APRIL 11, 2018

Wednesday, April 11, 2018
4:00 PM - 5:00 Workhop (1.0 PDH)
5:30 PM - 6:30 P.M. Technical Program (1.0 PDH)

TECHNICAL PROGRAM

Geoforensic Study for Retaining Wall

Speaker: Harry Nguyen, Geotech Engineering & Testing, Tel. (713) 699-4000

PRESENTATION SUMMARY

A retaining wall that would separate a mitigation pond from a pumped detention pond in Houston, Texas, collapsed during construction. The retaining wall consisted of a CMU block wall, 15-ft tall, 120-ft long and about 1.0-ft thick. The wall was supported on a footing with 12-ft width and 12-inch thickness. A geoforensic study was conducted by Geotech Engineering and Testing (GET) to evaluate the cause (s) of the retaining wall collapse. This was achieved by reviewing the existing documents, conducting site visits to assess site conditions, performing field investigations which included drilling, ground penetrating radar, coring, survey and engineering analysis with regards to bearing capacity, global stability, etc.

The investigation and analysis showed that the retaining wall collapse occurred as a result of one, or a combination of poor design, poor construction and poor materials.