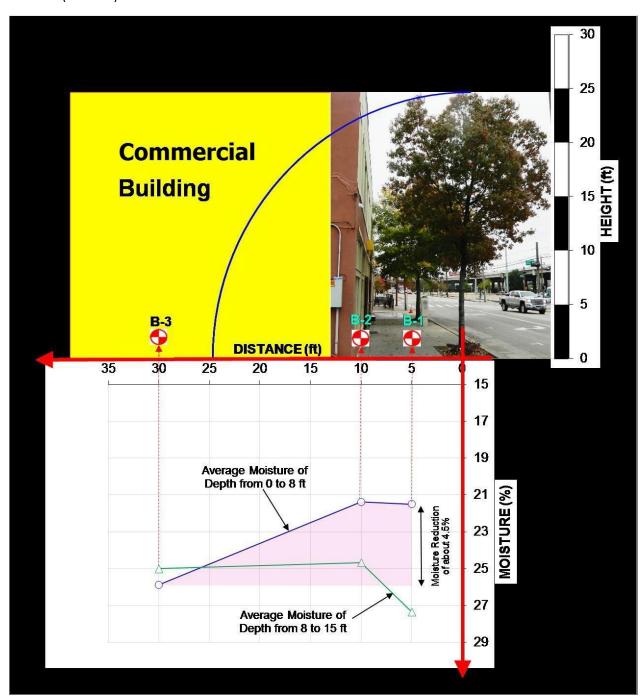
DECEMBER 11, 2019

Wednesday, December 11, 2019 4:00 PM (1.0 PDH)



WORKSHOP

4:00 PM (1.0 PDH)

Title: Geoforensic Study of a Commercial Building

Speaker: Dr. Harry Nguyen w/ Geotech Engineering and Testing

Dr. Nguyen is a project manager at DAE & Associates, Ltd, dba Geotech Engineering and Testing (GET) with the responsibility for the daily operations of geotechnical explorations, data analyses and the preparation of report recommendations. He has several years of experience in fields of geotechnical, environmental, materials and forensic engineering. His experience is in public infrastructure, including water, wastewater, roads, bridges, freeways, retaining walls, embankments, commercial and high-rise buildings, rail, parks, underground utilities, airports, ports, flood control channel, and subdivisions. He has experience in design of industrial plants, hydropower, ports, structures, buildings, various foundations, piles, seepage analysis, slope stability, retaining walls, triaxial testing, consolidation testing, groundwater, and contamination modeling.

ABSTRACT: The damages of light structures caused by soil desiccation of vegetation has long been recognized. However, understanding for a complex natural system of vegetation, soils, weather, and their effects on the stability of light structure foundation is quite poor; for example, there is still little evidence to distinguish between species, soil types, foundation types and different regional weather patterns. This paper discusses the foundation distress of a commercial building in City of Houston, which is caused by soil desiccation of young trees near building. Growth and penetration of tree roots into soils, water absorption and transpiration of trees, and foundation-placed depth of light structures constructed near trees will also be discussed.

PAST PRESENTATION SUMMARIES

To read summaries of previous FPA presentations by Dr. Nguyen, please click:

<u>December 2018</u> - Geoforensic Evaluation of Concrete Pavements <u>April 2018</u> - Geoforensic Study for Retaining Wall