



■ Commercial Buildings



Reference Details:

Owner Irving Tissue Corporation, Toronto, Canada +++

Consulting Engineers AMEC Earth & Environmental Limited, Scarborough, Canada

+++ Piling Contractor Geo-Foundations Contractors Inc., Bolton, Canada

DSI Units DSI Canada, Eastern Division, Gormley, Ontario, Canada

DSI Services Supply of 40 *GEWI*® Piles, 92 feet/28m long, Ø57 mm grade75 bar with double corrosion protection, accessories, expertise and equipment



access area.

Irving Tissue Weston road plant upgrade; Canada

Toronto, Ontario, Canada

Irving Tissue is one of North America's leading tissue manufacturers. At their Weston road plant in Toronto, Ontario, the existing paper mill no. 4 was to be modified and required new foundations. These foundations are required to support a new machine located at basement level. In view of the foundations, which will be subject to static and dynamic load, as well as the limited head room and tight access, the owner decided to isolate the new machine loading using pile foundations. The system retained for the pile foundations is the *GEWI*® Pile system also known as micro pile system for its proven ability to meet fatigue loading requirement and space constraints.

In addition to space restrictions and limited access, all work was executed within an environment where mill production was continuous around the clock.

Each *GEWI*® Pile consists of a DYWIDAG threadbar (Ø57 mm) grade75 bar in the center of a 200mm diameter drilled hole. Permanent steel casings were provided in the free length of the pile except in bed rock. To ensure long time serviceability, bars were provided with the double corrosion protection system.

The pile lengths were typically 92 feet/28m, to deal with space and access limitations, the shop grouted double corrosion protected bars were supplied in 8 feet/~2.5 m long sections which were coupled as installed in the drilled hole.

Once the entire pile assembly was installed, the hole was tremie grouted. Two preproduction test anchors were successfully tested in compression by the piling contractor Geo-Foundations Contractors Inc., Bolton, Ontario. This is a new example of the ideal application of the *GEWI*® Pile System in limited head room and very tight