Slide Name:	**(GP 2) Hwy 40:38 Kakwa River (20 km S. of Kakwa River)**
Inspection Date:	**May 5, 2005**
Inspection by:	**Alberta Infrastructure & Transportation and EBA staff listed on Page 1**

1.0 BACKGROUND

Refer to EBA 2004 and earlier reports for site conditions and details of risk assessment prior to the November 2004 reconstruction of slope. The current instrumentation data and details of data interpretation are provided in the Spring 2005 Instrumentation Monitoring Report.

2.0 OBSERVATIONS

Remedial repair (completed in November 2004) of this slide was discussed on site as follows:

- slope reconstructed at 3H:1V using pit-run backfill material and erosion protection blanket over slope face.
- two outlet subsurface drains were installed, with the first outlet (constructed at a lower elevation) observed to yield continuous flow. The second outlet, constructed at a slightly higher elevation for redundancy was observed to be dry. The subsurface drains were installed along the basal elevation of the granular toe key of the slope reconstruction for drainage of groundwater.
- the repair of the slide area appears to be functioning well.

3.0 INSTRUMENTATION DATA UPDATE

The 2005 Spring instrumentation data does not indicate a change of previous slide movement monitoring characteristics (shear movement not apparent, previous instability was erosion and seepage induced) as described in previous reports.

4.0 RISK ASSESSMENT

PF (3) * CF (6) = 18

Risk rating is downgraded in this 2005 assessment because of the slide repair completed in November 2004. Any current additional comments are provided in the Spring 2005 Instrumentation Monitoring Report.

5.0 ACTION

The performance of recent reconstructed slope should be monitored by visual inspection and continued reading of existing instrumentation.

Figure 1
1993 Aerial Photograph

0 400
SCALE (metres)

7100131002Q22a.cdr

Photo 1
Looking north (toward Grande Prairie)
- Slide remediation (slope reconstruction) area between guardrail and to the left of siltation fence perimeter at toe of slope
- Pitrun material utilized for slope reconstruction and slope face protected with erosion control matting

Photo 2
Looking north - another closer view
- Fill placement buttressed onto shoulder edge (previous slide scarp) to right of guardrail edge
- Fill settlement very minor

Photo 3
Toe area
- Two rows of silt fence at perimeter locations

Photo 3a
Toe area of slope reconstruction (Grande Prairie side)
- Second (safety) drainage outlet for tile system at basal granular toe key
- very minimal water outfall as this second outlet is higher than first outlet (on south side)

Photo 4
Looking south along toe of slope
- Slope reconstruction to 3H:1V with pitrun material
- Erosion control matting material with high intensity seeding (3 times normal rate)
- toe drainage outlet at left corner of photo (at far end of silt fence)

Photo 5
Looking northfrom south edge of toe area
- First drainage outlet (of tile system at base of toe key at center bottom of photo) yield continuous flow
- silt fence along perimeter at bottom toe edge of slope reconstruction