



2015-2016

December Meeting Notice

Minnesota Geotechnical Society

Investigation and Repair of a Wharf Wall Failure

Wayne Wambold, PE

On January 15, 2014 a wharf wall adjacent to the South Menomonie Canal in Milwaukee, Wisconsin had shifted outward. A 6 inch gap between the sidewalk and wall had formed. The wharf wall, originally constructed in 1984, consists of steel sheet pile with tie backs. The tie back system consists of 1 1/4" Dywidag Grade 150 thread bar connected to a deadman. The deadman consists of a 3-foot by 4-foot continuous concrete mass supported on compression and tension pile.

SEH was retained to investigate the failure and prepare a root cause failure analysis report. The investigation methods and results of the investigation will be presented. In addition, the current status of an ongoing investigation into the condition of the tie backs for approximately 500 feet of wall at the site, which has not failed, will be presented. An initial investigation with ground penetrating radar was conducted. The results of the GPR investigation will be discussed and compared to actual observations of the tie back conditions observed recently during an open cut near the wall.

Date: Wednesday December 9, 2015

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

Time: 6:00 Social Hour – Sponsored by Atlas Foundation Company

7:00 Dinner: Salad, Rolls, 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 – \$40.00
2. Chicken Marsala - A chicken breast lightly breaded and drizzled with marsala wine sauce, mushrooms and onions– \$35.00
3. Feta Cheese and Sun-Dried Tomato Stuffed Walleye - Served over white cheddar mashed potatoes with a drizzle of lemon thyme butter sauce – \$35.00
4. Chicken Fettuccine Alfredo - Fettuccine noodles, snow pea pods, and mushrooms tossed in an Alfredo cream sauce and topped with a grilled chicken breast and parmesan cheese – \$30.00
5. Cobb Salad - Iceberg topped with turkey, ham, bacon, hard cooked eggs, avocado, diced tomatoes, bleu cheese crumbles, and black olives with choice of dressing (Ranch, Fat Free Ranch, Bleu Cheese, French, Fat Free French, Italian, Fat Free Italian, Balsamic Vinaigrette) – \$25.00

8:00 Presentation – Wayne Wambold

(One professional development hour toward continuing education requirements for Professional Engineers is available).

9:00 Coffee and Dessert – Sponsored by Atlas Foundation Company

Cost: Paid 2015-2016 MGS Members receive a \$5 meeting discount on the meal costs listed above. The cost for full-time students is \$5, payable to MGS at the door.

Reservations: Requested by 12 Noon, Friday, December 4, 2015

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