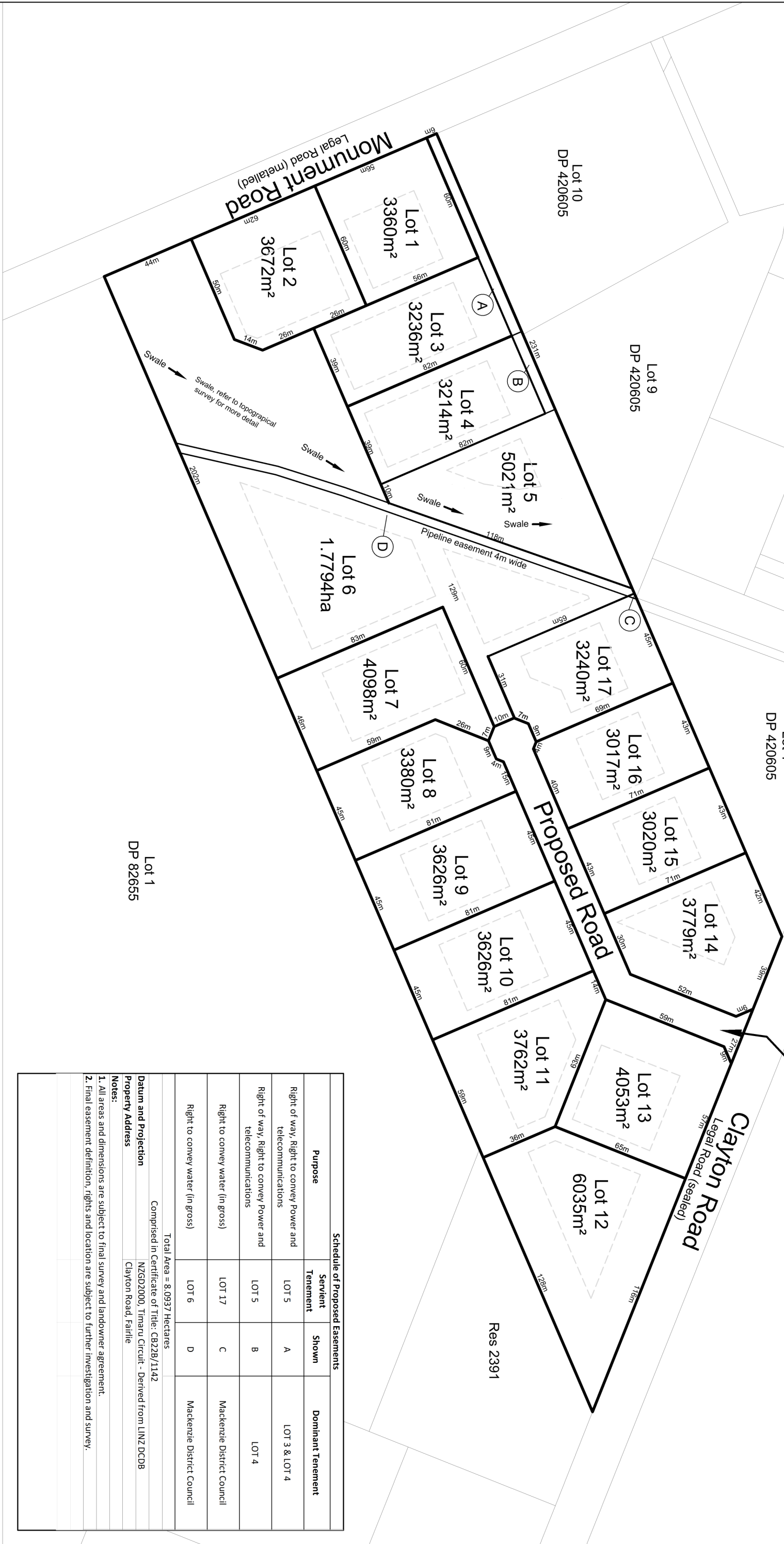


Buildable Areas
20m clear of external boundaries
6m clear of internal boundaries
5m clear of swales

ALL AREAS AND DIMENSIONS ARE
APPROXIMATE ONLY AND ARE
SUBJECT TO FINAL SURVEY

Lot 200
3000m²
to vest as road



Schedule of Proposed Easements

Purpose	Servient Tenement	Dominant Tenement
Right of way, Right to convey Power and telecommunications	LOT 5	LOT 3 & LOT 4
Right of way, Right to convey Power and telecommunications	LOT 5	LOT 4
Right to convey water (In gross)	LOT 17	Mackenzie District Council
Right to convey water (In gross)	LOT 6	Mackenzie District Council

Total Area = 8.0937 Hectares

Comprised in Certificate of Title: CB22B/1142

Datum and Projection NZGD2000, Tīmaru Circuit - Derived from LINZ DCDB

Property Address Clayton Road, Fairlie

Notes:

- All areas and dimensions are subject to final survey and landowner agreement.
- Final easement definition, rights and location are subject to further investigation and survey.

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CONSULTANT PROJECT No.	REFERENCE DRAWINGS	REV.	DESCRIPTION	DATE	DESIGNED	DRAWN	CHECKED	APPD	CLIENT	STATUS	SHEET	DRAWING No.	REVISION
CONSULTANT DRAWING No.	REF. DRAWING No.									DRAFT	A1	5242-001	



27 November 2018

Graham McDermid
3 Bears Running Limited
PO Box 2870
CHRISTCHURCH 8140

Dear Graham

PRELIMINARY SITE INVESTIGATION – CLAYTON ROAD, ASHWICK FLAT, FAIRLIE

1.0 Introduction

Pattle Delamore Partners Limited (PDP) has been engaged by 3 Bears Running Limited to undertake a Preliminary Site Investigation (PSI; site history assessment) for a property located on Clayton Road, Ashwick Flat, Fairlie, Canterbury. It is understood the 8.09 ha rural property is to be subdivided into 17 individual lots.

It is understood a Request for Further Information (RFI) was received from Mackenzie District Council (MDC) as part of the resource consent process for the proposed subdivision (RM180137). One of the RFIs noted that the site is zoned rural and that it is therefore likely that an activity or industry described in the Ministry for the Environment's (MfE, 2011) *Hazardous Activities and Industries List* (HAIL¹) is being or may have been undertaken on the site. As such, the resource consent application for the proposed subdivision must consider the *Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soils to Protect Human Health) Regulations 2011* (referred to as the NESCS).

PDP has therefore prepared this PSI to address the requirements of the NESCS for the subdivision of the site. The PSI has included a review of historical aerial photographs, available Environment Canterbury (ECan) information, MDC property records, conducting a site walkover and obtaining relevant information from the current land owner. The objective of the investigation is therefore to determine any potential sources of contamination from past and present land use activities at the site, which are listed on HAIL.

This letter has been prepared by a suitably qualified and experienced practitioner (SQEP) as outlined by the NESCS and in accordance with *Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (Revised 2011)* (MfE, 2011a).

¹ The HAIL is a compilation of activities and industries that are considered likely to cause land contamination resulting from hazardous substance use, storage or disposal. The HAIL is intended to identify most situations in New Zealand where hazardous substances could cause, and in many cases have caused, land contamination.

2.0 Site Details

The site details are presented in Table 1 below. A plan showing the site location and current layout (Figure 1) and general photographs of the site are attached.

Table 1: Site Details	
Address	Clayton Road, Ashwick Flat (approximately 10 km north of Fairlie)
Legal Description	Part RS 32380
Owner	3 Bears Running Limited
Land Parcel Area	8.09 hectares
Zoning	Rural
Territorial Authority	Mackenzie District Council
Grid Reference	NZTM BY18: 2690 2549
Land Use	Vacant paddocks used for general grazing land
Site Description	The site is grassed with trees located along the north western boundary fronting Monument Road. A natural swale/former river channel is present in the northern portion of the site, which extends from the north western corner to the eastern site boundary. There are no buildings or other structures within the site.
Surrounding Land Use	<p>North east: Rural residential property</p> <p>North west: Open paddocks (over Monument Road)</p> <p>East: Open paddocks (over Clayton Road)</p> <p>South: Open paddocks</p> <p>West: Open paddocks and a gravel pit (approximately 120 m from the site boundary)</p>

2.1 Proposed Development Works

It is understood the site is to be subdivided into 17 individual rural residential lots. A proposed subdivision plan is attached.

3.0 Environmental Setting

The geological map for the area (Cox & Barrell, 2007; 1:250,000) reports that the site is underlain by alluvial deposits of 'light brownish grey river gravel, sand and silt within abandoned outwash plains or low to mid-level terraces'.

The ECan online GIS database was searched for any groundwater bores located within the site and surrounding properties. In summary, no bores were recorded within the site. Six bores are recorded as being present within the 500 m search radius, of which four are listed as being 'active (exist, present)'. The nearest active bore (J37/0026) is located approximately 130 m from the north eastern boundary, which was drilled to a depth of 4.5 m and used for 'domestic' supply. The remaining three active bores in the area are also for 'domestic' purposes (J37/0127 and J37/0215) while one bore was used for 'small

community supply' (J37/0278). A plot and table summarising the bores within a 500 m radius of the site are attached.

The nearest surface water body is an unnamed open drain located adjacent to the southern boundary of the site near Clayton Road while the South Opuha River is located approximately 800 m north of the site. A gravel pit with a small lake is also located approximately 120 m west of the site.

4.0 Desktop Review of Site History

A desktop assessment was undertaken to provide an overview of any potential contaminants of concern that may be present at the site as a result of any past or present land use activities. A summary of the information reviewed is provided in the following sections.

4.1 Historical Aerial Photographs

Historical aerial photographs from 1978 to 2015 have been reviewed for the site and are attached. The aerial photographs have been sourced from Canterbury Map Partners administered by ECan, Google Earth Pro and Retrolens licensed by LINZ. Note that the review of the aerial photographs was carried out on the electronic versions, which provides a higher resolution compared with the printed versions attached.

- ✧ The 1978 to 1986 aerial photographs show the site comprises open paddocks with no buildings or other structures evident across the property. The different shaded paddocks observed in the photographs are likely related to different types of stock feed being grown across the property. Trees and low-lying vegetation are located adjacent to the south western boundary while a shallow, natural surface swale/former river channel is located in the northern portion of the site. The surrounding land largely comprises open paddocks while a residential property is located 125 m north east of the site.
- ✧ With the exception of soil disturbance/earthworks for a gravel pit located approximately 100 m west of the site, the 1995 aerial photograph shows little or no significant changes to the site or surrounding properties.
- ✧ The 2008 aerial photograph shows the trees adjacent to the north western corner of the site near Monument Road have been felled, and the resulting timber is being stored in the northern area of the site. Due to the higher resolution photograph, various natural surface water channels are evident within the site. There are no major changes to the remainder of the site or surrounding properties.
- ✧ The 2015 aerial photograph shows the site in its current layout. The timber has been removed from the northern portion of the site while a residential property has been constructed to the east of the site near Clayton Road. There have been no other major changes to the remainder of the site and surrounding properties.

4.2 Environment Canterbury Information

4.2.1 Listed Land Use Register (LLUR) Information

An online search was made via ECan for information from their LLUR. The LLUR is used to hold information about sites that have used, stored or disposed of hazardous substances, based on activities detailed on MfE's (2011) HAIL. It should be noted that the LLUR is not complete and new sites are regularly being added as ECan receives information and conduct their own investigations into current and historical land uses.

In summary, the LLUR does not contain any information in relation to possible contamination for the site or surrounding properties. A copy of the LLUR is attached.

4.2.2 Resource Consent Database

The ECan online GIS database was used to review resource consents within a 250 m radius of the site. There are no active consents recorded for the site. While there were 30 discharge consents to discharge domestic wastewater to land within the site, these are all either terminated or inactive. Eight active resource consents are located within a 250 m radius of the site, which are all permits to discharge domestic wastewater to land.

A plot and table summarising the resource consents within a 250 m radius of the site are attached

4.3 Mackenzie District Council

PDP contacted the 'Records and Information Manager at MDC' (Liz Law) on 9 November 2018 regarding the property files and any information held for the site relating to past land use activities and potential contaminated land.

MDC confirmed that there were no records, permits or consents relating to any buildings or other structures on the site or information on any potential contamination sources. The only records held for the site were old files relating to a proposed subdivision, which had lapsed.

4.4 Interview

Information provided by Graham McDermid, the current land owner who purchased the property over 10 years ago, confirms the site has always been used for grazing and that there have been no farm sheds or other buildings/structures on the property. Mr McDermid was also not aware of any sheep dips or other similar structures within the site. In addition, Mr McDermid understands the site was also used for general grazing prior to his ownership.

4.5 Site Inspection

PDP visited the site on 14 November 2018 with the objective of identifying any potential sources of land contamination. The main findings of the site inspection are summarised below:

- ✧ The site comprised an open paddock with a low-lying natural swale/former river channel extending through the northern portion of the site.
- ✧ There were no buildings or other structures noted within the site.
- ✧ Trees were located along the north western site boundary along Monument Road while a few tree stumps were present in the north western corner of the property.
- ✧ A small stockpile of topsoil and gravel was located near the main entrance from Clayton Road, which appeared to have originated from a small site scrape for constructing the main entrance way into the property. There was no visual or olfactory evidence of any contaminants within this stockpiled material.
- ✧ No obvious contamination sources or indicators of contamination (such as stained/odour soils, any surface structures relating to farming activities, etc) were noted across the property during the inspection.

An aerial photograph showing the current site layout (Figure 1) and photographs of the site are attached.

5.0 Summary of Site History & Potential Contamination Sources

The site has historically comprised open, grassed paddocks used for general grazing with no evidence of any intensive agriculture (including market gardens and orchards), glasshouses, spray sheds or other farm buildings or structures within the site.

In summary, based on the information reviewed, there have been no potential contamination sources/ HAIL activities identified for the site.

6.0 Provision of the NESCS

The NESCS seeks to control activities on contaminated land so as to protect human health. The regulations apply to land which is described as having, has had or is more likely than not to have had an activity or industry described in the HAIL undertaken on it. As identified in Section 5.0 of this letter, no HAIL activities have been identified to have occurred at the site.

Therefore under regulation 5(7), the NESCS is **not applicable** for the proposed subdivision.

7.0 Conclusions

PDP has undertaken a PSI (site history review) for a 8.09 hectare rural property located on Clayton Road, Ashwick Flat, Fairlie (Part RS 32380) as part of the proposed subdivision of the site into 17 individual rural residential lots. The PSI has included a review of historical aerial photographs, available council information, conducting a site walkover and interviewing the current land owner to determine the history of the site and to identify any potential sources of contamination from past and/or present land use activities.

In summary, the information reviewed has shown the site has always comprised open paddocks used for general grazing with no evidence of any intensive agriculture (including market gardens and orchards), glasshouses, spray sheds or other farm buildings/structures within the property. As such, no obvious HAIL activities/potential contamination sources have been identified from the past or present land use activities.

Therefore, based on the available information, as detailed above, in the absence of any identified HAIL activities, under regulation 5(7), the NESCS is **not applicable** for the proposed subdivision.

8.0 References

Cox, S.C. and Barrell, D.J.A., 2007. *Geology of the Aoraki Area*. Institute of Geological and Nuclear Sciences 1:250,000 Geological Map 15. GNS Science, Lower Hutt, New Zealand.

Ministry for the Environment, 2011. *Hazardous Activities and Industries List (HAIL)*. Ministry for the Environment, Wellington.

Ministry for the Environment, 2011a. *Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (Revised 2011)*. Ministry for the Environment, Wellington.

Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

9.0 Limitations

This letter has been prepared by Pattle Delamore Partners Limited (PDP) on the basis of information provided by 3 Bears Running Limited and others (not directly contracted by PDP for the work). PDP has not independently verified the provided information and has relied upon it being accurate and sufficient for use by PDP in preparing the letter. PDP accepts no responsibility for errors or omissions in, or the currency or sufficiency of, the provided information.

This letter has been prepared by PDP on the specific instructions of 3 Bears Running Limited for the limited purposes described in the letter. PDP accepts no liability if the letter is used for a different purpose or if it is used or relied on by any other person. Any such use or reliance will be solely at their own risk.

Owing to the limited nature of this assessment (as described in the Introduction section), there could be conditions at the site that have not been identified and which have not been considered in this letter. Although the assessment has shown no specific knowledge of sources of soil contamination, there is a risk that sources of soil contamination could exist that have not been identified by the assessment. This risk could be reduced by undertaking further research or subsoil investigation.

Yours sincerely

PATTLE DELAMORE PARTNERS LIMITED

Prepared by



Lucy Duffus

Environmental Geologist

Reviewed and approved by



Gerard Stark

Contaminated Land Services Leader



SITE LOCATION

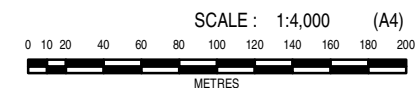


KEY :

SITE BOUNDARY

SOURCE:
 1. SATELLITE IMAGERY (FLOWN 2015) DERIVED FROM GOOGLE EARTH PRO (MAY NOT BE SPATIALLY ACCURATE).
 2. CADASTRAL INFORMATION AND INSET SOURCED FROM THE LINZ DATA SERVICE [HTTPS://DATA.LINZ.GOV.T.NZ/](https://data.linz.govt.nz/) AND LICENSED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENCE.

FIGURE 1 : SITE LOCATION PLAN





Photograph 1: View looking south west along the Clayton Road boundary.



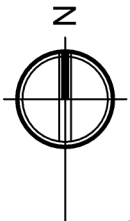
Photograph 2: View looking north west across the site from Clayton Road.



Photograph 3: View looking south east across the site.



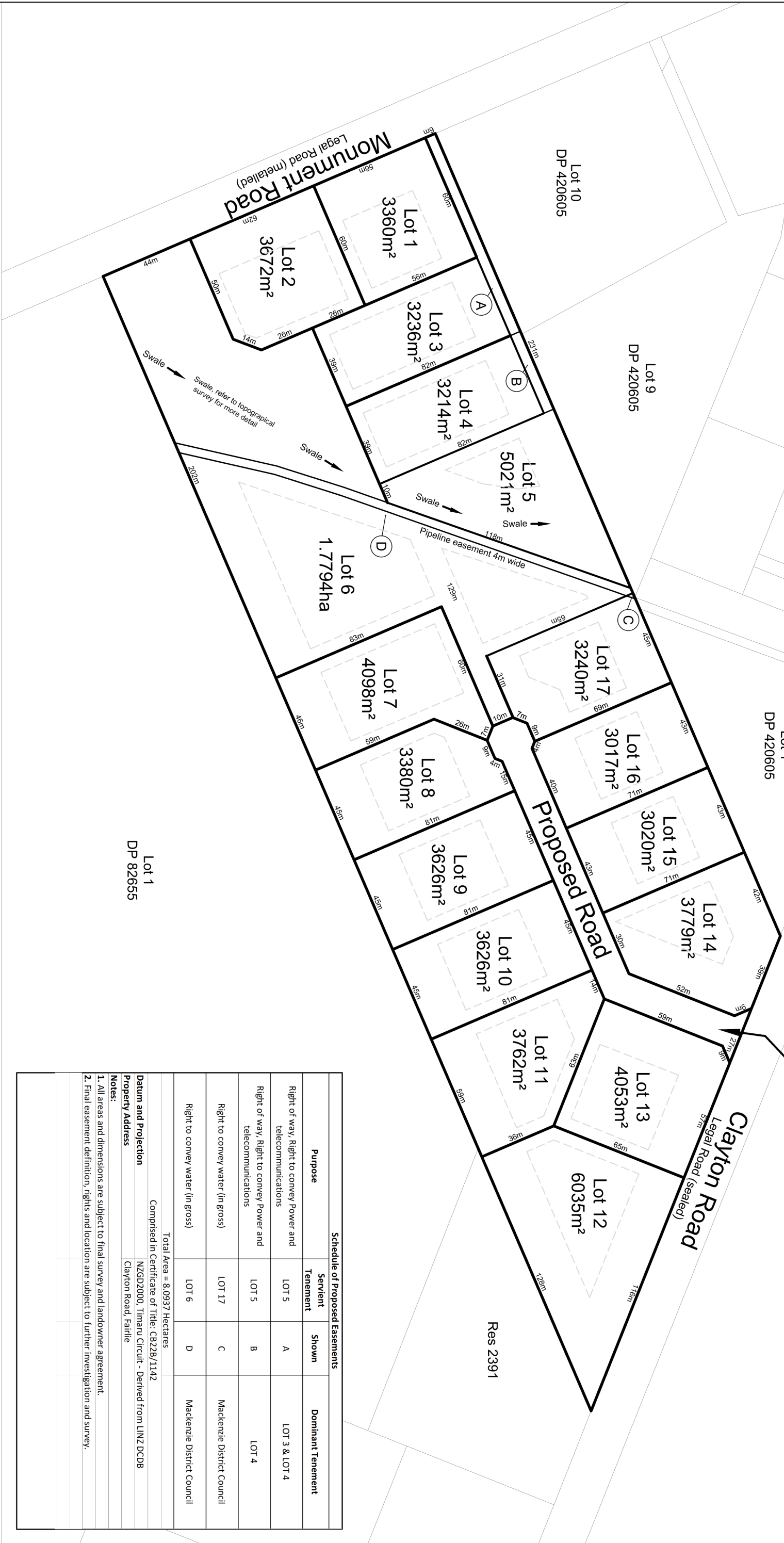
Photograph 4: View looking north east along the north western boundary.



Buildable Areas
20m clear of external boundaries
6m clear of internal boundaries
5m clear of swales

ALL AREAS AND DIMENSIONS ARE
APPROXIMATE ONLY AND ARE
SUBJECT TO FINAL SURVEY

Lot 200
3000m²
to vest as road



Schedule of Proposed Easements

Purpose	Servient Tenement	Shown	Dominant Tenement
Right of way, Right to convey Power and telecommunications	LOT 5	A	LOT 3 & LOT 4
Right of way, Right to convey Power and telecommunications	LOT 5	B	LOT 4
Right to convey water (In gross)	LOT 17	C	Mackenzie District Council
Right to convey water (In gross)	LOT 6	D	Mackenzie District Council

Total Area = 8.0937 Hectares

Comprised in Certificate of Title: CB22B/1142

Datum and Projection NZGD2000, Tīmaru Circuit - Derived from LINZ DCDB

Property Address Clayton Road, Fairlie

Notes:

- All areas and dimensions are subject to final survey and landowner agreement.
- Final easement definition, rights and location are subject to further investigation and survey.

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CONSULTANT PROJECT No.	REFERENCE DRAWINGS	REV.	DESCRIPTION	DATE	DESIGNED	DRAWN	CHECKED	APPD	CLIENT	STATUS	SHEET	DRAWING No.	REVISION
										DRAFT	A1	5242-001	



SOURCE:
1. AERIAL IMAGERY SOURCED FROM GOOGLE EARTH PRO (MAY NOT BE SPATIALLY ACCURATE).
2. CADASTRAL INFORMATION DERIVED FROM LAND INFORMATION NEW ZEALAND DATA.

BORES WITHIN A 500 M RADIUS OF THE SITE BOUNDARY - SOURCED FROM ECAN DATABASE NOVEMBER 2018

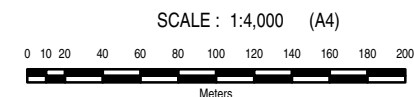
Bores located within a 500 m radius of the site boundary.

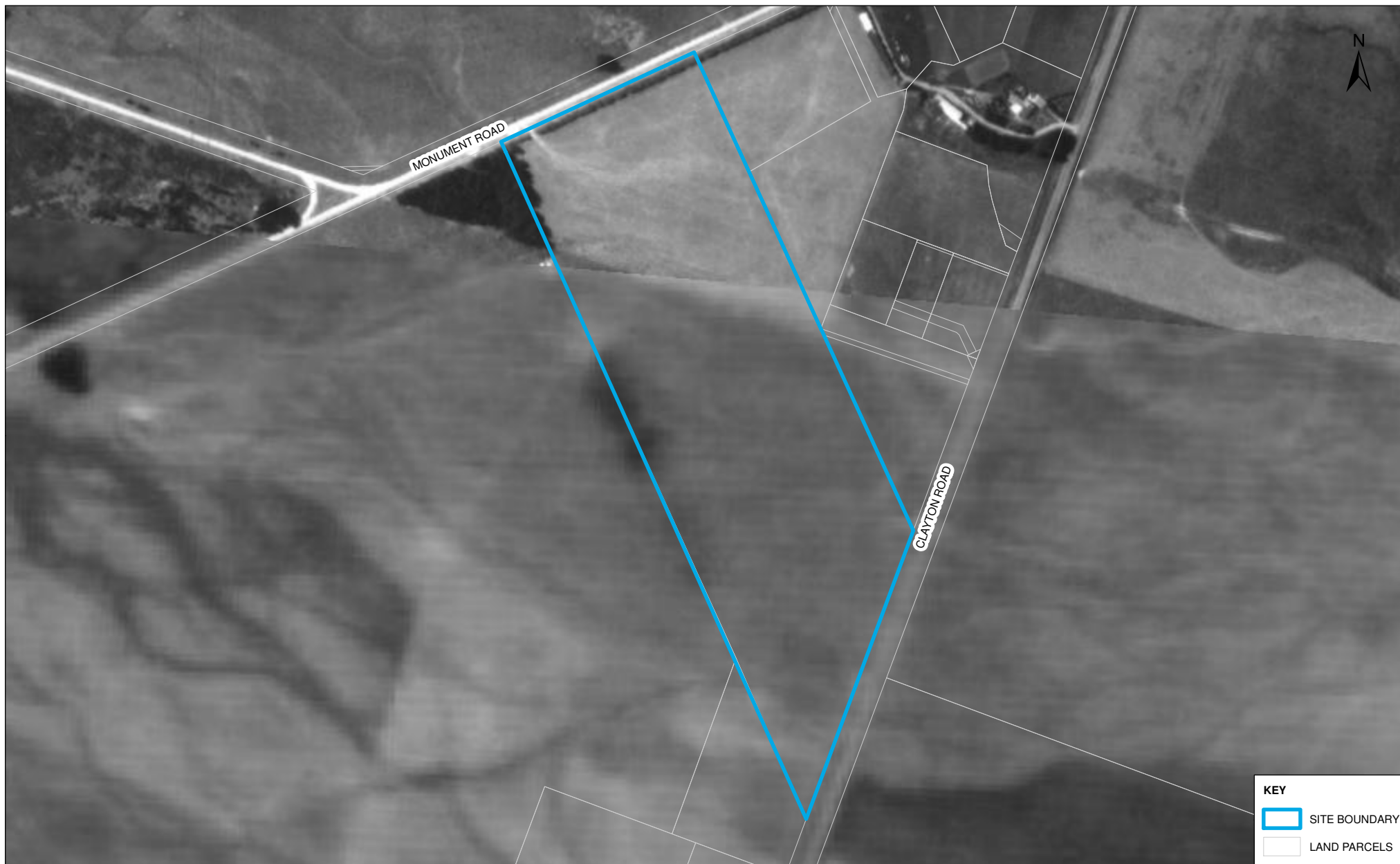
	Well No.	Well Status	Depth (m)	Diameter (mm)	Use Codes	Initial Water Level (m)	Grid East	Grid North	Approx. Distance from centre of Site (m)
1	J37/0026	Active (exist, present)	4.535	910	Domestic Supply	-0.9	1427058	5125649	250
2	J37/0278	Active (exist, present)	4.5	300	Small Community Supply	-3.4	1426530	5125518	380
3	J37/0127	Active (exist, present)	8	200	Domestic Supply	-3.5	1426749	5125074	410
4	J37/0215	Active (exist, present)	6	200	Domestic Supply	-4	1426687	5124897	600
5	J37/0093	No Info Expired Boreconsent	7	500	Irrigation	Not Supplied	1426596	5125987	620
6	J37/0128	No Info Expired Boreconsent	10	300	Domestic Supply	Not Supplied	1426707	5124857	630



SOURCE:
 1. AERIAL IMAGERY SOURCED FROM RETROLENS.NZ
 AND LICENSED BY LINZ CREATIVE COMMONS 3.0 (MAY
 NOT BE SPATIALLY ACCURATE).
 2. CADASTRAL INFORMATION DERIVED FROM LAND
 INFORMATION NEW ZEALAND DATA.

1978 AERIAL PHOTOGRAPH

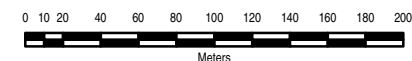




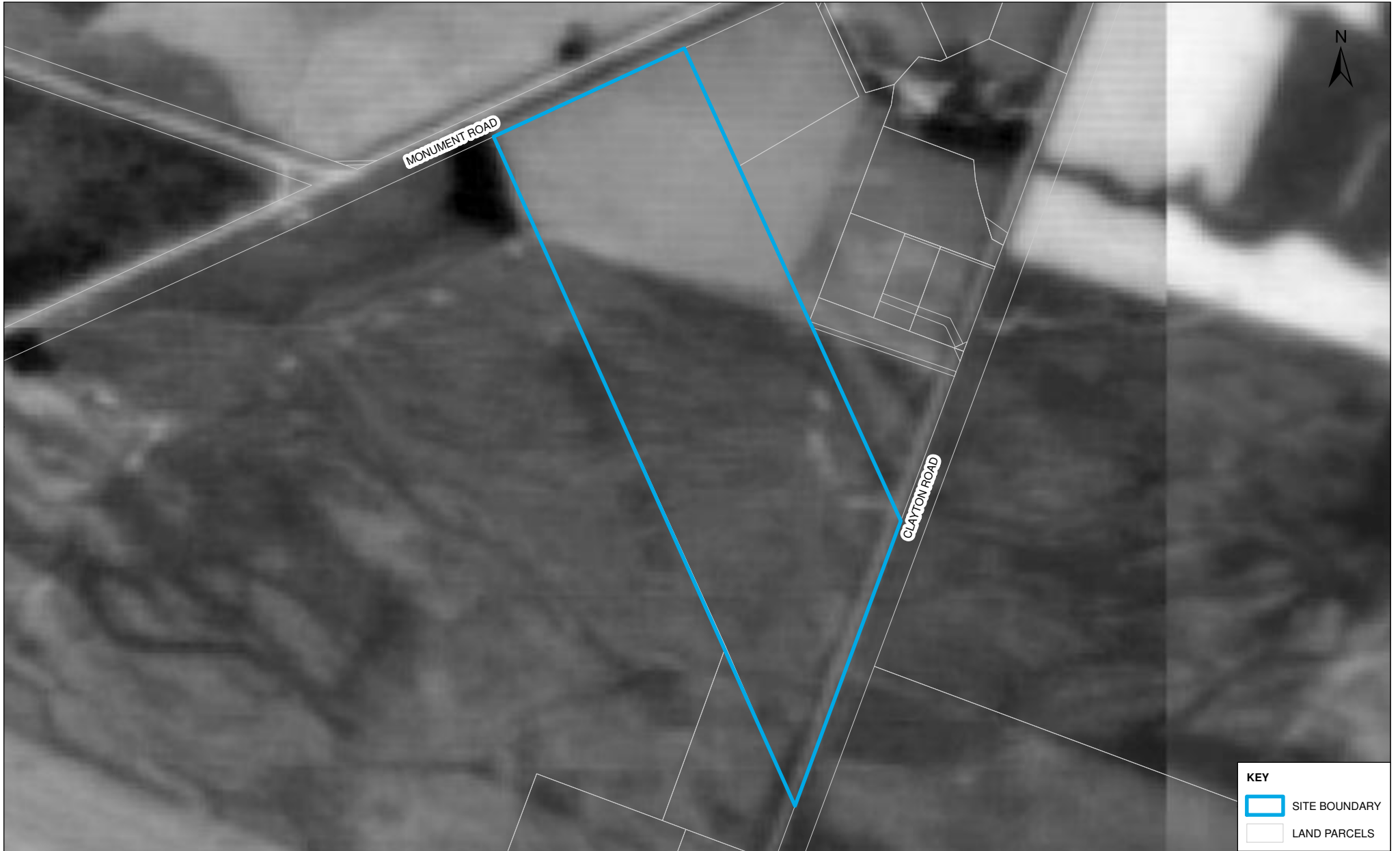
SOURCE:
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 2. CADASTRAL INFORMATION DERIVED FROM LAND INFORMATION NEW ZEALAND DATA.

1984 AERIAL PHOTOGRAPH

SCALE : 1:4,000 (A4)



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SOURCE:
1. AERIAL IMAGERY SOURCED FROM CANTERBURY MAP PARTNERS ADMINISTERED BY ENVIRONMENT CANTERBURY (MAY NOT BE SPATIALLY ACCURATE).
2. CADASTRAL INFORMATION DERIVED FROM LAND INFORMATION NEW ZEALAND DATA.

1986 AERIAL PHOTOGRAPH

SCALE : 1:4,000 (A4)

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Meters

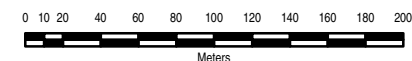
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SOURCE:
 1. AERIAL IMAGERY SOURCED FROM CANTERBURY MAP PARTNERS ADMINISTERED BY ENVIRONMENT CANTERBURY (MAY NOT BE SPATIALLY ACCURATE).
 2. CADASTRAL INFORMATION DERIVED FROM LAND INFORMATION NEW ZEALAND DATA.

1995 AERIAL PHOTOGRAPH

SCALE : 1:4,000 (A4)



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SOURCE:
1. AERIAL IMAGERY SOURCED FROM CANTERBURY MAP PARTNERS ADMINISTERED BY ENVIRONMENT CANTERBURY (MAY NOT BE SPATIALLY ACCURATE).
2. CADASTRAL INFORMATION DERIVED FROM LAND INFORMATION NEW ZEALAND DATA.

2008 AERIAL PHOTOGRAPH

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Meters

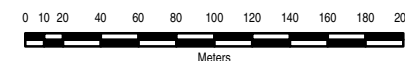
PATTLE DELAMORE PARTNERS LTD



SOURCE:
 1. AERIAL IMAGERY SOURCED FROM GOOGLE EARTH PRO (MAY NOT BE SPATIALLY ACCURATE).
 2. CADASTRAL INFORMATION DERIVED FROM LAND INFORMATION NEW ZEALAND DATA.

2015 AERIAL PHOTOGRAPH

SCALE : 1:4,000 (A4)



PATTLE DELAMORE PARTNERS LTD

Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345
Christchurch 8140

P. 03 365 3828
F. 03 365 3194
E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Dear Sir/Madam

Thank you for submitting your property enquiry in regards to our Listed Land Use Register (LLUR) which holds information about sites that have been used, or are currently used for activities which have the potential to have caused contamination.

The LLUR statement provided indicates the location of the land parcel(s) you enquired about and provides information regarding any LLUR sites within a radius specified in the statement of this land.

Please note that if a property is not currently entered on the LLUR, it does not mean that an activity with the potential to cause contamination has never occurred, or is not currently occurring there. The LLUR is not complete, and new sites are regularly being added as we receive information and conduct our own investigations into current and historic land uses.

The LLUR only contains information held by Environment Canterbury in relation to contaminated or potentially contaminated land; other information relevant to potential contamination may be held in other files (for example consent and enforcement files).

If your enquiry relates to a farm property, please note that many current and past activities undertaken on farms may not be listed on the LLUR. Activities such as the storage, formulation and disposal of pesticides, offal pits, foot rot troughs, animal dips and underground or above ground fuel tanks have the potential to cause contamination.

Please contact and Environment Canterbury Contaminated Sites Officer if you wish to discuss the contents of the LLUR statement, or if you require additional information. For any other information regarding this land please contact Environment Canterbury Customer Services.

Yours sincerely

Contaminated Sites Team

Property Statement from the Listed Land Use Register

Visit www.ecan.govt.nz/HAIL for more information about land uses.



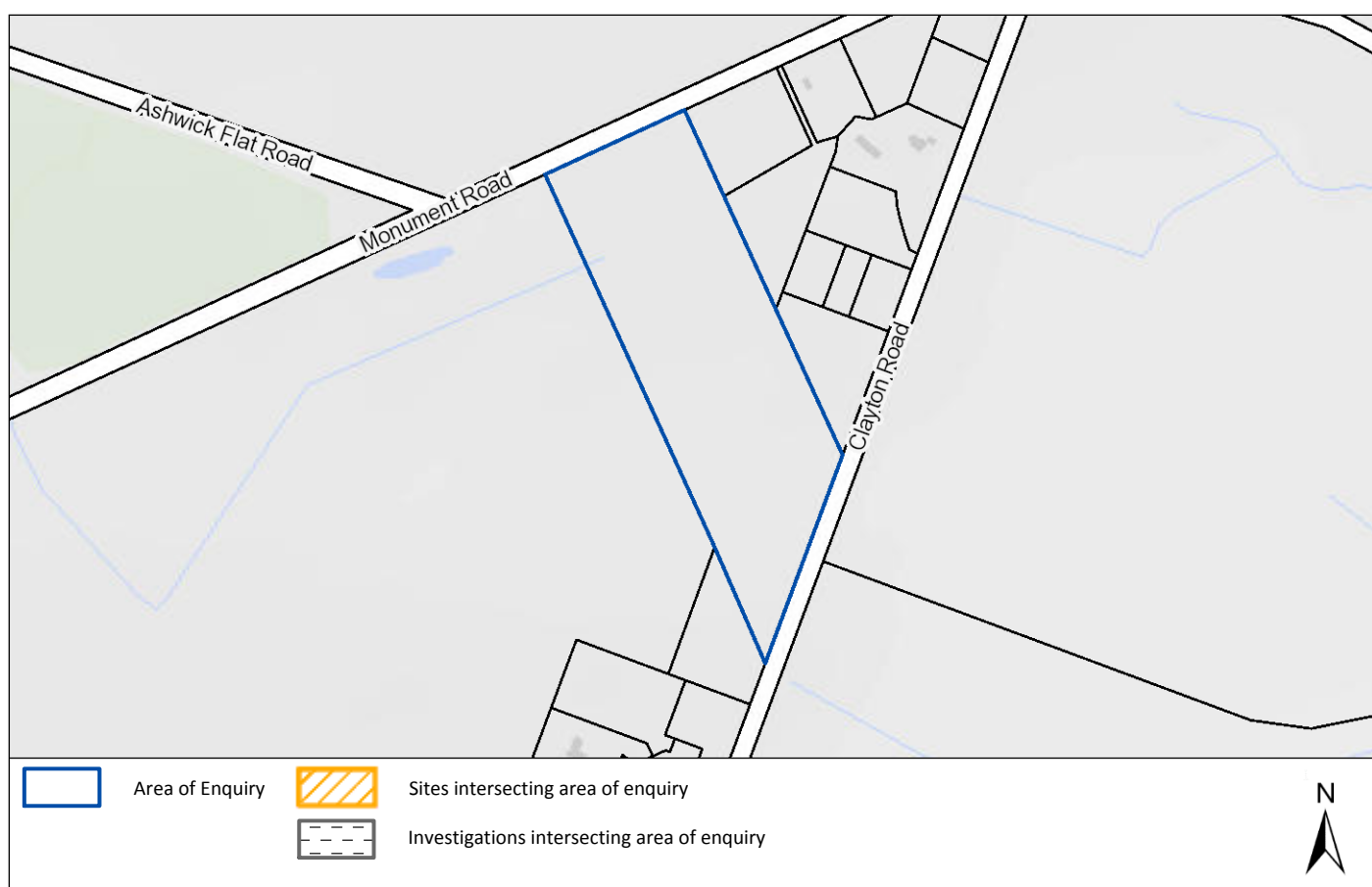
Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345
Christchurch 8140

P. 03 365 3828
F. 03 365 3194
E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Date:	07 November 2018	
Land Parcels:	Part RS 32380	Valuation No(s): 2528017014



The information presented in this map is specific to the property you have selected. Information on nearby properties may not be shown on this map, even if the property is visible.

Summary of sites:

There are no sites associated with the area of enquiry.

Information held about the sites on the Listed Land Use Register

There are no sites associated with the area of enquiry.

Information held about other investigations on the Listed Land Use Register

For further information from Environment Canterbury, contact Customer Services and refer to enquiry number ENQ220487.

Disclaimer: *The enclosed information is derived from Environment Canterbury's Listed Land Use Register and is made available to you under the Local Government Official Information and Meetings Act 1987 and Environment Canterbury's Contaminated Land Information Management Strategy (ECan 2009).*

The information contained in this report reflects the current records held by Environment Canterbury regarding the activities undertaken on the site, its possible contamination and based on that information, the categorisation of the site. Environment Canterbury has not verified the accuracy or completeness of this information. It is released only as a copy of Environment Canterbury's records and is not intended to provide a full, complete or totally accurate assessment of the site. It is provided on the basis that Environment Canterbury makes no warranty or representation regarding the reliability, accuracy or completeness of the information provided or the level of contamination (if any) at the relevant site or that the site is suitable or otherwise for any particular purpose. Environment Canterbury accepts no responsibility for any loss, cost, damage or expense any person may incur as a result of the use, reference to or reliance on the information contained in this report.

Any person receiving and using this information is bound by the provisions of the Privacy Act 1993.

Listed Land Use Register

What you need to know



What is the Listed Land Use Register (LLUR)?

The LLUR is a database that Environment Canterbury uses to manage information about land that is, or has been, associated with the use, storage or disposal of hazardous substances.

Why do we need the LLUR?

Some activities and industries are hazardous and can potentially contaminate land or water. We need the LLUR to help us manage information about land which could pose a risk to your health and the environment because of its current or former land use.

Section 30 of the Resource Management Act (RMA, 1991) requires Environment Canterbury to investigate, identify and monitor contaminated land. To do this we follow national guidelines and use the LLUR to help us manage the information.

The information we collect also helps your local district or city council to fulfil its functions under the RMA. One of these is implementing the National Environmental Standard (NES) for Assessing and Managing Contaminants in Soil, which came into effect on 1 January 2012.

For information on the NES, contact your city or district council.

How does Environment Canterbury identify sites to be included on the LLUR?

We identify sites to be included on the LLUR based on a list of land uses produced by the Ministry for the Environment (MfE). This is called the Hazardous Activities and Industries List (HAIL)¹. The HAIL has 53 different activities, and includes land uses such as fuel storage sites, orchards, timber treatment yards, landfills, sheep dips and any other activities where hazardous substances could cause land and water contamination.

We have two main ways of identifying HAIL sites:

- We are actively identifying sites in each district using historic records and aerial photographs. This project started in 2008 and is ongoing.
- We also receive information from other sources, such as environmental site investigation reports submitted to us as a requirement of the Regional Plan, and in resource consent applications.

¹ The Hazardous Activities and Industries List (HAIL) can be downloaded from MfE's website www.mfe.govt.nz, keyword search HAIL

How does Environment Canterbury classify sites on the LLUR?

Where we have identified a HAIL land use, we review all the available information, which may include investigation reports if we have them. We then assign the site a category on the LLUR. The category is intended to best describe what we know about the land use and potential contamination at the site and is signed off by a senior staff member.

Please refer to the Site Categories and Definitions factsheet for further information.

What does Environment Canterbury do with the information on the LLUR?

The LLUR is available online at www.llur.ecan.govt.nz. We mainly receive enquiries from potential property buyers and environmental consultants or engineers working on sites. An inquirer would typically receive a summary of any information we hold, including the category assigned to the site and a list of any investigation reports.

We may also use the information to prioritise sites for further investigation, remediation and management, to aid with planning, and to help assess resource consent applications. These are some of our other responsibilities under the RMA.

If you are conducting an environmental investigation or removing an underground storage tank at your property, you will need to comply with the rules in the Regional Plan and send us a copy of the report. This means we can keep our records accurate and up-to-date, and we can assign your property an appropriate category on the LLUR. To find out more, visit www.ecan.govt.nz/HAIL.



My land is on the LLUR – what should I do now?

IMPORTANT! Just because your property has a land use that is deemed hazardous or is on the LLUR, it doesn't necessarily mean it's contaminated. The only way to know if land is contaminated is by carrying out a detailed site investigation, which involves collecting and testing soil samples.

You do not need to do anything if your land is on the LLUR and you have no plans to alter it in any way. It is important that you let a tenant or buyer know your land is on the Listed Land Use Register if you intend to rent or sell your property. If you are not sure what you need to tell the other party, you should seek legal advice.

You may choose to have your property further investigated for your own peace of mind, or because you want to do one of the activities covered by the National Environmental Standard for Assessing and Managing Contaminants in Soil. Your district or city council will provide further information.

If you wish to engage a suitably qualified experienced practitioner to undertake a detailed site investigation, there are criteria for choosing a practitioner on www.ecan.govt.nz/HAIL.



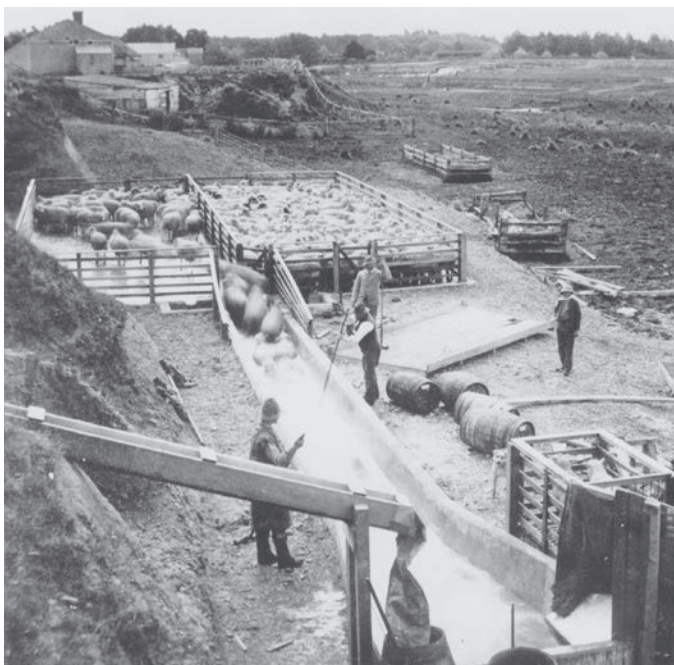
I think my site category is incorrect – how can I change it?

If you have an environmental investigation undertaken at your site, you must send us the report and we will review the LLUR category based on the information you provide. Similarly, if you have information that clearly shows your site has not been associated with HAIL activities (eg. a preliminary site investigation), or if other HAIL activities have occurred which we have not listed, we need to know about it so that our records are accurate.

If we have incorrectly identified that a HAIL activity has occurred at a site, it will be not be removed from the LLUR but categorised as Verified Non-HAIL. This helps us to ensure that the same site is not re-identified in the future.

IMPORTANT!

The LLUR is an online database which we are continually updating. A property may not currently be registered on the LLUR, but this does not necessarily mean that it hasn't had a HAIL use in the past.



Sheep dipping (ABOVE) and gas works (TOP) are among the former land uses that have been identified as potentially hazardous. (Photo above by Wheeler & Son in 1987, courtesy of Canterbury Museum.)

Contact us

Property owners have the right to look at all the information Environment Canterbury holds about their properties.

It is free to check the information on the LLUR, online at www.llur.ecan.govt.nz.

If you don't have access to the internet, you can enquire about a specific site by phoning us on (03) 353 9007 or toll free on 0800 EC INFO (32 4636) during business hours.

Contact Environment Canterbury:

Email: ecinfo@ecan.govt.nz

Phone:

Calling from Christchurch: (03) 353 9007

Calling from any other area: 0800 EC INFO (32 4636)



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www.ecan.govt.nz

E13/101

Listed Land Use Register

Site categories and definitions

When Environment Canterbury identifies a Hazardous Activities and Industries List (HAIL) land use, we review the available information and assign the site a category on the Listed Land Use Register. The category is intended to best describe what we know about the land use.

If a site is categorised as **Unverified** it means it has been reported or identified as one that appears on the HAIL, but the land use has not been confirmed with the property owner.

If the land use has been confirmed but analytical information from the collection of samples is not available, and the presence or absence of contamination has therefore not been determined, the site is registered as:

Not investigated:

- A site whose past or present use has been reported and verified as one that appears on the HAIL.
- The site has not been investigated, which might typically include sampling and analysis of site soil, water and/or ambient air, and assessment of the associated analytical data.
- There is insufficient information to characterise any risks to human health or the environment from those activities undertaken on the site. Contamination may have occurred, but should not be assumed to have occurred.

If analytical information from the collection of samples is available, the site can be registered in one of six ways:

At or below background concentrations:

The site has been investigated or remediated. The investigation or post remediation validation results confirm there are no hazardous substances above local background concentrations other than those that occur naturally in the area. The investigation or validation sampling has been sufficiently detailed to characterise the site.

Below guideline values for:

The site has been investigated. Results show that there are hazardous substances present at the site but indicate that any adverse effects or risks to people and/or the environment are considered to be so low as to be acceptable. The site may have been remediated to reduce contamination to this level, and samples taken after remediation confirm this.

Managed for:

The site has been investigated. Results show that there are hazardous substances present at the site in concentrations that have the potential to cause adverse effects or risks to people and/or the environment. However, those risks are considered managed because:

- the nature of the use of the site prevents human and/or ecological exposure to the risks; and/or
- the land has been altered in some way and/or restrictions have been placed on the way it is used which prevent human and/or ecological exposure to the risks.

Partially investigated:

The site has been partially investigated. Results:

- demonstrate there are hazardous substances present at the site; however, there is insufficient information to quantify any adverse effects or risks to people or the environment; or
- do not adequately verify the presence or absence of contamination associated with all HAIL activities that are and/or have been undertaken on the site.

Significant adverse environmental effects:

The site has been investigated. Results show that sediment, groundwater or surface water contains hazardous substances that:

- have significant adverse effects on the environment; or
- are reasonably likely to have significant adverse effects on the environment.

Contaminated:

The site has been investigated. Results show that the land has a hazardous substance in or on it that:

- has significant adverse effects on human health and/or the environment; and/or
- is reasonably likely to have significant adverse effects on human health and/or the environment.

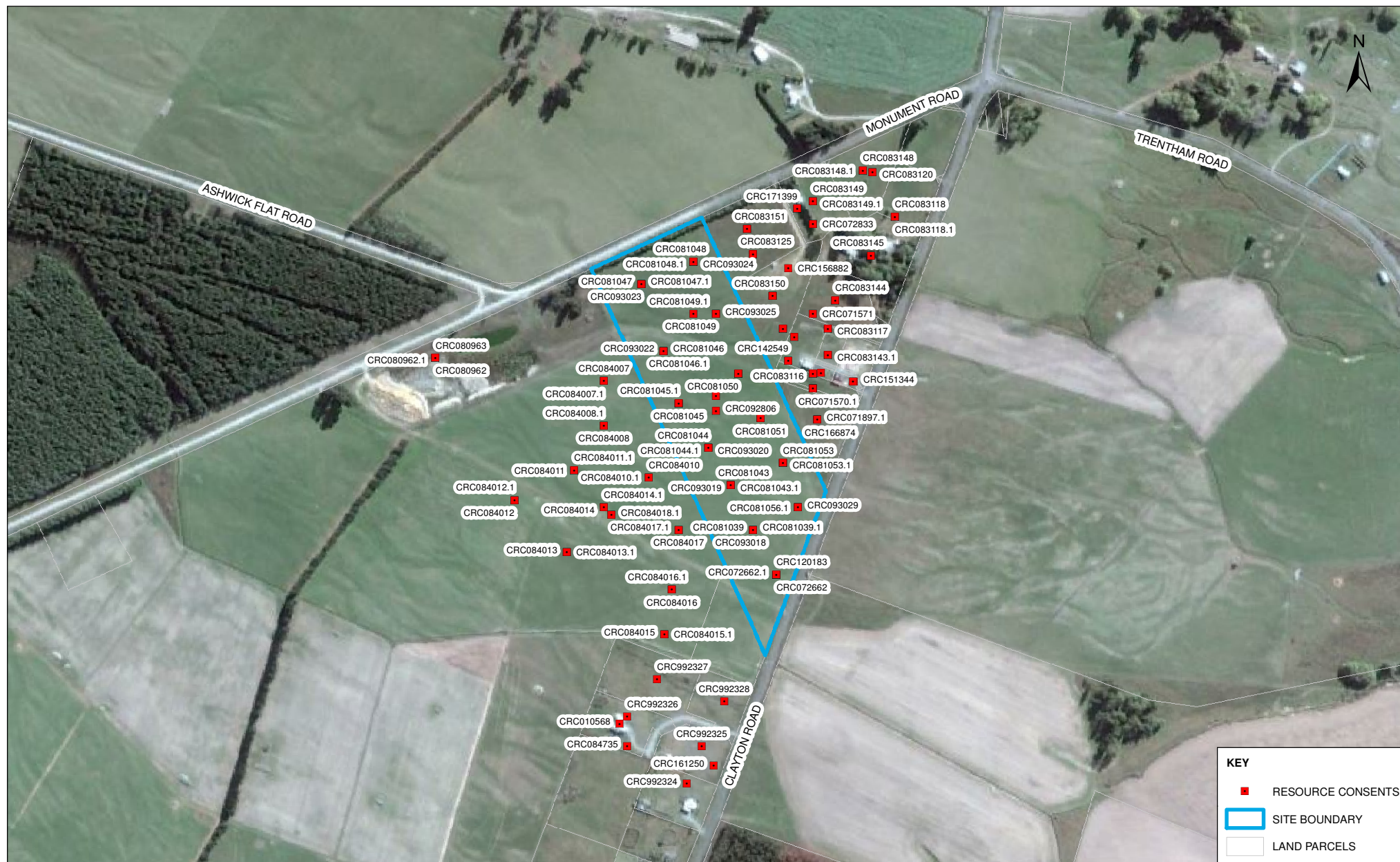
If a site has been included incorrectly on the Listed Land Use Register as having a HAIL, it will not be removed but will be registered as:

Verified non-HAIL:

Information shows that this site has never been associated with any of the specific activities or industries on the HAIL.

Please contact Environment Canterbury for further information:

(03) 353 9007 or toll free
on 0800 EC INFO (32 4636)
email ecinfo@ecan.govt.nz



SOURCE:
 1. AERIAL IMAGERY SOURCED FROM GOOGLE EARTH PRO (MAY NOT BE SPATIALLY ACCURATE).
 2. CADASTRAL INFORMATION DERIVED FROM LAND INFORMATION NEW ZEALAND DATA.

CONSENTS WITHIN A 250 M RADIUS OF THE SITE BOUNDARY - SOURCED FROM ECAN DATABASE NOVEMBER 2018

Resource Consents located within a 250 m radius of the Site Boundary. (Sourced from Ecan GIS Database in November 2018)

	Consent No.	Consent Description	Consent Status	Consent Holder	Grid East	Grid North	Approx. Distance from centre of Site (m)
1	CR072662	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426987	5125227	0
	CR072662.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426987	5125227	0
2	CR081039	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426956	5125287	0
	CR081039.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426956	5125287	0
3	CR081043	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426926	5125347	0
	CR081043.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426926	5125347	0
4	CR081044	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426896	5125397	0
	CR081044.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426896	5125397	0
5	CR081045	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426856	5125457	0
	CR081045.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426856	5125457	0
6	CR081046	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426836	5125527	0
	CR081046.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426836	5125527	0
7	CR081047	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426806	5125617	0
	CR081047.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426806	5125617	0
8	CR081048	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426876	5125647	0
	CR081048.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426876	5125647	0
9	CR081049	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426906	5125577	0
	CR081049.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426876	5125577	0
10	CR081050	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426936	5125497	0
	CR081050.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426936	5125497	0
11	CR081051	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426966	5125437	0
	CR081051.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426966	5125437	0
12	CR081053	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1426996	5125377	0
	CR081053.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1426996	5125377	0
13	CR081056	Discharge Permit (s15)	Terminated - Replaced	3 Bears Running Limited	1427016	5125317	0
	CR081056.1	Discharge Permit (s15)	Terminated - Lapsed	3 Bears Running Limited	1427016	5125317	0
14	CR084722	Certif of Compliance (s15)	Application Declined	3 Bears Running Limited	1426906	5125467	0
15	CR092134	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426987	5125227	0
16	CR092806	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426906	5125447	0
17	CR093018	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426956	5125287	0
18	CR093019	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426926	5125347	0
19	CR093020	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426896	5125397	0
20	CR093021	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426856	5125457	0
21	CR093022	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426836	5125527	0
22	CR093023	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426806	5125617	0
23	CR093024	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426876	5125647	0
24	CR093025	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426906	5125577	0
25	CR093026	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426936	5125497	0
26	CR093027	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426966	5125437	0
27	CR093028	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426996	5125377	0
28	CR093029	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1427016	5125317	0
29	CR120183	Discharge Permit (s15)	Issued - Inactive	3 Bears Running Limited	1426987	5125227	0
30	CR120322	Discharge Permit (s15)	Terminated - Surrendered	3 Bears Running Limited	1426987	5125227	0
31	CR142549	Discharge Permit (s15)	Terminated - Replaced	Clearwater Developments Ltd	1427003	5125514	110
32	CR152613	Discharge Permit (s15)	Issued - Active	Mr B P B & Mrs R L Jacques	1427003	5125514	110
33	CR071570	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427036	5125477	130
	CR071570.1	Discharge Permit (s15)	Terminated - Replaced	Pekachu Developments Limited	1427036	5125477	130
34	CR083116	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427036	5125497	130
	CR083116.1	Discharge Permit (s15)	Terminated - Surrendered	Pekachu Developments Limited	1427036	5125497	130
35	CR083123	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1426996	5125557	130
	CR083123.1	Discharge Permit (s15)	Terminated - Lapsed	Pekachu Developments Limited	1426996	5125557	130
36	CR161633	Discharge Permit (s15)	Issued - Inactive	Mr B P B & Mrs R L Jacques	1427011	5125546	130
37	CR166868	Discharge Permit (s15)	Issued - Inactive	Mr N B & L J Yannakis & Mr M L & Mrs M J Hutchinson	1427036	5125477	130
38	CR071897	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427042	5125435	140
	CR071897.1	Discharge Permit (s15)	Terminated - Replaced	Pekachu Developments Limited	1427042	5125435	140
39	CR084010	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426816	5125357	140
	CR084010.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426816	5125357	140
40	CR142548	Discharge Permit (s15)	Issued - Active	Clearwater Developments Ltd	1427047	5125498	140
41	CR166874	Discharge Permit (s15)	Issued - Inactive	Mr N B & L J Yannakis & Mr M L & Mrs M J Hutchinson	1427042	5125435	140
42	CR084007	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426756	5125487	150
	CR084007.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426756	5125487	150
43	CR083143	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427056	5125522	160
	CR083143.1	Discharge Permit (s15)	Terminated - Lapsed	Pekachu Developments Limited	1427056	5125522	160
44	CR083150	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1426982	5125601	160
	CR083150.1	Discharge Permit (s15)	Terminated - Replaced	Pekachu Developments Limited	1426982	5125601	160
45	CR084008	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426756	5125427	160
	CR084008.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426756	5125427	160
46	CR160176	Discharge Permit (s15)	Issued - Active	Mr GW & Mrs J Salter	1426982	5125601	160
47	CR071571	Certif of Compliance (s15)	Application Declined	Anthony Lewis Mathias	1427036	5125577	170
48	CR083117	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427056	5125557	180
	CR083117.1	Discharge Permit (s15)	Issued - Inactive	Pekachu Developments Limited	1427056	5125557	180
49	CR084017	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426856	5125287	180
	CR084017.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426856	5125287	180
50	CR142547	Discharge Permit (s15)	Terminated - Replaced	Clearwater Developments Ltd	1427090	5125486	180
51	CR151344	Discharge Permit (s15)	Issued - Active	Clearwater Developments Ltd	1427091	5125486	190
52	CR083125	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1426956	5125657	200
	CR083125.1	Discharge Permit (s15)	Terminated - Lapsed	Pekachu Developments Limited	1426956	5125657	200
53	CR156882	Discharge Permit (s15)	Issued - Active	Mr G & Mrs J Salter	1427003	5125638	200
54	CR083144	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427066	5125595	210
	CR083144.1	Discharge Permit (s15)	Issued - Inactive	Pekachu Developments Limited	1427066	5125595	210
55	CR084011	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426716	5125367	210
	CR084011.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426716	5125367	210
56	CR084014	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426756	5125317	210
	CR084014.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426756	5125317	210
57	CR084018	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426766	5125307	210
	CR084018.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426766	5125307	210
58	CR083151	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1426948	5125691	230
	CR083151.1	Discharge Permit (s15)	Terminated - Lapsed	Pekachu Developments Limited	1426948	5125691	230
59	CR084016	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426847	5125207	260
	CR084016.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426847	5125207	260
60	CR072833	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427036	5125697	270
	CR072833.1	Discharge Permit (s15)	Issued - Active	Pekachu Developments Limited	1427036	5125697	270
61	CR083145	Discharge Permit (s15)	Terminated - Surrendered	Anthony Lewis Mathias	1427114	5125655	280
62	CR171399	Discharge Permit (s15)	Issued - Inactive	Chris Bown	1427015	5125718	280
63	CR084013	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426706	5125257	290
	CR084013.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426706	5125257	290
64	CR083149	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427036	5125728	300
	CR083149.1	Discharge Permit (s15)	Issued - Active	Pekachu Developments Limited	1427036	5125728	300
65	CR084012	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426636	5125327	300
	CR084012.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426636	5125327	300
66	CR084015	Discharge Permit (s15)	Terminated - Replaced	Quintin Mitchell	1426837	5125147	320
	CR084015.1	Discharge Permit (s15)	Terminated - Lapsed	Shallow Creek Farms Limited	1426837	5125147	320
67	CR083118	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427146	5125707	340
	CR083118.1	Discharge Permit (s15)	Terminated - Lapsed	Pekachu Developments Limited	1427146	5125707	340
68	CR083148	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427103	5125769	360
	CR083148.1	Discharge Permit (s15)	Terminated - Lapsed	Pekachu Developments Limited	1427103	5125769	360
69	CR083120	Discharge Permit (s15)	Terminated - Replaced	Anthony Lewis Mathias	1427116	5125767	370
	CR083120.1	Discharge Permit (s15)	Terminated - Lapsed	Pekachu Developments Limited	1427116	5125767	370
70	CR080962	Water Permit (s14)	Terminated - Replaced	Willowbrook Trust (Q, L.A. D & K Mitchell)	1426530	5125518	380
	CR080962.1	Water Permit (s14)	Terminated - Lapsed	Shallow Creek Farms Limited	1426530	5125518	380
71	CR080963	Land Use Consent (s9)	Terminated - Expired	Shallow Creek Farms Limited	1426530	5125518	380
72	CR092327	Discharge Permit (s15)	Terminated - Lapsed	Village Hill Limited	1426827	5125087	380
73	CR092328	Discharge Permit (s15)	Terminated - Lapsed	Village Hill Limited	1426917	5125057	410
74	CR092326	Discharge Permit (s15)	Terminated - Lapsed	Village Hill Limited	1426787	5125037	440
75	CR010568	Land Use Consent (s9)	Terminated - Expired	Village Hill Limited	1426777	5125027	450
76	CR092325	Discharge Permit (s15)	Terminated - Lapsed	Village Hill Limited	1426887	5124997	470
77	CR084735	Discharge Permit (s15)	Issued - Active	Mr & Mrs W H & C B Haigh	1426787	5124997	480
78	CR161250	Discharge Permit (s15)	Issued - Inactive	John Andrew Robertson	1426903	5124971	490
79	CR092324	Discharge Permit (s15)	Terminated - Lapsed	Village Hill Limited	1426867	5124947	520

Note: A record showing '0 m' approximate distance from the centre of the site indicates that the consent is located within the site boundary.



novo group
Planning. Traffic. Development.

Integrated Transport Assessment
prepared for

3 BEARS RUNNING LTD

Clayton Road, Ashwick Flat

December 2018



Integrated Transport Assessment
prepared for

3 Bears Running Ltd

Clayton Road, Ashwick Flat

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Reviewed by	Rhys Chesterman, Senior Traffic Engineer & Director

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Appendices

Appendix 1 Application Plans

Appendix 2 Transport Compliance Assessment



Introduction

1. 3 Bears Running has commissioned Novo Group to prepare a Transport Assessment (TA) for the development of a 17-lot residential sub-division at 1089 Clayton Road, Ashwick Flat near Fairlie.
2. This report provides an assessment of the transport aspects of the proposed development. It also describes the transport environment in the vicinity of the site, describes the transport related components of the proposal and identifies compliance issues with the transport provisions in the District Plan. It has been prepared broadly in accordance with the Integrated Transportation Assessment Guidelines specified in New Zealand Transport Agency Research report 422, November 2010.
3. It is proposed to develop the land to provide a 17-lot residential sub-division. It is anticipated that 11 lots (proposed Lots 7-17) would take access to Clayton Road via a new road that would be vested in Council. Lot 12 would take access directly from Clayton Road. Four lots (proposed Lots 1-4) would take access from a separate Right of Way that links to Monument Road, with one lot taking direct access from Monument Road. The site location is illustrated in **Figure 1** and a copy of the proposed site layout is contained in **Appendix 1**.



Figure 1: Site Location

4. The site is predicted to generate 24 vehicle movements in the weekday peak hours and 172 vehicle movements per day.



Transport Environment

Road Network

Clayton Road

5. Clayton Road is classified as a *Local Road* in the District Plan road hierarchy. This road is approximately 5.5m wide with 0.5m wide sealed shoulders and wide grass berms on both sides. The speed limit is 100km/hr.
6. Existing traffic volumes on this road have been taken from the NZ Transport Agency CAS¹ database, which suggests a daily volume of 337 vehicles per day. It is assumed that the peak hour traffic volumes are 34 to 51 vehicles per hour (on the basis of peak hour volumes being 10% to 15% of daily traffic).

Monument Road

7. Monument Road is also classified as a *Local Road*. This road is a metalled road of approximately 8.2m width with wide grass berms on both sides. The speed limit on this road is 100km/hr.
8. Existing traffic volumes on this road have been taken from the NZ Transport Agency CAS database, which suggests a daily volume of 67 vehicles per day. It is assumed that the peak hour traffic volumes are 7 to 10 vehicles per hour.
9. It is understood that Monument Road will be sealed past the site in the near future.

Crash History

10. The NZ Transport Agency CAS database has been reviewed to identify reported crashes on the road network in the vicinity of the site between 2013 and 2018. This indicated one crash south-west of the Monument Road / Ashwick Flat Road intersection, where a u-turning driver failed to notice a log in the berm. Overall, this indicates that the surrounding road network is operating safely.

The Proposal

11. The proposal is to establish and operate a 17-lot residential sub-division, including the construction of a new cul-de-sac road to be vested in Council. Lot 12 will take access from Clayton Road. Lot 2 will take access from Monument Road.

Proposed Road

12. The proposed road will be approximately 190m long to the cul-de-sac turning head. That turning head will have a diameter of 18m. The road will have a sealed carriageway width of 6.5m in a legal width of 15.0m. There will be 1.1m shoulders as the carriageway

¹ Crash Analysis System



construction features to the grassed swales. It is proposed that the cul-de-sac has a speed limit of 50km/hr.

13. The road will serve eleven rural residential lots. The traffic generation of these lots has been estimated using the 85th percentile traffic generation rates for rural dwellings in NZTA Research Report 453 (*Trips and Parking Related to Land Use*). That document suggests per dwelling traffic generation rates of 1.4 vehicle movements per hour (during the peak hours) and 10.1 vehicle movements per day. This leads to 15 vehicle movements per hour in the peak and 111 vehicle movements per day. These volumes are considered to be conservatively high, noting that the location of the proposal relative to urban areas and the high likelihood that the proposed dwellings are used as holiday homes. This all suggests more trip linking and a likely lower overall generation rate per dwelling unit. For the purposes of this assessment the NZTA generation rates have been applied to ensure a robust assessment is carried out.

Monument Road Right of Way

14. A right of way is proposed to serve four lots accessed via Monument Road. This right of way is proposed to be 6.0m wide and 138m long. It will have a trafficable width of at least 5.5m and include a turning bay (hammerhead). The first 5.5m of this access (outside of the road boundary) will be sealed, with the remainder being a metalled surface.
15. Adopting the conservatively high traffic generation rates set out in paragraph 13 indicates this right of way will accommodate 6 vehicle movements per hour in the peak and 40 vehicle movements per day.

Additional Lots

16. In addition to the above, there are two further lots proposed that will not take access from either the proposed road or the Right of Way. This includes one lot with access to Clayton Road and one lot with access to Monument Road. The details of access to these lots will need to be assessed at the time of seeking resource consent for those specific activities.

District Plan Compliance Assessment

17. The site is located in the *Rural* zone in the District Plan. An assessment of compliance against the transport rules of the District Plan has been undertaken and is contained in **Appendix 2. Table 1** summarises the non-compliances identified. These non-compliances make the proposed activity Restricted Discretionary.

Table 1: District Plan Transport Non-Compliances

Rule	Nature of Non-Compliance
13-7.b Property Access 7.b.iii Footpaths shall be constructed as a sealed strip of 1.5m width within the berm. All areas of berms not sealed in footpath are to be formed in grass.	The berm includes sealed areas that are not footpath.



Assessment of Effects

18. The Restricted Discretionary nature of the proposal means that only the above non-compliance needs to be assessed.

Carriageway Formation

19. Although the District Plan sets out the matters of discretion regarding the non-compliance, none of these immediately appear relevant to the non-compliance identified. The proposed road will include all the elements to comply with the District Plan requirements. The non-compliance is that there are shoulders on both sides of the road where the seal tapers out.
20. This type of arrangement is common for rural roads that do not provide kerb and channel. As such, no adverse effects are anticipated.

Transport Commentary

21. Although not specifically required as an assessment against a non-compliance, the controlled nature of the activity does enable consideration of the location, alignment and pattern of roading or service lanes.
22. The alignment of the proposed road is considered to be logical and easy to understand. The road alignment is anticipated to provide for safe and efficient access to the properties, particularly given the low volumes and proposed 50km/hr speed limit.
23. The intersection of Clayton Road and the proposed road is anticipated to operate satisfactorily. There is good visibility along Clayton Road to oncoming traffic. The traffic volumes on Clayton Road and the proposed road are sufficiently low that not dedicated turning bays are considered necessary.
24. The Monument Road Right of Way will also have good visibility to traffic on the road network. Again, the traffic volumes (on Monument Road and those predicted on the Right of Way) are sufficiently low that the access is anticipated to operate satisfactorily.
25. The two properties that will access directly to the existing public road network are anticipated to be able to do so safely and efficiently subject to complying with District Plan rules. However, it is noted that the design of these accesses does not form part of this application.
26. Overall, the proposed road layout and Right of Way arrangements are considered to be acceptable.

Summary & Conclusion

Summary

27. It is proposed to develop the land to provide a 17-lot residential sub-division. It is anticipated that 11 lots would take access to Clayton Road via a new road that would be vested in Council. One lot would take access directly from Clayton Road. Four lots would



take access from a Right of Way that links to Monument Road, with one lot taking direct access from Monument Road.

28. One non-compliance has been identified, which relates to the formation width of the proposed road. The non-compliance is that the road will have an additional 1.1m of seal on both sides as the formation is feathered out. This formation arrangement is common on rural roads that do not have kerb and channel. As such, it is considered that the proposed arrangement is acceptable.
29. The general arrangement of the proposed road and the Right of Way have been reviewed and are considered to be acceptable.

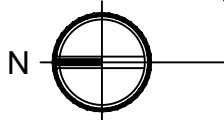
Conclusion

30. Based on the assessment undertaken above, we consider that the proposed development can be supported from a transport perspective as having less than minor effects.



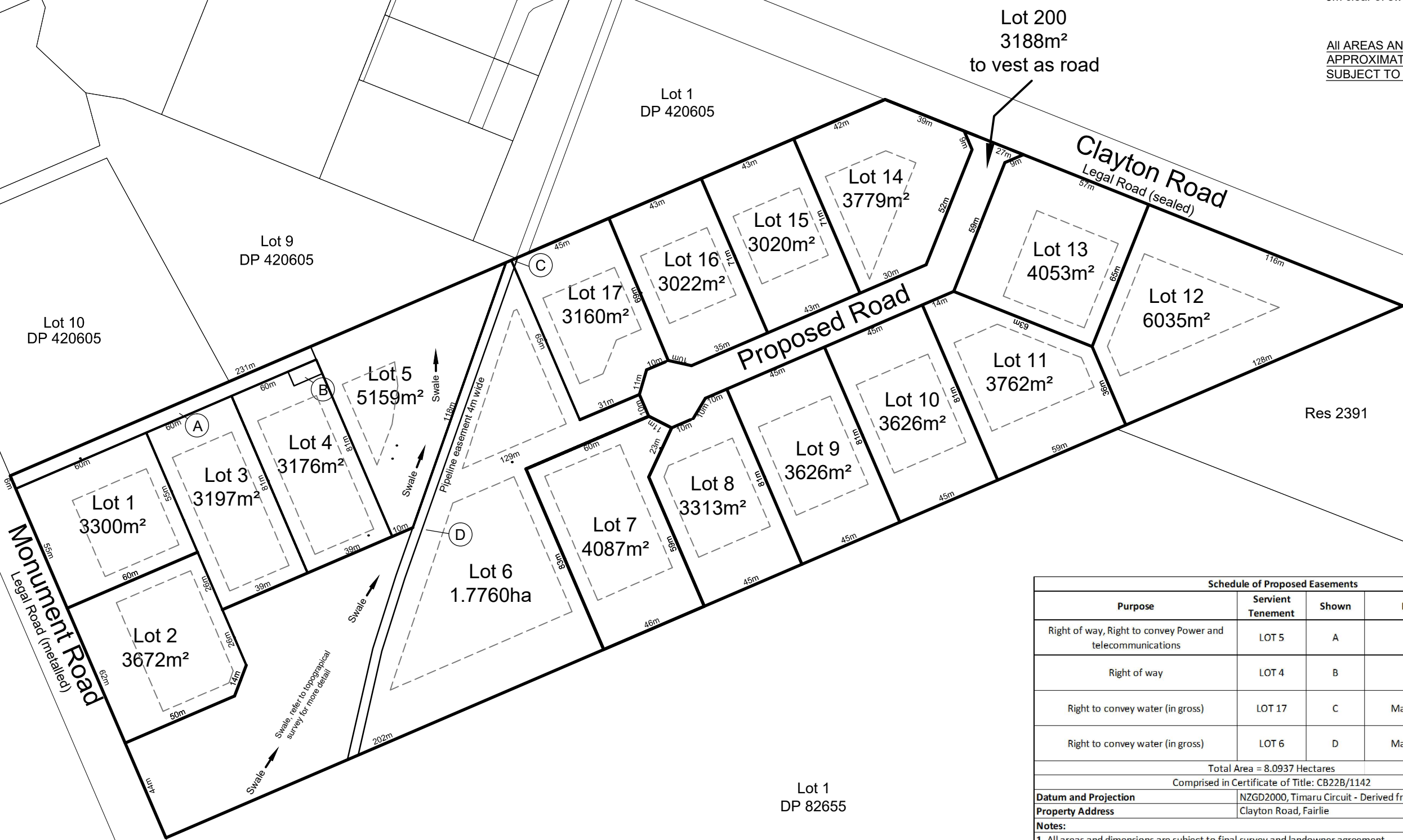
Appendix 1

Application Plans



Buildable Areas
20m clear of external boundaries
6m clear of internal boundaries
5m clear of swales

ALL AREAS AND DIMENSIONS ARE
APPROXIMATE ONLY AND ARE
SUBJECT TO FINAL SURVEY



Schedule of Proposed Easements			
Purpose	Servient Tenement	Shown	Dominant Tenement
Right of way, Right to convey Power and telecommunications	LOT 5	A	LOT 3 & LOT 4
Right of way	LOT 4	B	LOT 3 & LOT 5
Right to convey water (in gross)	LOT 17	C	Mackenzie District Council
Right to convey water (in gross)	LOT 6	D	Mackenzie District Council
Total Area = 8.0937 Hectares			
Comprised in Certificate of Title: CB22B/1142			
Datum and Projection	NZGD2000, Timaru Circuit - Derived from LINZ DCDB		
Property Address	Clayton Road, Fairlie		
Notes:			
1. All areas and dimensions are subject to final survey and landowner agreement.			
2. Final easement definition, rights and location are subject to further investigation and survey.			

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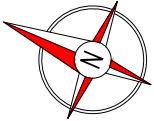
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DRAWN: KC	DATE: 6/20/18
CHECKED: BK	DATE: 6/21/18
APPROVED: JE	DATE:

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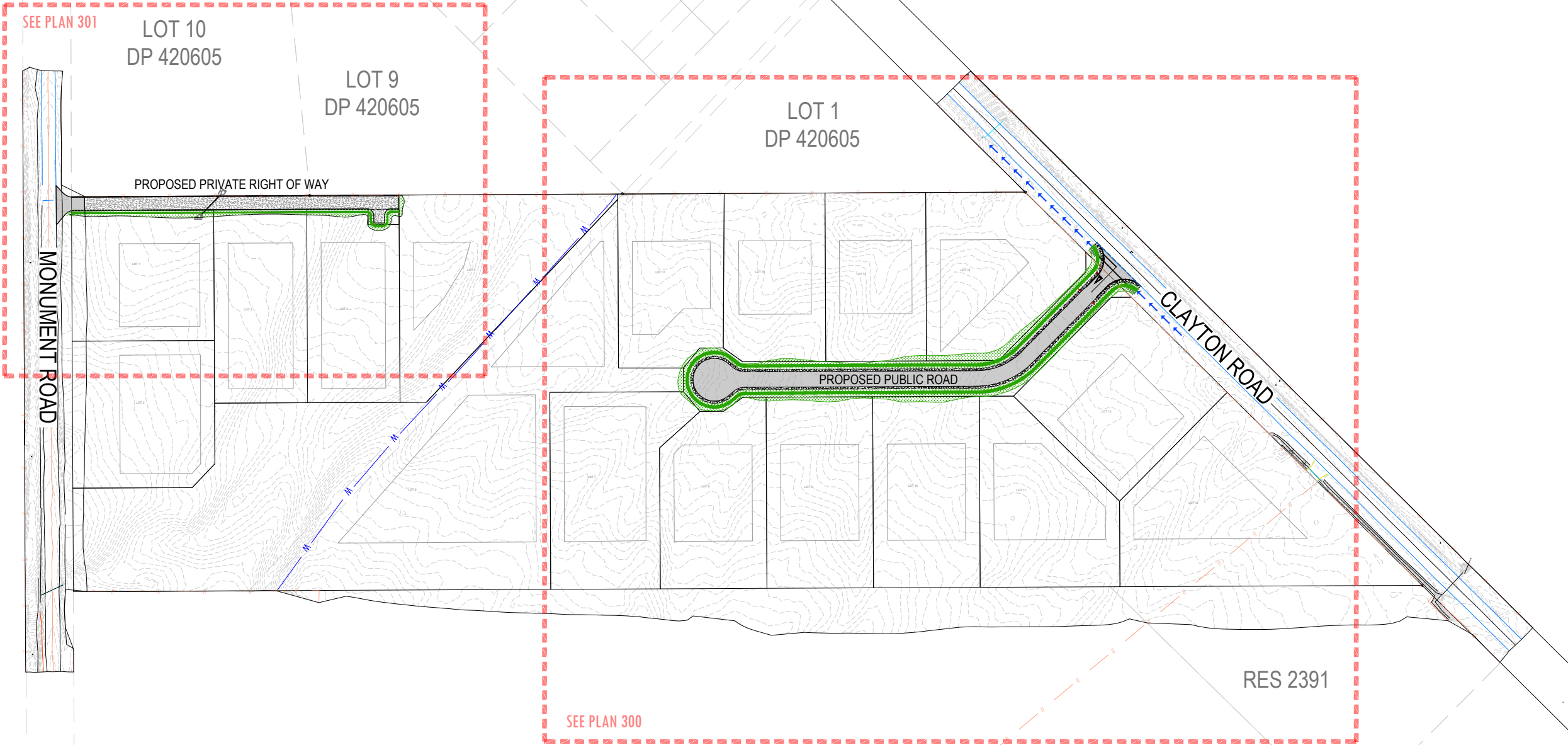
STATUS:
DRAFT

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SHEET SIZE	A1	DRAWING No.	5242-001
		REVISION	4



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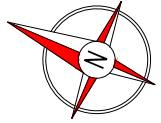
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**CLAYTON ROAD
CANTERBURY
PT RS 32380**

RESOURCE CONSENT

REV.	DESCRIPTION	BY	DATE
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B	INFORMATION UPDATED	JL	09/09/18
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SURVEYED			00/00/18
DESIGNED			JL 28/08/18
DRAWN			MV 28/08/18
APPROVED			JL 28/08/18

SCALE (A3) 1:2000
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SCALE BAR 1:2000@A3
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LEGEND

---	0	---	EXISTING CONTOURS
---	0	---	PROPOSED CONTOURS MAJOR
---	0	---	PROPOSED CONTOURS MINOR
---	0	---	OVERLAND FLOW PATH

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CANTERBURY
PT RS 32380**

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DRAWN	MV	28/08/18
APPROVED	JL	28/08/18

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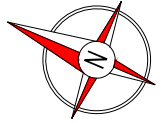
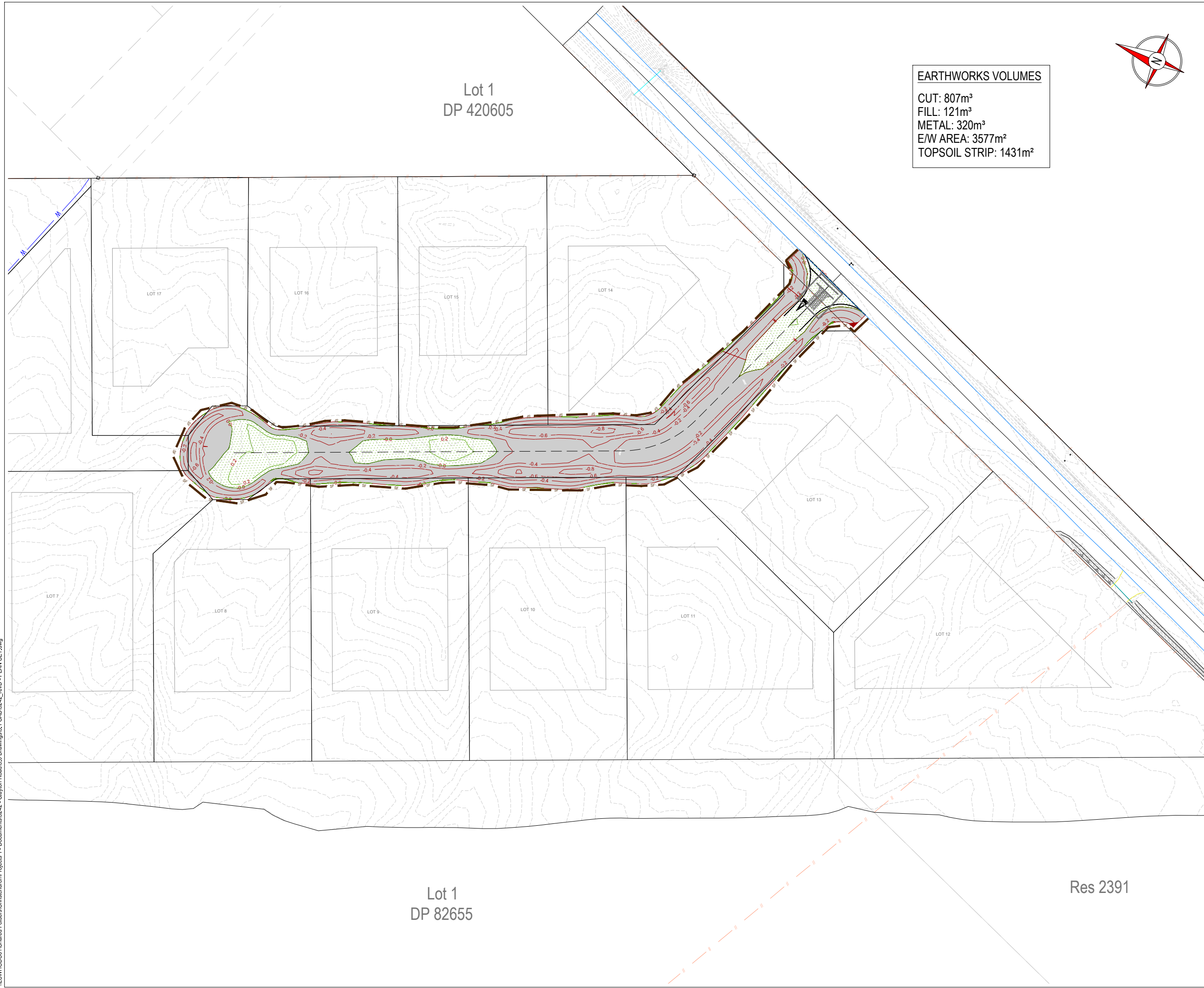
DRAWING REFERENCE	REVISION
5242-200	D

Lot 1
DP 420605



Res 2391

Lot 1
DP 82655



EARTHWORKS VOLUMES
CUT: 807m³
FILL: 121m³
METAL: 320m³
E/W AREA: 3577m²
TOPSOIL STRIP: 1431m²

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 5. ALL SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE INSTALLED IN COMPLIANCE WITH THE APPROVED DRAWINGS AND AUCKLAND COUNCIL'S EROSION & SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES IN THE AUCKLAND REGION (GD05).
 6. ASBULTS TO BE PROVIDED AND APPROVAL OF THE EROSION AND SEDIMENT CONTROL MEASURES MUST BE GAINED FROM THE ENGINEER PRIOR TO COMMENCING EARTHWORKS.
 7. CONSENT DOCUMENTS MUST BE HELD ON SITE AT ALL TIMES.

LEGEND

- EXISTING CONTOURS
- ZERO CONTOUR
- CUT CONTOURS & AREA
- FILL CONTOURS & AREA
- STABILISED ENTRANCE
- SILT FENCE

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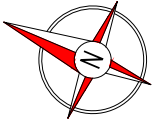
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**EARTHWORKS
EROSION & SEDIMENT
ISOPACH CONTROL PLAN**

PREPARED FOR:

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CANTERBURY
PT RS 32380**

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APPROVED		JL	28/08/18
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SCALE BAR 1:1000@A3			
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LEGEND

- SEAL
- SWALE
- COMPACTED GRAVEL
- RIPRAP

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PROPOSED ROADING PLAN

PREPARED FOR:

**CLAYTON ROAD
CANTERBURY
PT RS 32380**

RESOURCE CONSENT

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DRAWN			MV 28/08/18
APPROVED			JL 28/08/18

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SCALE BAR 1:1000@A3
DRAWING REVERENCE 5242-300
REVISION D

Lot 1
DP 420605

EXISTING
Ø300CULVERT

PROPOSED
Ø300 RC
CULVERT

CLEAN AND REGRADE THE
EXISTING SWALE DRAIN FROM
THE PROPOSED CULVERT
OUTLET TO THE DOWNSTREAM
EXISTING CULVERT INLET

DETAIL B - SEE PLAN 340

RG-01-6-VN-SS
SPEED LIMIT
(TWO NUMBERS)

RG-01-6-VN-SS
SPEED LIMIT
(TWO NUMBERS)

RG-02-6-VN-SS
SPEED
LIMIT "100"

RG-01-6-VN-SS
SPEED LIMIT
(TWO NUMBERS)

RG-01-6-VN-SS
SPEED LIMIT
(TWO NUMBERS)

RG-02-6-VN-SS
SPEED
LIMIT "100"

RG-01-6-VN-SS
SPEED LIMIT
(TWO NUMBERS)

EXISTING
OVERLAND FLOW

CLAYTON ROAD

PROPOSED PUBLIC ROAD

DETAIL A - SEE PLAN 340

LOT 17

LOT 16

LOT 15

LOT 14

LOT 7

LOT 8

LOT 9

LOT 10

LOT 11

LOT 12

Lot 1
DP 82655

Res 2391



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THE EARTHWORKS IN A LOCATION AGREED WITH THE
ENGINEER.
5. CULVERT CROSSING TO BE HARD FILL BACKFILL

Diagram illustrating four types of erosion control measures:

- SEAL
- SWALE
- COMPACTED GRAVEL
- RIPRAP

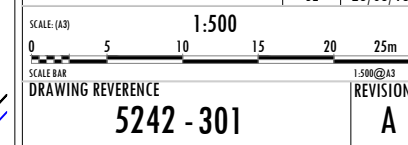
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PROPOSED RIGHT OF WAY PLAN

CLAYTON ROAD
CANTERBURY
PT RS 32380

REV.	DESCRIPTION	BY	DATE
A	ORIGINAL ISSUE	JL	13/12/18
	SURVEYED		00/00/18
	DESIGNED	JL	28/08/18
	DRAWN	MV	28/08/18
	APPROVED	JL	28/08/18

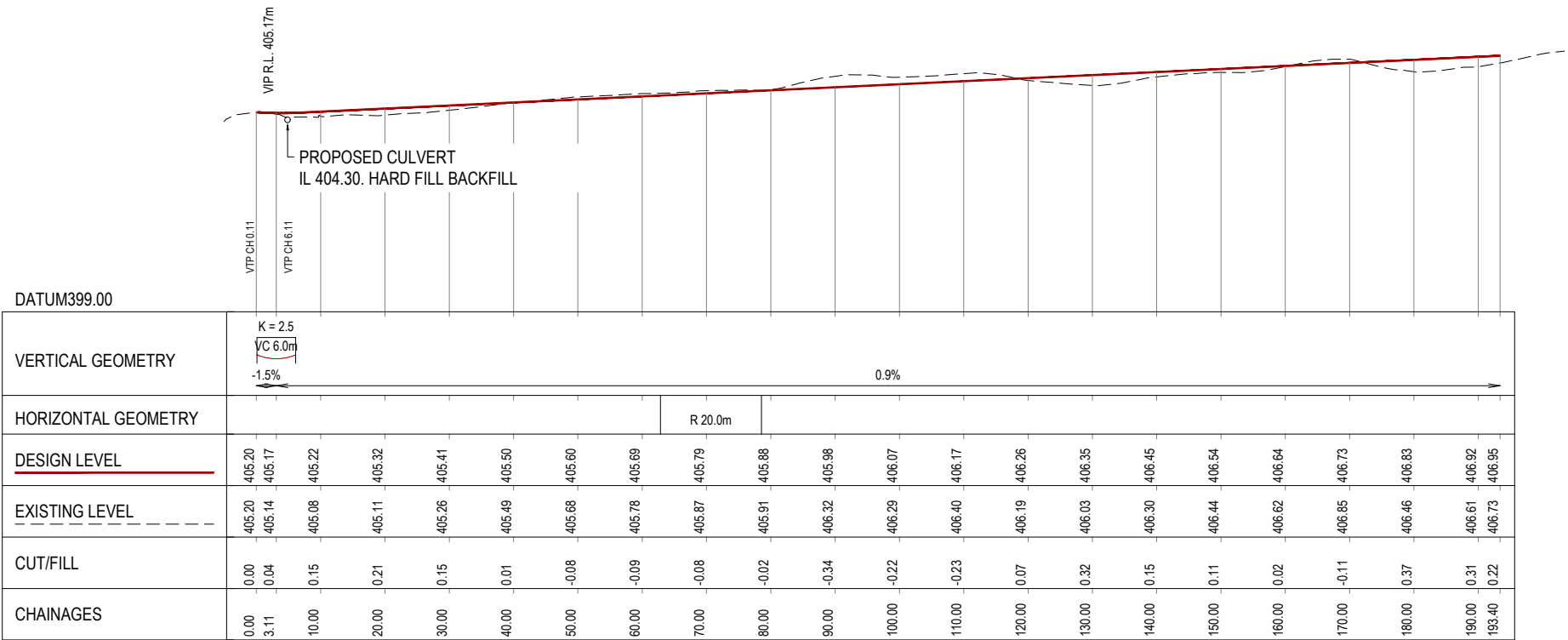


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NOTES:

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LONGITUDINAL SECTION CR01
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:200

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PROPOSED ROADING
LONGSETION

PREPARED FOR:

CLAYTON ROAD
CANTERBURY
PT RS 32380

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APPROVED			JL 28/08/18

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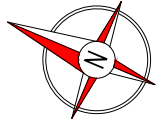
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 5. CULVERT CROSSING TO BE HARD FILL BACKFILL.

LEGEND

	SEAL
	SEWER
	SHOULDER
	RIPRAP

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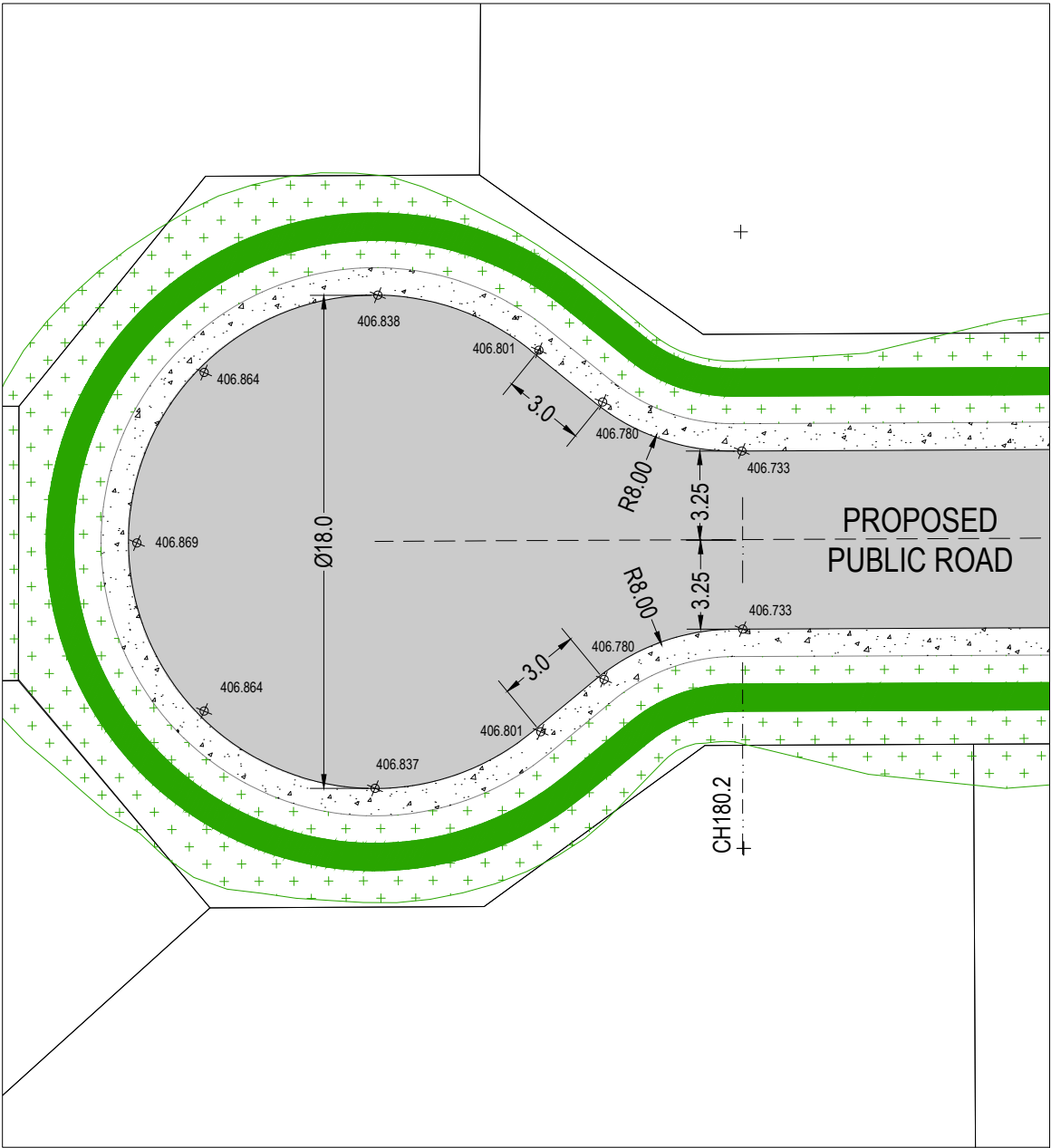
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**PROPOSED ROADING PLAN
INTERSECTION DETAILS**

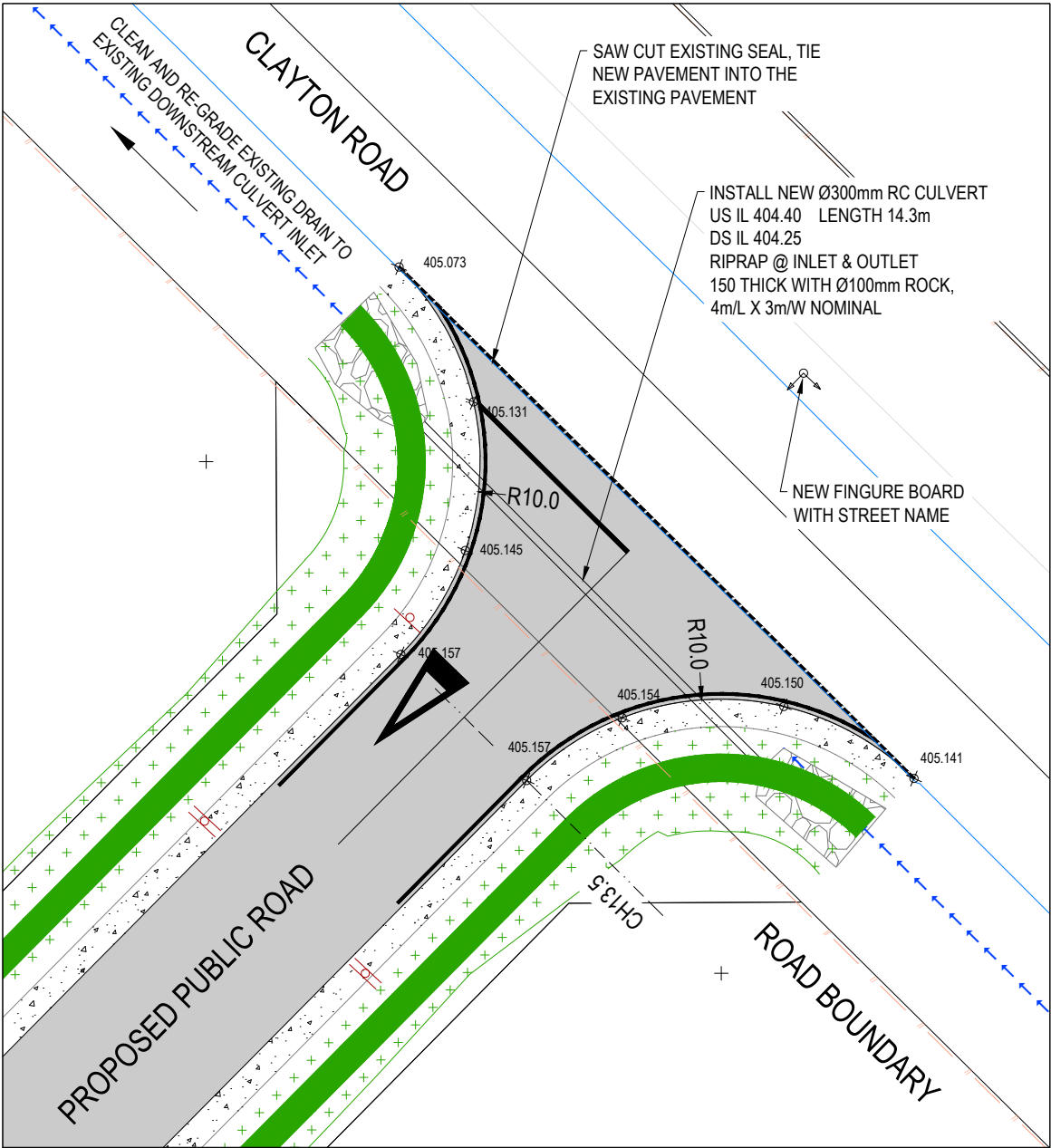
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CANTERBURY
PT RS 32380**

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DRAWING REVERENCE			REVISION
5242-340			D



DETAIL A - CULDESEC DETAIL
SCALE 1:250



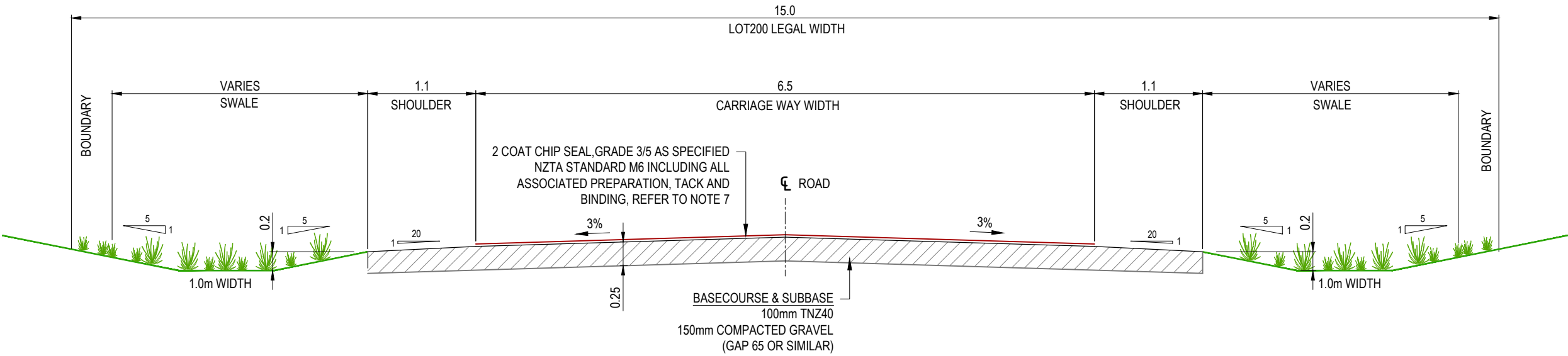
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SCALE 1:250

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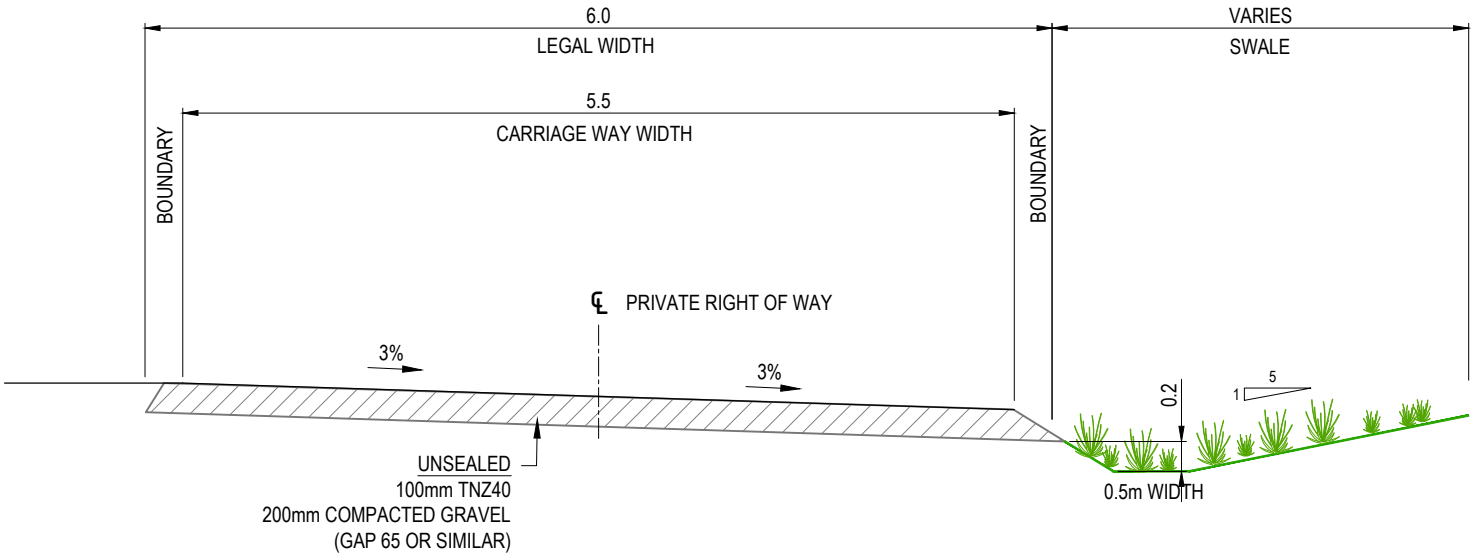
NOTES:

1. FOR GENERAL NOTES REFER TO PLAN 300
2. ALL DIMENSIONS ARE IN METERS UNO
3. ALL PAVEMENT DEPTHS ARE DESIGNED ON SPECIFIED CBR MEASUREMENTS. DEPTHS MAY BE ADJUSTED BY THE ENGINEER FOLLOWING TESTS OF THE SUBGRADE SURFACE.
4. LEVELS SHOWN ARE FINISHED LEVELS.
5. HARDFILL TO BE PLACED WHERE PIPELINES CROSS OR WHERE LINES CROSS CARRIAGEWAYS.
6. ALL PAVEMENT LAYERS REQUIRE INSPECTION AND APPROVAL FROM THE SUPERVISING ENGINEER.
7. TWO COAT CHIP SEAL SPECIFICATON SHALL BE IN ACCORDANCE WITH NZTA SPECIFICATION PUBLICATION M6.



PUBLIC ROAD TYPICAL CROSS SECTION

SCALE 1:50



RIGHT OF WAY TYPICAL CROSS SECTION

SCALE 1:50

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TYPICAL CROSS-SECTION

PREPARED FOR:

CLAYTON ROAD
CANTERBURY
PT RS 32380

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DRAWN			MV 28/08/18
APPROVED			JL 28/08/18

SCALE: (AS) AS SHOWN

DRAWING REVERENCE	REVISION
5242-390	D



Appendix 2

Transport Compliance Assessment



RULE	COMMENT	COMPLIES?
Section 13 – Subdivision		
7.b Property Access		
7.b.i All new roads shall be laid out and vested in the Council, in accordance with the standards set out in the table below Requires: Road width of 15m to 20m; and Carriageway width of 6.2m to 6.5m.	The legal width is 15m and the carriageway width is 6.5m.	Complies
7.b.ii The carriageway of all new roads laid out and vested in accordance with 7.b.i above shall be formed and sealed	Complies	Complies
7.b.iii Footpaths shall be constructed as a sealed strip of 1.5m width within the berm. All areas of berms not sealed in footpath are to be formed in grass. a. Cul-de-sac shall be constructed with turning heads of the following diameters measured kerb face to kerb face: - Residential Zones: 13m where there is no provision for on-street parking; 18m where there is provision for on-street parking. - Rural and Rural-Residential Zones: 18m.	There is no footpath requirement. The berm includes sealed areas not footpath.	No
7.b.iv If a corner lot is included in any subdivision, the corner at the road intersection shall be splayed with a diagonal line reducing each boundary by at least 6m from the corner in a Rural, Rural-residential or Residential Zone and at least 3m in a Business zone. The corner rounding or splay shall be vested in the Council.	Complies	Complies
7.b.v All new roads vested upon subdivision of land shall be given distinctive names not already in use with the area covered by the District Council. The name shall be agreed to by the Council.	Will comply	Will comply
7.b.vi Where any new road or road extension is to be vested in the Council or a named private access is provided, the applicant shall pay to the Council a financial contribution for the manufacture and erection of all necessary name plates which must be displayed at the intersections of all other roads. The financial contribution shall be the actual cost of the name plate.	Will comply	Will comply
7.b.vii Any subdivision of land within Pt Res 5177 (CT 38B/189) Sec 53 Blk X Tekapo Village, or Lot 1 DP 63170 (Ex MVWD Depot, Lake Tekapo Village) shall provide for a road linking Greig Street and Murray Place which road shall be to the same standard of Murray Place and Greig Street	Not applicable	N/A
7.b.viii All subdivisions shall comply with the relevant rules for access in Section 15.	Complies - see below for assessment	Yes



RULE	COMMENT	COMPLIES?
7.b.ix Where land to be subdivided with frontage to a State Highway has practical legal access to an alternative road there shall be no access to the State Highway.	Not applicable	N/A
7.b.x Access to allotments with the potential to accommodate more than 6 residential units shall be provided by way of a public road and not by private way or access lot.	Complies	Yes
Section 15 – Transportation		
2.a Minimum Parking Space Requirements The following (Table 1) shall be the minimum number of parking spaces to be provided at all times on the same site for any activity in any zone other than the Village Centre Zone in Fairlie. The required parking spaces shall be available for residents, staff and visitors at all times during the hours of operation of the activity. If any activity is not listed below, the activity closest in nature to the new activity should be used. Where there are two or more similar activities, the activity with the higher parking rate shall apply. Where there are two or more different activities on the site, the total requirement for the site shall be the sum of the parking requirements for each activity. Requirement -	Not applicable, as no land use is proposed at this stage.	N/A
2.b Assessment of Parking Areas Where an assessment of the required parking standards results in a fractional space any fraction under one half shall be disregarded and any fraction of one half or more shall be counted as one space. The area of any parking space or spaces provided and of vehicular access drives and aisles provided within a building shall be excluded from the assessment of gross floor area of that building for the purpose of ascertaining the total number of spaces required.	Not applicable, as no land use is proposed at this stage.	N/A
2.c Size of Parking Spaces All required parking spaces other than for residential units, and associated manoeuvre areas are to be designed to accommodate a 90 percentile design motor car (refer Appendix C) and shall be laid out in accordance with Appendix D.	Not applicable, as no land use is proposed at this stage.	N/A
2.d Car Spaces for People with Disabilities Car parking areas shall include spaces for people with disabilities provided at the rate of: - 1 for 10 to 50 spaces - 2 for up to 100 total spaces plus 1 more for every additional 50 spaces. Car parking for people with disabilities shall be located as close as practicable to the building entrance. The spaces should be on a level surface and be clearly signed	Not applicable, as no land use is proposed at this stage.	N/A
2.e Cash-in-Lieu A cash payment may be made in lieu of part or all of the parking requirement in areas where the Council is anticipating	Not applicable, as no land use is proposed at this stage.	N/A



RULE	COMMENT	COMPLIES?
<p>creation of public parking that would serve the area of the development. The basis of the cash payment in lieu of parking is to be:</p> <ul style="list-style-type: none"> i The area of land per required parking space is to be 25 square metres. ii The rate at which cash in lieu is charged is calculated at the current market value of the land. 		
<p>2.f Reverse Manoeuvring On-site manoeuvring for a 90 percentile car shall be provided to ensure that no vehicle is required to reverse either onto or off a site where:</p> <ul style="list-style-type: none"> i Any development has access to an arterial road (refer Rule 3) ii Any development requiring 4 or more car spaces having access onto a collector road. iii Any development which is required to provide 10 or more parking spaces. <p>On-site manoeuvring for a 90 percentile truck shall be provided to ensure that no truck is required to reverse onto or off a site where any development requires loading areas or trade vehicle storage having access onto an arterial or a collector road.</p>	Not applicable, as no land use is proposed at this stage.	N/A
<p>2.g Residential Parking Spaces Any residential parking spaces required by this Plan shall have the minimum internal dimensions of 2.5m width and 5.0m depth. The minimum width of the entrance to a single garage shall be no less than 2.4 metres wide. The manoeuvre area from the property to the garage entrance shall be designed to accommodate a 90 percentile motor car as set out in Appendix C.</p>	Not applicable, as no land use is proposed at this stage.	N/A
<p>2.h Queuing Queuing space shall be provided for all vehicles entering a parking or loading area where conflict with vehicles already on site is likely to arise. The required queuing space length shall be in accordance with Table 2 following. <i>Requires 5.5m queue space at both accesses</i></p>	The required queue space is provided as the accesses are greater than 5.5m trafficable width so two-way flow is provided,	Complies
<p>2.i Loading Areas Every loading space shall be of a useable shape and shall be of the following dimensions:</p> <ul style="list-style-type: none"> i For transport depots or other similar activities, not less than 9m in depth. ii For retail premises, offices, warehouses, bulk stores, industries, service industries and other similar uses, not less than 8m. iii Offices and other non-goods handling activities, where the gross floor area is less than 500m², and where on street parking is available for occasional servicing by larger vehicles, 6m long, 3m wide and 2.6m high. iv Notwithstanding anything to the contrary in the foregoing clauses, where articulated trucks are used or intended to be used in connection with any site, sufficient loading space not less than 11m in depth shall be provided. v No loading space shall be less than 3.8m in height. vi No loading space shall be less than 3.5m in width, or such greater width as is required for adequate manoeuvring. 	Not applicable, as no land use is proposed at this stage.	N/A



RULE	COMMENT	COMPLIES?
2.j Surface and Drainage of Parking and Loading Areas The surface of all parking, loading and trade vehicle storage areas (except parking areas for residential units requiring less than three spaces) shall be formed and paved or otherwise maintained, so as not to create a dust or noise nuisance, nor to deteriorate in adverse weather conditions. The first 5.5m of such areas (as measured from the road boundary) shall be formed and surfaced to ensure that material such as mud, stone chips or gravel is not carried onto any footpath, road or service lane. Stormwater originating from the property shall be disposed of within the property by sump and piped to the street channel or stormwater drain.	The access to Monument Road is proposed to be sealed for 5.5m from the road boundary and then metalled. Accesses to site served by the proposed road that links to Clayton Road will be assessed as they are developed, as will the access to Lot 12, which has direct access to Clayton Road.	Yes
2.k Landscaping Landscaping shall not adversely affect the visibility of motorists leaving a site or create an unsafe environment for persons using the car park or the adjacent footpath. All car parking areas containing 5 or more spaces shall have a landscape strip 1.5m deep along the road frontage.	Not applicable, as no land use is proposed at this stage.	N/A
2.l Standards of Vehicle Crossing Vehicle access to any site shall be by way of a vehicle crossing constructed pursuant to Council standards, from the roadway to the road or service lane boundary of the site, and shall be at the owners expense. Vehicle crossings shall be constructed to the following standards: i For 10 or less residential units or activities which generate fewer than 100 normal car traffic movements per day: standard vehicle culverts and crossings to carry car traffic i.e. 225mm ii Drive-in accesses and other activities: heavy duty vehicle culverts and crossings shall be constructed and maintained so that they remain in a good state of repair and are fit for their purpose of carrying all types of normal road traffic.	The access to Monument Road will comply. Compliance for the remaining accesses will be determined at the time of developing those sites.	Complies
2.m Length of Vehicle Crossings The following crossing lengths shall apply: Requires minimum crossing of 4.0m and maximum of 9.0m The length of culverts and crossings shall be the actual length of channel covers or the length of the fully dropped curb.	The access to Monument Road will comply. Compliance for the remaining accesses will be determined at the time of developing those sites.	Complies
2.n Distance of Vehicle Crossings from Intersections No part of any vehicle crossing shall be located closer to the intersection of any roads than the distances permitted in the following Table. Requires 55m separation Distances shall be measured parallel to the centre line of the roadway of the frontage road from the nearest edge of the carriageway of the intersecting road. Where the roadway is divided the edge of the dividing strip nearest to the vehicle crossing shall for the purposes of this control be deemed the centre line. Where the boundaries of the site do not allow the provision of any vehicle crossing whatsoever in conformity with the above distances a single vehicle crossing may be constructed provided it is located adjoining an internal boundary of the	Not applicable, as no land use is proposed at this stage. However, it is noted that the site boundaries are such that the proposal could comply.	N/A



RULE	COMMENT	COMPLIES?
site in the position which most nearly complies with the provisions of this Code. For the avoidance of doubt, the Urban standards above shall apply to Rural-residential zones.		
2.o Access onto State Highways – All Zones	Not applicable	N/A
2.p Visibility from Accesses All private accesses shall be located to ensure continuous visibility up to the minimum sight distances in the following table are achieved. Requires 250m visibility to Clayton Road and Monument Road. 85m visibility required to accesses on the Proposed Road. Note: Minimum sight distance is measured in accordance with Diagram B in Appendix D.	A visibility splay of 250m is assumed to be required for the accesses to Clayton Road and Monument Road, which will be provided. A visibility of 85m is required out of the accesses to the proposed road and this can be achieved when these lots are developed.	Complies
2.q Private Vehicle Access i All private vehicular access to fee simple title allotments, cross leases, unit titles or leased premises shall be in accordance with the standards set out in the table below. Requires Monument Access to have a minimum legal width of 5.0m, a minimum trafficable width of 4.0m and a turning bay.	The Monument Road Right of Way provides these features.	Yes
2.r Standard of Vehicle Access Accessways in the Rural and Rural-Residential zones shall: - be designed to minimise edge break; - be designed to ensure that vehicles using the access do not reduce the safe and efficient functioning of the adjacent road; - be formed, sealed and maintained to an all weather standard with the first 5.5 metres of the access (as measured from the formed road surface) being formed to ensure that material such as mud, stone chips, or gravel is not carried onto the road. For the purpose of this rule 'all weather standard' means sealing of accesses on sealed roads and compacted level metal surfacing on unsealed roads. - be designed to ensure that the efficient drainage of surface flows in the road reserve is not impeded. This will be achieved by the provision of culverts where necessary, being adequately sized, of sufficient length to limit blockages, and with properly formed inlets and outlets. For the purpose of this rule safe and efficient functioning of the adjacent road requires that where there is likely to be an average of at least 30 heavy vehicle movements in or out of the access (i.e. 15 visits) per month over three consecutive months during a 12 month period, the access shall be designed and maintained so that a truck and semitrailer or such larger vehicle which regularly uses the access, will not leave the formed carriageway or the formed access when entering or leaving the property.	The accesses will comply.	Complies



RULE	COMMENT	COMPLIES?
The diagrams contained in Appendix C specify the swept paths of a truck and semitrailer and other heavy vehicles. A sample access design (Diagram E) which meet the above standard, is shown in Appendix D.		
2.s Compensation for Damage to Roads Where the use of a vehicle causes damage to a public road which is vulnerable to damage due to recent or current adverse climatic or weather conditions, the owner and/or driver of that vehicle shall pay to the Council an amount equivalent to the cost of restoring the road to the standard which existed prior to such damage.	Noted	Noted