

# CASE STUDY BROUGHT TO YOU BY DALINGHAUS CONSTRUCTION, INC



## **Project: Hyatt Hotel - Temporary Shoring**

**Project Location: Los Angeles, CA**

### **Project Background Information:**

When you buy a building to transition it from a variety of business to a full on functioning hotel, it can raise a few challenges. One of the first challenges to address was adding additional elevators to take on the requirements of the number of users and occupants. This can be a process within itself, but to compound it, you have to shore up the existing structural beams and pads is a whole other, but it is definitely doable, if you think outside the box.

### **Project Design Phase:**

The initial design concept for the project consisted of utilizing a combination of MicroPiles to be drilled along side an existing structural concrete pad. They would then attach to the pad to stabilize it while excavations for the new elevator pit could be completed at a safe level, without having the structure be placed in a compromised position. Upon review of the initial design, Dalinghaus Construction proposed an alternate to the micro-pile system and pushed forward with a helical system that would support the column while the excavations could take place.

### **Dalinghaus Solution:**

During Dalinghaus Construction's initial plan review and site visit we informed the client that the project may be able to yield better end and time frame results utilizing another deep pile product. The initial project data was provided to our engineering staff for review. They came back with a design that utilized a combination of 24 helical piles with retrofit brackets installed under the existing concrete pad.

Prior to installation of the production piles, Dalinghaus Construction installed a test pile. We performed a compression and tension test on the pile system. The system passed both tests with minimal movement.

The helical piles were installed around the perimeter of the large concrete pad footing. There were a total of 24 helicals that were installed to an installation depths ranging from 10' to 15' and an installation value exceeding 80,000 lbs.

The project was able to be completed with in a 2 week timeframe that included various inspections by the city of LA. The excavation contractor was able to start his scope of work immediately after. No wait time for concrete to set up or project downtime.

### **Project Team**

<b>Structural Engineer:</b>	Helfrich and Associates
<b>Geotechnical Engineer:</b>	Geocon West, Inc
<b>General Contractor:</b>	KCS West, Inc
<b>Tieback/Pile Installer:</b>	Dalinghaus Construction, Inc

### **Products Installed**

- 24 - 3.5" Helical Piles with Retrofit Brackets