



SUBSURFACE CONSTRUCTORS, INC.

Full Service Geotechnical Contractors and Ground Improvement Specialists

Ground Improvement



Sheboygan Police Station – Sheboygan, Wisconsin

PROJECT DESCRIPTION

This project is located in Sheboygan, WI, just off of Lake Michigan, and involved construction of a new, 32,000 sq. ft., two-story structure with attached parking garage. Soils at the site consisted of fill overlying firm to stiff silty clay with trace of sand and gravel. The geotechnical investigation also indicated the possibility of peat or buried topsoil in isolated areas.

The foundation design for this structure required that all footings and floor slabs be treated with aggregate piers to develop a post-treatment bearing capacity of 4,500psf. Subsurface Constructors designed the ground improvement layout, and constructed a total of 734 vibro stone columns without the need to pre-drill or pre-loosen existing soils. This saved the general contractor considerable time and money in spoil removal.

The stone columns on this project were installed to depths ranging from 10 to 18 feet, and the entire ground improvement program was completed in less than three weeks. Modulus tests were performed and demonstrated that the stone columns exceeded the design parameters.

PROJECT TEAM

Owner:	City of Sheboygan, WI	Geotechnical Engineer:	Giles Engineering Associates
Structural Engineer:	Harwood Engineers	General Contractor:	Quasius Construction, Inc.
Ground Improvement Design/Builder:	Subsurface Constructors, Inc.		