

**To**

Waimakariri District Council  
Rangiora

**From**

Woods  
Neil Cox – Survey Manager

W-REF: P21-414  
6 March 2024

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## Memorandum

### 1188 Main North Road / 20 Te Haunui Lane

The following is a brief summary and comment on some of the servicing aspects to support the proposed rezoning of above described land.

#### 1. Roading and Access

Access to the land proposed to be rezoned is currently by way of an existing right of way off Te Haunui Lane. This right of way crosses land currently owned by the Pegasus Golf Course. This right of way was set up as part of an agreement with the original developers of the Mapleham and Pegasus areas.

The right of way is of a short length being approximately 16 metres from the boundary of Te Haunui Lane and the applicant's property. The legal width of the right of way is 15 metres wide and there are splays where the right of way boundaries meet the road boundaries as would be expected of two roads intersecting.

This land that has been created for the right of way is of a sufficient width to become a legal road if this can be agreed with the existing owner in the future. The existing formation of the right of way is 5 metres wide.

A new road or right of way can be created to service approximately 12 lots of a similar size to other lots within the Mapleham development. This would be to the current council standards with services and utilities located within road or right of way corridor.

On the following page shown in Figure 1 there is a possible layout for the rezoned land. Due to the proposed shape of the land to be rezoned, the size of the lots, and a desire to have lots overlooking the golf course, there is not a huge scope for a layout to be vastly different to what is shown, though the road layout is liable to change.

Overall the proposed rezoning is of a minor nature as it is anticipated that only 12 lots will be created on the rezoned land.

#### 2. Rubbish Disposal and Service Vehicles

The legal width of the Right of Way (15m) is sufficient to allow construction of a formed right of way or road to accommodate Rubbish Trucks and other service vehicles to access the proposed allotments.

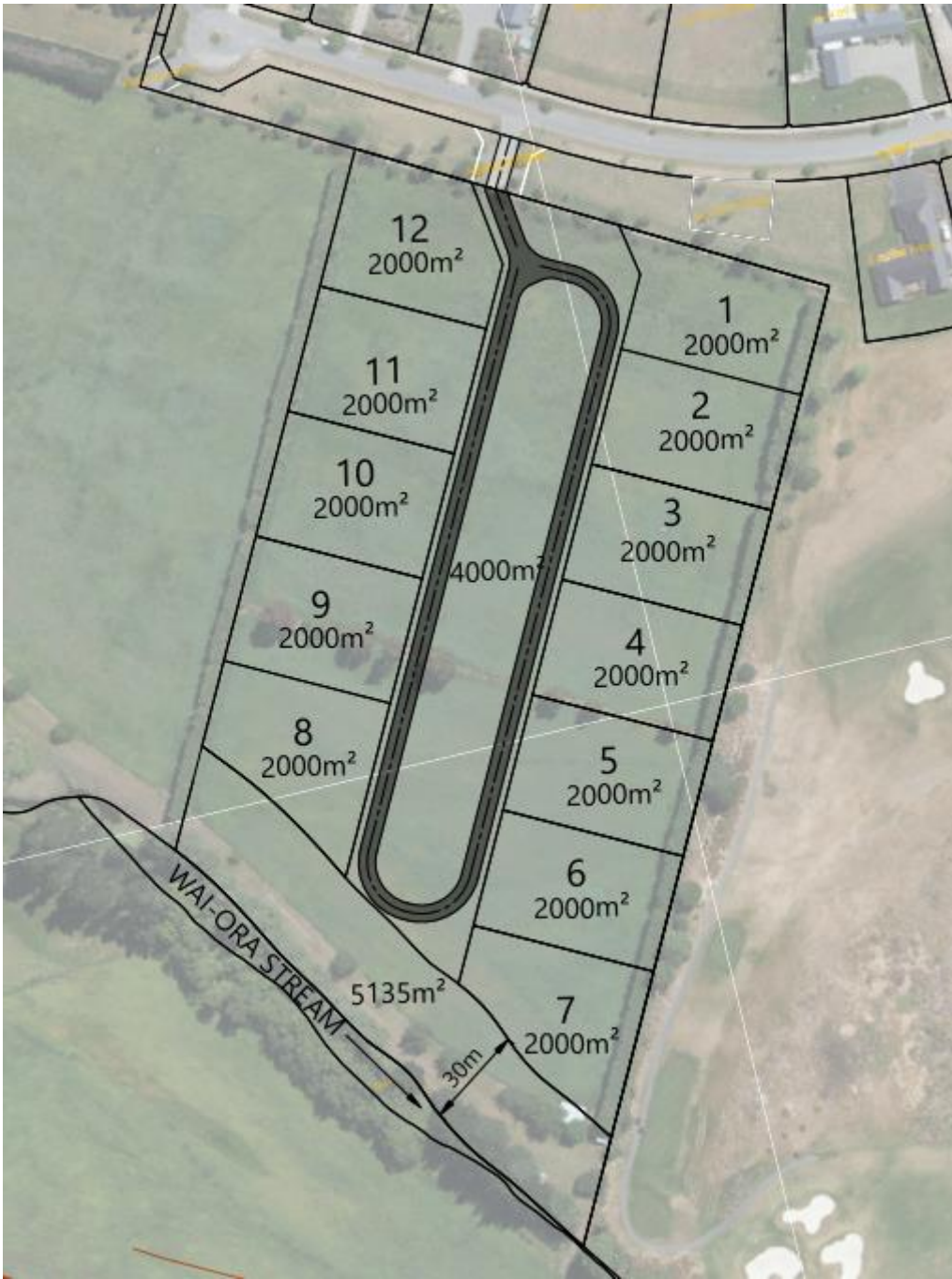


Figure 1

### 3. Earthworks and Flooding

Earthworks will be required on the site to facilitate any future development. The earthworks will involve cut and fill operations to create the roads, stormwater devices and residential lots with a desirable topography.

There is a minimum floor level requirement within the Mapleham area. This is currently set at being above RL 6.00m for the adjacent properties in Te Haunui Lane. The level of these properties is above RL 9.0m, therefore the minimum required floor level is achieved by the dwellings on those lots.

The land proposed for the rezoning varies in level and generally has a range from RL 8.3m by the Waioara Stream waterway along the southern boundary to RL 9.0m along the northern boundary. The site therefore meets the current minimum floor level. Allowing for revised minimum floor levels on updated modelling, it is anticipated any earthworks would still generally be of a minimal nature. There is also a lower depression

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on the site below the surrounding ground which has a low point of 7.7m. The site contours are shown on drawing P21-414-SU-0902 attached at Appendix A.

Figure 2 below shows the Council flood modelling for the site. The green colouring indicates there would be some isolated ponding of less than 300mm within that area for a 200 and 500 year storm event. This aligns with the contours on the site plan shown in Appendix A.

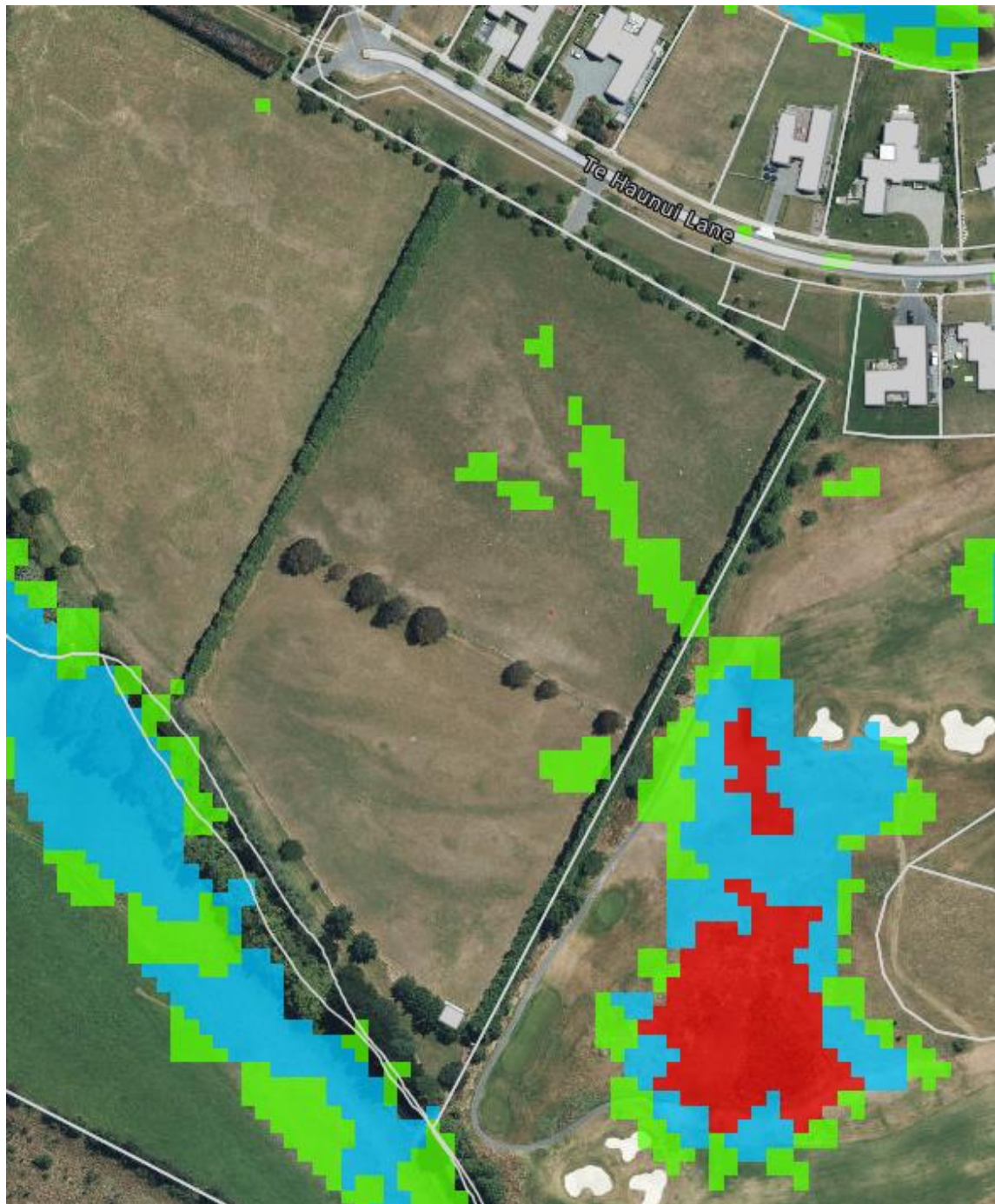


Figure 2.

There is a rural catchment of approximately 2.5ha to the west of the site. The catchment is a grassed paddock that is generally flat with a slight fall towards the western boundary of the site. There are no significant overland flowpaths indicated by the contours, and it is expected that shallow surface water may flow towards the site in major rainfall events. This shallow flow can easily be collected in a swale on the site boundary and directed to the Wai Ora stream. To ensure that the possible effects of flooding on the upstream property are mitigated, the swale will be appropriately sized to take the flows and an appropriate discharge point constructed to eliminate any erosion at point of discharge. Another effect would be that this water makes it

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way to the stream slightly further upstream than it does currently. This will have a minimal effect on the Wai Ora Stream.

Information available from the Council suggests that the land is not located within a Faultline rupture area and that the area is not considered at risk of a Tsunami.

Further information indicates the site is located within a liquefaction area. No observable liquefaction was noticed on the site during the Canterbury Earthquakes in 2010 – 2011. No liquefaction was observed at Mapleham and Pegasus developments during the earthquake sequence.

A further geotechnical report will be supplied to confirm the technical category of the rezoned land and any future earthworks will be monitored by a suitable qualified Geotechnical Engineer to ensure the land is suitable for dwellings.

An enquiry was made on the Ecan website and there is no known contamination issues on the site. At the time of subdivision a PSI can be undertaken and if required a DSI to determine if soil remediation is required. A copy of the LLUR from Environment Canterbury is attached.

## **4. Stormwater**

A stormwater management solution will be provided to meet council standards to manage stormwater quantity and quality effects of the proposed development.

The site lends itself to many options for stormwater management, as the site is not subject to flooding, it is flat and has stable ground and has an appropriate depth to groundwater. The EDC geotechnical investigations encountered groundwater at depths of between 2.2 and 2.7m and groundwater was not encountered in some of the investigation locations up to a depth of 3.6m.

The indicative development layout provides ample space to provide stormwater solutions within the proposed right of way. The indicative development layout sets aside approximately 4,000m<sup>2</sup> for stormwater management, however this can be increased or decreased to suit requirements. The details of the stormwater management solution will be developed with design for resource consent; however we expect that it will include dry basins to attenuate stormwater flows to below predevelopment flows. Discharge of the attenuated water will be to the stream or to ground or a combination of both. The feasibility of discharging water to ground will be investigated during the resource consent design phase, however there is enough land set aside for stormwater management to ensure that a complying system can be provided without relying on soakage.

Best practice stormwater treatment systems can be provided within the site to manage stormwater quality effects to meet council requirements.

Overall, due to the proposed low density of lots and dwellings, there is sufficient area available to ensure all stormwater effects from a proposed development can be mitigated.

## **5. Wastewater**

There is an existing public wastewater reticulation available in Te Haunui Lane. This is a low pressure STEP wastewater system and the same type of system is located throughout the Mapleham area. Each individual lot has their own septic tank, but the liquid waste is disposed of through the low-pressure system.

A 75mm MDPE main is located within Te Haunui Lane. This connects to a 160mm MDPE main located in Pegasus Boulevard. The existing valves are located within the carriageway on Te Haunui Lane. It is Woods understanding that a 63mm OD pipe may have been laid up to the boundary of the Stone property, however this will need to be confirmed before construction commences.

The location of the existing wastewater services are shown on the attached services plan P21-414-SU-0900 Rev2.

When the original Mapleham subdivision was undertaken, Beca undertook modelling for the wastewater system. This modelling specifies that the design of the system has been calculated and designed so that the system can accommodate the 12 lots that are proposed by the rezoning sought. The full report is held by the Council. We particularly reference Page 2 of the report confirming this shown in Figure 3 on the following page.

## 2 Sewage Flows

### 2.1 Number of Connections to System

The following summarises the allowance made for the total number of connections to the system:

**Table 2.2.1**  
**Mapleham Sewer Connections**

Descriptions	Number of Connections
Proposed Mapleham residential	98
Proposed golf course maintenance building	1
Proposed golf course toilet block	1
Proposed Clubhouse/ Restaurant	11
Proposed Driving Range/ Pro shop	1
Existing Molyneux property	1
Existing Scott property	4
Possible Stone property connection (agreement with neighbour to provide capacity - no immediate development plans)	12
Existing Homestead on Mapleham	2
<b>Total</b>	<b>131</b>

Figure 3

## 6. Water Supply

There is an existing reticulated water system available from Te Haunui Lane and is also located throughout Mapleham. Consultation with the Council Engineers has confirmed that the existing water network has capacity to service the development area.

The Council as-built information shows that there is a 150mm main located in Te Haunui Lane. There is also a 100mm line that has been blanked off heading towards the subject site, and a further 63mm submain. Council have confirmed that there is sufficient capacity to supply the 12 lots.

The final reticulation layout and design can be confirmed and calculated at the engineering approval stage for any future subdivision.

The location of the existing water services are shown on the attached services plan P21-414-SU-0900 Rev2.

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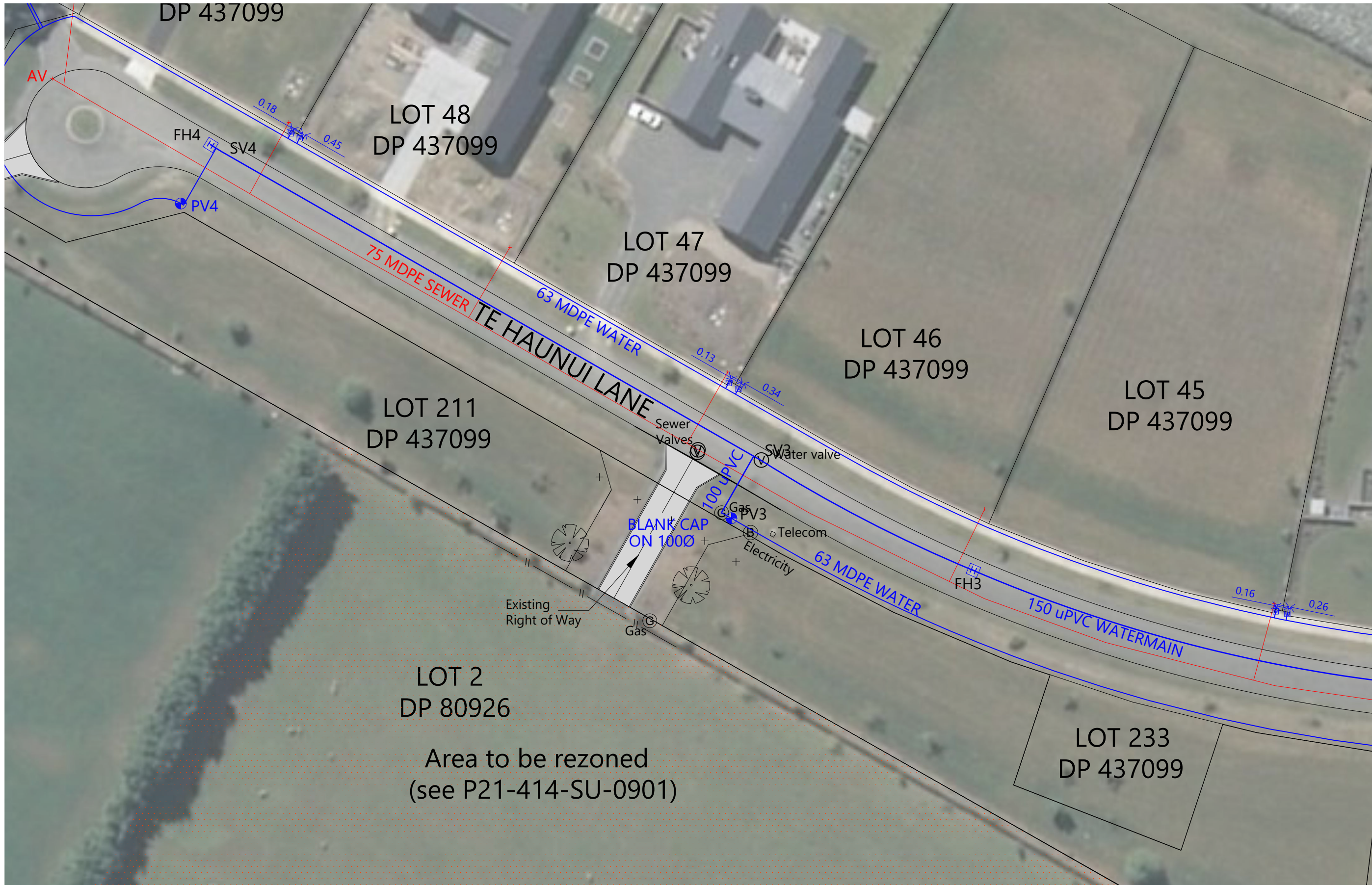
## 7. Utility Services

A gas valve and pipe to the boundary has been installed to service this land. The lateral is still visible . Power and telecommunications are located in Te Haunui Lane and can be extended to service the land proposed to be rezoned.

The location of the utility service boxes are shown on the attached services plan P21-414-SU-0900 Rev2.

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## Appendix A - Plans



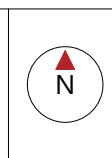
LOT 2  
DP 80926  
Area to be rezoned  
(see P21-414-SU-0901)

REVISION DETAILS	INT	DATE	SURVEYED	
1 FOR INFORMATION	NC	22.11.21	DESIGNED	
2 EXISTING SERVICES UPDATED	CC	13/12/2023	DRAWN	CC
			CHECKED	NC
			APPROVED	NC

1188 MAIN NORTH ROAD  
WOODEND

H A STONE

20 TE HAUNUI LANE / 1188 MAIN NORTH ROAD  
EXISTING SERVICES



STATUS	ISSUED FOR INFORMATION	REV
SCALE	1:500 @ A3	2
COUNCIL	WAIMAKARIRI	
DWG NO	P21-414-SU-0900	





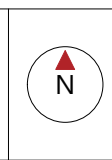
REVISION DETAILS		INT	DATE	SURVEYED	
1	FOR INFORMATION	NC	13.12.23	DESIGNED	
				DRAWN	CC
				CHECKED	NC
				APPROVED	NC

1188 MAIN NORTH ROAD  
WOODEND

H A STONE

## 20 TE HAUNUI LANE / 1188 MAIN NORTH ROAD

EXISTING CONTOURS

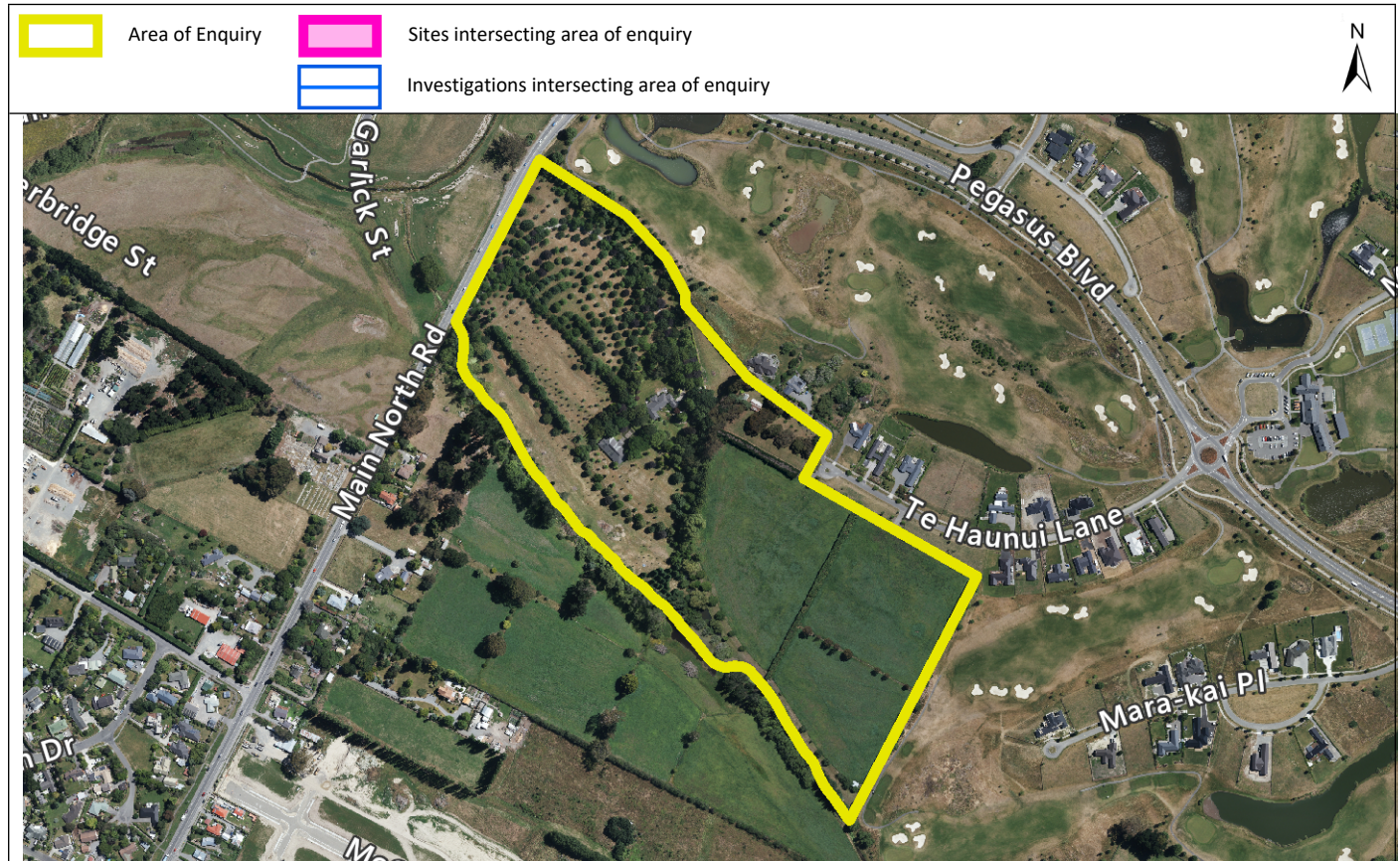


STATUS	ISSUED FOR INFORMATION	REV
SCALE	1:1500 @ A3	1
COUNCIL	WAIMAKARIRI	
DWG NO	P21-414-SU-0902	

# Property Statement from the Listed Land Use Register

Visit [ecan.govt.nz/HAIL](http://ecan.govt.nz/HAIL) for more information or contact Customer Services at [ecan.govt.nz/contact/](http://ecan.govt.nz/contact/) and quote ENQ363620

**Date generated:** 20 December 2023  
**Land parcels:** Lot 2 DP 80926



The information presented in this map is specific to the property you have selected. Information on nearby properties may not be shown on this map, even if the property is visible.

## Sites at a glance

 Sites within enquiry area

There are no sites associated with the area of enquiry.

## More detail about the sites

There are no sites associated with the area of enquiry.

## Disclaimer

The enclosed information is derived from Environment Canterbury's Listed Land Use Register and is made available to you under the Local Government Official Information and Meetings Act 1987.

The information contained in this report reflects the current records held by Environment Canterbury regarding the activities undertaken on the site, its possible contamination and based on that information, the categorisation of the site. Environment Canterbury has not verified the

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