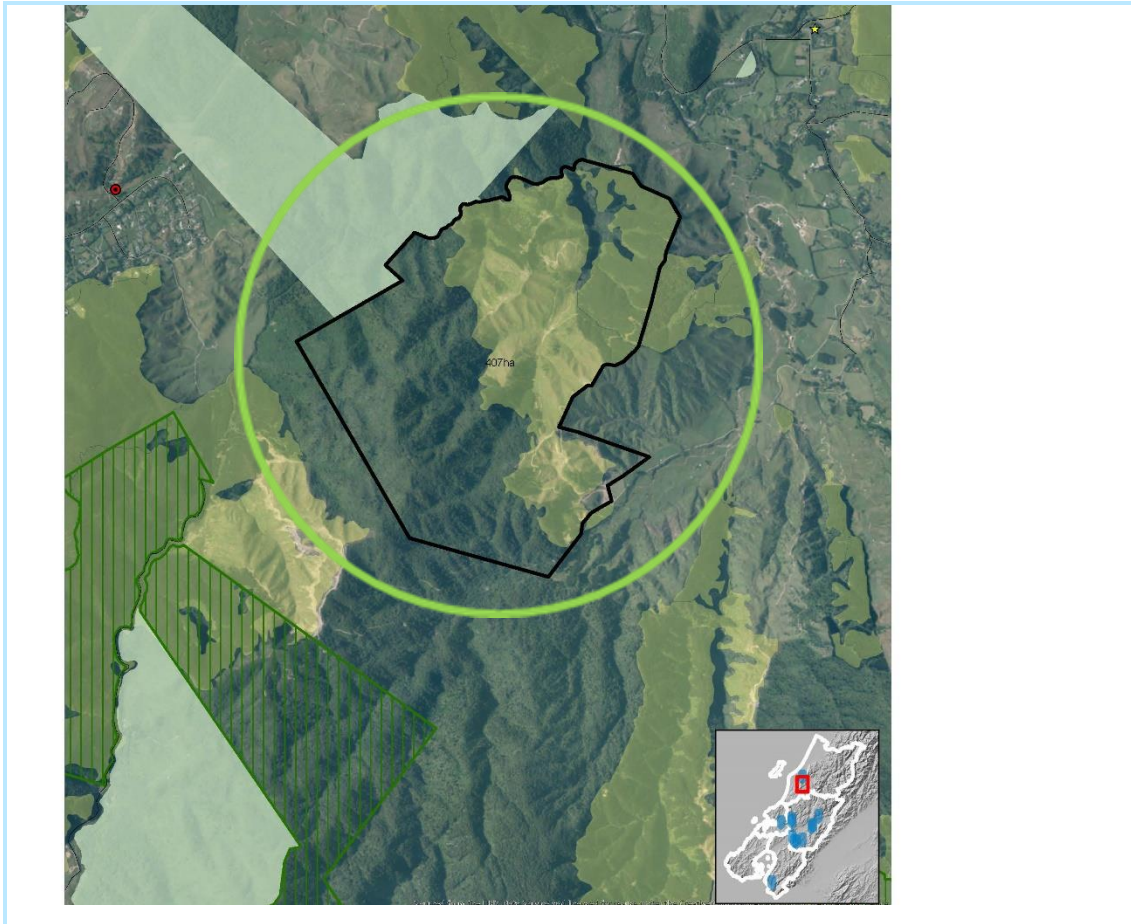


| | |
|----------------------|--|
| Advantages | Good access to SH2 and SH58, ability head north and south, ability for screening, |
| Disadvantages | SH58 access point and unclear as to NZTA policy regarding access given further growth projected in the area. |

5.0 Evaluation of Focus Sites

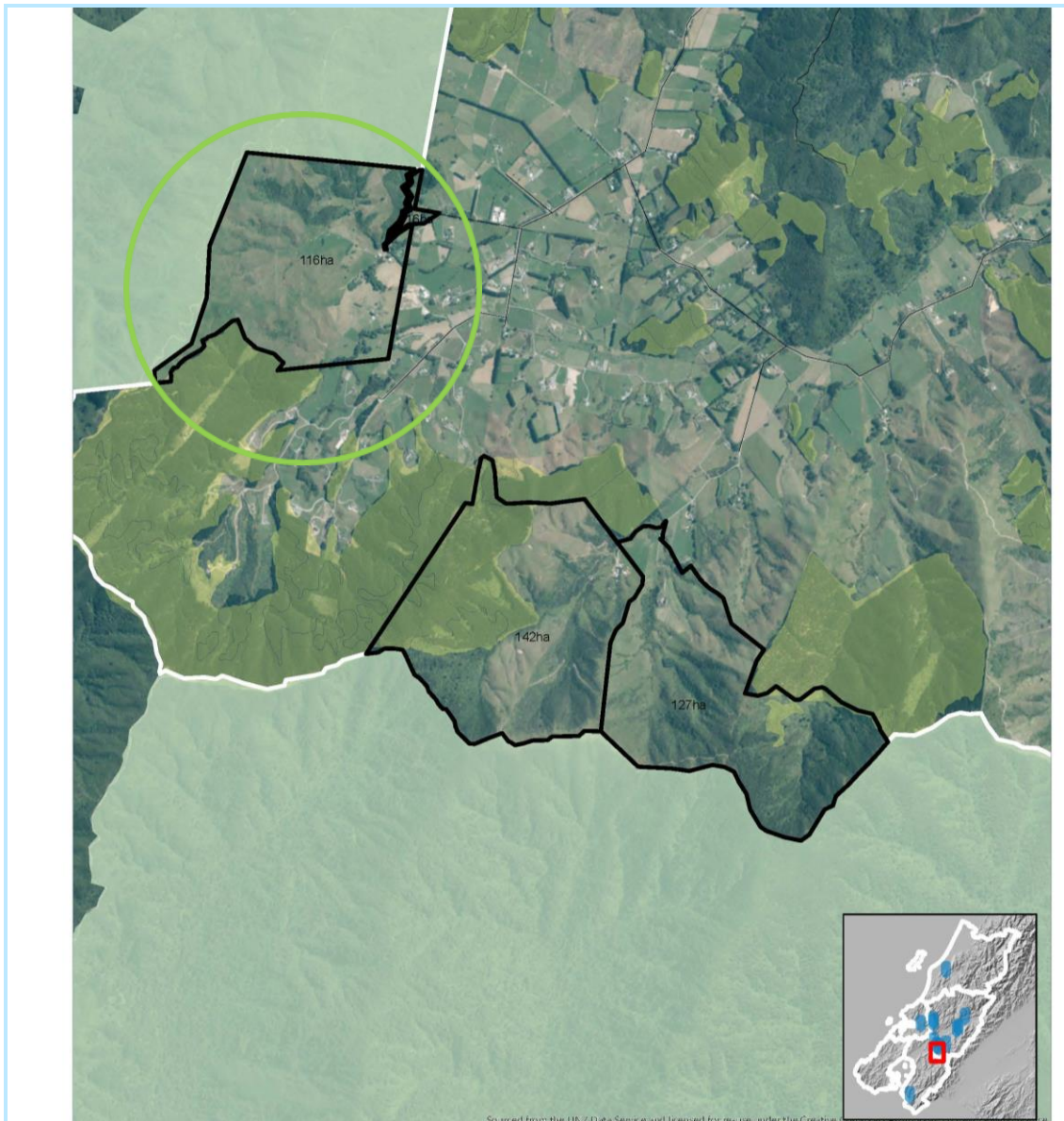
Within the identified three focus areas are six potential focus sites. The six sites and specific features are as follows:

Site 1. Reikorangi, Waikanae East (within Focus Area One)



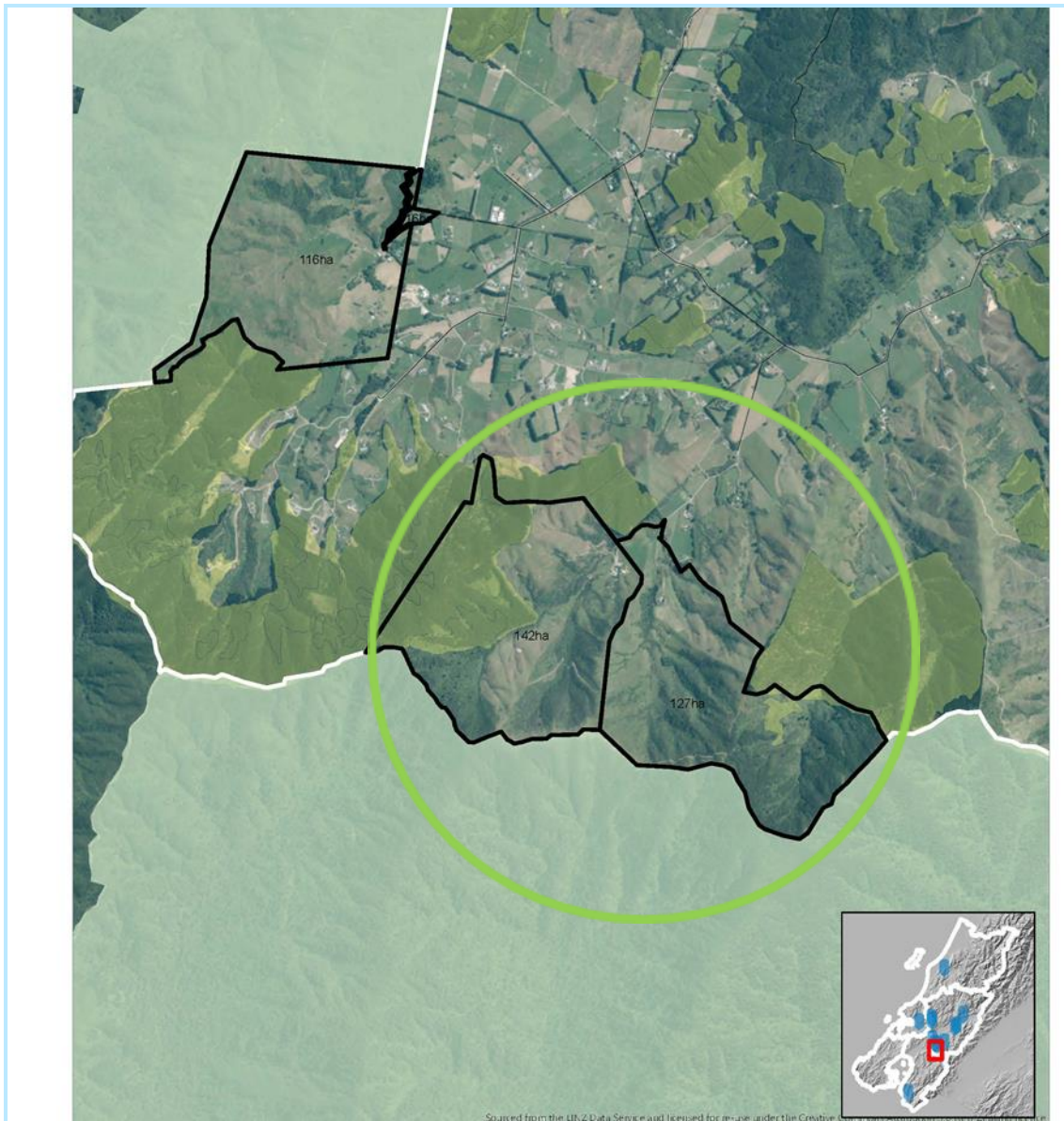
| Features | Evaluation |
|--------------------|--|
| Lot size | 407ha |
| Zoning | Rural, Kāpiti Coast District Council. Western half of the site (shaded a darker green) is identified in the proposed Kapiti District Plan as an Ecological site, and Outstanding Natural Landscape and Feature (but under appeal)). |
| Road Access | Reikorangi Road, then Elizabeth St which is within an urban area, and then onto the former SH1 at Waikanae township. |
| Comments | Secluded site. Some distance from primary markets. Rural Residential lifestyle lots on the access road, and then required to pass through urban area. Winstone Aggregates are on Reikorangi Road. Site also within a water catchment area. Planning constraints are uncertain given appeals. |

Site 2. Pinehaven East (within Focus Area Two)



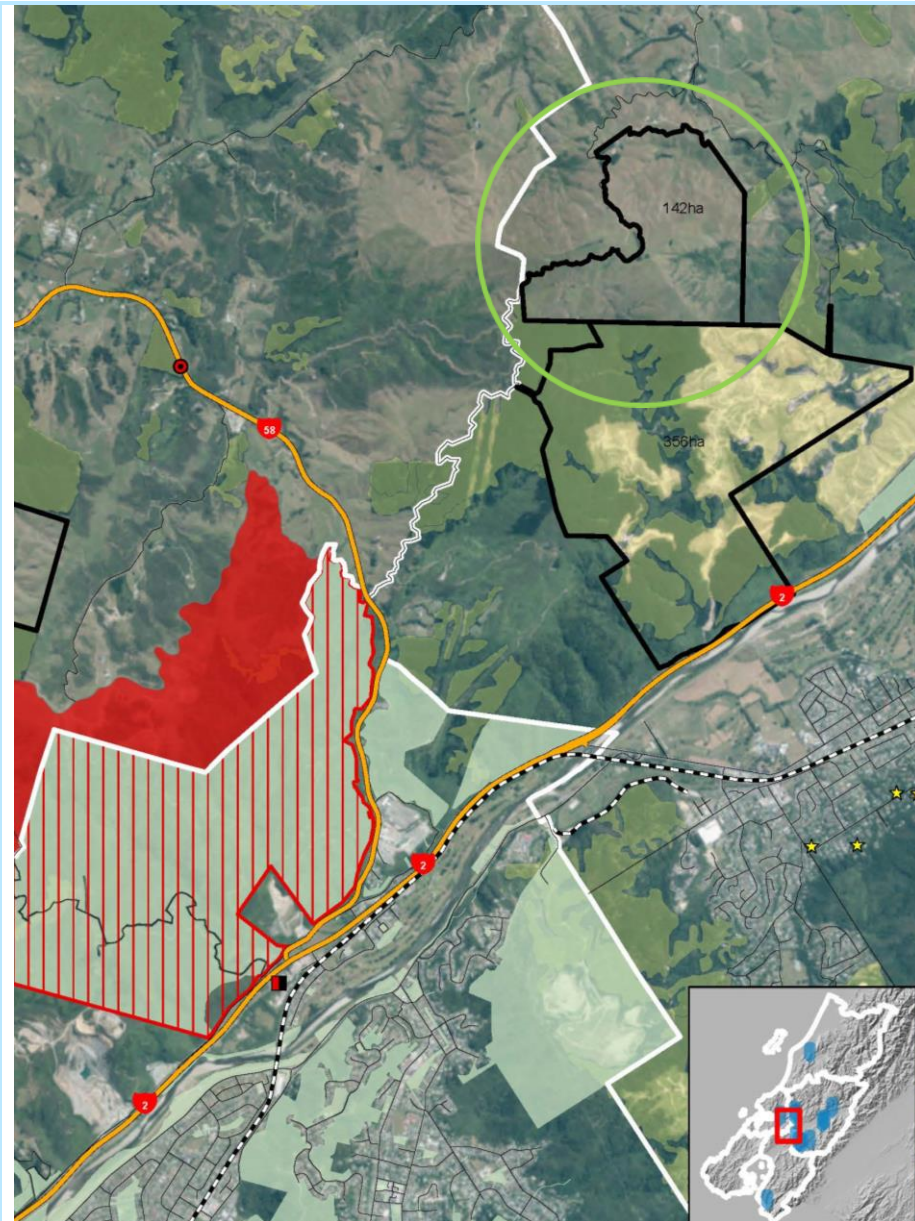
| Features | Evaluation |
|----------|--|
| Lot size | 116ha |
| Zoning | Rural, Upper Hutt City Council |
| Access | Rural roads, through Whitemans Valley, Blue Mountains and suburban areas within Pinehaven onto SH2 |
| Comment | Guilford potential residential lifestyle to the north which could impact on access and increase reverse sensitivity effects. Access a real potential issue given need to traverse through rural and urban areas to reach SH2 which is some 8km away. |

Site 3. Pinehaven West (within Focus Area Two)



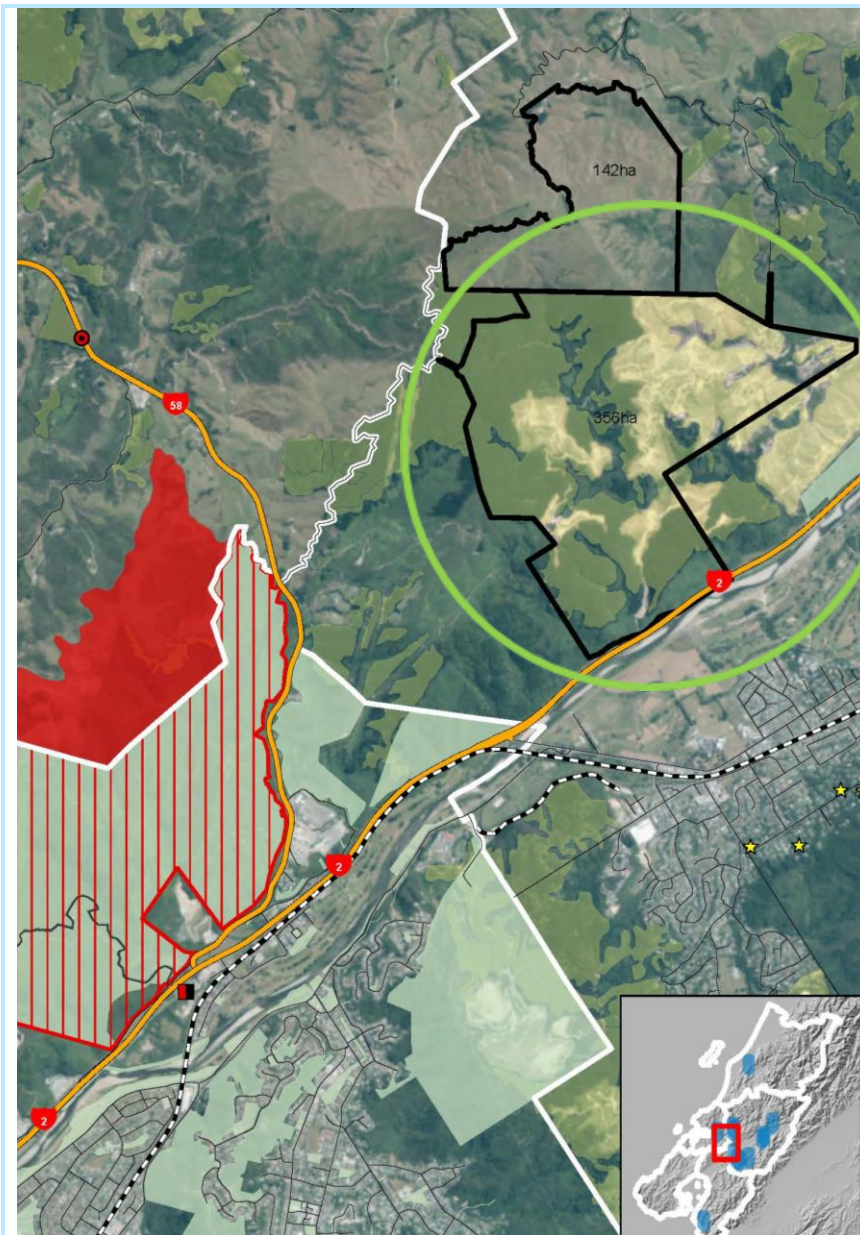
| Features | Evaluation |
|----------|--|
| Lot size | 142ha and 127ha |
| Zoning | Rural, Upper Hutt City Council |
| Access | Rural roads, through Whitemans Valley, Blue Mountains and suburban areas within Pinehaven onto SH2 |
| Comment | Access a real potential issue given need to travers through rural and urban areas to reach SH2 which is some 9km away. |

Site 4. Moonshine Hill Rd (within Focus Area Three)



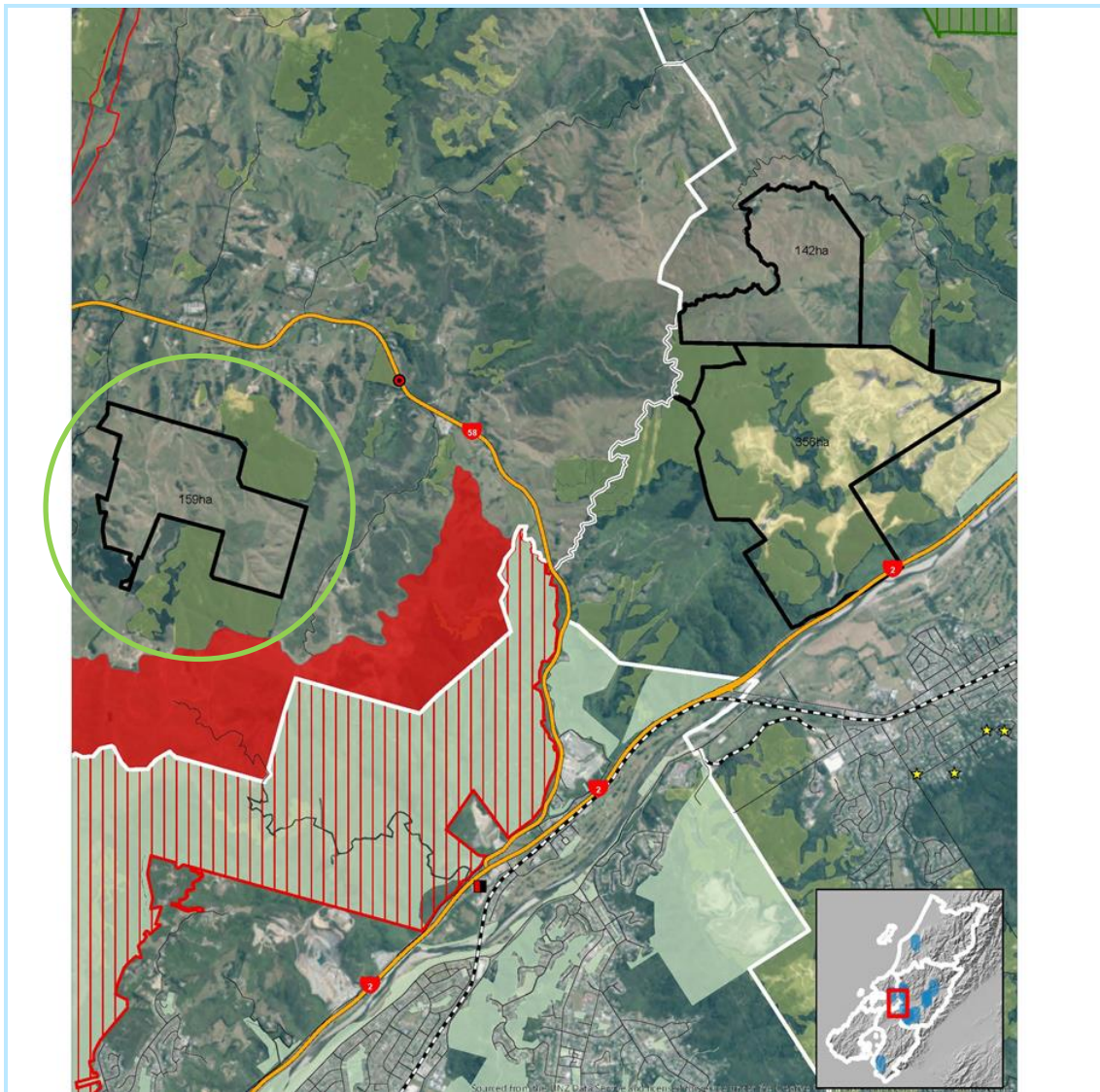
| Features | Evaluation |
|----------|--|
| Lot size | 142ha |
| Zoning | Upper Hutt City, Rural Hill (20ha minimum) Land to the west (within Porirua City) is within the Judgeford Structure Plan Area (2-4ha) |
| Access | Moonshine Hill Road (to the north of the site) and then onto SH2 |
| Comments | Site on boundary of Upper Hutt and Porirua. Area to the west is part of the Judgeford Structure Plan area. Secluded site. Upper Hutt is reviewing its landscape areas so the site could be tagged as a landscape area. Access may be an issue. |

Site 5. SH58 (within Focus Area Three)



| Features | Evaluation |
|----------|--|
| Lot size | 356ha |
| Zoning | Upper Hutt City, Rural Hill (20ha minimum). Land to the west (within Porirua City) is within the Judgeford Structure Plan Area (2-4ha) |
| Access | Potentially SH58 or SH2 |
| Comments | Viable site. Site recently logged. National Grid Transmission lines running through the property. Secluded areas within the site. Good access options and close to product markets. Upper Hutt is reviewing its landscape areas so the site could be tagged as a landscape area. |

Site 6. Judgeford (within Focus Area Three)



| Features | Evaluation |
|----------|---|
| Lot size | 159ha |
| Zoning | Within Porirua City Also within the Judgeford Structure Plan Area (min 1-2ha) |
| Access | SH58 |
| Comments | Potential access issues given proposed Judgeford Hamlet Policy Area to the north on SH38. Site also within future growth area flagged for 1-2ha lots, therefore likely to be opposed by Council. As such, unlikely to be successful as a potential option. Red area to the south is identified as a draft Significant Amenity Landscape area. |

Proposal to Wellington City Council to extend Horokiwi Quarry

January 2019

1. Purpose, background and proposed extension area outline

Purpose

Horokiwi Quarries supplies aggregates to the Wellington region from its quarry located adjacent to SH2 between Petone and Wellington.

Wellington City Council (WCC) and the Greater Wellington Regional Council (GWRC) support securing access to aggregate supplies to enhance the economic and strategic benefits to the region from ready access to aggregates.

The purpose of this proposal is to get Wellington City Council approval in principle to extend Horokiwi Quarry on the western side, into land currently owned by WCC.

Background

Aggregates are an overlooked non-renewable resource that is necessary for building and construction. There is ongoing demand in the Wellington region for aggregates, with particularly high growth in residential building.

Three quarries currently supply the Wellington region: Kiwi Point Quarry, Belmont and Horokiwi. There are limited sources of suitable rock resources and there are significant barriers to establishing a new quarry.

Horokiwi Quarry has existing consents and land area available for further quarry development. However, the existing active faces have about 2 million tonnes of rock resources. Horokiwi produces around 650,000 tonnes of aggregate. Extending the life of these existing faces will provide between 3 million to 6 million tonnes of aggregate. This extends the lifespan of the quarry and improves its ability to phase in later development of the quarry

Extension area

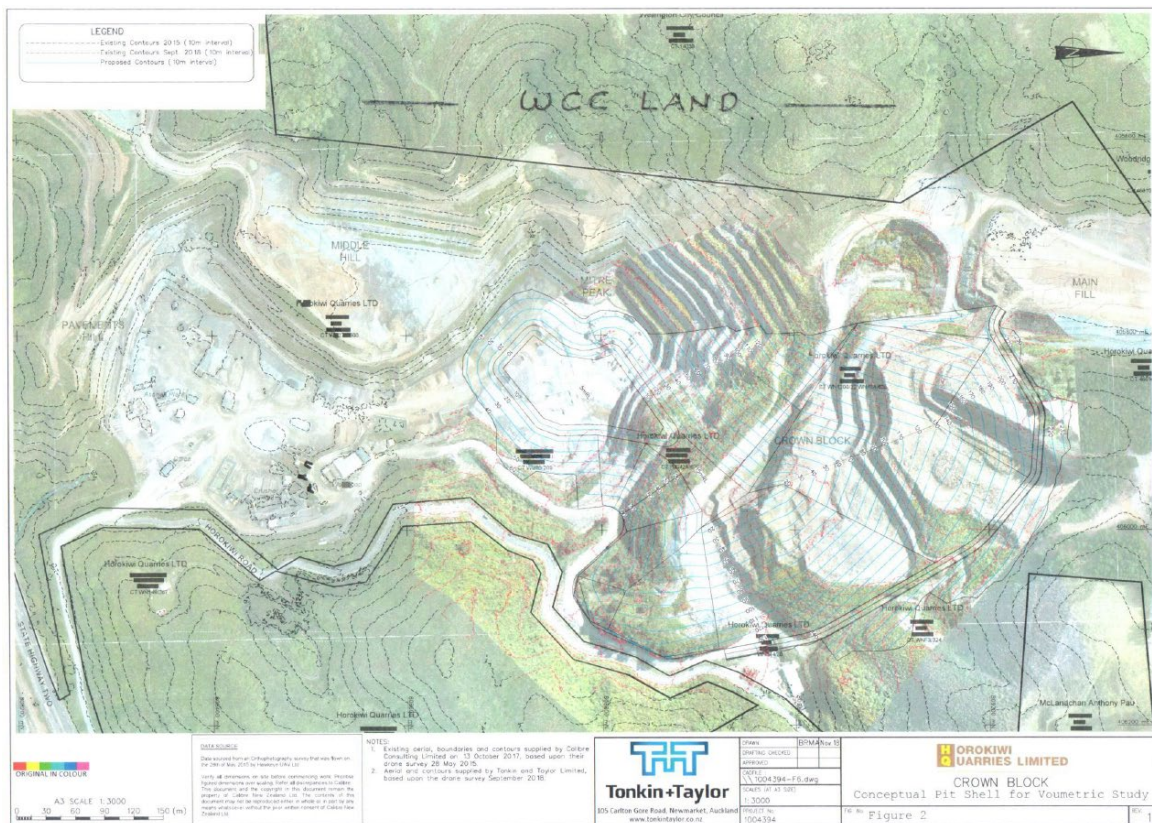
The area proposed for extension is the lower slopes adjacent to Wahinahina Park that was formed from the old Horokiwi Landfill. The extension will not affect the park area or the integrity of the closed landfill site.

Figure 1 General location of current main site



More specifically, the proposal would see the continuation of active faces of Middle Hill and Mitre Peak

Figure 2 – Site drawing showing Middle Hill and Mitre Peak active faces



Both areas have good percentages of premium rock suitable for concrete, asphalt and roading materials. This can be seen in the existing face and bench structures visible from the existing quarry. There is minimal overburden and access is already established with existing roads and benches in close proximity to the existing processing plant and stockpile areas.

2. Council considerations and options to support Horokiwi extension

There are several issues and options for Council in supporting the proposed extension. It is acknowledged that Middle Hill and Mitre Peak do have different characteristics. The Middle Hill area is immediately adjacent to the old Horokiwi Landfill site. This has low quality scrub regeneration and little likely impact from clearance. All faces would be followed by eventual rehabilitation and revegetation activities. There are some minor walkways in this area that may be affected and re-routed. The Mitre Peak area does have some regenerating bush/scrub areas that may have some conservation value. However, as canvassed in Plan Change 83, the regeneration timeframes for native bush in the area are long – exceeding 80 years or into the 100's of years for mature secondary forest. So seen within the context of regeneration timeframes a temporary 5-10 year period of clearance and then subsequent regeneration could be considered for this area as well.

The following options could apply to the Middle Hill and Mitre Peak separately or combined:

- Purchase by Horokiwi Quarries. This would be the simplest transactional approach from a commercial perspective, although Reserves Act revocation may be needed.
- Lease by Horokiwi Quarries, with subsequent rehabilitation and return to WCC. This could mitigate some of the issues associated with infringing on a Council asset, by Council retaining ownership and returning it to a reserve following the cessation of quarrying and initial rehabilitation works being completed by Horokiwi Quarries.
- Land swap with Horokiwi Quarries. This could be a 'net conservation benefit; approach which may be the most appropriate for the Mitre Peak area. Horokiwi Quarries owns the land adjacent to SH2 which has areas of potentially high conservation value, particularly the face adjacent to SH2.

Figure 3 – Land parcel which may contain areas suitable for Land swap with WCC



3. Benefits of Horokiwi extension

The Policy Case

The general case for quarry extension is well supported.

- WCC supports quarry extensions. They own Kiwi Point Quarry (a strategic asset of Council based on the need to maximise aggregate resources close to Wellington) and have carried out District Plan Change 83 to secure additional resources. WCC also intends to fund further work to identify additional resources within Wellington that can be exploited when the current quarries
- The Greater Wellington Regional Council’s Regional Policy Statement 60 directs that particular regard be given to the social, economic, and environmental benefits of utilising mineral resources within the region.

Extending lifespans of existing quarries

The current lifespans for the quarries that can be inferred has Horokiwi and KPQ lasting into the mid 2030’s with Belmont into the mid 2040’s. With the extension of both Middle Hill and Mitre Peak, Horokiwi’s lifespan would extend into 2040’s, and would also extend Belmont into the 2050’s.

| Forecasts for Lifespans | | | | | | | |
|---|------|------|------|------|------|------|------|
| Current lifespan forecasts | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | |
| Horokiwi Quarry | | | | | | | |
| KPQ (assuming approval of Plan Change 83) | | | | | | | |
| Belmont Quarry | | | | | | | |
| With Horokiwi Extension | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
| Horokiwi Quarry | | | | | | | |
| KPQ (assuming approval of Plan Change 83) | | | | | | | |
| Belmont Quarry | | | | | | | |

With the additional resource, Horokiwi and Belmont would have lifespans that would extend for a further 10 year and 5 year respectively.

Economic benefits

The economic benefits mostly arise from avoided increased costs arising from transport costs and reduced competition.

Transport costs are a significant factor for quarry products, with the industry rule of thumb that costs double over the first 30km from the quarry gate.

Reduced competition costs arise as where supply is constrained inevitably there will be pressure on prices, particularly when there are only few suppliers. This can also arise from increased demand for particular products. For example, Transmission Gully requires over 500,000 tonnes of high grade sealing chip for completion, but the existing three quarries will struggle to supply that while they also have ongoing contracts with local authorities for road maintenance and construction.

The following model is similar to that used by WCC itself in Plan Change 83¹. This indicates that the extension area represents about an additional 9 years of production. Without that production, the increased transport costs and impact of reduced competition represents about \$43 million of value to the region. This is the additional cost purchasers including councils and NZTA will incur on road

¹ The model is simplified as it is just looking at 2 factors. The transport cost is estimated as \$5.60 per tonne representing the additional transport distance Belmont to Horokiwi at SH2. The reduced competition increase is about 5% on the average selling price.

maintenance; and additional costs to housing developers, construction firms and individuals that they would have to pay without this resource.

| Without access to the extension area | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Total |
|--|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|
| Tonnage otherwise supplied | 650,000 | 650,000 | 650,000 | 650,000 | 650,000 | 650,000 | 650,000 | 650,000 | 650,000 | 650,000 | 6,500,000 |
| a) Increased transportation cost | \$3,640,000 | \$3,640,000 | \$3,640,000 | \$3,640,000 | \$3,640,000 | \$3,640,000 | \$3,640,000 | \$3,640,000 | \$3,640,000 | \$3,640,000 | \$ 36,400,000 |
| b) Increased costs from reduced competitor | \$617,500 | \$617,500 | \$617,500 | \$617,500 | \$617,500 | \$617,500 | \$617,500 | \$617,500 | \$617,500 | \$617,500 | \$ 6,175,000 |
| Total Cost impost | \$4,257,500 | \$4,257,500 | \$4,257,500 | \$4,257,500 | \$4,257,500 | \$4,257,500 | \$4,257,500 | \$4,257,500 | \$4,257,500 | \$4,257,500 | \$ 42,575,000 |
| Total cost to community | \$ (42,575,000) | | | | | | | | | | |
| NPV | -\$34,532,139 | | | | | | | | | | |

This does not include the economic benefits and multipliers from:

- The multiplier from the continued employment at the quarry for a longer period.
- The continuation and economic benefits and multipliers of the asphalt, emulsion, and concrete plants on site that may become uneconomic without adjacent quarrying on site.
- Lost economic benefits of development projects cancelled because of increased costs.

The extension area therefore represents a significant economic resource to support construction and development in the region.

4. Background on Aggregates, Current Supply and Lack Of Alternatives

Demand

The demand for aggregates is typically quoted at a population level of 7-8 tonnes of aggregate per person per year. Currently according to the Aggregate and Quarry Association demand in New Zealand equates to about 8.5 tonnes per person per year.

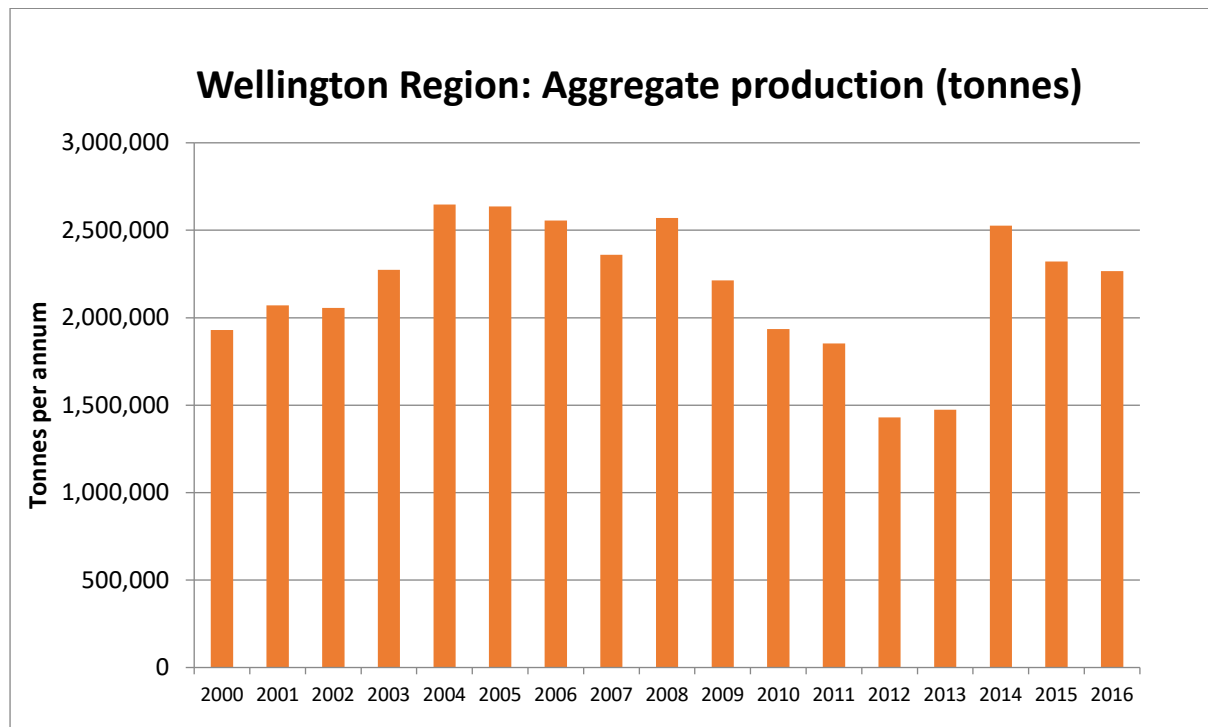
Quarry materials are used in roading in basecourse, sealing chip, asphalt. Each kilometre of motorway uses about 40,000 tonnes of aggregate.

Quarry materials also are used in construction, including foundations, concrete, building materials, and drainage. A single new house is estimated to require about 250 tonnes of aggregate for its construction.

There has been sustained demand for quarry products in the Wellington Region. Ongoing demand is also anticipated to be strong with the current construction forecasts for the Wellington indicating significant growth. These include a 65% increase in residential construction between 2017 to 2023.

Wellington Regional Production

The Wellington market² has also had similar cyclical demand cycles with reasonably strong demand since 2014. In the Wellington Region, the estimate of usage is about 6.3 tonnes per person per year for a total of about 2.3-2.5 million tonnes:



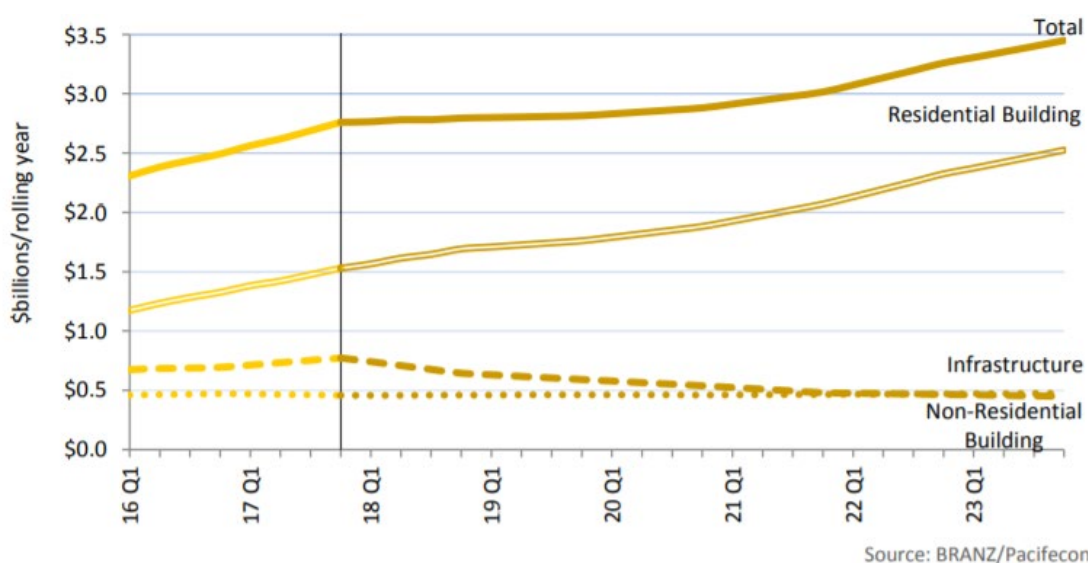
² Source Crown Minerals data.

Construction forecasts and future development

The population of Wellington City for 2018 is 211,809 and is forecast to grow to 249,997 by 2043; a rise of 18%³. Slightly lesser increases are forecast for other areas in the region. This population increase will underpin ongoing construction demand particularly for residential housing.

The current construction pipeline forecasts⁴ predict the strongest regional growth is in the Wellington region. In 2017, total construction value was \$2.8 billion and is forecast to remain at this elevated level to 2020 when it will further increase. By 2023 this is forecast to increase to \$3.4 billion. The biggest driver of this is residential growth which is expected to have an increase of 65% from \$1.5 billion in 2017 to \$2.5 billion in 2023. Wellington non-residential building is forecast to decrease but level out from 2023. Infrastructure growth is expected to increase by 4% from 2017 to 2023 and then be maintained

The following graph is taken from the June 2018 MBIE forecasts for the Wellington Region:



These forecasts are supported by indications of planned non-residential works and infrastructure works in Wellington that include:

- Conference Centre, retail and entertainment
- Hospital construction
- Non-residential building work arising from the earthquake (reinstatement, strengthening etc.)
- Infrastructure such as ongoing water and waste investments in Council AMP's including reservoir construction etc.
- Ongoing Airport related development (terminal expansions, runway overlay, property development)
- Retirement village expansion
- Roading including completion of Transmission Gully, link roads (e.g. Petone to Grenada), Airport linkages, cycleways etc.

³ Source: Wellington City Population Forecasts at <https://forecast.idnz.co.nz/wellington>

⁴ National Construction Pipeline Report 2019. MBIE June 2018.

Construction demand will continue to underpin demand for aggregate materials. There is sufficient demand across residential, non-residential, and infrastructure projects to support the ongoing demand for quarry materials.

Barriers to Quarry establishment

There is very limited scope to develop a new quarry in the region. While there are many small historical quarry areas, establishing a new quarry would be challenging. The rock resources in the Wellington region are located close to fault lines but there are limited areas that have been identified with suitable rock. There would be major environmental impacts to establish and operate a new quarry.

The Commerce Commission has noted the following barriers to entry in the quarry and aggregate industry⁵:

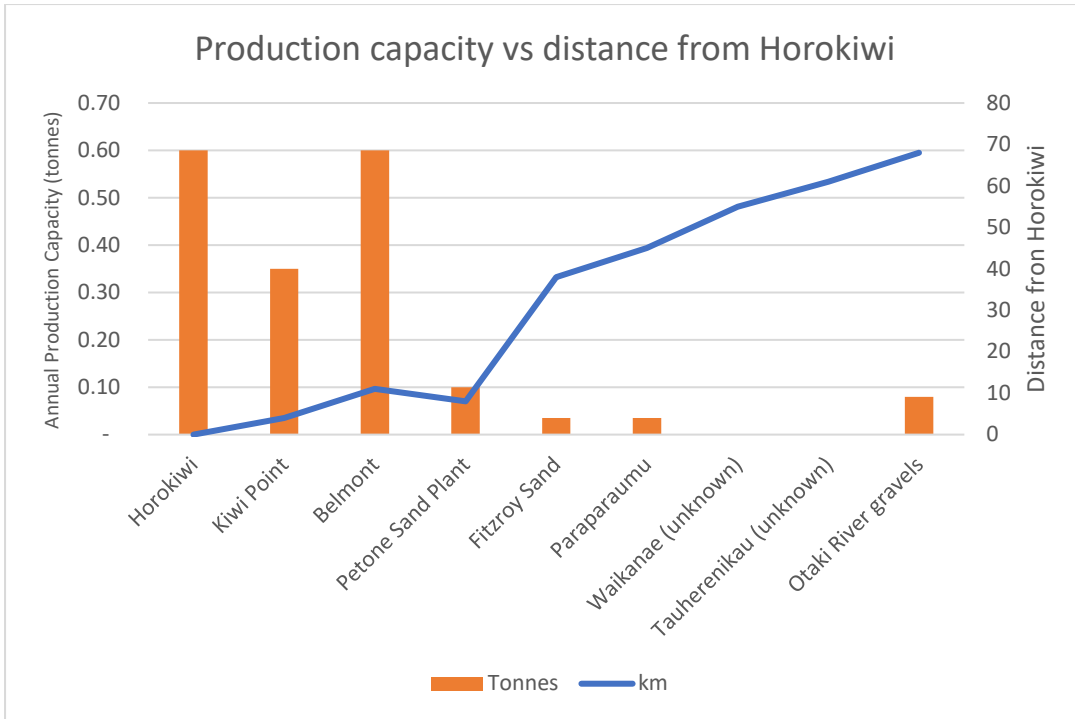
- Appropriate Resource. The rock needs to be of sufficient quality to be utilized.
- Land. Land needs to be available next to the appropriate resource.
- Equipment/capital. There is significant investment required to establish and develop a quarry. Hard rock quarries have higher equipment needs than river gravel extraction.
- Resource consent.

New quarry sites would run into considerable difficulty to be established due to these factors. Consenting activities would also need to be considered in relation to the District Plan provisions with potential sites in the Wellington region more likely to be zoned 'rural' or 'open space B' which would likely require a plan change. A new site is unlikely to be well-located to transport routes so there would be environmental impacts from truck transportation as well as the need for significant roading infrastructure investment.

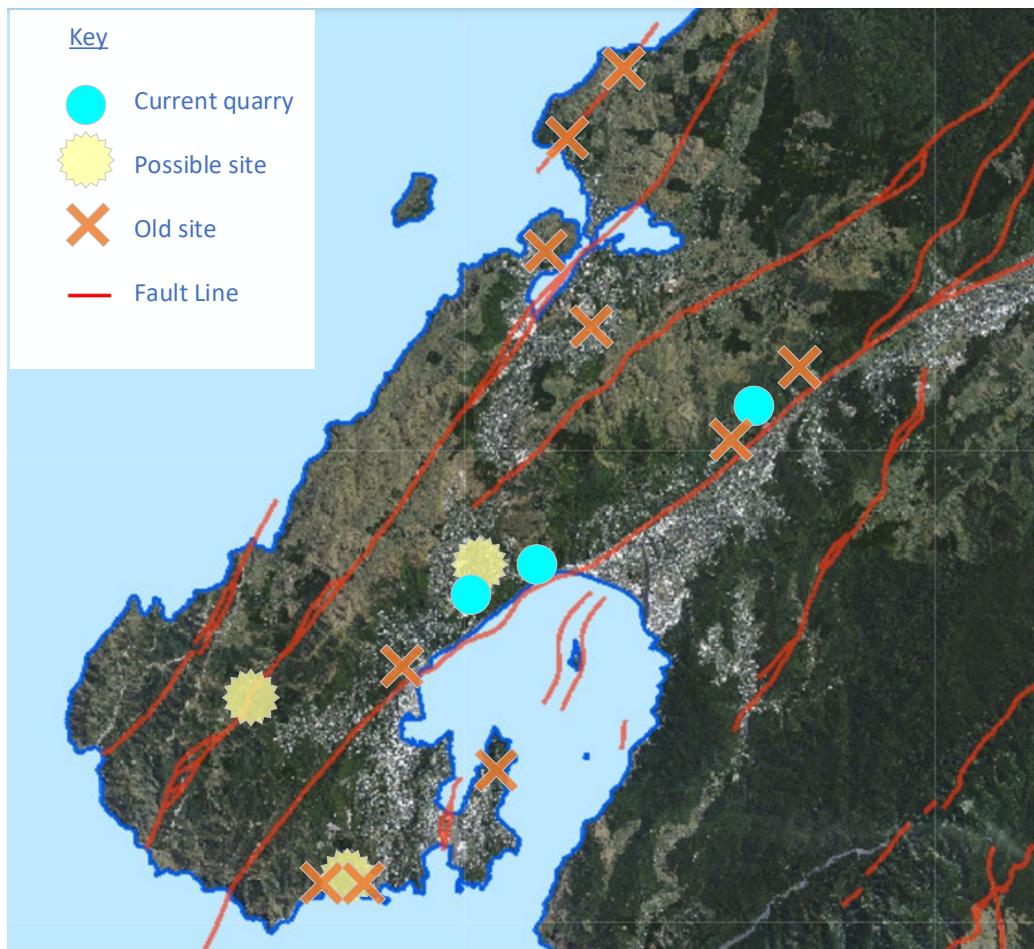
Wellington Limited Supply Options

WCC's Plan Change 83 noted the limited supply options in the region. The following indicates that any other *potential* sites in the region do not have production capacity or the range of products required (sand quarries cannot provide all product types).

⁵ Commerce Commission decision: Fletcher-Building-Holdings-NZ-Ltd-Higgins-Group-Holdings-Ltd-and-Horokiwi-Quarries-Ltd-clearance-application-16-February-2016



The existing quarries are located on the northern side of the Wellington Fault which uplifts the hard high quality rock for quarrying. Older quarries have been at various sites around Wellington. The following indicates the fault lines, some of the old quarries, and some possible sites considered by WCC previously. None of these are practically exploitable or readily consentable.



5. Summary and Next Steps

WCC and GWRC both recognise the need for aggregates to support regional development and construction. WCC itself recognises the economic costs of losing access to aggregates. The approximately 6 million tonnes represented by the proposed Horokiwi extension would be a considerable addition to the regional resource. The economic benefit is about \$43 million to the region when initiated.

The extension could be executed through a range of methods with WCC. Horokiwi will first need access to land prior to seeking a Plan Change based on the current District plan zoning. Horokiwi Quarries seeks WCC's feedback on this proposal particularly:

- a) WCC's preference as to sale/lease/land swop for further consideration and discussion
- b) Any issues WCC identifies with the Middle Hill and Mitre Peak proposed extensions.