



Iowa Wind Farm



Ground Improvement – Installing Vibratory Stone Columns

PROJECT OVERVIEW

CNC installed vibratory stone columns to densify the soil so the contractor could use traditional foundation methods over deep foundations when installing the wind turbines.

Vibratory stone columns are extremely more cost-effective than typical over-excavation or a more costly deep foundation system. VSCs mean no spoils removal and a fast efficient installation process. This allows general contractors to use traditional shallow foundations.

REQUIREMENTS AND CHALLENGES

In this case, the soils allow us to use the top feed method. The top feed method is where we open the hole with the vibratory flot, place the rock in the hole, and then build the pile from the bottom up using multiple lifts.

If the soils were collapsible, then we would need to alternate to a bottom feed method.

SOLUTION AND RESULTS

Our computer monitoring systems that all of our VSC rigs are outfitted with are unique in the marketplace. CNC's particular data logger shows the number of piles the time it took to install the piles and the bar pressure we achieved on every lift.

This gives a general contractor and an engineer of record amazing peace of mind throughout the project, which accelerates schedules which better utilizes dollars. Our computer monitoring system is another method of checks and balances provided by CNC Foundations, which then allows us to move through the schedule of the project a little quicker.

Project Details

SECTOR
Wind Farm

LOCATION
Iowa

APPLICATION(S)
Vibratory Stone Columns

1ST CHOICE