

SITE NUMBER AND NAME: S056-II West Gorge Creek, West of Turner Valley		HIGHWAY & KM: Sheep River Road	PREVIOUS INSPECTION DATE: June 8, 2020	INSPECTION DATE: July 5, 2021
LEGAL DESCRIPTION: 01-32-019-05 W5M	NAD 83 COORDINATES: UTM Northing Easting 11 5613067 666206		RISK ASSESSMENT: PF: 9 CF: 10 TOTAL: 90	
MONTHLY AVERAGE DAILY TRAFFIC (MADT): May 2020 390 (west), 382 (east). (Ref. No. 55460220)			CONTRACTOR MAINTENANCE AREA (CMA): 27	

SUMMARY OF SITE INSTRUMENTATION: None LAST READING DATE: N/A	INSPECTED BY: Chris Morgan (KCB) Chris Grapel (KCB) Alex Frotten (AT) Roger Skirrow (AT)
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: Slope failure is 4.9 m from guard rail of realigned highway (was 5.4 m in 2019 and 5.0 m in 2020).	
DATE OF ANY REMEDIAL ACTION: This section of Sheep River Road was realigned due to slope instability impacting the highway.	

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 southern side of highway.		X
Erosion	X		Erosion due to surface water runoff and river erosion at the slope toe.		X
Seepage	X		Not visible from ground surface.		X
Culvert Distress		X			X

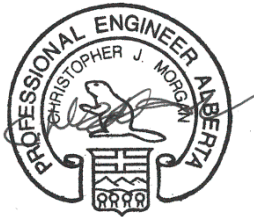
COMMENTS
Ongoing slope erosion due to surface runoff, frost and seepage, leading to undermining of the crest of the slope. No current impact to the realigned highway. Site will be monitored moving forward.
Undermining of the old pavement is leading to the old highway surface cracking and dropping away. Current edge erosion slope is 4.9 m from the safety barrier. Slope erosion was visible east of the main erosion feature.
Cut slope to the north of the highway is poorly vegetated and should be seeded to reduce surface water runoff erosion. A proposal has been submitted to AT for evaluation of hydroseed mixes to promote vegetation.
Recommended activities include: <ul style="list-style-type: none"> • Annual inspections to monitor slide retrogression; and • Hydroseeding of the cut slope north of the highway to minimize runoff erosion.

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KCB has prepared this report in a manner consistent with the level of care, skill, and diligence ordinarily provided by members of the same profession for projects of a similar nature at the time and place the services were rendered. KCB makes no warranty, express or implied.

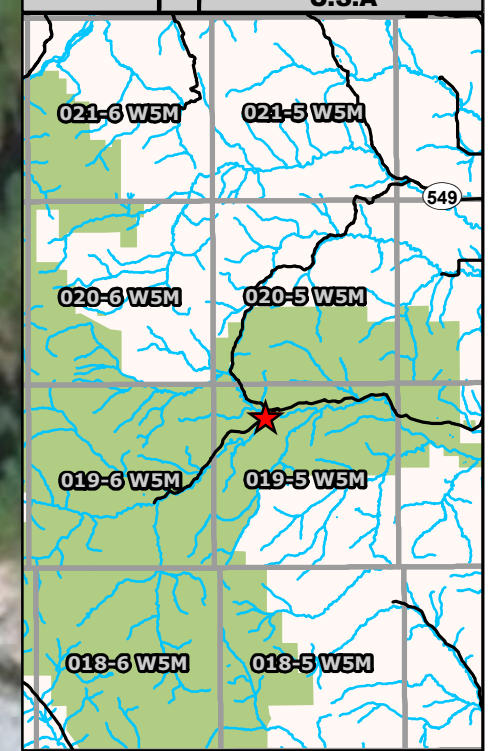
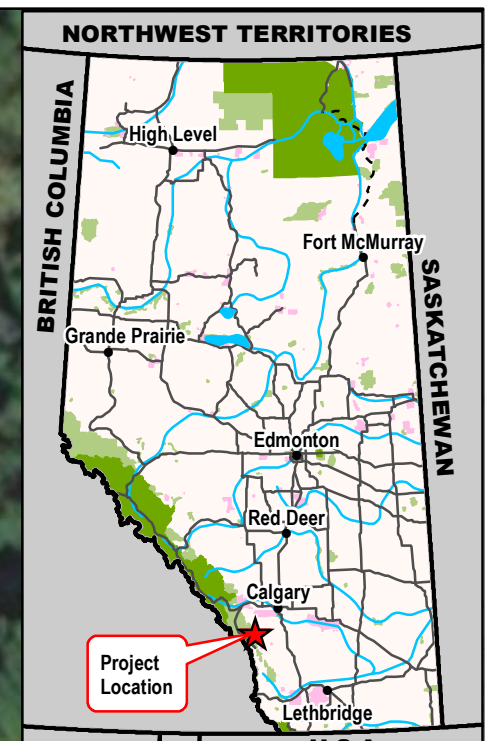
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- (i) The report is to be read in full, with sections or parts of the report relied upon in the context of the whole report.
- (ii) The observations, findings, and conclusions in this report are based on observed factual data and conditions that existed at the time of the work, and should not be relied upon to precisely represent conditions at any other time.
- (iii) KCB should be consulted regarding the interpretation or application of the findings and recommendations in the report.



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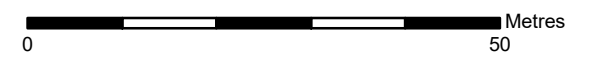
Chris Morgan, M.Sc., P.Eng.
Senior Geotechnical Engineer



Legend

--- Main Scarp

→ Flow Direction



NOTES: 1. HORIZONTAL DATUM: NAD83 2. GRID ZONE: UTM Zone 11N 3. IMAGE SOURCE: Bing Maps 2020, Microsoft Corporation.	CLIENT 	PROJECT SOUTHERN REGION GEOHAZARD RISK MANAGEMENT PROGRAM
		TITLE Site Plan S056-II West Gorge Creek Site II Sheep River Road
SCALE 1:800	PROJECT No. A05116A03	FIG No. 1

Time: 10:18:56 AM
 Date: October 08, 2021
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Photo 1 **Realigned highway on the right-hand side of the picture due to slope instability impacting the old road. Photo was taken facing southwest on July 5, 2021.**



Photo 2 **Ongoing slope retrogression. Photo was taken facing south on July 5, 2021.**



Photo 3 **Unvegetated cut slope from highway realignment. Photo was taken facing west on July 5, 2021.**

