



Project Title: Sullivan Creek Culvert and Embankment Reconstruction

Client: Brun-Way Highway Operations

Project Description:

GEMTEC was retained by Brun-Way Highway Operations to carry out an investigation into the settlement of the westbound lanes of the Trans Canada High at Sullivan Creek, New Brunswick.

The Sullivan Creek culvert and embankment were constructed in the early 2001 comprising a 10 metre high embankment over a 1300 mm culvert. The original construction included the excavation of a 5 metre deep peat bog prior to the construction of the embankment fill. Between 2001 and 2006 significant settlement occurred, the result being a large “bump” in the highway and significant movement of the underlying culvert. Up to 0.7 metres of settlement occurred at the highway.

GEMTEC’s mandate from Brun-Way was to investigate the cause of the settlement, to recommend remedial alternatives and to design and supervise remedial work.

The investigation revealed that a significant thickness of peat remained at the bottom of the excavation and was the cause of the significant settlement. The remedial measures involved excavating, removing the peat material and reconstructing the culvert and highway embankment. This work was completed over a 2-month period in the summer of 2006.

