

SITE NUMBER AND NAME: S056-II West of Gorge Creek Steep Slope Slides		HIGHWAY & KM: 25002:02 8.196	PREVIOUS INSPECTION DATE: July 5, 2021	INSPECTION DATE: May 16, 2022
LEGAL DESCRIPTION: 01-32-19-05 W5M	NAD 83 COORDINATES: UTM Northing Easting 11 5613067 666206		RISK ASSESSMENT: PF: 8 CF: 10 TOTAL: 80	
MONTHLY AVERAGE DAILY TRAFFIC (MADT): May 2020 390 (west) & 382 (east) (Reference No. 55460220)			CONTRACTOR MAINTENANCE AREA (CMA): 27	

SUMMARY OF SITE INSTRUMENTATION: There is no instrumentation at the S056-II site. LAST READING DATE: N/A	INSPECTED BY: Chris Morgan (KCB) Laura Assaad (KCB) Roger Skirrow (AT) Alex Frotten (AT)
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PRIMARY SITE ISSUE: Slope failure on the south side of the highway due to surface runoff and river erosion at the slope toe. The highway is located at the crest of a steep valley slope above Sheep Creek River. The highway was realigned in 2014 due to slope instability, and slide retrogression is continuing.

APPROXIMATE DIMENSIONS: The head scarp of the slide is approximately 15 m to 20 m long

DATE OF ANY REMEDIAL ACTION: 2014 – the highway was realigned/shifted north by approximately 5 m

ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress		X	Slide retrogression continues to impact the old highway alignment, not impacting realigned highway yet.		X
Slope Movement	X		Slope failure on south side of highway.		X
Erosion	X		Erosion due to surface water runoff and river erosion at the slope toe.		X
Seepage		X	N/A – none observed		X
Culvert Distress		X	N/A – none observed		X

COMMENTS

Ongoing slope erosion due to surface water runoff, frost and seepage. The erosion is leading to undermining of the crest of the slope. No current impact to the realigned highway.

Undermining of the old pavement is leading to the old highway surface cracking and dropping away. Current edge erosion slope is approximately 3.3 m from the guardrail (approximately 5.4 m in 2019 and 5.0 m in 2020) (WP 87). Slope erosion was visible east of the main erosion feature. The edge of the eroding slope is approximately 6 m from the edge of pavement at WP 88.

Cut slope to the north of the highway is poorly vegetated and should be seeded to reduce surface water runoff erosion. During the 2022 inspection, some riling was observed along the slope. A proposal was issued AT for review and comment in January 2019 for evaluation of hydro-seed mixes to promote vegetation.

A large block failure near the top of the slope does not appear to have changed significantly since the 2021 inspection (WP 87) (Photo 4).

Maintenance/Repair/Monitoring Recommendations:

- The site should be inspected by AT's MCI and annually as part of the Southern Region GRMP Section B inspections.
- The cut slope should be hydro-seeded to promote vegetation growth using a suitable seed mix.

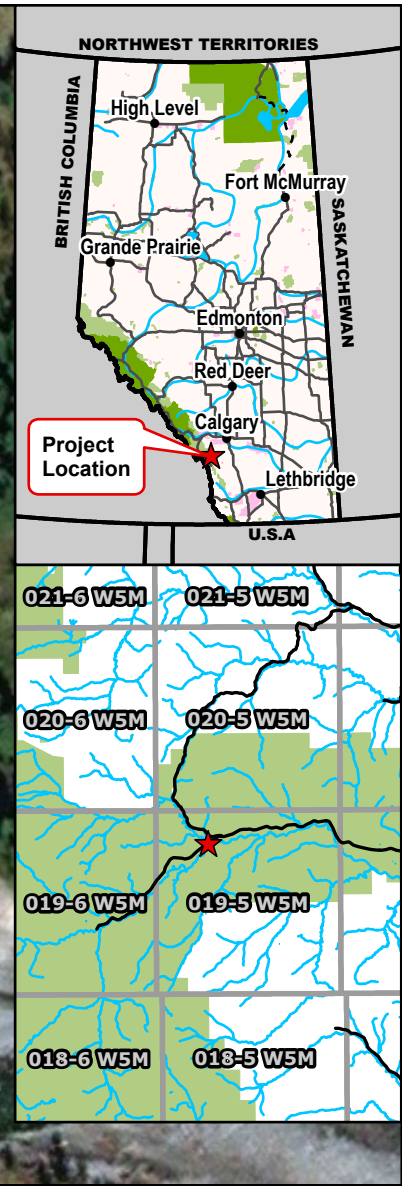
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
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Chris Gräpel, M.Eng., P.Eng.
Senior Civil Engineer, Associate



Legend

-  GPS Waypoint (May 16, 2022)
-  GPS Track (May 16, 2022)
-  Flow Direction
-  Main Scarp

NOTES:
 1. HORIZONTAL DATUM: NAD83
 2. GRID ZONE: UTM ZONE 11N
 3. IMAGE SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS AND THE GIS USER COMMUNITY.

CLIENT




PROJECT SOUTHERN REGION GEOHAZARD RISK MANAGEMENT PROGRAM		
TITLE Site Plan S056-2 - West of Gorge Creek Steep Slope Slides Hwy 25002:02, km 8.196		
SCALE 1:1,500	PROJECT No. A05116A03	FIG No. 1

Inspection Photographs

Photo 1 The highway was realigned/shifted north in 2014 (right-hand side of the photo) since the slide was impacting the south (eastbound) lane of the old highway. Photo taken May 16, 2022, facing southwest.



Photo 2 The head scarp is retrogressing towards the highway and is approximately 3 m from the edge of pavement. Photo was taken May 16, 2022, facing east-northeast.



Photo 3 The cut slope from highway realignment is unvegetated. Photo was taken May 16, 2022, facing east.



Photo 4 A large block has failed and dropped downslope (WP 87). The block does not appear to have changed significantly since the 2021 inspection. Photo taken May 16, 2022, facing east.

