Cherry St. Stormwater & Lakefilling

Piling

Toronto, ON

Project snapshot

- Part of a $1.25B project
- Funding by all three branches of government
- 193m long combined dockwall
- Project created a new 7,500 m2 landmass once complete

Project description

The Port Lands in Toronto, Ontario, is approximately 800 acres in size and is one of the most underutilized areas of land in the City. In 2017, Local, Provincial, and Federal Governments agreed to spend $1.25B to flood-proof and develop the Port Lands, and soon thereafter a Tender for the CSLF Project was issued. The CSLF Project involved the construction of a 193 m long combi-wall and backfilling behind the combi-wall to create a new 7,500 m2 landmass. Soletanche Bachy Canada (SB Canada) was contracted to construct the combi-wall.

Owner
Toronto Waterfront Revitalization Corporation (TWRC)
Consultant
CH2M Hill
Construction Manager
EllisDon Civil Ltd.

Bermingham personnel
Michael Van Impe
Period of work
May 2018 - December 2018

Site conditions & Work Sequence

The combi-wall extended westerly along the edge of the Keating Channel before turning southerly and tying into the Essroc Quay. Marine based operations were required to complete the combi-wall construction and SB Canada utilized three (3) barges to execute the work. SB Canada was required to drive pipe pile, sheet piles, and rock anchor casings through a layer of soft sediment and into a layer of weathered bedrock. Under-ream systems were used to seat the pipe piles and casings into the bedrock and then down-the-hole drilling systems were utilized to drill the pipe and rock sockets.

Innovative solutions

The position of the combi-wall was of the utmost importance and ensuring the pipe piles and sheet piles were in the correct position proved challenging, particularly given that SB Canada had to complete the installation work from a barge in a channel that had frequent boat traffic. To overcome this challenge, SB Canada developed an installation template that utilized previously installed pipe piles, temporary spuds, and GPS survey equipment to ensure proper location. The template was independent of the barge and was therefore not impacted by waves and/or barge movement