



M. Sullivan & Son Limited

Arnprior Solar Farm - Pile Supply and Installation

The Situation

When the Ontario Government introduced the Clean Energy Act in the spring of 2009, an abundance of alternate energy projects were developed for the Province, one of which was the Arnprior Solar Project. This massive solar energy project consists of two sites being developed under the Government of Ontario's Standard Offer Program: a program focused on encouraging renewable energy production to help the Province move away from its reliance on coal generated electricity.

Through their online research, M. Sullivan & Son Limited, a large construction company based in Arnprior, Ontario, was introduced to Almita and the benefits of screw piles. Almita was given the task of designing, fabricating and installing the piles necessary for 312,000 solar panels covering 60 acres. The key requirement: all of this had to be engineered, approved and completed in under 115 days.

The Solution

Upon receiving the commission, Almita's operating team went to work assembling a team of 25 field crew members, sourcing and outfitting five specialized pile installation units and establishing the acquisition of over 400,000 lineal feet of steel pipe. Working closely with their pipe supplier, Almita was able to secure a highly cost effective freight charge by utilizing rail transport instead of shipment by trucks, which consequently led to savings passed along to the client.

Within one month of award, Almita had begun sending crews, equipment, as well as the first shipment of piles to Ontario in order to begin installation. To ensure a smooth installation schedule, production was increased to ensure a minimum delivery of 2,400 screw piles per week.

Through intensive supply chain management, a total of sixty-five shipments of hot-dip galvanized finished product were coordinated to arrive in Ontario at appropriate intervals. This increased efficiency achieved a reduced timeline in completion of the project.

Testimonial

"Almita fabricated 26,000-engineered helical piles, shipped and installed all those piles within a 14-week timeframe. This was an unprecedented task, and considering the geographical disparity of fabricating in Alberta and installing in Ontario, Almita made history with their efficiencies by finishing the project 3-weeks ahead of schedule."

Robert (Bob) MacLaren
 President and C.E.O.
 M. Sullivan & Son Limited

The Result

With installation rates in excess of 350 piles per day, Almita crews finished the job 17 days ahead of schedule. Almita's strict adherence to safety and quality resulted in zero lost time incident and zero rejected piles. Almita's exemplary safety program led the way and was utilized for all on-site construction. On this project, over 26,000 screw piles, engineered and built to specific standards, were delivered on time and installed to stringent tolerances for EDF EN Canada.

Environmental Benefits

Upon completion, the Arnprior Solar Project will be able to meet the electricity needs of nearly 7,000 homes in the local community. Since the final sites will be clean, safe, and sustainable, the resulting avoided CO₂ emissions will total to a staggering 21,154 metric tons.

Avoided Emissions

21,154 Metric Tons of CO₂

Equivalencies*

Annual Greenhouse Gas Emissions from 3874 passenger cars

Annual CO₂ emissions from 2,401,161 gallons of gasoline

Annual CO₂ emissions from electricity use of 2,934 homes

*Based on EPA Greenhouse Gas Equivalencies.