# CHANCE

## UNDERPINNING ANCHORING REPORT

### A CASE HISTORY

#### **Project:**

Pleasant Hill Baptist Church Houston, Texas

#### **General Contractor:**

Williams Industries, Inc. Houston. Texas

#### **Foundation Contractor:**

R. L. Nelson Construction Foundation Repair, Inc.

#### **Job Description:**

The Pleasant Hill Baptist Church was scheduled for a complete renovation. This renovation included a redesign of the roof framing system. The new framing scheme would add approximately 22,000 pounds of compression load onto each existing column and its foundation. Those foundations were spread footings, each with a 4-ft.square base located 6 to 7 ft. below groundline. Project constraints included low headroom  $(2\frac{1}{2})$  ft. in some areas) and the existing wood floor of the church was to be kept in its original condition. Soil was a stiff clay with PP values of 2 to 4 tsf.

#### **Supplemental Foundations:**

Four Chance Helical Pier $^{\text{TM}}$ **Foundation Systems anchors** were installeď per column location. The anchors were installed at approximately a 15° batter to clear the spread footing base. The anchors were placed on a 3-ft.-square grid at groundline and connected with a reinforced-concrete cap connected to the vertical stem of each footing at the groundline. Eight columns were reinforced employing this scheme. Each anchor had a 5-ft. long 1½-inch round-cornered-square steel shaft with 10- and 12-inch







diameter helices on the lead section. Extensions were  $3\frac{1}{2}$  ft. long. Predrilling at some locations was required due to low headroom. Average installed



depth of the anchors was approximately 18 ft. with a minimum average installation torque of 1,500 ft.-lb. from a Chance 2500 ft.-lb. portable drive unit.





210 North Allen Street Centralia, MO 65240 USA NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.

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