Project Profile: SHAFT CONSTRUCTION



ODEC Wildcat Point Raw Water Supply

Peach Bottom, PA



PROJECT OVERVIEW AND CHALLENGES

ODEC's Wildcat Point Generation Facility (WPGF) in Cecil County, MD will use water from the Conowingo Reservoir in Lancaster County, PA. The Wildcat Point Raw Water Supply Project, consisting of a pump house, wet well shaft and pipelines to convey water from the Susquehanna River to WPGF. The wet well shaft was constructed by Bradshaw to serve as both tunnel access and as the permanent intake. Spatial constraints required that both the initial and final liners be incorporated into only 12". This was achieved with a combination of liner plates and shotcrete. Combined with a grout curtain, liner plates supported the shaft 36' deep without ribs encroaching on the inside clearance. The remaining competent rock was supported with rock bolts. Concerns about cold weather and blast vibrations caused the final shotcrete to be installed after tunneling. Bradshaw retrofitted a shotcrete arm so the entire 54' shaft could be shot from the bottom slab.





PROJECT INFORMATION - 552

OWNER:

Old Dominion Electrical Corporation 804-747-0592 feedback@odec.com

ENGINEER:

Burns & McDonnel Robert Fayard 816-822-4275 bfayard@burnsmcd.com

CONTRACTOR:

Allen Meyers, LP

COMPLETION DATE:

6/10/2016

GEOLOGY:

Weathered Schist Rock

EXCAVATION METHOD:

Conventional Drill & Blast

MINING DIMENSIONS:

54' x 23'Ø

FINAL LINING:

296" Liner Plate / Rock Bolt Initial Support 10" Shotcrete Permanent Wet Well Liner

FOR MORE INFORMATION:

Todd Brown, Project Manager 410-970-8300 tbrown@bradshawcc.com Refer to Project 552