



29 April 2025

**Our Ref:** 1250546-1 Issue 2  
**WR:** 22220

Mr Kevin Hutchings

Personal Information

Dear Mr Hutchings,

**RE: McCrae Groundwater Investigation MCCRAE**

At your request, Civiltest Pty Ltd attended the abovementioned area on 02 April 2025 to conduct a walkover of properties and streets affected by abnormal moisture conditions. Civiltest was also requested to review information provided by the client and residents and review topography and contour maps to determine likely flow paths.

Civiltest was provided with the following media for review.

File Title/Contents	File Type	Prepared/Provided By	Date
The McCrae Landslide 080425b	Powerpoint	Kevin Hutchings & McCrae Residents	08.04.2025
Facebook post from media showing a pothole in Coburn Avenue	Mp4 Video	Media Outlet	January 2025
Penny Lane water flow.MOV	MOV video	Kevin Hutchings & McCrae Residents	12.01.2025
Surface water flow downslope	Mp4 Video	Kevin Hutchings & McCrae Residents	07.01.2025
8 View Point Road Water flow	Mp4 Video	Kevin Hutchings & McCrae Residents	08.01.2025
Charlesworth Street and Waller Place flow	Mp4 Video	Kevin Hutchings & McCrae Residents	14.01.2025
Burst pipe site video (3 videos)	Mp4 Video	Kevin Hutchings & McCrae Residents	27.02.2025
McCrae Landslide Presentation Recording	Mp4 Video	Kevin Hutchings & McCrae Residents	08.04.2025

The information provided is summarised as follows:

- \* The location of the alleged burst pipe is on the corner of Bayview Road and Outlook Road, as shown in slides 19 and 22 of the provided PowerPoint presentation.
- \* The alleged burst water pipe was repaired on 31 December 2024 by South East Water, according to local residents.
- \* Damage to vegetation was observed in the area of the burst water pipe.
- \* The alleged groundwater flow path extends under the Mornington Peninsula Freeway to the North-West, then North-West down Charlesworth Street, and then crossing Coburn Avenue onto Prospect Hill Road.
- \* The presentation and provided media contain several photos of the surface water that was present on the abovementioned streets and the subsequent remediation works that occurred.
- \* The water emanating from the landslip escarpment at 10-12 View Point Road was observed on 7 January 2025 to be 12 litres per minute, which Civiltest believes to be approximately correct based on our assessment of the site on 6 January 2025.

Civiltest attended the local area detailed above on 02 April 2025. A site walkover was conducted starting at the alleged burst water pipe location, through the vegetated area to the North-west, around to the North-West side of the M11, down Charlesworth Street, across Coburn Avenue and down Prospect Hill Road to View Point Road, and concluded outside 10-12 View Point Road, the location of the two 2025 landslides.

In the vegetated area, the ground surface was dry, but evidence of potential recent disturbance and inundation was noted in the form of collapsed trees that appeared to have fallen recently due to the condition of the attached foliage, and also areas of migrated sediment were present.



**Site photograph 1:** Disturbed vegetation North of the burst pipe location

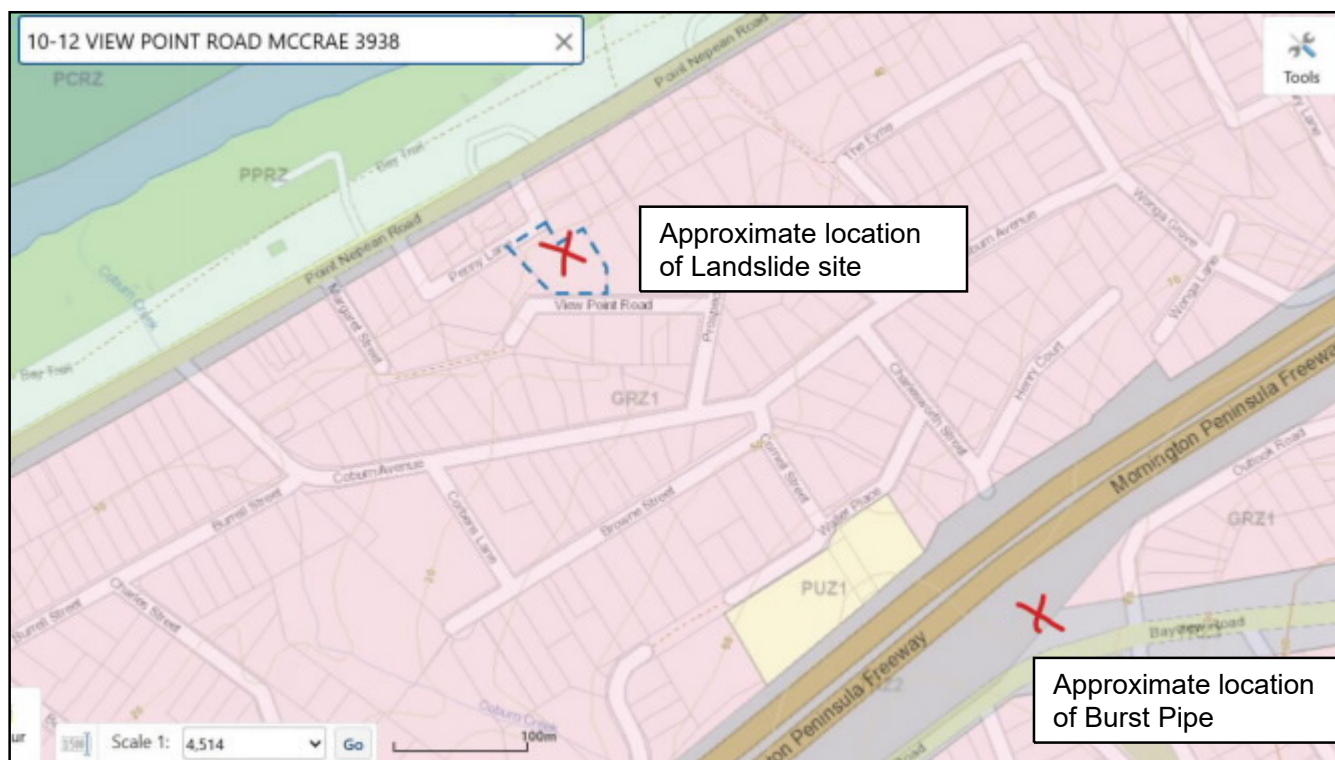


**Site photograph 2:** Example of recently deposited sediment, North of the burst location



All the areas where emergency roadworks were conducted were observed during the site walkover (Charlesworth Street, Charlesworth/Waller intersection, Coburn Avenue) and the areas were observed to be dry at the time of assessment. Small undulations, indents and settlements were noted in the nature strips along Charlesworth Street, which the client indicated was due to vehicles becoming bogged in the grass when it was inundated back in January.

The general observation was made that the alleged flow path approximately follows the natural contour of the local area. The following screenshot from VicPlan marks the approximate location of the burst pipe and the approximate location of the Landslide site.



**Image 1:** VicPlan screenshot

While VicPlan contours should not be used as a precise guide for determining site levels, they can help to provide an understanding of the general topography of the local area. It can be observed that the burst pipe location is located between 70-80 AHD on the map, and the landslide location is located around 30 AHD. Furthermore, the contour generally moves downwards in a North-Westerly direction, or the general direction of the foreshore. Based on the media provided to Civiltest, it appears that the water allegedly originating from the burst water pipe was moving downslope with the natural contour.

Civiltest did not observe the surface water flows recorded in January directly, apart from the water flow from the headscarp during the initial landslide inspection on 6 January 2025 at 10-12 View Point Road. However, based on the dates given for the media provided in the table above, it is possible that the water observed emanating from the landslip headscarp on 6 January 2025 (by Civiltest) and on 7 January 2025 (by the client) originated from the burst pipe location. Elevated pore pressure in the subsurface soils is a major contributing factor to most landslides, and it appeared that a large volume of water had accumulated in the subsurface soils around 10-12 View Point Road at the time of the 2025 landslips.

Much of the water was likely in the form of subsurface groundwater flow, moving through the surface soils overlying the Dromana Granite. The water likely would have accumulated through the flow path over many weeks, leading up to the January landslides. The exact timeframes that this saturation might occur are hard to determine and are highly dependent on the paths that the water takes through the ground. Groundwater movement via trench flow may be more rapid than permeation through the natural soils. Areas where there is uncompacted or highly permeable FILL material would also be able to accommodate larger volumes of groundwater flow. Subsequently, after the remediation of the burst pipe on 31 December 2024, the area affected took many weeks to dry out again.

The conclusions detailed in this report are partially based on information that Civiltest did not directly observe, but rather information that was provided as detailed in the above table. Should additional information become available, then Civiltest may need to review the conclusions drawn. It is recommended that a more comprehensive hydrogeological assessment of the area be conducted to form a management plan for local drainage.

The levels referred to above from VicPlan should be regarded as general and are not to be interpreted as surveyed confirmed levels. All levels should be checked and confirmed by a licensed surveying organisation or qualified personnel.

Should you require any further information regarding this matter, please do not hesitate to contact me at our Mornington office.

Yours faithfully,

Personal Information

**Daniel Tolan**  
**GEOTECHNICAL ENGINEER**  
**CIVILTEST PTY LTD**

**REF:** DT/jy/mg

***AMENDMENT:*** This report was first issued on 28 April 2025. Sections of this report were amended on 29 April 2025 and consequently this revised report now takes precedence over any previously dated report.