

Trinity Products' Weldless Interlock System

PROJECT: Trunk Highway 169/TH 41/CSAH 78 DDI 147th St. Overpass

LOCATION: Shakopee, MN (Scott County, MN) OWNER: Minnesota DOT GENERAL CONTRACTOR: Ames SUBCONTRACTOR: Midwest Borings



SCOPE: 120LF of 60" OD x .875" x 20' Tri-Loc Steel Casing - This casing was installed underneath UPRR tracks to protect a 54" carrier pipe that was needed to act as a storm sewer relief into a retention pond. Ground conditions were solid sandstone from one end to the other.

INSTALLATION: Tri-Loc was selected on this project solely for the reduced welding time. Jeff Olson of Midwest Boring loved the idea of not welding a 60" x .875" casing. Because the ground conditions were sandstone and he had a 2" over cut on the casing; ground friction was not enough for the casings to engage. The crew improvised and used a 1.5" cable that they attached to their excavator and the other end to the lifting lug on top of the casing. Once they were able to hold the lead pipe in place with the cable, they made the connection at the bottom of the casing and were able to push forward creating full engagement of the teeth.

TRI-LOC CASE STUDY Summer 2018



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RESULTS: The Midwest Boring crew was able to decrease their engagement time on each pipe throughout the duration of the project. The average length of time from picking a new pipe, placing the pipe in the pit and successfully engaging all teeth was around 30 minutes at the end of the job. They completed the job on time and online and grade with no issue.

TESTIMONIAL: "After we got the hang of it, we were putting these pipes together easily. A few required a little dog and wedge, but it was nothing. I'm never welding large OD pipe again unless I have to!"

-Jeff Olson- Midwest Borings



PROJECT DETAILS:

- Pipe used 60"OD x .875" x 20' lengths Trinity LoProfile Spiral Weld / Tri-Loc
- Total quantity installed 120LF
- Joint (3 tooth or 4 tooth) 4 tooth (pre 3-tooth design)
- Equipment used 48/60 Barbco 60" auger
- Soil Conditions solid sandstone
- Carrier Pipe 54" PVC
- Annular space info. 2" over cut