MARLBOROUGH
DISTRICT COUNCIL

RESOURCE CONSENT APPLICATION

U161010

Elect Mining Limited

Wakamarina Road, Canvastown

Submissions Close

5.00 pm Tuesday 4 April 2017

ISO 9001
Document Number:
RAD0038-CI1636

03 October 2016

Record No: 16191801
File Ref: U161010
Ask For: Guy Boddington

Mr Steve Wilkes
WilkesRM Ltd
Temple Chambers
76 High Street
Blenheim

Dear Steve

U161010 Elect Mining: S92 Further Information Request

Following my letter of receipt letter to you for this application on 29 September 2016, I require certain further information/clarity to more fully understand the effects of the proposal on the local environment before making a decision on notification. I have grouped this information below under a number of topic headings.

1. **Mining operations on north and south sides of SH63:**
- please provide an assessment of the potential turbidity effects on the Pelorus River;
- please identify all domestic water abstraction wells that could be affected and their respective distances from the nearest part of any open pit ;
- please identify any effects of flooding of an open pit and associated nearby excavated soil on the Pelorus River and its flood plain (eg. where will any gravel and sediment be deposited?) and of an open pit located on the south side of SH6 (eg. what is the potential for gravel and sediment from a pit and associated nearby excavated soil to be deposited in the vicinity of the Racecourse Stream culvert on SH6?).

2. **Monitoring of turbidity changes in ground water:**
While it appears from the limited monitoring undertaken during the exploration phase in 2015 that there was no down gradient (from any pit) increased turbidity in borehole water samples, this may not necessarily be the case for different ground conditions encountered by a fuller mining operation. Council raises this concern given our view that the gravels have been shown to be highly variable in nature and therefore likely have changing permeabilities. Therefore:
- please indicate how you propose to monitor potential ground water turbidity increases, particularly in the proximity of domestic wells;
- please assess the effects of a mining operation at the closest planned pit locations near the right bank of the Pelorus River on increased turbidity effects on this water body (under non-flood conditions).

3. **Quantum of the bond:**
Page 31 of the application refers to a bond of $30,000. Please provide details of how the amount was derived in order that Council may consider this and if necessary gain an independent evaluation.

4. **Archaeological Assessment:**
Please undertake a full archaeological assessment of the entire mining permit area. Such an assessment could indicate the likelihood of encountering sites of significance to the iwi with the most enduring and acknowledged strongest associations with the area, Te Runanga O Ngati Kuia

5. **Noise generation by operations:**
Page 22 of the application refers to the absence of rules relating to noise emissions in the Rural zone of the MSRMP and carries on to identify rule 36.1.3.4 as one that provides " *permitted activity noise standards.*" It is noted that the activity for which consent is sought,(being quarrying and mineral extraction) is not one of the listed permitted activities and therefore the standards referred to are of limited value in this situation. Council is concerned that the application provides no evidence of the applicant's

ability to comply with the noise standards identified
Please undertake a comprehensive investigation by a suitably qualified and experienced person into the sources of noise and vibration generated by typical mining activity and assess the effects of this on the local receiving environment, in particular:
- the Canvastown Hotel and the properties around it;
- the dwellings located along Wakamarina and Healys Roads;
- the dwelling on the east side of Racecourse Stream and south of SH6, being Sec 34 Blk X Wakamarina SD); and
- any dwellings located within or in close proximity to the margins of the mining permit area on the north side of SH6.
The investigation and report should amongst other things, provide comment on the likelihood of the activity being able to comply with the permitted activity noise standards.

Responding to this Request

Within 15 working days (3 November 2016) you must either:

- Provide the requested information; or
- Provide written confirmation that you can not provide the requested information within the timeframe, but do intend to provide it (Council will provide a revised timeframe); or
- Provide written confirmation that you do not agree to provide the requested information.

The processing of your application has been put on hold.

If you have not provided the requested information within the agreed timeframes, or if you do not provide all the requested information, the Council will publicly notify your application pursuant to section 95C of the Resource Management Act 1991.

If you have any questions regarding this request, please do not hesitate to contact me.

Yours sincerely

GUY BODDINGTON
RESOURCE MANAGEMENT OFFICER

Bea Gregory-5252

From: Steve Wilkes <steve@wilkesrm.co.nz>
Sent: Tuesday, 14 February 2017 9:35 a.m.
To: Guy Boddington-5174
Cc: Mike Hj (mike@hjc.co.nz); Tim Madden (tim@hairymussel.co.nz)
Subject: Elect Mining
Attachments: Wakamarina Mining AEE 2017 Final.pdf; Appendix 3 Example Photos.pdf; Appendix 3 Photo2.pdf; Appendix 5 283111.pdf; Appendix 4 - Site Survey Feb 2016.pdf; Appendix 1 - Location Plan.jpg; Appendix 6 - Accidental Discovery Protocol.pdf; Appendix 7 - Mining License.pdf; Appendix 9 - Annual Works Programme.pdf; Appendix 10 - Bond.pdf; Appendix 11 - EML cultural assessment.pdf; Appendix 8 - Petroleum Delivery Procedures.pdf; Appendix 12 - Bore Locations.jpg; RAF0002ApplicationforResourceConsent.pdf; Appendix 2 Site Plan Final.jpg

Greetings Guy

We have re-drafted the application docs to respond to the s92 request.

Happy to discuss the attached of course.

Three matters to note:

1. Stage 2 removed from the application
2. CEA has been undertaken by HistoryWorks Ltd and is attached.
3. Noise & vibration…have had lengthy discussion with the applicant. The position is:
    a. No vibration effects – no blasting etc.
    b. No noise compliance issues on WC and they have same noise standards as MDC.
    c. Cannot do noise testing/modelling as all mining equipment is purpose built and specific to the individual mine. Hasn't been constructed yet. Applicant happy to do noise testing as pre-curser to works commencing and after RC granted if necessary to demonstrate no non-compliance issues.
    d. No independent noise/vibration assessment warranted or provided.

Not sure how you want to handle this in terms of a s92 response, replacement application etc.

Again happy to discuss as necessary.

Steve Wilkes

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Temple Chambers, 76 High Street, Blenheim 7201, New Zealand

steve@wilkesrm.co.nz
www.wilkesrm.co.nz

Resource Consent Application

This application is made under Section 88 of the Resource Management Act 1991

MARLBOROUGH DISTRICT COUNCIL

Please read and complete this form thoroughly and provide all details relevant to your proposal. Feel free to discuss any aspect of your proposal, the words used in this form or the application process with Council staff, who are here to help.

This application will be checked before formal acceptance. If further information is required, you will be notified accordingly. When this information is supplied, the application will be formally received and processed further.

You may apply for more than one consent that is needed to cover several aspects of the activity on this form.

For Office Use

ISO 9001:2008
Document Number:
RAF0002-CI1579

Lodgement Fee Paid $

Receipt No.

Consent No.

Case Officer:

Date Received:

1. Applicant Details *(If a trust, list full names of all trustees.)*

Name: *(full legal name)* Elect Mining Limited

Mailing Address: *(including post code)*
c/- Tim Madden
PO Box 1174
Nelson 7040

Email Address: tim@hairymussel.co.nz

Phone: (Daytime) 03 5798231 Phone: (Mobile) 0274 895 847

2. Agent Details *(If your agent is dealing with the application, all communication regarding the application will be sent to the agent.)*

Name: Steve Wilkes

Mailing Address: *(including post code)*
WilkesRM Ltd
Temple Chambers
76 High Street

Email Address: steve@wilkesrm.co.nz

Phone: (Daytime) 03 5772162 Phone: (Mobile) 021 68477

3. Type of Resource Consent Applied For

☐ **Coastal Permit** ☑ **Discharge Permit** ☑ **Land Use** ☐ **Subdivision** ☑ **Water Permit**

4. Brief Description of the Activity

Multiple resource consents are sought to undertake mining and mineral extraction activities at Canvastown as per the attached reports.

5. Supplementary Information Provided? ☑ Yes ☐ No

Council has supplementary forms for some activities, such as moorings, water permits, domestic wastewater, discharge permits, to assist applicants with providing the required information.

6. Property Details

The location to which the application relates is (address): Canvastown

Legal description (i.e. Lot 1 DP 1234): see attached

(Attach a sketch of the locality and activity points. Describe the location in a manner which will allow it to be readily identified, e.g. house number and street address, Grid Reference, the name of any relevant stream, river, or other water body to which application may relate, proximity to any well known landmark, DP number, Valuation Number, Property Number.)

Please attach a copy of the Certificate of Title that is less than 3 months old (except for coastal or water permits).

The names and addresses of the owner and occupier of the land (other than the applicant): see attached

Please attach the written approval of affected parties/adjoining property owners and occupiers.

Note: As a matter of good practice and courtesy you should consult your neighbours about your proposal. If you have not consulted your neighbours, please give brief reasons on a separate sheet why you have not.

7. Assessment of Effects on the Environment (AEE) *(Attach separate sheet detailing AEE.)*

I attach, in accordance with Schedule Four of the Resource Management Act 1991, an assessment of environmental effects in a level of detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment. Applications also have to include consideration of the provisions of the Resource Management Act 1991 and other relevant planning documents.

Note: Failure to submit an AEE will result in return of this application.

8. Other Information

Are additional resource consents required in relation to this proposal? If so, please list and indicate if they have been obtained or applied for.

I attach any other information required to be included in the application by the relevant Resource Management Plan, Act or regulations. ☑ **Yes** ☐ **No**

9. Fees

1. The applicable lodgement (base) fee is to be paid at the time of lodging this application. If payment is made into Council's bank account 02-0600-0202861-02, please put Applicant Name and either U-number, property number or consent type as a reference. If you require a GST receipt for a bank payment, please tick ☑
2. The final cost of processing the application will be based on actual time and costs in accordance with Council's charging policy. If actual costs exceed the lodgement fee an invoice will be issued (if actual costs are less, a refund will be made). Invoices are due for payment on the 20th of the month following invoice date. Council may stop processing an application until an overdue invoice is paid in full. Council charges interest on overdue invoices at 15% per annum from the date of issue to the date of payment. In the event of non-payment, legal and other costs of recovery will also be charged.
3. Please make invoice out to: ☑ Applicant ☐ Agent
   (if neither is ticked the invoice will be made out to Applicant)

10. Declaration

I (*please print name*) S M Wilkes

confirm that the information provided in this application and the attachments to it are accurate.

Signature of applicant or authorised agent:

Date: 4 September 2016

Privacy Information

The information you have provided on this form is required so that your application can be processed and so that statistics can be collected by Council. The information will be stored on a public register and held by Council. Details may be made available to the public about consents that have been applied for and issued by Council. If you would like access to or make corrections to your details, please contact Council.

Reset Form

Schedule Four
Resource Management Act 1991
Information Required in Application for Resource Consent

1 Information must be specified in sufficient detail

Any information required by this schedule, including an assessment under clause 2(1)(f) or (g), must be specified in sufficient detail to satisfy the purpose for which it is required.

2 Information required in all applications

(1) An application for a resource consent for an activity (the **activity**) must include the following:

- (a) a description of the activity:
- (b) a description of the site at which the activity is to occur:
- (c) the full name and address of each owner or occupier of the site:
- (d) a description of any other activities that are part of the proposal to which the application relates:
- (e) a description of any other resource consents required for the proposal to which the application relates:
- (f) an assessment of the activity against the matters set out in Part 2:
- (g) an assessment of the activity against any relevant provisions of a document referred to in section 104(1)(b).

(2) The assessment under subclause (1)(g) must include an assessment of the activity against—

- (a) any relevant objectives, policies, or rules in a document; and
- (b) any relevant requirements, conditions, or permissions in any rules in a document; and
- (c) any other relevant requirements in a document (for example, in a national environmental standard or other regulations).

(3) An application must also include an assessment of the activity's effects on the environment that—

- (a) includes the information required by clause 6; and
- (b) addresses the matters specified in clause 7; and
- (c) includes such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.

3 Additional information required in some applications

An application must also include any of the following that apply:

- (a) if any permitted activity is part of the proposal to which the application relates, a description of the permitted activity that demonstrates that it complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under section 87A(1)):
- (b) if the application is affected by section 124 or 165ZH(1)(c) (which relate to existing resource consents), an assessment of the value of the investment of the existing consent holder (for the purposes of section 104(2A)):
- (c) if the activity is to occur in an area within the scope of a planning document prepared by a customary marine title group under section 85 of the Marine and Coastal Area (Takutai Moana) Act 2011, an assessment of the activity against any resource management matters set out in that planning document (for the purposes of section 104(2B)).

4 Additional information required in application for subdivision consent

An application for a subdivision consent must also include information that adequately defines the following:

- (a) the position of all new boundaries:
- (b) the areas of all new allotments, unless the subdivision involves a cross lease, company lease, or unit plan:
- (c) the locations and areas of new reserves to be created, including any esplanade reserves and esplanade strips:
- (d) the locations and areas of any existing esplanade reserves, esplanade strips, and access strips:
- (e) the locations and areas of any part of the bed of a river or lake to be vested in a territorial authority under section 237A:
- (f) the locations and areas of any land within the coastal marine area (which is to become part of the common marine and coastal area under section 237A):
- (g) the locations and areas of land to be set aside as new roads.

5 Additional information required in application for reclamation

An application for a resource consent for reclamation must also include information to show the area to be reclaimed, including the following:

(a) the location of the area:

(b) if practicable, the position of all new boundaries:

(c) any part of the area to be set aside as an esplanade reserve or esplanade strip.

Assessment of environmental effects

6 Information required in assessment of environmental effects

(1) An assessment of the activity's effects on the environment must include the following information:

(a) if it is likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:

(b) an assessment of the actual or potential effect on the environment of the activity:

(c) if the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment that are likely to arise from such use:

(d) if the activity includes the discharge of any contaminant, a description of—

(i) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and

(ii) any possible alternative methods of discharge, including discharge into any other receiving environment:

(e) a description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect:

(f) identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any person consulted:

(g) if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved:

(h) if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).

(2) A requirement to include information in the assessment of environmental effects is subject to the provisions of any policy statement or plan.

(3) To avoid doubt, subclause (1)(f) obliges an applicant to report as to the persons identified as being affected by the proposal, but does not—

(a) oblige the applicant to consult any person; or

(b) create any ground for expecting that the applicant will consult any person.

7 Matters that must be addressed by assessment of environmental effects

(1) An assessment of the activity's effects on the environment must address the following matters:

(a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects:

(b) any physical effect on the locality, including any landscape and visual effects:

(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity:

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations:

(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants:

(f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.

(2) The requirement to address a matter in the assessment of environmental effects is subject to the provisions of any policy statement or plan.

Section 88
Resource Management Act 1991
Making an Application

88 Making an application

(1) A person may apply to the relevant consent authority for a resource consent.

(2) An application must—

(a) be made in the prescribed form and manner; and

(b) include the information relating to the activity, including an assessment of the activity's effects on the environment, as required by Schedule 4.

(2A) An application for a coastal permit to undertake an aquaculture activity must include a copy for the Ministry of Fisheries.

(3) A consent authority may, within 10 working days after an application was first lodged, determine that the application is incomplete if the application does not—

(a) include the information prescribed by regulations; or

(b) include the information required by Schedule 4.

(3A) The consent authority must immediately return an incomplete application to the applicant, with written reasons for the determination.

(4) If, after an application has been returned as incomplete, that application is lodged again with the consent authority, that application is to be treated as a new application.

(5) Sections 357 to 358 apply to a determination that an application is incomplete.

Elect Mining Limited

Application for Resource Consent

- **Land Use – Activities**
- **Water Permits – Take and Use Underground Water**
- **Water Permit – Divert Water**
- **Land Use – River Surface or Bed Activities**

Final

2017

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1 Introduction

The applicant is Elect Mining Limited (EML).

In 2015 EML obtained land use consents to construct several test bores and pits in association with exploratory alluvial gold extraction activity located at Canvastown.

The results from the exploratory work shows some of the best alluvial gold test results the applicant and drilling contractor (with over 30 years' experience) have seen anywhere in New Zealand.

EML now seek resource consent associated with the establishment and operation of a floating plant alluvial gold mine located at Canvastown.

The proposed work site will be located on some 46 hectares of flat to undulating land on the river flats and terraces adjoining the confluence of the Wakamarina and Pelorus Rivers located to the south of SH6 only.

The proposed site is currently a developed intensive dairy farm.

The operation will consist of an excavated pit between 14 to 16 metres deep, 200 metres long and up to 80 metres wide with a floating plant utilised for the extraction process within the pit. A land based screen will likely work adjacent to the pond or at other locations on the site where the nature of the topography allows.

Topsoil and overburden will be stripped ahead of the pond, stored temporarily and then used to rehabilitate the land behind the pond as mining progresses along a mine path. With groundwater at two meters below ground level the pit will fill with groundwater on which a floating trommel will be positioned.

After rehabilitating the site any surplus over-burden from the mine area will be spread evenly across the elevated terrace to the south of Racecourse Creek and re-grassed.

Surplus over-burden may be located in conjunction with MDC Rivers Engineers as the option remains for over-burden to be utilised to reduce flood risk at the site.

The mine will be supported by a range of ancillary facilities and services, including excavators, a dragline bucket dredge, and possibly stacker/conveyors to efficiently move materials. The progressive rehabilitation of the mine site as mining advances will restore the land back to a state suitable for pastoral land use.

An application (60132.01) for a Mining Permit under Section 23A of the Crown Minerals Act 1991 has been approved.

EML is seeking resource consent for the following activities:

- To undertake industrial activities related to the establishment and operation of a floating plant alluvial gold mine;
- To undertake land disturbance activities within a flood hazard zone associated with the operation of a floating plant alluvial gold mine and site rehabilitation;
- To clean out and realign sections of Racecourse Stream;
- To form sediment traps in the form of a series of small low level bunds within Racecourse Stream; and
- To take and use groundwater to be used for washing gravels.

This report provides an assessment of effects on the environment in accordance with the Fourth Schedule of the Resource Management Act 1991 (RMA) for the following activities:

- Land Use – Activity;
- Land Use – Land Disturbance;
- Land Use – River Surface or Bed Activities;
- Water Permit – Take Underground Water;
- Water Permit – Use Underground Water;
- Water Permit – Divert Water.

Attached to this application are the following:

- Appendix 1 – Location Plan;
- Appendix 2 – Indicative Site Plan;
- Appendix 3 – Example Photos;
- Appendix 4 – Site Survey;
- Appendix 5 – Title Documents;
- Appendix 6 – Accidental Discovery Protocol;
- Appendix 7 – Mining License;
- Appendix 8 – Fuel Delivery Criteria;
- Appendix 9 – Proposed Condition - Annual Works Programme;
- Appendix 10 – Proposed Condition – Bonds;
- Appendix 11 – HistoryWorks Ltd Cultural Impact Report;
- Appendix 12 – Groundwater Bore Locations.

2 The Proposal

Elect Mining Limited seek all necessary resource consent to undertake mineral extraction and associated activities as detailed below at Canvastown, Marlborough on the following properties:

- Pt Lot 2 DP 358893;
- Pt Sec 61 Pelorus DIST; and
- Secs 8 - 10 Blk X Wakamarina SD.

The properties are owned by TL & NL Bryant. Access agreements are in place.

Mining will commence on issue of resource consent and is confined to the Bryant property located to the south of State Highway 6. It is expected that mining operations will be ongoing for approximately 5 - 7 years.

2.1 Site Establishment

2.1.1 Introduction

Elect Mining Limited seeks to undertake alluvial gold extraction on an area covering some 46 hectares. The application site comprises the river flats and terraces adjoining the confluence of the Wakamarina and Pelorus Rivers in Canvastown on the south side of State Highway 6 (see Appendix 1).

The activity involves the establishment and operation of an open pit of up to 200 x 80 m in dimension, the extraction of gold bearing alluvium from the pit, and site rehabilitation. Due to the nature of the operation, a mobile floating plant will be used and the site progressively mined on an ongoing basis. Various examples are shown in Appendix 3.

The mine will be supported by a range of facilities and services which would support the mining activity, including but not limited to a site office, mine maintenance facility, site and access roading, parking, portable water storage, fuel storage, security and first-aid facilities, communication services, backup power and fire protection equipment. All such facilities will be located on the elevated terrace at the southern end of the site.

2.1.2 Site Formation

The establishment of the project site will comprise the construction of laydown areas, gravel pads for the placement of the temporary site facilities, and earthworks associated with sediment control. Adequate roads exist across most of the property and the landowner has existing buildings and sheds that will be used in conjunction with the project.

The site establishment will take place using excavators, bulldozers and dump trucks.

The construction phase of the site establishment is expected to take approximately one month. The basic site infrastructure requirements needed to support the ongoing mining operations are minimal as most of the physical plant operation will be mobile, contained within a small area and floating on the pond itself.

The following activities will be undertaken during the establishment phase:

- Establishment of initial site infrastructure. This includes construction and/or establishment of:

    - Initial access into the site from Healys Road, and development of a formed private road within the site itself.

    - Establishment of erosion and sediment control protection systems such as the excavation of silt retention ponds and dust suppression methods such as the availability of water carts onsite. Dust suppression is principally for these initial construction activities, but will also be utilised, where required, in the subsequent mining operations. Material processed is generally damp resulting in minimal dust.

    - Forming and placement of gravel pads for site facilities for the fuel tank storage area and site facilities/containers (i.e. engineering workshop, site office, ablutions block and gold processing facility). It is noted however that most of these locations already exist as some of the existing structures are to be utilised in cooperation with the landowner.

- Construction of other infrastructure to support mineral extraction operations. This principally includes the establishment of temporary site facilities. While temporary, these facilities will be present throughout the life of the mine. They include site security fencing and the containers that will accommodate the mine site's engineering workshop, site office, self-contained ablution block and gold processing facility.

2.1.3 Fuel supply, storage and distribution

A diesel fuel storage facility will be installed during the construction phase in order to initially provide fuel for construction activities. The facility will be constructed in the SE corner of the site on the elevated terrace such that it is not at risk to flooding.

The maximum storage capacity of the fuel storage facility will be 20,000 L. The facility will be appropriately bunded. The facility will be supplied by fuel tanker truck on an as required basis. Given the capacity of the storage facility, and the likely demand at the mine site once fully operational, it is likely that fuel deliveries will occur on a weekly basis. Stationary mining equipment (e.g., the dredge and the excavators in the mine pit) will be refuelled using the site's smaller fuel delivery truck.

2.1.4 Operating Hours and Site Personnel

EML propose to operate six days a week. Daily operating times will generally be between 6am – 6pm Monday to Friday and 730 am – 100 pm Saturdays.

While earthworks (topsoil and overburden removal and earthworks associated with site rehabilitation) and mining / material processing activities will not occur outside of these hours, it is possible that minimal activities within the mine pond may take place outside of these main operating hours including the operation of water pumps.

EML's proposed workforce, at the mine site, will consist of the following:

- Manager/Foreman.
- Mechanical/Engineering Foreman.
- Up to five plant operators.

The plant operators' main duties will include stripping, gravel processing and site rehabilitation.

2.1.5 Traffic and Access

The location of the site access off Healys Road and Wakamarania Valley Road is shown on the Site Plan contained in Appendix 2. As the mine advances, both heavy and light vehicles will continue to use the initial site access off Healys Road throughout the mine life.

Although access may move as the mine progresses, at any one time there will only be two operational access points to the mine site. At no time during the operation of the site will there be direct access off State Highway 6.

The extent of vehicle movements will be relatively minor with the principle source of traffic being the daily passenger vehicles to the site as staff commence and finish work and a weekly fuel tanker once operations commence. At the initial construction stage there will of course be heavy traffic movements as the various machinery and plant are delivered to the site. Once on site this machinery and plant will not routinely be taken offsite.

Additional vehicle movements will be internalised and include trucks used for transporting materials to the processing area, transporting materials to the overburden and topsoil stockpiles, refuelling at the processing area and digger/bulldozer work on site.

2.1.6 Initial Mine Start Up Activities

Initial start-up activities will entail clearing and stockpiling of topsoil to a nominal depth of between 100 to 200 mm, as the first stage in developing the start-up mine pit. The topsoil will be stockpiled in the south-eastern corner of the application site outside the mining pit footprint, as shown on the Site Plan contained in Appendix 2.

An open mine pond would be excavated to a depth of some 10-16 metres. The drill tests indicated a consistent hard bottom at approximately 14-16 metres deep across the mining area, but as shallow as 9 metres in some areas. The pit would naturally fill with groundwater to the level of the water table, which is relatively close to the surface across most of the

proposed mining area. A 6 foot gold screen would then be floated within the mine pit pond and will be utilised throughout the mining operations.

Stockpiled aggregate will be located immediately adjacent to the open pit and progressively back-filled as the mining operation advances.

2.2 Mining Operations

2.2.1 Overview

Mining will commence immediately south of State Highway 6 and work up-valley toward Healys Road in a horizontal stripping, processing and rehabilitation procedure.

2.2.2 Wash and Gold Processing

An excavator and/or a dragline or bucket dredge would dig wash from the leading edge of the mine pit and feed it into the hopper on the gold screen. The screen will be rubber mounted to minimise noise, rattle or vibration.

The gold screen would wash the gold bearing gravels, retain the gold and deposit the tailings at the rear of the mine pit via a stacker. The mine pit would progressively move forward and simultaneously be backfilled with tailings. The pit would progress in strips in order to maximise gold recovery.

When mining has progressed a sufficient distance, the overburden, washed gravels, and then topsoil will be returned to the pit which enables progressive restoration of the land as the mine advances. This is a highly established methodology used actively in other areas of New Zealand. It is widely viewed as the most environmentally friendly mining method in existence.

Water is naturally recycled and very little water is discharged from the mine site, thus water usage is kept to a minimum.

All mining activities are contained within the area of the active pit so the actual mining footprint is minimal compared to the site size. Rehabilitation is continuous and ongoing and the land is returned to its original state within a matter of months.

2.2.3 Water Use

The groundwater is associated with the Wakamarina River. Based on discussions with MDC staff is understood that the sub-surface flow is in an east – northeast direction, i.e., away from the right bank of the Wakamarina River. Water for the gold screen would be pumped from the mine pit, to the gold screen and discharged back into the mine pit, sediment ponds or onto the adjacent grass covered land.

Water monitoring tests have demonstrated that there is no contamination of ground water within 10 metres of open pits used during testing.

Pumps within the pit will be used to manage water; however tests have demonstrated that a static water level is obtained almost immediately.

2.2.4 Dust Emissions

The proposed mining activity is unlikely to generate dust at levels that would compromise the amenity of the area. The mining involves extracting materials that encounter water and hence are damp, and then that material is washed with groundwater. This essentially means that all extracted material is damp when it is stockpiled which avoids potential dust nuisance.

There is the potential for stockpiles to cause small scale dust nuisances when the cap or crust around them is broken to return the material to ground however the effects of this are minor and temporary, as mining will be undertaken progressively.

In order to manage any dust nuisance a water cart will be onsite and utilised as required to dampen down dry areas.

2.2.5 Site Stormwater & Pit Water Management

Sediment laden stormwater may be generated during and following rainfall events with the stockpiled aggregate being the primary source.

Site management of this stormwater will revolve around ensuring that the amount of 'sediment laden' stormwater at the site is minimised as much as practicable. To achieve this, EML will progressively install (and remove) bunds or cut-off drains that move in association with mine advancement. These bunds and cut-off drains will direct stormwater away from any flowing water and into settling ponds.

The settling ponds will be constructed initially in the location as shown in the plan contained in Appendix 2, and a later subsequent location that will be established as the mine advances.

New settling ponds will be constructed and commissioned before the previously operational settling ponds are decommissioned. This approach will ensure that appropriate treatment of the pit water, and sediment laden stormwater, is provided at all times.

The mine pit water will contain sediment as a result of wash excavation, return of oversize material to the pond, dredge operations, tailings disposal and also as it will be receiving the dirty stormwater from the site. For this reason, the settling ponds have been incorporated into mine operations to provide treatment of the mine pond water.

The settling ponds will be cleaned out using an excavator. Accumulated sediment will be transported to the top of the tailings by dump truck and blended into the rehabilitation works.

From the settling ponds, the treated mine water will be conveyed overland and into Racecourse Stream. This will further assist in the reduction of sediment laden water entering the flowing Racecourse Stream.

2.2.6 Works within Racecourse Stream

The proposal includes cleaning out and realigning a section of Racecourse Stream and also creating a series of low level bunds.

Racecourse Stream usually flows clear through the site but due to sediment laden overland flow from the adjacent harvested forestry sites the stream is often discoloured and carrying sediment as it passes under SH6.

Cleaning out works are proposed downstream of SH6 after which a series of small low level bunds/weirs (less than 300mm high) will be constructed to assist as secondary sediment traps for those occasions when water is flowing within the creek. These bunds will be constructed and cleaned out in the dry.

The new channel cross section will be shaped to transition into the natural channel at the downstream end with the re-contoured channel sides will be sown down to stabilise the soils.

As the result of the minor realignment works this application also seeks approval to provide for the diversion of water.

The new waterway channel will replicate what is present currently.

In all likelihood the re-alignment can be undertaken when Racecourse Creek is dry however if there is flowing water present the following procedures will be adhered to:

1. The new channel is formed working in an upstream direction and compacted down.
2. The new channel is opened at the top end to allow flow to pass via the channel.
3. The existing watercourse channel is shut off at the upstream extent of the channel to allow this channel to drain.

The following Fish Recovery Procedures will be implemented to relocate stranded fish:

- If fish need to be picked up, hands will be wet.
- If eels need to be relocated, they will be kept in a bucket with adequate water to ensure survival and separate from other fish species.
- If fish species, other than eel need to be relocated, they will be kept in a bucket with adequate water to ensure survival and separate from eels.
- If fish are temporally held in buckets for subsequent relocation, the buckets of fish will be kept in a shady location.
- Fish, including eel, shall be released upstream of the works site within 15 minutes of putting them in a bucket.
- Fish will be released gently back into the river water allowing for the gradual mixing of cooler river water to mix with the water in the bucket.
- A record of any recovered stranded fish shall be taken and forwarded to:
    - the Marlborough District Council, attention Environmental Scientist - Aquatic Biota, and
    - Department of Conservation, Renwick Office;

  no later than 5 working days after diversion works take place.
- A record of any sportfish recoveries and/or mortalities shall be taken and forwarded to the Marlborough Fish and Game Council, no later than 5 working days after diversions works take place.

2.2.7 Site Restoration

Restoration will involve progressive backfilling of the worked out area, using previously processed gravels and stockpiled overburden then top soil, followed by grass seeding when germination conditions are suitable.

The end result of the mining activity will be to return the land to its' former state, which includes removal of all roads, unless the land owner wishes to retain some, and all mining infrastructure including sediment ponds.

The resultant land form will mimic pre mining land forms and the land will assimilate back to the same productive capacity as currently experienced.

2.2.8 Site Management and Controls

The mining activity will be undertaken by experienced mining contractors.

EML will operate the mine site in accordance with a Site Management Plan (SMP) including an Annual Works Programme (AWP). The SMP is proposed to be completed and provided to Council for approval following issue of consent. No works will commence until the SMP has been approved.

The SMP will contain a number of management procedures and/or associated specific management plans. The purpose of the SMP (and the AWP) will be to monitor and manage health, safety and environmental performance against industry and site specific requirements. In relation to environmental considerations, this includes ensuring that resource consent conditions are complied with and that adverse effects from the mining operations are avoided, remedied or mitigated.

The AWP will be submitted to Council annually following the exercise of the consent and will include those matters contained in the proposed draft condition of consent in Appendix 9.

2.2.9 Summary

This mining method is in accordance with good industry practice. Floating gold screen operations are widely accepted as the most efficient and environmentally sustainable method of alluvial gold recovery, particularly in areas such as the application area where the bottom is uniform and the water table is conductive to a floating gold screen.

The life of the mine is dependent on the economic viability of the project. Should the gold price slump, mining will either not commence, or if it is operational it will placed in care and maintenance until the gold price recovers. If this occurs, EML will ensure that any mined land will be rehabilitated to its current state and the site will be kept safe and tidy. If the mine is placed into care and maintenance, EML will ensure that it continues to meet all of its legislative and regulatory requirements, including compliance with resource consent conditions and the provision of a financial bond.

3 The Existing Environment

The application site is located at Canvastown on the river flats and terraces adjoining the confluence of the Wakamarina and Pelorus Rivers.

The proposed mining area is located to the south of SH6.

The site is currently a developed intensive dairy farm. The surrounding hills are a mix of native and exotic forest with the over-riding visual impression dominated by commercial forestry harvesting operations.

The land is typically flat, with a series of elevated terrace features noticeable to the east and away from the Wakamarina River and Racecourse Stream.

There are no known domestic or irrigation wells, soakage fields of a septic tank or offal pits within 20 m of the mining area. The location of known domestic bores are shown on the attached plans.

Racecourse Stream, an intermittently flowing stream/ditch, traverses the site before flowing under SH6 and into the Pelorus River several kilometres downstream. Racecourse Stream is more of a farm drainage ditch that does not routinely carry flowing water. Racecourse Stream will be realigned as necessary to accommodate the mine path.

The Wakamarina River lies to the west of the site, beyond Wakamarina Road. Adjacent to Wakamarina Road are dwellings, sheds and the Canvastown Hall and the Trout Hotel. Beyond the site's northern boundary is SH6.

4 Geology of the Gold Resource

Caples Terrane forms the geological basement of the Wakamarina Catchment.

Caples Terrane comprises Mesozoic Marlborough Schist which is Otago schist origin but has been offset approximately 470km by movement along the Alpine Fault (Rattenbury *et at*, 1998[1]).

Wakamarina Quartzite is a prominent formation which outcrops within the Marlborough Schist. These quartz vein outcrops are known to host gold. This mineralisation occurred as a result of a regional deformation event ca 140 ma which caused tensional uplift and fracturing. This released crustal hydrothermal fluids into the metamorphic schist and lead to the deposition of gold within these fractures which host the quartz veins (Ratterbury *et al*, 1998).

Fluvial activity has eroded gold from these quartz veins and transported it down the Wakamarina Valley. Where the Wakamarina River leaves the confines of the gorge, alluvial gold has been deposited and concentrated into placer leads within the Quarternary sediments on the valley floor.

Exploration undertaken within the Canvastown application site are has located these placer leads within the Quarternary gravels. Drilling has indicated a consistent bottom between 14m and 16m across the permit area. Most of the upper gravels contain only traces of alluvial gold and would not be suitable for commercial mining purposes. Most of the gold bearing gravels are in the bottom 4-6 metres of gravels.

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[1] Rattenbury, N.S; Cooper, R.A; Johnston, M.R (1998). *Geology of the Nelson Area.* Institute of Geological & Nuclear Sciences. Lower Hutt: GNS Science.

5 Statutory Framework

5.1 The Resource Management Act 1991

Section 9 of the Resource Management Act 1991 (RMA) requires that no person may use land in a manner that contravenes a rule in a regional plan or proposed regional plan, unless the activity is expressly allowed by a resource consent.

Section 13 of the RMA requires that no person may, in relation to the bed of any lake or river, use, erect, place, alter, extend, remove or demolish any structure, in, on, under, or over the bed; or excavate, drill, tunnel, or otherwise disturb the bed, reclaim or drain the bed, unless expressly allowed by a rule in a regional plan, and in any relevant proposed regional plan, or a resource consent.

Section 14 of the RMA requires that no person may take, use or divert water unless expressly allowed by a rule in a regional plan, and in any relevant proposed regional plan or a resource consent.

5.2 The Marlborough Sounds Resource Management Plan

The site is zoned rural along with a flood hazard overlay as per the Marlborough Sounds Resource Management Plan (the Plan),

The Plan contains both general rules that relate to all zones plus zone specific rules. The relevant rules and the associated resource consent requirements are as follows.

Rule 26.1.1.3 provides for the taking or use of more than 15 m^3/day of freshwater from a groundwater body as a discretionary activity. The non-consumptive abstraction of groundwater during the operations will likely exceed 15 m^3/day therefore a discretionary activity is required.

Rule 26.1.6.1 provides as a permitted activity, river control and drainage works within the beds and banks of rivers, when carried out by a local or roading authority, subject to conditions. There are no rules in the Plan for river control works undertaken by private individuals, therefore the activity is considered in-nominate under the RMA, and is considered a discretionary activity.

Rule 36.1.5.3.6 states that no excavation or filling may take place within riparian management zones. Non-compliance with this rule requires a limited discretionary consent under Rural Zone Rule 36.3.1.

Rule 36.4 provides for the hazardous facility (being the fuel storage reservoir) as a discretionary activity.

Rule 36.5 requires that a non-complying activity consent is required for the proposed discharge.

Rule 36.4.3.12 provides for Quarrying and Mineral Extraction as a discretionary activity.

The Plan includes no relevant rule relating to noise emissions from the proposed activity. Rule 36.1.3.4 does however provide permitted activity noise standards. These will be complied with. No dispensations from the permitted activity noise standards are sought.

In addition to those rules identified above, the activities proposed are considered to comply with the following rules of the Plan:

- Rural Zone Rule 36.1.7.5 – Clean Fill
- Rural Zone Rule 36.1.7.12 – Dust Emissions.

All necessary resource consents as per the Plan are sought.

5.3 The Proposed Marlborough Environment Plan

The site is zoned Rural as per the Marlborough Environment Plan (the MEP). Parts of the site are also subject to the flood hazard (Level 2) overlay and the Threatened Environments (Indigenous Vegetation).

The following rules within the MEP are relevant and have immediate effect as per s86B of the RMA.

Rule 2.5.2	The take & use of sub–surface water for non-consumptive purposes is a discretionary activity.
Rule 2.5.5	The diversion of water associated with water flow down the re-aligned path of Racecourse Stream is a discretionary activity.
Rule 3.6.6	Quarrying & mineral extraction in the Rural Zone is a discretionary activity.

There are no relevant rules within the Plan dealing with the discharge of water to land from the proposed test pits.

All necessary resource consents as per the MEP are sought.

6 Statutory Acknowledgements, Cultural & Historic Matters

It is recognised that the Crown has provided a Statutory Acknowledgement over Te Hoiere / Pelorus River and its tributaries to Te Ātiawa o Te Waka-a-Māui, Ngati Kuia, Ngati Toa Rangatira, Ngati Koata and Ngati Tama ki Te Tau Ihu.

Ngati Kuia is widely regarded as being the local Iwi who have the longest association with the area in which the application site falls. It is understood that some Ngati Kuia people were involved in the Wakamarina River gold mining industry of the 1800s.

Whilst a search of both the New Zealand Archaeological Association "Archsite" and NZ Heritage database failed to show any sites of particular significance to any party, the area is or particular importance to Ngati Kuia and there is the likelihood that cultural artefacts may well be unearthed during the proposed works.

The significance of To Hoiere Awa (Pelorus River) catchment to Ngati Kuia has been recognized by the Crown through the Ngati Kuia Treaty Settlement Act 2014 and a statutory acknowledgement. A Statutory Acknowledgement registers the association between iwi and a particular site or area and enhances the iwi's ability to participate in specified Resource Management Act processes.

The Statutory Acknowledgment text amongst other matters highlights that Te Hora Pa near Canvastown was an important pā site with associated kainga, cultivations and urupā. Te Hora Pa is immediately opposite the subject site on the west bank of the Wakamarina River. Pa and the surrounding areas are considered to be of significance and not just the physical structure.

There are no iwi management plans of relevance that can be considered. In addition the Ngati Kuia website does not show the site location as being a site of significance however Canvastown is the location of several Pa, Mahinga kai and Kainga as well as being the site of Te Hora Marae.

The applicant acknowledges the historic and cultural importance of the wider Te Hoiere Awa and valley and a copy of the full application documents will be provided to Te Ātiawa o Te Waka-a-Māui, Ngati Kuia, Ngati Toa Rangatira, Ngati Koata and Ngati Tama ki Te Tau Ihu.

The applicant has commissioned HistoryWorks Ltd to undertake a cultural impact report. That report attached as Appendix 11 has been produced following an extensive review of historical, printed and published sources, including research prepared for the norther South Island Waitangi Tribunal claims, histories of the area, journal articles, the Ngati Kuia Deed of Settlement with the Crown, files held at Archives New Zealand and the Native Land Court minute book.

That report concludes:

i. No archaeological or heritage sites as per the NZAA "Arcview', the Ministry of Cultural & Heritage 'List" or the MDC 'Register of Significant Heritage Sources' are within or proximate to the proposed application area;

ii. There is no evidence that reveals that any culturally significant, archaeological or heritage sites exist within the application area; and

iii. The land has been sold to Europeans by its Ngati Huia owners and has been used for a considerable period for farming and other purposes absentt of any evidence that the land use activities have offended any Ngati Kuia cultural or other values associated with the land.

7 Assessment of Effects

7.1 The Assessment Criteria for Quarrying and Mineral Extraction

The Marlborough Sounds Resource Management Plan includes specific assessment criteria for the effects of quarrying and mineral extraction.

The specific assessment criteria in section 7.1.1.1.1 include:

a) ***The extent to which the activities of vegetation clearance and the excavation and removal of material associated with mining impact on amenity values, heritage values, landscapes values, and natural conservation values:***

The proposed mining activity will not involve vegetation clearance or any areas of natural conservation value. However there is the potential to impact on heritage values if cultural artefacts are unearthed. Under such circumstances the attached Accidental Discovery Protocol will be adhered to.

The application site displays a range of rural characteristics reflecting a working environment given the areas pastoral faming and forestry land use.

Although parts of the rural landscape will be temporarily affected, the mine site will be progressively rehabilitated as mining advances thereby restoring the land back to a state suitable for pastoral land use. There will not be any permanent adverse effects on the integrity of the general nature of the application site.

Whilst the nature of the activity is such that that there will be some visual disturbance the reality is that apart from the stockpiled aggregate adjacent to the active pit and the stockpiled spoil/over burden the remaining view will largely be innocuous unless viewed from overhead. The site will continue to reflect an active working rural environment with a concentration of activity occurring within a relatively confined when considered against the size of the overall application site.

Rehabilitation is continuous and ongoing and the land is returned to its original state within a matter of months. The progressive reinstatement of land will ensure that potential effects of the exposed ground are temporary and no more than minor.

The intent of the mining activity is to extract the gold as efficiently as possible in order to ensure that the effects of the activity are as short term as possible.

The mining activity may be visible from public roads however there will be no discernible views except for working machinery, worker's vehicles and worker's themselves.

The operation will be visible from State Highway 6, however as the active pit progressively works away from the highway the ability to view activities significantly reduces.

The applicant considers that screening is not warranted or appropriate however if screening is necessary for those sites adjacent to State Highway 6 then this can be achieved by the retention of stock piled aggregate located between the pit and the highway.

The visual impacts of the proposal are considered less than the visual impact of other land use activities such as forestry establishment and harvesting.

The operation of the pit when considered in the wider environment reflects an active and vibrant rural location is such that the effects in terms of amenity and landscape are considered to be temporary and no more than minor.

With respect to heritage values the importance of the area to iwi is acknowledged and the likelihood of accidental discovery of artefacts, Taonga etc accepted. To that effect the applicant volunteers the Accidental Discovery Protocol condition of consent as per Appendix 6.

b) The extent to which roads or buildings impact on amenity values, heritage values, landscape values, and natural conservation values:

The proposed mine site is in close proximity to day to day farming and forestry activities where tracks and temporary buildings are common.

The mining activity will result in some new farm tracks for access around the different parts of the site. These tracks will be appropriately formed with cut-off drains to ensure any stormwater run-off is directed to land.

The tracks will not be out of character for the rural context and any effects on amenity and landscape are considered no more than minor.

The only potential new build form will be temporary staff facilities. These will look no different to permitted activity structures routinely utilised and visible in the rural environment.

The effects on amenity and landscape are considered to be no more than minor.

c) The ability of the proposal to rehabilitate the site after mining so:

i. That the long-term stability of the site is ensured:

The long term stability of the site will not be compromised as a result of the mining activity. The land to be mined is improved pasture and as mining progresses, rehabilitation will also progressively be undertaken.

The extracted material will be returned in the same order as it is removed to ensure the integrity of the below ground structures are re-established, and all filled material will be compacted to ensure the site is stable. In the event of any surplus over-burden, the material shall be removed from the site and disposed of appropriately. However the applicants hold the view that from their mining experience surplus overburden is not likely to eventuate. Once pasture has been established, the land will be suitable for reuse.

A pre works ground survey has been completed. This survey will be replicated on completion of the works to demonstrate that the land form has been replicated following completion of the project.

If however it is preferable that the land be re-contoured to provide a more efficient and effective flood plain then that can be achieved.

ii. That the landforms or vegetation on finished areas are visually integrated into the landscape:

The end result of the mining activity will return the land to its former state, which includes removal of roads, unless the landowner wishes to retain some, and all mining infrastructure, including sediment ponds, and the mine pit and processing areas.

The resultant land form will mimic pre-mining land forms and the land will adjust back to the receiving environment.

The effects in terms of visual integration are considered to be less than minor.

iii. That the land is returned to its original productive capacity, where appropriate:

The land will be returned to the same productive capacity as currently experienced. There will be no long term loss of productive capacity as a result of the mining activity once rehabilitation is complete.

iv. That water and soil values are protected.

Sediment controls and appropriate discharges of water to land will ensure that water quality will not be adversely affected.

Water use in the mining process is non-consumptive which means that the overarching hydrological characteristics of the environment will not be altered, rather, water will enter and exit the environment at slightly different points. Post completion of the proposal the sub-surface flow of ground water being an east – north east direction from the Wakamarina River will be maintained.

Soil values will not be compromised as the soil structure will be returned to below the surface and once the topsoil has been reinstated, the sub-surface structure will integrate and return to its former state.

Overall the effects on water and soil are considered to be no more than minor.

d) The ability to minimise dust, noise, lighting and vibration so that amenity or natural conservation values are not at risk:

The proposed mining activity is not anticipated to generate dust at levels that cannot be adequately managed by the use of a water cart such that amenity or any natural conservation values would be compromised.

The mining involves extracting materials that encounter water and hence are damp, and then that material is washed with groundwater. This essentially means that all extracted material is damp when it is stockpiled which avoids potential dust nuisance.

There is the potential for stockpiles to cause small scale dust nuisances when the cap or crust around them is broken to return the material to ground however the effects of this are minor and temporary, as mining will be undertaken progressively.

Continuous wind and dust monitoring will take place to ensure no adverse effects arise as a result of dust emissions.

Noise generated from mining activities is going to have a very minor effect on the surrounding environment. The key sources of noise at the mine site are likely to be associated with the use of excavators, dump/haul trucks, bulldozers and the trommel in the mine pond. However any such noise generated is akin to routine agricultural and/or forestry noise generated within the Canvastown environment.

The predicted noise levels from the proposed mining operations (all plant and dredging operations) are not considered to breech any noise limits provided in the Plan. Dispensation for noise effects is not sought.

The distance from the nearest offsite residential activity and the noise remediation from the pit walls mean that noise will not be readily discernible above a distant low hum when travelling past or near the site.

There are also a number of secondary noise sources on the site including the mine pond dewatering pump. In relation to the dewatering pump, given the size of the pump and the

fact that it will be screened in the mind pond, it is predicted that the noise from this source will be no more than minor.

The applicant has many years of experience operating similar mines on the West Coast with noise and vibration never been an issue. By way of example a current active mine on the West Coast is working on is located within 20m of an existing dwelling and no undue noise or vibration is discernible at the dwelling.

The various West Coast District Council noise standards are in line with the permitted activity noise standards contained within the Plan. That is noise must not exceed 55dBA L10 during the hours 0700 – 2200 hours noting that Westland DC has a 2100 hours limitation. The applicants experience is such that there has not been any noise related issues whilst operating on the West Coast.

It is therefore considered appropriate to not seek resource consent for noise dispensation and to rely upon the applicants experience and exercise of best practice to demonstrate noise emission compliance.

In addition noise and vibration is difficult to monitor prior to works occurring as the various machinery & equipment is purpose built for this specific mining operation. However prior to commencing actual mining operations EML will undertake noise monitoring of the equipment to demonstrate compliance with MDC noise standards.

When considered to the surrounding farming and forestry land uses, noise emanating from this proposal will not be discernible.

Mitigation measures include all land disturbance and mining activities are only to take place inside the proposed general operating hours between 6am and 6pm weekdays and 730am and 100pm Saturdays.

Plant and machinery will be maintained to ensure the noise emission is to a practical minimum.

The operational hours of the mining operations are generally during daylight hours.

It is acknowledged that during winter months, it may be dark at the beginning and end of the operational day. As the majority of mining activities will occur below ground level it is expected that there will be no significant effect from lighting on any adjoining property or road.

No blasting will take place to produce any adverse vibration effects and the actual mining process itself does not result in vibration that is discernible beyond the immediate confines of the excavated pit.

It is therefore considered that a comprehensive investigation into the sources of noise and vibration is neither warranted nor necessary.

Overall the proposal will not lead to adverse amenity effects. The site is within an active working farm environment characterised by pastoral activities such as farm machinery, cultivation, cropping and a dynamic visual landscape.

In addition forestry is predominant the surrounding land use. Adjacent to the site is cut-over forest, ongoing logging operations as well as re-generating forestry. It is considered that this land use grossly outweighs any impact on the amenity values of the Canvastown area of this proposal.

During and on completion of the works there will be no adverse effect on amenity, conservation or character values. In addition there is a valid argument that the return of the area to a former land use, mining, can be considered to support or even enhance the character values.

e) The ability to provide a contingency plan for early mine closure, including an evaluation of the risk to the neighbouring community and environment:

The mining activity will be undertaken by experienced mining contractors. The company undertaking the mining has appropriate public liability insurances and is also familiar with resource consent conditions to ensure no adverse effects on neighbouring communities or environments arise should the mining operations cease earlier than expected.

The applicant volunteers a condition of consent requiring the submission of a contingency plan to Council prior to the exercise of resource consent.

f) The ability to provide a bond to the Council annually for the purpose of rehabilitating operation areas in the event of a premature closure:

If a bond is considered appropriate and / or necessary then the applicant will accept such. Based on experience elsewhere a figure of $30,000 is considered appropriate and can be deposited into an appropriate holding account as per the proposed condition of consent in Appendix 10.

The bond figure has been determined based on the formula used by the West Coast Regional Council – a regional council with considerable experience in mineral extraction consenting.

g) The ability to adequately monitor the operations and its effects on the receiving environment:

Continuous monitoring of the mining operations and its effects on the receiving environment will take place to ensure the integrity of the receiving is not being compromised.

This will include compliance with all relevant conditions of consent together with standard mining practices such as daily monitoring of sediment controls, water management and dust management.

It noted and accepted by the applicant that ongoing monitoring of the project by MDC Officers operating on a cost recovery basis may occur.

h) The extent to which the proposal will adversely affect water quality and quantity:

It is proposed to abstract water from the river gravels associated with the Wakamarina River. Consequently the possibility of interference effects is very small given the size of the proposed abstraction and the fact that it is non-consumptive. Sub-surface water tests were undertaken during the testing when large test pits were in operation, similar to conditions of actual mining. The results showed no contamination of ground water during mining and excavation activities during testing.

It is unlikely that the proposed abstraction could interfere with neighbouring wells as the closest well will be some 40 metres away from any of the pits. Generally speaking the operations will be 'downstream' based on the direction of the sub-surface flows. Water tests showed no contamination of test bores within 10 metres of test pit mining.

The proposed abstraction of groundwater will be used to recirculate through a gravel screening facility and then returned to the test pit holes from which it came. The proposal is therefore a non-consumptive take.

As this abstraction is solely for non-consumptive purposes imposing any flow restriction conditions would not be appropriate in this instance.

By returning the water either directly back into the hole it came from or to a shallow surface drain that will lead to either adjacent pasture or a settling pond will allow some settling before the water penetrates the underground gravel layer.

Given the above, and that there will be a minimum separation distances of 50m from any neighbouring wells, no adverse effects on adjacent groundwater users is anticipated.

The discharge of water to land will not take place within 30m of Racecourse Stream and the discharge of water will not be applied when rain occurs that could cause the soils to become saturated. Therefore the application of water to land should not cause waterlogged soils to occur.

The proposed water abstraction is a non-consumptive take in that the water will be pumped from each test pit as it is worked to allow for sluicing of the aggregate through the screen.

The discharged water will obviously be discoloured and usually returned direct to the subject pit or settling pond. Test pits demonstrated that sediment laden water clears within a matter of hours.

Some discoloured / sediment laden water may also be discharged onto land. Any such discharge will not however be of sufficient volume or in a location that the discharge will enter surface water.

There is some potential for turbid water to enter the Pelorus River however it is considered that potential is slight. As detailed it is proposed to install (and remove) bunds and cut-off drains together with settlings ponds. The bunds and cut-off drains will direct stormwater toward the settling ponds.

From the settling ponds, water will be conveyed overland into the grassed ephemeral Racecourse Stream.

It is considered that as the result of this stormwater management the likelihood of sediment laden water entering the Pelorus River and resulting in turbidity effects is such that any potential adverse effects could not be considered anything but less than minor.

In the event of flooding and the site being inundated with floodwaters then sediment laden water would enter the Pelorus. However under current circumstances the sediment loading of the Pelorus River (and the associated turbidity effects) when in flood is such that it is considered any additional loading from the site would not be discernible. This view is based on the significant areas of logged forestry within both the Pelorus and Wakamarina Rivers catchments for which there is no sediment management or control in place.

When rainfall of sufficient intensity occurs resulting in flood flows in the Pelorus or Wakamarina Rivers under current land use, sediment levels and turbidity are significantly elevated for a period of time. This proposal will not worsen this effect to a discernible or measurable degree.

i) Any actual or potential adverse effect on road traffic movements or road safety:

The main vehicles entering and leaving the site on a day to day basis will be small utility/personal vehicles as associated with workers starting and finishing shifts. The effects from these vehicles and the frequency of them are within the permitted baseline and within the anticipated level of traffic on the road.

There will also be some heavy vehicle movements on the nearby road network but these will be limited. Given that most material will be retained on site in stockpiles, heavy vehicle traffic on public roads will be infrequent.

The main heavy vehicles on public roads will be fuel trucks and supply trucks. The nature of the rural area means that fuel and supply trucks are not uncommon on such roads and the frequency of such vehicles is consistent with permitted activities including forestry vehicles, farming vehicles and stock trucks.

No works will take place within 10m of road reserve to provide appropriate separation between road users and the mine.

The movement of vehicles across unsealed surfaces shall be kept to a practicable minimum.

The operational hours of the mining operations are generally during daylight hours and therefore it is unlikely that lights from the site will dazzle drivers. It is acknowledged that during winter months, it may be dark at the beginning and end of the operational day. As the majority of mining activities will occur below ground level it is expected that there will be no significant effect from lighting on any adjoining property or road.

There are not considered to be any cumulative effects from neighbouring activities beyond what would reasonably be anticipated on such rural roads.

7.2 Other Assessment Criteria / Matters

The Plan includes general assessment criteria. The following assessment considers those matters that are relevant along with any other potential effects of relevance.

7.2.1 Flood Hazard Effect

The site had a history of flooding and it is highly possible that flood events will occur during the operations.

To ensure any such flooding does not result in increased hazard and risk the following are proposed:

- Machinery will be removed from the lower terrace when practicable over weekends and for longer periods when active extraction is not proposed. The floating screen will be anchored securely to the sides of the mining pond. In the event of a flood, the screen would float in place.

- There is sufficient high ground in the immediate vicinity of the mine area where all equipment and facilities could be quickly relocated. All structures, fuel storage and other equipment will be located in a non-flood prone area.

In addition the applicant volunteers the submission to MDC of a Flood Hazard Mitigation Management Plan prior to exercise of the consent.

With respect to the long term flood hazard, a pre-works ground survey has been completed as per Appendix 4. Following the completion of the works this survey will be repeated to demonstrate that a like for like ground contour has been replicated.

7.2.2 Sedimentation Effects

Once the topsoil has been stripped, the overburden materials will be removed to water table height and initially stockpiled. The stockpiles of surplus overburden will be located in the same south-eastern corner of the application site but will be kept separate from the topsoil stockpiles to ensure that materials are reinstated correctly during rehabilitation. As the mine advances, the overburden will be used as backfill in a direct transfer approach.

Sediment run off is to be controlled at the stockpile by way of an earth bund around the base of the stockpile. If the bunds prove inadequate and sediment laden run-off is routinely occurring over the adjacent pasture then purpose built sediment ponds will be constructed. These will be cleaned out as required, with the sediment dried out and then mixed back in with waste material and overburden and returned to the pit.

The clean stormwater will continue to discharge into the surrounding land as it would have prior to the mine being established. The infrastructure associated with the site stormwater management system will be sized to accommodate heavy rainfall events while also ensuring that the potential for localised erosion is minimised.

7.2.3 Hazardous Goods

A range of control and mitigation measures will be put in place to ensure that fuel is not released to the environment. This includes: appropriate bunding, refuelling vehicles at the storage facility over an appropriately protected area of land; shut off valves and back-up

systems on the site fuel delivery vehicle so fuel can only be transferred when intended; placement, and associated training of site personnel, and spill kits at both the refuelling area and in the vicinity of the mine pit.

The likelihood of the tank failing is very remote. Should the tank rupture, 100% of the fuel will be contained by the bund.

The tank meets all industry standards and safety requirements under H.A.S.N.O.

Safety Signage will be placed on the side to the tank advising the following:

- Emergency Contact numbers;
- Emergency Procedures; and
- General Safety Information.

In addition all fuel delivery trucks adhere to specific delivery procedures, as contained in Appendix 8.

The refuelling point will be located on the elevated terrace to the SE of the site to avoid flood hazard issues.

The above ground structure can be removed should any issues arise.

The proposed fuel tank is of neutral colours and not considered to be out of place within the surrounding environment.

Fuel tanks of this nature are a common feature of rural working environments and when viewed holistically within the wider area, the proposal will have a minimal effect of the site and people's appreciation of the area's character and surrounding landscape.

7.2.4 Watercourse Re-Alignment Effects

In order to carry out works the ephemeral Racecourse Stream will be re-aligned.

The specific realignment works will retain a meandering flow path and margins that befit a drainage channel through a rural landscape. The site will remain set within what is overall an area with a rural natural character. Being on private property, the stream is not used for public recreation.

As the watercourse is ephemeral, flowing only after heavy or prolonged rainfall, there is no apparent aquatic habitat. However eel are present and active fish recovery practices will be carried out in the event of the re-alignment occurring during or immediately following the occurrence of flowing water.

There are no signs of water adapted marginal vegetation and no in-stream faunal ecosystems. Nevertheless, to prevent sedimentation of the channel bed, the re-contoured channel sides will be sown down to stabilise the soils. The changed channel characteristics are therefore considered as not having any adverse effects on in-stream and riparian habitat.

Pollution of the creek by hydrocarbons such as diesel and grease will be minimal given that no machinery will be used in the wetted channel of the creek during the construction phase. All refuelling and servicing of machinery will take place away from riparian areas to avoid the potential contamination of any watercourses from a spill.

Any equipment/machinery used will be high pressure water blasted (and air dried) prior to arriving on site to avoid machines carrying other material into the watercourse such as seeds, weeds or mud from other areas of the region.

During stream re-alignment works, appropriate sedimentation control measures will be established should there be water in the stream at the time of the works occurring. This will ensure that any effects arising from the disturbance to the creek bed is minimal.

Once the re-alignment works are completed, water will still be able to continue downstream, albeit through a slightly different flow-path. The proposed stream diversions will not increase the velocity or flow of water through or downstream from the site. The

channel in the immediate vicinity will be altered, however normal stream flows will be able to continue downstream thereby not detrimentally affecting the hydraulic capacity of the watercourse in any more than a minor way.

All works are to be undertaken using best practices, for example, staging the diversion if flowing water is present and constructing the new channel then linking the old channel to the new channel as the last stage of the works to ensure the works are stable and will have less than minor environmental effects.

While there will be some minor localised effects to the waterbody, these will be short term in nature, with no long term effects anticipated.

The effects on the waterway being diverted to a new desirable flow path will be negligible as water will continue to flow downstream and a meander channel will be maintained.

Once the realignment and infilling works have been completed, water will still be able to continue downstream, albeit through a slightly different flow path thereby not detrimentally affecting the hydraulic capacity of the stream in any more than a minor way.

The cleaning out of the downstream reaches of Racecourse Stream during periods of no flow is not considered to lead to the occurrence of adverse effects that are more than minor.

The proposed works are therefore considered as not altering the subject waterway in any more than a minor way.

7.2.5 Visual Effects

As detailed the mining activity may be visible from public roads however, there will be no discernible views except for working machinery, worker's vehicles and workers themselves.

Whilst it is acknowledged that the visual impact will be highest when working in proximity to public roads, the reality is that the most visual feature will be machinery sitting on a paddock, stock-piled material or the upper extent of excavator arm (with the bulk of the excavator being below ground in the pit). It is considered that sights such as excavators, machinery and stock-piles of aggregate are routine within a dynamic rural environment and there is no justification for screening of the site.

The opportunity for people to experience land based alluvial gold mining from nearby public roads is quite limited. People will however be able to appreciate the nature of alluvial mining and also relate the historic activities known to have been undertaken in the area with the modern technologies and techniques.

The visual impacts of the proposal are considered to be significantly less than the visual impact of other adjacent and more dominant land use activities such as forestry establishment and harvesting.

7.2.6 Gravel Deposition

In the event of gravel and sediment being deposited within the site, the site operators are responsible for removing and/or managing the dispersal of aggregate in the same manner as now occurs should the Wakamaina River flood and deposit flood debris onto the site.

7.2.7 Monitoring of turbidity changes in groundwater

Domestic Wells

The applicant is firmly of the view that turbidity effects on domestic bores will not eventuate. Based on the exploratory monitoring in 2015 no such effects arose.

A minimum 20 m setback from all domestic wells (and property boundaries) is proposed which will further minimise any potential effects on domestic bores.

If however it is considered necessary EML will install monitoring equipment in existing bores or drill new bores to provide for turbidity monitoring.

7.2.8 Any Alternative Locations or Methods

In terms of mining method, as the gold resource is contained in alluvial gravel, a floating platform and associated processing by a dredge located on a mine pond is considered to be best practicable and safest option available to EML.

Given the adoption of this mining method, other related mining operations that are proposed by EML (i.e., topsoil and overburden stripping, water management activities, rehabilitation etc.) reflect mining good practice approaches and have also been developed to minimise potential effects on the environment.

7.3 Cultural effects

As detailed HistoryWorks Ltd have completed a cultural impact report.

That report concludes:

i. No archaeological or heritage sites as per the NZAA "Arcview', the Ministry of Cultural & Heritage 'List" or the MDC 'Register of Significant Heritage Sources' are within or proximate to the proposed application area;

ii. There is no evidence that reveals that any culturally significant, archaeological or heritage sites exist within the application area; and

iii. The land has been sold to Europeans by its Ngati Huia owners and has been used for a considerable period for farming and other purposes absentt of any evidence that the land use activities have offended any Ngati Kuia cultural or other values associated with the land.

That said the importance of the Te Hoiere Awa is acknowledged and a copy of the application document will be provided to Ngati Kuia for review / comment.

In addition the applicant volunteers the appended "Accidental Discovery Protocol". That protocol outlines the procedures that must be undertaken if sub-surface excavations uncover any:

- Wahi tupuna / archaeological site;
- Koiwi / human bones;
- Taonga / Maori artefacts; and
- Other artefacts.

7.4 Any Other Potential Effect

The proposal is not anticipated to have any significant adverse effects that cannot be avoided, remedied or mitigated by way of appropriate conditions of consent on those in the neighbourhood or wider community (including any socio-economic or cultural effects). Rather the proposed works will result in economic returns to the community by way of revenue spent within the district by way of fuel, accommodation, food and direct employment opportunities. The applicant anticipates the monthly expenditure within the community once the operation is running would be in the order of $50,000 - $100,000.

Due to commercial sensitivity a precise dollar figure of the economic returns from the operation will not be stated. However, the site will create direct employment opportunities as well as work for local contractors and others in the local community.

In addition the proposal represents an efficient use of a resource. As stated the mineral can be extracted and the site returned to a pre-works state such that there will be no ongoing discernible effect from the works, other than the social and economic benefits that will result from the project.

The proposal is entirely self-contained and places little or no additional demand on services or infrastructure.

There are no other potential effects anticipated.

8 Summary of Mitigation Measures

The mitigation measures in relation to this application to ensure the environmental effects are not more than minor, as discussed above, are summarised as follows:

- The Accidental Discovery Protocol will ensure cultural and archaeological values are protected.
- The existing site is dynamic in nature and represents an active rural working environment. The land is currently a working farm, and the landowner and EML have an excellent cooperative relationship to use existing roads and facilities;
- The proposed mining method has a very low environmental impact and the mine area itself will have a relatively small footprint;
- The site will be rehabilitated continuously, and a post works ground survey undertaken to demonstrate that a like for like landform has been retained;
- Potential flooding and ecological effects can be avoided;
- Sub-surface flow direction is such that turbidity effects are not likely to arise; and
- Screening from State Highway 6 can be undertaken.

9 Notification

It is considered that the potential effects on the environment resulting from this proposal are such that public notification of this proposal is not warranted and cannot be justified.

The potential effects of the proposal are considered to be demonstrably less than other land use activities that require resource consent for example land disturbance resource consents associated with forestry harvesting operations. Such applications are rarely publicly notified.

The assessment of potential effects of the proposal is such that the potential adverse effects can be avoided, remedied or mitigated such than any effect is less than minor, therefore public notification is not justified or warranted. In addition notification cannot also not be justified when the proposal is compared with other land use consented activities within the surrounding area that are routinely processed on a non-notified basis for example the significant land disturbance activities that occur in conjunction with forestry operations.

However, it is considered that it the following iwi be provided with copies of the application documents:

- Te Ātiawa o Te Waka-a-Māui;
- Ngati Kuia;
- Ngati Toa Rangatira;
- Ngati Koata; and
- Ngati Tama ki Te Tau Ihu

In addition landowners within the immediate surrounding environment on Wakamarina Valley Road can be supplied with copies of the application documents.

10 Other Matters

10.1 Resource Management Act 1991

Part 2 of the RMA sets out its purpose and principles on which the RMA is founded and from which all other associated statutory framework is derived. The purpose of the RMA is to promote the sustainable management of natural and physical resources. The RPS and the Plan have been developed under the RMA and are generally considered to be the local implementation of the purpose and principles.

EML's proposed mining activity enables its employees, the landowner within the mine site, and other individuals and organisations whose goods and services will be used to provide for their economic and social well-being. These benefits also extend to those individuals, businesses, families and communities indirectly benefiting from the downstream effects of EML's proposed operations.

In relation to the potential effects of the proposal, the effects assessment contained in this application show that subject to the implementation of a range of site management and mitigation measures, adverse effects will be avoided, remedied or mitigated.

10.1.1 Section 6 Matters of National Importance

Matters of national importance are considered with relevance to this application:

a) *The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development.*

The natural character of the Wakamarina Valley reflects a dynamic working rural landscape. This proposal will not result in long term adverse change to that dynamic landscape.

b) *The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development.*

There are no outstanding natural features at risk from this proposal.

c) *The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.*

There are no such areas at risk from this proposal.

d) *The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers.*

There is no effect on the current nature or location of public access as a result of this proposal.

e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.*

It is considered that this proposal does not exclude Maori from the use of the Wakamarina Valley.

f) *The protection of historic heritage from inappropriate subdivision, use, and development.*

Gold mining is an integral part of the history of the Wakamarina Valley and the local community is excited to see this project return the area to its historical roots.

g) *The protection of recognised customary activities.*

There are no recognised customary activities relevant to this proposal other than dairy farming, which will continue uninterrupted on 95% of the area during mining.

10.1.2 Section 7 Other Matters

Section 7 of the Act sets out other matters that Council is to have particular regard to in achieving the purpose of the Act. The matters of relevance to this application are outlined below:

7(a) Kaitiakitanga:

7(aa) The ethic of stewardship:

7(b) The efficient use and development of natural and physical resources:

7(c) The maintenance and enhancement of amenity values:

7(d) Intrinsic values of ecosystems:

7(f) Maintenance and enhancement of the quality of the environment

It is recognised that Ngati Kuia is Tangata Whenua with kaitiakitanga over the area associated with this application.

EML's proposed mining activities, the mitigation measures proposed, will ensure the efficient use and development of natural and physical resources.

No adverse effects on amenity values are anticipated.

In addition, as assessed within this application the intrinsic values of ecosystems will not be adversely affected as a result of EML's proposal and the quality of the environment in and around the mine site will be maintained.

10.1.3 Section 8 Treaty of Waitangi

The application is consistent with the RMA planning framework and is therefore considered consistent with Section 8 in terms of Treaty of Waitangi considerations.

Based on the above assessment, it is considered that the proposal is consistent with Part 2 of the Act.

10.2 The National Policy Statement for Freshwater Management

The National Policy Statement for Freshwater Management (NPSFW) sets out objectives and policies that direct local government to manage water in an integrated and sustainable way, while providing for economic growth within set water quantity and quality limits.

The proposed works will not impede flows or adversely affect the natural functioning of the freshwater resource.

Amongst other matters the NPSFW requires that all Regional Councils manage fresh water and land use and developments in catchment in an integrated and sustainable way so as to avoid, remedy or mitigate adverse effects, including cumulative effects.

The activity proposed seeks to be undertaken in a sustainable way and will avoid, remedy or mitigate any adverse effects on the subject watercourse.

10.3 NES for Assessing and Managing Contaminants in Soil to Protect Human Health

A preliminary assessment as per the NES for Assessing & Managing Contaminants in Soil to Protect Human Health has been consideration in light of the fact that this proposal is.

The site is currently used for pastoral farming, with dairy and beef cattle and sheep currently grazed on the property. This land use has been the dominant land use since the property was first developed.

There have however been intermittent periods of gold mining activity in the general area with varying degrees of success with the majority of the historic gold mining being direct river – run mining associated with the Wakamarina River.

Contaminants associated with the pastoral farming often include historic sheep dip, offal pits and fuel storage facilities. In this instance there are no such historic features associated with the site.

There are no environmental reports available on the property and there is no known history of complaints at the site.

There are also no known MDC records of such sites on the subject property.

10.4 The Proposed Marlborough Environment Plan

The relevant sections of the Proposed Marlborough Environment Plan (the Proposed Plan) include the following chapters:

Chapter 3 – Marlborough's tangata whenua iwi

Issue 3C – The threats to the cultural heritage of Marlborough's tangata whenua iwi.

Issue 3D – The impact of resource use on the mauri of natural resources.

> *Objective 3.2 – Natural and physical resources are managed in a manner that takes into account the spiritual and cultural values of Marlborough's tangata whenua iwi and respects and accommodates tikanga Māori.*
>
> *Objective 3.3 – The cultural and traditional relationship of Marlborough's tangata whenua iwi with their ancestral lands, water, air, coastal environment, waahi tapu and other sites and taonga are recognised and provided for.*
>
> *Policy 3.1.2 – An applicant will be expected to consult early in the development of a proposal (for resource consent or plan change) so that cultural values of Marlborough's tangata whenua iwi can be taken into account.*

The importance of the Te Hoiere Awa is acknowledged and a copy of the application document will be provided to those iwi with Statutory Acknowledgments relating to the area. This approach is based upon direct advice received from MDC.

In addition the applicant volunteers the appended Accidental Discovery Protocol.

Chapter 4 – Use of Natural and Physical Resources

Issue 4A – Marlborough's social and economic wellbeing relies on the use of its natural resources.

> *Policy 4.1.1 – Recognise the rights of resource users by only intervening in the use of land to protect the environment and wider public interests in the environment.*
>
> *Policy 4.1.3 – Maintain and enhance the quality of natural resources.*

EML's proposed mining activities, the mitigation measures proposed, will maintain the quality of natural and physical resources. This is achieved by the pre and post ground surveys to ensure a like for like physical environment results.

Chapter 7 – Landscape

Issue 7A – Resource use and changes in resource use can result in the modification or loss of values that contribute to outstanding natural features and landscapes and to landscapes with high amenity value.

> *Objective 7.1 – Identify Marlborough's outstanding natural features and landscapes and landscapes with high amenity value.*
>
> *Policy 7.1.4 – Landscapes that meet the criteria to be identified as an outstanding natural feature and landscape, or landscapes with high amenity value, where those values are more sensitive to change:*
>
> *(a) are specifically identified on the Landscape Overlay; and*

(b) the specific values associated with the identified landscapes are set out in Appendix 1 of Volume 3 of the Marlborough Environment Plan.

Objective 7.2 – Protect outstanding natural features and landscapes from inappropriate subdivision, use and development and maintain and enhance landscapes with high amenity value.

Policy 7.2.3 – Control activities that have the potential to degrade the amenity values that contribute to those areas of the Marlborough Sounds Coastal Landscape not identified as being an outstanding natural feature and landscape by:

(a) using a non-regulatory approach as the means of maintaining and enhancing landscape values in areas of this landscape zoned as Coastal Living;

(b) setting standards/conditions that are consistent with the existing landscape values and that will require greater assessment where proposed activities and structures exceed those standards; and

(c) requiring resource consent for commercial forestry activities.

Policy 7.2.4 – Where resource consent is required to undertake an activity within an outstanding natural feature and landscape or a landscape with high amenity value, regard will be had to the potential adverse effects of the proposal on the values that contribute to the landscape.

Policy 7.2.8 – Recognise that some outstanding natural features and landscapes and landscapes with high amenity value will fall within areas in which primary production activities currently occur.

The application site is in an area subject to human induced change over many years. The area is not pristine or highly natural but is a highly modified area with paddocks having been turned over for more than 100 years.

The resultant land form will mimic pre mining land forms and the land will assimilate back to the same productive capacity as currently experienced.

The proposal is not anticipated to compromise any of the objectives or policies relating to landscape within the immediate vicinity.

Chapter 11 – Use of the Rural Environment

Issue 14A – Safeguarding the potential of Marlborough's rural resources for primary production.

> *Objective 14.1 – Rural environments are maintained as a resource for primary production activities, enabling these activities to continue contributing to economic wellbeing whilst ensuring the adverse effects of these activities are appropriately managed.*
>
> *Policy 14.1.1 – Enable the efficient use and development of rural environments for primary production.*
>
> *Policy 14.1.7 – Recognise that primary production activities in rural environments may result in effects including noise, dust, smell and traffic generation, but that these will require mitigation where they have a significant adverse effect on the environment.*
>
> *Objective 14.4 – Rural character and amenity values are maintained and enhanced and reverse sensitivity effects are avoided.*

The Plan recognises that a range of activities occur in rural zones, allowing people to protect and provide for their economic well-being. Overall, the proposal is considered as not degrading the surrounding rural environment or amenity values associated with the site. This conclusion is reached when the proposal, together with the potential immediate and the long term effects are considered in light of the surrounding physical environment.

Chapter 15 – Resource Quality (Water, Air, Soil)

> *Policy 15.1.29 – To control land disturbance activities in order to:*
>
> *(a) mitigate the effects of increased sediment runoff to fresh waterbodies or coastal water; and*
>
> *(b) avoid the potential for direct entry of contaminants into groundwater.*

Appropriate site stormwater controls are proposed to ensure that clean stormwater is diverted away from disturbed areas, while the stormwater that does run across disturbed land, and which has therefore been contaminated with sediment, is collected and directed either into the mine pond or settling ponds for treatment prior to being discharged.

10.5 Marlborough Regional Policy Statement

The Plan has been written in accordance with the provisions of the Marlborough Regional Policy Statement (RPS). As such any matters raised through the policies and objectives of the Plan are the same matters raised in the RPS.

10.6 The Marlborough Sounds Resource Management Plan

The relevant sections of the Marlborough Sounds Resource Management Plan (the Plan) include the following chapters:

Chapter 2: Natural Character

Chapter 2 provides objectives and policies that provide for the preservation of the Natural Character, particularly of rivers and their margins. The application is to be undertaken in an area subject to human induced change over many years. The area is not pristine or highly natural but is a highly modified area with paddocks having been turned over for more than 100 years.

Chapter 3: Fresh Water.

The specific relevant provisions in Chapter 3 include:

> Policy 3.2.2.1.7 – Promote and where necessary specify appropriate riparian management practices that will provide for: natural hazard management; provision of public access and recreation; and protection of riparian habitat diversity; in-stream habitat; and water quality.

Objective 3.3.2.1 – Management of the effects of activities so that: the quality of groundwater is maintained, or where appropriate enhanced; and the quantity of groundwater is maintained at a level which will protect and sustain ecosystems.

Policy 1.1 – Avoid, remedy or mitigate the reduction of groundwater quality by contamination from land use activities that discharge to land and water, or disturb the land.

Policy 1.2 – Avoid, remedy or mitigate any adverse environmental effects arising from the taking and use of groundwater.

Policy 3.2.5.1 – That the natural functioning of ecosystems is not disrupted by the taking, use, damming and diversion of fresh surface water.

As demonstrated in the assessment of potential effect and subject to conditions of consent that seek to avoid, remedy or mitigate adverse effects it is considered that the natural functioning of freshwater environments will not be unduly compromised by the proposed works.

Chapter 5: Landscape.

The site under application is not identified as a significant regional or district feature and is a dynamic farming area. Furthermore, the proposal is not anticipated to compromise any of the objectives or policies relating to the general landscape within the immediate vicinity.

Chapter 6 –Tangata Whenua

Objective 6.1.2.1 – Recognition and provision for the relationship of Marlborough's Maori to their culture and traditions with their ancestral lands, waters, sites, waahi tapu and other taonga.

The applicant is aware of the significance of the area to Tangata Whenua. The application includes an Accidental Discovery Protocol. The application is therefore considered to be consistent with Chapter 6.

Chapter 11 - Rural Environments

Objective 11.3.1 – Sustainable management of rural resources and integrated resource use to protect the character and amenity of rural areas and avoid, remedy or mitigate adverse effects of activities.

Policy 1.4 – Resolve conflicts between rural activities and non rural uses and users of rural resources by avoiding an indiscriminate mixture of activities with incompatible effects.

Policy 1.6 – Maintain and enhance the amenity values and environmental qualities of open space and quietness that contribute to the distinctive character of the rural environment.

Policy 1.7 – Enable the establishment of rural based industrial and commercial activities that avoid, remedy and mitigate adverse effects.

Policy 1.8 – Avoid, remedy, and mitigate the effects of unreasonable noise in the rural environment.

The Plan recognises that a range of activities occur in rural zones, allowing people to protect and provide for their economic well-being subject to those activities not resulting in the occurrence of various affects. Overall and subject to the imposition of conditions of consent relating to hours of operation and the location of works the proposal is considered as not degrading the surrounding rural environment or amenity values associated with the site.

This application is considered consistent with the relevant objectives and policies contained within the Plan.

11 Resource Consent Duration

The applicant seeks that the consents sought be granted with a 30 year duration in light of the nature and purpose of the activity proposed.

12 Proposed Monitoring

The Fourth Schedule of the Act, requires that 'where the scale or significance of the activity's effect are such that monitoring is required, a description of how, once the proposal is approved, effects will be monitored and by whom'.

Primary monitoring of the proposal is to be carried out by the consent holder including complying with any resource consent conditions. Once the works have been completed no ongoing monitoring is proposed.

13 Conclusion

The applicant is Elect Mining Limited (EML).

EML is seeking all necessary resource consents for the following activities:

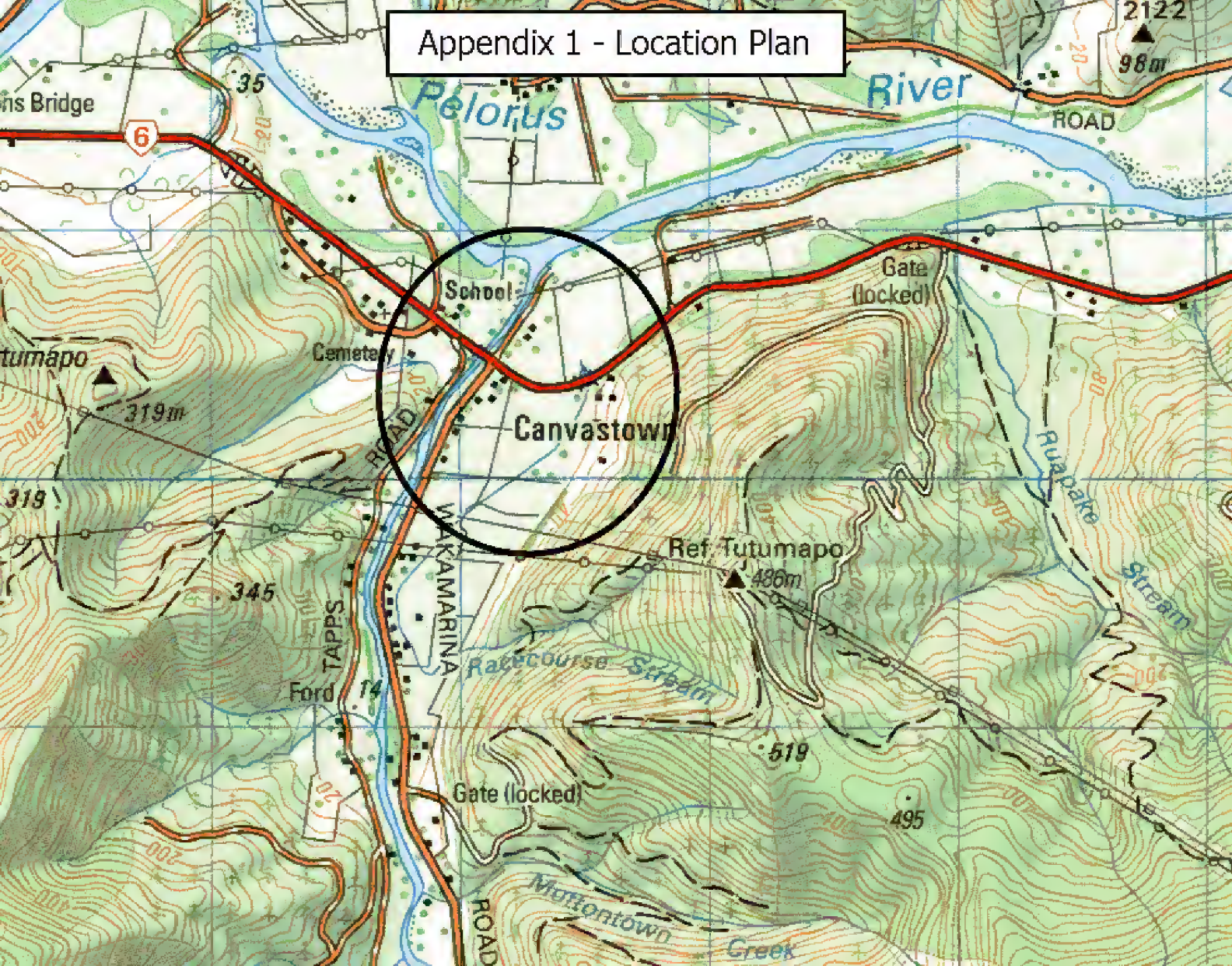
- To undertake industrial activities related to the establishment and operation of an open pit alluvial gold mine;
- To undertake land disturbance activities within a flood hazard zone associated with the operation of an open pit alluvial gold mine and site rehabilitation;
- To clean out and realign a section of Racecourse Stream;
- To form sediment traps in the form of a series of small low level bunds within Racecourse Stream; and
- To take and use groundwater to be used for washing gravels.

Any associated potential effects on the environment can be appropriately avoided, remedied or mitigated through the imposition of conditions of consent.

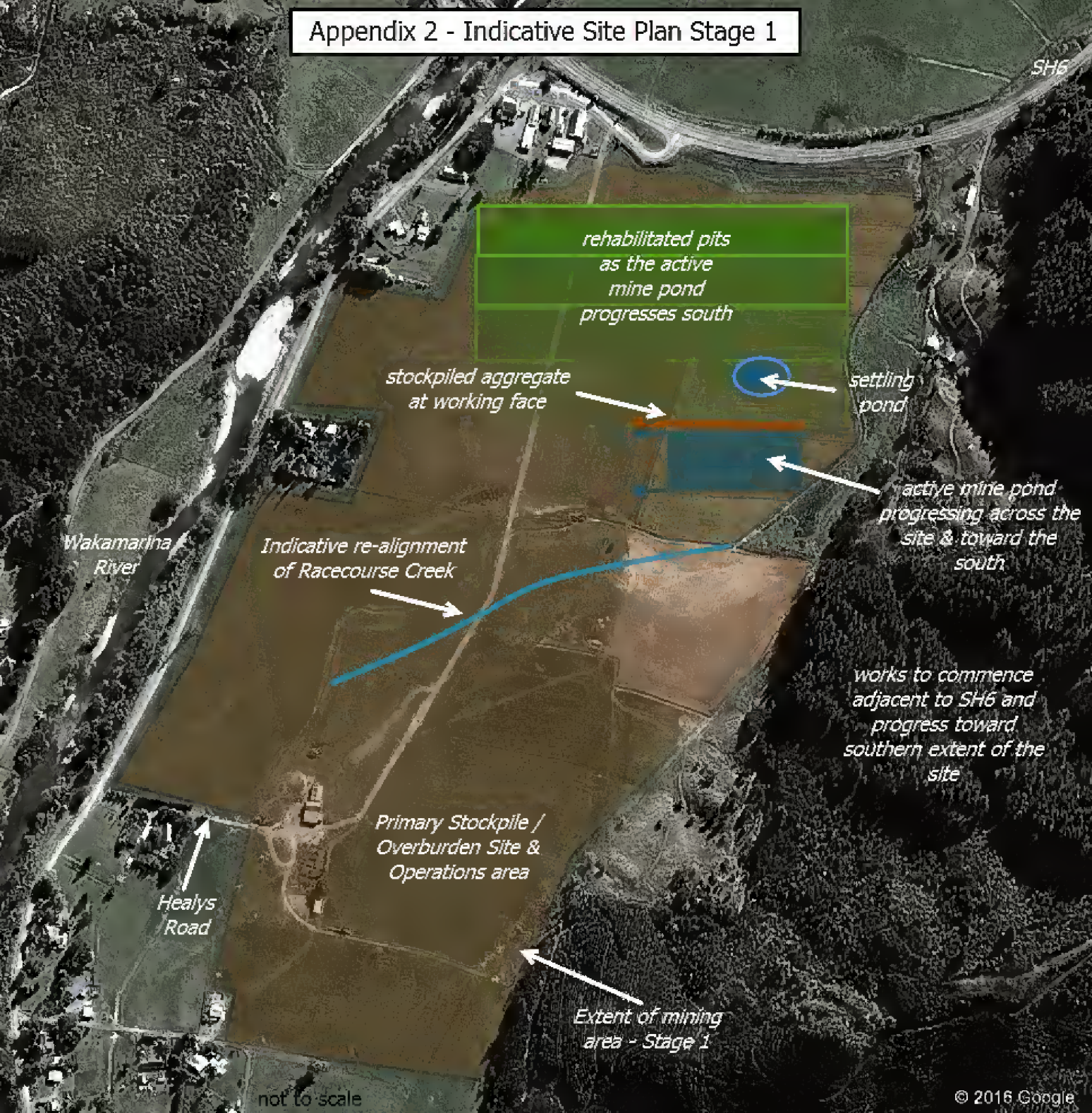
The proposal is consistent with the relevant provisions of Part 2 of the Act, relevant NES, the Marlborough Regional Policy Statement and the Marlborough Sounds Resource Management Plan.

Accordingly resource consent should be granted to this proposal.

Appendix 1 – Location Plan


Appendix 1 - Location Plan
Pelorus
River
ROAD
2122
98m
6
35
ns Bridge
School
Cemetery
Gate
(locked)
tumapo
319m
Canvastown
ROAD
WAKAMARINA
Ref. Tutumapo
486m
Ruapake
Stream
319
345
TAPPS
Ford
14
Racecourse Stream
519
495
Gate (locked)
Muttontown
Creek
ROAD

Appendix 2 – Site Plans


Appendix 2 - Indicative Site Plan Stage 1
SH6
rehabilitated pits as the active mine pond progresses south
stockpiled aggregate at working face
settling pond
active mine pond progressing across the site & toward the south
Wakamarina River
Indicative re-alignment of Racecourse Creek
works to commence adjacent to SH6 and progress toward southern extent of the site
Primary Stockpile / Overburden Site & Operations area
Healys Road
Extent of mining area - Stage 1
not to scale
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Appendix 3 – Example Photos

Appendix 4 – Site Survey

Notes:

1. Height Datum - LINZ Vertical Height Datum
Origin of heights is benchmark RB37 (R.L = 8.592m)

Client:
Elect Mining - Canvastown

Drawing Title
Site Survey

Rev	Date	Revision Details	By
	25/02/16	Issue Steve Wilkes	PM

Prepared by
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Scale: 1:3000 (A3)

Revision:

Job ID: 9714

Drawing No.: 1 of 1

Appendix 5 – Title Documents

COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**283111**
Land Registration District	**Marlborough**
Date Issued	05 July 2006

Prior References
MB6A/57

Estate	Fee Simple
Area	45.5210 hectares more or less
Legal Description	Lot 2-3 Deposited Plan 369737

Proprietors
Phillip Andrew Jones and Maria Anna Gunnel Carlson

Interests

200668.1 Crossing place Notice pursuant to Section 91 Transit New Zealand Act 1989 - 27.10.1998 at 9.55 am

200608.1 Gazette Notice (1997 page 418) declaring State Highway 6 adjoining the within land to be a limited access road - 27.10.1998 at 9:55 am

6933498.1 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 5.7.2006 at 9:00 am

Subject to Section 241(2) Resource Management Act 1991 (affects DP 369737)

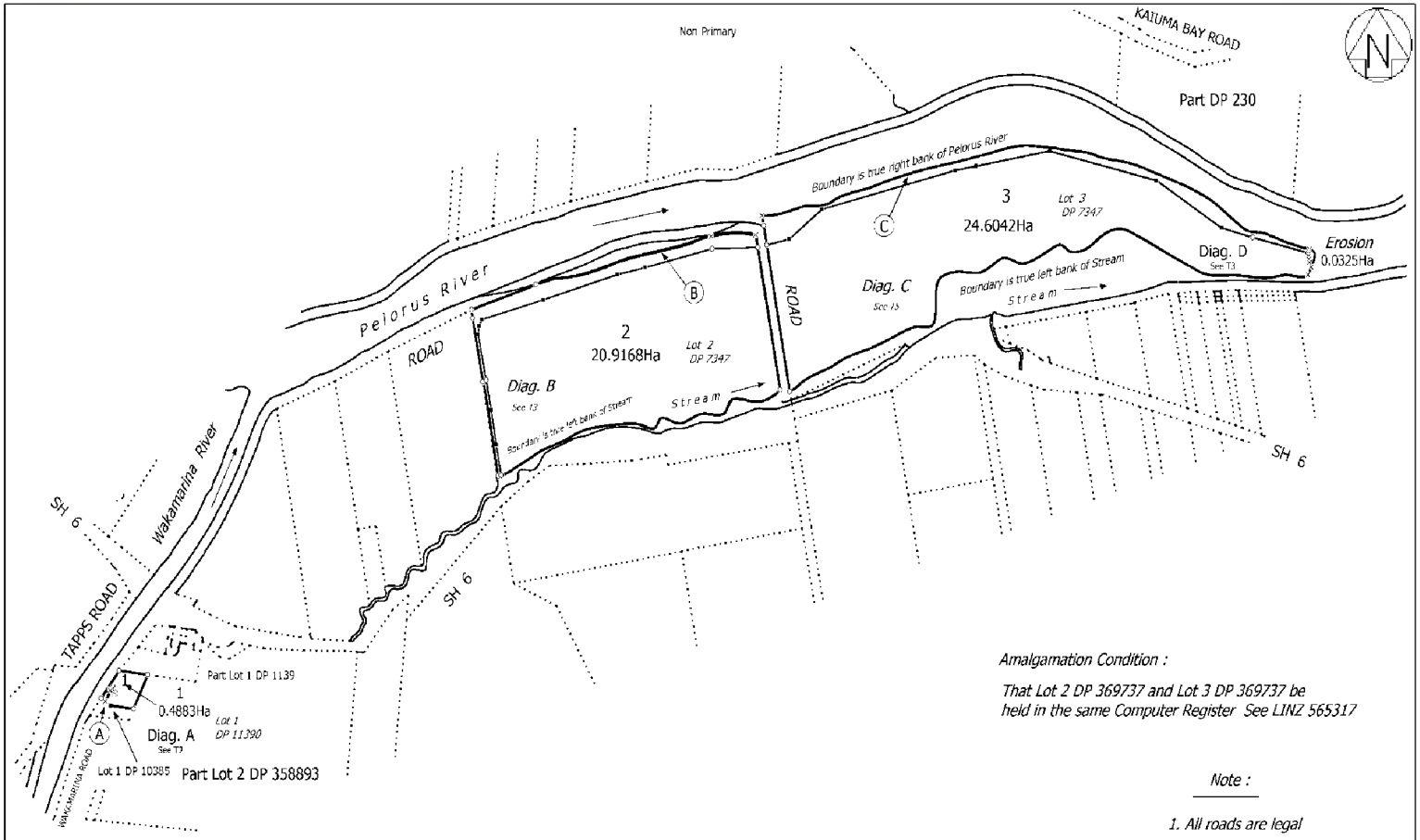
6933498.3 Esplanade Strip Instrument pursuant to Section 232 Resource Management Act 1991 - 5.7.2006 at 9:00 am (affects Lot 3 DP 369737)

Subject to a right of way in gross over part Lot 2 marked B and over part Lot 3 marked C all on DP 369737 in favour of Mike Edridge Contracting Limited created by Easement Instrument 6933498.4 - 5.7.2006 at 9:00 am

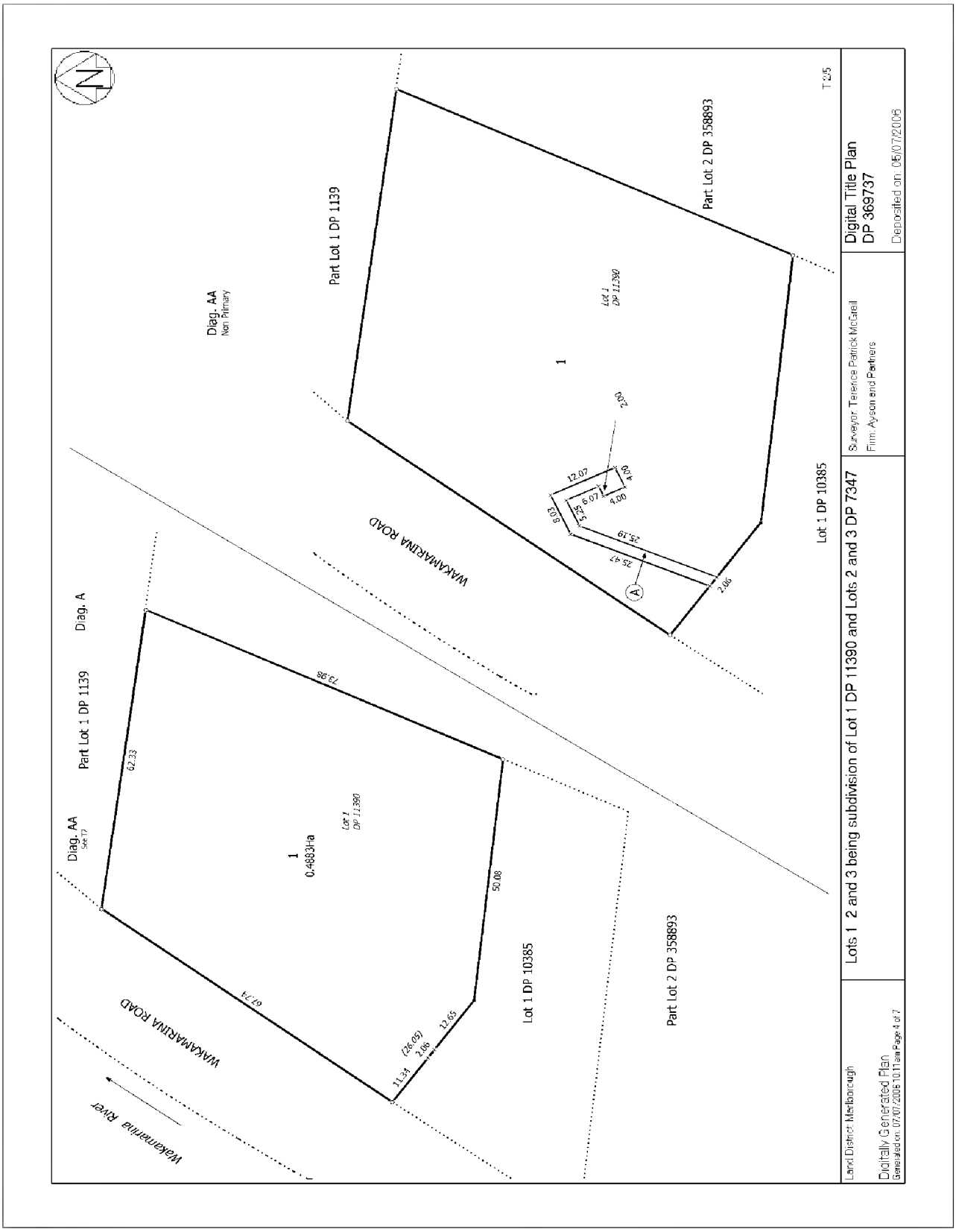
The easements created by Easement Instrument 6933498.4 are subject to Section 243 (a) Resource Management Act 1991

8612383.3 Mortgage to ASB Bank Limited - 13.10.2010 at 9:48 am

Subject to a right (in gross) to convey electricity over part Lot 3 DP 369737 marked A on DP 486144, and over part Lot 2 DP 369737 marked B on DP 486144 in favour of Marlborough Lines Limited created by Easement Instrument 10170530.1 - 27.8.2015 at 10:27 am


Non Primary
KAIUMA BAY ROAD
Part DP 230
Boundary is true right bank of Pelorus River
3
24.6042Ha
Lot 3
DP 7347
Erosion
0.0325Ha
Diag. D
See T3
Pelorus River
ROAD
B
2
20.9168Ha
Lot 2
DP 7347
Diag. C
See T3
Boundary is true left bank of Stream
Stream
Diag. B
See T3
Boundary is true left bank of Stream
ROAD
SH 6
Wakamarina River
SH 6
TAPPS ROAD
SH 6
Part Lot 1 DP 1139
1
0.4883Ha
Lot 1
DP 11390
Diag. A
See T3
A
Lot 1 DP 10385
Part Lot 2 DP 358893
WAKAMARINA ROAD
Amalgamation Condition :
That Lot 2 DP 369737 and Lot 3 DP 369737 be
held in the same Computer Register See LINZ 565317
Note :
1. All roads are legal
2. River and stream banks are
generally 1 - 2 metres high
Job No : 11110
MDC : U 051237
T1/5
Land District: Marlborough
Digitally Generated Plan
Generated on: 07/07/2006 10:11am Page 3 of 7
Lots 1 2 and 3 being subdivision of Lot 1 DP 11390 and Lots 2 and 3 DP 7347
Surveyor: Terence Patrick McGrail
Firm: Ayson and Partners
Digital Title Plan
DP 369737
Deposited on: 05/07/2006

Identifier **283111**



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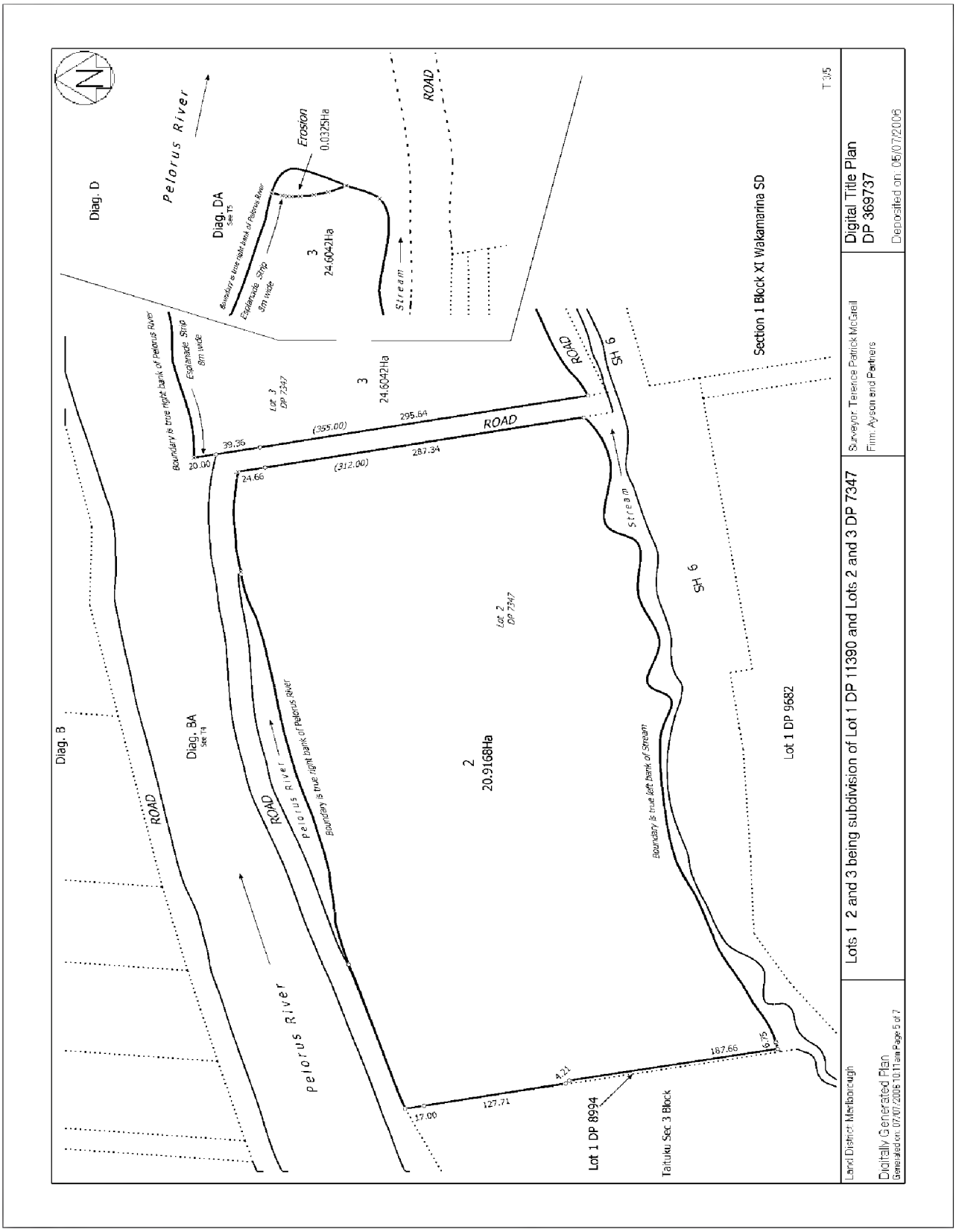

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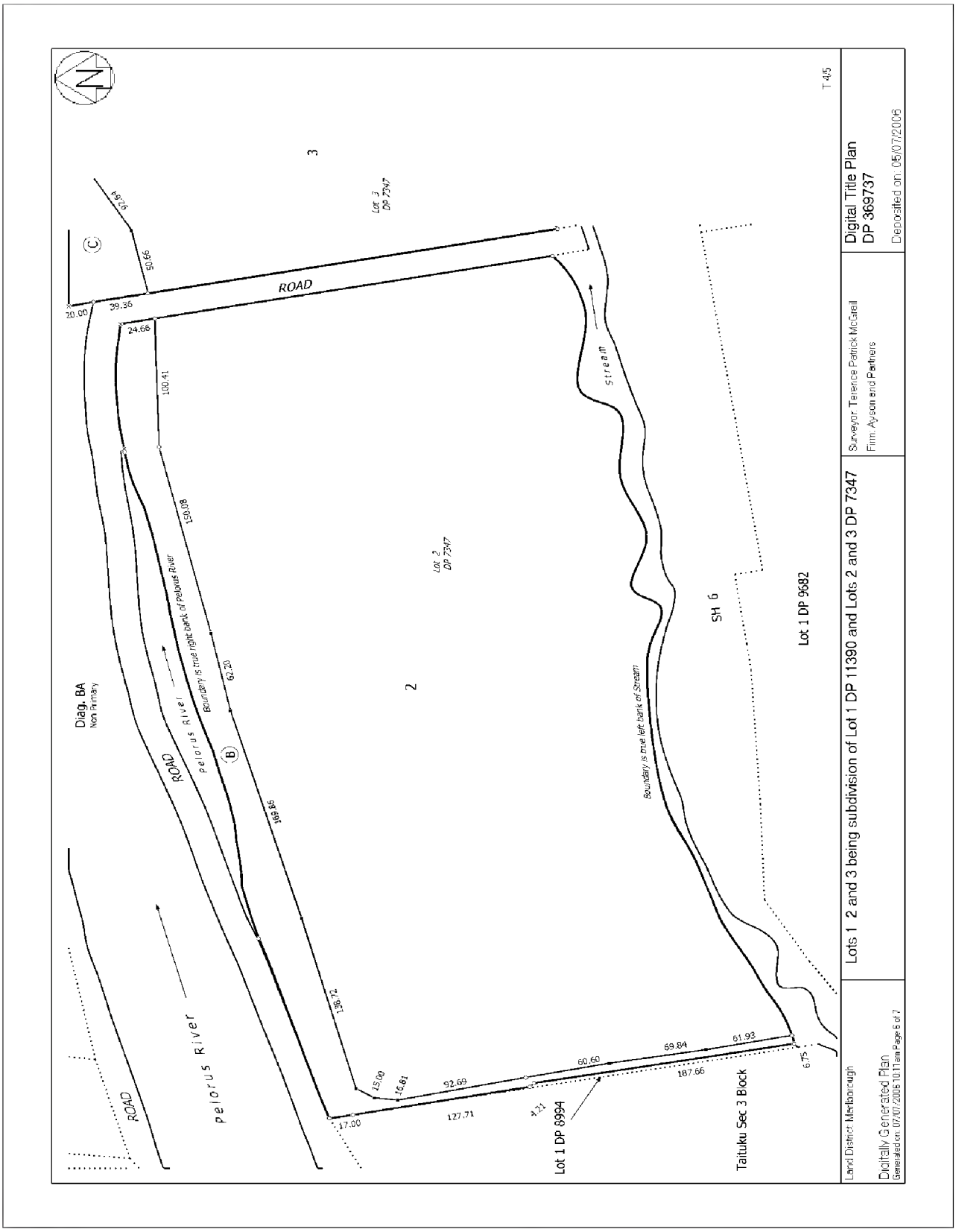

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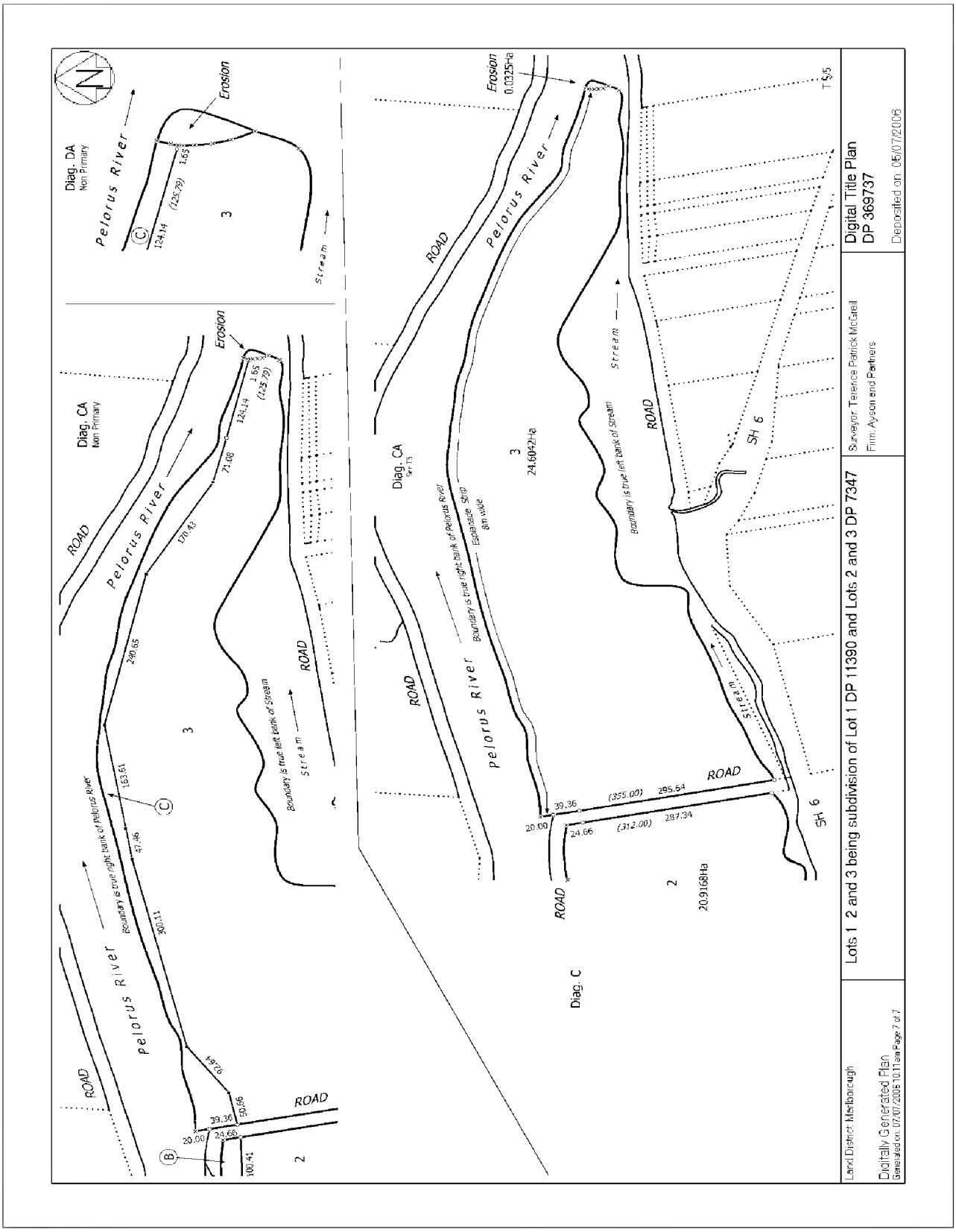

Appendix 6 – Accidental Discovery Protocol

Process for the Accidental Discovery of Archaeological Sites

1. Introduction & Purpose
    a. To provide clear procedures in the event of discovering, as the result of physical disturbance to the existing ground surface:
        i. Wahi tupuna / archaeological site;
        ii. Koiwi / human bones;
        iii. Taonga / Maori artefacts; and
        iv. Other artefacts.
    b. This protocol involves the following parties:
        i. The Consent Holder or their appointed representative;
        ii. The Marlborough District Council;
        iii. Te Ātiawa o Te Waka-a-Māui, Ngati Kuia, Ngati Toa Rangatira, Ngati Koata and Ngati Tama ki Te Tau Ihu or any other party agreed to by all iwi; and
        iv. The Site Manager.

There can never be certainty that sites are not present and it is important that contractors working in this environment are made aware of the type of features to look out for. Common site indicators are fire cracked stones, charcoal, rubbish heaps including shell, bone and / or 19th century glass and crockery, fire pits, old building foundations, artefacts of Maori or early European origin, or human burials.

Pits in the form of regular-shaped depressions, usually up to about 3 x 4m in area are another feature to be aware of. These pits can be quite shallow when filled with natural litter but are sometimes up to a metre in depth. Pit sites are often found in clusters and are obviously deliberately excavated. They are almost always located on the flattened ground suited to accommodating additional structures. They sometimes have a raised rim formed to cover the eaves of the roof which has long since rotted away.

2. General Procedures Following the Accidental Discovery of Possible Wahi Tupuna, Koiwi or Taonga

    a. In the event of the accidental discovery of material that could be wahi tupuna / archaeological site, kaiwi/human bones and or Taonga/Maori artefacts the following steps shall be taken.

    b. All work in the discovery area (within 20 metres of the suspected site) shall cease immediately. The plant operator will shut down equipment and activity, leave the site/area and unearthed archaeological material in-situ and advise the Site Manager.

    c. The Consent Holder shall then notify the following parties of the discovery:

        i. Te Ātiawa, Ngati Kuia, Ngati Toa, Ngati Koata and Ngati Tama;

        ii. Heritage NZ;

        iii. Marlborough District Council; and

        iv. NZ Police if Koiwi are uncovered.

    d. The Site Manager will secure the discovery area (20 metres from suspected site}, ensuring the area (and any objects contained within) remains undisturbed and meets health and safety requirements.

    e. Work may continue outside of the site area.

    f. The Consent Holder shall ensure that either themselves or the Site Manager, as appropriate, are available to meet or escort the above listed parties to the discovery area.

    g. The Consent Holder & Site Manager shall ensure that no information is released to the media except as authorised by the Site Manager, in consultation with the above listed parties.

    h. In the event the discovery area is found to contain an archaeological site, the Regional Archaeologist, thew Consent Holder shall contact Heritage NZ and an archaeological authority must be obtained in accordance with the *Heritage New Zealand Pouhere Taonga Act 2014*. Koiwi that are part of an archaeological site can only be removed if an archaeological authority has been obtained.

    i. When the archaeological authority has been granted, the Consent Holder shall ensure the Site Manager undertakes all subsequent works in accordance with the conditions of this authority.

    j. The Site Manager must approve all site visits to the discovery area.

    k. The Site Manager shall ensure that work in the discovery area does not recommence until all statutory and cultural requirements have been met.

3. Further Procedures in the Event that Koiwi are discovered

    a. As soon as practicable after the Consent Holder has given notice to Te Ātiawa, Ngati Kuia, Ngati Toa, Ngati Koata and Ngati Tama that Koiwi have been discovered, those parties and a Consultant Archaeologist shall be invited to inspect the site and undertake appropriate cultural ceremonies at the site.

    b. If Te Ātiawa, Ngati Kuia, Ngati Toa, Ngati Koata and Ngati Tama wish to undertake such ceremonies, the Consent Holder and Site Manager shall make the necessary arrangements for these ceremonies to be able to be undertaken on site as soon as practicable.

    c. Once these ceremonies are completed, the Consent Holder & Site Manager shall arrange for a Consultant Archaeologist, in consultation with the New Zealand Police and Te Ātiawa, Ngati Kuia, Ngati Toa, Ngati Koata and Ngati Tama to inspect the skeletal remains.

    d. The Consultant Archaeologist will record details of the Koiwi, the site of discovery, and any other relevant facts, and those records will be made available to the New Zealand Police and Te Ātiawa, Ngati Kuia, Ngati Toa, Ngati Koata and Ngati Tama.

    e. If the Koiwi are Maori, and the New Zealand Police and / or Coroner have no uncertainty or suspicion about the Koiwi, the Consent Holder & Site Manager shall arrange for Te Ātiawa, Ngati Kuia, Ngati Toa, Ngati Koata and Ngati Tama to remove the Koiwi from the site, or if they decline, arrange for the New Zealand Police and / or Coroner to do so.

    f. In the event that the New Zealand Police and / or Coroner have any uncertainty or suspicion about the Koiwi, they are responsible for making any records they require and for any Koiwi that they remove from the site.

    g. If the Koiwi are Maori and the New Zealand Police and / or Coroner remove only part of the Koiwi the provisions of Section 3 (e) above will apply.

    h. If the Koiwi are non-Maori, the New Zealand Police and / or Coroner will be responsible for removing any exposed Koiwi.

4. Custody of Taonga (Excluding Koiwi) or Material Found at an Archaeological Site
    a. The Consultant Archaeologist will have initial control of, and responsibility for, all material contained in the discovery area.
    b. The Consent Holder & Site Manager shall ensure no objects are removed from the site until it has been determined, in consultation between the Archaeologist and Te Ātiawa, Ngati Kuia, Ngati Toa, Ngati Koata and Ngati Tama whether it is associated with any archaeological site or the object is Taonga (be it Taonga Tuturu or otherwise).
    c. If the object is of Maori origin and found in an archaeological site and/or is a Taonga Tuturu, the Archaeologist will record the object and notify the Ministry for Culture and Heritage of the finding as required under the Protected Objects Act 1975.
    d. The Archaeologist will then hand the material to the local public museum for the Maori Land Court to make a determination on ownership.
    e. If the object is European in origin the Consultant shall deliver any such object to the Client so that the legal right to ownership can be determined.
    f. If the object is a Taonga and less than 50 years old, (i.e. not Taonga Tuturu), the Archaeologist shall request Te Ātiawa, Ngati Kuia, Ngati Toa, Ngati Koata and Ngati Tama to remove the Taonga from the site.

5. In all other cases:
    a. The Consultant Archaeologist and the Consent Holder shall determine what further actions are appropriate to avoid, reduce, remedy or mitigate any damage to archaeological sites.
    b. Heritage NZ shall be consulted for advice of any requirements under the *Heritage New Zealand Pouhere Taonga Act 2014*.

Appendix 7 – Mining License

Record 60132:
Minerals Mining Permit

Record Status: Active

Obligations

Search...

Showing 1-5 of 21 | Download results

Financial - 2 Active

Royalty - Minerals

01

The point of valuation for the purpose of royalties is the permit boundary.

02

The annual reporting period for this permit is 1 January to 31 December as specified under the Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013.

General Permit Conditions - 16 Active

MMP General

13

The permit holder must not unreasonably interfere with the activities of any other persons lawfully operating in the permit area.

04a

comply with the Crown Minerals Act 1991 (Act) and all other relevant legislative requirements;

04b

obtain any consents and approvals required under the Resource Management Act 1991, the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 and any other applicable Acts; and

< Prev 1 2 3 4 5 Next >

Record details

View details

Record information

PERMIT DETAILS

Permit Tier:	2
Area (hectares):	90.490
Operation Name:	Canvastown
Onshore/Offshore:	Onshore
Granted Under Act:	Crown Minerals Act 1991
Duration (Years):	10
Duration (Months):	0
Allocation Method:	AWPO
Non Exclusive Permit:	No
Subsequent permit:	Yes
Previous permit number:	56908
Granted Date:	30/05/2016
Commencement Date:	30/05/2016

Expiry Date:	29/05/2026
Mining method:	Surface Mining, Opencast
Minerals Programme:	Minerals Programme for Minerals 2013

Additional record information

MINERALS

Mineral Group:	Metal
Mineral:	Gold

Permit holder

Contact name:	Michael Lance
Contact type:	Participant
Holding (%):	10
Address:	C/- Duncan Cotterill 197 Bridge Street Nelson 7010 New Zealand

Contact name:	Elect Mining Limited
Contact type:	Operator participant
Holding (%):	90
Address:	C/- Duncan Cotterill 197 Bridge Street Nelson 7010 New Zealand

Additional permit details Show map

Supporting information

Appendix 8 – Fuel Delivery Criteria

4.4 DELIVERY PROCEDURES – BULK DROPPING

Driver in sole charge.

You should be quite certain that you fully understand the discharge arrangements for each individual location before leaving the installation / depot. Bulk delivery is very likely to be carried out in a work environment where the general public is not aware of the hazards of petroleum handling. It is therefore up to you to be alert to the presence of potential hazards, either through public ignorance or deliberate risk taking. You are in sole charge in this situation & must exercise your responsibility firmly & with tact.

4.7.1 Bulk Drop

The procedures to be followed for gravity drops are as follows:

1. Locate truck to minimise access restrictions & enable quick emergency exit forward.
2. Stop vehicle engine, apply park brake. The engine must be stopped while the discharge is proceeding & not started again until all openings & valves have been closed
3. Locate safety cones in the areas specified for this site. Refer to Schedule A.
4. Fit all safety apparel, eye wear and gloves.
5. Dip storage tanks & record results. Ensure that tanks can receive the intended delivery volume within the specified maximum safe fill levels for all product(s) to be dropped.
6. If balancing a partly used compartment it must be dipped prior to dropping to verify your calculated compartment level.
7. Couple up delivery drop hose, connecting the truck end first.
8. Before connecting the underground tank end touch the free drop hose end to the housing of the remote spill container, with the fill cap still fitted. This will bring the truck tank & the underground tank / pipework up to the same electrical potential & minimise static discharge.
9. Ensure that all connections are tight to avoid leaks.
10. Ensure that storage tank dip points & secondary fill points are tightly closed.
11. Check that the product identification tags on the delivery faucets match those on the fill points.
12. Open the Master Valve
13. Open the Pot Valve to the compartment you are draining.
14. Open the bottom API Head lever partially.
15. Check all connections for leaks.
16. If no leaks evident open the API Head lever fully.
17. Once flow commences, check delivery connections constantly for leaks.

18. Do not leave the delivery operating area of the truck while delivery is in progress.

19. Check the sight glass to ensure the compartment is completely drained.

20. Then close the API Head lever.

21. Then close the pot valve.

22. If this is the last compartment close the Master Valve.

If you are reusing a drop hose for delivery of another grade at the same site, commence with the procedures in 4.7.2 below or continue with the step 23 if you have finished.

23. Disconnect the drop hose from the truck end and hold up to drain any residue.

24. Disconnect the goose neck from the fill point and replace the fill cap and tobby lid.

25. Stow and secure drop hoses to the truck and/or trailer.

26. Re-dip customer tanks & record product levels. Once fuel has been dropped you must re-dip the tank to reconcile to calculated end dip to an actual dip.

27. Invoice the customer according to the known volume delivered from the truck. Refer any customer queries to your Manager.

4.7.2 If reusing a drop hose for delivery of another grade at the same site, commence with the following procedures:

1. Disconnect the drop hose from the truck end and hold up to drain any residue.

2. Disconnect the goose neck from the underground tank. Do NOT reconnect it to the next tanks fill point at this stage.

3. Reconnect the drop hose to the trucks outlet point of the next compartment.

4. Then go back to steps 8 – 27 in '4.7.1' above.

4.8 DELIVERY PROCEDURES - PUMPING

1. Ensure you can deliver the product safely. Check customer tank foundations, ladder security & no leaks are evident. If using truck ladder ensure good ladder stability.

2. Ensure tank vent is above fill point level and product labelling is correct.

3. Park truck in the safest and most practical position to the tank and where possible in a location where you can see the tank from the pump controls.

4. Ensure the tank is structurally safe and sound and no leaks are evident. Ensure no debrie is lying around the base of the tank. Do NOT fill the tank if these conditions are not meet.

5. If tank or area is unsafe discuss it with the customer or leave a note. Also contact and inform your manager.

6. Fit all safety apparel required, eye protection and gloves etc

7. Determine your Process Location for the fill:
   - If the tank is out of site from the trucks pump control area it will be a 'Tank Process Location' and go to procedure number 4.8.2. on the next page.
   - If you can see the tank whilst standing next to the pump controls it will be a 'Controls Process Location' and continue with step 8.

8. Attach bonding wire to tank.

9. Locate and secure ladder on tank. Ensure ladder has secure footing.

10. Dip and determine the ulage of the tank and preset your meter to this figure.

11. Check the tank product label matches that of your compartment and the correct API Head is connected.

12. Locate the nozzle as far into the fill point as possible and lock open the nozzle lever.

13. If the ulage of the tank was not possible to determine, use the automatic shutoff system on the delivery nozzle. If this is the case, ensure you can see the nozzle while you are standing next to the pump activating lever during the entire pumping process.

14. Locate the nozzle as far into the fill point as possible and lock open the nozzle lever now as it is a 'Controls Process Location.

15. Engage truck PTO.

16. Attach and secure the required API head to the correct compartment outlet.

17. Do a final check to ensure the following three all match:
   - Truck compartment fuel grade
   - API Head and delivery hose
   - Customers Tank Label

18. Open the Master Valve.

19. Open the appropriate pot valve only.

20. Open the API head dry break slowly to ensure there are no leaks.

21. Turn the hydraulic speed control valve to slow position.

22. Engage the pump control lever slowly.

23. If your process location is beside the pump controls, ensure there are no leaks and if the nozzle is secure increase the hydraulic speed control valve.

24. If your process location is beside the nozzle, set the hydraulic speed control valve to a medium speed(approx 120 ltrs/pm). Ensure there are no leaks around the truck area and then position yourself next to the nozzle and lock it open.

25. Remain next to the nozzle throughout the entire filling process.

26. Once you are nearing the end of the delivery (approx 100 – 150 litres) reduce the flow rate, to 120 – 130 ltrs/pm, via the hydraulic speed control valve.

27. Once completed: - turn the pump activating lever off

- turn the hydraulic speed control back to 'No Flow'
- Ensure the nozzle is shut off and stow it safely on the truck
- close the API Head lever
- close the pot valve
- close the master valve
- disengage the PTO
- restore safety apparel

28. Invoice the customer and leave a copy of this for the customer. If the customer specifically requests a meter docket, attach it to the delivery docket.

29. Before leaving check both mirrors to ensure all is clear

4.8.2 Tank Process Location

1. Attach bonding wire to tank.

2. Locate and secure ladder on tank. Ensure ladder has secure footing.

3. Dip and determine the ulage of the tank and preset your meter to this figure.

4. Check the tank product label matches that of your compartment and the correct API Head is connected.

5. Locate the nozzle as far into the fill point as possible, do NOT lock open the nozzle lever at this stage.

6. If an accurate ulage of the tank was not possible to determine, use the automatic shutoff system on the delivery nozzle. If this is the case, ensure you can see the nozzle at all times during the entire pumping process.

7. Engage truck PTO.

8. Attach and secure the required API head to the correct compartment outlet.

9. Do a final check to ensure the following three all match:
   - Truck compartment grade
   - API Head and delivery hose
   - Customers tank label

10. Open the Master Valve.

11. Open the appropriate pot valve only.

12. Open the API head dry break slowly to ensure there are no leaks.

13. Turn the hydraulic speed control valve to slow position.

14. Engage the pump control lever slowly and recheck for leaks.

15. Increase the hydraulic speed valve to a medium flow of no more than 120 ltrs/pm.

16. Position yourself next to the nozzle and lock it open.

17. Position yourself next to the nozzle, throughout the entire process, in readiness to shut the nozzle off incase the auto shut off fails or the ulage was calculated incorrectly.

18. Once completed:
    - turn the pump activating lever off
    - turn the hydraulic speed control back to 'No Flow'
    - Ensure the nozzle is shut off and stow it safely on the truck

- close the API Head lever
- close the pot valve
- close the master valve
- disengage the PTO
- restore safety apparel

19. Invoice the customer and leave a copy of this for the customer. If the customer specifically requests a meter docket, attach it to the delivery docket.

20. Before leaving check both mirrors to ensure all is clear

Appendix 9 – Proposed Condition - Annual Works Programme

Appendix 9 – Proposed Condition Annual Work Programme

1. The consent holder shall submit to the Manager Resource Consents, Marlborough District Council, an Annual Work Programme (AWP) before 1 January, provided that no works can commence until after the first AWP is submitted. No works shall commence until written acceptance of the AWP has been provided by the Manager Resource Consents.

   Each AWP shall describe and illustrate the locations of the following:

   a. the maximum area to be worked;
   b. the mining method;
   c. indicative location of settling ponds;
   d. location of overburden piles; and
   e. stormwater management (as appropriate) of any spoil piles.

2. All works shall be carried out in accordance with the AWP, except that the consent holder may, at any time, submit an amended AWP for written approval provided those amendments improve the efficiency and/or quality of the mining operation, or avoid, remedy or mitigate an adverse effect.

Appendix 10 – Proposed Condition - Bonds.

Appendix 10 – Proposed Condition of Consent – Cash Bond

1. In order to secure the performance of the land rehabilitation the consent holder at its election and before the consent is exercised shall either:
    a. Deposit a cash bond with Council in an amount of $30,000; or
    b. Enter into security documentation to be prepared by Council's solicitors which will allow Council to register a first ranking charge over the subject land and in the amount of $30,000; or
    c. Provide a guarantor acceptable to Council which guarantor will bind itself to perform the rehabilitation obligations or alternatively bind itself to pay the amount of the cash bond to Council in the event of default by the consent holder.

Appendix 11 – HistoryWorks Ltd Cultural Impact Report

Elect Mining Resource Application for Resource Consent, Te Hora/Canvastown.

Cultural Impact Report

D. A. Armstrong

HistoryWorks

1. Introduction

1. My name is David Anderson Armstrong. I hold Bachelor of Arts (Hons) and Bachelor of Laws degrees from Victoria University of Wellington. I am currently a Director of HistoryWorks Ltd, a Wellington-based research company. Since 1988 I have worked as a professional historian, specialising in Treaty of Waitangi claim research. I have previously undertaken research in connection with Rangitane ki Wairau and Ngati Apa Ki Te Ra To Treaty claims in the northern South Island, and assisted Ngati Kuia with some aspects of their claim settlement negotiations relating to cultural redress.

2. I have been asked by Elect Mining Ltd. (EML) to prepare a 'cultural impact' report involving land at the confluence of the Wakamarina and Pelorus Rivers south of State Highway 6. The land subject to the EML application is shown in fig. 1, below. I have consulted a range of historical, printed and published sources, including research prepared for northern South Island Waitangi Tribunal claims, histories of the area, journal articles, the Ngati Kuia Deed of Settlement with the Crown, files held at Archives New Zealand, Wellington, and Native Land Court minute books. A bibliography is provided below. I have not consulted with Ngati Kuia, the local iwi most strongly associated with the application area.

2. Ngati Kuia associations

3. A significant Ngati Kuia settlement was located at Te Hora/Canvastown, at the Wakamarina/Pelorus confluence. This included a pa and associated cultivations, food gathering places (mahinga kai) and occupation areas (kainga). In an 1894 article in the *Journal of the Polynesian Society* J. Rutland noted that 'the point of land formed by the junction of the Wakamarina and Pelorus Rivers was occupied 30 years [1864] ago, and formed the principal pa

of the district'.[1] It is likely that the current revised application area, located east of the Wakamarina River and south of the Pelorus River, includes a part of a broader occupation and cultivation complex associated with the main Ngati Kuia occupation area at the confluence of the rivers.

3. The land

3.1. Te Hora reserve

4. A 230-acre Te Hora reserve was set aside for Ngati Kuia by Donald McLean when he purchased the iwi's interests in the northern South Island for the Crown 1856.[2] The reserve included the pa and associated areas at the Pelorus/Wakamarina confluence, as shown on fig. 2, below. The current application site - east of the Pelorus/Wakamarina confluence - is not included in the Te Hora reserve.

5. In 1870 the reserve was vested in the Crown under the terms of the Native Reserves Act 1856 to enable it to be leased by the Commissioner of Native Reserves for flax growing and timber milling purposes, with the proceeds to be distributed among Ngati Kuia.[3]

6. This arrangement lasted until 1889, when title to the reserve was investigated by the Native Land Court. The land was awarded to 36 individual Ngati Kuia owners in six separate subdivisions.[4] The land was further partitioned over succeeding years, and much of the reserve, including the main pa site, was sold to Europeans.[5] Part of the original reserve, consisting of around 56 acres, remains in Maori ownership today.[6]

7. The Te Hora land retained by Ngati Kuia includes an urupa (cemetery) reserve and the Te Hora Marae. The Marae was built on land gifted by its Ngati Kuia owners in 1987. The first hui was

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[1] J. Rutland. 'Traces of Ancient Human Occupation in the Pelorus District, Middle Island, New Zealand'. *Journal of the Polynesian Society*. 1894. Vol. 3. No. 4. December, 1894. 230. See also T. L. Buick. *Old Marlborough or the Story of a Province*. 1900. 77.

[2] S. Campbell. *'A Living People', Ngati Kuia and the Crown, 1840-1856*. March, 2000. Wai 785. #A77. 190-191

[3] D. Alexander. *Reserves of Te Tau Ihu (Northern South Island).* October, 1999. Wai 785. #A60. 432: Ngati Kuia Deed of Settlement. October 23, 2010. 7.

[4] Nelson Minute Book #3. 335-336.

[5] D. Alexander. *Reserves of Te Tau Ihu (Northern South Island).* October, 1999. Wai 785. #A60. 432-442.

[6] S. Campbell. *'A Living People', Ngati Kuia and the Crown, 1840-1856*. March, 2000. Wai 785. #A77. 223.

held there in February 1990. Ngati Kuia's Deed of Settlement with the Crown was signed at the Marae in August, 2010.[7]

3.2. Taituku Section 30

8. A 51-acre area included in the 1856 sale was purchased from the Crown by six Ngati Kuia individuals in 1857.[8] It may have included cultivation or occupation areas. It was given the appellation Taituku Section 30. A Crown grant issued in January 1862.[9] This land abutted the southern bank Pelorus River, and is included in the current application area. Section 30 was partitioned into three sections - Taituku 1, 2 and 3 (of 17, 14 and 20 acres respectively) - by the Native Land Court in 1895, and awarded to several individual Ngati Kuia owners.[10]

9. A series of sales and further partitions took place over succeeding years.[11] The bulk of Section 30 was purchased from its Ngati Kuia owners by John Kearns Hart between 1910-1915.[12] Hart was active in the local gold mining industry which, although well past its heyday, continued around Canvastown. Hart obtained licenses to prospect on a number of areas of Crown land in the district from 1900 up until the 1930s. In some applications he described himself as a Havelock farmer. In others he identified himself as a Canvastown miner. These applications are held by Archives New Zealand. The file references are listed in the bibliography. It is not clear whether Hart acquired Section 30 land for its farming or gold-bearing qualities.

3.3. Section 31 Pelorus

10. Section 31 Pelorus Valley District, consisting of 19 acres, was also purchased from the Crown by two Ngati Kuia individuals in 1857. As in the case of Section 30, it may have included cultivations or an occupation area. Section 31 abuts on the eastern bank of the Wakamarina River. It is included in the current application area. The Crown grant issued in January 1863.

11. In 1886 William Brownlee purchased 1 acre in the northern part of the block adjoining the Wakamarina River. This purchase may have related to timber milling operations. In this regard I

[7] Ngati Kuia Deed of Settlement. October 23, 2010. 24.
[8] Nelson Minute Book #3. 39.
[9] Alexander. 470: Ngati Kuia Deed of Settlement. October 23, 2010. 7. AJHR. 1862. E10. 3.
[10] Nelson Minute Book #3. 18.
[11] Alexander. 470.
[12] Alexander. 470-472.

note that Brownlee had also acquired a little over 1 acre in Taituku Section 30 as a tramway crossing in 1886.[13] The majority of Section 31 was acquired by a European named Robert Anderson in 1888, presumably for farming purposes. Further land was taken for a road in 1971. According to Alexander, writing in October, 1999, 13.3 perches remained in Maori ownership at that time, although this is not recorded in the Maori Land Court system.[14] I note that fig. 2 (Maori Land Online) does not show any Maori-owned land remaining in what was Section 31.

12. The relationship between the Te Hora reserve, Sections 30 and 31, and the current application area can be seen with reference to figs. 2 and 3, below. Fig. 1 is reproduced from Alexander.[15] Fig. 2 is from the EML application document.

4. Impact on Heritage and cultural Values

13. According to the New Zealand Archaeological Association's 'ArcView' on-line finding aid, no archaeological sites are within or proximate to the current application area. No heritage sites on or near the application area appear in the Ministry of Culture and Heritage 'New Zealand Heritage List/Rarangi Korero'. Nor do any appear in the Marlborough District Council 'Register of Significant Heritage Sites'.[16]

14. Although the current application site is located in an area associated with an important Ngati Kuia occupation and cultivation area, based around Te Hora, the evidence I have seen does not reveal that any culturally significant, archaeological or heritage sites are currently known to exist within the application area.

15. The land was sold to Europeans by its Ngati Kuia owners, and has been used for a considerable period for farming and other purposes (perhaps including gold prospecting). The present writer has seen no evidence that this activity has hitherto offended against Ngati Kuia cultural or other values associated with the land.

[13] Alexander. 470.
[14] Alexander. 462-463.
[15] Alexander. Before page 420.
[16] Marlborough District Council. 'Register of Significant Heritage Sites'. February, 2007.

Fig. 1. *The revised application area*

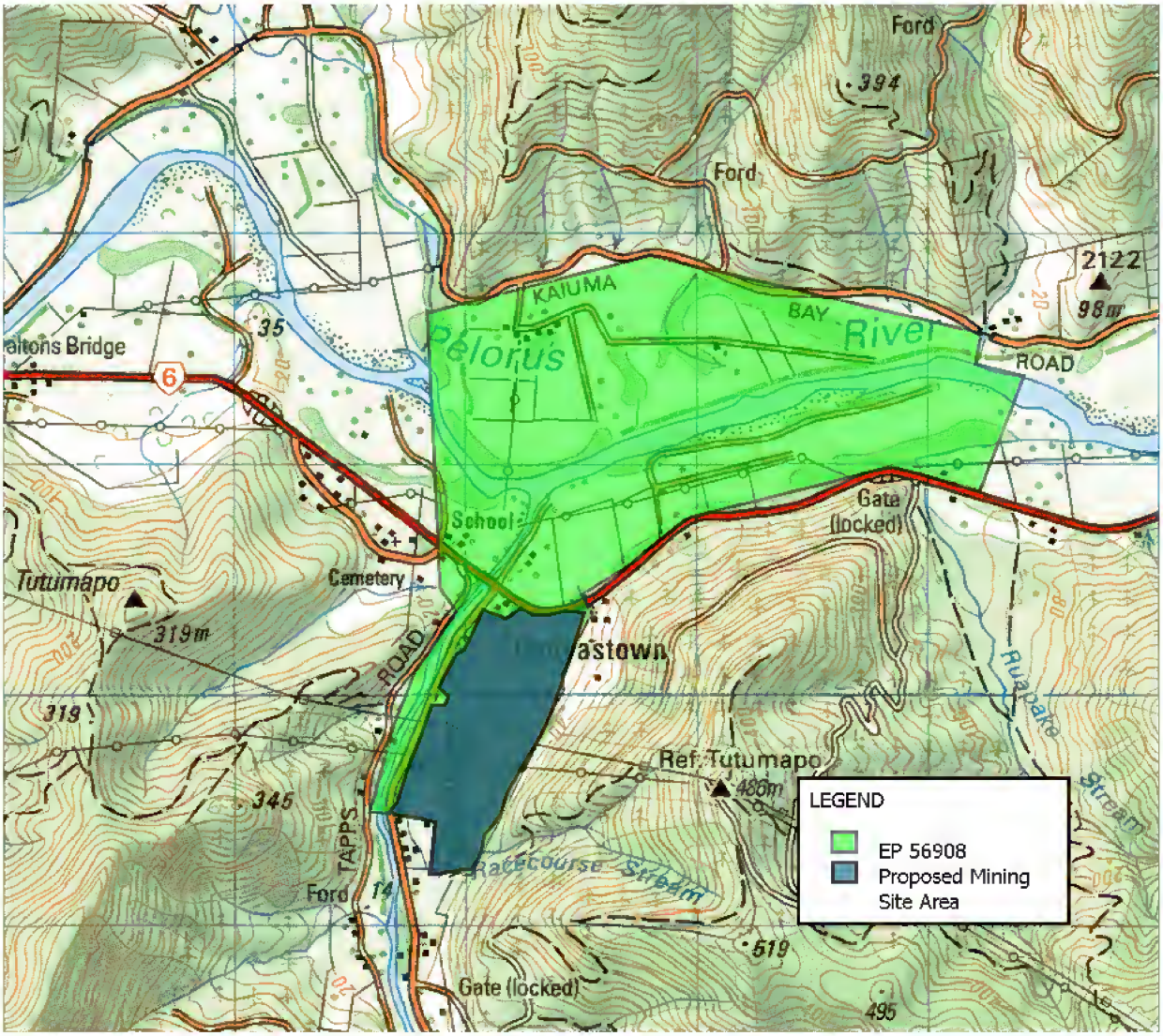
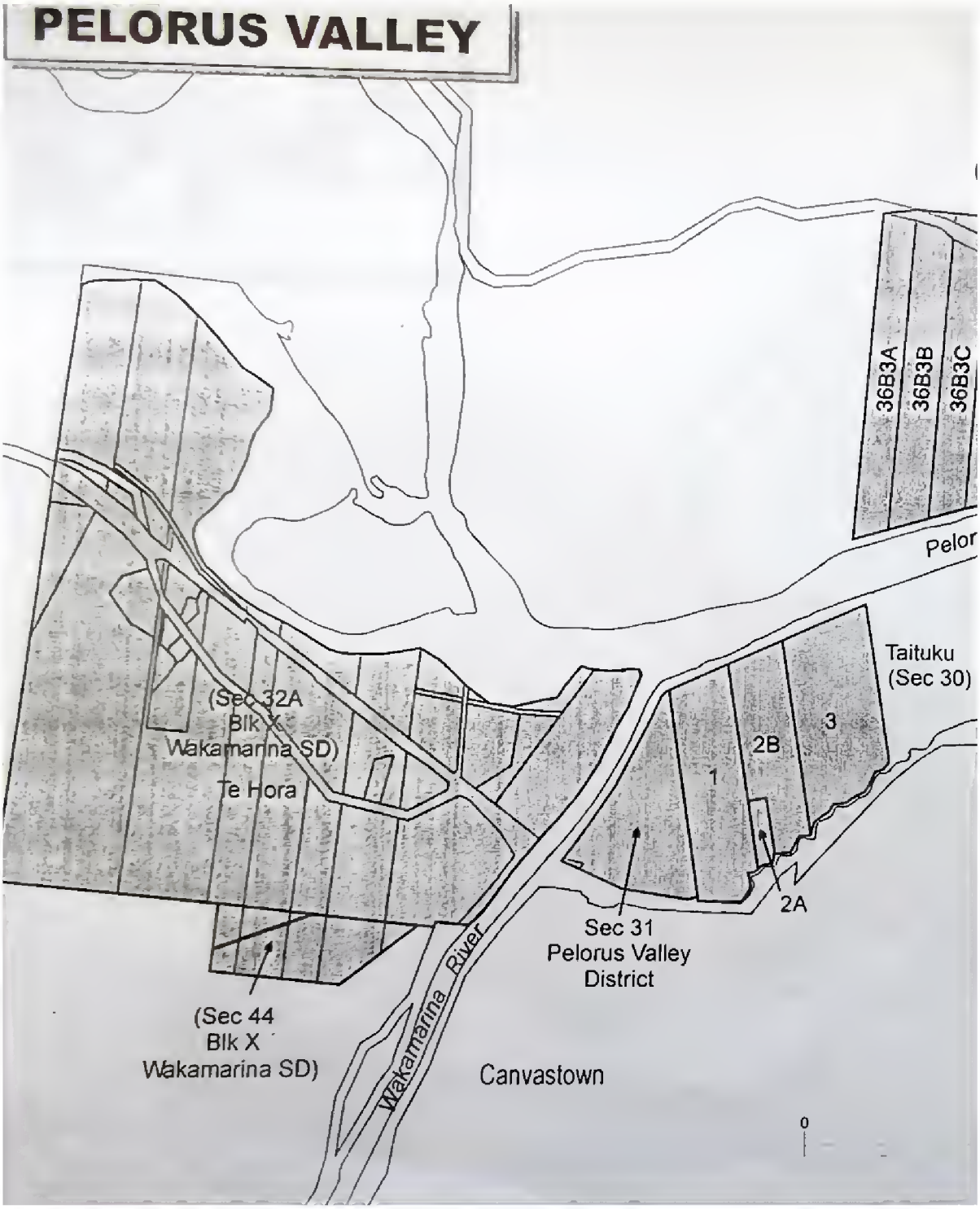


Fig. 2. Te Hora reserve, Sections 30 and 31



5. Bibliography

Archives New Zealand, Wellington.

R22907793 ABYB 23399 W5732 20 118. J. K. Hart claim, Quayles Terrace, Wakamarina. 1900

R22907808 ABYB 23399 W5732 20 133. J. K. Hart, license. 1901

R22914232 ABYB 23567 W5732 45 No. 3. J. K. Hart, license. 1908

R22912920 ABYB 23399 W5732 36 J. K. Hart, license No. 4. 1908

R22913343 ABYB 23399 W5732 39 No. 13. J. K. Hart, water-race license. 1933

R22913739 ABYB 23567 W5732 40 No. 411. J. K. Hart, license for water-race. 1933

R22912550 ABYB 23567 W5732 34 804B. J. K. Hart, transfer of site. 1935

Maori Land Court Minute Books

Nelson Minute Book #2

Nelson Minute Book #3

Nelson Minute Book #4

Printed and Published sources

D. Alexander. *Reserves of Te Tau Ihu (Northern South Island).* October, 1999. Wai 785. #A60. 432.

T. L. Buick. *Old Marlborough or the Story of a Province*. 1900

S. Campbell. *'A Living People', Ngati Kuia and the Crown, 1840-1856*. March, 2000. Wai 785. #A77

Marlborough District Council. 'Register of Significant Heritage Resources'. February 20, 2007

The Crown and Ngati Kuia Deed of Settlement. October 23, 2010

Ministry of Culture and Heritage. *New Zealand Heritage List/Rarangi Korero*

J. Rutland. 'Traces of Ancient Human Occupation in the Pelorus District, Middle Island, New Zealand'. *Journal of the Polynesian Society*. 1894. Vol. 3. No. 4. December, 1894

Appendix 12 – Groundwater Bore Locations

Appendix 12 - Bore Locations

To: Marlborough District Council
PO Box 443
Blenheim 7240

MARLBOROUGH DISTRICT COUNCIL

ISO 9001:2008
Document Number:
RAF0010-CI1220

SUBMISSION ON APPLICATION FOR A RESOURCE CONSENT

1. Submitter Details

Name of Submitter(s) in full _____

Address for Service *(include post code)* _____

_____

_____

Email _____

Telephone *(day)* Mobile Facsimile

Contact Person *(name and designation, if applicable)* _____

_____

2. Application Details

Application Number U _____

Name of Applicant *(state full name)* _____

Application Site Address _____

Description of Proposal _____

_____

_____

3. Submission Details *(please tick one)*

I/we support all or part of the application ☐

I/we oppose all or part of the application ☐

I/we are neutral to all or part of the application ☐

The specific parts of the application that my/our submission relates to are *(give details, using additional pages if required)*

_____

_____

_____

_____

The reasons for my/our submission are *(use additional pages if required)*

The decision I/we would like the Council to make is *(give details including, if relevant, the parts of the application you wish to have amended and the general nature of any conditions sought. Use additional pages if required)*

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4. Submission at the Hearing

I/we wish to speak in support of my/our submission ☐

I/we do not wish to speak in support of my/our submission ☐

OPTIONAL: Pursuant to section 100A of the Resource Management Act 1991 I/we request that the Council delegate its functions, powers, and duties required to hear and decide the application to one or more hearings commissioners who are not members of the Council. *(Please note that if you make such a request you may be liable to meet or contribute to the costs of commissioner(s). Requests can also be made separately in writing no later than 5 working days after the close of submissions.)* ☐

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5. Signature

Signature _____ Date _____

Signature _____ Date _____

6. Important Information

- Council must receive this completed submission before the closing date and time for submission for this application. The completed submission may be emailed to mdc@marlborough.govt.nz
- You must also send a copy of this submission to the applicant as soon as reasonably practicable, at the applicant's address for service.
- Only those submitters who indicate that they wish to speak at the hearing will be sent a copy of the hearing report.

7. Privacy Information

The information you have provided on this form is required so that your submission can be processed under the Resource Management Act 1991. The information will be stored on a public file held by Council. The details may also be available to the public on Council's website. If you wish to request access to, or correction of, your details, please contact Council.
