



## Bald Eagles are Loving the Helical Pile - on the Site of a Large Helical Pile Deep Foundation Project on the Irondequoit Bay Near Rochester, NY

Summer, 2016



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Project Name & Location:	Irondequoit Bay Apartment & Condo Project - Rochester, NY
Project Date:	Summer 2016
Project Type:	Helical Pile Deep Foundations
Helical Pile Installation Contractor:	CMI Structural Solutions - <a href="http://www.cmistructural.com">www.cmistructural.com</a>
General Contractor:	Spoleta Construction Corp. - <a href="http://www.spoleta.com">www.spoleta.com</a>
Architect & Civil Engineer:	Passero Associates - <a href="http://www.passero.com">www.passero.com</a>
Structural Engineer:	Jensen/BRV Engineering - <a href="http://www.jensenbrv.com">www.jensenbrv.com</a>
Geotechnical Engineer:	Empire Geo Services - <a href="http://www.sjbegs.com">www.sjbegs.com</a>
Helical Piles Specifications:	(450) 5.50" Diameter 0.361 Wall Helical Piles with 16" Helix Bearing Plates; Non-Galvanized; Grouted
Soils:	Sand, Gravel, Variable Fill and Cobbles
Project Timeline:	(6) Weeks - Difficult Soils Slowed Some Installations
Helical Pile Manufacturer:	IDEAL Group - Webster, NY

### Project Overview

A new 315 unit apartment and condo development is being built in Rochester, NY on a 26 acre parcel which borders county park land and the Irondequoit Bay. Aside from a bald eagles nest, the site remained vacant and undeveloped for decades and was primarily used as a fill site for much of the time.

### CHALLENGE:

Some of the big site challenges were the presence of excessive fill and rubble which created unpredictable soils. Much of the site was congested with other sub-contractors so space restriction was another issue that ruled out other piling methods. The bald eagles nest on the property is at least 10 years old and is protected by both state and federal laws. It is required that all construction in the area is minimally disruptive to their habitat.



### SOLUTION:

Because of the above mentioned concerns and challenges, Helical Pipe Piles were specified as the preferred foundation. With limited install space, minimal noise, and no vibration, (450) 5.5" OD x .361 wall Helical Pipe Piles with 16" bearing plates were installed to support the buildings. The Helical Pipe Piles were installed by CMI Structural Solutions. The piles were installed to depths of up to 65' and were load tested to 50 tons. The piles were concrete filled for additional strength and corrosion resistance. The eagles are still living happily ever after.

