

MIAMITOWN INTERCEPTOR SEWER

Miamitown, OH



- **Owner:**
Metropolitan Sewer District, Cincinnati, OH
- **General Contractor**
Affholder, Chesterfield, MO
- **Technique(s) Utilized:**
Jet Grouting

Because a more traditional construction method, such as sinking a shaft, would have caused far more disruption to the neighborhood, Nicholson designed and constructed a 29-foot-diameter access shaft to serve as the receiving pit for the microtunneling machine as well as support of excavation for subsequent construction activity. The shaft wall was comprised of two rows of 59 overlapping jet grout columns to create a minimum wall thickness of 6.4 feet to a depth of 81 feet. A 20-foot-thick bottom plug consisting of 76 jet grout columns was installed in the base of the shaft to create a watertight seal. The jet grout scheme was selected due to the extremely congested nature of the site. The shaft is located in the front yard of a residential property and the jet grouting ensured minimal disturbance to the house and other nearby structures.