

APPLICATION FOR RESOURCE CONSENT OR FAST TRACK RESOURCE CONSENT FORM 9: SECTION 88 RESOURCE MANAGEMENT ACT 1991



1 Dunorling Street
PO Box 122, Alexandra 9340
New Zealand

Email to: resource.consent@codc.govt.nz

Post to: The Chief Executive
Central Otago District Council
PO Box 122
Alexandra 9340

RECEIVED
1/06/2022
CODC

+64 3 440 0056
info@codc.govt.nz
www.codc.govt.nz

CONTACT DETAILS OF APPLICATION

Full name(s) and contact details of owner/occupier/applicant: *(name will be issued on the decision)*

Postal Address

Email

Phone

Full name(s) and contact details for service of application *(if different from above)* e.g. Agent:

Postal Address

Email

Phone

DETAILS OF PROPERTY

Street address/rapid number of property to which this application relates:

Legal description of land:

DETAILS OF APPLICATION

Application Type(s) applying for: *(please tick one)*

- Land use consent
- Subdivision consent
- Change/Cancelation of consent or consent notice conditions
- Extension of lapse period of consent (time extension) s125
- Certificate of compliance
- Existing use certificate

Description of proposal:

- No additional resource consents are needed for the proposed activity.

Or

- The following additional resource consents are needed for the proposed activity. *(give details)*
They have / have not been applied for: *(please highlight)*

Under section 87AAC a controlled activity or deemed permitted boundary activity may be eligible for fast-track processing. Please select one:

I opt out / I do not opt out of the fast-track consent process.

PAYMENT DETAILS

I confirm amount and date paid:

Reference used (if applicable):

- Bank Transfer to 020916 0081744 00 (BNZ Alexandra Branch). Please reference payment the with the debtor number on your invoice or RC and the applicant surname in the payment details e.g. RCSMITH
- Cheque payable to Central Otago District Council
- Manual payment (can only be made once application lodged and RC reference number issued)

Invoicing Details:

If you require the invoices to be sent to someone other than the nominated contact person, please state their name and email address:

Development Contribution Requirements:

Some applications require Development Contributions.

If it is assessed that your application requires development contributions any invoices or correspondence relating to these will be sent via email.

Preferred name and email address for Development contributions correspondence & invoicing:

APPLICATION CHECKLIST**The following is attached to this application:**

(please tick boxes as appropriate)

- *Application fee of the prescribed amount (an additional charge may also be payable where the initial application fee is inadequate to recover Council costs).
- Assessment of the Effects on the Environment (AEE).
- *Copy of current Certificate of Title.
- *A location plan.
- *A site plan which shows the location of any buildings, driveways, parking areas or other significant features in relation to site boundaries. (Please ensure the paper size is either A4 or A3.)
- A building plan including the floor plan of the proposed building and elevations (if appropriate). (Please ensure the paper size is either A4 or A3.)
- Photographs of the site and of any important features relative to the application.
- Any other information required by the District Plan or Act or regulations to be included.

**Items with a star are required for all consent applications.*

Full details relating to the contents of applications are contained in the checklists and guidance notes available on Councils website www.codc.govt.nz or from any Council office.

Note to applicant:

You may apply for two or more resource consents that are needed for the same activity on the same form.

You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991 (if any).

I/We attach, in accordance with the Fourth Schedule of the Resource Management Act 1991, an assessment of environmental effects in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment.

I/We attach any information required to be included in this application by the district plan, the regional plan, the Resource Management Act 1991, or any regulations made under the Act.

(List all documents that you are attaching)

Subdivision consent requirements

As/if this is an application for a subdivision consent, I/We attach information that is sufficient to adequately define: *(delete if this is not an application for a subdivision consent)*

- (a) The position of all new boundaries; and
- (b) the areas of all new allotments; and *(delete if 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; and
- (d) the locations and areas of any existing esplanade reserves, esplanade strips, and access strips; and
- (e) the locations and areas of land below mean high water springs of the sea, or of any part of the bed of a river or lake, to be vested in the Crown or local authority under section 237A of the Resource Management Act 1991; and
- (f) the locations and area of land to be set aside as new roads.

As this is an application for a resource consent for reclamation, I/We attach information to show the area proposed to be reclaimed, including its location, the position of all new boundaries, and the portion of that area (if any) to be set apart as an esplanade reserve or esplanade strip. *(delete if this is not an application for a resource consent for reclamation)*



Signature

Date

(to be signed by applicant or person authorised to sign on behalf of applicant)



Our Ref: C2883

1st June 2022

Central Otago District Council
P O Box 122
ALEXANDRA 9320

Attention: Planning Officer

**Re: Application for Discretionary Subdivision Consent
Bendigo Loop Road – Loop Road Ltd**

1. On behalf of our client, we hereby apply for the above subdivision consent.
2. I attach evidence of payment of the \$900.00 application deposit fee.

Notification

3. Amendments to the Resource Management Act 1991 have removed the presumption of notification. Sections 95A – 95G of the Resource Management Act 1991 set out the specific steps the Council is required to consider in determining whether notification is required.
4. With respect to public notification under Section 95A:
 - a) None of the criteria for mandatory public notification under Set 1 apply.
 - b) Public notification is precluded under Step 2.
 - c) Step 3 is therefore not applicable.
 - d) There are no special circumstances that warrant the application being publicly notified under Step 4.
5. Accordingly, public notification is not required.
6. With respect to limited notification under Section 95B:
 - a) None of the criteria for limited notifying certain affected groups and persons under Step 1 apply.
 - b) None of the criteria for preclusion of limited notification under Step 2 apply.

DUNEDIN:
P.O. Box 5933,
Dunedin 9058.
T 03 477 3245

CHRISTCHURCH:
P.O. Box 160094,
Christchurch 8441.
T 03 928 1533

ALEXANDRA:
P.O. Box 103,
Alexandra 9340.
T 03 448 8775

CROMWELL:
P.O. Box 84,
Cromwell 9342.
T 03 445 1826

QUEENSTOWN:
P.O. Box 2645,
Queenstown 9349.
T 03 441 4715

WANAKA:
P.O. Box 283,
Wanaka 9305.
T 03 443 0110

- c) As detailed in the attached assessment of environmental effects, there are no persons who would be affected to a minor or more than minor extent by the application. Open space, natural character and amenity values will be maintained, and reverse sensitivity effects are not anticipated. Potential effects can be appropriately managed. Therefore, there are no affected persons that need to be limited notified under Step 3.
 - d) There are no special circumstances that warrant the application being limited notified under Step 4.
7. Accordingly, limited notification is not required.
8. Pursuant to Sections 95A-G, it is considered that this application can be processed without notification and without the need to obtain any written approvals.
9. Please forward, on a “without prejudice” basis, a draft of the proposed conditions of consent for our comments prior to issue of the consent. The applicant is happy to agree to a time extension to facilitate this, if required.

Yours faithfully



Rod Baxter
Snr Surveyor/Planner



14 April 2021

Peregrine Wines Limited
blair@peregrinewines.co.nz

Re: Preliminary Environmental Site Investigation at Lot 1 DP408812, Bendigo Loop Road, Bendigo

Our reference: 21010

1 Introduction

JKCM Limited, trading as Insight Engineering (IE), was contracted by Peregrine Wines Limited to undertake a preliminary environmental site investigation (PSI) of the property (herein referred to as 'the site') at Lot 1 DP408812, Bendigo Loop Road, Bendigo (contract reference P21010). Figure 1 (under Appendix 1) indicates the location of the property. IE understands that the property is proposed to be used for agricultural activities, but that the option for rural residential activities is desirable.

The approach to this investigation was to assess whether the Resource Management (*National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health*) Regulations¹ (herein referred to as the NES) apply to the site, according to criteria specified in NES Regulation 5. If the NES applies, the investigation would assess the suitability of the site for rural residential use.

This report was prepared in general accordance with the Ministry for the Environment (MfE) *Contaminated Land Management Guidelines (CLMG) No. 1: Reporting on Contaminated Sites in New Zealand*².

2 Objectives of the Investigation

The objectives of this report were to investigate the site history, in terms of potentially contaminating activities, and assess whether a risk to human health is likely to result from potential future rural residential use of the site.

2.1 Approach

IE completed the following scope of work to satisfy the investigation objectives:

2.1.1 Review of Site Information

- Desk based study of relevant publicly available environmental and geological publications, including historical aerial photographs;

- Undertaking a site walkover to describe current site conditions and assess whether any visual or olfactory evidence of contamination is present at the site;
- Undertake discussions with the son of the property owner and a site worker to determine the sites past uses, to identify activities which could have the potential to contaminate the site;
- Review of ORC Hazardous Activities, Industries and Bore Search database in terms of any property specific records of hazardous activities or industries that are held in their database of potentially contaminated sites;
- Reviewing the CODC NES Records Search statement to determine whether any records of contamination at the site are held in their database;
- Review the results of an electromagnetic conductivity survey of the property undertaken by AgriOptics New Zealand Limited;
- Review of existing laboratory results of soil nutrient tests undertaken by CRT Farm Centre and analysed by RJ Hill Laboratories; and
- Review of publicly available data describing the local geology and hydrogeology.

3 Site Description

Site information is summarised in Table 1.

Table 1: Site Information

Location	Bendigo Loop Road, Bendigo
Legal Description	Lot 1 DP408812
Property Owner	Peregrine Estate Limited
Current Site Use	Agricultural
Proposed Site Use	Agricultural and / or Rural Residential
Site Area	Approximately 389,229 m ² (38.9229 ha)
Territorial Authority	Central Otago District Council
Zoning	RU (Rural Resource Area)

The site setting is summarised in Table 2.

Table 2: Site Setting

Topography	<p>The site slopes gently from a high area along the northern property boundary (refer to Appendix 2), approximately 229 m above mean sea level (amsl), to the southern corner of the site where the elevation reaches a minimum of 224.6 m amsl. Localised gradients vary in direction across the property. The south eastern portion of the site is situated along the toe of a terrace that rises moderately to steeply towards the east.</p>
Local Setting	<p>The site is located in a rural area approximately 9 km south west of Tarras. The neighbouring properties toward the north east and west contain large vineyards. Dwellings are located north and east of the site. The remainder of the surrounding land (south east, south and south west) is used for agricultural purposes (pastoral grazing).</p>
Nearest Surface Water & Use	<p>Bendigo Creek is located approximately 850 m south of the southern corner of the site. The creek joins the Clutha River / <i>Mata-Au</i> approximately 1.77 km south west of the site, is located approximately 2.8 km to 2.9 km south east, south and south west of the site. The Clutha River / <i>Mata-Au</i> is used as a source of potable water as well as for recreational, irrigation and electricity generation purposes</p>
Geology	<p>The GNS New Zealand Geology Webmap³ indicates that the site is located within the Late Pleistocene river deposits geological unit, described as <i>'unweathered to slightly weathered, well sorted, sandy gravel forming large outwash terraces in Clutha catchment'</i>.</p> <p>The surface material observed during the site visit is broadly described as light grey silt with cobbles.</p>
Hydrogeology	<p>According to a report completed by ORC⁴, the site is located within the Bendigo Allocation Zone of an unconfined aquifer which is referred to as the Bendigo-Tarras groundwater system. Groundwater is considered likely to be present at an elevation of 201 to 203 m amsl and the flow is likely to be towards the south west.</p>
Groundwater Abstractions ⁵	<p>The following current or historical groundwater abstraction consents were issued for properties located at, or within 250 m of, the site:</p> <ul style="list-style-type: none"> • Consent number 2002.522 was issued in 2002 for Marlborough Development Company Limited to construct a bore to take water for irrigation of a vineyard for an unlimited term. The location of the consent is recorded near to the water storage tanks and pump house in the southern portion of the site. • Consent number 2002.523 was issued in 2002 for Marlborough Development Company Limited to construct a bore to take water for irrigation of a vineyard for an unlimited term. The location of the consent is recorded on the eastern side of Bendigo Loop Road, near to the dwelling located east of the eastern side boundary. <p>Consent number 2002.613.V2 was issued in 2003 for QWIL Investments (NZ) Pty Limited to take and use groundwater for the purpose of viticultural irrigation. The consent expires in 2028 and the location of the consent is recorded at the same location as consent 2002.523.</p>

Table 2 (cont.): Site Setting

Groundwater Abstractions (cont.) ⁵	<ul style="list-style-type: none"> • Consent number 2002.614 was issued in 2003 for New Zealand Vineyard Estates Limited to take and use groundwater for the purpose of viticultural irrigation. The consent expires in 2028 and the location of the consent is recorded at the same location as consent 2002.522. • Consent number RM.12.323.01 was issued in 2012 for QWIL Investments (NZ) Pty Limited to take and use groundwater from the Bendigo Aquifer for the purpose of irrigation. The consent expires in 2042 and the location of the consent is recorded at the same location as consent 2002.522. • Consent number RM.21.042.01 was issued in 2021 for Peregrine Estate Limited to construct a bore for the purpose of accessing groundwater. The consent expires in 2023 and the location of the consent is recorded along the site north eastern boundary.
Discharge Consents ⁵	There are no current or historical discharge consents issued for properties located at, or within 250 m of, the site.

3.1 Current Site Conditions

Claude Midgley of IE completed a site walkover inspection on 12 March 2021. Observations made at that time are summarised in Table 3 and photographs are presented in Appendix 3.

Table 3: Current Site Conditions

Visible signs of contamination	None
Surface water appearance	No surface water was present during the site walkover inspection.
Current surrounding land use	Mixed rural residential and agricultural (pastoral grazing and viticulture) land surrounds the property.
Local sensitive environments	No sensitive environments are located within 200 m of the site.
Visible signs of plant stress	Apart from seasonal stress caused by dry summer conditions, no visible signs of plant stress were noted.
Other	<p>A modern electrical transformer, which is unlikely to contain PCB based oil, was present adjacent to the well / pump shed area in the southern portion of the property. The transformer showed no signs of leaks.</p> <p>Wood chips were observed near to the centre of the site, covering an area measuring approximately 85 m by 10 m.</p>

3.2 Interview with the Son of the Property Owner and Site Worker

Blair McLachlan (*pers. Comm.*), a vineyard supervisor for Peregrine Estate Limited and son of the property owner, provided the following information:

- The site was owned by NZ Vineyard Estate Limited prior to 2012, when Peregrine Estate Limited purchased the property. The land was fallow prior to that time.
- The woolshed and yards had been removed from the property when Peregrine Estate Limited purchased the site and no visual evidence of contamination was observed at that time.

- The sawdust / wood chips placed near to the center of the site are untreated shavings used for livestock bedding.
- Green waste burning in the northern portion of the site was a one-off removal of dried tree stumps.
- Mr McLachlan indicated that the property is proposed to be used for agricultural activities, but that the option for rural residential activities is desirable.
- Mr McLachlan could not think of any activities that could have resulted in contamination impacts at the site.

Stephen Stuart (*pers. Comm.*), who has worked at the site since Peregrine Estate Limited purchased the land, provided the following information:

- Mr Stuart has been involved with maintaining infrastructure and ensuring the health of animals kept on site.
- The land has been used to breed cattle, starting with 30 breeding cows in approximately 2017. The herd has been increased to 60 cows and calves. The cattle are drenched on a neighbouring property.
- Prior to breeding cattle, bought steers were fattened on site prior to resale.
- The cattle have been viewed as a way to improve the soil quality in an organic way. A seaweed based fertilizer (Bio Marinus Organic Liquid Fish Fertiliser) is applied annually during springtime to improve grass growth.
- Rabbits are controlled by shooting, although Mt Stuart indicated that there are low numbers of rabbits due to significant portions of the boundary fences being reinforced with rabbit fencing.
- A shed and associated livestock yards had been present in the northern portion of the property, but they were demolished in approximately 2010/2011.
- Mr Stuart could not think of any other activities that could have resulted in contamination impacts at the site.

3.3 ORC Property Database

IE reviewed the ORC Hazardous Activities, Industries and Bore Search database⁶ on 24 March 2021. The search confirmed that property is not currently on the ORC database, however the absence of information does not necessarily mean that no contamination impacts are present at the property.

No contaminated sites are recorded within 5 km of the site.

3.4 CODC NES Records Search

The NES Records Search (Appendix 4) completed by Olivia Stirling, Planning Officer – Consents, on 25 March 2021 contains the following information:

- Several records in the NES search relate to neighbouring properties that had been part of an original block which included the subject site. The records include building permits for dwellings, alterations to dwellings and disposal of wastewater via soakage to ground.
- A building permit was issued for the erection of a new woolshed in 1965.

- Several subdivision and boundary adjustment consents were issued between 1996 and 2008.
- No known preliminary or detailed site investigations could be found on the property file.
- No information could be found on Council's aerial photographs that date back to 2006.

3.5 Review of Historical Aerial Photographs and Maps

Photographs in the Crown Collection⁷ and Google Earth⁸, as well as topomaps on the MapsPast⁹ website, have been reviewed to obtain information on the past uses of the site. Aerial photographs taken between 1958 and 2017, as well as maps created between 1929 and 2009, have been reviewed. Table 4 summarises the features visible in each image.

Table 4: Historical Aerial Photographs and Maps

1929 ⁹	The site is part of a larger block that includes the properties towards the north and south east of the site. The block is labelled 'For Subdivision'. A railway line, running along a north east / south west axis, is marked as crossing the property north of the site. No other significant features are apparent on the map.
1939 ⁹	The site remains part of a larger block that includes the properties towards the north and south east of the site. The block is now labelled '30' and '244,1,0'. The railway line is marked on the properties north east and west of the site, but not on the property north of the site, resulting in a gap between the portions of railway line. No other significant features are apparent on the map.
1949 ⁹	The map contains very few details. The site contains no features, Bendigo Loop Road and the railway line are not marked, although a corridor corresponding with the location of the railway line is present on the properties west of the site.
1957 ⁷	The site is undeveloped and appears to be vegetated with patchy turf or tussock grass. The surrounding land appears to be vegetated with the same plants and contains no structures. Bendigo Loop Road and the Tarras Cromwell Highway (SH8) are visible towards the east and west, respectively.
1958 ⁷	No changes are visible compared with the 1957 photograph.
1959 ⁷	No changes are visible compared with the 1958 photograph.
1962 ⁷	The photograph covers the central and norther portions of the site, but not the southern portion. No changes are visible compared with the 1959 photograph.
1975 ⁷	A shed and stock yards have been constructed in the northern corner of the site. Trees have been planted along the northern and north eastern site boundaries. A dwelling and ancillary buildings have been constructed on the neighbouring property towards the north. A track links the shed on the site to the neighbouring property towards the north. The southern half of the site is a darker colour than the northern half, suggesting that vegetation is denser in the southern area. No other changes are visible compared with the 1962 photograph.
1976 ⁷	No changes are visible compared with the 1975 photograph.
1977 ⁷	No changes are visible compared with the 1976 photograph.
1978 ⁷	No changes are visible compared with the 1977 photograph.
1979 ⁹	Apart from symbols indicating the presence of trees on the eastern side of the site and a terrace sloping downwards towards the site from the east, there are no significant features visible at the site or in the surrounding area.
1982 ⁷	Apart from the construction of a new dwelling east of the eastern site boundary, no significant changes are visible at the site or in the surrounding area.
1983 ⁷	No changes are visible compared with the 1982 photograph.

Table 4 (cont.): Historical Aerial Photographs and Maps

1984 ⁷	No changes are visible compared with the 1983 photograph.
1989 ⁹	No significant changes are apparent compared with the 1979 map.
1999 ⁹	A black square on the site indicates the presence of a building near to the northern corner. The word 'Clearvue' is present just south of the black square. No significant changes are apparent compared with the 1989 map.
2001 ⁷	Apart from a new row of trees crossing through the centre of the site along a roughly east / west axis, there are no changes are visible compared with the 1984 photograph.
2005 ⁸	A circular feature, resembling a pile of green waste ready for burning, is located approximately 245 m south of the northern corner of the site. Vineyards and a large dam have been established on the neighbouring properties toward the north west and north east. A large pivot irrigator has been installed in the neighbouring property towards the south west. There are no other significant changes apparent at the site or in the surrounding land.
2007 ⁸	No changes are visible compared with the 2005 photograph.
2009 ⁹	No significant changes are apparent compared with the 1999 map.
2011 ⁸	The shed has been removed, but the livestock yards remain. In the surrounding landscape, additional vineyards have been established east of the site on the east side of Bendigo Loop Road. There are no other significant changes apparent at the site or in the surrounding land.
2015 ⁸	The livestock yards have been removed and a track has been constructed through the centre of the site along a north / south axis. The track leads to an area containing a water tank and a pump house near to the south eastern site boundary. The site has been divided into six separate paddocks which appear to be managed differently due to different colours of vegetation in different paddocks.
2017 ⁸	No changes are visible compared with the 2015 photograph.
2019 ⁸	Bales of silage are visible along the site access track in three places. An area just north of the central shelter belt, measuring approximately 85 m by 10 m appears to contain piles of sawdust or wood chips. No other changes are visible compared with the 2017 photograph.
2019 ⁹	No significant changes are apparent compared with the 2009 map. The map erroneously indicates that the shed remains on the property.

3.6 Review of Existing Soil Quality Data

Soil quality tests were undertaken by CRT Farm Centre for Peregrine Wines Limited June 2013 (refer to Appendix 5). The samples are believed to have been taken from locations across the property.

The analyses (Appendix 4) included potassium, calcium, magnesium, sodium and other analytes relevant to soil nutrients and crop health, but not necessarily applicable to soil contamination assessment. However, five samples were tested for copper which is one of the priority contaminants identified in the NES¹.

Copper concentrations ranged between 0.7 mg/kg and 2.2 mg/kg, which is appropriate for rural residential use. According to the NES, the health limit for copper in soil exceeds 10,000 mg/kg.

3.7 Review of Electromagnetic Conductivity Survey Data

An electromagnetic (EM) conductivity survey was undertaken at the site by AgriOptics New Zealand Limited (AgriOptics) in 2019 (refer to Appendix 2). The results highlight zones of similar conductivity, which requires additional laboratory analysis to assess which parameters of each zone are the cause of the conductivity levels.

Accurate relative elevation data was also collected during the survey. The elevation map shows that the site elevation is highest in the northern portion of the site and lowest in the southern portion of the property.

The broad interpretation provided by AgriOptics states that zones which are more conductive relate to 'heavier soils' with greater clay content, whereas lower conductivity zones indicate the presence of 'lighter soils' which generally have a lower water holding capacity.

Although water greatly affects the soil conductivity readings, other parameters such as concentrations of metals can also influence the soil conductivity levels.

Zones of highest conductivity are located near to the northern portion of the site and approximately mid-way along the eastern property boundary. Further assessment would be required to determine whether those zones relate to areas of increased soil moisture, nutrients resulting from cattle manure or metal concentrations. It is possible that the results are a combination of the various factors.

3.8 Summary of Identified Hazardous Activities and Industries

Seven activities noted on the MfE Hazardous Activities and Industries List¹⁰ (HAIL) have been identified during review of the site history. The activities and their respective contaminants of concern are summarised in Table 5.

Table 5: HAIL Activities and Contaminants of Concern

Category A1 – Agrichemicals including commercial premises used by spray contractors for filling, storing or washing out tanks for agrichemical application.

This category is represented by the use of organic seaweed-based fertilizer on an annual basis.

Category A8 – Livestock dip or spray race operations.

This category is represented by the livestock yards that had been present adjacent to the shed. Although unconfirmed, it is considered possible that livestock were treated with pesticides within that area.

Category B2 – Electrical transformers including the manufacturing, repairing or disposing of electrical transformers or other heavy electrical equipment.

This category is represented by the presence of an electrical transformer adjacent to the pump shed in the southern portion of the property.

Category G5 – Waste disposal to land.

This category is represented by the likely green waste burn area in the northern half of the site, the area where sawdust / wood chips were placed onto the ground north of the central shelter belt, as well as the small amounts of metal waste that were encountered in isolated parts of the property.

3.9 Discussion

3.9.1 Former shed and livestock yards

Although no obvious visual indicators of contamination were observed within the former shed and livestock yards area, the EM survey (Appendix 2) has highlighted that the soil parameters are significantly different in that area, compared to the majority of the remainder of the site.

It is possible that a combination of factors, such as soil moisture, metals concentration and organic content resulting from livestock manure has resulted in the increased conductivity levels in that area.

It is also considered possible that livestock were treated with pesticides within that area, but the affected piece of land is considered likely to be relatively small and highly isolated.

3.9.2 Green waste burning area and sawdust / wood chip disposal area

Regular burning of green waste in the same location can result in the accumulation of heavy metals within that zone. Evidence in the aerial photographs suggests that the burn area was not used frequently or for a very long period of time.

Disposal of wood chips or sawdust to ground is not considered likely to result in contamination impacts.

4 Conceptual Site Model

A contamination conceptual site model, presented in Table 6, consists of three primary components to allow the potential for risk to be determined. These are:

- Source of contamination;
- Pathway to allow the contamination to mobilise; and
- Sensitive receptors which may be impacted by the contamination.

Table 6: Conceptual Site Model

Source	Pathway	Receptor
Heavy metals Organochlorine pesticides	Ingestion of home-grown produce; Inhalation of dust; Dermal absorption (direct contact); Ingestion of soil; Migration via groundwater flow; Ingestion of / direct contact with groundwater.	Residents; Visitors; Excavation workers; Site workers.
Acceptable risk to human health?	<p>Earthworks associated with land development Yes: It is considered highly unlikely that contamination impacts (if any) exceed the relevant criteria for earthworks activities.</p> <p>Residential use of the site (if required) Yes: The majority of the site is considered highly unlikely to pose a significant risk to human health. However, it is conservatively recommended that a future residential building platform (if required) is not located within the areas marked on Figure 2.</p> <p>Abstraction of groundwater Unknown: It is recommended that laboratory tests are undertaken to confirm that the water is potable prior to approval of domestic supply (if required).</p>	

5 Conclusions

Information obtained as part of this investigation (refer to Section 3) indicates that the site has been used to provide grazing to livestock from at least the 1960s. Consent was granted for the construction of a woolshed and associated livestock yards in 1965 and the structures were removed at some point in time between 2009 and 2011. It is considered possible that livestock were treated with pesticides within the area surrounding the woolshed.

A green waste burn area was observed in aerial photographs taken between 2005 and 2007. The area was located approximately 245 m south of the northern corner of the site and measured approximately 25 m by 20 m. No visual evidence of contamination impacts was observed in that area during the site walkover inspection.

Since the current owners purchased the site, livestock breeding has been the focus of the activities on the property. The herd of cattle has grown to 60 cows and calves, which have a positive and organic influence on the soil quality. An organic, seaweed based fertiliser is also applied on an annual basis to improve the soil nutrient status.

The HAIL activities identified during this investigation are considered unlikely to pose a significant risk to human health, if the potentially impacted areas are not used for residential purposes. If future building platforms (if any) are positioned away from the former livestock yards area and the area where green waste was burned, the site is considered suitable for rural residential use.

6 Recommendations

It is recommended that the proposed subdivision and potential change of use are allowed as a Permitted Activity under NES Regulation 8(4).

Furthermore, the positioning of future building platforms (if any) should be outside of the areas highlighted in Figure 2.

Future applications for subdivision / development / disturbance of the new properties should be assessed in terms of activities identified in this investigation and any potential new HAIL activities that could occur at any time after this report was written.

If any material showing signs of potential contamination (visual or olfactory) is unearthed during soil disturbance events, work should stop immediately and a suitably qualified environmental practitioner should be engaged to assess the risk to human health prior to recommencing earthworks

7 References

1. Ministry for the Environment 2012: Users' Guide National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health
2. Ministry for the Environment 2011: Contaminated Land Management Guidelines No.1: Reporting on Contaminated Sites in New Zealand
3. GNS Webmap Institute of Geological and Nuclear Sciences 2013: 1:250,000 Geology. Viewed at: <http://data.gns.cri.nz/geology/>
4. Otago Regional Council 2010: Bendigo and Tarras Groundwater Allocation Study. Viewed at: <https://www.orc.govt.nz/media/3807/bendigo-tarras-groundwater-allocation-study-2010-web.pdf>
5. Otago Regional Council 2017: Otago Regional Council Resource Consent Database. Viewed at: <http://data.orc.govt.nz/>
6. Otago Regional Council 2020: Mapping Resource Hazardous Activities, Industries and Bores Search. Viewed at:

<https://maps.orc.govt.nz/portal/apps/MapSeries/index.html?appid=052ba04547d74dc4bf070e8d97fd6819>

7. Local Government Geospatial Alliance 2017: Retrolens - Historical Image Resource Project. Viewed at: <http://retrolens.nz>
8. Google Earth v7.3.2.5491. Tarras, Central Otago, New Zealand. -44.856035° lon, 169.387421° lat, Eye alt 657 m. DigitalGlobe 2018. <http://www.earth.google.com>. [March 2019]
9. Mapspast 2017: Current and Historical Topographic Maps (Topomaps) of New Zealand. Viewed at: <http://www.mapspast.org.nz/>
10. Ministry for the Environment 2011: Ministry for the Environment Hazardous Activities and Industries List

8 Limitations

- i. We have prepared this report in accordance with the brief as provided. This report has been prepared for the use of our clients, Peregrine Wines Limited, their professional advisers and the relevant Territorial Authorities in relation to the specified project brief described in this report. No liability is accepted for the use of any part of the report for any other purpose or by any other person or entity.
- ii. The recommendations in this report are based on the ground conditions indicated from published sources, site assessments and subsurface investigations described in this report based on accepted normal methods of site investigations. Only a limited amount of information has been collected to meet the specific financial and technical requirements of the client's brief and this report does not purport to completely describe all the site characteristics and properties. The nature and continuity of the ground between test locations has been inferred using experience and judgement and it should be appreciated that actual conditions could vary from the assumed model.
- iii. Subsurface conditions relevant to construction works should be assessed by contractors who can make their own interpretation of the factual data provided. They should perform any additional tests as necessary for their own purposes.
- iv. This Limitation should be read in conjunction with the IPENZ/ACENZ Standard Terms of Engagement.
- v. This report is not to be reproduced either wholly or in part without our prior written permission.

We trust that this information meets your current requirements. Please do not hesitate to contact the undersigned on 021 556 549 if you require any further information. The author is a Certified Environmental Practitioner (CEnvP) under the Environment Institute of Australia and New Zealand (EIANZ) accreditation system.

Report prepared by



Claude Midgley, CEnvP


Associate Environmental Scientist



APPENDIX 1

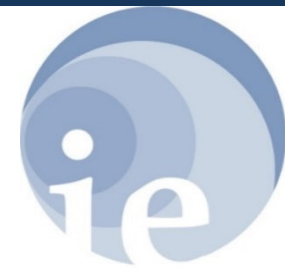
Figures



Description	Site Location Plan	Figure Number	1	
Project	Preliminary Environmental Site Investigation Lot 1 DP408812, Bendigo Loop Road, Bendigo	Date	Apr-21	
Client	Peregrine Wines Limited	Drawn by	CM	
Project Number	21010	Approved by	JK	



Description	Potentially Impacted Areas Plan	Figure Number	2
Project	Preliminary Environmental Site Investigation Lot 1 DP408812, Bendigo Loop Road, Bendigo	Date	Apr-21
Client	Peregrine Wines Limited	Drawn by	CM
Project Number	21010	Approved by	JK



APPENDIX 2

EM Survey Report



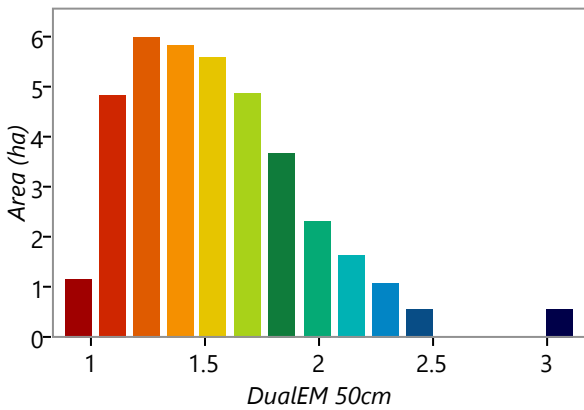
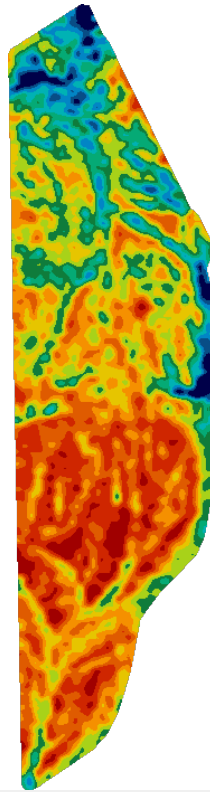
Grower Peregrine Estate Limited

Farm Bendigo

Field Cattle Block

DualEM 50cm

Powered by pct-ag.com



Layer name	DualEM 50cm
Field name	Cattle Block
Season	2019
Activity date	26/08/2019
Min	0.87
Min	0.87
Mean	1.55
Mode	1.25
Max	3.59
SD	0.37
CV	24.01%
Total	58.51
Total Area	37.74 ha

Comments:

This map shows the EM values of the top 50cm of the soil. The blue areas on this map are heavier soils with a greater clay content, these soils tend to have a greater water holding capacity and greater nutrient availability than lighter soils. The red areas on the map are the lighter soils which generally have a lower water holding capacity. This map shows that the northern end of the block has slightly heavier soils than the southern end.



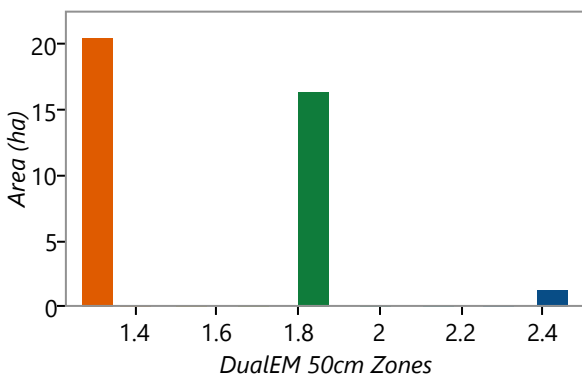
Grower Peregrine Estate Limited

Farm Bendigo

Field Cattle Block

DualEM 50cm Zones

Powered by pct-ag.com



Layer name	DualEM 50cm Zones
Field name	Cattle Block
Season	2019
Min	1.3
Min	1.3
Mean	1.55
Mode	1.31
Max	2.47
SD	0.3
CV	19.10%
Total	58.5
Total Area	37.74 ha

Comments:

This map simplifies the previous EM map, it is broken up to 3 zones of 2 standard deviation per zone. Areas less than 0.10ha in size have been removed and the edges have been smoothed out. This map will be a good one to use for creating management zones. This map can be further simplified if required.

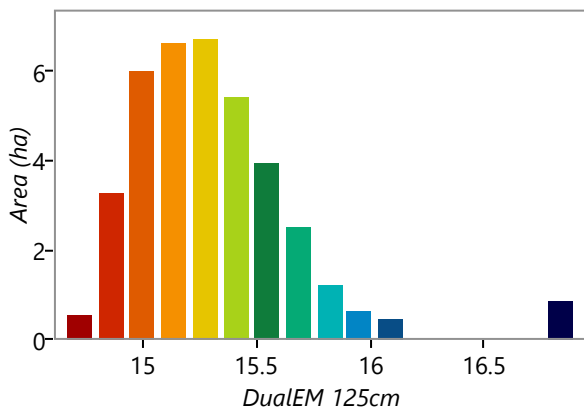
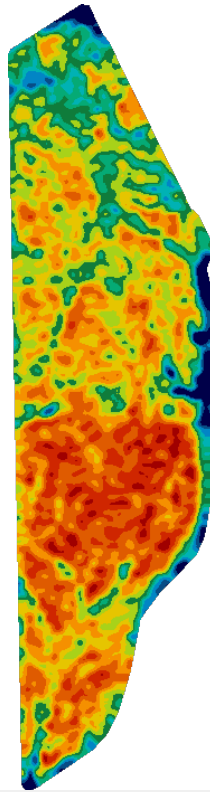


Grower Peregrine Estate Limited

Farm Bendigo

Field Cattle Block

DualEM 125cm



Layer name	DualEM 125cm
Field name	Cattle Block
Season	2019
Activity date	26/08/2019
Min	14.65
Min	14.65
Mean	15.3
Mode	15.27
Max	17.53
SD	0.33
CV	2.17%
Total	577.24
Total Area	37.74 ha

Comments:

This map shows the deep EM values (0-125cm depth). Red areas consist of soils with a coarser texture (e.g. sand) and the blue areas consist of soils with finer textures such as clay. This map shows similar trends to the shallow EM map, showing that the soil type is likely to be consistent down to a depth of 125cm.

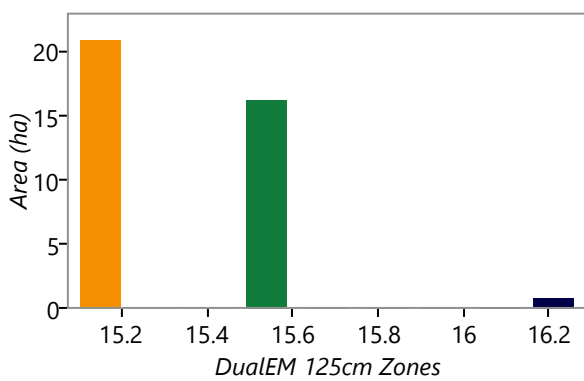


Grower Peregrine Estate Limited

Farm Bendigo

Field Cattle Block

DualEM 125cm Zones



Layer name	DualEM 125cm Zones
Field name	Cattle Block
Season	2019
Min	15.09
Min	15.09
Mean	15.29
Mode	15.15
Max	16.26
SD	0.24
CV	1.59%
Total	576.88
Total Area	37.74 ha

Comments:

This map is broken up to 3 zones of 2 standard deviation per zone. Areas less than 0.10ha in size have been removed and the edges have been smoothed out. This map can be simplified or made more complex if required.



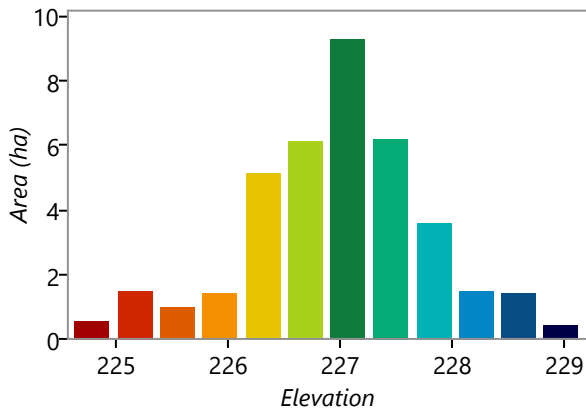
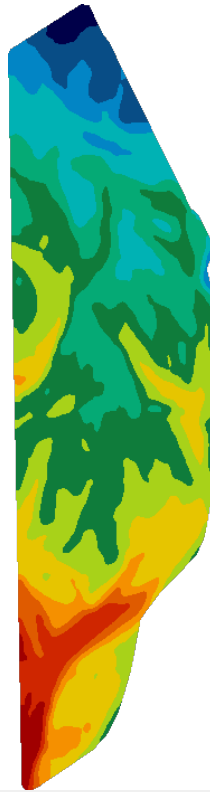
Grower Peregrine Estate Limited

Farm Bendigo

Field Cattle Block

Elevation

Powered by pct-ag.com



Layer name	Elevation
Field name	Cattle Block
Season	2019
Activity date	26/08/2019
Min	224.6
Min	224.6
Mean	226.97
Mode	227.07m
Max	229.16
SD	0.8
CV	0.35%
Total	8564.85
Total Area	37.74 ha

Comments:

The elevation falls from the north towards the south end of the block, the fall in elevation over the whole block is 4.56m.



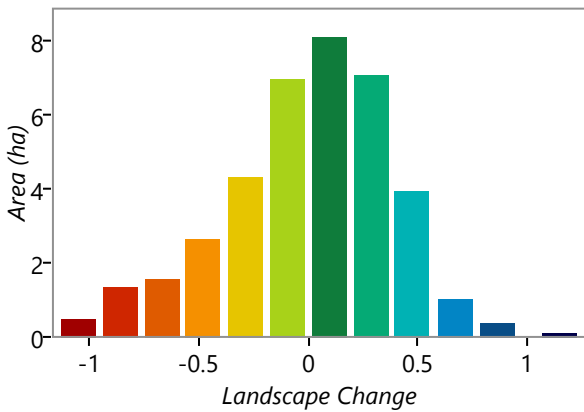
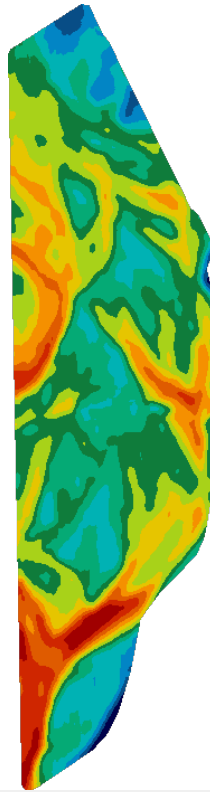
Grower Peregrine Estate Limited

Farm Bendigo

Field Cattle Block

Landscape Change

Powered by pct-ag.com



Layer name	Landscape Change
Field name	Cattle Block
Season	2019
Activity date	26/08/2019
Min	-1.15
Min	-1.15
Mean	0
Mode	0.09m
Max	1.32
SD	0.38
CV	8946.61%
Total	-0.16
Total Area	37.74 ha

Comments:

The landscape change is measured in meters, the areas in green are the average elevation. The areas in red and orange are the low-lying areas and are up to 1.15m deeper than the average surrounding landscape. The areas in blue and green colours are the higher than average (up to 1.32m higher than the surrounding landscape). The areas in red are more likely to collect water in a high rainfall event and therefore be more susceptible to nutrient leaching.



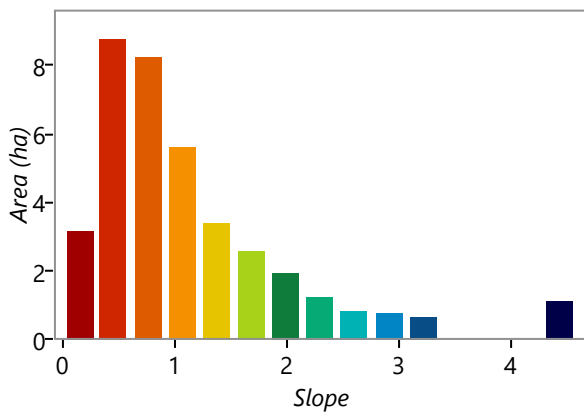
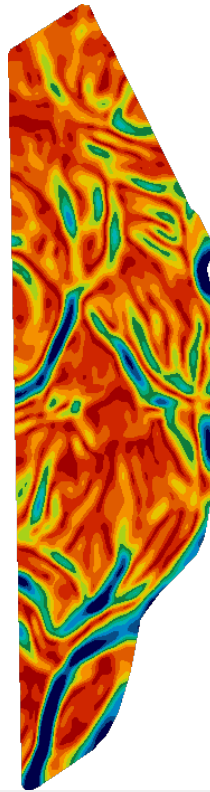
'the future of farming'

Grower Peregrine Estate Limited

Farm Bendigo

Field Cattle Block

Slope



Layer name	Slope
Field name	Cattle Block
Season	2019
Activity date	26/08/2019
Min	0.01
Min	0.01
Mean	1.13
Mode	0.46
Max	5.51
SD	0.85
CV	75.49%
Total	42.47
Total Area	37.74 ha

Comments:

This map is measured in % slope. The maximum slope on this block is 5.51%. The areas of high slope are the blue areas on the map.



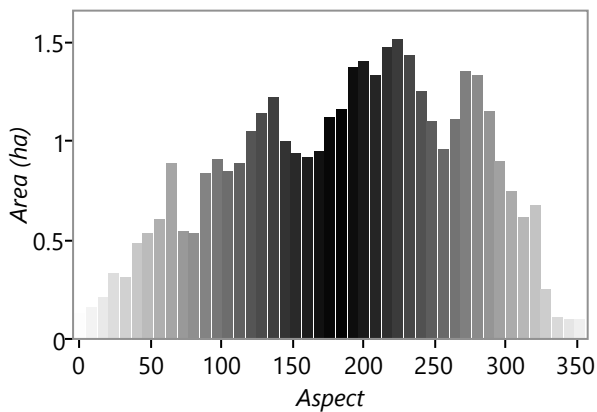
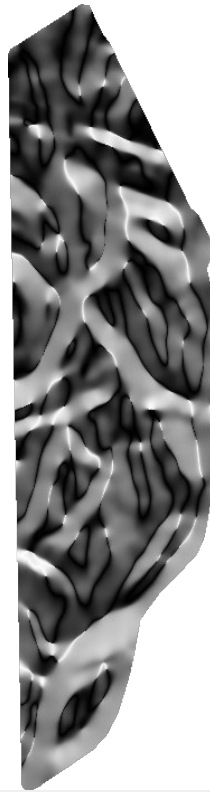
'the future of farming'

Grower Peregrine Estate Limited

Farm Bendigo

Field Cattle Block

Aspect



Layer name	Aspect
Field name	Cattle Block
Season	2019
Activity date	26/08/2019
Min	0.02
Min	0.02
Mean	191.24
Mode	224
Max	359.98
SD	80.38
CV	42.03%
Total	7216.69
Total Area	37.74 ha

Comments:

This aspect map shows that the majority of the block faces the south west.

The x axis is labelled 0 - 360:

0 50 100 150 200 250 300 350

N E S W N

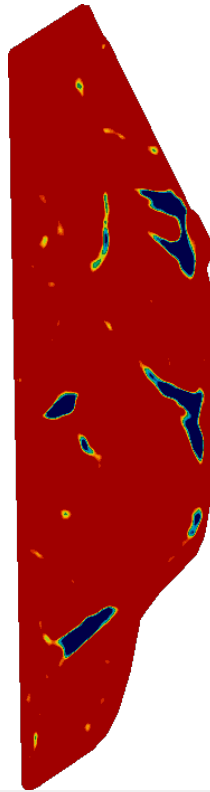


Grower Peregrine Estate Limited

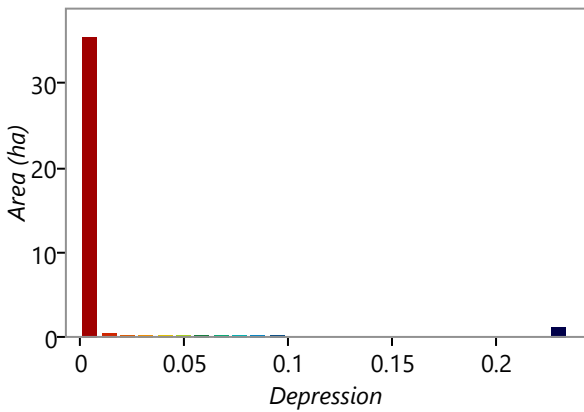
Farm Bendigo

Field Cattle Block

Depression



Powered by pct-ag.com



Layer name	Depression
Field name	Cattle Block
Season	2019
Activity date	26/08/2019
Min	0
Min	0
Mean	0.01
Mode	0m
Max	0.36
SD	0.03
CV	467.92%
Total	0.27
Total Area	37.74 ha

Comments:

This map highlights any depressions that we drove through when EM surveying. The depressions are up to 0.36m deep, these areas are likely to collect water after rainfall and can be higher risk areas for nutrient leaching.



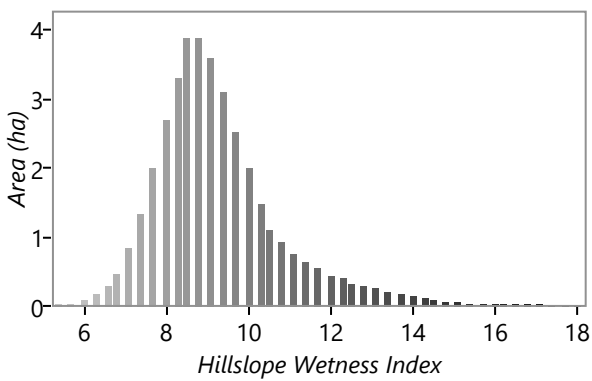
Grower Peregrine Estate Limited

Farm Bendigo

Field Cattle Block

Hillslope Wetness Index

Powered by pct-ag.com



Layer name	Hillslope Wetness Index
Field name	Cattle Block
Season	2019
Min	5.41
Min	5.41
Mean	9.38
Mode	8.55
Max	18.24
SD	1.48
CV	15.81%
Total	353.82
Total Area	37.74 ha

Comments:

This map shows the direction of water flow after rainfall or irrigation, water will flow from the light grey to the dark grey areas.



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Grower Peregrine Estate Limited

Farm Bendigo

Field All shown

Measurement layers

Layer name	Field name	Season	Activity date	Min	Mean	Mode	Max	SD	CV	Total	Total Area
DualEM 50cm	Cattle Block	2019	26/08/2019	0.87	1.55	1.25	3.59	0.37	24.01%	58.51	37.74 ha
DualEM 50cm Zones	Cattle Block	2019		1.3	1.55	1.31	2.47	0.3	19.10%	58.5	37.74 ha
DualEM 125cm	Cattle Block	2019	26/08/2019	14.65	15.3	15.27	17.53	0.33	2.17%	577.24	37.74 ha
DualEM 125cm Zones	Cattle Block	2019		15.09	15.29	15.15	16.26	0.24	1.59%	576.88	37.74 ha
Elevation	Cattle Block	2019	26/08/2019	224.6	226.97	227.07m	229.16	0.8	0.35%	8564.85	37.74 ha
Landscape Change	Cattle Block	2019	26/08/2019	-1.15	0	0.09m	1.32	0.38	8946.61%	-0.16	37.74 ha
Slope	Cattle Block	2019	26/08/2019	0.01	1.13	0.46	5.51	0.85	75.49%	42.47	37.74 ha
Aspect	Cattle Block	2019	26/08/2019	0.02	191.24	224	359.98	80.38	42.03%	7216.69	37.74 ha
Depression	Cattle Block	2019	26/08/2019	0	0.01	0m	0.36	0.03	467.92%	0.27	37.74 ha
Hillslope Wetness Index	Cattle Block	2019		5.41	9.38	8.55	18.24	1.48	15.81%	353.82	37.74 ha
				-1.15	46.242		359.98			17449.07	377.4ha

APPENDIX 3

Site Photographs



Photo 1: Northern corner of the site viewed from the north east, facing north west.



Photo 2: Northern portion of the site viewed from the north east, facing west north west.



Photo 3: Northern property boundary, viewed from the north east facing south west.



Photo 4: Northern property boundary, viewed from the north west facing north east.



Photo 5: Former woolshed area viewed from the north, facing south east.



Photo 6: North western property boundary viewed from the north west, facing south.


Description	Site Photographs	Photos	1 to 6	
Project	Preliminary Environmental Site Investigation Lot 1 DP408812, Bendigo Loop Road, Bendigo	Date Taken	12/03/21	
Client	Peregrine Wines Limited	Taken by	CM	
Project Number	21010	Approved by	JK	



Photo 7: Southern portion of the site, viewed from the southern corner facing north.



Photo 8: Southern portion of the site, viewed from the southern corner facing north east.



Photo 9: Well area with storage tanks, pump shed and electrical transformer.



Photo 10: Livestock ramp and sawdust near to the centre of the site.



Photo 11: Small amount of metal waste near to the north eastern property boundary.



Photo 12: Spare fencing wire near to the north eastern property boundary.

Description	Site Photographs	Photos	7 to 12
Project	Preliminary Environmental Site Investigation Lot 1 DP408812, Bendigo Loop Road, Bendigo	Date Taken	12/03/21
Client	Peregrine Wines Limited	Taken by	CM
Project Number	21010	Approved by	JK



APPENDIX 4
CODC NES Records Search



NES RECORD SEARCH

Application

JKCM Limited PO Box 456, Cromwell 9342	Number NES210014 Application date 9/03/2021 Phone Mobile 021 556 549 Email Claude@insighteng.co.nz
--	--

Property

Valuation No.	2841111409
Location	Bendigo Loop Road, Bendigo
Legal Description	LOT 1 DP 408812
Area (hectares)	38.9717

Resource consents

Resource Area: Rural Resource Area

Consents:

- 8/04/2008 RESOURCE CONSENT 080127:** Two lot rural subdivision creating allotments of 39.39ha and 26.18ha with amalgamation condition
This record indicates that some of the land is capable of being used for independent productive farming purposes including existing vineyard activities. Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds is listed as item A10 on the HAIL and may trigger NES requirements. Livestock dip or spray race operations are listed as item A8 on the HAIL and may trigger NES requirements.
- 14/09/2005 RESOURCE CONSENT 050349:** 5 lot rural subdivision creating allotments ranging in size from 2 ha to 65.7 ha
(Found on related property: X2841111406)
This record indicates that wastewater is to be disposed of on site in accordance with the requirements of AS/NZS 1547:2000. Wastewater treatment is item G6 on the HAIL and may trigger NES requirements.
- 19/03/2004 RESOURCE CONSENT 040118:** 13 lot rural subdivision creating allotments with sizes ranging from 6.9ha to 9.4ha
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
- 19/09/2001 RESOURCE CONSENT 010133:** Subdivision to create 3 rural allotments
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
- 3/01/2001 RESOURCE CONSENT 010001:** Boundary adjustment subdivision
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
- 24/12/1996 RESOURCE CONSENT 960238:** Subdivision of a surplus dwelling
(Found on related property: 2841111400)]
No information in regards to HAIL activity could be found on this record.

Building

Consents/Permits/Compliance Schedules:

- 20/09/2016 BUILDING CONSENT 160808:** Convert existing room to bathroom
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
- 26/05/2014 BUILDING CONSENT 140290:** Install a new Metro fire
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
- 26/09/2007 BUILDING CONSENT 070696:** Internal alterations & new deck/verandah to existing dwelling.
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
- 1/03/2005 BUILDING CONSENT 050114:** Install a new fire appliance.
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
- 8/04/2003 BUILDING CONSENT 930159:** Reinstate fire destroyed dwelling
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
- 30/06/1983 BUILDING PERMIT A78495:** Additions to dwelling
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
- 30/03/1979 BUILDING PERMIT 1326:** Plumbing and drainage permit.
(Found on related property: 2841111400)
No information in regards to HAIL activity could be found on this record.
Note: wastewater disposed of on site in accordance with the requirements of AS/NZS 1547:2000. Wastewater treatment is item G6 on the HAIL and may trigger NES requirements.
- 13/10/1978 BUILDING PERMIT H141988:** Erect new dwelling.
(Found on related property: 2841111400 - LOT 1 DP 362171)
- 4/06/1965 BUILDING PERMIT B000082:** Erect new woolshed.
Activities associated with rural sheds can include storage tanks or drums for fuel or chemicals (Item A17) or landfill (item G3). If any of these activities have occurred on the site it may trigger NES requirements.

Preliminary Site Investigations and Detailed Site Investigations

No other information in regards to the above could be found on the property file.

Aerial Photographs

Council's aerial photographs date back to 2006. Other than as outlined above no evidence of HAIL activity could be found on previous aerial photographs.

Disclaimer: The Council does not hold records directly relating to activities on the Hazardous Activities and Industries List (HAIL). In the event some information is available it cannot be guaranteed as correct or complete and therefore may not satisfy your request. We therefore recommend you undertake further investigation to determine whether any HAIL activities exist on the site.



Olivia Stirling
Planning Officer - Consents

Date: 25 March 2021

APPENDIX 5

Soil Nutrients Laboratory Results



Hill Laboratories
BETTER TESTING BETTER RESULTS

R J Hill Laboratories Limited
1 Clyde Street
Private Bag 3205
Hamilton 3240, New Zealand

Tel +64 7 858 2000
Fax +64 7 858 2001
Email mail@hill-labs.co.nz
Web www.hill-labs.co.nz

ANALYSIS REPORT Page 3 of 5

Client: L McLachlan	Lab No: 1143646 <small>shMAFPv1</small>
Address: C/- Peregrine Wines 2127 Kawarau Gorge Road RD 1, Gibbston QUEENSTOWN 9300	Date Registered: 08-Jun-2013 Date Reported: 12-Jun-2013
Phone: 03 742 4000	Quote No: Order No: D111029074 Client Reference: Submitted By: A Brown

Sample Name: North ~~Zebra~~ **Block .** **CATTLE BLOCK** **Lab Number:** 1143646.3
Sample Type: SOIL Grape, Vineyard (S49) **NORTH.**

Analysis	Level Found	Medium Range	Low	Medium	High	
pH	pH Units	5.6	5.8 - 6.8			
Olsen Phosphorus	mg/L	19	15 - 40			
Potassium	MAF units	9	7 - 15			
Calcium	MAF units	3	7 - 14			
Magnesium	MAF units	9	21 - 63			
Sodium	MAF units	< 2	0 - 19			
Soil Sample Depth*	mm	0-150				
Base Saturation %	K 5.3 Ca 26 Mg 5.2 Na 0.2					
me/100g	K 0.42 Ca 2.1 Mg 0.42 Na < 0.05					
Additional Properties	Cation Exchange Capacity (me/100g) 8					
	Total Base Saturation (%) 37					
	Volume Weight (g/mL) 0.99					

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.

Andrew Brown
027 297 0568



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1 Clyde Street
Private Bag 3205
Hamilton 3240, New Zealand

Tel +64 7 858 2000
Fax +64 7 858 2001
Email mail@hill-labs.co.nz
Web www.hill-labs.co.nz

ANALYSIS REPORT Page 1 of 5

Client: L McLachlan	Lab No: 1143646 <small>shMAFpv1</small>
Address: C/- Peregrine Wines 2127 Kawarau Gorge Road RD 1, Gibbston QUEENSTOWN 9300	Date Registered: 08-Jun-2013 Date Reported: 12-Jun-2013
Phone: 03 742 4000	Quote No: Order No: D111029074 Client Reference: Submitted By: A Brown

Sample Name: ~~South Zebra~~ ~~MID BLOCK~~ **CATTLE BLOCK** **Lab Number:** 1143646.1
Sample Type: SOIL Grape, Vineyard (S49)

Analysis	Level Found	Medium Range	Low	Medium	High	
pH	pH Units	5.4	5.8 - 6.8			
Olsen Phosphorus	mg/L	19	15 - 40			
Potassium	MAF units	5	7 - 15			
Calcium	MAF units	2	7 - 14			
Magnesium	MAF units	9	21 - 63			
Sodium	MAF units	< 2	0 - 19			
Soil Sample Depth*	mm	0-150				
Base Saturation % me/100g	K 3.3 Ca 19 Mg 5.2 Na 0.2 K 0.27 Ca 1.6 Mg 0.42 Na < 0.05					
Additional Properties	Cation Exchange Capacity (me/100g) 8 Total Base Saturation (%) 28 Volume Weight (g/mL) 0.95					

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.

→ DEPTH OF SAMPLING?

→ IMPLICATIONS OF PLOUGHING?



This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised. The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked *, which are not accredited.



ANALYSIS REPORT

Client: Lamont Livestock	Lab No: 1143646	shMAFpv2
Address: C/- AB Lime PO Box 102 WINTON 9741	Date Registered: 08-Jun-2013	
	Date Reported: 24-Jul-2013	
	Quote No:	
	Order No: D111029074	
	Client Reference:	
	Submitted By: A Brown	

Amended Report

This report replaces an earlier report issued on the 12 Jun 2013 at 2:46 pm
Additional tests included and client and sample name details amended.

Sample Name: Mid Block **Lab Number:** 1143646.1
Sample Type: SOIL Mixed Pasture, Sed/low PR (Dry Stock) (S197)

Analysis	Level Found	Medium Range	Low	Medium	High
pH	pH Units	5.4	5.8 - 6.2		
Olsen Phosphorus	mg/L	19	15 - 25		
Potassium	MAF units	5	6 - 8		
Calcium	MAF units	2	4 - 10		
Magnesium	MAF units	9	17 - 30		
Sodium	MAF units	< 2	10 - 19		
Sulphate Sulphur	mg/kg	2	10 - 12		
Boron	mg/kg	0.3	1.0 - 2.0		
Iron	mg/kg	160			
Manganese	mg/kg	21	50 - 400		
Zinc	mg/kg	0.8	2.0 - 10.0		
Copper	mg/kg	0.7	1.0 - 5.0		
Cobalt	mg/kg	0.2	2.0 - 4.0		
'Total' Phosphorus	mg/kg	516			
'Total' Sulphur	mg/kg	126	600 - 1000		
Soil Sample Depth*	mm	0-150			
Base Saturation % me/100g	K 3.3 Ca 19 Mg 5.2 Na 0.2 K 0.27 Ca 1.6 Mg 0.42 Na < 0.05				
Additional Properties	Cation Exchange Capacity (me/100g) 8 Total Base Saturation (%) 28 Volume Weight (g/mL) 0.95				

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.



This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.

The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked *, which are not accredited.



ANALYSIS REPORT

Client: Lamont Livestock	Lab No: 1143646	shMAFpv2
Address: C/- AB Lime PO Box 102 WINTON 9741	Date Registered: 08-Jun-2013	
	Date Reported: 24-Jul-2013	
	Quote No:	
	Order No: D111029074	
	Client Reference:	
	Submitted By: A Brown	

Amended Report

This report replaces an earlier report issued on the 12 Jun 2013 at 2:46 pm
Additional tests included and client and sample name details amended.

Sample Name: South Block **Lab Number:** 1143646.2
Sample Type: SOIL Mixed Pasture, Sed/low PR (Dry Stock) (S197)

Analysis	Level Found	Medium Range	Low	Medium	High
pH	pH Units	5.5	5.8 - 6.2		
Olsen Phosphorus	mg/L	25	15 - 25		
Potassium	MAF units	7	6 - 8		
Calcium	MAF units	2	4 - 10		
Magnesium	MAF units	10	17 - 30		
Sodium	MAF units	< 2	10 - 19		
Sulphate Sulphur	mg/kg	1	10 - 12		
Boron	mg/kg	0.3	1.0 - 2.0		
Iron	mg/kg	158			
Manganese	mg/kg	23	50 - 400		
Zinc	mg/kg	1.0	2.0 - 10.0		
Copper	mg/kg	0.8	1.0 - 5.0		
Cobalt	mg/kg	0.2	2.0 - 4.0		
'Total' Phosphorus	mg/kg	543			
'Total' Sulphur	mg/kg	126	600 - 1000		
Soil Sample Depth*	mm	0-150			
Base Saturation % me/100g	K 4.2 Ca 22 Mg 5.7 Na 0.2				
Additional Properties	K 0.33 Ca 1.8 Mg 0.45 Na < 0.05				
	Cation Exchange Capacity (me/100g) 8				
	Total Base Saturation (%) 32				
	Volume Weight (g/mL) 1.03				

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.

ANALYSIS REPORT

Client: Lamont Livestock	Lab No: 1143646	shMAFpv2
Address: C/- AB Lime PO Box 102 WINTON 9741	Date Registered: 08-Jun-2013	
	Date Reported: 24-Jul-2013	
	Quote No:	
	Order No: D111029074	
	Client Reference:	
	Submitted By: A Brown	

Amended Report

This report replaces an earlier report issued on the 12 Jun 2013 at 2:46 pm
Additional tests included and client and sample name details amended.

Sample Name: North Block	Lab Number: 1143646.3
Sample Type: SOIL Mixed Pasture, Sed/low PR (Dry Stock) (S197)	

Analysis	Level Found	Medium Range	Low	Medium	High
pH	pH Units	5.6	5.8 - 6.2		
Olsen Phosphorus	mg/L	19	15 - 25		
Potassium	MAF units	9	6 - 8		
Calcium	MAF units	3	4 - 10		
Magnesium	MAF units	9	17 - 30		
Sodium	MAF units	< 2	10 - 19		
Sulphate Sulphur	mg/kg	3	10 - 12		
Boron	mg/kg	0.3	1.0 - 2.0		
Iron	mg/kg	161			
Manganese	mg/kg	25	50 - 400		
Zinc	mg/kg	1.1	2.0 - 10.0		
Copper	mg/kg	0.7	1.0 - 5.0		
Cobalt	mg/kg	0.2	2.0 - 4.0		
'Total' Phosphorus	mg/kg	521			
'Total' Sulphur	mg/kg	152	600 - 1000		
Soil Sample Depth*	mm	0-150			
Base Saturation %	K 5.3 Ca 26 Mg 5.2 Na 0.2				
me/100g	K 0.42 Ca 2.1 Mg 0.42 Na < 0.05				
Additional Properties	Cation Exchange Capacity (me/100g) 8				
	Total Base Saturation (%) 37				
	Volume Weight (g/mL) 0.99				

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.

ANALYSIS REPORT

Page 4 of 6

Client: Lamont Livestock	Lab No: 1143646	shMAFpv2
Address: C/- AB Lime PO Box 102 WINTON 9741	Date Registered: 08-Jun-2013	
	Date Reported: 24-Jul-2013	
	Quote No:	
	Order No: D111029074	
	Client Reference:	
	Submitted By: A Brown	

Amended Report

This report replaces an earlier report issued on the 12 Jun 2013 at 2:46 pm
Additional tests included and client and sample name details amended.

Analyst's Comments

Samples 1-3 Comment:

The medium range guidelines shown in the histogram report relate to sampling protocols as per Hill Laboratories' crop guides and are based on reference values where these are published. Results for samples collected to different depths than those described in the crop guide should be interpreted with caution.
For pastoral soils, the medium ranges are specific for a 75mm sample depth, but if a 150mm sampling depth is used the nutrient levels measured may appear low against these ranges, as nutrients are typically more concentrated in the top of the soil profile. These soil profile differences are altered upon cultivation or contouring.

Samples 1-3 Comment:

The low CEC level found in this soil indicates that it can only retain cation nutrients (potassium, calcium, magnesium and sodium) at low levels. The normal ranges and the derived histograms are based on a typical soil with a CEC level between 12 and 25 me/100g. The % base saturation data for each element provides an alternative presentation that may be more appropriate for soils with atypical CEC values. Normal %BS levels, as a general guide, are: K 2%-5%, Ca 50%-75%, Mg 5%-15%, Na 1%-2%.

Samples 1-3 Comment:

While soil Mg MAF levels of 8-10 are sufficient for pasture production, soil levels of 25-30 are required to ensure adequate Mg content in pasture for animal health (greater than 0.22%).

Samples 1-3 Comment:

For interpretation of 'Total' Sulphur results in pastoral soils, the following guidelines are suggested: 0-600 mg/kg Low (responsive to S application), 600-1000 mg/kg Medium (moderately responsive to S application), greater than 1000 mg/kg High (poor or no response to S application). Soils located closer to coastal areas can expect 5-10 kg S inputs through sea showers. Raw peat soils are excluded from these guidelines.

SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Samples
Sample Registration*	Samples were registered according to instructions received.	-	1-3
Soil Prep (Dry & Grind)*	Air dried at 35 - 40°C overnight (residual moisture typically 4%) and crushed to pass through a 2mm screen.	-	1-3
pH	1:2 (v/v) soil:water slurry followed by potentiometric determination of pH.	0.1 pH Units	1-3
Olsen Phosphorus	Olsen extraction followed by Molybdenum Blue colorimetry.	1 mg/L	1-3
Sulphate Sulphur	0.02M Potassium phosphate extraction followed by Ion Chromatography.	1 mg/kg	1-3
Potassium (MAF)	1M Neutral ammonium acetate extraction followed by ICP-OES.	1 MAF units	1-3
Calcium (MAF)	1M Neutral ammonium acetate extraction followed by ICP-OES.	1 MAF units	1-3
Magnesium (MAF)	1M Neutral ammonium acetate extraction followed by ICP-OES.	1 MAF units	1-3
Sodium (MAF)	1M Neutral ammonium acetate extraction followed by ICP-OES.	2 MAF units	1-3
Boron	Extraction with boiling dilute calcium chloride followed by ICP-OES.	0.2 mg/kg	1-3



ANALYSIS REPORT

Client: Peregrine Vineyards Gibbston	Lab No: 1628399 shpv1
Address: C/- Peregrine Wines 2127 Kawarau Gorge Road RD 1, Gibbston Queenstown 9300	Date Received: 09-Aug-2016 Date Reported: 15-Aug-2016 Quote No: Order No: Client Reference: Submitted By: Peregrine Vineyards Gibbston

Sample Name: Cattle Block South East **Lab Number:** 1628399.4
Sample Type: SOIL Mixed Pasture, Sed/low PR (Dry Stock) (S197)

Analysis	Level Found	Medium Range	Low	Medium	High	
pH	pH Units	6.3	5.8 - 6.2			
Olsen Phosphorus	mg/L	15	15 - 30			
Potassium	me/100g	0.41	0.30 - 0.50			
Calcium	me/100g	4.2	3.0 - 9.0			
Magnesium	me/100g	0.36	0.80 - 1.50			
Sodium	me/100g	< 0.05	0.20 - 0.40			
CEC	me/100g	7	12 - 25			
Total Base Saturation	%	74	55 - 75			
Volume Weight	g/mL	1.09	0.60 - 1.00			
Sulphate Sulphur	mg/kg	7	10 - 12			
Boron	mg/kg	0.4	1.0 - 2.0			
Potentially Available Nitrogen (15cm Depth)*	kg/ha	80	150 - 250			
Anaerobically Mineralisable N*	µg/g	49				
Organic Matter*	%	3.1	7.0 - 17.0			
Total Carbon*	%	1.8				
Total Nitrogen*	%	0.13	0.30 - 0.60			
C/N Ratio*		14.0				
Anaerobically Mineralisable N/Total N Ratio*	%	3.8				
Iron	mg/kg	148				
Manganese	mg/kg	25	50 - 400			
Zinc	mg/kg	0.9	2.0 - 10.0			
Copper	mg/kg	1.0	1.0 - 5.0			
Cobalt	mg/kg	0.3	2.0 - 4.0			
'Total' Phosphorus	mg/kg	553				
Soil Sample Depth*	mm	0-150				
Soil Type*		Sedimentary				
Base Saturation %		K 6.1 Ca 62 Mg 5.3 Na 0.4				
MAF Units		K 9 Ca 6 Mg 9 Na < 2				

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.



ANALYSIS REPORT Page 1 of 8

Client: Peregrine Vineyards Gibbston	Lab No: 1628399 shpv1
Address: C/- Peregrine Wines 2127 Kawarau Gorge Road RD 1, Gibbston Queenstown 9300	Date Received: 09-Aug-2016 Date Reported: 15-Aug-2016 Quote No: Order No: Client Reference: Submitted By: Peregrine Vineyards Gibbston

Sample Name: Cattle Block South **Lab Number:** 1628399.1
Sample Type: SOIL Mixed Pasture, Sed/low PR (Dry Stock) (S197)

Analysis	Level Found	Medium Range	Low	Medium	High	
pH	pH Units	6.5	5.8 - 6.2			
Olsen Phosphorus	mg/L	18	15 - 30			
Potassium	me/100g	0.40	0.30 - 0.50			
Calcium	me/100g	5.0	3.0 - 9.0			
Magnesium	me/100g	0.39	0.80 - 1.50			
Sodium	me/100g	< 0.05	0.20 - 0.40			
CEC	me/100g	7	12 - 25			
Total Base Saturation	%	89	55 - 75			
Volume Weight	g/mL	1.10	0.60 - 1.00			
Sulphate Sulphur	mg/kg	7	10 - 12			
Boron	mg/kg	0.6	1.0 - 2.0			
Potentially Available Nitrogen (15cm Depth)*	kg/ha	84	150 - 250			
Anaerobically Mineralisable N*	µg/g	51				
Organic Matter*	%	3.0	7.0 - 17.0			
Total Carbon	%	1.8				
Total Nitrogen	%	0.18	0.30 - 0.60			
C/N Ratio*		9.9				
Anaerobically Mineralisable N/Total N Ratio*	%	2.9				
Iron	mg/kg	169				
Manganese	mg/kg	68	50 - 400			
Zinc	mg/kg	3.9	2.0 - 10.0			
Copper	mg/kg	2.2	1.0 - 5.0			
Cobalt	mg/kg	0.9	2.0 - 4.0			
'Total' Phosphorus	mg/kg	648				
Soil Sample Depth*	mm	0-150				
Soil Type*		Sedimentary				
Base Saturation %		K 6.1 Ca 77 Mg 5.9 Na 0.5				
MAF Units		K 9 Ca 7 Mg 10 Na < 2				

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.



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ANALYSIS REPORT

Page 2 of 5

Client: L McLachlan Address: C/- Peregrine Wines 2127 Kawarau Gorge Road RD 1, Gibbston QUEENSTOWN 9300 Phone: 03 742 4000	Lab No: 1143646 shMAFpv1 Date Registered: 08-Jun-2013 Date Reported: 12-Jun-2013 Quote No: Order No: D111029074 Client Reference: Submitted By: A Brown
--	---

Sample Name: ~~Lucerne Corner~~ **SOUTH BLOCK CATTLEBLOCK** **Lab Number:** 1143646.2
Sample Type: SOIL Grape, Vineyard (S49) **SOUTH**

Analysis	Level Found	Medium Range	Low	Medium	High
pH pH Units	5.5	5.8 - 6.8			
Olsen Phosphorus mg/L	25	15 - 40			
Potassium MAF units	7	7 - 15			
Calcium MAF units	2	7 - 14			
Magnesium MAF units	10	21 - 63			
Sodium MAF units	< 2	0 - 19			
Soil Sample Depth* mm	0-150				
Base Saturation %	K 4.2 Ca 22 Mg 5.7 Na 0.2				
me/100g	K 0.33 Ca 1.8 Mg 0.45 Na < 0.05				
Additional Properties	Cation Exchange Capacity (me/100g) 8				
	Total Base Saturation (%) 32				
	Volume Weight (g/mL) 1.03				

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.



View Instrument Details

Instrument No. 12273989.10
Status Registered
Date & Time Lodged 25 Mar 2022 15:21
Lodged By Sinclair, Fraser James
Instrument Type Consent Notice under s221(4)(a) Resource Management Act 1991



Affected Records of Title	Land District
1019926	Otago
1019927	Otago
1019928	Otago

Annexure Schedule Contains 3 Pages.

Signature

Signed by Fraser James Sinclair as Territorial Authority Representative on 25/03/2022 03:20 PM

***** End of Report *****

IN THE MATTER of Lots 1 - 3 DP 568048 being a subdivision of
Lot 1 DP 408812, RT 432321.

AND

IN THE MATTER of resource consent RC 210171 from the Central Otago
District Council to subdivide the above land.

CONSENT NOTICE PURSUANT
TO SECTION 221 OF THE
RESOURCE MANAGEMENT ACT 1991

PATERSON PITTS LIMITED PARTNERSHIP
P O Box 84
CROMWELL

In accordance with a condition of resource consent RC210171 of the Central Otago District Council granted pursuant to Section 104 and 104B of the Resource Management Act 1991 dated 22 July 2021, the following conditions are to be imposed on an ongoing basis by a consent notice to be registered against the certificate of title for Lot 1 DP 568048 RT 1019926 and Lot 2 DP 568048 RT 1019927 and Lot 3 DP 568048 RT 1019928.

7.

- a) All allotments are unserviced land intended for production purposes, and the provision of potable water, wastewater disposal, power supply, and telecommunications is the responsibility of the landowner.
- b) In the event that Bendigo Loop Road is sealed, the successor shall upgrade the accesses to the sealed standard in accordance with Part 29 of Council's Rooding Policy.
- c) At the time of construction of a dwelling on any of the lots 1 - 3, or at the time an existing on-site wastewater disposal system is subsequently upgraded and replaced, an on-site wastewater disposal system that complies with the requirements of AS/NZ 1547:2012 "On-site Domestic Wastewater Management" shall be designed by a suitably qualified professional.
- d) A copy of the design and designer producer statement shall be supplied to the Chief Executive. The dwelling shall not be constructed until the design and designer producer statement has been supplied to the Chief Executive.
- e) The designer shall supervise the installation and construction of the system and must provide a construction producer statement to the Chief Executive.
- f) An operation and maintenance manual shall be provided to the owner of the system by the designer and a copy supplied to the Chief Executive. This manual must include a maintenance schedule and an as-built plan of the system dimensioned in relation to the legal property boundaries. A code of compliance certificate for the dwelling and/or disposal system shall not be issued until the construction producer statement and a copy of the owner's maintenance and operating manual have been supplied to the Chief Executive. The maintenance and operating manual shall be transferred to each subsequent owner of the disposal system.
- g) Disposal areas shall be located such that the maximum separation (in all instances greater than 50 metres) is obtained from any watercourse or any water supply bore.
- h) The consent holder or successor is responsible for sourcing and meeting all costs associated with the installation of electricity or telecommunication services for any future land use on Lots 1 – 3. Any

new electricity or telecommunication services shall be laid underground,
or provided wirelessly in the case of telecommunications.

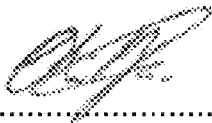
(Note: numbering above refers to numbered conditions of RC 210171)

DATED this.....04.....day of.....February.....2022.

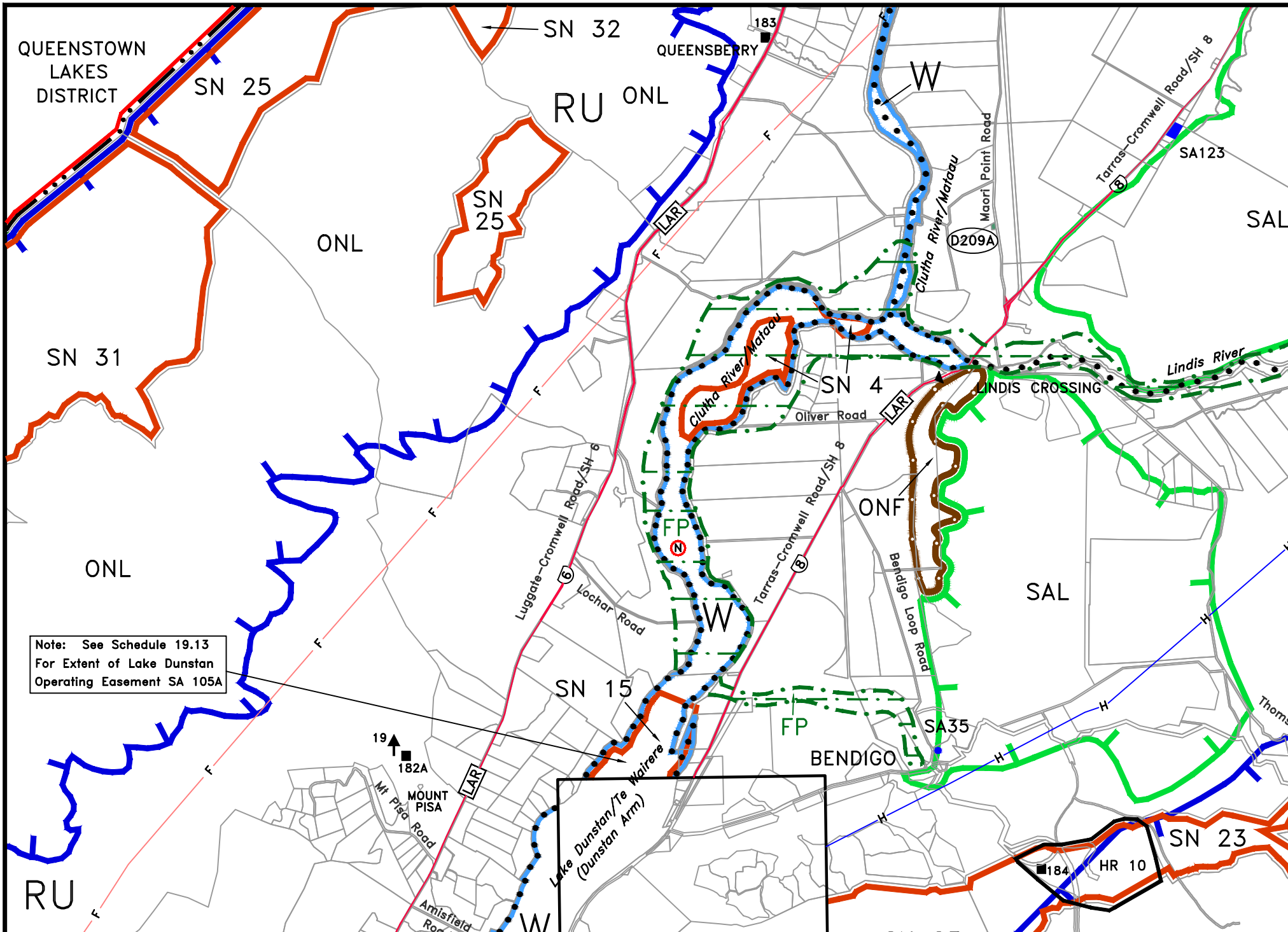
SIGNED for and on behalf of the

CENTRAL OTAGO DISTRICT COUNCIL

BY ITS PLANNING MANAGER (Acting)



.....
Olivier Monthule-McIntosh
Pursuant to delegated authority



QUEENSTOWN
LAKES
DISTRICT

SN 25

SN 32

183
QUEENSBERRY

RU ONL

W

SN 25

ONL

SN 31

D209A

Tarras-Cromwell Road/SH 8
SA123

SAL

Clutha River/Mataau

LINDIS CROSSING

Lindis River

SN 4

Oliver Road

ONL

SAL

Note: See Schedule 19.13
For Extent of Lake Dunstan
Operating Easement SA 105A

Luggate-Cromwell Road/SH 6
Lochar Road

Tarras-Cromwell Road/SH 8

Bendigo Loop Road

SN 15

SA35

BENDIGO

SN 23

184 HR 10

RU

19
182A
Mt Pisa Road
MOUNT PISA

Lake Dunstan/Te Wairere
(Dunstan Arm)

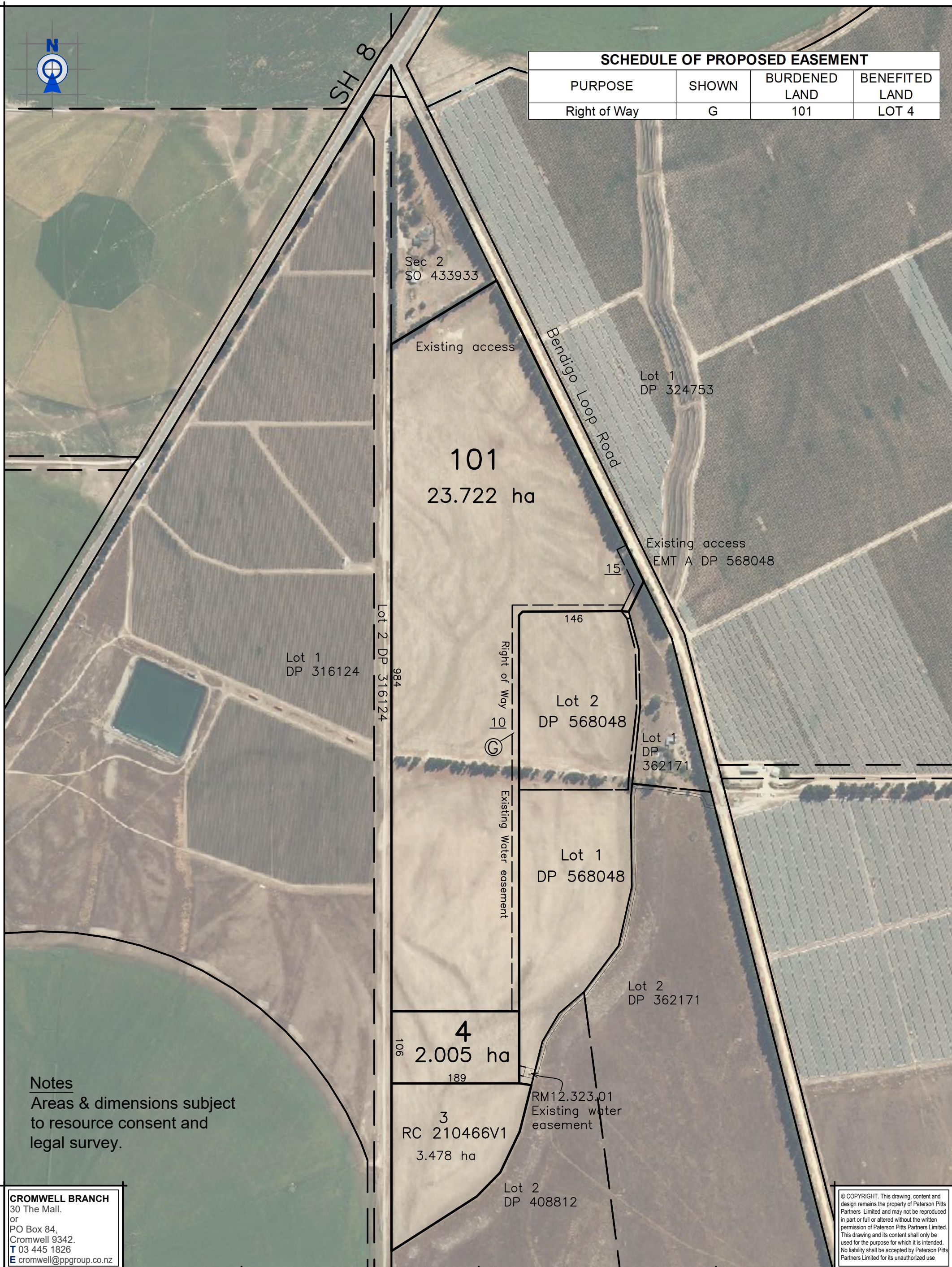
Amisfield Road

Thomas



SCHEDULE OF PROPOSED EASEMENT

PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of Way	G	101	LOT 4



Notes
Areas & dimensions subject to resource consent and legal survey.

CROMWELL BRANCH
30 The Mall.
or
PO Box 84,
Cromwell 9342.
T 03 445 1826
E cromwell@ppgroup.co.nz

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Your Land Professionals
www.ppgroup.co.nz
0800 PPGROUP

Client/Location:
Loop Road Ltd

Purpose/Drawing Title:
Lots 4 & 101 Being a Subdivision of Lot 100 RC 210466V1

Surveyed by:	BD	Original Size:	Scale:
Designed by:		A3	1:5000
Drawn by:	RB/KWG		DO NOT SCALE
Checked by:	RB		
Approved by:	MG		
Job No:	C2883_SCM	Sheet No:	Revision No: Date Created:
		4	B 26/04/2022

Bill Payment Details

From Account	Bus First Transact / 02-1265-0036804-000
Payer Name	LOOP ROAD LIMIT
Payee Account	02-0916-0081744-000
Payee Name	CODC
Amount	900.00
Payment date	31/05/2022

Status	PROCESSED
Created	31/05/2022
Last Modified	31/05/2022
Authorised By	BLAIR1

Statement Details

Your Statement

Payee's Statement

LoopRoad Ltd

End of Report

Loop Road Limited

ASSESSMENT OF ENVIROMENTAL EFFECTS

Subdivision Consent

Bendigo Loop Road
Bendigo

Job No: C2883

Date: 1st June 2022

Prepared For:

Loop Road Limited

Prepared By:

Rod Baxter

Licensed Cadastral Surveyor/BSurv/GradDipSurvPrac/GradDipU&RP/MNZIS

Paterson Pitts Limited Partnership (Cromwell Office)

30 The Mall

Cromwell 9342

Telephone +64 3 445 1826

Email: cromwell@ppgroup.co.nz

Web: www.ppgroup.co.nz

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1.0 The Site

1.1 Location

The subject site is located on Bendigo Loop Road, Bendigo, at the northern end of the loop road close to where it meets the State Highway 8. The site and surrounding allotments are within the Rural Resource Area and the subject site itself is not subject to any other notation. It is entirely located within CODC Planning Map 48. The area is predominantly rural in nature, with the surrounding allotments comprising rural farming activities with a mix of dryland pasture to the south and vineyards to the west and east of the subject property. The site is generally flat dryland pasture. There are no dwellings or other structures on the land. The property gains access from two existing points off Bendigo Loop Road, one to the north and one to the south of the section.

The site and surrounds are shown in Figure 1 below.



Figure 1: Subject site and surrounds. Source: CODC GIS

1.2 Legal Description and Site Background

The property is described as Lot 3 DP 568048, with an area of 29.2053Ha, held in fee simple by the applicant Peregrine Estate Limited as shown on one title RT 1019928. The site is subject to CONO 12273989.10, a copy of the title and consent notice is attached.

The land is currently in the process of being sold to Loop Road Limited. As part of consent RC210171 the subject site was subdivided into three allotments, which have been issued title recently (Lots 1, 2 and 100 DP 568048). Under consent RC210466V1 consent was granted to subdivide the site creating one new allotment in the south-western corner of the allotment.

1.3 Zoning

The site is within the Rural Resource Area and is not subject to any other notation. See attached CODC Zoning Planning Map 48.

2.0 Proposed Subdivision

2.1 Lot Layout

The proposal is to subdivide Lot 100 RC 210466V1 into 2 parcels.

See attached plan of Subdivision C2883_SCM_4A dated 26/04/2021. It is proposed to subdivide the site as follows:

- Lot 4 2.005ha
- Lot 101 23.722ha

The average lot area calculation is $(2 + 16) / 2 = 9$ ha

2.2 Access

Proposed Lot 4 will be provided access from the existing access off Bendigo Loop Road, along the 10m wide easement Right of Way (ROW) (easement G) along the western boundary of Lots 1 & 2 DP 568048 as created through RC210466V1.

2.3 Services

This subdivision is for rural productive purposes only and no services to support residential activity are being provided.

The irrigation water supply is from an existing consented bore RM 12.323.01, with an abstraction rate of 1,134cu/day. It will continue to provide water to lots 1 and 2 DP 568048, Lot 3 RC 210466V1 and new Lots 4 & 101.

Pursuant to Sec 221 (5) RMA91, a certificate cancelling CONO 12273989.10 (or new document registered for RC 210446V1) is requested as it relates to Lots 4 and 101. Even though a residential activity is not supported in this application, it is requested Conditions 2 – 7 CONO 12273989.10 be duplicated to a new Consent Notice to be registered on titles to Lots 4 & 101, with the addition of the new points 1 and 3 from RC 210466V1:

- 1. Lots 4 and 101 are intended for productive purposes only and the lots are unserviced land. The provision of potable water, wastewater disposal, power supply and telecommunications will be the future responsibility of owners at the time of building.*
- 2. In the event that Loop Road is sealed, the successor shall upgrade the accesses to the sealed standard in accordance with Part 29 of Council's Roading Policy.*
- 3. If any residential activity is proposed on Lot 101 in the future, this must not be located within the areas identified in Appendix 1, Figure 2 as not suitable for residential development in the Insight Engineering Report title 'Preliminary Environmental Site Investigation at Lot 1 DP 408812, Bendigo Loop Road, Bendigo' reference 21010 dated 14 April 2021.*
- 4. At the time of construction of a dwelling on any of the Lots 4 or 101 or at the time an existing on-site wastewater disposal system is subsequently upgraded and replaced, an on-site wastewater disposal system that complies with the requirements of AS/NZ 1547:2000 "On-site Domestic Wastewater Management" shall be designed by a suitably qualified professional, and:
 - i. A copy of the design and designer producer statement shall be supplied to the Chief Executive. The dwelling shall not be constructed until the design and producer statement have been supplied to the Chief Executive.*
 - ii. The designer shall supervise the installation and construction of the system and shall provide a construction producer statement to the Chief Executive.*
 - iii. An operation and maintenance manual shall be provided to the owner of the system by the designer and a copy supplied to the Chief Executive. This manual shall include a maintenance schedule and an as-built plan of the system dimensioned in relation to the legal property boundaries. A code of compliance certificate for the dwelling and/or disposal system shall not be issued until the construction producer statement and a copy of the owner's maintenance and operating manual have been supplied to the Chief Executive. The maintenance and operating manual shall be transferred to each subsequent owner of the disposal system.**

- iv. *Disposal areas shall be located such that the maximum separation (in all instances greater in 50 metres) is obtained from any water course or any water supply bore.*

2.4 Financial & Development Contributions

The following are due:

– Reserves	\$1,100.00
– Roading	<u>\$2,040.00</u>
	<u>\$3,140.00 incl gst</u>

2.5 Easements

Council’s generic “service easement” condition is requested.

3.0 District Plan Matters

3.1 Subdivision

3.1.1 Rules

The subdivision requires consent in terms of the following rules:

- 4.7.4 (iii) (b) Discretionary Activity Subdivision in Rural Resource Area when the average lot area exceeds 8ha and minimum lot area exceeds 2ha.

3.1.2 Assessment Matters

Rule 4.7.4 (iii) requires the following assessment matters to be addressed:

1. *The effects of subdivision and future development on:*
 - *Open space, landscape, natural character and amenity values,*
 - *Reserves, all public conservation land managed by the Department of Conservation and recreation facilities, including the provision and maintenance of such facilities,*
 - *Heritage sites, including archaeological sites and waahi tapu, and heritage landscapes.*
 - *Site, lakes and rivers and their margins and other features of cultural value to Kai Tahu ki Otago,*
 - *Notable trees, and areas of significant indigenous vegetation and significant habitats of indigenous fauna, and,*
 - *The natural character of water bodies and their margins.*

- There will be no change to the open character and rural amenity on the site.
 - There is currently no public access across this land nor any need for this.
 - There are no known heritage or archaeological sites on the land.
 - So far as is known, the site does not contain any sites of cultural value to Kai Tahu ki Otago.
 - There are no notable trees or any areas of significant indigenous vegetation or habitats of indigenous fauna. The site is a working pastoral farm.
 - There are no water bodies within the site.
2. *Potential for visual absorption of future built development with particular attention being given to those areas identified as outstanding natural landscapes and significant amenity landscapes on the planning maps.*
- There is no planned built environment for the land.
 - There are no outstanding natural landscapes and significant amenity landscapes on the land.
3. *Capability for sustainable use of the productive land and soil resource.*
- There is no intention to alter the current land usage.
4. *The potential for reverse sensitivity effects and methods to address such effects on existing rural production activities and on existing infrastructure, including the use of separation distances and yards.*
- The land is to be retained as bare dryland pasture because of this subdivision.
5. *The adequacy of the allotment in respect of its ability to safely dispose of effluent and stormwater on-site, without compromising health, and the quality of ground and surface water resource.*
- Not applicable to this site.
6. *The provision of an adequate water supply, given the intended use of the allotments, unless an allotment is incapable of being occupied by a dwelling.*
- Not applicable to this site.
7. *The location, design and construction of access, and its adequacy for the intended use of the allotments.*
- Access is being constructed per RC 210466v1
8. *The provision of adequate utility services, (including roading), and in particular the location, design and construction of these services.*
- See Secs (2.2) – (2.3) above of this AEE.

9. *Earthworks necessary to prepare the site for occupation and/or use.*
 - There will be no need for earthworks as no structures are intended. Any necessary earthworks for construction of access will be within the Council permitted rules.
10. *The provision of access to back land.*
 - Not applicable to this site.
11. *The provision of esplanade reserves and strips and access to them.*
 - Not applicable to this site.
12. *Any financial contributions necessary for the purposes set out in Section 15 of this plan.*
 - See Sec (2.4) above of this AEE.
13. *Any amalgamations or easements that are appropriate.*
 - See Sec (2.2) & Sec (2.5) above of this AEE. No amalgamations are required.
14. *The identification of potential building platforms that are encourage in locations that will maintain the open natural character of hills and ranges, without compromising the landscape and amenity values of prominent hillsides and terraces.*
 - Building platforms are not required for the subdivision.
15. *Whether or not the clustering of lots would be beneficial in terms of avoiding or mitigating adverse environmental effects.*
 - The subdivision does not alter any adverse effects on the environment.
16. *Whether or not the applicant will commit or has committed to work or services as environmental compensation (such as the control of wilding pines) and if so committed, whether it is or will be:*
 - *To remedy at least in part any adverse effects of onsite works; or*
 - *On the site or within the same general area, landscape or environment as the proposed activity; and/or*
 - *Effective by way of conditions, bond or covenant; and/or*
 - *The product of public consultation or participation.*

- The effects of this application are such that environmental compensation is neither necessary nor feasible.
17. *The appropriate size of any allotment bearing in mind any of the above factors.*
- The lot sizes are appropriate for viticulture activity or similar within the vicinity.
18. *Any objectives and policies relevant to the above matters.*
- See Sec (3.2) below of this AEE.
19. *Any other matters provided for in Sec 220 of the Act.*
- All relevant matters have been addressed.

4.0 Objectives & Policies

The following are relevant to this applicant:

Obj	4.3.3	Landscape & Amenity Values
Pol	4.4.2	Landscape & Amenity Values
Pol	4.4.8	Amenity Values of Neighbouring Property Owners
Pol	4.4.9	Reverse Sensitivity
Pol	4.4.10	Rural Subdivision & Development

All of the relevant matters in these objectives and policies have been covered in the assessment matters already addressed in Sec (3.1.2) above of this AEE.

4.1 Lot averaging and size

Advice note 3 RC 210466v1 stated that any future application for subdivision will be required to calculate the average lot size considering Lot 3 and Lot 100 (RC210466) and Lot 1 & 2 (RC 210171) utilising the parent parcel. It should be noted that Lots 1 & 2 DP 568048 have now sold, and not in the possession of the applicant.

Policy 4.4.10 states *“the control of subdivision, particularly in respect of minimum (and average) allotment size, is a tool which assists in controlling the adverse effects of the land use that follows thereby promoting sustainable management.”*

The District Plan provides the tools to calculate the lot sizes, both minimum and lot averaging. As each resource consent application must be considered on its own merit, this application meets both these requirements for a Discretionary application. It is not required to calculate the averaging based on previous Decisions.

4.2 Cumulative effect

Advice note 5 on RC 210466v1 made the Applicant aware that any future applications should consider the cumulative adverse effects associated with further subdivision of the parent title.

s104(1)(a) – Cumulative effect does not occur where development of a site has no consequence to the general zone strategy, does not run counter to objectives and policies, and has no general adverse amenity effect – *Clulee v Kapiti Coast DC*.

The surrounding allotments are within the open farming nature, interspersed with scattered local housing, blending in well with the local environment. Incorporation of smaller unserviced allotments maintains the rural character and amenity of the region within the surrounding larger vineyards to the west, the south and east as well as a proposed viticulture of the northern portion of the subject property by the Applicant. The subject site has minimum visibility from the State Highway due to existing western viticulture, house to the north, and shelter belt along Bendigo Loop Road. There is a single dwelling to the north and another to the northeast of the property, neither of which is considered, if any, no more than a minor environmental effect. Therefore, a cumulative effect cannot be considered as there is no increase in visibility or degradation of the rural character or amenity due to the subdivision.

Section 4 of the District Plan, Rural Resource Area, only refers to adverse ‘cumulative’ effects when referring to residential building platforms in conjunction with existing and unimplemented built development.

Further, Cumulative effect is included in the definition of “effect” within s3(d) RMA.

“any cumulative effect which arises overtime or in combination with other effects, regardless of scale, intensity, duration, or frequency of the effect, “

The Environment Court in *Dye v Auckland Regional Council* concerned an application for a non-complying 5 lot rural section, found that:

“the proposal would not result in either an actual or cumulative loss of rural character”.

Further in *Dye v Auckland Regional Council*:

“held that a cumulative effect must be one which arises as an effect of the application for which consent is sought, and which is being considered in the particular case before the consent authority. It is not legitimate to consider, as cumulative effects on the environment of one application, effects of possible future applications which may be made. The Court concluded that an effect which may never happen, and which, if it does, will be the result of some activity other than the activity for which the consent is sought, cannot be regarded as a cumulative effect.”

The smaller lots provide opportunities to produce smaller operations in the region. The new owner of Lot 1 DP 568048 is researching for a berry production. Lot 2 DP

568048 has been leased back to the applicant for 5 years for grazing. Lot 3 is currently under contract and the owner is intending the land to continue as productive agriculture land such as a small vineyard or other speciality crop. Smaller allotments allow for labour intensive specialty crops to be grown still as commercial ventures, such as saffron, lavender, cherries, flowers and vineyards where mechanization (i.e. long rows) don't provide huge economies of scale. Vineyards can work if the intention is high-end passion projects, rather than full scale mechanized production.

The application is not counter to the Policies and Objectives of the District Plan. The application does not in itself provide a cumulative adverse effect as there is no change to the productive use of the land, environment, rural character nor amenity of the region. Cumulative effects can only be considered as an effect of the application. As there are no more than minor effects on the environment, the cumulative effect is not relevant.

5.0 Other Statutory Matters

- The application is consistent with Pt II RMA91.
- There are no applicable National Policy Statements.
- The only applicable National Environmental Standard is the NES for Assessing and Managing Contaminants in Soil to Protect Human Health 2012. In accordance with Sec 5(8)(c) of the Regulations this subdivision does not result in the Lots 3 & 100 ceasing to be production land, therefore the Lots are not subject to the NES.
- A Preliminary Site Investigation was undertaken in April 2021, with no discernable effects relevant to this application. A copy of the report is attached.
- There are no other applicable National Environmental Standards.
- The Regional Policy Statement is of no particular relevance to this application.
- There are no directly applicable permitted activities associated with this application.
- The applicant has not consulted with any other person.
- All of the relevant information requirements of Secs 6 and 7 of the 4th Schedule RMA91 have been complied with.

6.0 Conclusion

This application is for a non-serviced subdivision of 1 additional lot. There is no more than minor environmental effect on the receiving environment which meets the policies and objectives of the District Plan. It is considered that this subdivision is in keeping with the developing rural amenity.

7.0 List of Attachments

1. Record of Title RT 1019928
2. CONO 12273989.10
3. DP 568048 T
4. District Plan Map 48
5. Plan of Subdivision C2883_SCM_4B
6. Insight Engineering Preliminary Site Investigation report

GRIP TITLE INFORMATION PREVIEW

Freehold



Identifier 1019928
Land Registration District Otago
Date Issued 25 March 2022

Prior References

[432321](#)

Estate	Fee Simple	Instrument	OCTN 12273989.5
Area:	29.2053 hectares more or less		
Legal Description	Lot 3 Deposited Plan 568048		

Registered Owners

Peregrine Estate Limited

Interests

Appurtenant hereto is a right to convey electricity created by Easement Instrument 9669855.4 - 21.3.2014 at 4:14 pm

Land Covenant in Covenant Instrument 12273989.9 - 25.3.2022 at 3:21 pm

Subject to a right (in gross) to convey water over part marked D on DP 568048 in favour of Loop Road Water South Limited created by Easement Instrument 12273989.7 - 25.3.2022 at 3:21 pm

Subject to a right of way over part marked A on DP 568048 created by Easement Instrument 12273989.6 - 25.3.2022 at 3:21 pm

The easements created by Easement Instrument 12273989.6 are subject to Section 243 (a) Resource Management Act 1991

12269150.1 CAVEAT BY AURORA ENERGY LIMITED - 13.10.2021 at 4:18 pm

12273989.10 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 25.3.2022 at 3:21 pm

Disclaimer: This preview provides an indication of the likely content of Record of Title 1019928, it is not a substitute for an authoritative Record of Title. For an authoritative Record of Title of 1019928 please contact Land Information New Zealand. This content of this preview has been generated using data sourced from LINZ Data Service on 20/05/2022.



Title Plan - DP 568048

Survey Number DP 568048
Surveyor Reference A4378 Peregrine
Surveyor Rodney Allan Baxter
Survey Firm Paterson Pitts Limited Partnership (Cromwell)
Surveyor Declaration I Rodney Allan Baxter, being a licensed cadastral surveyor, certify that--
(a) this dataset provided by me and its related survey are accurate, correct and in accordance with the Cadastral Survey Act 2002 and Cadastral Survey Rules 2021; and
(b) the survey was undertaken by me or under my personal direction.
Declared on 31 Mar 2022 12:26 PM

Survey Details

Dataset Description LOTS 1 - 3 BEING A SUBDIVISION OF LOT 1 DP 408812
Status Deposited
Land District Otago
Submitted Date 31/03/2022

Survey Class	Class B
Survey Approval Date	31/03/2022
Deposit Date	25/03/2022

Territorial Authorities

Central Otago District

Comprised In

RT 432321

Created Parcels

Parcels	Parcel Intent	Area	RT Reference
Area D Deposited Plan 568048	Easement		
Area E Deposited Plan 568048	Easement		
Area C Deposited Plan 568048	Easement		
Lot 1 Deposited Plan 568048	Fee Simple Title	5.3013 Ha	1019926
Lot 2 Deposited Plan 568048	Fee Simple Title	4.4163 Ha	1019927
Lot 3 Deposited Plan 568048	Fee Simple Title	29.2053 Ha	1019928
Area A Deposited Plan 568048	Easement		
Area B Deposited Plan 568048	Easement		
Total Area		<u>38.9229 Ha</u>	

Land Registration District

Otago

Plan Number

DP 568048

Territorial Authority

Central Otago District Council

Job Number

A4378

MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT (BURDENED LAND)	DOMINANT TENEMENT (BENEFITED LAND)
Right of Way	A	Lot 3	Lots 1 & 2
	B	Lot 1	Lot 2

SCHEDULE OF EXISTING EASEMENT

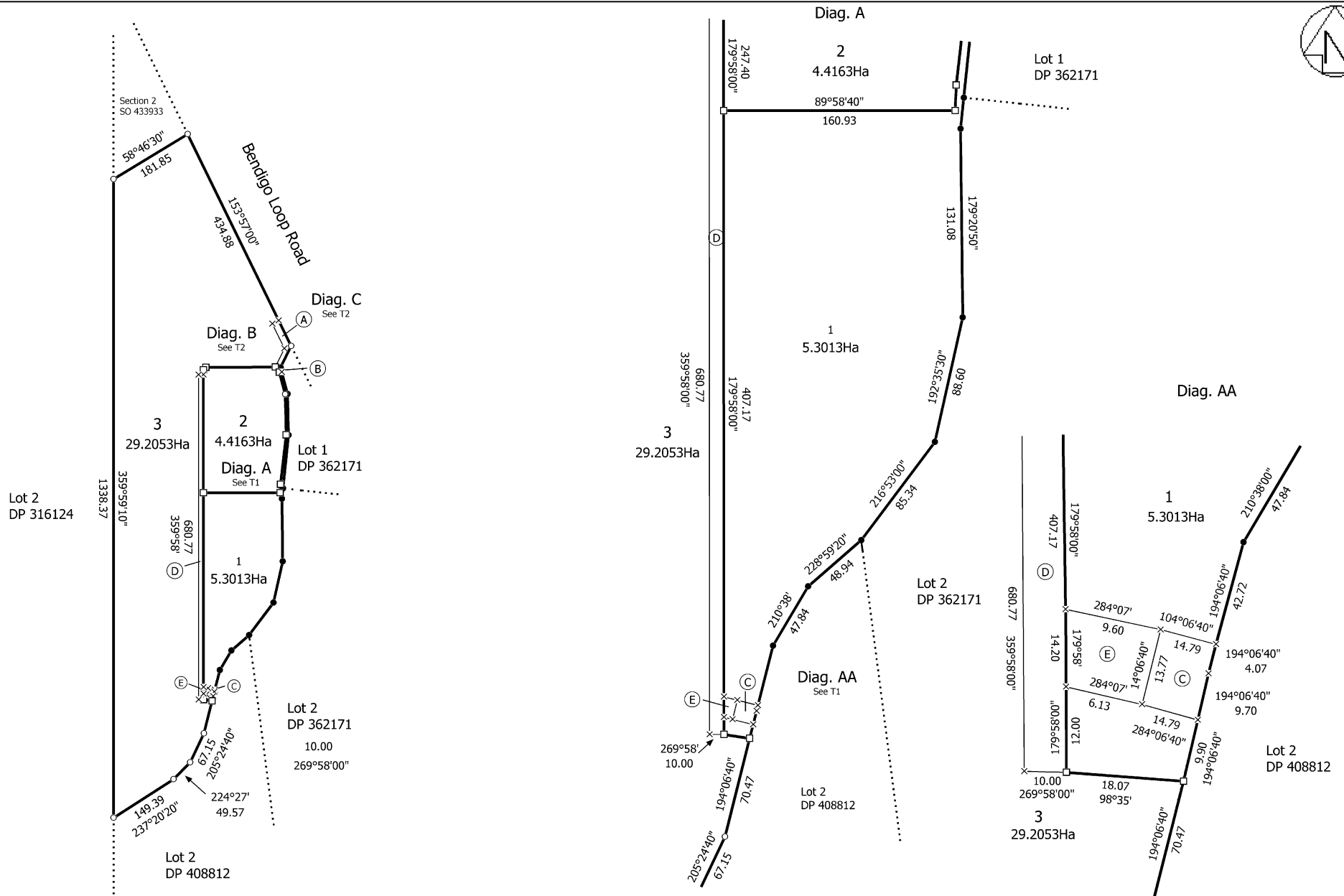
PURPOSE	SHOWN	SERVIENT TENEMENT (BURDENED LAND)	DOCUMENT
Right to occupy for a bore	C	Lot 1	EI 9669855.4
Right to convey water and electricity			

SCHEDULE OF EXISTING EASEMENT IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT (BURDENED LAND)	DOCUMENT
Right to convey electricity	C	Lot 1	EI 9669855.3
Right to transform electricity			

SCHEDULE OF EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT (BURDENED LAND)	GRANTEE
Right to Convey Water	D	Lot 3	Loop Road Water South Limited
Right to Convey Water	C, E	Lot 1	Loop Road Water South Limited
Right to Convey Electricity	C, E	Lot 1	Loop Road Water South Limited



T 1/2

Land District: Otago

LOTS 1 - 3 BEING A SUBDIVISION OF LOT 1 DP 408812

Surveyor: Rodney Allan Baxter
Firm: Paterson Pitts Limited Partnership (C)

Title Plan
DP 568048

Deposited on: 25/03/2022

Digitally Generated Plan

Generated on: 26/04/2022 2:41pm Page 3 of 4

