

CP Railway near Tottenham, Ontario

Culvert Reline



Canadian Pacific Railway (CPR) provides freight transportation services in Canada and the U.S. In Ontario, CPR owns hundreds of miles of railway that crosses the rugged terrain and the agricultural regions of the province. CPR maintains this railway through a variety of activities including an extensive culvert inspection program. This culvert inspection program enables the owner to determine the condition of the culvert and whether it needs to be upgraded.

In October 2005, CPR rehabilitated two existing 800mm CSP culverts located beneath their tracks by sliplining with Weholite HDPE profile-wall pipe. Weholite was chosen for its long service life (Weholite is made from abrasion and corrosion resistant materials) and inherent resistance to external loads and vibrations that are present with train traffic. In addition, the lightweight of Weholite pipe minimized the impact on the environment, as the contractor was able to use light-duty lifting equipment.

Weholite's smooth outer wall and threaded joint ensured quick and easy insertion into the deteriorated CSP culverts. After installation, the annular space was grouted in order to fill the voids and to provide structural support. The culvert ends were left exposed as Weholite has lifetime protection against UV degradation. The entire construction process (from inspection to clean-up) took only four days to complete.

Contractor threads together the Weholite pipe.

Project:
CP Railway Mile Marker 40.42,
near Tottenham, Ontario

Owner:
Canadian Pacific Railway

Application:
Sliplining of existing 800mm CSP
culverts with Weholite

Distributor:
Terrafix Geosynthetics Inc.

Consultant:
ACB Consulting

Contractor:
Provincial Underground Services Ltd.