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Memo

To:	Amy Driessen Transportation and Economic Corridors	From:	Leslie Cho and Lawrence Onwude Stantec Consulting Ltd.
File:	123315222	Date:	October 31, 2025

Reference: North Central Region, Stony Plain Area, Site NC092 - Highway 37:02 Cattlepass Culvert BF 80823, Fall 2025 Instrumentation Monitoring Report

1.0 OBSERVATIONS

1.1 FIELD PROGRAM AND INSTRUMENTATION STATUS

NC092 was added to the Spring 2025 reading cycle and consisted of instrument readings for one standpipe piezometer (SP24-01). SP24-01 was initialized on February 12, 2024. **Figure 1** attached provides a schematic of the site. The instrument could not be read since the flush mount protective cover was paved over with asphalt. The site visit and observation were carried out by Akintola Fakinlede, GIT on October 6, 2025.

GPS coordinates of the instrument were surveyed using a Garmin eTrex 10 handheld GPS unit.

2.0 INTERPRETATION

2.1 GENERAL

Standpipe piezometer results are summarized in **Table NC092-1** and in the following sections with resulting plots attached.

2.2 INSTRUMENTATION READINGS

2.3.2 Piezometer

Prior to being paved over, water levels in SP24-01 increased by 0.9 m during the Spring 2025 reading cycle.

3.0 RECOMMENDATIONS

FUTURE WORK

The slope inclinometer is now buried under pavement and cannot be monitored without removal of the pavement surface. As such, it is recommended that this site be removed from the instrumentation monitoring program until replacement instruments are installed.

3.1 INSTRUMENTATION REPAIRS

No instrument repairs are required at this time.

Reference: **North Central Region, Stony Plain Area, Site NC092 - Highway 37:02 Cattlepass Culvert BF 80823, Fall 2025 Instrumentation Monitoring Report**

Table NC092-1: Fall 2025 Piezometer Reading Summary

Instrument Name	Date Initialized	Coordinates (1) (UTM 11U, NAD1983) (m)		Bottom Depth (m bgs)	Current Status	Highest Recorded Water Level (m bgs)	Measured Water Level (m bgs)	Previous Water Level June 30, 2025 (m bgs)	Change in Water Level (m) (3)
		Northing	Easting						
SP24-01	February 12, 2024	5955896	307597	5.5	Operational	June 30, 2025 (4.4)	-	4.4	-

(1) Operational Instruments were updated October 6, 2025, with approximate accuracy of ± 3 m
(2) 'bgs' refers to below ground surface
(3) Negative (-) indicates decrease in water level

CLOSING

We trust this instrumentation report meets your requirements. If you have any questions, please do not hesitate to contact the undersigned.

Stantec Consulting Ltd.

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October 31, 2025
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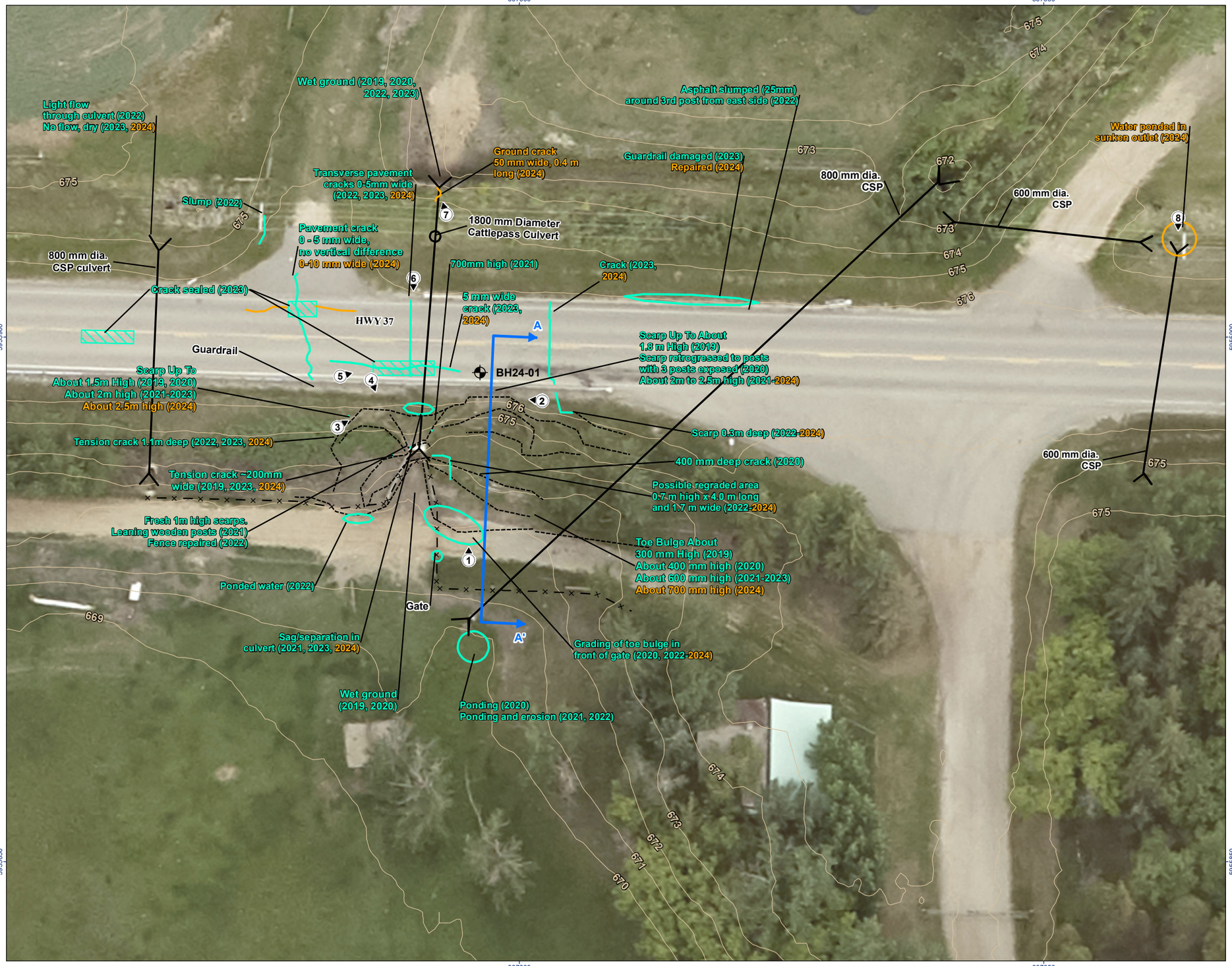
Attachment: Figure 1 – Site Plan Showing Instrument Locations
Standpipe Piezometer Level Depth vs Time Plot
Standpipe Piezometer Level Elevation vs Time Plot
NC092 Fall 2025 Instrument Location Photos

PERMIT TO PRACTICE
STANTEC CONSULTING LTD.
Signature ID# 74389
Date 6-Nov-2025
PERMIT NUMBER: P 0258
The Association of Professional Engineers and Geoscientists of Alberta



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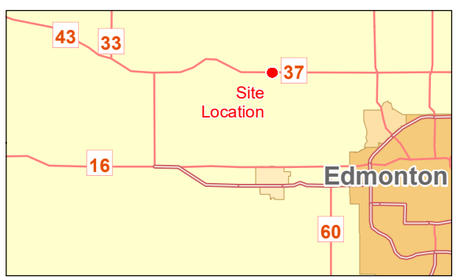
- Previous Observation
- 2024 Observation
- Fence
- Culvert
- Ground Elevation Contours (m
- Cross-Section Location
- Photo Number and Direction
- Borehole Location

N

0 7 14 metres

(At original document size of 11x17)
1:375

Notes
1. Coordinate System: NAD 1983 UTM Zone 12N
2. Data Sources: Geogratis, ©Department of Natural Resources Canada, All rights reserved.
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Project Location
NE-33-054-27-W4M, Alberta

Prepared by SP on 2024-10-08
TR by LC on 2024-10-08
IR by XL on 2024-10-08

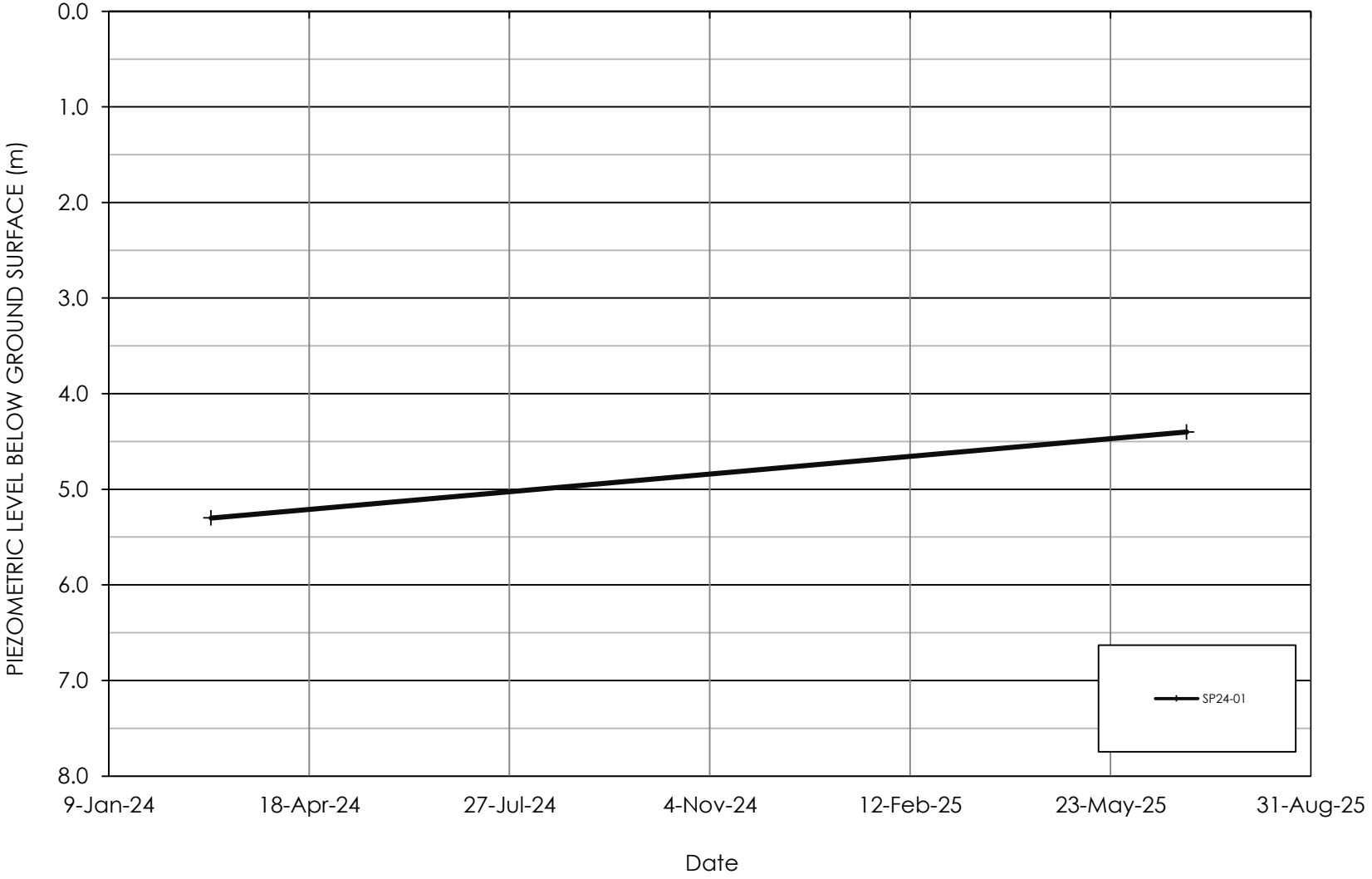
Client/Project 123315222
Transportation and Economic Corridors
Geohazard Monitoring Program
NC92 - Highway 37:2 Cattlepass Culvert

Figure No.
1

Title
Site Plan

C:\Users\sphanan\Documents\Project not yet set up\123315222\working_figures\fig_1_site_plan_nc92_hwy37_2_11x17.mxd Revised: 2024-10-11 By: sphanand

PIEZOMETER DATA



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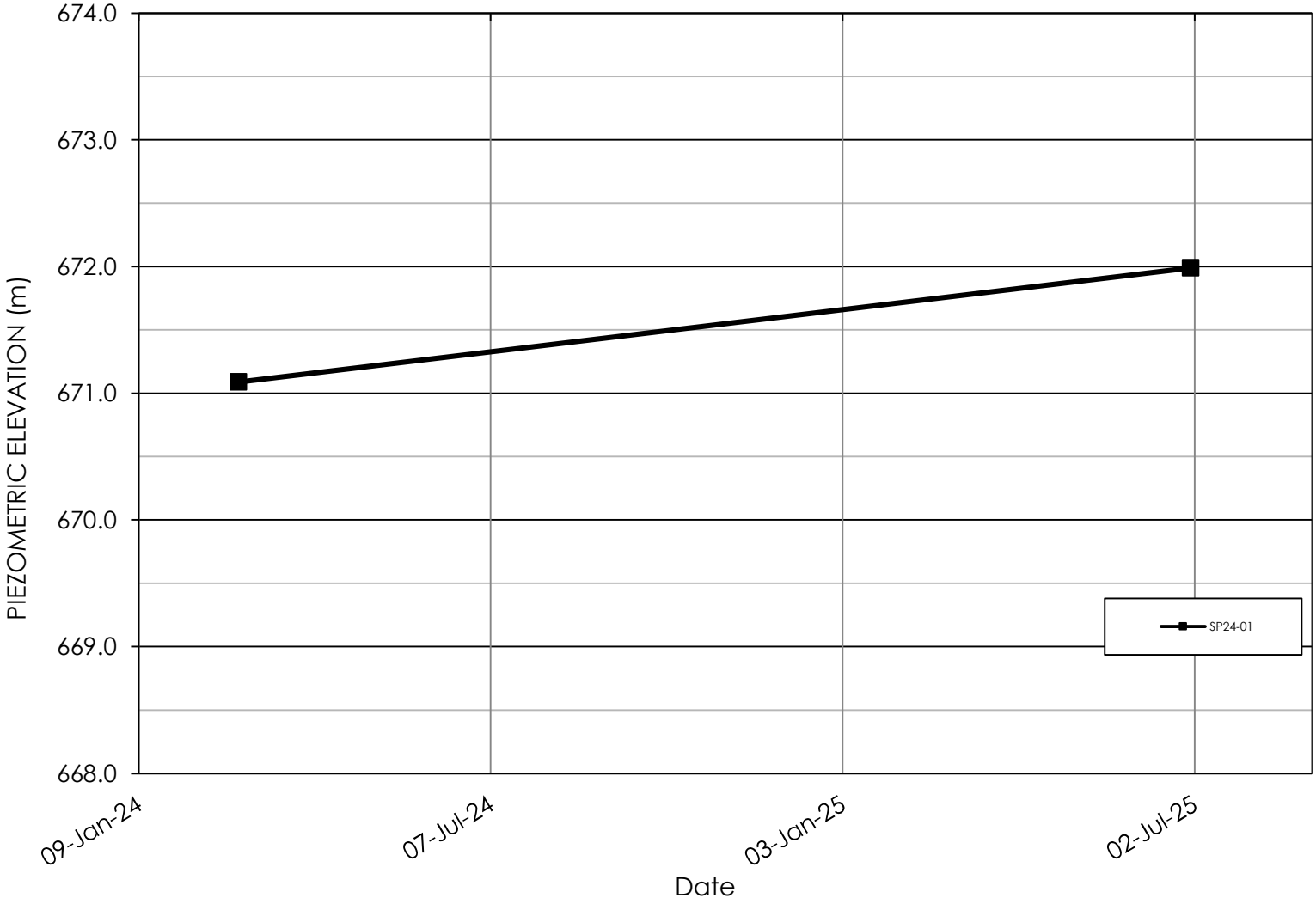
PIEZOMETER DATA



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NC092 2025 Fall Instrument Location

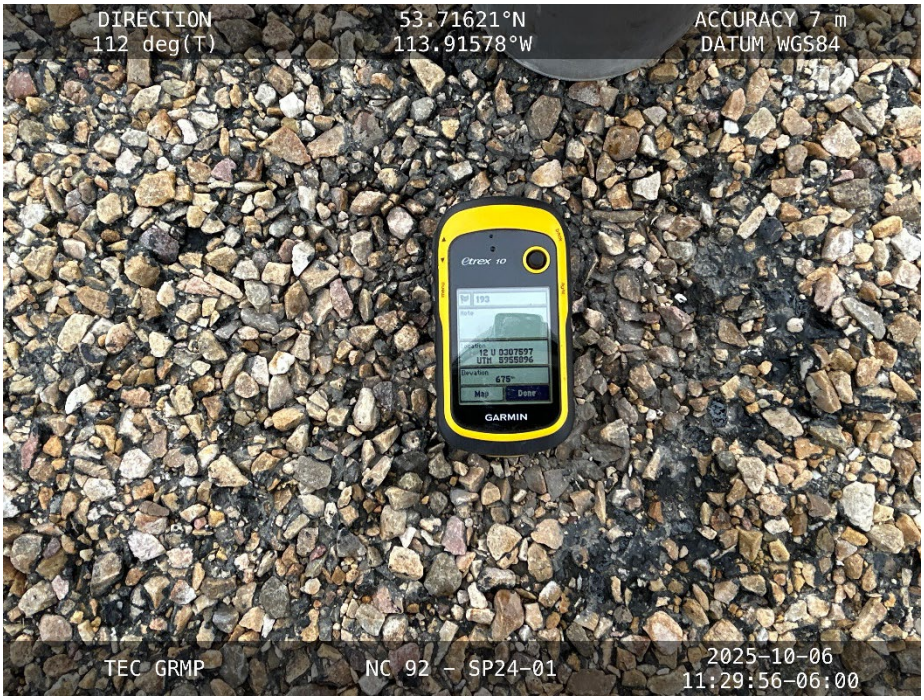

Photo 1: Location of SP24-01 marked by the handheld GPS device.

Photo 2: An overview of SP24-01 location, facing west.

NC092 2025 Fall Instrument Location

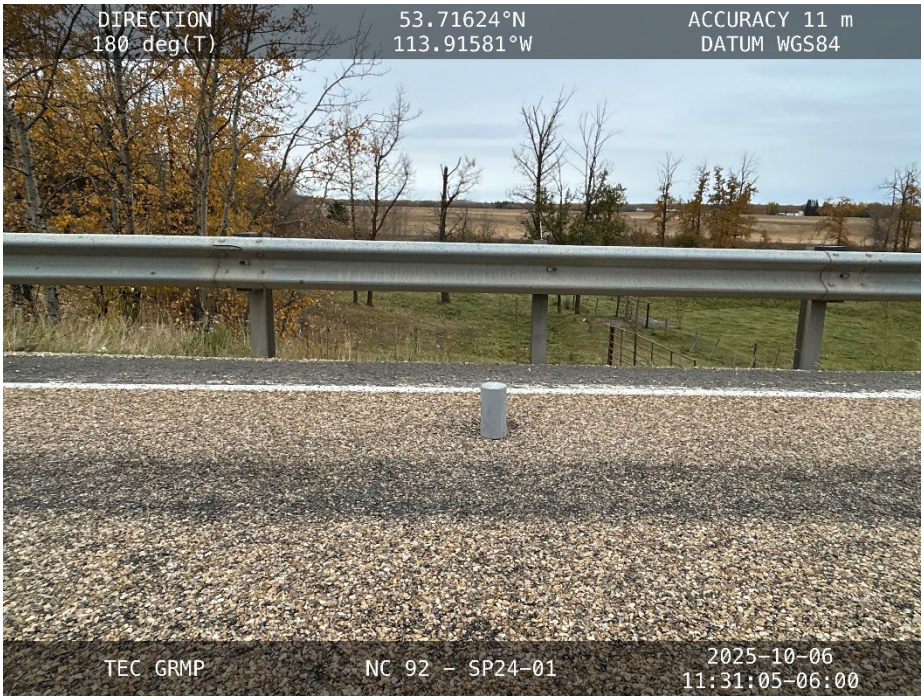

Photo 3: An overview of SP24-01 location, facing south.

Photo 4: An overview of SP24-01 location, facing east.

NC092 2025 Fall Instrument Location

Photo 5: An overview of SP24-01 location, facing north.