CHANCE®

UNDERPINNING ANCHORING REPORT

A CASE HISTORY

Project:
The Hunt at Louvier subdivision
Newark, DE

Home Builder:
Toll Brothers

Foundation Contractor:
Phoenix Construction

Foundation Engineer:
Tim Wentling

Job Description:

A large two-story house with basement was to be built at The Hunt of Louvier subdivision, outside Newark, DE.

Site and Methods Analysis:

The contractor excavated to the footing elevation and discovered soil unsuitable for the "standard" footer. Competent soil was found to be at least 10 feet deeper.

Excavation and replacement with compacted fill was determined not to be cost effective in this case. As an alternative, Chance SS-5 galvanized HELICAL PIER® Foundation Systems anchors were submitted to the City of Newark and approved.

Installation Procedure:

Phoenix Construction installed the underpinning anchors with a Chance torque head mounted on a Kubota backhoe. Each anchor had two helices (10" and 12" diameters) and was installed until 3,500 ft.-lb. of torque was reached. Torque was measured by a Chance shear-pin torque indicator. Average anchor depth was 22 feet.

A locally-fabricated load-transfer device was placed on each cut-off anchor shaft. The device consisted of square tubing welded to a 6" x 6" top plate. Plate elevation was 3" above the footing bottom.