

Morty's Trenchless Academy

Where's Morty the Tunnel Rat?

Morty's Adventures and Travel with Iowa Trenchless

By: Wes James, Iowa Trenchless



Introduction

Iowa Trenchless was excited to bring Morty the Tunnel Rat home from NASTT's 2022 No-Dig Show in Minneapolis, MN last year, and has been doing their best to keep him gainfully employed since!

At each year's NASTT No-Dig Show, Morty the Tunnel Rat donates his services for the upcoming year to the highest bidder, in a tradition of raising funds for NASTT's Annual Educational Fund Auction. Since 2002, NASTT's annual auction has raised over \$1.2M to support educational initiatives. All of the proceeds are used to support trenchless training, technical course manuals, university student chapter attendance at the No-Dig Show, awarding student and municipal scholarships, and to provide targeted training to NASTT members. (see pg 32)



Morty's old crew (L-R): Tyler Ireland, Lance Atkinson, Chris McClellan, Kyle Spoon, Randy Siemers, James Bailey

Morty kicked off his year at Iowa Trenchless by catching up with his old tunneling crew including superintendent Randy Siemers and meeting his new team, then went straight to work on his first job of the year with foremen Lance Atkinson and Kyle Spoon on their Closes Creek project in Des Moines, Iowa.

Des Moines, IA - Closes Creek Storm Sewer

This project is part of the City of Des Moines, Iowa's multi-year plan to mitigate flooding in the Closes Creek Watershed. In an effort to mitigate future flooding issues, the City of Des Moines implemented four long-term stormwater improvement plans for areas with previously inadequate drainage. The project scope of work included increasing the capacity of existing stormwater culverts and installing additional storm sewer infrastructure including two separate 150-foot tunnels of 84-inch RCP, as well as 340-foot and 152-foot tunnels and jacking 72-inch RCP using open-faced Akkerman TBM tunnel machines and pipe jacking techniques.

In addition to performing efficiently and safely in a high-traffic residential setting, the Iowa Trenchless crew went the extra mile to create cost-effective work plans, including installation of two separate 84-inch tunnels from one launch shaft and job-site layouts to safely accommodate existing



Morty and team with the Akkerman 720TBM coming into the side of the shaft; (L-R): Shawn Hunt, Lance Atkinson, Kyle Spoon, Justin Jungles, Alex Bower, Jacoby Winters, Noah Ramsey



Morty loves the variety of projects he works on!



Tunneling Out – the Iowa Trenchless Excavator Shield operator gets a glimpse of their team member operating another excavator

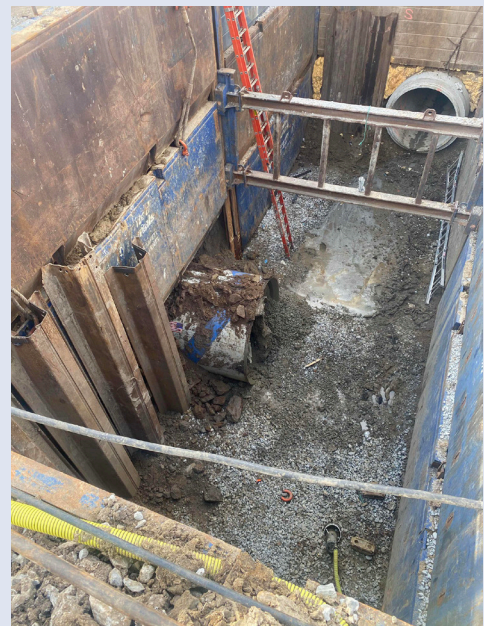


BEFORE AND AFTER: Justin Jungles and Noah Ramsey taking a break inside the Akkerman 960 TBM

geography, multiple residences, and heavy pedestrian traffic while minimizing disruption to the neighborhood. This was a unique and important project, and earned a finalist spot for the 2022 NUCA Top Jobs competition.



In order to make this project work, multiple tunnels shared one shaft, which had to be angled to accommodate both purposes, and allowing a receiving shaft to be the launch shaft for the next drive



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Crawford County, IA DOT 301

Back at the yard, it was time for Morty to get back to work for the Iowa Department of Transportation, this time tunneling 200 LF of 72-inch RCP with the Akkerman TBM and 450LF trenchless installation of 30-60-inch steel casing for storm water culverts under highways 59 and 141.



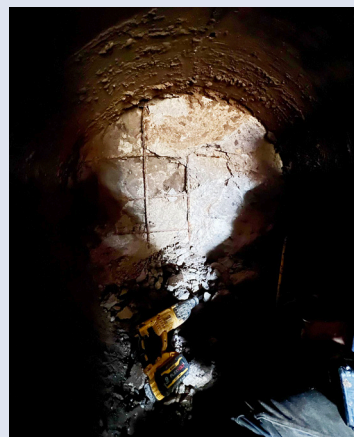
TUNNELING OUT – (L-R): Justin Jungles, Lance Atkinson, Lane Gagnard, Jacoby Winters, Shawn Hunt



Morty gets to work for the Iowa Department of Transportation



Twin 60-inch tunnels installed to replace a structurally deficient box culvert



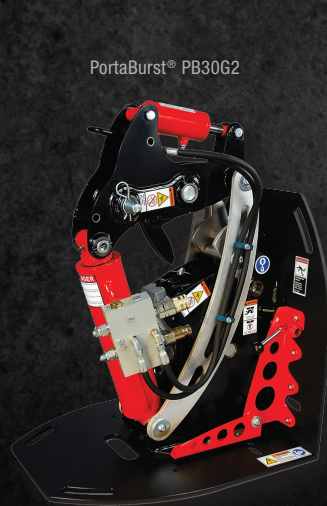
Morty removes a reinforced concrete obstruction with explosive enthusiasm



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Pre-Bidding and Job-Site Inspections

Then Morty tagged along to a pre-construction meeting in Utah with Superintendent Rick Siemers. As you can tell, he's really excited to promote Iowa Trenchless and the outstanding work performed by our professional crews. Morty helped Rick operate the drone for pre-bid and jobsite inspections.



Morty and Superintendent Rick Siemers heading for Oklahoma to inspect jobs



Rick and Morty use the Iowa Trenchless drone to inspect job sites before and during trenchless installation projects



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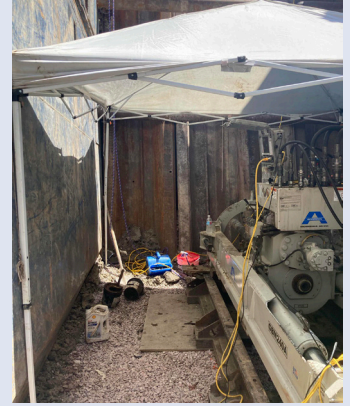
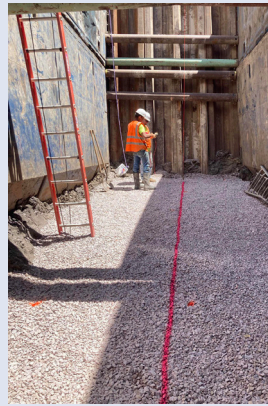
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Sioux City, IA - 6th Street Sanitary Sewer

After loading trucks safely all day, Morty and the crew are ready to mobilize for a Sioux City, Iowa project to jack & bore 140LF of 30-inch steel casing for an 18-inch sanitary sewer, including bore and receiving pits, to cross underneath the BNSF railroad.



*Morty ready to mobilize!
(L-R) Shaylon Brady, Jim Herbst,
Ryon Herbst, Kyle Spoon, Noah Ramsey*



Before the machine can be set up, Morty and crew always make sure the bore pit starts out on line and grade. This Akkerman 240 GBM has it made in the shade



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NASTT member Iowa Trenchless is a full-service boring and tunneling company located in Panora Iowa.

Founded in 2002, the company offers services nationwide that include auger boring, rock boring, pilot tube boring, microtunneling, pipe ramming, pipe jacking, pipe bursting, railroad crossing, and bore pit design.

Iowa Trenchless takes pride in using the newest technology and equipment to get the job done right the first time. Their website is www.iowatrenchless.com.



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Glidden, IA - Minnesota St SS Extension

116 feet of 24-inch steel casing and 139 feet of 8-inch PVC for Sanitary sewer; set new manhole, connect to existing manhole; remove/replace pavement. Morty comes through on another crucial job!



Morty ready to mobilize! (L-R) Joe James, Jason Craver, Jon Kile



Joe James welding while Morty takes a break

Conclusion

Working in the Trenchless Industry, Morty says he gets to work with the best people, and loves the variety of projects he works on. With a long family history in the Tunnel Industry, Morty is always eager to share the projects he's been working on and the places he's been. He won't gnaw your ear off... but he might talk it off!

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