

Slide Name: (GP 15a) SH 727:02 Rat/Howard Creek

Inspection Date: June 20, 2006

Inspection by: Alberta Infrastructure & Transportation and KarlEng Staff listed on Page 1

1.0 BACKGROUND

Deterioration of this slide necessitated the realignment of the existing highway. The study of a new alignment was completed in late 2005 for fast-tracking the detailed design and its construction. As of June 2006, it is understood that detailed design and construction of the new alignment is in progress so that it can urgently replace the existing slide-infested highway alignment.

In the interim prior to construction completion of the new alignment, it was discussed that the existing alignment will be maintained to allow passage of traffic. The traffic volume using this existing roadway should be of low intensity and this roadway interim maintenance strategy should be viable.

2.0 OBSERVATIONS

- Ongoing sliding movements
- Roadway width can accommodate one lane traffic in case abrupt slide slumping occurs to cause loss of road surface
- Over the recent 2005/2006 year, the distressed slide areas have not significant manifested to affect the passage of traffic. For safe operation of roadway, adequate signing and barricade should be posted at slide encroachment and “steep” locations to alert traffic of road hazard danger. Adequate roadway width should be maintained to allow passage of traffic prior to completion of the new alignment.

3.0 RISK ASSESSMENT

The following assessment is updated, as appropriate, from previous AIT reports.

$$PF (11) * CF (5) = 55$$

Note:

- The risk assessment is provided based on a categorization of Hazard Probability Factor (PF) and Consequence Factor (CF) as provided by AIT’s RFP 2000. The details are provided in Table II at front portion of this Report.

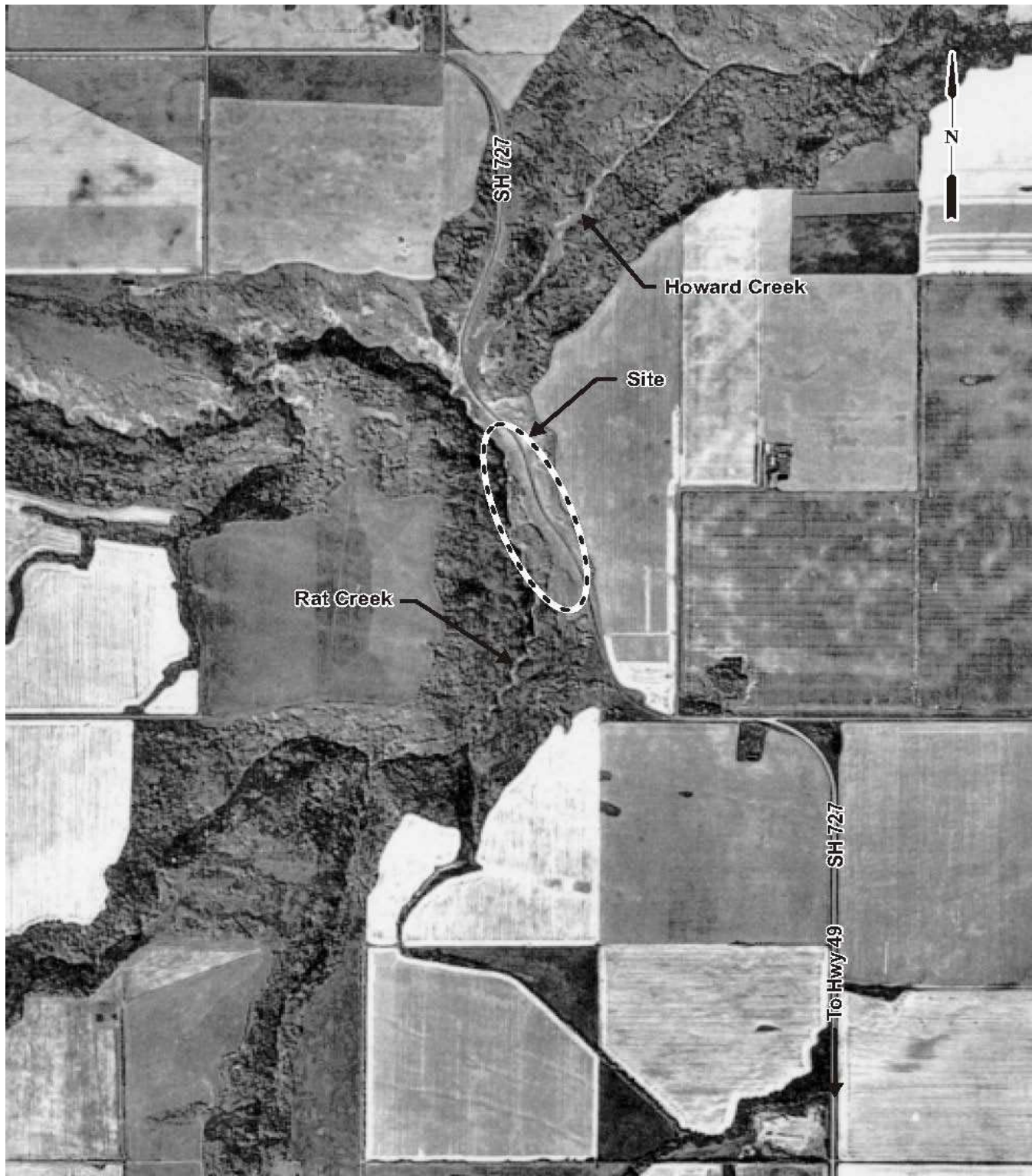
4.0 ACTION

As a new alignment is being constructed to replace this slide infested highway, it will be pragmatic to keep road width in a passable condition for traffic operation. For practical geotechnical risk assessment purposes, it was discussed that future inspection assessment of this

will be not be necessary. Thus, this site should be classified as inactive and future inspection no longer necessary because a new alignment is being constructed.

However, if it should happen that future delay of construction of the realignment is to occur, future reactivation of this site assessment will be reviewed as necessary.

END



Based on 1995 Aerial Photograph

Figure 1
Site Plan





Photo 1

Looking upgrade (south) towards Hwy. 49 Jct.

- Sideslope slides along upper portion of valley slope
- Steep backslope showing signs of slippage; backslope steepened as a result of shifting of alignment inland
- One lane traffic can be maintained in the event of slide deterioration



Photo 2

Looking upgrade (south)

- Closed up
- Sideslope slides along upper portion of valley slope



Photo 3

Looking south upgrade (towards Hwy. 49 Jct.)

- Slides at mid-portion of Rat Creek valley slope
- Rat Creek to right of photo



Photo 4

Looking north downgrade (towards Howard Creek)

- Lower portion of slides along mid-stretch of Rat Creek valley slope
- Rat Creek to left of photo
- This slide deteriorated during 2004/05 to cross centerline to backslope ditch. However, no obvious drastic accelerated movement was reported in 2005/06
- The section of road should be maintainable to provide one-lane traffic in event of drastic sliding movements



- Looking upgrade (towards Hwy. 49 Junction)
- Close up view of lower slides along mid-stretch of valley
 - Existing roadway 2 lane width
 - Roadway can be maintained to provide 1 lane traffic in emergency event of slide deterioration