

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

SITE NUMBER SH 22 (5+6+7)	SITE NAME Little Smoky Site 7	HIGHWAY & KM 744:02	PREVIOUS INSPECTION DATE May 18, 2010	INSPECTION DATE May 31, 2011
LEGAL DESCRIPTION LSD 06-21-76-22-W5M	NAD 83 COORDINATES N 6,161,367 E 477,683	PREVIOUS RISK ASSESSMENT PF: 9 CF: 3 TOTAL: 27		
		CURRENT 2011 RISK ASSESSMENT PF: 9 CF: 3 TOTAL: 27		

SUMMARY OF SITE INSTRUMENTATION: No Instruments LAST READING DATE: N/A	INSPECTED BY: (i) AT: Ed Szmata, Ted Prue, Rodney Johnston, Rocky Wang (ii)KarlEng: Karl Li
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PRIMARY SITE ISSUE:
(Reiterated from previous report)

- Sliding movement of sidehill alignment at mid elevation of north valley slope
- Slide is likely the north flank of a large slide block
 - o Along a curve stretch with crack line traversing diagonally from sideslope to cross roadway to loop back up towards backslope into the treeline. This crack fang is a likely headscarp escarpment to loop into the backslope. (to likely connect downgrade with Sites # 4+5+6 downgrade).
 - o More severe patching distress of contortion undulation observed as headscarp crack (as well as tension cracks) traverses the highway at this location
 - o Site is located directly above an eroded toe of valley location where the scour bank of the meandering channel of Little Smoky River is undergoing active lateral degradation process. The River is actively scouring onto toe of vast valley slope. At this toe location of the vast valley slope, the laterally degrading channel flow is incising a sharp meander into toe of the valley slope. This Site is also located at the high elevation of valley slope location where (at toe area) the channels of the Little Smoky River confluences with Peavine Creek (a tributary). The Peavine Creek is also effecting lateral and vertical degradation of its channel to render a steepening of the tributary valley to invoke unstable valley slopes. Instability of this valley slope is obvious. Hwy 744:02 alignment climbs its upper stretch along the Peavine Creek tributary valley and is distressed by its unstable valley slopes.
 - o This distress area should be connected to and part of its centre portion of large block slide (i.e. Sites # 4+5+6 downgrade)
- Pavement distress more severe at this north flank portion of a large slide block. .

Note:
1) Refer to previous 2009 Slide Tour and earlier reports for details.

2) Generally, adverse seepage groundwater regime and wet bogs (sag ponds) are common along north valley slope
APPROXIMATE DIMENSIONS: - About 100m stretch of curve
DATE OF ANY REMEDIAL ACTION: - none

ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
PAVEMENT DISTRESS	x		i) Transverse headscarp cracks and tension cracking ii) pavement distress more severe comparatively iii) Pavement distress chronic	x	x
SLOPE MOVEMENT	x		-Likely location of north flank of a large block slide with transverse shearing movements of a headscarp escarpment -Likely faster rate of movement and abrupt ground deformation at this area	x	x
EROSION		x	n/a		
SEEPAGE	x	x	Generally, adverse seepage groundwater regime and wet bogs (sag ponds) are common along north valley slope		
CULVERT DISTRESS		x			

COMMENTS

In current 2011 site visit, it was reviewed that

- 1) No new deterioration has drastically developed over year 2011/2010.
- 2) Pavement patching should be carried out as appropriate when subsidence movement and cracking of pavement occurs.
- 3) This Hwy 744:02 sidehill alignment has been chronically plagued by numerous landslides. For this northern valley slope (north of bridge), it is understood that a realignment study may be under consideration by AT in the future.

Important Note:

This form assessment is an update for current year only. Please refer to the detailed assessment

provided as in the 2008 Annual Assessment (letter report) and earlier Reports for background understanding of this site.
END