

SITE NUMBER AND NAME: NC081 – Evansburg Slide	HIGHWAY AND KM: 16A:08, km 8.230	PREVIOUS INSPECTION: June 13, 2024	CURRENT INSPECTION: May 20, 2025
LEGAL DESCRIPTION: SW 30-53-07-W5M	NAD83 COORDINATES: UTM11U 5941007N, 630586E		RISK ASSESSMENT: PF: 3 CF: 3 Total: 9
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 550 (2024)		CONTRACTOR MAINTENANCE AREA (CMA): 508	

SUMMARY OF INSTRUMENTATION: Two slope inclinometers and four standpipe piezometers functional	INSPECTED BY: Stantec: Leslie Cho, Sonja Pharand TEC: Kristen Tappenden
LAST READING DATE: May 8, 2025	
PRIMARY SITE ISSUE: Shallow slope failure on south side of highway.	
APPROXIMATE DIMENSIONS: 50 m wide by 9 m long x 2 m deep	
DATE OF ANY REMEDIAL ACTION: Berm constructed over culvert alignment in 2001. Highway resurfaced in 2009. Eastbound lane (EBL) patched in Fall 2014 and June 2017. An 8 – 10 tonne patch placed October 2020. Remedial construction including installation of a driven steel pile wall (HP 310x110) and highway reconstruction was completed in Fall 2021. The cracked pavement in the passenger side tire rut of the eastbound lane was sealed between June 2024 and May 2025.	

ITEM	CONDITIONS EXIST		DESCRIPTION AND LOCATION	NOTICEABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress		X	Pavement is still in good condition since repair.		X
Slope Movement	X		SI21-01 and 02 show small movements at the pile top. Bulging on south slope near creek.		X
Erosion	X		Minor erosion in the south ditch, on west side of culvert adjacent to property access road.		X
Seepage		X			X
Bridge/Culvert Distress		X			X

COMMENTS
<ul style="list-style-type: none"> Pavement cracks approximately 3 mm to 5 mm wide and 250 mm long were observed in the westbound lane's northern wheel path, and appear similar to the 2022 inspection. The repaired pavement appears in good condition (Photos 1 & 9) Pavement cracking was observed on either side of the 2021 repair zone due to the joint between old and new pavement (Photos 2 & 3). SI21-01 and SI21-02 are installed within the pile wall. Small deflections were observed at the pile top which is likely due to loading and deflection of the pile wall. Piezometric levels range from 2.1 m to 4.2 m below ground surface and are approximately at creek elevation, similar to previous years. Erosion/bare ground was noted at the west end of the culvert crossing the property access road at the southwest corner of the project extents (Photo 4). The east end of the culvert is well vegetated. The ground around the flush mounts installed for SI21-01 and SI21-02 has settled, similar to the condition in 2022 and 2024. This is likely due to less compaction around the inclinometers by the Contractors to avoid damage to the instrument.

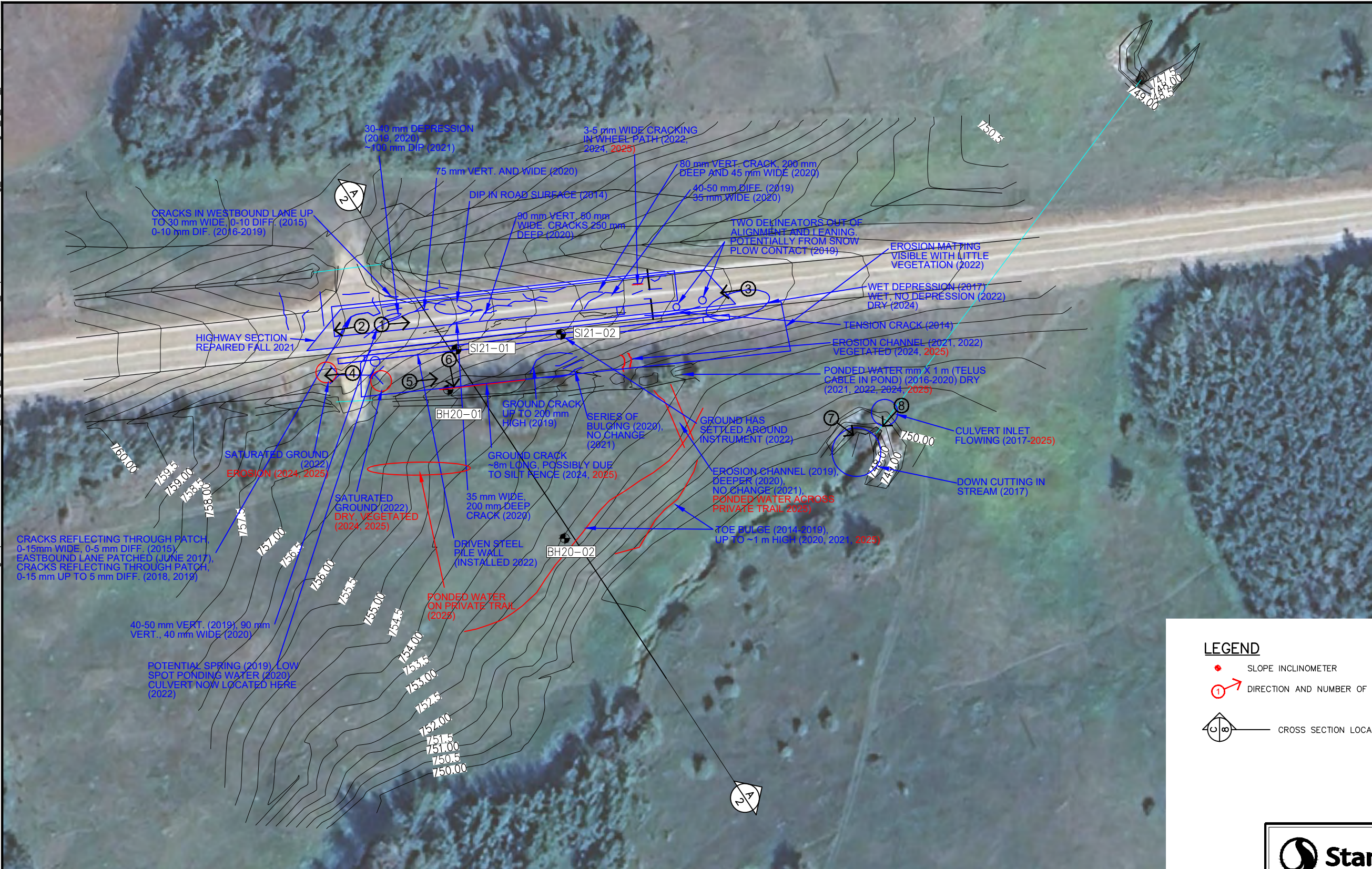
- The south ditch was observed to be dry and well vegetated. A ground crack, approximately 8 m long and 60 mm wide was observed near the south fence line (Photos 5 & 6). This crack may be due to removal of the silt fencing, and appeared unchanged from 2024.
- The private trail across the property south of Highway 16A had some areas with ponded water, and saturated soils.
- The toe bulge located on the south slope, near the creek appears unchanged since previous inspections and is up to 1 m high (Photo 10).
- The culvert (BF71355) is in good condition and does not appear to have been affected by the landslide or construction (Photos 7, 8, 11).
- The erosion channel near BH20-02 was vegetated and appears unchanged since 2024.
- The south slope beyond the tree line was very well vegetated at the time of inspection and may have obscured some landslide features.

RECOMMENDATIONS


- Pavement cracks should be monitored by the MCI and sealed to prevent water infiltration into the embankment and pavement structure.
- The ground crack along the fence line should be regraded to prevent water infiltration into the embankment.
- Re-vegetation of the bare ground west of the culvert below the south access road should be completed to reduce the likelihood of further erosion.
- The MCI should continue to monitor the culverts on a regular basis to ensure they are free flowing to reduce surface water penetration of the embankment and pavement structure.
- The site inspection frequency can be reduced given installation of the pile wall and re-vegetation of the slopes. Consideration should be given to remove this site from site inspection program until new observations are made at this site.
- Consideration should also be given for reducing the instrumentation monitoring frequency.


PREPARED BY: Sonja Pharand, P.Eng.	REVIEWED BY: Leslie Cho, M.Eng., P.Eng.	PERMIT TO PRACTICE:


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LEGEND

 SLOPE INCLINOMETER

 DIRECTION AND NUMBER OF PHOTO

 CROSS SECTION LOCATION

- NOTES:**
1. FEATURE LOCATIONS ARE APPROXIMATE.
 2. PREVIOUS OBSERVATIONS SHOWN IN **BLUE**.
 3. 2025 OBSERVATIONS SHOWN IN **RED**.

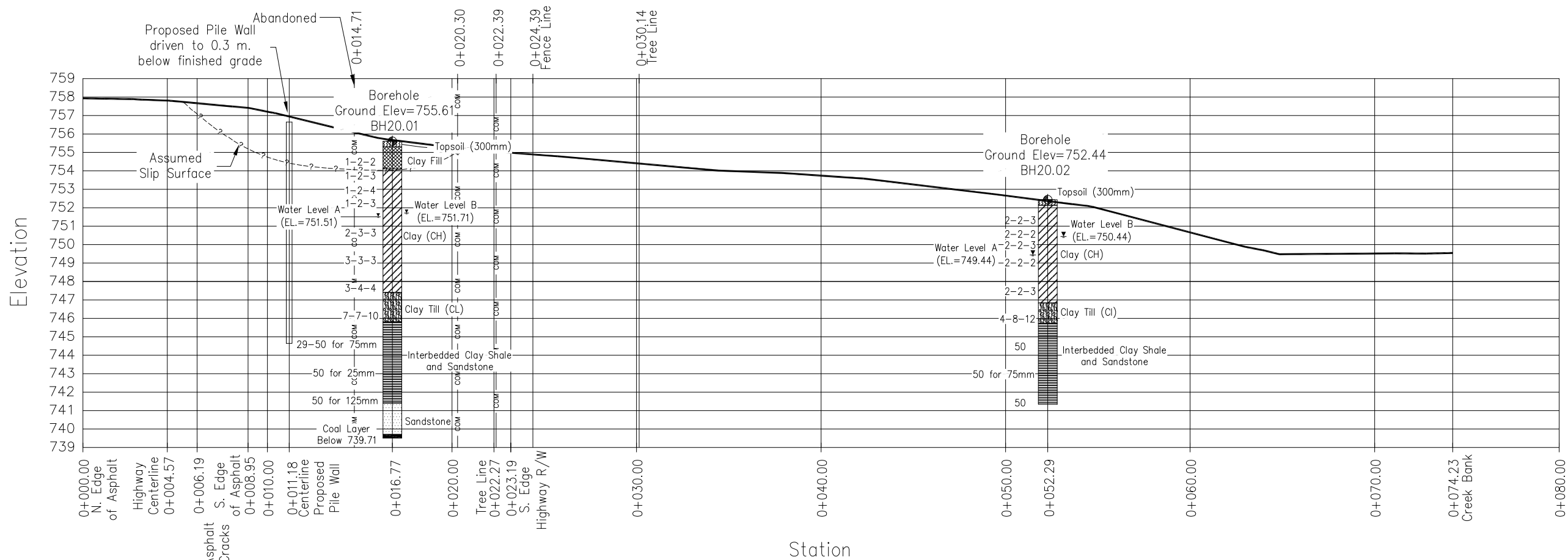



STANTEC CONSULTING
300-10220 103 AVENUE NW
EDMONTON, ALBERTA, CANADA
T5J 0K4

TRANSPORTATION AND ECONOMIC CORRIDORS
GEOHAZARD MONITORING PROGRAM
NC81 HWY 16A:08, KM 8.23 EVANSBURG SLIDE
SITE PLAN

DRAWN	SP/MK	CHECK	SP	APPROVE	LC
DATE	16 JUL 2025	SCALE	AS SHOWN	PROJECT #	123315222

FIGURE 1





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FIGURE 2

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2025 Site Inspection Photos at NC081



Photo 1: Pavement and embankment repair along Highway 16A. Looking east.



Photo 2: Pavement repair along Highway 16A. Looking west.

2025 Site Inspection Photos at NC081



Photo 3: East end of repair zone. Looking west.



Photo 4: Erosion at west end of culvert across property access road. Looking west.

2025 Site Inspection Photos at NC081



Photo 5: South ditch, looking east. Ground crack visible near fence line, possibly due to removal of silt fence.



Photo 6: Possible ground crack in south ditch near fence line. Looking south.

2025 Site Inspection Photos at NC081



Photo 7: Culvert on south side of highway. Looking southeast.



Photo 8: Looking down channel beyond culvert outlet on south side of highway. Facing southwest.

2025 Site Inspection Photos at NC081



Photo 9: Aerial photo of Highway 16A pavement repair area. Facing northwest, taken by drone.



Photo 10: Aerial photo of toe bulge and creek to the south of Highway 16A, facing northwest. Taken by drone.

2025 Site Inspection Photos at NC081

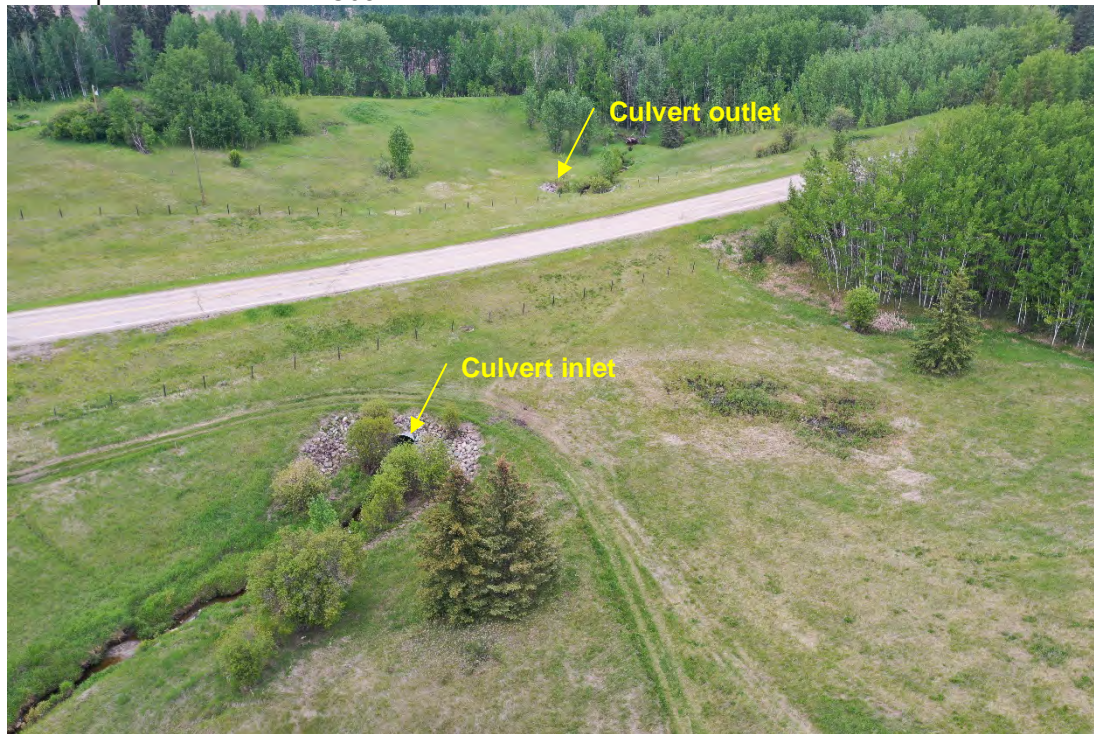


Photo 11: Aerial photo of culvert below Highway 16A, facing northeast. Taken by drone.