UNIQUE FOUNDATIONS FOR BUILDINGS ON 60 FEET OF RUBBLE FILL

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CEE Conference Room ~ 2355 GG Brown Lab

A large auto parts manufacturer desired to construct a new headquarters complex on a site north of Detroit Metropolitan Airport that had been formerly used as a sand and gravel quarry. After most of the sand and gravel had been mined, the resulting lake, that was approximately 40 acres, was used as an illegal landfill for disposing of soil, concrete rubble, and anything else that people did not want to pay to put into a licensed landfill. The geotechnical investigation of the site encountered approximately 60 feet of concrete rubble had been dumped into the northern end of the lake, at precisely the location where the headquarter’s complex was to be constructed. There were indications that the rubble fill was unstable and actually sliding into the lake. Numerous remediation techniques were evaluated and the method of construction chosen for the foundations ultimately saved the Owner almost $10,000,000 over more conventional techniques. The challenges associated with constructing the foundations on this site will be discussed as well as how these techniques can be applied to other difficult sites.

***** Everyone is invited – refreshments will be served *****