

VIRGINIA LAW BUILDING

HELICAL PILES

PROJECT DESCRIPTION:

Project Date: March 2015

Project Name: Virginia Law Building

Engineer of Record: Magnum-Geo Solutions

Project Type: Helical Piles

Project Location: Norfolk, VA

Description: The Law Building in Downtown Norfolk, VA required 4 new construction helical piles for a new elevator pit. Advanced Builders encountered tight access issues (3 ft doorway) that would not allow for conventional helical pile equipment to be used. A custom rigging device was engineered to allow for a 12,000 ft-lb motor to be utilized using only winches and pulleys to support the motor. Remote hydraulic controls were also used to control the hydraulic power source over 80 ft away.

SHORING & UNDERPINNING PLAN

SCALE 1/4" = 1'-0"

HELICAL ANCHOR SHORING SCHEDULE						
SYMBOL	QUANTITY	DESIGN CAPACITY	MIN. LENGTH	PIER CAP	SHAFT DIA.	NOTES
①	12	30 KIPS	10' (RT)	THICKET TIE-BACK CAP W/ WEDGE WASHERS	1 1/2" Ø 3/8" WALL 3/4" HELIX SHAFT (STANDARD DUTY)	CLEAN & OIL TUBE POST TENSION NUT 3/8" Ø 3/8" (MIN.)
②	16	30 KIPS	9' (RT)	THICKET TIE-BACK CAP W/ WEDGE WASHERS	1 1/2" Ø 3/8" WALL 3/4" HELIX SHAFT (STANDARD DUTY)	CLEAN & OIL TUBE POST TENSION NUT 3/8" Ø 3/8" (MIN.)

CONSTRUCTION				
STAGE	STAGE AREA	MAGNUM PIERING	SEE PRINTS, EXCAVATE, INSTALL HELIX FOR DETAILS, ALLOW 10 MIN. PER 100 LB.	
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CONSTRUCTION		NOTES
PHASE 1	INSTALL HELICAL PILES	VERIFY PILES, EXCAVATE, LAGGED AND PER DETAIL. ALLOW FOR BARS THAT ARE NOT
PHASE 2	INSTALL BRACKET	ON PLATE, INSTALL HELICAL PILES, ALLOW FOR CONNECTIONS
PHASE 3	INSTALL BRACKET	ON PLATE, INSTALL HELICAL PILES, ALLOW FOR CONNECTIONS



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