TEXAS A&M UNIVERSITY
Zachry Department of Civil Engineering

The Texas Medical Center's Tallest Building: Memorial Hermann Medical Plaza

Ed Ulrich
Civil Engineer Specializing in Geotechnics
Ulrich Engineers, Inc.
Houston, Texas

Abstract. This presentation focuses on the contribution of drilled piers in making an awesome project spectacular. Drilled piers and shallow foundations combined to eliminate temporary retention systems to support the Texas Medical Center's tallest building at thirty-two stories. Reduced development costs amounted to over $1 million when consideration is given to increased useable basement space, eliminating cantilevered floors for one full bay to the property line, and eliminating interior perimeter columns to effectively minimize the depth of basement excavation. The unique foundation features of the building and parking garage are highlighted along with the structural concepts for pier design.

Drilled piers formed the temporary and permanent basement wall along with the sole support for thirty-two stories of exterior column loads of the reinforced concrete tower. The drilled pier design considered installation only by the Slurry Displacement Method in general accordance with the ACI 336.1-89 & 01 specifications, and modified for the site-specific design.

Pier design details are furnished along with the concrete mix designs and construction engineering results of the completed piers to the base of the basement excavation. The Design Geotechnical Engineer investigated, designed, construction engineered, inspected, and monitored.

When and Where.

Tuesday, February 6, 12:45 - 2:00 PM
CE Building, Room 203

Event Series Website.

http://geoinstitute.tamu.edu

Contact Person.
Jennifer Nicks
jenn04@neo.tamu.edu

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