

# O'Connell Electric Company

*In construction, highlighting key projects which demonstrate a company's expertise and the market segments in which they specialize is critical to establishing credibility and promoting business. For O'Connell Electric Company, a U.S. Top 50 specialty contractor, I developed 53 in-depth project write-ups for their corporate website, each through a series of interviews and research.*

*In this case, installing the cable for Nik Wallenda's historic high wire walk across Niagara Falls came down to PR and gaining national exposure. I was also photographer for this event as well as Nik's high wire walk across the Grand Canyon the following year.*

## **Project: Nik Wallenda's Walk Across Niagara Falls: Cable Installation**

### **Project Overview:**

"How cool would that be to walk a wire across Niagara Falls!" Those were the thoughts of a young Nik Wallenda the first time he visited the Falls with his family while his parents were performing in Buffalo. Nik admits that might sound strange to most people, but being part of the seventh generation of Wallendas who continue in the family tradition, "It's sort of in the blood," he says.

Fast forward about 25 years. To make his longtime dream a reality, serious lobbying of US and Canadian officials began twenty months before the walk actually took place. The New York State Assembly passed a bill that granted a onetime anti-stunting law exemption early on in the process, however Ontario Canada's Niagara Parks Commission (NPC) didn't grant their approval until four months before the event.

On June 15, 2012, Nik Wallenda became the first person to perform a tightrope skywalk over Niagara Falls since 1896. His successful crossing was performed in front of nearly 200,000 spectators and millions of television viewers across the world. "All my attention is focused right there on that wire and nothing else," Nik stated. "It's me and that wire in our own world."

A key factor in Wallenda's success rested on finding the right contractor to install the cable: experts who possessed the resources and equipment to rig and stabilize an 1800-foot span of wire rope without the use of guy-wires. He found what he was looking for in NECA Contractor O'Connell Electric and the IBEW Local 1249 tradesmen who work for them.

### **O'Connell's Role:**

O'Connell was selected to install Wallenda's custom made wire rope from among several qualified contractors in the region.

To perform the installation, O'Connell assembled a crew of ten men who were divided into two teams, one on either side of the border. Four days prior to the event, they mobilized and began staging equipment at strategically placed anchor points where micropiles had been drilled and mortared into bedrock.

Wallenda's 2-inch diameter custom wire rope weighed over seven pounds per linear foot, more than eight tons in all. Too heavy for a helicopter to carry across the gorge, a synthetic rope was used instead. The rope was flown from Table Rock in Canada to Terrapin Point in the US where it was secured to the pulling end of the cable. A swivel fitting allowed the cable to spin freely as it was being fed off the tensioner and keep it from becoming damaged while a turnblock provided the two-part purchase that

enabled the rope to meet pulling tensions of around 30,000 pounds.

Pulling of the cable was managed through continual communications between the operator of a large tensioner on the US side, the operator of a puller anchored to the Canadian side, and several spotters who were their eyes for everything in between.

The cable made the Canadian side at 3:30 a.m. Once through the crane pulley, grips were attached to the lead end of the cable so it could be disengaged from the puller and secured in an aligned position with the anchor yoke. Four grips were then attached further back on the cable to make up the rest of the distance. By 8:40 a.m. the anchor pin was set and the cable was secure. Final cable tensioning to 65,000 pounds was achieved between the cranes on either side of the gorge. After crews finished securing the two sites, a 27-hour shift had come to a close.

After a brief rest, crews were back on the job that evening to stabilize the cable. Two by two they journeyed out onto the cable in custom-made baskets from both locations; the very path Nik would take two nights later. Working their way along the wire and out over the Falls, they inspected the cable and secured pendulum anchors every 150 feet to counteract rolling and bouncing of the wire. A small weather station was attached in the center of the wire to monitor the unpredictable micro weather conditions generated by the Falls.

During the walk itself, two O'Connell crews were staged in bucket trucks at each end of the wire. They were prepared to rush to Nik's aid as first responders in the O'Connell baskets, if necessary. Proving to be the professional athlete that he is, no aid was required. Nik made his 25-minute trek between countries look easy. Within an hour of Nik presenting papers to Canadian customs officials, O'Connell had begun the cable dismantling process. Within 24 hours, O'Connell crews had the cable coiled back onto the truck and their equipment off of both sites, leaving no evidence that they had ever been there.

Nik has aptly stated in numerous interviews that his dream would have never been realized apart from the dedication and expertise of O'Connell Electric and the IBEW Local 1249 tradesmen. We are grateful to have had the privilege to contribute to this historic event. Next stop, the Grand Canyon.

#### SUPPLEMENTAL:

A month before the walk, O'Connell installed a practice cable at the Seneca Niagara Casino that was identical to the one pulled across the Niagara River gorge for the big event, only slightly shorter. Open to the public, Nik practiced for eleven days, just a block away from the American Falls. To help simulate conditions he might encounter over the Falls, he incorporated a large, high-powered fan and fire hose spray into his daily workouts.