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20 June 2022

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

Dear Jocelyn,

PRELIMINARY SITE INVESTIGATION – 606 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 606 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 HAIL¹ 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 is currently a rural-residential property, comprising a main dwelling and associated outbuildings including a garage and several storage sheds. A smaller self-contained accommodation building/studio is also present, as well as an outdoor swimming pool. The remainder of the property comprises lawn and garden areas.







¹ 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.



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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.

Table 1: Site Identification										
Address	Legal Description	Lot Area (m²)	Current Land Use	Current Owner						
606 Selwyn Road,	PT RURAL SEC 5192		Rural-residential	Ellis Darussette						
Rolleston	BLKS III IV LEESTON SD	11,207	(lifestyle block) property	Trustees Limited						



Table 2: Environ	mental Setting					
Zoning	'Inner Plains' as per the Operative Selwyn District Plan 'General Rural Zone' as per Proposed Selwyn District Plan					
Current Land Use	Rural-residential block					
Future Land Use	Potentially residential subdivisions					
Immediate Surrounding Land Uses	The site is bordered by Selwyn Road to the south. Rural and rural-residential land immediately surround the site to the south over Selwyn Road and east, while residential subdivision works are occurring to the north and west.					
Topography ¹	Generally flat.					
Site Services	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.					
	An onsite bore supplies domestic water in the property, while a dedicated stormwater soakpit receives all roof water discharges. Wastewater is directed to a septic tank and associated land disposal process.					
Regional Geology	Brownish-grey river alluvium ¹ .					
Hydrogeology	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 southeasterly direction.					
	The GIS database shows that a bore (M36/3104) is present in the central portion of the site, although this spatial location appears to be incorrect as the bore was observed to be located in the western portion of the site during the recent PDP site inspection (see Section .0). The GIS database recorded this bore as being 'active' and used for domestic supply purposes. The bore was drilled to a depth of 20 m bgl, however, information as to screened depth was not available.					
	Within a 1 km radius of the site, the GIS database indicates presence of 53 registered bores of which 41 (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 13 bores are recorded as being either not used, not drilled, unlikely to still exist, sealed/grouted up, capped or expired bore consent. A plot and table showing the recorded bores within a 1 km radius of the site is attached.					
Ecological Receptors (within 500 m)	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 approximately 500 m to the east of the site boundary.					
Notes: 1. Geology of Cl	hristchurch Urban Area, GNS, 1992 (1:25,000 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 2021 have been reviewed for the site, and these photographs have been sourced from Canterbury Map Partners administered by ECan. 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.

- The 1942 and 1961 aerial imageries show the site was vacant rural land with no obvious structural features. The site appears to form part of a larger rural property, containing a residential type building and associated outbuildings in the south (i.e., adjacent to the west of the site's current boundary line) and a horse track in the northwest (horse track no longer present in the 1961 aerial photograph). Selwyn Road is shown in its current footprint.
- The 1974 and 1982 aerial imageries show that a residential building and outdoor swimming pool is now present in the central and northern portion of the site. The remainder of the site remains largely undeveloped. The adjoining property to the west remains largely unchanged, although additional outbuildings to the west and north are now visible.
- The 1994 and 2004 aerial imageries show that in addition to the existing dwelling and outdoor swimming pool, additional small buildings are now present in the western portion of the site. The remainder of the site remains largely undeveloped, although mature trees are now visible throughout the property.
- The 2012 aerial image shows the site to be largely unchanged, apart from the addition of another small building in north-western portion as well as formal-looking garden area in the southwest.
- The 2021 aerial imagery shows the site in its present-day layout, which remained unchanged since 2012.

3.2 Review of Environment Canterbury Records

3.2.1 Listed Land Use Register

An online search was made via ECan for information from their Listed Land Use Register (LLUR) on 15 June 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 SDC Property Records

The property file record for the site was obtained from SDC and reviewed. The files obtained were predominantly limited to general building information such as drawing plans, project information memorandums (PIMs) and building consents associated with the construction of the dwelling and garage in early 1970s, extension of the garage in mid-1980s and alteration and extension of the dwelling in late 1990s and 2018. Of note, the 1973 building plans identified the use of fibrolite (i.e., asbestos cement sheet) in the building material. The PIM reports also identified the presence of septic tanks for disposal of wastewater and soak pit for disposal of stormwater within the property.

A letter dated 1991 indicated that the property owner at that time had been using the garage as a 'high quality workshop for restoring, repairing and displaying vintage car collection. This is consistent with the stated purpose of the garage extension works previously undertaken in the mid-1980s, as discussed above. There was no further information as to the extent and specific nature of workshop activities, however, it is unlikely to be of the same degree as a commercial vehicle workshop/repair activity.

Copies of the relevant property files are 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. 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 2021 aerial imagery. An extended overgrown area was observed along the northern and eastern site boundaries. The ground in this overgrown area was soft and uneven, so it was not possible to make visual observations as to the condition of the soil surface (i.e., possible contaminants). However, partly buried 200 L steel drums were observed in this overgrown area near the boundary fence at the western/north-western corner of the property and were in poor condition (i.e., rusty and full of holes).
- The dwelling and extended garage (constructed in the 1970s) as well as a small studio, a metal shed, a swimming pool and landscaped areas were located in the western part of the site. The septic tank was located in a landscaped area to the south of the dwelling, while a water supply bore and associated water tank were located to the north-west of the swimming pool. According to the site owner, the garage had been used by a previous site occupier for model train storage. Model train tracks also used to be located across the area to the north of the extended garage and along northern and eastern site boundaries, although they had been removed by the time of the inspection. Some wooden posts that reportedly supported the former model train tracks were observed near the overgrown area to the north of the extended garage. A small fire pit was observed to the north-west of the small studio. Another small fire pit was also observed in a garden to the immediate north-east of the swimming pool.
- Asbestos containing materials (ACM), including cement sheets, were observed on the exterior of the extended garage and a shed to the north-west of the swimming pool but were generally in good condition. While no obvious ACM was observed on the ground in the vicinity of these



structures, it should be noted that the surrounding area was mostly overgrown and was not fully inspected.

- The eastern part of the site was mainly grassed/landscaped areas. Apart from the overgrown areas along the eastern and northern site boundaries, a garden with a small pond and associated landscaping were located in the central part of this area. A couple of stockpiles of dry wood were observed in the northern part, while the remainder of the area was mostly a lawn.
- There was no obvious indication of contamination sources, such as stained/odorous soils, observed on the ground surface, although the overgrown area was not able to be fully inspected. Similarly, no evidence of use and/or bulk storage of chemicals such as pesticides or fuel was reported.

5.0 Summary of Site History and Potential Contamination Sources

The reviewed site historical information showed that the site was a vacant (undeveloped) rural land and formed part of a larger farmland property. In the early 1970s, the site was subdivided from the main property and used for residential purposes following construction of the main dwelling and garage at that time. Extension works to the garage was carried out in the mid-1980s, while alteration works to the main dwelling comprising the construction of a second level was carried out in late 1990s. Further alterations to the second level of the dwelling were carried out in 2018. Overall, the land use activities at the site have been limited to residential purposes only and remained as such to date.

Drawing plans obtained from SDC indicated the use of asbestos cement sheet in the building material during the construction of the dwelling and garage in the early 1970s. This is not unexpected given the use of asbestos (and potentially lead-paint) in building materials was prevalent at that time.

In the late 1990s, alteration works including the construction of a second level was carried out to the dwelling. However, it was unclear as to the extent of changes made in the original dwelling and whether removal of the hazardous building materials (i.e., asbestos and potentially lead-based paint) have been undertaken as part of the alteration works. The recent PDP site inspection showed visual presence of asbestos cement sheet in the outbuildings but not in the dwelling. The cement sheets and painted surfaces were generally observed in good condition with no observable deterioration. On this basis, the asbestos containing material (ACM) is not considered to be in deteriorated state and therefore, HAIL Category E1 (buildings containing asbestos products known in deteriorated condition) is not considered applicable.

However, given the use of hazardous material and in the absence of soil sampling data, HAIL Category I (any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that could be a risk to human health or the environment) has been conservatively considered applicable in this instance. It is important to note that as per the wording of Category I, the classification of HAIL requires that concentrations of contaminants are present which could pose a risk to human health or the environment (which PDP considers to equate to an exceedance of either the applicable NESCS soil contaminant standard (SCS) for the current land use, or environmental guidelines in addition to taking into consideration the site conceptual model²). Conversely, individual properties can be confirmed as 'not HAIL' if contaminants are found to be below concentrations which could pose a risk to human health or the environment (e.g., below or around applicable guideline values). Therefore, the HAIL Category I for the site is considered conservative for the purposes of this PSI, and this categorisation should be confirmed by undertaking a soil sampling investigation.

² Representation of the biological, physical and chemical processes that determine the ways that contaminants move from sources through the environmental media to environmental receptors.



During the recent PDP site inspection, localised rubbish, including partly buried 200 L steel drums were observed near the boundary fence at the western/north-western corner of the property. The area appears to be slightly elevated from the surrounding area and was heavily vegetated. Whether more rubbish was present in the area could not be confirmed. Therefore, and as a prudent approach, HAIL Category G5 (waste disposal to land) is considered to be applicable in this instance to this area of 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.

The CSM for the site is summarised below. This considers the current and future land use, and whether there is a potential risk to human health or the surrounding environment in relation to any potential contaminants as a result of historical or current activities. Note that the CSM is conservative at this stage, based on the information presented in Section 5.0, and should be updated once further information, such as soil sample results or future land use, is obtained.

Table 3: CSM						
Address	Source	Exposure Route	Receptor	Pathway Linkage		
606 Selwyn Road, Rolleston	Heavy metals (e.g., lead) and	Dermal contact Soil Ingestion	Current (and future) Residents	Potentially Complete		
	asbestos in surface soils	Dust Inhalation	Construction and Maintenance Workers			

In order to fully ascertain completeness of the pathway (and assess potential risk to human health and the environment), it is recommended that soil sampling investigation is undertaken.

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 subclauses (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, possible HAIL activities have been identified within parts of the site. Therefore, as a prudent approach and in the absence of soil sampling information to show otherwise, the requirements of the NESCS should be taken into consideration 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 606 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 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 was a vacant land and formed part of a larger rural property. By early 1970s, the site was subdivided off the larger rural parcel and a residential building and garage were constructed at the site. Additional outbuildings and alteration works for the dwelling were undertaken over time however, the overall residential land use of the site remains to date.
- Review of district council (property files) records show the use of hazardous materials in the building during construction in the 1970s, a period in which use of asbestos containing material and lead-based paint was prevalent.
- Review of 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 showed that asbestos cement sheet remained present in the buildings although in good condition, based on visual observation. Similarly, a localised rubbish disposal area was noted in the western/north-western corner of the property, although the extent and magnitude of the rubbish present could not be ascertained due to the presence of overgrown vegetation.

Therefore, based on the reviewed information, HAIL activities under Categories I and G5 (i.e., potential source of contamination) have been conservatively identified over parts of the site. It is recommended that a soil sampling investigation is undertaken to confirm if these HAIL activities have resulted in soil contamination such that it could result in a potential risk to human health and/or the environment. The soil sampling investigation will also assist in confirming the completeness of potential exposure pathways to current and future receptors.

Finally, in the context of the proposed future re-zoning and district plan changes and given the presence of possible HAIL activities, the requirements of the NESCS should be taken into consideration should any of the regulated activities be undertaken within the site, unless otherwise proven by a soil sampling investigation.

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.



PRELIMINARY SITE INVESTIGATION - 606 SELWYN ROAD, ROLLESTON, SELWYN DISTRICT

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



PRELIMINARY SITE INVESTIGATION - 606 SELWYN ROAD, ROLLESTON, SELWYN DISTRICT

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:

HAIL Categories I and G3 have been conservatively identified over parts of the site (i.e. piece of land) based on the reviewed information. Therefore, and in the absence of soil sampling data to confirm if these HAIL activities have resulted in ground contamination such that it can cause potential risk to human health and the environment, the requirements of the NESCS over the 'piece of land' should be taken into consideration should any of the regulated activities are carried out in the future.

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.





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Site Photographs



Photograph 1: View looking north across the landscaped area and the dwelling from the site access along Selwyn Road.



Photograph 2: View looking north-east across the landscaped areas in the south-western part of the site.



Photograph 3: View looking south-east at the extended garage from the north-western corner of the site.



Photograph 4: View looking north-west at the overgrown area at the north-western corner of the site.



Photograph 5: View looking north-east from the northern end of the extended garage.



Photograph 6: View looking west at the extended garage from the south-eastern corner of the carpark area to the east.



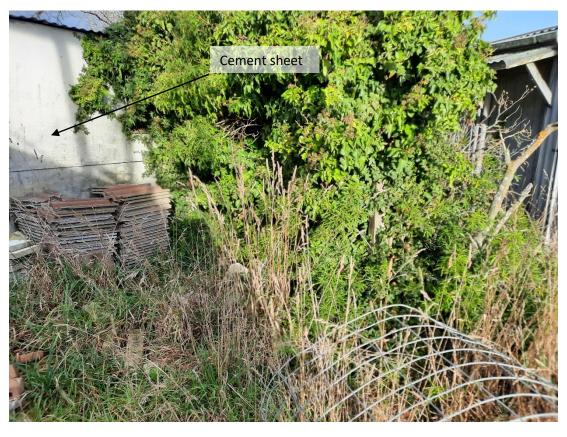
Photograph 7: View looking south-east at the small studio in the north-western part of the site.



Photograph 8: View looking north at the small fire pit to the north of the small studio.



Photograph 9: View looking south-west at the water tank and overgrown area along the north-western site boundary.



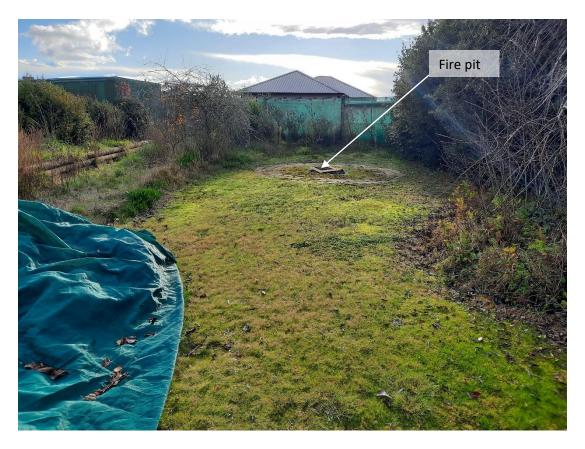
Photograph 10: View looking south at the back of a shed near the swimming pool from the overgrown area to the north-east of the small studio. The swimming pool area and the front of the shed was not available for inspection.



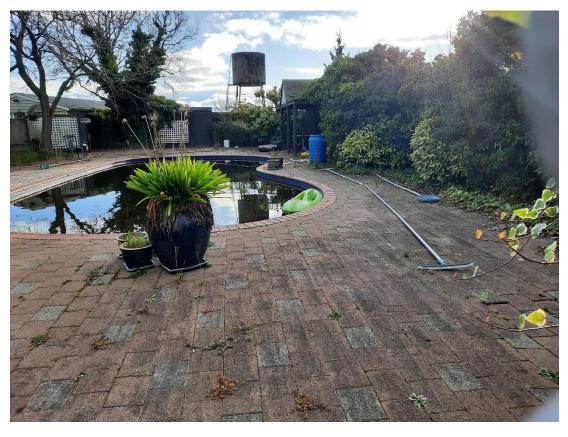
Photograph 11: View looking north-east across the overgrown area along the northern site boundary from the north of the small studio.



Photograph 12: Inside of the small shed to the north of the swimming pool.



Photograph 13: View looking north-west across the landscaped area to the north-east of the swimming pool.



Photograph 14: View looking north-west across the swimming pool area. The area was not fully inspected due to limited access.



Photograph 15: View looking south-west across the site from the north-eastern corner.



Photograph 16: View looking west across the site from the south-eastern corner.

Historical Aerial Photographs



1942 AERIAL PHOTOGRAPH

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1982 AERIAL PHOTOGRAPH

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1994 AERIAL PHOTOGRAPH

— PATTLE DELAMORE PARTNERS LTD



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2012 AERIAL PHOTOGRAPH



C04602100Z014_AERIAL_PHOTOGRAPH_606_SELWYN_RD.mxd 08/06/2022 ISSUE 1

2021 AERIAL PHOTOGRAPH

— PATTLE DELAMORE PARTNERS LTD

Selwyn District Council Property Records

- SOURCED FROM THE ECAN GIS DATABASE JUNE 2022

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UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENCE.

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

Well No.	Well Status	Depth	Diameter	Use Codes	Screened Depth/s	Grid East	Grid North	Well Owner	Well Type	Well Location	Top Screen	Bottom	Initial SWL	Aprrox. Distance from
Well No.	Well Status	(m)	(mm)	ose codes	Screened Deptilys	Gilu Last	Grid North	well Owller	well Type	Weil Education	Top screen	Screen	IIIILIAI SVVL	centre of Site (m)
1 M36/3104	Active (exist, present)	20	150	Domestic Supply		1552512	5170281	VICKERS .M	Bore or Well	SELWYN RD				10
2 M36/0135	Sealed / Grouted up	14	203	Irrigation	8.5 to 11.6	1552373	5170238	Mr D L Geddes	Bore or Well	SELWYN RD	8.5	11.6	-7.3	140
3 M36/3018	Active (exist, present)	65.7	200	Irrigation	58.4 to 61.3	1552606	5170440	BOWDEN M.L.	Bore or Well	SELWYN RD	58.4	61.3	-9.3	190
4 M36/1854	Not Used	10.2	76			1552306	5170190	GREENSLADE J.C.	Bore or Well	SELWYN RD			-7.88	220
5 M36/8392	Active (exist, present)	36	150	Domestic Supply	34 to 36	1552567	5170574	A J LLOYD	Bore or Well	572 SELWYN ROAD	34	36	-10	300
6 M36/0139	Sealed / Grouted up	65.8	203	Domestic and Stockwater	55 to 66	1552207	5170190	GREENSLADE J.C.	Bore or Well	SELWYN RD	55	66	-5.30	310
7 M36/4425	Active (exist, present)	36	150	Irrigation		1552406	5169861	Ms V A Bingham-Grandiek	Bore or Well	Selwyn RD				430
8 M36/8002	Active (exist, present)	66	150	Domestic and Stockwater	64.5 to 66	1552536	5170700	MR & MRS AT & JM MULCAY	Bore or Well	SELWYN ROAD	64.5	66	-12	430
9 M36/4433	Active (exist, present)	30	150	Irrigation	28 to 30	1552875	5170540	Mr & Mrs H J & D P Bates	Bore or Well	SELWYN ROAD	28	30	-9.70	450
10 M36/4332	Active (exist, present)	30	150	Irrigation		1552257	5169891	MOULDER D.W	Bore or Well	SELWYN RD				460
11 M36/2996	Active (exist, present)	59.4	200	Irrigation	55.7 to 59.4	1552913	5170536	NISBET, NA & EM	Bore or Well	SELWYN ROAD	55.7	59.4	-9.6	480
12 M36/4424	Not Used	36.8	150		34.8 to 36.8	1552551	5169794	MOULDER DW	Bore or Well	SPRINGSTON ROLLESTON RD	34.8	36.8	-9	480
13 M36/8299	Active (exist, present)	90	150	Domestic Supply	89 to 90	1552686	5170750	MR GJ & MRS BA SCURR	Bore or Well	SELWYN ROAD	89	90	-21	510
14 BX23/0262	Active (exist, present)	42	150	Domestic Supply	40.48 to 42	1552560	5170858	MR & MRS J E & A T HEYL	Bore or Well	Selwyn Road	40.48	42	-7.8	580
15 BX23/0201	Active (exist, present)	35.6	150	Domestic and Stockwater	34.1 to 35.6	1552655	5169697	MR & MRS R B & J E GREEN	Bore or Well	SPRINGSTON ROLLESTON ROAD	34.1	35.6	-8.0	600
16 M36/4790	Active (exist, present)	35.5	150	Irrigation	33.4 to 35	1552463	5169676	SCOTT, AB	Bore or Well	SPRINGSTON-ROLLESTON RD	33.4	35	-7.3	600
17 M36/8009	Active (exist, present)	36	150	Domestic and Stockwater	34 to 36	1552356	5170860	MR & MRS GC & PM MORGAN	Bore or Well	SELWYN ROAD	34	36	-12.2	600
18 BX23/0026	Active (exist, present)	38.8	150	Other - see comments	37.3 to 38.8	1552058	5169865	SELWYN DISTRICT COUNCIL	Bore or Well	CN SELWYN & SPRINGSTON ROLLESTON RDS	37.3	38.8	-7.2	610
19 M36/20655	Active (exist, present)	14.5	150	Water Level Observation	7.5 to 14.5	1551971	5169884	SELWYN DISTRICT COUNCIL	Bore or Well	SPRINGSTON ROLLESTON ROAD	7.5	14.5		660
20 M36/4926	Active (exist, present)	30	150	Irrigation		1552167	5169701	Messrs R S, A G & J H Paton & Mrs J R Geddes	Bore or Well	SPRINGSTON ROLLESTON ROAD				670
21 M36/7976	Active (exist, present)	36	150	Domestic and Stockwater	34 to 36	1552386	5170950	WEATHERBY ESTATE LIMITED	Bore or Well	SELWYN ROAD	34	36	-10.6	680
22 M36/5230	Active (exist, present)	30	150	Irrigation	28.5 to 30	1552746	5169631	Mrs S J Robertson	Bore or Well	SPRINGSTON ROLLESTON ROAD	28.5	30	-7.2	690
23 BX23/0286	Active (exist, present)	56	150	Domestic and Stockwater	53.55 to 55.05	1552215	5169626	K & V Oswell	Bore or Well	Springston Rolleston Road	53.55	55.05	-7.3	710
24 M36/8300	Active (exist, present)	42	150	Domestic Supply	39 to 40.5	1552676	5170960	Mr & Mrs G J & B A Scurr	Bore or Well	SELWYN ROAD	39	40.5	-14	710
25 M36/7875	Active (exist, present)	38	150	Domestic and Stockwater	35.5 to 38	1553056	5169791	MR & MRS M J & P C PILCHER	Bore or Well	RATTLETRACK ROAD	35.5	38	-7	730
26 M36/5114	Active (exist, present)	35	150	Irrigation	33.5 to 35	1553210	5170088	R H Garrett	Bore or Well	RATTLETRACK ROAD	33.5	35	-8.6	730
27 M36/4989	Active (exist, present)	39.5	250	Irrigation	33.88 to 35.9	1553210	5170088	R H Garrett	Bore or Well	RATTLETRACK ROAD	33.88	35.9	-7.5	730
28 M36/3826	Not Used		76			1553236	5170190	GARRETT AR & RH	Bore or Well	RATTLETRACK RD				740
29 M36/3825	Active (exist, present)	18	125	Domestic Supply		1553236	5170190	GARRETT AR & RH	Bore or Well	RATTLETRACK RD				740
30 M36/7975	Active (exist, present)	37.5	150	Domestic Supply	35 to 38	1552316	5171000	MR & MS SH & EL LOEFFLER & HUISMANS	Bore or Well	SELWYN ROAD	35	38	-10	750
31 M36/1683	Active (exist, present)	13.1	150	Domestic and Stockwater	10.1 to 13.1	1551807	5169990	YATES R.P.	Bore or Well	SPRINGSTON ROLLESTON ROAD	10.1	13.1		750
32 M36/8334	Active (exist, present)	48	150	Domestic and Stockwater	47 to 48	1551898	5169777	MR & MRS VAN DER ZWET	Bore or Well	SELWYN ROAD	47	48	-8.2	790
33 M36/0167	Casing Retrieved / Abandoned	33.5	254			1552407	5169491	MEADOWS D.L.	Bore or Well	SPRINGSTON			-7	790
34 M36/0158	Not Used	23.2	152			1552706	5169491	WOODLEY J.	Bore or Well				-8.4	810
35 M36/5959	Not Used	36	150			1552646	5169471	POWNALL, DB & B	Bore or Well	SPRINGSTON RD 4			_	820
36 M36/3037	Active (exist, present)	36	152	Domestic Supply	34.5 to 36	1552786	5169501	FULLER, CE	Bore or Well	SPRINGSTON ROLLESTON RD	34.5	36	-8.1	820
37 M36/4107	Active (exist, present)	35	150	Irrigation		1552906	5169541	POWELL M.W.	Bore or Well	SPRINGSTON ROLLESTON RD	1			840
38 M36/1927	Active (exist, present)	20	150	Irrigation		1552634	5169450	R M Duthie	Bore or Well	SPRINGSTON NURSERY NO.4.R.D.				840
39 M36/4777	Active (exist, present)	28	150	Irrigation	27 to 28	1553156	5169751	Ms L J Lester	Bore or Well	RATTLETRACK ROAD	27	28	-8	840
40 M36/5250	Active (exist, present)	36	150	Domestic Supply	34.5 to 36	1553286	5169951	Mr & Ms P M & J M Barrowclough & Koster	Bore or Well	RATTLETRACK ROAD	34.5	36	-11.6	850
41 M36/0196	Not Drilled	55	250		2 10 00	1553106	5169671	COTSWOLD PARTNERSHIP	Bore or Well	WATERHOLES ROAD		<u> </u>		850
42 M36/4398	Active (exist, present)	24.4	150	Irrigation	22 to 24	1551707	5169821	YATES RP & EM	Bore or Well	SELWYN RD	22	24	-8.0	920
43 M36/3868	Active (exist, present)	36.77	125	Domestic and Stockwater	35.5 to 36.8	1552493	5171202	PULLIN BE & PM	Bore or Well	LINCOLN ROLLESTON RD	35.5	36.8	-10	930
44 M36/8261	No Info Expired Boreconsent	40	150	Domestic Supply	22.2.2.000.0	1552196	5171180	MR & MS SR & AJ BOYCE & SMITH	Bore or Well	SELWYN ROAD	-55.5			960
45 M36/7928	Active (exist, present)	37	150	Domestic and Stockwater	35 to 37	1551567	5170040	RP & EM YATES	Bore or Well	SELWYN ROAD	35	37	-7.6	970
46 M36/1380	Active (exist, present)	56.1	200	Irrigation	33 10 37	1551777	5169611	P J & H M Rains Family Trust	Bore or Well	CNR SELWYN & SPRINGSTON ROLLESTON RD	- 55	, , , , , , , , , , , , , , , , , , ,	-5.94	990
47 M36/4369	Active (exist, present)	27	200	Irrigation	25 to 27	1552616	5169281	QUATE G.G.	Bore or Well	RATTLETRACK RD	25	27	-9	1000
48 M36/7204	Buried / unlikely still exists	114	200	Irrigation	88 to 94	1551572	5170646	Mr & Mrs R Geddes & Davis	Bore or Well	SPRINGSTON ROLLESTON ROAD	88	94	-7.3	1000
49 M36/5113	Active (exist, present)	35	150	Irrigation	33.5 to 35	1553496	5170380	B G Growers Ltd	Bore or Well	RATTLETRACK ROAD	33.5	35	-8.54	1000
50 M36/7642	No Info Expired Boreconsent	60	200	Irrigation	33.3 10 33	1552746	5169291	Mr DA McIntosh	Bore or Well	365 Rattletrack Road	33.3	- 55	5.54	1010
51 M36/8138	Active (exist, present)	36	150	Domestic and Stockwater	34 to 36	1552946	5171200	MR & MRS RG & VA HUBBARD	Bore or Well	LINCOLN ROLLESTON ROAD	34	36	-14.6	1020
52 M36/0293	Active (exist, present) Active (exist, present)	25	150	Domestic Supply	37.00 30	1552816	5169281	HOWSON .T	Bore or Well	RATTLETRACK RD "PENRITH'	77	- 50	17.0	1040
53 M36/2744	Active (exist, present) Active (exist, present)	8.5	114	Domestic Supply		1552816	5169281	HOWSON.T.	Bore or Well	RATTLETRACK RD "PENRITH"		-		1040
JJ 1913U/Z/44	Active (exist, present)	0.3	114	Domestic Supply	i .	1332010	3103201	TIOVVJOIN.T.	DOLE OF MEIL	NATILLINACK ND FEMNITH				1040

Environment Canterbury Records



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 ENQ318330

Date generated: 15 June 2022 Land parcels: Part RS 5192



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



Everything is connected

What is the Listed Land Use Register (LLUR)?

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

Why do we need the LLUR?

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

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

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

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

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

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

We have two main ways of identifying HAIL sites:

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

¹The 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.

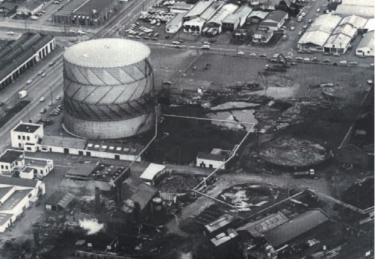
Please refer to the Site Categories and Definitions factsheet for further information.

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.

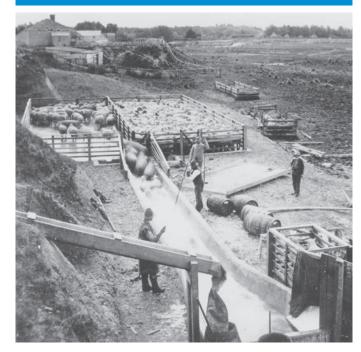
We may also use the information to prioritise sites for further investigation, remediation and management, to aid with planning, and to help assess resource consent applications. These are some of our other responsibilities under the RMA.

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)



Everything is connected

Promoting quality of life through balanced resource management.

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:



PATTLE DELAMORE PARTNERS LTD