

# ROCKY MOUNTAIN STEEL PIERING INCORPORATED

## CASE STUDY

**Project:** Covered Porch - Home Addition, Parker, CO

**Underpinning Contractor:** Rocky Mountain Steel Piering, Inc.

**General Contractor:** Clearwood Custom Builders, Inc.

**Structural Engineer:** Structural Consultants Incorporated



### Project Description:

The home consists of a two-story structure with a full basement, supported on a drilled concrete pier foundation system. The proposed construction to the home consists of a covered porch to be constructed along the rear portion of the home. The existing foundation system was found to be adequate to support the additional loading from the proposed addition; however, a helical steel pier foundation system was installed to support the outer structural members of the addition.

Five helical steel piers were installed by Rocky Mountain Steel Piering, Inc., utilizing a hydraulic torque head, which was powered by a skid steer. The helix piers consisted of 1-1/2-inch rounded corner square steel shafts with a single 8-inch helix near the base of each lead section. The piers were advanced approximately 9 to 15 feet into the ground and torqued to 4,000 ft-lbs. The tops of the helical steel piers were attached to new construction brackets, which were embedded in concrete pier caps. After allowing the concrete pier caps to cure, post base attachments were attached to the pier caps, which transfer the load from the new structural columns to the helical steel piers.