

Project Number: 5-WT616.01

# Whenuku Road Quarry Expansion

Resource Consent Application to South Taranaki  
District Council and Taranaki Regional Council

28 September 2020

CONFIDENTIAL



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Project Number: 5-WT388.43  
Whenuku Road Quarry Expansion  
Resource Consent Application to South Taranaki District Council and Taranaki Regional Council

## PART A RESOURCE CONSENT APPLICATION PURSUANT TO SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

|                           |  |
|---------------------------|--|
| <b>To:</b>                | The General Manager<br>Taranaki Regional Council<br>Private Bag 713<br>Stratford 4352<br><br>The General Manager<br>South Taranaki District Council<br>Private Bag 902<br>Hawera 4640  |
| <b>Applicant:</b>         | Todd Nicholson<br>Horizon Trust Management Limited<br>PO Box 141<br>Whanganui 4541   |
| <b>Proposal:</b>          | This application seeks consent to: <ol style="list-style-type: none"><li>1. Expand an existing quarry at 277 Whenuku Road by approximately 7.6 hectares.</li><li>2. Extract a maximum of 1,100,000m<sup>3</sup> of material from the new quarry expansion area.</li><li>3. Deposit cleanfill to the site.</li><li>4. Dewater below water table level to 7 – 8 metres.</li><li>5. Discharge treated stormwater and washwater.</li></ol> |
| <b>Location:</b>          | The quarry is located at 277 Whenuku Road, Normanby. The proposed expansion area is directly north of the existing quarry area and bounded to the north and west by the Waingongoro River.<br><br>Map reference: 1,705,885.04E 5,623,114.65N   |
| <b>Legal Description:</b> | Section 38 Patea DIST  |
| <b>Consents Required:</b> | Controlled and discretionary activity consents pursuant to Rules 20, 27, 49 and 76 are required under the Taranaki Freshwater Plan for proposed diversion, discharge of stormwater, dewatering below the water table and modification of a stream.<br><br>Land Use Consent as a Discretionary Activity pursuant to Rules 3.1.3 (b) and 3.1.4 (a) under the South Taranaki District Plan.   |
| <b>Activity Status:</b>   | Discretionary Activity   |
| <b>Term Sought:</b>       | 25 years   |
| <b>Consultation:</b>      | Please refer to Section 6 of the Assessment of Environmental Effects for consultation discussion.  |
| <b>Attachments:</b>       | The Assessment of Environmental Effects is attached as Part B of this report.  |

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**Appendix A** - Site Plans (Proposed Quarry – Cross Sections)

**Appendix B** - Quarry Management Plan

**Appendix C** - Hydrology Report

**Appendix D** - Acoustic Report

**Appendix E** - Traffic Assessment Report

**Appendix F** - Freight Vehicle Management Plan

**Appendix G** - Traffic movements information

**Appendix H** - Extraction Timeframes

**Appendix I** - Photos

**Appendix J** - Conditions of existing consent

**Appendix K** - Certificate of Title

# PART B ASSESSMENT OF ENVIRONMENTAL EFFECTS

## 1 Introduction

This application has been prepared in accordance with those matters set out in Section 88 and the Fourth Schedule of the Resource Management Act 1991. This assessment of environmental effects accompanies and forms part of the resource consent application.

Horizon Trust Management Ltd 'the applicant' proposes to expand the existing quarry at 277 Whenuku Road, by 7.6 hectares into the adjacent paddock.

This application seeks to enable:

- the expansion of the quarry area including extraction below the water table and associated dewatering,
- increase truck movements associated with the existing quarry and proposed expansion operations, and
- address the proposed changes to the method of reinstating the existing quarry area and proposed reinstatement of the expansion area including depositing of cleanfill.

This is a combined consent application addressing both district and regional requirements of South Taranaki District Council (STDC) and Taranaki Regional Council respectively. Relevant technical reports are appended to this application.

In lodging this application, the applicant will formally withdraw the current s127 application lodged with STDC, to change consent RML14076 condition 17 as it is intended that it be superseded by this comprehensive new application. This application will replace a number of existing consents, as outlined in section 1.1.2 below.

### 1.1 Background

Whenuku Road Quarry was established in 2011 by Grant Cudby Contracting Limited and was taken over by Horizon Trust Management Limited in November 2016.

The site currently produces and supplies aggregates for the local community of Hawera, mainly used as base course products in roading, pathways, drainage, cow races and foundation works for infrastructure projects such as the new Hawera countdown building and carpark. The land occupied by the quarry is owned by Bill and Mary Schrader.

#### 1.1.1 Reason for Expansion

The applicant is proposing to expand the quarry, for the following reasons;

1. To contribute to providing for on-going market demand for aggregates in the local community.
2. The shallow depth of andesite deposit discovered during drilling investigation late in 2019.

## 1.1.2 Existing Consents

The quarry currently operates under the following district and regional council consents.

### South Taranaki District Council (STDC)

*Table 1: Existing STDC consents*

| Consent Number | Consent Type & Purpose  | Granted         | Review  | Expiry |
|----------------|---|-----------------|---|--------|
| RML14076       | Land use – Expand, Operate and Reinstate a Quarry Business        | 11 August 2015  | 2016, 2017 2019 and every five years after that | 2030   |
| RML13110       | Land Use – Change of consent Conditions 7 and 14 New Condition 29 | 27 January 2014 | Not specified                                   | 2030   |
| RML11031       | Land Use – Operate a Quarry Business                              | 2 November 2011 | Not specified                                   | 2030   |

An application to change condition 17 of consent RML14076 was lodged (May 2020) with STDC under Section 127 of the Resource Management Act. This was for the purpose of increasing trucks movements from a maximum of 16 heavy vehicle movements to a maximum of 80 heavy vehicle movements, and a maximum of 120 vehicle movements for 10 days of the year. This application is being considered by STDC on the understanding that a new consent, to account for the current and proposed quarry activities, will be lodged by November 2020.

Refer to the conditions for each existing consent in Appendix J.

#### 1.1.2.1 Procedural considerations – STDC Application to vary condition

As noted above, the applicant lodged an application (with STDC) to vary condition 17 on consent RM10476, has been progressed to the point of submissions having been received. It is anticipated that this new comprehensive application, and subsequent process, will supersede the variation application. The applicant recognises that the submissions made on the variation application are relevant to this application going forward, because they relate to the issue of the existing heavy vehicle use as a result of the quarry. Of note is that the proposal, for traffic numbers, in this comprehensive application does not change the numbers proposed in the variation, additional mitigation in the form of management is proposed however. The issues raised in the submissions are discussed in the assessment of effects section 5 and a description of engagement undertaken by the applicant at section 6.

### Taranaki Regional Council (TRC)

*Table 2: Existing TRC consents*

| Consent Number | Consent Type & Purpose  | RMA Ref | Granted        | Review          | Expiry      |
|----------------|---|---------|----------------|-----------------|-------------|
| 7845-1.0       | To discharge treated stormwater into land from quarry activities  | S15     | 28 June 2011   | June 2017, 2023 | 1 June 2029 |
| 7845-1.1       | To discharge treated stormwater and incidental groundwater from a quarry site through land seepage and into Waingongoro River | S15     | 19 August 2015 | June 2020       | 1 June 2029 |

|           |  |     |                |   |             |
|-----------|--|-----|----------------|---|-------------|
|           | and its tributary.   |     |                |   |             |
| 7845-1.2  | To discharge treated stormwater and incidental groundwater from a quarry site through land seepage and into Waingongoro River and its tributary.<br><br>Change of consent conditions to include the discharge of aggregate washwater so that the purpose now reads.<br><br>To discharge treated washwater and include incidental groundwater from a quarry site through seepage to land and treated stormwater into Waingongoro River and its tributary. | S15 | 9 October 2019 | June 2016, 2018, 2020, 2022, 2024, 2026, 2028 | 1 June 2029 |
| 10017-1.0 | To realign and install piping in sections of two unnamed tributaries of the Waingongoro River, including associated disturbance and reclamation of the streambed.  | S13 | 19 August 2015 | June 2023                                     | 1 June 2029 |
| 10018-1.0 | To take groundwater incidental to quarrying operations.  | S14 | 19 August 2015 | June 2023                                     | 1 June 2029 |

Consent 7845-1.0 was varied in 2015 to:

- Include the discharge of treated stormwater and incidental groundwater through land seepage; and
- Discharge treated stormwater and incidental groundwater into the Waingongoro River and its tributary.

Consent 7845-1.0 was varied again in 2019 to

- Enable the use of a closed-circuit wash system for aggregate washing purposes.

Refer to the conditions for each existing consent in Appendix J.

## 2 Site Description

### 2.1 Existing Environment

The quarry is located on farmland situated at the end of Whenuku Road, approximately 6km from Normanby, Hawera (Figure 1).

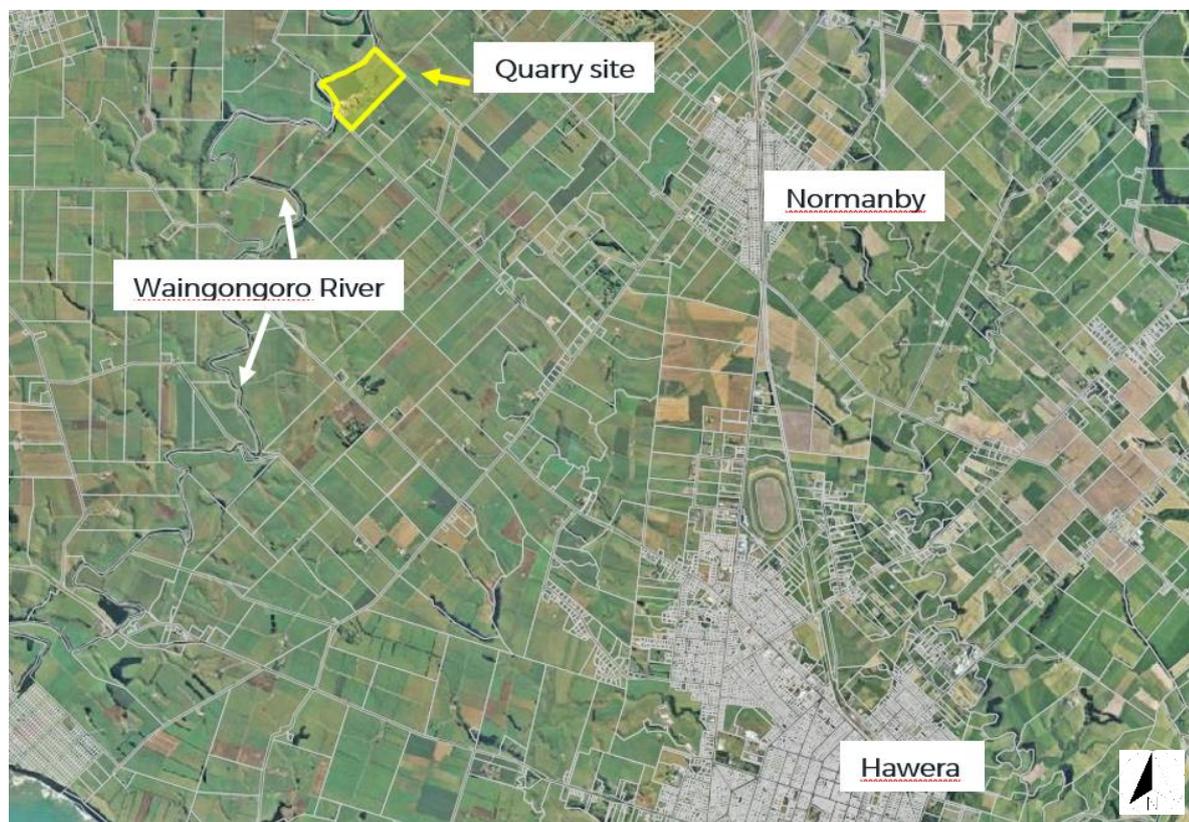


Figure 1: Site location

The surrounding area is predominantly rural in character. Surrounding land use is predominantly pastoral based farming. The surrounding land is generally flat to rolling.

There are multiple dwellings along Whenuku Road, and the closest is at 262 Whenuku Road, approximately 290m from the quarry boundary (as shown in Figure 2).

The quarry site is bounded by the Waingongoro River to the west and to the north. There is an unnamed tributary of the Waingongoro River that passes through the quarry site (as shown by Figure 3 below). This has been diverted and partly piped as per existing TRC resource consent 10017-1.0.



Figure 2: The quarry site, showing closest residential property. (Note the Google Earth aerial has not been updated recently, refer to Figure 5 for an accurate aerial of the existing quarry site).

### 2.1.1 Catchment Geology

The quarry is situated in the lower reaches of the Waingongoro catchment. The elevated flat land to the east and south-east of the quarry are within the cover beds of the Ngarino Marine Terrace which are proposed for extraction. The marine terrace materials give way in the Waingongoro River valley to the Ngaere Formation volcanic debris-avalanche deposit (30,000 years old). The Ngaere Formation is confined to the river valley below 80 m at the quarry and is the material being extracted. The alluvial andesitic rock and sand deposit have been well compacted as they have been laid down in horizontal bedding planes. This means that battered faces created during extraction are very stable.<sup>1</sup>

### 2.1.2 Waingongoro River

The Waingongoro River is described as regionally significant and is a river listed within Appendix A1 of the Taranaki Regional Council's Freshwater Plan as having high natural, ecological, and amenity values. The upper reaches of the River are the source of water supply to the Normanby Dam. The River has particular significance to the region, firstly because of its importance to Iwi – both Ngaati Ruanui and Ngaruahine and secondly, as a popular fishing and recreational destination.

The riverbank adjacent to the subject site is fenced off and planted mostly with natives. In some areas the bank between the fence and bed of the river is 30m, in other areas the width from the river to the fence may only be 5m.

According to a TRC report, on stream modification in the region, the Waingongoro River catchment is among catchments with the greatest modification (between 2001 and 2007).<sup>2</sup>

<sup>1</sup> Page 2 of Geosearch, Whenuku Road quarry hydrogeological assessment (dated 5 June 2019)

<sup>2</sup> TRC, 2010. Small Stream Modification in Taranaki. Taranaki Regional Council.

The Normanby Dam is located approximately 5km upstream from the subject site, this controls the flow of water. It is understood that as the flow is somewhat controlled the subject site is less prone to flooding.

### Freshwater Fish Species

A search of the New Zealand freshwater fish database for the Waingongoro River was undertaken. These species are identified in the table below. It is noted that only climbing and jumping species could feasibly make it up to the unnamed tributary. These species have been identified with an asterisk (\*) below.

| Scientific name                  | Common name   | Threat status <sup>3</sup> |
|----------------------------------|---------------|----------------------------|
| * <i>Anguilla australis</i>      | Short fin eel | Not Threatened             |
| * <i>Anguilla dieffenbachii</i>  | Long fin eel  | At Risk, Declining         |
| * <i>Cheimarrichthys fosteri</i> | Torrentfish   | At Risk, Declining         |
| <i>Galaxias argenteus</i>        | Giant Kokopu  | At Risk, Declining         |
| * <i>Geotria australis</i>       | Lamprey       | Nationally Vulnerable      |
| <i>Gobiomorphus basalis</i>      | Crans Bully   | Not Threatened             |
| <i>Gobiomorphus breviceps</i>    | Upland Bully  | Not Threatened             |
| <i>Gobiomorphus cotidianus</i>   | Common bully  | Not Threatened             |
| * <i>Gobiomorphus huttoni</i>    | Redfin Bully  | At Risk, Declining         |
| <i>Neochanna apoda</i>           | Brown mudfish | At Risk, Declining         |
| * <i>Oncorhynchus mykiss</i>     | Rainbow trout | Introduced                 |
| <i>Retropinna retropinna</i>     | Common smelt  | Not Threatened             |
| * <i>Salmo trutta</i>            | Brown Trout   | Introduced                 |

#### 2.1.3 Unnamed tributary

The unnamed tributary is an open channel with the bed consisting of silt and stream cobbles (generally <100mm). The banks of the stream are dominated by grass and grazed by cattle. The channel width is less than 0.5m in most places and the water depth is generally 150mm. Further characterisation of the unnamed tributary is discussed in the Hydrology assessment attached as Appendix C.

This tributary eventually discharges into the Waingongoro River (Refer to Appendix I for photos) at its natural discharge point. The discharge point is located on the steep banks of the river and as such any fish species in the unnamed tributary would be climbing species who would be able to navigate the steep banks of the Waingongoro River.

<sup>3</sup> Goodman, J. M., Dunn, N. R., Ravenscroft, P. J., Allibone, R. M., Boubee, J. A. T., David, B. O., Griffiths, M., Ling, N., Hitchmough, R. A. and Rolfe, J. R., 2014, 'Conservation status of New Zealand freshwater fish, 2013', New Zealand Threat Classification Series 7, Department of Conservation, Wellington.

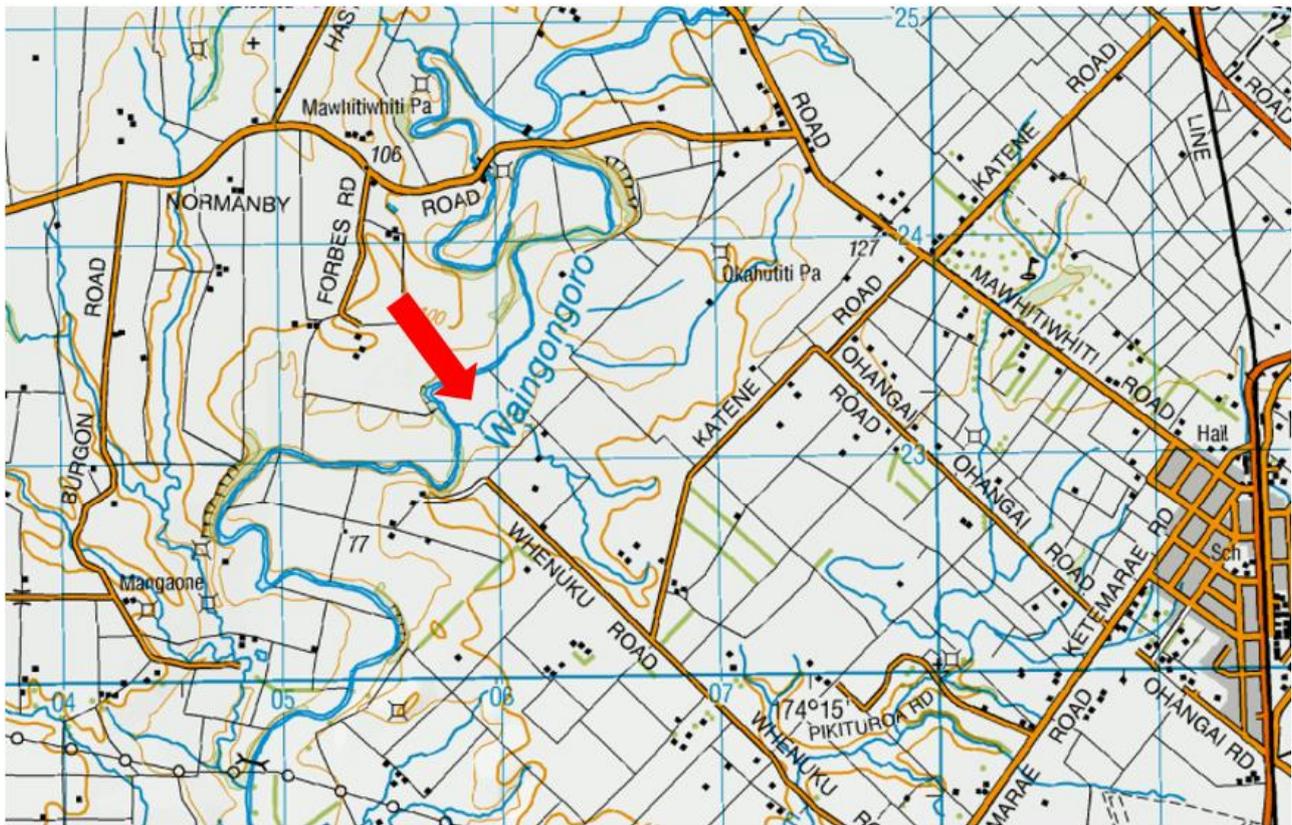


Figure 3: Surrounding waterbodies in the area. Red arrow showing location of the quarry site

## 2.2 The Existing Quarry Area

The existing 'working quarry area', covers approximately 7.73 hectares and comprises the open quarry area, areas to be quarried (as shown in Figure 15), the crushing plant, office building, stock pile areas, the wash plant, un quarried areas currently in pasture and a number of onsite settling ponds.

For details on site layout of the existing quarry area, refer to Figures 7 and 8 below and Appendix I for photos of the quarry area.



Figure 4: View of quarry operation area looking south-west from the northern paddock.

### 2.2.1 Existing Quarry Geology

In May 2019, the quarry pit was approximately 8.5 metres deep exposing Ngaere Formation alluvium below an overburden of ash soils (Figure 5). This was layered with relatively thick continuous beds of sand, gravel and boulders, in a matrix of sand and silt.

The materials were tightly packed with interlocking grains giving structural integrity to the pit walls. No evidence of river re-working was observed, suggesting the deposit is largely of primary origin.<sup>4</sup>



Figure 5: Ngaere Formation (tight) alluvium exposed in northwest face. White stick is 2.4 metres long. Pit floor is just above the groundwater level exposed in the ring drain.

## 3 Existing Quarry Activity

The quarry supplies aggregate for the local community of Hawera, materials are mainly used as base course products in roading, pathways, drainage, cow races and foundation works for infrastructure projects such as the new Hawera Countdown building and carpark.

### 3.1.1 Hours of Operation

The hours of operation are limited to 7:00am – 7:00pm Monday to Friday, and 8:00am to 12 noon on Saturdays except in the situation where emergency work is required outside these hours and the approval of the Group Manager: Environmental Services at South Taranaki District Council has been obtained.

Quarry activities do not take place on Sundays or public holidays.

Since 2019, the applicant has reduced the hours for truck movements in consideration of the interests of nearby residents. Where possible hours for truck movements are 7:00am – 5:30pm Monday to Friday. The applicant actively discourages any truck movements on Saturday mornings, and those that enter site are by request only. If required, truck movements on Saturdays are limited to between 8.00am to 12:00pm.

Quarry activities are conducted all year round. Operations are generally quieter during the winter months, as well as from mid-December to mid-January each year.

The hours of operation are well within the restriction imposed by condition 4 of the existing STDC resource consent RML14076.

<sup>4</sup> Page 3 of the Hydrology Report attached as Appendix C

### 3.1.2 Staff

Typically, there are 3-4 full time equivalent staff employed at the site. On occasions there are also up to 2 contractors on site, for machinery maintenance purposes, or for overburden removal.

### 3.1.3 Site Layout

The current 'open working quarry area' is approximately 2.5 hectares which together with the existing open extraction area comprises 4.86 hectares of open quarry area.

The open working area comprises a crushing plant, office building, vehicle parking area, a washing plant, stock piles, stormwater ponds and internal roadway (refer to Figure 7). The balance area will be reinstated as set out in section 4.2.5 of this application.

Figure 6 below, shows the route (in red) that the trucks take through the open working quarry area quarry, and the location of the diverted and piped tributary of the Waingongoro River.



Figure 6: Red arrows shows truck movements. Blue shows the flow of the open and piped tributary.



Figure 7: Site Layout. A: Visitor and machinery parking. B: Site office and staff parking. C: Crushing plant. D: Wash processing plant. E: Stormwater ponds (x3). F: Washwater ponds. G: Screening machine. H: Stockpiles

### 3.1.4 Equipment

The permanent equipment typically onsite includes the following;

- A main plant (primary crushing plant, secondary crushing plant, and a generator),
- A Wash plant (a pump, sand wheel, screen and trammel),
- Digger x3 (Volvo EC300, Komatsu PC18MR-3 and a Komatsu PC360LC-11)
- Loader truck x2 (Komatsu WA380)
- Screening machine (Portafill CT5000)
- Allied Fuel Pump x2,
- Dump truck (Komatsu HA250-3)
- Excavator x3 (30T hydraulic excavator, 36T hydraulic excavator, 1.8T excavator).

The general location of equipment on site is used is shown in below Figure 8 below.

Other temporary equipment can from time to time include a portable site office, storage containers, water cart trailer and quad bike.



Figure 8: Site layout for equipment. A- Crushing plant and generator. B- Wash plant processing. C - Digger (Volvo EC300) and excavator (30T). D - Excavator (36T). E/F - Processing stock pile areas. G - Screen machine. H - Fuel pumps. I - excavator (1.8T). J - area where dump trucks will be working.

For photos of the equipment onsite refer to Appendix Fuel for the plant is stored onsite, in two banded Allied Petroleum tanks. This complies with all Hazardous Substances Regulations as set out in the Hazardous Substances and New Organisms Act 2001 and associated Regulations and complies with all local authority requirements.



Figure 9: Main plant area

### 3.1.5 Traffic and Access

Truck movements to and from the quarry are currently limited to 7:00am - 7:00pm by condition 4 of the STDC resource consent RML14076. However, the applicant intends to operate the quarry to avoid no truck movements will occur after 5:30pm Monday to Friday. Truck movements on Saturdays (8:00am to 12:00pm) will continue to be by arrangement only, which is closely managed by the applicant currently.

The total full days for quarry traffic is estimated at 235 days of the year. There are no trucks movements on Sundays, public holidays/long weekends, over the Christmas - New Year period nor during heavy rain events. This is detailed in the Freight Vehicle Management Plan which is attached as Appendix F.

Condition 17 of the existing STDC consent RML14076 states;

*“That the quarry operator restricts quarry-related heavy vehicle movements on Whenuku Road to a maximum of 16 truck movements per day and that a copy of the log of truck movements to and from the quarry site be provided to the Council every twelve months or is available on request to demonstrate compliance with this condition.*”

The District Plan defines heavy vehicles as: “A motor vehicle that has a gross vehicle mass (GVM) exceeding 3500 kilograms.”

Many of the existing traffic movements at the quarry are made up of light trucks (up to 3 Tonne) and truck only units. Refer to the traffic logs in Appendix G which record how many light trucks, trucks and truck and trailers, go to and from the quarry over a 4-month period.

The existing quarry operation generates on average approximately 26 heavy vehicle movements per day or 13 truckloads (this excludes movements from light vehicle and tractors). This exceeds condition 17 of the STDC resource consent RML14076, which limits heavy vehicle movements to 16 vmpd being 8 truckloads per day. During peak season, heavy truck movements can be seen to exceed 40 heavy vehicle movements in a day, as shown by the traffic logs over the last 4 months (attached as Appendix G).

Vehicle movements including heavy and light trucks have increased due to the wider product range offered, an improvement in product quality and increase in local infrastructure projects. This

has resulted in increased demand for product. In addition, the quarry attracts local contractors with light trucks who make multiple trips rather than use a heavy truck and trailer unit.

Refer to Figure 6 above for the route which trucks take through the existing open quarry area. For more information on the existing heavy vehicle movements refer to Appendix G.



Figure 10: Example of light truck, transporting material offsite

The site access is located at the end of Whenuku Road. Adjacent to the quarry entrance is a driveway which provides access to a neighbouring property located at 277 Whenuku Road.



Figure 11: Quarry Entrance. Note: This image is prior to the sealing of Whenuku Road.

### 3.1.6 Existing Diversion and Culverting of Water courses

A 120m section of the unnamed tributary of the Waingongoro River has been diverted from its previous alignment within the current boundaries of the existing quarry area. The diversion involved lowering the tributaries bed level down to the current level of the quarry floor as excavation of the quarry extended past the alignment of the tributary. The applicant has installed a 55m long, 315mm diameter pipe to carry flow from the diverted open channel through the bund between the quarry and the river.

A 65m length of the tributary remains as an open channel in the base of the quarry, before joining with the piped section. The lowering of the bed has resulted in the creation of a small waterfall feeding the tributary into the quarry from the upstream catchment.

An ephemeral watercourse joins the tributary of the Waingongoro River at the edge of the northern boundary of the existing quarry area. The applicant has banded this confluence and installed a 315mm diameter pipe. When the ephemeral water course is running, water flows through the pipe and bund, down a slope and into the currently open channel of the tributary that runs along the edge of the existing quarry area.

Consent 10017-1.0 provided for the culverting of the 65m long open channel which discharges via a waterfall into the existing quarry, flows along the boundary of the quarry and then through an existing 315mm pipe into the Waingongoro River.

### 3.1.7 Stormwater treatment system

Currently any incidental groundwater taken due to activities at the quarry, travels through a series of ponds, as part of the stormwater system, before it enters the Waingongoro River by way of land discharge/seepage in accordance with TRC consent 7845-1.2.

The stormwater system on the existing quarry has used the settlement ponds as the sole method of stormwater discharge. Stormwater seeps through the base and walls of the pond.

When the quarry opens a new extraction area the stormwater management processes are to dig a new drainage ditch/ring drain at the top of the bank (out of the overburden) to reduce the amount of stormwater that runs over the bank and into the work area and into the stormwater ponds. The process is expected to continue in the proposed expansion area.

Within the current work area of the existing quarry, the stripping has been done in a way that ensures that the grading of the floor is contoured so any stormwater will drain towards the drainage channels which are dug to transport the stormwater to the settlement pond and allow seepage through the base of the drainage channels. Stormwater within the settlement pond naturally drains away through the porous subsurface material (refer Figure 12 below).

Current processing operations include the crusher, access roads, office, front end loader and stockpiles which are all located in a limited area near the entrance of the quarry.



Indicative drawing only

-  SW catchment ring drain
-  Tributary,
-  Piped tributary
-  Culvert
-  Novaflow pipe section
-  Washwater ponds (\* wash plant)
-  Stormwater catchment holes

Figure 12 : Existing Stormwater Management Plan

### 3.1.8 Washwater system

In October 2019, Taranaki Regional Council (TRC) granted consent to enable the use of a closed-circuit wash system for aggregate washing purposes.

Any incidental groundwater encountered during excavation activities (and added rainwater) is recycled and used to wash aggregate on site.

Once the water has been used for washing it is treated through a series of settlement ponds before being pumped to a main pond for recycling through the wash system again (refer to Figure 14 below). Two ponds are still to be constructed (as per Figure 13).

As it is a closed system that is isolated from the stormwater treatment system, any water that is 'lost' during this process is through land drainage via seepage.

As detailed in the TRC consent 7845-1.2 the ponds have been designed to hold a combined capacity of 7400m<sup>3</sup>. The pond sizes are as follows:

- Pond 1: 4 m x 10 m x 6 m = 240 m<sup>3</sup>
- Pond 2: 10 m x 30 m x 6 m = 1800 m<sup>3</sup>
- Pond 3: 10 m x 30 m x 6 m = 1800 m<sup>3</sup>
- Pond 4: 10 m x 30 m x 6 m = 1800 m<sup>3</sup>
- Pond 5: 10 m x 30 m x 6 m = 1800 m<sup>3</sup>



Figure 13: Two settlement ponds of the aggregate wash system, to be constructed

The settling ponds are bunded (approximately 1m in height) and contoured to ensure separation from the stormwater catchment. For more information on the existing washwater system refer to the TRC consent 7845-1.2.

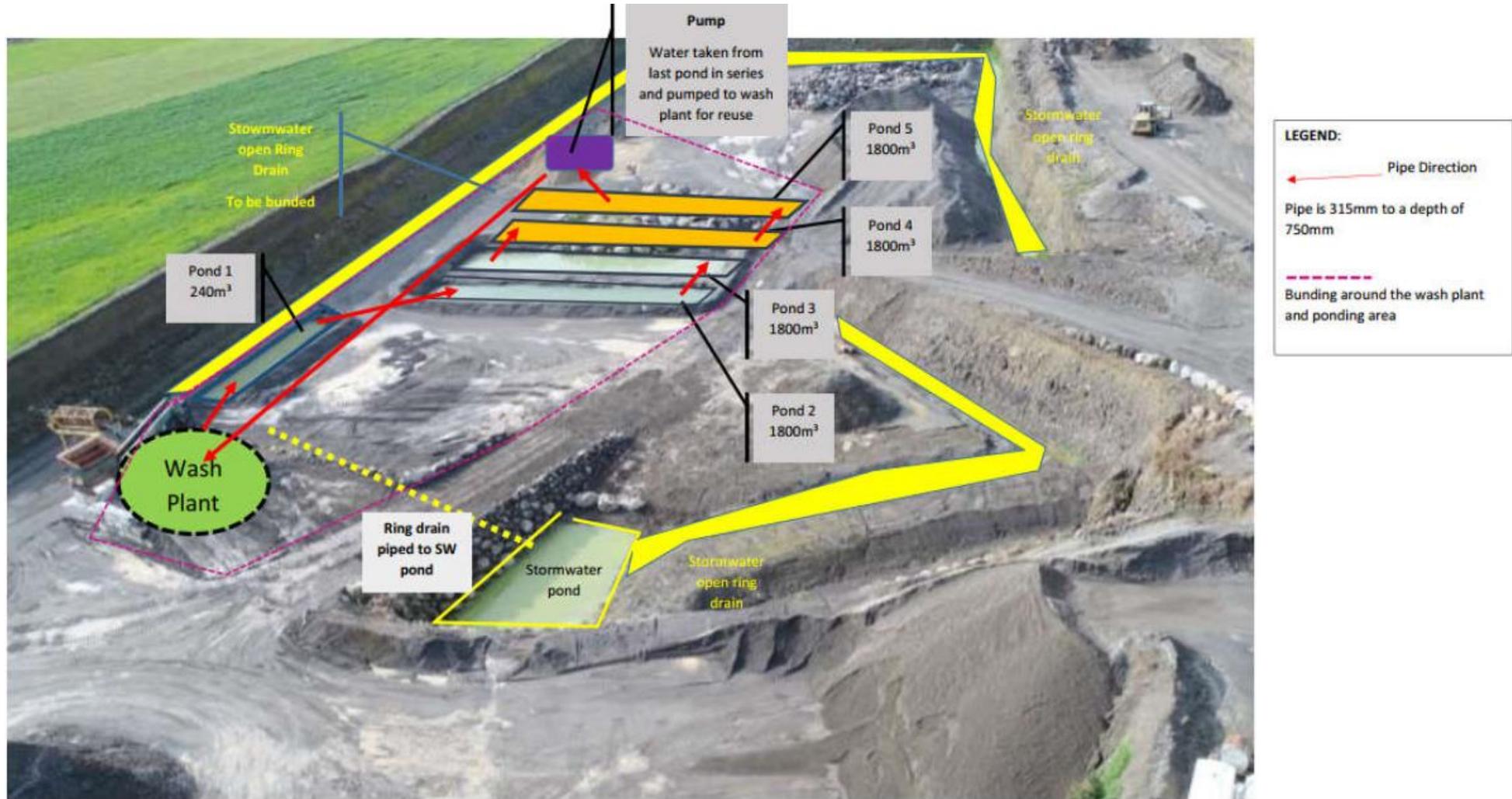


Figure 14: Wash water closed circuit system

### 3.1.9 Reinstatement methodology

It is intended that the existing quarry area be reinstated back to its primary function, to pastoral farmland.

Conditions 8 - 11 in the STDC consent RML14076 state the methodology for reinstatement.

*“8. That the quarry operator progressively reinstates the site as identified in the application while restricting the area exposed for quarrying to not greater than 0.5 hectares in size. This reinstatement should include levelling, consolidating and seeding of the areas previously quarried.*

*9. That all material used for backfill and reinstatement work must be natural resources sourced from the site. At no time must miscellaneous material or matter be used in the reinstatement process that may result in contamination of the site.*

*10. That the quarry operator notifies the Council, Te Runanga o Ngaati Ruanui and Te Korowai o Ngaruahine in writing when gravel extraction in each area (as identified in the quarry and stream realignment plan) has been completed.*

*11. That the reinstatement of any area where gravel extraction has ceased is fully completed within 18 months of the extraction activities concluding.”<sup>5</sup>*

## 4 Proposed Quarry Activity

Fundamentally what is sought by this application is to extend the existing quarry. The section below outlines the proposed expansion area and describes any key changes to the operation of the site going forward.

The applicant intends to extract 1,100,000m<sup>3</sup> of material from the extraction area. Based on this quantity the resource area identified will be excavated out roughly over a 15-20 year period, depending on demand fluctuations.

### 4.1 Proposed Expansion Area

It is proposed to expand the quarry by 7.6 hectares (76,000m<sup>2</sup>) into the area north of the existing quarry area (Figure 15). This area is undulating to rolling in contour, currently in pasture.

This area is bounded by the Waingongoro River, to the north and west (Figures 15 - 18).

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<sup>5</sup> South Taranaki District Consent RML14076, granted 11 August 2015.



Figure 16: Proposed area to be quarried outlined in purple.



Figure 15: Western side of the proposed expansion area.



Figure 17: Eastern side of the proposed expansion area

The Quarry Management Plan further details the proposed activity, which is attached as Appendix B. This details how sediment from the quarry extraction practises will be managed.

The long-term intention is to reinstate the land back to its primary function as pastoral farmland., to reinstate the tributary natural flow path with re-contouring of Area A to encourage ponding in a low-lying area, for stormwater runoff and potentially some seepage from the pastoral area prior to entering the tributary as part of the reinstatement, in lieu of the previously proposed wetland area in the south-eastern corner of the existing quarry. The purpose of the previously proposed wetland (Refer to TRC consent 7845-1.1 Condition 1) was not related to mitigation of effects but rather a method to reduce the volume of overburden required to reinstate. The landowner would now prefer a pond be located in the expansion area and this is the reason for the proposed change in location.

#### 4.1.1 Quarrying Methodology

The proposed quarrying methodology is outlined below. For the purposes of description, the proposed expansion Area has been delineated into two sites A and B.

##### 4.1.1.1 Extraction Areas

The proposed quarry expansion area is roughly rectangular in shape with dimensions of approximately 140m by 530m. This area to be quarried has a surface area of approximately 7.6 hectares (76,000m<sup>2</sup>). It is proposed to extract down to a total depth of 17m (up to 8-10m above the water table, and 7-8m below the water table). The proposed extraction site is outlined in purple in Figure 18 below.

The edge of the extraction area will be at least 25m from the bed of the Waingongoro.



Figure 18: Extraction areas A and B within the purple lines.

#### 4.1.1.2 General staging of extraction, and overburden removal

Over the next four years the existing quarry working area will be progressively reinstated. This is discussed below.

The proposed extraction areas A and B (outlined in purple in Figure 18) will be extracted in stages.

##### Extraction Area A (38,000m<sup>2</sup>)

Area A will be extracted first over four stages, in order from A1 to A4 (Figure 19).



Figure 19: Staging of Extraction Area A

Table 3: Extraction Area A detail

| Area  | Size (m <sup>2</sup> ) | Overburden (m <sup>3</sup> ) | Resource material (m <sup>3</sup> ) | Timeframe (months)  |
|-------|------------------------|------------------------------|-------------------------------------|---------------------|
| A1    | 11,000                 | 33,000                       | 154,000                             | 36                  |
| A2    | 9,000                  | 27,000                       | 126,000                             | 24                  |
| A3    | 9,000                  | 27,000                       | 126,000                             | 22                  |
| A4    | 9,000                  | 27,000                       | 126,000                             | 20                  |
| Total | 9,000                  | 27,000                       | 126,000                             | 102 months (8.5yrs) |

#### Extraction Area A1

Topsoil will be stripped over a period approximately 2 weeks. The 33,000m<sup>3</sup> of overburden will be placed in areas A and B (as shown outlined in orange in Figure 18) as part of reinstatement. The extraction program of Area A1 will be completed in 3 years. This area will be left open for the following two years and progressively reinstated as areas A2, A3 and A4 are extracted.

#### Extraction Area A2

Topsoil will be stripped and stored around the perimeter of the extraction area. The rest of the overburden will be stripped and stored on the adjacent extraction area (A3). A small portion will be transported and deposited in deposit Area B shown in Figure 18. The andesite in this area will take two years to extract.

#### Extraction Area A3

Topsoil will be stripped and stored around the perimeter of the extraction area. The rest of the overburden will be stripped and stored on the adjacent extraction area (A4) well away from the river. The andesite in this area will take just under two years to extract.

#### Extraction Area A4

Topsoil will be stripped and stored around the perimeter of the extraction area. The rest of the overburden will be stripped and stored on the adjacent extraction area (B4) well away from the river.

#### **Extraction Area B (38,000m<sup>2</sup>)**

Andesite material from extraction area B will be extracted once extraction area A has been fully exhausted. This area will be extracted in order from B4 - B1 (Figure 20).

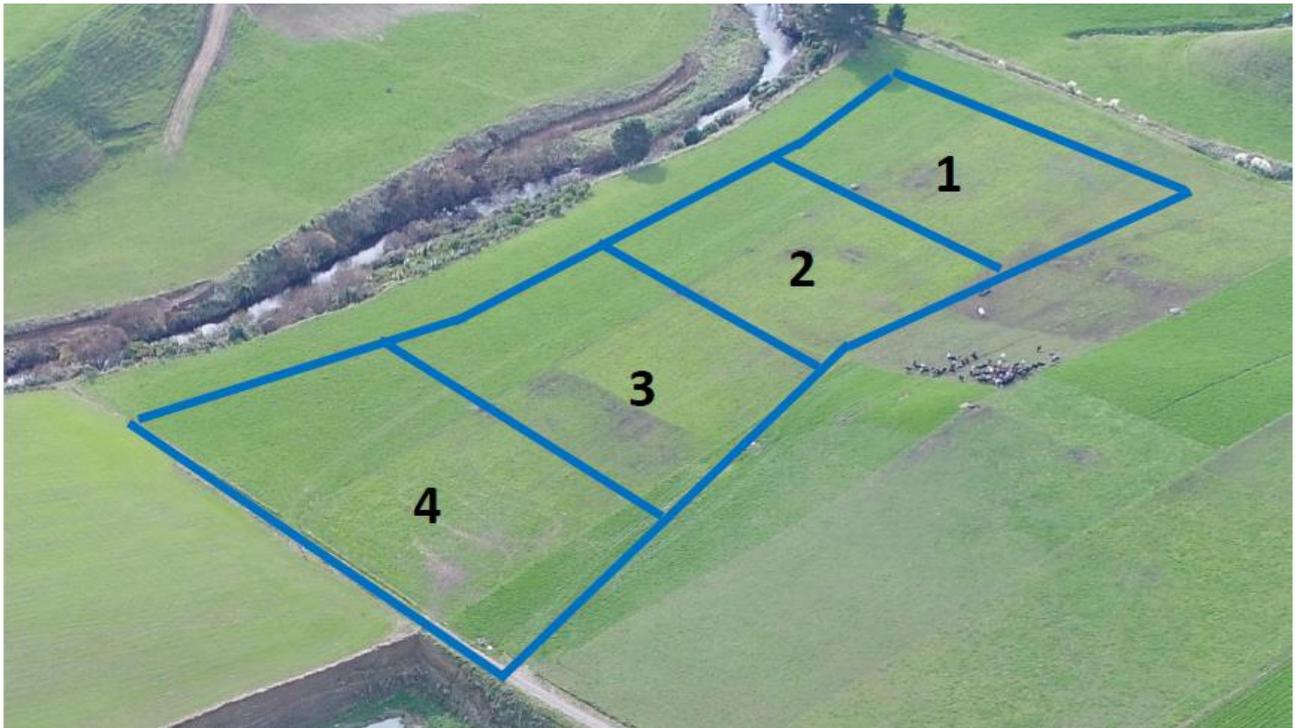


Figure 20: Staging of Extraction Area B

Table 4: Extraction Area B detail

| Area  | Size (m <sup>2</sup> ) | Overburden (m <sup>3</sup> ) | Resource material (m <sup>3</sup> ) | Timeframe (months) |
|-------|------------------------|------------------------------|-------------------------------------|--------------------|
| B4    | 10,000                 | 30,000                       | 140,000                             | 20                 |
| B3    | 10,000                 | 30,000                       | 140,000                             | 20                 |
| B2    | 10,000                 | 30,000                       | 140,000                             | 20                 |
| B1    | 8,000                  | 24,000                       | 112,000                             | 18                 |
| Total | 38,000                 | 114,000m <sup>3</sup>        | 532,000                             | 78 months (6.5yrs) |

#### Extraction Area B4

Topsoil will be stripped and stored around the perimeter of the extraction area. The rest of the overburden will be stripped and stored on the adjacent extraction area (B3) well away from the river. The andesite in this area will take approximately 20 months to extract.

#### Extraction Area B3

Topsoil will be stripped and stored around the perimeter of the extraction area. The rest of the overburden will be stripped and stored on the adjacent extraction area (B2) well away from the river. The andesite in this area will take approximately 20 months to extract.

#### Extraction Area B2

Topsoil will be stripped and stored around the perimeter of the extraction area. The rest of the overburden will be stripped and stored on the adjacent extraction area (B1) well away from the river. The andesite in this area will take approximately 20 months to extract.

#### Extraction Area B1

Topsoil will be stripped and stored around the perimeter of the extraction area. The rest of the overburden will be stripped and stored south of B1. The andesite in this area will take approximately 18 months to extract.

Note: Once the existing quarry areas A and B (as shown in orange in Figure 18) are reinstated, there will be a maximum of two extraction areas exposed (A1 - A4 or B1 -

B4) at any one time. The first area will be in a process of reinstatement and the other will be the extraction area with fines and overburden used to reinstate the first area.

Refer to Appendix H for a timeline of extraction and reinstatement of each area.

Note: During the on-going reinstatement of extraction area B, an access way will be retained through the south side of extraction areas B4, B3 and B2, to provide access from the open plant area to B1. Therefore, extraction areas B2-4 will only be partially reinstated, until section B1 is extracted and then fully reinstated.

#### 4.1.1.3 General Extraction methodology

The same extraction methodology as has occurred on the site to date will be used for the expansion area. Given the stable geology of the site no changes to the methodology are considered necessary.

Slope batters will be a 5:1 ratio (as per the existing site) including in the area to be extracted below ground water table. Benching can be undertaken, if required, if less stable conditions are encountered. However, based on existing knowledge of the site this is not proposed at this stage.

#### 4.1.1.4 Detailed Extraction methodology

The following detailed extraction methodology will be applied in each extraction area (i.e A1, A2, A3, A4, B1, B2, B3 and B4);

Extraction will occur above the water table, across the entire block (eg A1) in long strips, to a depth of 8-10 metres below existing ground level.

Extraction below the water table will then be carried out in approximately 8 stages of 25m by 25m (625m<sup>2</sup>) square blocks, to a depth of 7 – 8m. The exposed extraction face will move towards the river progressively. Each block will have an approximate volume of 5000m<sup>3</sup>. This will also be extracted in strips.

Extraction and backfill of a square block will take approximately 4 weeks. Over a 4 week period, the extraction face would increase from 10m to 17m depth then over a few days of reinstating will be reduced back to 10m depth again.

This is to ensure that the extraction face exposure at the closest point of the river, below the water table, is limited and exposed for the shortest period of time.

#### 4.1.1.5 Overburden and topsoil stockpiling

The overburden from each stage will be either stored around the adjacent extraction area or relocated to deposit sites A and B for restoration, as explained in the above section 4.1.1.2.

Only topsoil will be stored around the perimeter, at a depth of approximately 300mm thick. This will be hydro-seeded as soon as practical to minimise the risk of erosion and silt runoff. Topsoil will be stored at a minimum of 25m from bed of the Waingongoro River.

Clay overburden stock piles, of around 2.5m depth, will be stored well away from the river, on the next adjacent extraction area.

#### 4.1.1.6 Dewatering process

As the proposed extraction will go below the water table, dewatering will be required.

Water will be pumped from the proposed extraction areas to three ponds. These will be established in the open working area (see Figure 21 below), and progressively serve each extraction area as required.

The pumping rate of abstraction will not exceed 40l/s and will cease when the flow in the Waingongoro River is at or below 821 l/s (2/3 MALF, in accordance with recommendation in the Hydrology Assessment)

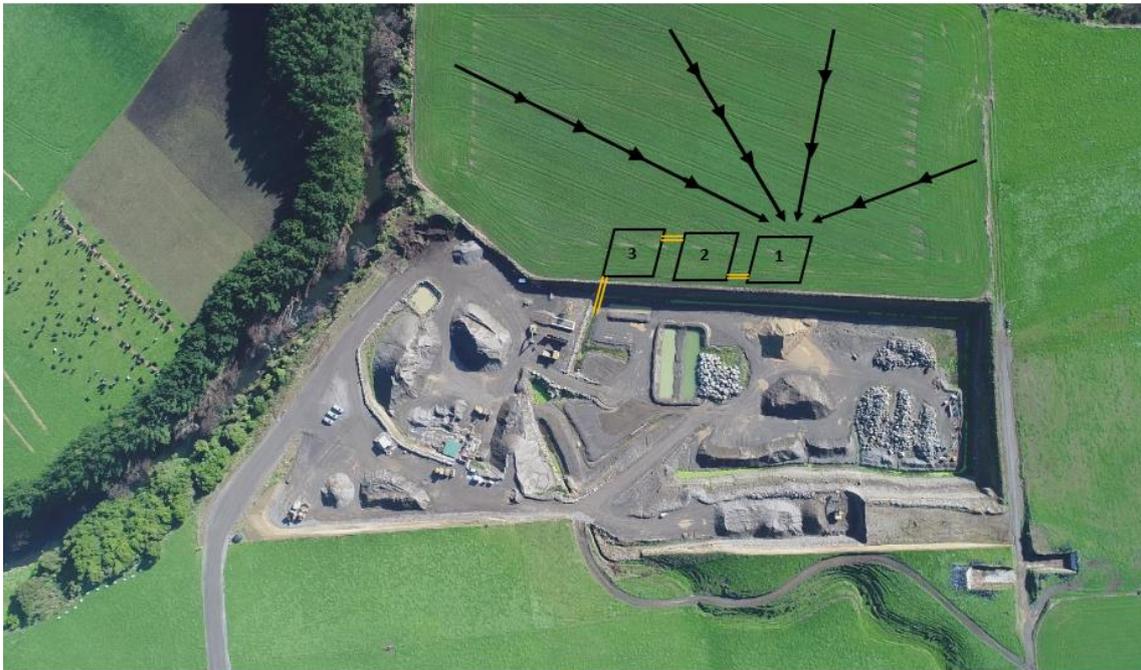


Figure 21: Proposed dewatering filtration system

These ponds will be 30m long x 30m wide x 6m deep. Each pond will hold approximately 5,400m<sup>3</sup> of water, which equates to 5,400,000L. In total the three ponds will have a holding capacity of approximately 16,200,000L (16,200m<sup>3</sup> x 1000L).

The water will enter the ring drain system, which will go through the existing stormwater system as explained in section 3.1.7 above. The ring-drain will also catch water that may leach from the sides of the new extraction face.

## 4.1.2 Hours of Operation

### 4.1.2.1 Quarry operation hours

The hours of operation are limited to 7:00am – 7:00pm Monday to Friday, and Saturdays from 8:00am – 4:00pm. This is an extension of four hours on a Saturday, is to provide for general quarry work to prepare for the next week, quarry maintenance, quarry stockpiling and office activities on-site only.

Saturdays are critical for maintenance, servicing and general prep work for the next week. Refer to Figure 22 below which shows the sign at the gate of the quarry, stating the shop hours

Staff will generally arrive and leave outside of these hours for safety and security reasons, e.g. at times our crew will gather before 7:00am to have safety tool box meetings, machinery checks, and carry out site checks.

### 4.1.2.2 Shop hours

Truck movements to and from of the site will continue to be limited to between 7:00am to 5:30pm Monday to Friday, and 8:00am to 12:00pm Saturdays. The applicant will continue to actively discourages truck movements on Saturday mornings, and those that enter site will by prior arrangement only.

A new sign and protocol for Staff working on Saturdays has been recently introduced. The gate is closed so the sign is displayed as shown in Figure 22.



Figure 22: Sign at the gate of the quarry

#### 4.1.3 Staff

There are 3-4 full time equivalent staff employed at the site. On occasions there are also up to 2 contractors on site, for machinery maintenance purposes, or for overburden removal. There will be no change to staff numbers on-site.

#### 4.1.4 Site Layout

Refer to Figure 10 in section 3.1.3 of this report for existing site layout.

No significant changes to the existing open working area will be required until extraction of Areas B1 – B4 commences in approximately 10 years (refer to Appendix H for an indicative timeline).

Changes to site layout at this point would likely involve use of the, 'yet to be purchased' mobile plant given the distance from the open working area to Extraction Area B.

The existing washwater system will be used and maintained throughout the life of the quarry.

The existing stormwater settlement ponds system will be used and maintained throughout the life of the quarry, but the drainage path from each quarry area will be established prior to commencement of each stage and be removed as part of reinstatement as each stage progresses. This will maintain a broadly constant flow of stormwater to the existing ponds for settlement and seepage to land.

Details of stormwater and washwater management systems refinements are addressed in sections 3.1.7 and 3.1.8 of this application respectively.

A larger 'open working area' is proposed in this application to match the existing refinements to site layout already made by the applicant in the last two years. These site layout enhancements provide for a safer working space (e.g limiting flow of non-quarry vehicles into working areas) and additional shelving space for stock piling of quarry product, as well as reducing potential dust effects.

To work a safe operation, the applicant proposes to have a minimum open working area of 2.5 hectares. This area will include the;

- Entrance road
- Safe traffic road/ internal roads
- Stock pile area
- Two plant processing areas
- Separate area for visitor parking, site office and machinery parking.

This area will also allow the quarry to hold up to 12,000m<sup>3</sup> of product in stock.

Note: The open working area refers to the permanent open area (which includes the above bullet points). This area is distinct from the quarry face extraction area.

#### 4.1.5 Equipment

The permanent equipment typically onsite includes the following;

- A main plant (primary crushing plant, secondary crushing plant, and a generator),
- A Wash plant (a pump, sand wheel, screen and trammel),
- Digger x3 (Volvo EC300, Komatsu PC18MR-3 and a Komatsu PC360LC-11)
- Loader truck x2 (Komatsu WA380)
- Screening machine (Portafill CT5000)
- Allied Fuel Pump x2,
- Dump truck (Komatsu HA250-3)
- Excavator x3 (30T hydraulic excavator, 36T hydraulic excavator, 1.8T excavator).

Additional equipment required for the proposed expansion of the quarry may include the following;

- A mobile crushing unit
- Dewatering pump
- Bulldozer (Komatsu D53 dozer).

#### 4.1.6 Traffic and Access

This application seeks consent to continue to generate traffic movements as recorded in section 3.1.5 of this report.

The existing scale of traffic movements is consistent with projected quarry activity. No further increase in traffic volume beyond existing will be required for the proposed quarry activity.

Consent is sought for a maximum of 80 heavy vehicle movements per day (40 truckloads), with a maximum of 120 heavy vehicle movements per day, being 60 truckloads, for 10 days of the year.

This increase is to cater for the variable periods where there are no movements due to adverse weather condition events, and to assist with delivering on major contract work at peak times. This will accurately reflect what is occurring onsite, and would enable the operation to adequately support the level of growth and development in the region.

The existing heavy vehicle traffic routes will continue to be used by future quarry traffic. Customers will be reminded not to use Katene Road. This is made clear in the Freight Vehicle Management Plan (attached as Appendix F).

No change to the location or configuration of the Quarry entrance is proposed.

## 4.2 Proposed Mitigation and Management Measures

### 4.2.1 Management Plans

The application includes two management plans that are live documents to guide the ongoing management of the quarry operations. These are:

- Quarry Management Plan (QMP) attached as Appendix B
- Freight Vehicle Management Plan (FVMP) attached as Appendix F

The QMP details site preparation, extraction methodology, operation and management of the quarry. It specifies requirements for fuel storage, access and transport, control of noise, stormwater and dust controls. It set out the accidental discovery protocol requirements and includes details about reinstatement of the existing area and proposed extraction areas.

The FVMP was developed in June 2019 to specifically address a number of the community concerns relating to historic traffic behaviour and effects of quarry customers using Whenuku Road. This plan sets out freight vehicle restrictions, traffic management methods, speed restrictions and complaints procedures and monitoring.

### 4.2.2 Whenuku Road Upgrade

STDC has partially completed a project to upgrade and widen the full length of Whenuku Road from a single lane to a sealed two-lane rural road. The works were not completed prior to COVID-19 lockdown and are expected to be completed as soon as practical.

The purpose of the upgrade and widening of the road is to ensure the road is suitably designed and maintained to accommodate the existing and future traffic likely to be generated by the quarry, including light and heavy vehicles.

This is evidenced by a formal 'road maintenance agreement' between STDC Roding and the applicant. This agreement confirms ongoing financial contribution by the applicant to ensure that the road is appropriately maintained to a standard able to accommodate the quarry traffic and safe for other road users such as residents of Whenuku Road.

Completion of this road upgrade project is expected to address a number of concerns raised in submissions to application RML20041 lodged with STDC seeking approval to allow heavy vehicle movements at current levels, in exceedance of the limits imposed on the existing quarry activity consent (RML14076). This is addressed in section 6 of this report.

### 4.2.3 Stormwater and Drainage

The stormwater will be treated via the settlement ponds. (Refer to Figure 12 in section 3.1.7). The concept is to use 2 ponds for sequential settling of sediment. One pond at the top end of the pipe extends to the Waingongoro River. This finishing pond is located in the section of the quarry being reinstated and the settling pond would be located at the bottom of the section currently being quarried. The ponds are sized at 200 cubic meters/ha of planned quarry for each new strip.

As each section of the quarry 'expansion area' is opened a new settling pond will be constructed in conformance with the earthworks guideline and the old settling pond will become the new finishing pond. Sediment from the settlement pond will be removed prior to it becoming the new finishing pond. The discharge pipe will be extended to the new finishing pond and the old finishing pond will be drained and reinstated to the same contours as the surrounding land surface. In this leap frog manner, stormwater management will follow the quarrying progression up gradient through the expansion area. The settling pond would receive all surface flow of water from the quarry floor and would be sized for the extent of the current anticipated quarrying phase.

Current processing operations include the crusher, access roads, office, front end loader and stockpiles which are all located in a limited area near the entrance of the quarry. This area will remain the same size for the duration of quarrying and is adequately served by the existing stormwater infiltration pond. It is proposed that this pond continues as a discharge to land.

The stormwater for the proposed expansion area will follow the above detailing unless dewatering is required in which case the stormwater for these areas will be pumped to the dewatering system which will contain 3 new ponds and will discharge through the tributary through to the river.

The proposal is to retain the existing diversion of the unnamed tributary for the proposed expansion area which will be progressively reinstated as the existing quarry working area is reinstated. The long-term intention is to divert the unnamed tributary potentially through a constructed wetland within the 'quarry expansion area' before discharging into the Waingongoro River.

#### 4.2.4 Washwater System

There will be no changes to the existing washwater system as described in section 3.1.8 above, however will include the two additional settlement ponds as required.

In October 2019, Taranaki Regional Council (TRC) granted consent to enable the use of a closed-circuit wash system for aggregate washing purposes.

Any incidental groundwater encountered during excavation activities (and added rainwater) is recycled and used to wash aggregate on site.

Once the water has been used for washing it is treated through a series of settlement ponds before being piped to a main pond for recycling through the wash system again (refer to Figure 13 below). Two ponds are still to be constructed (as per Figure 14).

As it is a closed system that is isolated from the stormwater treatment system, any water that is 'lost' during this process is through land drainage via seepage.

As detailed in the TRC consent 7845-1.2 the ponds have been designed to hold a combined capacity of 7400m<sup>3</sup>. The pond sizes are as follows:

- Pond 1: 4 m x 10 m x 6 m = 240 m<sup>3</sup>
- Pond 2: 10 m x 30 m x 6 m = 1800 m<sup>3</sup>
- Pond 3: 10 m x 30 m x 6 m = 1800 m<sup>3</sup>
- Pond 4: 10 m x 30 m x 6 m = 1800 m<sup>3</sup>
- Pond 5: 10 m x 30 m x 6 m = 1800 m<sup>3</sup>

The settling ponds are bunded (approximately 1m in height) and contoured to ensure separation from the stormwater catchment. For more information on the existing washwater system refer to the TRC consent 7845-1.2.

#### 4.2.5 Cleanfill for Reinstatement

Overburden from the existing quarry extraction area has been utilised within the wider farm, as the intention was to reinstate by creating a deep wetland in the quarry 'expansion area'. Hence no overburden has been retained or stockpiled.

That plan has since been abandoned and the applicant proposes to address the overburden shortfall by replacing the significant fines material quarried from the area, using overburden from extraction area A1 and utilising cleanfill for the balance as detailed below and in section 4.1.1.

It is proposed to rehabilitate the existing open quarry area, and the new expansion area with overburden material sourced on-site as well as with cleanfill material that is proposed to be externally sourced.

It is anticipated that majority of the trucks that will deposit cleanfill material onsite, will also collect aggregate while onsite. For clarity these truck movements are included within the total limits detailed in section 4.1.6 of this application.

The following 'acceptable waste material' only is proposed to be deposited on-site for reinstatement purposes. 'Non-acceptable waste material' listed below will not be deposited.

| Acceptable Waste Material | Non-acceptable Waste Material |
|---------------------------|-------------------------------|
| Clay                      | General waste                 |
| Soils (clean)             | Demolition waste              |
| Rocks                     | Construction waste            |
| Concrete (steel free)     | Any hazardous substances      |
| Brick                     | Metals and plastics           |
| Un-treated timber         |                               |

No materials will be accepted unless they meet the definition of cleanfill in the Guide to the Management of Cleanfills (Ministry for the Environment, 2002).

All persons depositing cleanfill material will be required to sign in at the site office before entering. All loads will be inspected prior to depositing and recorded on a docket book system.

Cleanfill will be deposited directly to the working reinstatement area as it comes in. It will not be stockpiled. These areas will follow as each extraction area is completed and then reinstated as outlined in section 4.1.1. There will be an excavator at the deposit point levelling and contouring the area, with appropriate sediment controls in place.

#### 4.2.6 Reinstatement Methodology for the Existing Quarry Area

It is proposed to reinstate the existing open quarry deposit areas A and B (outlined in orange in Figure 23) with imported cleanfill material, fine materials on-site, and overburden material from extraction area A (outlined in purple).

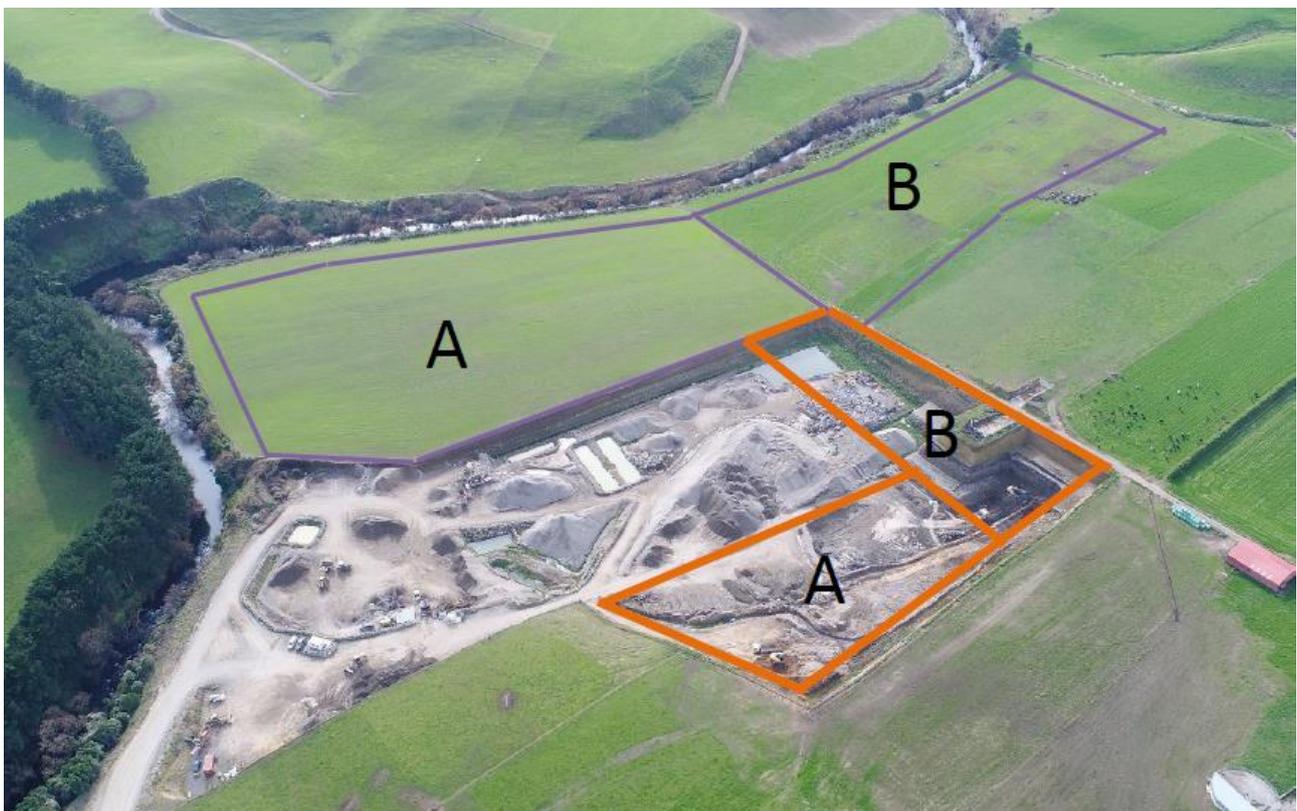


Figure 23: Deposit areas to be reinstated A and B within the orange lines

Deposit area A requires 18,000m<sup>3</sup> of material to reinstate it, and Deposit area B requires 44,000m<sup>3</sup> of material. This equates to a total of 62,000m<sup>3</sup> material needed to restore the two areas in orange.

Overburden from the extraction area A1 (as detailed in section 4.1.1.2) will be relocated to existing open areas A and B for reinstatement. This will make up 53% of the fill required to restore the areas. The remaining 47% (29,000m<sup>3</sup>) will be made up of 20,000m<sup>3</sup> of imported cleanfill being deposited at a rate of 5000m<sup>3</sup> per annum with the remaining 9,000m<sup>3</sup> coming from extraction area A2.

The applicant will complete 200m of the open tributary realignment in the summer of 2020/21 as part of the existing consent and restored with vegetation within the next 2 years. This work will commence in October 2020.

Existing quarry open deposit areas A and B will be reinstated within a 4-year timeframe (Refer to Appendix H).

The details for reinstatement of the existing area are covered in the Quarry Management Plan attached as Appendix B.

#### 4.2.7 Reinstatement methodology for the proposed area

The proposed quarry expansion area will be reinstated progressively using overburden and by using imported cleanfill material.

The extraction areas will be reinstated using the following mix of material:

- 55% clay,
- 25% andesite fines,
- 15% imported clean fill; and
- 5% topsoil.

Reinstatement will occur progressively as follows;

- Grade and contour the resultant surface to provide a free draining base surface
- Spread the overburden and cleanfill material to create a new slope
- Spread the topsoil to provide a consistent depth and contour
- Sow grass seed and fertilise to stimulate for pasture growth.

Cleanfill will be deposited directly to the required reinstatement area. It will not be stockpiled. The dump site location will be wherever the current reinstatement area is.

The overburden material that will be used to reinstate each section will be stored on the adjacent section as explained in section 4.1.1 above.

During the on-going reinstatement of extraction area B, an access way will be retained through the south side of extraction areas B4, B3 and B2, to provide access from the open plant area to B1. Therefore, extraction areas B2-B4 will only be partially reinstated, until section B1 is extracted and then fully reinstated.

Earth will be used from the hill south of the proposed extraction area B will be used to re-contour the landscape of an improved finish for pastoral farming.

Refer to Appendix H for a timeframe on how the proposed extraction area will be reinstated.

The details for reinstatement of the proposed quarry expansion area are covered in the Quarry Management Plan attached as Appendix B.

#### 4.2.8 Wetland

As part of the ultimate reinstatement of the site it is proposed that a portion of the site would be established as a wetland. The wetland would conceptually be:

- Approx. 3m deep,
- shallow at the edges and cover an area of up to approximately 2.5ha,
- the top of the water level would be the water table level where the two settling ponds are now.

This opportunity is possible through the existence of the unnamed tributary that passes through the existing quarry area en-route to the Waingongoro River.

The wetland would be constructed to have a range of depths to allow for various plants to be established. Refer to Figures 24 and 25 below for indicative location and concepts. The applicant intends to engage with Te Runanga o Ngāti Ruanui and Te Korowai o Ngāruahine Trust with regards to co-design of the wetland. This will be canvassed in future engagement with iwi.

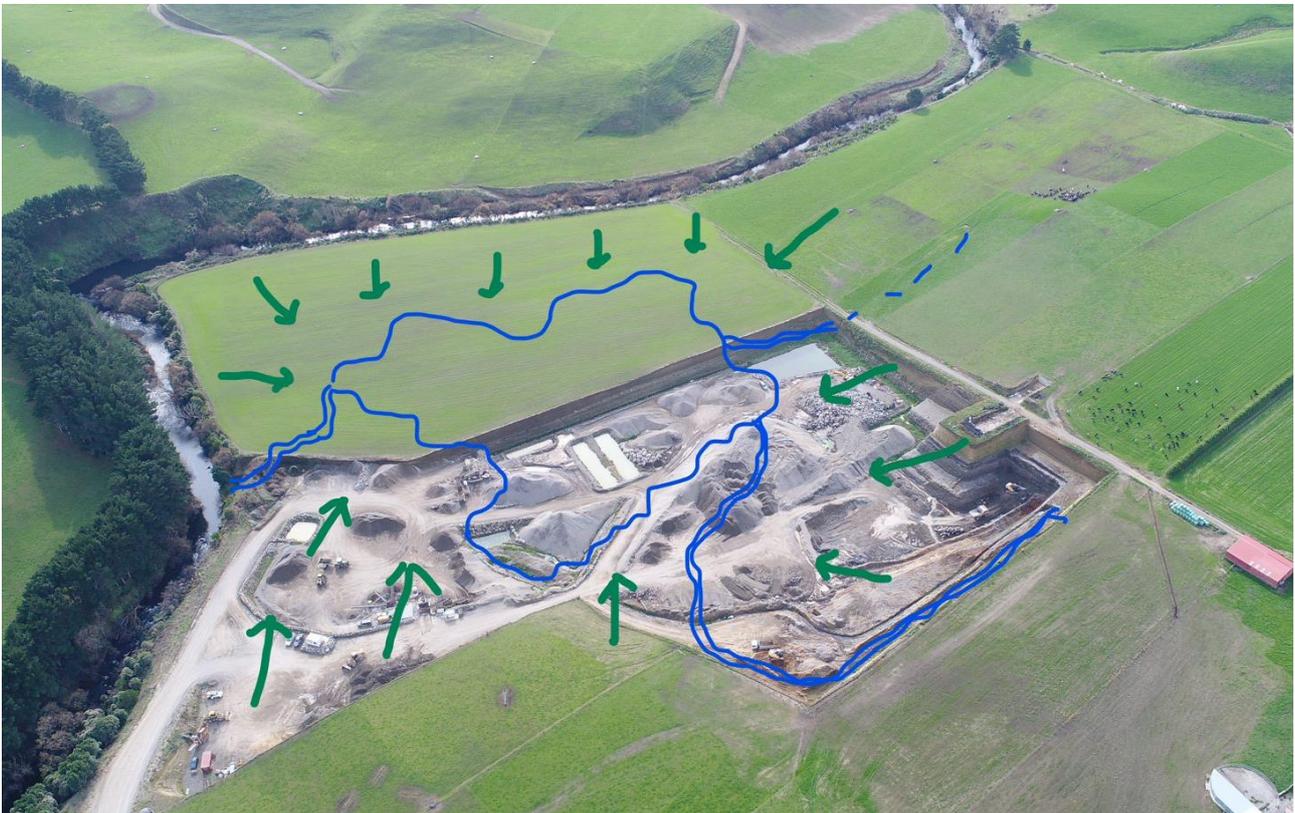


Figure 24: Approximate location of proposed wetland



Figure 25: Indicative concept of wetland and tributary

## 5 Statutory Approvals Sought and Statutory Framework

This section sets out the resource consents sought and briefly outlines the statutory framework for consideration of the Proposal.

A full assessment of the Proposal against the statutory and policy framework is included in Section 10 of this report.

### 5.1 South Taranaki District Council (STDC)

The quarry site is in the Rural Zone of the District Plan and surround by Rural zoned land.

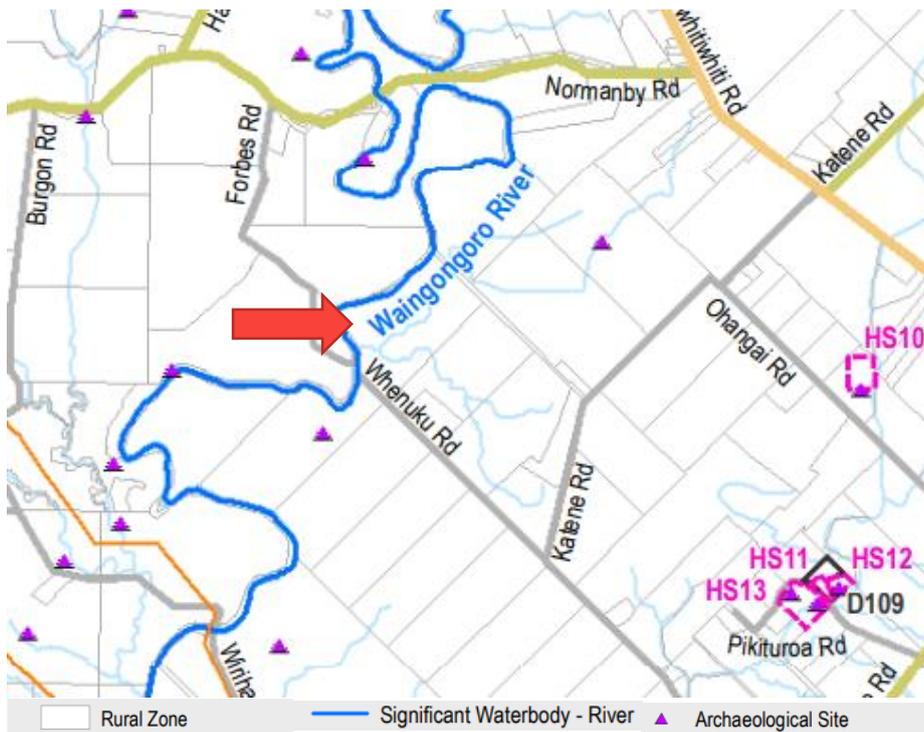


Figure 26: District Council Planning Maps. Red arrow showing the quarry site

The STDC planning map show a number of archaeological sites in the wider area surrounding the subject site with the closest being approximately 300m from the subject site.

The quarry site is adjacent to the Waingongoro River. This river is identified as a ‘significant waterway’ as detailed in Schedule 5 of the District Plan. The Waingongoro River has the following values.

| Significant Waterbody | Natural/Conservation | Natural | Recreational/Access | Heritage/Cultural | Water |
|-----------------------|----------------------|---------|---------------------|-------------------|-------|
| Waingongoro River     | ✓                    | ✓       | ✓                   | ✓                 | ✓     |

### 5.1.1 Relevant Rules

An assessment has been made against the provisions of South Taranaki’s Proposed District Plan (2015). Most of the Proposed District Plan rules now apply. Certain rules were effective immediately from the date of notification of the Proposed District Plan (15 August 2015). There are some Proposed District Plan rules that do not have legal effect as they are part of an ongoing appeal.

The rules relevant to the proposed activities are listed below.

## 5.1.2 Chapter 3: Rural Zone Rules

The provisions in this chapter has been assessed, as the proposal is located within the Rural Zone.

| Rule                                    | Activity   | Comment   |
|---|--|---|
| <b>Proposed District Plan (2015)</b>    |  |   |
| 3.1.1 (n)<br>[Permitted]                | Aggregate/soil extraction  | <p><b>Does not comply</b></p> <p>This activity is permitted in the Rural Zone, provided the activity complies with all relevant permitted activity Performance Standards in section 3.2 and all other sections of the District Plan.</p> <p>The proposal cannot meet all of the relevant standards. These are listed in the below table. Specifically, the proposal exceeds the defined annual extraction rate and will be undertaken within 50m of the Waingonoro River.</p> <p>Therefore, the activity is considered under rule 3.1.4 (a).</p>  |
| 3.1.3 (b)<br>[Restricted Discretionary] | Any activity that will generate unusual heavy vehicle traffic.   | <p><b>Triggered</b></p> <p>The proposal involves heaving vehicle traffic</p> <p><i>Matters to which the Council restricts its discretion:</i></p> <ul style="list-style-type: none"> <li>(i) <i>Avoiding, remedying or mitigating the effects of the increase in heavy vehicle movements beyond the boundary of the site.</i></li> <li>(ii) <i>Road safety, maintenance and upgrades.</i></li> <li>(iii) <i>Dust.</i></li> <li>(iv) <i>Noise.</i></li> <li>(v) <i>Hours of operation.</i></li> <li>(vi) <i>Heavy vehicle Traffic routes</i></li> <li>(vii) <i>Access.</i></li> <li>(viii) <i>Whether a review condition is necessary</i></li> <li>(ix) <i>Financial contributions.</i></li> </ul> |
| 3.1.4 (a)<br>[Discretionary]            | Aggregate/Soil Extraction which does not meet one or more of the performance standards in Section 3.2.11, except within the National Grid Yard (refer Rule 3.1.3(k) or Rule 3.1.5(c)(vi)) or in the Coastal Protection Area (refer Rule 17.1.5(a)(i)). | <p><b>Triggered</b></p> <p>The proposed activity does not meet the performance standards in section 3.2.11, as shown in the table below.</p>  |

Table 5: 3.2 Performance Standards - Permitted Activities

The performance standards relevant to the proposal has been assessed against below.

| 3.2.7 Access and Rooding   | Comment  |
|--|--|
| All activities shall be provided with practicable vehicle access from a road, and on-site parking, manoeuvring areas and loading facilities in accordance with the permitted activity standards in Section 10: Parking and Transportation.   | Complies   |
| 3.2.11 Aggregate/Soil Extraction   | Comment  |
| <p>1. Aggregate/Soil Extraction shall comply with the following standards:</p> <p>(i) Not exceed 1,000m<sup>3</sup> of extracted material within any site per 12 month period.</p> <p>Setbacks of:</p> <p>(a) 150m from existing dwelling units, home occupations and sensitive activities on sites under separate ownership</p> <p>(b) 20m from identified heritage building/object in Schedule 1A, historic site or sites of significance to tangata whenua in Schedule 1B.</p> <p>(c) 100m from Significant Natural Areas in Schedule 2</p> <p>(d) 100m from the Patea River.</p> <p>(e) 50m from a Significant Waterbody in Schedule 5 identified with natural hazard values, and</p> <p>(f) 30m from all other Significant Waterbodies in Schedule 5</p> <p>(ii) Not use blasting as a method of exploration or extraction unless a copy of the necessary licence obtained from Worksafe New Zealand has first been submitted to the Council, and at least 48 hours' notice has been given to all property owners and occupiers within a 1 km radius of the blasting site.</p> <p>(iii) Provide landscaping and planting of at least 2 m depth at site boundaries where the extraction area is visible from a public road, public place, or any dwelling unit on a site in separate ownership.</p> <p>(iv) Achieve compliance with Performance Standards 3.2.14 Earthworks in the National Grid Yard.</p> <p>(v) All excavated and disturbed areas shall be progressively rehabilitated (except where</p> | <p>(i) The proposed activity will exceed 1,000m<sup>3</sup> of extracted material.</p> <p>Complies with (a)</p> <p>Complies with (b)</p> <p>Complies with (c)</p> <p>Complies with (d)</p> <p>(d) The Waingongoro River is identified as a Significant Waterbody in the District Plan. The proposal does not comply with this set back.</p> <p>(f) Not applicable as (e) applies.</p> <p>Complies - No blasting proposed</p> <p>Can be designed to comply.</p> <p>Not applicable</p> |

|  |   |
|--|---|
| <p>otherwise used for permitted activities or provided for by resource consent conditions). Any planting (grass or other vegetation) shall take place as soon as practicable (within the next growing season) following the completion of the excavation activity.</p> | <p>Mirrors existing consent conditions.<br/>                 Can be designed to comply.</p> |
|--|---|

**Comment:**

Under Chapter 3 in the South Taranaki District Plan, the proposal requires consent pursuant to Rule 3.1.3 (b) as a restricted discretionary activity, and consent pursuant to Rule 3.1.4 (a) as a discretionary activity.

**5.1.3 Chapter 11: Noise Rules**

The proposal has been assessed under the provisions in this chapter.

| Rule                                 | Activity                             | Comment  |            |                                 |             |                                 |             |                                 |             |                                      |
|--------------------------------------|--------------------------------------|--|------------|---------------------------------|-------------|---------------------------------|-------------|---------------------------------|-------------|--------------------------------------|
| <b>Proposed District Plan (2015)</b> |                                      |  |            |                                 |             |                                 |             |                                 |             |                                      |
| 11.1.1 (a)<br>[Permitted]            | Noise                                | <p><b>Complies</b></p> <p>All activities are permitted provided that they comply with the relevant performance standards in Section 11.2.</p> <p>The relevant standards are listed below.</p>  |            |                                 |             |                                 |             |                                 |             |                                      |
| 11.2.2 (1)                           | Noise                                | <p><b>11.2.2 RURAL ZONE AND TOWNSHIP ZONE</b></p> <p>1. Noise generated by any activity in the Rural Zone and Township Zones shall not exceed the following noise limits when measured at any point within the boundary of any other Rural Zoned or Township Zoned site:</p> <table border="1" data-bbox="624 1227 1062 1413"> <tr> <td>7am to 7pm</td> <td>55dBA L<sub>Aeq</sub> (15 min)</td> </tr> <tr> <td>7pm to 10pm</td> <td>50dBA L<sub>Aeq</sub> (15 min)</td> </tr> <tr> <td>10pm to 7am</td> <td>45dBA L<sub>Aeq</sub> (15 min)</td> </tr> <tr> <td>10pm to 7am</td> <td>75dBA L<sub>Amax</sub><sup>3</sup></td> </tr> </table> <p>Note: This rule is under appeal in the Proposed District Plan.</p> | 7am to 7pm | 55dBA L <sub>Aeq</sub> (15 min) | 7pm to 10pm | 50dBA L <sub>Aeq</sub> (15 min) | 10pm to 7am | 45dBA L <sub>Aeq</sub> (15 min) | 10pm to 7am | 75dBA L <sub>Amax</sub> <sup>3</sup> |
| 7am to 7pm                           | 55dBA L <sub>Aeq</sub> (15 min)      |  |            |                                 |             |                                 |             |                                 |             |                                      |
| 7pm to 10pm                          | 50dBA L <sub>Aeq</sub> (15 min)      |  |            |                                 |             |                                 |             |                                 |             |                                      |
| 10pm to 7am                          | 45dBA L <sub>Aeq</sub> (15 min)      |  |            |                                 |             |                                 |             |                                 |             |                                      |
| 10pm to 7am                          | 75dBA L <sub>Amax</sub> <sup>3</sup> |  |            |                                 |             |                                 |             |                                 |             |                                      |

The Performance Standards apply to all permitted activities, except those exempt from the standards as set out in Section 11.2.1.

Table 6: Section 11.2.1 Activities that are exempt from the Noise Performance Standards

| <b>11.2.1 ACTIVITIES THAT ARE EXEMPT FROM THE NOISE PERFORMANCE STANDARDS</b>  |   |
|--|---|
| The following activities are exempt from the specific noise performance standards, but which shall be controlled separately by reference to and Sections 16 and 17 of the RMA and by the application of relevant New Zealand Noise Standards where these are applicable: |   |
| <b>Activity</b>  | <b>Comment</b>  |
| (b) Vehicles being driven on a road (within the meaning of Section 2(1) of the Transport Act 1998), or within a site as part of or compatible with a normal residential activity.  | The noise associated with the vehicles from proposed quarry expansion is exempt from Rule 11.1.1 (a). |
| (d) Sounds specifically generated by construction, maintenance and demolition activities which shall be assessed, managed and controlled by reference to NZ S6803:1999 Acoustics – Construction noise.   | The noise associated with the construction from proposed quarry expansion is exempt from 11.1.1 (a).  |

Table 7: Section 11.2 Performance Standards – Permitted Activities

| <b>Standard</b>  | <b>Comment</b>  |
|--|---|
| 11.2.2<br>Noise generated by any activity in the Rural Zone and Township Zones shall not exceed the following noise limits when measured at any point within the boundary of any other Rural Zoned or Township Zoned site:<br>7am to 7pm ..... 55dBA LAeq (15 min)<br>7pm to 10pm ..... 50dBA LAeq (15 min)<br>10pm to 7am ..... 45dBA LAeq (15 min)<br>10pm to 7am ..... 75dBA L <sub>max</sub> | <b>Complies</b><br>The noise generated by the proposal will comply with this standard. Refer to the Acoustic Report attached as Appendix D. |
| (e) Sounds specifically generated by construction, maintenance and demolition activities which shall be assessed, managed and controlled by reference to NZ S6803:1999 Acoustics – Construction noise.   | The noise associated with the construction from proposed quarry expansion is exempt from 11.1.1 (a).  |

**Comment:**

Noise generated by quarrying activities during the operating hours are predicted to achieve the 55 dB LAeq(15 min) noise criteria when assessed at the notional boundary of all adjacent residential dwellings. Noise levels are also predicted to be below the South Taranaki District Plan site boundary noise limits apart from at 76 Forbes Road, and 113 Katene River. However, the elevated noise areas do not occur over an area used for residential activity, affecting only pastoral farmland.

### 5.1.4 Summary

In summary the following consents are required from the South Taranaki District Council;

- Land use consent (restricted discretionary) pursuant to Rule 3.1.3 (b) as the proposal will generate heavy traffic.
- Land use consent (discretionary) pursuant to Rule 3.1.4 (a) as the proposal will exceed the extraction volumes and does not meet set back distances from the River.

Overall, consent for a **discretionary activity** is required.

## 5.2 Taranaki Regional Council

A brief assessment has been made against the provisions of the Taranaki Regional Fresh Water Plan (2001). The rules relevant to the proposed activities are listed below:

| Rule  | Standards  | Compliance?  |
|---|--|--|
| <p><b>Rule 18</b><br/>[Permitted]</p> <p>Damming or diversion of water from a river or stream (excluding diversion or damming for the purposes of river and flood control, land drainage, or from wetlands listed in Appendix II)</p> | <ul style="list-style-type: none"> <li>• Catchment area upstream of the damming or diversion is not more than 25 ha;</li> <li>• Any dam or weir has a maximum height (measured vertically from the downstream bed to the crest) of not more than 3m;</li> <li>• Structure must not impound water beyond the property on which it is built, unless agreed to in writing by that property's owner(s);</li> <li>• Structure must have an auxiliary spillway which is capable of conveying flood flows;</li> <li>• No take for domestic, stock water, school, public water supply, or fire fighting purpose, nor any take under any resource consent, is restricted as a result of the damming or diversion;</li> <li>• There shall be no significant adverse effects on aquatic life or instream habitat;</li> <li>• The activity shall not restrict the passage of fish;</li> <li>• The Taranaki Regional Council shall be informed that the damming or diversion is to occur, at least two working days prior to the commencement of works</li> </ul> | <p><b>Does Not Comply.</b><br/>The catchment area above the site of the diversion exceeds 25 ha.</p> |

| Rule   | Standards   | Compliance?   |
|--|---|---|
| <p><b>Rule 20</b></p> <p>[Discretionary]</p> <p>Damming or diversion of water from a river or lake which does not meet the conditions of Rules 18 and 19</p> |   | <p><b>Triggered.</b></p> <p>As the proposed diversion cannot comply with Rule 18 (above).</p>                                 |
| <p><b>Rule 57</b></p> <p>[Permitted]</p> <p>Construction, placement and use of a culvert, ford or bridge in, on, under or over the bed of a river</p>        | <ul style="list-style-type: none"> <li>• Cross sectional area of the river bed on or over which the culvert, ford or bridge is to be placed (measured from the top of each bank) is no greater than 10m<sup>2</sup>;</li> <li>• Structure shall not alter the natural course of the river nor reduce channel capacity to convey flood flows;</li> <li>• No significant erosion, scour or deposition results from placement of the structure;</li> <li>• Structure shall not restrict the passage of fish;</li> <li>• Excess construction materials shall be removed from the bed;</li> <li>• Sediment disturbance shall not conspicuously change the visual clarity of the water beyond a zone of reasonable mixing<sup>40</sup>;</li> <li>• There shall be no significant adverse effects on aquatic life or instream habitat;</li> <li>• Disturbance of the bed shall be the minimum necessary to carry out the required works;</li> <li>• No contaminants shall be released to the river bed from equipment being used for the activity, and no refuelling of equipment shall take place on any area of the river bed;</li> <li>• Between 1 May and 31 October there shall be no disturbance of any part of the bed covered by water;</li> </ul> | <p><b>Does Not Comply.</b></p> <p>The culvert will alter the natural course of the river and the pipe length exceeds 25m.</p> |

|  |  |  |
|--|--|--|
|  | <ul style="list-style-type: none"> <li>• The Taranaki Regional Council shall be informed that the placement of the structure is to occur, at least two working days prior to the commencement of works;</li> <li>• Culvert is not greater than 1m in diameter, with no more than 1m of fill over the culvert (measured from the bed level to the crest of the fill);</li> <li>• Culvert is not greater than 25m in length;</li> <li>• Ford raises the level of the bed no more than 300mm;</li> <li>• Bridge has no abutments or piers fixed in or on the bed;</li> <li>• Bridge soffit is placed level with or above adjoining ground level at the top of the bank;</li> <li>• No culverts shall be constructed, placed or used within a defined urban catchment</li> </ul> |  |
| <p><b>Rule 74</b><br/>         [Permitted]<br/>         Realignment or modification of a stream or river</p> | <ul style="list-style-type: none"> <li>• Catchment area upstream of the realignment or modification is no more than 25ha;</li> <li>• Drainage channel shall be no greater than 4m<sup>2</sup> in cross-sectional area;</li> <li>• Length of stream or river to be realigned or modified shall not exceed 200m;</li> <li>• No significant erosion, scour or deposition shall result or be liable to result from channel modification;</li> <li>• Realignment or modification shall not restrict the passage of fish;</li> <li>• Realignment or modification shall not cause flooding or erosion of downstream or adjacent properties;</li> </ul>  | <p><b>Does Not Comply.</b></p> <p>The catchment upstream of the tributary exceeds 25ha and the length of the stream to be modified exceeds 200m.</p> |

|   |  |  |
|---|--|--|
|   | <ul style="list-style-type: none"> <li>• Disturbance of the bed is the minimum necessary to carry out the required works;</li> <li>• The Taranaki Regional Council shall be informed that the realignment or channel modification work is to occur, at least two working days prior to its commencement;</li> <li>• There shall be no significant adverse effects on aquatic life or instream habitat</li> </ul>   |  |
| <p><b>Rule 76</b></p> <p>[Discretionary]</p> <p>Excavation, drilling, tunnelling, deposition of any substance, reclamation, and any other disturbance of the bed of a river or lake which is not provided for or does not meet the conditions of Rules 69, 74 and 75</p>  |  | <p><b>Triggered.</b></p>   |
| <p><b>Rule 26</b></p> <p>[Permitted]</p> <p>Discharges of stormwater and sediment deriving from soil disturbance activities of between 1 and 8ha; Into surface water (excluding those wetlands listed in Appendix II) and/or onto or into land in circumstances where sediment from the soil disturbance may enter water.</p> | <ul style="list-style-type: none"> <li>• The discharge shall not derive from an area of soil disturbance greater than 8ha;</li> <li>• The discharge shall not derive from a volume of soil disturbance greater than 24,000m<sup>3</sup>;</li> <li>• The discharge shall not derive from soil disturbance which takes place between 1 May and 31 October;</li> <li>• The discharge shall not derive from soil disturbance which takes place within a defined urban catchment;</li> <li>• Soil stabilisation shall be undertaken as soon as practicable after the completion of the works;</li> <li>• Discharge to surface water shall contain less than 100gm<sup>3</sup> suspended solids;</li> <li>• Discharge to surface water shall not give rise to any or all of the following effects in the receiving water after reasonable mixing:</li> </ul> | <p><b>Does not comply</b></p> <p>Total area of the quarry would exceed 8ha</p> <p>Soil disturbance will be greater than 24,000m<sup>3</sup></p> <p>Soils disturbance (quarrying) will potentially occur all year round</p> |

|  |   |   |
|--|---|---|
|  | <p>(c) the production of any conspicuous oil or grease films, scums, or foams, or floatable or suspended materials;</p> <p>(d) any conspicuous change in the colour or visual clarity;</p> <p>(e) any emission of objectionable odour;</p> <p>(f) the rendering of fresh water unsuitable for consumption by farm animals;</p> <p>any significant adverse effects on aquatic life</p> |   |
| <p><b>Rule 27</b><br/>[Controlled]</p> <p>Discharge of stormwater and sediment into surface water (excluding those wetlands listed in Appendix II), or onto or into land in circumstances where sediment from soil disturbance may enter water, from soil disturbance activities that do not come within or comply with the conditions of Rules 25 or 26</p> | <p>A site erosion and sediment control management plan shall be submitted to the Taranaki Regional Council.</p>   | <p><b>Triggered</b></p> <p>As the proposal cannot comply with Rule 26.</p>  |
| <p><b>Rule 49</b><br/>[Controlled]</p> <p>Taking and use of water from a well or bore which does not meet the conditions of Rule 48.</p>   | <p>The abstraction shall cause not more than a 10% lowering of static water-level by interference with any adjacent bore;</p> <p>The abstraction shall not cause the intrusion of saltwater into any fresh water aquifer</p>  | <p><b>Triggered</b></p> <p>The cone of interference predicted by the dewatering within the extraction area is predicted to be limited to a 500m radius. TRC records show there are no registered abstraction bores within 500m of the quarry.</p> |

### 5.2.1 Summary

In summary the following consents are required from Taranaki Regional Council;

- Consent for the proposed diversion as a discretionary activity pursuant to Rule 20.
- Consent for the discharge of stormwater as a controlled activity pursuant to Rule 27.
- Consent for taking and use of water from a well or bore as controlled activity pursuant to Rule 49 to authorise dewatering (groundwater) below the water table.
- Consent for the modification of a stream as a discretionary activity pursuant to Rule 76.

Overall, consent for a **discretionary activity** is required.

## 5.2.2 Statutory Framework

Section 104 (1) of the RMA states that in considering applications the consent authority must, subject to Part 2, have regard to:

- any actual and potential effects on the environment of allowing the activity;
- any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity; and
- any relevant provisions of—
  - a national environmental standard;
  - other regulations;
  - a national policy statement;
  - a New Zealand coastal policy statement;
  - a regional policy statement or proposed regional policy statement;
  - a plan or proposed plan; and
  - any other matter the consent authority considers relevant and reasonably necessary to determine the application.

The relevant RMA plans and policy statements are:

- National Policy Statement on Freshwater Management 2014 (NPSFM) (amended 2020)
- The Operative Regional Policy Statement 2010; and
- The Taranaki Freshwater Plan;
- Proposed South Taranaki District Plan

Under Section 104(2A) of the RMA, the consent authority must have regard to the value of investment of the existing consent holder when considering an application affected by Section 124 of the RMA. In this regard, significant investments have been made by the applicant, including agreements reached with STDC in relation to upgrading Whenuku Road.

Section 105 of the RMA also states if an application is for a discharge permit or coastal permit to do something that would contravene section 15 or section 15B the consent authority must, in addition to the matters in section 104(1), have regard to—

- The nature of the discharge and the sensitivity of the receiving environment to adverse effects; and
- The applicant's reasons for the proposed choice; and
- Any possible alternative methods of discharge, including discharge into any other receiving environment.

Section 107(1) of the RMA states (except for as provided in subsection 2) a consent authority shall not grant a discharge permit to do something that would otherwise contravene section 15 or section 15A if, after reasonable mixing, the contaminant or water discharged (either by itself or in combination with the same, similar, or other contaminants or water), is likely to give rise to all or any of the following effects in the receiving waters:

- The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
- Any conspicuous change in the colour or visual clarity;
- Any emission of objectionable odour;
- The rendering of fresh water unsuitable for consumption by farm animals; and
- Any significant adverse effects on aquatic life.

These matters are addressed in the subsequent sections of the AEE.

## 6 Assessment of Environmental Effects

The effects of the proposed activity have been assessed below:

### 6.1 Positive Effects

This proposed activity will allow for the extraction of high quality materials, to use in the District and the wider region. The proposed quarry expansion activity will allow for materials for local road construction and other infrastructure projects to be sourced locally. Having a local source available greatly reduces cartage costs, compared to importing material from outside the District. In addition, having locally available materials can reduce fuel costs associated with transporting materials from a greater distance. The rate at which existing resource from the quarry has been excavated and increased demand from customers helps to demonstrate the ongoing need for good quality resource to use in local projects.

The quarry provides for ongoing employment of quarry staff and supports the wider construction industry by supplying resource so that projects are able to be undertaken. The quarry also supports a wide range of local small to medium businesses, i.e. engineering, mechanical, electrical, supplies and hospitality businesses.

The Council is part way through a significant upgrade of Whenuku Road to establish a two-lane road (6m wide) designed to accommodate current traffic movements. This improvement is enabled, in part, through funding from the applicant in recognition of the proposed ongoing use of the road.

The improved safety and quality of the road will benefit all road users, including all farm related milk tankers, stock trucks, rural contractors, tractors, cyclists and private vehicles.

### 6.2 Landscape and Visual Amenity

Quarrying has the potential to cause visual impacts due to the modification of landforms, removing vegetation, exposing large areas of earth, and creating large processing areas and stockpiles.

Land use in the vicinity is predominantly dairy farming.

The quarry site is at the very end of Whenuku Road and is situated largely below the road level. Established trees on the boundary effectively screen the extraction area and operation site to the north and west. Views generally in to the quarry and proposed expansion area are generally limited.

The methodology proposed allows for the progressive reinstatement of the excavated sites. Overburden is to be returned to the land and re-vegetated progressively throughout extraction of the material. Once extraction is complete, the extraction sites are to be reinstated to pasture. The applicant is committed to rehabilitating the site.

Due to the progressive reinstated of the extraction area the long-term effect on landscape and amenity values is considered to be less than minor.

### 6.3 Cultural Effects

The applicant recognises that engagement and collaboration with iwi/ hapū will best achieve a sustainable outcome for the environment which enables expansion of the quarry site. The applicant is continuing to engage with Ngāti Ruanui and Nga Ruahine in relation to cultural values associated with the site and environs. Engagement to date is reported in this application and will continue to be reported to both decision making authorities. Engagement to date is recorded in section 8.2.

In terms of existing policy documents the proposal appears to be generally consistent with the objectives of the Ngāti Ruanui Environmental Plan 2014, as detailed in section 10.6, particularly in regard to formal monitoring of any cultural sites and impacts associated with the proposed activity and preservation of the quality of the surrounding environment especially in regard to the Waingongoro River.

The STDC planning map shows a number of archaeological sites in the wider area with the closest being approximately 300m from the quarry site. The quarry is adjacent to the Waingongoro River. This river is identified as a 'significant waterway' in Schedule 5 of the District Plan which records that River has significant heritage/cultural values.

The hydrological monitoring and assessment of the Waingongoro River and tributaries together with the assessment of the potential effects of the proposed quarry extraction activity, has concluded that water quality will as a minimum be maintained and groundwater flows will be sustained.

Section 2.1.12 of this application has identified, through the freshwater fish database, that a number of rare and threatened indigenous species are likely to be present in the Waingongoro River. Two activities could potentially impact on the quality of aquatic habitats and natural values, being the potential impacts on the baseflows in the River and the discharge of treated/settled washwater from the site. Both these activities have been assessed as having a less than minor potential effect on flows and water quality. It is submitted that the proposed activities will have minimal impacts on natural processes in the River.

Stormwater diversions in place during the quarry operation have the effect of separating 'clean' from 'dirty' stormwater, this increases the effectiveness of the proposed stormwater treatment through the settlement ponds.

No contaminants are to be discharged to waterways and abstraction will be temporary and sustainably managed. Overall mauri of the River and tributaries will likely be preserved.

Disturbance or discovery of archaeological items or physical wāhi tūpuna or wāhi taapu are regulated by the Heritage New Zealand Pouhere Taonga Act 2014. This legislation is administered and enforced by Heritage New Zealand. All persons undertaking land disturbance must abide by such legislation.

Opportunities to monitor works such as removal of overburden and construction of the tributary diversion as well as an invitation to co-design the proposed wetland landscape planting, acknowledge and respect the kaitiaki role of hapū/iwi and provide for ongoing engagement and monitoring to ensure the wider wellbeing of the River and environs is preserved and sustained.

## 6.4 Noise

An acoustic assessment has been undertaken to assess the potential effects of noise that could be generated by the proposed quarrying activity and assess against the relevant standards in the Proposed District Plan.

The assessment concluded that the noise generated by the quarrying activities during the operating hours are predicted to achieve compliance with Rule 11.2.2 (1) of the Proposed District Plan as demonstrated by the Acoustic Report attached as Appendix D. The noise generated by the proposed quarry expansion are predicted to be at a reasonable level which will not have any adverse effects on surrounding residential properties.

“Noise levels are also predicted to be below the South Taranaki District Plan site boundary noise limits apart from at 76 Forbes Road, and 113 Katene River. This however will only affect pastoral farmland and will not occur over an area used for residential activity”.<sup>6</sup>

Overall, the noise generated by the proposed quarry expansion will not have less than minor effects on occupants of the surrounding closest residential dwellings. For more information refer to the Acoustic Assessment attached as Appendix D.

#### 6.4.1 Truck movements

Noise arising from truck engine braking has been recorded as an issue for nearby residents. The applicant installed directive signage and instructions to drivers and freight companies not to use engine braking and to reduce speed to 50km /hr on Whenuku Road in order to mitigate this potential nuisance effect.

The District Plan does not regulate noise created by road users. It is noted that the issue of public road user etiquette is not something that can be readily controlled by the applicant. The intersection is 2.9km from the quarry site. Vehicles other than those associated with the quarry will also use the intersection from time to time.

Following receipt of Submission 1 on the variation application the applicant met with the landowners. The applicant has again formally reiterated the requirement to avoid use of engine brakes at the corner with the main quarry customers. See pages 2 -3 of the Freight Vehicle Management Plan (FVMP), attached as Appendix F.

The traffic management methods identified on page 2 of the FVMP have been shown to work when implemented by quarry customers. Continued monitoring will be required to ensure that quarry customers are regularly reminded to manage potential noise effects. The methods and monitoring of their implementation forms part of the FVMP.

#### 6.5 Dust

Dust can be generated by certain winds and in dry conditions when trucks use the road and access leg of the quarry.

To mitigate potential dust effects an industrial sprinkler system has been installed on the fence line of the quarry site to dampen dry areas (Figure 27). The sprinkler is on a timer and is turned on intermittently as required. This has proven to be the most effective option as even with sealing, over time vehicles will track dust and grit onto the pavement and re-create a potential for dust issues over time. The water for the sprinklers is connected to the closed-circuit wash system.

The entranceway to the quarry has also recently been sealed for 15metres to the first irrigator.

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<sup>6</sup> Page 17 of the Acoustic Report – attached as Appendix D.



Figure 27: Sprinklers used



Figure 28: Red dots and black line indicate the location of the sprinkler system

Within the working quarry area itself, the sprinkler system is able to mitigate areas with the most potential to generate dust. Modern quarry equipment is fitted with dust suppressant features which aids in avoiding potential dust generation.

The raw material for processing is damp so there is minimal dust from plant and processing.

## 6.6 Transport Network

The increased truck movements associated with the expansion of the Whenuku Road Quarry has the potential to have effects on the surrounding transport network.

A Traffic Assessment Report has been prepared. This report is attached as Appendix E. A summary of the Traffic Assessment is discussed below.

The report assesses the additional truck movements generated by the quarry, and concludes that the existing road network can accommodate the increase without adversely affecting the operation and function of Whenuku Road and other local roads, subject to the recommended improvements to the road being implemented. The report also confirms that the actions carried out to date (including signage, sprinklers and more communication with drivers) have all contributed to improved safety on Whenuku Road.

The report recommends embayments at various locations along Whenuku Road to improve passing opportunities and to ensure that two vehicles can pass each other. With these in place, the increased truck movements will have minimal impact on Whenuku Road and other road users from both a capacity and safety perspective. Road widening to provide a 6-metre wide sealed carriageway with centreline is underway and will be completed in the 2020/21 summer season. The embayment option is superseded by the superior option of road widening option for the entire length of Whenuku Road.

Submission 4 to RML20041 noted that trucks have started using the road at 7am. The existing consent provides for this start time Monday to Friday with an 8am start time on Saturdays. A potential offset for the increased traffic movements on Monday to Friday is the agreement to minimise truck movements on Saturday where possible. This has already been largely achieved by liaison with regular customers, although there has still been some smaller local traffic, being irregular customers, who just turn up expecting the quarry to be open. Such customers are now being turned away. This has created traffic on some Saturdays even though the applicant is committed to minimise Saturday traffic for the medium and longer term and limit it to emergency or urgent works.

#### 6.6.1 Freight Vehicle Management Plan

A "Freight Vehicle Management Plan" (FVMP) was implemented in June 2019. The FVMP addresses many of the community concerns relating to historic behaviour and effects of quarry customers using the road. The document has been enclosed as Appendix F.

Signage has been erected along Whenuku Road and within the quarry site that outlines the expectations on drivers, including speed and engine braking restrictions and responsible driving precautions.

Since implementation of the FVMP, only three 'minor breach' complaints have been raised. One was truck engine-braking and the other two were trucks travelling at an estimated speed of 55-70km/hr. The applicant has addressed these issues directly with the truck company owners and require that such offending cease via a formal written warning system. The applicant cautions that while they control most, they do not control all, heavy vehicles on Whenuku Road. Feedback from residents on the FVMP has been positive with no significant changes proposed to date.

The FVMP has been provided to all quarry customers and it appears that drivers are adhering to the road signage and road user policies as detailed. The applicant believes this strategy together with the significant upgrade to the road width and condition will assist in protecting road users and neighbours and improve road safety.

Submissions 1 and 4 to RML20041 identify that trucks have continued to use Whenuku Road on the weekend despite agreement to the contrary. The applicant has written formally to all quarry customers to reiterate that the quarry is not open on the weekend, except if between 8:00am – 12:00pm on Saturday by prior arrangement or if there is an emergency. Only staff vehicles use the road on Saturdays, as the quarry is open for maintenance or extraction/stockpiling activity. The Quarry Manager will consider refusing to supply customers who repeatedly breach the FVMP.

### 6.6.2 Whenuku Road Upgrade

The purpose of the upgrade and widening of the road is to ensure the road is suitably designed and maintained to accommodate the existing and future traffic likely to be generated by the quarry, including light and heavy vehicles.

Completion of this road upgrade project is expected to address a number of concerns raised in submissions 1, 2 and 4 to application RML20041 lodged with STDC.

The specific concerns likely to be resolved relate to road safety issues caused by the:

- existing poor condition of the carriageway, road verges and including potholes, boggy winter road verges resulting in vehicles getting stuck; as well as
- road narrowness including risks to pedestrians especially children, damage to adjacent private accessways and poor passing conditions for vehicles.

In relation to driveway damage this is expected to be addressed where relevant with installation of culverts followed by re-sealing as required.

Concerns raised about deterioration of the upgraded portion of the road are shared by the applicant.

## 6.7 Water Quality

The hydrology assessment attached as Appendix C discusses activities that could potentially affect water quality. The excavation and required dewatering and stormwater run off from the site could potentially result in increased sediment being entrained in water bodies. As part of the hydrology assessment monitoring has been undertaken.

Stormwater from the proposed expansion area will be treated within the existing settlement ponds on site, and via the proposed settlement ponds that will be constructed as per section 4.2.2 in this report. When dewatering is required during works in the expansion area, stormwater will be pumped to the dewatering system which will contain 3 new ponds and will discharge to the tributary and ultimately to the river.

Water quality samples were collected at two locations from the unnamed tributary, and from the Waingongoro River above and below the quarry. Results showed that all the parameters that were tested for, increased between the upstream and downstream sites (both the unnamed tributary and the river). The observed increase reflects the farming and quarry activities in the catchment between the two sampling sites, and it is considered that the increased levels that were observed are less than minor.

## 6.8 Ecological Effects

Section 2.1.2 of this application has identified, through the freshwater fish database, that a number of rare and threatened indigenous species are likely to be present in the Waingongoro River. Two activities could potentially impact on the quality of aquatic habitats and natural values, being the potential impacts on the baseflows in the River and the discharge of treated/settled washwater from the site. The washwater system is a closed circuit and the existing TRC consent 7845-12 permits discharge of treated washwater and incidental groundwater through land seepage only. Both these activities have been assessed as having a less than minor potential effect on flows and water quality. Therefore, it is submitted that the proposed activities will have minimal impacts on natural processes in the River.

There is an unnamed tributary running through the quarry site which currently has two V-notch weirs installed for the purpose of determining flow rates (this is explained further in the hydrology report). During this time, it is likely that these weirs have created a barrier to fish passage through the unnamed tributary during this time. The weirs will be removed when monitoring ceases, so are not an effect of the quarry application proposal.

This unnamed tributary eventually discharges into the Waingongoro River this is its natural discharge point. The discharge point is located on the steep banks of the river and as such any fish species in the unnamed tributary would be climbing species who would be able to navigate the steep banks of the Waingongoro River.

## 6.9 Effects on surface and groundwater

Impacts on groundwater and surface water may result from the proposed activities, specifically the dewatering and stormwater discharges.

The hydrology assessment discusses that dewatering may deplete flows in the unnamed tributary and Waingongoro River by drawing down the underlying groundwater surface. As the unnamed tributary enters the Waingongoro River at the quarry, depletion of flows in the stream would result in depletion the river flow.

As the direction of extraction is proposed away from the unnamed tributary and the effects on flows on this waterway should diminish as the working progress northwards.<sup>7</sup> Effects on the flows in the tributary are considered to be less than minor.

In relation to the Waingongoro River, while there is no direct abstraction the hydrology assessment considers that there will at times be a hydraulic connection between the surface water and groundwater. The hydrology assessment states that there is an unconfined aquifer underlying the alluvial terrace at the quarry which is bounded by the river. When dewatering is undertaken, the pumping would lower water levels and as a result of the 'cone of depression' that would occur in the surrounding groundwater surface. A brief dewatering trial was undertaken and while no effects were observed in the data at the time it is considered that effects on groundwater beyond the quarry may take longer than the test period to develop. The hydrology report estimates that drawdown effects could extend several hundred metres radially and include the river.

The hydrology report recommends a maximum dewatering rate of 40 l/s, this equates to 3.2% of the estimated MALF in the river at the quarry. The discharge from the treatment ponds, as this ultimately discharges back into the River, would reduce the net effect on the take on the river to 2.4% of estimated MALF.

Provided that the rate of dewatering does not exceed 40 l/s and pumping ceases at 2/3 MALF, the effects of flow depletion on the river are expected to be less than minor.<sup>8</sup>

## 6.10 Discharge of Cleanfill

As stated in Section 4.2.4 of this report the following waste material is proposed to be deposited on-site for reinstatement purposes.

| <b>Acceptable Waste Material</b> |
|----------------------------------|
| Clay                             |
| Soils (clean)                    |
| Rocks                            |
| Concrete (steel free)            |
| Brick                            |
| Un-treated timber                |

Effects associated with the discharge of cleanfill can include land stability and potential for contamination should materials not meet the definition of cleanfill.

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<sup>7</sup> Page 13 of the Hydrology Report

<sup>8</sup> Page 17 of the Hydrology Report.

Imported cleanfill will make up approximately 31% (20,000m<sup>3</sup>) of the material used to reinstate the existing quarry deposit areas A and B. Imported cleanfill will make up approximately 15% of the material to be used to reinstate the new expansion area A and B. The reinstated areas will then be resown as pasture. With appropriate compaction measures and allowing time for materials to 'settle' it is anticipated potential effects on land stability would be minor.

As noted above there is methodology proposed to ensure that only materials meeting the definition of cleanfill will be accepted on to site. The risk of contamination will be low.

It is considered that any potential adverse effects from the use of cleanfill to reinstate the quarry extraction area as proposed will be less than minor.

## 6.11 Erosion and hazard effects

The land is inherently stable shellrock with existing 5:1 batters consistently demonstrating stability throughout the life of the existing quarry area. In the proposed expansion area, slopes will be constructed so that the risk of ground subsidence is minimised where changes in ground level exist.

As the alluvial andesitic rock and sand deposit have been well compacted, the battered faces created during extraction to date are very stable. Currently faces within the quarry range between 10 and 17m in height and are stable. There is minimal evidence of stormwater erosion and no slipping or collapsing occurring.

The proposed benching designs adhere to industry best practice to ensure stability of quarry faces and river bank are maintained. In particular as water runoff presents the biggest hazard to the site, best management practices will ensure this does not become either an environmental or health and safety risk. For the majority of the proposed expansion area face heights will be between 10 to 12m, the maximum face height of 17m will only be open for a short time before back filling occurs, as detailed in section 4.1.1.2 – 4.1.1.4.

## 6.12 Assessment of Environmental Effects - Conclusion

The proposed works result in the utilisation of a valuable natural resource that would otherwise not be utilised. The effects are limited to the quarry lifespan, and the adverse effects will be mitigated through the implementation of the Quarry Management Plan and Freight Vehicle Management Plan. Overall the environmental effects of the proposed activity are considered to be less than minor.

# 7 Mitigation

To ensure effects of the proposed works are avoided, remedied or mitigated, the following mitigation measures are proposed.

## 7.1.1 Quarry Management Plan

A site-specific Quarry Management Plan will address dust control management, accidental discovery protocol and fuel storage compliance, noise emission, stormwater control, and reinstatement management. Hours of operation and management representatives are also detailed. Refer to Appendix B.

The mitigation methods contained in the Quarry Management Plan, and reinstatement of the site will ensure that adverse environmental effects will be minimised. The life-supporting capacity of water, soil and ecosystems will be safeguarded through implementation of these plans.

## 7.1.2 Freight Vehicle Management Plan

An activity specific “Freight Vehicle Management Plan” (FVMP) has been implemented since June 2019. The FVMP addresses many of the community concerns relating to historic behaviour and effects of quarry customers using the road. The document has been enclosed as Appendix F.

The management plan sets out traffic management methods for all drivers operating heavy vehicle. These can include the following;

- Enter and exit Whenuku Road via Ketemarae Road,
- Not exceeding 50km per hour.
- Not using engine brakes; in, out or along Whenuku Road.
- Comply with signage\*
- Reduce speed for pedestrians, cyclists and children.
- Adhere to quarry hours.
- Sign the South Taranaki Quarries Truck Driver Induction

The FVMP has been provided to all quarry customers and drivers are generally adhering to the road signage and road user policies as detailed. The applicant believes this strategy together with the significant upgrade to the road width and condition will assist in protecting road users and neighbours and improve road safety.

## 8 Consultation

### 8.1 Whenuku Road residents.

The applicant’s focus until June 2020, was to address the state of Whenuku Road, and the effects that may result from an increase in truck movements.

The applicant undertook regular and extensive consultation with the residents of Whenuku Road, and included at-home meetings, pamphlet documents and community meetings held at Orchard Contracting depot. A summary of engagement is set out in the table below:

*Table 8: Log of consultation*

| Date              | Key points:  |
|-------------------|--|
| Mid-February 2019 | Face to Face Meetings with Landowners/Residents  |
| End February 2019 | Letter and Pamphlet to Landowners/Residents  |
| March 2019        | Face to Face Meetings with Landowners/Residents  |
| 14 May 2019       | Consultation Meeting<br>Outcomes: <ul style="list-style-type: none"> <li>• Regular meetings between Council, South Taranaki Quarries (STQ) and Whenuku Road Representatives (WRR - Damian Orchard, Danny Meier)</li> <li>• Actions are being taken by STQ to mitigate safety concerns</li> <li>• Implementation of freight vehicle management strategy</li> <li>• Draft to be sent to persons for review</li> <li>• Meeting between Council and STQ within 2 weeks to confirm upgrade of Whenuku Road</li> </ul> |
| May 15            | Follow up letter   |
| End May           | Meeting with WRR end of May to discuss feedback from Landowners/Residents  |
| 14 June 2019      | Meeting with WRR, STQ, Liam Dagg (STDC)  |
| 27 June 2019      | Follow up letter to Landowners/Residents   |
| July 10           | Meeting with WRR, STQ, STDC  |
| August 20         | Meeting with WRR, STQ, STDC  |
| September 2       | Follow up letter to Landowners/Residents   |
| October 23        | Meeting with WRR & STQ   |

|                |   |
|----------------|---|
| October 30     | Follow up Letter  |
| December 3     | Update letter   |
| March 2020     | Engagement with potentially affected parties disrupted by Covid 19  |
| May/ June 2020 | Representative meeting held Thursday 28 <sup>th</sup> May. Minutes sent to all residents June 3 <sup>rd</sup> . |

Throughout the consultation process, the issues associated with the heavy vehicles that visit the quarry and use Whenuku Road was openly discussed. A major concern about the state of the road, and the lack of appropriate formation and the lack of upgrade and maintenance to Whenuku Road, the speed and the driving behaviour of some truck drivers.

As noted above submissions were received on the variation as sought, these are summarised below.

### 8.1.1.1 Submissions to application RML20041 (STDC Variation to Consent RML14076)

Submissions to application RML20041 lodged with STDC, are relevant to this comprehensive application as they relate to actual and potential effects of current heavy vehicle movements associated with the quarry activity, which exceed the limits imposed on the existing quarry consent (RML14076). The issues raised are canvassed in section 6 where they relate to effects on the environment and section 10 where they relate to cultural assessment and effects.

**Submitter 1 – Terry Dwyer and Jeff Maulder** opposes any extra vehicle movement entering or exiting Whenuku Rd/Ketemarae Rd intersection for the following reasons:

1. Existing agreement regarding quarry traffic movements has not been upheld. Trucks continue to use the road on weekends despite agreement to contrary.
2. Engine brakes of vehicles entering/exiting Whenuku Rd from Ketemarae Rd disturbs shift worker's sleep.
3. Whenuku Road/Ketemarae Road corner is ripped up and potholes are constantly being repaired and reopened, as a result of the number of heavy vehicles. This is dangerous for motorbikes, pushbikes, farm vehicles or other vehicles trying to avoid potholes."
4. Trucks passing other vehicles, including large tractors, has destroyed private driveway.

**Submitter 2 – Dayna Johnson** opposes the application for the following reasons:

1. Road is cracking and breaking. In winter road reserve becomes boggy and users have to pull off the road to pass other vehicles. -not in a fit state for volume of heavy traffic
2. Causes damage to vehicles when they get stuck
3. Top of Whenuku Rd is a shambles due to heavy braking from trucks and tractors with heavy loads. It is constantly being repaired with many potholes. Damage is largely due to truck and trailers from the quarry.
4. New road upgrade already has patches which is a huge concern. Road upgrade needs to be to a higher standard before additional vehicles are permitted. Road will not withstand the heavy tonnes of metal carted on it.
5. Road is not wide enough in some places to allow for safe passing. Should have been addressed before quarry established. Witnessed a number of near misses.
6. Quarry already exceeds limit of 16 movements per day. Council has never enforced the consent conditions so have little faith in future operations or restrictions.

7. Tractor and trailer movements should be counted as carry heavy loads also.

**Submitter 3 - Te Runanga o Ngāti Ruanui Trust** opposes the application as it does not inadequately address the following:

1. The application Sections 6, 7 and 8 of RMA.
2. Fails to determine any impact on mana whenua to arrive at claim in section 8.3 of application
3. Comes from ignorance in relation to assessment s8 RMA assessment
4. Misled by Council that iwi consultation not required (page 11)
5. Compartmentalises the road upgrade and traffic issue rather than addressing the whole
6. Fails to take account of STDP sections 20.1(e) - iwi management plans and 20.1(j) xiv

**Submitter 4 – WJ and CR Galliers** opposes the application for the following reasons:

1. Most Whenuku Rd people don't want to hear 80 plus truck and commercial tractor movements per day being a truck every 10 minutes over an 8 hour day.
2. Dust is still a problem, even though were told in Sept/Oct 2019 that was being rectified. Trucks exiting the quarry are immersed in a dust plumme until they hit the tar seal.
3. Dust drifts over the submitter's property from the quarry itself.
4. The quarry activity was initially supported to start as a small metal pit. Due to small volume of metal present, they understood the quarry would be a 3 – 4 year operation.
5. Vehicle movements have increased 250% since the applicant took ownership.
6. Road is dangerous. People pushed off road by speeding trucks. About 20 children live on the road and walk to catch school bus.
7. Even though road being upgraded to two lanes, trucks are not keeping to 50km/hr speed.
8. Trucks have started using road at 7am.
9. Have little faith in future operations or restrictions following a new consent.

## 8.2 Te Korowai o Ngāruahine Trust and Te Runanga o Ngāti Ruanui

The applicant recognises that engagement and collaboration with iwi/ hapū will best achieve a sustainable outcome for the environment which enables expansion of the quarry site.

In 2019 the applicant approached Te Korowai o Ngāruahine Trust (the post settlement governance entity for Ngāruahine iwi) and Te Runanga o Ngāti Ruanui and invited representatives to meet on site to discuss a proposal to expand the quarry activity. The applicant met with Bart Jansma of Te Korowai o Ngāruahine Trust and Graham Young of Te Runanga o Ngāti Ruanui. At that time the proposal included the potential creation of a significant lake.

On 27 July 2020, a further meeting was held on site with representatives of both Ngāruahine and Ngāti Ruanui representatives. Graham Young expressed his frustration that the applicant had not engaged with iwi about an application to expand traffic movements to the quarry lodged in May 2020. This was not the appropriate way to proceed. The application was only intended to be a temporary solution. It is the applicant's intention to withdraw the application lodged in May and proceed with this comprehensive consent application instead.

At the site meeting a revised and comprehensive quarry expansion proposal was canvased. This proposal includes creation of a wetland to temporarily divert the flows of two tributaries before they reach the River. The wetland would also capture river seepage that naturally flows in the vicinity of the River.

As requested by iwi representatives, a draft application was provided to iwi in September for review and to enable further dialogue between the applicant and hapū/ iwi to consider protection of the cultural values associated with the area.

The applicant hopes to meet with hapū/ iwi in the near future to collectively determine how best to recognise and provide for the relationship of hapū/iwi with this ancestral land, water and other taonga relevant to the cultural values of this area.

Engagement with iwi hapu is ongoing. Future engagement will focus on the proposed application and the applicant will reported to decision makers as this engagement progresses.

### 8.3 Department of Conservation

The consent application has been circulated to the Department of Conservation and is awaiting their feedback.

### 8.4 Fish and Game

The consent application has been circulated to Fish and Game and is awaiting their feedback.

## 9 Notification Assessment

### Section 95A - Public Notification Analysis:

A consent authority must follow the steps set out in this section, in the order given, to determine whether to publicly notify an application for a resource consent.

| <b>Step 1: Mandatory Public Notification in certain circumstances:</b>   | YES | NO |
|--|-----|----|
| Has the applicant requested public notification? [s95A(2)(b)]  |     | X  |
| Is Public Notification required under s95C?  |     | X  |
| The application is made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act 1977.   |     | X  |
| <b>Step 2: Public Notification precluded in certain circumstances:</b>   | YES | NO |
| Does a rule or NES preclude public notification of the application? [s95B(2)]  |     | X  |
| A controlled activity; and/or  |     | X  |
| Restricted-discretionary or discretionary activities for: <ul style="list-style-type: none"> <li>- A subdivision of land</li> <li>- A residential activity [s95A(6)]</li> <li>- A boundary activity [87AAB]</li> </ul> |     | X  |
| <b>Step 3: Public Notification required in certain circumstances:</b>  | YES | NO |
| Does a rule or NES require public notification of the application? [s95B(2)]   |     | X  |
| Are adverse effects on the environment more than minor? [s95A(2)(a)]   |     | X  |
| <b>Step 4: Public notification required in special circumstances:</b>  | YES | NO |
| Do special circumstances apply that warrant public notification? [s95A(4)]   |     | X  |

### Section 95B – Limited Notification Analysis:

The consent authority must follow the steps outlined under Section 95B, in order, to determine whether to publicly notify or limited notify an application for resource consent.

| <b>Step 1: Certain affected groups and affected persons must be notified:</b>   | YES | NO  |
|---|-----|-----|
| Are there any affected protected customary rights groups? [s95F]  |     | X   |
| Is the activity on, adjacent to or likely to affect a statutory acknowledgement area? And; would you consider the person(s) for whom the statutory acknowledgement is made to be affected? [s95E(2)(c)] | tbc | tbc |
| <b>Step 2: Limited Notification precluded in certain circumstances:</b>   | YES | NO  |
| Does a rule or NES preclude limited notification of the application? [s95B(2)]  |     | X   |
| Is the land use consent a controlled activity?  |     | X   |
| <b>Step 3: Certain other affected persons must be notified:</b>   | YES | NO  |
| Are adverse effects on any person minor or more than minor?   | tbc | tbc |
| <b>Step 4: Limited notification required in special circumstances:</b>  | YES | NO  |
| Do special circumstances apply? [s95A(4)]   |     |     |

The Resource Management (Simplifying and Streamlining) Amendment Act of October 2009 substantially amended the notification provisions for resource consent applications. There is no longer a presumption that Council's should publicly notify resource consent applications. Instead the Act gives councils a general power to publicly notify an application (Section 95A (1)) and prescribes the circumstances when an application is required to be notified (Section 95A (2)). The test for determining which notification pathway an application should take is outlined in Sections 95A to 95E. The Act also prescribes some circumstances when an application is not to be publicly notified (Section 95A (3)), which in turn can be 'overridden' if a council consider that 'special circumstances' exist.

The Section 95A (2) provisions that require an application to be publicly notified are if:

- the activity will have, or is likely to have, adverse effects on the environment that are more than minor;
- the applicant requests public notification of the application; or
- a rule or national environment standard requires public notification.

Section 95B provides that if an application is not publicly notified, Council must decide if there are any 'affected persons' in relation to the activity. Limited notification of the application to 'affected' persons must be undertaken unless a rule or environmental standard precludes limited notification, or their written approval has been obtained or it is unreasonable to require this.

## 9.1 Statutory Acknowledgement

The Waingongoro River and its tributaries are recognised as a statutory acknowledgement in Section 53 of the Ngaruahine Claims Settlement Act 2006. This requires Taranaki Regional Council to forward Ngaruahine summaries of resource consent applications and have regard to the river and its tributaries when forming an opinion on who is considered an affected party under the Resource Management Act 1991.

We note that the quarry site is in the rohe of Ngaati Ruanui, and engagement with both iwi is ongoing.

## 9.2 Public Notification

Horizon Trust Management Limited and their advisors are not, in terms of the Section 95A (2) provisions noted above, requesting public notification of the application. They are not aware of any district/ or regional plan rule that requires public notification of the activities that, as outlined earlier, are either of a controlled or discretionary activity nature. As such this part of the report focuses on the provisions in Section 95D that guide the Council in its notification decision making.

Under Section 95A(2) a consent authority must publicly notify an application if adverse effects are likely to be more than minor. In deciding whether adverse effects are more than minor under Section 95D, the consent authority must disregard any effects on persons who own or occupy the land over which the activity will occur or any land adjacent to that land. They must also disregard any effect on a person who has given written approval to the relevant application.

## 9.3 Limited Notified

The limited notification process is used when all potentially affected persons can be positively identified and the effects on the wider environment will be no more than minor, as is the case in this application. In this instance, the landowners and occupiers of dwellings on Whenuku Road have been considered the only affected persons with regards to the for increased vehicle movements.

At this point cultural effects are still able to be comprehensively recorded and addressed via proposed engagement with iwi. If this cannot be supported by iwi then limited notification would need to extend to iwi also.

In relation to the general expansion of the quarry site and proposed refinement in the quarry operations as described in this application, the only additional parties considered to be potentially affected are immediately adjacent landowners to the north and west. The Acoustic Report concludes that the noise effects are likely to comply with the District Plan permitted standard in all directions. All other potential effects that may impact adjacent landowners or occupier, other than traffic effects, are considered to be less than minor.

Given that written approval has not been obtained from all those identified as potentially affected persons in terms of this application in relation to traffic effects, we request that the application proceed on a Limited Notified basis under Section 95B of the Resource Management Act.

STDC has provided the applicant with a list of potentially affected parties and the applicant was advised that the proposal would likely not be publicly notified where the extent of the effects is limited to parties affected by the increase of traffic movements along Whenuku Road.

## 10 Statutory Considerations

### 10.1 Overview

This section outlines the statutory and planning provisions that are relevant to the proposal. The assessment against the relevant documents generally follows the hierarchy of those documents as shown below.

As set out above in section 5.2.1 of this AEE, Section 104 of the RMA applies to the consideration of resource consent applications.

104 Consideration of applications

*(1) When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to -*

*(a) any actual or potential effects on the environment of allowing the activity;*

*(b) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity; and*

*(c) any relevant provisions of -*

*(i) a national environmental standard;*

*(ii) other regulations;*

*(iii) a national policy statement;*

*(iv) a New Zealand coastal policy statement;*

*(v) a regional policy statement or proposed regional policy statement;*

*(vi) a plan or proposed plan; and*

*(c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.*

(2) *When forming an opinion for the purposes of subsection (1)(a), a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect.*

(2A) ...

An assessment of the actual or potential effects on the environment has been undertaken in Section 8. The extent to which the proposed resource consents are able to satisfy Section 104(1)(b) and(c) and Part 2 of the RMA is considered below.

## 10.2 NPSFM National Policy Statement for Freshwater Management 2020 (Freshwater NPS 2020)

The National Policy Statement for Freshwater Management 2020 (Freshwater NPS 2020) provides local authorities with updated direction on how they should manage freshwater under the Resource Management Act 1991. It came into force on 3 September 2020.

New requirements relevant to this application include to:

- Manage freshwater in a way that 'gives effect' to Te Mana o te Wai:
  - through involving tangata whenua
  - prioritising the health and wellbeing of water bodies, then the essential needs of people, followed by other uses.
- Improve degraded water bodies, and maintain or improve all others using bottom lines defined in the NPS.
- Avoid any further loss or degradation of streams.
- Address in-stream barriers to fish passage over time.

The fundamental concept of the NPSFM 2020 is Te Māna o te Wai, that refers to the fundamental importance of water and recognizes that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Māna o te Wai is about restoring and preserving the balance between the water, the wider environment and the community.

There are 6 principles encompassed within Te Māna o te Wai, which inform the NPSFM and its implementation.

There is a hierarchy of obligations in Te māna o te Wai that prioritises:

- (a) first, the health and well-being of water bodies and freshwater ecosystems
- (b) second, the health needs of people (such as drinking water)
- (c) third, the ability of people and communities to provide for their social, economic and cultural well-being, now and in the future

The NPSFM primarily directs regional councils are to give effect to the NPSFM, through the develop of long-term visions, actively involving tangata whenua, adopting an integrated approach to management, and transparent decision-making.

Regional Councils may impose conditions on resource consents to achieve target attribute states. There are specific requirements in relation to wetlands and rivers. For this activity there are no natural inland wetlands in the subject site.

In relation to the unnamed tributary, the initial diversion is already authorized by consent 10017-1.0. The subsequent diversion would be to allow the tributary to enter the proposed wetland and therefore consideration is given to section 3.24.

In accordance with section 3.24 (1)(a) the functional need for the location of the quarry is demonstrated, being a combination of the location of the natural resource and existing

infrastructure. In considering the effects hierarchy the values of the tributary, and River, have been considered. Effects associated with the diversion are considered to be minimal, based on the existing environment. The wetland will result in positive effects in relation to values associated with waterways, despite the length of the tributary ultimately being shorter and therefore loss of some habitat. However, the habitat that will be created by the wetland will ultimately create more habitat than is lost when the unnamed tributary is shortened and enters the wetland. It is submitted this is inkeeping with the NPSFM..

### 10.3 South Taranaki Proposed District Plan – Relevant Objectives and Policies

The objectives and policies in the Proposed District Plan that are relevant to the proposal are set out below. There are some Proposed District Plan objectives and policies that do not have legal effect as they are part of an ongoing appeal. Objective and policies that are highlighted in yellow below, are under appeal.

#### 10.3.1 Section 2.1 Rural Zone

##### **Objective 2.1.3**

*"To ensure subdivision, land use and development in the rural environment is of a nature, scale, intensity and location that maintains and enhances rural character and amenity values."*

##### **Policy 2.1.8**

*"Manage the adverse effects of noise, vibration, odour, dust, traffic, glare and other nuisances from land use activities and development through relevant performance standards and appropriate spatial buffers and setback requirements for specific activities".*

##### **Policy 2.1.11**

*"Provide for the establishment and operation of new non-farming activities and the ongoing operation of existing lawfully established activities which are compatible and / or associated with farming activities in the rural environment, provided they avoid, remedy or mitigate adverse effects."*

##### **Policy 2.1.17**

*"Ensure that activities based on the extraction or processing of rural products, as well as large scale soil and aggregate extraction activities, avoid, remedy or mitigate potential adverse effects on the surrounding environment and that the environmental effects are internalised on site as much as possible".*

##### **Policy 2.1.21**

*"Manage the effects of heavy vehicle movements from rural activities on the environment, including cumulative effects on the safety and efficiency of the District's roading network."*

#### Comment:

The Whenuku Road quarry is located within the Rural Zone. The rural environment is home to a variety of different activities and land uses, it can generally be described as a working environment. Quarrying is anticipated within the Rural Zone, as there is allowance for quarrying as a permitted activity up to certain limits. Consent is sought for the activity, as a Discretionary Activity, in accordance with the above Objective and supporting Policies it must be demonstrated rural character and amenity can be maintained and enhanced.

The noise assessment attached to and forming part of this application demonstrates that the noise standards in the District Plan will be met by the proposed activity. Dust, as another potential nuisance factor, is able to be controlled through the mitigation measures put in place – the sprinkler system in particular- helps ensure nuisance levels of dust off-site can be avoided. It is submitted that the proposed activity, when undertaken with the proposed mitigation, is consistent with Policy 2.1.8.

Policy 2.1.11 is considered to be an enabling policy, in that it seeks to provide for the establishment and continuation of certain types of activities. The quarry has been operating at the end of Whenuku Road since 2011, and has been used as a farm metal pit for approximately 30 to 40 years prior to this. As an existing consented activity, it is considered to be a lawfully established activity. The proposed expansion does not materially intensify effects, other than the increase in traffic number (consent as variation to existing conditions has previously been sought). Accordingly, it is considered the proposal is consistent with Policy 2.1.11

The proposed quarry expansion is adjacent to the existing quarry and is largely screened by the sites natural topography and is below the road level. Processing, as required, is undertaken onsite. As such it is considered that the potential effects are internalised as much as practicable and therefore consistent with Policy 2.1.17

A traffic assessment was carried out to assess the increase in vehicle movements, and concluded that the existing road network can accommodate the increase without adversely affecting the operation and function of Whenuku Road and other local roads. The applicant has worked with STDC in respect of upgrading Whenuku Road, which will assist in avoiding adverse effects on the Road and users. The proposal is consistent with Policy 2.1.21

### 10.3.2 Section 2.7 Transportation

#### Objective 2.7.5

*“Safe and efficient road and rail networks to ensure the reliable movement of people and goods”.*

#### Policy 2.7.12

*“Avoid, remedy or mitigate the adverse effects that may arise from increased traffic or changed traffic type, and new or changed access and intersections, through the use of standards and controls.”*

#### Comment:

The applicant has an on-going road maintenance agreement with South Taranaki District Council. To accommodate the current level of quarry traffic, the Council is currently undertaking upgrades to Whenuku Road and this will be completed in the summer months of 2020/21.

The increase in vehicle movements due to the quarry activity has been assessed (see report attached as Appendix E). This report concludes that the existing road network can accommodate the increase without adversely affecting the operation and function of Whenuku Road and other local roads. The report also confirms that the actions carried out to date (including signage, sprinklers and more communication with drivers) have all contributed to improved safety on Whenuku Road.

The proposal is consistent with the above Objective and relevant supporting Policy.

### 10.3.3 Section 2.13 Tangata Whenua

#### Objective 2.13.6

*“To recognise and provide for the relationship of Tāngata Whenua and their culture and traditions (including mauri) with land, water, sites and areas of cultural and spiritual significance, wāhi tapu and other taonga”.*

#### Objective 2.13.9

*“To provide Tāngata Whenua with opportunities to participate in resource management processes and decision-making.”*

#### Objective 2.13.10

*To have particular regard to the concept of Kaitiakitanga as defined by Tāngata Whenua of the District in respect of the management of natural and physical resources.*

**Policy 2.13.12**

*“To actively engage with Tāngata Whenua when addressing matters of concern to Iwi and hapū, including recognition of the relationship of Tāngata Whenua and their culture and traditions with land, water, sites and areas of cultural and spiritual significance, wāhi tapu and other taonga.”*

**Policy 2.13.13**

*“To encourage, where appropriate, as part of the determination of resource consent applications, consultation with Tāngata Whenua be undertaken and reported to the decision-making authority”.*

Comment:

The applicant is continuing to engage with Ngāti Ruanui and Nga Ruahine in relation to cultural values associated with the site and environs. Engagement to date is reported in this application and will continue to be reported to both decision-making authorities.

The hydrological monitoring and assessment of the Waingongoro River and tributaries together with the assessment of the potential effects of the proposed quarry extraction activity, has concluded that water quality will as a minimum be maintained and groundwater flows will be sustained.

Stormwater diversions in place during the quarry operation have the effect of separating ‘clean’ from ‘dirty’ stormwater, this increases the effectiveness of the proposed stormwater treatment through the settlement ponds.

No contaminants are to be discharged to waterways and abstraction will be temporary and sustainably managed. Overall mauri of the River and tributaries will likely be preserved.

Disturbance or discovery of archaeological items or physical wāhi tūpuna or wāhi taapu are regulated by the Heritage New Zealand Pouhere Taonga Act 2014. This legislation is administered and enforced by Heritage New Zealand. All persons undertaking land disturbance must abide by such legislation.

Opportunities to monitor works such as removal of overburden and construction of the tributary diversion as well as an invitation to co-design the proposed wetland landscape planting, acknowledge and respect the kaitiaki role of hapū/iwi and provide for ongoing engagement and monitoring to ensure the wider wellbeing of the River and environs is preserved and sustained.

**10.3.4 Section 2.18 Waterbodies**

**Objective 2.18.4**

*“To preserve the natural character of the district’s lakes, rivers, streams, wetlands and other waterbodies and protect them from inappropriate subdivision, use and development”.*

**Objective 2.18.7**

*“To maintain and enhance the recreational and amenity values of lakes, rivers, streams and other waterbodies.”*

**Policy 2.18.8**

*“Identify significant lakes, rivers and other waterbodies with high natural character, ecological, recreation, amenity, heritage and cultural values”.*

**Policy 2.18.9**

*“Avoid, remedy or mitigate the adverse effects of subdivision, use and development that would detract from or compromise the natural character, ecological, recreation, amenity, heritage and cultural values of lakes, rivers and other waterbodies”.*

**Policy 2.18.10**

*“Ensure that subdivision, use and development is of a scale, location, and design that*

*protects the natural character of lakes, rivers and other waterbodies and maintains and enhances their values by having regard to the following matters in assessing proposals:*

- (a) Extent to which natural processes, elements and patterns that determine the natural character of the water body are sustained, and/or restored and rehabilitated;*
- (b) Degree of protection of vegetation cover and patterns, including use of a buffer or riparian margin;*
- (c) Compatibility with existing level of modification to the environment;*
- (d) Functional necessity to be located in or near the waterbody, and no reasonably practicable alternative locations exist;*
- (e) Ability to mitigate any potential adverse effects of subdivision, use and development; and*
- (f) Provision of public amenity and access to land acquired by Council for reserve purposes.*

Comment:

In accordance with Policy 2.18.8 the Waingongoro River is identified as significant water body with the following values (Schedule 5)

*Natural/Conservation values - The natural character of the water body and its margins, the presence and abundance of rare and threatened indigenous species, the nature and quality of aquatic habitats and natural values.*

*· Natural hazards - The nature and magnitude of natural hazards.*

*· Recreational/Access - The nature and use of the waterbody for recreational purposes, including surface water activities, fishing, hunting and tramping. The importance of the waterbody in providing access and connections to areas of recreational use.*

*· Heritage/Cultural - Presence of historic heritage in or adjacent to the water body, and the relationship of Maori with the water body and ability to undertake customary activities.*

*· Water quality - The quality of water, including whether it is used for urban water supplies or other purposes, such as irrigation.*

Section 6 of this report addresses the potential effects on the various values as identified as being significant for the Waingongoro.

Policy 2.18.10 sets out a number of matters that must be regarded to in order to ensure identified values are maintained or enhanced. Section 2.1.12 has identified, through the freshwater fish database, that a number of rare and threatened indigenous species are likely to be present in the Waingongoro River. Two activities could potentially impact on the quality of aquatic habitats and natural values, being the potential impacts on the baseflows in the River and the discharge of treated/settled washwater from the site. The washwater system is a closed circuit and the existing TRC consent 7845-12 permits discharge of treated washwater and incidental groundwater through land seepage only. Both these activities have been assessed as having a less than minor potential effect on flows and water quality. Therefore, it is submitted that the proposed activities will have minimal impacts on natural processes in the River.

The proposed expanded quarry area will have a buffer of 25m from the bed of the Waingongoro River. No vegetation removal (other than pasture) is proposed, the existing riparian margin of woody vegetation will not be altered by the proposed activity.

The quarry has been established onsite for some time and it is considered that the area is already modified. The proposed methodology and area to be excavated is considered to be in-keeping with the level of modification of the environment. In addition, reinstatement, to pasture, will be undertaken progressively. The proposed cleanfill discharge will help to facilitate this as it will

enable the site to achieve contours and heights that would not otherwise be attainable with overburden materials from the subject site.

The location of the proposed activity is driven by two factors, the first being that a quarry is already established on the site and the second being the source of the natural deposits of material suitable for quarrying. As such, no reasonably practicable alternative exists.

### 10.3.5 Section 2.19 Natural Hazards

#### Objective 2.19.2

*"The risks and adverse effects from natural hazards on people, property and the environment are avoided or mitigated".*

#### Objective 2.19.3

*"Subdivision, use and development do not create, worsen, displace or increase the severity of natural hazards."*

#### Policy 2.19.8

*Ensure that the use and development of land does not accelerate or worsen any material damage to that land, or displace to other land or structures, resulting from erosion, subsidence, slippage, debris flow, or surface water flooding*

#### Policy 2.19.18

*"Manage subdivision, use and development in areas considered to be susceptible to land instability by siting work in stable locations to avoid hazard risks or adopting specifically designed measures such as appropriate building foundations or batter slopes to mitigate the hazard risks."*

#### Comment:

Potential natural hazard risks at the subject site include land instability, erosion and flooding.

In respect of land instability and erosion, it has been demonstrated that the nature of the materials being excavated are stable. Ongoing control of surface water in and around the site are proposed to ensure risk of erosion is minimised. In addition, the site will be rehabilitated progressively, further reducing potential risk of erosion.

Cleanfill and overburden, then topsoiling are part of the reinstatement of much of the site. The site will then be put back into pasture and grazed, this is considered to be a low risk of erosion in terms of hazards (as compared to using for building foundations).

The risk of flooding is considered to be low. The Waingororo is deeply incised at the subject site and it is understood flooding on the subject site unlikely to occur. A buffer zones of some 25m will be retained between the quarry and the river bed to assist in ensuring that the risk of bank erosion is not increased.

The water being discharged from the site, from the dewatering process as well as diverted tributary, will have no material impact on potential surface water flooding.

## 10.4 Taranaki Regional Policy Statement – Relevant Objectives and Policies

### UDR OBJECTIVE 1

*To recognise the role of resource use and development in the Taranaki region and its contribution to enabling people and communities to provide for their social, economic and cultural wellbeing.*

### UDR POLICY 1

*Recognition will be given in resource management processes to the role of resource use and development in the Taranaki region and its contribution to enabling people and communities to provide for their economic, social and cultural wellbeing.*

Comment:

UDR objective 1 and supporting policy are enabling, in that they seek to recognise the role of resource use and development. The proposal seeks to expand an existing quarry site, the quarry site is being expanded to meet demand from the community. Thus its ongoing operation and expansion will provide for economic and social wellbeing's.

**WAL OBJECTIVE 1**

*To sustainably manage the taking, use, damming or diversion of fresh water in the Taranaki region diversion to enable people and communities to meet their needs for water while safeguarding the life-supporting capacity of water and related ecosystems and avoiding, remedying or mitigating any adverse effects on the environment arising from that use.*

**WAL OBJECTIVE 2**

*To protect the natural character of water bodies from inappropriate subdivision, use and development.*

**WALPOLICY 3**

The in-stream values and life supporting capacity of water bodies will be maintained, and the natural character of rivers, streams, and lakes and their margins protected from inappropriate subdivision, use and development.

Comment:

The proposal involves taking, use and diversion of freshwater. The dewatering, to allow for safe extraction of the quarry material, will have an impact on the Waigongoro River due to the hydraulic connection between the groundwater and the River. Monitoring and assessment has demonstrated that at the maximum proposed dewatering rate (40l/s) this could impact up to 3.2% of the baseflow of the River, this is reduced to some 2.8% when taking into account the discharge of treated water back into the River. At the rates proposed, as well as proposed conditions to reduce/cease dewatering when River conditions are at 2/3 MALF will ensure that the life supporting capacity of the Waigongoro River are not adversely affected.

Diversion of an unnamed tributary is proposed, it is noted that this tributary is currently highly modified and it is therefore considered that the diversion will not have a significant impact on natural character.

**WQU OBJECTIVE 1**

*To maintain and enhance surface water quality in Taranaki's rivers, streams, lakes and wetlands by avoiding, remedying or mitigating any adverse effects of point source and diffuse source discharges to water.*

**WQU POLICY 1**

*Sustainable land management practices and techniques that avoid, remedy or mitigate adverse effects on surface water quality will be encouraged, including:*

*(a) the retention and restoration of effective riparian buffer zones;*

*(d) the development, recontouring and restoration of disturbed land to reduce diffuse source discharges of contaminants to water;*

*(f) other land management practices, including the discharge of contaminants to land and the diversion of stormwater runoff to land, which avoid or reduce contamination of surface water.*

Comment:

As noted in the explanatory text in the RPS Policy WQU 1 outlines management practise to be encouraged. The relevant management practices have been identified above, specifically the buffer zone from the quarry itself will ensure there is no impact on the existing riparian margin on the banks of the Waingongoro River. The restoration of the site to be disturbed involves restoring much of the land into pasture, the proposed wetland can potentially provide a valuable role in reducing diffuse discharges of sediment. Stormwater diversions in place during the quarry operation have the effect of separating 'clean' from 'dirty' stormwater, this increases the effectiveness of the proposed stormwater treatment through the settlement ponds.

Through management of the site and the proposed reinstatement strategy the water quality in the Waingongoro River will as a minimum be maintained, this is consistent with the above Objective and support policies.

**NFL POLICY 2**

*Recognition shall be given to the appropriate management of other natural areas, features or landscapes not covered by Policy 1 above, but still of value to the region for one or more of the following reasons:*

- (a) the maintenance of water quality and quantity;*
- (b) soil conservation;*
- (c) the avoidance or mitigation of natural hazards;*
- (d) natural character amenity and heritage values and scientific and educational significance;*
- (e) geological and geomorphological, botanical, wildlife and fishery values;*
- (f) biodiversity and the functioning of ecosystems;*
- (g) 'sinks' or 'pools' for greenhouse gases; and*
- (h) cultural features of significance to tangata whenua.*

Comment:

NFL Policy 2 recognises that areas, not identified as being outstanding natural features or landscapes, and gives effect to aspects of Section 6 and 7 of the RMA. It is recognised that the area, and Waingongoro River in particular, posses amenity values, ecosystem values and that the quality of the environment is to be regarded.

The methodology and management practices proposed will help to ensure that water quality and quantity are maintained. Flooding and erosion are recognised as potential natural hazards, the location of the quarry site relative to the River and maintenance of the buffer strip to the River bank ensure that risks from natural hazards will be avoided. The dewatering will influence the baseflows within the Waingongoro River at times, but not to the extent that the functioning of ecosystems will be impacted taking into account the proposed management practices. Accordingly, it is considered that the site and proposed activities can be appropriately managed and is consistent with NFL Policy 2.

## **AMY OBJECTIVE 1**

*To recognise the positive contributions of appropriate use and development in terms of providing for the maintenance and enhancement of amenity values in the Taranaki region, while avoiding, remedying or mitigating the adverse effects of inappropriate use and development on amenity values.*

## **AMYPOLICY 1**

*The adverse effects of resource use and development on rural and urban amenity values will be avoided, remedied or mitigated and any positive effects on amenity values promoted. Any positive effects of appropriate use and development will be fully considered and balanced against adverse effects. Those qualities and characteristics that contribute to amenity values in the Taranaki region include:*

*(a) safe and pleasant living environment free of nuisance arising from excessive noise, odours and contaminants, and from traffic and other risks to public health and safety;*

*(b) scenic, aesthetic, recreational and educational opportunities provided by parks, reserves, farmland, and other open spaces, rivers, lakes, wetlands and their margins, coastal areas and areas of vegetation;*

*(c) a visually pleasing and stimulating environment;*

*(d) efficient, convenient and attractive urban forms; and*

*(e) aesthetically pleasing building design, including appropriate landscaping and signs.*

### Comment:

The subject site is located within a rural environment, and due to the natural topography is generally fairly well screened from view from the general public. The open working faces may by some be considered to be detrimental to amenity, other amenity effects include potential generation of dust and noise, as well as traffic effects.

The site is to be rehabilitated progressively and to a large extent put back into a similar land type that exists now, in other words pasture. Ultimately much of the site is proposed to be developed as a wetland, which will provide positive amenity and ecological values.

Dust will continue to be controlled and managed through the sprinkler system already established on site. It has been demonstrated that the noise generated from the site can comply with the relevant standards (in this case the District Plan which helps to give effect to the RPS).

Improvements to the road help to ensure that traffic effects and public health and safety risk, insofar as they can be managed by the applicant, have been determined in the TIA to be appropriate and these potential effects no more than minor.

Allowing for the balance and taking into account the positive effects that will be generated by the wetland as part of the reinstatement of the site, as well as the management proposals as part of the application, it is considered that the proposal is consistent with the above objective and supporting policy.

## **MIN OBJECTIVE 1**

*To provide for use and development of the region's mineral resources while avoiding, remedying or mitigating any adverse effects on the environment.*

## **MIN Policy 1**

*Provision will be made to enable appropriate use and development of the region's mineral resources in a way that avoids, remedies or mitigates adverse effects on the environment.*

Comment:

Minerals including aggregate are recognised as an important resource within the Taranaki Region. The RPS notes that high quality aggregate which is accessible for extraction is in short supply in the region.

Policy 1 is an enabling policy seeking to provide for mineral resources, in this case aggregate, to be used provided effects are avoided, remedied or mitigated. Various potential effects associated with the proposal have been outline as well as management to avoid or minimise these potential effects. It is considered that the activity, taking into account the proposed management procedures, is consistent with MIN Objective 1 and relevant supporting policy.

## 10.5 Taranaki Regional Plan – Relevant Objectives and Policies

### OBJ 3.1.2

*To maintain and enhance the natural, ecological and amenity values of rivers and streams of value in the region, and regionally significant wetlands.*

### OBJ 3.1.3

*To protect the natural character of all of Taranaki's rivers, lakes and wetlands from inappropriate use and development and the adverse effects of appropriate use and development.*

### OBJ 3.1.5

*To maintain and enhance amenity values and the quality of the environment of Taranaki's rivers, lakes and wetlands and their margins.*

### POL 3.1.2

*The adverse effects of activities on the natural character, ecological and amenity values of all rivers, lakes and wetlands and their margins in the Taranaki region will be avoided, remedied or mitigated, having regard to:*

- (a) the topography and form of the river, lake or wetland;*
- (b) the natural flow characteristics, hydrological functions and natural water levels and their fluctuations in rivers, lakes and wetlands;*
- (c) ecosystems, habitats and species;*
- (d) existing water quality and the need to maintain or enhance that quality;*
- (e) recreational, fishery, aesthetic and scenic values.*

Comment:

Amenity and ecological values have the potential to be impacted by quarrying activities. In this case it is noted that a buffer strip will be maintained such that the existing riparian margin on the Waigongoro River is to be maintained, this will assist in maintaining this element of amenity. Sediment laden discharges can impact on amenity, and ecological function, they Hydrology assessment supporting this application undertook monitoring that demonstrated minor changes in suspended solids in the waterways above and below the quarry site. The ongoing use of the stormwater treatment system will aid in ensuring effects from suspended solids be avoided.

The dewatering proposed will at times have an influence on the baseflows in the Waingongoro River and therefore potential to impact on ecological functions. Management procedures are proposed so as to minimise this potential impact and avoid adverse effects occurring, noting that the potential impact is further reduced by the discharge of treated stormwater back into the river.

**OBJ 4.1.1**

*To recognise and provide for the cultural relationship and values of Iwi and hapu of Taranaki with water, and with ancestral land and sites, wāhi tapu and other taonga associated with fresh water, and the beds of rivers and lakes, in a manner reflective of their status as Tangata Whenua and in accordance with Tikanga Maori.*

**POL 4.1.2**

*Adverse effects of activities on mahinga kai and the habitats of species harvested by Tangata Whenua, will be avoided or mitigated to the fullest extent practicable.*

**POL 4.1.4**

*The aspirations of Iwi and hapu of Taranaki to develop fresh water within their rohe will be recognised and provided for, where this is appropriate and consistent with the purpose and principles of the Act, the Regional Policy Statement for Taranaki and this Plan.*

**POL 4.1.6**

*Procedures and approaches will be adopted to enable Iwi and hapu of Taranaki to participate in fresh water management decision making.*

Comment:

The applicant is continuing to engage with Ngāti Ruanui and Nga Ruahine in relation to cultural values associated with the site and environs. Engagement to date is reported in this application and will continue to be reported.

The hydrological monitoring and assessment of the Waingongoro River and tributaries together with the assessment of the potential effects of the proposed quarry extraction activity, has concluded that water quality will as a minimum be maintained and groundwater flows will be sustained.

Stormwater diversions in place during the quarry operation have the effect of separating 'clean' from 'dirty' stormwater. This increases the effectiveness of the proposed stormwater treatment through the settlement ponds.

No contaminants are to be discharged to waterways and abstraction will be temporary and sustainably managed. The existing weirs placed to enable hydrological monitoring would impede any fish present in the tributary, noting the steepness of the riverbank at the discharge point. This is temporary and would cease once monitoring is no longer required.

On this basis no adverse effects on mahinga kai are anticipated. An ecological assessment in the summer months will confirm whether any habitats of species harvested by hapu/iwi are present and identify any potential effects.

Disturbance or discovery of archaeological items or physical wāhi tūpuna or wāhi taapu are regulated by the Heritage New Zealand Pouhere Taonga Act 2014. This legislation is administered and enforced by Heritage New Zealand. All persons undertaking land disturbance must abide by such legislation.

Opportunities to monitor works such as removal of overburden and construction of the tributary diversion as well as an invitation to co-design the proposed wetland landscape planting, acknowledge and respect the kaitiaki role of hapū/iwi and provide for ongoing engagement and monitoring to ensure the wider wellbeing of the River and environs is preserved and sustained.

Overall mauri of the River and tributaries is believed to be will likely be preserved.

#### **POL 5A.1.1**

*When considering any application for a discharge the consent authority must have regard to the following matters:*

*(a) the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water and*

*(b) the extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided.*

#### **POL 5A.1.2**

*When considering any application for a discharge the consent authority must have regard to the following matters:*

*(a) the extent to which the discharge would avoid contamination that will have an adverse effect on the health of people and communities as affected by their contact with fresh water; and*

*(b) the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their contact with fresh water resulting from the discharge would be avoided.*

*Policies 5A.1.1 and 5A.1.2 applies to the following discharges (including a diffuse discharge by any person or animal):*

*(a) a new discharge or*

*(b) a change or increase in any discharge - of any contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.*

#### **POL 5A.2.1**

*When considering any application, the consent authority must have regard to the following matters:*

*(a) the extent to which the change would adversely affect safeguarding the life supporting capacity of fresh water and of any associated ecosystem and*

*(b) the extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of fresh water and of any associated ecosystem resulting from the change would be avoided.*

*POL 5A.2.2 Policy 5A.2.1 applies to:*

*(a) any new activity and*

*(b) any change in the character, intensity or scale of any established activity - that involves any taking, using, damming or diverting of fresh water or draining of any wetland which is likely to result in any more than minor adverse change in the natural variability of flows or level of any fresh water, compared to that which immediately preceded the commencement of the new activity or the change in the established activity (or in the case of a change in an intermittent or seasonal activity, compared to that on the last occasion on which the activity was carried out).*

**Comment:**

The discharge of stormwater from the treatment system is an existing activity, the proposed expansion of the quarry will continue to discharge from the site. Monitoring of water quality to date does not increase or change the proposed discharge as such. Dewatering is considered to have an effect on the baseflows of the Waingongoro River but will not result in more than minor changes to natural variability of flows in the River.

**OBJ 6.1.1**

*To promote the sustainable management of the surface waters of Taranaki while avoiding, remedying or mitigating any actual or potential adverse effects from the taking, use, damming or diversion of surface water.*

**POL 6.1.2**

*The Taranaki Regional Council will as far as practicable, strictly limit the taking, use, damming and diversion of water above the existing level of use in the catchments or reaches listed in Table 2. All applications for existing and any further taking, use, damming or diversion of water in these catchments will be assessed on a case-by-case basis according to Policies 6.1.3 and 6.1.5-6.1.9.*

*Table 2 Catchments or reaches where taking, use, damming and diversion of water will be limited*

| <b>Catchment</b>  | <b>Reach</b>  |
|-------------------|---|
| Kapuni Stream     | Whole catchment   |
| Kaupokonui Stream | Whole catchment   |
| Mangorei Stream   | Whole catchment   |
| Patea River       | Above Mangaehu Stream confluence                                    |
| Waiongana Stream  | Whole catchment   |
| Waingongoro River | Whole catchment   |
| Waiwhakaiho River | Catchment above 100 m above weir (located at NZMS 260 P19: 078-298) |

**POL 6.1.3**

*Notwithstanding Policy 6.1.4, when assessing the quantity of water that may be taken, used, dammed or diverted from any surface water body, the Taranaki Regional Council will have particular regard to:*

- (a) the natural, ecological and amenity values of the water body;*
- (b) the relationship of Tangata Whenua with the water body;*
- (c) the importance of the water body to meet existing or reasonably foreseeable needs for community water supplies, agricultural, industrial or other use;*
- (d) the effects of water levels and flows on water quality;*

*(e) the hydrological characteristics of the catchment including flow variability, flow recession characteristics and the relationship to groundwater recharge; Taking, use, damming and diversion of surface water 51*

*(f) the significance of flows and groundwater recharge for the maintenance or enhancement of downstream flows;*

*(g) the extent to which the adverse effects of the taking, use, damming or diversion of water can be avoided, remedied or mitigated.*

#### **POL 6.1.4**

*Subject to Policy 6.1.3, when assessing resource consents and imposing conditions for the taking, use, damming or diversion of surface water the Taranaki Regional Council will require quantities, levels and flows of water in rivers and streams (excluding those in Policies 6.1.1 and 6.1.2), that retain at least 2/3 habitat at mean annual low flow.*

#### **POL 6.1.5**

*When assessing resource consent applications for the taking, use, damming or diversion of water, the Taranaki Regional Council will consider:*

*(a) the need to ensure that surface water is available for reasonable domestic needs, stock drinking water requirements, and firefighting purposes;*

*(b) where there are competing uses for water, or in catchments identified in Policy 6.1.2, the degree of community or regional benefit from the taking, use, damming or diversion as distinct from private or individual benefit;*

*(c) the need for the volumes of water sought;*

*(d) the need to use water efficiently and with a minimum of waste;*

*(e) what alternative sources of water or water collection or storage methods have been considered;*

*(f) possible mitigation measures including the maintenance of adequate minimum flows or flow regimes, the reduction or suspension of takes, the location, timing, duration and rate of the abstraction, the maintenance of fish passage, the application of riparian planting, use of gradient control for diversions, or other measures;*

*(g) the need to install systems to accurately measure the volumes of water abstracted and to reduce or suspend abstractions.*

Comment:

As discussed above it is acknowledged that the dewatering of groundwater will have an effect on the baseflows in the River due to be hydraulically linked. There is no direct abstraction of surface water. Water is treated in settlement ponds prior to discharging back into the River. There is a relatively small portion of the River that is potentially affected.

Dewatering is undertaken so as to be able to safely abstract the aggregate and minimise potential erosion risks. Water is used as a 'closed circuit' system, which avoids the need for alternative water supply. Some of the water from the treatment system is used in the dust suppressant system for the purposes of mitigating potential dust generation from the site, this is considered an efficient use of water.

In accordance with the above policy it is recommended that dewatering cease when flows in the River are below 2/3 of MALF so as to avoid impacts on habitat during sensitive periods.

It is submitted that the proposal is consistent with above objective and supporting policies.

**OBJ 6.2.1**

*To maintain and enhance the quality of the surface water resources of Taranaki by avoiding, remedying or mitigating the adverse effects of contaminants discharged to land and water from point-sources.*

**POL 6.2.1**

*In managing point-source discharges to land and water, the Taranaki Regional Council will recognise and provide for the different values and uses of surface water including:*

- (a) natural, ecological and amenity values;*
- (b) the relationship of Tangata Whenua with water;*
- (c) the maintenance and enhancement of aquatic ecosystems, and water quality for fisheries and fish spawning;*
- (d) use of water for water supply purposes;*
- (e) use of water for contact recreation.*

**POL 6.2.2**

*Discharges of contaminants or water to land or water from point sources should:*

- (a) be carried out in a way that avoids, remedies or mitigates significant adverse effects on aquatic ecosystems;*
- (b) maintain or enhance, after reasonable mixing, water quality of a standard that allows existing community use of that water for contact recreation, and water supply purposes, and maintains or enhances aquatic ecosystems;*
- (c) be of a quality that ensures that the size or location of the zone required for reasonable mixing does not have a significant adverse effect on community use of fresh water or the life supporting capacity of water and aquatic ecosystems.*

Comment

The main potential contaminant in the treated stormwater is sediment, which can be naturally entrained in the water as result of quarrying activities. Discharge to the River occurs both through seepage and the discharge point. The settlement ponds help to ensure that significant adverse

effects on the River and Tributary are avoided. Water quality monitoring undertaken to date does not indicate significant increases in contaminants upstream and downstream of the quarry site.

#### **OBJ 6.3.1**

*To maintain and enhance the quality of the surface water resources of Taranaki by avoiding, remedying or mitigating the adverse effects of contaminants discharged to water from diffuse sources.*

#### **OBJ 6.3.2**

*To maintain and enhance the riparian margins of surface waterbodies in order to avoid, remedy, or mitigate the adverse effects of activities on water quality, and aquatic and instream habitat.*

#### **POL 6.3.1**

*Land use practices which avoid, remedy or mitigate adverse effects on water quality will be encouraged and promoted including:*

*(d) land development and restoration of disturbed land to reduce diffuse source discharge of contaminants to water;*

*(g) land management practices that retain riparian buffer zones.*

#### **POL 6.3.2**

*Existing riparian vegetation along the margins of Taranaki's rivers, streams and lakes will be protected and enhanced, as far as is practicable, for the purpose of maintaining or enhancing water quality and the effective functioning of riparian zones.*

#### Comment:

The activities proposed could result diffuse discharge of sediment from the quarry site. The natural gravels and deposits under the site will assist in filtering washwater that discharges through land as a result of the proposed activities. No vegetation removal in the existing riparian margin is proposed, the buffer of land between the quarry site and the riparian margin will ensure that damage to the vegetation does not occur as a result of the proposed activities. The proposal is considered to be consistent with the above Objective and policies.

## **10.6 RMA 104(1)(c) – Relevant Other Matters**

### **Ngāti Ruanui Environmental Plan 2014**

The Ngāti Ruanui Environmental Plan acknowledges and affirms the intrinsic relationship of Ngāti Ruanui with the natural environment. The Plan allows nga Uri me nga Hapu or Ngāti Ruanui to outline and express their position on matters relating to the environment in their takiwa.

The proposal to expand the existing quarry at 277 Whenuku Road by 7.6 hectares, with the inclusion of allowing dewatering below ground level, the discharge of stormwater and washwater, and for the discharge of cleanfill material to site, has been assessed against the Ngāti Ruanui Environmental Plan.

#### Assessment

The following table identifies, with reference to the provisions of the Ngāti Ruanui Environmental Plan the relevant issues, objectives and policies against which the proposal has been assessed.

| Section 3 Whenuakura – The Land  |  |
|--|--|
| 3.1 Issues   | 3.2 Objectives   |
| <ul style="list-style-type: none"> <li>• <b>Issue 3.1.1</b> Land use</li> </ul>  | <ul style="list-style-type: none"> <li>• That the concept of Kaitiakitanga as defined by Ngāti Ruanui is applied to the management of natural and physical resources.</li> </ul>   |
| 3.5 Specific Land Use Plan Policies  | Application Response   |
| <p><u>Quarry Policy</u></p> <ol style="list-style-type: none"> <li>1. Life of a quarry to be set.</li> <li>2. Quarry to be a minimum of 25 metres from any awa or water course.</li> <li>3. Require detailed information relating to the use of settling ponds (contaminant control, method for capturing and controlling water levels, anything piped to rivers, how the pond will be maintained).</li> <li>4. Limiting the amount of working area at any one time.</li> <li>5. Provision of expert engineering and/or geological advice to ensure long term security of the quarry development.</li> </ol> | <ol style="list-style-type: none"> <li>1. Term is 25 years</li> <li>2. Extraction is proposed to be approximately 25m from the bed of the Waingongoro River. Refer to section 4.1.1 of this application.</li> <li>3. No change to the existing methodology for contaminant control. The tributary diversion through the existing quarry area will in due course be diverted to the proposed wetland before returning to the River. No change to the natural tributary flow volume at the point of discharge to river.</li> <li>4. Working area limited to 2.5ha.</li> <li>5. The existing quarry area demonstrate the stable nature of the quarry faces. Quarry best practice such as 5:1 batters have proven successful to date. Details of the extraction methodology below water table and near the river are provided in section 4.1.1. of this application. The methodology is designed to minimise the exposure of areas below the water table particularly at the closest points to the River.</li> </ol> |
| <p><u>Reinstatement</u></p> <ol style="list-style-type: none"> <li>1. Reinstatement methods and final contours of the quarried area required including the reinstatement of the settling pond and general working areas of the quarry site.</li> <li>2. Protect the stockpiles of material stripped (topsoil and clay) to reinstate each quarry working area is required.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Reinstatement methodology is set out in section 4.2.7.</li> <li>2. Overburden and fines material is to be stockpiled and used to reinstate each extraction area progressively.</li> </ol>  |

| 3.5 Specific Land Use Plan Policies  | Application Response   |
|--|--|
| <p><u>Monitoring</u></p> <ol style="list-style-type: none"> <li>Ngāti Ruanui will visit the site annually with the applicant to monitor.</li> <li>The monitoring conditions is to form part of the format consent conditions.</li> <li>All monitoring reports from the relevant Councils to be forwarded to Ngāti Ruanui for information.</li> </ol>   | <ol style="list-style-type: none"> <li>Noted and supported.</li> <li>Noted and supported.</li> <li>Noted and supported</li> </ol>  |
| <p><u>Recording and Protection of Significance of Site</u></p> <p>Ngāti Ruanui will record any site of cultural significance and provide a copy to the land owner and applicant. This will be included as part of the consent application. Where a site of cultural significance is identified Ngāti Ruanui will identify options for protection and where possible alteration to the application and intended activity. Where methods for protection cannot be resolved Ngāti Ruanui reserves the right to seek the independent protection of the site.</p> | <p>Noted. The applicant is continuing to engage with Ngāti Ruanui in relation to cultural values associated with the site and environs.</p> <p>Disturbance or discovery of archaeological items or physical wāhi tūpuna or wāhi taapu are regulated by the Heritage New Zealand Pouhere Taonga Act 2014. This legislation is administered and enforced by Heritage New Zealand. All persons undertaking land disturbance must abide by such legislation.</p> |
| <p><b>Assessment</b></p>   |  |
| <p>This quarry application will generally adhere to the policy requirements and will be consistent with the objective particularly in regard to formal monitoring of any cultural sites and impacts associated with the proposed activity, which in turn will support the aspirations of the Ngāti Ruanui Environmental Plan.</p>  |  |
| <p><b>Section 4 Te Puna Waiora - Water</b></p>   |  |
| <p><b>4.1 Issues</b></p>   | <p><b>Relevant Objectives</b></p>  |
| <ul style="list-style-type: none"> <li>4.1.1 Environmental Effects</li> <li>4.1.3 Specific Catchment areas</li> </ul>  | <ul style="list-style-type: none"> <li>Preservation of the mauri of watercourses.</li> <li>Water quality standards for ecosystems, recreational, cultural and water-use values are identified.</li> <li>Contaminant discharges to water ways are minimised, controlled and monitored to ensure standards are met.</li> <li>Water abstraction is sustainably managed</li> </ul>   |
| <p><b>4.1.1b Policies</b></p>  | <p><b>Application Response</b></p>   |
| <ol style="list-style-type: none"> <li>That the Taranaki Regional Council ensures non-point and point source discharge standards protect customary freshwater food gathering practices and users.</li> <li>The boundaries of Ngāti Ruanui are shared with its neighbouring iwi. The Waingongoro Awa is shared with Nga Ruahine.</li> </ol>   | <ol style="list-style-type: none"> <li>Noted and supported. No contaminants will enter the River. The hydrological assessment concludes that the proposed activity is managed carefully it will have a less than minor effect on ground and surface water quality and groundwater flows in the River. Refer to</li> <li>Noted and engagement has been ongoing with both iwi for this proposal.</li> </ol>  |

|  |  |
|--|--|
| <b>Assessment</b>  |  |
| Based on the hydrological monitoring and assessment of the Waingongoro River and tributaries together with the assessment of the potential effects of the proposed quarry extraction activity, it is considered that water quality and groundwater flows will be sustained. No contaminants are to be discharged to waterways and abstraction will be temporary and sustainably managed. Overall mauri of this River and tributaries will likely be preserved. |  |
| <b>Section 5 Te Moana Uriuri Tangaroa Takapou Whariki   Papatuanuku e Takoto Nei - Coastal and Marine Environment</b>  |  |
| <b>Relevance</b>   |  |
| The quarry is remote from the coastal marine environment. No direct or indirect adverse effects on the coastal environment are anticipated by the proposal to expand the quarry.   |  |
| <b>Section 6 Te Ai Tokorangi - Oxygen Air and Wind</b>   |  |
| <b>Relevance</b>   |  |
| No discharge of contaminants to the air are proposed in this consent. The issues, objectives and policies outlined in this section of Te Ai Tokorangi are not considered relevant to the proposal.   |  |
| <b>Section 7 Waahi Tapu</b>  |  |
| <b>7.1 Issues</b>  | <b>Relevant Objectives</b>   |
| <ul style="list-style-type: none"> <li>7.1.1 Protection</li> </ul>   | <ul style="list-style-type: none"> <li>To prevent the destruction, damage and/or alteration of waahi tapu</li> </ul> |
| <b>7.3 Relevant Policies</b>   |  |
| <ul style="list-style-type: none"> <li>That protection of waahi tapu shall be provided by not allowing:           <ul style="list-style-type: none"> <li>- Structures to be erected on a waahi tapu;</li> <li>- Earthworks or excavation to occur on a waahi tapu; and</li> <li>- Clearance of vegetation from a waahi tapu.</li> </ul> </li> </ul>  |  |
| <b>Assessment</b>  |  |
| Noted. The applicant is continuing to engage with Ngāti Ruanui in relation to cultural values associated with the site and environs. Disturbance or discovery of archaeological items or physical wāhi tūpuna or wāhi taapu are regulated by the Heritage New Zealand Pouhere Taonga Act 2014. This legislation is administered and enforced by Heritage New Zealand. All persons undertaking land disturbance must abide by such legislation.                 |  |
| <b>Section 8: Maunga Taranaki</b>  |  |
| <b>Relevance</b>   |  |
| The proposed quarry expansion is approximately 20km south east of the Mount Taranaki National Park Boundary. No direct or indirect adverse effects on Maunga Taranaki are anticipated.   |  |

## Conclusion

This applicant has been assessed against the objectives and policies of the Ngāti Ruanui Environmental Plan. The proposed quarry extraction and reinstatement methodology maintains opportunities for tangata whenua to physically reconnect with the Waingongoro River, its tributaries and this land and respects and acknowledges cultural values within a context of competing Part 2 matters.

## 10.7 Resource Management Act 1991 – Part 2 Assessment

Taking guidance from the recent Supreme Court Decision *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316, decisions on resource consents must have regard to the provisions of Part 2 of the RMA where it is appropriate to do so. In this instance the District and Regional Plans has been prepared with regard to Part 2 of the RMA and reflect Sections 5-8 and are considered to be robust in the context of the activity assessed in this application. However, a general response to Part 2 of the RMA is provided below for completeness.

### Section 5 – Purpose

The purpose of the Act as stated in section 5 is “to promote the sustainable management of natural and physical resources”. The term “sustainable management” is defined in section 5(2). This definition includes managing resources in a way that enables people and communities now and, in the future, to provide for their well-being and their health and safety, while protecting natural and physical resources and minimising adverse effects on the environment.

The proposed activity will enable the continued supply of material for the construction and maintenance of roads and other infrastructure projects in the District and wider region. The activity will supply a vital material locally and support economic wellbeing.

The activities will comply with the permitted noise standards in the District Plan and the effects of heavy vehicle traffic on Whenuku Road residents is proposed to be managed by restricting hours of movement and other methods detailed in the Freight Vehicle Management Plan (FVMP) and Quarry Management Plan.

The area of impact will be kept to a minimum via management of the ‘open working quarry area’ and each extraction area will be progressively reinstated as pastoral land following shellrock extraction. The avoidance and mitigation methods contained in the Quarry Management Plan and FVMP, and progressive remediation of the site will ensure that adverse environmental effects are minimised. The life-supporting capacity of water, soil and ecosystems will be safeguarded through implementation of these plans.

The existing erosion and sediment control measures, along with stormwater and washwater management and discharge will continue to apply. Management of stormwater runoff from each extraction area will be detailed in the Quarry Management Plan to ensure that stormwater and washwater are kept separated and filtered prior to discharge to the River.

Dewatering methods and rates will be managed as recommended in the Hydrology Report to ensure that the effects on the River will be less than minor. Water will be filtered and returned to the River.

It is therefore considered that any effects on the environment will be less than minor and the purpose of the Act is achieved through this application.

### Section 6 – Matters of national importance

Section 6 matters of national importance relevant to this application are.

- (a) *the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
- (c) *the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna*
- (d) *the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*

- (e) *the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:*
- (h) *the management of significant risks from natural hazards.*

The natural character of the River and margins will be preserved as the quarry activity will not be occurring in or on the River or margins. A buffer area will be maintained around the extraction areas and dewatering methods and rates will be managed as recommended in the Hydrology Report to ensure that the effects on the River will be less than minor.

The existing erosion and sediment control measures, along with stormwater and washwater management and discharge will continue to apply. Management of stormwater runoff from each extraction area will be detailed in the Quarry Management Plan to ensure that stormwater and washwater are kept separated and filtered prior to discharge to the River.

The Waingongoro River and its tributaries are recognised as a statutory acknowledgement in Section 53 of the Ngaruahine Claims Settlement Act 2006. The quarry site is in the rohe of Ngaati Ruanui. Engagement is ongoing to recognise and provide for the relationship of both iwi with the area as detailed in sections 6.3, 8 and 10 of this application.

## **Section 7 – Other matters**

Section 7 sets out matters that must be given particular regard when considering resource consent applications. Of relevance to this application are:

- (a) *kaitiakitanga*
- (b) *the efficient use and development of natural and physical resources*
- (c) *the maintenance and enhancement of amenity values*
- (d) *intrinsic values of ecosystems*
- (f) *maintenance and enhancement of the quality of the environment*
- (g) *any finite characteristics of natural and physical resources*
- (i) *the effects of climate change:*

7(a) The assessment of cultural effects at section 6.3 of this application, and consideration of the Ngati Ruanui Environmental Plan at section 10.6 demonstrates that the application has had and continues to have particular regard to kaitiakitanga.

7(b) The area is considered suitable for gravel extraction because it contains a high ratio of shellrock to overburden, presenting an economical use of natural resources while minimising environmental impacts.

7(c) The proposed new quarry area is not highly visible from adjacent properties, the river margins or the road. This is mainly as the activity other than overburden removal will occur below ground level, so impacts to the landscape and amenity values whilst the quarry is operational will be minimal.

7(d) As detailed in sections 6.7 – 6.9 of this application and in response to STDC District Plan Policy 2.18.10 sets out a number of matters that must be regarded to in order to ensure identified values are maintained or enhanced. Section 2.1.12 of this application has identified, through the freshwater fish database, that a number of rare and threatened indigenous species are likely to be present in the Waingongoro River. Two activities could potentially impact on the quality of aquatic habitats and natural values, being the potential impacts on the baseflows in the River and the discharge of treated/settled washwater from the site. Both these activities have been assessed as having a less

than minor potential effect on flows and water quality. It is submitted that the proposed activities will have minimal impacts on natural processes in the River. Therefore, it is concluded that it is likely that the effects on intrinsic values of ecosystems is at least maintained.

7(f) The overburden will be returned to the land and re-vegetated as the extraction is completed on the site is progressively remediated. The quality of the environment will be maintained, and more likely enhanced across the proposed quarry extraction areas, by the implementation of the proposed reinstatement, Quarry Management Plan, Freight Vehicle Management Plan and proposed mitigation measures.

7(g) The land will continue to be available for pastoral farming as areas are reinstated following metal extraction.

7(i) The hydrology assessment has accounted for impacts of climate change and concluded that the effects on ground and surface water quality and flows will be less than minor, provided

Overall the proposal is considered to be consistent with Section 7.

## Section 8 – Treaty of Waitangi

Engagement with māna whenua has and will continue to adhere to the principles of the Treaty and this will be reflected in the final application which is yet to be refined by such discussions and information about cultural values and concerns.

Such engagement will need to be ongoing to ensure the proposal and implementation of any consent approved, recognises and provides for the relationship of hapū/iwi with this ancestral land, water and other taonga relevant to the cultural values of this area. This approach is consistent with the principles of the Treaty.

The quarry site contains no known archaeological sites. Accidental discovery protocols will be observed and implemented as required during the works, particularly during overburden removal.

It is considered that in addressing the resource management issues associated with this proposed quarry activity and by engaging in a genuine manner that this application takes account of the principles of the Treaty of Waitangi.

## 11 Conclusion

The applicant wishes to expand an existing quarry at 277 Whenuku Road by approximately 7.6 hectares and extract a maximum of 1,100,000m<sup>3</sup> of material from the new quarry expansion area. This activity includes discharge of cleanfill to the site, dewatering below ground level to 7 – 8 metres and discharge of stormwater and washwater.

The actual and potential environmental effects of the activity are considered to be less than minor, and the proposal is consistent with the

Objectives and policies of the Taranaki Regional Plan and the South Taranaki District Plan.

Written approvals have not been sought from residents and owners of dwellings at Whenuku Road in relation to this comprehensive application. Engagement with iwi is ongoing and the applicant will provide feedback to council once available.

# Appendix A: Site Plans

# Appendix B: Quarry Management Plan

# Appendix C: Hydrology Report

# Appendix D: Acoustic Report

# Appendix E: Traffic Assessment Report

# Appendix F: Freight Vehicle Management Plan

# Appendix G: Traffic movements

# Appendix H: Extraction Timeline

# Appendix I: Photos of the River

# Appendix J: Consent conditions

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