

**This is a guide to undertaking pre-drilling assessments to meet the requirements of the Canterbury Regional Council Bore Installers Programme.**

You will note this procedure requires the checking of different separation distances from the same features. This reflects the separation distances required under different plans and bylaws.

**Before commencing works, for each bore you must:**

1. Obtain permission from the landowner.
2. Check the proposed site is not:
  - a. on contaminated land
  - b. within a Rūnanga Sensitive Area
  - c. in an area requiring archaeological authority
  - d. in an area protected by Environment Canterbury's (ECan's) [Flood Protection and Drainage Bylaw](#)
  - e. in a stream, river or lake bed.
3. Check the separation distances between the proposed site, surface water bodies, and structures.

**In most cases, issues relating to one or more of the above can be resolved by moving the location of the proposed bore/gallery.**

### 1. LANDOWNER PERMISSION

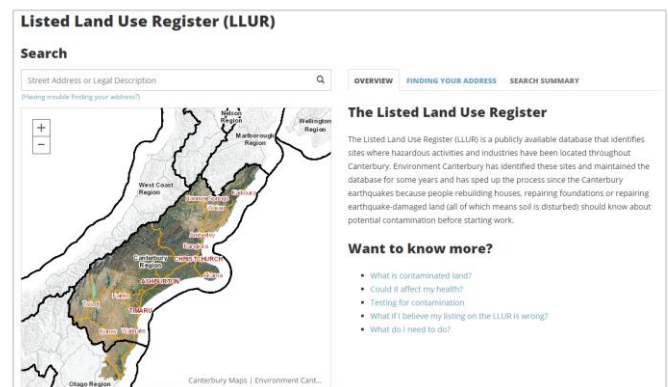
You must obtain written approval from the landowner prior to drilling a bore. Leaseholders installing bores will require permission from the landowner before commencing work.

For land owned by central or local government (ECan, Department of Conservation, New Zealand Transport Agency, Land Information New Zealand, district councils, etc.) we recommend that your client provide you with written approval from the appropriate authority prior to works commencing.

If undertaking works on the verge of a road, you or your client will need to contact the New Zealand Transport Authority and/or the territorial authority as there may be planning and/or health and safety rules specific to such an activity.

### 2. CONTAMINATED LAND CHECK

Environment Canterbury holds information about contaminated and potentially contaminated land in the [Listed Land Use Register](#). Search a property's address or legal description in the Register to see if there is any known or potential contamination on the property.



If we have no record of contamination at an address, you will see:

Thank you for your enquiry.

The Listed Land Use Register does not currently have any information about a Hazardous Activities and Industries List site on this land parcel.

If you would like a property statement, please fill in your details below.

If we do have record, you will see:

Thank you for your enquiry.

The Listed Land Use Register has information relating to this land parcel.

If you would like a property statement and / or a site management plan, please fill in your details below.

In this case, you will need to contact ECan's Contaminated Sites team ([Contaminated.Land@ecan.govt.nz](mailto:Contaminated.Land@ecan.govt.nz)). If the land is contaminated your client may require consent.

The Register may not capture all contaminated land information. We recommend talking to the occupant and/or territorial authority to assess whether land may be contaminated. Our Contaminated Sites team is available to answer any questions.

**For the remaining checks, we will use the [Tools for Well Drillers](#) map on [Canterbury Maps](#). We have included instructions on how to use this webpage at the rear of this document. We recommend consulting this prior to undertaking a pre-drill**

**assessment to ensure familiarity with the tools. If you require assistance or training, please contact us.**

Under the Layers List, click the arrow (▶) next to 'Well Drillers' to display the layers needed to complete your pre-drill assessment.

You will the layer's names are either light grey or black. Only layers with black coloured names will display on your map. For the layers with light grey names to display, you will need to zoom in (or out).

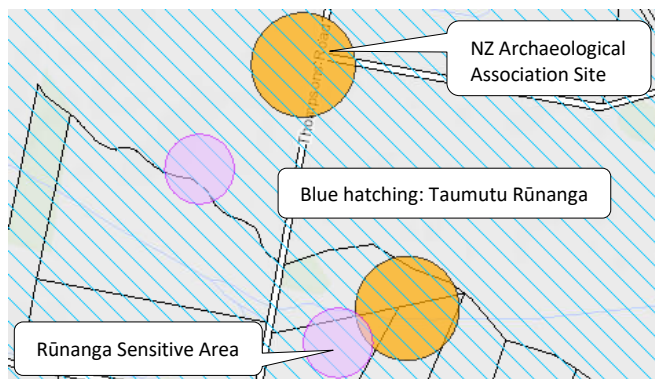
### 3. RŪNANGA SENSITIVE AREA CHECK

Tick the box next to 'Rūnanga Sensitive Areas – earthworks (ground disturbance)' for the areas to appear as pink shapes on the map. **If your proposed drill site is located within a Rūnanga Sensitive Area, you will need to consult with rūnanga before commencing works.**

To identify which rūnanga to consult, turn on the 'Environmental Advisory Entities (Ngāi Tahu)' layer, and click on your drill site location. A pop-up will appear containing the contact details of the relevant rūnanga. At the top of the pop-up, click on the arrow (▶) to see all relevant rūnanga if there are more than one for your property.

For more rūnanga contact details, click [here](#).

Rūnanga have seven days to respond to your query, if you have not had a reply within seven days you may proceed.



### 4. ARCHAEOLOGICAL AUTHORITY CHECK

Tick the box next to 'New Zealand Archaeological Association Sites' for the areas to appear as orange shapes on the map. **If your proposed drill site falls within an archaeological site, you must consult with Heritage New Zealand (HNZ) before commencing works.**

To advise HNZ of which site your works may disturb, click on the orange shape to get the archaeological site number (e.g. M35/123). You will need to describe to HNZ your proposed works to check whether an archaeological authority is required. If an

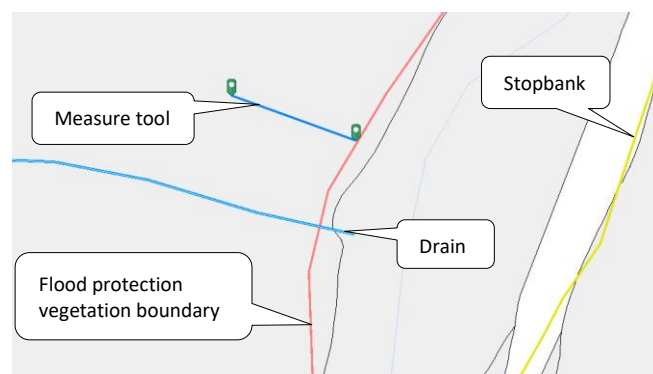
archaeological authority is required, ensure you have submitted your application, have had authority granted, and a copy received before proceeding with works. If HNZ advise authority is not required, you may proceed with works under [the Accidental Discovery Protocol](#).

### 5. FLOOD PROTECTION AND DRAINAGE BYLAW 2013 CHECK

Turn on the 'Drains and watercourses', 'Stopbanks', 'Stopbanks – 20m exclusion', 'Flood protection vegetation boundary', and 'Floodways' layers and measure the distance between the proposed location and these features using the Measurement (📏) tool.

The [Bylaw](#) requires that you obtain an Authority if your site is

- i. Within 7.5 m of a Stopbank (Rule 5.3(g)(h); yellow line)
- ii. Within 20 m of 'Stopbanks – 20m exclusion' along parts of the lower Waimakariri and Ashley/Rakahuri river reaches (Rule 5.3(h); orange line)
- iii. Within 7.5m of a drain/watercourse (Rule 5.1(e); double blue, purple, and green lines)
- iv. Between Stopbanks (Rule 5.3(g)(h); yellow and orange lines)
- v. Within a flood protection vegetation boundary (Rule 5.4; red lines) or floodway (Rule 5.2(d); green lines).



**If your client wants to install a bore/gallery within an area protected under the [Bylaw](#) they must fill out an [authority application form](#).** Obtaining an authority under the Bylaw is a reasonably quick process and free of charge.

If you have any queries regarding the Bylaw or want to discuss options with the ECan River Engineers, please contact us.

## 6. STREAM, RIVER AND LAKE BED CHECK

A stream/river/lake bed is the space of land between the flood protection vegetation lines, or the area the water of a stream/river/lake covers at its fullest without overtopping its banks.

Turn on the 'Lakes, Ponds and River Labels', 'Rivers and Streams – 1:50,000', and 'Lakes, Ponds and Rivers – 1:50,000' layers. If viewing at large scale, use the 1:250,000 option.

**If the site is within a stream/river/lake bed, your client may need resource consent.** If this is the case, we recommend that you or your client contact our Customer Services team to discuss.

## 7. LAND AND WATER REGIONAL PLAN CHECK

Turn on the 'River Flow and Stage Monitoring Sites' 'Transpower Lines', and 'Transpower Structure' layers, and measure the distance between the proposed location and these features using the Measurement

 tool.

The [Land and Water Regional Plan](#) requires that to be a permitted activity, a bore/gallery taking less than 5 L/s and 10 m<sup>3</sup> per day per property must be located a minimum of

- i. 20 m from any surface water body (rules 5.113 and 5.114)
- ii. 20 m from any property boundary (rules 5.113 and 5.114)
- iii. 10 m from any dam, weir, bridge, network utility pole, pylon or flood protection vegetation (rules 5.136 and 5.137)
- iv. 150 m from any water level recorder (rules 5.136 and 5.137)
- v. 50 m from any defence against water (rules 5.136 and 5.137).

The Plan requires new septic tanks to be 50 m from a bore (rules 5.7 and 5.8) for human health reasons. Though not required as part of this programme, we recommend not installing bores closer than 50 m to septic tanks. Check this by measuring the distance between your site and features in the 'Discharge to Land Consented Activities' and 'Discharge to Land Consented Activities Area' layers. Clicking on the map will bring up a pop-up which will tell you if the discharge is for effluent/sewage.

**If your proposed site is within a minimum separation distance, we recommend relocating.** If this is not possible, then you or your client should contact us to discuss options.

There are other layers on the map that may be of use to you when determining where to site your well.

These are:

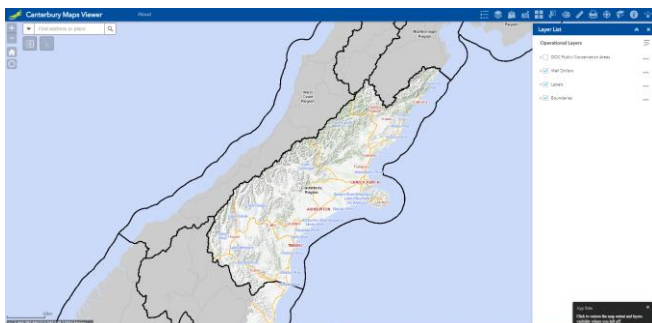
- Wells;
- Well Installation Consented Activities;
- Groundwater Take Consented Activities;
- Spring Locations;
- Community Supply Wells;
- Piezometric Contours;
- Wetland Areas;
- Wetlands of Representative Importance;
- Environment Canterbury Land;
- Canterbury Regional Wetlands.

### Drillers checklist

Pre-drilling:	During drilling:	Post-drilling:
<ul style="list-style-type: none"> <li>• Land-owner permission;</li> <li>• Contaminated land check;</li> <li>• Rūnanga Sensitive Area check;</li> <li>• Archaeological check;</li> <li>• Flood and Drainage Bylaw check;</li> <li>• River/lake bed check;</li> <li>• Land and Water Regional Plan check.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow accidental discovery protocol;</li> <li>• Follow procedures for discovery of contaminated material;</li> <li>• Complete headworks appropriately;</li> <li>• Cover/cap bore;</li> <li>• Comply with NZS 4411:2001;</li> <li>• Record bore details;</li> <li>• Record strata details.</li> </ul>	<ul style="list-style-type: none"> <li>• Submit details to Environment Canterbury.</li> </ul>

## GUIDE TO THE TOOLS FOR WELL DRILLERS MAP







The [Tools for Well Drillers](#) map is available on the [Canterbury Maps](#) website. If accessing from Canterbury Maps, enter 'Tools' into the search box, then click the link 'Tools for Well Drillers'.



The following table lists the map tools and how to use them.

Button	Description
	<b>Zoom in/out</b> zoom map view in or out, alternatively use your mouse wheel.
	<b>Default extent</b> change current map view back to default extent (extent shown when page is first loaded).
	<b>My location</b> if accessing Canterbury Maps off a device that has location services enabled, use this to zoom the map to your location and add a marker.
	<b>Swipe</b> select layer group from the dropdown list then move the vertical marker to show (left of the marker)/hide (right of the marker) the layer group.
	<b>Elevation profile</b> uses the Measurement tool to show changes in elevation along a length.
	<b>Search</b> select the layer you are wanting to search a feature in from the dropdown list, enter the value to be searched in the search field and hit the magnifying glass to find it. Alternatively, do not

Button	Description
	select a layer to search a value in all layers.
	<b>About</b> opens help menu – this is very useful for additional assistance in using the Canterbury Maps tools.
	<b>Pop-up window tools</b> click the left button to hide the window and the right to close.
	<b>Legend</b> opens window showing all active (turned on) layers.
	<p><b>Layer list</b> contains all available layers</p> <ul style="list-style-type: none"> <li>Expand headings to show nested layers by clicking the arrow (▸)</li> <li>Turn layers on and off using the checkbox next to each heading (☑)</li> <li>Headings shown in light grey will not be displayed on the map. Zoom in/out to change them to black and enable their display</li> <li>Click ⋮ to see options related to each layer</li> </ul>
	<b>Add data</b> allows you to add other map layers not included by default within the Tools for Well Drillers map.
	<b>Explore</b> allows easy access to other Canterbury Maps pages.
	<b>Basemap</b> change basemap used.
	<b>Select</b> tick the layer you want to select features from and draw an area over the target features. Click ⋮ to open the attribute table and view feature details. Click the Clear button at the top of the Select window to clear selected features.
	<b>Draw</b> tools to annotate your map.

Button	Description
	<p><b>Measurement</b> select the 'Area' or 'Distance' tool to measure. Ensure you are using the appropriate unit. Single click to start measuring and add corners; double click to end.</p>
	<p><b>Print</b> allows you to 'print to PDF'; creates a PDF file of your map based on current display.</p>
	<p><b>Locate</b> enter coordinates to zoom to a location.</p>
	<p><b>Bookmarks</b> access saved bookmarks.</p>
	<p><b>About</b> information about Canterbury Maps.</p>
	<p><b>Share</b> your edited map directly with others.</p>