CHANCE®

UNDERPINNING ANCHORING REPORT

A CASE HISTORY

Project:
Coastal Cities Imaging Center
Oxnard, CA

Engineer:
Medical Imaging Consultants
Beverly Hills, CA

Geotechnical Engineer:
Earth Systems Consultants
Ventura, CA

Structural Engineer:
Engel & Company Engineering
Bakersfield, CA

Foundation Contractor:
RJG Construction
Cyn. Country, CA

Job Description: A linear accelerator room was being added inside the existing Coastal Cities Imaging Center building. The walls, floor, and ceiling in the new 25' x 35' room would be 3' to 4' thick concrete to act as shielding. With compressible bay mud and sand layer 10' below, there was concern by the geotechnical engineer that the room could settle up to 1" if left unsupported. A compression load test was conducted at the site on a Chance SS5 HELICAL PIER® Foundation Systems screw anchor with 8" and 10" helices to determine the suitability of using them to support the concrete. The screw anchor was installed to 30' into a gravelly sand layer with a phi angle of 40° to 45°. Installation torque exceeded 5,000 ft.-lb. A test load of 68 KIPS was applied to the screw anchor. Design load for the piers was 34 KIPS. A total of 26 anchors were installed to depths of 31' to 34 1/2' and 12 tiebacks for lateral loading considerations were installed to 42'.

Threaded stud adapter (on ground) will be attached to the screw anchors and lateral anchors. A square plate will be double-nutted onto the adapter and cast in concrete.

An existing room at CCIC was converted to a linear accelerator room.