



PROJECT CASE STUDY

Location: South Bend, Indiana
Engineer: n/a (in-house design)

Description

This former assisted living facility was undergoing a full renovation when plaster cracks were discovered along the entire East wall of the facility. This section of the building rests on high ground with slopes of about 8' in elevation to the East and South sides. Minor settlement of the foundation was noted in these areas.

Requirements & Challenges

The foundation along the East wall needed stabilization to accommodate the interior renovations. Any continued movement of the foundation would cause additional damage to repaired plaster walls and ceiling areas. To get the facility up and running with staff and residents, these repairs were conducted under a sequence of phases with oversight by the facilities director.

The grade conditions presented tight access for machinery. Because of the age of structure and lack of original

construction documents, the condition and construction method for foundation and footing were unknown prior to excavation.

Solution

3D Structural designed a repair plan consisting of 39 A.B. Chance Helical piers spaced 5'o.c. to be installed to an average depth of 14'.

Results

All 39 piers were installed over a two-day span, including excavation and backfill of soils. The renovation project was able to commence without delay and without any further concern of movement of the foundation.

3D STRUCTURAL

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