

Gallina Nominees,
Heinz Wattie Pension
Fund, and Brookside
Road Residential Ltd



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PRELIMINARY SITE INVESTIGATION – CONTAMINATION

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Heinz Wattie Pension
Fund, and Brookside
Road Residential Ltd

BROOKSIDE ROAD PLAN
CHANGE, ROLLESTON

PRELIMINARY SITE INVESTIGATION - CONTAMINATION

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GALLINA NOMINEES, HEINZ WATTIE PENSION FUND, AND BROOKSIDE ROAD RESIDENTIAL LTD

BROOKSIDE ROAD PLAN CHANGE, ROLLESTON

PRELIMINARY SITE INVESTIGATION – CONTAMINATION

EXECUTIVE SUMMARY

In response to instructions from Aston Consultants, Fraser Thomas Limited (FTL) undertook a Preliminary Site Investigation (PSI) for the proposed rezoning of the site at Brookside Road, Rolleston. The subject site (approximately 110 ha) comprises the following properties ('site'):

1. Lot 1 DP 82068; approx. 44.0 ha
2. Lot 1 DP 72132; approx. 9.45 ha
3. Lot 2 DP 72132; approx. 10.0 ha
4. Lot 3 DP 20007 approx. 24.47 ha
5. Lot 4 DP 20007; approx. 21.85 ha

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)).

In our opinion, under Regulation 5(7), the NESCS applies to the site due to the following areas of potential contamination:

- *A10 Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds.* This relates to poultry sheds.

- *Activity A17: Storage tanks or drums for fuel, chemicals or liquid waste.* This relates to the above ground fuel storage tanks in Lot 4 DP 20007 and Lot 1 72132.
- *Activity E1: Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition.* This relates to buildings that potentially contain asbestos being present on site and suspected burial of ACM within pits.
- *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 building materials being buried, potentially lead contaminated paint observed to be flaking on timber barge boards trim of buildings, and potential for informal dosing during stock loading, may have resulted in localized soil contamination.
- *Activity G5: Waste disposal to land (excluding where biosolids have been used as soil conditioners):* This relates to On-site wastewater disposal fields from toilets and ablution block associated with poultry farm operation.

It is recommended that these potential/actual HAIL areas be further investigated 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.

These potential/actual HAIL activities may trigger a resource consent under the “subdivision”, “change of land use” and “soil disturbance” activity NESCS provisions, if soil sampling finds contamination to be present above background and/or guideline levels. Any such consent will require the preparation of a Site Management/Remediation Plan that will set out soil disturbance management requirements.

Copyright of this report is held by Fraser Thomas Ltd. The professional opinion expressed herein has been prepared solely for, and is furnished to our client, Selwyn District Council and Environment Canterbury (this being a regional planning requirement), on the express condition that it will only be used for the works and the purpose for which it is intended.

No liability is accepted by this firm or by any principal, or director, or any servant or agent of this firm, in respect of its use by any other person, and any other person who relies upon any matter contained in this report does so entirely at its own risk. This disclaimer shall apply notwithstanding that this report may be made available to any person by any person in connection with any application for permission or approval, or pursuant to any requirement of law.

NATIONAL ENVIRONMENTAL STANDARD FOR ASSESSING AND MANAGING CONTAMINANTS IN SOIL TO PROTECT HUMAN HEALTH

PRELIMINARY SITE INVESTIGATION - CERTIFYING STATEMENT

I, Dr Sean Matthew Finnigan of Fraser Thomas Ltd certify that:

This Preliminary Site Investigation meets the requirements of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, NESCS) Regulations 2011 because it has been:

- a. done by suitably qualified and experienced practitioners, and
- b. reported on in accordance with the current edition of Contaminated land Management Guidelines No 1 – Reporting on Contaminated Sites in New Zealand, and
- c. the report is certified by a Suitably Qualified and Experienced Practitioner.

This Preliminary Site Investigation has found:

- a. The proposed zoning change will trigger a “change in land use” activity under the NESCS, while “subdivision” and “soil disturbance” activities will apply to future consenting stages.
- a. The NESCS does apply to specified potential HAIL activities as described in this report and illustrated on the Site Plan. Further intrusive investigation is required of these areas for potential contamination in order to determine any associated human health and environmental effects. If further investigation is not undertaken prior to lodging for resource consent, then the proposed subdivision would be a discretionary activity under Regulation 11 of the NESCS.

This investigation has been undertaken by the following staff:

- a. Dr Sean Finnigan, BE, MEnv.Sci, PhD; CPEng, M.ALGA, M.WasteMINZ, CEnvP-CL (21 yrs CL experience)
- b. Sam Gladwin, BSc, M.ALGA, M.WasteMINZ (4 yrs CL experience)

Further evidence of these staff’ qualifications and experience can be provided on request.

S. Finnigan



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BROOKSIDE ROAD PLAN CHANGE, ROLLESTON

PRELIMINARY SITE INVESTIGATION – CONTAMINATION

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PRELIMINARY SITE INVESTIGATION – CONTAMINATION

1.0 INTRODUCTION

In response to instructions from Aston Consultants, Fraser Thomas Limited (FTL) undertook a Preliminary Site Investigation (PSI) for the proposed rezoning of the site at Brookside Road, Rolleston. The subject site (approximately 110 ha) comprises the following properties ('site'):

1. Lot 1 DP 82068; approx. 44.0 ha
2. Lot 1 DP 72132; approx. 9.45 ha
3. Lot 2 DP 72132; approx. 10.0 ha
4. Lot 3 DP 20007 approx. 24.47 ha
5. Lot 4 DP 20007; approx. 21.85 ha

It is understood that it is proposed to request a plan change to the Operative Selwyn District Plan seeking to rezone the above properties from rural "Outer Plains" to "Living Z", to enable subdivision of the site to create new residential lots, with a minimum net density of 12 households per hectare.

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 AND LAND USE

As discussed in Section 1.0, the subject site (approximately 110 ha) comprises the following properties ('site'):

1. Lot 1 DP 82068; approx. 44.0 ha
2. Lot 1 DP 72132; approx. 9.45 ha
3. Lot 2 DP 72132; approx. 10.0 ha
4. Lot 3 DP 20007 approx. 24.47 ha
5. Lot 4 DP 20007; approx. 21.85 ha

The subject site is located between Brookside Road (to the north), Dunns Crossing Road (to the south-west) and Edwards Road (to the north-east). Existing rural properties abut the southern and south-western site boundaries.

A summary of each property is listed in Table 1 below.

Table 1: Property Details

Registered Owner	Address	Appellation Title	Area (ha)	Land Use
White Gold Limited	N/A	Lot 1 DP 82068	44.0055	Rural
Paul Andrew McIlraith and Karen Diane McIlraith	152 Edwards Road, Burnham	Lot 1 DP 72132	9.4494	Rural-residential
Paul Andrew McIlraith and Karen Diane McIlraith	N/A	Lot 2 DP 72132	10.001	Rural
Gallina Nominees Limited	203 Dunns Crossing Road	Lot 3 DP 20007	24.47	Rural-residential, grazing, poultry farming
Gallina Nominees Limited	241 Dunns Crossing Road	Lot 4 DP 20007	21.85	Rural-residential, grazing
Gallina Nominees Limited	243 Dunns Crossing Road	Lot 4 DP 20007		Rural-residential, grazing, poultry farming
Gallina Nominees Limited	267 Dunns Crossing Road	Lot 4 DP 20007		Rural-residential, grazing

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

4.2 TOPOGRAPHY, GEOLOGY AND SOILS

The topography across the entire site is generally level.

In assessing the geology of the site, reference has been made to the Institute of Geological & Nuclear Sciences Geological Map 16, scale 1:250,000, “Christchurch”.

This map indicates that the site is likely to be underlain by “brownish grey river alluvium”, inferred to be of the Late Pleistocene Age.

The results of a geotechnical investigation undertaken by Fraser Thomas Ltd on 8 and 11 October 2021, in general, indicate that the surficial soils underlying the site are likely to comprise alluvial sediments of Late Pleistocene age.

4.3 PROPOSED DEVELOPMENT

It is understood that it is proposed to request a plan change to the Operative Selwyn District Plan seeking to rezone the above properties from rural “Outer Plains” to “Living Z”, to enable subdivision of the site to create new residential lots, with a minimum net density of 12 households per hectare.

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 E01082-01), 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 IDENTIFICATION AND LAND USE

The site details and ownership history are summarised below.

Table 2: Site Details and Ownership History

Registered Owner	White Gold Limited	
Street Address	N/A	
Legal Description	Lot 1 DP 82068	
Title	CB47B/859	
Area (ha)	44.0055	
Zoning	Rural Outer Plains	
Ownership History		
CTs	From	Registered Owner
CB47B/859	Aug 2001	White Gold Limited
CB340/116	Apr 1994	Selwyn Plantation Board Limited
	Feb 1945	Selwyn Plantation Board
	May 1944	His Majesty the King (NZ Government)
	May 1922	Mary Copeland Bate, wife of David Bates, Solicitor

Table 3: Site Details and Ownership History

Registered Owner	Paul Andrew McIlraith and Karen Diane McIlraith	
Street Address	152 Edwards Road, Burnham	
Legal Description	Lot 1 and Lot 2 DP 72132	
Title	CB41D/425 and CB41D/426	
Area (ha)	9.4494 ha and 10.001 ha respectively	
Zoning	Rural Outer Plains	
Ownership History		
CTs	From	Registered Owner
CB41D/425 & CB41D/426	June 1996	Paul Andrew McIlraith and Karen Diane McIlraith
CB32K/620	Dec 1989 Dec 1989	Paul Andrew McIlraith and Karen Diane McIlraith Landcorp Investments Ltd

Table 4: Site Details and Ownership History

Registered Owner	Gallina Nominees Limited	
Street Address	203, 241, 243 and 267 Dunns Crossing Road, Rolleston	
Legal Description	Lot 3 and Lot 4 DP 20007	
Title	CB772/69	
Area (ha)	24.4708 ha and 21.8479 ha respectively	
Zoning	Rural Outer Plains	
Ownership History		
CTs	From	Registered Owner
CB772/69	Aug 1991 Oct 1976 Feb 1967	Gallina Nominees Limited General Foods Poultry General Foods Corporation
CB383/220	Oct 1958 July 1944 Sep 1926	Eric Hume Dodds, farmer H.Kendall, farmer George John Roberts, farmer

The CT information available indicates that the properties were generally used for rural/farming purposes from at least 1926 until 1967, when poultry farming was established on Lots 3 and 4 DP 20007. Lot 1 DP 82068, Lots 1 and 2 DP 72132 have been used for farming purposes until present day.

5.2 INTERVIEWS

Paul Andrew McIlraith, owner Lots 1 and 2 DP 72132

The following information was provided by Paul:

- The site has been used for Sheep and Cattle grazing.
- No sheep dips are known to have been located at the site.
- The McIlraith's built the dwelling in the late 1980s and to their knowledge no asbestos containing material was used.
- Glyphosate has been used for weed control.

- A historical 'offal pit' is located in the north-western corner of Lot 1, DP 72132. The offal pit is understood to have been backfilled with non-engineered fill material, understood to comprise site-won soils. Due to the short turnaround time between engagement and report due dates, interviews were not conducted with people familiar with the site (i.e. previous owners) of Lots 3 and 4 DP 20007.

5.3 AERIAL PHOTOGRAPHS

1942 and 1962 Aerials

The land use at the subject site is generally in pasture. A small shed (Figure 1) can be seen in the south-western part of Lot 3 DP 20007.



Figure 1. Small shed located in south-west corner of Lot 3 DP 20007

The majority of the site generally remains unchanged in the 1962 aerial. Two sheds and what look like stock yards have can be seen approximately mid-way along the boundary between Lots 3 and 4 DP 20007 (Figure 2). A small implement shed can also be seen along the south-eastern boundary of Lot 3 2007. The shed observed in the 1942 aerial appears to have been removed. A water race can be seen in the south-western corner of Lot 3 DP 2007 in 1962.



Figure 2 Sheds and possible stock yards mid-way along the boundary between Lots 3 and 4 DP 20007

1974, 1982, 1994, 1995, 2000, 2012, 2019 and 2021 Aerials

In the 1974 aerial the land use has changed significantly in Lots 3 and 4 DP 20007. The stock yards and sheds have been demolished and several long buildings, understood to be poultry sheds have been constructed. Several smaller buildings/shed associated with the poultry sheds have also been constructed. Two dwellings have also been constructed within Lot 4 DP 20007. The remainder of the site appears to still be used for pasture purposes. The water race observed in the 1962 aerial appears to have been re-routed and the original drain backfilled, likely as part of poultry shed construction.

In the 1982 aerial, a dwelling has been constructed in Lot 3 DP 20007. An implement shed can be seen on Lot 1 DP 72132 and some form of cropping appears to be taking place across the south-western half of Lot 1 and all of Lot 2 DP 72132.

In 1994, a dwelling has been constructed in Lot 1 DP 72132 and the cropping activity is gone.

The land use for the remainder of the site appears to be used for pasture.

The site configuration has not significantly changed from 1994 to the present day.

5.4 COUNCIL RECORDS

The Council property file for Lots 3 and 4 DP 20007 was reviewed. The property files for Lot 1 DP 82068, Lots 1 and 2 DP 72132 were not able to be obtained before the report deadline date due to the short turnaround time. The only relevant information found related to building permit applications submitted to Council:

- 1967 – Building permit documents for new poultry sheds, dwellings and toilet blocks
- 1968 – Building permit documents for new garage and toilet blocks
- 1970 – Building permit documents for new implement shed
- 1971 – Building permit documents for new poultry sheds
- 1972 – Building permit documents for new changing rooms
- 1973 – Building permit documents for new showers, egg dispatch rooms and laying shed
- 1975 – Building permit documents for new egg dispatch/changing rooms
- 1978 – Building permit documents for new dwelling and garage
- 1979 – Building permit documents for new shaving shed
- 1982 – Building permit documents for new coolstore and garage/workshop
- 1985 – Building permit documents for new breeder shed
- 1989 – Building permit documents for relocating egg store
- 1998 – Building consent documents for new ablutions block
- 1999 – Building consent documents for new generator shed

The building permit documents for the poultry sheds, egg dispatch, changing/toilet blocks and coolstore specify the following building materials to be used for wall cladding:

- FlexBoard of (unknown composition), this cladding appears to have been specified for internal walls
- Insulated Rudnev Panel (polystyrene sandwich panel)
- Corrugated iron

The building permit documents for the dwellings and garages specify the following building materials to be used for wall cladding:

- Concrete block veneer
- Gib board
- Corrugated iron
- Cement plaster on netting

The building consent documents do not specify construction materials or plans for the generator shed, and no information on any potential fuel source could be found.

5.5 PREVIOUS REPORTS

Two previous reports, entitled “Asbestos Management Survey. Rolleston 1, 2 – 243 Dunns Crossing Road, Rolleston, 7675” and “Asbestos Management Survey. Rolleston 3, 4 & 5 – 201 Dunns Crossing Road, Rolleston, 7675” were prepared by EnvirotechNZ for Tegel Foods Limited.

The asbestos management surveys identified that asbestos containing materials (ACM) were present within the buildings associated with the poultry farm.

5.6 LISTED LAND USE REGISTER (LLUR)

Lots 1 DP 82068, Lots 1 and 2 DP 72132

Contaminated site enquiries were sent to Canterbury Regional Council on 14 October 2021, for information on the subject site held on their Listed Land Use Register (LLUR), which states the sites are currently not listed as potentially contaminated in the Listed Land User Register (LLUR).

Lots 3 and 4 DP 20007

A contaminated site enquiry was sent on 26 September 2021, for information on the subject site held on the LLUR, which states that the site has been subject to HAIL activity *A10 Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds*. The LLUR also notes the following: *“Area defined from 1974 to present aerial photographs. A poultry farm (persistent pesticides) was noted in aerial photographs reviewed”* and the verified HAIL has not been investigated.

5.7 SITE WALKOVER RESULTS

Site walkovers of the subject site were undertaken by a FTL Engineering Geologist experienced in contaminated site investigations on 8 and 13 October 2021. Site investigation photographs are provided in Appendix C.

The topography across the subject site is generally level, with the majority of the site comprising paddocks which are currently in pasture and used for grazing cattle.

The properties making up the site comprise the following features:

Lot 1 DP 82068

- An irrigation pivot is present, and the paddocks are used for grazing cattle.
- A water race bisects the property.

Lots 1 and 2 DP 72132

- A dwelling, detached garage and two implement sheds are located in the south-western corner of Lot 1.
- The dwelling was generally in good condition and comprises light concrete block construction with a profiled metal roof and a concrete slab on ground foundation.
- The detached garage and sheds are generally of timber frame/pole construction, profiled metal cladding, with a mix of earthen and concrete slab floors. They are being used to store various vehicles including farm equipment, cars, motorbikes, and a boat. The garage appears to be used as a private workshop for personal vehicles.

- An above ground fuel tank which is not currently fixed in place and has no bund, and several drums of varying size are located in the garages and sheds. The fuel tank and drums were being stored on pervious surfaces (Photo P7).
- In the paddock immediately to the north of the dwelling, various items including oil containers and vehicles in deteriorated condition were observed being stored on the ground. A burn pile which was observed to have been used to dispose of synthetic materials and vegetation is also located in the paddock.
- Other than a patch of bare ground, no obvious evidence of the historical offal pit was observed at the location indicated by the owner.
- The remainder of the properties are in pasture and used for grazing cattle.

Lots 3 and 4 DP 20007

- Three dwellings are located at the site (203, 243 and 267 Dunns Crossing Road). The dwellings are all of similar construction, generally comprising light timber frame construction with mixed concrete brick and timber cladding, profiled metal roofs and generally appear to have suspended timber floors supported on shallow piles.
- The buildings are generally in good condition, with no obvious damage to construction materials. Paint was observed to be flaking on timber barge boards and trim on one of the dwellings in Lot 4.
- Each of the dwellings have detached garages and sheds generally clad with profiled metal or stucco.
- Seven approximately 100m long poultry sheds are located across both lots. Some of the sheds have profiled metal cladding, while some are clad in what appears to be Structurally Insulated Panel (SIP) type material. Generally, the buildings were observed to be in good condition with no obvious damage to construction materials. Paint was observed to be flaking on timber barge boards and trim. Concrete pads extend out from the ends of each shed, some of which were observed to have cracking.
- Several ancillary buildings associated with the poultry farming operation are also present at the site. The buildings comprise a number of different construction materials including concrete block, profiled metal, and gib board. Some of these buildings have warning signs indicating Asbestos Containing Material (ACM) is present within.
- An approximately 1000L above ground fuel tank is located on at 241 Dunns Crossing Road (Lot 4). The tank is surrounded by a concrete bund. Seven full fuel containers were being stored on bare ground in front of the tank.
- An approximately 6,300m² area to the south of the above ground fuel tank is being used to store various items including farm equipment, shipping containers and metal building materials. Within this area features inferred to either be burn piles or disposal to ground of pallets and concrete structures were observed. The exact nature of these features was obscured by overgrown grass. A single old metal drum inferred to be used for burning refuse was also observed.
- A stock loading ramp and associated small yard is located at 203 Dunns Crossing Road (Lot3). No obvious signs of any sheep dips were observed in this area.
- A generator shed is located at 203 Dunns Crossing Road (Lot 3). A warning sign on the side of the building indicates Asbestos Containing Material (ACM) is present. No obvious

sign of fuel source for the generator was observed. A small Versatile shed is located behind the generator shed.

- A stockpile overgrown with grass, inferred to be soil of unknown origin was observed along the western boundary of 203 Dunns Crossing Road (Lot3).
- Localised depressions and hummocky surface features observed in the vicinity of the south-western ends of two poultry sheds are inferred to be the remnants of backfilled pits. Excavations of these features during the geotechnical investigation revealed building debris (including possible ACM), metal, glass bottles and animal bones.
- An existing shallow water race extends through the south-western corner of the site. The water race banks are generally subvertical and approximately 0.3 m in vertical height. The water race ranges between approximately 6 m and 10 m wide. The water race banks are unretained. The current path of the water race was established sometime before 1974. Aerial photography, from 1962, indicates that the water race originally crossed the south-western corner of Lot 3, DP 20007, at a different location to its present course. The original path of the water race, in this location, appears to have been backfilled, likely as part of poultry shed construction. The nature of the material placed to backfill this part of the water race is not reliably known

6.0 DISCUSSION

6.1 SUMMARY OF KEY FINDINGS

The properties were generally used for rural/farming purposes from at least 1926 until 1967, when commercial poultry farming was established in Lots 3 and 4 DP 20007. The poultry farming operation is currently operated by Tegel Foods Limited. Lot 1 DP 82068, Lots 1 and 2 DP 72132 have been used for farming purposes until the present day.

The existing buildings on site are understood to have been built before 1990. Some historical buildings and structures appear to have been demolished and/or removed prior to the early 1970s.

No obvious asbestos containing material (ACM) was visually observed during the site walkover. However, some buildings displayed warning labels indicating the presence of ACM and, suspected ACM containing material was found within one of the geotechnical test pits put down in the vicinity of one of the poultry sheds.

ACM was confirmed, by others, to be present within some of the buildings associated with the poultry farm operation. It should be noted that FTL did not have internal access into the poultry buildings for biosecurity purposes.

Inferred backfilled pits and/or burn piles were identified in several areas. Building materials (including possible ACM) and general refuse were observed to be present within the soils used to backfill pits.

Potential HAIL activities identified for this property are listed in Table 5 below, along with the associated possible contaminants.

Table 5: Potential HAIL activities identified at the subject sites

Description/Applicable Lots	Potential HAIL Activity	Possible Contaminants
Lots 3 and 4 DP 20007 - Poultry Sheds and ancillary buildings, including onsite wastewater disposal fields from toilet and ablution blocks known to have ACM and flaking paint (potentially lead based due to age of buildings)	A10: Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds	As, Cu, Pb, Hg and OCPs
	E1: Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition	Asbestos
	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	Pb
	G5: Waste disposal to land (excluding where biosolids have been used as soils conditioners)	HMs, PAHs, bacteria/viruses
Lot 4 DP 20007 - Above ground fuel tank.	A17: Storage tanks or drums for fuel, chemicals or liquid waste	PAHs
Lots 3 and 4 DP 20007 - Possible backfilled pits and/or burn piles. Building materials stored on ground.	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	HMs, Asbestos, PAHs
Lot 4 DP 20007 - Flaking paint on dwelling and detached garage (potentially lead based due to age of buildings)	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	Pb
Lot 3 DP 20007 - Stock loading ramp potentially used as informal dosing area.	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	HMs
Lot 3 DP 20007 - Generator building suspected to have ACM	E1: Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition	Asbestos
Lot 3 DP 20007 - Suspected backfilling of historical water race.	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	HMs, Asbestos
Lot 3 DP 20007 - Stockpiled soil of unknown origin/composition.	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	HMs, PAHs, Asbestos
Lot 1 DP 72132 - Above ground fuel tank and storage of oil drums/containers in private workshop.	A17: Storage tanks or drums for fuel, chemicals or liquid waste	PAHs, HM
Lot 1 DP 72132 - Storage of dilapidated vehicles, oil containers and burn pile observed to have been used for disposal of synthetic material.	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	HMs, PAHs
Lot 1 DP 72132 Backfilled historical offal pit with potential household refuse disposal.	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	HMs

Note: As = arsenic, Cu = copper, Hg = mercury, Pb = lead, HMs = heavy metals, PAHs = polycyclic aromatic hydrocarbons, OCPs = organochlorine pesticides

6.2 CONCEPTUAL SITE MODEL

The most likely exposure pathway is direct contact with potentially contaminated soils, via inhalation and ingestion of dust, during future earthworks should subdivision occur in the future. Crop uptake is considered unlikely as the areas identified as potentially contaminated are not currently used for such activities. The geotechnical investigation undertaken by Fraser

Thomas Ltd on 8 and 11 October 2021 indicates that the groundwater level is inferred to be at a depth in excess of approximately 10 m below the existing ground surface, and therefore the risk of leaching to groundwater is low.

The risk of contamination of surface water from any soil contamination is also considered low, given all the contaminants listed as potentially being present are generally strongly bound to soil. This, combined with the flat nature of the site, means that the potential for contamination of the only surface water source within the site (water race) is considered low). Furthermore, it is likely that this water race would be filled in as part of any subdivision development, further reducing the potential for any contamination of surface water from any residual contaminants on the site.

Potential receptors are likely to be workers during earthworks for any future subdivision, who may be exposed to potentially contaminated soil.

It should be noted that the potential HAIL activities identified during this investigation are the result of visual inspection only, and soil sampling would be required to confirm any soil contamination if any.

6.3 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 applies to the site due to the following areas of potential contamination:

- *A10 Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds.* This relates to poultry sheds.
- *Activity A17: Storage tanks or drums for fuel, chemicals or liquid waste.* This relates to the above ground fuel storage tanks in Lot 4 DP 20007 and Lot 1 72132.
- *Activity E1: Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition.* This relates to buildings that potentially contain asbestos being present on site and suspected burial of ACM within pits.
- *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 building materials being buried, potentially lead contaminated paint observed to be flaking on timber barge boards trim of buildings, and potential for informal dosing during stock loading, may have resulted in localized soil contamination.
- *Activity G5: Waste disposal to land (excluding where biosolids have been used as soil conditioners):* This relates to on-site wastewater disposal fields from toilets and ablution block associated with poultry farm operation.

It is recommended that these potential/actual HAIL areas be further investigated 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.

7.0 CONCLUSIONS AND RECOMMENDATIONS

This investigation has confirmed that the subject site has been used for rural/residential and grazing and commercial poultry farming purposes. Hence under Regulation 5(7), the NESCS applies to the site due to the following areas of potential contamination:

- *A10 Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds.* This relates to poultry sheds.
- *Activity A17: Storage tanks or drums for fuel, chemicals or liquid waste.* This relates to the above ground fuel storage tanks in Lot 4 DP 20007 and Lot 1 72132.
- *Activity E1: Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition.* This relates to buildings that potentially contain asbestos being present on site and suspected burial of ACM within pits.
- *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 building materials being buried, potentially lead contaminated paint observed to be flaking on timber barge boards trim of buildings, and potential for informal dosing during stock loading, may have resulted in localized soil contamination.
- *Activity G5: Waste disposal to land (excluding where biosolids have been used as soil conditioners):* This relates to On-site wastewater disposal fields from toilets and ablution block associated with poultry farm operation.

It is recommended that these potential/actual HAIL areas be further investigated 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.

These potential/actual HAIL activities may trigger a resource consent under the “subdivision”, “change of land use” and “soil disturbance” activity NESCS provisions, if soil sampling finds contamination to be present above background and/or guideline levels. Any such consent will require the preparation of a Site Management/Remediation Plan that will set out soil disturbance management requirements.

8.0 LIMITATIONS

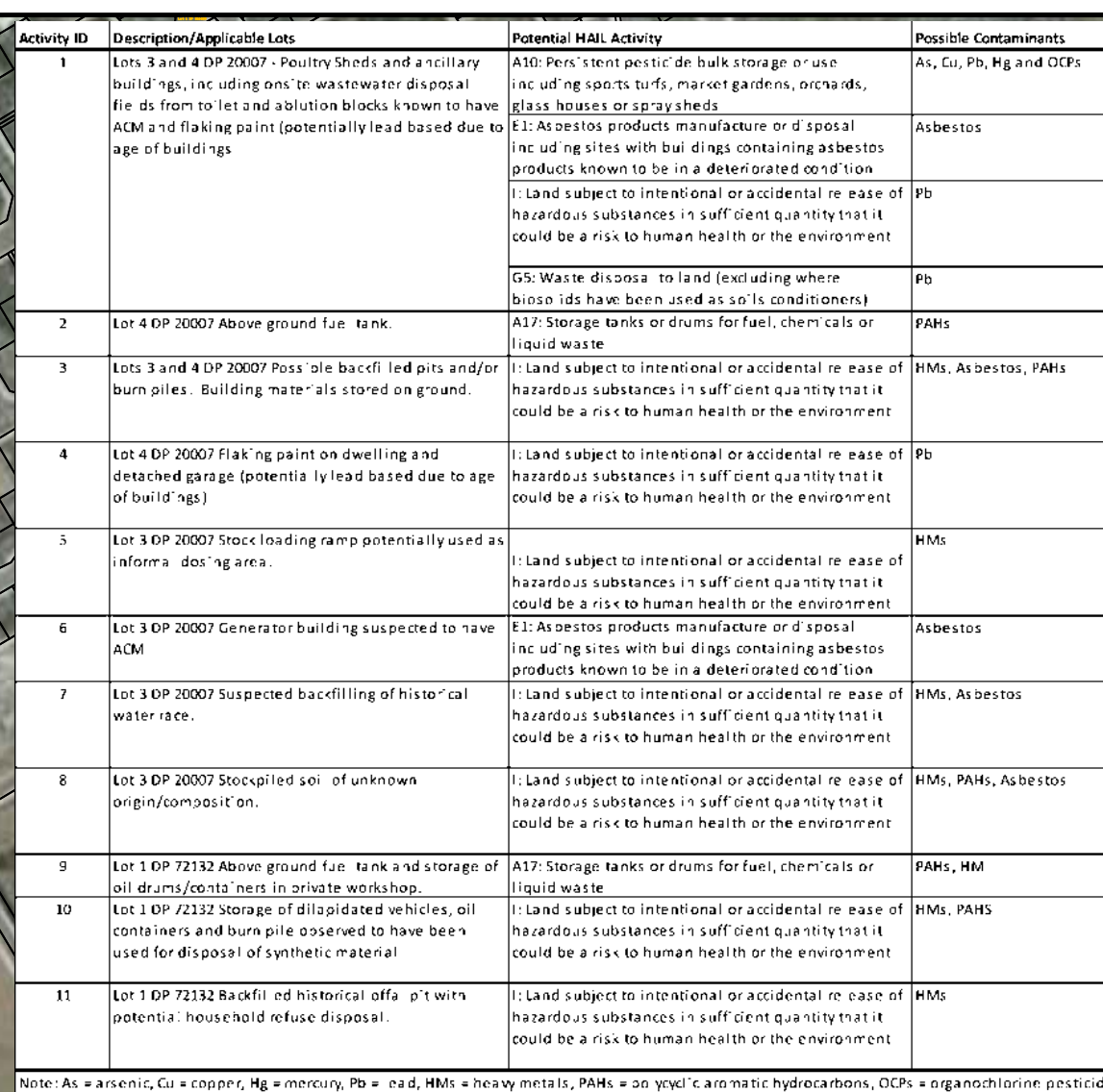
We have performed our services for this project in accordance with current professional standards for an assessment of the nature and extent of any soil contamination on-site, based upon detailed site assessment investigations and current regulatory standards for site contamination. The scope of the site assessment activities was generally in accordance with the Ministry for Environment Contaminated Land Management Guideline's (Parts 1 (2021), 2 (2011) and 5 (2021)) 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.

Copyright of this report is held by Fraser Thomas Ltd. The professional opinion expressed herein has been prepared solely for, and is furnished to our client, Selwyn District Council and Environment Canterbury (this being a regional planning requirement), on the express condition that it will only be used for the works and the purpose for which it is intended.

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Figures/Drawings



NOTES	
1.	This plan has been adopted from Grip map. The location and extent of the site boundaries and site features are therefore considered to be approximate only.

PROJECT

BROOKSIDE ROAD
PLAN CHANGE,
ROLLESTON



Fraser Thomas

ENGINEERS • RESOURCE MANAGERS • SURVEYORS

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SHEET 1 of 1		

Appendix A

Ministry for the Environment Contaminated Site Report Checklist

GALLINA NOMINEES, HEINZ WATTIE PENSION FUND, AND BROOKSIDE ROAD RESIDENTIAL LTD

BROOKSIDE ROAD PLAN CHANGE, ROLLESTON

PRELIMINARY SITE INVESTIGATION – CONTAMINATION

SUMMARY CONTAMINATED SITES REPORT CHECKLIST

Content	Required	Required if relied on	CLMG 5 section
1. Introduction			
• investigation objectives	<input checked="" type="checkbox"/>		2.1
• site identification (site name, address, legal description; site boundaries; a map reference and geographic coordinates)	<input checked="" type="checkbox"/>		3.3.1
• proposed site use		<input checked="" type="checkbox"/>	3.3.2
2. Site description			
• environmental setting		<input checked="" type="checkbox"/>	3.3.3
• site layout	<input checked="" type="checkbox"/>		3.3.4
• current site uses	<input checked="" type="checkbox"/>		3.3.5
• surrounding land uses	<input checked="" type="checkbox"/>		3.3.6
• geophysical surveys		<input type="checkbox"/>	5.1
• site inspection		<input checked="" type="checkbox"/>	3.3.8
3. Historical site use			
• summary of site history gained from: <ul style="list-style-type: none"> – review of existing investigation reports – review of council information – review of aerial photographs – interviews – review of other historical information 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	3.3.7
• preliminary sampling (if carried out) <ul style="list-style-type: none"> – description (including diagram) – justification for sample location and analyte selection – results – comparison of results to guidelines 		<input type="checkbox"/>	3.3.9
4. Risk assessment			3.3.11
• conceptual site model	<input checked="" type="checkbox"/>		
• evaluation of the probability that contamination exists on the site	<input checked="" type="checkbox"/>		
• identification and characterisation of potential pathways and receptors for each exposure area across the site (eg, assessment of geology, hydrogeology, building construction, site use)	<input checked="" type="checkbox"/>		
• likelihood that contamination poses a risk to identified receptors including potential receptors	<input checked="" type="checkbox"/>		

<ul style="list-style-type: none"> • magnitude of the risk to receptors, pursuant to regulation 8(4)(b): – <i>is it highly unlikely that there will be a risk to human health if the activity is done to the piece of land?</i> • evaluate the magnitude of any identified risk to other receptors (eg, ecological) • describe the limitations of the data collected and the assumptions and uncertainties inherent in the data and models used • Note: If the regulation 8(4)(b) ‘highly unlikely’ test cannot be achieved, then the activity is not permitted. 	<input checked="" type="checkbox"/>		
5. Conclusions	<input checked="" type="checkbox"/>		
6. Recommendations (if relevant to report purpose)	<input checked="" type="checkbox"/>		
7. Report limitations	<input checked="" type="checkbox"/>		
8. SQEP certification of report (refer appendix C)	<input checked="" type="checkbox"/>		1.2
9. References	<input type="checkbox"/>		
Appendices: relevant supporting information			

Supporting information	Required	Required if relied on
Figures (including site plan – regulation 8(4)(c))	<input checked="" type="checkbox"/>	
Conceptual site model (if not included in report body)	<input checked="" type="checkbox"/>	
Land titles		<input type="checkbox"/>
Site photographs (if site inspection carried out)		<input checked="" type="checkbox"/>
Laboratory reports and chain of custody documentation (if sampling carried out)		<input type="checkbox"/>
Calibration information for any field screening instruments used		<input type="checkbox"/>
Other supporting information		<input type="checkbox"/>
Statement of qualification of the author and, if not the author, the certifying SQEP	<input checked="" type="checkbox"/>	1.2

Appendix B

Aerial Photographs

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1962

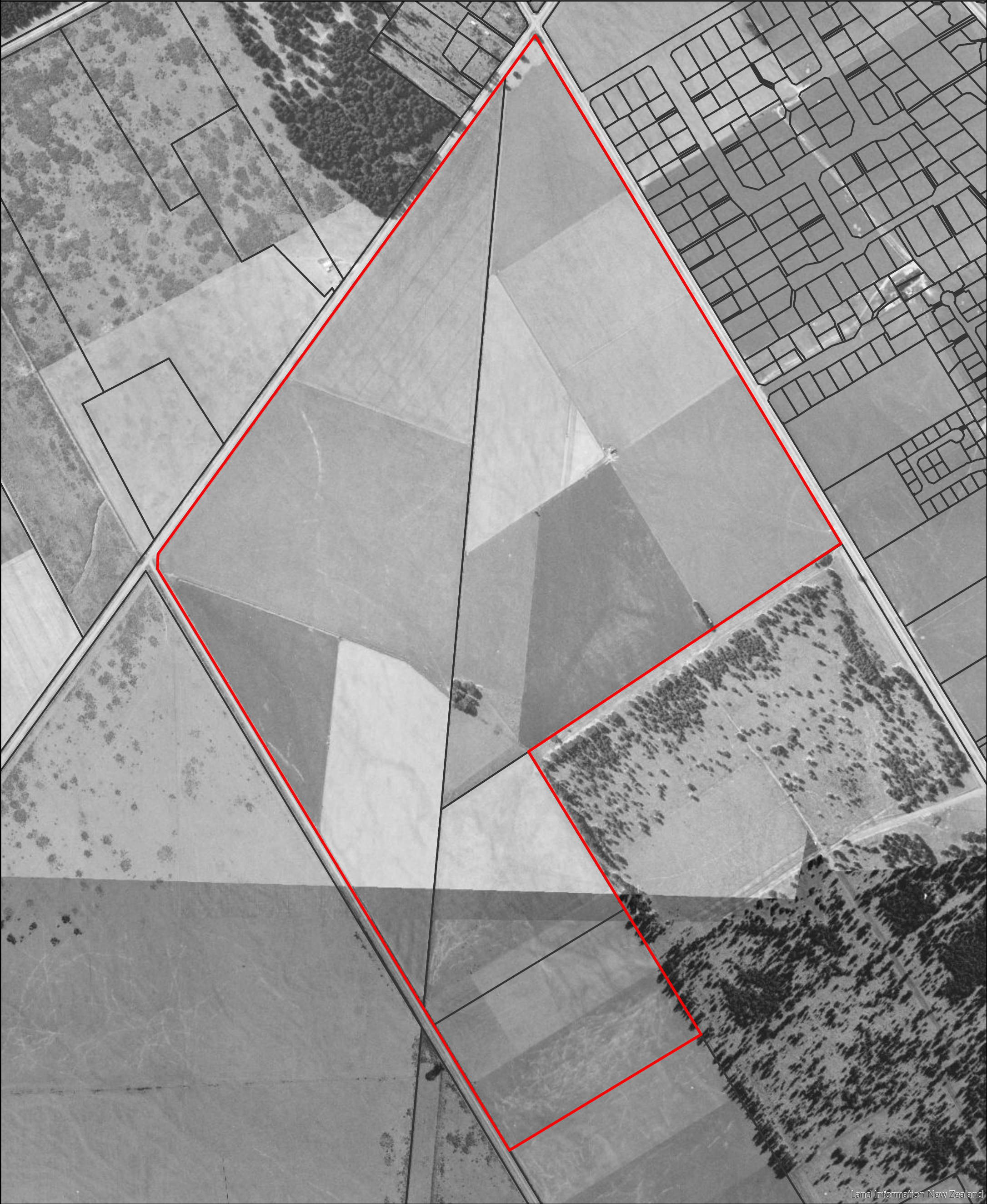
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1974

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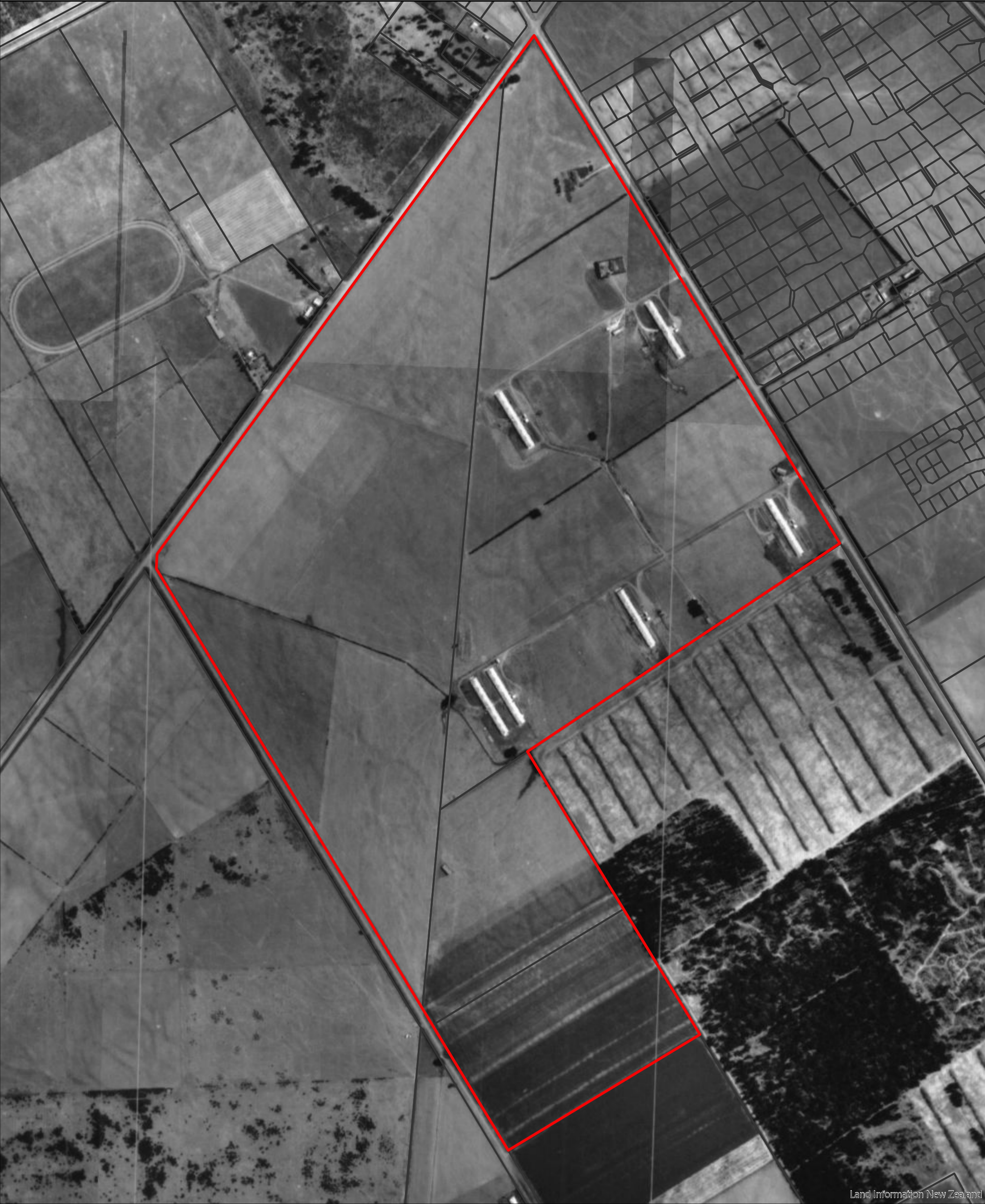
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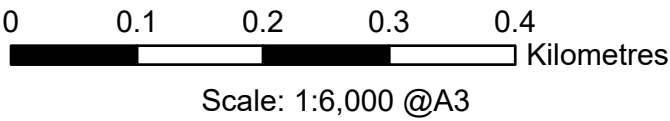
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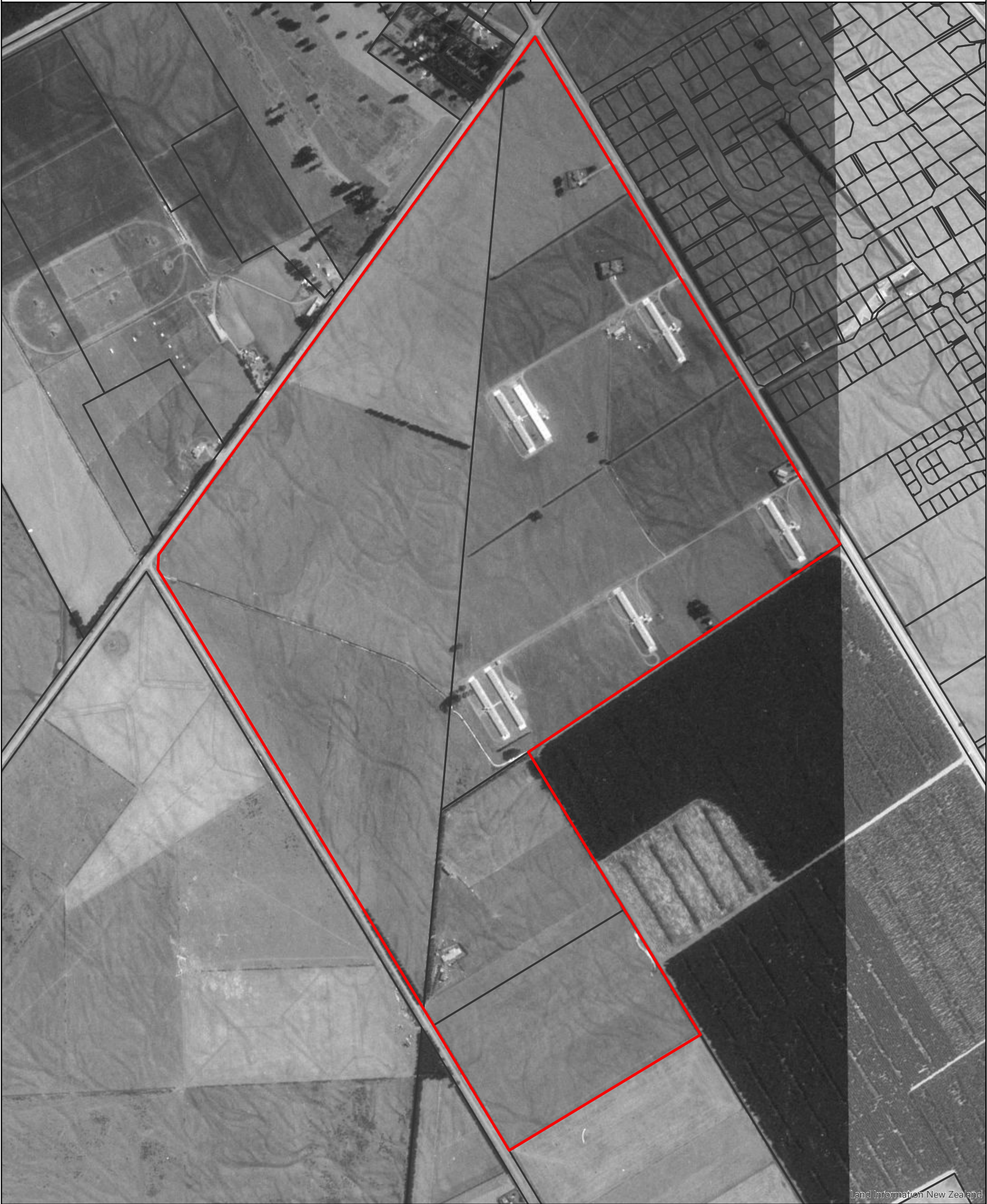


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2012

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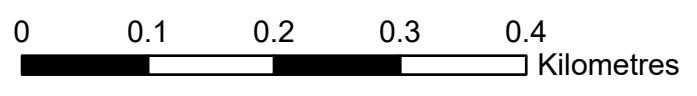
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Appendix C

Site Walkover Photographs

Site Walkover Photographs – October 2021

Lot 1 DP 82068	
	
P1: View looking south from northern corner across Lot 1 DP 82068.	P2: Pump shed of profiled metal construction along north-western boundary of Lot 1 DP 82068.
	
P3: View looking south-east across water race and Lot 1 DP 82068. Edwards Road is on right.	P4: View looking south-west across southern part of Lot 1 DP 82068.

Lots 1 and 2 DP 72132



P5: View of dwelling and implement shed Lot 1 DP 72132.



P6: View of Implement sheds and garage which is used as a private workshop.



P7: Fuel tank observed in one of the implement sheds. The tank is not fixed, and has no bund.



P8: Oil containers being stored on bare ground in paddock north of dwelling.



P9: Burnpile in paddock north of dwelling. Synthetic materials were observed to have been burnt here.



P10: Hayshed located along western boundary of Lot 1 DP 72132. Various vehicles in dilapidated states are being stored on the ground behind the shed.

Site Walkover Photographs – October 2021



P11: Close up view of area behind shed.



P12: Location of former offal pit as indicated by owner. Other than lack of grass, no obvious evidence of past activity.



P13: View looking north-east across Lot 1 from hay shed.



P14: View looking south-east across Lots 1 and 2 DP 72132.



P15: Looking east across Lot 2 from driveway of Lot 1 DP 72132.

Site Walkover Photographs – October 2021

Lots 3 and 4 DP 20007



P16: View looking south from northern corner across 267 Dunns Crossing Road (Lot 4). Dwelling in far background.



P17: Dwelling located at 267 Dunns Crossing Road (Lot 4).



P18: View looking south from northern corner across 243 Dunns Crossing (Lot 4).



P18: Metal sheeting that has been dumped in vicinity of dwelling at 243 Dunns Crossing (Lot 4).



P19: Dwelling located at 243 Dunns Crossing Road (Lot 4). Flaking paint on timber trim.



P20: Example of chicken shed clad with "SIP" type cladding.

Site Walkover Photographs – October 2021



P21: Example of chicken shed clad with profiled metal cladding



P22: Example of cracking in concrete pad at end of chicken shed.



P23: Example of ancillary building and structures associated with chicken sheds.



P23: Example of ancillary building associated with chicken sheds



P24: ACM warning sign on building in P23.



P25: Above ground fuel tank in Lot 4. Fuel containers on ground are full.

Site Walkover Photographs – October 2021



P25: Concrete bund construction and condition. No cracking observed in floor.



P26: Implement shed used for storing farm equipment.



P27: Building materials (metal) being stored behind implement shed. No obvious ACM.



P28: Suspected burn pile and/or disposal to ground of pallets at 241 Dunns Crossing Road (Lot 4)



P29: Suspected burn pile and/or disposal to ground of concrete at 241 Dunns Crossing Road (Lot 4)



P30: Old drum inferred to be used for refuse burning at 241 Dunns Crossing Road (Lot 4)

Site Walkover Photographs – October 2021



P31: Stockyard and loading ramp in 203 Dunns Crossing Road (Lot 3).



P32: Generator shed. Building behind is office/lunch room of modern construction.



P33: Asbestos warning sign.



P34: Inferred stockpile along western boundary of Lot 3.



P35: Animal bones found in geotechnical test pit TP10.



P36: Possible backfilled pit at southern end of chicken shed in Lot 3.

Site Walkover Photographs – October 2021



P37: Geotechnical test pit TP13 showing man-made materials (metal, glass bottles)



P38: Suspected ACM excavated from TP13

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 from our Listed Land Use Register (LLUR). The LLUR holds information about sites that have been used or are currently used for activities which have the potential to cause contamination.

The LLUR statement shows the land parcel(s) you enquired about and provides information regarding any potential LLUR sites within a specified radius.

Please note that if a property is not currently registered 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 database 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; additional relevant information may be held in other files (for example consent and enforcement files).

Please contact Environment Canterbury if you wish to discuss the contents of this property statement.

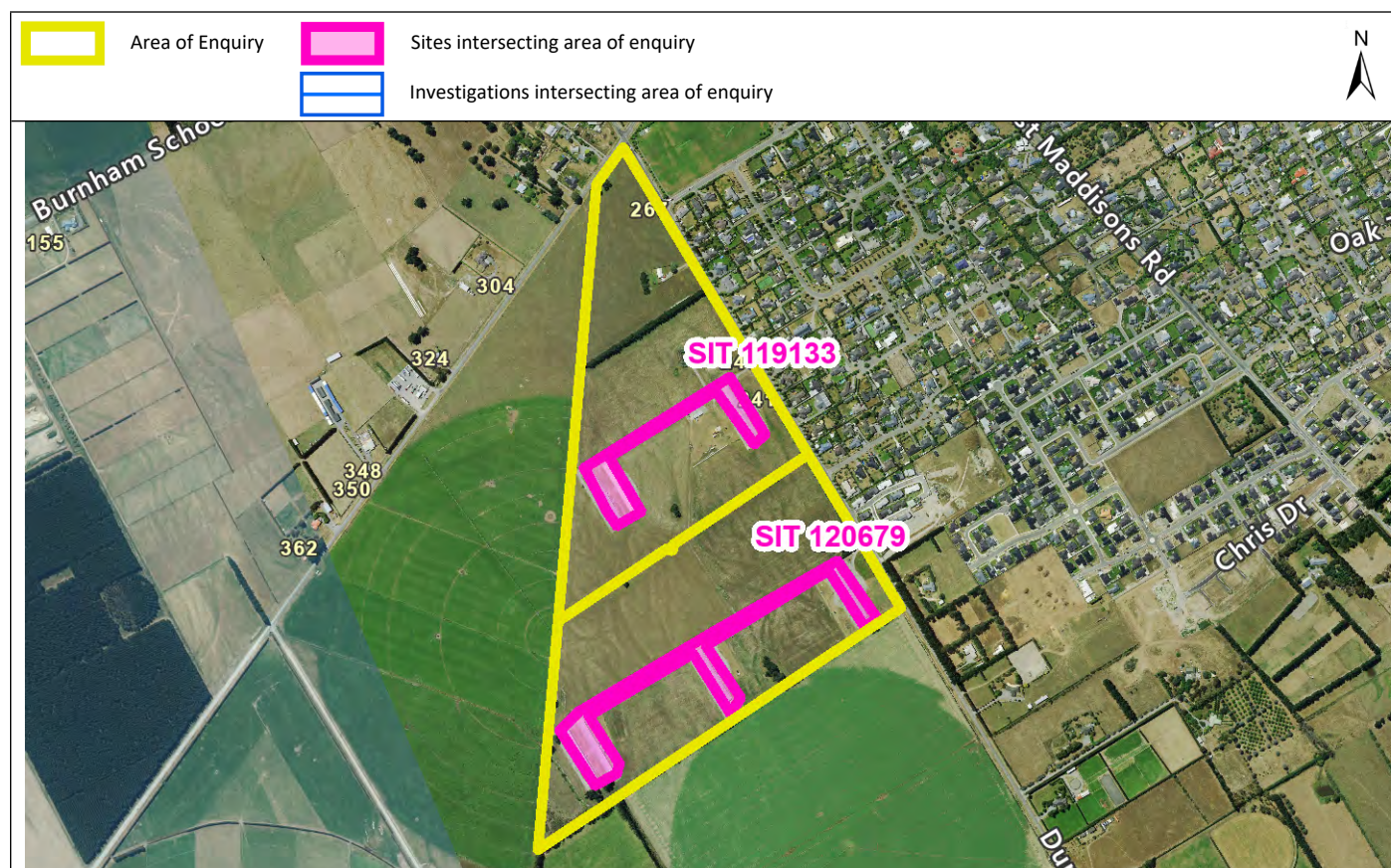
Yours sincerely

Contaminated Sites Team

Property Statement from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or
contact Customer Services at ecan.govt.nz/contact/ and quote ENQ294644

Date generated: 26 September 2021
Land parcels: Lot 4 DP 20007
Lot 3 DP 20007



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.

Sites at a glance

 Sites within enquiry area

Site number	Name	Location	HAIL activity(s)	Category
119133	243 Dunns Crossing Rd, Rolleston	243 Dunns Crossing Rd, Rolleston	A10 - Persistent pesticide bulk storage or use;	Not Investigated
120679	203 Dunns Crossing Road, Rolleston	203 Dunns Crossing Road, Rolleston	A10 - Persistent pesticide bulk storage or use;	Not Investigated

More detail about the sites

Site 119133: 243 Dunns Crossing Rd, Rolleston (Intersects enquiry area.)

Category: Not Investigated

Definition: Verified HAIL has not been investigated.

Location: 243 Dunns Crossing Rd, Rolleston
Legal description(s): Lot 4 DP 20007

HAIL activity(s):	Period from	Period to	HAIL activity
	1974	Present	Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds

Notes:

5 Nov 2014 This record was created as part of the Selwyn District Council 2015 HAIL identification project.

5 Nov 2014 Poultry farm

5 Nov 2014 Area defined from 1974 to Present aerial photographs. A poultry farm (persistent pesticides) was noted in aerial photographs reviewed.



Investigations:

There are no investigations associated with this site.

Site 120679: 203 Dunns Crossing Road, Rolleston (Intersects enquiry area.)

Category: Not Investigated
Definition: Verified HAIL has not been investigated.

Location: 203 Dunns Crossing Road, Rolleston
Legal description(s): Lot 3 DP 20007

HAIL activity(s):	Period from	Period to	HAIL activity
	1974	Present	Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds

Notes:

8 Jan 2016 This record was created as part of the Selwyn District Council 2015 HAIL identification project.

8 Jan 2016 Area defined from 1974 to Present aerial photographs. A poultry farm (persistent pesticides) was noted in aerial photographs reviewed.



Investigations:

There are no investigations associated with this site.

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.

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.



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.)

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.

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



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 from our Listed Land Use Register (LLUR). The LLUR holds information about sites that have been used or are currently used for activities which have the potential to cause contamination.

The LLUR statement shows the land parcel(s) you enquired about and provides information regarding any potential LLUR sites within a specified radius.

Please note that if a property is not currently registered 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 database 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; additional relevant information may be held in other files (for example consent and enforcement files).

Please contact Environment Canterbury if you wish to discuss the contents of this property statement.

Yours sincerely

Contaminated Sites Team

Property Statement from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or
contact Customer Services at ecan.govt.nz/contact/ and quote ENQ297487

Date generated: 13 October 2021
Land parcels: Lot 1 DP 82068



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.

Sites at a glance

 Sites within enquiry area

There are no sites associated with the area of enquiry.

More detail about the sites

There are no sites associated with the area of enquiry.

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.

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.

Property Statement from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or
contact Customer Services at ecan.govt.nz/contact/ and quote ENQ297488

Date generated: 13 October 2021
Land parcels: Lot 1 DP 72132



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.

Sites at a glance

 Sites within enquiry area

There are no sites associated with the area of enquiry.

More detail about the sites

There are no sites associated with the area of enquiry.

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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.

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Property Statement from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or
contact Customer Services at ecan.govt.nz/contact/ and quote ENQ297489

Date generated: 13 October 2021
Land parcels: Lot 2 DP 72132



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.

Sites at a glance

 **Sites within enquiry area**

There are no sites associated with the area of enquiry.

More detail about the sites

There are no sites associated with the area of enquiry.

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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.

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

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- 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:

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