



Clybourn West MIS Relocation

LOCATION: Milwaukee, WI

OWNER: Milwaukee Metro Sewerage District

OWNER CONTACT: David Kasper, P.E., (414) 225-2183
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ARCHITECT OR ENGINEER: Same as Project Owner

PROJECT PROFILE

Utilizing a two pass system, and a 129" Lovat TBM in "open mode", Super Excavators, Inc. installed 1,235 LF of 120" rib and lagging tunnel and grouted the annular space. The ground conditions were comprised of saturated sands/silts and clays, and we also ran through several wet sand / gravel / cobble seams. Dewatering occurred at the shaft locations as well as into the rib/lag tunnel.

As part of the design, we also slip lined 1,400 LF of existing 72" sewer with 48" Hobas pipe. CCFRPM pipe, cured in place pipe (CIPP) liner and fiberglass-reinforced plastic (FRP) liner were the materials the specifications allowed in the structural sections, but our team ultimately chose it for the entire project. A combination of low profile bell and flush joints to slipline the existing deteriorated 72-inch diameter monolithic concrete sewer. We installed the pipe with an in-house designed pushing mechanism that utilized two hydraulic rams and a plate, which backed to the existing sewer. The maximum push distance was 3,600 feet. Two separate 100-ton jacks were installed to make the push. Several other smaller segments were sliplined with drives averaging over 1,000 feet.



TOTAL VALUE OF CONTRACT:
\$,606,633

COMPLETION TIMELINE:
JUNE 15, 2005 - JULY 31, 2006

COMPLETED AS:
PRIME CONTRACTOR