

# CASESTUDY

MAY 2023



**34 HELICAL PILES  
STABILIZE A SETTLING  
FORT MOHAVE, AZ HOME**



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NEVERSETTLE





# FORT MOHAVE, AZ HOMEOWNER CALLS DALINGHAUS CONSTRUCTION TO STABILIZE SINKING FOUNDATION

## PROJECT BACKGROUND

After seeing increased signs of a settling foundation, a Fort Mohave homeowner called our team to come evaluate the situation. Our inspection specialist, Thomas, performed the foundation evaluation and was immediately met with cracks on stucco, especially around window frames and door frames. With the help of his Ziplevel altimeter Thomas measured over 3 inches of settlement in several areas of the home. He also found several more cracks in the drywall. With his floor elevation measurements in hand he was able to put together a scaled diagram of the home, that he would use to help design and visualize his repair plan.

## PROJECT DESIGN PHASE

With the help of Waypoint Engineering, Thomas designed a repair plan consisting of 34 helical piles along with polyurethane void fill injections to lift and stabilize the home's foundation. Due to the amount of settling measured around the entire home it made the most sense for Thomas to use helical piles around the whole home with about 6 foot spacing on average. There would also be about 1500sq/ft of polyurethane void fill injections used to stabilize the slab and fill any voids created during the lift process.

## DALINGHAUS SOLUTION

Utilizing 34 of the TAF-288 helical piles from ECP Noah, Ryan, and their crews made quick work of the project. Due to access around the home all 34 piles would need to be installed with hand equipment. They started by excavating the soils at the pier locations before chipping the footings and driving the piles with a handheld hydraulic setup. The crews found competent, load-bearing soils at depths between 14 and 20 feet. After the piles were installed the crew cut and cap the pile brackets before pressurizing the systems and attempting to lift and recover some of the settlement. Once maximum practical recovery was achieved they locked off the brackets to secure the home for years to come.

## INSTALLATION OVERVIEW

TOTAL PILES

**34**

PILE PRODUCTS

**ECP TAF-288**

