



Foundation Repair – Helical Pile Systems PLAN REVIEW PROCESS & PROCEDURES

This document will outline requirements for obtaining a permit and inspections for foundation repair using a helical pile system.

Applying for the Permit

The following information must be submitted when applying for a foundation repair permit. Since every project is unique, there may be some situations where you will be asked to provide additional information.

Submittal Documents

✓ *Site Plan*

Show the location of the proposed work.

✓ *Product Evaluation Report*

Permit applications for proprietary helical pile systems shall include an evaluation report by a nationally recognized and accredited evaluation agency, such as International Code Council Evaluation Services (ICC-ES). These reports shall serve as the basis for permitting and inspecting helical pile system installations.

✓ *Geotechnical investigation report.*

A geotechnical investigation which addresses all the items identified in the applicable ICC-ES product evaluation report must be performed and subsequent report provided for the following:

- Structures regulated under the Oregon Structural Specialty Code (OSSC).
- Structures located where any of the following conditions exist, if the repair involves (5) or more piles:
 - The site is identified on DOGAMI Landslide hazard maps as having either “moderate” or “high” deep landslide susceptibility, or “high” shallow landslide susceptibility.

((<https://gis.dogami.oregon.gov/maps/slido/>);

or

- The structure is located on a slope steeper than one unit vertical in three units horizontal (33.3% slope).

For structures regulated under the Oregon Residential Specialty Code (ORSC), if a geotechnical investigation is not required as described above and is not provided, a factor of safety of 2.5 shall be used in the structural design.

✓ *Structural calculations and drawings*

Prepared by an Oregon registered design professional. The structural design shall be in accordance with accepted engineering practice and principles, the current edition of the Oregon Structural Specialty Code, and the applicable ICC-ES product evaluation report.

✓ *Existing building information.*

Sufficient plans and details of the existing building structure must be provided to verify the loads and assumptions used in the structural design.

✓ *Details of system installation,*

and identification of manufacturer’s components to be used.

✓ *Statement of Special Inspections,*

in accordance with OSSC 1704.3 & 1705.9 and the specific product evaluation report. The statement shall include:

- Type and extent of each special inspection.
- Identification of continuous special inspection.

To Apply

Applications should be submitted online at buildingclerk@ci.warrenton.or.us

Foundation Repair – Helical Piles

Inspections

The following inspections are required to determine compliance with the approved construction documents:

✓ *Special Inspection*

Special inspection is required for installation of helical piles. The special inspector shall be employed by the owner or design professional acting as the owner's agent, be competent to perform the required inspections, and be approved by the building official. The registered design professional is approved to perform special inspection of work he/she designed.

The special inspector shall keep records of inspections. Items to be observed, recorded and verified by the special inspector include:

- Permit number and address for the work performed;
- date(s) and time(s) that the special inspector was on site;
- product manufacturer and component identification;
- helical pile and bracket configuration;
- installation equipment used;
- inclination and position of piles;
- final installation torque and depth of each pile;
- full-surface contact of brackets with foundation; and
- compliance of the installation with the approved construction documents, the ICC-ES product evaluation report and the manufacturer's installation instructions.

Special inspections must be performed continuously during installation of the helical foundation system for structures regulated under the OSSC. Periodic special inspection is allowed for structures regulated under the ORSC. Periodic inspection shall include continuous observation during installation of at least one pile.

✓ *City Inspection*

A final inspection shall be requested after all work required by the building permit is completed. The City of Eugene building inspector will verify:

- Receipt of an acceptable special inspection report;
- any work that is exposed or accessible for inspection, such as applied foundation reinforcement, if any;
- that any necessary trade work (i.w. plumbing and/or electrical) associated with the foundation repair has been permitted and inspected; and
- that the site has been restored to a safe condition.