GROUNDBREAKING Solutions
NEWS YOU CAN BUILD ON FROM G2 CONSULTING GROUP
2009 Issue 3

Happy Holidays!

Happy holidays and best wishes for a prosperous 2010
from your friends at G2 Consulting Group!

G2 works on 2,000th project funded by federal stimulus bill

G2 Consulting Group is providing geotechnical design and vibration monitoring services for a Michigan Department of Transportation (MDOT) project to rebuild nearly two miles of I-94 in Portage, Mich. – the nation's 2,000th project funded by the American Recovery and Reinvestment Act (ARRA).

G2's work is part of MDOT's three-year project to relieve congestion along one of Michigan's main commercial trucking corridors by widening I-94 from four lanes to six and rebuilding the Westnedge Avenue interchange as a more efficient single-point interchange. ARRA provided $43.9 million in federal stimulus dollars to fund the total project.

Walter Toebe Construction Co. of Wixom, Mich., the project's primary contractor, selected G2 to provide specialized geotechnical services for the reconstruction of four I-94 bridges – eastbound and westbound bridges over a Norfolk Southern Railroad line and Portage Creek, and eastbound and westbound bridges over Westnedge Avenue.

G2 designed earth retention systems that allow Toebe to safely perform construction activities on and around the four bridges.

Throughout the construction process, G2 will also monitor the level of vibrations experienced by an existing 60-inch sanitary sewer line adjacent to the new center bridge pier. G2 designed a system that uses multiple geophones installed within casing adjacent to the underground sewer line to detect vibrations and transmit the information to instruments that record vibrations. Those instruments – which run on batteries charged by solar panels – send the data via modem to G2's Troy headquarters. There, an engineer monitors the data to confirm that vibrations from construction activity don't exceed levels that could damage the sewer line.

G2 Dirt

G2's construction engineering services group hired two fall interns: **Eileen Disante** and **Allison Maraldo**, who are both pursuing bachelor's degrees in civil engineering at University of Detroit Mercy.

Mike Evans, a staff engineer in G2's construction engineering services group, recently earned a master's degree in civil engineering with a concentration in geotechnical engineering from Wayne State University. A G2 employee since 2006, Mike previously earned a bachelor's degree in engineering from WSU.

G2's **Casey** and **Rachel O'Brien** were married Oct. 30. Casey is a field engineering technician in G2's construction engineering services group.

Katherine (Katie) Lamb, a staff engineer with G2's geotechnical group in Troy since 2005, has passed the Michigan Professional Engineers exam to earn her professional engineering (PE) license in Michigan.

Jeff Hayball, a staff engineer in G2's geotechnical group in Troy, and his wife Sarah had a baby boy (Donovan) on Dec. 9

GROUNDBREAKING Solutions

Foundation design for high-tension median cable barriers

Barrier system manufacturers and contractors for state transportation departments are relying on G2's geotechnical experts to design special foundations for high-tension median cable barriers on highways nationwide.

These barriers, also known as wire rope safety fences, are installed in relatively flat highway median areas to capture and redirect vehicles and prevent cross-over crashes. During installation, the cables are placed on weak posts and anchored into the ground with end terminals. The cables are then tensioned in place. When a vehicle strikes the cables, the force of the impact transfers along the cables to the end terminals, reducing the forces transmitted to the vehicle occupants. Compared to traditional concrete and metal-barriers, cable barriers cost less to install, need less maintenance and are at least as effective.

G2's geotechnical engineers have designed foundations for end terminals – typically involving either drilled piers or anchor blocks – in high-tension median cable barrier projects in Michigan, Indiana, Wisconsin and Florida. Upcoming projects include systems in Pennsylvania and Mexico.

"We're proud to play a role in making divided highways safer," says Mark Smolinski, G2 principal.

G2 The Geo-logical Choice

We're proud to announce the following new clients and projects!

Client: ***O'Laughlin Construction Co.***
Project: North Huron Valley Lift Station – geotechnical design engineering services

Client: ***TMP Architects***
Project: L'Anse Creuse Schools – geotechnical engineering

Client: ***Giffels-Webster Engineers***
Project: Rochester Road rehabilitation, Leonard, MI – geotechnical engineering

Client: ***RW Mercer Co.***
Project: Jackson Community College, Jackson, MI – construction engineering

Client: ***Clearwire***
Project: Clearwire NTIA, Detroit, MI – environmental consulting services

Client: ***Commercial Contracting Corporation***
Project: Chrysler plant, Marysville, MI – construction engineering

Client: ***Hawke, Inc.***
Project: Sonic Restaurant, Sterling Heights, MI – construction engineering

Client: ***Beals Hubbard, PLC***
Project: Industrial Drive building, Macomb, MI – environmental consulting services

Client: ***Cunningham-Limp Co.***
Project: Retail building, Spring Lake, MI – environmental consulting services

Client: ***Rowe Engineering, Inc.***
Project: Lovejoy Road over Shiawassee River – geotechnical engineering services

Client: ***Lawndale Christian Health Center***
Project: proposed 5-story building housing clinical offices and fitness center, Chicago, IL – geotechnical investigation

Client: ***Banco Popular***
Project: Miscellaneous sites, Chicago, IL – environmental services

Client: ***Semaan Engineering***
Project: Miscellaneous telecommunication sites, Oklahoma City, OK – geotechnical engineering and foundation mapping

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