



**2014-2015**

*January Meeting Notice*

## **Minnesota Geotechnical Society**

### **North Dakota Oil Well Platform Construction and Stability Failure Repair: Retention Systems used for Construction of the Bross Pad and Failure Repair of the Mormon Butte Pad**

**Jeff A. Segar, PE – Braun Intertec**

With the explosion of oil drilling in North Dakota, the pressure is intense to create locations for the drilling platforms. Many of these flat platforms are created by cutting soil out of the side of a slope and using the cut soils as fill to level off the down slope side. Some of these pads are created by the contractor using fill slopes that have worked in the past without engineering and only compaction testing the top of the platform, not the sloped area.

This case study will focus on two separate platforms, highlighting the parameters that resulted in different construction types used to create the final platforms. One of the platforms, constructed in 1985 and failed in the spring of 2014, was repaired using a combination of drainage, buttressing, and a reinforced soil structure. The other platform was constructed in summer of 2014 using geogrid in the sloped backfill and tie back retaining walls to provide stability and allow the platform to remain within the property limits.

**Date:** Wednesday January 14, 2015

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

**Time: 6:00** Social Hour – Sponsored by Braun Intertec  
**7:00** Dinner: 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 – \$35.00
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 – Jeff A. Segar – Braun Intertec  
(One professional development hour toward continuing education requirements for Professional Engineers is available).

**Cost:** Paid 2014-2015 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, January 9, 2015

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Membership applications can be found at: <http://www.mngeotechnicalsociety.com/memberjoin.asp>

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