

**PEACE REGION – SWAN HILLS
GEOHAZARD RISK ASSESSMENT
SITE INSPECTION FORM**

SITE NUMBER SH 7	SITE NAME Island Creek Slide	HIGHWAY & KM HWY 33:14	PREVIOUS INSPECTION DATE September, 2011	INSPECTION DATE July 4, 2012
LEGAL DESCRIPTION SE33-71-09 W5M	NAD 83 COORDINATES N 6,110,760 E 607,250	PREVIOUS RISK ASSESSMENT		
		PF: 2	CF: 1	TOTAL: 2
		CURRENT RISK ASSESSMENT		
		PF: 3	CF: 2	TOTAL: 6 – See Comments

<p>SUMMARY OF SITE INSTRUMENTATION:</p> <p>Operational slope inclinometers: 3 (SI-1, SI-2, and SI-3)</p> <p>Operational pneumatic piezometers/standpipes: 1 standpipe (SP00-1)</p> <p>LAST READING DATE: June 9, 2012</p> <p>BRIEF SUMMARY OF 2012 MONITORING: No discernable incremental movement in historically monitored zones and no zones of new movement.</p> <p>For further details of recent monitoring results refer to 2012 Instrumentation – Spring Monitoring Results Report</p>	<p>INSPECTED BY:</p> <p>(i) AMEC: John Richmond, Eric Paton,</p> <p>(ii) AT: Ed Szmata, Roger Skirrow</p>  <p>John A. Richmond, P.Eng Permit Number: P 04546</p>
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<p>PRIMARY SITE ISSUE(S):</p> <p>l) Potential retrogression of a slide on the Swan River valley slope. The headscarp of the slide is currently located within the south ditch of the highway (Photo's 1 and 2). In 2000, the highway was re-aligned to the north above the headscarp of the slide. Prior to re-alignment, the headscarp of the slide extended to the approximate centreline of the highway. However, there has been no observable retrogression of the slide headscarp or signs of highway distress noted since re-alignment.</p> <p>Note: Refer to previous inspection reports for further details.</p>

<p>APPROXIMATE DIMENSIONS:</p> <p>Slide retrogression could affect ~300 m of road</p>
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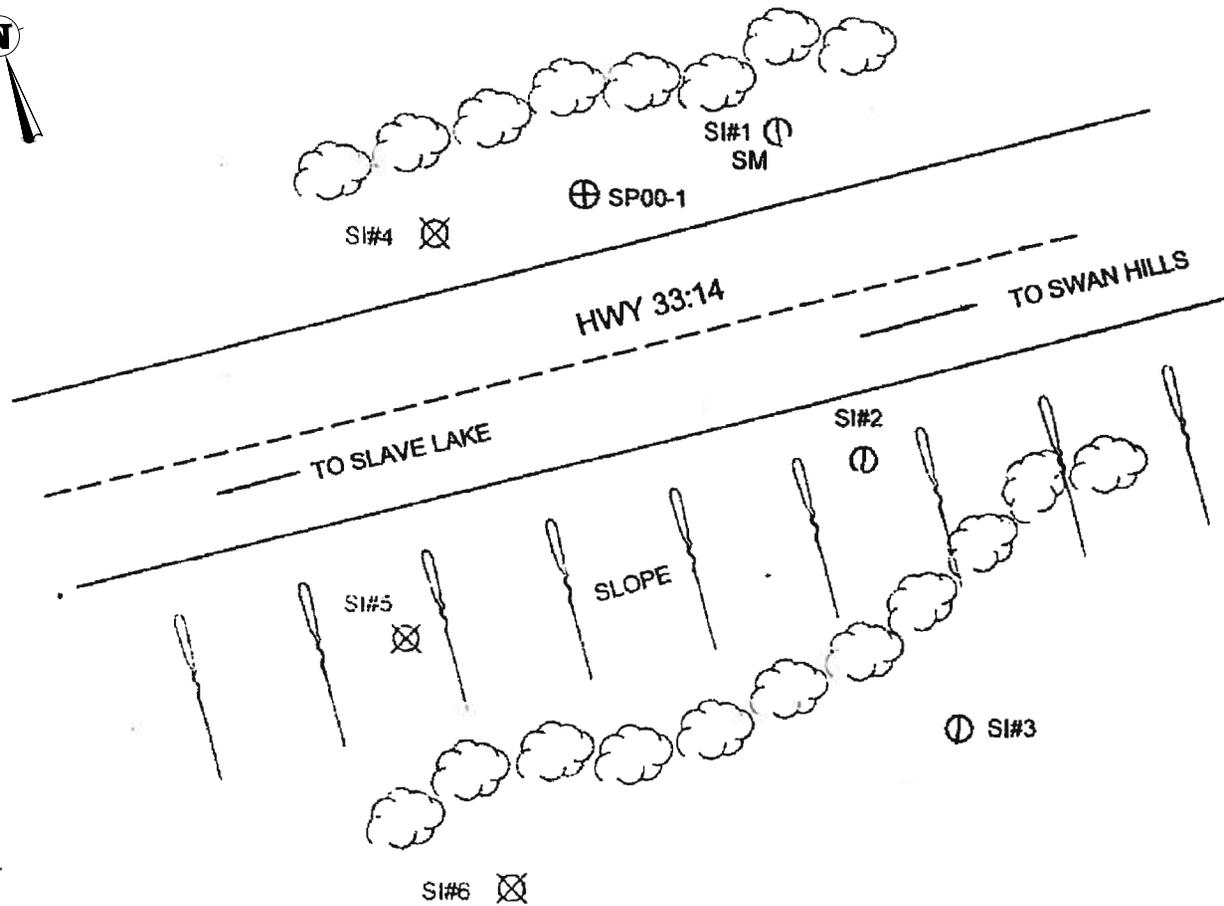
<p>DATE OF ANY REMEDIAL ACTION:</p> <p>2000: Highway re-alignment included:</p> <ul style="list-style-type: none"> - Minimum horizontal shift of 7.5 m at midpoint of affected section of highway with a total re-alignment length of 480 m; - Minimum grade lowering of 0.5 m at midpoint of affected section; - Unloading of existing road fill from slide area to provide finished side slope of 4H:1V for shifted roadway; - North ditch lowered to 1 m below top of road subgrade; - Subdrain installed in north ditch (2 m below ditch base). - Extension of (north) ditch subdrain down the hill to the north west and installation of straw bale ditch checks in north ditch. Installation of gravel drainage slots in north sideslope of highway embankment to drain highway base course gravel.
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ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION		
	YES	NO		YES	NO	SEE COMMENTS
PAVEMENT DISTRESS		X			X	
SLOPE MOVEMENT		X	Creep movement of slide below (south of) road		X	
EROSION		X			X	
SEEPAGE		X			X	
OTHER						
COMMENTS:						
<p>The increase in Perceived Risk Level resulted from a reassessment of PF and CF by AMEC. CF was increased due to potential length of roadway that could be impacted. Although slide has been unloaded since realignment of highway, it is likely quite sensitive to groundwater levels. Thus PF adjusted from a 2-very low to low probability of slide occurrence, to a 3 - low probability of slide occurrence.</p> <p>Monitoring of the operational instrumentation and annual inspection of the site should be continued.</p>						



LEGEND

- ⓪ SI CASING OPERATIONAL
- ⊗ ABANDONED SI CASING
- ⊕ STANDPIPE PIEZOMETER



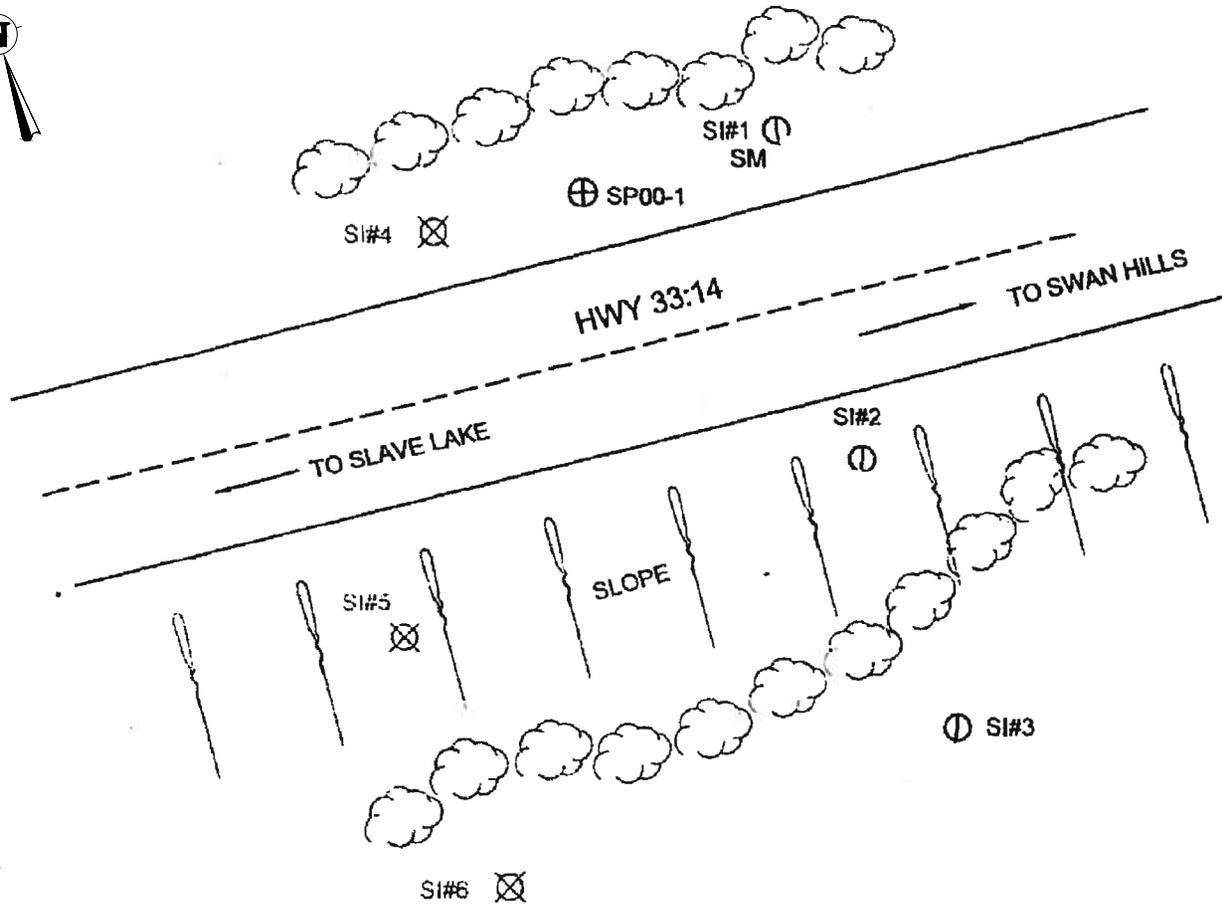
REFERENCE: SH7Plan - 1.pdf DATED OCTOBER, 2007, SUPPLIED BY ALBERTA INFRASTRUCTURE AND TRANSPORTATION.

CLIENT: 	DWN BY: BGR	PROJECT: GEO HAZARD ASSESSMENT PEACE REGION (SWAN HILLS)	DATE: DECEMBER, 2012
	CHK'D BY: JAR		PROJECT No.: EG10030
AMEC Environment & Infrastructure 5681-70 STREET, EDMONTON, ALBERTA, T6B 3P6 PHONE 780-436-2152, FAX 780-435-8425	DATUM: -	TITLE: SH7: HWY 33:14 - ISLAND CREEK SLIDE SITE PLAN	REV. No.: A
	PROJECTION: -		FIGURE No.: FIGURE 1
	SCALE: N.T.S.		



LEGEND

- ⓪ SI CASING OPERATIONAL
- ⊗ ABANDONED SI CASING
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REFERENCE: SH7Plan - 1.pdf DATED OCTOBER, 2007, SUPPLIED BY ALBERTA INFRASTRUCTURE AND TRANSPORTATION.

CLIENT: Government of Alberta Transportation	DWN BY: BGR	PROJECT: GEO HAZARD ASSESSMENT PEACE REGION (SWAN HILLS)	DATE: AUGUST, 2012
	CHK'D BY: JAR		PROJECT No.: EG10030
AMEC Environment & Infrastructure 5681-70 STREET, EDMONTON, ALBERTA, T6B 3P6 PHONE 780-436-2152, FAX 780-435-8425	DATUM: -	TITLE: SH7: HWY 33:14 - ISLAND CREEK SLIDE SITE PLAN	REV. No.: A
	PROJECTION: -		FIGURE No.: FIGURE 1
	SCALE: N.T.S.		



SH7 Photo 1: Looking east along headscarp of slide in south ditch (July 2012)



SH7 Photo 2: Looking west along headscarp of slide in south ditch (July 2012)