



15 June 2022

Jocelyn Lewes  
Strategy and Policy Planner  
Selwyn District Council  
PO Box 90  
**ROLLESTON 7643**

Dear Jocelyn

## **PRELIMINARY SITE INVESTIGATION - 890 SELWYN ROAD, ROLLESTON, SELWYN DISTRICT**

### **1.0 Introduction**

Pattle Delamore Partners Limited (PDP) has been engaged by Selwyn District Council (SDC) to undertake a preliminary site investigation (PSI) for the property located at 890 Selwyn Road, Rolleston (i.e., the site). The PSI was carried out to gain an understanding of potential ground contamination sources and support the proposed rezoning of the site and wider area within Selwyn District as part of the Future Urban Development Area (FUDA) programme. The PSI is also intended to assist SDC with the variation of the Proposed District Plan, particularly with regards to future compliance assessments relating to land use activities covered by the *Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soils to Protect Human Health) Regulations 2011* (the NESCS).

The PSI has been undertaken through the review of available site information including review of district and regional council records, property file records and aerial photographs, as well as undertaking site inspection and interviews to identify areas of the site where HAIL<sup>1</sup> activities may have been undertaken.

This assessment has been carried out in accordance with Ministry for the Environment's (MfE) *Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (Revised 2021)* (MfE, 2021). The investigation has been certified by suitably qualified and experienced practitioners (SQEP) as outlined by the NESCS. A certifying statement to this effect is attached.

### **2.0 Site Details**

The site currently comprises a dwelling and an associated garage/warehouse building in the south-eastern part and mostly vacant paddocks across the remaining areas. Gum trees are present sporadically across the western part of the site.

The site identification and environmental setting are summarised in Tables 1 and 2 below. An aerial photograph of the site is attached as Figure 1.

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<sup>1</sup> Hazardous Activities and Industries List (HAIL; MfE 2011). The HAIL is a compilation of activities and industries that are considered likely to cause land contamination resulting from hazardous substance use, storage or disposal. The HAIL is intended to identify most situations in New Zealand where hazardous substances could cause, and in many cases have caused, land contamination.

**Table 1: Site Identification**

Address	Legal Description	Lot Area (m <sup>2</sup> )	Current Land Use	Current Owner
890 Selwyn Road, Rolleston	LOT 1 DP 355996	40,000	Rural-residential block	Annette Pamela Foster, Michael Howard Croucher and Tania Rochelle Croucher

**Table 2: Environmental Setting**

<b>Zoning</b>	'Inner Plains' as per the Operative Selwyn District Plan 'General Rural Zone' as per Proposed Selwyn District Plan
<b>Current Land Use</b>	Rural-residential block
<b>Future Land Use</b>	Potentially residential subdivisions
<b>Immediate Surrounding Land Uses</b>	The site is bordered by Goulds Road to the west and Selwyn Road to the south. Rural and rural-residential land immediately surround the site in all directions, although some form of residential subdivision work is already occurring further to the east.
<b>Topography<sup>1</sup></b>	Generally flat and level.
<b>Site Services</b>	The Canterbury Maps GIS database show the site is not connected to the council's reticulated network, although the available network in the general vicinity of the site appears to be limited to wastewater main along Selwyn Road. It is expected that the services infrastructure will be constructed as part of the future re-zoning and redevelopment of the site and wider areas into residential subdivisions.
<b>Regional Geology</b>	Brownish-grey river alluvium <sup>1</sup> .
<b>Hydrogeology</b>	<p>Information obtained from Environment Canterbury's (ECan) GIS database indicates that the groundwater level beneath the site and immediate surrounding area ranges between approximately 5 and 7 m below ground level (bgl) and is expected to flow in a general south-easterly direction.</p> <p>The GIS database shows that a bore (BX23/0895) is present in the south-western corner of the site, although this was not observed during the recent PDP site inspection (see Section 4.0). The GIS database recorded this bore as being 'active' and used for domestic and stockwater supply purposes. The bore was drilled to a depth of 53.5 m bgl and screened between 51.5 and 53.5 m bgl. The bore is registered under the ownership of Mike and Tania Croucher (current landowners).</p> <p>Within a 1 km radius of the site, the GIS database indicates presence of 42 registered bores of which 31 (including the onsite bore) are currently recorded as being 'active' and used for a range of purposes including domestic, irrigation and/or stockwater supply. The remaining 11 bores are recorded as being either not used, not drilled, capped or expired bore consent. A plot and table showing the recorded bores within a 1 km radius of the site is attached.</p>
<b>Ecological Receptors (within 500 m)</b>	Due to the rural nature of the general area, several stock water races are present in the immediate vicinity of the site; the nearest of which is located 300 m to the east of the site boundary.

**Notes:**

1. Geology of the Christchurch Area, GNS, 2008 (1:250,000 scale).

### 3.0 Desktop Review of Site History

A desktop review of available information has been undertaken to understand past and present land use activities at the site which could potentially result in ground contamination sources. The following information was obtained and reviewed in order to establish the history of the site:

- ✧ Historical aerial photographs;
- ✧ ECan Listed Land Use Register (LLUR);
- ✧ Property file records from Selwyn District Council; and
- ✧ Site inspection and interview with the current landowner.

#### 3.1 Historical Aerial Photographs

Selected historical aerial photographs from between 1942 and 2020 have been reviewed for the site, and these photographs have been sourced from Canterbury Map Partners administered by ECan and Google Earth Pro. The historical aerial photographs reviewed are attached. Note that the review of the aerial photographs was carried out on the electronic versions, which provides a higher resolution compared with the printed versions appended.

In summary, the aerial photographs review showed that:

- ✧ The 1942, 1962, 1974, 1982 and 1994 aerial images show the site to be a vacant paddock, likely used for animal grazing. There is no observable presence of any farm related structures such as animal yards, sheds or pest treatment facilities (e.g., sheep dip structures).
- ✧ The 2004 aerial photograph shows presence of vegetation planted in rows (understood to be a gum tree plantation as per site inspection, see Section 4.0 below) in the western portion of the site, while the eastern portion remains to be vacant and grass surfaced.
- ✧ The 2012 aerial photograph shows the site remains the same as the 2004 aerial photograph, although the extent of vegetation (i.e., gum trees) in the western portion has been reduced significantly.
- ✧ The 2020 aerial photograph shows the site in its present-day layout, as previously discussed in Section 2.0 above.

#### 3.2 Review of Environment Canterbury Records

##### 3.2.1 Listed Land Use Register (LLUR)

An online search was made via ECan for information from their Listed Land Use Register (LLUR) on 26 April 2022. The Register is used to hold information about sites that have used, stored or disposed of hazardous substances, based on activities detailed on the HAIL (MfE, 2011). It should be noted that the LLUR is not complete and new sites are regularly being added as ECan receives information and conduct their own investigations into current and historical land uses.

In summary, the site is not listed on the LLUR (i.e., no known HAIL activity). A copy of the LLUR is attached.

##### 3.2.2 Resource Consents

A review of resource consents within the ECan GIS database shows the site does not hold any type of resource consent from ECan, active or otherwise. A plot showing resource consents within a 1 km radius of the site is attached.

### 3.3 Review of Selwyn District Council Property Records

The property file record for the site was obtained from SDC and reviewed. Given the limited land use at the site, the files obtained were limited to building consent information relating to the construction of the onsite dwelling in circa 2020. No other information relevant to potential ground contamination sources was available.

A copy of the relevant property file information is attached.

## 4.0 Site Inspection

A site inspection was carried out by a PDP Environmental Scientist on 9 June 2022 to understand the current land use activities within the site. In addition to the site inspection, a discussion was carried out with the current landowner who has owned the site for approximately five years. Photographs taken during the site inspection are attached.

In summary, the findings of the site inspection and discussion showed that:

- ✧ The current site layout was generally consistent with that observed in the 2020 aerial imagery. The dwelling (constructed in 2020) was located in the south-eastern part of the site. A separate garage/warehouse building (constructed post-2020) was also present to the south-east of the dwelling as well as a septic tank to the north of the dwelling. It is understood that the processed wastewater from the septic tank is disposed onto land to the north of the dwelling, consistent with the property file information from SDC. Similarly, roof water from the buildings is disposed directly to land via an onsite stormwater soakpit.
- ✧ A bore and associated water tank were present adjacent to the garage, which supplies domestic water to the dwelling. The landowner indicated that this is the same bore as bore BX23/0895. It appears the spatial location of this bore as shown in the ECan GIS database is incorrect.
- ✧ The western part of the site was a vacant paddock and is being used for rearing horses. Gum trees and piles of chopped wood were observed sporadically across this area. According to the site owner, these trees are remnants of a previous gum tree plantation carried out by former site owners, which confirms the rows of trees evident in the 2004 aerial photograph (see Section 3.1). The specific purpose of the trees or plantation practices is unknown, but unlikely to have been subjected to any form of chemical treatment (e.g., pesticide/herbicide sprays).
- ✧ The remainder of the site was a vacant paddock, although minor soil stockpiles were observed in the northern part of the paddock. The site owner indicated that these soil stockpiles were surplus from the dwelling construction. Two piles of wood chips were also present along the north-eastern site boundary.
- ✧ There was no obvious indication of contamination sources, such as stained/odorous soils, observed on the ground surface or on stockpiled soils during the inspection. Similarly, no evidence of use and/or bulk storage of chemicals such as pesticides or fuel.

## 5.0 Summary of Site History and Potential Contamination Sources

The reviewed historical information showed that the site was predominantly vacant rural land since at least the 1940s. The earlier aerial photographs indicated that animal grazing appears to have been undertaken although there was no evidence of intensive animal husbandry activities identified including the presence of animal yards, farm structures and/or pest treatment facilities, such as a sheep dip. The 2004 aerial photograph showed that a tree plantation (confirmed as gum trees) was present in the western portion of the site. The gum tree plantation activity is highly unlikely to have been subjected to any agrichemical spray/treatment. Irrespective of this, any use of persistent hazardous compounds such as heavy metals and/or organochlorine pesticide compounds (OCPs) is highly unlikely given the period in which the plantation activity was undertaken was beyond the point at which the use these hazardous compounds have been banned in NZ.

The recent PDP site inspection showed a dwelling and associated garage/warehouse type building (constructed post-2020) were present in the south-eastern part of the site. The remainder of the site comprised remnants of the gum tree plantation and horse rearing paddocks in the western portion and storage of several soil stockpiles (surplus material from dwelling construction) and chopped wood in the northern portion. There was no obvious indication of contamination sources, such as stained/odorous soils, observed on the ground surface or on stockpiled soils during the inspection. Similarly, no evidence of use and/or bulk storage of chemicals such as pesticides or fuel were recorded.

The site is not listed on the ECan LLUR. The site does not hold any resource consent indicative of any potentially contaminating activities or contamination sources. The available property files from SDC were limited to the recent construction of dwelling at the site.

Therefore, based on the reviewed information, the balance of evidence shows that HAIL activities are **highly unlikely** to have been undertaken within the site.

## 6.0 Conceptual Site Model (CSM)

For a risk to human health to exist there has to be a hazard (in this case, a source of contaminated soil), a receptor (e.g., people) and an exposure pathway (e.g., ingestion of soil) linking the hazard and the receptor. An absence of any one of these components means that the source to receptor linkage is incomplete and therefore there is unlikely to be a risk to the receptor. A CSM is designed to identify the hazards, receptors and possible links between these.

As previously discussed in Section 5.0, there has been no potentially contaminating activities (i.e., no HAIL activities) or potential contamination sources identified at the site. As such, the linkage between the source-receptor-pathway is incomplete and therefore, there is considered to be no risk to human health and the environment, should any land use activities be carried out within the site in the future (e.g., residential land use).

## 7.0 Provisions of the NESCS

The NESCS seeks to control activities on contaminated land so as to protect human health. The regulations apply to land, which is described as having, has had or is more likely than not to have had an activity or industry described in the HAIL undertaken on it and if a person wants to do an activity described in sub-clauses (2) to (6) of regulation 5, including removal/replacement of fuel storage system, sampling of soil, disturbance of soil, change of land use and land subdivision.

As previously discussed in Section 5.0, HAIL activities have not been identified within the site. This is further re-enforced in the CSM assessment (Section 6.0), which showed there is an incomplete linkage to the receptor given the absence of potential contamination sources. Therefore, under regulation 5(7), the requirements of the NESCS are considered **not applicable** should any of the activities covered by the regulation be undertaken within the site. These activities include the future residential subdivision of the site as a result of the proposed re-zoning and district plan changes.

## 8.0 Summary and Conclusions

PDP has undertaken a PSI (site history review) for the property located at 890 Selwyn Road, Rolleston. The PSI was carried out to gain an understanding of land use practices that may result in potential ground contamination sources and to support the proposed rezoning of the site and wider area within Selwyn District as part of the Future Urban Development Area (FUDA) programme. The PSI was also intended to assist SDC with the variation of the Proposed District Plan particularly with regards to future compliance assessments relating to land use activities covered by the NESCS.

In summary, the reviewed information showed that:

- ✧ Review of aerial imagery showed the site largely comprised vacant paddocks used for animal grazing from at least the early 1940s. Between sometime after 1994 and approximately 2015, the western portion was used as a gum tree plantation. More recently, a dwelling and associated garage/warehouse building was constructed in the south-eastern portion in 2020.
- ✧ Review of publicly available district council (property files) and regional council (LLUR, bores and consent records) documents did not show any evidence of potential contamination sources or potentially contaminating activities.
- ✧ Recent inspection of the site, and discussion with the current landowner did not identify any potential contamination sources, such as visually stained/odorous soils, waste disposal to land of persistent contaminants, and use and/or storage of hazardous chemicals. With regard to the gum tree plantation, the use of persistent hazardous pesticides/herbicides such as heavy metal and/or OCP compound formulations was highly unlikely given the period of activity being beyond the year in which these hazardous compounds have been banned in NZ.

Therefore, based on the reviewed information, the balance of evidence showed that HAIL activities are **highly unlikely** to have been undertaken within the site. Furthermore, given the absence of any obvious contamination sources, the source-pathway-receptor linkage is assessed to be incomplete and therefore, there can be no risk to human health and the environment.

Finally, in the context of the proposed future re-zoning and district plan changes, the requirements of the NESCS are considered **not applicable** should any of the regulated activities be undertaken within the site.

## 9.0 References

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

Ministry for the Environment, 2021. *Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (Revised 2021)*. Ministry for the Environment, Wellington.

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

## 10.0 Limitations

This letter has been prepared on the basis of information provided by Selwyn District Council and others (not directly contracted by PDP for the work) including Environment Canterbury. PDP has not independently verified the provided information and has relied upon it being accurate and sufficient for use by PDP in preparing the letter. PDP accepts no responsibility for errors or omissions in, or the currency or sufficiency of, the provided information.

This letter has been prepared by PDP on the specific instructions of Selwyn District Council for the limited purposes described in the letter. PDP accepts no liability to any other person for their use of or reliance on this letter, and any such use or reliance will be solely at their own risk.

Owing to the limited nature of this assessment (as described in Section 1.0), there could be conditions at the site that have not been identified and which have not been considered in this letter. Although the assessment has shown no specific knowledge of sources of soil contamination, there is a risk that sources of soil contamination could exist that have not been identified by the assessment. This risk could be reduced by undertaking further research or subsoil investigation.

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Yours faithfully

**PATTLE DELAMORE PARTNERS LIMITED**

Prepared by



**Vivien Pan**

Environmental Geologist/ Scientist

Reviewed by



**Tracy Singson, CEnvP**

Service Leader - Contaminated Land

Approved by



**Guy Knoyle**

Technical Director - Contaminated Land

## Certifying Statement

I, Guy Knoyle, of Pattle Delamore Partners Limited certify that:

1. 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) Regulations 2011* (the NESCS) because it has been:
  - a. done by a suitably qualified and experienced practitioner, 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.
2. This preliminary site investigation concludes that:

*No HAIL activities were identified to have occurred within the Investigation Area, therefore under Regulation 5(7) the NESCS is not applicable.*

Evidence of the qualifications and experience of the suitably qualified and experienced practitioner(s) who have done this investigation and certified this report is provided below.

This certification applies to the date of this report.

### Signed



Guy Knoyle  
Technical Director – Contaminated Land



### **Guy Knoyle – Project Director**

Guy is an environmental scientist with over 25 years of experience in undertaking environmental and contaminated land assessments. He has a BSc (Joint Honours) in Environmental Science and Zoology, and a MSc in Applied Hydrobiology, both from the University of Wales, College of Cardiff. Guy currently project manages contaminated land assessments and monitoring programmes for a diverse range of sites including commercial/industrial and largescale residential developments, former market gardens, horticultural and timber treatment sites, pesticide storage depots, landfills, the petroleum industry, former gas works sites and illicit methamphetamine laboratories, with experience attained over several hundred sites.

Guy has experience involved in a wide range of environmental issues, across a broad range of media including soil, sediment, surface water, groundwater, and ground gas; and for a wide range of contaminants including heavy metals, petroleum hydrocarbons, and asbestos.

Guy's knowledge has also allowed him to present technical evidence on behalf of various clients, as part of a multi-disciplinary team, at District Court, High Court and Environment Court mediation and at numerous joint territorial and regional authority hearings.

Guy has familiarity with and understanding of the current contaminated land regulation and practice in New Zealand including assessments against the NESCS, and in the consenting of contaminated sites.





SOURCE:  
1. AERIAL IMAGERY SOURCED FROM THE LINZ DATA SERVICE AND LICENCED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENCE.  
2. CADASTRAL/TOPOGRAPHICAL INFORMATION SOURCED FROM THE LINZ DATA SERVICE AND LICENCED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENCE.

FIGURE 1: SITE LOCATION, RECENT LAYOUT AND CURRENT FEATURES







**Photograph 1: View looking south-east across the eastern part of the site from the northern site boundary.**



**Photograph 2: View looking north-east across the eastern part of the site from the southern site boundary along Selwyn Road.**





**Photograph 3: View looking south-west across the western part of the site from the north-western corner.**



**Photograph 4: View looking north across the western part of the site from the southern site boundary along Selwyn Road.**









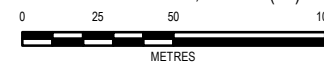
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UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0  
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1942 AERIAL PHOTOGRAPH

KEY :

-  SITE BOUNDARY
-  LAND PARCEL

SCALE : 1:2,500 (A4)









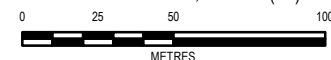
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INTERNATIONAL LICENCE.

1962 AERIAL PHOTOGRAPH

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-  SITE BOUNDARY
-  LAND PARCEL

SCALE : 1:2,500 (A4)







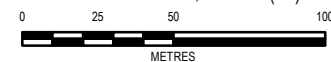
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1974 AERIAL PHOTOGRAPH

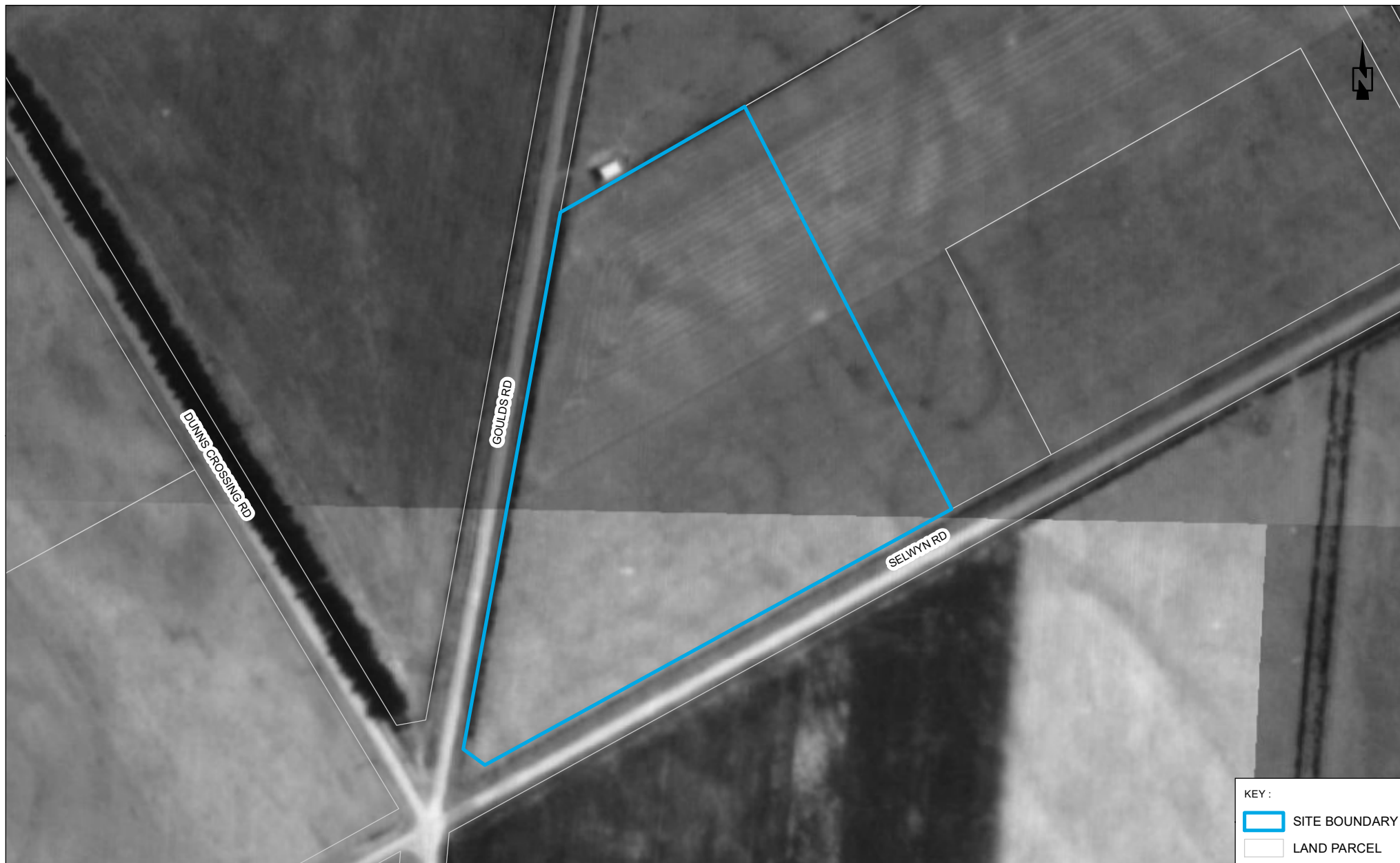
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INTERNATIONAL LICENCE.

1982 AERIAL PHOTOGRAPH

KEY :  
 SITE BOUNDARY  
 LAND PARCEL



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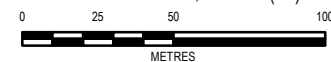
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1994 AERIAL PHOTOGRAPH

KEY :

-  SITE BOUNDARY
-  LAND PARCEL

SCALE : 1:2,500 (A4)









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2004 AERIAL PHOTOGRAPH

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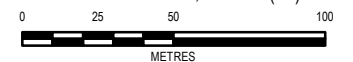
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2012 AERIAL PHOTOGRAPH

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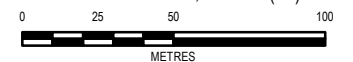
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2020 AERIAL PHOTOGRAPH

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- SITE BOUNDARY
- LAND PARCEL

SCALE : 1:2,500 (A4)



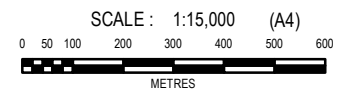






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# GROUNDWATER BORES WITHIN A 1 KM RADIUS OF THE SITE BOUNDARY - SOURCED FROM THE ECAN GIS DATABASE APRIL 2022



Bores located within a 1 km radius of the Site Boundary. (Sourced from ECan GIS Database in April 2022)

	Well No.	Well Status	Depth (m)	Diameter (mm)	Use Codes	Screened Depth/s	Grid East	Grid North	Well Owner	Well Type	Well Location	Top Screen	Bottom Screen	Initial SWL	Approx. Distance from centre of Site (m)
1	BX23/0895	Active (exist, present)	53.5	150	Domestic and Stockwater	51.5 to 53.5	1549886	5168726	Mike & Tania Croucher	Bore or Well	Selwyn Road	51.5	53.5	-5.8	150
2	M36/4220	Active (exist, present)	21.3	150	Irrigation	20.3 to 21.3	1550117	5168868	Mr G B Shadwell	Bore or Well	SELWYN RD	20.3	21.3	-5.8	160
3	M36/4387	Active (exist, present)	35.6	200	Domestic Supply	32.6 to 35.6	1549703	5168988	Mr & Mrs I G & D C Robertson	Bore or Well	DUNNS CROSSING RD	32.6	35.6	-5.65	290
4	M36/4221	Active (exist, present)	21.44	150	Irrigation	20.4 to 21.4	1550160	5169165	Mr & Ms R J & S E Silcock & Russell	Bore or Well	Cnr GOULDS RD and SELWYN RDS	20.4	21.4	-6.6	370
5	M36/20236	Not Drilled	80	300	Irrigation		1550327	5168911	Messers M G Stephens A L Billborough & J R Scott	Bore or Well	CNR SELWYN & GOULDS ROADS				380
6	M36/20535	Active (exist, present)	30	150	Domestic and Stockwater		1550017	5169231	Mr S & Mrs M Baxter	Bore or Well	870 Goulds Road			-7.10	380
7	M36/0214	Not Used	13.85	203	Irrigation		1549864	5168435	Messers M G Stephens A L Billborough & J R Scott	Bore or Well	GOULDS ROAD SPRINGTON			-0.4	430
8	M36/5254	Active (exist, present)	36	150	Irrigation	34 to 36	1550467	5169031	Mr D B Irvine	Bore or Well	SELWYN ROAD	34	36	-6.0	540
9	M36/20235	Active (exist, present)	167.31	300	Irrigation	154.59 to 160.60	1550335	5168447	Gammack Estate	Bore or Well	CNR SELWYN & GOULDS ROADS	154.59	160.60	-10.00	560
10	M36/4663	Not Used	15.2	150			1550367	5168441	IRVINE, D.B. & C.E.	Bore or Well	MADDISONS ROAD				580
11	M36/7902	Active (exist, present)	36	150	Domestic and Stockwater	34.5 to 36	1550407	5169271	RB & BM CHAPMAN & HAMILTON	Bore or Well	SELWYN ROAD	35	36	-8.40	610
12	M36/7512	Active (exist, present)	29	150	Domestic and Stockwater	27 to 29	1550237	5169431	Mr & Mrs A S & M M Baxter	Bore or Well	East Maddisons Road	27	29	-8.10	640
13	M36/4662	Not Used		200			1550457	5168441	IRVINE, D.B. & C.E.	Bore or Well	MADDISINS ROAD				650
14	M36/4650	Capped (semi- permanent)	60	300	Irrigation		1550484	5168467	Messers M G Stephens A L Billborough & J R Scott	Bore or Well	GOULDS ROAD				660
15	M36/0109	Not Used	14.9	152		9 to 15	1550567	5168473	IRVINE, D.B. & C.E.	Bore or Well	MADDISONS ROAD	9	15	-3.30	720
16	M36/4449	Not Used	24.2	150	Irrigation	22 to 24	1549508	5169470	TYACK GJ & FR	Bore or Well	DUNNS CROSSING RD	22	24		760
17	M36/4121	Active (exist, present)	21.5	152	Domestic and Stockwater		1550437	5169451	WARREN RJ & CL	Bore or Well	MADDISONS RD			-6.00	770
18	M36/4451	Active (exist, present)			Domestic Supply		1549448	5169450	TYACK GJ & FR	Unknown	DUNNS CROSSING RD				780
19	M36/7639	Active (exist, present)	32	150	Domestic and Stockwater	29 to 31	1550597	5169331	Mr & Mrs DA & MG Miller	Bore or Well	0503 East Maddisons Road	29	31	-6.3	800
20	M36/0047	Active (exist, present)	14	150	Irrigation		1549307	5168390	Mr D P D Tyson	Bore or Well	SELWYN ROAD			-1.94	800
21	BX23/0735	Active (exist, present)	48	150	Irrigation	41 to 42.8	1549220	5168385	David and Erith Boyd	Bore or Well	Selwyn Road	41	42.8	-5.9	870
22	M36/4090	Active (exist, present)	18.3	150	Irrigation		1550747	5169211	DUTHIE D.J.M.	Bore or Well	SELWYN RD			-5.20	870
23	M36/0052	Active (exist, present)	10.5	76	Domestic Supply		1549208	5168391	JONES W	Bore or Well	SELWYN ROAD				880
24	M36/7416	Active (exist, present)	46.9	200	Irrigation	44.9 to 46.9	1549058	5168781	Kilsyth Limited	Bore or Well	SELWYN ROAD	44.9	46.9	-5.50	900
25	M36/3626	Active (exist, present)	7.6	51	Dairy Use		1549708	5167991	IRVINE DB	Bore or Well	GOULDS RD				900
26	M36/7648	Active (exist, present)	26	150	Domestic and Stockwater	24 to 26	1550377	5169690	Mr & Ms PM & KI Tilling & Thompson	Bore or Well	East Maddisons Road	24	26	-8.1	930
27	M36/3684	Active (exist, present)	19	150	Irrigation	12.2 to 13.4	1550707	5169491	MEADOWS G.L.	Bore or Well	MADDISONS RD	12.2	13.4		980
28	M36/4450	Active (exist, present)	25.2	150	Irrigation	23.3 to 25.2	1549388	5169660	Mr & Mrs L K & J C Blackmore	Bore or Well	DUNNS CROSSING RD	23.2	25.2		980
29	M36/2467	Active (exist, present)	6	51	Domestic Supply		1550207	5167891	IRVINE DB & CE	Bore or Well	ELLESMERE JUNCTION RD				1000
30	M36/7584	Active (exist, present)	23	150	Domestic Supply	21.5 to 23	1549128	5168251	Mr W D Roycroft	Bore or Well	997 Selwyn Road	21.5	23	-5.43	1030
31	M36/4280	Active (exist, present)	25	150	Irrigation		1550537	5169720	MEADOWS, G.L & J.M	Bore or Well	MADDISONS RD				1040
32	M36/4346	Active (exist, present)	26.8	150	Domestic Supply	24.8 to 26.8	1549967	5169900	MAIN M.R.	Bore or Well	CNR MADDISONS & GOULDS RDS	24.8	26.8		1040
33	M36/0455	Active (exist, present)	9	150	Domestic Supply		1549022	5168373	SAVED COMPUTERS LTD	Bore or Well	CNR EDWARDS & SELWYN ROADS			-5.9	1050
34	M36/0368	Active (exist, present)	5.5	51	Dairy Use		1549508	5167891	IRVINE DB	Bore or Well	GOULDS RD				1060
35	M36/4579	Not Used	23.5	150			1550567	5169740	MEADOWS, G.L.	Bore or Well	MADDISONS RD			-7.0	1070
36	BX23/0179	Active (exist, present)	161.58	300	Irrigation	155.6 to 161.1	1550199	5167789	WHITE GOLD LIMITED	Bore or Well	ELLESMERE JUNCTION ROAD	155.6	161.6	-8.70	1090
37	M36/2645	Active (exist, present)	6.8	100	Dairy Use		1550207	5167791	IRVINE DB & CE	Bore or Well	ELLESMERE JUNCTION RD			-3.1	1090
38	M36/0018	Not Used	11	152		6.1 to 11	1548908	5168491	KEN WICKHAM	Bore or Well	SPRINGSTON	6.1	11.0	-4.0	1110
39	M36/7543	Active (exist, present)	26	150	Domestic and Stockwater	24 to 26	1550607	5169770	Mr & Ms G K & P R Poole & Eastmond	Bore or Well	East Maddison Road	24	26	-7.7	1120
40	M36/0357	Active (exist, present)	7.6	203	Irrigation	3 to 7.6	1549744	5167754	White Gold Limited	Bore or Well	SPRINGSTON R.D.4 CHRISTCHURCH	3.0	7.6	-1.80	1120
41	M36/8312	No Info Expired Boreconsent	38	150	Domestic and Stockwater		1550347	5169920	MR K D FINDLATER	Bore or Well	EAST MADDISON ROAD				1130
42	M36/0343	Not Used	9.4	152		3.3 to 9.4	1549208	5167991	IRVINE DB	Bore or Well		3.3	9.4	-1.8	1140



**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](mailto:ecinfo@ecan.govt.nz)

[www.ecan.govt.nz](http://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](https://ecan.govt.nz/HAIL) for more information or  
contact Customer Services at [ecan.govt.nz/contact/](https://ecan.govt.nz/contact/) and quote ENQ312356

**Date generated:** 26 April 2022  
**Land parcels:** Lot 1 DP 355996



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.

# 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)<sup>1</sup>. 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.

<sup>1</sup> The Hazardous Activities and Industries List (HAIL) can be downloaded from MfE's website [www.mfe.govt.nz](http://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](http://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](http://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](http://www.ecan.govt.nz/HAIL).



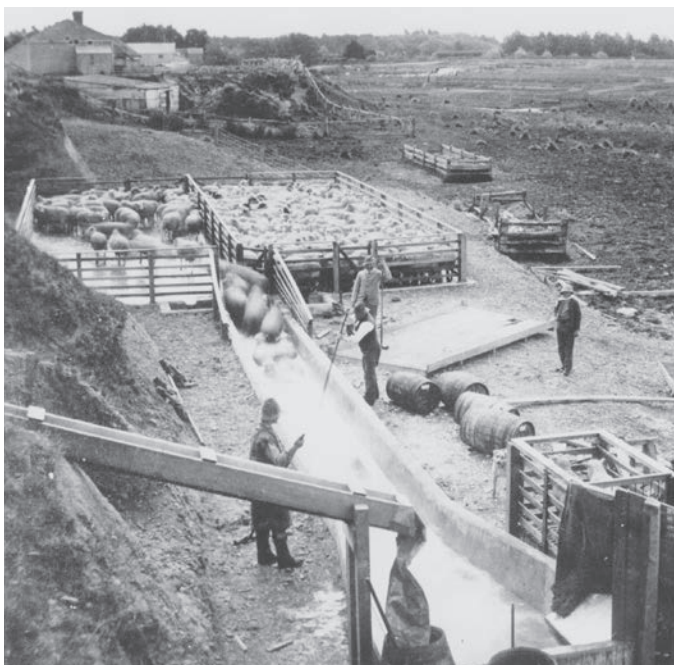
## I think my site category is incorrect – how can I change it?

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](http://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](mailto: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.

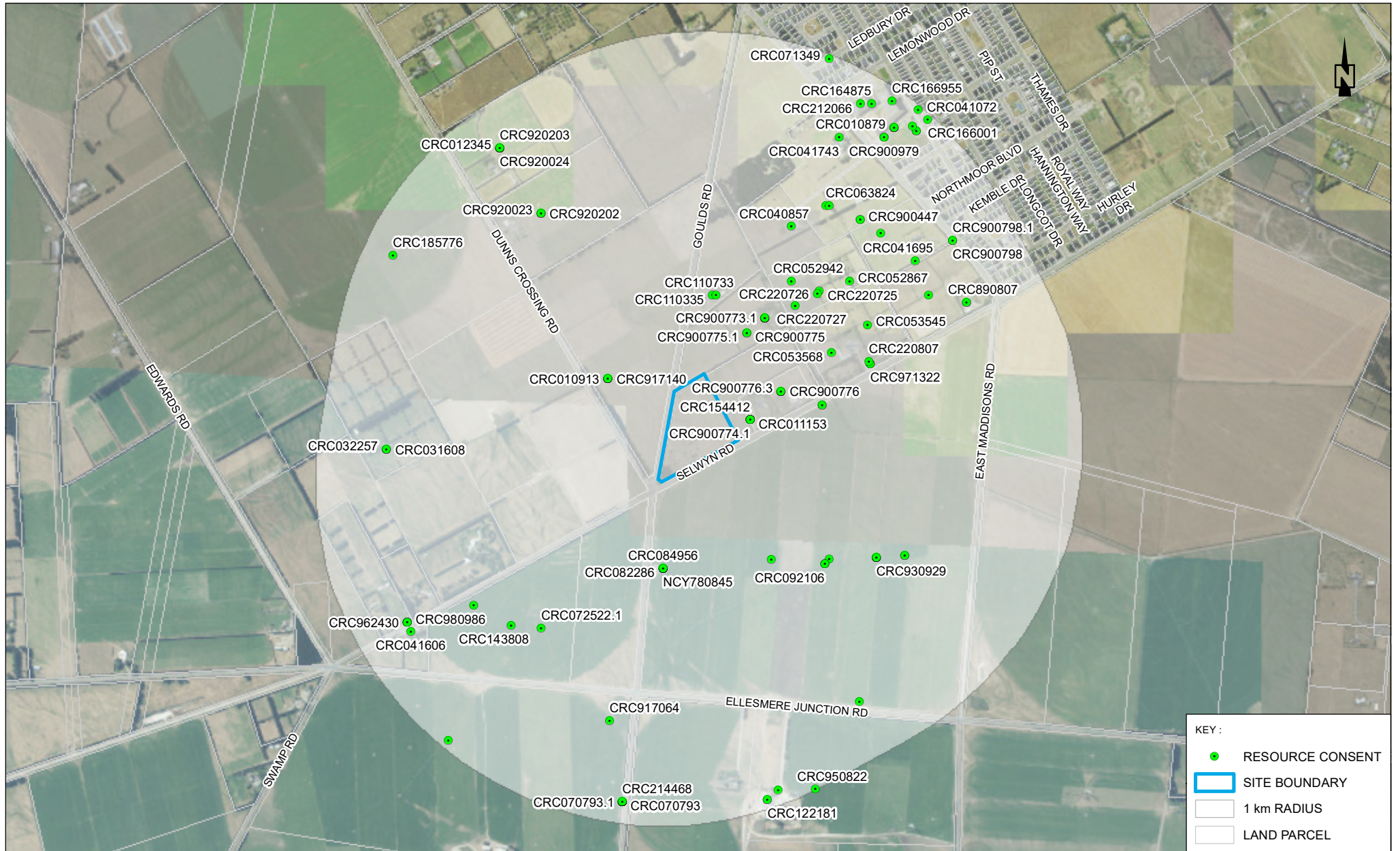
**If a site has been included incorrectly on the Listed Land Use Register as having a HAIL, it will not be removed but will be registered as:**

### **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](mailto:ecinfo@ecan.govt.nz)



SOURCE:  
 1. AERIAL IMAGERY SOURCED FROM THE LINZ DATA SERVICE AND LICENCED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENCE.  
 2. CADASTRAL/TOPOGRAPHICAL INFORMATION SOURCED FROM THE LINZ DATA SERVICE AND LICENCED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENCE.

## RESOURCE CONSENTS WITHIN A 1 KM RADIUS OF THE SITE BOUNDARY - SOURCED FROM THE ECAN GIS DATABASE APRIL 2022



## Project information memorandum

*Section 34, Building Act 2004*

### Application

PIM Number: 191345P  
Owner: MH & TR Croucher & AP Foster  
C/- AO Architecture Ltd  
PO Box 1170  
Christchurch 8140  
Issue Date: 07 August 2019

### Project

Description: 2 Storey, 4 bedroom domestic dwelling with attached garage  
Intended use: 2.0 Housing: 2.0.2 Detached Dwelling  
Location: Lot 1 Selwyn Road  
Rolleston  
Legal description: LOT 1 DP 355996  
Valuation number: 2405534201

Building work can proceed following formal notification of Building Consent Approval being received from the Selwyn District Council Building Consent Authority and approvals being obtained from the agencies identified in this Project Information Memorandum.

**This project information memorandum does NOT constitute a building consent.**

### Heritage status of the building

Building work associated with this project will not be affecting land or structures that have heritage status. This project is exempt from the rules of the district plan that relate to heritage buildings.

### Notable trees

The council is not aware of there being any notable trees associated with this site. Therefore the project is exempt from the rules of the district plan that relate to notable trees.

### Special features of the land concerned

There are no known special features of the land concerned - this includes potential natural hazards, or the likely presence of hazardous contaminants that is likely to be relevant to the design and construction or alteration of the building or proposed buildings; and that is known to the Territorial Authority; and that is not apparent from the district plan under the Resource Management Act 1991.

Special feature(s) of the land concerned are: Council does not hold site specific information on subsoil

classifications or ground bearing capacities. Therefore the applicant will need to carry out on site subsoil investigations to verify that 'Good Ground' can be achieved on the site and to determine the subsoil classification in accordance with NZS1170. Verification of site investigation data will need to be submitted as part of the documentation for Building Consent.

The definition of 'Good Ground' can be found in the Definitions section of the NZ Building Code Handbook, and appropriate test methods are detailed in either NZS3604, or NZBC B1/VM4.

Adequate stormwater soakage may not be available at depths less than 5m.

Residential Stormwater in this area is covered by a Global Stormwater Discharge Consent issued by Environment Canterbury. Any discharge must comply with requirements in this consent. Refer to the Environment Canterbury website ([www.ecan.govt.nz](http://www.ecan.govt.nz)) for further details.

*"Land concerned" means the land on which the proposed building work is to be carried out; and includes any other land likely to affect or be affected by the building work.*

*"Special feature of the land concerned" includes, without limitation, potential natural hazards, or the likely presence of hazardous contaminants, that -*

- a) are likely to be relevant to the design and construction or alteration of the building or proposed building; and*
- b) is known to the Territorial Authority; and*
- c) is not apparent from the District Plan under the Resource Management Act 1991.*

#### **Details of existing stormwater or wastewater systems relating to proposed building work**

Stormwater from the roof(s) is to be disposed of to ground via a soak hole.

This property may be located within an area covered by an Environment Canterbury stormwater consent. It is the responsibility of the property owner to contact Environment Canterbury customer services (0800 324 636) to ensure that any activity undertaken on site complies with the relevant consent conditions.

The Council sewerage scheme is not available - Private onsite disposal required.

#### **Other information**

No Council water supply available. Own potable supply required.

This property does not currently have an assigned legal address or RAPID number. Please contact Council 347 2800 and notify the Transportation Department when the entranceway has been formed so a RAPID number can be allocated.

#### **Other information**

Environment Canterbury - Well Water Bores

## Environment Canterbury - Effluent Disposal System (discharge to ground)

### **Notes:**

1. The information supplied in the sections of this project information memorandum is specific to the building project to which the application relates by reference to Council files and records. No property inspection, or title search, has been undertaken. To enable the Council to measure the accuracy of this document based on our current records we would appreciate your response should you find any information contained herein which may be considered to be incorrect or omitted. Please telephone the Council (03) 347 2800.
2. The Council has used its best endeavors to ensure that all information provided in this project information memorandum is correct and complete in all material respects. In the event that a material error or omission can be proven the Council's liability, whether in contract or in tort shall be limited to the fee paid to Council to obtain this report.
3. This information reflects the Selwyn District Council's current understanding of information which is relevant to the project. This is based only on the information thus far provided to it and held on record. As a result the Council is not in a position to warrant that the information is complete or without error and accepts no liability for any inaccuracy in, or omission from, this information.
4. The information contained in this project information memorandum is current at the date the memorandum is issued. Further relevant information may come into the Council's possession subsequent to the date of issue.