

Built to Last

Helical Piers Support Contemporary Waterfront Home

Wichita, Kansas

RESIDENTIAL PROJECT OF THE YEAR FINALIST

This project involved the installation of 56 new construction helical piers for a single-family residence at 2209 N Emmalyn St in northwest Wichita. Situated in a rapidly developing neighborhood, the homes in this area are part of a new residential addition with modern construction practices and clean design standards.



IWP worked closely with both the building contractor (whom they've partnered with on five previous foundation ventures) and the concrete crew to ensure pier placements and elevations were accurate and aligned with the planned footings. Each pile was equipped with flat new construction helical caps, and rebar was field-welded to each bracket to support the footing prep and meet structural engineering requirements.

Having completed multiple jobs in this neighborhood and with this contractor, IWP was familiar with both the soil conditions and preferred construction process, which streamlined communication and on-site execution.



This project came with several unique site-specific and scheduling challenges. The home was built in a new residential addition developed around an old rock quarry that was converted into a lake- a feature that adds beauty to the neighborhood but also presents tricky soil conditions. The sandy, loose soils required careful monitoring during pile installation to ensure proper embedment depth and torque readings were achieved. Additionally, the job was performed on a tight timeline, with coordination required across multiple trades to keep the project moving without delays. While the IWP team was familiar with both the neighborhood and builder, the soil variability and strict deadline demanded a focused and efficient execution from start to finish.

To meet the project's aggressive timeline, IWP adjusted their scheduling and manpower accordingly. Their team mobilized two full crews and worked through the weekend to maintain momentum on-site. The job officially began on a Friday, and the crews were able to successfully meet their goal of pouring concrete the following Wednesday, completing the helical pile installation in just under one week.



To address the sandy soil conditions caused by the site's history as a former rock quarry, they adjusted their installation plan to include a deeper depth clause and allocated additional material to ensure all piles achieved the necessary torque and load-bearing requirements. These proactive steps allowed IWP to deliver a stable foundation system without compromising schedule or structural integrity.