

RAM JACK PACIFIC

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# CASE STUDY

RAM JACK CASE STUDIES | CA201702





### **Sea World Light & Banner Poles Supported**

San Diego, California

Grantham Engineering contacted Ram Jack Pacific for help in providing light and banner poles that were to span over a heavily trafficked pedestrian area in Sea World San Diego. Ram Jack was asked to provide the helical piles to complete this project.

#### **PROBLEM**

During the summer months, Sea World Sand Diego has extended summer hours and large crowds. Due to the crowds, Sea World must limit construction access and work time on essential renovations. Sea World displays themes and temporary decorations for different holidays and events throughout the year. As a result, there are several high traffic areas that are in need of renovations and repairs. One attraction is in need of numerous light and banner poles in an area of the park that is typically utilized as a grass play and picnic area. Standard drilled and poured caissons are not considered a viable option due to the time necessary for drilling, removing spoils, and setting rebar, forms and anchor bolts. Concerns of possible collapsing soil and dewatering the highwater table were top-of-mind with Sea World being only five to ten feet above sea level: conventional concrete caissons are not recommended.

Additionally, concrete bollards and poles would not be attractive during the three seasons the area would not be used for a lighting display.

#### PROPOSED SOLUTION

Grantham Engineering contacted Ram Jack Pacific and proposed a 5 ½ in. dia. helical pile with 12 in. and 14 in. helix discs to be driven 12 ft. deep. The pile was designed with a custom cap to receive light and banner poles that can be installed and uninstalled rapidly. The baseplate is hidden in a concealed irrigation box that sits flush with surrounding grass. Light and banner poles only use a fraction of the pile's compression and tension capabilities but is ideal for increased lateral stability.



#### **OUTCOME**

Ram Jack's in-house engineers produced drawings for approval and fabrication of the helical piles. Ram Jack Manufacturing began production of the banner poles and light poles in a timely manner. Though the project was small, Ram Jack put in the same fast pace and attention to detail, custom fabrication, and thermoplastic powder coatings as if this was a major installation. Ram Jack places high importance on the quality of work, and this project was no different. The piles arrived right on schedule via flatbed semi and were transferred to the Sea World site on Ram Jack trucks. Ram Jack's trucks were required because of the poles' size; the trucks were small enough to maneuver through Sea World's maze of various walkways and exhibits without causing damage to those areas. Once the park was closed and all visitors had exited the main gates, Ram Jack was allowed to enter at approximately midnight. Ram Jack performed the installation using a small telehandler, with a boom attachment, that was used to implement the Pro-Dig X16K5 driver. Twelve specialty helical piles with concealment boxes installed and ready for light poles and banner poles proved to be the right choice. Using the Ram Jack helical piles saved Sea World time, money, and minimized area closures with the least invasive, most versatile products available.

#### **INSTALLATION OVERVIEW**

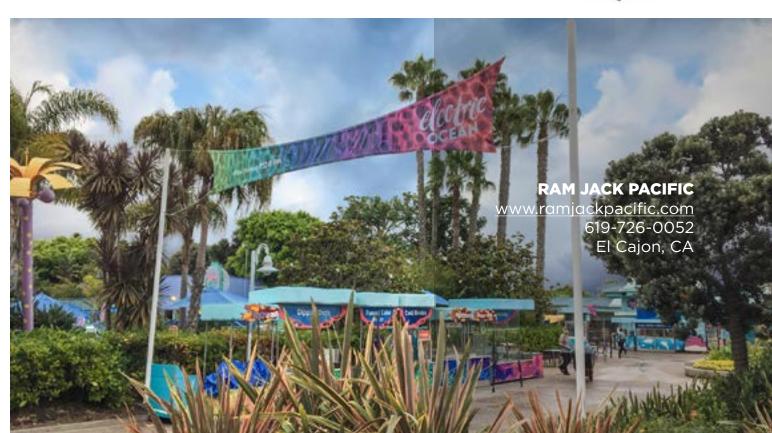
Commercial Installation
Ram Jack Pacific

**Products Used** 5 1/2" Helical Piles

**Product Type**New Construction - Helical

Typical Applications
Ram Jack's helical lead sections
can be used in either tension or
compression















## **Everything an Engineer Needs**

The Ram Jack Technical Manual provides engineers with the information that you will need to understand, design, and specify Ram Jack's helical and driven piles. It also provides information verifying compliance with current building codes and ICC-approved acceptance criteria.

Everything an engineer could ever want and need to know about Ram Jack Helicals and Driven Piles in one book. If you or your firm would be interested in a Ram Jack Technical Manual, please contact your local Ram Jack dealer by emailing info@ramjack.com.

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