
NEW TERMINATION DESIGN – AUGER CAST ALTERNATIVE FOR PRIVACY WALL

A customer in Palm Beach was looking for a cost-effective alternative to auger cast pilings for a 7 foot high privacy wall. Due to poor soil conditions, a 2-7/8" helical pile system was chosen. The regular new construction termination plate (10" x10" x 3/4") was too large to for the 12" wall width design. However, the engineer was able to come up with a simple, inexpensive termination to accommodate the restricted wall dimensions, and the tension/compression design loads for the wall. How did we do it?

The driveway was covered with plywood to prevent damage during construction.



The thirty (30) 2-7/8" helical piles were installed to torque to a depth of between 38 and 41 feet using a Bobcat and hydraulic drive head to meet capacities specified by the engineer (15 kips working/30 kips ultimate compression and 7.5 kips working/15 kips ultimate tension).

The simple termination designed with the engineer involved using the two (2) existing bolt holes in the top of the pile shaft (used for attaching either the next shaft extension, if required for additional depth, or the termination plate). A 3/4X x 10" galvanized threaded rod was inserted into each holt hole and secured using plated washers and nuts.

This design provided all the capcity required for both the tension and compression design load for the wall.



For more information on this project, please contact us.

norr

norr building corp
engineered foundation solutions

3866 Prospect Avenue, Suite 12
West Palm Beach, FL 33404
Phone (561) 881-7939 Fax (561) 881-7824
email admin@norrbuild.com
www.norrbuild.com
CBC037854