



UNITED STATES

## T-43 Warehouse Teterboro, NJ



**Owner**  
Forsgate Ventures XII, LLC

**Engineer**  
Melick-Tully

**General contractor**  
Herrod Construction Company, Inc.

**Dates of work**  
12/2015 to 02/2016

### Description

T-43 Warehouse is a new 207,000 sq-ft facility located next to the Teterboro Airport in Teterboro, NJ. Although the site contained a previously demolished warehouse, the perimeter of the new facility is larger than that of the previous structure.

Menard was chosen to perform ground improvement to support the new facility in the areas outside the footprint of the previously demolished warehouse.

Wick Drains were proposed to consolidate and strengthen the soils of the new building footprint. However, the owner was concerned about potentially contaminated ground water in an approximately 33,000 sq-ft area. Controlled Modulus Column (CMC)<sup>®</sup> rigid inclusions were then incorporated into the design in this area of concern to prevent the possibly contaminated ground water from reaching the surface.

### Main figures

**Wick drains**  
40000 LF

**Controlled Modulus Columns (CMC)<sup>®</sup>**  
497 EA.

### Ground conditions

The site soils consist of up to 10 ft of fine to medium sand, overlaying a layer of varved clay and silt which extends to approximately 75 ft below the ground surface – this layer contained sand at approximately 65 ft. Below a depth of 75 ft was a layer of fine to coarse sand with some rock fragments.

### Solution

Because of the site's proximity to the Teterboro Airport, a challenge on this project was coordinating with the Federal Aviation Administration to meet air traffic height requirements. Every night, Menard was required to lower the wick masts, park the CMC rigid inclusion rig in a designated area of the site, and keep the rigs lit and easily visible.

Wick drain and CMC rigid inclusion installation kept to schedule. More than 40,000 LF of wick drains were installed to an average depth of 67 ft, and a total of 497 CMC rigid inclusions were installed to a maximum depth of 76 ft.