



2010 - 2011

October Meeting Notice

Minnesota Geotechnical Society

Value Engineering of Drilled Shaft Foundations, Milwaukee, WI

Chad A. Underwood, P.E., P.G., Engineering Partners International LLC

This presentation will discuss a value engineering approach to re-evaluate subsurface conditions, redesign, and construct drilled shaft foundations for a hotel and condominium project in downtown Milwaukee, Wisconsin. Maximum column loads were 3375 kips. The surficial geology of the site consists of miscellaneous fill materials and soft estuarine deposits overlying medium dense alluvium and very competent glacial till. The unconsolidated deposits are underlain by weathered, highly fractured bedrock, which raised concerns regarding the proposed design of end bearing shafts socketed one foot into "suitable bearing rock".

An alternative drilled shaft design utilizing a combination of skin friction and end bearing in the glacial till deposit was proposed. Geotechnical design parameters were determined using pressuremeter testing combined with research of the local geology and data from a previous project in the area. Design assumptions were confirmed by high strain dynamic load testing. The shafts were drilled to depths of 90 feet to 100 feet under slurry using a combination of auger drilling and rock coring.

(Note: this presentation was given at the DFI Drilled Shaft Specialty Seminar held in Minneapolis in July 2010)

Date: Wednesday, October 13, 2010

Location: Rose Vine Hall (downstairs at Grumpy's Bar & Grill)
2801 Snelling Ave. N., Roseville, MN

Time: 6:00 Social Hour, Sponsored by Engineering Partners International LLC

7:00 Dinner & Dessert: Salad, Rolls, Coffee/Soda and a choice of:

1. 10-Ounce Top Sirloin - Char-grilled and topped with bleu cheese garlic butter. Served with white cheddar mashed potatoes and a sautéed vegetable medley
2. Feta Cheese and Sun-Dried Tomato Stuffed Walleye - Served over white cheddar mashed potatoes with a drizzle of lemon thyme butter sauce.
3. Seared Chicken Parmesan - Tender chicken breast crusted with aged Parmesan cheese and rapidly seared until golden brown. Served over white cheddar mashed potatoes and a sautéed vegetable medley.
4. Manicotti – Fresh Pasta tubes filled with ricotta, mozzarella and parmesan cheeses. Baked in marinara sauce and finished with melted mozzarella.

8:00 Presentation – Chad A. Underwood, P.E., P.G., Engineering Partners International LLC
(One professional development hour toward continuing education requirements for Professional Engineers is available).

Cost: \$25.00 members, \$30.00 non-members, and \$5.00 Full-time students, payable to MGS at the door.

Reservations: Requested by 12 Noon, Friday, October 8, 2010

Please register via the website at <http://www.mngeotechnicalsociety.com/eventsmpls.asp>

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