

Fyfe Company Technical Report Abstract FB-10

Behavior of Concrete Box Culverts and their Strengthening by Fiber Reinforced Plastics

By S. A. Sheick, A. Biddah

The structural behavior of a culvert structure and possible strengthening techniques for the same, have been investigated at the University of Toronto in a research program. The study involved simulation of the structural behavior of a culvert in a laboratory. Four full scale reinforced concrete culverts were constructed and tested to determine the capacity of the existing technique in increasing the capacity of an existing culvert. The analytical predictions of the failure loads were found to be conservative for all the culverts. The Tyfo SCH System was verified as an effective method of strengthening culverts.