

NYC DEP C547A Shafts (USA) Shaft Waterproofing

Country	USA, New York
Type	Water Tunnel
Client	NYC Department of Environmental Protection
Main Contractor	Walsh Construction
Execution of the work	Renesco Inc.
Designer/ Engineering	Aecom, McMillen, STV
Construction Period	2022-2024

Project Description

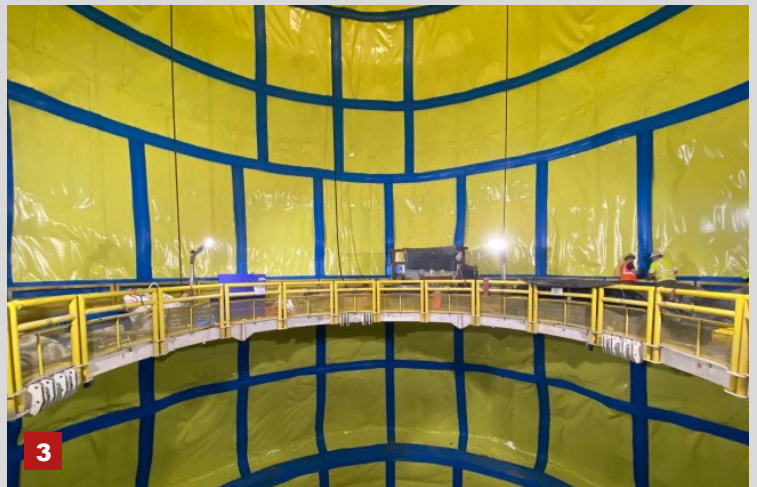
NYC's Giant Water Tunnel, Construction of Shafts 17B-1 and Shaft 18B-1, City Tunnel No. 3, Stage 2 in Brooklyn and Queens., one of the largest capital projects in New York City's history. The shafts will connect the surrounding communities to City Tunnel No. 3, a 60-mile water delivery system that the city has been building since 1970.

The first phase of the project is for the construction of two shafts on the 10.5-mile City Tunnel No. 3 (CT3), Stage 2 Queens-Brooklyn Leg (QBT). In the second phase, underground distribution chambers will be constructed atop the new shafts.

Scope of Service

The tunnel will be waterproofed with a loose-laid sheet membrane around the entire perimeter between a) ground frozen soil & sprayed insulation foam, or b) steel-fiber reinforced shotcrete & a levelling layer and the final CIP concrete lining.

- 118 mil (3 mm) PVC-P sheet waterproofing
- Geotextile, Polypropylene (22oz./sq. yd)
- PVC-P Water barriers (1'-5" width, 1-11/16" height, with 6 ribs)
- Remedial Grouting System & Concept
- BA anchors



1. Ground-freezing
2. Shaft Waterproofing
3. Water Barrier Sectioning