

Dunweavin 2020 Ltd



Fraser Thomas

ENGINEERS • RESOURCE MANAGERS • SURVEYORS

SUBMISSION ON THE PROPOSED
SELWYN DISTRICT PLAN,
EAST MADDISONS ROAD,
ROLLESTON



PRELIMINARY SITE
INVESTIGATION –
CONTAMINATION

Dunweavin 2020 Ltd

SUBMISSION ON THE PROPOSED
SELWYN DISTRICT PLAN,
EAST MADDISONS ROAD,
ROLLESTON

PRELIMINARY SITE INVESTIGATION - CONTAMINATION

Project No.	CH00676	Approved for Issue	
Version No.	1	Name	Sean Finnigan
Status	Final	Signature	
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Reviewer	S Finnigan		

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SUBMISSION ON THE PROPOSED SELWYN DISTRICT PLAN EAST MADDISONS ROAD, ROLLESTON

PRELIMINARY SITE INVESTIGATION - CONTAMINATION

EXECUTIVE SUMMARY

In response to instructions from Dunweavin 2020 Ltd, Fraser Thomas Limited (FTL) undertook a Preliminary Site Investigation (PSI) for Lot 1 DP 26880, Lot 2 DP 74311, Lot 3 DP 74311 ('site'). The site comprises three properties and is located on the south-western side of East Maddisons Road.

This investigation involved a desktop study, site walkover, and reporting associated with potential land contamination issues.

The main rationale and objectives for this investigation were:

- To identify the main actual or potential contamination issues due to ongoing and historic use of land within the site.
- To confirm that the site is suitable or can be made suitable for the proposed rezoning.

This investigation has been managed, reviewed and approved by a Suitably Qualified and Experienced Practitioner (SQEP), as defined in the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

The NESCS governs a number of activities, including soil sampling, soil disturbance, subdivision and changes of land use on potentially contaminated land in New Zealand. In general, the rules of the NESCS apply to sites on which it is "more likely than not" that a HAIL (Hazardous Activities and Industries List) activity has occurred or is occurring (Regulation 5(7)).

This investigation has confirmed that the majority of the subject site has only been used for grazing purposes. The NESCS does not apply to these portions of the site under Regulation 5(7).

This investigation has however, identified a few localised potential or actual HAIL activities:

- *Activity A17: Storage tanks or drums for fuel, chemicals or liquid waste.* This relates to the inferred fuel source for the boiler believed to have historically been located in Lot 1 26880.
- *Activity F4: Motor vehicle workshops* This relates to the vehicle workshop and empty oil containers located in Lot 2 DP 74311.
- *Activity I: Land subject to intentional or accidental release of hazardous substances in sufficient quantity that it could be a risk to human health or the environment:* This

relates to the deteriorated condition of the paint on the older existing buildings on Lot 1 DP 26880. Additionally, other activities such as burn piles may have resulted in release of hazardous substances.

- *Activity E1: Asbestos product manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition.* This relates to the demolished/removed building, deteriorated state of existing older buildings and alterations to existing dwelling on Lot 1 DP 26880, due to the fact that these buildings have been present since the early 1970s, and the dwelling appears to have had extension work undertaken at some stage.

In summary, based on the information presented in this report, whilst it is clear that historic HAIL activities have occurred at the site, it is uncertain what effects, if any, they have had on site soils. Therefore, in accordance with NESCS requirements, a Detailed Site Investigation (DSI) is required in order to assess site soils to determine environmental effects, or otherwise. This should be undertaken as part of a future subdivision consent application. If further investigation is not undertaken prior to lodging for resource consent, then any future subdivision would be a discretionary activity under Regulation 11 of the NESCS.

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SUBMISSION ON THE PROPOSED SELWYN DISTRICT PLAN EAST MADDISONS ROAD, ROLLESTON

PRELIMINARY SITE INVESTIGATION - CONTAMINATION

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PRELIMINARY SITE INVESTIGATION - CONTAMINATION

1.0 INTRODUCTION

In response to instructions from Dunweavin 2020 Ltd, Fraser Thomas Limited (FTL) undertook a Preliminary Site Investigation (PSI) for the three properties comprising the site - Lot 1 DP 26880, Lot 2 DP 74311 and Lot 3 DP 74311 ('site'), located on the south-western side of East Maddisons Road.

It is understood that it is proposed to lodge a submission on the Proposed Selwyn District Plan, seeking rezoning of the above property from "General Rural" to "General Residential", to enable future subdivision of the site to create new lots, with an average lot size of approximately 650 m², and some medium density lots with a lot size ranging between 400 m² and 499 m².

This investigation involved a desktop study, site walkover and reporting associated with potential land contamination issues.

The format of this report is as follows:

- Rationale, objectives and scope of work.
- Site details.
- Investigation methodology.
- Desktop study and site walkover results.
- Discussion, conclusions and recommendations.
- Site plans, representative photographs and other relevant information in appendix form.

This investigation has been managed, reviewed and approved by a Suitably Qualified and Experienced Practitioner (SQEP), as defined in the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

2.0 RATIONALE, OBJECTIVES AND SCOPE OF WORK

The main rationale and objectives for this investigation were:

- To identify the main actual or potential contamination issues due to ongoing and historic use of land within the site.
- To confirm that the site is suitable or can be made suitable for the proposed rezoning.

3.0 INVESTIGATION METHODOLOGY

The methodology used for this site assessment is summarised below:

1. Desktop study involving review of existing historical information for the subject site including aerial photographs, certificates of title, Council property files/databases and interviews with relevant people.
2. Site walkover investigation of the subject site, with a visual appraisal to identify any disturbed and potentially contaminated areas. Relevant photographs are set out in Appendix C.
3. Preparation of a PSI report including the results of the desktop study, site walkover survey and conclusions and recommendations.
4. Provision of site plans, relevant documentation and representative photographs as appendices to this report.

Fraser Thomas Limited Health and Safety Management Plan procedures were followed throughout the duration of the investigation.

4.0 SITE DETAILS

4.1 LOCATION, PROPERTY DETAILS AND LAND USE

The site comprises three different properties and covers an area of approximately 13 ha located on the south-western side of East Maddisons Road.

The site is zoned “Rural” under the Selwyn District Plan.

Details of each of the individual properties making up the rezoning area are listed in Table 1, including the current land use.

Table 1: Property Details

Registered Owner	Address	Appellation Title	Area (ha)	Land Use
Louise Marie Wilkinson	605 East Maddisons Road	Lot 1 DP 26880	4.86	Rural Residential
Angelene Lorna Holton	617 East Maddisons Road	Lot 3 DP 74311	4.067	Rural Residential
Michael Paul Moynihan Hayley Marie Moynihan	627 East Maddisons Road	Lot 2 DP 74311	4.047	Rural Residential

4.2 TOPOGRAPHY, GEOLOGY AND SOILS

The topography across the entire site is generally level, with some gentle undulations across the site.

In carrying out the appraisal of the site, reference has been made to the Institute of Geological and Nuclear Sciences geological web map (NZ 1:250,000). The map indicates that the site is underlain by unweathered, variably sorted gravel, sand, silt and clay of alluvial origin.

The results of a geotechnical investigation undertaken by Fraser Thomas Ltd on 3 December 2020, in general, indicate that the surficial soils underlying the site are likely to comprise alluvial sediments of the Springston Formation of Holocene age. No obvious surficial fill material was identified during the geotechnical investigation.

5.0 DESKTOP STUDY AND WALKOVER SURVEY RESULTS

The results of the desktop study and the site walkover survey are summarised in this section and illustrated in the attached site features plan (drawing E00676-01), aerial photographs (Appendix B) and site photographs (Appendix C). Throughout the site walkover survey, a visual assessment was used to classify any foreign materials as particular contaminants, without any formal identification. Hence, reference to a specific contaminant in the survey results should essentially be read as “suspected contaminant”, unless otherwise stated.

5.1 SITE DETAILS, LAND USE AND OWNERSHIP

The site details and ownership history for the site are summarised in the tables below.

Table 2: Site Details and Ownership History

Registered Owner	Louise Marie Wilkinson	
Street Address	605 East Maddisons Road	
Legal Description	Lot 1 DP 26880	
Title	CB33A/761	
Area (ha)	4.0468	
Zoning	General Rural	
Ownership History		
CTs	From	Registered Owner
CB33A/761	April 1990	Transfer to David John Scriggins, Fitter and Jennifer Scriggins
	Jul 1992	Transfer to Norman Thomas Peveral Mason, Chargehand and Dale Monica Mason, Nurse
	Aug 1994	Maurice Graham Moppett, Civil Trade Officer and Lorraine Moppett, Secretary
	Mar 1996	Ian Chester Clegg, Self Employed Engineer and Lynne Maree Clegg, Accounts Clerk
	Jun 2003	Louise Marie Wilkinson and Brian Robert Smart
	Jan 2008	Louise Marie Wilkinson

Table 3: Site Details and Ownership History

Registered Owner	Angelene Lorna Holton	
Street Address	617 East Maddisons Road	
Legal Description	Lot 3 DP 74311	
Title	CB42D/967	
Area (ha)	4.0650	
Zoning	General Rural	
Ownership History		
CTs	From	Registered Owner
CB42D/967	March 1997	Transfer to Kevin Phillip Graham, Service Station Manager, and Doreen Mary Graham
	Oct 2006	Transfer to Stephen Leslie Phillips and Angelene Lorna Holton
	Dec 2007	Transfer to Angelene Lorna Holton

Table 4: Site Details and Ownership History

Registered Owner	Michael Paul Moynihan and Hayley Marie Moynihan	
Street Address	627 East Maddisons Road	
Legal Description	Lot 3 DP 74311	
Title	CB42D/966	
Area (ha)	4.8570	
Zoning	General Rural	
Ownership History		
CTs	From	Registered Owner
CB42D/967	March 1997	Transfer to David Thomas Allan and Suzanne Kathleen Ellen
	Jan 2006	Transfer to Michael Paul Moynihan and Hayley Marie Moynihan

The CT information available indicates that the properties that make up the subject site were previously part of a larger property Lot 1 DP 16082 from 1953 until 1969, and had several owners, generally farmers. The site was subdivided in 1969 to create Lot 1 DP 26880 and Lot 1 DP 16082 (which was later further subdivided in to Lots 2 and 3 DP 74311).

5.2 INTERVIEWS

The owners of the three properties were supplied with a questionnaire of historical land use. A summary of their replies is below.

Louise Wilkson – Current owner Lot 1 DP 26880

The following information was provided by Louise:

- The land was previously used for keeping horses.
- The existing buildings were present at the time of purchase (2003).
- The main use of the land during the current ownership has been keeping sheep and pigs. No sheep dips are known to have been on site.
- No cultivation has occurred at the property during the current ownership.
- No fuel storage has occurred on the property during the current ownership.
- No chemicals have been used on the property during the current ownership.

Angelene Holton – Current owner Lot 3 DP 74311

The following information was provided by Angelene:

- The land was previously used for keeping horses.
- The existing buildings were present at the time of their purchase (2007).
- The main use of the land during the current ownership has been keeping horses.
- No cultivation has occurred at the property during the current ownership.
- No fuel storage has occurred on the property during the current ownership.
- The only chemical used on the property during the current ownership has been Roundup (Glyphosate) along fence lines and around the garage.

Hayley Moynihan – Current owner Lot 2 DP 74311

The following information was provided by Hayley:

- The land was previously used for grazing sheep.
- The existing buildings were present at the time of their purchase (2006).
- The main use of the land during the current ownership has been keeping horses and cattle.
- No cultivation has occurred at the property during the current ownership.
- No fuel storage has occurred on the property during the current ownership.

5.3 AERIAL PHOTOGRAPHS

1940-1984 Aerials

The subject site is almost entirely covered with grass and appears to be in pasture. The only development is located in Lot 1 DP 26880 605 East Maddisons Road where two to three small sheds can be seen in the south-eastern corner. A small dwelling and two buildings appear to have been constructed sometime in the early 1970s on the same property.

1990-1994 Aerial

There only significant change from 1940-84 is the construction of a dwelling and detached garage in the north-western part of the site (Lot 3 DP 74311 627 East Maddisons Road). The dwelling in the south-eastern corner of the site appears to have had extensions added. The remainder of the site is the same.

2000-2004 Aerial

The only significant changes are the addition of a dwelling, detached garage and two implement sheds in the south-eastern corner of Lot 2 DP 74311 617 East Maddisons Road. A shed previously located in Lot 1 DP 26880 605 East Maddisons Road, is no longer present, having been either demolished or removed.

2004-2010 Aerial

Two separate stands of trees have been planted to the south and east of the dwelling in Lot 3 DP 74311 627 East Maddisons Road. The remainder of the site is the same.

2010-2019 Aerials

A garage was constructed sometime in the early 2010s at Lot 1 DP 26880 605 East Maddisons Road. The remainder of the site is the same.

5.4 COUNCIL RECORDS

The Council property files was reviewed. The only relevant information found related to building consents issued by Council:

Lot 1 26880

- 1969 – Building permit documents for fattening house
- 1972 - Building permit documents for relocated house
- 1972 - Building permit documents for boiler house
- 1989 - Building permit documents for garage and dwelling alteration

- 1994 – Building consent documents for dwelling alterations
- 2005 - Building consent documents for garage

Lot 3 74311

- 1997 - Building consent documents for dwelling
- 1998 – Building consent documents for implement shed and garage

Lot 2 74311

- 1991 - Building consent documents for dwelling
- 2006 – Building consent documents for implement shed

5.5 LISTED LAND USE REGISTER (LLUR)

A contaminated site enquiry was sent to Canterbury Regional Council on 30 November 2020, for information on the properties making up the subject site held on their Listed Land Use Register (LLUR). There are no records associated with the site under the Environment Canterbury LLUR. The LLUR statement for this site is included in Appendix D.

5.6 SITE WALKOVER RESULTS

A site walkover of the subject site was undertaken by a FTL Engineering Geologist on 3rd December 2020. Site investigation photographs are provided in Appendix C. The site is located on the south-western side of East Maddisons Road. The site was accessed from East Maddisons Road and comprised the following features:

Lot 1 DP 26880

- A dwelling is located at the eastern end of the site. The dwelling appears to be of light timber frame construction with profiled metal cladding and roofing. The paint on the timber roof barge boards, window framing and soffits, is weathered and flaking off.
- A detached garage of timber frame construction with profiled metal roof and cladding is located approximately 22m from the dwelling.
- Two buildings of concrete block construction with profiled metal roofs are located near the middle of the property along the south-eastern boundary. These buildings are in a deteriorated condition, with damage to the roofs and cladding of unknown composition observed, although some cladding does resemble Asbestos containing material (ACM) It is understood this building was used as piggery.
- A small timber and profiled metal structure which appears to be an old chicken coop is also located in the vicinity of the concrete buildings.
- The areas around the buildings on site are generally untidy, with various types of refuse lying on the ground. For example, in the vicinity of the house, a car battery and empty portable fuel container were observed on the ground, with the fuel container lying on its side.
- The remainder of the site comprises paddocks, which are used for keeping horses.

Lot 3 DP 74311

- A dwelling and detached garage are located at the eastern end of the property. The dwelling appears to be of light timber frame construction with brick cladding and metal tile roofing. The garage has a mix of brick and profiled metal cladding. The buildings are of modern construction and are well kept with no damage to the construction materials.
- Two implement sheds of timber pole construction with earth floors, profiled metal cladding and roofing are also present at the property. One of the sheds is used mainly for the storage of fire wood and various equipment (e.g., lawnmowers). In this shed, partially empty containers of Kerosene, Thiropel and Chrysal LVB were present. The other shed is used for hay storage.
- A burn pile is located in the paddock to the west of the dwelling. The owner has indicated that only clippings and wood from the site have been burned here.
- The remainder of the site comprises paddocks, which are used for keeping horses.

Lot 2 DP 74311

- A dwelling and two detached garages are located in the middle of the property. The dwelling appears to be of light timber frame construction with brick cladding and metal tile roofing. The dwelling is modern construction and well kept with no damage to the construction materials.
- The garages are of timber frame construction and have profiled metal cladding/roofs. One of the garages is used as a vehicle workshop and has a concrete slab on ground floor. Various empty oil containers are located on bare ground in the vicinity of the workshop.
- A burn pile is located in the paddock to the east of the dwelling. A mixture of organic material and tubular metal framing was observed in the burn pile.
- Two stands of pine trees are also located at the site.
- Several old empty oil drums are located around the eastern perimeter of a dressage arena located in the paddock behind the workshop.
- The remainder of the site comprises paddocks, which are used for keeping horses.

An existing shallow water race extends through all three properties that make up the subject site.

6.0 DISCUSSION

The existing property appears to have been part of a larger property since at least 1944. The majority of the site has been used for grazing purposes until the early 1970s when rural/residential activity was established in Lot 1 DP 26880. Additional rural/residential activity was established in Lots 2 and 3 DP 74311.

The building consent documentation indicate that a boiler may have been present on Lot 1 DP 26880, presumably associated with the fattening shed/piggery. The presence of a boiler means

there would have been an associated fuel storage tank. The current owner (since 2003) has indicated that to their knowledge no fuel was stored on site. The contact details for previous owners are unknown. No signs of any above or below ground tank were observed by this building, although the vegetation is quite overgrown on one side of the building.

Potential/actual HAIL activities identified during the site walkover of the site relates to the following:

- Hydrocarbons associated with a possible boiler and therefore fuel source located on site Lot 1 DP26880 - HAIL A17.
- Asbestos associated with the demolished/removed building, deteriorated state of older buildings and alterations to existing dwelling on Lot 1 DP 26880 - HAIL E1. The aerials show that these buildings have been present at least since the early 1970s. Asbestos based products were prominent in New Zealand homes and other buildings from the 1920s to the mid-1980s and stopped being used from 2000. Therefore, it is possible that adjacent soils could potentially be contaminated with asbestos from prior demolition/removal activities, and alterations to older existing dwellings.
- Heavy metals and hydrocarbons associated with the motor vehicle workshop on Lot 2 DP 74311 -HAIL activity F4.
- Lead paint associated with the deteriorated condition of older buildings on Lot 1 DP 26880 – HAIL I.
- Heavy metals associated with the burn pile in the eastern paddock of on Lot 2 DP 74311 - HAIL activity I.

7.0 NESCS CONSENTING REQUIREMENTS

The NESCS governs a number of activities, including soil sampling, soil disturbance, subdivision and changes of land use on potentially contaminated land in New Zealand. In general, the rules of the NESCS apply to sites on which it is “more likely than not” that a HAIL (Hazardous Activities and Industries List) activity has occurred or is occurring (Regulation 5(7)).

In our opinion, under Regulation 5(7), the NECS does not apply to the majority of site due to no potential contamination issues being identified.

The NESCS however, applies to the following localised areas:

- *Activity A17: Storage tanks or drums for fuel, chemicals or liquid waste.* This relates to the inferred fuel source for the boiler believed to have historically been located in Lot 1 26880.
- *Activity F4: Motor vehicle workshops* This relates to the vehicle workshop and empty oil containers located in Lot 2 DP 74311.
- *Activity I: Land subject to intentional or accidental release of hazardous substances in sufficient quantity that it could be a risk to human health or the environment:* This relates to the deteriorated condition of the paint on the older existing buildings on Lot 1

DP 26880. Additionally, other activities such as burn piles may have resulted in release of hazardous substances.

- *Activity E1: Asbestos product manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition.* This relates to the demolished/removed building, deteriorated state of existing older buildings and alterations to existing dwelling on Lot 1 DP 26880, due to the fact that these buildings have been present since the early 1970s, and the dwelling appears to have had extension work undertaken at some stage.

It is recommended that these potential/actual HAIL areas be further investigated by soil sampling as part of a future subdivision consent application and remediated, as necessary, as part of enabling (pre-construction) works prior to any bulk earthworks or other soil disturbance activities. If this is done and these areas are validated as being free of contamination, then subsequent earthworks and soil disturbance activities can be undertaken without having to consider contamination issues, other than accidental discovery protocols for unexpected contamination.

8.0 CONCLUSIONS AND RECOMMENDATIONS

This investigation has confirmed that the majority of the subject site has only been used for grazing purposes. The NESCS does not apply to these portions of the site under Regulation 5(7).

This investigation has however, identified a few localised potential or actual HAIL activities:

- *Activity A17: Storage tanks or drums for fuel, chemicals or liquid waste.* This relates to the inferred fuel source for the boiler believed to have historically been located in Lot 1 DP 26880.
- *Activity F4: Motor vehicle workshops* This relates to the vehicle workshop and empty oil containers located in Lot 2 DP 74311.
- *Activity I: Land subject to intentional or accidental release of hazardous substances in sufficient quantity that it could be a risk to human health or the environment:* This relates to the deteriorated condition of the paint on the older existing buildings on Lot 1 DP 26880. Additionally, other activities such as burn piles may have resulted in release of hazardous substances.
- *Activity E1: Asbestos product manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition.* This relates to the demolished/removed building, deteriorated state of existing older buildings and alterations to existing dwelling on Lot 1 DP 26880, due to the fact that these buildings have been present since the early 1970s, and the dwelling appears to have had extension work undertaken at some stage.

In summary, based on the information presented in this report, whilst it is clear that historic HAIL activities have occurred at the site, it is uncertain what effects, if any, there have been on site soils. Therefore, in accordance with NESCS requirements, a Detailed Site Investigation (DSI)

is required in order to assess site soils to determine environmental effects, or otherwise. This should be done as part of a future subdivision resource consent application. If further investigation is not undertaken prior to lodging for resource consent, then any future subdivision would be a discretionary activity under Regulation 11 of the NESCS.

9.0 LIMITATIONS

We have performed our services for this project in accordance with current professional standards for an assessment of the nature and extent of any soil contamination on-site, based upon detailed site assessment investigations and current regulatory standards for site contamination. The scope of the site assessment activities was generally in accordance with the Ministry for Environment Contaminated Land Management Guideline's (Parts 1 (2003), 2 (2003) and 5 (2004)) and the NESCS (2011). Conclusions on actual or potential contamination cannot be applied to areas outside of the site investigation.

We do not assume any liability for misrepresentation or items not visible, accessible or present at the subject site during the time of the site inspection.

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Figures/Drawings

Appendix A

***Ministry for the Environment
Contaminated Site Report Checklist***

DUNWEAVIN 2020 LTD

SUBMISSION ON THE PROPOSED SELWYN DISTRICT PLAN EAST MADDISONS ROAD, ROLLESTON

PRELIMINARY SITE INVESTIGATION - CONTAMINATION

SUMMARY CONTAMINATED SITES REPORT CHECKLIST

Report sections and information to be presented	PSI	SIR	RAP	SVR	MMP	Notes
Executive summary	R <input checked="" type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	
Scope of work	R <input checked="" type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	
Site identification	R <input checked="" type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	
Site history	R <input checked="" type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	
Site condition and surrounding environment	R <input checked="" type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	
Geology and hydrology	A <input checked="" type="checkbox"/>	R <input type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	
Sampling and analysis plan and sampling methodology	A <input checked="" type="checkbox"/>	R <input type="checkbox"/>	X	R <input type="checkbox"/>	R <input type="checkbox"/>	
Field quality assurance and quality control (QA/QC)	N <input checked="" type="checkbox"/>	R <input type="checkbox"/>	X	R <input type="checkbox"/>	S <input type="checkbox"/>	
Laboratory QA/QC	N <input checked="" type="checkbox"/>	R <input type="checkbox"/>	X	R <input type="checkbox"/>	X	
QA/QC data evaluation	N <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	X	
Basis for guideline values	R <input checked="" type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	
Results	A <input checked="" type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	S <input type="checkbox"/>	
Site Characterisation	R <input checked="" type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	
Remedial actions	X	X	R <input type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	
Validation	X	X	X	R <input type="checkbox"/>	S <input type="checkbox"/>	
Site management plan	X	X	R <input type="checkbox"/>	S <input type="checkbox"/>	S <input type="checkbox"/>	
Ongoing monitoring	X	X	X	N <input type="checkbox"/>	R <input type="checkbox"/>	
Conclusions and recommendations	R <input checked="" type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	R <input type="checkbox"/>	

KEY:

1. PSI = preliminary site inspection report
SIR = detailed site investigation report

RAP = site remedial action plan

SVR = site validation report

MMP = ongoing monitoring and management plan

2. R = corresponding details required

A = readily available information should be included;

S = summary of this section's details is adequate if detailed information has been included in an available referenced report;

N = include only if no further site investigation is to be undertaken;

X = not applicable and may be omitted.

Appendix B

Aerial Photographs

Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

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0 0.04 0.08 0.12 0.16 Kilometres

Scale: 1:3,000 @A4

Map Created by Canterbury Maps on 9/12/2020 at 3:03 PM



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0 0.04 0.08 0.12 0.16 Kilometres

Scale: 1:3,000 @A4

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0 0.04 0.08 0.12 0.16 Kilometres

Scale: 1:3,000 @A4

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0 0.04 0.08 0.12 0.16 Kilometres

Scale: 1:3,000 @A4

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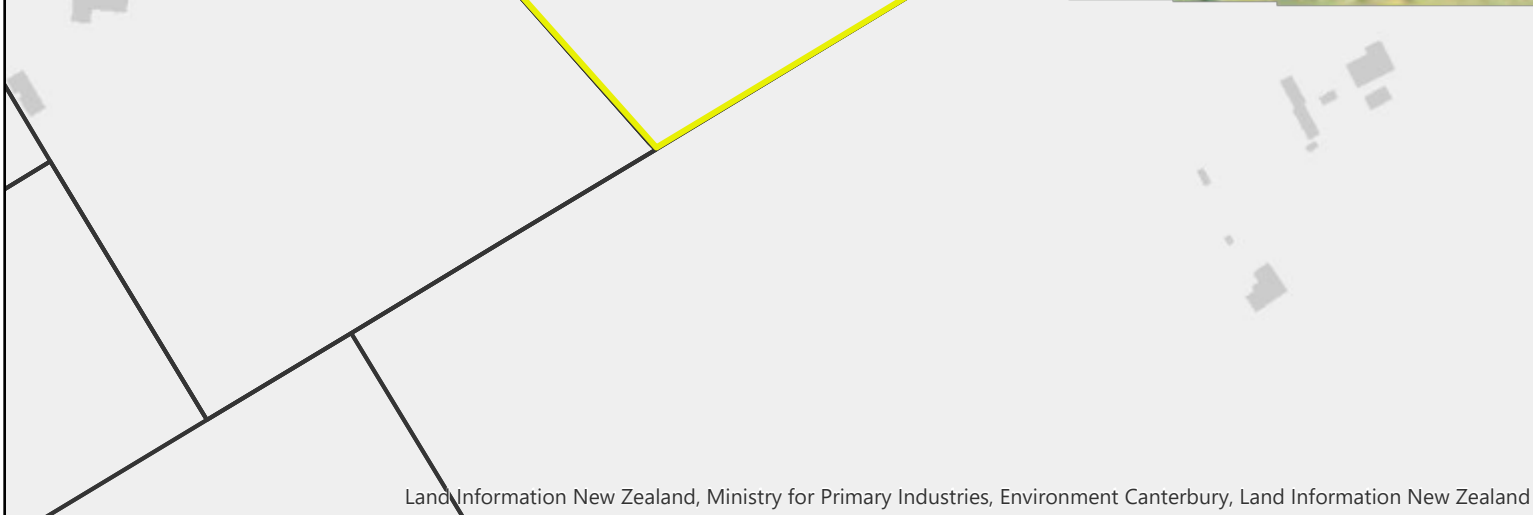
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Kilometres

Scale: 1:3,000 @A4

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Kilometres

Scale: 1:3,000 @A4

Map Created by Canterbury Maps on 9/12/2020 at 3:08 PM



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0 0.04 0.08 0.12 0.16
Kilometres

Scale: 1:3,000 @A4

Map Created by Canterbury Maps on 9/12/2020 at 3:08 PM



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Kilometres

Scale: 1:3,000 @A4

Map Created by Canterbury Maps on 9/12/2020 at 3:09 PM



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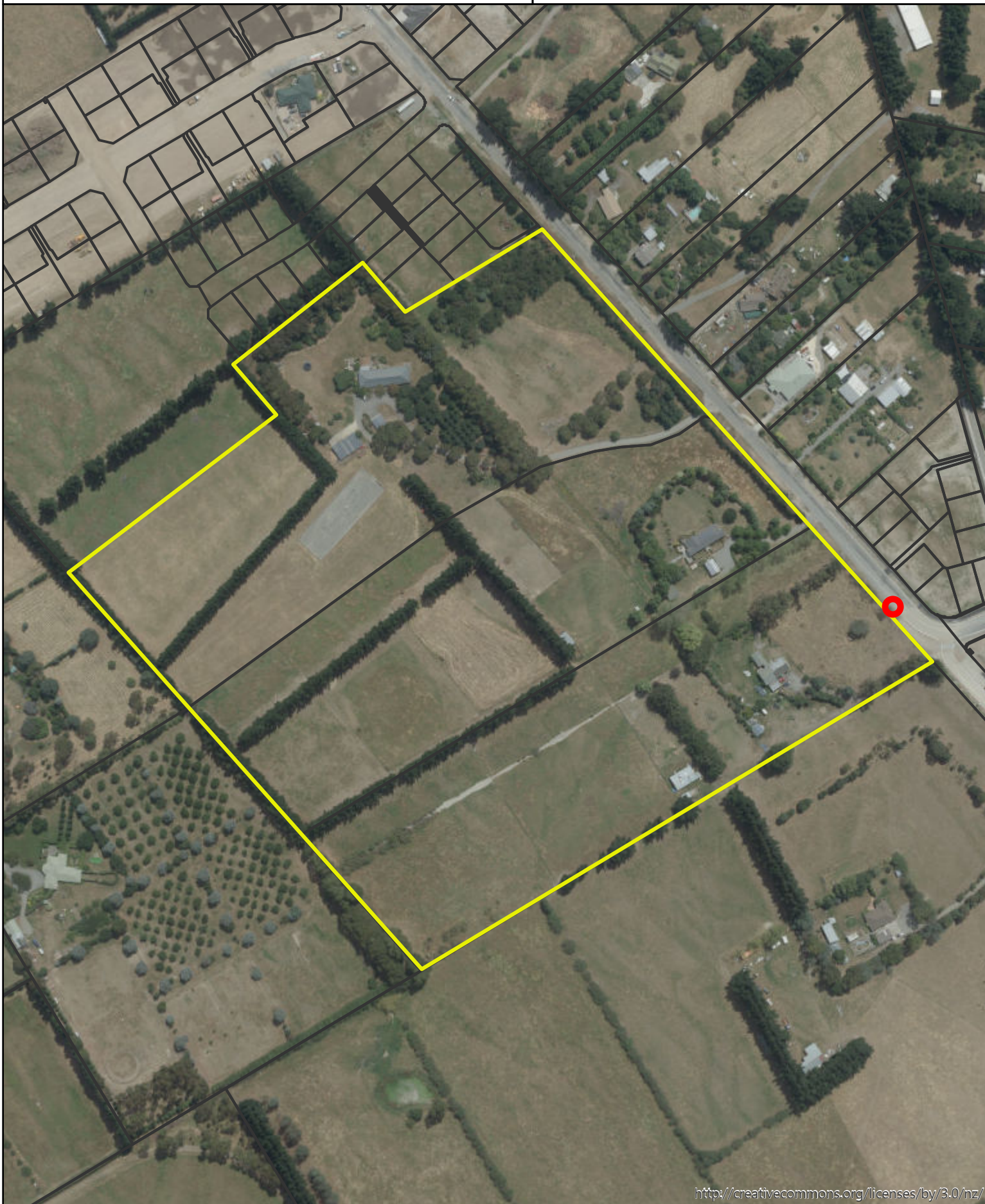
Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



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Kilometres

Scale: 1:3,000 @A4

Map Created by Canterbury Maps on 9/12/2020 at 3:10 PM



Appendix C

Site Walkover Photographs

Lot 1 DP 26880 605 East Maddisons Road



P1 & P2: Dwelling located at Lot 1 26880. Close up shows paint flaking on barge boards.



P3 & P4: View looking west across site towards detached garage. Hay is being stored beneath tarpaulins in background.



P5: View looking south across site to fattening shed. **P6:** Close up of fattening shed.

Site Walkover Photographs – December 2020



P7 & P8: Close up of fattening shed.



P9 & P10: Views looking looking west across paddocks in Lot 1 26880.

Lot 3 74311 617 East Maddisons Road



P11 & P12: Views of dwelling and detached garage.



P13 & P14: Views of implement sheds.



P15: Views of burn pile. The owner has indicated that only clippings from the property has been burnt.

Lot 2 74311 627 East Maddisons Road



P16 & P17: Views looking south and west across paddock bounding East Maddisons Road.



P18 & P19: Views of burn pile located in middle of paddock mentioned above.



P20 & 21: Views of motor vehicle workshop.

Site Walkover Photographs – December 2020



P22 & P23: Views of area in the vicinity of the workshop where oil containers are being stored on the ground.



P24 & P25: View looking south across paddock behind workshop. Stockpile is gravel, assumed to be used for dressage arena located in the same paddock.



P26 & P27: Views of paddocks located in the western half of the property.

Appendix D

Listed Land Use Register (LLUR)

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.



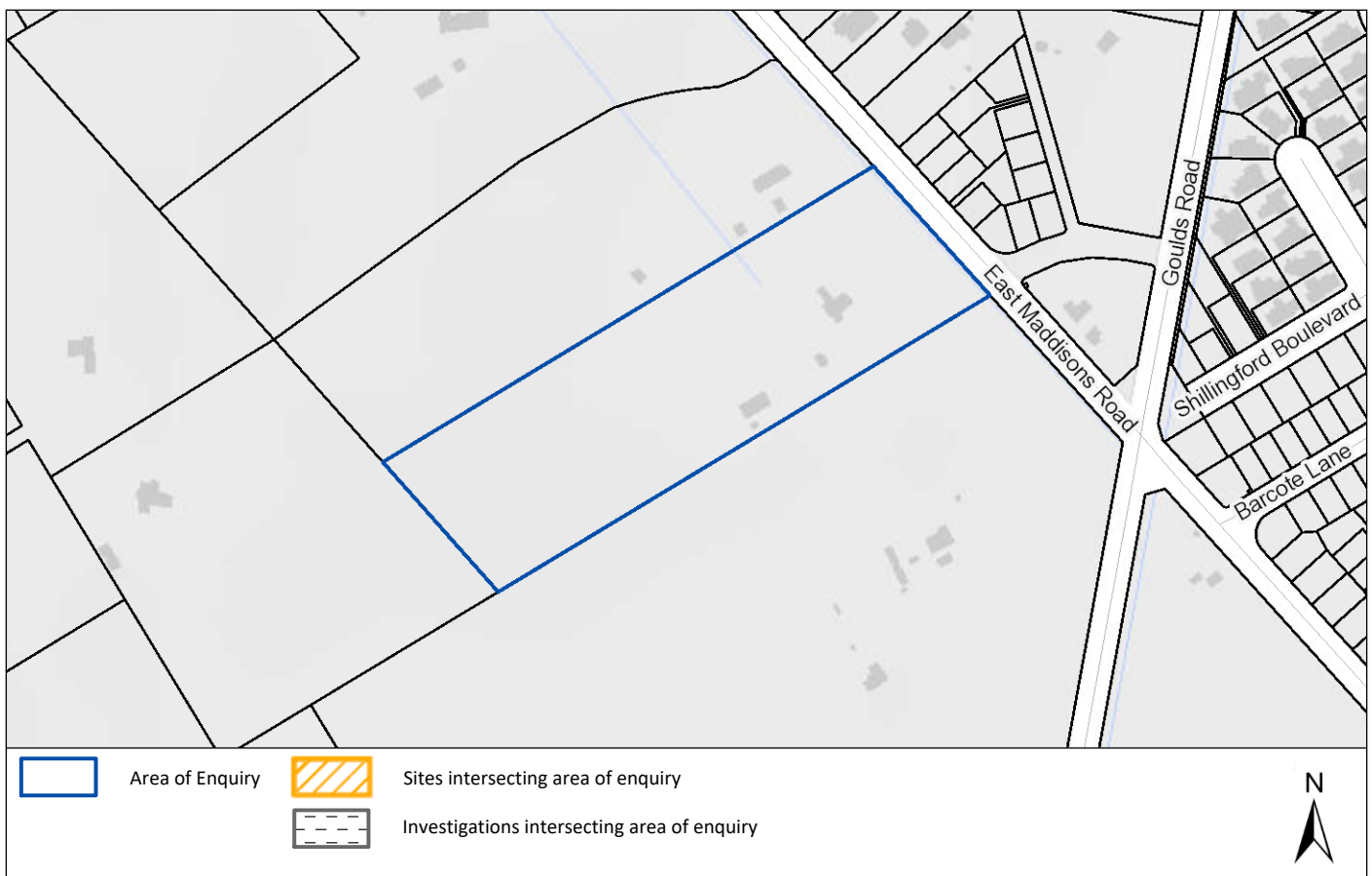
Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345
Christchurch 8140

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

www.ecan.govt.nz

Date:	30 November 2020	
Land Parcels:	Lot 1 DP 26880	Valuation No(s): 2405534500



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 ENQ269403.

Property Statement from the Listed Land Use Register

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



Customer Services
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PO Box 345
Christchurch 8140

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

www.ecan.govt.nz

Date:	30 November 2020	
Land Parcels:	Lot 3 DP 74311	Valuation No(s): 2405534600



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 ENQ269404.

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:	30 November 2020	
Land Parcels:	Lot 2 DP 74311	Valuation No(s): 2405534700



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 ENQ269405.

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



Everything is connected

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.



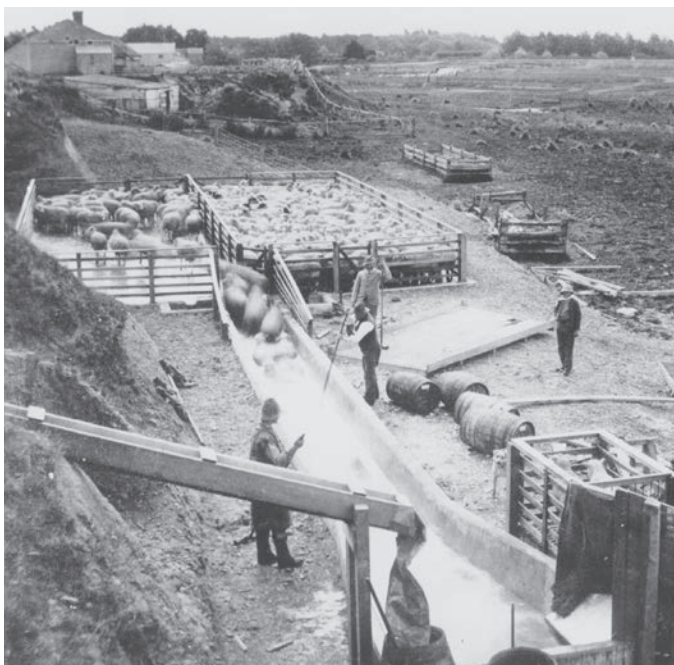
I think my site category is incorrect – how can I change it?

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)

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