

Joint Technology Committee Presentation

August 2022

The pathway to possible.

Agenda



What is Microtrenching?

Why is it useful and more sensitive to the environment?

How will it benefit Coloradans?

The Benefits of Microtrenching

The Benefits of Microtrenching

Less Impact than Conventional Trenching

In a Central Business District:

Conventional Open Cut Trench = 50–100 feet/day

Microtrenching = 1000 to 1500 feet/day

Schedule Example:

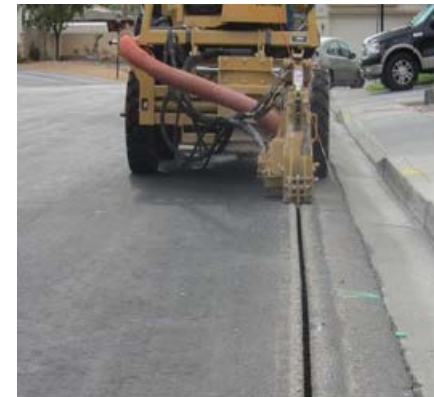
A single 500 foot trench:

Conventional Open Cut Trench = 1 Crew, 5-10

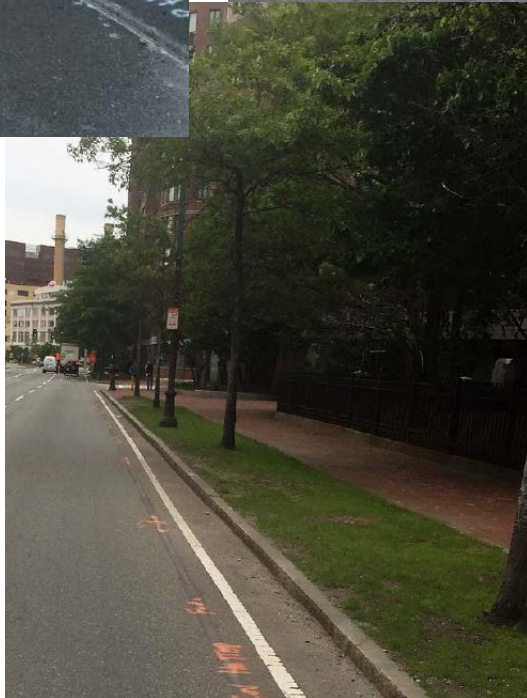
days **Microtrenching = 1 Crew, 6 hours**



In a recent deployment in Dallas, TX, we were able to microtrench, install & restore the right-of-way within three traffic signal rotations!!!



The Benefits of Microtrenching

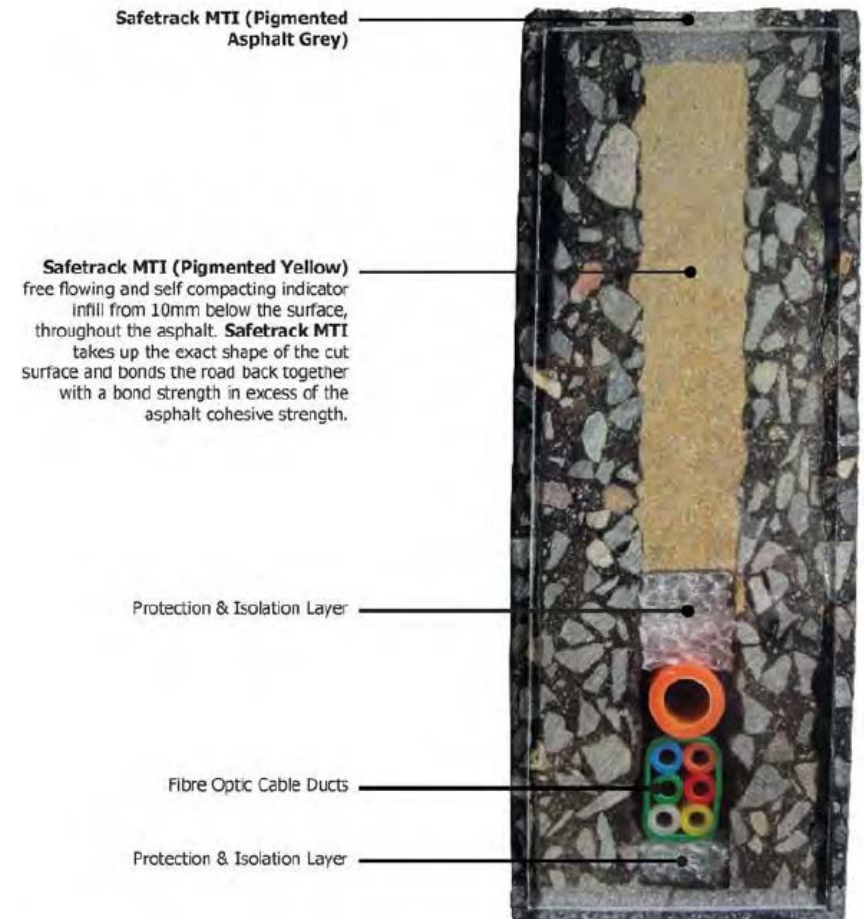


- ✓ Less Time
- ✓ Less Invasive
- ✓ Less Traffic Impact
- ✓ Less Waste
- ✓ Less Restoration
- ✓ Faster Deployment of high speed broadband
- ✓ Improved public safety

What is Microtrenching

Microtrench is a fiber construction technology which allows installation of fiber cable with a lower impact to the right-of-way

- Installed within the roadway at depths between 12 to 24 inches
- Main conduit running line typically requires a saw cut between 1 to 2 inch width



Microtrenching is safer, quicker, cheaper, greener and less disruptive to local communities...



Pre-installation
Ground Penetrating Radar



Installation



cabLe Placement



Restoration

Benefits for Colorado

Jobs and the Economy

1. Jobs related to the new 5G Economy will reach 16M in 5 years*.
2. Proportionally in Colorado this means 291,000 new jobs - IF we can get reliable high speed broadband to rural, unserved, and under-served communities.
3. Microtrench is a tool that will help get us there.

*"Impact of 5G on the United States Economy" Accenture Strategy 2021

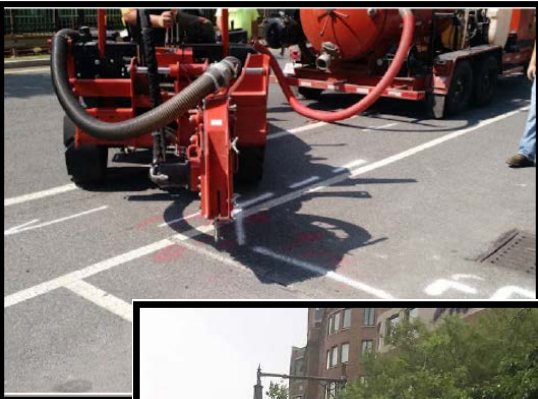
Microtrenching: Summary

Summary:

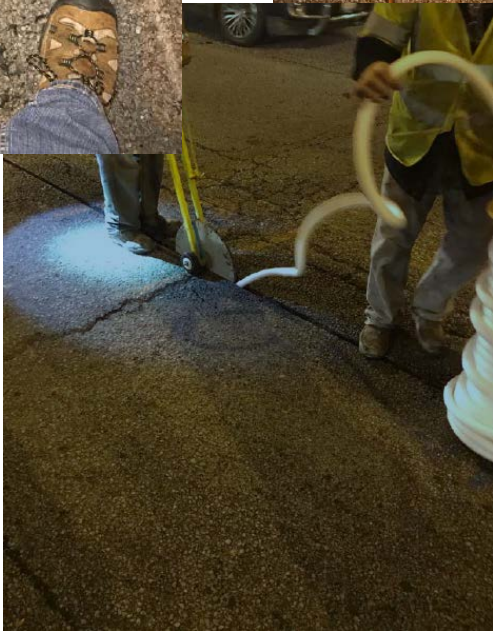
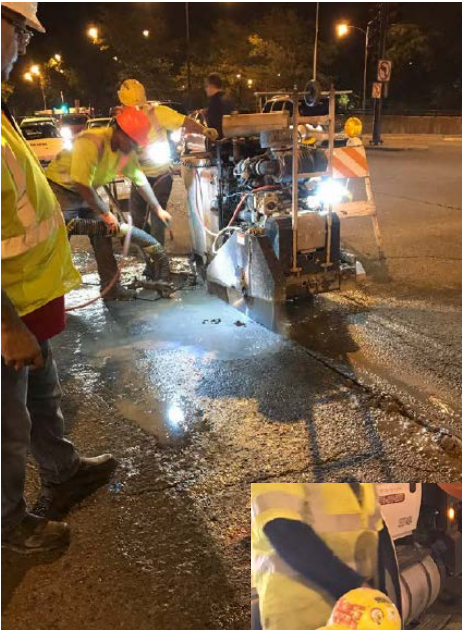
- ✓ **Less disruptive deployment.**
- ✓ **Less traffic disruptions during deployment.**
- ✓ **Less noise, dirt and traffic during deployment.**
- ✓ **Trench repair almost un-noticeable.**
- ✓ **Fewer complaints to elected officials during deployment.**
- ✓ **Less structural impact to expensive infrastructure.**
- ✓ **More Eco-Friendly.**
- ✓ **Enhanced public safety during deployment.**
- ✓ **Greatly reduced duration of construction.**

Questions/Comments

Crown Castle MT Market - Boston



Crown Castle MT Market - Chicago



Crown Castle MT Market – New York



Crown Castle MT Market - Louisville



Crown Castle MT Market - Nashville



Crown Castle MT Market – Los Angeles

