Products in Action: Microtrenching
What is microtrenching?

- Cutting asphalt or concrete
- Narrow
  - Generally 10-40mm wide (0.375”-1.5”)
- Shallow
  - Below the upper layer
  - Shallower than most utilities
  - 10-40cm (4”-16”) typically
- Primarily used to install duct for fiber
- Uses vac system for optimal results
- “Nanotrenching”....10mm x 100mm (0.375” x 4”) ...or smaller!....
Why use microtrenching?

• Speed
  • Up to 12 meters (40’) per minute
• Less disruptive
  • Less dust / debris (vs saws)
  • Not on private property
• Location
  • Avoids crowded easements
• Safety
  • Distance from existing utilities can reduce chance of utility strikes
• Labor
  • Less training required (vs HDD)
• Can be less expensive
  • For all the reasons above
Financial Considerations

• Equipment
  – Primary & support products, trucks, trailers

• Manpower
  – Direct, indirect, benefits, training, recruiting

• Consumables
  – Conduit, junctions, fill, sealant, fuel, fiber

• Wear Items
  – Blades, filters, core bits

• Productivity
  – Hours of operation, speed, soil conditions

• Reinstatement
  – Spoils disposal, lawn/sod, asphalt/concrete finish

Contact an experienced local equipment dealer for help building a complete analysis.
Microtrench Jobsite Variables

- Design
- Location
- Product
- Dimensions
- Reinstatement
- Other

Every job is different...
Microtrenching Requires A System!
Microtrenching Residential Areas

Steve Seabolt, Ditch Witch
Microtrenching: A New and Emerging Technology
Utility Location and Exposure
Mainline Microtrencher

- Depth 0-40cm (0”-16”)
- Width 10-50mm (0.375”– 2.0”)
- Traversing offset
- Tilts & Swings
- Floating housing follows ground contour with constant pressure
Residential Microtrencher

- Depth 0-40cm (0-12”)
- Width 10-40mm (.375”-1.50”)
- Tilts & Swings
- Traversing offset
- Standard or High-Speed Motor options
Sidewalk or Behind-the-Curb

• Extended offset
Street Crossings

- “Push or Pull”
- Width 10-40mm (.375”-1.50”)
- Depth 10-23cm (0”-9”)

DIRECTION OF MOVEMENT

DIRECTION OF ROTATION
Vacuum Excavator

- Used for pre-job “potholing” and to remove microtrencher spoils during cutting process
- 1000 CFM min recommended
- 800 gal recommended
- Cyclonic filter required
- Use of a vac is always recommended
Concrete Mixer

• Auger driven mixer
• 380L (100 gal or ½ yard) mixing tank
• Mix, fill and level in one pass
• Hydraulic hopper
• Adjustable vibrating chute
• Any flowable fill
Training and Support
Microtrenching Job Photos: Austin, Texas
Results
Microtrenching Today

• Currently educating versus traditional methods
• Gaining acceptance by DOT’s and municipalities