GP Project No: 1636.87

Visit Date: July 31, 2017

Report Date: August 1, 2017



FIELD OBSERVATION REPORT

Project: Gas Main – Cumberland-Falmouth-Yarmouth Client: Towns of Cumberland, Falmouth and Yarmouth

GP Field Rep: Benjamin Grondin (BG).

Weather: Cloudy Temp. Range: 70-80°F Time onsite: Multiple visits

Summit Natural Gas

Crew #1: ETTi – Foreman (Tyler) and 4 man crew Equipment: CAT mini excavator, 2 dump truck

Crew #2: ETTi – Foreman (Brandon) and 3 man crew Equipment: CAT mini excavator, I ton dump truck

Distribution: File, Bill Shane, Chris Bolduc, Adam Theriault, Bryan Haberman, Bryan Foster, Bert

Stefanic

Work in Progress – Town of Cumberland

- Crew #1 installing 4" gas main in the southbound shoulder on Route 100.
- Crew #2 installing long side ½" gas service at 3 Friar Lane.

Discussions & Observations

Crew #1:

<u>Route</u> 100

- Work Zone Closure: One lane closed on Route 100 with flaggers maintaining alternating one way traffic.
- Crew installing 4" gas main via open trench method.
- Crew installed approximately 280' of 4" gas main at approximately 3'4" depth from near the undeveloped land on Route 100 to near the driveway at the Westside Animal Hospital.
- All utilities located via manhole inverts, camera, electronic locator, or hand excavated.
- Depth of utilities are to top of pipe unless noted in table below.

Utility	Depth					
12" stormdrain near house	5'2"					
165						
12" stormdrain near driveway	3'11"					
crossing						

- ➤ BG was not onsite when crew crossed utilities. Crew indicated they did not achieve >1' of separation between the 4" gas main and the 12" stormdrain near the driveway at the Westside Animal Hospital due to other Stormdrains near the crossing. A rock shield was placed between the gas main and the stormdrain.
- > Crew backfilled trench with sand around the gas main and existing material. Backfill was compacted in lifts with a jumping jack and plate wacker.



> Crew clean worksite and traffic returned to normal at approximately 3:00 PM.

Crew 2:

3 Friar Lane

- Work Zone Closure: I lane closed on Friar lane with flaggers maintaining alternating one way traffic.
- Crew installing 1/2" gas service by open trench and automatic punch method.
- > 1/2" service was installed at approximately 3' depth.
- All utilities located via manhole inverts, camera, electronic locator, or hand excavated.
- Depth of utilities are to top of pipe unless noted in table below.

Utility Crossing	Depth
Gas Main	3'4"
8" Water Main	4'+
8" Sewer	4'+

- Crew hand excavated 1' below gas service and did not located the water main or sewer main. Therefore, >1' of separation for the utility crossings was achieved. The ½" gas service is 6'+ from all existing parallel utilities.
- Crew excavated a small portion of the roadway to attempt to find the water main without undermining the road. GP will review the condition of the roadway with the town to determine if moratorium restoration is required.
- Crew backfilled trench with sand around the gas main and service, with excavated material above the sand. Backfill was compacted in lifts with jumping jack.
- Cold patch was not used for the excavated roadway trench due to the location.
- Crew cleaned work area and traffic returned to normal by 5:00 PM.

Upcoming Work

4" gas main installation on Route 100 tomorrow (8/1)

Restoration Required

Location	Length of Main or # of Services	Roadway Crossing Trench Patch (1)	Driveway Crossing Trench Patch (1)	Longitudinal Road or Shldr Trench Patch (1)	Sidewalk Trench Patch (1)	Pave Pothole (1)	Restore Gravel Shldr or Driveway (2)	Loam, Seed & Mulch (2)	EC Blanket (2)	Riprap (2)	Moratorium Roadway Restoration (1)	Comments
MAINS												
Route 100	280'							X				
SERVICES												
3 Friar Lane	I			X				X				

- (I) Gorrill Palmer must observe pavement during placement
- (2) Gorrill Palmer will observe restoration after completion



Visitors on Site

None

Concerns or Questions

None at this time.

Follow up Required

GP to review condition of Friar Lane with the Town of Cumberland.

Prepared By: Benjamin Grondin, El
Reviewed By: Drew Gagnon, El
If there are any discrepancies, please notify the sender immediately





Shoulder trench on Route 100



Roadway trench on Friar Lane for Water Main location





Compacting gravel on Friar Lane



Compacting backfill on Route 100