## Indoor Small Arms Firing Range & Parking Niagara Falls Air Reserve Station Niagara Falls, New York

## **Project Description**

Pro Geotech, Inc. performed a subsurface investigation for the new Indoor Small Arms Firing Range and associated parking at the Niagara Falls Air Reserve Station in Niagara Falls, New York. The new Indoor Firing Range consists of a single-story 30,000 square foot building. Pro Geotech advanced 10 test borings for structural and pavement design recommendations. Five (5) structural test borings were advanced to depths ranging from 13.5 to 15.1 feet and five (5) pavement test borings were advanced to a depth of 6.0 feet. The five structural test borings were terminated on dolomite bedrock. A bulk sample was obtained from the shallow auger cuttings from each pavement boring and a California Bearing Ratio (CBR) test was performed to provide pavement design parameters. The major concern encountered at the site was shrink/swell and intolerable differential settlement of the soft clay lake deposits. Pro Geotech performed both classification testing and physical testing on disturbed and undisturbed soil samples to determine the engineering properties of the soils and provide foundation recommendations for the Indoor Firing Range.

## **Client:**

The Mason and Hanger Group, Inc. 300 West Vine St. Lexington, Ky. 40507

## **Contact:**

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**Performance Period:** February 2010 to May 2010

**Project Costs:** \$20,125

**PGI's Role:** Geotechnical Exploration

