

# CASE STUDY

## PILOT TUBE METHOD | PILOT TUBE MICROTUNNELING



### Project Name:

Nicollet Mall Sanitary Sewer Replacement, Phase 1 & 2



### Prime Contractor:

Minger Construction, Inc.



### Location:

Minneapolis, MN



### Owner:

City of Minneapolis Public Works



### Ground Conditions:

Cobbles, Granular Materials



### Akkerman Equipment:

GBM 4800 Jacking Frames, Guidance Systems, PCH 20 Cutter Head



### Pipe:

30-in. Steel Casing, 12, 15 & 18-in. ID NO-DIG® Vitrified Clay Pipe, 2m joints



### Total Length/Longest:

1,800-lf./425-lf.

## PROJECT OVERVIEW

The City of Minneapolis's sewer system was originally constructed in the 1890s and in need of capacity upgrades and new extensions as part of the Nicollet Mall re-imaging effort in the heart of downtown. The highly urbanized region had many subsurface utilities and above ground buildings and structures.

## THE CHALLENGES

- Need to preserve live traffic and public access to businesses
- Construction around existing structures and landscaping
- Line and grade accuracy was necessary to circumvent many existing buried utilities
- Varying ground up to 20-ft. depths with pockets of cobble
- Minimal space for construction equipment and pipe staging
- Installation conducted during cold winter months
- Need for carefully phased construction planning and communication with project team

## OUTCOME

- Successfully installed 1,800-lf. of sewer alignments in nine runs at up to 20-ft. depths
- Completed ahead of schedule and under budget

