

CASE STUDY

68 STELCOR 1200 PILES IN 7 DAYS AT THE DARIGOLD PLANT IN SUNNYSIDE, WA

INSTALLER:

TBH & Associates, LLC
Vancouver, WA

GENERAL CONTRACTOR:

Design Group Facility Solutions
Seattle, WA

ARCHITECT:

Design Group Facility Solutions
Seattle, WA

STRUCTURAL ENGINEER:

Design Group Facility Solutions
Seattle, WA

GEOTECHNICAL ENGINEER:

PBS Engineering & Environmental
Kennewick, WA

LOADS

100 tons - 100 kips ultimate compression
45kips/90kips max uplift
2.0kips/4.0kips max lateral

SPECIFICATIONS:

5.5" pile shaft
.304 wall thickness 80 ksi
16" tip or drive plate
12" corrugated grout column
9" solid grout column
8" reverse auger

SOILS + EMBEDMENT DEPTH:

20' View soils report

TIME FRAME:

10 days. Work was completed in 7 days.



A 54% PILE COUNT REDUCTION AND 1/5 OF THE INSTALL TIME WITH STELCOR DDM PILES



OVERVIEW:

The Darigold manufacturing facility needed 8 new silos and pipe racks with deep foundations to be installed at their working manufacturing facility. The project was designed for helical piles and TBH brought in STELCOR as a cost-saving alternate.

CHALLENGE:

There was a time frame of 10 days to install 246 micropiles. With standard micropiles, the installers average 6-8 per day which would have put them well beyond the 10 day limit. The piles needed to be installed in areas with space restrictions and traffic. Because the facility had to remain open during construction, tractor trailers had to pass through the area where the work was being performed.

SOLUTION:

TBH presented the STELCOR alternate which reduced the pile count from 246 to 113 - 45 helical piles in phase 1 and 68 STELCOR piles in phase 2. With the faster install time, TBH performed installation during hours when there was little or no truck traffic. Given a 10 day window to install the 68 STELCOR piles to a depth of 20', they completed the work in 7 days.