

Bennett, Betty (MTO)

From: Dundas, Dave (MTO)
Sent: Monday, May 28, 2001 3:21 PM
To: O'Neill, Tom (MTO)
Cc: Grimmond, David (MTO); Bennett, Betty (MTO)
Subject: Hwy 400/9 slope instabilities

Tom

Further to our site visit of May 28/01, in which you requested my review of the slope instabilities along the south side of the Hwy 9 cut just west of Hwy 400:

It was agreed that there was a range of remedial measures for the slope instabilities, and that the selection should be based on an evaluation of the advantages, disadvantages, costs and reliability of the alternatives.

Alternatives included:

- 1) 1.2 m deep excavation at the sloughed areas, then backfilled with rock
- 2) excavation of softened material (maybe 0.6m) at the sloughed areas, then backfilled with rock
- 3) no excavation at the sloughed areas, but backfilled with rock

A further variation was that the extent that of the remedial treatment could extend either from the toe of slope to the top of the effected area, or from the toe of slope to the top of slope.

It was agreed that Alternative 2, extending from the toe of slope to the top of the effected area would be adopted. This choice was based on its relatively lower cost and the relatively low consequences if a slope failure were to occur or if additional maintenance would be required.

During the site visit, we observed erosion of the south shoulder of Hwy 9 to the west of Hwy 400. It was agreed that this erosion was caused by uncontrolled runoff from the road way and that a curb and gutter system, with armoured channels to the ditch, should be considered for installation as soon as possible. Also bituminous coating of the granular shoulder should be considered.

If there are any questions, please advise.

Dave Dundas, P.Eng
Sr. Foundation Engineer

July 10

Met with CA - Al Snider,
Lyle?, and MTO CCO
Tom O'Neill, & David
Grimmond at site.

Considerable erosion
of slope below bench elev.

Section between Sta 109+135
and Sta 109+260 requires
rebuilding.

Three localized areas require
some attn as well.

Recs by THURSDAY July 13