

# Martha Mineral Zone Plan Change Waihi Transportation Assessment

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WAI-086-008-REP-LC-0084\_Rev D  
TECHNICAL REPORT  
MARTHA MINERAL ZONE PLAN CHANGE - TRANSPORTATION ASSESSMENT  
GENERAL AREA 080

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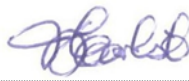
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## 1.0 INTRODUCTION

OceanaGold New Zealand Limited (“OGNZL”) is proposing a plan change application to the Hauraki District Council (“HDC”) to rezone several land parcels it owns from *Residential, Low Density Residential* and *Town Centre Zone* in the Hauraki District Plan (“HDP”) to *Martha Mineral Zone* (“MMZ”). The identified parcels of land subject to the rezoning are required to support a potential future expansion of the Martha Pit and ancillary activities (i.e. noise bunds and surface facilities areas). The area subject to the proposed extension of the MMZ is to the north, west and south of the Martha Pit, and is described in more detail in the plan change application prepared by Mitchell Daysh.

Rezoning of these land parcels in the HDP is required because surface mining to support the potential future expansion of the Martha Pit is a prohibited activity in the Residential, Low Density Residential and Town Centre Zones. Future surface mining activity within the expanded area of the Martha Mine will remain subject to a discretionary activity resource consent application under the rules that apply to the MMZ.

This assessment considers the transportation implications of the plan change, with a focus on the potential trip generation that could occur with permitted activities and the adequacy of the existing HDP provisions to appropriately manage those activities and future application for the expansion of the Martha Pit within the MMZ.

## 2.0 EXISTING TRANSPORTATION ENVIRONMENT

### 2.1 MARTHA MINERAL ZONE LOCATION AND ACCESS

The existing MMZ comprises the Martha Pit immediately to the north of Waihi town centre and ancillary processing facilities including ore processing, water treatment and tailings storage to the southeast of Waihi. The pit and processing area are separated by several blocks of land and State Highway 25 (SH25). Material is transported between the pit and the ore processing and storage areas by a conveyor which passes beneath SH25.

The proposed rezoning relates to land parcels that surround the existing Martha Pit.

The main administrative offices for the mine are located on the corner of Moresby Avenue and Martha Street, adjacent to the Martha Pit.

A street network encircles the Martha Pit comprising of various road classifications defined in the HDP as depicted in **Figure 1** and as follows: State Highway 25 (SH25) and State Highway 2 (SH2) to the southeast; and a loop around the north side of Martha Pit from SH2 back to SH25 formed by Moresby Avenue (an Arterial Road as far as Savage Road), followed by Collector Roads comprising Savage Road, Cambridge Road, Bulltown Road, William Street, Kent Crescent and Walmsley Road. An alternative linkage is available from William Street via Boundary Road, Grey Street and Dobson Street, which are also Collector Roads.

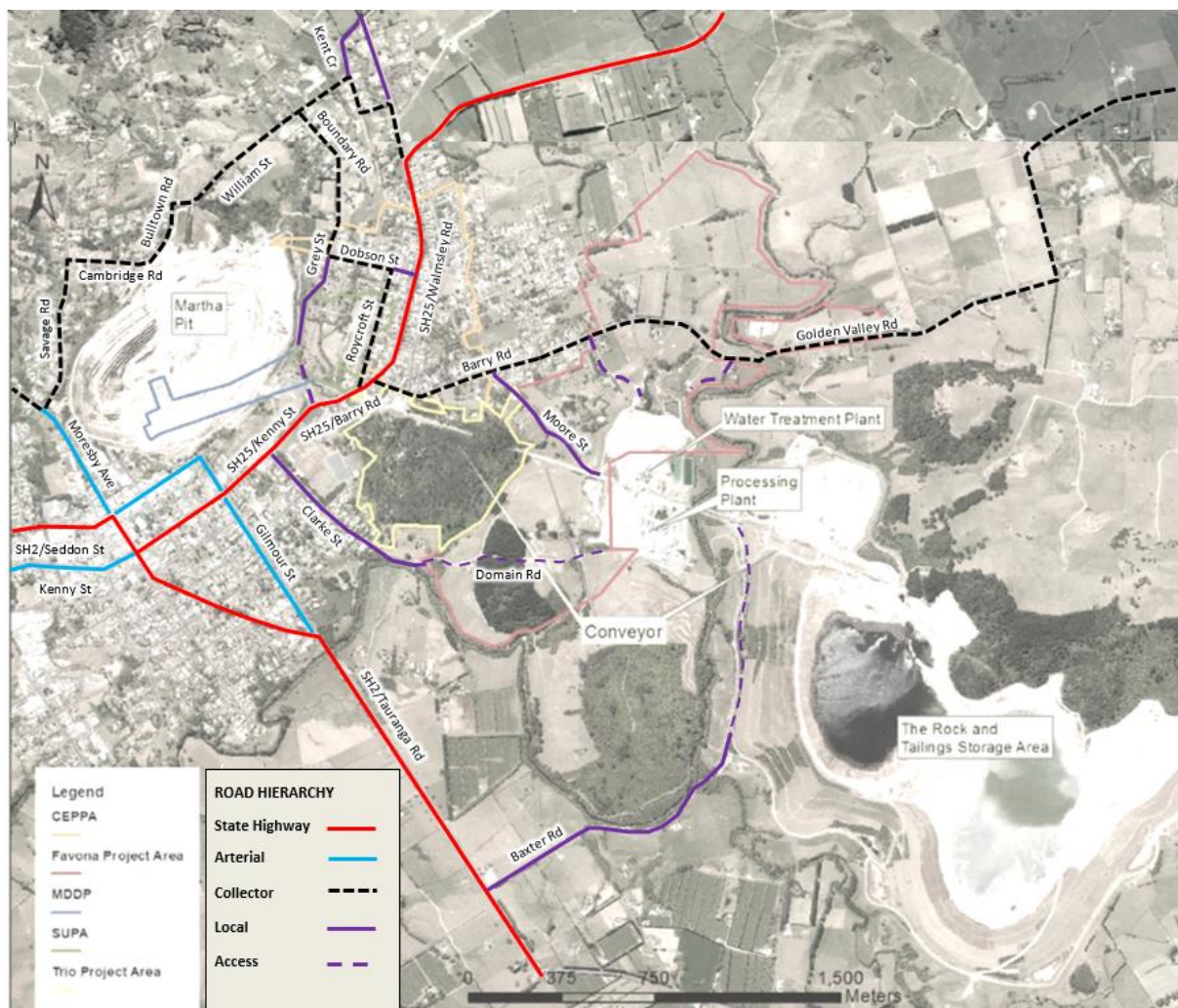
A number of local roads within the area of the MMZ are closed to traffic and will remain closed as part of the consented rehabilitation plan for the Martha Pit, including Grey Street south of Dobson, and parts of Newman Street, Slevin Street, Seddon Street, Brickfield Road, Barry Road and Pipe Lane.

OGNZL has provided advice with respect to the use of each of the mine accesses. With very few exceptions, current mine traffic passes through one of the two main access gates which are located on Barry Road (SH25) and Baxter Road. Access locations to the mine areas are shown on **Figure 1** and described as:

- Principal vehicular access to the Martha Pit is by way of a gated entrance located on SH25 on the corner of Barry Road and Kenny Street.
- The main vehicular access to the processing area is a gated access at the eastern end of Baxter Road, approximately 1.2 km east of its intersection with SH2.



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**Figure 1: Martha Mineral Zone Mine and Access Locations showing Road Hierarchy**

Over-weight and over-dimension vehicles also use the main gates whenever possible, with secondary accesses being used only when access via the main gates is impractical. Secondary accesses are available as follows:

- (a) A secondary access gate to the Martha Pit (northern area) is located on Grey Street approximately 115 m north of Dobson Street. This gate is used for infrequent access by heavy vehicles.
- (b) There are other secondary access gates to the processing area which are used relatively infrequently and include:
  - (i) Moore Street approximately 500 m southeast of its intersection with Barry Road is used in cases where an oversize or heavy load cannot access via Baxter Road. It is also used as an alternative to the Baxter Road access on occasions when the Ohinemuri River floods, preventing access via Baxter Road.
  - (ii) Clarke Street – used very infrequently for over-weight or over-dimension vehicles.
  - (iii) Two access gates off Golden Valley Road to the east of Moore Street. These accesses are also used infrequently (average of once a week over a year) for monitoring or exploratory work.

## **2.2 PRINCIPAL MARTHA PIT ACCESS**

The principal vehicular access to the Martha Pit is located on the outside of a horizontal curve on Barry Road (SH25) where Barry Road intersects with Kenny Street. A right-turn lane is provided for westbound traffic turning





right into the mine. The available sight distance has been assessed at the access based on aerial photography in accordance with the Austroads guidelines and the sight line in both directions is assessed to exceed the recommended requirement for a 50 km/h operating speed. The mine security gate is located approximately 43 m back from the SH25 carriageway in the vicinity of the open pit mine access on Barry Road (SH25) and is a two-lane urban arterial route with a 50 km/h posted speed limit.

**Figure 2** shows the layout of the Martha Pit mine access on SH25.



**Figure 2: SH25 Martha Pit Access**

## **2.3 SURROUNDING ROAD NETWORK (MARTHA PIT)**

### **2.3.1 Moresby Avenue**

Moresby Avenue, between Seddon Street (SH2) and Savage Road, is classified in the HDP as an Arterial Road. For approximately 120 m from its intersection with Seddon Street, it is flanked by a mix of commercial and residential activities, followed by Waihi Central School on the south side. This section generally has a through lane in each direction with parallel parking on each side.

The carriageway width varies over the section with a widened segment of nominally 14.5 m adjacent to the school providing wider parking bays, and a narrower segment of approximately 11.5 m width north of the school where the parking is only provided on the west side of the street. Adjacent to the Savage Road intersection, the carriageway width reduces further to approximately 10 m, and the road is marked with a centre line only.

West of Savage Road, Moresby Avenue is classified as a Collector Road, and has residential activity on both sides. The carriageway measures approximately 8 m to 9 m in width, with kerb, channel and a footpath on the south side and a narrow shoulder, feathered edge and grass berm on the north side.

### **2.3.2 Savage Road / Islington Terrace**

Savage Road is classified as a Collector Road in the HDP (between Moresby Avenue and Cambridge Road). It has a typical sealed width of approximately 11 m between kerbs and is marked with a centre line. Activity on both sides is low-density residential apart from near the southern end, where the Martha pit is adjacent to the eastern side of the road.

Islington Terrace is a residential cul-de-sac serving approximately 20 dwellings, on the west side of Savage Road approximately 130 m north of its intersection with Moresby Avenue. It is classified as a Local Road in the HDP.



### 2.3.3 Martha Street / Haszard Street

Martha Street and Haszard Streets are both local roads with nominal carriageway widths of 11 m and 12 m respectively, which allows for parallel parking on each side. The streets provide access to the adjacent properties including commercial activities at the southern end of Haszard Street, the building on the corner of Moresby Avenue and Martha Street which houses the mine administrative offices as well as several other commercial activities (and currently zoned “Town Centre”), the carpark on Martha Street used predominantly by the mine personnel, and neighbouring residences.

As well as the local property access function the streets are linked and provide an alternative route between Moresby Avenue and Seddon Street.

### 2.3.4 Cambridge Road /Bulltown Road

Cambridge Road and the southern section of Bulltown Road, as far as William Street, are classified as Collector Roads in the HDP (between Savage Road and William Street) linking the southern and northern areas of Waihi around the northern side of the Martha Pit. The western end (Cambridge Road) is similar in nature to Savage Road, with an approximate 11 m carriageway width with kerb and channel and is marked with a centre line.

At the eastern end of Cambridge Road, the carriageway continues as Bulltown Road to the north as the priority route. The main alignment of Bulltown Road is narrower than Cambridge Road, with a seal width reducing to approximately 6 m. Bulltown Road is more rural in nature, with no kerb or channel, and grass berms on both sides. A short cul-de-sac is located on the south side and outside of the curve where Cambridge Road intersects with Bulltown Road. While this existing cul-de-sac is currently signed as Bulltown Road it is owned by OceanaGold and is no longer a public road.

## 3.0 TRAFFIC PATTERNS

Data obtained from the MobileRoad website<sup>1</sup> as hosted by Auckland Motorways includes estimates of the average daily traffic (ADT) volumes for the surrounding road network and is summarised in **Table 1**.

**Table 1: Traffic Volumes**

Road and Location	Daily Traffic Volume (veh/d)	Road Hierarchy
Moresby Ave south of Savage Rd	2,220	Arterial
Moresby Ave north of Savage Rd	1,385	Collector
Savage Rd north of Moresby Ave	980	Collector
Islington Tce	185	Local
Pitt St	100	Local
Cambridge Rd west of Bulltown Rd	420	Collector
Bulltown Road	450	Collector
William Street	300	Collector
Grey St north Dobson St	400	Collector
Dobson St east of Grey St	365	Collector
Newman St south Dobson St	16	Local
Slevin St west Roycroft St	100	Local
SH25 Kenny St north of Clark St	3,820	State Highway
Seddon St	5,400	Arterial
Haszard St north Seddon St	700	Local
Martha St	570	Local

<sup>1</sup> mobileroads.org



It can be seen from **Table 1** that most roads have a low traffic volume with less than 500 vehicles per day, with only SH25, Moresby Ave, and Seddon St carrying volumes greater than 1,000 vehicles per day. Peak hour volume data for these roads is not available and has been estimated at 10% of the ADT.

## 4.0 PROPOSED PLAN CHANGE

As previously noted, it is proposed to rezone several land parcels from *Residential, Low Density Residential* and *Town Centre* to *MMZ in the HDP*. The identified parcels of land subject to the rezoning are required to support the potential for a future expansion of the Martha Pit and ancillary activities (i.e., noise bunds and surface facilities areas). This includes expanding the extent of the zone in the vicinity of Moresby Avenue, Savage Road, Cambridge Road, Martha Street, Haszard Street, Seddon Street, Grey Street and Selvin Street.

The land parcels to be rezoned are all owned by OGNZL. The land parcels to be rezoned are shown in **Figure 3** and summarised as follows:

- Two *Residential* lots on Grey Street and three on Slevin Street as an extension of the existing Martha Mineral zone most likely required to accommodate the extended noise bund and surface facilities (and partially within the existing mine hazard area).
- Two *Low Density Residential* lots on the north side of Cambridge /Bulltown Roads to accommodate a potential future road realignment of Cambridge/Bulltown Road.
- Four *Low Density Residential* lots to the south of Cambridge Road contiguous with the existing zone and most likely to be utilised to repair and expand the north wall.
- Eleven *Residential* lots between Pitt Street and Miners Place of which most are currently vacant most are currently vacant have already been retired and one is a section of closed road.
- Eight *Residential* lots on Savage Road, Islington Terrace and Moresby Avenue primarily to enable the potential realignment of Savage Road in the future subject to further consenting processes.
- Six *Residential* lots south of Moresby Road primarily to enable the potential realignment of Moresby Road in the future and some car parking spaces all subject to further consenting processes.
- Three *Residential* lots east of Seddon Street most likely to be utilised to enable the Mine Closure Plan to be implemented.
- Twenty-Two (or thereabouts) *Town Centre* lots on Moresby Avenue, Martha Street, Haszard Street and Seddon Street most likely to be utilised to enable the future mining and extension of the southern wall with the retention of some of the existing buildings subject to further consenting processes.

While an indicative pit shell layout for the Martha Pit has been provided in the plan change application, the expansion of the pit does not form part of the plan change itself. Any proposal to expand mining activity at the Martha Pit will be assessed as part of a future resource consent application. Likewise, the road realignment of Moresby Avenue, Savage Road, Cambridge Road and Bulltown Road does not form part of the plan change application. Any road realignments will also need to be assessed as part of any future resource consent application. Similarly, any related road stopping will be progressed through the appropriate (and separate) process.

Other key changes proposed to the MMZ as part of the plan change application include updating of the text for the MMZ to provide a more reflective zone purpose, general background information on the expectations for activities in the zone, objectives and policies with respect to management of adverse effects particularly in relation to the CBD and the eventual mine closure / rehabilitation. None of these changes are understood to have any effect on the transportation requirements of the District Plan.





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**Figure 3: Plan Change Land Parcels to be Rezoned to MMZ**

## **4.1 MARTHA MINERAL ZONE ACTIVITIES**

Permitted Activities within the MMZ are set out in the Section 5.17.4.1 of the HDP and understood to be:

- Any activity conducted in accordance with the relevant terms and conditions of, and within the area covered by mining licence 32 2388 and within the area covered by land use resource consent 97/98-105 (this excludes underground and surface mining – see below). It is understood the existing licences and land use consents do not cover the land proposed to be rezoned.
- Passive recreation activities located outside the “medium” and “high” underground workings hazard (shafts and stopes) zones.
- Any of the following recreation activities:
  - pedestrian walkways, cycleways and jogging tracks (including bridges); and
  - planted areas and stands of trees; and
  - associated maintenance activities.
- Prospecting and exploration
- Farming and associated accessory buildings
- Temporary uses and buildings meeting part (a) of the definition and part (b) and (d) of the definition located outside the “medium” and “high” underground workings hazard (shafts and stopes) zones.

Within the *MMZ* it is a discretionary activity to undertake *underground and surface mining and mining activities not otherwise permitted*. It is understood that mining activity additional to that already permitted or consented (e.g. Project Martha – which authorises further mining as part of the remediation of the north wall) can only be enabled through additional discretionary resource consent applications.



## 4.2 COMPARISON OF ZONES ACTIVITY STATUS

The existing zone activity status has been indicatively<sup>2</sup> compared to the proposed MMZ Activity status in the table below. It is recognised that within each activity type there are other standards that may apply, however, broadly the table highlights how the requested zone change will affect the type of activity that could be developed.

**Table 2: Indicative Activity Status for Different Activities in Each Zone of the Hauraki District Plan**

Activity	Residential	Low Density Residential	Town Centre	Martha Mineral
Residential	Permitted 1 dwelling / Controlled 2 dwellings	Permitted 1 dwelling / Controlled 2 dwellings	Permitted*	Non Complying
Home Occupations	Permitted	Permitted	Non Complying	Non Complying
Home Stay	Permitted	Permitted	Non Complying	Non Complying
Passive recreational	Permitted	Permitted	Non Complying	Permitted*
Prospecting	Permitted	Permitted	Permitted	Permitted
Drainage Works	Permitted	Permitted	Non Complying	Non Complying
Exploration	Permitted (less than 20m <sup>2</sup> /year), Controlled 20- 50m <sup>3</sup> /year, Otherwise Discretionary	Permitted (less than 20m <sup>2</sup> /year), Controlled 20-50m <sup>3</sup> /year, Otherwise Discretionary	Permitted (less than 20m <sup>2</sup> /year), Controlled 20-50m <sup>3</sup> /year, Otherwise Discretionary	Permitted
Temporary uses and buildings	Permitted	Permitted	Permitted	Permitted
Demolition and Removal of Buildings	Permitted	Permitted	Permitted	Non Complying
Drainage Works	Non Complying	Permitted	Non Complying	Non Complying
Storage Buildings	Permitted	Permitted	Non Complying	Non Complying
Accessory Building (associated with minor dwelling)	Permitted	Permitted	Non Complying	Non Complying
Education	Controlled	Non Complying	Non Complying	Non Complying
Training Facilities and Offices	Controlled	Non Complying	Permitted	Non Complying
Community Housing	Controlled	Non Complying	Non Complying	Non Complying
Visitor Accommodation	Controlled	Discretionary	Non Complying	Non Complying
Comprehensive Residential Development	Controlled	Non Complying	Non Complying	Non Complying
Community Facilities	Discretionary	Non Complying	Permitted	Non Complying
Underground Mining	Discretionary	Discretionary	Discretionary	Discretionary
Dairy	Discretionary	Non Complying	Permitted	Non Complying
Surface Mining	Prohibited	Prohibited	Prohibited	Discretionary
Administrative, Buisness, retail	Non Complying	Non Complying	Permitted	Non Complying
Emergency Services	Non Complying	Non Complying	Permitted	Non Complying
Parking Lots and Parking Buildings	Non Complying	Non Complying	Controlled	Non Complying
Service Station	Non Complying	Non Complying	Discretionary	Non Complying
Transport Depots	Non Complying	Non Complying	Discretionary	Non Complying
Car Caravan and Boat Sales	Non Complying	Non Complying	Discretionary	Non Complying
Farm Marchinery Sales and Repair	Non Complying	Non Complying	Discretionary	Non Complying
Trade Depots	Non Complying	Non Complying	Discretionary	Non Complying
Farming and Associated Accessory Buildings	Non Complying	Non Complying	Non Complying	Permitted

From the table, the following key differences in activities can be identified that influence traffic generation that will change as a result of the proposed expansion of the MMZ.

- Within the existing zones the extent of exploration is constrained (anything greater than 50 m<sup>3</sup> per year is discretionary) but nonetheless permitted, and under the MMZ exploration is also a permitted activity. The ability to undertake small scale exploration is unchanged.
- Farming activity is non-complying under the existing zones and will be permitted in the MMZ.
- Passive recreational activities<sup>3</sup> are not permitted in the Town Centre Zone but are permitted in the other zones.

<sup>2</sup> This is not intended as a robust planning assessment but an indicative approximate summary of activity status for the purpose of identifying key traffic generators only

<sup>3</sup> Means any recreation activity where the principal aim is the enjoyment of leisure of a primarily non competitive casual nature that does not involve the use of vehicles (motorised)



- Demolition and removal of buildings is not currently permitted in the MMZ and is permitted in the existing zones. It is understood that it is proposed to add demolition as a permitted activity.
- Administrative, business and retail activities are permitted in Town Centre Zone but not in the MMZ.
- Residential activity is permitted to some degree in all existing zones but will be non-complying in the MMZ.

The only other permitted activities in the MMZ are already permitted in some form in all of the existing zones:

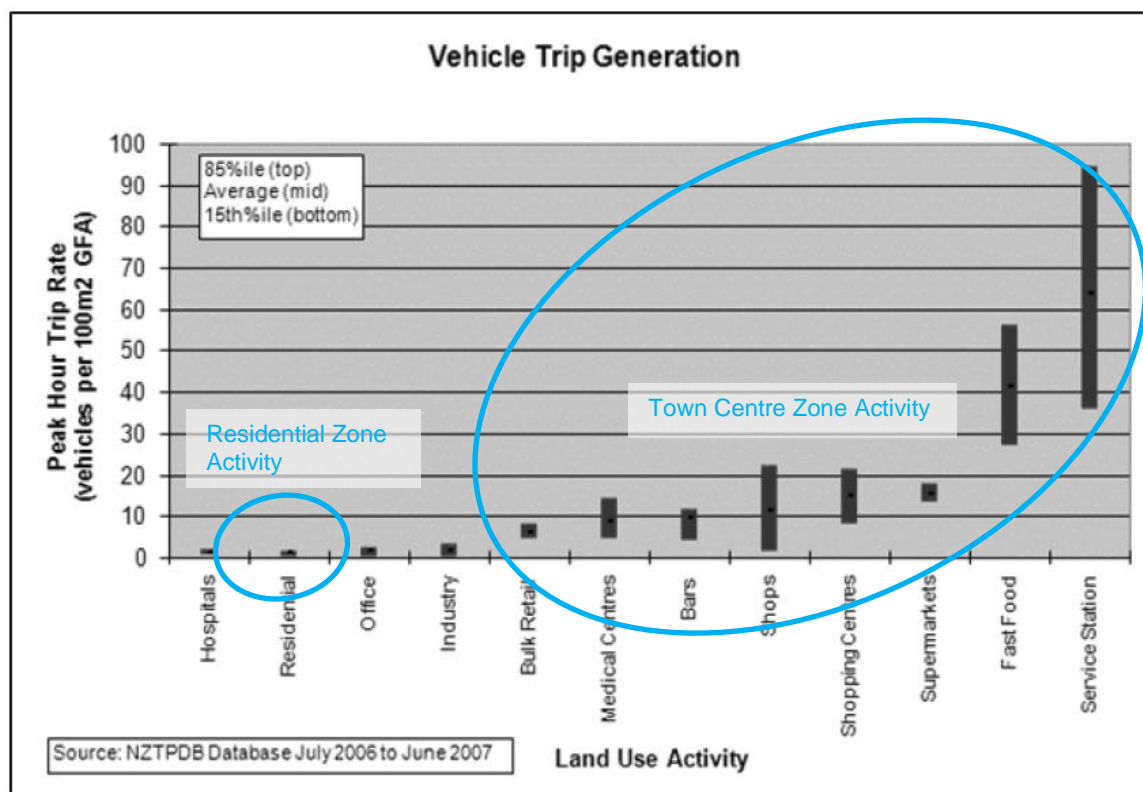
- Prospecting is permitted in all of the zones
- Temporary uses and buildings are permitted in all of the zones, subject to some restrictions.

It is understood that existing use rights would apply to the existing land use within the zone, for example existing residential activity in the residential zone that exists would still be allowed as would existing buildings and the associated activities they house in the *Town Centre Zone*.

## 5.0 TRAFFIC GENERATION

### 5.1 RESIDENTIAL AND TOWN CENTRE ACTIVITIES

The relative traffic generation characteristics of different land uses have been considered with reference to transport engineering industry reference documents. The NZTA Research Report 453 Trips and Parking Related to Land Use (RR453) includes traffic generating characteristics of different activities as summarised in **Figure 4** (extract from RR453 Figure 7.1). **Figure 4** demonstrates the range of traffic generation rates by activity type with the primary activities included in the town centre and residential zones highlighted.



**Figure 4: Indicative Traffic Generating Characteristics by Activity**

It can be seen that the type of activities that could occur within the Town Centre Zone have the highest traffic generation, and residential zones have comparably low traffic generation. Whilst passive recreational activity is not included, it will typically generate traffic lower than the town centre activity (in which passive recreation is a non-complying activity).





It is considered based on the site size available, and how other land in the area zoned MMZ is used, farming as an activity is unlikely to occur.

## **5.2 MINING RELATED ACTIVITY**

Prospecting and Exploration are defined<sup>4</sup> in the HDP (with reference to s2 RMA and the Crown Minerals Act 1991). Based on these definitions prospecting will involve very low, and likely temporary, traffic generation. Exploration could involve some earthmoving, although more typically involves investigatory drilling. In either case the trip generation would be of a low level and temporary nature compared to the activities described above.

OGNZL has advised that investigatory drilling projects typically<sup>5</sup> involve the following traffic movements:

- Establishment / Disestablishment: Over a period of 1-2 days, one truck to transport the drilling rig and up to 3 other smaller vehicles to transport personnel and auxiliary equipment i.e. up to 8 movements total (four in and four out).
- Operations: one small flat deck truck and 4x4 vehicles typically used with the expectation of up to 4 vehicle visits per day (i.e. 4 movements in and out) may be generated. Operations proceed on a 24-hour day, 7-day week basis. The majority of the traffic movements will be between 9am and 4pm.

On a peak day, daily traffic generation associated with drilling would be the equivalent of approximately one residential household trip generation, and that would only occur over a short period. In the case of the small lots to be rezoned, the number of theoretical investigatory holes and hence period of investigation would be very limited (i.e. typically two or three weeks).

Moreover, the scale of site investigations as described above is permitted by the current zoning for each of the subject land parcels.

Surface and underground mining is a discretionary activity within the MMZ, and as such requires resource consent to occur. Similarly, access to mine operations is subject to either the current permitted activity rules (P1 and P2) or the existing resource consent conditions (e.g., Project Martha). Any expansion of mining in the MMZ, including consideration of accesses would be a discretionary activity and all potential related traffic effects would be able to be considered by a decision maker at that time.

## **5.3 SUMMARY**

It is concluded that for each of the zones, the permitted or controlled traffic generating characteristics of the rezoned land (i.e. to MMZ) will likely be less than for the existing land parcels under current zoning, and in most cases significantly less. This is demonstrated at a high level in Table 3 for each of the existing land parcel zones described in Section 4.0 with reference to the likely generation rates identified in Section 5.1 for existing zoning and Section 5.2 for the proposed zoning.

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<sup>4</sup> Prospecting means “any activity undertaken for the purpose of identifying land likely to contain mineral deposits or occurrences”. It includes the following activities:

- geological, geochemical, and geophysical surveying;
- aerial surveying;
- taking samples by hand or handheld methods;
- taking small samples offshore by low-impact mechanical methods.

Exploration means “activity undertaken for the purpose of identifying mineral deposits or occurrences and evaluating the feasibility of mining particular deposits or occurrences of one or more minerals; and includes any drilling, dredging, or excavations (whether surface or sub-surface) that are reasonably necessary to determine the nature and size of a mineral deposit or occurrence; and to explore has a corresponding meaning.”

<sup>5</sup> Based on exploration work undertaken by OGNZL and previously assessed by Stantec



**Table 3: Comparison of Trip Generation Existing and Proposed Zoning**

Existing Zone / Permitted Use	Typical Existing Zone Trip Generation <sup>6</sup>	Potential trip generation Proposed MMZ (exploration)
Residentially zoned lots	10.4 veh/d/dwelling	8 veh/d
Town Centre Lots (residential use)	10.4 veh/d/dwelling	8 veh/d
Town Centre Lots (retail use)	129 veh/d <sup>7</sup>	8 veh/d

Table 3 shows that for each lot the trip generation from either residential activity or retail activity is higher than that expected from exploration activities that are permitted under the MMZ.

Any potential impacts associated with additional surface mining within the MMZ, and traffic generation associated as a result of a future pit expansion, would be considered through a discretionary activity resource consenting process, giving HDC the ability to impose conditions as necessary to mitigate any potential effects.

## 6.0 ASSESSMENT OF TRANSPORT EFFECTS

### 6.1 GENERAL ASSESSMENT

As described earlier in Section 5 of this report, the activities permitted by the rezoning properties to MMZ are expected to generate less traffic than for the existing permitted uses in the residential and town centre zones. The overall effect on the operation and safety of the wider transport network will be negligible, and likely better than the performance that could be expected with existing zoning.

The HDP rules require a Transportation Impact Assessment if the daily traffic generation of an activity (generally excluding temporary activities operating under a traffic management plan) is greater than 250 veh/d, or 10 veh/d for a State Highway. This existing rule will appropriately apply for any permitted, controlled or restricted discretionary activity that triggers this requirement and therefore it is considered that this rule provides a suitable means for addressing any possible traffic effects from activity within the MMZ which generates a traffic generation substantially higher than anticipated.

Furthermore, an activity is a permitted, controlled or restricted discretionary activity MMZ subject to compliance with the District Wide Performance Standards in Section 8.0 of the HDP, which includes standards for vehicle parking, loading and access (Section 8.4). These standards will appropriately manage any permitted, controlled or restricted discretionary activity within the rezoned land and remain unchanged between existing and proposed zonings.

Nevertheless, a detailed area by area assessment has been carried out to understand the potential for localised effects of the zone change.

As also noted in Section 5.2 surface and underground mining is a discretionary activity within the MMZ, and as such requires resource consent to occur and any traffic effects to be assessed at that stage any expansion of mining in the MMZ, including consideration of accesses would be a discretionary activity and all potential related traffic effects would be able to be considered by a decision maker at that time. Irrespective, it is likely and expected that future mining operations within the MMZ would make use of the existing principal access on Kenny Street as this access is already positioned with respect to the internal mine roads and infrastructure. As

<sup>6</sup> Trip rates sourced from RR453

<sup>7</sup> Based on a single shop of 100 m<sup>2</sup> GFA



described in Section 2, the Kenny Street access has been formed with a right turn bay, with adequate sightlines and is understood to have performed adequately in previous periods of mining that utilised this access.

## 6.2 MORSEBY AVENUE – SAVAGE ROAD

The underlying Residential Zone in the vicinity of Moresby Avenue – Savage Road, proposed to be rezoned to MMZ, is indicated by the image in **Figure 5** below.



**Figure 5: Rezoning Proposed in Moresby Ave – Savage Road Vicinity**

The proposed MMZ will extend to the opposite side of both Moresby Avenue and Savage Street, meaning the zone will straddle both sides of the road. The traffic generation activities permitted in the MMZ would not be significantly different to those permitted in the Residential Zone, and therefore the traffic affects associated with this change would be of little consequence. Any new access required as part of future mining activity would be assessed against the HDP rules. It is considered that, compared to the existing Residential zoning, the change in transport safety and efficiency would be negligible as a result of this rezoning.

As a result of the MMZ rezoning, surface mining within these land parcels will be provided for as a Discretionary Activity, subject to assessment and future resource consent application, however a future expansion of the current pit would likely utilise these land parcels for road realignment, and therefore, they would not generate any traffic in themselves. The road realignment will require additional resource consents and approval of the road controlling authority. It is anticipated that any realignment will maintain the current road linkages and provide a similar level of service for all road users as for the current layout.

It is also possible that any balance land is considered for use as additional car parking, however, this activity would require consent to occur with potential traffic impacts assessed during this process.

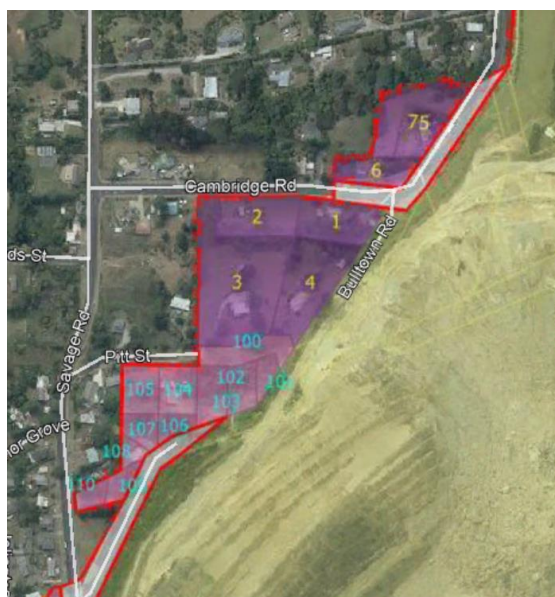
Overall, it is considered any future land use within the areas proposed to be rezoned, would generate negligible traffic impacts on the surrounding environment, and certainly no more than what currently exists under the current Residential zoning.

## 6.3 CAMBRIDGE ROAD – PITT STREET

The underlying Residential and Low-Density Residential zoning in the vicinity of Cambridge Road – Pitt Street, proposed to be rezoned to MMZ is indicated by the image in **Figure 6** below.







**Figure 6: Rezoning Proposed in Moresby Ave – Savage Road Vicinity**

The proposed MMZ will extend to the opposite side of Cambridge Road resulting in the zone straddling both sides of the road. The traffic generation activities permitted in the MMZ would not be significantly different to those permitted in the Residential Zone, and therefore the traffic affects associated with this change would be of little consequence.

There are understood to be existing consents in place that enable the slight realignment of the road in the vicinity of the Cambridge Road / Bulltown Road intersection.

Surface mining within the rezoned land will be provided for as a discretionary activity, subject to assessment and future resource consent application, however a future expansion of the current pit would likely utilise these land parcels for road realignment, and therefore, they would not generate any traffic in themselves.

Any new access required as part of future mining activity will need to comply with the HDP. It is considered that, compared to the existing Residential zoning, the change in transport safety and efficiency would be negligible as a result of this rezoning.

## 6.4 GREY STREET – SLEVIN STREET

There is rezoning proposed from residential and low density residential in the vicinity of Cambridge Road – Pitt Street is indicated by the image in **Figure 7** below.





**Figure 7: Rezoning Proposed in Grey Street – Slevin Street Vicinity**

The blocks of land to be rezoned in this area are contiguous with the existing Martha Mineral Zone and the traffic effects of the effective boundary extension are negligible. Indeed, Slevin Street is already closed to public traffic adjacent to the proposed lots to be rezoned and the Grey Street boundary will be simply extended to the north (although any road closure process will need to consider access to existing residential lots not part of the rezoning and the road “boundary” indicated in **Figure 7** may be too far to the north (however roads are not part of the rezoning so not affected by the plan change).

Existing transportation controls of the Martha Mineral Zone will apply as they do for the adjacent land with negligible net effect.

Surface mining will be a Discretionary Activity and subject to assessment and further resource consent application.

## 6.5 TOWN CENTRE AREA

There is rezoning proposed from town centre zoning in the vicinity of Martha Street and Haszard Street as indicated by the image in **Figure 8** below.





**Figure 8: Rezoning in Martha Street / Haszard Street /Seddon Street Vicinity**

Within the town centre the zone extends up to the edge of Moresby Avenue (arterial), Martha Street (local road) and Haszard Street (local road) and the north end of Seddon Street (arterial). The rezoning will enable the expansion of the mining in the vicinity of the southern wall which may entail the closure the northeast / northwest ends of Martha Street and Haszard Street respectively. Some traffic uses this road linkage between Moresby Avenue and Seddon Street and any closure will result in re-routing this traffic along Moresby Avenue to the roundabout intersection with Seddon Street. The effects of the traffic diversion on the road network will be assessed at the time of any resource consent application and require the approval of the road controlling authority. Preliminary work suggests the effect of traffic re-distribution on the roundabout and associated approaches to be minimal. Furthermore, the traffic route involving Moresby Avenue and Seddon Street is the most appropriate route for traffic as this is an arterial route (see Section 2.1) rather than “rat-running” through the local road network.

As set out earlier, traffic generation characteristics for town centre activities are significantly higher than the potential traffic generation from permitted activities in the MMZ. On this basis the local road network would not be adversely affected by any change in traffic movement resulting from the proposed change in activities.

Existing transportation controls over permitted and restricted discretionary activities in the MMMZ will apply as they do for the adjacent land, with negligible net effect.

Surface mining will be a discretionary activity and subject to assessment and further resource consent application.

Changes to buildings and any associated parking lot would not be permitted in the zone and further resource consent would be required.

## 7.0 HAURAKI DISTRICT PLAN

An assessment has been carried out of the proposal in the context of its consistency with the HDP transportation policies.

The following Objectives and Policies currently apply to the MMZ.

### 5.17.2 OBJECTIVES AND POLICIES

#### (1) OBJECTIVE 1

*To provide for the utilisation of the mineral resource in a sustainable manner.*





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MARTHA MINERAL ZONE PLAN CHANGE  
TRANSPORTATION ASSESSMENT**

*(a) Policies*

*Objective 1 will be achieved by the implementation of the following policies:*

- (i) Recognise the development of the mine and its processing areas, its ongoing rehabilitation and its longer term likely uses.*
- (ii) Provide for the social, economic and cultural well-being of the people of the District and for their health and safety.*
- (iii) Ensure that the amenity values of Waihi and the wider community are protected.*
- (iv) Recognise that the risks associated with the historic underground working areas require a mixture of approaches to avoid, remedy or mitigate those hazards and provide for appropriate longer term land use activities.*

As set out in the preceding assessment, the traffic generating characteristics of the MMZ are of a similar or lesser scale than the comparable existing residential and town centre zonings. Most activities will be short term. The exception is surface mining which would logically form an extension of the Martha Pit and will require authorisation through a discretionary activity resource consenting pathway.

The HDP Transport Chapter includes relevant objectives and policies at 7.9.3.

*(1) OBJECTIVE 1*

*Provide and maintain a safe and efficient transport network that will meet current and planned future demands with minimal effects on the environment and adjoining land uses.*

*(2) OBJECTIVE 2*

*Ensure the adverse effects of activities outside the road reserve on the safety and efficiency of the transport network are avoided, remedied or mitigated.*

Policies 7.9.3 (2) (a) (iv) and (v) are set out below as being relevant for the change in use of the adjacent activity:

- (iv) Recognise that the function of the transport network may have a detrimental effect on adjacent land use activities and manage the development of adjoining land accordingly.*
- (v) Manage land use, vehicle access and traffic management to maintain the safe and efficient operation of the transport network, especially the regionally significant roading infrastructure.*

As assessed in this report, the proposed change in use has a negligible effect on the operation of the road network based on the assessment of changes in permitted uses. Retention of the discretionary activity status relating to surface mining in the MMZ, provides HDC with the ability to assess all potential adverse traffic effects associated with a future pit expansion, and impose conditions as appropriate to scale of those effects.

Existing performance standards (Section 8.4 of the HDP) with respect to parking, access and loading remain relevant and are expected to satisfactorily avoid, remedy or mitigate the adverse effects of permitted or restricted discretionary land use activities on a road or street.

In assessing a discretionary activity, as stated at Section 15.7.7 of the HDP "*Council shall have regard to the relevant development standards, environmental results and assessment criteria for Permitted and Restricted Discretionary Activities in Rules 5.17.4 to 5.17.6, and the relevant assessment criteria below, and any other matters it considers appropriate*". This requirement is very broad and specifically requires consideration of the policies and objectives of Section 7.9 including 7.9.3 (2) (a) (v) as outlined above. On this basis, no changes are considered necessary to the existing transportation provisions within the HDP. However, to avoid any doubt with respect to the interpretation of matters of discretion the following additional assessment criteria is proposed to be included in Section 5.17.7 of the MMZ:

*Whether the proposed methods to avoid, remedy or mitigate the adverse effects of the activities on the safe and efficient operation of the road network are practical and effective.*



## 8.0 SUMMARY AND CONCLUSION

It is proposed to rezone several land parcels from *Residential, Low Density Residential* and *Town Centre* zone to *Martha Mineral Zone*. The identified parcels of land subject to the rezoning are required to support a potential future Martha Pit expansion and ancillary activities by removing the prohibited activity status that currently applies to the underlying zoning. This includes expanding the extent of the zone in the vicinity of local streets surrounding the existing Martha Pit.

An assessment has been undertaken of the activities that will be permitted in the rezoned land in comparison to the existing zoning and it is concluded that, the permitted traffic generating characteristics of the rezoned land will likely be less than for the existing land parcels under current zoning and, in most cases, significantly less. It is also noted that the wider effects associated with the potential for additional surface mining traffic generation would be considered through a discretionary activity consenting process.

As the activities permitted by the Martha Mineral rezoning are expected to generate less traffic than for the existing permitted uses in the residential and town centre zones the overall effect on the operation and safety of the wider transport network will be negligible.

Existing transportation related rules and standards in the HDP will continue to apply to the rezoned land. These include rules that require a Transportation Impact Assessment for activities that generate significant volumes of traffic and standards for vehicle parking, loading and access that must be met for an activity to be considered a Permitted Activity in the MMZ. Any expansion of mining in the MMZ, including any potential new access, would be a discretionary activity and all potential related traffic effects would be able to be considered by a decision maker at that time.

Given the overall negligible impact anticipated upon the wider transport network as a result of the proposed rezoning of land parcels to MMZ, together with the proposed and existing transportation related provisions of the HDP, it is anticipated that activities within the MMZ will be appropriately assessed and managed to ensure that the safe and efficient operation of the road network is maintained.



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