

Transportation

CENTRAL REGION GRMP SITE INSPECTION FORM



SITE NUMBER AND NAME:	HIGHWAY & KM:	PREVIOUS INSPECTION DATE:		
C066 Ghostpine Creek Slide	27:10, 12.434	INSPECTION DATE: June 13, 2018		
		June 14, 2017		
LEGAL DESCRIPTION:	NAD 83 COORDINATES:	RISK ASSESSMENT:		
02-16-031-22 W4M	UTM Northing Easting	PF: 5 CF: 2 TOTAL: 10		
	12 5724022 357407			
AVERAGE ANNUAL DAILY TR	AFFIC (AADT):	CONTRACT MAINTENANCE AREA (CMA):		
1970 (west) & 1940 (east) (Ref	No. 106260 & 105250)	20		

SUMMARY OF SITE INSTRUMENTATION:

None

Chris Gräpel (KCB) Ryan Gazley (KCB) Rocky Wang (AT) Tony Penney (AT)

INSPECTED BY:

LAST READING DATE: n/a

PRIMARY SITE ISSUE: A slide in the highway embankment near the east abutment that was repaired in 2015. The slide was initiated by heavy rainfall in 2014 and consisted of two zones: (1) the "major slide" zone, a large deep- seated failure that impacted the pavement surface, and (2) the "minor slide" zone.

APPROXIMATE DIMENSIONS: The site is approximately 60 long, and the highway embankment is approximately 15 m high.

DATE OF ANY REMEDIAL ACTION: October 2015 – the major slide zone was excavated to stiff clay and backfilled with gravel to a 4H:1V slope. Eight counterfort drains, each with a 150-mm diameter perforated HDPE drain pipe at the base, were installed in the major slide zone. At the minor slide zone, the slope was flattened to 4H:1V without the installation of subsurface drainage or the replacement of the failed material.

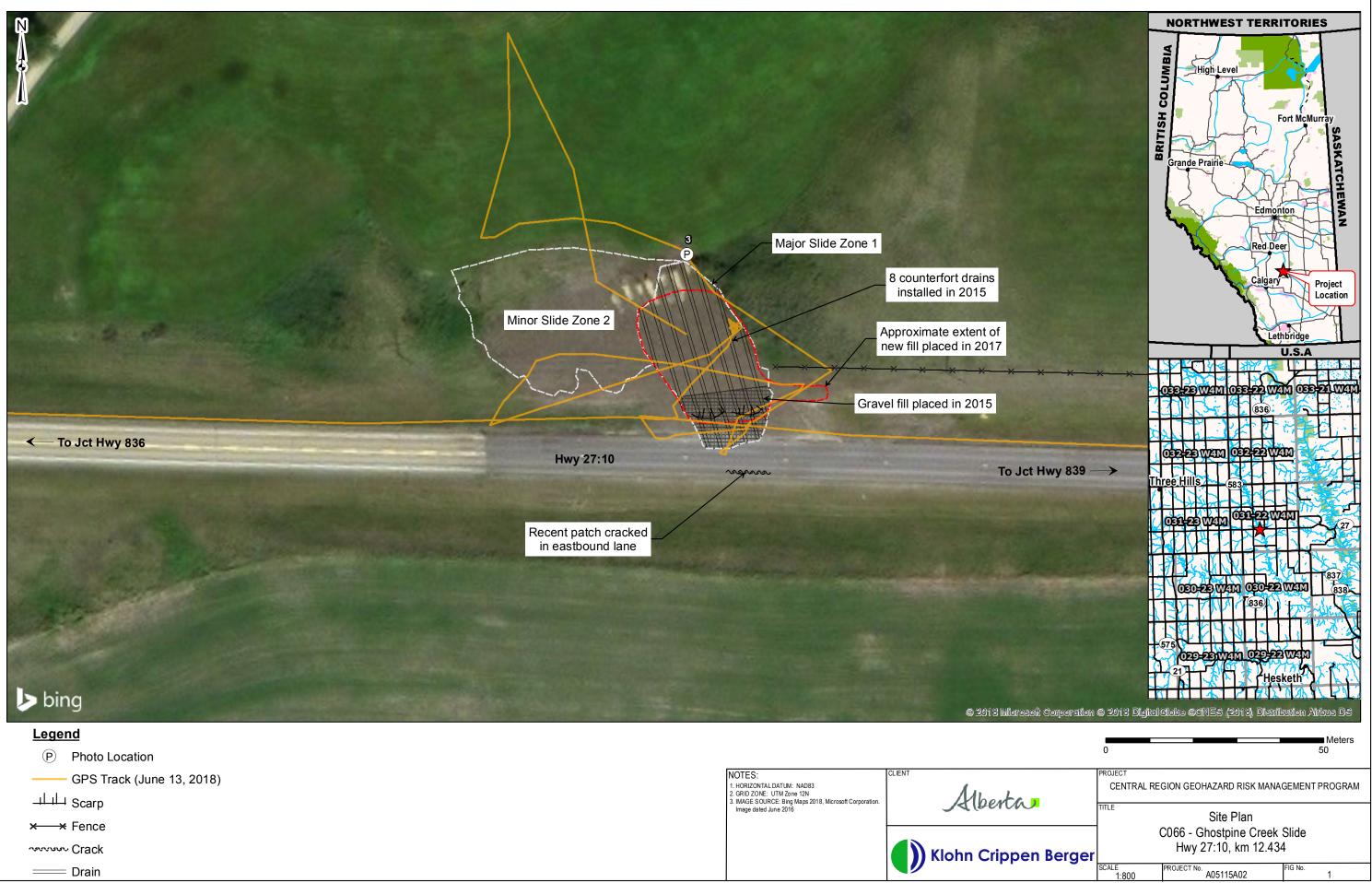
ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress	Х		Existing pavement cracking in eastbound lane		Х
Slope Movement		Х	No new signs of movement on recently regraded slopes	Х	
Erosion		Х	No observed rilling of fill.	Х	
Seepage		Х	No observed seepage from slope drains		Х
Culvert Distress	Х		Eight counterfort drains		Х

COMMENTS

Since the 2017 inspection, the stockpile of fill material has since been removed or has been used to regrade the slide zone. Currently there are no signs of erosion (i.e. rilling) on the slope. The slope is poorly vegetated and should be reseeded as soon as possible to limit the potential for erosion during a rainfall event. The five HDPE slope drains remain exposed at the toe of the slope but were not flowing at the time of inspection. Pavement cracking in the eastbound lane does not appear to be increasing.

Discussed remedial actions: The fence should be re-installed, and the regraded fill should be reseeded. If cracking and pavement deformations continue, a slope inclinometer should be installed to monitor depth of movement.

Inspect site very two years, unless additional movements occur.



Crack Drain		Klohn Crippe
× × Fence	Image dated June 2016	Alberta
GPS Track (June 13, 2018)	NOTES: 1. HORIZONTAL DATUM: NAD83 2. GRID ZONE: UTM Zone 12N 3. IMAGE SOURCE: Bing Maps 2018, Microsoft Corporation.	clent Alberta
(P) Photo Location		

Photo 1 In the major slide zone, the fill material has been regraded and the mid slope bench that was present in 2017 has been removed. At the time of inspection there were no signs of recent erosion but the slope remains poorly vegetated. Photo taken June 13, 2018 looking northwest.



Photo 2 Secondary view of the poorly vegetated slope. Photo taken June 13, 2018 looking east.





Photo 3 Photo taken downslope of one of the five exposed slope drains. No seepage flows were observed during the inspection. Photo taken June 12, 2018 looking south.



Photo 4 The pavement cracking in the eastbound lane above to slide area does not appear to be increasing. Photo taken June 12, 2018 looking north.



