

Slide Name: (GP 23) Hwy 43:08 Waskahigan River – NBL (Climbing Lane)
Inspection Date: May 3, 2005
Inspection by: Alberta Infrastructure & Transportation and EBA staff listed on Page 1

1.0 BACKGROUND

Slide failure of a fill slope occurred along the NBL (climbing lane) which was previously (early 1990's) widened with a sliver fill construction over poor subgrade comprising buried organic material (snake pit of buried trees and stripping). A remedial design provided by EBA was carried out in December 2004 as part of the twinning construction contract of this highway. The slope was reconstructed at 4H:1V using pit-run material and a toe key was installed.

2.0 OBSERVATIONS

The climbing lane was restored and no obvious cracking or settlement distress was observed about 6 months after completion of slope reconstruction (December 2004). The reconstruction of the slope and slide repair is considered successful.

3.0 RISK ASSESSMENT

$$PF (2) * CF (2) = 4$$

Due to recent repair, the slide is assessed inactive with a low probability of remobilization. However, in the case of remobilization of the slide, the closure of one lane may be required. With the completion of twinning, anticipated in early 2006, to separately accommodate the SBL traffic, any future distress along this area will not have significant impact as the present 3-lane width (2 lanes for 2-way traffic plus a NBL as climbing lane) can be narrowed down to a 2-lane width available for future NBL traffic.

4.0 ACTION

- Continue visual monitoring of the slope to be continued on an annual basis.



Figure 1

N.T.S.

Site Location Plan - Highway 43:08 Waskahigan River

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Photo 1

Looking north (towards Valleyview)

- Slide remediated by removal of "snake pit" of buried organic material and the slope reconstructed with pit-run to include toe key and berming
- Reconstruction of slope extended to shoulder edge of Climbing Lane
- A buried utility line runs along toe of slope and required exposing during slope reconstruction



Photo 2

Looking east at toe berm.



Photo 3

Looking north (towards Valleyview)

- Top portion of slope reconstruction forming $\frac{1}{2}$ of a highway lane
- Pavement structure (temporary pavement) performing well for half year since December 2004 slope reconstruction



Photo 4

- Looking south (towards Fox Creek)
- Temporary pavement performing well