

Helical Pile Installation at a Power Plant Sub-Station

Wyoming, U.S.A.



Park Range Construction was awarded the contract to install 250 Magnum galvanized 6.50" O.D. x .280" wall thickness tubular piles with .875" x 24" helices and 10"x10" pier caps welded to the shafts. Piles and caps penetrated 14" into concrete footing. Piles were installed to support foundations for a new sub-station at a power plant in the Western U.S.

The original foundation was designed with 6" micropiles. Installation was scheduled during winter months which would have required tremmie grouting in extreme conditions for micropiles. However, an alternate design was engineered by Magnum Geo Solutions providing an economical and efficient installation with helical piles. In addition, the soils were soft and sandy in the upper 15 feet. The conditions were ideal for helical piles. The 6 1/2" helical pile met the lateral capacity requirements of the engineer and torqued to the required capacity at 18-24 lf. The job finished on time and within budget.



PROJECT SUMMARY

Client: Timberline Construction

General Contractor: Park Range Construction

Engineer: Rocky Mountain Power, Pacific Corporation & Magnum GeoSolutions




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