

Land Information Memorandum **L251916**

Application

Stephan Charles Knowler
Stephan Charles Knowler
18 Bella Vita Drive
Lincoln 7608

No.	L251916
Application date	22/08/2025
Issue date	2/09/2025
Phone	0272299522

Property

Valuation No.	2354143102
Location	Johnson Road
Legal Description	Lot 2 DP 590267
Owner	Chapman Jeremy William and Chapman Anna Carole
Area (hectares)	4.0002

The certificate of title submitted with this application, shows easements, covenants, encumbrances or caveats registered on the title, for further information a copy of these can be obtained from Land Information New Zealand 112 Tuam Street.

Rates

Rateable Value

The date of Selwyn's last General Revaluation was 1/09/24. For further information please contact Council's Rates Department.

Revaluation Year	2024
Land	\$ 690,000
Capital Value	\$ 700,000
Improvements	\$ 10,000

Current Rates Year 2025 to 2026

Annual Rates	\$ 2,271.70
Current Instalment	\$ 567.95
Current Year - Outstanding Rates	\$ 14.50-
Arrears for Previous Years	\$ 0.00
Next Instalment Due	15/09/25

Next Revaluation Due 2027.

The rates listed for this property are correct as at the date of this report being issued.

If this property is vacant land, and the applicant intends building a house or making other improvements, additional rates and charges will be added. Such rates and charges are for the operation of the District libraries, local community centre and recreation reserves, sewerage and water systems and refuse collections and recycling.

If a ratepayer in the district purchases additional properties, that ratepayer maybe eligible for certain rating exemptions due to multiple ownership. The exemptions would only apply to uniform library charges on bare land blocks and an exemption from the uniform annual general charge if contiguous or same use land is purchased.

Please contact the Councils rates team if you require clarification on 0800 SELWYN (735 996).

Note: Rates are charged in four equal instalments for the period commencing 1 July and ending 30 June each year.

Planning/Resource Management

Partially Operative District Plan: GRUZ

Operative District Plan Zoning: Rural Inner Plains

The Council has undertaken a review of the Operative District Plan and through this process it has developed a New District Plan ('The Partially Operative District Plan') which provides clear objectives, policies and rules to manage the effects of land use activities on the environment, but also sets a clear direction for our district's development and reflects our communities' needs and expectations. It also incorporates any changes in legislation, national and regional policy statements, environmental standards and other regulations.

The period for lodging appeals against decisions on the Partially Operative District Plan closed on the 6th of October 2023 and the Council released the Appeals Version of the Partially Operative District Plan on 27th November 2023. Many provisions in Partially Operative District Plan are now beyond challenge and are operative/treated as operative (pursuant cl 103 of Schedule 1 and s86F of the Resource Management Act (1991)). The Operative District Plan now only applies where a relevant provision in the Partially Operative District Plan remains subject to appeal. For more information visit <https://www.selwyn.govt.nz/property-And-building/planning/strategies-and-plans/selwyn-district-plan/selwyn-district-plan-review>

2/09/22

Resource Consent 225608

To Undertake A Two Lot Rural Subdivision

Section 224 Issued 19/10/23

Granted By Local Authority Officer 2/12/22

Planning Notes

The information provided on this LIM has come from the information lodged against the property file/information and GIS at the time of processing. Please note that the resource consents, fill certificates and other relevant property files listed are based on what is available on our general property information, and that there may be other documents for the property which have not yet been added to the property record.

Resource Consents often contain a multitude of information and reports that are not ordinarily separately referenced or included in the LIM itself. Information identifying each (if any) special feature or characteristic of the land concerned, including but not limited to potential erosion, falling debris, subsidence, slippage, alluvion, or inundation, or likely presence of hazardous contaminants.

Preliminary Site Investigation Reports, Detailed Investigation Site Reports and Geotechnical Reports are submitted as part of the subdivision Resource Consent Process it is not likely to be currently of relevance in relation to the "land concerned", otherwise it would be elsewhere noted on the LIM to the extent any issues still apply following subdivision).

Any resource applications or consents that may contain information relating to the land which is not otherwise included in the LIM, including Geotechnical, Environmental and other expert reports, can be obtained via Selwyn District Council Information Management team on information.management@selwyn.govt.nz

SCA – RD1

A resource consent may not be required to establish a residential unit on this property subject to compliance with the provisions of the District Plan. For further information visit <https://eplan.selwyn.govt.nz/review> or contact the duty planner on 0800 SELWYN (0800735996).

There is a consent notice on the Record of Title to this property. This records a condition/s of a subdivision consent which must be complied on an ongoing basis.

Building

There are no known buildings sited on this property at the time of issuing this report.

Buildings erected prior to 1965 may not have a building permit record or had inspections carried out.

All building products and materials have a designed life, and must be maintained in accordance with the manufacturer's specifications.

In the case of building permits and building consents no further inspections have been carried out by the council since these structures were completed.

Any concerns of this nature should be referred to an organization that carries out property checks or the product manufacturers.

Schedule 1 Exempt Building Work

Under section 42A of the Building Act 2004 building owners can carry out certain types of building work specified in Schedule 1 of the Building Act 2004 without need to obtain building consent approval. Where Council holds any information provided by a property owner in relation to exempt works undertaken on the property it is important to note that Council do not check or review the documentation for compliance, it is simply filed for record keeping purposes and not to satisfy any statutory obligation. Any information held of this nature has been provided at Councils discretion under Section 44A (3) of the Local Government Official Information and Meetings Act 1987 without any representation or warranty.

Services

Water

Council water scheme is available, but not connected.

This property has metered water supply not connected to the West Melton Scheme. For any further information, please contact water.services@selwyn.govt.nz.

The Selwyn District Council Water Bylaw 2008 is applicable. A copy can be found at <http://www.selwyn.govt.nz/your-council/bylaws/current-bylaws>

Please note this property has a water meter and charges are a rate which are payable by the property owner. Therefore, please ensure a meter reading is requested on settlement so you are not liable for previous owner's water charges. Solicitors must ensure that when settling rates with Council on the sale of a property that water meter charges are also included in the settlement calculation.

The water supply is metered and billed 6 monthly for every cubic meter of water used.

Commercial properties are required to have an RPZ backflow device. This must be installed just inside the boundary of the property at the point of water supply – this backflow device will be owned by the property owner and will be maintained under the building compliance schedule in addition to any other on-site backflow devices deemed necessary by the building department.

If, during a Civil Defence emergency event the water supply is not operational, Council's immediate focus for its staff and resources will be to bring the supply back into operation. Depending on the size and scale of the event, it may be difficult to meet everyone's needs so property owners are asked to take personal responsibility for drinking water.

As a precaution, the Council would also recommend from a drinking water perspective that a property owner also has bottled water available to meet their immediate drinking water needs of all individuals living on the property for a 72hr period (the recommended amount is 4 litres of water per person per 24hrs).

For those properties not connected to a Council reticulated water supply, it is encouraged that the quality of the domestic water supply be regularly tested to ensure that it is to a potable standard. If the same water supply is also used for irrigation or stock water, check that there is a backflow protection device to prevent any contamination of water supply.

Sewer

Council sewer scheme is not available.

On-site sewage treatment and disposal.

The property is not serviced through Council sewer network. Any onsite wastewater treatment or changes to it will require Environment Canterbury consent.

If there is an existing domestic onsite wastewater treatment system on this property, the owner is responsible for ensuring regular maintenance and servicing is carried to ensure it continues to function satisfactorily.

Any new or replacement of domestic onsite wastewater treatment system will need to meet the requirements of Rule 5.8 of the Canterbury Land and Water Regional Plan to be considered a permitted activity and will require a building consent from Selwyn District Council prior to installation.

Any property with onsite sewage treatment and disposal, animal effluent disposal or water extraction for irrigation may have or require consent from Environment Canterbury and may require consent from the surrounding properties for a variety of discharges. This could have an adverse effect on the neighbouring property in relation to odour, potable water supply quality, or be of a general nuisance factor.

Information regarding what consents have been granted for this or surrounding properties can be obtained by contacting the issuing authority Environment Canterbury.

Land used to dispose of waste or to spread effluent or treated sewage, may be contaminated due to the concentrations or mix of material deposited onto the land over time. If any soil tests have been carried out, please forward a copy to the Council in order for the records to be updated.

For those properties not connected to a Council reticulated sewer system, it is important that the effluent system is regularly checked and maintained. You should also be aware of the limits on what can and should not be disposed of through these systems. Any concerns should be referred to an organization that carries out checks and maintenance or to the product manufacturers.

Stormwater

Stormwater to soakhole

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

Note – the above describes the current roof water disposal type and does not reflect the future situation, which should be determined as part of the subdivision (if applicable). For more information please contact Council.

If you have any questions about the Water, Sewage or Stormwater information above please contact the Selwyn District Council Water Department at 0800 SELWYN or contactus@selwyn.govt.nz

Kerbside Waste Collections

The Council provides refuse and recycling collection services for most residential and rural residential properties where these properties occur alongside maintained public roads. Private roads and Right of Ways (as maybe referenced in the Transportation Notes pertaining to this LIM) will not be directly serviced as these access ways are not usually of a sufficient standard to be used safely and efficiently by the collection vehicles. This could also apply to other public roads or streets that are narrow and/or have a lack of vehicle turning facilities. Rural and high country areas and settlements are not covered by regular collection services however localised refuse drop off facilities maybe available for use in specific areas. For further details and advice on refuse collection and recycling services as they may pertain to the property please phone the Council's

Asset department on phone 3472 800.

[Selwyn District Council - Collection Days & Routes](#)

If your address shows “no results found”, this means

- your property is not serviced directly by kerbside collections, OR
- you have a new property and either:
 - o you have requested for your property to be added to the route and it is in the process of being added, OR
 - o you have not yet requested for your property to be added to the route, OR

Please contact Council for further detail.

Land and Building Classifications

Energy Infrastructure and Transport

None known

Hazard and Risk

Reference: Plains Flood Management Overlay

This property is identified in the Partially Operative District Plan as being located within a Natural Hazard Overlay. For further information visit

<https://apps.canterburymaps.govt.nz/SelwynNaturalHazards/> or contact the duty planner on 0800SELWYN (0800735996)

Reference: Liquefaction Unlikely Overlay

This property is identified in the Partially Operative District Plan as being located within a Natural Hazard Overlay. For further information visit <http://eplan.selwyn.govt.nz/review> or contact the duty planner on 0800SELWYN (0800735996)

Culture and Heritage

None known

Natural Environment

None known

District-wide matters

None known

Area-specific matters

None known

Land Notes

Land Notes: Council holds the following reports:

- November 2022 – Soil Contamination Risk – Momentum Environmental

Please contact our Information Management Team at Information.Management@selwyn.govt.nz for further information.

Land Notes: This property is one a list of sites that could be potentially contaminated due to a suspected previous use as Vineyard.

This information has been included as required disclosure of information currently held by Selwyn District Council in relation to the property. Applicants must themselves consider whether or not any additional investigations are required for the applicant's purposes relating to the existence or otherwise of contamination from previous sites.

Environment Canterbury may also hold information on their Listed Land Use Register (LLUR).

Land Notes: This property is within the area encompassed by the 2007 Christchurch, Rolleston, and Environs Transportation Study (CRETS). The published Strategy outlines a range of strategic transportation initiatives to cater for long term growth in this area of the district. This includes the upgrading of existing roads and the provision of new roads which may affect private property. Further information on this Study can be viewed on the Councils website www.selwyn.govt.nz under "Transportation and Roding".

Land Notes: This property is located within the area encompassed by the Greater Christchurch Urban Development Strategy (UDS). The UDS is a joint initiative to plan and manage the growth of the Greater Christchurch Region over the next 35 years and is a partnership between the Christchurch City Council, Environment Canterbury, the Waimakariri District Council, Selwyn District Council, and Waka Kotahi NZ Transport Agency.

The Selwyn District Council is developing several strategic documents that seek to implement the UDS that may have an impact on this property in the future. Further information on Council projects can be found on the Council's website www.selwyn.govt.nz or by contacting the planning department on 0800 SELWYN (0800735996).

Listed Land Use Register (LLUR):

Hazardous activities and industries involve the use, storage or disposal of hazardous substances. These substances can sometimes contaminate the soil. Environment Canterbury identifies land that is used or has been used for hazardous activities and industries. This information is held on a publicly available database administered by Environment Canterbury called the Listed Land Use Register (LLUR). The Selwyn District Council may not hold information that is held on the LLUR, therefore, it is recommended that you check Environment Canterbury's online database at www.llur.ecan.govt.nz.

Residential Swimming Pool

No pool registered to this property.

Land Transport Requirement

Johnson Road and Neave Road are formed and sealed local road maintained by Selwyn District Council.

Special Land Features

	NZS3604:2011	AS/NZS1170:2002
Wind Region	A	A7
Snow Zone	N4	N4 Sub-alpine
Earthquake	Zone: 2	Z Factor: 0.3
Approximate Altitude (Amsl)	73m	-
Exposure Zone	B	-

Exposure Zone Descriptions

Zone B: Low

Inland areas with little risk from wind blown sea-spray salt deposits

Zone C: Medium

Inland coastal areas with medium risk from wind blown sea-spray salt deposits. This zone covers mainly coastal areas relatively low salinity. The extent of the affected area varies significantly with factors such as winds, topography and vegetation.

Zone D: High

Coastal areas with high risk wind blown sea-spray salt deposits. This is defined as within 500 m of the sea including harbours, or 100 m from tidal estuaries and sheltered inlets.

Flooding

Flood Management Area - 500 year event

The Council is undertaking a District Plan Review and through this process the Council has obtained and holds information showing that this property may be susceptible to flooding from the Selwyn River and/or in heavy rainfall events. The two reports are outlined below and can be found at <https://apps.canterburymaps.govt.nz/SelwynNaturalHazards/>:

ECan report R19/41 – Selwyn River/Waikirikiriri floodplain investigation. The report identifies areas that may be affected by flooding from the Selwyn River/Waikirikiriri.

DHI Water and Environment Ltd report – Regional Policy Statement Modelling for SDC – District Plan. The report identifies areas that may be affected by flooding in heavy rainfall events in the Selwyn District. For more information, please contact the Selwyn District Council: phone: 0800 SELWYN (735 996), email contactus@selwyn.govt.nz or visit 2 Norman Kirk Drive, Rolleston.

Alluvion

None known

Avulsion

None known

Erosion

None known

Land Fill

None known

Slippage

None known

Ground Water Level

Less than 30m below ground

Soil Type

Templeton moderately deep fine sandy loam + Halkett sand

Eyre shallow and stony sandy loam

Liquefaction and Subsidence

Council does not hold site specific information on subsoil classifications or ground bearing capacities. Therefore, the applicant will need to carry out site subsoil investigations to verify '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.

Licences/Environmental Health

No information located.

Network Utility Operators

Information related to the availability of supply, authorisations etc. (e.g. electricity or gas) can be obtained from the relevant Network Utility Operator.

Other Information

1. The applicant is advised that the Environment Canterbury may have other information in relation to this property including, but not limited to:

- a) Discharge consents.
- b) Well permits.
- c) Consents to take water.
- d) The existence of contamination and/or hazardous sites.
- e) Flooding.
- f) Clean air discharge compliance.

Further information may be obtained from Environment Canterbury by requesting a Land Information Request (LIR). To find out more contact the Environment Canterbury on 0800 ECINFO (0800 324 636) or at <http://www.ecan.govt.nz/>

2. The following further information is supplied on the basis set out in note 2 below.

Notes

1. The information supplied in the sections of this report, other than 'Other Information', is made available to the applicant pursuant to Section 44A(2) of the Local Government and Official Information Act 1987 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 LIM 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 on 0800 SELWYN (375 996).
2. The information or documents supplied to the applicant and referred to in the 'Other Information' section of this report has been supplied to the Council by property owners, their agents and other third parties. That information is made available pursuant to section 44A(3) of the Local Government and Official Information Act 1987 on the basis that:
 - a) The information may be relevant to the purposes for which this report is obtained;
 - b) The Council does not warrant or represent the accuracy or reliability of the information. If the subject matter of that information is important to the applicant it is recommended that relevant professional advice should be taken before reliance is placed upon that information.
3. The information included in the LIM is based on a search of Council records only and there may be other information relating to the land which is unknown to the Council. Council records may

not show illegal or unauthorised building or works on the property. The applicant is solely responsible for ensuring that the land is suitable for a particular purpose.

4. Schedule 1 Exempt Building Work

Building owners can carry out certain types of building work without needing to obtain a building consent. This exempt building work is listed in Schedule 1 of the Building Act 2004.

It is the owners' responsibility to ensure that any exempt building work done complies with the Building Code and fits within the provisions of the schedule before they carry out the work.

Please note that Council do not check or review documentation for compliance where information on exempt work has been provided by a property owner to Council. This information is simply filed for record keeping purposes and not to meet any statutory obligation.

Any information of this nature held by Council has been provided at Councils discretion under Section 44A (3) of the Local Government Official Information and Meetings Act 1987 without any representation or warranty.

5. The Council has used its best endeavors to ensure that all information provided in this LIM report 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.
6. This information reflects the Selwyn District Council's current understanding of the site, which is based only on the information thus far provided to it and held on record concerning the site. It is released only as a copy of those records and is not intended to provide a full, complete or totally accurate assessment of the site. 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.
7. The information contained in this Land 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.

Information Management Team

Date: 02 September 2025

LIM Report Legend

Base Layers

Road

— Road

Railway

—+— Railway

District Boundary

--- District Boundary

Township Boundary

--- Township Boundary

Ratepayer Information

□ Ratepayer Information

Parcels

□ Parcels

PODP - Zones and Precincts

Precincts

■ Commercial Precincts

■ Industrial Precincts

■ Airfield Precincts

■ Rural Precincts

Zones

- Large lot residential zone
- Low density residential zone
- General residential zone
- Medium density residential zone
- Settlement zone
- General rural zone
- Neighbourhood centre zone
- Local centre zone
- Large format retail zone
- Town centre zone
- General industrial zone
- Special purpose zone

Zone and Water Services

Water_pt

- ▲ EQUIPMENT - BORE
- ▲ EQUIPMENT _ GENERATOR
- ▲ EQUIPMENT - SAMPLE TAP
- ▲ EQUIPMENT - OTHER
- FACILITY
- ★ FIRE PLANT
- ⊕ HYDRANT
- ▲ IRRIGATION
- NODE
- OBSOLETE
- ⊕ SUPPLY POINT
- TANK
- ⊗ VALVE

Water_In

- DIM LINE
- DUCT
- IRRIGATION
- NON SDC SERVICE
- OBSOLETE
- OUTLINE
- PIPE - TREATED
- PIPE - UNTREATED
- PIPE - SEWER
- SITE_BOUNDARY

Sewer_pt

- ◊ CHAMBER
- ▲ EQUIPMENT
- FACILITY
- MANHOLE
- NODE
- ⊗ VALVE

Sewer_In

- OUTLINE
- DIM LINE
- DUCT
- IRRIGATION
- NON SDC SERVICE
- OBSOLETE
- OUTLINE
- PIPE_GRAVITY
- PIPE_RISINGMAIN
- SITE_BOUNDARY

Storm_pt

- CHAMBER
- ▲ EQUIPMENT
- FACILITY
- ✱ INLET/OUTLET
- ▣ MANAGEMENT
- MANHOLE
- NODE
- SOAKHOLE
- SUMP
- ⊗ VALVE

Storm_In

- CHANNEL
- DIM LINE
- MANAGEMENT
- NON SDC SERICE
- OBSOLETE
- OUTLINE
- PIPE
- SITE_BOUNDARY
- ▲ Soakhole w/Hoz Soakage
- StopBank

Storm_py

- CATCHMENTS
- CONSENT AREA
- GROUNDWATER LESS 6M
- OUTLINE OF BASIN
- RATED AREA

Stormwater Management Area

- Stormwater Management Area

West Melton Observatory Zone

- West Melton Observatory Zone

Planning Zones

- High Country
- Port Hills
- Existing Development Area
- Living 1
- Living 2
- Living 3
- Living X
- Living West Melton (North)
- Living Z
- Deferred Living
- Business 1
- Business 2
- Business 3
- Inner Plains
- Outer Plains
- Malvern Hills
- Key Activity Centre
- Living West Melton (South)

Liquefaction Drains and Water Race

- ▲ GATE
- Site
- ▲ WEIR

CDrain_pt

- ▲ GATE
- Site
- ▲ WEIR

CDrain_In

- DRAIN
- ECan
- OUTLINE
- StopBank
- Site Boundary

WRace_pt

- DISCHARGE
- + DIVIDE
- △ EQUIPMENT
- GATE
- ▣ GRILL
- ✱ HEADWALL
- MANHOLE
- NODE
- ⊕ POND
- SITE
- SHAFT
- SOAKHOLE

WRace_In

- AQUEDUCT
- CULVERT
- ↔ DIM LINE
- EMERGENCY DISCHARGE
- INTAKE
- LATERAL
- LOCAL
- MAIN
- OBSOLETE
- OUTLINE
- SIPHON
- +— TUNNEL

SDC Cleaned

- SDC Cleaned

Project Extent

- Project Extent

Boundary Between Liquefaction Assessment Zones

- Boundary Between Liquefaction Assessment Zones

Liquefaction Susceptibility

- DBH TC Zoned Area
- Damaging liquefaction unlikely
- Liquefaction assessment needed

Ecan River Protection Scheme

- Properties Beside Rivers
- ▲ Halswell Staff Gauges
- ◆ Halswell Floodgates
- Halswell Drainage

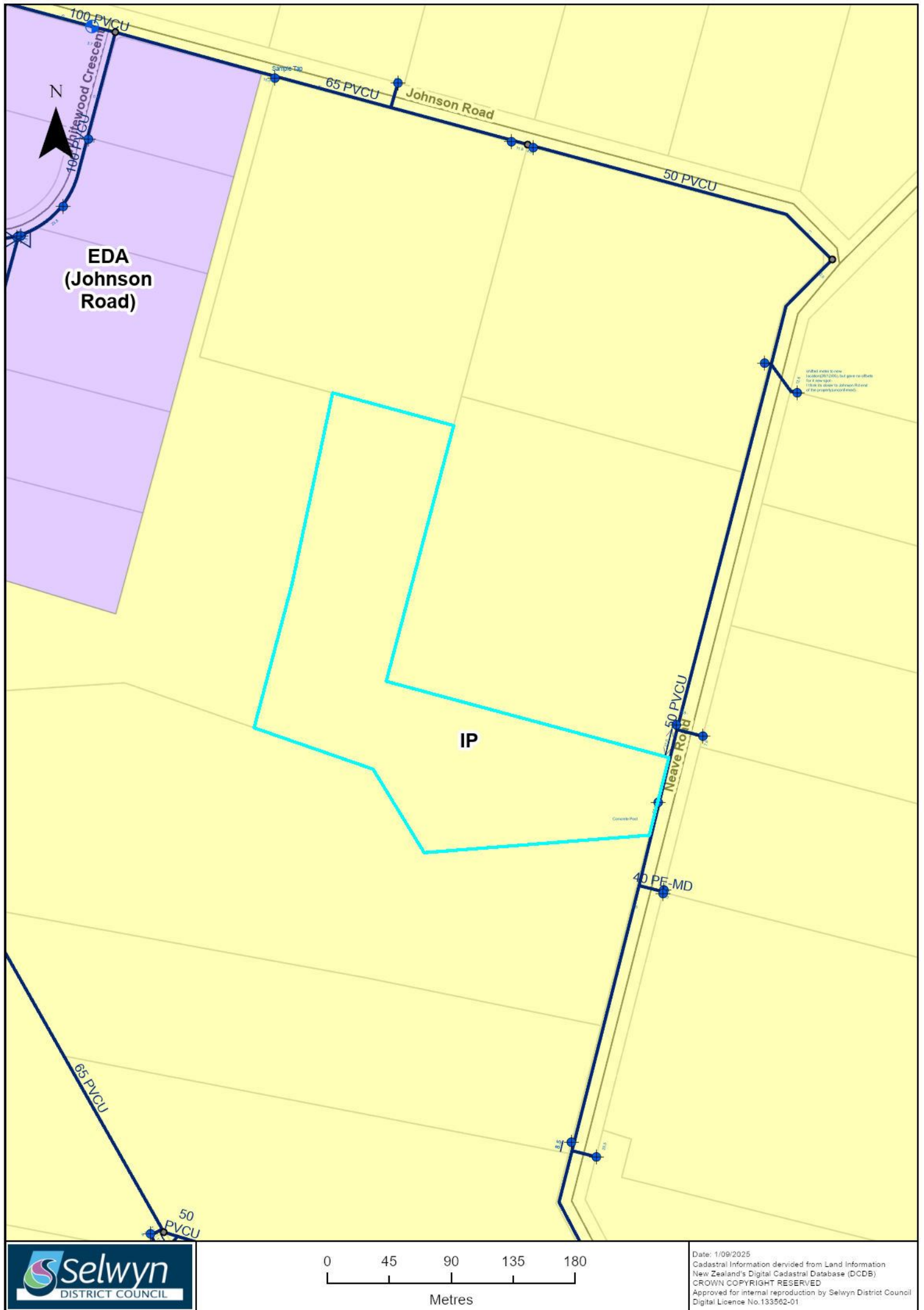
Greendale Fault

- Greendale Fault 50m Buffer
- Fault Lines (GNS 2013)
- Folds (GNS 2013)

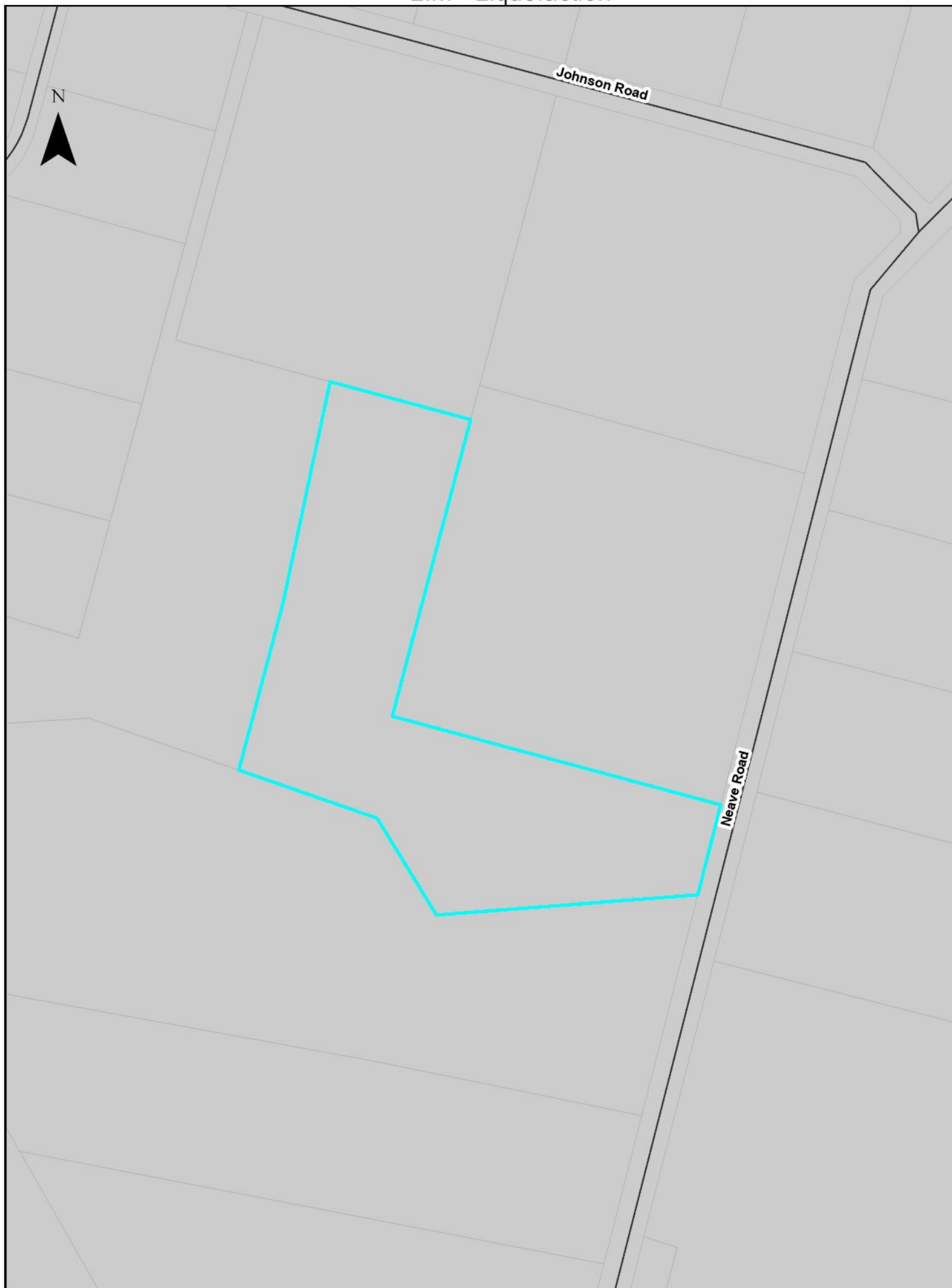
Biodiversity

- ◆ Canterbury Plains SDC AB and C Classes
- Endangered Flora and Fauna
- Potentially Significant Sites
- Confirmed SNA Sites
- Significant Natural Areas (Final 115)

LIM REPORT - Zone and Water Services



LIM - Liquefaction



LIM REPORT - PODP Zone and Precinct



RESOURCE CONSENT INFORMATION

This document is one of three pages titled “Resource Consent Information” which should be read together.

- Because of the large number of resource consents only consents which fall within the red buffer as identified on the map have been included with this report.
- If further information is required please contact the Council’s Planning Department – Phone Direct 03 3472 868.
- Every effort is made by the Council to identify resource consent in proximity to the property subject to this LIM application. However, it is suggested that a site inspection be undertaken by prospective purchasers to identify any land uses of interest. These may include uses which have existing use rights or other uses which are permitted under the Council’s District Plan.

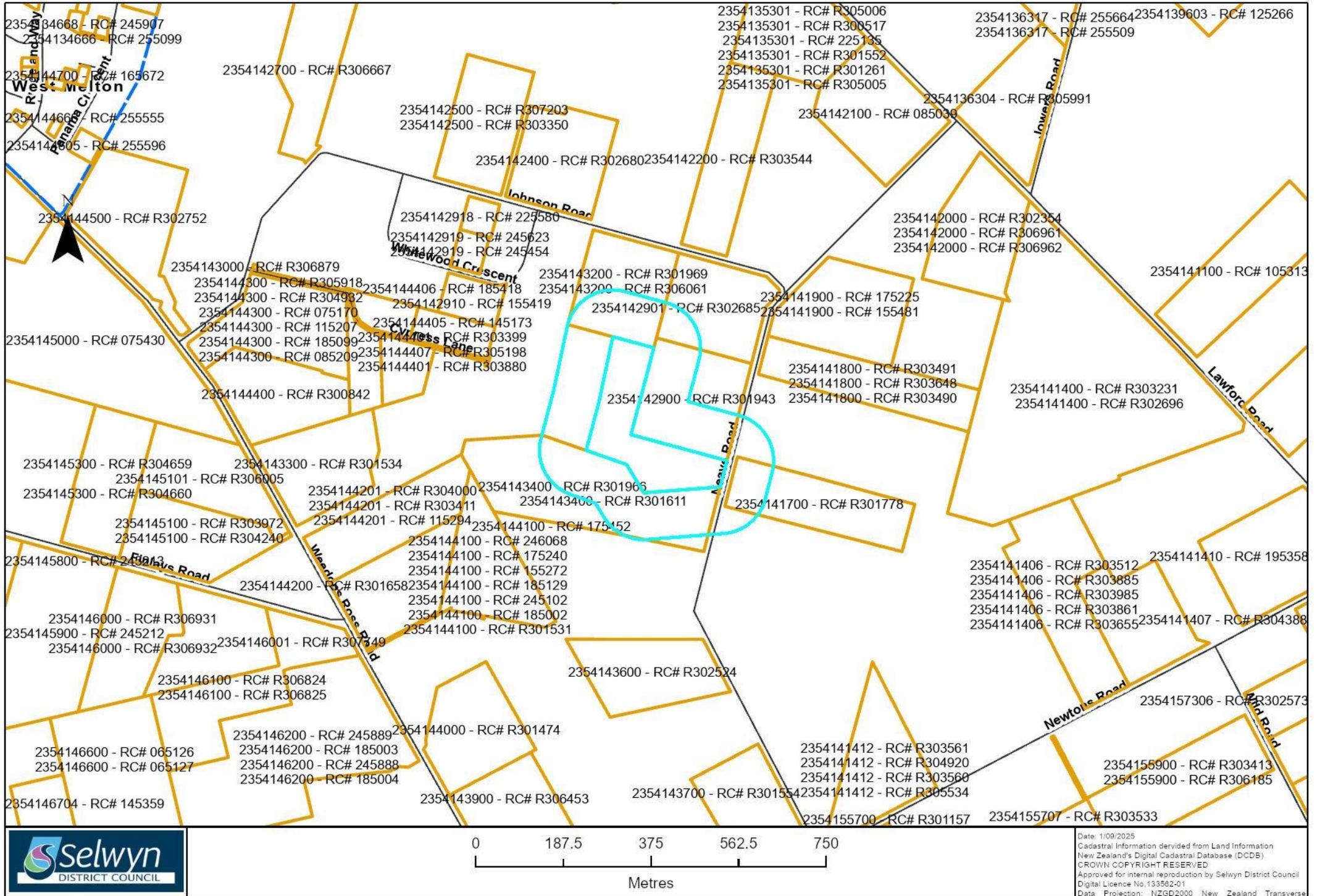
Resource Consent Status Codes:

GHP	Granted by Hearing
GEC	Granted by Environment Court
GDEL	Granted by Delegation
GCOM	Granted by Commissioner
DCOM	Declined by Commissioner
DHP	Declined by Hearing
WD	Withdrawn application
AP	Approved
DC	Declined
Blank	No decision issued
DN	Decision Notified

ADN	Appeal Decision Notified
AE	Appeal expiry
AEC	Appeal Heard by Environment
AN	Abatement Notice
AR	Appeal received
ARI	Application returned incomplete
AWD	Appeal withdrawn
CC	Cancelled
CCI	Certificate Compliance Issued
D37	Deferred under s.37
D37E	s.37 deferral ends
D91	Deferred under s.91
D91E	s.91 deferral ends
ECDN	Environment Court Decision notified
FI	Further Information
FICR	Further Information request - no clock restart
FR	Formally received
HD	Hearing Date
HH	Hearing held
INV	Invoiced
IR	Information received
LAPS	Lapsed
LD	Lodged
LN	Limited Notified
LS	Lapsed
ODN	Objection decision notified
OH	On Hold
OR	Objection received

PA	Pre- application
PN	Publically notified
PS	Process suspended
RAD	Recommendation adopted by Council
RRA	Recommendation to required authority
S223	Section 223
S224	Section 224
SC	submissions closed
WAR	Written Approval Requested
WARE	Written Approvals Received

2354143102



Assessment_ID	RC Number	Proposal	Decision Date
2354141700	R301778	SUBDIVISION INTO 2 X 4 HA LOTS IN RU PT ZONE	1995-07-17
2354142900	R301943	SUBDIVISION INTO 2 X 4 HA LOTS	1995-09-18
2354142901	R302685	SUBDIVISION OF 2 X 4 HA LOTS INTO 6 RU RES LOTS AVERAGING > 1 HA	1997-06-17
2354143200	R306061	EXTENSION TO FARM BUILDING IN NON COMPLYING POSITION	
2354143200	R301969	SUBDIVISION INTO 2 X 4 HA LOTS IN RU A ZONE	1995-10-11
2354143400	R301611	SUBDIVISION INTO 4 LOTS > 4 HA IN RU PT ZONE	1995-06-08
2354143400	R301966	SUBDIVISION OF 7.64 HA IN RU A ZONE INTO 2 LOTS OF 4HA	1996-03-20



**Soil Contamination Risk
Preliminary and Detailed Site Investigation Report**

**45 Johnson Road,
West Melton, Canterbury**

November 2022



www.momentumenviro.co.nz

Specialist soil contamination experts, keeping your project moving.

Quality Control and Certification Sheet

Client: Anna Chapman

Date of Issue: 16 November 2022

Report written by:

Hollie Griffith, Environmental Scientist, BEMP, CEnvP
(6 years contaminated land experience)

Signed:



Email: hollie@momentumenviro.co.nz

Phone: 027 5134 057



Report reviewed and certified as a Suitably Qualified and Experienced Practitioner by:

Nicola Peacock, Principal Environmental Engineer, NZCE, CEnvP
(14 years contaminated land experience within 30 years environmental experience)

Signed:



Email: nicola@momentumenviro.co.nz

Phone: 021 132 0321



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- D. Sample Location Plan
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- G. Laboratory Reportsa

1 Executive Summary

The subject of this investigation is a property located at 45 Johnson Road in West Melton, Canterbury, from herein referred to as 'the site'. It is proposed to undertake a boundary adjustment, creating a 4ha rural residential lot to the east of the existing dwelling and farm buildings. This will involve subdivision of the site, and subsequent change of use of the land, soil disturbance and potential off-site disposal of soils. As a result, an assessment under the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Health) Regulations 2011 (NESCS) is required. It is also noted that Momentum Environmental Ltd is obligated to consider the requirements of Section 10(4) of the Health and Safety at Work (Asbestos) Regulations 2016. This report details the work undertaken to assess the risks.

The Preliminary Site Investigation (PSI) portion of the investigation identified the site was used for pastoral farming purposes until being converted to a vineyard in 2005. As such, the site was listed on the ECan Listed Land Use Register (LLUR) under Hazardous Activities and Industries List (HAIL) A10 – persistent pesticide bulk storage or use. Based on the era of operation being outside the timeframe of concern for organochlorine pesticides (OCPs), and the very short time of operation the risk of contamination associated with persistent pesticide use is likely to be very low. However, the PSI highlighted a potential soil contamination risk associated with copper chromium arsenate (CCA) treated timber posts used as part of the previous vineyard. Information obtained from the client suggest the posts themselves were in good condition upon removal and had only likely been in-situ for approximately 10 years. There were no other potential sources of contamination identified for the site.

Soil sampling was undertaken within the residential curtilage area of proposed Lot 2 to assess the potential risks posed by the CCA treated timber posts. The results of the sampling showed heavy metal concentrations below the 'rural residential 25% produce' soil guideline values (SGVs) and below expected background levels. Based on the investigation undertaken, soils at the site are considered to pose a low risk to human health in a rural residential setting and a low risk to the surrounding environment. As a result, no further investigations, remediation or management measures are recommended at this time.

It is noted that while the investigation has been restricted to the residential curtilage area within proposed Lot 2 of the site, the results are likely to be applicable to the site as a whole given the land use has historically been consistent across the site. With results below background concentrations, it is evident that no HAIL activities have occurred and the LLUR listing should be changed accordingly.

As per Regulation 5(9) of the NESCS, the NESCS does not apply to proposed subdivision, change of use of the land and future soil disturbance and off-site disposal of soils.

2 Objectives of the Investigation

This report has been prepared in general accordance with the Ministry for the Environment's (MfE) "Contaminated Land Management Guidelines No 1: Reporting on Contaminated Sites in New Zealand, revised 2021" (CLMG). This report includes all requirements for a Preliminary and Detailed Site Investigation Report.

The objective of this investigation is to:

- Collect and assess information from multiple sources to understand past and current land uses.
- Describe the physical and environmental features of the site to understand potential pathways and receptors.
- Establish whether an activity or industry described in the Hazardous Activities and Industries List (HAIL) is being, has been, or is more likely than not to have been undertaken on the site.
- Assess whether there is any risk to potential receptors that would warrant further investigation.
- Collect and analyse site information, including soil sampling and testing, to determine the extent and type of any contamination present.
- Provide remediation or site management recommendations to the client based on the results of the investigation.

3 Scope of Work Undertaken

The scope of the work undertaken has included:

- Obtaining and review of Environment Canterbury (ECan) data from the Listed Land Use Register (LLUR).
- Search of Land Information New Zealand (LINZ) orchard database.
- Review of relevant historical aerial photographs.
- Review of relevant historical certificates of title (CTs).
- Review of Selwyn District Council (SDC) property files.
- Designing a sampling and analysis plan based on the identified contaminant risks.
- On site soil sampling and laboratory testing.
- Analysis of results against applicable soil guidelines values (SGVs).
- Preparation of this report in accordance with MfE guidelines.

4 Site Identification

The subject of this investigation is located at 45 Johnson Road in West Melton, Canterbury, from herein referred to as 'the site'. The site is legally described as Lot 1 DP 72773 and Lot 2 DP 71948 and measures approximately 8.14ha, as shown on **Figure 1** below.

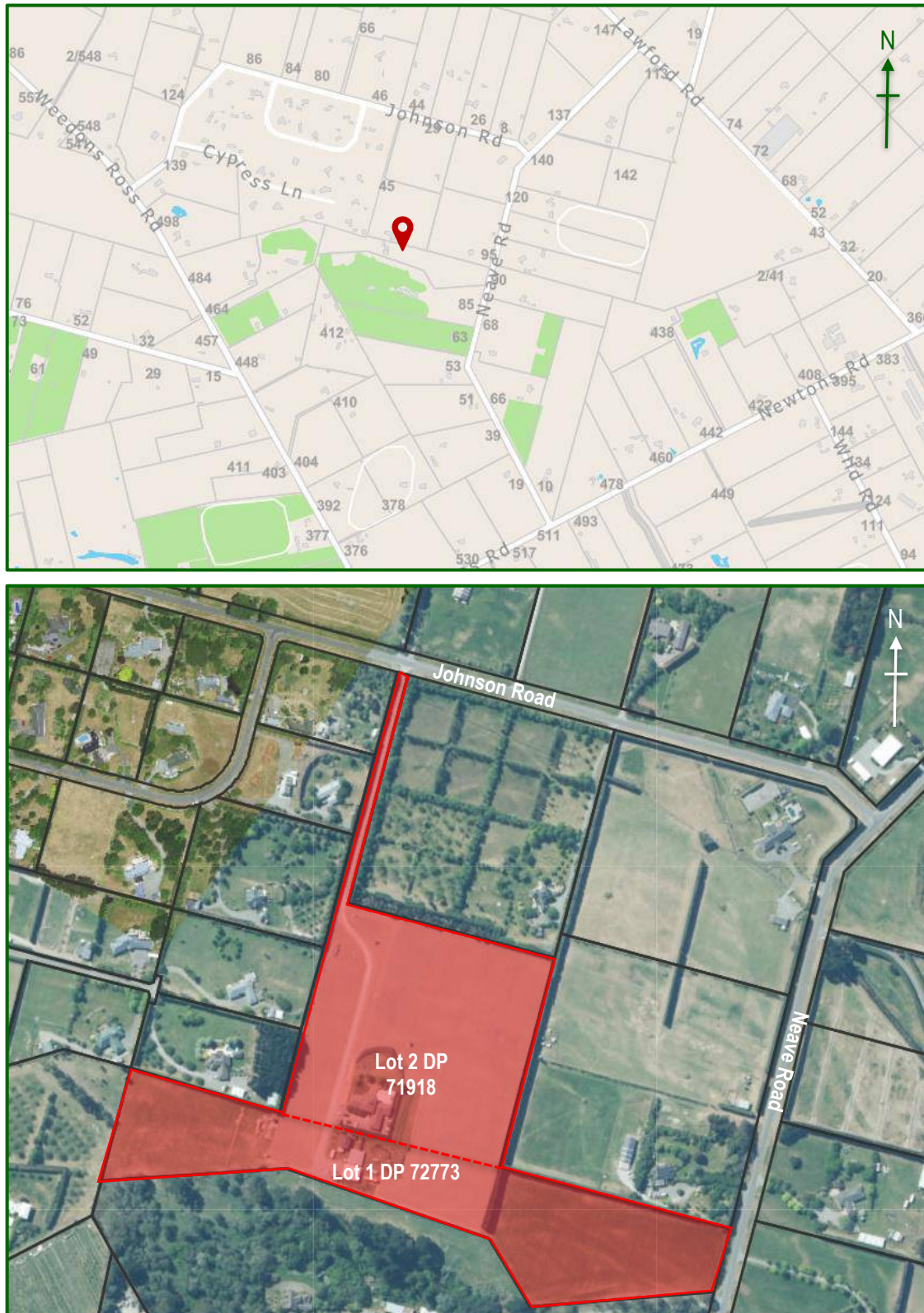


Figure 1 – Location Plan

5 Proposed Site Use

It is proposed to undertake a boundary adjustment, creating a 4ha rural residential lot to the east of the existing dwelling and farm buildings, as shown in **Figure 2** below.

The proposal will involve the subdivision and change of use of the land, future soil disturbance activities and possible disposal of soils off-site.



Figure 2 – Proposed Boundary Adjustment Layout

6 Site Description

6.1 Environmental Setting

Table 1 – Environmental Information

Topography	The site is generally flat land.
Geology	The ECan GIS database describes the soils at the site as a combination of the Templeton moderately deep silt and the Eyre shallow loam. Bore log information from an on-site well indicates that topsoils are underlain by layers of sand and gravels.
Soil Trace Elements	According to the ECan GIS database, natural concentrations of trace elements for the site are those of the 'Regional, Recent' soil group.
Groundwater	According to the ECan GIS database, the site lies over the unconfined and semi-confined gravel aquifer system. Groundwater levels recorded on on-site and nearby wells are 16.34-21.48m deep. The direction of groundwater flow is generally in a south-easterly direction.
Surface Water	There are no on-site or directly surrounding surface water receptors.

6.2 Site Layout and Current Site Uses

The site is currently used for rural residential purposes and contains a main dwelling, secondary dwelling and several farm buildings. The remainder of the site is in pasture and used for stock grazing and pastoral purposes.

6.3 Surrounding Land Uses

The site is surrounded on all sides by similar rural residential land.

6.4 Geotechnical Investigations

At the time of writing of this report, no geotechnical investigations were made available to Momentum Environmental Ltd (MEL).

7 Historical Site Use

7.1 Previous Site Ownership and Use

Historical Certificates of Title (CTs) were reviewed with the following relevant ownership information outlined below:

02 February 1900	William Nathaniel Carter Bond, a Weedons farmer
12 August 1903	William Griffiths Smith, a Chertsey sheep farmer
23 December 1919	New Zealand Refrigerating Company Ltd
02 June 1925	Basil Curtis Russell Montgomery, a West Melton sheep farmer
10 April 1942	Herbert Ellesmere Cross, a Weedons farmer
13 April 1951	Lawrence Allen Watson, a Weedons farmer
22 April 1955	Maurice John Mood, a West Melton farmer
05 August 1959	Harold Dean Greenwood, a Teviotdale sheep farmer
13 December 1966	Daphne Patricia Greenwood, an Amberley school teacher as to three 1/22 shares and Michael Anthony White-Johnson, a West Melton farmer, as to three 1/22 shares
14 February 1972	Transfer of Daphne Patricia Greenwoods shares to Michael Anthony White-Johnson

07 May 1974	Transmission of Harold Dean Greenwoods shares to George Dean Greenwood of Amberley and Harold Cameron Greenwood of Christchurch, both farmers
05 December 1974	Michael Anthony White-Johnson, a West Melton farmer, Judith Mary White-Johnson, his wife and Simon Hallows Wood, a Christchurch solicitor
18 March 1980	Michael Anthony White-Johnson, a West Melton farmer, Judith Mary White-Johnson, his wife and John Allen Dobson, a company director
15 January 1992	Leonard Philpott, a chartered accountant and Susan Lorrimer Philpott, a clerk
05 December 1996	David Noel Evans and Gaynor Mae Evans, both Christchurch company directors
26 February 1998	Heather Clare Anderson and Graeme Robert Noel Lindsay
15 January 2016	Jeremy William Chapman, Anna Carole Chapman and Veritas Ltd
13 May 2019	Jeremy William Chapman, Anna Carole Chapman and Duncan Cotterill Christchurch Trustee Ltd

Note that some of the older information was of poor quality and difficult to follow, therefore the accuracy of the spelling of names and dates is not guaranteed. Copies of the historical CTs are included in **Appendix A**.

7.2 District Authority Records

The site is within the Inner Plains zone in the operative Selwyn District Plan and General Rural zone in the proposed Selwyn District Plan.

Property files were sourced from Selwyn District Council (SDC) and reviewed on 02 November 2022. The following building consent information was included in the property file:

- A Building Consent to construct an implement shed, dated October 2001.
- A Building Consent to construct a dwelling, dated September 2001.
- A Building Consent to construct a tractor shed, dated September 2005.
- A Building Consent to construct a farm building, dated January 2010.
- A Building Consent to construct a workshop/office, dated October 2015.

7.3 Regional Council Records

Information available from the ECan GIS database shows the site is listed on the LLUR for land use activities and industries associated with the Hazardous Activities and Industries List (HAIL). The site is listed for 'HAIL A10 – persistent pesticide bulk storage or use' associated with a vineyard present on the site since 2005. The LLUR Statement references the vineyard as Tresillian Estates. The site is categorised as 'verified HAIL, has not been investigated'.

There are five properties within a 100m radius of the site also listed on the LLUR, as follows:

- 460 Weedons Ross Road is listed as HAIL A10 – persistent pesticide bulk storage or use' associated with horticultural activities undertaken at the property since 2005. The property is categorised as 'verified HAIL, has not been investigated'. The property is located directly south-west of the site.
- 464 Weedons Ross Road is listed as HAIL A10 – persistent pesticide bulk storage or use' associated with horticultural activities undertaken at the property since 2000. The property

is categorised as ‘verified HAIL, has not been investigated’. The property is located directly west of the site.

- 25 Johnson Road is categorised as ‘verified non-HAIL’. A Preliminary Site Investigation undertaken by Malloch Environmental Ltd (now known as Momentum Environmental Ltd) in 2018 determined there was no evidence of HAIL activities at the time of the report or in the past.
- 85 Neave Road is listed as ‘HAIL A8 – livestock dip or spray race operation’ as a livestock dip or spray race was noted in aerial photographs from 1941 onwards. The property is categorised as ‘verified HAIL, has not been investigated’. The potential livestock dip or spray race is located approximately 70m south of the site.
- 412 Weedons Ross Road is listed as ‘HAIL A17 – storage tanks or drums for fuel, chemicals or liquid waste’. A PSI is available for the property and states that a contractor’s yard is present which may have resulted in the storage of fuels and lubricants. As no soil sampling was undertaken, the property is listed as ‘verified HAIL, has not been investigated’. The property is located approximately 100m south of the site.

The LLUR Statement is included in **Appendix B**.

Resource consent information was sourced from the ECan GIS database. There are no active resource consents associated with the site. Several resource consents are associated with surrounding properties for the discharge of domestic sewage to land or to take and use groundwater.

Bore information was sourced from the ECan GIS database. There are two active bores present at the site, these are for domestic water supply and irrigation purposes. The nearest off-site active downgradient well is M35/8595, located approximately 180m south of the site.

7.4 LINZ Records

The LINZ orchard layer does not show the site, or any directly surrounding properties as having listed orchards.

7.5 Review of Historical Aerial Photographs

A total of nine historical aerial photographs have been sourced from the ECan GIS database to assess the historical use of the site. Copies of the aerial photographs used are included in **Appendix C**.

- The earliest available photograph is from **1940-1944** and shows the site as vacant pastoral land. There are three lighter coloured areas within the site boundary, two within the eastern section and one along the northern boundary of the site. Based on the size and shape, these appear to be mounds of stock feed. The site is part of a larger sheep farm with the main dwelling and farm buildings located on the property to the south of the site. A woolshed and sheep yards are present on this same property. While no sheep dip structure or spray race operation is visible, it is considered likely based on the layout and era of the property. Stock tracks can be seen heading from the sheep yards further south and also to the north, entering the eastern section of the site. The remaining surrounding land is vacant pastoral land, likely part of the same sheep farm.
- The next available aerial photograph is from **1960-1964** and shows the site remaining vacant of structures and in pasture. The dwelling, farm buildings and sheep yards remain on the property to the south of the site. Any potential sheep dip structure or spray race operation is

not visible due to the extensive vegetation now surrounding the property. Two structures are now present on adjacent properties to the west and south of the site.

- The **1970-1974** aerial photograph shows the site remaining vacant of structures. The central portion of the site appears to be used for pastoral cropping and stock are visible. Some lighter coloured areas are present adjacent to existing trees. These are likely associated with tree removal. There are no significant changes to the surrounding land.
- The **1980-1984** aerial photograph shows no significant changes to the site. Some vegetation clearance has occurred on the property to the south, however due to the quality of the imagery no significant changes are visible.
- The **1990-1994** aerial photograph shows the site remaining vacant of structures and in pasture. The dwelling, farm buildings and sheep yards remain on the property to the south of the site. Several dwellings now exist on land directly surrounding the site.
- The **2000-2004** aerial photograph shows the site remaining vacant of structures and in pasture. The dwelling, farm buildings and sheep yards remain on the property to the south of the site. Residential dwellings now surround the site in all directions. Horticultural activities are occurring on the property directly north of the site.
- The **2004-2010** aerial photograph shows a residential dwelling, secondary dwelling and farm buildings in the central section of the site, surrounded on all sides by a vineyard. Both the eastern and western sections of the site appear to be in pasture. There appear to be no significant changes to the surrounding area.
- The **2010-2014** aerial photograph shows three additional structures present at the site. The vineyard now exists on both the eastern and western sections of the site. There appear to be no significant changes to the surrounding area.
- The **latest** aerial photograph shows the site has been returned to pasture. Approximately 10 rows of vines still exist to the east of the main residential dwelling. A domestic vegetable garden and a large, landscaped mound are now present surrounding the residential curtilage area of the site. There appears to be some mounds of excavated material present in the north-western corner of the site and within the western section of the site. There appear to be no significant changes to the surrounding area.

8 Preliminary Risk Assessment

8.1 Potential HAIL Uses

The Hazardous Activities and Industries List (HAIL) compiled by the Ministry for the Environment identifies industries and activities that are considered potentially contaminating. Based on historical land uses and the information reviewed above, the following categories (*in italics*) have been identified for the site, including a summary of the risks associated with such activities.

A – Chemical manufacture, application and bulk storage

10 – Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds

Historical aerial photographs indicate the site has been used for farming purposes since the pre-1940's. The normal uses of fertilisers and pastoral weed controls associated with this use is unlikely to have caused soil contamination that would pose a risk to human health.

Historical aerial photographs and the ECan LLUR show a vineyard present on site in 2005. The site was returned to pasture at some stage between 2015 and the present day. Based on the era

of operation being outside the timeframe of concern for organochlorine pesticides (OCPs), and the short time of operation the risk of contamination associated with persistent pesticide use is likely to be very low.

G – Cemeteries and waste recycling, treatment and disposal

5 – Waste disposal to land

The latest aerial photograph shows some mounds of excavated material present in the north-western corner of the site and within the western section of the site. The client was contacted regarding this and stated that the material had been excavated from the site, stockpiled and currently used for landscaping.

H – Any land that has been subject to the migration of hazardous substances from adjacent land in sufficient quantity that it could be a risk to human health or the environment

The ECan LLUR identified two properties within a 100m radius of the site listed as 'HAIL A10 - persistent pesticide bulk storage or use' associated with horticultural activities undertaken since 2000 onwards. Based on the era of operation being outside the timeframe of concern of OCPs, the risk from the migration of contamination to the site associated with persistent pesticide use is likely to be very low.

The ECan LLUR identified a property within a 100m radius of the site listed as 'HAIL A17 – storage tanks or drums for fuel, chemicals or liquid waste' from the storage of fuels and lubricants in a contractor's yard. Given the separation distance between the contractor's yard and the site and the localised nature of the source of contamination, the risk of migration to the site is likely to be very low.

The ECan LLUR identified a property within a 100m radius of the site listed as 'HAIL A8 – livestock dip or spray race operation' as a livestock dip or spray race was noted in aerial photographs from 1941 onwards. The potential dip/ spray race is shown on the LLUR Statement as being approximately 70m south of the southern boundary of the site. Given the separation distance and the potential dip/spray race being downgradient from the site, the risk from the migration of contaminants to the site is considered to be low.

I - Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment

There were no buildings/structures present on site until residential development occurred in 2001, outside the timeframe of concern for lead-based paint products and asbestos containing materials (ACM). Therefore, the risk of accidental release of a hazardous substance from the buildings/structures in sufficient quantity to be a risk to human health or the environment is considered highly unlikely.

There is a potential risk associated with copper chromium arsenate (CCA) treated timber posts used in vineyards, creating a halo of elevated arsenic concentrations surrounding each post.

Contaminants of concern include heavy metals.

8.2 Preliminary NESCS Assessment

In relation to the NESCS, Regulation 5(7) states that land is considered to be covered if an activity or industry described in the HAIL is being undertaken; has been undertaken; or is more likely than not to have been undertaken on it. Regulation 6 describes the methods for determining this. Method 6(3) is to rely on a Preliminary Site Investigation. The 'NESCS Users Guide' indicates the test for 'more likely than not' is whether there is more than a 50 percent likelihood of the HAIL having occurred.

The table below states the likelihood of each HAIL identified in **Section 8.1** above:

Table 2 – Preliminary NESCS Assessment

HAIL Category	6(3)a - Is being undertaken	6(3)b – has been undertaken	6(3)c – likelihood of having been undertaken (if not confirmed)
HAIL A10 – Persistent pesticide bulk storage or use	-	-	Highly unlikely
HAIL G5 – Waste disposal to land	-	-	Highly unlikely
HAIL Class H – Migration of hazardous substances	-	-	Highly unlikely
HAIL I – Any other land	-	-	More likely than not

8.3 Preliminary Conceptual Site Model

The following preliminary conceptual site model (CSM) indicates a potentially complete exposure pathway associated with the sites use as a vineyard.

Table 3 – Preliminary Conceptual Site Model

Preliminary Conceptual Site Model			
Source	Pathways		Receptor/Exposure Pathway Status
Potential heavy metal contamination associated with CCA treated timber posts used as part of the vineyard.	Human	Dermal contact, ingestion and inhalation through soil contact	Potentially complete exposure pathway for future land users.
			Potentially complete exposure pathway for workers involved in soil disturbance activities at the site
	Ecological	Infiltration through soils to groundwater	Pathway is likely incomplete as groundwater is likely to be between 16.34-21.48m deep at the site.
		Surface runoff to waterways	Pathway incomplete as there are no nearby surface water receptors.

Based on the NESCS assessment and the preliminary CSM above, the NESCS does apply and further assessment in the form of a Detailed Site Investigation (DSI) is recommended.

9 Sampling and Analysis Plan

9.1 Sampling Design

The principal contamination risk arises from the site's previous use as a vineyard. The proposal involves subdivision of the site and development of proposed Lot 2 for rural residential purposes. There is no change of use, soil disturbance or off-site disposal of soils occurring within proposed Lot 1. Based on the above, the exposure area is restricted to the proposed residential curtilage area within proposed Lot 2. It is noted that while the investigation has been restricted to the residential curtilage area within proposed Lot 2 of the site, the results are likely to be applicable to the site as a whole given the land use has historically been consistent across the site.

The specifics of the sample design strategy are included in **Table 4** below.

Table 4 – Sampling Design Strategy

Contaminants of concern	Heavy metals
Media to be sampled	Soils
Number of sample locations	An approximate grid layout including 4-8 sample locations situated across the residential curtilage area within proposed Lot 2. The XRF will be used on site to delineate the extent of any contamination identified.
Depth of samples	Due to the likely mode of contamination and likely exposure to soils during future use and redevelopment of the site, surface and shallow (250mm) sample depths are considered appropriate.
Testing Methodology	All surface samples will be tested for heavy metals with analysis on deeper samples occurring where contamination is identified in surface soils.
Field Sampling Technique	Samples to be taken by hand using a stainless-steel spade, trowel or fresh disposable nitrile gloves.
XRF Testing Procedure	For each sample location and depth, three XRF tests are to be performed over an approximate 10cm ² area.

9.2 Soil Guideline Values

Human health soil contaminant standards for a group of 12 priority contaminants were derived under a set of five land-use scenarios and are legally binding under The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Health) Regulations 2011 (NESC). These standards have been applied where applicable. The regulations describe these as Soil Contaminant Standards. For contaminants other than the 12 priority contaminants, the hierarchy as set out in the Ministry for the Environment Contaminated Land Management Guidelines No 2 has been followed. These are generally described as Soil Guideline Values. For simplicity, this report uses the terminology Soil Guideline Values (SGV) when referring to the appropriate soil contaminant standard or other derived value from the hierarchy. For soil, guideline values are predominantly risk based, in that they are typically derived using designated exposure scenarios that relate to different land uses. For each exposure scenario, selected pathways of exposure are used to derive guideline values. These pathways typically include soil ingestion, inhalation and dermal adsorption. The guideline values for the appropriate land use scenario relate to the most critical pathway.

The land-use scenario applicable for the site is 'rural residential 25% produce' and 'commercial/industrial outdoor worker' used as a proxy for workers involved in disturbing soils.

The adopted trigger value used to determine need for assessment of ecological receptors (including stormwater disposal areas) also referred to as Ecological Guideline Values (EGVs) is the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (online) – Sediment GV-high (ANZWQ).

For comparison of site concentrations against expected background levels heavy metal concentrations will be assessed against the expected background levels as published in *Background Concentrations in Canterbury soils*, Tonkin and Taylor, July 2007.

9.3 Quality Assurance and Quality Control

Field quality assurance measures as described in Section 4.3.1 of the “Contaminated Land Management Guidelines No 5: Site Investigation and Analysis of Soils, revised 2021” (CLMG) are to be followed. These include using trained staff, choosing appropriate sample containers, accurate and individual labelling and recording of locations, completing appropriate laboratory chain of custody forms, chilling of samples as appropriate and timely delivery to laboratories. All non-disposable sampling equipment should be decontaminated between samples using Decon 90 and rinsed with tap water. All samples are to be submitted to IANZ accredited laboratories. Quality control to ensure freedom from sample cross-contamination is to be measured by the appropriate use of duplicate and rinsate blank samples.

9.4 XRF Quality Assurance Measures

The XRF to be used is a Thermo Scientific Niton XL2 GOLDD. The manufacturer’s instructions are to be followed in the use of the device. Calibration samples are to be tested prior to each day’s testing and compared with the manufacturer’s specifications, and silicon blank readings are to be taken approximately every 20 samples to ensure there is no contamination of the XRF window.

The US EPA Method 6200 - Field Portable X-ray Fluorescence Spectrometry for the Determination of Elemental Concentrations in Soil and Sediment (2007) is used as guidance for the use of the XRF and quality assurance measures. This method recommends that 5% of XRF tests should be verified through lab testing.

As the device reads 23 metals, the contaminants to focus on should be narrowed down to those likely to be present based on the risk profile and the limitations of the XRF. It is noted that the XRF is not suitable for measuring cadmium with the limit of detection being higher than the ‘rural residential 25% produce’ SGV. As cadmium is primarily associated with fertiliser storage or industrial processes it is considered unlikely to be a significant contaminant of concern, however, is included in the standard laboratory metal suite tested. The results from the XRF for arsenic, cadmium, chromium, copper, lead, nickel and zinc are to be analysed in detail but only reported if relevant to human health risk.

10 Sampling Results

10.1 Summary of Works/Field Observations

Soil sampling was undertaken on 26 September 2022 in general accordance with the sampling strategy outlined above.

Proposed Lot 2 consisted of two separate paddocks, both in pasture. There was no evidence of the previous vineyard, such as the CCA treated timber posts. There was no evidence of any other potential source of contamination within proposed Lot 2, such as burn areas or extensive storage. The clients were on site at the time of sampling and stated that they had purchased the property approximately seven years ago and removed the CCA treated timber posts approximately one year after purchasing. The clients stated that the posts themselves were in good condition upon removal and had likely only been in-situ for approximately 10 years.

A walkover of the remainder of the site was conducted and no sources of contamination were identified.

A total of 13 samples, including a duplicate, were collected from six sample locations situated within the residential curtilage area of proposed Lot 2. Surface samples from every sample location were analysed for heavy metals.

A Sample Location Plan is included in **Appendix D**.



Photo 1 & 2 – Proposed Lot 2

10.2 Results of the XRF Quality Assurance Measures

The quality assurance measures described in **Section 9.4** above were followed. Calibration checks and blank testing showed no quality control issues. A total of 50% of the samples collected from XRF tested locations were laboratory tested for seven heavy metals.

Insufficient data was available to carry out a regression analysis on the arsenic readings and laboratory results as all of the XRF readings were below the device limit of detection.

10.3 Results of Field & Laboratory Quality Assurance and Quality Control

The Relative Percentage Differences (RPD) for the duplicate sample pair were 1-13%, within acceptable ranges, indicating no quality-control issues.

All laboratory tested samples were submitted to Analytica Laboratories for analysis. Analytica Laboratories holds IANZ accreditation. As part of holding accreditation the laboratory follows appropriate testing and quality control procedures. No quality control issues were identified.

10.4 Evaluation of Results

The laboratory analysis and XRF readings showed heavy metal concentrations below the 'rural residential 25% produce' soil guideline values (SGVs). Heavy metal concentrations were below expected background levels.

A Table of Laboratory Results is included in **Appendix E** and a Table of XRF Results is included in **Appendix F**. Copies of the Laboratory Reports are included in **Appendix G**.

11 Quantified Risk Assessment

The soil sampling results show concentrations of contaminants below the 'rural residential 25% produce' SGVs and expected background levels. Based on the investigation undertaken, soils at the site are considered to pose a low risk to human health in a rural residential setting and a low risk to the surrounding environment. As a result, no further investigations, remediation or management measures are recommended at this time.

12 Regulatory Assessment

Soil sampling has shown contamination levels are below the applicable standards in Regulation 7 of the NESCS and below expected background values. As per Regulation 5(9) of the NESCS, the NESCS does not apply to proposed subdivision, change of use of the land and future soil disturbance and off-site disposal of soils.

It is recommended that a planner fully assess all proposed activities associated with the development against the Land and Water Regional Plan to determine whether resource consents from ECan are necessary due to exceedance of expected background values.

13 Conclusion

The Preliminary Site Investigation portion of this investigation identified a potential soil contamination risk associated with CCA treated timber posts used as part of a previous vineyard present on site since 2005. There were no other potential sources of contamination identified for the site.

Soil sampling undertaken within the residential curtilage area of proposed Lot 2 showed heavy metal concentrations below the 'rural residential 25% produce' SGVs and expected background levels. Based on the investigation undertaken, soils at the site are considered to pose a low risk to human health in a rural residential setting and a low risk to the surrounding environment. As a result, no further investigations, remediation or management measures are recommended at this time.

It is noted that while the investigation has been restricted to the residential curtilage area within proposed Lot 2 of the site, the results are likely to be applicable to the site as a whole given the land use has historically been consistent across the site. With results below background concentrations, it is evident that no HAIL activities have occurred and the LLUR listing should be changed accordingly.

14 Limitations

Momentum Environmental Limited has performed services for this project in accordance with current professional standards for environmental site assessments, and in terms of the client's financial and technical brief for the work. Any reliance on this report by other parties shall be at

such party's own risk. It does not purport to completely describe all the site characteristics and properties. Where data is supplied by the client or any third party, it has been assumed that the information is correct, unless otherwise stated. Momentum Environmental Limited accepts no responsibility for errors or omissions in the information provided. Should further information become available regarding the conditions at the site, Momentum Environmental Limited reserves the right to review the report in the context of the additional information.

Opinions and judgments expressed in this report are based on an understanding and interpretation of regulatory standards at the time of writing and should not be construed as legal opinions. As regulatory standards are constantly changing, conclusions and recommendations considered to be acceptable at the time of writing, may in the future become subject to different regulatory standards which cause them to become unacceptable. This may require further assessment and/or remediation of the site to be suitable for the existing or proposed land use activities. There is no investigation that is thorough enough to preclude the presence of materials at the site that presently or in the future may be considered hazardous.

No part of this report may be reproduced, distributed, publicly displayed, or made into a derivative work without the permission of Momentum Environmental Ltd, other than the distribution in its entirety for the purposes it is intended.

Appendix A – Historical Certificates of Title

References

Prior C/T 797/14

Transfer No. 956746

N/C. Order No.



Land and Deeds 69

Cancelled
REGISTER

No. 13K / 1365

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 17th day of July one thousand nine hundred and seventy four under the seal of the District Land Registrar of the Land Registration District of CANTERBURY

WITNESSETH that MICHAEL ANTHONY WHITE-JOHNSON of West Melton, Farmer as to an undivided 13/14 share and MICHAEL ANTHONY WHITE-JOHNSON of West Melton, Farmer, JUDITH MARY WHITE-JOHNSON his wife and SIMON HALLOWS WOOD of Christchurch, Solicitor (jointly inter se) as to an undivided 31/44 share are

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 202.2930 hectares or thereabouts situated in Block XI and XV of the Rolleston Survey District, being Lot 3 on Deposited Plan 34585



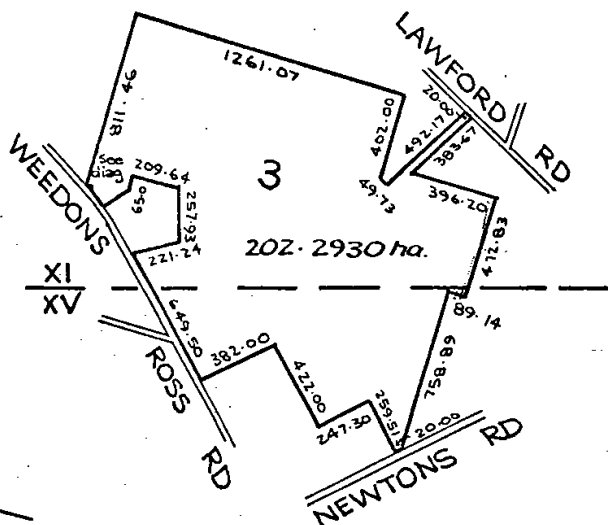
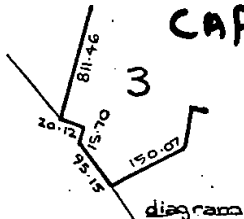
A. L. R.
Assistant Land Registrar

Mortgage 507892 to (now) George Dean Greenwood and Harold Cameron Greenwood - 2.9.1959 at 10.28 a.m.

Variation of Mortgage 507892 - 4.9.1974 at 10.03 a.m.

PLAN No. 35310 DEPOSITED 5.12.74
Affects part

19746/1 } Cancelled and New Cs T. issued
5.12.1974 } for Lot 3 D.P. 35310 and BALANCE
Lot 3 - 14B/1258
Balance - 14B/1259



+ *Discharge of mortgage*
507892 as T. 673 of
35310 - 5/12/1974 at 9.21 a.m.

35998

PLAN No. **35999** DEPOSITED

Measurements are Metric

No. 13K / 1365

References

Prior C/T 13K/1365

Land and Deeds 69

No.

14B/1259

Transfer No.

N/C. Order No. 19746/1



REGISTER

CANCELLED

CANCELLED

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 5th day of December one thousand nine hundred and Seventy Four under the seal of the District Land Registrar of the Land Registration District of CANTERBURY

WITNESSETH that MICHAEL ANTHONY WHITE-JOHNSON of West Melton, Farmer (as to an undivided 13/44 share) and MICHAEL ANTHONY WHITE-JOHNSON of West Melton, Farmer, JUDITH MARY WHITE-JOHNSON his wife and SIMON HALLOWS WOOD of Christchurch, Solicitor (jointly inter se) as to an undivided 31/44 share

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 201.5604 hectares or thereabouts situated in Blockx XI and XV of the Rolleston Survey District being part Lot 3 on Deposited Plan 34585



Assistant Land Registrar

Subject to Mortgage 507892 to (now) George Dean Greenwood and Harold Cameron Greenwood - 2.9.1959 at 10.28 a.m. (as varied once subsequently)

Pursuant to Section 35(3) of the Counties Amendment Act 1961 ~~Lot 31 Plan 35998~~ and Lot 32 D.P. 35999 are vested in the Chairman Councillors and Inhabitants of the County of Ashburton as Road

Plans do. ~~35998~~, 35999 deposited 24/9/75.

Plan do. 35998 deposited 24/9/75.

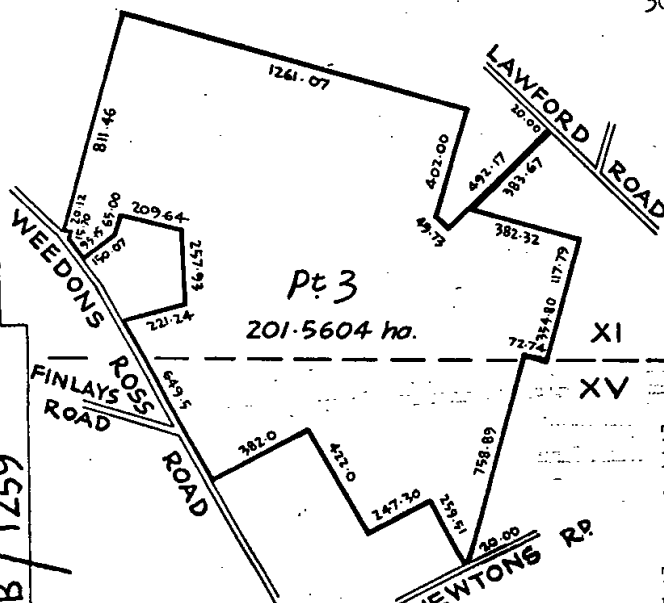
A.L.R.

N.C.O. 44681/1
30/7/1975

(Cancelled and new C.s.T. 15B/1308 - 1319 inclusive issued for Lots 16 - 27 inclusive D.P. 35999 and 15B/1239 issued for the balance (being pt. Lot 3 D.P. 34585)

A.L.R.

11.6.1975



Measurements are Metric

PART CANCELLED

DUPLICATE DESTROYED

Pursuant to Section 35 (3) of the Counties Amendment Act 1961 Lot 31 Plan 35998 is vested in the Chairman Councillors and Inhabitants of the County of Paparua as road

Transmission 52250/1 of Mortgage 507892 to Harold Cameron Greenwood as Survivor - 24/9/1975 at 2.00 p.m.

A.L.R.

A.L.R.

Transfer 52250/2 of Mortgage 507892 to Harold Cameron Greenwood, John Dean Brinkman Greenwood and Victoria Carolyn Greenwood 24/9/1975 at 2.00 p.m.

OVER.... Register copy for L. & D. 69, 71, 72

A.L.R.

K BF

No. 14B/1259

C.T.14B/1259

~~N.C.O.44604/4 (Cancelled and now
30.7.1975 (Cs.T. 15B/1308-1319
(inclusive issued for
(Lots 16-27 D.P.35999)~~

Entered in Error.

A.L.R.

~~PART CANCELLED~~

O.C.T. 63315/1 (Cancelled and C's.T.
17.12.1975 (15K/1088-1098 issued
(for Lots 3-7, 12-14
(and 28-30 D.P.35998

H. Monahan
A.L.R.

DUPLICATE CANCELLED DESTROYED.



References

Prior C/T 14B/1259

Transfer No.

N/C. Order No. 44681/1

Land and Deeds 69



CANCELLED

REGISTER

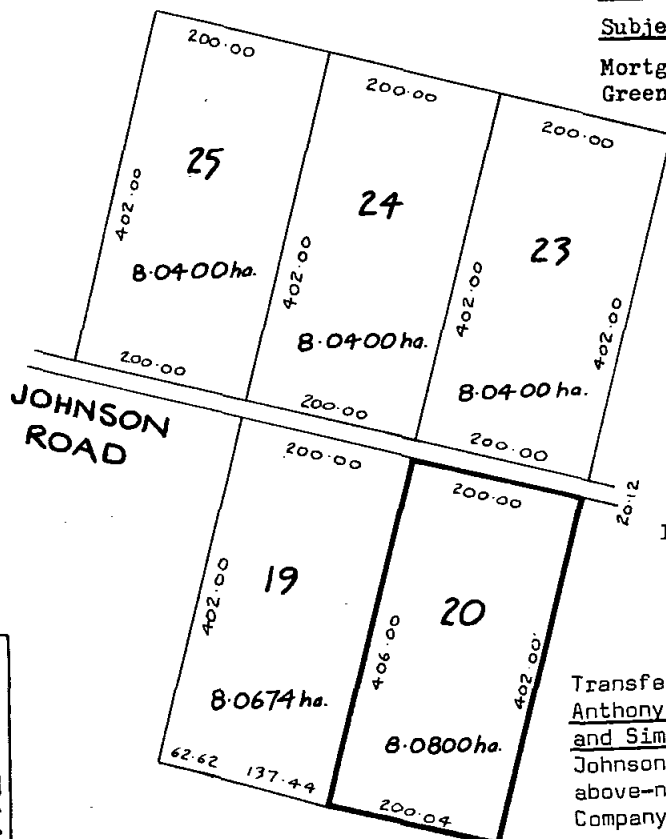
No. 15B / 1312

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 30th day of July one thousand nine hundred and seventy five under the seal of the District Land Registrar of the Land Registration District of CANTERBURY

WITNESSETH that MICHAEL ANTHONY WHITE-JOHNSON of West Melton, Farmer (as to an undivided 13/44 share) and MICHAEL ANTHONY WHITE-JOHNSON of West Melton, Farmer JUDITH MARY WHITE-JOHNSON his wife and SIMON HALLOWS WOOD of Christchurch, Solicitor (jointly inter se) as to an undivided 31/44 share —

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 8.0800 hectares or thereabouts situated in Block XI of the Rolleston Survey District being Lot 20 on Deposited Plan 35999 —



Assistant Land Registrar

Subject to:-

Mortgage 507892 to George Dean Greenwood and Harold Cameron Greenwood - 2.9.1975 at 10.45 a.m. (as varied once subsequently)

A.L.R.

Transmission 52250/1 of Mortgage 507892 to Harold Cameron Greenwood as Survivor - 24/9/1975 at 2.00 p.m.

A.L.R.

Transfer 52250/2 of Mortgage 507892 to Harold Cameron Greenwood, John Dean Greenwood and Victoria Carolyn Greenwood - 24/9/1975 at 2.00 p.m.

A.L.R.

Mortgage 242890/1 to Ryna Gould Guinness Limited - 10-9-1975 at 10.03a.m.

for A.L.R.

Transfer 266586/1 of their 31/44 share Michael Anthony White-Johnson, Judith Mary White-Johnson and Simon Hallows Wood to Michael Anthony White-Johnson and Judith Mary White-Johnson, both above-named and John Allen Dobson of Christchurch, Company Director - 18-3-1980 at 9.18a.m.

for A.L.R.

Measurements are Metric

PLAN No. 47115 LODGED 1/3/84
AND DEPOSITED 6/11/87

- OVER -

Register copy for L. & D. 69, 71, 72

No. 15B / 1312

NH

Mortgage 546928/1 to The Bank of America
Banking and Finance Corporation
- 20.5.1985 at 11.29a.m.
for A.L.R.

No. 477828/1 Compliance Certificate
pursuant to Section 306 (1)(f)(i)
Local Government Act 1974 -
6.3.1984 at 11.53am

OCT 710735/2 - Cancelled and new
6.11.1987 CT 30F/633 issued for
Lot 2 DP 47115 (pt
herein)

CANCELLED DUPLICATE DESTROYED

References

Prior C/T 14B/1259

Transfer No.

N/C. Order No. 63315/1

CANCELLED



Land and Deeds 69

REGISTER

No. 15K / 1098

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 17th day of December one thousand nine hundred and seventy five under the seal of the District Land Registrar of the Land Registration District of CANTERBURY

WITNESSETH that MICHAEL ANTHONY WHITE-JOHNSON of West Melton, Farmer (as to an undivided 13/44 share) and MICHAEL ANTHONY WHITE-JOHNSON of West Melton, Farmer, JUDITH MARY WHITE-JOHNSON his wife and SIMON HALLOWS WOOD of Christchurch, Solicitor (as to an undivided 31/44 share) ———

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 11.577 hectares or thereabouts situated in Blocks XI & XV of the Rolleston Survey District being Lot 30 on Deposited Plan 35998 ———



Assistant Land Registrar

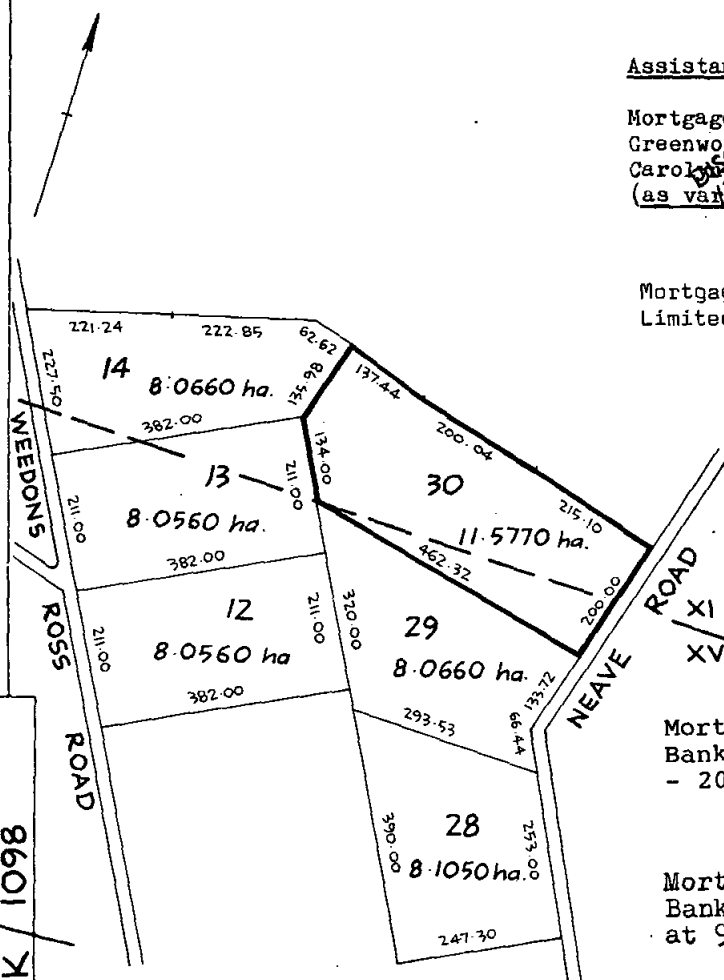
Mortgage 50389/1 (now) Harold Cameron Greenwood, John Deane Greenwood and Victoria Carolyn Greenwood - 2.9.1959 at 10.28 a.m. (as varied on subsequently)

Mortgage 242890/1 to The Equitable Guinness Limited - 10-9-1972 at 11.02a.m.

Transfer 266586/1 of their 31/44 share Michael Anthony White-Johnson, Judith Mary White-Johnson and Simon Hallows Wood to Michael Anthony White-Johnson and Judith Mary White-Johnson, both above-named and John Allen Dobson of Christchurch, Company Director - 18-3-1980 at 9.18a.m.

Mortgage 546928/1 to The Rural Banking and Finance Corporation Ltd - 20.5.1985 at 11.29a.m.

Mortgage 656453/1 to Westpac Banking Corporation - 12.1.1986 at 9.13 a.m.



Measurements are Metric

Transfer A29042/1 to Michael Anthony White-Johnson of West Melton, Farmer - 15.12.1992 at 11.38am

[Signature]
for A.L.R.

NOTICE OF CLAIM A34757/1 UNDER SECTION 42 OF THE MATRIMONIAL PROCEEDINGS ACT 1976 BY JUDITH MARY WHITE-JOHNSON - 28.1.1993 at 11.59am

[Signature]
for A.L.R.

Mortgage A117807/1 to ANZ Banking Group (New Zealand) Limited - 14.6.1994 at 11.36am

[Signature]
for A.L.R.

Transmission A209931/1 to Peter Frederick Whiteside of Christchurch, Solicitor and Diane Margaret White-Johnson of West Melton, Widow, as executors - 11.12.1995 at 12.00pm

[Signature]
for A.L.R.

PLAN No. 72773 LODGED 18/6/1996
AND DEPOSITED 24/9/96

No. A260166/1 Certificate pursuant to Section 224(c) Resource Management Act 1991 - 24.9.1996 at 11.56am

[Signature]
A.L.R.

OCT A260166/2,3 - Cancelled & CsT 42A/759-760 issued for Lots 1-2 DP 72773 respectively

[Signature]
A.L.R.

CANCELLED DUPLICATE DESTROYED



References

Prior C/T 15B/1312,1313

Transfer No.

N/C. Order No. 710735/2

Land and Deeds 69



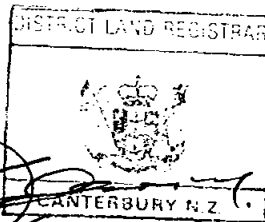
CANCELLED REGISTER

CANCELLED

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 6th day of November one thousand nine hundred and eighty-seven under the seal of the District Land Registrar of the Land Registration District of CANTERBURY MICHAEL ANTHONY WHITE-JOHNSON of West Melton, Farmer, JUDITH MARY WHITE-JOHNSON WITNESSETH that his wife and JOHN ALLEN DOBSON of Christchurch, Company Director jointly as to an undivided 31/44 share and the said MICHAEL ANTHONY WHITE-JOHNSON as to an undivided 13/44 share, are as tenants in common in the said shares ---

* seld of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 8.1260 hectares or thereabouts being Lot 2 Deposited Plan 47115 ---



ASSISTANT LAND REGISTRAR

PAPARUA COUNTY

Easement PLAN No. 53431 LODGED 27/17/1988
AND DEPOSITED 16/18/88

Transfer 973458/1 to David Leonard Philpott, Chartered Accountant and Susan Lorrimer Philpott, Clerk, both of Christchurch - 15.1.1992 at 11.11am

W. J. Stubbins
A.L.R.

Mortgage 973458/3 to Trust Bank Canterbury Limited - 15.1.1992 at 11.11am

W. J. Stubbins
A.L.R.

PLAN No. 71918 LODGED 29/12/96
AND DEPOSITED 13/6/1996

CAVEAT A238405/2 BY DAVID NOEL EVANS AND GAYNOR MAE EVANS - 21.5.1996 at 11.12AM

No. A242563/1 Certificate pursuant to Section 224 (c) Resource Management Act 1991 - 13.6.1996 at 11.58am

W. J. Stubbins
A.L.R.

W. J. Stubbins
A.L.R.

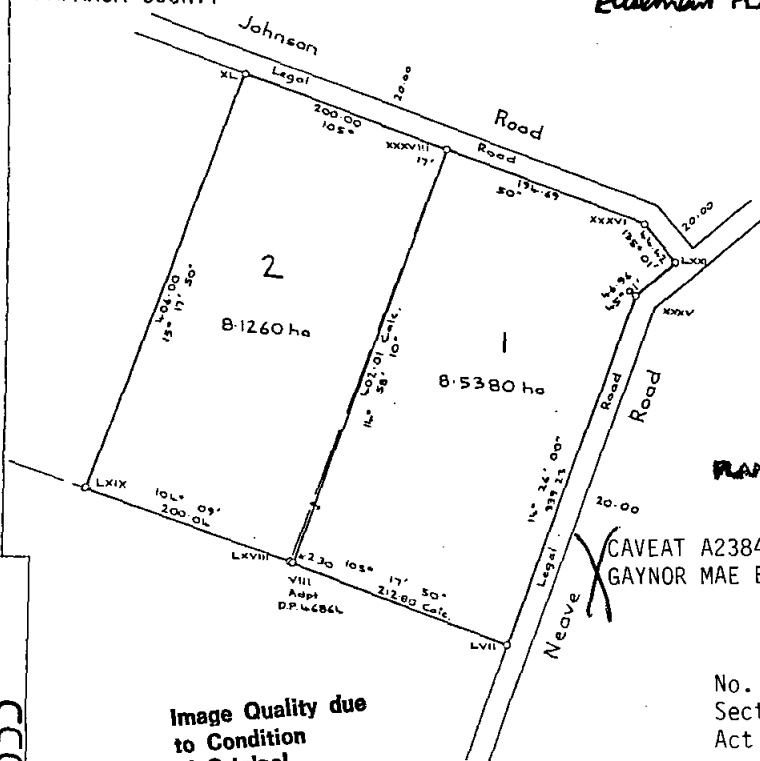


Image Quality due
to Condition
of Original

Measurements are Metric

OVER

No. 30F/633

No. 30F/633

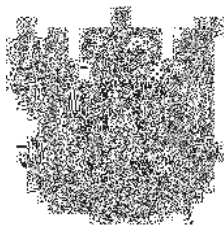
30F/633

OCT A242563/2, /3 - Cancelled and C's.T.
13.6.1996 41C/1088 and 41C/1089
issued for Lots 1 and 2
D.P.71918 respectively

A.L.R.
A.L.R.

CANCELLED DUPLICATE DESTROYED





RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Historical Search Copy




R.W. Muir
Registrar-General
of Land

Constituted as a Record of Title pursuant to Sections 7 and 12 of the Land Transfer Act 2017 - 12 November 2018

Identifier **CB41C/1089**

Land Registration District **Canterbury**

Date Issued 13 June 1996

Prior References

CB30F/633

Estate Fee Simple
Area 4.1256 hectares more or less
Legal Description Lot 2 Deposited Plan 71918
Original Registered Owners
Heather Clare Anderson and Graeme Robert Noel Lindsay

Interests

A336647.14 Transfer creating the following easements in gross - 29.1.1998 at 12.26 pm

Type	Servient Tenement	Easement Area	Grantee	Statutory Restriction
Convey electric power	Lot 2 Deposited Plan 71918 - herein	G DP 76680	Southpower Limited	

The above easement is subject to Section 243 (a) Resource Management Act 1991

A340540.3 Mortgage to The Hongkong and Shanghai Banking Corporation Limited - 26.2.1998 at 2.00 pm

5089897.2 Discharge of Mortgage A340540.3 - 3.10.2001 at 1:12 pm

5089897.3 CERTIFICATE PURSUANT TO SECTION 37 (2) BUILDING ACT 1991 (ALSO AFFECTS CB42A/759) - 3.10.2001 at 1:12 pm

5089897.4 Mortgage to ASB Bank Limited - 3.10.2001 at 1:12 pm

7968720.1 Variation of Mortgage 5089897.4 - 16.10.2008 at 9:00 am

10284030.1 Discharge of Mortgage 5089897.4 - 15.1.2016 at 5:02 pm

10284030.2 Transfer to Jeremy William Chapman, Anna Carole Chapman and Veritas (2015) Limited - 15.1.2016 at 5:02 pm

10284030.3 Mortgage to Bank of New Zealand - 15.1.2016 at 5:02 pm

11322375.1 Transfer to Jeremy William Chapman, Anna Carole Chapman and Duncan Cotterill Christchurch Trustee (2018) Limited - 13.5.2019 at 8:45 am

References:
Prior C/T 30F/633
Document No. A242563/3



LTO 69

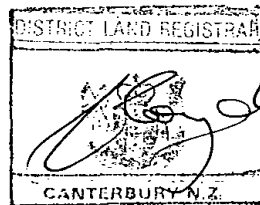
No. 41C/1089

REGISTER

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 13th day of June one thousand nine hundred and ninety-six under the seal of the District Land Registrar of the Land Registration District of CANTERBURY **WITNESSETH** that DAVID LEONARD PHILPOTT, Chartered Accountant and SUSAN LORRIMER PHILPOTT, Clerk, both of Christchurch are ---

As seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 4.1256 hectares, or thereabouts being Lot 2 Deposited Plan 71918 ---



ASSISTANT LAND REGISTRAR

Subject to:

Mortgage 973458/3 to Trust Bank
Canterbury Limited - 15.1.1992 at 11.11am

CAVEAT A238405/2 BY DAVID NOEL EVANS AND
GAYNOR MAE EVANS - 15.1.1996 AT 11.12AM

A242564

Transfer A272409/1 to David Noel
Evans and Gaynor Mae Evans, both of
Christchurch, Company Directors

Mortgage A272409/4 to Southland
Building Society

both on 5.12.1996 at 9.50am

Subject to a right to convey electric power
in gross over the part herein marked G on
DP 76680 to Southpower Limited created by
Transfer A336647.14

The above easement is subject to Section
243 (a) Resource Management Act 1991

all 29.1.1998 at 12.26

A340540.2 Transfer to Heather Clare
Anderson and Graeme Robert Noel Lindsay

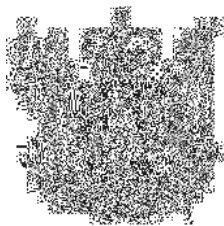
A340540.3 Mortgage to The Hongkong and
Shanghai Banking Corporation Limited

all 26.2.1998 at 2.00

for A.L.R.

PLAN No. 71918 LODGED 22/9/97
AND DEPOSITED

No. 41C/1089



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Historical Search Copy




R.W. Muir
Registrar-General
of Land

Constituted as a Record of Title pursuant to Sections 7 and 12 of the Land Transfer Act 2017 - 12 November 2018

Identifier **CB42A/759**
Land Registration District **Canterbury**
Date Issued 24 September 1996

Prior References
CB15K/1098

Estate Fee Simple
Area 4.0130 hectares more or less
Legal Description Lot 1 Deposited Plan 72773
Original Registered Owners
Heather Clare Anderson and Graeme Robert Noel Lindsay

Interests

A414674.2 Mortgage to The Hongkong and Shanghai Banking Corporation Limited - 8.7.1999 at 1.58 pm
5089897.1 Discharge of Mortgage A414674.2 - 3.10.2001 at 1:12 pm
5089897.3 CERTIFICATE PURSUANT TO SECTION 37 (2) BUILDING ACT 1991 (ALSO AFFECTS CB41C/1089) -
3.10.2001 at 1:12 pm
5089897.4 Mortgage to ASB Bank Limited - 3.10.2001 at 1:12 pm
7968720.1 Variation of Mortgage 5089897.4 - 16.10.2008 at 9:00 am
10284030.1 Discharge of Mortgage 5089897.4 - 15.1.2016 at 5:02 pm
10284030.2 Transfer to Jeremy William Chapman, Anna Carole Chapman and Veritas (2015) Limited - 15.1.2016 at 5:02
pm
10284030.3 Mortgage to Bank of New Zealand - 15.1.2016 at 5:02 pm
11322375.1 Transfer to Jeremy William Chapman, Anna Carole Chapman and Duncan Cotterill Christchurch Trustee
(2018) Limited - 13.5.2019 at 8:45 am

References:

Prior C/T 15K/1098

Document No. A260166/2



LTO 69

REGISTER

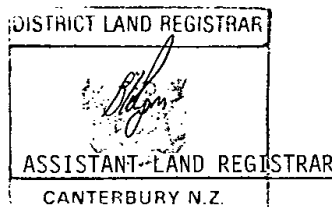
No. 42A/759

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 24th day of September one thousand nine hundred and ninety six under the seal of the District Land Registrar of the Land Registration District of CANTERBURY

WITNESSETH that PETER FREDERICK WHITESIDE of Christchurch, Solicitor and DIANE MARGARET WHITE-JOHNSON of West Melton, Widow are ---

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 4.0130 hectares or thereabouts being Lot 1 Deposited Plan 72773 ---



Subject to:

Mortgage A117807/1 to Shanghai Banking Group (New Zealand) Limited - RU
14.6.1994 at 11.36am

A.L.R.

A414674.1 Transfer to Heather Clare Anderson and Graeme Robert Noel Lindsay

A414674.2 Mortgage to The Hongkong and Shanghai Banking Corporation Limited

all 8.7.1999 at 1.58


for RGL

No. 42A/759

Doell form D 15

Register-book, *Cancelled*
Vol. 186, folio 213

186/213

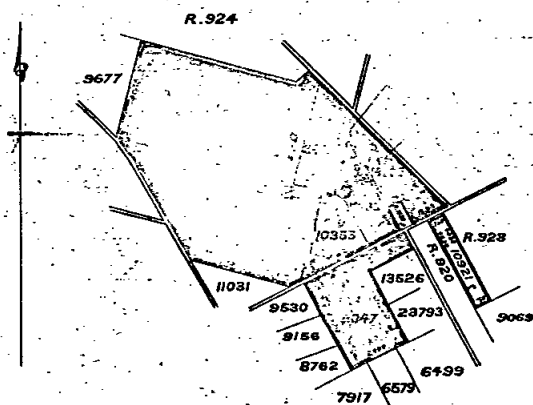
This Certificate, dated the second day of February, one thousand nine hundred and , under the hand and seal of the District Land Registrar of the Land Registration District of Wentworth, Witnesseth that William Nathaniel Barton Bend & Madams Farmers

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or indorsed hereon; subject also to any existing right of the Crown to take and lay off roads under the provisions of any Act of the General Assembly of New Zealand) in the land hereinafter described, as the same is delineated by the plan hereon, bordered green, be the several admeasurements a little more or less, that is to say: All ^{these} parcels of land containing together eight hundred and ninety-eight acres and two roods or thereabouts situated in blocks XL, XLV and XLVI of the Hatterton Survey District comprising Rural Sections 6417, 8047, 10355, 10921, 11565, 12155, 12155*, 14085, 14146, 18841, 24173 and 24173*

TO PART COLOURED RED.



W. B. Primes
District Land Registrar



Scale 40 chains to an inch

Mortgage 44830, produced 27 October
1908 at 11:20 am William Nathaniel
Carlow Bond to Thomas John
Deschard and Stanley Blumthay
and Melville Lawrence Gray
11-2-8-1908

Mortgage 44831 produced 27 Oct. 1900
at 11:20am William Nathaniel Carson
Road to Bingham, Stanley & Dorothy
and ~~W. N. Carson~~ *W. N. Carson*
12. 8. 1903. *W. N. Carson* and *L. R.*

Transfer book 78 produced 12 August 1963 at
12 10 p.m. William Nathaniel Carlson Bond
10 William Griffiths Smith of Liberty
Shaffermer. 12 2 1963

Mortgage No. 5796 produced 12 August 1893
at 1246 p.m. William Griffith Smith Co.
BASCHARD & B Broker Arthur Stanley
Gardner & Son, Inc. 100 Nassau Street N.Y.C.

Page 68259 reduced to August 1908
2 1/2 m. N. of Smith
H. O'Connell
DISCHARGED
Grady

Transfer 109331 of Mortgage 69282 produced
4 October, 1915, at this time Thomas John Teschemaker,
Arthur Stanley Ewerthy and Melville Jameson Gray to
Charles Newman Orbell of The Levels, Farmer. And the
said Thomas John Teschemaker and Arthur Stanley
Ewerthy.

156/213

Extension of Mortgage 69789
produced 26 November 1917 at
2.28 pm.

Transmission 12418 of Mortgage
to the above named Arthur Stirling Elworthy and Charles
Newman Orbell. Entered 4 September 1919 at 2.42 p.m.
ALR

Transfer 126906 produced 23 December 1919
at 10.10 pm William Griffiths Smith to
The New Zealand Refrigerating Company
Limited.

Mortgage 111678 produced 23 December 1919
at 10.10 pm The New Zealand Refrigerating
Company Limited to William Griffiths Smith.

Variation of the terms of Mortgage 111678
produced 1 May 1924 at 11 am.

Transfer 165211 produced 2 June 1925 at 2.44 pm.
The New Zealand Refrigerating Company
Limited to Basil Russel Russell
Montgomery of West Melton Shepherds.

Variation of the terms of Mortgage 111678 produced
25 September 1929 at 11.10 am.

Transmission 22078 of Mortgage 111678 to
Hunter Morris. Entered 26 April 1931 at
2.35 pm.

Variation of the terms of Mortgage 111678
produced 7 April 1935 at 2.30 pm.

Mortgage 184337 produced 8 April 1935 at 10.30
am. Basil Russel Russell Montgomery
to the New Zealand Refrigerating
Company Limited.

Mortgage 184346 produced 10 April 1935 at
2.20 pm. Basil Russel Russell Montgomery
to Henry, bothwell, Henry Denis Bothwell
and Miss Margaret Rogers.

Variation of the terms of Mortgage 111678 with
consent of Mortgagee under Mortgage 184346
produced 2 June 1936 at 2.55 pm.

13011 produced the 15 day of
March 1939 at 9.30 am.

of Adjustment under the Mortgage and Section
Rehabilitation Act, 1936 affecting above land
and Mortgages 111678, 184337 and discharging
Mortgage 184346.

Transfer 244327 produced 10 April
1942 at 11.25 am Basil Russel Russell
Montgomery to Herbert Cleamer
Coors of Woodens farmer.

Transfer 269331 of Mortgage 111678 produced
20 May 1942 at 1.15 pm Hunter Morris to
New Zealand Refrigerating Company Limited.

Variation of the terms of Mortgage 111678 produced
10 May 1942 at 2.30 pm.

338212 Transfer Herbert Cleamer
Coors to Lawrence Allan Watson
of Woodens farmer produced
13 April 1951 at 10.10 am.

338213 Mortgage Lawrence Allan
Watson to the New Zealand
Provident and General Insurance
Association Limited produced 13 June
1951 at 10.11 am.

363326 Mortgage Lawrence Allan
Watson to the New Zealand
Provident and General Insurance
Association Limited produced 29 July 1952 at 2.57 pm.

416432 Transfer Lawrence Allan Watson to
Maurice John Moon of West Melton Farmer
produced 22 April 1955 at 11.39 am.

416433 Mortgage Maurice John Moon to the
CERTIFICATE OF THE Church Property Trustees
produced 22 April 1955 at 12.40 pm.

Variation of the terms of Mortgage 416433
Produced 12 September 1958 at 12.23 p.m.

Discharge of Mortgage 416433 as to Rural
Sections 10355, 12133, 12133*, 14146, and
24173* produced 8/5/1959 at 2.50 pm.

Transfer 500716 of Rural Sections 10355,
12133, 12133*, 14146 and 24173*, Maurice
John Moon to Harold Annie Osborne and
John William Walker produced 8/5/1959 at
2.51 pm.

Transfer 505003 of Rural Sections
8047 and 18841 Maurice John Moon
to John Cairns and many Forest
Cairns and others produced 20/7/1959
at 10.6 am.

Transfer 506059 of Rural Sections 6417, 11565, 14033
and 24173 Maurice John Moon to Harold
Joan Greenwood produced 5/8/1959 at 7.55 am.

Transfer 518662 of Rural Section 10921
Maurice John Moon to John Flannery
Stubbsfield produced 23/2/1960 at 11.15 am.
828 120
Cancelled



Reference: Transfer No. 506059
Order for N/C No.



NEW ZEALAND

Register-book,
Vol. . , folio
797 . 14

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate, dated the Fifth day of August, one thousand nine hundred and fifty-nine under the hand and seal of the District Land Registrar of the Land Registration District of Canterbury WITNESSETH that HAROLD DEAN GREENWOOD of Teviotdale Sheepfarmer

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial under written or endorsed hereon, subject also to any existing right of the Crown to take and lay off roads under the provisions of any Act of the General Assembly of New Zealand) in the land hereinafter described, as the same is delineated by the plan hereon bordered green, be the several admeasurements, a little more or less, that is to say: All that parcel of land containing FIVE HUNDRED AND NINETY-SIX ACRES THREE RODS TWENTY-NINE PERCHES or thereabouts situated in Blocks XI and XV of the Rolleston Survey District being Rural Sections 6417, 11565, 14083 and 24173 —

District-
Assistant Land Registrar

Michigan 507892 Harold Dean Greenwood to Harold Dean
Greenwood and Irene Stummer wedding present 2/9/1959 at 10:28 am
P. Monal ALR

*Transmission 637902 of Mortgage 507842 -
the above named Harold Dean Greenwood
as Guarantor. Indorsed
dated 7/12/1964 at 5.56 pm 23/10/1964 at 10.35 and*

Joseph 637903 of Montague #507892 Anthony
Lawrence Westall of Lebanon and Harold
Dean Greenwood ^{Montague} of Lebanon
Entered 7/12/1964 at 1:57 pm

Transfer 700141 to Lophne
Patricia Greenwood of Ambler²
Schoolteacher as to a 3 1/2
share. 13/12/1966 at 9.40am

Transfer 700142 to Michael A. R.
Anthony White-Johnson
West Melton, Farmer as to
three 1/23 shares 13.12.1966
at 9.40.

Transfer 803598 of Clontar 507892 to Anthony Frederick Westall, 1511 1/2 Ave. Harold Cameron Greenwood and George Dean Greenwood - 26-7-1970 at 2:50 p.m. H.B.

Transfer 856725 of her share Daphne Patricia
Greenwood to Michael Anthony White-Johnson
of West Melton, farmer - 14.2.1972 at 1-51 pm

An aerial photograph showing several land parcels outlined in black. The parcels are labeled with their area measurements in square feet:

- R. 924**: Located at the top center.
- R S 9677**: Located on the left side.
- S. 6417**: A large central parcel.
- R S 14083**: A narrow vertical parcel on the right side.
- R S 24173**: A small parcel below R S 14083.
- T 19823^s**: A small parcel below R S 24173.
- R S 12133**: A parcel below T 19823^s.
- S. 11565**: A large parcel at the bottom left.
- R S 10355**: A large parcel at the bottom right.

The parcels are situated near roads labeled "Weedons / G. Ross Rd" and "Newtons Rd". Various boundary dimensions are also indicated along the edges of the parcels.

Total Area: 596.3.29

Scale : 40 chains to an inch

THIS REPRODUCTION ON A REDUCED SCALE
CERTIFIED TO BE A TRUE COPY OF THE
ORIGINAL REGISTER FOR THE PURPOSES OF
SECTION 215A LAND TRANSFER ACT 1952

Plan 33233 deposited 26/7/1973. 797/14

Transmission 933638 of the 31/44ths
share of Harold Dean Greenwood to
George Dean Greenwood and Harold
Cameron Greenwood as Trustees -
29.10.1973 at 12.35 a.m.

A.L.R.

Transfer 933639 presented for Registration
29.10.1973 and Withdrawn from Registration
21.11.1973

A.L.R.

Transfer 936192 of Mortgage 507892 to
George Dean Greenwood and Harold Cameron
Greenwood - 15.11.1973 at 12.20 p.m.

A.L.R.

PLAN No. 34585 DEPOSITED

Transmission 956745 of the share of Harold Dean
Greenwood to George Dean Greenwood of Amberley,
and Harold Cameron Greenwood of Christchurch
both Farmers as Executors - 7.5.1974 at 2.40p.m.

A.L.R.

Transfer 933639 of their share George Dean
Greenwood and Harold Cameron Greenwood to
Michael Anthony White-Johnson of West Melton
Farmer and Judith Mary White-Johnson his wife
and Simon Hallows Wood to Christchurch Solicitor
- 16.5.1974 at 2.50p.m.

A.L.R.

Transfer 956746 } New Cst issued for Parts Lots
17.7.1974 } 1,2 and 4 D.P.33233(herein)

Lot 1 - 13K/1360
Lot 2 - 13K/1361
Lot 4 - 13K/1362
and Balance being Lots 1,23 and
15 D.P.34585

Lot 1 - 13K/1363
Lot 2 - 13K/1364
Lot 3 - 13K/1365
Lot 15 - 13K/1366

A.L.R.

CANCELLED

DUPLICATE DESTROYED

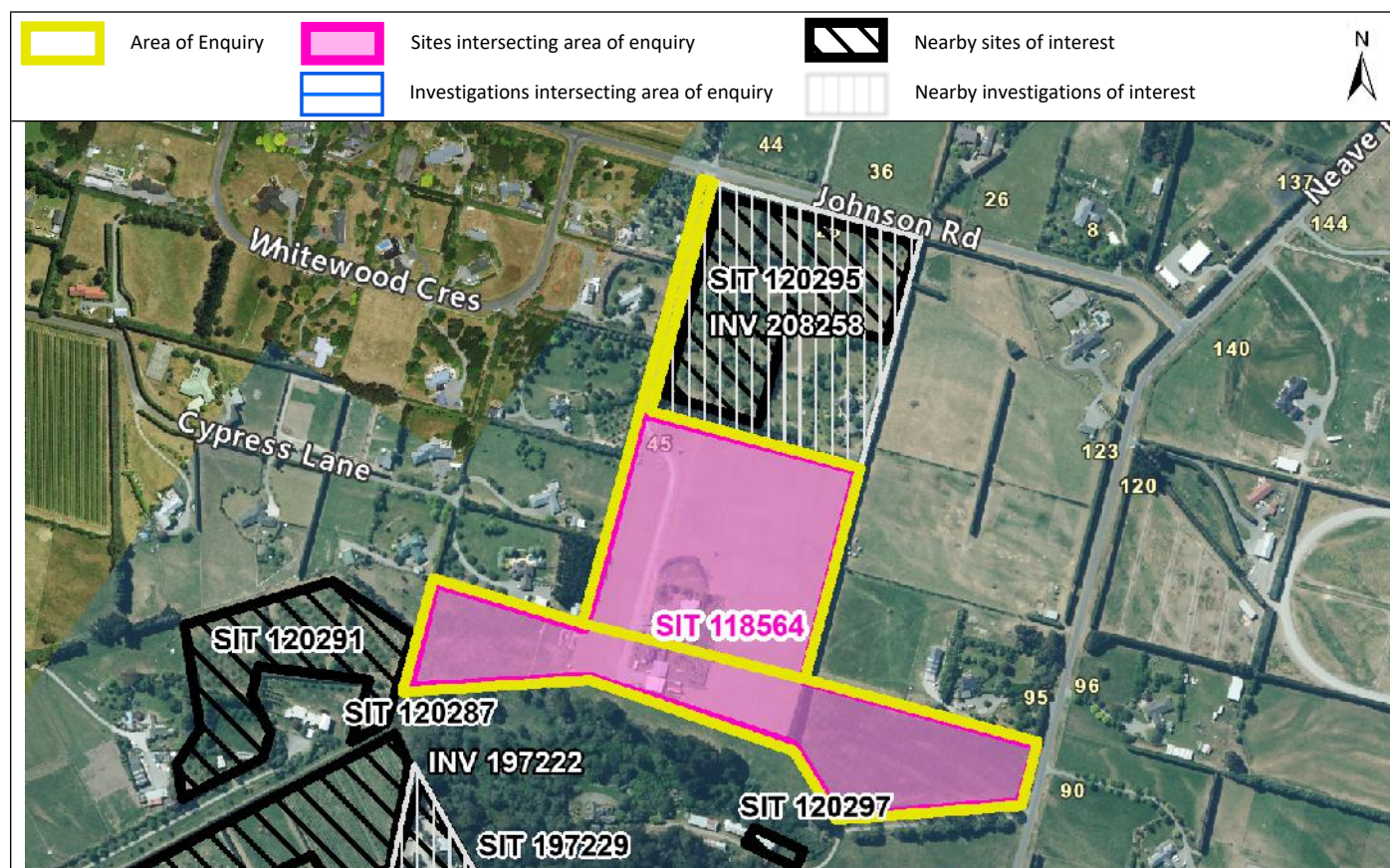


Appendix B – LLUR Statement

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 ENQ330458

Date generated: 25 October 2022
Land parcels: Lot 2 DP 71918
Lot 1 DP 72773



The information presented in this map is specific to the area within a 100m radius of property you have selected. Information on properties outside the search radius may not be shown on this map, even if the property is visible.

Sites at a glance

 Sites within enquiry area

Site number	Name	Location	HAIL activity(s)	Category
118564	45 Johnson Rd	45 Johnson Rd	A10 - Persistent pesticide bulk storage or use;	Not Investigated

Please note that the above table represents a summary of sites and HAILS intersecting the area of enquiry only.

Nearby sites

Site number	Name	Location	HAIL activity(s)	Category
120287	460 Weedons Ross Road, West Melton	460 Weedons Ross Road, West Melton	A10 - Persistent pesticide bulk storage or use;	Not Investigated
120291	464 Weedons Ross Road, West Melton	464 Weedons Ross Road, West Melton	A10 - Persistent pesticide bulk storage or use;	Not Investigated
120295	25 Johnson Road, West Melton	25 Johnson Road, West Melton		Verified Non-HAIL
120297	85 Neave Road, West Melton	85 Neave Road, West Melton	A8 - Livestock dip or spray race operations;	Not Investigated
197229	412 Weedons Ross Road, West Melton	412 Weedons Ross Road, West Melton	A17 - Storage tanks or drums for fuel, chemicals	Not Investigated

			or liquid waste;	
--	--	--	------------------	--

Please note that the above table represents a summary of sites and HAILs intersecting the area of enquiry within a 100m buffer.

More detail about the sites

Site 118564: 45 Johnson Rd (Intersects enquiry area.)

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

Location: 45 Johnson Rd
Legal description(s): Lot 1 DP 72773, Lot 2 DP 71918

HAIL activity(s):	Period from	Period to	HAIL activity
	2005	Present	Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds

Notes:

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

5 Nov 2014 Vineyard (Tresillian Estate)

5 Nov 2014 Lawyer phoned re: this site, advised this is a vineyard.
HC

5 Nov 2014 Area defined from 2005 to present aerial photographs. Horticultural activities (persistent pesticides) were noted in aerial photographs reviewed.



Investigations:

There are no investigations associated with this site.

Site 120287: 460 Weedons Ross Road, West Melton (Within 100m of enquiry area.)

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

Location: 460 Weedons Ross Road, West Melton
Legal description(s): Lot 1 DP 71606

HAIL activity(s):	Period from	Period to	HAIL activity
	2005	Present	Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds

Notes:

15 Dec 2015 This record was created as part of the Selwyn District Council 2015 HAIL identification project.

15 Dec 2015 Area defined from 2005 to present aerial photographs. Horticultural activities (persistent pesticides) were noted in aerial photographs reviewed.



Investigations:

There are no investigations associated with this site.

Site 120291: 464 Weedons Ross Road, West Melton (Within 100m of enquiry area.)

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

Location: 464 Weedons Ross Road, West Melton

Legal description(s): Lot 2 DP 71183

HAIL activity(s):	Period from	Period to	HAIL activity
	2000	Present	Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds

Notes:

15 Dec 2015 This record was created as part of the Selwyn District Council 2015 HAIL identification project.

15 Dec 2015 Area defined from 2000 to present aerial photographs. Horticultural activities (persistent pesticides) were noted in aerial photographs reviewed.



Investigations:

There are no investigations associated with this site.

Site 120295: 25 Johnson Road, West Melton (Within 100m of enquiry area.)

Category: Verified Non-HAIL

Definition: Site entered on register based on information found to be incorrect.

Location: 25 Johnson Road, West Melton

Legal description(s): Lot 1 DP 71918

HAIL activity(s):	Period from	Period to	HAIL activity
-------------------	-------------	-----------	---------------

Notes:

15 Dec 2015 This record was created as part of the Selwyn District Council 2015 HAIL identification project.

15 Dec 2015 Area defined from 2000 to present aerial photographs. Horticultural activities (persistent pesticides) were noted in aerial photographs reviewed.



Investigations:

INV 208258 **Soil Contamination Risk, Preliminary Site Investigation Report - 25 Johnson Road, West Melton**
Malloch Environmental Ltd - Preliminary Site Investigation
30 Jun 2018

Summary of investigation(s):

Malloch Environmental Ltd were engaged to complete a Preliminary Site Investigation (PSI) of 25 Johnson Road, West Melton. The PSI involved review of district and regional council records, historic aerial photographs and titles, and an interview with the current owner. Chestnut and ornamental trees were grown on the property from 2000 to present. The current owner who had owned the property for 22 years stated that no persistent pesticides were used on the trees. The consultant concluded that there is no evidence of HAIL activities which may have caused soil contamination which would pose a risk to human health and that the NESCS does not apply.

Conclusions: the site has been categorised as 'Verified non-HAIL'.

Site 120297: 85 Neave Road, West Melton (Within 100m of enquiry area.)

Category: Not Investigated

Definition: Verified HAIL has not been investigated.

Location: 85 Neave Road, West Melton

Legal description(s): Lot 2 DP 72773

HAIL activity(s):	Period from	Period to	HAIL activity
	1941	Present	Livestock dip or spray race operations

Notes:

15 Dec 2015

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

15 Dec 2015

Area defined from 1941 to present aerial photographs. A livestock dip or spray race was noted in aerial photographs reviewed.



Investigations:

There are no investigations associated with this site.

Site 197229: 412 Weedons Ross Road, West Melton (Within 100m of enquiry area.)

Category: Not Investigated

Definition: Verified HAIL has not been investigated.

Location: 412 Weedons Ross Road, West Melton

Legal description(s): Lot 2 DP 52643

HAIL activity(s):

Period from	Period to	HAIL activity
1990s	Present	Storage tanks or drums for fuel, chemicals or liquid waste

Notes:



Investigations:

INV 197222 **Soil Contamination Risk, Stage 1 - Preliminary Site Investigation Report, 412 Weedons Ross Road, West Melton, Canterbury**
Malloch Environmental Ltd - Preliminary Site Investigation
15 Oct 2017

Summary of investigation(s):

A Preliminary Site Investigation was undertaken in October 2017, at 412 Weedons Ross Road, West Melton, by Malloch Environmental Limited.

The investigation noted that a contractors yard was present at the rear of the property, and that it was likely that fuels and lubricants were stored in the area. This has been recorded with an activity and site on the LLUR. As no soil sampling took place, the investigation has been categorised as "not investigated".



Nearby investigations of interest

There are no investigations 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.

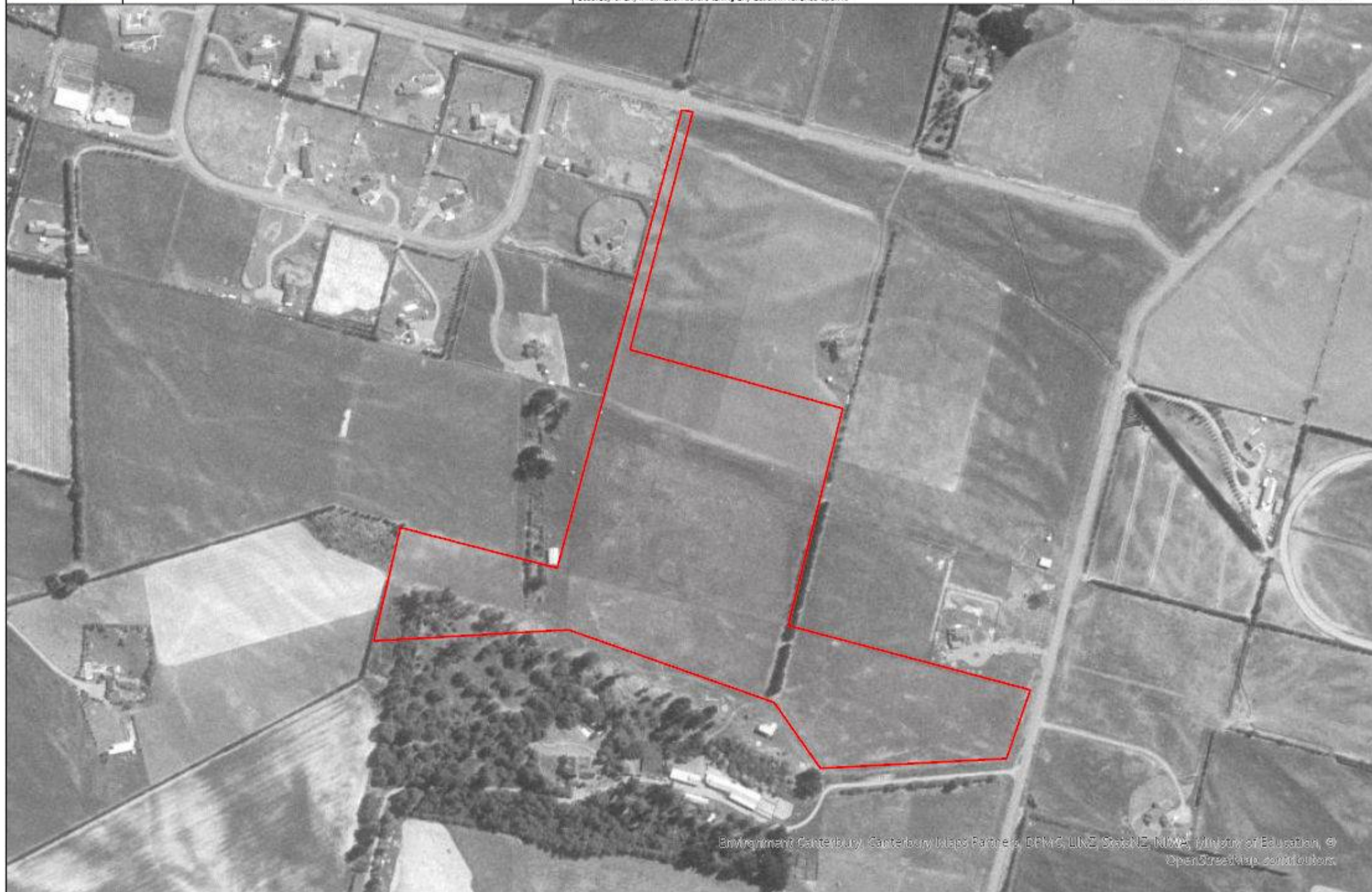
Appendix C – Historical Aerial Photographs



















Appendix D – Sample Location Plan



Approx. extent of site shown on plan



Specialist soil contamination experts,
keeping your project moving.

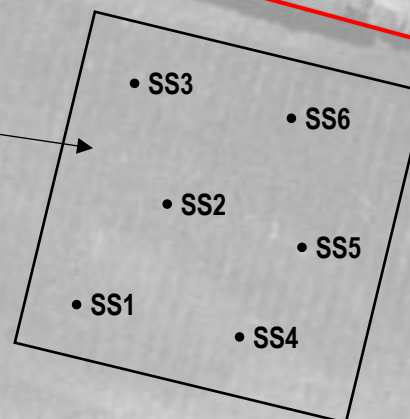
www.momentumenviro.co.nz

LEGEND

- **SS1** Soil sample location
laboratory and XRF tested

PLAN MUST BE PRINTED IN COLOUR

Proposed building
platform and residential
curtilage area



Graphic scale is approximate only



Date: 03 November 2022 Drawing No: 714/1

Sample Location Plan
45 Johnson Road, West Melton, Canterbury

Notes:

- 1 This plan has been prepared for soil contamination risk assessment purposes only. No liability is accepted if the plan is used for any other purposes.
- 2 Any measurements taken from this plan which are not dimensioned on the electronic copy are at the risk of the user.
- 3 Soil sample locations are approximate only

Appendix E – Tables of Laboratory Results

Table of Laboratory Results - 45 Johnson Road, West Melton, Canterbury

Date of sampling: 26 October 2022



Analyte	Sample Name:	SS1.1	SS1.2	SS2.1	SS3.1	SS4.1	SS5.1	SS6.1	RPD	Soil Guideline Values					
Soil Results	Lab Number:	22-39378-1	22-39378-2	22-39378-4	22-39378-6	22-39378-8	22-39378-10	22-39378-12	SS1.1 & SS1.2	Rural Residential 25% Produce	Commercial/ Industrial	Reference	Ecological Receptors	Reference	Background ₁
	Depth (mm)	0-50	0-50	0-50	0-50	0-50	0-50	0-50							
Heavy Metals															
Arsenic	mg/kg dry wt	4	4.1	4	3.8	4.1	4.1	4	2%	17	70	NES	70	ANZWQ	12.58
Cadmium	mg/kg dry wt	0.096	0.1	0.088	0.081	0.1	0.09	0.091	13%	1	1,300	NES	10	ANZWQ	0.19
Chromium	mg/kg dry wt	12	13.2	12.5	12	12	12	12.7	5%	290	6,300	NES	370	ANZWQ	22.70
Copper	mg/kg dry wt	5.1	5.3	5.1	4.6	5.1	4.7	5.1	4%	>10,000	>10,000	NES	270	ANZWQ	20.30
Lead	mg/kg dry wt	11.6	12	12.5	11.7	11.9	12.3	12	4%	160	3,300	NES	220	ANZWQ	40.96
Nickel	mg/kg dry wt	8.88	9.1	8.89	8.66	8.86	8.93	9.31	2%	400	6,000	NEPM	52	ANZWQ	20.70
Zinc	mg/kg dry wt	49	50	49.8	51	49.1	50.3	53.7	1%	7,400	400,000	NEPM	410	ANZWQ	93.94

Indicates result exceeds 'rural residential 25 % produce' guideline value
Indicates result exceeds ecological guideline value
Indicates result exceeds background value for soil type

NES - National Environmental Standard for Assessing and Managing Contaminants in Soils, MfE
NEPM - National Environmental Protection Measures 2013, Formerly NEPC, Australia
ANZWQ - Australian and New Zealand - Guidelines for Fresh and Marine Water Quality (online)- Sediment GV-high
₁ Concentrations for "Regional, Recent" soil group from Background concentrations in Canterbury soils, Tonkin and Taylor, July 2007

Appendix F – Tables of XRF Results

Table of XRF Results - 45 Johnson Road, West Melton, Canterbury

Date of testing: 26 October 2022

Units: ppm



Sample ID (Lab tested samples in BOLD)	Sample Depth	XRF Reading No	Date & Time	Test Duration (secs)	Total Recoverable Arsenic	
					Result	Error
SS1.1	0-50	125	26/10/2022 9:15	30.08	<LOD	5.6
SS1.1	0-50	126	26/10/2022 9:15	30.07	<LOD	6.43
SS1.1	0-50	127	26/10/2022 9:17	30.07	<LOD	5.86
SS1.3	200-250	128	26/10/2022 9:20	30.07	<LOD	7.26
SS1.3	200-250	129	26/10/2022 9:20	30.17	<LOD	7.47
SS1.3	200-250	130	26/10/2022 9:21	30.08	<LOD	6.09
SS2.1	0-50	131	26/10/2022 9:27	30.08	<LOD	6.51
SS2.1	0-50	132	26/10/2022 9:28	30.08	<LOD	7.33
SS2.1	0-50	133	26/10/2022 9:28	30.07	<LOD	6.16
SS2.2	200-250	134	26/10/2022 9:31	30.08	<LOD	6.24
SS2.2	200-250	135	26/10/2022 9:32	30.08	<LOD	7.45
SS2.2	200-250	136	26/10/2022 9:33	30.07	<LOD	6.83
SS3.1	0-50	137	26/10/2022 9:39	30.97	<LOD	6.52
SS3.1	0-50	138	26/10/2022 9:40	30.56	<LOD	6.2
SS3.1	0-50	139	26/10/2022 9:41	30.08	<LOD	7.1
SS3.2	200-250	140	26/10/2022 9:44	30.07	<LOD	6.42
SS3.2	200-250	141	26/10/2022 9:45	30.08	<LOD	6.29
SS3.2	200-250	142	26/10/2022 9:45	30.09	<LOD	6.65
SS4.1	0-50	143	26/10/2022 9:54	30.57	<LOD	6.5
SS4.1	0-50	144	26/10/2022 9:55	30.16	<LOD	6.61
SS4.1	0-50	145	26/10/2022 9:55	30.08	<LOD	6.62
SS4.2	200-250	146	26/10/2022 9:58	32.96	<LOD	7.39
SS4.2	200-250	147	26/10/2022 9:59	30.07	<LOD	6.13
SS4.2	200-250	148	26/10/2022 9:59	30.07	<LOD	6.39
BLANK	-	149	26/10/2022 10:03	30.08	<LOD	5.32
SS5.1	0-50	150	26/10/2022 10:06	30.07	<LOD	5.99
SS5.1	0-50	151	26/10/2022 10:06	30.97	<LOD	6.09
SS5.1	0-50	152	26/10/2022 10:07	30.16	<LOD	6.63
SS5.2	200-250	153	26/10/2022 10:09	30.08	<LOD	6.48
SS5.2	200-250	154	26/10/2022 10:10	30.08	<LOD	6.68
SS5.2	200-250	155	26/10/2022 10:10	30.56	<LOD	6.71
SS6.1	0-50	156	26/10/2022 10:17	30.07	<LOD	5.8
SS6.1	0-50	157	26/10/2022 10:18	30.07	<LOD	5.95
SS6.1	0-50	158	26/10/2022 10:19	30.08	<LOD	5.81
SS6.2	200-250	159	26/10/2022 10:21	30.56	<LOD	6.18
SS6.2	200-250	160	26/10/2022 10:22	30.16	<LOD	6.48
SS6.2	200-250	161	26/10/2022 10:22	30.08	<LOD	5.98
BLANK	-	162	26/10/2022 10:25	30.07	<LOD	4.78
Soil Guideline Values	Rural Residential 25% Produce				17	
	Commercial/Industrial Worker				70	
	Reference				NES	

Result exceeds 'rural residential 25% produce' SGV

Appendix G – Laboratory Reports



Certificate of Analysis

Momentum Environmental Ltd
19 Robertsons Road, Kirwee
Christchurch 7671

Attention: Nicola Peacock
Phone: 027 513 4057
Email: hollie@momentumenviro.co.nz

Sampling Site: 45 Johnson Road, West Melton

Lab Reference: 22-39378
Submitted by: Hollie Griffith
Date Received: 28/10/2022
Testing Initiated: 28/10/2022
Date Completed: 2/11/2022
Order Number:
Reference: 714

Report Comments

Samples were collected by yourselves (or your agent) and analysed as received at Analytica Laboratories. Samples were in acceptable condition unless otherwise noted on this report.
Specific testing dates are available on request.

Heavy Metals in Soil

Client Sample ID			SS1.1 0-50	SS1.2 0-50	SS2.1 0-50	SS3.1 0-50	SS4.1 0-50
Date Sampled			26/10/2022	26/10/2022	26/10/2022	26/10/2022	26/10/2022
Analyte	Unit	Reporting Limit	22-39378-1	22-39378-2	22-39378-4	22-39378-6	22-39378-8
Arsenic	mg/kg dry wt	0.125	4.0	4.1	4.0	3.8	4.1
Cadmium	mg/kg dry wt	0.005	0.096	0.10	0.088	0.081	0.10
Chromium	mg/kg dry wt	0.125	12	13.2	12.5	12	12
Copper	mg/kg dry wt	0.075	5.1	5.3	5.1	4.6	5.1
Lead	mg/kg dry wt	0.25	11.6	12.0	12.5	11.7	11.9
Nickel	mg/kg dry wt	0.05	8.88	9.10	8.89	8.66	8.86
Zinc	mg/kg dry wt	0.05	48.5	50.3	49.8	50.6	49.1

Heavy Metals in Soil

Client Sample ID			SS5.1 0-50	SS6.1 0-50
Date Sampled			26/10/2022	26/10/2022
Analyte	Unit	Reporting Limit	22-39378-10	22-39378-12
Arsenic	mg/kg dry wt	0.125	4.1	4.0
Cadmium	mg/kg dry wt	0.005	0.090	0.091
Chromium	mg/kg dry wt	0.125	12	12.7
Copper	mg/kg dry wt	0.075	4.7	5.1
Lead	mg/kg dry wt	0.25	12.3	12.0
Nickel	mg/kg dry wt	0.05	8.93	9.31
Zinc	mg/kg dry wt	0.05	50.3	53.7

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation with the exception of tests marked *, which are not accredited.
This test report shall not be reproduced except in full, without the written permission of Analytica Laboratories.

Method Summary

Elements in Soil

Samples dried and passed through a 2 mm sieve followed by acid digestion and analysis by ICP-MS. In accordance with in-house procedure based on US EPA method 200.8.



Thara Samarasinghe, B.Sc.
Technician



Astra Southwood
Lab Technician



INTERACTION BETWEEN EXISTING ACTIVITIES IN RURAL ZONES

When considering buying a rural property, especially if it is a small block, there are some important things that need to be considered.

Zoned rural these areas are foremost for Horticultural and Agricultural farming, plus their associated activities. As these activities operate 24 hours a day seven days a week, it is important to appreciate that as towns and cities have their own unique characteristics, so too do rural areas.

In particular your attention is drawn to the following matters that are part of the rural character of the District.

- (a) Use of agricultural chemicals including ground or aerial application of sprays and fertilisers, subject to manufacturers instructions, adopted codes of practice and other formal controls.
- (b) Some farming activities may commence early in the morning or operate through the night such as harvesting of crops, operation of irrigators or bringing dairy cows in for milking.
- (c) Although excessive noise is not permitted the noise levels associated with permitted land uses such as orchard sprayers, birdscarers, cowsheds (especially at dawn), woolsheds, use of working dogs, aircraft for rural management, tractors, headers and assorted agricultural machinery will in the majority of situations not be considered excessive. Farm animals may make a substantial amount of noise especially deer during the roar, bulls, animals at weaning time, roosters, donkeys and peacocks.
- (d) There are a variety of rural odours including those from established piggeries, spraying of animal effluent on pasture, silage, growing of certain crop species, burning of orchard prunings, hedge prunings and stubble, application of fertilisers, spray from farm chemicals and composting.
- (e) District roads are used to move stock from one part of a farm to another, or one property to another. It is therefore in the landowners best interests to maintain stock proof road boundary fences and gates.
- (f) The existing state of district roads serving the property must be recognised, particularly if any road is unsealed. Unsealed roads can create dust. Dust can also be generated from paddocks when they are being worked or during strong winds.
- (g) Fencelines along road frontages do not always follow the legal road boundary. The road boundary can frequently be located inside what looks like private property.
- (h) Rural dwellings depend upon septic tanks and on-site systems for the disposal of sewage. The septic tanks are the responsibility of the property owner and require regular maintenance to ensure proper functioning.
- (i) Council water supply is not available to every property. Where it is not available, and the landowner seeks to construct a new dwelling, the District Council will not issue a Code Compliance Certificate until the owner provides proof that a potable water supply is available.



IMPORTANT INFORMATION TO ALL NEW HOME/LAND OWNERS

STREET TREES AND IRRIGATION

The Selwyn District Council would like to make all new home/land owners and their contractors aware of the process of gaining approval to relocate/remove street trees, or alter Council irrigations systems.

In some areas of the Selwyn District, various types of linked dripper irrigation systems are installed to water establishing street trees. In some cases, the system has not been installed very deep in the ground. It is particularly important that any contractors who are going to be excavating within road berms are aware of this and excavate carefully to locate irrigation lines or drippers, or seek assistance from Council as to their presence/location before excavating. Similarly, care should be taken when excavating near street trees to avoid damage to tree roots.

The developer has put a lot of effort into enhancing the streetscape and providing an attractive environment within your subdivision. It is accepted that in some cases when a new home is built, a planted street tree and associated irrigation system may need to be shifted or removed to facilitate vehicle access to the site. Upon formal request, Council will consider giving approval for such changes to the initial planting plan or irrigation system on a case by case basis, after exploring all alternative options available.

Where it has been qualified that trees can be removed or relocated and/or an irrigation system needs to be shifted, then these works are to be organised by Council and/or the Developer and carried out by one of their approved contractors. All costs associated with these works are to be borne by the requesting land owner.

Please be aware, that in some situations, street trees can be removed and landscaping in a subdivision might still be under the management of the developer. In such cases, Council should still be contacted in the first instance, who will forward the request onto the developer for a response.

The following procedure is to be followed by a land owner who is wanting to request removal or relocation of a street tree and/or associated irrigation systems, in order to facilitate vehicle access to their property.

Requests for the removal or shifting of a tree must be made in writing to the Council Reserves Department stating:

- Street address of the property and the lot number;
- Name of the contact person;
- Contact details;
- Reason for the tree to be removed

On receipt of this formal request, Council staff will assess the following:

- Quality of the tree and whether or not the tree can successfully be moved;
- Whether an irrigation system is present and also needs shifting or decommissioning;
- Any conditions of sale by the developer;
- Any Resource Consent conditions;
- Streetscape theme and amenity value contribution of the tree.

If a tree is not able to be shifted and has to be removed, the landowner may also be required to pay for the cost to plant another tree of the same species and of similar size within the road berm as a replacement.

If an agent of the land owner makes the request to Council, then the agent is deemed to be the person responsible for the payment of all expenses relating to this procedure.

CARE FOR ESTABLISHING STREET TREES

Although the Developer and/or Council endeavours to water in newly planted street trees during their initial establishment years, the public is encouraged to assist with watering trees on your road berm. Establishing a tree in an urban environment faces many challenges so give your tree the best chance of reaching its full potential and value.

Council implements an annual programme of street tree inspections and maintenance throughout the district. Street tree maintenance is the responsibility of the Council, who employs a contractor to provide arboricultural services. It is critical that any other tree maintenance required is undertaken by our appointed contractor to ensure consistency in both quality and tree form.

Please contact us by lodging a Service request if your tree requires any tree maintenance.

Thank you for your assistance and co-operation

Reserves Maintenance Staff
Selwyn District Council

Be water wise



Reducing water use is important as Selwyn households tend to be high users of water. Residential properties connected to a Council supply used an average of 1,470 litres of water per day in 2012/13 and 1,386 litres per day in 2011/12. As a comparison, typical household use in New Zealand is around 675 litres per day.

Part of the reason why Selwyn households have higher water consumption is because properties tend to have large sections and over dry summers water use can increase

significantly. Additional bores can be added to increase the capacity of Council water supplies, but this is costly and unsustainable.

Over summer, demand for water is much higher than in winter, as people use more water to maintain their lawns. When demand for water is very high during dry summers, water restrictions can be introduced if necessary.

Demand is especially high at the peak times of 6–9am in the morning and 4–9pm in the evening, when people

use water for cooking, washing and dishwashers, and often water their lawns at the same time.

We are asking everyone to be careful about how they use water, especially in summer when there is more demand for water. Some areas like Rolleston and Darfield also pay for their water based on metered use so reducing your water consumption will mean you spend less on water bills.

How much water do you use?

This chart shows the amount of water typically used for different household activities. Once you know where your water is going, you can think about how you could reduce your water use. If your water is metered and billed this will help reduce how much you spend on water.

Kitchen—Activity	Water used	Buckets
Dishwashing by Hand	12 to 15 litres per wash	1–1½
Dishwasher	20 to 60 litres per wash	2–6
Drinking, Cooking, Cleaning	8 litres per person	¾–1
Bathroom—Activity	Water used	Buckets
Toilet	4.5 to 11 litres per flush	½–1
Bath	50 to 120 litres (half full)	5–12
Shower (8 minutes)	70 to 160 litres per 8 minutes	7–16
Handbasin	5 litres	½
Tap Running (Cleaning teeth, washing hands)	5 litres	½
Leaking Tap	200 litres	20
Laundry—Activity	Water used	Buckets
Washing Machine (Front loading)	23 litres per kg of dry clothing	4–5
Washing Machine (Top Loading)	31 litres per kg of dry clothing	5–6
Outside—Activity	Water used	Buckets
Hand Watering by Hose	600 to 900 litres per hour	60–90
Garden Sprinkler	Up to 1500 litres per hour	150
Car Wash with Hose	100 to 300 litres	10–30
Filling Swimming Pool	20,000 to 50,000 litres	2,000–5,000
Leaking Pipe (1.5mm hole)	300 litres per day	30



Tips for managing your water use

You can help manage your water consumption wisely by following these tips:

Your garden and lawn

- Water your garden and lawn every few days rather than every day. Wetting the soil surface every day encourages roots to develop at the surface, making them more vulnerable to hot dry spells.
- Water your garden and lawn outside of peak water usage hours (avoid 6am–9am, and 4pm–9pm). Watering in the early morning (before 6am) or late evening (after 9pm) will minimise evaporation loss. Also avoid watering in a Nor' West wind as the water will quickly evaporate.
- Using a watering can or hand watering plants by hose often uses far less water than a sprinkler.
- Use a timer to avoid overwatering as it makes plants more susceptible to fungus diseases and will leach out soil nutrients.
- Use mulch or cover the soil with a layer of organic matter to keep the soil moist. Mulches help protect plant roots from drying effects of sun and wind and also reduce weed growth.

- Check if the soil needs watering by digging down with a trowel and having a look. This is a more accurate way to see if watering is needed than looking at the surface.
- Check you have the right head for your sprinkler. Sprinklers should apply water gently so that it seeps into the soil. Some sprinklers apply water faster than the soil can absorb.
- When planting choose drought resistant plants that don't require a lot of water.



Outdoors

- Wash your car with a bucket of water rather than a hose.
- Use a broom rather than hosing down paths and driveways.
- Inspect hoses and taps both indoors and outdoors to check for leaks which waste water.
- Collect rainwater for use watering gardens and lawns.
- If you have a swimming pool, keep it covered to stop the water evaporating.

Indoors

- Reduce your water consumption at the peak times of 6-9am and 4-9pm. Easy ways to do this include using your washing machine after 9pm at night, and putting your dishwasher on just before you go to bed.
- Take a short shower instead of a bath.
- Don't switch on the dishwasher or washing machine until you have a full load.
- Use a half flush when using the toilet.



2 Norman Kirk Drive, Rolleston, New Zealand
PO Box 90, Rolleston 7643
Telephone (03) 347-2800
Toll-free Darfield (03) 318-8338
Enquiries: accounts.receivable@selwyn.govt.nz

Stephan Charles Knowler
18 Bella Vita Drive
Lincoln 7608

GST Number: 53-113-451
Invoice Date: 2/09/2025
Account No: 806547
Order No.

Tax Invoice 240388

Qty	Description	Rate	GST	Amount
L251916	2/09/25 : Stephan Charles Knowler : Stephan Charle			
2354143102	: Johnson Road			
	Non Residential - Land Information Memorandum		58.70	450.00
Subtotal				391.30
GST				58.70
Total Amount				\$450.00

(Please detach and return this portion with your payment)

REMITTANCE ADVICE

Stephan Charles Knowler
18 Bella Vita Drive
Lincoln 7608

Account No.: 806547
Invoice No.: 240388
Total Due: **\$450.00**

Amount Enclosed:

Payment can be made by internet banking to the following account: 03 1587 0050000 00.

Please enter your account number in the particulars field, and your invoice number in the code field.

You are welcome to pay your invoice online by visiting our website <https://www.selwyn.govt.nz>

