

Taking ground engineering to a deeper level



TECHNICAL REFERENCE



Dana-Farber Cancer Institute Yawkey Center for Cancer Care

Boston, MA

Slurry Wall



Owner: DANA-FARBER CANCER INSTITUTE

Architect: ZIMMER/GUNSUL/FRASCA PARTNERSHIP

Engineer: *Simon Design Engineering, LLC (Structural Engineer)*
GEI Consultants, Inc. (Geotechnical Engineer)

2006-03

The project is located at the corner of Brookline Avenue and Jimmy Fund Way in Boston, MA and is adjacent to the Dana-Farber Susan B. Smith Building, which was constructed with a slurry wall in the mid 90's.

The building will have 13 floors plus a mechanical space above, which will be used for clinical research. The foundation work consisted of the construction of a 36" thick slurry wall with permanent tieback rock anchors for open cut construction of the garage structure, which includes 7 levels of underground parking. The slurry wall serves as support of excavation and permanent foundation wall. The project was performed in a joint venture between Treviicos Corporation and East Coast Slurry Construction Company.

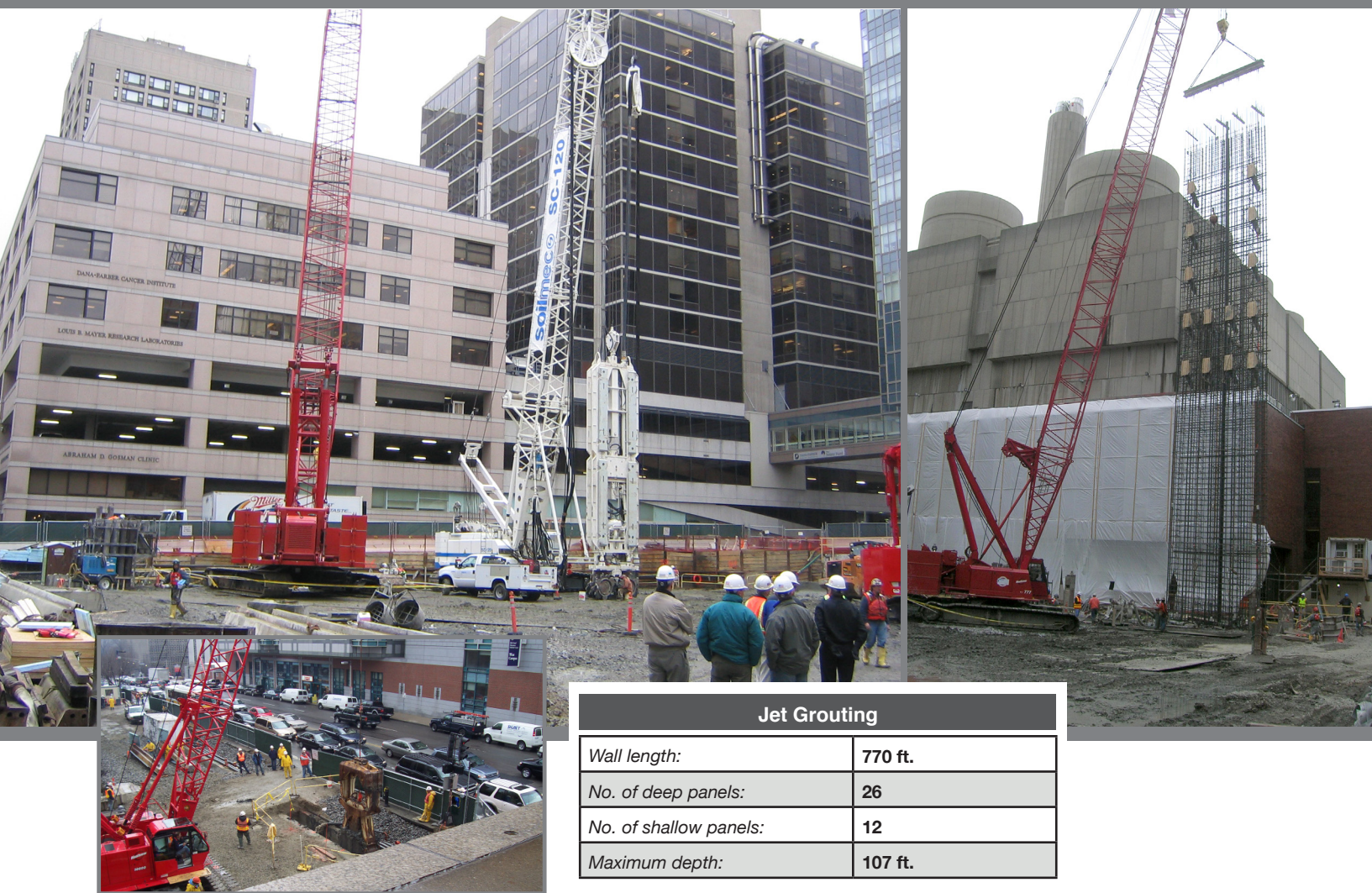
The slurry wall was constructed through layers of clay, sand, glacial till and bedrock with a combination of clamshell buckets and a Soilmecc Hydromill cutter. Due to the close proximity of this project to other

Dana-Farber buildings and the MATEP power plant, a Hydromill cutter was specified for excavation in order to limit vibrations and effects on medical and laboratory facilities and power plant equipment.

The deep slurry wall panels were embedded 2 to 3 feet into competent bedrock. The Hydromill cutter was key in advancing through Diabase bedrock, which was encountered in several panels. The shallow slurry wall panels placed along Brookline Avenue were installed for a below ground mechanical space.

Special excavation procedures were developed and utilized for construction of two corner panels that interface with the existing Dana-Farber Smith Building slurry wall.

Much to the client's satisfaction, the project was completed on time meeting very high quality and safety standards.



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