

Authorisation of Existing Mining Activities Report

OCEANAGOLD (NEW ZEALAND)
LIMITED

**PART E: AUTHORISATION OF
EXISTING MINING ACTIVITIES**

A Report Prepared for the Waihi North
Project Application made under the
Fast-track Act 2024

March 2025

TABLE OF CONTENTS

1.	Introduction	1
2.	Overview of the Mining Activities	2
2.1	Martha Mine	2
2.2	The Underground Mines	4
2.3	The Waihi Surface Facilities Area	4
2.4	The Rock and Tailings Storage Facilities	9
2.5	The Conveyor	10
2.6	Rehabilitation and Closure of the Waihi Based Mining Activities	10
3.	Wharekirauponga Exploration Activities	14
3.1	District Consents Under the Resource Management Act 1991	14
3.2	Regional Consents Under the Resource Management Act 1991	16
3.3	Authorisations Under the Crown Minerals Act 1991, Conservation Act 1987 and Wildlife Act 1953	18
4.	Waihi Mining Activities: Hauraki District Council Land Use Approvals	20
4.1	Permitted Activities	20
4.2	Land Use Consents	23
4.3	Summary of how Individual Mine Elements are Authorised	23
5.	Waihi Mining Activities: Waikato Regional Council Approvals	35
5.1	The Taking of Water at Waihi	35
5.2	Discharges to Air at Waihi	37
5.3	Clean Water Diversions and Discharges	37
5.4	Establishment of, and Discharge from Silt, Collection and Contingency Ponds	41
5.5	Water Treatment Plant Discharge	44
5.6	Discharge of Material to Land at Stockpiles	45
5.7	Establishment and Operation of TSF1A & TSF2	46
5.8	Discharges from Rehabilitated Tailings Storage Facilities	47
5.9	Rehabilitation of Underground Mining and Creation of Martha Lake	48
5.10	Miscellaneous consents for construction and maintenance of Existing Infrastructure	51
6.	Waihi Mining Activities: Other Authorisations	52
7.	Mining Permits	53

LIST OF FIGURES

Figure 1: Overview of the Existing Mining Infrastructure at Waihi	3
Figure 2: The Waihi Surface Facilities Area	5
Figure 3: Waihi water management system.	7
Figure 4: Rock and tailings storage facilities.	9
Figure 5: Current Closure Concept Plan for Martha Mine.....	12
Figure 6: The TSF rehabilitation concept plan contained in the approved 2020/21 Rehabilitation and Closure Plan.....	13
Figure 7 Wharekirauponga Exploration Programme Sites	14
Figure 8: Geographic area covered by expired ML 32 2388 (Rule 5.17.4.1(P1)) and expired LUC 97/98-105 (Rule 5.17.4.1(P2)).	22
Figure 9: Existing clean water diversion drains and discharge points.	40
Figure 10: Silt, collection and contingency ponds.	42
Figure 11: Existing surface water discharge points.	43
Figure 12 Mining Permit 41808 (Favona)	53
Figure 13 Mining Permit 60541 (Wharekirauponga)	54

LIST OF TABLES

Table 1: Summary of how the use of land for key mining activities is authorised at Waihi	24
Table 2: Resource consents which authorise the take of water associated with Waihi mining activities.....	36
Table 3: Resource consent which authorises discharges to air from Waihi mining activities.	37
Table 4: Resource consents which authorise diversion of natural water around TSF1A.	37
Table 5: Silt Pond Discharge Permits	41
Table 6: Resource Consents which authorise the WTP discharge.	44

Table 7:Resource consent which authorises stockpiles45

Table 8: Resource consents which authorise the establishment and operation of the TSFs .46

Table 9: Resource consent which authorises the discharge from the rehabilitated TSFs.47

Table 10: Resource consents which authorise activities associated with the rehabilitation of underground mines and creation of Martha Lake.....48

REPORT INFORMATION

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1. INTRODUCTION

A variety of existing mining and mining-related activities have, and continue to be, undertaken by OGNZL in Waihi (see Figure 1 below). These activities and areas include:

- > The Martha Mine / Martha Open Pit (“**MOP**”);
- > Various existing and consented underground mines;
- > A surface facilities area which contains an ore processing plant (“**Processing Plant**”), water treatment plant (“**WTP**”), various rock stockpiles and various amenity facilities;
- > Various rock stockpiles;
- > Two tailings storage facilities;
- > A conveyor connecting the Martha Mine to the Processing Plant, rock stockpiles and tailings storage facilities; and
- > An extensive network of mine water management infrastructure.

These activities are described below.

2. OVERVIEW OF THE MINING ACTIVITIES

2.1 MARTHA MINE

The Martha Mine is an open pit located in central Waihi. The Martha Mine has been operated since 1987. A slip on the North Wall halted production in 2015. Resource consents were granted as part of the Project Martha project in 2018 for a layback of the Martha Mine north wall, removal of this slip material and construction of a new haul road. Project Martha also authorised the Martha Underground Mine.¹ The location of the Martha Mine is shown in Figure 1.

¹ New underground mining beneath the Martha Pit and under a small area of residential, reserve and commercial land to the southeast of the pit.

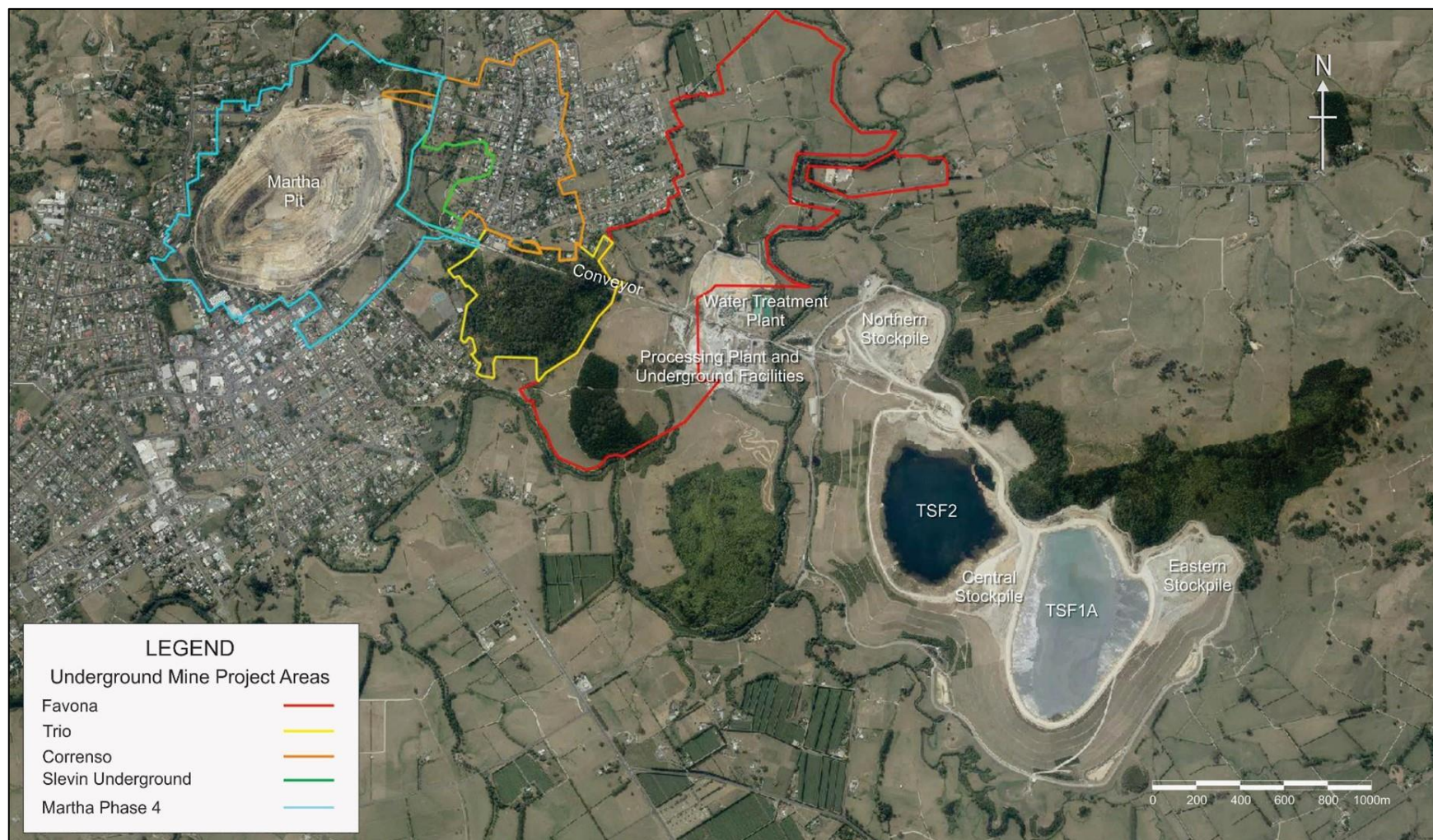


Figure 1: Overview of the Existing Mining Infrastructure at Waihi.

2.2 THE UNDERGROUND MINES

Several underground mines have been established to beneath, the east and to the southeast of the Martha Mine in the last 30 years. They include:

- > The Favona Underground Mine;
- > The Trio Underground Mine;
- > The Correnso Underground Mine;
- > The Slevin Underground Mine; and
- > The Martha Phase 4 Underground Mine.

The geographic extent of these underground mines is shown in Figure 1.

2.3 THE WAIHI SURFACE FACILITIES AREA

The Waihi Surface Facilities Area is located to the east of Waihi (see Figure 2 below). Access is by way of Baxter Road and an access road over the Ohinemuri River.

It contains the following mining infrastructure:

- > The Processing Plant;
- > The Water Treatment Plant;
- > The Favona Portal;
- > The Favona Stockpile;
- > The Run of Mine Stockpile
- > The Polishing Pond Stockpile;
- > The Concrete Batching Plant; and
- > The Maintenance Workshop area.

The location of these various elements is shown in Figure 2, and each is described below.

2.3.1 The Processing Plant

The Processing Plant consists of a conventional carbon-in-pulp gold and silver processing plant.

The Processing Plant is currently authorised to process up to 1.25 million tonnes of ore per annum from anywhere in the Waihi epithermal district.

Ore from the conveyor (see Section 2.5 below) is discharged onto a coarse ore pad. This coarse ore stockpile material is fed into a semi-autogenous grinding mill and secondary ball mill circuit. Water and limestone is added and the ground ore in slurry form is pumped to a series of cyanide leach and carbon adsorption tanks for dissolution of the gold and silver, which is then adsorbed onto the activated carbon.

The carbon is removed from the circuit and the remaining slurry (tailings) which is barren of economically recoverable gold and silver is pumped to the tailing's storage area. The carbon, which is loaded with gold and silver, is chemically washed to remove the gold and silver – which are then recovered by electrowinning. The remaining barren solution is recycled to the leach tanks.

The precipitated gold and silver are smelted to produce bullion bars and the slag from the smelting process is returned to grinding circuits. The bullion bars are exported to Australia for refining.

2.3.2 The Water Treatment Plant

OGNZL operates a comprehensive mine water management system at Waihi. An overview is provided in Figure 3 below. The system is designed to capture and treat, as necessary all water impacted by mining activities.

While some water is re-used as process water, there is always a net gain of water on site due to the high rainfall experienced in Waihi. The basic operating regime applied to site water management includes:

- > Natural water is diverted away from areas disturbed by mining activities wherever practicable, in order to reduce the volumes of water affected by the mining activities;
- > All water from areas disturbed by mining activities is directed to appropriate collection and treatment facilities prior to discharge off-site;
- > Where practicable, OGNZL endeavours to reduce the volumes of water requiring treatment; and
- > Disturbed areas are progressively rehabilitated at the earliest practicable time to minimise silt losses and improve runoff water quality.

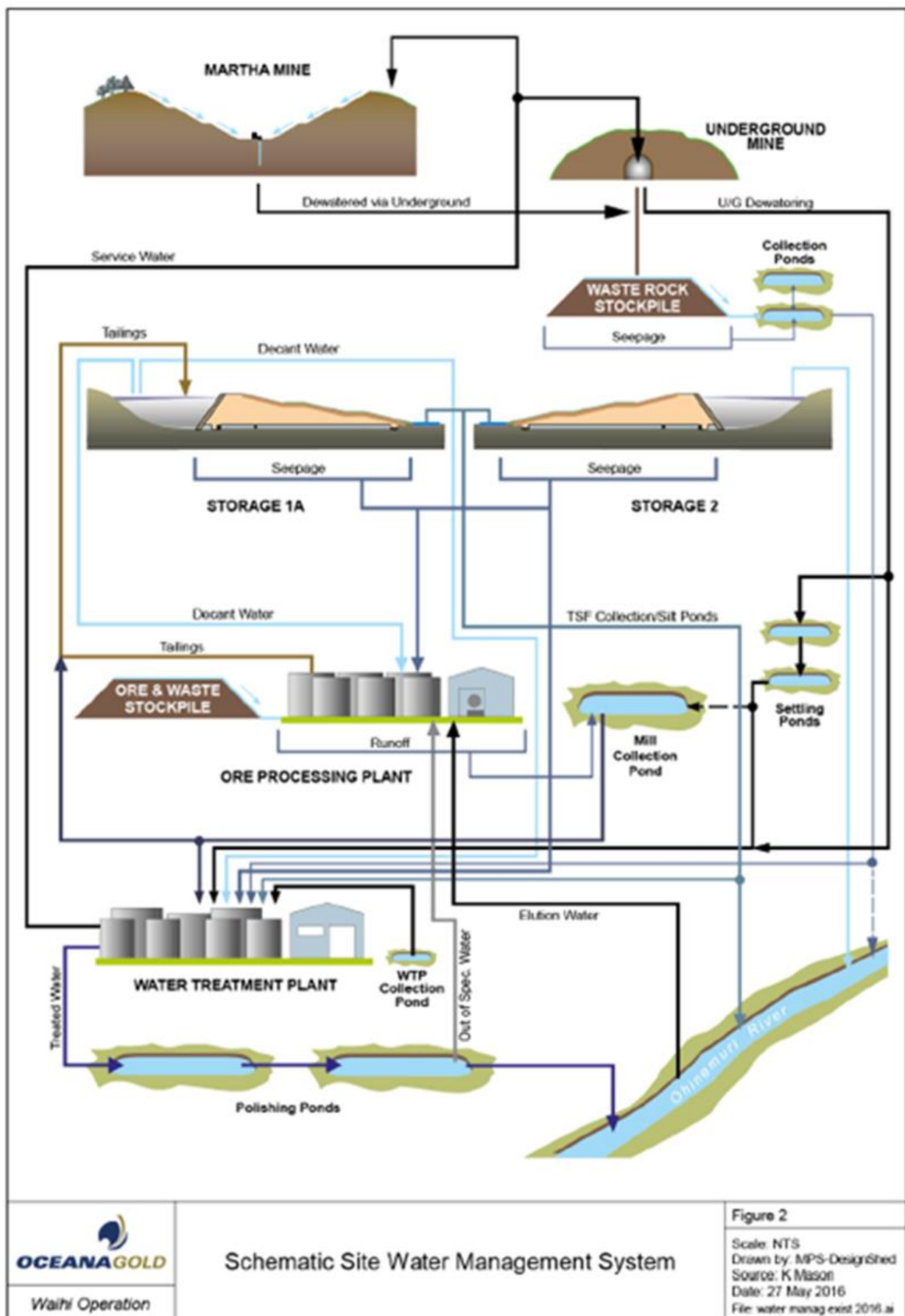


Figure 3: Waihi water management system.

Areas that currently generate water requiring treatment by the WTP include:

- > The Martha Mine – stormwater runoff and groundwater;
- > The underground mines – groundwater dewatering;
- > Runoff from the Waihi Surface Facilities Area;
- > Decant pond water – from TSF1A (see Section 2.4 below);
- > Collection pond water (at times) – stormwater runoff from overburden storage areas; and
- > Seepage – from TSF1A and TSF2 (including embankment structures).

2.3.3 The Favona Portal

The Favona Portal is located to the west of the Processing Plant. It provides access to the underground mines described in Section 2.2 above.

2.3.4 The Run of Mine Stockpile

The Run of Mine Stockpile (“**ROM Stockpile**”) is used to store ore before it is processed in the Processing Plant. It is located to the south of the Transfer Station on the conveyor and adjacent to the Processing Plant.

2.3.5 The Favona Stockpile

The Favona Stockpile is located between the Favona Portal and the Processing Plant. It is used to temporarily stockpile rock before it is transported elsewhere for permanent disposal.

2.3.6 The Polishing Pond Stockpile

The Polishing Pond Stockpile is located to the north of the WTP. It is used to temporarily stockpile rock before it is transported elsewhere for permanent disposal. It may also be used to temporarily store excess ore where it exceeds the Processing Plant and ROM Stockpile capacities. This stockpile has a footprint of approximately 250 m by 200 m (5 ha) and a height of approximately 30 m.



2.3.7 The Concrete Batching Plant

The consented, but yet to be constructed, concrete batching plant² (“**CAF Plant**”) is to be located north of the conveyor and immediately west of the WTP. It produces cement aggregate fill (“**CAF**”) for use in backfilling underground mines.

2.3.8 The Maintenance Workshop and Other Surface Facilities

To the south of the Processing Plant is the Maintenance Workshop and various other facilities. It contains a workshop and stores for vehicles and parts, changing room facilities, offices, tearooms and various other surface facilities for staff.

2.4 THE ROCK AND TAILINGS STORAGE FACILITIES

Mining activities generate rock and tailings which require disposal in safe permanent storages. As such, OGNZL operates the Central, Northern and Eastern Stockpiles and two Tailings Storage Facilities (“**TSFs**”) (known as TSF1A and TSF2) to the east of the Ohinemuri River. The general layout of the Central, Northern and Eastern Stockpiles and the TSFs is shown Figure 4 below.

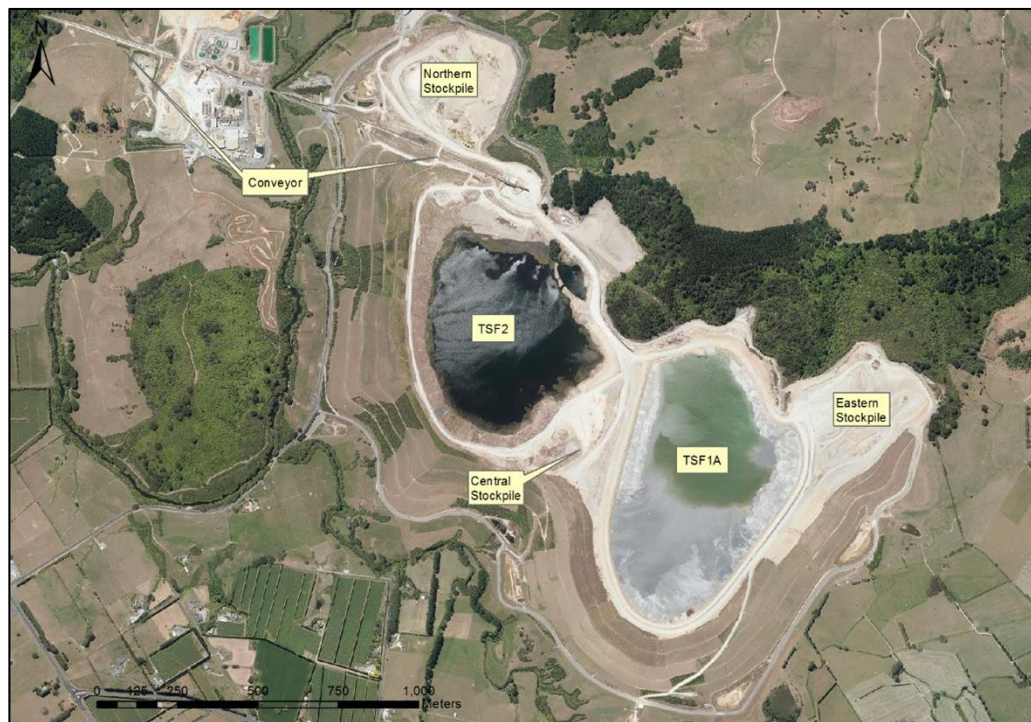


Figure 4: Rock and tailings storage facilities.

² LUSE-202.2018.00000857.004 & LUSE-202.2012.00000050.001.

Rock has also been used to construct some of the embankments of the TSFs. These facilities are authorised to accommodate material originating anywhere in the Waihi Epithermal District. This would include the Gladstone Open Pit and Wharekirauponga Underground Mine.

Tailings disposal operations occur 24 hours per day, seven days per week. However, rock disposal only occurs between the hours of 0700 and 2100 on Monday to Friday, and between 0700 and 1200 on Saturday.

Rock is delivered to an area adjacent to the Northern Stockpile by the conveyor. To allow flexibility in the selection of materials on site, material is hauled and placed by trucks or scrapers from a loading facility at the conveyor termination point.

2.5 THE CONVEYOR

Material from the Martha Mine and various underground mines surrounding Waihi township (refer Figure 1) is transported to the Waihi Surface Facilities Area and to the Central, Northern and Eastern Stockpiles and TSFs by an overland conveyor system. The conveyor passes under Grey Street and State Highway 25 (“**SH25**”). It then enters the area around Union Hill, where it rises to ground level and then enters a tunnel through Union Hill. From the eastern end of the tunnel the conveyor passes at ground level through open farmland to the Waihi Surface Facilities Area.

Ore is directed to the Run stockpile at the Waihi Surface Facilities Area by a tripper and stacking conveyor, while rock remains on the conveyor and is transported across the Ohinemuri River to a truck loading facility at the Central, Northern and Eastern Stockpiles and TSFs.

Access is provided along the conveyor route to permit daily inspection, maintenance and rock spillage clean up.

2.6 REHABILITATION AND CLOSURE OF THE WAIHI BASED MINING ACTIVITIES

OGNZL is required to rehabilitate the area containing the various mining activities described in Section 2.2 above in accordance with an approved Rehabilitation and Closure Plan. The currently approved Rehabilitation and Closure plan envisages the following rehabilitation occurring:

- > The Martha Pit is to be transformed into a pit lake and surrounding parkland facility for recreational use;
- > If, at or after the end of mining operations the Waihi Surface Facilities Area the facilities are dismantled, the area formerly occupied by and surrounding the dismantled plant is

to be contoured, and as far as is reasonably practicable restored in a manner that will protect water quality and avoid soil erosion;

- > The conveyor route is to be restored to its former condition unless the Hauraki District Council (“**HDC**”) requires that it be left for use as a public walkway or other useful amenity provided the cost of doing so does not exceed the cost of restoration to the former condition; and
- > The TSFs are to be rehabilitated using a range of vegetative covers (e.g. grass, native plants and vegetation and wetlands) as appropriate.

The current Rehabilitation and Closure Plan for the Martha Pit is shown in Figure 5 below.

The current Rehabilitation and Closure Plan for the Rock and Tailings Storage area is shown in Figure 6 below.

The pit lake filling would be supplemented by water taken from the Ohinemuri River, and once full, would discharge any overflow water via a tunnel and outlet structure to the Mangatoetoe Stream.







Figure 6: The TSF rehabilitation concept plan contained in the approved 2020/21 Rehabilitation and Closure Plan

3. WHAREKIRAUPONGA EXPLORATION ACTIVITIES

OGNZL has an ongoing mineral exploration drilling programme within the Wharekirauponga and Waiharekeke catchments. The current sites for drilling and associated activities (helipads, camps and pump sites) are shown on Figure 7, below.

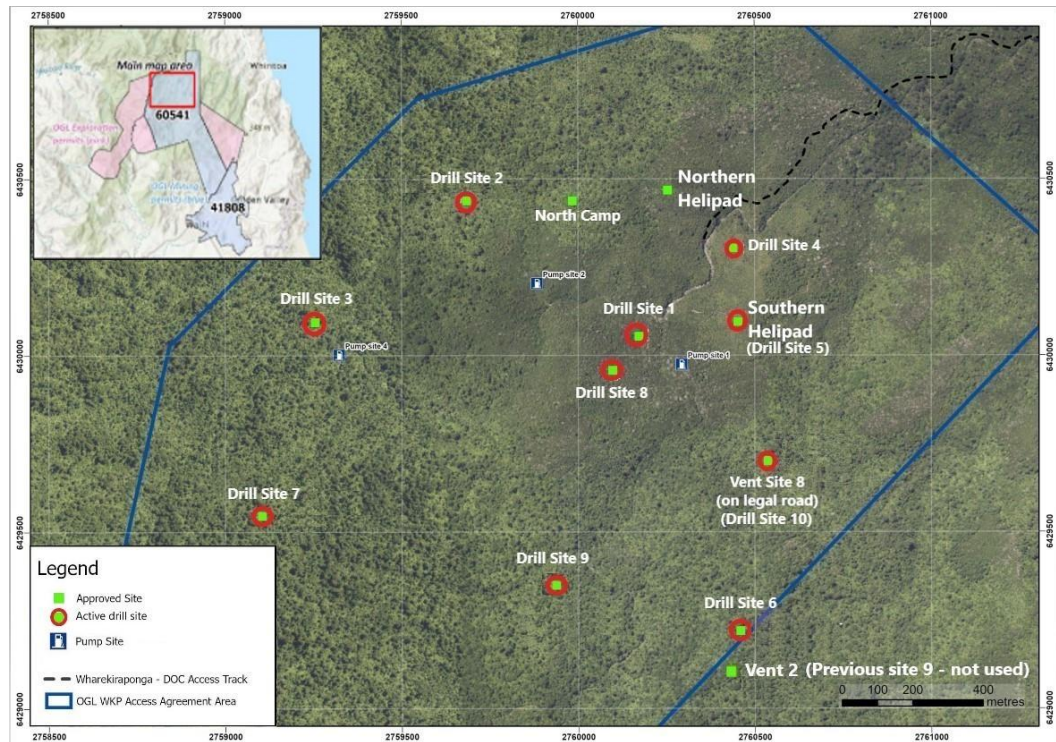


Figure 7 Wharekirauponga Exploration Programme Sites

In addition to the fixed drill sites, a further 12 locations are authorised for drilling and piezometer installation using a man-portable drill rig.

3.1 DISTRICT CONSENTS UNDER THE RESOURCE MANAGEMENT ACT 1991

- > The exploration programme is authorised by the following resource consents from HDC:
 - > LUSE-202.2016.00000609.001 to modify or remove part of Significant Natural Area T13P152 to undertake mineral exploration at nine drill sites and establish two helipads and a campsite at Wharekirauponga (granted 23 December 2016);
 - > LUSE-202.2016.00000609.002 to vary condition 1 of LUSE-202.2016.00000609.001 to grant consent for two drilling rigs and two camp sites to be operating concurrently (granted 24 October 2017);

- > LUSE-202.2016.00000609.003 to vary condition 1 of LUSE-202.2016.00000609.002 to authorise the installation of a vibrating wire piezometer at Site 3 and both standpipe and vibrating wire piezometers at Site 5 (granted 23 November 2020);
- > LUSE-202.2016.00000609.004 to vary conditions of consents to authorise the installation and use of piezometers at seven existing drilling sites (granted 4 July 2022);
- > LUSE-202.2016.00000609.005 to vary condition 1 of land use consent LUSE-202.2016.00000609.004 which authorises mineral exploration activity at Wharekirauponga, to enable a third drilling rig to operate concurrently with the two drilling rigs that are currently authorised (granted 26 June 2023);
- > LUSE-202.2017.00000690.001 to modify and remove part of Significant Natural Area T13P152 in order to establish a camp site, that may subsequently be used as a drill site, at Wharekirauponga (granted 8 June 2017);
- > LUSE-202.2017.00000690.002 to vary condition 1 of LUSE-202.2017.00000690.001 to authorise the installation of standpipe piezometers at Site 7 (granted 23 November 2020);
- > LUSE-202.2017.00000690.003 to vary conditions of consents to authorise the installation and use of piezometers at seven existing drilling sites (granted 4 July 2022);
- > LUSE-202.2019.00000995.001 to install piezometers of an unspecified type at Site 3, Site 5 and at the Southern Helipad site within the Wharekirauponga Catchment (granted 25 March 2019);
- > LUSE-202.2019.00001121.001 to modify and remove part of Significant Natural Area T13P152 in order to undertake mineral exploration at two drill/camp sites at Wharekirauponga (granted 4 December 2019);
- > LUSE-202.2019.00001121.002 to vary condition 1 of LUSE-202.2019.00001121.001 to authorise the installation of a vibrating wire at Site 18-6a (granted 23 November 2020); and
- > LUSE-202.2021.0001528.001 to modify or remove part of Significant Natural Area T13P152 and undertake mineral exploration drilling and associated ancillary activities including the installation of vibrating wire or standpipe piezometers in each borehole at Site 21-B (granted 26 November 2021).
- > LUSE- 202.2022.00001609.001 to undertake mineral exploration, including various ancillary activities (wooden drilling platforms, lighting, temporary signage, the

installation of piezometers, surface data readers and rain gauges, and the storage of hazardous substances) and associated vegetation clearance within the Wharekirauponga Valley at two sites (Site 8 and Site 9) on legal road reserve. (granted 7 October 2022);

- > LUSE-202.2023.00001786.001 to re-consent the use of existing meteorological monitoring equipment, previously authorised by LUSE-202.2018.00000956.00 (granted 28 July 2023);
- > LUSE-202.2024.00001860.001 to undertake mineral exploration and establish and operate a new exploration drilling site, including various ancillary activities, at the Southern Helipad Site (granted 29 February 2024);
- > LUSE-202.2024.00001865.001 to undertake mineral exploration and establish and operate a new exploration drilling site (Site 23-9), including various ancillary activities (granted 22 February 2024);
- > LUSE-202.2024.00001958.001 to install 12 near-stream piezometers and a telemetry system across 29 sites, and to use a man-portable rig in conjunction with up to 3 platform rigs (granted 7 October 2024).

3.2 REGIONAL CONSENTS UNDER THE RESOURCE MANAGEMENT ACT 1991

WRC regional consents are in place for:

- > A “global” surface water take (119755) to cover water takes to service drilling operations for the whole programme area. This consent expires on 1 July 2025 and a renewal application has been lodged with WRC outside the WNP Fast-track application
- > A water take (AUTH146336.01.01) and discharge permit (AUTH146336.02.01) to takes and discharge water for hydrogeological pump testing at four of the WKP drilling programme drill sites. Both expire 27 March 2029.

Permission to conduct exploration related activities within an area of the DOC estate associated with the WUG and covered by MP 60541, was granted in 2016 in the form of an Access Arrangement (48614-AA), which sets out a range of operating requirements and conditions.

The first schedule of the Access Arrangement authorises 0.15 ha of vegetation clearance including up to 9 drill site locations (comprising a maximum total disturbed area of 0.135 ha), 1 camp site (comprising a total disturbed area of 0.015 ha) and another camp site situated at a drill site, other associated activities including helipads, water pumps and

associated pipes, hoses and tanks, and minimum impact activities such as geological mapping, geochemical sampling, and geophysical surveys.

The Access Arrangement also requires comprehensive ecological surveys to be undertaken to ensure the sites are void of 'threatened' or 'at risk' fauna and flora, of particular note is the presence of Archey's Frogs.

The conditions of the Access Arrangement which are of particular relevance to the consent application are summarised below:

- > A limit of 9 drill locations with a maximum of total disturbed area of 0.135 ha (an additional camp site can locate at a drill site) and one camp site location with a maximum total disturbed area of 0.015 ha. Each camp and drill sites are to not exceed a total disturbance area of 150 m², with vegetation clearance only to be undertaken where necessary.
- > Do not damage vegetation outside of the drill sites, campsites, helicopter landing areas or pumps sites, or that is equal or greater than 50 cm diameter at breast height. All felled trees, slash and other leafy materials are to be stockpiled on site and restored to the land upon completion of drilling.
- > Use helicopters to enter the site and move any associated equipment to, from and between drill sites.
- > Conduct detailed ecological surveys (by a suitably qualified ecologist and herpetologist) to ensure no drilling is undertaken on sites where there are one or more 'Coromandel Striped geckos', and/or 5 or more 'At Risk' or 'Threatened' frog species or trees containing roosting bats. Where these species are identified and impact upon them is unable to be avoided, an alternative drill site will need to be found.
- > Where sites are deemed suitable for drilling, erect an exclusion fence (in accordance with a fencing plan) within 5 days of the final ecological survey to prevent wildlife from entering the drill site.
- > Undertake the drilling activity in accordance with a 'Kauri Dieback Management Plan'.
- > Conditions in relation to water management, including maximum water take, and avoidance of any harmful discharge into waterways. Removal of all grey water from sites.
- > Erection of appropriate signage.
- > Avoidance of any historic, culturally significant or archeologically significant sites.
- > Comprehensive rehabilitation of sites upon completion of drilling activity.

All management plans required as part of the Access Arrangement have been prepared and lodged with DOC. This includes the Kauri Dieback Management Plan and Fencing Plan.

3.3 AUTHORISATIONS UNDER THE CROWN MINERALS ACT 1991, CONSERVATION ACT 1987 AND WILDLIFE ACT 1953

The current drilling programme is largely on DOC administered land³ and is authorised by:

- > Mineral Mining Permit (“**MP**”) 60541 – active. Expires 4th August 2060.
- > Access Arrangement (“**AA**”) 48614-AA-V4, covering part of the MP60541 area – first granted 2nd December 2016, with the subsequent variations dated 17th August 2020, 7th May 2021, 20 May 2022 and 12 May 2023. Expires on 21st May 2027 with provision for review and earlier expiry in 2025.
- > Concession 87585-OTH, covering activities in the DOC estate outside the MP area. This was granted on 14 December 2020, and authorises drilling, piezometer installation and monitoring equipment outside the AA area. Expires 14 December 2025.
- > Concession 101993-OTH granted on 7 August 2024 - authorises installation of piezometers using a man-portable drilling rig, together with a telemetry system. Expires 7 April 2034.
- > Authority to Enter and Operate (“**AEO**”) 48614-AA-V4-AEO3, granted for the period 18 December 2024 to 17 December 2025.
- > Authority to Enter and Operate (“**AEO**”) 48614-AA-V4-AEO4, approved for the year to 17 December 2025.
- > Wharekurauponga Kauri Dieback Management Plans (“**KDMP**”) lodged and approved for the approved AWP.
- > Wildlife Act Authority (“**WAA**”) 97859-FAU, for catching and liberating native frogs and lizards in association with the establishment of drill sites. Granted 8 June 2023. Expires 21 May 2027 (subject to early expiry in 2025);
- > WAA 114932-FAU, to catch alive and liberate (or incidentally kill) native frogs and lizard species from Coromandel Forest Area (unformed road and public conservation land) to provide for vegetation clearance.

³ The vent sites shown in Figure 7 are located on a legal road reserve. (Note also that these were prospective vent sites identified earlier in the WNP exploration phase and may not be the same as the final vent site locations)

- > Research and Collection Permit 101231-RES to undertake Archey's and Hochsetter's Frog distribution survey in the conservation area. Granted 15 May 2023, expires 14 May 2028;
- > Minium Impact Authority 91248-MIA – to undertake minimum impact activities within MP area outside the area of AA 48164. Granted 21 December 2020. Expires 1 October 2026.

A further concession (easement) was granted for the WNP services trench on 1 February 2025. This conveys a right to convey water, a right to drain water, a right to convey electricity, a right to convey telecommunications (via fibre optic cable only), for the purposes of connection the Willows Surface Facilities Area to the Waihi Surface Facilities Area supporting the Wharekirauponga Underground Mine. It expires on 31 January 2055.

4. WAIHI MINING ACTIVITIES: HAURAKI DISTRICT COUNCIL LAND USE APPROVALS

The use of land for the various mining activities described in Section 2.2 is authorised by two permitted activity rules and several resource consents issued by the HDC. These are described below and then summarised in Table 1.

4.1 PERMITTED ACTIVITIES

The modern mining operation at Waihi was initially authorised by Mining Licence (“ML”) 32 2388 (issued under the Mining Act 1971) in 1988. Changes to ML 32 2388 and a new land use consent - LUC 97/98-105 were issued in June 1999 which authorised a further extension of the mining activities.

ML 32 2388 and LUC 97/98-105 were complementary and applied to separate geographic areas as shown in Figure 7 below. ML 32 2388 authorised all mining related activities within the Mining Licence area shown in Figure 7, and LUC 97/98-105 authorised all mining related activities within the Extended Martha Mineral Area shown in Figure 7. There was no geographic overlap in the area to which each approval applied.

Together ML 32 2388 and LUC 97/98-105 authorised various mining activities associated with the establishment, operation and closure of:

- > Martha Mine;
- > The Conveyor;
- > The Processing Plant;
- > The Water Treatment Plant;
- > The Favona Stockpile and ROM Stockpile;
- > TSF1A up to 177.25 Mine Datum minus 1000 m (**m RL**);
- > TSF2 up to 156 m RL;
- > The Northern Stockpile, Central Stockpile and Eastern Stockpile; and
- > Various haul roads, perimeter roads, topsoil stockpiles, diversion drains and collection ponds within the footprint of each authorisation.

A copy of ML 32 2388 and LUC 97/98-105 is provided in **Appendix 1**. The terms and conditions of those documents describe in full the various activities they authorise.

ML 32 2388 and LUC 97/98-105 expired in 2017 and 2019 respectively, however, the activities which were covered by those authorisations are grandfathered into the Hauraki District Plan as a permitted activity as of their respective expiry dates via Rules 5.17.4.1(P1) and (P2) which state:

5.17.4.1 PERMITTED ACTIVITIES

Those activities listed below are a Permitted Activity unless otherwise specified and subject to compliance with the:*

- > *Zone Development Standards specified in Rule 5.17.5;*
- > *Activity Specific Standards specified in Rule 5.17.6;*
- > *Conservation and Heritage provisions in Section 6.0;*
- > *Specific and District Wide provisions in Section 7.0; and*
- > *District Wide Performance Standards in Section 8.0***

P1 ANY ACTIVITY CONDUCTED IN ACCORDANCE WITH THE RELEVANT TERMS AND CONDITIONS OF, AND WITHIN THE AREA COVERED BY MINING LICENCE 32 2388 AFTER ITS EXPIRY DATE OF 16 JULY 2017*

P2 ANY ACTIVITY CONDUCTED IN ACCORDANCE WITH THE RELEVANT TERMS AND CONDITIONS OF, AND WITHIN THE AREA COVERED BY LAND USE RESOURCE CONSENT 97/98-105 AFTER ITS EXPIRY DATE OF 18 OCTOBER 2019*

NOTE **

Once Rules P1 and P2 come into effect after the dates specified, any activity conducted within the areas of the zone covered by, and within the terms and conditions of Mining Licence 32 2388 and/or Land Use Resource Consent 97/98 – 105 is not subject to the provisions of sections 8.2.5 and 8.3.2.

In effect, these rules permit the scope and extent of Waihi Mining activities which were previously authorised via ML 32 2388 and LUC 97/98-105.

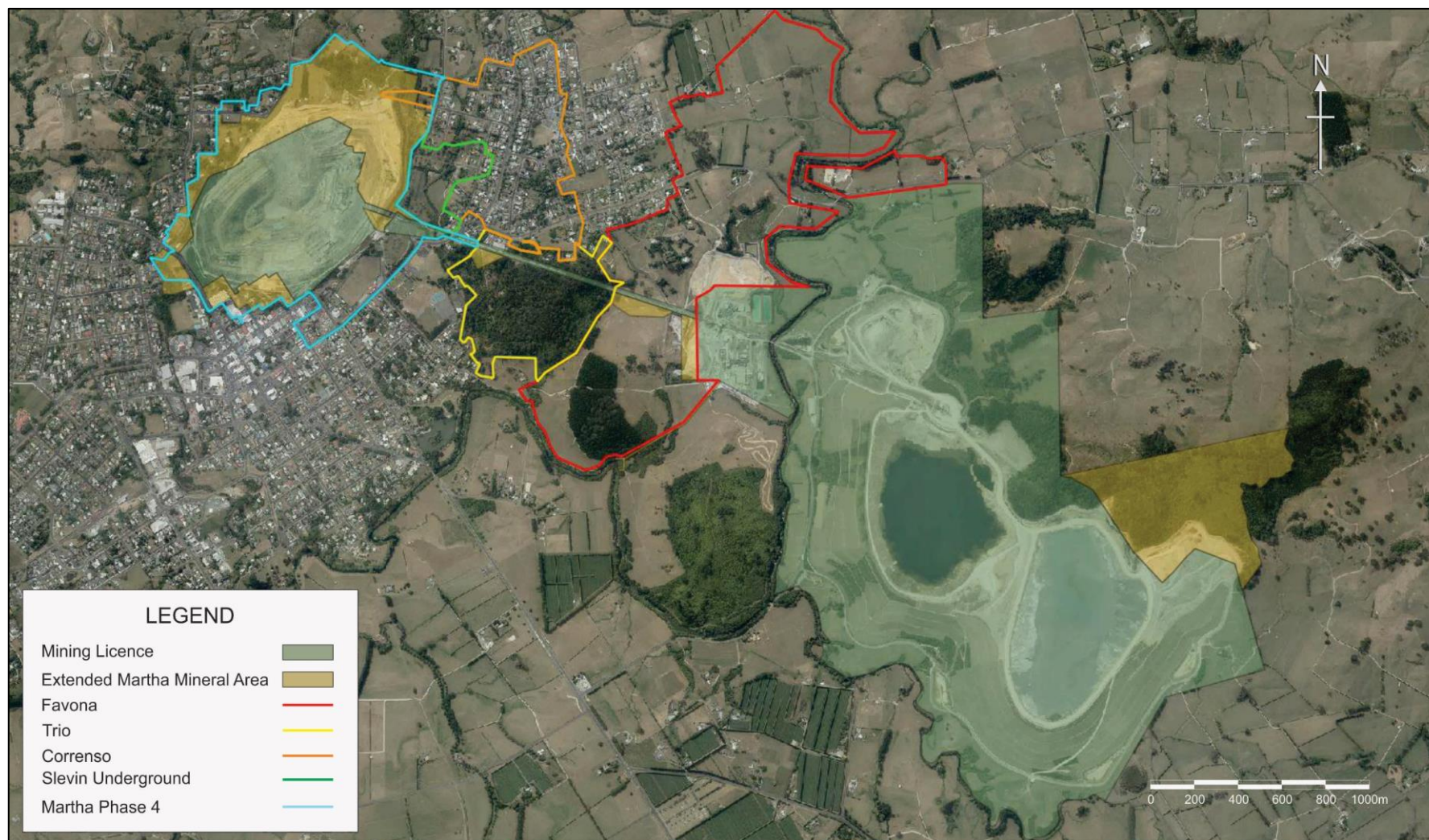


Figure 8: Geographic area covered by expired ML 32 2388 (Rule 5.17.4.1(P1)) and expired LUC 97/98-105 (Rule 5.17.4.1(P2)).

4.2 LAND USE CONSENTS

Since 1999 various land use consents have been granted to authorise additional mining activities at Waihi over and above those which were authorised by ML 32 2388 and LUC 97/98-105, and which are now covered by the permitted activity Rules 5.17.4.1(P1) and (P2).

These land use consents include:

- > The Favona Exploration Decline Land Use Consent-85.050.325.D;
- > The Favona Underground Mine Land Use Consent-85.050.326.E (2004);
- > The Trio Underground Mine Land Use Consent-15744 (2012);
- > The Correnso Underground Mine Land Use Consent-202.2012.0000050.001 (2013);
- > The Slevin Underground Mine Land Use Consent-202.2016.00000544.001;
- > The Martha Drill Drives Project Land Use Consent-202.2017.00000664.001;
- > The Project Martha Land Use Consent-202.2018.00000857.001;
- > The TSF2 Crest Raise Land Use Consent-202.2018.00000812.002;
- > The TSF1A Crest Raise Land Use Consent-202.2021.00001466.001; and
- > The mining operation on and adjoining Domain Road in the Rural zone and Reserve (Passive) zone Land Use Consent 202.2022.00001604.001.

A copy of each is provided in **Appendices 2 – 10** and **21** respectively.

At time of writing, decisions are pending on applications made to HDC (LUSE-202.2024.00001981.001) and WRC (APP147193) to authorise the WNP services trench. This was previously Area 4 of the WNP proposal, but was brought forward for consideration by the Councils independently of the fast-track application.

4.3 SUMMARY OF HOW INDIVIDUAL MINE ELEMENTS ARE AUTHORISED

Table 1 below provides a summary of how the use of land for each mine element described in Section 2 is authorised by HDC.

Table 1: Summary of how the use of land for key mining activities is authorised at Waihi

Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
Martha Mine	<ul style="list-style-type: none"> > All activities associated with the operation of the Martha Mine within the ML 32 2388 area shown in Figure 7 up to and including the pit extent authorised by the Martha Extended Project. 	<ul style="list-style-type: none"> > All activities associated with the operation of the Martha Mine within the Extended Martha Mineral area shown in Figure 7 up to and including the pit extent authorised by the Martha Extended Project. 	<ul style="list-style-type: none"> > The Phase 4 Cutback is authorised by Project Martha LUC 202.2018.00000857.001.
Conveyor	<ul style="list-style-type: none"> > The operation of the conveyor in the manner described in ML 32 2388. > Annex A of the ML 32 2388 is clear the conveyor can be used in association with any new mine located within the Waihi epithermal district. 	<ul style="list-style-type: none"> > Yes, but only insofar as it authorised various laydown areas adjacent to the conveyor which are outside the area covered by ML 32 2388 and which were used as laydown areas during the upgrade of the conveyor as part of the Martha Extended Project. 	<ul style="list-style-type: none"> > N/A
Processing Plant	<ul style="list-style-type: none"> > The establishment and operation of the Processing Plant in the manner described in ML 32 2388. > This includes it processing up to 1.25 million tonnes of ore per annum. 	<ul style="list-style-type: none"> > N/A 	<ul style="list-style-type: none"> > N/A



Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
	<ul style="list-style-type: none"> > Annex A of the ML 32 2388 is clear the processing plant can be used in association with any new mine located within the Waihi epithermal district. 		
Water Treatment Plant	<ul style="list-style-type: none"> > The establishment and operation of the Water Treatment Plant in the manner described in ML 32 2388 (this facility is shown in Figure 2.7 of ML 32 2388). > Annex A of the ML 32 2388 is clear the WTP can be used in association with any new mine located within the Waihi epithermal district. 	<ul style="list-style-type: none"> > N/A 	<ul style="list-style-type: none"> > N/A
Favona Portal and decline	<ul style="list-style-type: none"> > No – the portal is located outside the area covered by ML 32 2388. 	<ul style="list-style-type: none"> > No – the portal is located outside the area covered by LUC 97/98-105. 	<ul style="list-style-type: none"> > Establishment and operation of the Favona Portal and Decline are authorised by the Favona Exploration Decline Land Use Consent 85.050.325.D and the Favona Underground Project LUC 85.050.326.E (2004). > The Favona Underground Project LUC 85.050.326.E (2004) also authorise the road to the south and east of the Processing Plant which connects to the Favona Portal to the haul road adjacent to the conveyor



Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
			> The other land use consents described in Section 4.2 make it clear this infrastructure can be used in association with those activities.
The Run of Mine Stockpile	<ul style="list-style-type: none"> > This stockpile is located within the area covered by ML 32 2388 and is authorised to be used in the manner described in ML 32 2388 (this facility is shown in Figure 2.7 of ML 32 2388). > Annex A of the ML 32 2388 is clear the stockpile can be used in association with any new mine located within the Waihi epithermal district. 	> N/A	> N/A
The Favona Stockpile	<ul style="list-style-type: none"> > The establishment and operation of that part of this stockpile which is located within the area covered by ML 32 2388, in the manner described in ML 32 2388 (this facility is shown in Figure 2.7 of ML 32 2388). > Annex A of the ML 32 2388 is clear the stockpile can be used in 	<ul style="list-style-type: none"> > The extension of the stockpile to the west of the ML 322388 boundary was initially authorised by LUC 97/98-105. It was subsequently authorised for use by subsequent projects by the land use consents authorising those projects (see adjacent column). 	> The use and rehabilitation of this stockpile area outside the Martha Mineral Zone was authorised for use by subsequent projects by the land use consents authorising those projects. The most recent was Project Martha LUC LUSE-202.2018.00000857.004.



Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
	association with any new mine located within the Waihi epithermal district.		
Polishing Pond Stockpile	> No - This stockpile is located to the north of the WTP and outside of the area covered by ML 32 2388.	> No - This stockpile is located to the north of the WTP and outside of the area covered by LUC 97/98-105.	> Its establishment and operation is authorised by Favona Underground Project LUC 85.050.326.E (2004). > The other land use consents described in Section 3.2 make it clear this infrastructure can be used in association with those activities.
Concrete Batching Plant	> N/A	> N/A	> Establishment and operation of the CAF Plant was initially authorised by Correnso Underground Mine Land Use Consent-202.2012.0000050.001 (2013). > Its use to provide CAF for the Martha Underground Project is authorised by Project Martha LUSE-202.2018.00000857.004. > A change to the conditions of these land use consents provided for the relocation of the CAF Plant within the existing Waihi Surface Facilities Area, authorised by LUSE-202.2018.00000857.004 & LUSE-202.2012.0000050.001.
Maintenance Workshop, Store	> The establishment and operation of the Processing Plant in the manner described in ML 32 2388 (these	> N/A	> Mining activities on a section of Domain Road and adjoining land at the southern side of the SFA of the SFA are authorised by LUSE-202.2022.00001604.001, which

Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
and Various other Amenity Facilities at the Waihi Surface Facilities Area	<p>facilities are shown on Figure 2.7 of ML 322388).</p> <p>> Annex A of the ML 32 2388 is clear these facilities can be used in association with any new mine located within the Waihi epithermal district.</p>		<p>was granted in 2022. This land is in the Rural zone and Reserve (Passive) zone. Activities authorised include the establishment and operation of various maintenance, workshop, store, and amenity facilities.</p>
Northern Stockpile	<p>> The establishment and operation of this stockpile in the manner described in ML 32 2388 (this stockpile is shown on Figure 2.3 of ML 322388).</p> <p>> Annex A of the ML 32 2388 is clear this stockpile can be used in association with any new mine located within the Waihi epithermal district.</p>	> N/A	> N/A
Central Stockpile	<p>> The establishment and operation of this stockpile in the manner described in ML 32 2388 (this stockpile is shown on Figure 2.3 of ML 322388).</p>	> N/A	> N/A



Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
	<ul style="list-style-type: none"> > Annex A of the ML 32 2388 is clear this stockpile can be used in association with any new mine located within the Waihi epithermal district. 		
Eastern Stockpile	<ul style="list-style-type: none"> > The establishment and operation of this stockpile in the manner described in ML 32 2388 (this stockpile is shown on Figure 2.3 of ML 322388). > Annex A of the ML 32 2388 is clear this stockpile can be used in association with any new mine located within the Waihi epithermal district. 	<ul style="list-style-type: none"> > N/A 	<ul style="list-style-type: none"> > N/A
TSF2	<ul style="list-style-type: none"> > The establishment, operation and rehabilitation of TSF2 up to a height of RL 156 m in the manner described in ML 32 2388 (the TSF is shown on Figure 2.8 of ML 322388). > Annex A of the ML 32 2388 is clear TSF2 can be used in association 	<ul style="list-style-type: none"> > N/A 	<ul style="list-style-type: none"> > The establishment, operation and rehabilitation of TSF2 up to a height of 160.7 m RL is authorised by the TSF2 Crest Raise LUSE202.2018.00000812.002. > This consent makes it clear TSF2 can continue to be used in association with any new mine located within the Waihi epithermal district.



Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
	with any new mine located within the Waihi epithermal district.		
TSF1A	<ul style="list-style-type: none"> > The establishment, operation and rehabilitation of TSF1A up to a height of 177.25 m RL in the manner described in ML 32 2388 (the TSF is shown on Figure 2.8 of ML 322388). > Annex A of the ML 32 2388 is clear TSF1A can be used in association with any new mine located within the Waihi epithermal district. 	<ul style="list-style-type: none"> > The following activities on Extended Martha Mineral Area land to the north of TSF1A (see Figure 4 above): <ul style="list-style-type: none"> > Mining operations and associated earthworks; > Stockpiling of waste rock; > Construction and use of haul roads; > Miscellaneous drainage works; and > Rehabilitation. 	<ul style="list-style-type: none"> > The establishment, operation and rehabilitation of TSF1A up to a height of 182 m RL is authorised by the TSF1A Crest Raise LUSE 202.2021.00001466.001. > This consent makes it clear TSF1A can continue to be used in association with any new mine located within the Waihi epithermal district.
The establishment and use of various haul roads, perimeter roads, topsoil stockpiles, diversion drains	<ul style="list-style-type: none"> > Insofar as they are located within the area covered by ML 32 2388 (see Figure 7). 	<ul style="list-style-type: none"> > Insofar as they are located within the area covered by LUC 97/98-105 (see Figure 7)). 	



Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
and collection ponds.			
The Favona Underground Mine	> N/A	> N/A	<ul style="list-style-type: none"> > The Favona Underground Mine Land Use Consent 85.050.326.E (2004) authorises this activity, including: <ul style="list-style-type: none"> > The use of existing surface and underground facilities and infrastructure; > The use and storage of hazardous substances; > Extension of the decline and underground mining within the Favona area shown on Figure 7 above; > A new vent riser and escape shaft immediately to the west of the Polishing Pond stockpile; and > Rehabilitation of all of the above facilities.
The Trio Underground Mine	> N/A	> N/A	<ul style="list-style-type: none"> > The Trio Underground Mine Land Use Consent -15744 (2012) authorises this activity, including: <ul style="list-style-type: none"> > The use of existing surface and underground facilities and infrastructure; > The use and storage of hazardous substances; > Underground mining activities, ongoing exploration of the orebody, and rehabilitation activities within the Trio area shown on Figure 7 above;



Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
			<ul style="list-style-type: none"> > Establishment of the Trio Vent shaft within Union Hill; and > Rehabilitation of all of the above facilities.
The Correnso Underground Mine	> N/A	> N/A	<ul style="list-style-type: none"> > The Correnso Underground Mine Land Use Consent- 202.2012.0000050.001 (2013) authorises this activity, including: <ul style="list-style-type: none"> > The use of existing surface and underground facilities and infrastructure; > The use and storage of hazardous substances; > Underground mining activities, ongoing exploration of the orebody, and rehabilitation activities within the Correnso area shown on Figure 7 above; > Establishment of a vent shaft at the northern end of Martha Pit; and > Rehabilitation of all of the above facilities.
The Slevin Underground Mine	> N/A	> N/A	<ul style="list-style-type: none"> > The Slevin Underground Mine Land Use Consent 202.2016.00000544.001 authorises this activity, including: <ul style="list-style-type: none"> > The use of existing surface and underground facilities and infrastructure; > The use and storage of hazardous substances;



Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
			<ul style="list-style-type: none"> > Underground mining activities, ongoing exploration of the orebody, and rehabilitation activities within the Slevin Underground area shown on Figure 7 above; and > Rehabilitation of all of the above facilities.
The Martha Drill Drives Project	> N/A	> N/A	<ul style="list-style-type: none"> > The Martha Drill Drives Project Land Use Consent-202.2017.00000664.001 authorises this activity, including: <ul style="list-style-type: none"> > The use of existing surface and underground facilities and infrastructure; > The use and storage of hazardous substances; > The development and rehabilitation of two drill drives from the Slevin Underground mine to a position below the Martha Pit, and development of a breakthrough from one of the drill drives within the Pit for use as a fresh air intake; and > Rehabilitation of all of the above activities.
The Martha Underground Mine	> N/A	> N/A	<ul style="list-style-type: none"> > The Project Martha Land Use Consent LUC 202.2018.00000857.001 authorises this activity, including:



Activity	How is the Land Use Authorised?		
	ML 32 2388 / Rule 5.17.1.1(P1)	LUC 97/98-105 / Rule 5.17.1.1(P2)	Other
			<ul style="list-style-type: none"> > Underground mining activities, ongoing exploration of the orebody, and rehabilitation activities within the Martha Phase 4 area shown on Figure 7 above; > The use of existing surface and underground facilities and infrastructure including the Favona and Polishing Pond stockpiles and concrete batching plant; > The use and storage of hazardous substances; and > Rehabilitation of all of the above activities.



5. WAIHI MINING ACTIVITIES: WAIKATO REGIONAL COUNCIL APPROVALS

OGNZL holds a large suite of resource consents from the Waikato Regional Council to authorise activities associated with the mining activities described in Section 2.2. These include resource consents which authorise:

- > The taking of water;
- > Discharges to air;
- > Clean water diversions around mine areas and the discharge of that clean water;
- > The establishment of and discharge from silt ponds and collection ponds;
- > The discharge from the WTP to the Ohinemuri River;
- > The discharge of material to land at stockpiles;
- > The establishment and operation of the TSFs;
- > Discharges from rehabilitated TSFs;
- > Discharges within underground mining activities;
- > Various activities associated with the Martha Pit Lake creation upon mine closure; and
- > Various Wharekirauponga exploration drilling activities.

These approvals are described below.

5.1 THE TAKING OF WATER AT WAIHI

Water is taken to dewater Martha Mine and the underground mine workings, and for use in the Processing Plant and. The resource consents which authorise these activities are set out in Table 2.

There are also consents to take water during Martha Mine closure to assist with the creation of the Martha Lake. These are described in Section 4.9 below.

Of note, the most recent dewatering consent granted for the Martha Underground Mine (AUTH 139551.01.01) authorises dewatering down to 500 m RL.



Table 2: Resource consents which authorise the take of water associated with Waihi mining activities.

Resource Consent	Expiry Date
Processing Plant Use	
AUTH 1145544	15/7/2017
Take up to 430 cubic metres per day of water from Ohinemuri River for elution water purposes. [check OGNZ for replacement]	
Dewatering	
AUTH 109742	31/12/2028
To take groundwater and mine water for de-watering the underground mine (part of the Favona Underground Mine)	
AUTH 121446.01.02	31/12/2028
To undertake dewatering of the underground workings (including groundwater and mine water) associated with the Trio Development Project and any associated authorised mine.	
AUTH 124860	4/12/2042
To undertake dewatering of underground workings (including groundwater and mine water) within the Golden Link Project Area, including the Correnso Underground Mine.	
AUTH 139551.01.02	1/1/2045
To take groundwater, including geothermal water, associated with the dewatering of the Martha Pit and associated underground workings including the Martha Underground Mine.	

⁴ An application to replace this consent has been lodged and is being processed by Waikato Regional Council. The activity is currently authorized under section 124 of the RMA until that resource consent process is complete.



5.2 DISCHARGES TO AIR AT WAIHI

All discharges to air from the existing and authorised mining activities at Waihi are authorised by the resource consent set out in Table 3.

AUTH 124859.01.02 contains conditions which control how mining activities are to be undertaken such that they do not generate an objectionable adverse effect at or beyond the boundary of the property.

Table 3: Resource consent which authorises discharges to air from Waihi mining activities.

Resource Consent	Expiry Date
AUTH 124859.01.04 [Project Martha consent] Discharge contaminants into the air relating to all activities within the Golden Link Project Area. This includes dust and carbon dioxide arising from mining operations, emissions from the Process Plant including waste heat and water vapour, vehicle fumes, and other minor and/or fugitive emissions associated with mining operations; and within Area D only, smoke from burning of tramp material (including vegetation and surplus packaging)	15 July 2037
AUTH 121697 [Trio consent] To discharge contaminants to air from a vent shaft associated with the Trio Underground Mine Project	31 December 2028
AUTH 109741 [Favona Consent] To discharge contaminants to air from the mine portal, vent shaft(s) and project area (fugitive emissions) being dust, CO ₂ , blast fumes and exhaust fumes	31 December 2028

5.3 CLEAN WATER DIVERSIONS AND DISCHARGES

Clean runoff from the ground above mine areas is intercepted and diverted by various existing uphill diversion drains and discharged directly to surface water bodies. These activities are authorised by the various consents set out in Table 4 and are shown in Figure 8, below.

Table 4: Resource consents which authorise diversion of natural water around TSF1A.

Resource Consent	Expiry Date
Waihi Surface Facilities Area	



Resource Consent	Expiry Date
<p>AUTH 971310</p> <p>To divert natural water (farm water run-off and intercepted groundwater) to the south on the western side of the Process Plant site area.</p>	13/10/2034
<p>AUTH 971317.01.03</p> <p>To discharge natural water (farm run-off and intercepted groundwater) diverted to the south on the western side of the Process Plant site area</p>	12/10/2034
<p>AUTH 109743</p> <p>To divert and discharge ground and surface water (farm run-off and intercepted groundwater) from around the project area [the Polishing Pond Stockpile]</p>	13/12/2028
<p>AUTH103820.01.01</p> <p>Undertake stabilisation works of an existing river crossing of the Ohinemuri River</p>	31/08/2035
Rock and Tailings Storage Area	13/10/2034
<i>Southern Diversion Drain</i>	
<p>AUTH 971307.01.05</p> <p>To divert natural water (farm run-off and intercepted groundwater) around the eastern side of Storage 1A via the southern diversion drain</p>	12/10/2034
<p>AUTH 971308.01.05</p> <p>To discharge natural water (farm run-off and intercepted groundwater) diverted around the eastern side of Storage 1A into the southern diversion drain and thence to an unnamed tributary (Unnamed Stream 3) of the Ruahorehore Stream</p>	12/10/2034
<i>Northern Diversion Drain</i>	
<p>AUTH 971309.01.06</p> <p>To divert natural water (farm run-off and intercepted groundwater) around Storage 2 (and part of Storage 1A) via the northern diversion drain</p>	12/10/2034
<p>AUTH 971310.01.05</p>	12/10/2034



Resource Consent	Expiry Date
To discharge diverted natural water (farm run-off and intercepted groundwater) around Storage 2 (and Part of Storage 1A) via the northern diversion drain into an unnamed tributary (Unnamed Stream 2) of the Ohinemuri River	
<i>Other Diversions of Natural Water</i>	
AUTH 971296	13/10/2034
To divert natural water (farm run-off and intercepted groundwater) around Oxidised Stockpile N2	
AUTH 971297	13/10/2034
To discharge natural water (farm run-off and intercepted groundwater) diverted around Oxidised Stockpile N2 at the northern end of Storage 2 into an unnamed tributary (Unnamed Stream1) of the Ohinemuri River	
AUTH 971298	13/10/2034
To divert an unnamed tributary (Unnamed Stream 2) of the Ohinemuri River at the northern end of Storage 2	
AUTH 971299	13/10/2034
To divert part of an unnamed tributary (Unnamed Stream 1) of the Ohinemuri River by way of culverting at the northern end of Storage 2	
AUTH 971300	13/10/2034
To divert natural water (farm run-off and intercepted groundwater) around the surplus soil stockpiles via the southern diversion drain	
AUTH 971301	13/10/2034
To discharge natural water (farm run-off and intercepted groundwater) diverted around the surplus soil stockpiles via the southern diversion drain into an unnamed tributary	
AUTH 971302	13/10/2034
To divert an unnamed tributary (Unnamed Stream 3) of the Ruahorehore Stream around the eastern end of the stockpile (eastern diversion drain)	





Figure 9: Existing clean water diversion drains and discharge points.



5.4 ESTABLISHMENT OF, AND DISCHARGE FROM SILT, COLLECTION AND CONTINGENCY PONDS

There is an extensive system of silt, collection and contingency ponds which collect runoff around the site. Each pond, and their respective catchment is shown in Figure 9. Each type of pond has a different function as follows:

- > Silt ponds are sited to capture runoff from catchments that may contain sediment, but no chemical or elevated soluble metal contaminants.
- > Collection ponds are sited to receive runoff from active working catchments that could contain potentially acid-forming (“**PAF**”) material and that might therefore contain elevated concentrations of soluble metals.
- > Contingency ponds are sited to capture chemical spills. These include the Mill Contingency Pond (“**MCP**”), the WTP Contingency Pond, and Tailings Contingency Ponds TCP1 and TCP2.

Only the silt ponds and collection ponds can discharge directly to surface water. Those discharges are authorised by the various consents set out in Table 5 below, and the discharge point for each is shown in Figure 10.

Table 5: Silt Pond Discharge Permits

Resource Consent	Expiry Date
AUTH 971313.01.09 To place and use structures across a watercourse for the purpose of constructing a collection pond for the Water Treatment Plant	12/10/2034
AUTH 971314.01.03 To dam a watercourse for the construction of a collection pond for the Water Treatment Plant	12/10/2034
AUTH 971315.01.03 To discharge water from the collection pond to the Ohinemuri River	12/10/2034
AUTH 971311.01.09 To discharge settled stormwater from the silt ponds into the Ohinemuri River and the Ruahorehore Stream	12/10/2034
AUTH 971312.01.08 To discharge water from the collection ponds within Area D, to the Ohinemuri River and to the Ruahorehore Stream	12/10/2034





Figure 10: Silt, collection and contingency ponds.

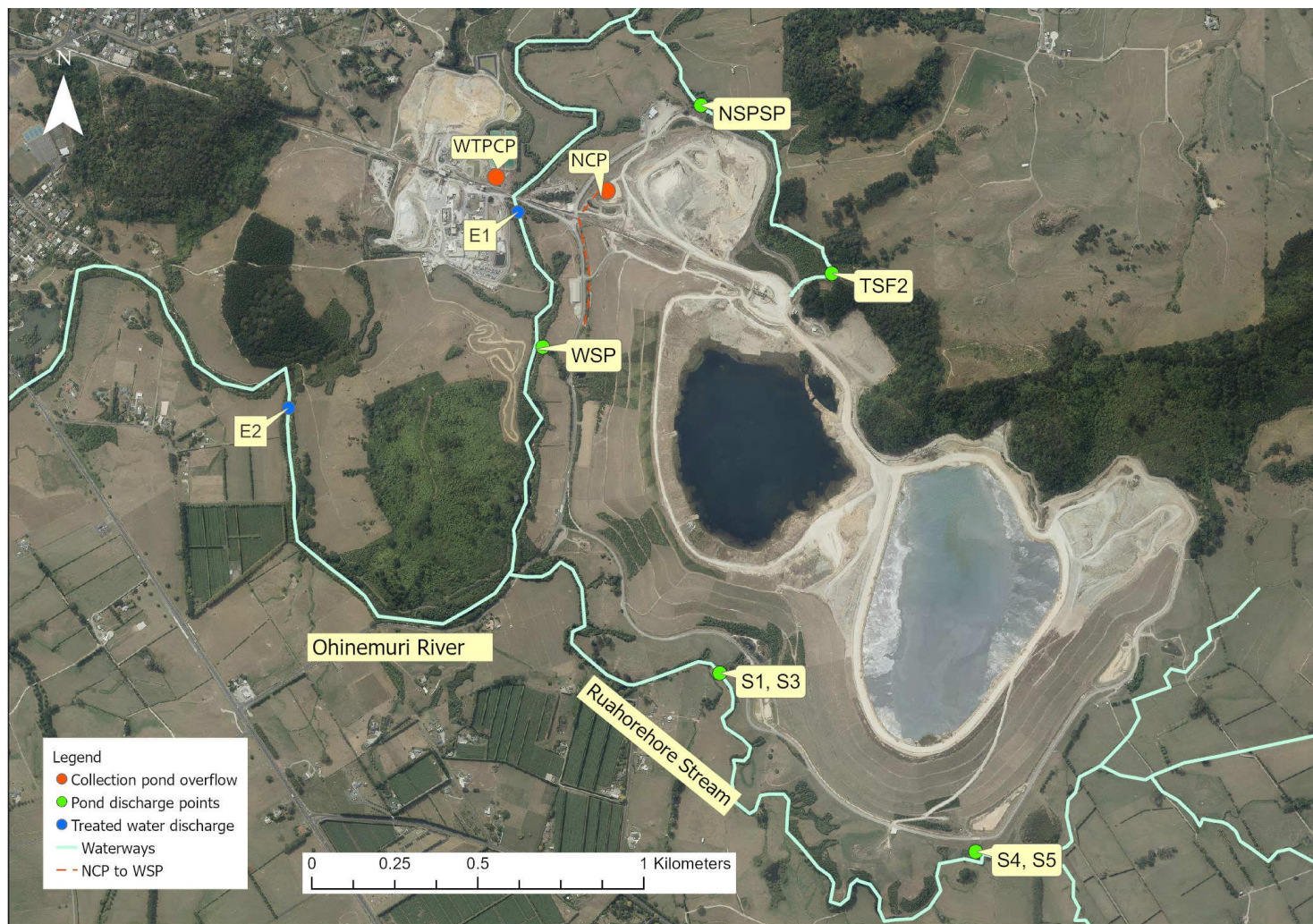


Figure 11: Existing surface water discharge points.⁵

⁵ The Favona Settlement Pond (FSP 1 & 2) flows into the MCP and does not discharge to surface water in any circumstances.



Reflecting the different catchment and purpose of the silt and collection ponds, their respective consents contain different conditions controlling their design and in what circumstances they are able to discharge directly to surface water and when their contents need to be pumped to the WTP for treatment.

For the collection ponds the default position is that their contents be pumped to the WTP, except during large, 1 in 10 year storm events when they are able to overflow into surface water.

A notable condition of AUTH 971312 is that if the consent holder can demonstrate that the quality of water entering these ponds is of a certain quality (because of the nature of the activities within its catchment etc), it may seek the approval of the Waikato Regional Council to discharge directly from those ponds, and once that approval is given the ponds shall be deemed to be silt ponds and the conditions of AUTH 971311 shall apply. S3, S4 and S5 shown in Figure 9 and 10 have been approved by Waikato Regional Council to operate in this manner.

5.5 WATER TREATMENT PLANT DISCHARGE

The WTP has been in operation since 1988. It was upgraded in 2011 to add a fourth metals treatment stream and a reverse osmosis (RO) plant stream to allow for treatment of increased volumes of groundwater from the Martha open pit.

The discharge from the WTP to the Ohinemuri River at two locations (labelled as E1 and E2 in Figure 10 above) is authorised by the resource consents set out in Table 6 below.

Table 6: Resource Consents which authorise the WTP discharge.

Resource Consent	Expiry Date
AUTH 971318.01.13 To discharge treated water from the Water Treatment Plant into the Ohinemuri River via two discharge points.	12/10/2034
AUTH 971319.01.12 To place and use structures in the Ohinemuri River for the discharge of treated water from the Water Treatment Plant into the Ohinemuri River	12/10/2034
AUTH 971320.01.12 To place and use structures in the Ohinemuri River for the discharge of treated water from the Water Treatment Plant into the Ohinemuri River	12/10/2034



The WTP discharge is subject to a range of conditions on discharge quality and quantity. These are set out in the conditions of 971318.01.02. These authorise the following five discharge regimes:

- > **Regime A** – Authorises a discharge of 20,000 m³/day or a discharge which increases flows in the Ohinemuri River by no more than 15% (whichever is lesser) subject to meeting a stringent suite of water quality standards;
- > **Regime B** – Authorises a discharge of 26,000 m³/day or a discharge which increases flows in the Ohinemuri River by no more than 20% (whichever is lesser) subject to meeting a stringent suite of water quality standards;
- > **Regime C** – Authorises a discharge of 5,200 m³/day or a discharge which increases flows in the Ohinemuri River by no more than 10% (whichever is lesser) from the RO Plant only subject to meeting a stringent suite of water quality standards;
- > **Regime D** – Authorises a discharge of 26,000 m³/day or a discharge which increases flows in the Ohinemuri River by no more than 40% (whichever is lesser) subject to meeting a stringent suite of water quality standards; and
- > **Regime E** – Authorises a discharge of 52,000 m³/day or a discharge which increases flows in the Ohinemuri River by no more than 60% (whichever is lesser) subject to meeting a stringent suite of water quality standards.

5.6 DISCHARGE OF MATERIAL TO LAND AT STOCKPILES

As outlined in Sections 2.3 and 2.4 above ore, rock, topsoil and other material is placed in stockpiles in various locations at the Waihi Surface Facilities Area and at the Rock and Tailings Storage Facilities.

The discharge of this material to land is authorised by the consents set out in Table 7.

Table 7: Resource consent which authorises stockpiles

Resource Consent	Expiry Date
AUTH 971295	13/10/2034
To place ore, waste rock, topsoil and other material in stockpiles	
AUTH 109744	31/12/2028
To discharge waste rock and ore onto land in temporary surface stockpiles and to discharge seepage from the temporary stockpiles into ground [Polishing Pond Stockpile]	



Resource Consent	Expiry Date
AUTH139551.02.02	01/01/2045
To place ore, waste rock, topsoil and tramp material to land within, and adjacent to, the Martha Pit, including stockpiled material and material for the creation of noise bunds.	

5.7 ESTABLISHMENT AND OPERATION OF TSF1A & TSF2

The various consents which authorise the establishment and operation of TSF1A up to 177.25 m RL and TSF2 up to 163 m RL are set out in Table 8. They include consents which authorise the discharge of rock to construct each TSF and its embankment, and the consents which authorise the discharge of tailings into each TSF and the diversion and capture of seepage and groundwater within the TSF structures, using the extensive seepage collection system beneath each TSF. This system is designed to capture upwelling groundwater, seepage from tailings, and leachate from the waste rock used to construct the tailings embankments. Seepage flow derived from the TSFs is either directed to the Processing Plant WTP.

Table 8: Resource consents which authorise the establishment and operation of the TSFs

Resource Consents	Expiry Date
TSF1A	
AUTHW1750.01.03	1/10/2026
To dam unnamed water courses within the designated area for Storage 1 in order to construct an impoundment structure for the containment of tailings from mining operations	
AUTH 971303.01.12	12/10/2034
To place waste rock and other material onto the ground to establish Storage 1A	
AUTH 971304.01.12	12/10/2034
To discharge tailings into Storage 1A	
AUTH 971305.01.12	12/10/2034
To discharge seepage from Storage 1A into the ground	



Resource Consents	Expiry Date
AUTH 971306.01.12To divert groundwater from within the footprint of Storage 1A into subsoil drains	12/10/2034
TSF2	
AUTHW1749.01.04	1/10/2026
To dam unnamed water courses within the designated area for storage 2 in order to construct an impoundment structure for the containment of tailings from mining operations	
AUTHW1761.01.03	1/10/2026
To discharge natural water containing waste onto the land and into the ground beneath storage 2 and the holding pond	
TSF1A & TSF2	
AUTHW1751.01.03	1/10/2026
To dam unnamed water courses in order to construct a perimeter bund and access road around the north, west and south edges of the designated areas for Storages 1 and 2 for waste and tailings disposal in a line described as approximately NZMS260-T13-648193 north to 645196 south to 644184 south east to 652175 and north east to 657181, near Black Hill Reserve.	

5.8 DISCHARGES FROM REHABILITATED TAILINGS STORAGE FACILITIES

Upon closure only rainwater will enter TSF2 and TSF1A (see Figure 6) and the two TSFs will be connected by a spillway from TSF1A to TSF2. At this point water quality will improve over time such that it is able to support aquatic life and be discharged directly from TSF2 to a tributary of Ohinemuri River. The location of this discharge is shown as “TSF2” on Figure 10.

Table 9: Resource consent which authorises the discharge from the rehabilitated TSFs.

Resource Consents	Expiry Date
AUTH 971323.01.07	12/10/2034
To discharge water from the tailing ponds following rehabilitation into an unnamed tributary (Unnamed Stream 2 of the Ohinemuri River)	



5.9 REHABILITATION OF UNDERGROUND MINING AND CREATION OF MARTHA LAKE

OGNZL holds various resource consents authorising activities associated with the rehabilitation and closure of the underground mines and Martha Mine. These include consents which authorise the placement of waste rock (overburden) and cemented aggregate into underground mines as backfill, and the creation of Martha Lake and associated flooding of underground mines. They are set out in Table 10.

Table 10: Resource consents which authorise activities associated with the rehabilitation of underground mines and creation of Martha Lake.

Resource Consents	Expiry Date
Favona Underground	
AUTH 109745	31/12/2028
To discharge waste rock into land underground in the project area as backfill and to allow degraded quality groundwater to discharge from the flooded workings in the project area into the surrounding ground post closure	
AUTH 109746	31/12/2028
To discharge treated mine water from the Martha Mine Water Treatment Plant to ground in association with flooding the underground mine on completion of the project	
Trio Underground	
AUTH 121416.01.01	31/12/2028
To place waste rock (overburden) into land underground as backfill, and to discharge groundwater from the flooded workings into the ground following closure, all associated with the Trio Development Project and any associated authorised mine.	
AUTH 121694.01.02	31/12/2028
Place waste rock (overburden) into land underground as backfill, and to discharge groundwater from the flooded workings into the ground following closure, all associated with the Trio Underground Mine Project	
Correnso Underground	
AUTH 124864	4/12/2042



Resource Consents	Expiry Date
To construct and place a water intake structure in the Ohinemuri River to facilitate accelerated flooding of the underground workings and filling of the pit lake upon completion of the Golden Link Project	
AUTH 124862	4/12/2042
Take and use up to 15,000 cubic metres of water per day from the Ohinemuri River for the purposes of:	
i) Accelerating the flooding of the underground workings on completion of the Golden Link Project; and	
ii) Accelerating the filling of the pit lake on completion of the Golden Link Project	
AUTH 124863	4/12/2042
To discharge treated water from the Water Treatment Plant and surface water from the Ohinemuri River to ground for the purpose of flooding of underground workings on completion of the Golden Link Project and into the extended pit to accelerate filling of the pit lake	
AUTH 124861	4/12/2042
To place waste rock (overburden) and cemented aggregate into land underground as backfill, and to discharge groundwater from the flooded workings area into the ground following closure, all associated with the Golden Link Project Area	
Martha Underground	
AUTH 139551.04.02	01/01/2045
To place rock and Concrete Aggregate Fill into land in the Martha Underground Mine	
AUTH139551.03.02	01/01/2045
To remove vegetation and carry out earthworks and contouring of land for mining, mining operations and post-mining operations (including for rehabilitation purposes) associated with Project Martha.	
AUTH971282.01.03	15/07/2017
Remove up to 20 hectares of vegetation [get update from OGNZ]	(Superseded by AUTH 139551)
AUTH971283.01.03	15/07/2017



Resource Consents	Expiry Date
Carry out earthworks & contouring of land for mining purposes.	
AUTH971284.01.03	15/07/2017
Discharge ore, waste rock, topsoil & tramp material in stockpiles.	
AUTH971294.01.04	12/10/2034
Carry out earthworks associated with construction.	
AUTH 139551.09.02	01/02/2044
To construct and use an intake structure in the Ohinemuri River	
AUTH 139551.10.02	(1/02/2049
To construct and use an outlet structure in the Mangatoetoe Stream	
AUTH971321.01.04	12/10/2034
Carry out earthworks, trenching & other activities in watercourses	
AUTH 139551.11.02	01/02/2049
To temporarily divert groundwater during the construction of the outlet structure in the Mangatoetoe Stream	
AUTH971322.01.04	12/10/2034
Diversion & take water from the monitoring wells within area D	
AUTHW1742.01.02	15/07/2017 (Replacement being processed)
To discharge stormwater at a maximum rate of up to 520 litres per second from surface facilities, the overland conveyor trench eastwards from the open pit and westwards from the portal of the Union Hill tunnel into Eastern Stream in the vicinity of map reference NZMS260: T13: 627-199 adjacent to Barry Road	
AUTHW1743.01.02	15/07/2017 (Replacement being processed)
To discharge intercepted groundwater and stormwater at a maximum rate up to 100 litres per second from works associated with the transportation of ore and waste in the area east of Union Hill via stormwater drains into an unnamed tributary of the Ohinemuri River in the vicinity of map reference NZMS260: T13: 634-197 adjacent to Moore Street	
AUTH 139551.12.02	01/02/2044



Resource Consents	Expiry Date
To temporarily discharge groundwater, diverted during the construction of the pit lake outlet, to the Mangatoetoe Stream	
AUTH971316.01.03	12/10/2034
Divert natural water to south on western side of process plant	
AUTH 139551.05.02	
To take water from the Ohinemuri River to flood the Martha Pit and associated underground workings.	01/01/2045
AUTH 139551.06.02	
To discharge surface water from the Ohinemuri River and treated water from the WTP into the Martha Pit on completion of mining for the purposes of flooding	01/02/2054
AUTH 139551.07.02	
To discharge limestone to the pit lake	01/02/2069
AUTH 139551.08.02	
To discharge overflow from the lake via an outlet structure and channel to the Mangatoetoe Stream	01/02/2079
AUTH3617.01.02	12/10/2034
Well drilling - For the establishment of monitoring bores.	

5.10 Miscellaneous consents for construction and maintenance OF EXISTING INFRASTRUCTURE

Resource Consents	
AUTH930088.01.01	08/06/2028
Construct and use a culvert for access purposes.	



6. WAIHI MINING ACTIVITIES: OTHER AUTHORISATIONS

Existing mining and related operations at Waihi take place almost exclusively on land owned by OGNZ and in the main do not require authorisation under access arrangements or concessions. The exceptions relate to small parcels of crown owned land adjacent to Martha Pit and the conveyor, where access arrangements are in place with LINZ and DOC.

7. MINING PERMITS

Mining permits confer a right to explore and mine Crown owned minerals that would otherwise be prohibited. They do not provide authorisation to undertake activities that require consent or permitting under other acts which impose particular controls (such as the RMA).

Mining Permit (“MP”) 41808 covers all mining & associated infrastructure at Waihi. It covers an area of 1,572.59 Ha, as shown in **Figure 12**, and expires on 21 March 2044.

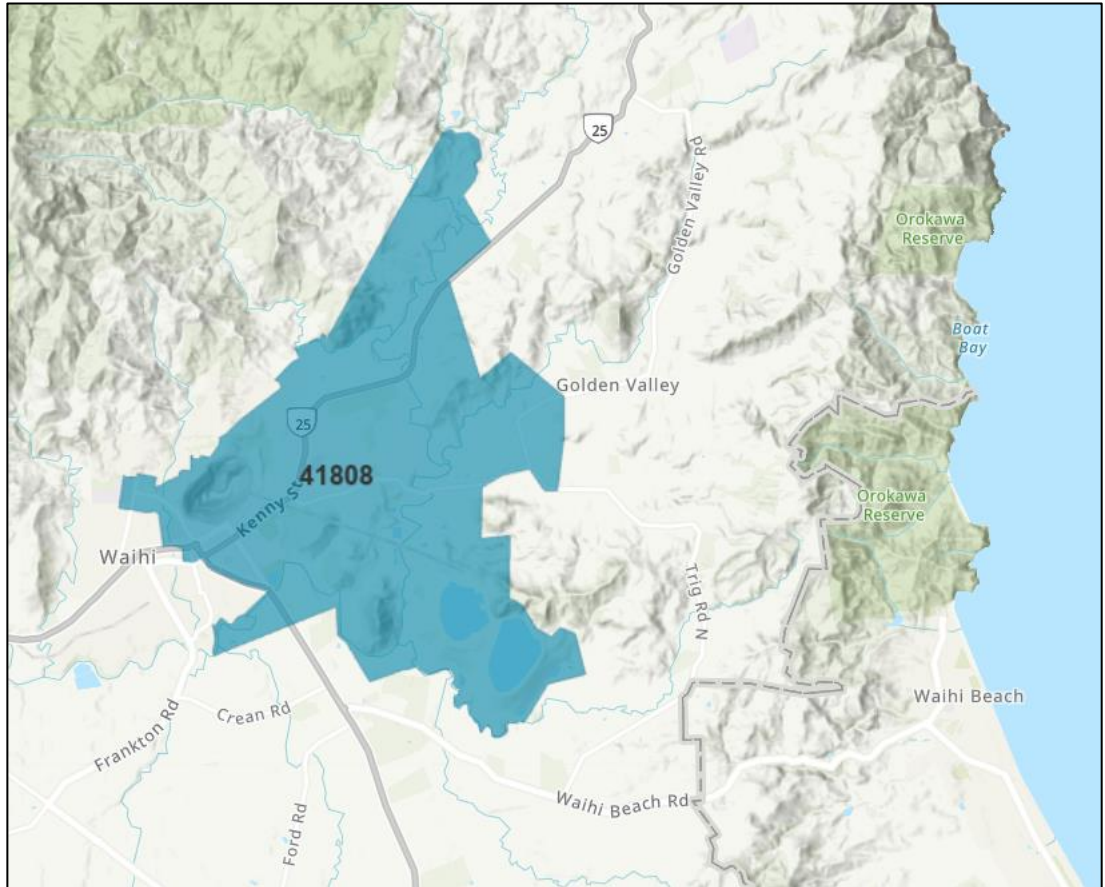


Figure 12 Mining Permit 41808 (Favona)

MP 60541 covers existing exploration (and potential mining) activities at Wharekirauponga and the decline/access tunnels. It covers an area of 3,271.75 Ha, largely located in the Coromandel Forest Park north of Waihi (see **Figure 13**). It expires on 8 April 2060.

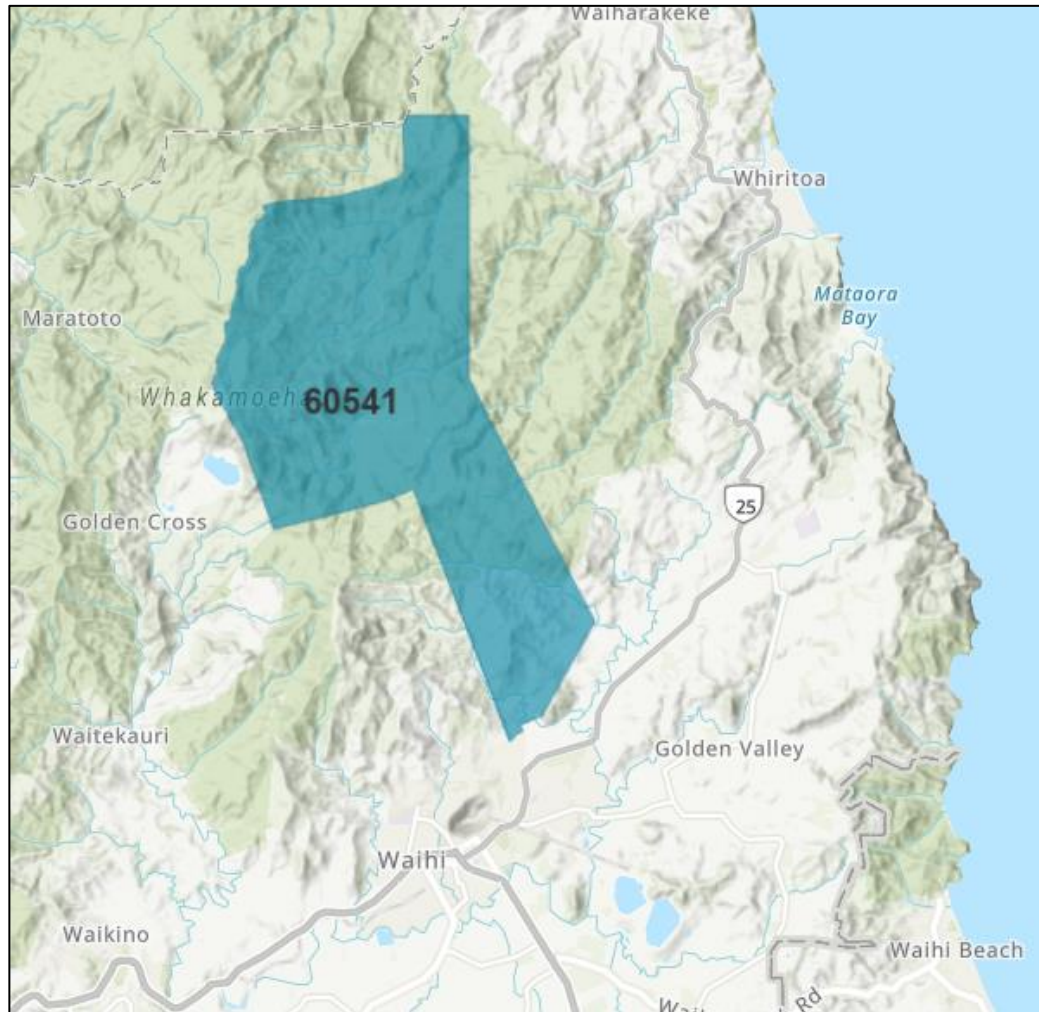


Figure 13 Mining Permit 60541 (Wharekurauponga)



APPENDIX 1

ML 32 2388 and LUC 97/98-105

CONDITIONS OF MINING LICENCE 32-2388 (incorporating Favona, Trio Variations – and 2017 Variation)

This Mining Licence was originally issued in 1987 for the Martha Project. Subsequent variations to the Mining Licence have been issued to provide for the following:

- The Extended Project (1999);
- Processing of material from the Favona underground mine (2003), inter alia;
- Processing of material from the Waihi Epithermal District, including the Trio underground mine; and raising the height of the tailings dam TSF1A (2011), inter alia;
- Development and trial stoping for the Martha Exploration Project (2012), inter alia; and;
- A delay in completing rehabilitation of the Storage 1A embankment to RL166m (May 2014).

In 2017, variations were made to:

- Delete reference to the development and trial stoping for the Martha Exploration Project on the basis that the project did not proceed,
- Make administrative changes to correct minor errors, update wording, remove construction related conditions that had served their purpose and provide clarity.

All activities authorised by this licence shall be undertaken in accordance with the varied conditions of Mining Licence 32-2388 as set out in full hereunder.

First Stage

The licensed project shall be undertaken in accordance with the conditions of mining licence 32-2388 as set out at 16 July 1987.

Second Stage

The Extended Project shall be undertaken generally in accordance with the information contained in the Assessment of Environmental Effects - Text and Figures (July 1997) and supporting technical documents submitted by Waihi Gold Company to the Minister in support of its application for the variation of licence required for the extended project and as subsequently confirmed or modified in further information supplied to the Minister in response to Section 92 Resource Management Act 1991 requests and evidence called by the licensee at the hearing held in Waihi between 20 November 1997 and 17 February 1998, and as amended by the variation of conditions of licence.

Third Stage

Any amendments to the pit design to ensure that the pit walls are left in a stable and safe state in preparation for closure shall be undertaken in accordance with the conditions of this Licence. Such amendments shall be considered by the peer reviewers, as required by condition 7A prior to being undertaken.

Similarly, amendments within the waste disposal area to accommodate changes to waste rock and ore quantities arising from an amended pit design shall be undertaken in accordance with the conditions of this licence and considered by the relevant peer reviewer(s) as required by condition 7A prior to being undertaken.

General and particular work programmes

1. The work to be undertaken pursuant to this licence shall be limited to the following:

- (a) Construction

Construction of mine surface facilities, the ore-waste conveyor, the conveyor tunnel, the process plant, wastewater treatment plant and the tailings and waste rock disposal area, including removal and burning of vegetation and waste timber, stripping and stockpiling of top soil and the stripping of overburden and waste, the construction and destruction of noise barriers and all associated civil works and facilities.

- (b) Mining

Open pit and minor underground mining, access and exploratory work, using explosives and mechanical excavating, truck handling of material within the pit area and that portion of the rest of the licence area that lies to the west of Junction Road, conveyor belt handling to a chemical processing plant, beneficiation and ore treatment including waste and tailings disposal within the licence area.

- (c) Rehabilitation

The licensee shall progressively implement Part A of the approved Rehabilitation and Closure Plan and shall implement Part B of the approved Rehabilitation and Closure Plan in the event of closure occurring. The approved Rehabilitation and Closure Plan is the plan approved pursuant to the conditions of the resource consents granted by the Waikato Regional Council and the Hauraki District Council.

(d) Monitoring

The regular monitoring of pit slopes, tailings retaining structures, ground movement, noise, blasting, vibration, air quality and rehabilitation programmes together with the necessary rectification work as required.

Except as provided for elsewhere in these conditions, or as required or authorised by or pursuant to any governing legislation, the licensee, in carrying out the foregoing work shall do so generally in accordance with the methods of mining and programme of work appended hereto as "Annex A".

2. In order to assist the Inspector of Mines to determine that the proposed operations are in conformity with the general work programme and the conditions of the licence, the licensee shall before starting work and at intervals not exceeding twelve (12) months thereafter, or where any significant change is to be effected, submit in triplicate a detailed work programme of operations proposed for the subsequent twelve (12) months to the Inspector of Mines. Except for the purposes of restoring the land surface and preventing damage to the environment, no work other than that specified in the detailed work programme or provided for elsewhere in these conditions or by legislation shall be carried out pursuant to the licence. Each such work programme submitted shall give details of the area to be mined, equipment to be used, provisions for access, power and water supply, stockpiling of soil, subsoil, overburden and tailings, settling ponds, area to be restored and methods of restoration, and any other significant matters.

Construction operations

3. In respect of the extended project, construction conditions shall apply to the following activities:

Initial Construction Activities

- Removal of vegetation from around the extended pit, removal of topsoil, the initial cut-back, batter and first bench at any point around the pit;
- Demolition and relocation of pit surface facilities from inside the Mining Licence;
- Creation of noise bunds at Grey Street and to the west of the extended pit;
- Upgrade of conveyor system;
- Site clearance and topsoil stockpiling;
- Upgrade of pipeline from pit to Water Treatment Plant;
- Upgrade of Process Plant;

- Construction of pipeline from the Water Treatment Plant to the Ohinemuri River;
- Construction of the foundations of Storage 1 A

Other Construction Activities

- Reworking of noise bunds at Grey Street and to the west of the pit at the end of their life;
- Removal of all plant and equipment during the closure/rehabilitation phase and recontouring of the land;
- Construction of lake outlet tunnel, enclosed structure and open channel

4. Prior to commencement of construction at the mine site, conveyor corridor, plant site, or waste disposal area the licensee shall provide the territorial authority with a copy of the construction programme indicating the proposed sequence of operations and their timing. During the construction period this copy is to be updated at regular three (3) monthly intervals.

5. deleted

6. deleted

7. deleted

7A Pit

(a) The licensee shall engage, at its own cost, a Peer Review Panel ("the Panel"). The members of this Panel shall be fully independent of the planning, design, and construction of the open pit at the Martha Mine, and all associated facilities.

(b) The primary function of the Panel is to ensure that the conditions relating to design, construction, operation, and rehabilitation associated with the key components of the open pit mining, and all associated development works (with particular focus on pit slope stability issues) are met, that the open pit is stable and that such work is undertaken by appropriately qualified personnel in accordance with best practice.

(c) The Panel shall comprise technical specialist(s) who between them have demonstrated expertise in the following fields:

- Geotechnical, with recognised experience in open pit construction and rock mechanics experience;
- Hydrogeology, with recognised open pit mining experience;
- Rehabilitation, with experience in open pit revegetation, rehabilitation and closure

(Note: There may be any number of individuals on the Panel, so long as the necessary areas of expertise are covered)

- (d) The members of the Panel and their defined field(s) of expertise, shall be approved by the Minister prior to the appointment of the Panel.
- (e) Each member of the Panel may act as Peer Reviewer only in their area of expertise, but the full Panel shall review all plans relating to the open pit construction.
- (f) The Panel may co-opt other specialist members to assist in any of its functions for specified periods subject to the approval of the Minister.
- (g) The licensee shall provide the Panel with all records, plans, designs etc that the Panel requests, and shall afford the Panel full access to the site at all reasonable times.
- (h) The Panel or individual members of the Panel may be the same panel as that which undertakes peer review as required by any other consent (including authorisations issued prior to the Resource Management Act 1991) relating to the mining licence area.
- (i) To carry out its primary function, the Panel shall report in writing to the Minister on all matters which are submitted to it for review, other than draft proposals submitted to it by the licensee and which are superseded, and at least at the following times:
 - Prior to commencing the extension related mining activities associated with the open pit;
 - At all critical stages during the development of the open pit (eg slope formation near the Cornish Pumphouse, major remedial works - eg coal seam at 1800 east, initial work on forming the pit perimeter);
 - On completion of open pit mining;

- On completion of lake filling;
- On rehabilitation of Area A

on at least the following matters:

- The Pit Slope Management Manual and any subsequent updates as are appropriate;
- Progress against the Annual Work Programme;
- Pit development including hydrogeological issues and geotechnical issues;
- Performance against the requirements of the Pit Slope Management Manual;
- Pit slope stability monitoring; and
- Rehabilitation and closure plans.

(j) The licensee shall develop a Pit Slope Management Manual. This manual shall be peer reviewed by the Panel and submitted to the Minister for approval prior to exercise of this consent. The Pit Slope Management Manual shall address at least the following issues:

- Procedures for the investigation, monitoring, excavation and backfilling of old mine stopes where required;
- Specifications for the construction and placement of stope pillars where required;
- Backfilling of the trial stopes;
- Development of a monitoring regime focused on monitoring groundwater and pit slope behaviour;
- Procedures for the investigation and remedial measures of old coal seams, and monitoring of the same;
- Location and installation of horizontal drains for the purposes of addressing groundwater and surface water effects;
- Monitoring of Pumphouse stability;
- Instability contingency response.

(k) By 1 December 2017 the licensee shall prepare a plan of the buffer zone associated with the open pit addressing the bullet points below and to the satisfaction of the territorial authority.

This plan may be updated at any time including where requested by the territorial authority and is to be approved in writing by the territorial authority.

The licensee shall consult with land owners and/or occupiers within the buffer zone associated with the extended open pit. In each case the licensee shall:

- Identify the facilities potentially at risk;
- Develop a contingency response appropriate to these facilities in the event of instability;
- At its own cost, in the event that these facilities are adversely affected as a result of pit mining operations, restore those facilities to their former condition and provide for interim provision of an equivalent facility until such time as this is achieved or provide alternative equivalent facilities. These arrangements shall be to the satisfaction of the Minister.

7B Company Liaison Officer

- (a) The licensee shall appoint a person ("the Company Liaison Officer"), subject to the approval of the Minister to liaise between the licensee, the community, and the Minister as set below. The Company Liaison Officer shall have sufficient delegated power to be able to deal immediately with complaints received and shall be required to investigate those complaints as soon as possible after receipt.
- (b) The name of the Company Liaison Officer together with the contact phone numbers for that person shall be publicly notified in local newspapers by the licensee prior to the commencement of the extended project (at least one month prior, but not more than two months prior to the commencement of construction activities) and at least once a year thereafter.
- (c) The Company Liaison Officer shall be appointed prior to the commencement of the extended project and this position shall be filled at all times during the construction activities as defined in Condition 3.

Council Liaison Officer

- (d) The licensee shall provide all the reasonable costs associated with the appointment and support of a Council Liaison Officer, to be employed by and be responsible to the Minister during the construction activities as defined in Condition 3.

(Note: The following is for information purposes only and does not form part of the condition.

The Council Liaison Officer may either be a new appointment or may be an existing employee.

Whether or not the appointee is an existing employee, the Council Liaison Officer's role shall be independent and objective and designed to promote effective gathering of information of effects upon the community from the mining activity; and, in the light of such information, to promote effective liaison with the Company Liaison Officer so that the effects identified may be remedied or mitigated.)

The functions and responsibilities of the Council Liaison Officer shall be as follows:

- (i) Liaise between the Company Liaison Officer, members of the community, the Waihi Liaison Forum (or its equivalent), and the Minister;
 - (ii) Report to the Minister on an "as events happen" basis, and weekly on complaints received, actions undertaken by the licensee and the complainant in respect to complaints, and on any other relevant actions and activities occurring during the week;
 - (iii) Ensure that the Company Liaison Officer is providing information to residents in the area around the mine and tailings facilities of the activities that are programmed to be undertaken in the coming week (especially land clearance, construction and blasting), activities that were carried out in the previous week and any other material that will inform the residents of what is programmed to happen in the coming weeks;
 - (iv) Facilitate the appointment of a mediator, venue, time etc agreeable to both parties, to undertake the mediation of disputes or concerns between the licensee and members of the community. Except in those situations where both parties are in agreement, the Council Liaison Officer's function is not to act as a mediator. The role of mediation is a specialist one that needs to be undertaken by persons experienced and trained in this area.
- (e) The Company Liaison Officer shall, during construction activities, report weekly to the Council Liaison Officer on all complaints received in the prior week and the action taken to investigate those complaints. In addition, the Company Liaison Officer shall investigate and report on any other matters as directed by the Council Liaison Officer

concerning or arising out of construction activities. (See periods of construction activities as defined in condition 3.)

- (f) The Company Liaison Officer shall give residents who are likely to be affected and the Council Liaison Officer reasonable (minimum one week's) prior notice of construction activities, indicating likely timing and duration.
- (g) Following completion of initial construction activities, and prior to the commencement of other construction activities (ie during operations stage), the Company Liaison Officer shall report six monthly to the Minister on the following:
 - (i) All complaints received during the previous six month period, action taken by the licensee and the resolutions, if any;
 - (ii) Other matters of concern raised by the community;
 - (iii) Any mediation entered into by the licensee and others with respect to operational matters and the outcome (unless the parties have agreed to keep such confidential).

7C Complaints procedure and mediation

Note: the following is for information purposes only and does not form part of the condition.

- Complainants will be expected to contact the Company Liaison Officer in the first instance (refer condition 7B(a)).
- During construction activities, if a complainant is dissatisfied with the response by the Company Liaison Officer, they shall contact the Council Liaison Officer with the details of the complaint and the Company Liaison Officer's response. Outside the construction activities, complainants shall contact any officer of the Minister.

The licensee shall comply with the following complaints procedure and mediation process:

- (a) The Company Liaison Officer shall meet with the complainant and the Council Liaison Officer to discuss the complaint and ways in which the issue can be resolved.
- (b) If the parties cannot agree on a resolution, the matter shall be put to mediation.

(Note: The following is for information purposes only and does not form part of the condition:

- (i) Refer condition 7B(d)(iv) above.
- (ii) Unless the parties agree the outcome of mediation shall not be binding.)

7D Noise Bunds

- (a) The licensee shall, prior to commencing construction and reworking activities associated with the noise bunds associated with the extended project prepare and submit detailed proposals to the Minister.
- (b) Proposals shall indicate:
 - Activities to be carried out, including their sequence and duration. A discussion on construction and removal methods considered shall be provided.
 - Plant and equipment proposed to be used.
 - Any activities likely to be undertaken on land beyond the ownership or control of the licensee, the duration of such activities, and proposed measures to mitigate adverse effects that might be experienced by the general public and/or adjacent residents as a consequence of these activities.
 - Proposals with respect to the removal or demolition of existing houses lying within or adjacent to the proposed noise bund (construction proposals only).
 - Proposed measures to mitigate potential adverse effects (in particular noise, dust, traffic generation and visual impact) occurring as a consequence of construction and removal activities, in particular measures aimed at safeguarding adjacent residential amenity.
- (c) This condition shall be read in conjunction with Condition 25, including the proposals under this condition to incorporate the screen planting provisions.
- (d) The Company Liaison Officer shall also ensure that the programme of construction and reworking the noise bunds is provided to all residents in the immediate area surrounding the bund who in his/her opinion are likely to experience the effects of these activities and to the Council Liaison Officer. This programme shall be provided at least 5 days in advance of the work being undertaken.
- (e) The construction of part of the noise bund over Junction Road cannot be undertaken until such time as the stopping of Junction Road has been completed.

- (f) A 2 metre high close boarded wooden fence shall be constructed along the Grey Street frontage to visually screen the site and to provide noise attenuation, prior to any clearance of vegetation or other activities associated with the extended project are undertaken. Once the noise bund is completed, the 2 metre high closed boarded wooden fence can be removed to be used on the top of the noise bund.
- (g) Non acid forming material shall be used in the construction of the noise bund to ensure that no leaching occurs during or after construction of the noise bund.

7E deleted

7F Lake Outlet Tunnel Construction

- (a) The licensee shall, prior to commencing construction of the lake outlet tunnel, the enclosed structure and channel to the Mangatoetoe Stream prepare a detailed construction and design report, such report to be submitted to the Minister for approval prior to implementation.
- (b) The construction and design report shall indicate the main construction activities to be undertaken, materials to be delivered to the construction area, materials to be removed from the construction area, duration and timing of the tunnel, enclosed structure and open channel construction, and proposals concerning the rehabilitation of areas disturbed during construction.
- (c) Following the Minister's approval of the construction and design report this information shall be passed to adjoining residents and the Council Liaison Officer by the Company Liaison Officer.
- (d) Vibration levels resulting from the construction of the tunnel measured in the ground closest to any affected residence excluding those properties owned by the licence holder or related Company or subject to an agreement with the licence holder or related Company shall not exceed the vibration levels specified in condition 20(d).

In the event that a property is sold and ceases to be subject to an agreement between the licence holder (or related Company) and the purchaser, or in the event that there is no longer an agreement between the licence holder (or related Company) and the landowner, the location for the measurement of vibration shall revert to being in the ground closest to the affected residence.

- (e) The construction of the tunnel and the enclosed structure shall be carried out and completed to the satisfaction of the Minister.

7G Archaeological, Historical or Cultural Discoveries

Should any features of archaeological, historical, or cultural significance be discovered during the construction phase or the operational phase, work in the relevant area will be discontinued and the Hauraki District Council, Heritage New Zealand Pouhere Taonga, and Ngati Tamatera, as appropriate, are to be notified by the licensee within 24 hours.

With respect to archaeological discoveries, work in the direct area will not recommence until consent is obtained from Heritage New Zealand Pouhere Taonga and/or the Hauraki District Council, if such consent is required.

With respect to discoveries of cultural significance to Ngati Tamatera, if practicable and after consultation with Ngati Tamatera, the discovery shall be left in situ and all reasonable efforts will be taken by the licensee to protect that discovery. If it is not practicable to leave the discovery in situ, then Ngati Tamatera shall be given a reasonable opportunity to arrange for the removal of the discovery, and the licensee shall provide reasonable assistance to Ngati Tamatera to do so, if so requested by Ngati Tamatera.

Hours of work

- 8. Construction work shall be limited to within the following hours:

Monday - Friday 0700-2000 daily

Saturdays 0730-1800

- (a) Provided that construction work hours at the process plant site shall be permitted outside of the above hours as long as the noise levels do not exceed those specified in Condition 9(a).
- (b) The above hours of work do not apply with respect to the use of water trucks for the purpose of controlling dust, so long as this activity complies with the noise level criteria of condition 9.

Construction noise during construction period

- 9. (a) With the exception of Waihi Central School where the construction noise limit shall be 55dB L_{Aeq} at any point within the boundary of the school, all construction activities

provided for by the Mining Licence taking place within the Mining Licence area shall not exceed the following limits:

Monday-Friday	Saturdays	L_{Aeq}	L_{AFmax}
0630-0730		60	70
0730-1800	0730-1800	75	90
1800-2000		70	85

At all other times, including Sundays and Public Holidays, the noise level shall not exceed 40 dB L_{Aeq}

All noise shall be measured within or close to the boundary of any residentially zoned site or the notional boundary of any occupied rural dwelling site not owned by the licence holder or related Company or not subject to an agreement with the licence holder or related Company.

In the event that a property is sold and ceases to be subject to an agreement between the licence holder (or related Company) and the purchaser, or in the event that there is no longer an agreement between the licence holder (or related Company) and the landowner, the location for the measurement of noise shall revert to being on or close to the boundary of that residentially zoned site or the notional boundary of the occupied rural site.

- (b) Construction noise shall be managed, measured and assessed in accordance with New Zealand Standard 6803:1999 Acoustics – Construction Noise.
- (c) Deleted.
- (d) Deleted
- (e) Tree-felling shall be conducted to minimise as far as practicable noise intrusion on all neighbouring properties.
- (f) Unwanted surface material at the mine site shall be used wherever practical when barriers are required close to the pit edge or near the rotary crusher to reduce noise.
- (g) Soil stored in the waste disposal area shall be used where practical when noise attenuation is required.

- (h) All equipment and machinery shall be regularly maintained to ensure noise levels as low as reasonably attainable.

Blasting and vibration

10. Deleted

Dewatering

11. (a) The licensee shall prepare a Dewatering and Settlement Monitoring Plan. The purpose of this Plan is to monitor and assess the effects of dewatering associated with the extended project on land settlement and the effects of the mining activities on the subsurface hydraulic regime. The Dewatering and Settlement Monitoring Plan shall address at least the following:

- (i) An overall description of the groundwater and settlement monitoring system and the measures to be adopted to meet the objectives of the groundwater and settlement monitoring system.
- (ii) Details of the piezometer network proposed to monitor the effects of pit dewatering on the aquifers under Waihi township.

Any monitoring bores additional to the existing piezometer network shall be installed and operational prior to the commencement of the extended project.

- (iii) Details of the settlement monitoring network proposed to monitor the extended zone which has been, or is likely to be, affected by settlement caused by mine dewatering.

Any settlement monitoring network locations additional to the existing monitoring locations shall be installed and operational prior to the commencement of the extended project.

- (iv) Details of the survey of facilities in the Waihi township considered by the licensee to be potentially "at risk" of damage from ground settlement caused by mine dewatering. The survey to be completed shall include collection of information about the facility's location, the nature of construction materials, the

nature of sensitive equipment that might be potentially "at risk", and the sensitivity of this equipment to ground settlement caused by mine dewatering and/or tilt.

This survey shall be completed prior to the commencement of the extended project.

- (v) A settlement contingency plan to include mitigation measures to be implemented in the event that ground settlement caused by mine dewatering induces a tilt that exceeds 1 in 1000 between any two network monitoring locations spaced no less than 25 metres apart. The settlement contingency plan shall particularly address those facilities identified by the licensee as being potentially "at risk" of damage from ground settlement caused by mine dewatering.
- (vi) A dewatering contingency plan that describes the steps the licensee shall implement in the event that dewatering results in adverse impacts on affected aquifer systems and associated groundwater supplies used for domestic, stock or other purposes.

In detailing the monitoring programmes the licensee shall provide information on the monitoring methods proposed, the parameters to be monitored, and the calibration and maintenance of monitoring equipment.

In the event of any conflict or inconsistency between these conditions and the provisions of the Dewatering and Settlement Monitoring Plan, these conditions shall prevail.

- (b) The Dewatering and Settlement Monitoring Plan shall be submitted to the Minister for approval at least one month prior to the commencement of the extended project. The licensee shall review and update (as necessary) the Plan and shall provide promptly such updated Plan to the Minister for approval.
- (c) If in the opinion of the Minister the dewatering adversely affects land or facilities, then the licensee shall at its own cost be responsible for reinstating the facilities to an equivalent standard to the reasonable satisfaction of the Minister.
- (d) The licensee shall measure and record the daily volume of water abstracted.

- (e) The licensee shall undertake water level monitoring of the piezometer network in accordance with the Dewatering and Settlement Monitoring Plan.
- (f) The licensee shall monitor ground settlement at a minimum of six monthly intervals in accordance with the Dewatering and Settlement Monitoring Plan.
- (g) In the event that a tilt greater than 1 in 1000 occurs between any two network monitoring locations spaced no less than 25 metres apart, and such tilt is caused by mine dewatering, or there is a significant variance from the predicted settlement rates described in the approved Dewatering and Settlement Plan the licensee shall notify the Minister, in writing, within 20 working days of receiving the results of the monitoring. The licensee shall then:
- Explain the cause of the non-conformance;
 - Agree with the Minister on the appropriate settlement contingency measures to be implemented as described;
 - Implement settlement contingency measures as appropriate;
 - Advise the Minister on the steps the licensee proposes to take in order to prevent any further occurrence of the situation.
- (h) The licensee shall provide to the Minister an annual dewatering and settlement monitoring report. The report shall include at least the following information:
- The data from monitoring undertaken during the previous year including ground water contour plans (derived from the data) in respect of the piezometer network;
 - Identification of any environmentally important trends in settlement and dewatering behaviour;
 - Interpretation and analysis of any change in groundwater profile over the previous year, any contingency actions that may have been taken during the year, predictions of future impacts on other bore users that may arise as a result of any trends that have been identified, and what contingency actions, if any, the licensee proposes to take in response to those predictions
 - A comparison of the settlement survey data with that predicted in the approved Dewatering and Settlement Plan;
 - Comment on compliance with this condition;
 - A summary and analysis of complaints relevant to this condition;
 - Any reasons for non-compliance or difficulties in achieving conformance with this condition;

- Any works that have been undertaken to improve environmental performance or that are proposed to be undertaken in the forthcoming year to improve environmental performance in relation to activities permitted by this condition;
- The report shall be forwarded in a format acceptable to the Minister.

Ore, waste rock and overburden removal

12. (a) Any ore, waste rock or overburden removed from the pit area during the construction period shall be moved off the site by way of the conveyor.
- (b) The licensee may remove up to a maximum of 6 truck loads (12 truck movements) on any one day of tramp material from the extended pit to the existing Baxter Road recycling depot, for either recycling or controlled burning or other authorised disposal.
- (c) Where necessary, due to weather conditions or otherwise, all vehicles carrying tramp material from the mine shall pass through a wheel wash at the mine before entering onto a public road.
- (d) The licensee shall retain a record of each truck load of tramp material carried and these records are to be made available for inspection by the Minister upon request.

13. Deleted

Air quality

14. Deleted

Production operations

15. (a) Any ore, waste rock or overburden removed from the open pit during the operations period shall be moved off the site by way of the conveyor.
- (b) The licensee may remove up to a maximum of 6 truck loads (12 truck movements) on any one day of tramp material from the extended pit to the existing Baxter Road recycling depot, for either recycling or controlled burning or other authorised disposal.

- (c) Where necessary, due to weather conditions or otherwise, all vehicles carrying tramp material from the mine shall pass through a wheel wash at the mine before entering onto a public road.
- (d) The licensee shall retain a record of each truck load of tramp material carried and these records are to be made available for inspection by the Minister upon request.

Underground workings

16. The licensee may undertake minor underground mining operations and associated activities within the licence area provided that:
- (a) The stability of overlying land, both during and after mining operations, is not likely to be endangered; and
 - (b) No mining operation shall extend beyond the surface pit perimeter.
 - (c) No mining operation shall be carried out at a depth greater than 140 metres below sea level. This shall not prohibit exploratory drilling below that depth.

Occupational health dust

17. Deleted

18. Deleted

Hours of work

19. (a) Open Pit Mining and Conveying (other than maintenance work).
 Permissible operating hours within the open pit, adjacent service facilities and conveyor corridor shall be restricted to:
- | | |
|---------------|-----------|
| Monday-Friday | 0700-2100 |
| Saturday | 0700-1200 |
- (b) Operations within the process plant
 The plant may operate twenty-four (24) hours per day, seven (7) days per week.

(c) Operations within the waste and tailings area (other than maintenance work)

Permissible operating hours within the waste and tailings area shall be restricted to:

(i) Waste disposal:

Monday-Friday 0700-2100

Saturday 0700-1200

(ii) Tailings disposal: Twenty-four (24) hours per day, seven (7) days per week.

(d) The above hours of work to apply provided that operations in (a) and (c)(i) above are only permitted between 1900 and 2100 hours Monday-Friday if the operations are of an urgent nature and necessary for the effective carrying out of mining operations and that they comply with the noise level criteria as specified in Condition 21(a).

(e) Details of all operations conducted under (d) above shall be entered into a record book kept for that purpose.

(f) The above hours of work in conditions (a) to (d) do not apply with respect to the use of water trucks for the purpose of controlling dust so long as the activity complies with the noise level criteria of condition 21.

Blasting and vibration

20. (a) All blasting procedures shall be carried out so as to ensure the safety of persons in the mine and/or in the immediate vicinity of the mine site. The licensee shall notify WorkSafe New Zealand of the blasting procedures to be employed and of any changes thereto and the blasting procedures shall be approved by WorkSafe New Zealand. The blasting procedures shall address the following specific items: regular blasting times, warning and all clear signals, control of fly rock, vibration and air blast monitoring and such other matters as WorkSafe New Zealand may direct.

(b) No blasting operations shall be carried out without the written approval of the Mine Manager, who shall first satisfy himself that the blasting operations will not cause either danger, damage or undue discomfort to any person or danger to property.

(c) A blasting programme shall be publicly notified in newspapers circulating in the area prior to any blasting taking place and at regular intervals not exceeding six (6) months thereafter. Changes to the blasting programme will be notified in newspapers circulating in the area at least three (3) days prior to implementation.

The Company Liaison Officer shall also ensure that the blasting programme and changes to the blasting programme are provided to all residents in the immediate area surrounding the mine who in the opinion of the Company Liaison Officer (after consultation with the Council Liaison Officer) are likely to experience the effects of blasting and vibration. The same respective notification time periods shall apply.

- (d) Vibration levels measured in the ground closest to any affected residence excluding those properties owned by the licence holder or related Company or subject to an agreement with the licence holder or related Company shall be 95% compliant with a maximum level for ground vibration of 5mm/s and shall not exceed a Vmax of 10mm/s (both expressed as vector sum of velocity components). The 95% compliance limit is defined as the level not to be exceeded for 95% of blasts over the preceding twelve month period. Blasting is permitted within the following hours:

Open Pit Operations

Monday-Friday	1000-1500
Saturday	1000-1200

In the event that a property is sold and ceases to be subject to an agreement between the licence holder (or related Company) and the purchaser, or in the event that there is no longer an agreement between the licence holder (or related Company) and the landowner, the location for the measurement of vibration shall revert to being in the ground closest to the affected residence.

In the Annual Work Programme required by condition 2 the licensee shall provide a list of properties owned by it or a related Company or which are subject to an agreement between it or a related Company, and the property owner regarding vibration and/or noise.

- (e) Details of all blasts shall be recorded as set out in condition 29.
- (f) The peak overall sound pressure level due to air blasts shall not exceed 128dB linear (unweighted), measured at any affected residence excluding those properties owned by the licence holder or related Company, or subject to an agreement with the licence holder or related Company.
- (g) Deleted

- (h) Except where specifically provided in condition 20(f) all blasting operations and measurements in relation to operations shall be carried out in accordance with AS2187.2:2006 The Use of Explosives.

(i) Vibration Management Plan

The licence holder shall prepare a Vibration Management Plan. The objective of this plan is to detail the methods to be used to comply with conditions 20 and 29.

Noise

21. (a) All activities provided for by the Mining Licence taking place on any site within the Mining Licence area shall not exceed the following limits when measured at or within the boundary of any residentially zoned site or the notional boundary of any occupied dwelling in the Rural Zone and measured over the periods specified below:

Monday-Friday	0700-2100	55 dB L _{Aeq}
Saturday	0700-1200	55 dB L _{Aeq}
All other times		40 dB L _{Aeq}
	2100-0700 (the following day)	70 dB L _{AFmax}

All noise shall be measured within or close to the boundary of any residentially zoned site or the notional boundary of any occupied rural dwelling site not owned by the licence holder or related Company or not subject to an agreement with the licence holder or related Company.

In the event that a property is sold and ceases to be subject to an agreement between the licence holder (or related Company) and the purchaser, or in the event that there is no longer an agreement between the licence holder (or related Company) and the landowner, the location for the measurement of noise shall revert to being on or close to the boundary of that residentially zoned site or the notional boundary of the occupied rural site.

- (b) Deleted

- (c) Deleted

- (d) Noise shall be measured in accordance with the provisions of New Zealand Standard NZS 6801:2008 Acoustics – Measurement of Environmental Sound and assessed in accordance with the provisions of NZS 6802:2008 Acoustics – Environmental Noise.

(e) Noise Management Plan

The licence holder shall prepare a Noise Management Plan. This Management Plan shall be submitted to and approved by Hauraki District Council. The objective of this plan is to detail the methods to be used to comply with conditions 21 and 30.

Fencing

22. (a) The licensee shall provide and maintain a secure fence around the Martha Hill mine site, along the conveyor route and at all other sites on which any operations, other than purely administrative, are carried out pursuant to or in connection with the licence, including any bridge crossings of the conveyor route.
- (b) Any other fencing as required by WorkSafe New Zealand shall be to a visual standard acceptable to the territorial authority.
- (c) On completion of mining operations any fences not required for safety purposes to be either removed or retained by mutual agreement between the territorial authority and the licensee.

Lighting

23. Any night lighting established shall be installed, designed, located and shaded in order that the level of lighting measured at the boundary of any site not owned by the licensee is no greater than 8.0 lux.

Water

24. The licensee shall ensure that all conditions relating to the grant of any water right or waterway approval associated with this licence are complied with without delay. Except in conformity with a water right or waterway approval the licensee shall not affect the quality or quantity of any natural water in any manner whatsoever.

Landscape plan

25. The licensee shall prepare and implement a maintenance programme for the removal of invasive exotic trees, plants and seedlings in areas surrounding the open pit. The maintenance programme shall be documented in the Rehabilitation and Closure Plan referred to in condition 1c.

The removal of screening vegetation surrounding the open pit shall be approved by the Minister prior to being undertaken.

Monitoring

26. The licensee shall carry out monitoring of those aspects of the construction and production operations, using the methods and at the frequency more particularly specified in Condition numbers 27 to 32 inclusive hereof. All measurements taken shall be entered into a record book, which shall be made available to any Inspector of Mines for inspection and copying at any reasonable time.

Ground movement

27. Deleted

Pit slope stability

28. Deleted

Blasting

29. (a) The licensee shall monitor every blast event in terms of blast location, charge weight per delay, number of holes, initiation timing and measured vibration. Where equipment malfunctions or is not available for recording (eg during maintenance), this shall be noted and included in the monitoring report presented to the Minister. Where blasting is to be undertaken in the vicinity of the overpressure sensor, the licensee shall also monitor the overpressure level. The location of the fixed vibration and overpressure sensors shall be undertaken in consultation with the Minister, and changes to the location of these sensors and monitor shall be agreed with the Minister prior to their relocation. The licensee shall deploy a roving monitor to record blast vibrations in the location where complaints regarding vibration have been made. The results of the monitoring shall be provided to the Minister.

- (b) The licensee shall, unless otherwise directed to do so by the Minister following consultation with the licensee, provide a quarterly summary report to the Minister on the blasting undertaken, and the vibration and overpressure levels recorded, as well as any complaints received.
- (c) Monitoring in the ground at the base of the Cornish Pumphouse shall be undertaken when blasting is carried out within a 250 metre radius of the structure. The peak component vibration levels shall not exceed 25mm/s at frequencies in the range 20 to 30 Hz within the 250 metre radius. A report addressing changes to the building's structural integrity (with particular emphasis on changes that are likely to be caused by blast-induced vibrations within 250 metres) shall be supplied to the Minister on the anniversary of the date of commencement of the extended project. The report shall be prepared by a registered engineer experienced in such work.

Noise

- 30. (a) The licensee shall at weekly intervals during construction activities (as defined in Condition 3) and at intervals not exceeding six (6) months during operational activities, assess and record representative noise levels generated by mining operations.
- (b) Representative noise levels during construction and operation activities shall be measured and assessed in accordance with the methods specified in Conditions 9 and 21.
- (c) The licensee shall, unless otherwise directed to do so by the Minister following consultation with the licensee, provide a quarterly summary report to the Minister on the representative noise levels.

Air quality

- 31. Deleted

Waste rock embankments and tailings ponds

- 32. Deleted

Rehabilitation

General

- 33.** The licensee shall rehabilitate the whole licence area in accordance with the approved Rehabilitation and Closure Plan referred to in condition 1c, and in accordance with the work programme specified in condition 2.
- 34.** The licensee shall progressively strip and stockpile, as far as practical, topsoil from all areas to be used for construction and waste disposal in the process plant and waste disposal area. This stockpiled topsoil or topsoil stripped during the course of operations shall be used to produce the maximum rehabilitation benefit.

Mine site

- 35.** At all times mining shall be carried out in a manner which will ensure that environmental disturbance is kept to a minimum. All necessary steps shall be taken by the licensee to prevent unnecessary destruction of or damage to vegetation or property and to ensure the safety of the public and livestock.
- 36.** Mining, processing and waste disposal operations shall be carried out in such a manner as to ensure that the surface of the land suffers as little permanent damage as possible. The licence area is to be left in a clean and tidy condition after mining operations have ceased including removing from public view any used derelict equipment and machinery and the pit faces are to be left in a stable and safe condition.
- 37.** The upper pit slopes shall be treated to ensure revegetation as soon as possible in the mining programme and in accordance with the current approved Rehabilitation and Closure Plan. Revegetation of the upper slopes will be carried out as far as practicable and may preserve some areas without vegetation to preserve and reflect the mining heritage of the town provided that the water quality of the Pit lake remains suitable for direct discharge to surface waters in accordance with resource consents held by the licensee from the Waikato Regional Council.
- 38.** Adequate drainage shall be provided on all access tracks and benches beyond the pit perimeter to prevent erosion of any adjacent land.

Conveyor route

39. Upon completion of the project the land along the conveyor route shall be restored to its former condition unless the territorial authority requires that it shall be left for use as a public walkway or other useful amenity provided that the cost of so doing does not exceed the cost of restoration to the former condition.

Process plant site

40. If, at or after the end of mining operations, the process plant or the wastewater treatment plant is dismantled, the area formerly occupied by and surrounding the dismantled plant shall be contoured, and as far as is reasonably practicable restored, and in a manner that will protect water quality and avoid soil erosion.

Tailings and waste disposal site

41. The licensee shall make good all final surfaces of the waste rock embankments, tailings storage areas, perimeter bund and any associated work in the waste and tailings disposal area at Baxter Road.
42. Rehabilitation of the final surface shall be progressive as areas of a practical working size become available and shall include the provision of a suitable rooting medium, contouring and drainage as required, to ensure the establishment and maintenance of a surface which will protect water quality and avoid soil erosion.
- 42A (a) Prior to each increase in embankments and crest height of Tailings Storage Facility 1A above RL 166, as part of the Third Stage – Continued Waihi Operations within Annex A, the licensee shall provide to the Hauraki District and Waikato Regional Councils for their approval, a report detailing the height of the crest rise, the sequence of works proposed, and an anticipated timeline in which the physical works and revegetation of the embankments and crest will occur. The approved report shall form part of the Rehabilitation and Closure Plan required by 1(c) of this licence and shall incorporate the revegetation programme in 42A(c) below.
- (b) The licensee shall have completed revegetation of the embankment slopes of Storage 1A to RL166 by 31st March 2015.
- (c) Unless otherwise agreed in writing by Hauraki District Council and Waikato Regional Council, the licensee shall undertake the revegetation planting of the embankment

slopes of Storage 1A such that after 31st March 2015, all revegetation planting shall be staged relative to the annual lifts of the embankment crest, i.e. the lift undertaken in the previous season is to be revegetated while the current season's lift is being undertaken. Stockpile areas are excluded from the requirements of 42A(b) & (c).

- (d) If the programme in 42A(c) above is not achieved, the licensee shall forthwith provide a review to Hauraki District and Waikato Regional Councils detailing the reasons why this has occurred and measures proposed to address programme timing.

Road

43. Should it become necessary to use Moore Street on a regular basis then the licensee shall be responsible for upgrading the street to the satisfaction of the relevant territorial authority. Otherwise Moore Street shall be used only in emergencies or for exceptional access to the process plant.

Buildings

44. All buildings shall be designed and completed in accordance with the New Zealand Building Code and shall be maintained to a standard acceptable to the territorial authority.

(Note: The following is for information purposes only and does not form part of this condition.

The tailings storage embankments require building consents which are issued by the Waikato Regional Council.)

Post-production

45. Deleted

General

46. The licensee shall take whatever precautions are necessary to protect the old Cornish Pumphouse.

Public liability insurance

47. The licensee shall effect and keep current public liability insurance.

The indemnity expressed in the insurance policy shall be sufficiently wide in its coverage so as to include claims arising from damage caused by or resulting from fire or explosion and all firefighting costs resulting from the licensee's operations in respect of the land.

The licensee shall, if so requested by the Minister, provide the Minister with a copy of the insurance policy and the receipt evidencing payment of the premium in respect of such policy.

ANNEX A

METHODS OF MINING AND WORK PROGRAMME

INTRODUCTION

First Stage: Licensed Project

The first stage of mining at Martha Hill commenced in 1987.

Mine surface facilities include crusher, repair shop, change room, warehouse, offices and a carpark

Waste rock and overburden together with ore are transported by an overland conveyor to the waste disposal area and process plant area

The process plant has a capacity of 930,000 tonnes per annum

Waste rock and tailings are disposed of in Storage 2 and 1 at the waste disposal area

Waste water is treated in the water treatment plant prior to discharge to the Ohinemuri River

The first stage of mining will when completed around the year 2000 comprise the following elements:

- Pit area - 30 hectares
- Pit depth - 205 metres
- Pit floor level - RL 960¹
- Pit length x breadth - 730 x 540 metres
- Total waste rock volume - approximately 13 million BCM
- Total ore processed - approximately 11 million tonnes
- Total tailings - approximately 10 million m³
- Two tailings storage facilities - Storage 2 and 1. Storage 2 will have a height at approximately RL 156 and cover an area of 130 hectares. Storage 1 will have a height at approximately RL 140 and cover an area of 60 hectares. On completion of mining Storage 2 and 1 are to be rehabilitated by returning the slopes of the embankments to grass and native vegetation. The tailings ponds will be partly capped and partly developed into wetlands.

¹ A RL of 0 (mine datum) is 1000m below sea level.

Second Stage: Extended Project

The second stage of development will continue mining until around the year 2007 and will enlarge the pit referred to above, both by widening it and deepening it. (This will enable more ore to be extracted from within the mining licence area.)

The extended pit is both within the mining licence area and partly outside that area. As no ore is to be extracted from that part of the pit that falls outside the mining licence area no further mining licence (or mining permit) is required. Rather for that part of the pit that falls outside the mining licence area, land use consents have been obtained from the Hauraki District Council.

Clearly, the terms and conditions in this mining licence can only govern those activities that take place within the mining licence area. However it would be artificial to only describe those activities that fall precisely within the geographical area of the mining licence, even though the activity itself continues onto adjacent land eg the extended pit. Accordingly the figures attached to this Annex show both the mining licence area and where appropriate the immediately adjacent land. The mining licence boundary is however clearly marked.

Once the second stage is completed the following elements will apply:

- Pit area - approximately 50 hectares
- Pit depth - approximately 255 metres
- Pit floor level - approximately RL 910¹
- Pit length x breadth - approximately 860 x 600 metres
- Total waste rock volume - approximately 26 million BCM
- Total ore processed - approximately 19 million tonnes
- Total tailings - approximately 17 million m³
- Two tailings storage facilities - Storage 2 and 1A. Storage 1 design will be modified and Storage 1A will be constructed. This will have a completed height at approximately RL 166 and cover approximately 70 hectares. On completion of mining Storage 2 and 1A are to be rehabilitated by returning the slopes of the embankments to grass and native vegetation. The tailings ponds will be partly capped and partly developed into wetlands.

As with the first stage of development waste rock and overburden together with ore will be conveyed from the pit to the waste disposal area and process plant area by way of the conveyor. The conveyor is to be extended by about 500m at the waste disposal area and a new truck loading station will be built. The conveyor belt is to be increased in width from 1 metre to 1.35 metres.

Similarly, waste water will be treated in the water treatment plant prior to discharge to the Ohinemuri River

The capacity of the process plant will be increased to handle up to 1.25 million tonnes per annum.

Because the first stage of development described above is near to completion, the construction activities described below relate to the second stage of development only. At the same time as construction activities take place with respect to the second stage of development, operational activities relating to the first stage of development will be ongoing. The operational period refers to both the first and second stages of development.

Third Stage: Continued Waihi Operations

The third stage of development involves amendments to the Martha Pit design. The design for the Martha Pit has been adjusted over the years since 1998, as is usually the case for an operational mine with varying ground conditions being encountered and further mineral reserves located.

More recently, the amendments to the Martha pit design have been focussed on ensuring the pit walls are left in a safe and stable state in preparation for closure (as required by condition 36), particularly in light of stability issues arising from historic unfilled underground workings.

The south wall stability cutback and layback to the east wall of the Martha pit result in an overall pit shape that is more favourable from a stability perspective. Further amendments may need to be made to the pit design to ensure, based on the increased knowledge on surrounding ground conditions and the nature of historic underground workings, so that the pit walls are left in a safe and stable state at closure.

All amendments to the pit design have been, and will continue to be, approved by the Peer Reviewers, as required by condition 7A.

In the same way as the second stage of development, the third stage of development of the Martha pit is both within the mining licence area and partly outside that area. Land use consent has been obtained from the Hauraki District Council for that part of the pit that falls outside the mining licence area, and Mining Permit 41 808 covers the small amount of ore obtained from the Martha pit that is outside the mining licence area.

Additional mineral reserves have also been located within the Waihi Epithermal District refer Plan A resulting in the Favona Underground Mine, the Trio Underground Mine, and applications to explore

the remnant resource beneath the Martha open pit with a view to mining this should it prove viable. It is possible that further exploration in the Waihi Epithermal District may result in further economic mineral deposits being located.

These new mines (and potential future mines) use the existing operational infrastructure provided for by the mining licence, including stockpile areas, the processing plant, water treatment plant and the waste disposal area.

As part of the third stage of development, the crest height of Storage 1A may be increased to a completed height of approximately 177.25.

As was noted for the second stage of development, the terms and conditions in this mining licence can only govern those activities that take place within the mining licence area. However, it would be artificial to describe only those activities that fall precisely within the geographical area of the mining licence when the mining activities continue into adjacent land. The mining licence boundary is however clearly marked.

At the expiry of the mining licence in 2017, the following elements will generally apply:

- Pit area - approximately 51.1 hectares
- Pit depth - approximately 275 metres
- Pit floor level – RL890 (mine datum)
- Pit length x breadth – approximately 960m x 770m
- Total waste rock volume – approximately 40 million BCM
- Total ore processed – approximately 30 million tonnes
- Total tailings – approximately 28 million m³

THE CONSTRUCTION PERIOD (STAGE 2)

The Open Pit and its Surface Facilities

1. The second stage of development will be preceded by a programme of timbering and clearing. A contractor will be employed to cut down and truck merchantable timber to a lumber mill. The area will be approximately 20 hectares, of which 8 hectares is within the mining licence and the remaining area is on immediately adjacent land.
2. Immediately following the timber clearing, the area will be grubbed of bush and stumps.

3. The existing mine surface facilities will be relocated during this period. The facilities include workshops, change room, sample preparation area, offices and a car park. The existing crusher will be replaced by a new jaw crusher and feeder breaker located near Junction Road, east of the existing facilities. The new location for these facilities is outside the mining licence area.
4. The waste rock and overburden excavated will be used for the construction of noise and screening bunds around the pit area. Two noise bunds are proposed, one adjacent to Grey Street and the other at the western end of the extended pit. Both noise bunds fall partly within the mining licence area and partly on immediately adjacent land. In addition waste rock and overburden will be stockpiled for post-mining use adjacent to the pit surface facilities (and outside the mining licence area) or transported by the overland conveyor to the waste disposal area.

The Conveyor System

5. The existing conveyor system will be used. The belt of the conveyor will be widened from 1m to 1.35m and will travel at the same speed i.e. 19 km/hr. The conveyor will be extended by about 500m at the waste disposal area.

The Process Plant

6. The existing process plant will be upgraded by adding a new pre-leach thickener to increase slurry density and another leach tank together with minor modifications to control instrumentation, the mill generally and the gold room.

Tailings and Waste Disposal

7. The "footprint" of the southern tailings storage facility ("Storage 1A") will be cleared of organic matter and topsoil. The topsoil will be stockpiled and revegetated for later use in rehabilitation.
8. The extensive system of drains for Storage 1A will then be excavated and constructed followed by the excavation and construction of cut-off trenches around the tailings and waste disposal area for seepage control. The drainage system, in conjunction with cut-off trenches backfilled with relatively impermeable materials, will ensure that any potentially contaminated water draining from the tailings or the mine waste can be intercepted and pumped to a holding pond.

9. The initial embankment of the Storage 1A will be constructed from on-site borrow material or from waste rock stripped from the open pit.

THE OPERATIONAL PERIOD (STAGES 1, 2 AND 3)

The Open Pit

10. Access to the pit workings will be by a ramp on a 10% downgrade which will start adjacent to a pit services area on the eastern edge of the pit. Road access to the service area and the open pit will be via Junction Road. Ore and waste rock removed from the open pit will be transported by conveyor to the process plant or waste disposal area.
11. Design of the proposed open pit has been based on selection of overall slope angles projected from the economic base of the pit to surface. These final slope angles are intended to result in maximum ore recovery consistent with slope stability.
12. The selected overall pit slopes take account of geological variation and are as follows:
- in fresher rock, 43°,
 - reducing to 40° in softer zones,

Refer to Figure 2.1 for overall pit slopes.

13. The pit slope angles are designed conservatively, and will be refined as the pit is developed and more information is obtained during operation.

Pit Development

14. The first stage of development of the pit is almost complete.
15. Waste rock is mined in 5 metre benches and in the ore zones the bench heights are reduced to approximately 2.5 metres to allow selectivity of ore from internal waste rock. Catch berms are located generally at 15 metre vertical intervals.
16. During the second stage of development of the pit excavation will occur in the following sequence:

- Quarters 1-8: Central pit will provide the main ore supply, while the south wall is developed. The excavation of the north wall commences.
- Quarters 9-12: Central pit excavations reduce with the south wall becoming the main ore supplier. Large volumes of waste rock are removed from the north wall.
- Quarters 13-16: The north wall overtakes the south wall as the main ore supplier.
- Quarters 17-28: The north wall is the sole mining area until excavations reach the central pit and the south wall excavations. Final excavations to RL 910m.
- Refer Figure 2.1 for the indicative final pit.

17. The Martha Mine contains extensive old underground workings. While the vertical extent of these workings is partially known, old records and maps showing the extent of filling, timbering and open stopping are incomplete. During mine life, every precaution will be taken to ensure that men and equipment are located in a safe working environment. It may be necessary to drill ahead of mining in some areas, known from exploration to contain open voids, to identify the depth and location of the voids.

Extraction Methods

18. A combination of methods of extraction will be used depending on the characteristics of the material being mined. Diamond drilling, coupled with geologic interpretation, has identified material on the basis of whether it is diggable, rippable or blastable. Proportions of each vary from the upper levels to the lower levels of the proposed pit although the rock generally becomes more competent and harder with depth.

Digging

19. Altered rock classed as diggable represents approximately 10 percent of the waste to be removed. As the material is soft, hydraulic backhoes or front end loaders will dig and load this material. Where a transition takes place between waste types, it may be necessary to assist the digging by ripping.

Ripping

20. Approximately 15 percent of the material to be extracted from the second stage of development can be recovered by either digging with a hydraulic excavator or by first loosening the rock by ripping and then digging.

Blasting

21. Material in the open pit defined as other than diggable or rippable will require blasting before it can be extracted. This will amount to approximately 75 percent of the material to be mined.
22. Blasting practices, such as low charge weights and the use of millisecond delays will limit peak particle velocities for ground vibration and will be used.

Open Pit Mining Activities

Ore Mining

23. The process plant is to be upgraded to treat up to a nominal 3,800 tonnes per day working continuously (nominally up to 1.25m tonnes per year). Sufficient equipment will be scheduled to achieve ore mining rates that will maximise the amount of ore available.
24. The gold bearing quartz veins in the Martha Mine have been amenable to mining using a hydraulic backhoe. As the mine deepens, it is necessary to blast tighter quartz to facilitate digging with the excavator.
25. The ore will be loaded into haul trucks and taken to a storage area adjacent to the conveyor loading point or tipped directly into the crusher hopper.
26. Ore will be mined in approximately 2.5m lifts to facilitate ore grade control. Ore mining will be preceded by mapping, sampling and geologic interpretation to define ore and waste rock boundaries. Good mining practice will reduce dilution by barren waste to a minimum.
27. In some areas it is anticipated that small gold bearing quartz veins will continue into the final walls of the open pit. Where this occurs and ground conditions are suitable these veins will be mined for short distances by simple underground methods. To maintain overall pit slope stability the voids created will be supported by permanent rock pillars or by back filling with waste rock from the open pit.

Waste Rock Mining

28. Generally equipment will be scheduled to achieve waste mining tonnages sufficient to maintain ore feed to the process plant. It is anticipated that the equipment required will be sized to produce approximately 3000 tonnes per hour.

29. Removal of waste will vary with the types of rock being moved. Waste will be mined either by:
- direct loader extraction
 - ripping with a large bulldozer and loading
 - drilling and blasting and loading
30. The material will either be loaded directly into trucks or in the case of ripped material will be pushed to a loader for loading.
31. After loading, the waste will be crushed for conveying to the waste disposal area or alternatively stockpiled within the open pit.

Rock Sizing and Conveying

32. When to be removed from the open pit, all ore and waste rock will be crushed and then placed on a belt conveyor for transport to the process plant (ore) or to the waste disposal area.

Ancillary Mine Service Activities

33. In addition to the actual extraction and ore removal activities the open pit working areas and the mining equipment have to be maintained.
34. All working areas, temporary haulage ramps and pit access roads will be regularly graded to provide good traction in all weather conditions. In dry weather a water wagon will be used to wet down these working areas so as to reduce fugitive dust emissions. Irrigation sprays will be used on other exposed areas as required to prevent the generation of fugitive dust.
35. All services such as fuelling, lubrication and machinery maintenance will be performed in the pit working areas or in the pit surface facilities area.

Dewatering

36. The old Martha Mine workings were full of water to an elevation of approximately RL1115 (a RL of 0 (mine datum) is 1000m below sea level). To allow mining to take place below this level the old mine has been dewatered.
37. Pipelines along the conveyor route will convey water for reuse, treatment and discharge, and return river water to the open pit for lake filling at closure.

Operating Hours

38. The open pit mine and the conveyor system are scheduled to operate 12 hours per day from Monday through Friday and five hours on Saturday.
39. However, when weather conditions or other circumstances provided for in condition 19(d) cause production rates to fall below schedule it will be necessary to work the open pit for up to 14 hours per day from 7.00am to 9.00pm Monday - Friday.

Services

40. Water reticulation for mine and general offices will be serviced from the town water supply. A sewage disposal unit is provided on site. Power is supplied from the national grid for distribution within the pit and for rock sizing and dewatering.

Rehabilitation

41. At the end of mining operations the dewatering pumps will be removed and the void created will refill with water (groundwater and stormwater). It is proposed to augment the filling of the pit by taking water from the Ohinemuri River. After a period of approximately five years a new lake will be created. This will be rehabilitated into a recreational area in accordance with the approved Rehabilitation and Closure Plan.

Mine to Process Plant Conveyor and Project Administration Office

Conveyor Route

42. Ore and waste rock removed from the open pit will pass through a crusher and on to a marshalling conveyor and on to an overland conveyor system.
43. The overland conveyor system runs in a straight line directly to the process plant area and then to the waste disposal area. The conveyor passes under Grey Street and State Highway 25.
44. After passing beneath State Highway 25 the route enters the Union Hill area where it rises to ground level, and then enters a tunnel driven through Union Hill.

- 45. From the eastern end of the tunnel the conveyor passes over open farm land at ground level directly to the process plant.
- 46. At the process plant ore is directed to a stockpile by a tripper and stacking conveyor, while waste rock remains on the conveyor and is transported across the Ohinemuri River to a truck loading facility in the waste disposal area.
- 47. Access is provided along the conveyor route to permit daily inspection, maintenance and spillage clean up.

Project Administration

- 48. The project administration Offices for both the construction and operational phases will be situated at a site within the Waihi Ward of the Hauraki District Council.
- 49. Deleted
- 50. Deleted

The Process Plant

- 51. The general process plant layout is shown in Figure 2.7. Physical facilities are located above the 100m contour to minimise flood risk from the river. Access to the plant and waste disposal areas is by way of Baxter Road and the access road which crosses the Ohinemuri River east of the plant site.

Process Description

- 52. The plant consists of a conventional carbon-in-pulp (CIP) gold and silver process plant. It will be upgraded to treat up to 1.25 million tonnes of ore per annum.
- 53. Ore from the overland conveyor will be discharged onto a coarse ore pad. This coarse ore stockpile material will be fed into a semi-autogenous grinding (SAG) mill and secondary ball mill circuit. The ground ore in slurry form will be pumped to a series of cyanide leach and carbon adsorption tanks for dissolution of the gold and silver which is then adsorbed onto the activated carbon.

54. The, carbon is removed from the circuit and the remaining slurry which is barren of economically recoverable gold and silver is pumped to the tailings storage area. The carbon which is loaded with gold and silver is chemically washed to remove the gold and silver which are then recovered by electrowinning. The remaining barren solution is recycled to the leach tanks. The precipitated gold and silver are smelted to produce bullion bars and the slag from the smelting process is returned to grinding circuits.
55. The process plant area has its own maintenance workshop and warehouse facility together with an office and a change house. The whole process plant area is security fenced.

Waste Water Treatment

56. The process plant area serves as a central point for all waste water from the mining licence area. A waste water treatment plant is located within the process plant area to treat, as required, all excess water prior to its discharge to the Ohinemuri River.

Operating Hours

57. The process plant is a continuous operation which operates 24 hours per day, seven days per week.

Services

58. Power is supplied to the process plant from the national grid. Emergency battery powered lighting is available.
59. External lighting is provided for safety and security purposes.
60. The major water requirements for operation of the plant include water for process, fire protection, potable uses and, if required, dust control. Process water needs are met by mine dewatering and tailings pond and internal solution recycling. Potable water for the plant site is from the town supply.

The Tailings and Waste Disposal Area

61. Mining activities generate mine waste rock and process plant tailings which require disposal in safe permanent storages.

62. Tailings generated at the process plant will be piped to the disposal area where they will be discharged into the tailings storage/facilities (Storage 2 and 1A).
63. The area for disposal of the mine waste and tailings lies to the east of the Ohinemuri River in the vicinity of Baxter Road.
64. The general arrangement of the tailings and waste disposal scheme is shown in Figure 2.8. Access to the disposal area and the process plant will be from Baxter Road.
65. The proposed disposal scheme will utilise mine waste to confine the process plant tailings and is designed to accommodate only material originating from the Waihi Epithermal District. The proposed scheme has a nominal storage capacity of approximately 40 million BCM of mine waste and 28 million m³ of tailings.
66. Two tailings storage areas, designated Storage 1A and Storage 2, will be provided to allow flexibility in operation and to allow rehabilitation of one of the tailings surfaces to commence before ore treatment operations cease.
67. The structural embankments which will confine the tailings will be constructed of selected mine waste. Water will be prevented from ponding against the embankments by the tailings beach except under extreme rainfall conditions during the first years of operation when the developed area of the tailings beach will be small. At this stage the level of the tailings will be low in relation to the embankment dimensions.
68. Mine waste not suitable for use in the construction of the structural embankments and mine waste in excess of construction requirements will be placed in stockpiles. The outer slopes proposed for the waste disposal areas which typically will not exceed 1 vertical in 3.9 horizontal will be revegetated as early as possible.
69. Unoxidised mine waste will be sealed using oxidised mine waste to inhibit the rate of water movement and oxygen diffusion into the waste. A layer of loose oxidised waste will be placed on the final slopes of the waste disposal areas to encourage revegetation.
70. A holding pond for decant water from the surface of the tailings will be provided. The holding pond embankments will be constructed of selected mine waste rock.

71. Surface water from the surface of the tailings storage areas and seepage water emerging from the drainage system installed beneath the tailings storage and waste disposal areas will be pumped to the treatment facility.
72. Potentially contaminated water will be returned by pipeline to the process plant from the holding pond at the disposal area. Safeguards will be incorporated in the pumping systems and along the pipeline route to prevent the escape of tailings or return water into the Ohinemuri River in the event of pipeline failure.
73. Topsoil for use in rehabilitation will be stockpiled during the construction and waste disposal operation.
74. Construction of Storage 1A will commence at the beginning of the second stage of development with simultaneous placement of mine waste in the structural and bulk fill zones. (Storage 2 is being constructed and will reach its final dimensions around 2000).
75. During construction and waste disposal operations a bund will be maintained around the perimeter of the disposal area. The bund will act as a silt trap to reduce the amount of suspended solids carried off the site in storm runoff.
76. In general the permanent components of the proposed disposal scheme have been located above the 100m elevation. This is above the high flood level of the Ohinemuri River over this reach.

Rehabilitation

77. The waste and tailings disposal area will be rehabilitated in accordance with the approved Rehabilitation and Closure Plan to grass and native vegetation and wetlands (with permanent ponds). This will be achieved by staged revegetation of final slopes of the disposal area as soon as disposal operations allow. Stockpiled topsoil will be used to the maximum benefit in rehabilitation.

DISPOSAL TECHNIQUE

Mine Waste

- (i) Delivery

78. Mine waste will be delivered to the waste disposal area by the overland conveyor. To allow flexibility in the selection of materials on site mine waste will be hauled and placed by trucks or scrapers from a loading facility at the conveyor termination point.

79. The conveyor will be extended to near the top of Storage 2 to minimise haul distances.

(ii) Embankment Construction

80. Selected mine waste will be used for the construction of the structural zone of the tailings confining embankments. (See Figure 2.10).

81. Construction of the confining embankments is an integral part of waste disposal operations. Therefore, construction must continue throughout the year at a rate dictated by mine waste production.

82. Material selection will be achieved by co-ordination of mining and waste disposal. As far as practicable construction materials will be placed and compacted at close to the optimum water content for compaction. The properties of the compacted waste will be monitored to ensure that the embankment complies with the design requirements.

83. Waste disposal operations will be monitored to ensure that conditions which might prejudice the stability of the tailings storage facilities are not allowed to develop.

(iii) Runoff Control

84. Cross falls will be maintained on all construction surfaces to ensure water does not pond on the construction areas.

85. Vegetation will be established as rapidly as possible to stabilise the final surfaces and silt traps will be maintained to reduce the amount of suspended solids carried off the site in storm runoff.

Tailings Management

86. Tailings will be deposited in the storage areas by the subaerial method. The key elements in this method are drainage, cyclic disposition of thin layers of tailings and removal of supernatant water and incidental rainfall.

(i) Drainage

87. The results of the site investigation indicate that the ash and tephra units underlying the storage areas will be more permeable than the tailings and that these units will have the

capacity to carry water emerging from the base of the tailings to the basin drainage system installed at the base of the units.

(ii) Deposition

88. Tailings will be pumped to the storage areas from the mill as a slurry with an expected solids content of about 40% by mass.
89. At the storage area the distribution pipeline will be laid on a bench on the upstream face of the confining embankment. This distribution pipeline will be equipped with off-takes to discharge just above the tailings surface.
90. On discharge into the tailings storage the tailings solids will settle out of the water to form a beach sloping away from the discharge point. The water released from the slurry will flow down the beach to a pond at the low point of the storage.
91. The discharge location will be changed regularly to ensure that even disposition of thin layers of tailings will be achieved over the available beach areas. The importance of cyclic deposition is that it allows settling and initial consolidation of thin layers to take place rapidly and exposes the beaches to the beneficial effects of air drying.

(iii) Decant

92. Water will be removed from the tailings surface by pumping from the holding pond.

Operating Hours

93. The waste disposal operation is scheduled to operate for 12 hours per day (0700 to 1900 hours) Monday to Friday and five hours on Saturday (0700 to 1200 hours). However, operations will need to be extended to 9.00pm (Monday to Friday) when inclement weather conditions or other circumstances provided for in condition 19d) have caused delays either in the open pit or in the waste disposal area.

94. Tailings disposal like the process plant operations will take place 24 hours per day.

Ancillary Services

95. Power for the conveyors and pumps will be supplied from the national grid to the process plant and thence to the waste disposal area.

Landscaping

96. During construction and operations the open pit, overland conveyor, process plant site and waste disposal area will be screened as appropriate to limit the visual impact of the project.

Air Quality

97. A network of dust monitoring samplers has been established around the licence area to measure dust levels. This consists of high volume air samplers and British standard dust deposition gauges.

UNDERGROUND ACTIVITIES

98. The underground operations may use the surface facilities associated with the existing operations.

Operating Hours

99. Underground operations may be carried out 24 hours per day, seven days per week.

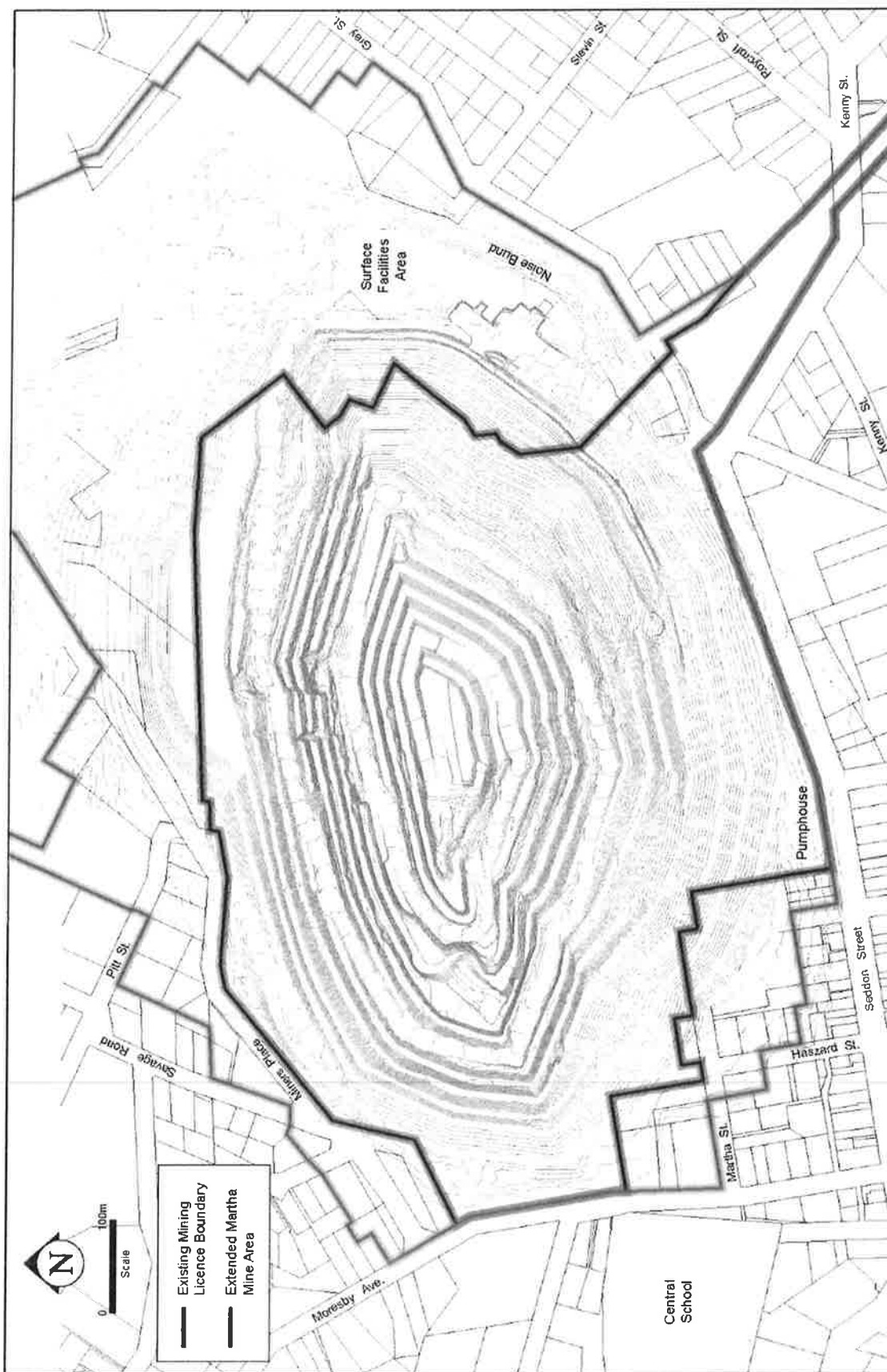
Rehabilitation

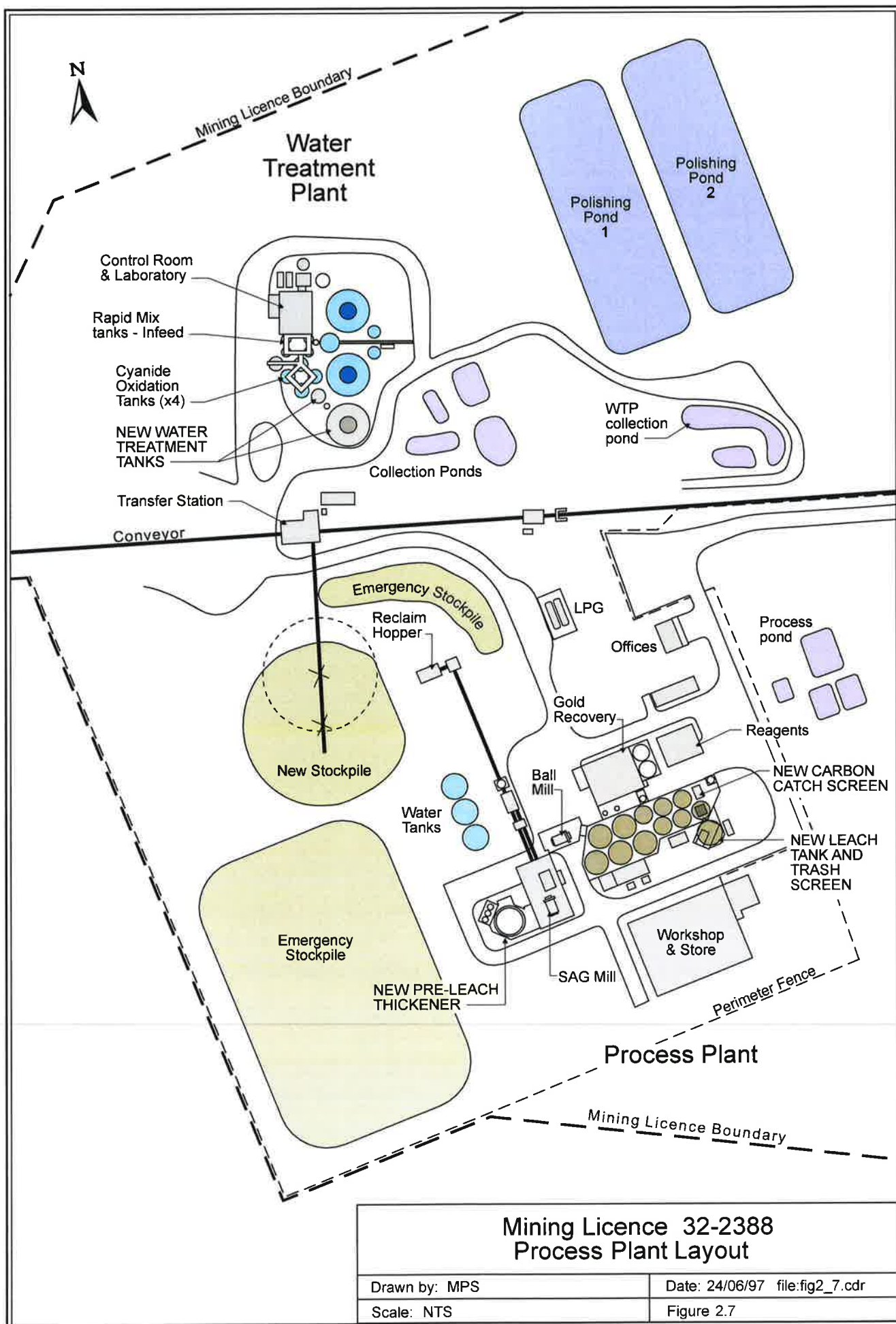
100. The stopes shall be backfilled with waste rock. The portals and shafts shall be plugged or otherwise blocked off. Reflooding of the workings will occur naturally from groundwater recharge once dewatering has ceased, and will also occur as part of the lake formation.

Plans

- Figure 2.1 Indicative Final Pit
- Figure 2.7 Process Plant Layout
- Figure 2.8 Storage 2 and 1A Layout
- Figure 2.10 Typical Section - Waste Storage Embankment

Plan A Waihi Epithermal District





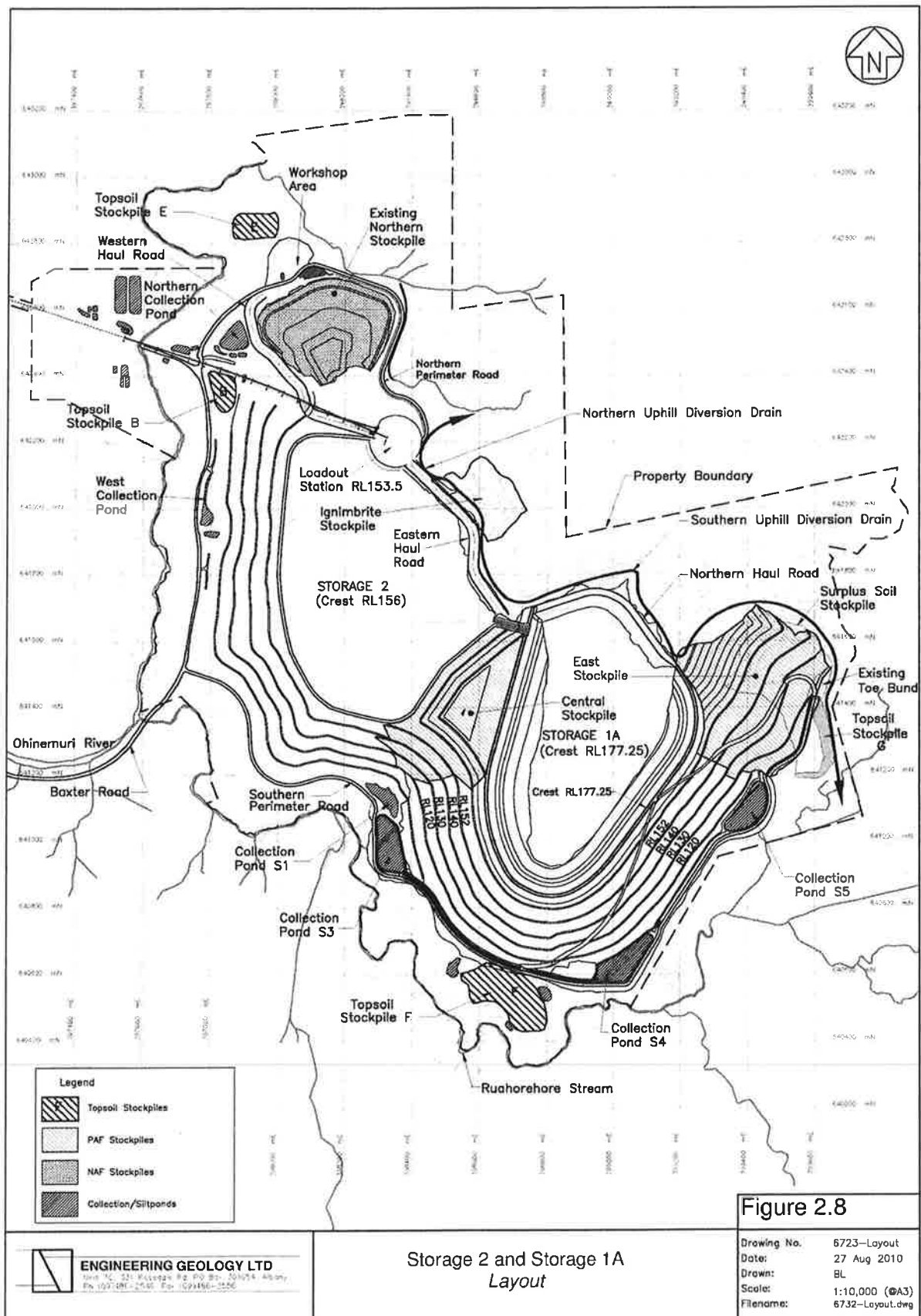
Mining Licence 32-2388 Process Plant Layout

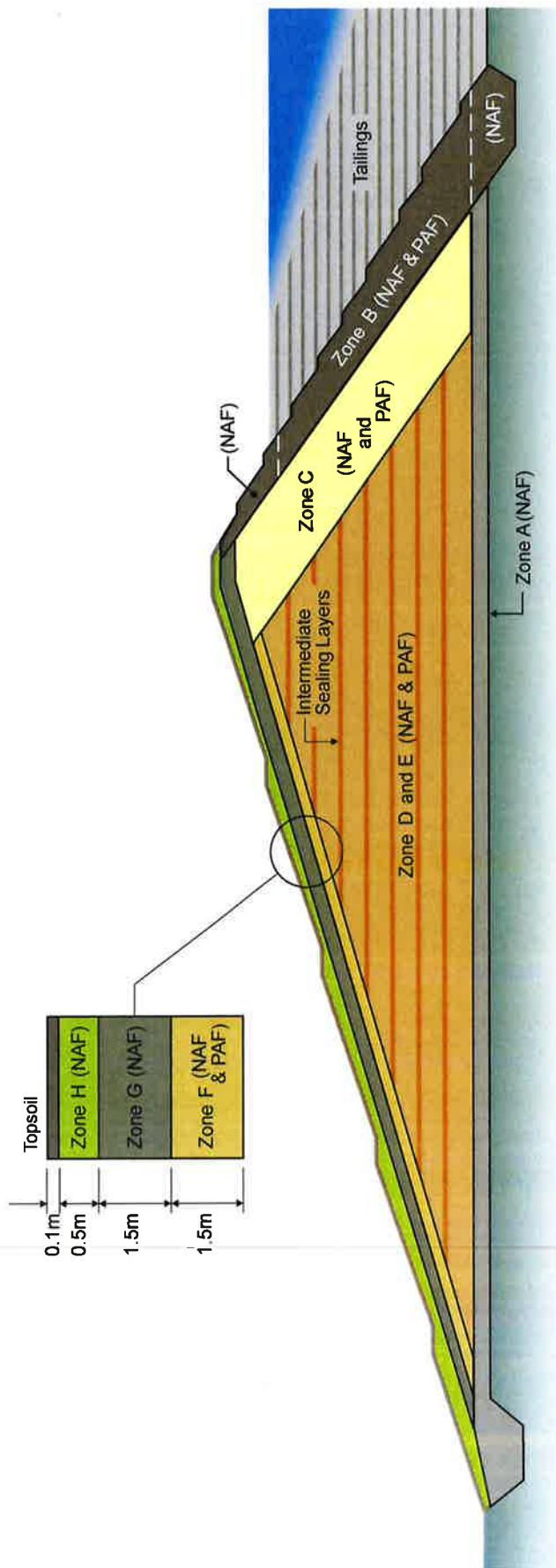
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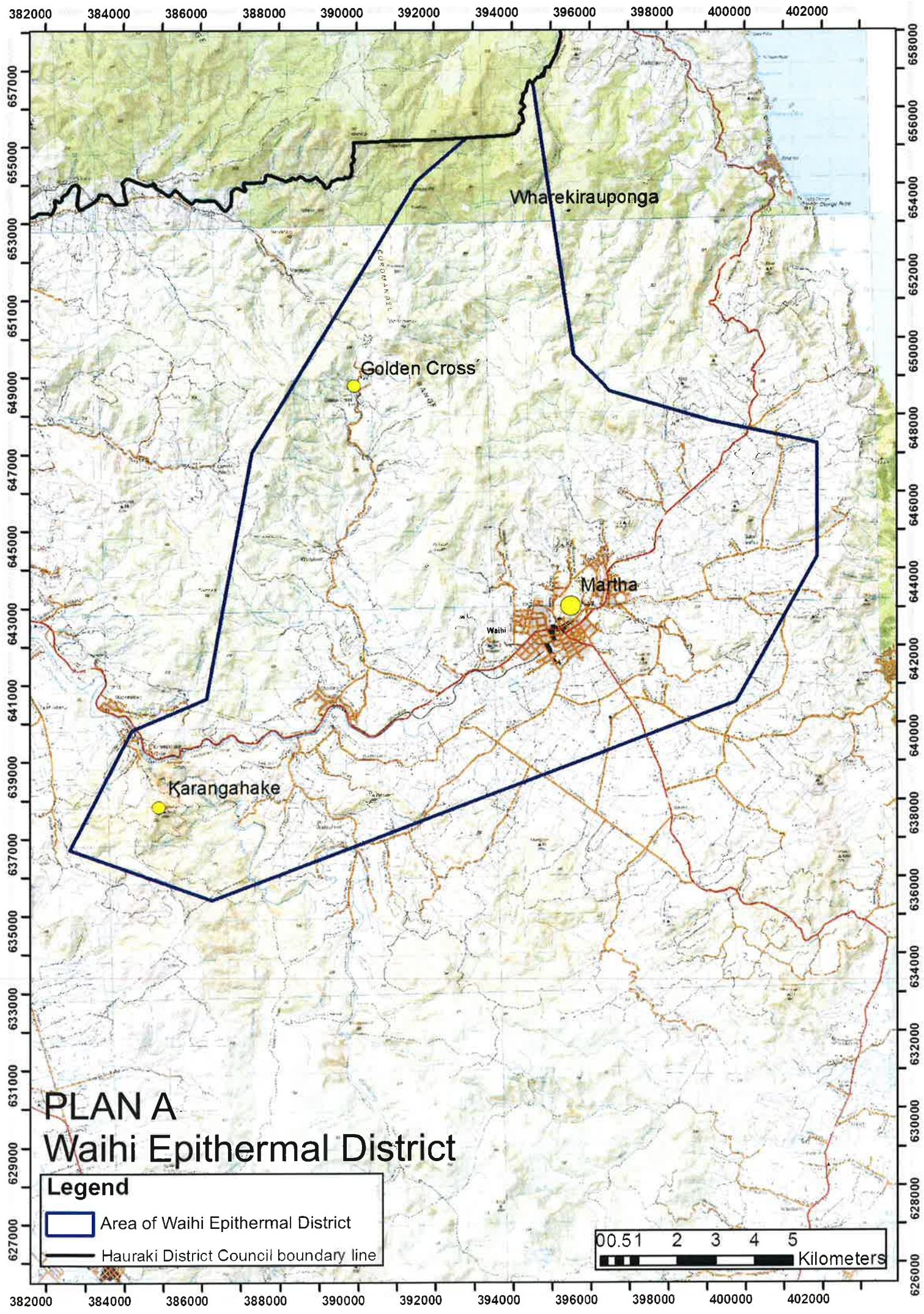
Figure 2.7





Note: NAF = Non Acid Forming
PAF = Potentially Acid Forming

Mining Licence 32-2388	
Typical Section - Waste Storage Embankment	
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Scale: NTS	Figure 2.10



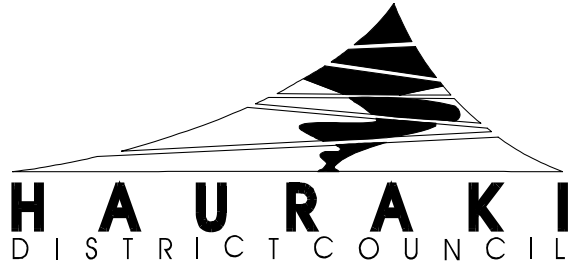
PLAN A

Waihi Epithermal District

Legend

-  Area of Waihi Epithermal District
-  Hauraki District Council boundary line





**LAND USE CONSENT AND CONDITIONS
FOR THE EXTENDED MARTHA MINE PROJECT
OCEANA GOLD (NEW ZEALAND) LTD
(NO. 97/98 - 105)**

**50 109 59
18 October 1999**

As amended via RMA s.127 on 22 June 2018 and 19 September 2019
[consent conditions updated 11 October 2019]

CONTENTS

1.0	EXTENDED PROJECT	1
2.0	LAND USE ACTIVITIES	1
3.0	DECISION	3
3.1	General Conditions	3
3.2	Annual Work Programme	4
3.3	Construction Activities	4
3.4	Liaison Officers	4
3.5	Complaints Procedure and Mediation	6
3.7	Hours of work	6
3.8	Noise	7
3.9	Monitoring and Reporting on Noise Levels	9
3.10	Blasting and Vibration	9
3.11	Monitoring and Reporting on Blasting and Vibration	10
3.12	Fencing	11
3.13	Lighting	11
3.14	Screen Planting	11
3.15	Construction Laydown Areas	11
3.17	Construction and Reworking of Noise Bunds	12
3.18	Lake Outlet Tunnel Construction	12
3.19	Pit Construction	13
3.20	Pipeline Corridor	15
3.21	Mine Shafts, Powerhouse and Grand Junction Battery Strongroom	15
3.21A	Kauri Tree	15
3.22	Historical Features	15
3.23	Rehabilitation	16
3.24	Annual Consultation Reports	17
3.26	Removal of Tramp Material	17
3.27	Storage and Management of Hazardous Materials	18
3.29	Scout Hall	18
3.30	Settlement	18
3.31	Bond and Trust	21
3.32	Administrative Charges	25
3.33	Review of Conditions	25
4.0	APPENDICES	27
	Appendix A - Annual Work Programme (Condition 3.2)	28
	Appendix B - 2018 Pit Perimeter (Condition 3.1 (d))	30
	Appendix E - Plan 2, 50 dB and 55 dB Control Boundaries (Condition 3.8(b)i)	32
	Appendix G - Proposed Trust Land (Condition 3.31.13)	34
5.0	PLANS	38
	Plan 1 – Areas A to F, H, I & K (Condition 2.2)	39
	Plan 3 – Pit Lake Outlet (Condition 3.18(a))	40
	Plan 4 – Pipeline Corridor (Condition 3.20(a))	41
	Plan 4a – Kauri Tree (Condition 3.21A)	42
	Plan 5 – Heritage Features (Condition 3.22(a))	43
	Plan 6 – Hazardous Substances (Condition 3.27(a))	44
	Plan 8 – Scouts (Condition 3.29)	45

MARTHA MINE EXTENDED PROJECT

LAND USE CONSENT AND CONDITIONS

(No. 97/98 - 105)

1.0 EXTENDED PROJECT

The full suite of consents required to permit the Martha Mine Extended Project are:

- Mining Licence 32-2388;
- Water and discharge permits granted by Waikato Regional Council;
- Land use consents granted by Waikato Regional Council; and
- This land use consent No. 97/98 - 105 granted by Hauraki District Council.

2.0 LAND USE ACTIVITIES

- 2.1 Activities authorised by this consent relate to land use activities that are to take place outside the area of land subject to the Mining Licence.
- 2.2 For ease of understanding, the activities authorised by this consent are described not only by the type of activity, but also by reference to areas. Plan 1 attached to this consent shows Areas A to F, H, I and K which relate to the Extended Project as a whole. This consent relates to Areas B to F, H, I and K only, and within Areas B to F, H, I and K, only to the land that is outside the area subject to the Mining Licence.
- 2.3 Activities permitted under this consent may include, but not be limited to, the following activities. Activities not listed may only be carried out if they are directly related to, and form part of, the Martha Mine Extended Project:
- (i) Removal of up to 12 hectares of vegetation (wooded and grassed areas) together with other tramp material on a progressive basis from around the perimeter of the licensed pit in Area B;
 - (ii) Disposal of the vegetation and other tramp material by way of chipping and composting within Area B or taking off site by truck, as appropriate;
 - (iii) Earthworks for the purposes of mining operations from time to time within 39 hectares around the licensed pit in Area B (including 9 hectares approximately for construction of surface facilities);
 - (iv) Stockpiling of ore, waste rock, topsoil and tramp material in Area B;
 - (v) Construction of noise bund near Grey Street up to 10m in height with a 2 metre high close boarded wooden fence (ie RL 127 m as measured at the top of the fence) and approximately 750m in length within 20 metres of a stream predominantly in Area B.

(Note: This noise bund is to be constructed predominantly within Area B, with a

small Section in Area A);

- (vi) Construction of part of a noise bund of up to 5m in height (ie RL 132 m as measured at the top of the noise bund) and approximately 80m in length at the western end of the extended pit partly in Area B

(Note: This noise bund is to be constructed mainly within Area A and partly within Area B);

- (vii) Establishment of surface facilities including the crusher, offices, workshops, sample preparation areas, the extension of the conveyor and stockpiles in Area B;
 - (viii) Making secure Grand Junction Shafts 1 and 2 (Area B);
 - (ix) Storage and use of hazardous substances (eg explosives, diesel and gases) in association with mining and mining operations in Area B;
 - (x) Carrying out of mining operations in Areas B and D;
 - (xi) Establishment and use of laydown areas associated with the upgrade of the conveyor and pipeline on land adjacent to the conveyor corridor (Area C);
 - (xiv) Rehabilitation of the extended pit together with surrounding areas within Area B by way of the creation of a lake and associated recreational facilities and landscaping;
 - (xv) Removal of the noise bund and surface facilities from Area B;
 - (xvi) Carrying out of the required earthworks over an area of approximately 39 hectares to contour the land post-mining to provide access to the proposed lake and to create the recreational facilities and landscaping referred to above (Area B);
 - (xvii) The construction and use of an outlet structure approximately 2m in height x 1.5m in width, 135m in length through the western wall of the pit together with an enclosed structure (eg a pipe) through to the point near the Mangatoetoe Stream where an open channel is required by Waikato Regional Council consent 971293 to discharge the lake overflow into the Mangatoetoe Stream (Areas H and I);
 - (xviii) Establishment, use, and rehabilitation of an area of approximately 5000m² for ancillary activities associated with the construction of the outlet structure, together with the removal of surplus soil and vegetation off-site as appropriate (Area H);
 - (xix) Making secure Grand Junction Shaft B (Area H);
 - (xx) Removal of vegetation of up to 40 hectares in Area D;
 - (xxi) Disposal of vegetation removed in Areas B & D by way of burning, chipping or composting within Area D or taking off-site as appropriate;
 - (xxii) Earthworks of up to 40 hectares for the purposes of mining operations and post mining rehabilitation in Area D;
 - (xxiii) Stockpiling of waste rock and surplus soil in Area D;
 - (xxiv) Construction and use of haul and service roads in Area D;
 - (xxvi) Use of a building, access route, and associated parking area for the purposes of the First Waihi Scout Group (Area K);
 - (xxvii) Construction and use of pipelines within the pipeline corridor approximately 1 kilometre in length, 10 metres in width and 1 metre below ground in Area F;
-

- (xxviii) Construction and use of structures on land adjacent to Ohinemuri River in connection with the discharge of treated waste water at or about NZMS 260 T13 634 188 (Area E2);
- (xxix) Construction and use of water intake structures on land adjacent to the intake point at or about NZMS 260 T13 634 189 (Area E3);
- (xxx) Miscellaneous drainage works in Areas B, C, D, F, H, and K.

3.0 DECISION

Pursuant to the provisions of sections 104 & 105 of the Resource Management Act 1991, Council grant a Land Use Consent No. 97/98 - 105 to Waihi Mines Limited, Welcome Gold Mines Limited, Auag Resources Limited and Martha Mining Limited (referred to in this consent as Waihi Gold Company) for all activities relating to the Extended Project being the construction and use of the extended pit and surface facilities, together with the rehabilitation of the extended pit and surrounding areas; construction and use of the lake outlet and associated activities; storage and use of hazardous substances; use and rehabilitation of ancillary facilities at the Waste Disposal Area; construction and use of the pipeline corridor and pipelines and associated structures for the discharge of treated wastewater to and the taking of water from the Ohinemuri River; and the use of the relocated First Waihi Scout Group Hall.

Advice Note: The Council agreed to change the name of the consent holder to Oceana Gold (New Zealand) Ltd (the Company) on 30 September 2016.

3.1 GENERAL CONDITIONS

- a) All activities to which this consent relate shall be undertaken generally in accordance with the information contained in the Assessment of Environmental Effects - Text and Figures (July 1997) and supporting technical documents submitted by Waihi Gold Company to the Hauraki District Council ("the Council") in support of its application for the consents required for the Extended Project and as subsequently confirmed or modified in further information supplied to the Council in response to Section 92 requests and evidence called by the consent holder at the consent hearing held in Waihi between 20 November 1997 and 17 February 1998, and as amended by the conditions below.
- b) This consent shall be specific to the Waihi Gold Company (as defined in Section 3.0), unless the agreement of Council is obtained to alter the name of the consent holder.
- c) This consent is for a period of 20 years from the date of commencement of the consent.
- d) Mining shall generally be within the boundaries of the 2018 Pit Perimeter attached as Appendix B. Mining beyond the pit walls shall be limited to removal of existing filling and local selective excavation, where necessary. Except where part of planned rehabilitation approved under Condition 3.23 of this consent, any removal of existing filling and selective excavation shall be reinstated with engineered backfill. Mining of the solid rock beyond the pit walls shall only be undertaken as part of remedial measures necessary to alleviate stability or safety concerns.

All such works are to be carried out in compliance with the provisions of Condition 3.19 - Pit Construction, of this consent.

3.2 ANNUAL WORK PROGRAMME

The consent holder shall within six months of the date of commencement of this consent and on the anniversary of that date every year thereafter, prepare and submit to the Council for information purposes an Annual Work Programme for the following year's work. The contents of the Annual Work Programme shall be as set out in Schedule 1, Condition 6 attaching to the resource consents granted by Waikato Regional Council for the Extended Project (attached hereto as Appendix A).

3.3 CONSTRUCTION ACTIVITIES

Construction activities are deemed to comprise the following:

Initial Construction Activities

- removal of vegetation from around the extended pit, removal of topsoil, the initial cut-back, batter and first bench at any point around the pit;
- relocation of pit surface facilities from inside the Mining Licence;
- creation of noise bund at Grey Street and to the west of the extended pit;
- upgrade of conveyor system including use of laydown areas;
- site clearance and topsoil stockpiling;
- construction of pipeline from the Water Treatment Plant to the Ohinemuri River.

Other Construction Activities

- reworking of noise bunds at Grey Street and to the west of the pit at the end of their life;
- removal of all plant and equipment during the closure/rehabilitation phase and recontouring of the land;
- construction of water abstraction facilities in Ohinemuri River;
- construction of lake outlet tunnel, enclosed structure and open channel;

3.4 LIAISON OFFICERS

Company Liaison Officer

- a) The consent holder shall appoint a person ("the Company Liaison Officer"), subject to the approval of the Hauraki District Council and the Waikato Regional Council to liaise between the consent holder, the community, the Hauraki District Council and the Waikato Regional Council as set out in this consent. The Company Liaison Officer shall have sufficient delegated power to be able to deal immediately with complaints received and shall be required to investigate those complaints as soon as possible after receipt.
 - b) The name of the Company Liaison Officer together with the contact phone numbers
-

for that person shall be publicly notified in local newspapers by the consent holder prior to the exercising of this consent (at least one month prior, but not more than two months prior to the commencement of construction activities) and at least once a year thereafter.

- c) The Company Liaison Officer shall be appointed prior to the exercising of this consent and this position shall be filled at all times during the construction activities as defined in Condition 3.3.

Council Liaison Officer

- d) The consent holder shall provide all the reasonable costs associated with the appointment and support of a Council Liaison Officer, to be employed by and be responsible jointly to the Hauraki District Council and Waikato Regional Council during the construction activities as defined in Condition 3.3.

(Note: The following is for information purposes only and does not form part of the condition.

The Council Liaison Officer may either be a new appointment or may be an existing employee. Whether or not the appointee is an existing employee, the Council Liaison Officer's role shall be independent and objective and designed to promote effective gathering of information of effects upon the community from the mining activity; and, in the light of such information, to promote effective liaison with the Company Liaison Officer so that the effects identified may be remedied or mitigated.

The functions and responsibilities of the Council Liaison Officer shall be as follows:

- i) *liaise between the Company Liaison Officer, members of the community, the Waihi Liaison Forum (or its equivalent), Hauraki District Council and Waikato Regional Council;*
 - ii) *report to the Hauraki District Council and Waikato Regional Council on an "as events happen" basis, and weekly on complaints received, actions undertaken by the consent holder and the complainant in respect to complaints, and on any other relevant actions and activities occurring during the week;*
 - iii) *ensure that the Company Liaison Officer is providing information to residents in the area around the mine and tailings facilities of the activities that are programmed to be undertaken in the coming week (especially land clearance, construction and blasting), activities that were carried out in the previous week and any other material that will inform the residents of what is programmed to happen in the coming weeks;*
 - iv) *facilitate the appointment of a mediator, venue, time etc agreeable to both parties, to undertake the mediation of disputes or concerns between the consent holder and members of the community. Except in those situations where both parties are in agreement, the Council Liaison Officer's function is not to act as a mediator. The role of mediation is a specialist one that needs to be undertaken by persons experienced and trained in this area).*
 - e) The Company Liaison Officer shall, during construction activities, report weekly to the Council Liaison Officer on all complaints received in the prior week and the action taken to investigate those complaints. In addition, the Company Liaison Officer shall investigate and report on any other matters as directed by the Council Liaison Officer concerning or arising out of construction activities. (See periods of construction activities as defined in condition 3.3)
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- f) The Company Liaison Officer shall give residents who are likely to be affected and the Council Liaison Officer reasonable (minimum one week's) prior notice of construction activities, indicating likely timing and duration.
- g) Following completion of initial construction activities, and prior to the commencement of other construction activities (ie during operations stage), the Company Liaison Officer shall report six monthly to the Hauraki District Council and the Waikato Regional Council on the following:
 - (i) All complaints received during the previous six month period, action taken by the consent holder and the resolutions, if any;
 - (ii) Other matters of concern raised by the community;
 - (iii) Any mediation entered into by the consent holder and others with respect to operational matters and the outcome (unless the parties have agreed to keep such confidential).

3.5 COMPLAINTS PROCEDURE AND MEDIATION

(Note: The following is for information purposes only and does not form part of the condition:

- i) *Complainants will be expected to contact the Company Liaison Officer in the first instance (refer to Condition 3.4 a)).*
- ii) *During the construction activities, if the complainant is dissatisfied with the response by the Company Liaison Officer, they shall contact the Council Liaison Officer with details of the complaint and the Company Liaison Officer's response. Outside the construction activities, complainants shall contact the Manager Planning and Environmental Services or any other Officer of Council.)*

The consent holder shall comply with the following complaints procedure and mediation process:

- a) The Company Liaison Officer shall meet with the complainant and the Council Liaison Officer, to discuss the complaint and ways in which the issue can be resolved.
- b) If the parties cannot agree on a resolution, the matter shall be put to mediation.

(Note: The following is for information purposes only and does not form part of the condition:

- i. *Refer to Condition 3.4 d), Note iv)*
- ii. *Unless the parties agree, the outcome of the mediation shall not be binding.)*

3.7 HOURS OF WORK

- (a) *Construction Activities (refer to definition in Condition 3.3)*

Monday - Friday	0700 - 2000
Saturday	0730 – 1800

- (b) *Mining Operations and Conveying (other than maintenance work)*

Permissible operating hours within the open pit, adjacent service facilities and

conveyor corridor shall be restricted to:

Monday - Friday 0700 - 2100
Saturday 0700 - 1200

(c) *Operations within Area D (other than maintenance work)*

Permissible operating hours within Area D for waste disposal and stockpiling of topsoil shall be restricted to:

Monday - Friday 0700 - 2100
Saturday 0700 - 1200

- (d) The above hours of work to apply provided that operations in (b) and (c) above are only permitted between 1900 and 2100 hours Monday - Friday if the operations are of an urgent nature and necessary for the effective carrying out of mining operations and they comply with the noise level criteria as specified in Condition 3.8(b). Details of all such operations are to be recorded and available to the Council upon request.
- (e) The above hours of work do not apply with respect to the use of water trucks for the purpose of controlling dust, as long as this activity complies with the noise level criteria of Condition 3.8.

3.8 NOISE

(a) Construction (refer to the definition in Condition 3.3)

With the exception of Waihi Central School where the construction noise limit shall be 55 dB L_{Aeq} at any point at or within the boundary of the school during school hours, all construction activities provided for by this consent shall not exceed the following limits:

Monday - Friday	Saturdays	dB L_{Aeq}	dB L_{AFmax}
0630 – 0730		60	70
0730 – 1800	0730 – 1800	75	90
1800 – 2000		70	85

At all other times, including Sundays and Public Holidays, the noise level (L_{10}) shall not exceed 40 dB L_{Aeq} .

All noise shall be measured within or close to the boundary of any residentially zoned site or the notional boundary of any occupied rural dwelling site not owned by the consent holder or related Company or not subject to an agreement with the consent holder or related Company.

In the event that a property is sold and ceases to be subject to an agreement between the consent holder (or related Company) and the purchaser, or in the event that there is no longer an agreement between the consent holder (or related Company) and the landowner, the location for the measurement of noise shall revert to being on or close to the boundary of that residentially zoned site or the notional boundary of the occupied rural site.

Construction noise shall be managed, measured and assessed in accordance with New Zealand Standard NZS6803:1999 Acoustics – Construction Noise.

(b) Operations

i) Activities Within Area B

The noise level (L_{Aeq}) at any point outside the 55 dB and 50 dB control boundaries shown in Plan 2 (copy attached in Appendix E) arising from mining and related activities when measured within or close to the boundary of any residentially zoned site or the notional boundary of any occupied dwelling in the Rural Zone not owned by the Company or not subject to an agreement with the Company or related Company shall not exceed the limits specified below:

		55 dB Control Boundary	50 dB Control Boundary
Monday – Friday	0700-2100	55 dB	50 dB
Saturday	0700-1200	55 dB	50 dB
All other times		40 dB	40 dB

In the event that a property is sold and ceases to be subject to an agreement between the consent holder (or related Company) and the purchaser, or in the event that there is no longer an agreement between the consent holder (or related Company) and the landowner, the location for the measurement of noise shall revert to being within or close to the boundary of that residentially zoned site or the notional boundary of the occupied rural site.

ii) Activities Within Areas C & D

The noise level (L_{Aeq}) measured within or close to the boundary of any Residential or Low Density Residential zoned site, or the notional boundary of any occupied rural dwelling site within the Rural zone not owned by the Company or not subject to an agreement with the Company or related Company shall not exceed the following limits:

Monday – Friday	0700-2100	55 dB
Saturday	0700-1200	55 dB
All other times		40 dB

In the event that a property is sold and ceases to be subject to an agreement between the consent holder (or related Company) and the purchaser, or in the event that there is no longer an agreement between the consent holder (or related Company) and the landowner, the location for the measurement of noise shall revert to being within or close to the boundary of that residentially zoned site or the notional boundary of the occupied rural site.

iii) Activities Within Areas E, F, H, I, & K

The provisions of Rule 8.3.1.3 of the Operative Hauraki District Plan 2014 shall apply.

In considering the action to be taken as a result of any breach of the noise limits, Council shall have regard to the following factors:

- 1) The total time duration for which the noise exceeded the limit
- 2) The time of the day at which the breach occurred
- 3) Whether the breach occurred as a result of factors beyond the control of the consent holder or contractor
- 4) The amount by which the noise limit was exceeded

- 5) The likelihood that the breach will recur
- 6) The actions taken to prevent recurrence of the breach
- 7) Action taken to mitigate the noise and whether the best practicable option for the circumstances was adopted

For the purposes of 4) above, a breach of the noise limit by 5dB or less shall be considered marginal. The Council will seek an explanation of the reasons for a marginal breach, and will seek that action be taken to avoid a recurrence if practical. The Council will not take enforcement action in respect of a marginal breach to achieve compliance where this would impose unreasonable restrictions on mine operations, such breach being one that will not impose anything more than minor adverse effects upon the residential areas in the vicinity of the mine. The Council may pursue enforcement action if the breach persists unduly in the circumstances or if the best practicable option is not being adopted.

- (e) Noise shall be measured in accordance with the provisions of New Zealand Standard NZS6801:2008 Acoustics – Measurement of Environmental Sound and assessed in accordance with the provisions of NZS 6802:2008 Acoustics – Environmental Noise.

3.9 MONITORING AND REPORTING ON NOISE LEVELS

- (a) The consent holder shall at weekly intervals during construction activities (as defined in Condition 3.3) and at intervals not exceeding six (6) months during operational activities, assess and record representative noise levels generated by mining operations.
- (b) Representative noise levels during construction and operation activities shall be measured and assessed in accordance with the methods specified in Condition 3.8.
- (c) The consent holder shall, unless otherwise directed to do so by the Council following consultation with the consent holder, provide a summary report to the Council at the end of each February, May, August and November on the representative noise levels.
- (d) The consent holder shall prepare a Noise Management Plan. This Management Plan shall be submitted to and approved by Hauraki District Council. The objective of this plan is to detail the methods to be used to comply with condition 3.8.

3.10 BLASTING AND VIBRATION

- (a) All blasting procedures shall be carried out so as to ensure the safety of persons in the mine and/or in the immediate vicinity of the mine site. The consent holder shall notify WorkSafe New Zealand of the blasting procedures to be employed and of any changes thereto and the blasting procedures shall be approved by WorkSafe New Zealand. The blasting procedures shall address the following specific items: regular blasting times, warning and all clear signals, control of fly rock, vibration and air blast monitoring and such other matters as WorkSafe New Zealand may direct.
- (b) No blasting operations shall be carried out without the written approval of the Mine Manager, who shall first satisfy himself that the blasting operations will not cause either danger, damage or undue discomfort to any person or danger to property.
- (c) A blasting programme shall be publicly notified in newspapers circulating in the area prior to any blasting taking place and at regular intervals not exceeding six (6) months thereafter.

Changes to the blasting programme shall be notified in newspapers circulating in the

area at least three (3) days prior to implementation.

The Company Liaison Officer shall also ensure that the blasting programme and changes to the blasting programme are provided to all residents in the immediate area surrounding the mine who in the opinion of the Company Liaison Officer (after consultation with the Council Liaison Officer) are likely to experience the effects of blasting and vibration. The same respective notification time periods shall apply.

- (d) Blasting shall be restricted to within the following hours:

Monday - Friday	1000-1500
Saturday	1000-1200

- (e) Details of all blasts shall be recorded as set out in condition 3.11(a).
- (f) The peak overall sound pressure level due to air blasts shall not exceed 128 dB linear (unweighted), measured at any affected residence excluding those properties owned by the consent holder or related Company, or subject to an agreement with the consent holder or related Company.
- (g) Vibration levels measured in the ground closest to any affected residence excluding those properties owned by the consent holder or related Company or subject to an agreement with the consent holder or related Company shall be 95% compliant with a maximum level for ground vibration of 5mm/s and shall not exceed a Vmax of 10mm/s (both expressed as vector sum of velocity components). The 95% compliance limit is defined as the level not to be exceeded for 95% of blasts over the preceding twelve month period.

In the event that a property is sold and ceases to be subject to an agreement between the consent holder (or related Company) and the purchaser, or in the event that there is no longer an agreement between the consent holder (or related Company) and the landowner, the location for the measurement of vibration shall revert to being in the ground closest to the affected residence.

In the Annual Work Programme required by condition 3.2, the consent holder shall provide a list of properties owned by it or a related Company or which are subject to an agreement between it or a related Company, and the property owner regarding vibration and/or noise.

- (i) Except where specifically provided in Condition 3.10(f) all blasting operations and measurements in relation to operations shall be carried out in accordance with AS2187.2:2006 Use of Explosives.

3.11 MONITORING AND REPORTING ON BLASTING AND VIBRATION

- (a) The consent holder shall monitor every blast event over 1 mm/sec in terms of blast location, charge weight per delay, number of holes, initiation timing and measured vibration. Where equipment malfunctions or is not available for recording (eg during maintenance), this shall be noted and included in the monitoring report presented to Council. Where blasting is to be undertaken in the vicinity of the overpressure sensor, the consent holder shall also monitor the overpressure level. The location of the fixed vibration and overpressure sensors shall be undertaken in consultation with Council, and changes to the location of these sensors and monitor shall be agreed with Council prior to their relocation. The consent holder shall deploy a roving monitor to record blast vibrations in the location where complaints regarding vibration have been made. The results of the monitoring shall be provided to Council.
- (b) The consent holder shall, unless otherwise directed to do so by the Council following
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consultation with the consent holder, provide a summary report to the Council at the end of each February, May, August and November on the blasting undertaken, and the vibration and overpressure levels recorded, as well as any complaints received.

- (c) Monitoring in the ground at the base of the Cornish Pumphouse shall be undertaken when blasting is carried out within a 250 metre radius of the structure. The peak component vibration levels shall not exceed 25 mm/s at frequencies in the range 20 to 30 Hz within the 250 metre radius. A report addressing changes to the building's structural integrity (with particular emphasis on changes that are likely to be caused by blast-induced vibrations within 250 metres) shall be supplied to Council on the anniversary of the date of commencement of this consent. The report shall be prepared by a registered engineer experienced in such work.
- (d) The consent holder shall prepare a Vibration Management Plan for written approval by the Council. The objective of this plan is to detail the methods to be used to comply with conditions 3.10 and 3.11 (a) to (c). The Vibration Management Plan may be reviewed and amended from time to time, subject to the approval of the Council but not in a manner inconsistent with these conditions.

3.12 FENCING

- (a) The consent holder shall provide and maintain a secure fence around the extended pit and Surface Facilities Area, and any other area required for public safety purposes.
- (b) On completion of mining operations the consent holder shall, after consulting with the Council and any relevant statutory body charged with public safety management, provide a secure fence around the extended pit / mine lake and any other areas previously subjected to mining operations that require, for public safety purposes, such fencing.

3.13 LIGHTING

Any night lighting established in Areas B-F, H, I and K shall be installed, designed, located and shaded in order that the level of lighting measured at the boundary of any site not owned by the consent holder is no greater than 8.0 lux.

3.14 SCREEN PLANTING

The consent holder shall prepare and implement a maintenance programme for the removal of invasive exotic trees, plants and seedlings in areas surrounding the open pit. The maintenance programme shall be documented in the Rehabilitation and Closure Plan referred to in condition 3.23.

The removal of screening vegetation surrounding the open pit shall be approved by the Council prior to being undertaken.

3.15 CONSTRUCTION LAYDOWN AREAS

Prior to developing and using construction laydown areas, including laydown areas for the conveyor upgrade and the lake outlet tunnel construction, the consent holder shall provide for the Council's approval a written description and layout plan relating to each laydown area. The information will include an indication of main construction activities to be undertaken, materials to be delivered, duration and timing of construction activities, and proposals with

respect to the rehabilitation of disturbed areas. Following Council's approval, this information shall be passed on to adjoining residents and the Council Liaison Officer by the Company Liaison Officer.

3.17 CONSTRUCTION AND REWORKING OF NOISE BUNDS

- (a) The consent holder shall, prior to commencing construction and reworking activities associated with the proposed noise bunds, prepare and submit detailed proposals to the Council for approval.
- (b) Proposals shall indicate:
 - Activities to be carried out, including their sequence and duration. A discussion on construction and removal methods considered shall be provided.
 - Plant and equipment proposed to be used.
 - Any activities likely to be undertaken on land beyond the ownership or control of the consent holder, the duration of such activities, and proposed measures to mitigate adverse effects that might be experienced by the general public and/or adjacent residents as a consequence of these activities.
 - Proposals with respect to the removal or demolition of existing houses lying within or adjacent to the proposed noise bund (construction proposals only).
 - Proposed measures to mitigate potential adverse effects (in particular noise, dust, traffic generation and visual impact) occurring as a consequence of construction and removal activities, in particular measures aimed at safeguarding adjacent residential amenity.
- (d) The Company Liaison Officer shall also ensure that the programme of construction and reworking the noise bunds is provided to all residents in the immediate area surrounding the bund who in their opinion are likely to experience the effects of these activities and to the Council Liaison Officer. This programme shall be provided at least 5 days in advance of the work being undertaken.
- (e) The construction of the part of the noise bund over Junction Road cannot be undertaken until such time as the stopping of Junction Road has been completed.
- (f) A 2 metre high close boarded wooden fence shall be constructed along the Grey Street frontage to visually screen the site and to provide noise attenuation, prior to any clearance of vegetation or other activities is undertaken. Once the noise bund is completed, the 2 metre high closed boarded wooden fence can be removed to be used on the top of the noise bund. (Refer also to Condition 3.14 for screen planting requirements, particularly Condition 3.14 (b)).
- (g) Non acid forming material shall be used in the construction of the noise bund to ensure that no leaching occurs during or after construction of the noise bund.

3.18 LAKE OUTLET TUNNEL CONSTRUCTION

- (a) The consent holder shall, prior to commencing construction of the lake outlet tunnel, the enclosed structure and channel to the Mangatoetoe Stream as indicated in Plan 3, prepare a detailed construction and design report, such report to be submitted to the Council for approval prior to implementation.

- (b) The construction and design report shall indicate the main construction activities to be undertaken, materials to be delivered to the construction area, materials to be removed from the construction area, duration and timing of tunnel, enclosed structure and open channel construction, and proposals concerning the rehabilitation of areas disturbed during construction.
- (c) Following Council approval of the construction and design report this information shall be passed on to adjoining residents and the Council Liaison Officer by the Company Liaison Officer.
- (d) Vibration levels resulting from the construction of the tunnel measured in the ground closest to any affected residence excluding those properties owned by the consent holder or related Company or subject to an agreement with the consent holder shall not exceed the vibration levels specified in Condition 3.10(g).

In the event that a property is sold and ceases to be subject to an agreement between the licence holder (or related Company) and the purchaser, or in the event that there is no longer an agreement between the licence holder (or related Company) and the landowner, the location for the measurement of vibration shall revert to being in the ground closest to the affected residence.

- (e) The construction of the tunnel and the enclosed structure shall be carried out and completed to the satisfaction of the Group Manager Engineering Services.

3.19 PIT CONSTRUCTION

- (a) The consent holder shall engage, at its cost, a Peer Review Panel ("the Panel"). The members of this Panel shall be fully independent of the planning, design, and construction of the open pit at the Martha mine and all its associated facilities.
- (b) The primary function of the Panel is to ensure that the conditions relating to design, construction, operation, and rehabilitation associated with the key components of the open pit mining and associated development works of the extended project (with particular focus on pit slope stability issues) are met, that the open pit is stable and that such work is undertaken by appropriately qualified personnel in accordance with best practice.
- (c) The Panel shall comprise technical specialist(s) who between them have demonstrated expertise in the following fields:
 - geotechnical engineering, with recognised experience in open pit construction and rock mechanics experience
 - hydrogeology, with recognised open pit mining experience
 - rehabilitation, with experience in open pit revegetation, rehabilitation and closure

(Note: There may be any number of individuals on the Panel, so long as the necessary areas of expertise are covered)
- (d) The members of the Panel and their defined field(s) of expertise, shall be approved by the Hauraki District Council prior to appointment to the Panel.
- (e) Each member of the Panel may act as Peer Reviewer only in their area of expertise, but the full Panel shall review all plans relating to the open pit construction.
- (f) The Panel may co-opt other specialist members to assist in any of its functions for specified periods subject to the approval of the Hauraki District Council.

- (g) The consent holder shall provide the Panel with all records, plans, designs etc that the Panel requests, and shall afford the Panel full access to the site at all reasonable times.
- (h) The Panel or individual members of the Panel may be the same panel as that which undertakes peer review as required by any other consent (including authorisations issued prior to the Resource Management Act 1991) at this site.
- (i) To carry out its primary function, the Panel shall report in writing to the Hauraki District Council on all matters which are submitted to it for review, other than draft proposals submitted to it by the consent holder and which are superseded, and at least at the following times:
 - Prior to commencing the extension related mining activities associated with the open pit
 - At all critical stages during development of the open pit (eg slope formation near the Cornish Pumphouse, major remedial works [eg coal seam at 1800 east], initial work on forming the pit perimeter)
 - On completion of open pit mining
 - On completion of lake filling
 - On rehabilitation of Areas A and B

and at least on the following matters:

- The Pit Slope Management Manual and any subsequent updates as are appropriate
 - Progress against the Annual Work Programme
 - Site development including hydrogeological issues and geotechnical issues
 - performance against the requirements of the Pit Slope Management Manual
 - pit slope stability monitoring, and
 - rehabilitation and closure plans.
- (j) The consent holder shall develop a Pit Slope Management Manual. This manual shall be peer reviewed by the Peer Review Panel and submitted to Council for approval prior to exercise of this consent. The Pit Slope Management Manual shall address at least the following issues:
 - procedures for the investigation, monitoring, excavation and backfilling of old mine stopes where required
 - specifications for construction and placement of stope pillars where required
 - development of a monitoring regime focused on monitoring groundwater and pit slope behaviour
 - procedures for the investigation and remedial measures of old coal seams, and monitoring of the same
 - location and installation of horizontal drains for the purposes of addressing groundwater and surface water effects
 - monitoring of Pumphouse stability
 - instability contingency response
 - (k) By 1 December 2017 the consent holder shall prepare a plan of the buffer zone associated with the open pit addressing the bullet points below and to the satisfaction of Council.

This plan may be updated at any time including where requested by Council and is to be approved in writing by Council.

The consent holder shall consult with land owners and/or occupiers within the buffer zone associated with the extended open pit. In each case the consent holder shall:

- identify the facilities potentially at risk;
- develop a contingency response appropriate to these facilities in the event of stability;
- at its own cost, in the event these facilities are adversely affected as a result of pit mining operations, restore these facilities to their former condition and provide for interim provision of an equivalent facility until such time as this is achieved or provide alternative equivalent facilities. These arrangements shall be to the satisfaction of Council.

3.20 PIPELINE CORRIDOR

- The consent holder shall, prior to commencing construction of the pipelines within the corridor indicated on Plan 4, prepare and submit to the Council, details of the proposed construction activities.
- These details should include:
 - pipeline engineering specifications (capacity, dimension, type);
 - proposed laydown areas;
 - duration of construction, plant and equipment to be used;
 - proposed measures to protect the adjacent environment from adverse effects;
 - rehabilitation of disturbed areas, including the pipeline route itself.

3.21 MINE SHAFTS, POWERHOUSE AND GRAND JUNCTION BATTERY STRONGROOM

- The consent holder shall carry out such engineering works as are necessary to either seal or make secure Grand Junction Shafts 1 and 2, powerhouse remains (including the foundations) and Grand Junction Battery Strongroom to the east of the extended pit and Grand Junction Shaft B between Moresby Avenue and the Mangatoetoe Stream to ensure public safety in the vicinity of the shafts.
- The consent holder shall, on completion of securing the features in (a), provide a report to the Council, including plans showing the location of the features and a description of works carried out. In addition, the consent holder shall provide plans describing how those features could be recovered and integrated into adjacent rehabilitated areas at the end of active mining.

3.21A KAURI TREE

The consent holder shall take all reasonable and practical steps to protect the kauri tree adjacent to Martha Street as shown on Plan 4a.

3.22 HISTORICAL FEATURES

- The consent holder shall, prior to exercising this consent, commission an archaeological / heritage survey of residual historical mining features in the area indicated on Plan 5 attached to this consent. The survey shall be carried out by an appropriately qualified specialist. The survey shall identify on cadastral and aerial photographic bases all features of historical interest, and shall be accompanied by a written description of the features, including placing them in a historical context. The results of this investigation will be presented in report form, the report being made available to the Council and the Waihi Museum.

- (c) Should any features of archaeological, historical, or cultural significance be discovered during the construction phase or the operational phase of the extended project, work in the relevant area will be discontinued and the Council, Heritage New Zealand Pouhere Taonga, and Ngati Tamatera, as appropriate, are to be notified by the consent holder within 24 hours.

With respect to archaeological discoveries, work in the direct area will not recommence until consent is obtained from Heritage New Zealand Pouhere Taonga and/or the Council, if such consent is required.

With respect to discoveries of cultural significance to Ngati Tamatera, if practicable and after consultation with Ngati Tamatera, the discovery shall be left in situ and all reasonable efforts will be taken by the consent holder to protect that discovery. If it is not practicable to leave the discovery insitu, then Ngati Tamatera shall be given a reasonably opportunity to arrange for the removal of the discovery, and the consent holder shall provide reasonable assistance to Ngati Tamatera to do so, if so requested by Ngati Tamatera.

3.23 REHABILITATION

(Note: Not forming part of these conditions. The rehabilitation proposals for the Extended Project relate mainly, but not exclusively, to areas within the boundary of Mining Licence 32-2388. The proposals envisage the following main rehabilitation provisions:

- *The extended open pit is to constitute a lake, with a recreational facility at its eastern end, and pedestrian access with lookout viewing facilities around its perimeter.*
- *The upper pit slopes are to be revegetated as soon as possible, and in accordance with the current approved Rehabilitation and Closure Plan. Revegetation of the upper slopes will be carried out as far as practicable and may preserve some areas without vegetation to preserve and reflect the mining heritage of the town provided that the water quality of the Pit Lake remains suitable for direct discharge to surface waters in accordance with resource consents held by the consent holder from the Waikato Regional Council.*
- *The consent holder shall progressively strip and stockpile, as far as practical, topsoil from all areas to be used for construction and waste disposal in the Waste Disposal Area. This stockpiled topsoil or topsoil stripped during the course of operations shall be used to produce the maximum rehabilitation benefit.*
- *The Waste Disposal Area, including the tailings storage facilities, is to be rehabilitated using a range of vegetative covers (eg grass, native plants and vegetation and wetlands) as appropriate.*
- *Rehabilitation of the final surface of the Waste Disposal Area is to be progressive as areas of a practical working size become available for rehabilitation.*
- *Upon completion of the project the land along the conveyor route shall be restored to its former condition unless the Council requires that it be left for use as a public walkway or other useful amenity provided that the cost of so doing does not exceed the cost of restoration to the former condition.*
- *If, at or after the end of mining operations, the Process Plant or the Water Treatment Plant is dismantled, the area formerly occupied by and surrounding the dismantled plant is to be contoured, and as far as is reasonably practicable restored in a manner that will protect water quality and avoid soil erosion.*

Mining Licence 32-2388 and the resource consents granted by the Waikato Regional Council in respect of the Extended Project set out conditions requiring that all areas within the Licence be rehabilitated generally in accordance with the above.)

- (a) The consent holder shall rehabilitate all areas that have been subjected to mining operations as part of the Extended Project.
- (b) Prior to the commencement of construction of the tailings storage facility (Storage 1A), the consent holder shall submit to the Council for approval detailed rehabilitation plans. These plans will be consistent with the relevant Annual Work Programme referred to in Condition 3.2 and the Rehabilitation/Closure Plan approved by the Peer Review Panel pursuant to Condition 8 of Schedule 1 to the Waikato Regional Council consents.
- (c) The rehabilitation plans shall set out:
 - proposed recontouring of and rehabilitation of the noise bunds;
 - landscaping and details regarding facilities proposed for the recreational reserve at the eastern end of the new mine lake;
 - location of pedestrian access, tracks and viewing facilities around the extended pit perimeter;
 - planting and landscaping proposals for the remainder of the upper pit benches/batters and the immediate pit surrounds, that have not already been progressively rehabilitated;
 - ongoing rehabilitation measures proposed to pyritic rock areas;
 - safety fencing;
 - maintenance proposals;
 - with respect to Area D the areas to be grassed
 - details of the investigation and removal process for areas that may contain contaminated soils
- (d) In considering these plans, Council shall take into account:
 - the degree of compliance with the concepts described in the relevant Annual Work Programme;
 - their usefulness and practicability in terms of the Waihi community;
 - on-going maintenance issues.

3.24 ANNUAL CONSULTATION REPORTS

The consent holder shall forward to the Council a report annually, covering the period to 1 June of each year, that details the discussions and outcomes of ongoing consultation with Ngati Tamatera in relation to the spiritual and cultural interests of Ngati Tamatera. Each report shall be produced in conjunction with Ngati Tamatera and forwarded to the Council within 3 months at the end of the period to which the particular report relates.

3.26 REMOVAL OF TRAMP MATERIAL

- (a) The consent holder may remove up to a maximum of 6 truck loads (12 truck movements) on any one day of tramp material from the extended pit to the existing Baxter Road recycling depot, for either recycling or controlled burning or other authorised disposal.

- (b) The consent holder shall maintain screen planting at the existing recycling depot, together with a vehicle parking and manoeuvring area to an all weather metalled standard.
- (c) Where necessary, due to weather conditions or otherwise, all vehicles carrying tramp material from the mine shall pass through a wheel wash at the mine before entering onto a public road.
- (d) The recycling depot shall not operate outside the hours of 7am to 8pm on any day.
- (e) Only one sign may be erected on the recycling depot site and shall not exceed 1.5 m² in area.
- (f) The consent holder shall retain a record of each truck load of tramp material carried and these records are to be made available for inspection by the Council upon request.
- (g) The recycling depot shall be bunded to divert all stormwater on the site into a containment pond. The bund and pond are to be constructed and maintained to the satisfaction of the Council's Group Manager Planning and Environmental Services.

3.27 STORAGE AND MANAGEMENT OF HAZARDOUS MATERIALS

- (a) The maximum quantities of the following hazardous substances to be stored at the Surface Facilities area, generally as indicated on Plan 6, shall be as follows:
 - Diesel: 124,000 litres
 - Ammonium Nitrate: 150 tonnes
 - Packaged Explosive: 8,000 kg
 - Detonators: 8,000 units.

together with bottled gases.
- (b) Prior to commissioning of any hazardous materials storage facility within the area indicated on Plan 6, or commencing storage of in excess of 4,000 detonators on site, the consent holder shall submit for the Council's approval a report:
 - indicating in detail (by way of plans and specifications) storage proposals;
 - establishing compliance with all relevant codes of practice and statutory requirements (including the Consent Holder's Environmental Management Plan and the Site Spill Contingency Plan);
 - providing certification by a suitably qualified safety expert that all facilities meet relevant codes of practice and statutory requirements.

3.29 SCOUT HALL

The First Waihi Scout Group hall shall be relocated from the site indicated on Plan 8 to a site on the reserve at the eastern end of the pit lake. The location of the building, the vehicular access, carparking, earthworks, and landscaping shall be subject to Council approval following receipt of appropriate plans and reports.

3.30 SETTLEMENT

- a) The consent holder shall prepare a Dewatering and Settlement Monitoring Plan. The purpose of this Plan is to monitor and assess the effects of dewatering on land settlement and the effects of the mining activities on the subsurface hydraulic regime. The Dewatering and Settlement Monitoring Plan shall address at least the following:

- i) An overall description of the groundwater and settlement monitoring system and the measures to be adopted to meet the objectives of the groundwater and settlement monitoring system.
- ii) Details of the piezometer network proposed to monitor the effects of pit dewatering on the aquifers under Waihi township.

Any monitoring bores additional to the existing piezometer network shall be installed and operational prior to the exercising of this consent.

- iii) Details of the settlement monitoring network proposed to monitor the extended zone which has been, or is likely to be, affected by settlement caused by mine dewatering.

Any settlement monitoring network locations additional to the existing monitoring locations shall be installed and operational prior to exercising this consent.

- iv) Details of the survey of facilities in the Waihi township considered by the consent holder to be potentially "at risk" of damage from ground settlement caused by mine dewatering. The survey to be completed shall include collection of information about the facility's location, the nature of construction materials, the nature of sensitive equipment that might be potentially "at risk", and the sensitivity of this equipment to ground settlement caused by mine dewatering and/or tilt.

This survey shall be completed prior to exercise of the Waikato Regional Council consent number 971286.

- v) A settlement contingency plan to include mitigation measures to be implemented in the event that ground settlement caused by mine dewatering induces a tilt that exceeds 1 in 1000 between any two network monitoring locations spaced no less than 25 metres apart. The settlement contingency plan shall particularly address those facilities identified by the consent holder as being potentially "at risk" of damage from ground settlement caused by mine dewatering.
- vi) A dewatering contingency plan that describes the steps the consent holder shall implement in the event that dewatering results in adverse impacts on affected aquifer systems and associated groundwater supplies used for domestic, stock or other purposes.

In detailing the monitoring programmes the consent holder shall provide information on the monitoring methods proposed, the parameters to be monitored, and the calibration and maintenance of monitoring equipment.

In the event of any conflict or inconsistency between the conditions of this consent and the provisions of the Dewatering and Settlement Monitoring Plan, then the conditions of Waikato Regional Council consent number 971286 shall prevail.

- b) The Dewatering and Settlement Monitoring Plan shall be submitted to Hauraki District Council for approval at least one month prior to the exercise of this consent. The Hauraki District Council shall consult with the Waikato Regional Council prior to approving the Dewatering and Settlement Monitoring Plan. The consent holder shall
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review and update (as necessary) the Plan and shall provide promptly such updated Plan to the Hauraki District Council for approval.

- c) If in the opinion of Hauraki District Council the dewatering adversely affects land or facilities, then the consent holder shall at its own cost be responsible for reinstating the facilities to an equivalent standard to the reasonable satisfaction of Council.
 - d) The consent holder shall measure and record the daily volume of water abstracted.
 - e) The consent holder shall undertake water level monitoring of the piezometer network in accordance with the Dewatering and Settlement Monitoring Plan.
 - f) The consent holder shall monitor ground settlement at a minimum of six monthly intervals in accordance with the Dewatering and Settlement Monitoring Plan.
 - g) In the event that a tilt greater than 1 in 1000 occurs between any two network monitoring locations spaced no less than 25 metres apart, and such tilt is caused by mine dewatering, or there is a significant variance from the predicted settlement rates described in the approved Dewatering and Settlement Plan the consent holder shall notify the Hauraki District Council and the Waikato Regional Council, in writing, within 20 working days of receiving the results of the monitoring. The consent holder shall then:
 - explain the cause of the non-conformance,
 - agree with the Hauraki District Council and Waikato Regional Council on the appropriate settlement contingency measures to be implemented as described,
 - implement settlement contingency measures as appropriate,
 - advise the councils on the steps the consent holder proposes to take in order to prevent any further occurrence of the situation.
 - h) The consent holder shall provide to the Hauraki District Council and the Waikato Regional Council an annual dewatering and settlement monitoring report. The report shall include at least the following information:
 - The data from monitoring undertaken during the previous year including ground water contour plans (derived from the data) in respect of the piezometer network;
 - Identification of any environmentally important trends in settlement and dewatering behavior;
 - Interpretation and analysis of any change in ground water profile over the previous year, any contingency actions that may have been taken during the year, predictions of future impacts on other bore users that may arise as a result of any trends that have been identified, and what contingency actions, if any, the consent holder proposes to take in response to those predictions;
 - A comparison of the settlement survey data with that predicted in the approved Dewatering and Settlement Plan;
 - Comment on compliance with this condition;.
 - A summary and analysis of complaints relevant to this condition;
 - Any reasons for non-compliance or difficulties in achieving conformance with this condition;
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- Any works that have been undertaken to improve environmental performance or that are proposed to be undertaken in the forthcoming year to improve environmental performance in relation to activities permitted by this condition.

The report shall be forwarded in a format acceptable to the Hauraki District Council.

3.31 BOND AND TRUST

1. Prior to the exercise of this consent the consent holder shall provide and maintain in favour of the Hauraki District Council and the Waikato Regional Council ("the Councils") a rehabilitation bond to:
 - (a) secure compliance with all the conditions of this consent and to enable any adverse effects on the environment resulting from the consent holder's activities and not authorised by a resource consent to be avoided, remedied, or mitigated;
 - (b) secure the completion of rehabilitation and closure in accordance with the approved Rehabilitation Plan;
 - (c) ensure the performance of any monitoring obligations of the consent holder under this consent;
 - (d) enable the Councils to undertake monitoring and management of the site until completion of closure of the site; and
 - (e) enable the Councils, in the event of the bond being called upon to purchase Industrial and Special Risk Insurance in the sum of \$12 million (1998 dollars) and Public Liability Insurance in the sum of \$5 million (1998 dollars).
2. The rehabilitation bond shall be in a form approved by the Councils and shall, subject to these conditions, be on the terms and conditions required by the Councils.
3. The rehabilitation bond shall provide that the consent holder remains liable under the Resource Management Act 1991 for any breach of the conditions of consent which occurs prior to the completion of closure.
4. Section 109(1) of the Resource Management Act 1991 shall apply to the rehabilitation bond and the rehabilitation bond shall be registered under the Land Transfer Act 2017 by the consent holder at its expense against the certificates of title of the properties listed in Appendix G owned by the consent holder or its subsidiaries, and as identified as 'Post Closure Proposed Trust Land' on the plans in Appendix G.
5. Unless the rehabilitation bond is a cash bond, the performance of all of the conditions of the bond shall be guaranteed by a guarantor acceptable to the Councils. The guarantor shall bind itself to pay for the carrying out and completion of any condition in the event of any default of the consent holder, or any occurrence of any adverse environmental effect requiring remedy.
6. (a) The amount of the rehabilitation bond shall be fixed at the commencement of the extended project and thereafter by the Councils who shall take into account any calculations and other matters submitted in the Rehabilitation Plan, or otherwise, by the consent holder which are relevant to the determination of the amount. The amount of the rehabilitation bond shall be advised in writing to the consent holder at least one month prior to the review date.

Advice Note: The Hearings Committee suggests that a fixed date of 31 May in any given year offers a useful 'target' for the two Councils and the Company to aim for.

- (b) The amount of the rehabilitation bond to achieve the purposes set out in 1 above shall include:
 - (i) the estimated costs (including any contingencies necessary) of rehabilitation and closure in accordance with the conditions of this consent, on completion of the mining operations proposed for the next year and described in the Rehabilitation Plan;
 - (ii) any further sum which the Councils consider necessary to allow for remedying any adverse effect on the environment that may arise from the exercise of this consent;
 - (iii) the estimated costs of monitoring, in accordance with the monitoring conditions of this consent, until this consent expires; and
 - (iv) any further sum which the Councils consider necessary for monitoring any adverse effect on the environment that may arise from the exercise of this consent including monitoring anything which is done to avoid, remedy, or mitigate an adverse effect.
 - 7. Should the consent holder not agree with the amount of the rehabilitation bond fixed by the Councils then the matter shall be referred to arbitration in accordance with the provisions of the Arbitration Act 1996. Arbitration shall be commenced by written notice by the consent holder to each of the Councils advising that the amount of the rehabilitation bond is disputed, such notice to be given by the consent holder within two weeks of receipt of notification of the amount of the rehabilitation bond. If the parties cannot agree upon an arbitrator within a week of receiving the notice from the consent holder, then an arbitrator shall be appointed by the President of the Institute of Professional Engineers of New Zealand. Such arbitrator shall give an award in writing within 30 days after his or her appointment, unless the consent holder and the Councils agree that time shall be extended. The parties shall bear their own costs in connection with the arbitration. In all other respects, the provisions of the Arbitration Act 1996 shall apply. Pending the outcome of that arbitration and subject to 8 below, the existing bond shall continue in force. That sum shall be adjusted in accordance with the arbitration determination.
 - 8. If, for any reason other than default of the Waikato Regional Council or the Hauraki District Council, the decision of the arbitrator is not made available by the 30th day referred to above, then the amount of the bond shall be the sum fixed by the Councils, until such time as the arbitrator does make his/her decision. At that stage the new amount shall apply. The consent holder shall not exercise this consent if the variation of the existing bond or new bond is not provided in accordance with this condition.
 - 9. The rehabilitation bond may be varied, cancelled, or renewed at any time by agreement between the consent holder and the Councils provided that cancellation will not be agreed to unless a further or new rehabilitation bond acceptable to the Councils is available to replace immediately that which is to be cancelled (subject however to the condition below as to release of the rehabilitation bond on the completion of closure of the site - as that phrase is elsewhere defined - to the Councils' satisfaction).
 - 10. The Councils shall release the rehabilitation bond on the completion of closure of the site.
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"Completion of closure of the site" means when the elements of the entire project have been demonstrated by the consent holder to the satisfaction of the Councils to have reached a stable, self-sustaining, rehabilitated state as defined by the approved Rehabilitation Plan.

11. All costs relating to the rehabilitation bond shall be paid by the consent holder.
12. This consent shall not become operative unless and until the consent holder provides the rehabilitation bond to the Councils.
13. As soon as practicable after the grant of this consent and in any event prior to the placement of PAF waste into Storage 1A, the consent holder, in consultation with the Councils, shall establish a Trust ("the Trust") (charitable if possible) whose purposes and powers shall be:
 - to take legal title after completion of the closure of the site to the land on which Storage 2 and Storage 1A are located (as shown in Appendix G). The Trust shall have no power of sale of the land;
 - to take legal title after completion of the closure of the site to the park to be formed at Junction Road (as shown in Appendix G);
 - to take legal title after completion of the closure of the site to the land upon which the Water Treatment Plant is located (as shown in Appendix G);
 - to monitor and maintain these facilities in perpetuity and to be responsible for such monitoring and maintenance as to ensure that Storage 2 and Storage 1A and the park (and proposed pit lake if acceptable to LINZ) remain in a stable, self-sustaining, rehabilitated state;
 - to maintain and monitor the proposed pit lake (subject to agreement with LINZ);
 - to obtain any resource consents that may be required after completion of the closure of the site and the expiration or surrender of this consent;
 - without limiting the above, to take out insurance cover against unexpected risks;
 - to reimburse the Councils for any costs incurred by them in monitoring or maintaining Storage 2 and Storage 1A, the park, and proposed pit lake;
 - to invest any funds held to generate the necessary income to pay for the above purposes.

These purposes and powers shall be recorded in a Trust Deed approved by the Councils.

The Trust Deed shall provide:

- that the Councils shall have the power to appoint two trustees each to the Trust;
 - for the appointment by the Councils, after consultation with Ngati Tamatera, of one additional trustee representing Ngati Tamatera;
 - and
 - for the appointment by Te Runanga a Iwi o Ngati Tamatera Incorporated of one advisory trustee representing Ngati Tamatera.
14. The consent holder shall be responsible for all costs associated with the establishment of the Trust. The solicitor appointed to act for the Trust shall be independent of the solicitors acting for the consent holder and shall be approved of by the Councils.
 15. The consent holder shall execute irrevocable transfer documents to enable the Trust to complete the transfer of the land described in Appendix G, and these transfer documents are to be held in escrow subject to condition 18 by the solicitor acting for

the Trust.

18. The Trust Deed shall provide that upon the completion of closure of the site, the transfers of land will be completed by the trustees registering the transfers on the relevant certificates of title, and the trustees shall undertake their responsibilities with respect to the park, proposed pit lake and tailings storage facilities. The Water Treatment Plant shall be in good working condition at the time the transfer of it to the Trust is completed.
19. Prior to the exercise of this consent, the consent holder shall provide and maintain in favour of the Councils a capitalisation bond to secure the settlement on the Trust of the required capital sum to fund the Trust to carry out its obligations.
20. The capitalisation bond shall be in a form approved by the Councils and, subject to these conditions, shall be on the terms and conditions required by the Councils.
21. Unless the capitalisation bond is a cash bond, the performance of all of the conditions of the capitalisation bond shall be guaranteed by a guarantor acceptable to the Councils.
22. The amount of the capitalisation bond shall be fixed annually by the Councils and shall cover:
 - the estimated costs of dealing with any adverse effect on the environment which may become apparent after the surrender or expiry of this consent. This sum may include (without limitation) provision to deal with structural instability or failure, land and/or water contamination, and failure of rehabilitation. Such estimated costs shall include the costs of investigation, prevention, and remediation of any adverse effect.
 - the estimated costs of monitoring for and of any adverse effect and of measures taken to avoid, remedy, or mitigate any adverse effect.
 - provision for contingencies.
 - the estimated costs of long-term monitoring and maintenance of the area to be owned or managed by the Trust, following completion of closure of the site,
 - provision for the reasonable remuneration of the trustees having regard to their duties and responsibilities as trustees

and be based on the residual risk assessment dated 20 July 1998 prepared by the consent holder and provided to the Councils. Such residual risk assessment shall be updated annually.

The amount of the reviewed bond shall be advised in writing to the consent holder at least one month prior to the annual review date.

The amount of the bond shall be reduced by the capital amounts settled on the Trust from time to time by the consent holder.

23. Should the consent holder not agree with the amount of the capitalisation bond fixed by the Councils then the matter shall be referred to arbitration in accordance with the procedures set out in conditions 7 and 8 above. Subject to condition 8, that sum shall be adjusted in accordance with the arbitration determination. The consent holder shall not exercise this consent if the variation of the existing capitalisation bond or new capitalisation bond is not provided in accordance with this condition.
24. The capitalisation bond may be varied, cancelled, or renewed at any time by agreement between the consent holder and the Councils.

25. The capitalisation bond shall expire upon the settlement on the Trust by the consent holder of the required capital sum.
26. All costs relating to the capitalisation bond shall be paid by the consent holder.
27. In addition to the insurance cover required for the Rehabilitation Bond in condition 3.31 1.(e), the consent holder shall throughout the term of this consent be able to demonstrate to the satisfaction of the Hauraki District Council that it holds sufficient funds, insurances or other financial instruments ("cover") to enable any adverse effect on the environment resulting from the consent holder's activities and not authorised by a resource consent to be promptly avoided, remedied or mitigated.

The consent holder shall provide evidence to the Council annually, or such other period as may be subsequently agreed with the Council in writing that sufficient cover is in place. This evidence shall be provided to Council at the same time as the Annual Work Programme is submitted as required by condition 3.2 of this consent.

Should the consent holder and the Council not agree on the sufficiency of the level of cover, the matter shall be referred to arbitration in accordance with the provisions of the Arbitration Act 1996. Arbitration shall be commenced by written notice by the Council advising that the amount of the cover is disputed, such notice to be given by the Council within two weeks of notification of the amount of the cover. If the parties cannot agree upon an arbitrator within a week of receiving the notice from the consent holder, then an arbitrator shall be appointed by the President of the Institute of Professional Engineers in New Zealand. Such arbitrator shall give an award in writing within 30 days after his or her appointment, unless the consent holder and the Council agree that time shall be extended. In all other respects, the provisions of the Arbitration Act 1996 shall apply. Pending the outcome of that arbitration, the existing cover shall continue in force. The sum of the cover shall be adjusted in accordance with the arbitration determination.

28. These conditions form an integrated whole and are not severable.

Note: This condition is complementary to the requirements of Condition 10 to Schedule 1 of the consents granted by the Waikato Regional Council.

3.32 ADMINISTRATIVE CHARGES

The consent holder shall pay to the Hauraki District Council any administrative charge fixed in accordance with Section 36 of the Resource Management Act 1991, or any charge prescribed in accordance with regulations made under Section 360 of the Resource Management Act 1991.

3.33 REVIEW OF CONDITIONS

- (a) Pursuant to section 128(1)(a)(i) and (ii) of the Resource Management Act 1991, the Council may review any or all of the conditions of this consent for the purpose of dealing with any adverse effects on the environment arising from the exercise of the consent and for the review of the appropriateness of the monitoring requirements required by the consent:
 - one year from the commencement of construction activities; and
 - at yearly intervals thereafter.

Such a review shall only be commenced after consultation between the consent holder and the Council.

- (b) Notwithstanding (a) above, where the Council elects to review condition 3.31 of this consent, such review shall be undertaken with the agreement of, and in conjunction with, the Waikato Regional Council.

4.0 APPENDICES

Appendix A.	Annual Work Programme (Condition 3.2)
Appendix B	2018 Pit Perimeter (Condition 3.1(d))
Appendix E	Plan 2, 50 dB and 55 dB Contour Boundaries (Condition 3.18(b))
Appendix G	Proposed Trust Land (Condition 3.31.13)

Appendix A - Annual Work Programme (Condition 3.2)

APPENDIX A

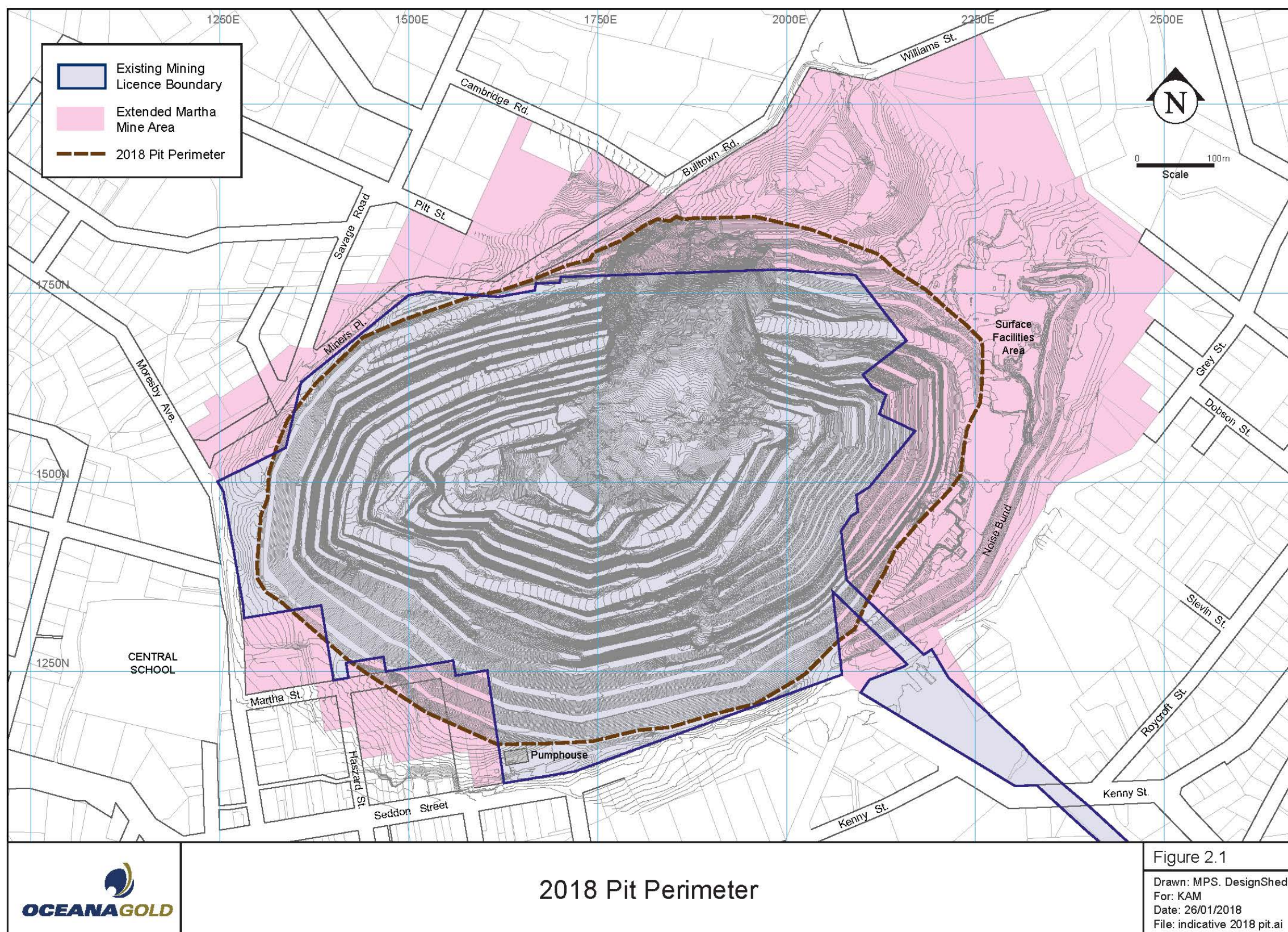
Annual Work Programme

The consent holder shall, within six months after the commencement of this consent and annually thereafter, prepare and submit to Council for information, an Annual Work Programme that outlines the anticipated activities to be performed during the following year and the management systems under which those activities will be undertaken. The Annual Work Programme shall include the following:

- i. Mining operations proposed for the forthcoming year.
- ii. Description of the sequencing of works, and description of the environmental procedures to be adopted during construction and the maintenance and management of facilities.
- iii. Proposed progressive rehabilitation and revegetation of the active areas of the mine operation.

The Annual Work Programme may also include any other information that the consent holder wishes, and may be combined with any other document which the consent holder is required to produce.

Appendix B - 2018 Pit Perimeter (Condition 3.1 (d))



2018 Pit Perimeter

Appendix E - Plan 2, 50 dB and 55 dB Control Boundaries (Condition 3.8(b)i)

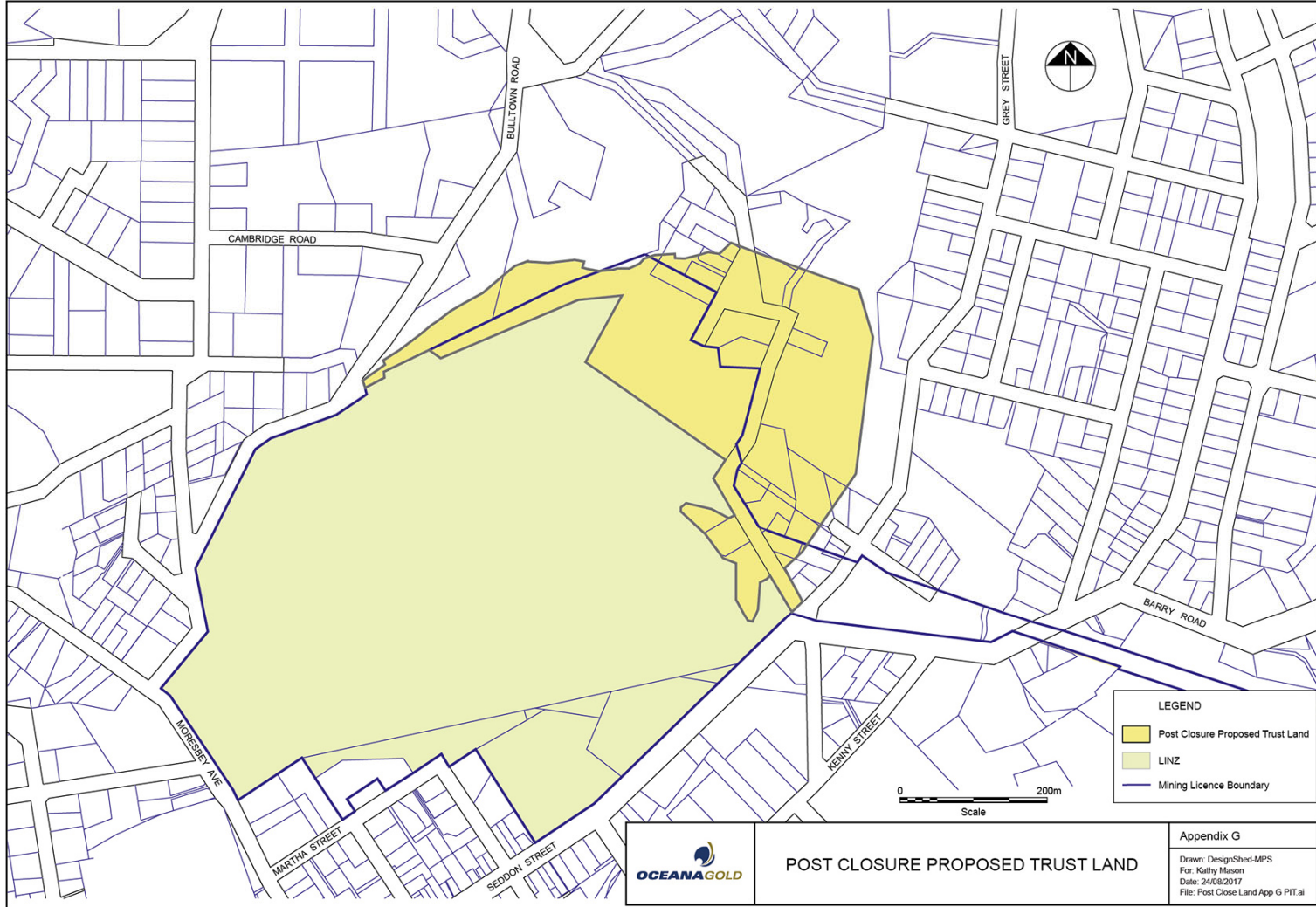
Appendix G - Proposed Trust Land (Condition 3.31.13)

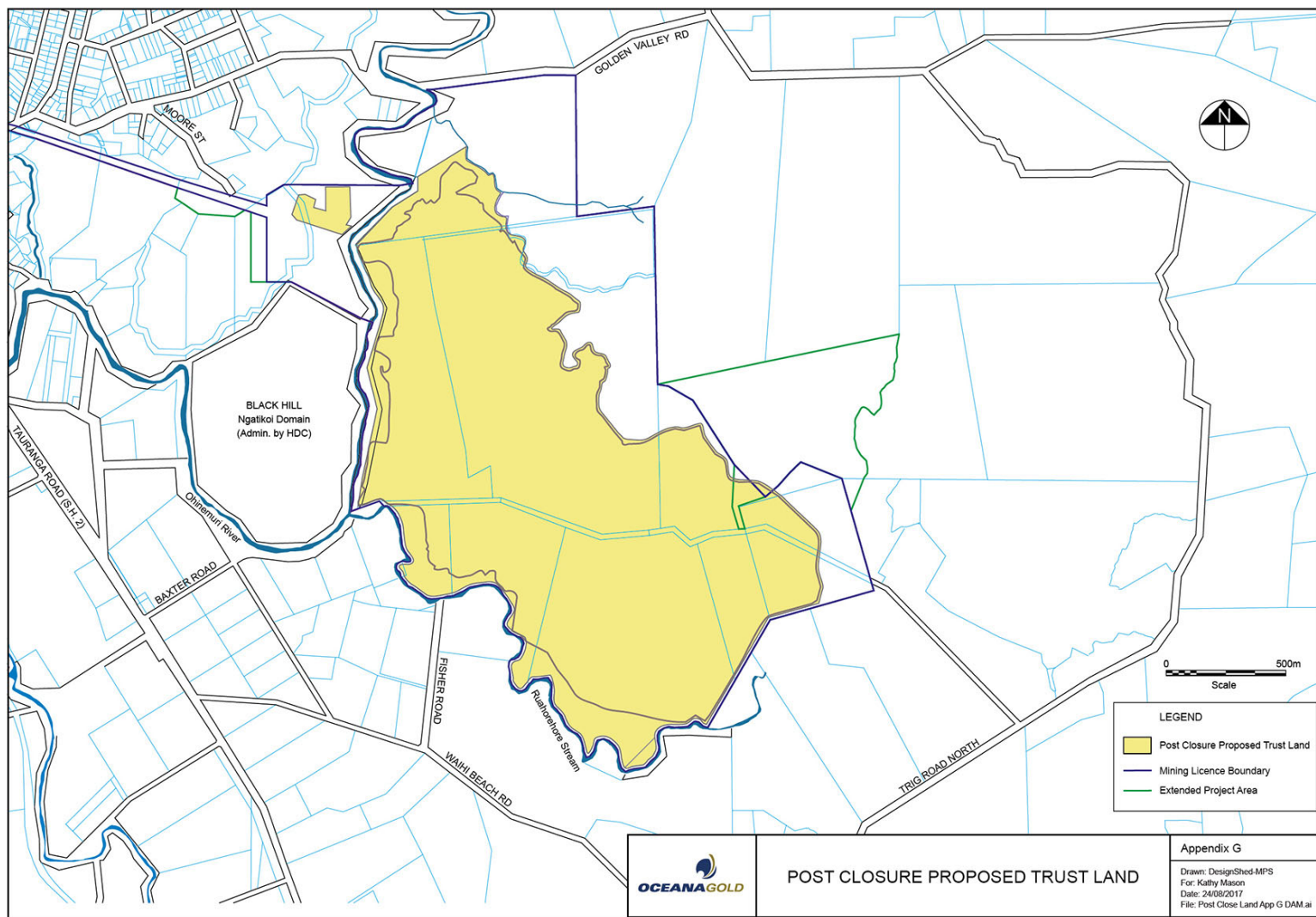
Table: Allotments to be subdivided in order for the transfer of the Trust Land to the Trust pursuant to the Conditions

Plan: Post Closure Proposed Trust Land

Plan: Post Closure Proposed Trust Land

RECORD OF TITLE	AREA (Hectares)	OWNER
Martha Pit		
SA71B/951	11.7155	OGNZL
24066	7.8943	OGNZL
SA50B/340	6.7780	OGNZL
SA32A/699	0.3907	OGNZL
SA32D/801	0.3792	OGNZL
Water Treatment Plant		
SA31D/451	16.6123	OGNZL
SA5A/1381(part cancelled)	6.4130	OGNZL
SA31D/452	12.2028	OGNZL
Waste Disposal Area		
SA65D/777	295.4743	OGNZL
SA15B/287	14.5181	OGNZL
SA807/214	39.8615	WGCL

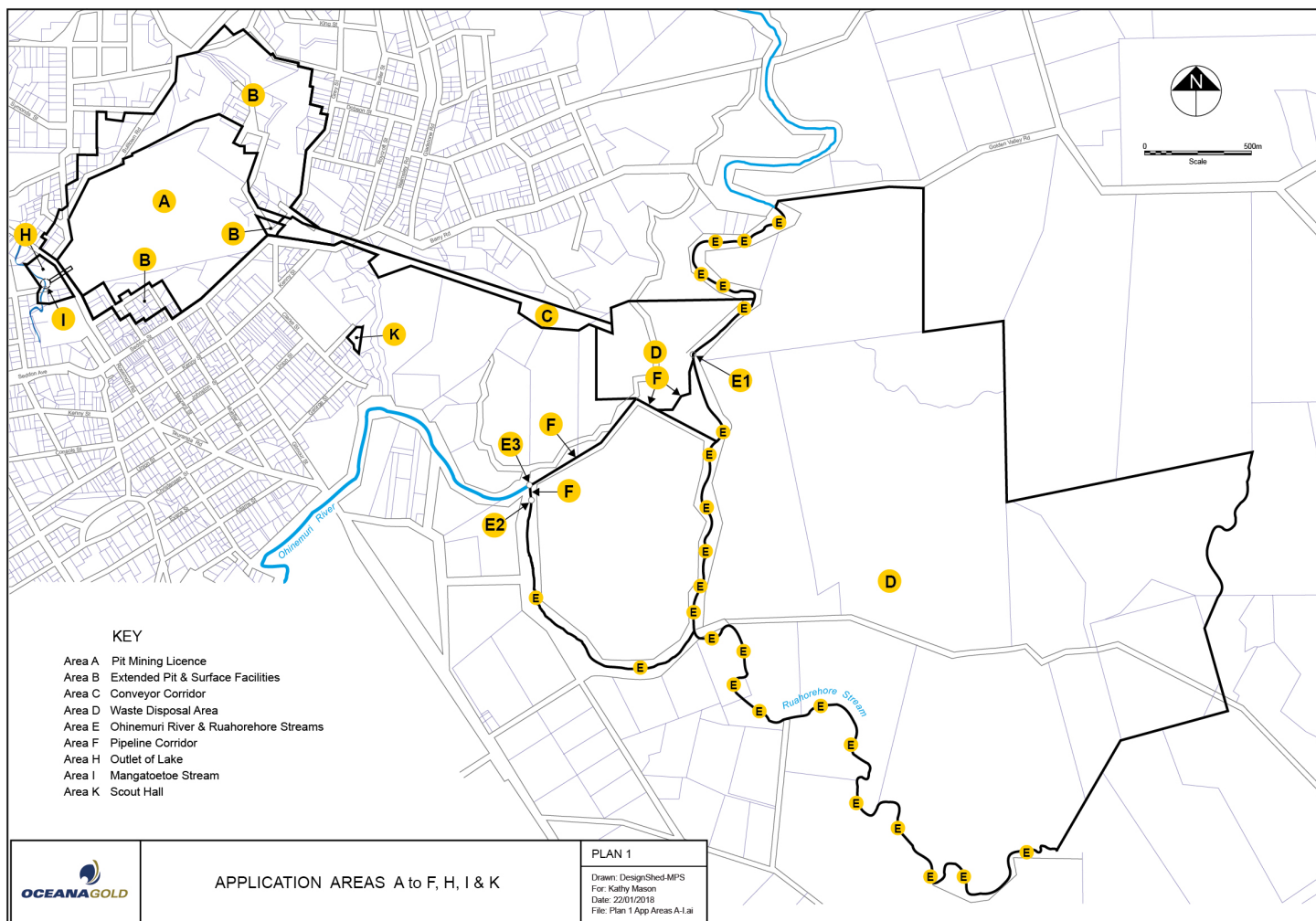




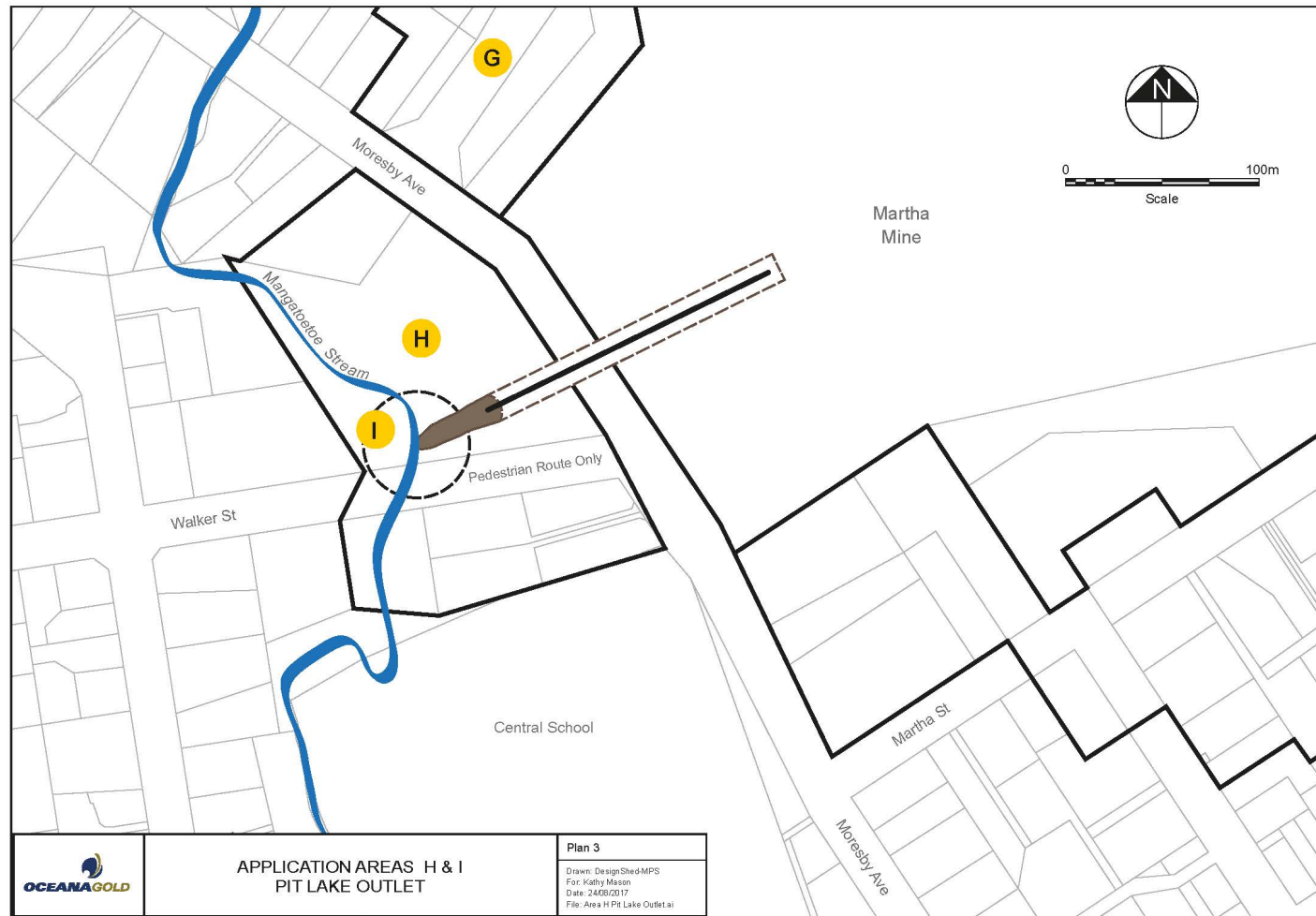
5.0 PLANS

1. Areas A to F, H, I & K (Condition 2.2)
3. Pit Lake Outlet (Condition 3.18(a))
4. Pipeline Corridor (Condition 3.20 (a))
- 4a. Kauri Tree (Condition 3.21A)
5. Heritage Features (Condition 3.22(a))
6. Hazardous Substances (Condition 3.27(a))
8. Scouts (Condition 3.29)

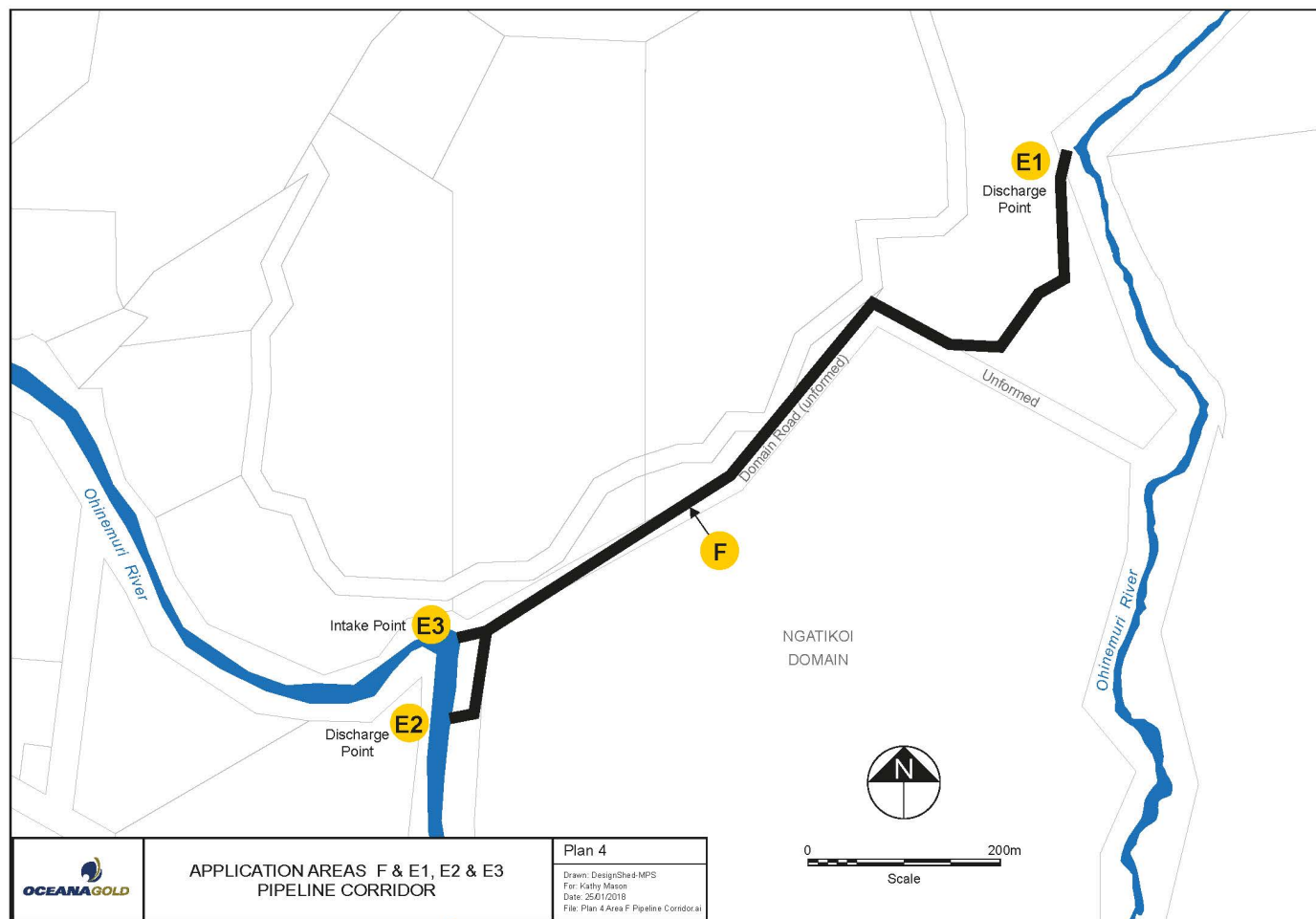
Plan 1 – Areas A to F, H, I & K (Condition 2.2)



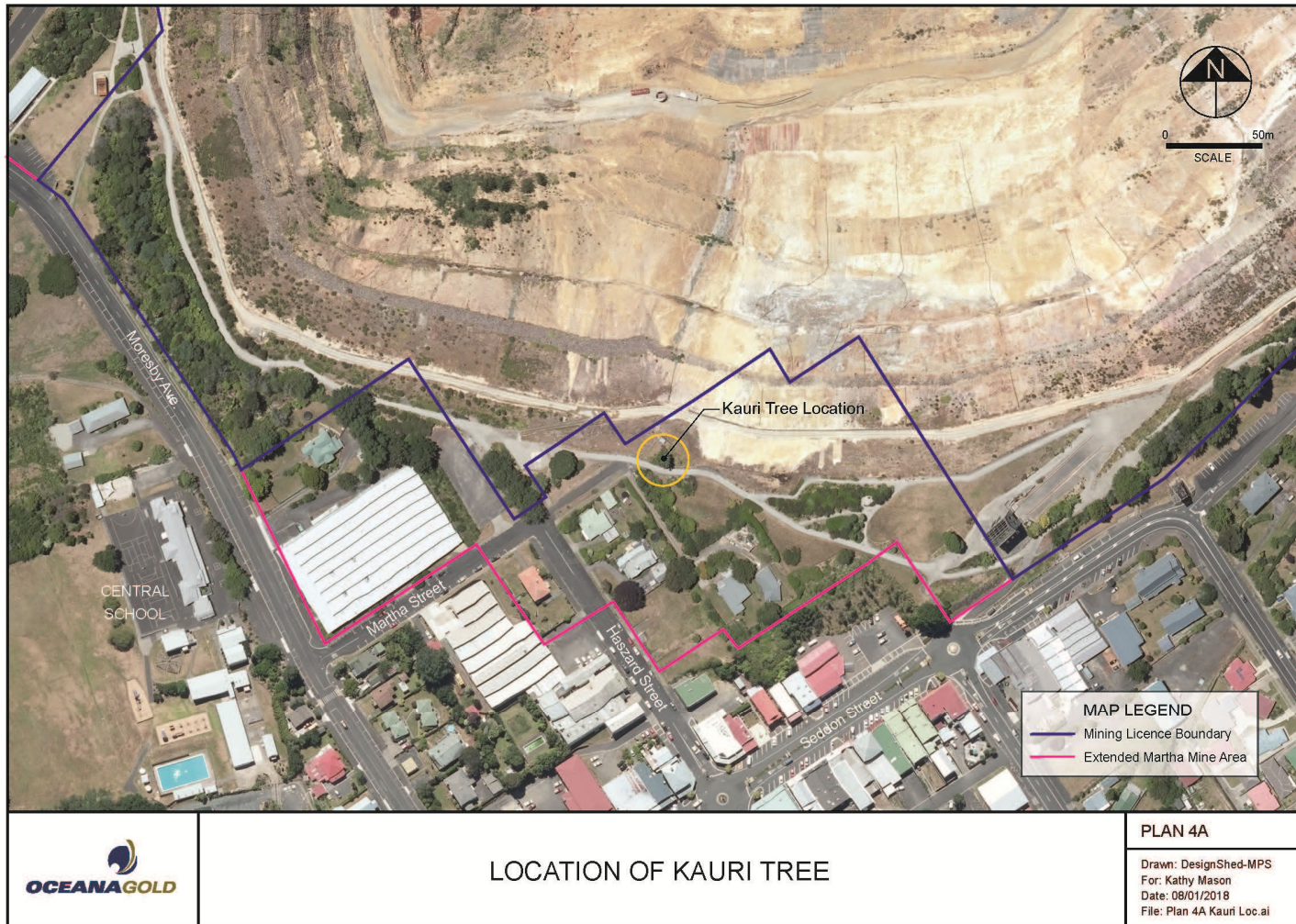
Plan 3 – Pit Lake Outlet (Condition 3.18(a))



Plan 4 – Pipeline Corridor (Condition 3.20(a))



Plan 4a – Kauri Tree (Condition 3.21A)



Plan 5 – Heritage Features (Condition 3.22(a))



Plan 6 – Hazardous Substances (Condition 3.27(a))



Plan 8 – Scouts (Condition 3.29)

