

Gas Modernization Project - Lowell Area



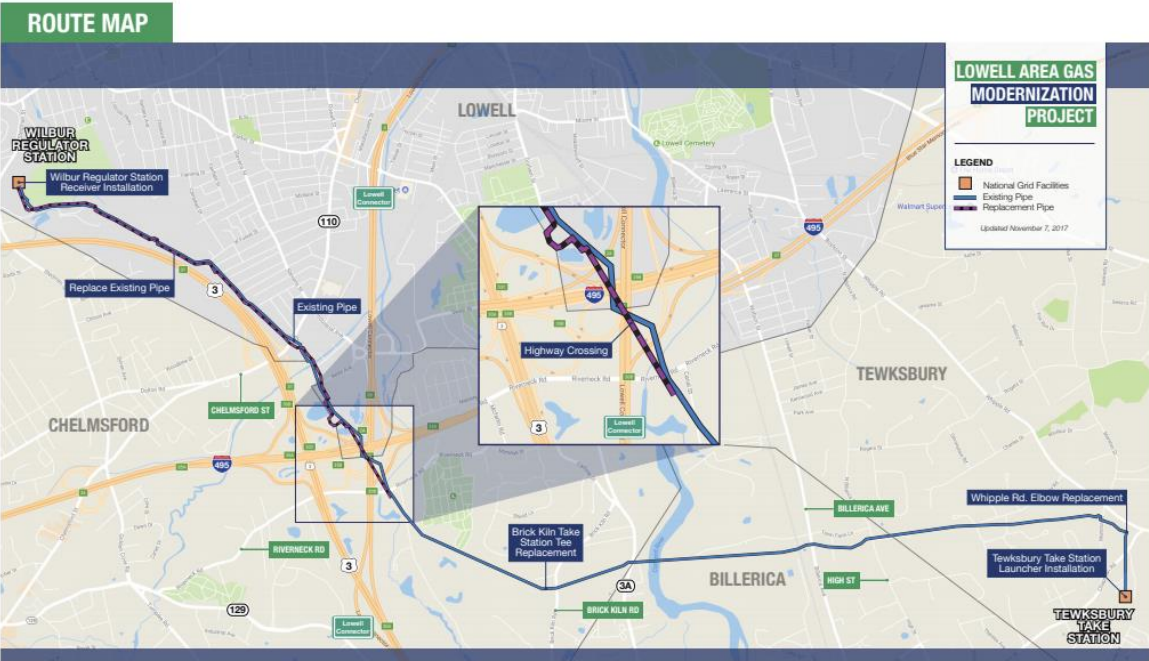
Improving Our Safety Processes with Inline Pipe Inspection
Municipal Briefing - May 2018



Project Charter

NEW TECHNOLOGY, NEW ENHANCEMENTS

The Gas Modernization Project is engineered to enhance the overall safety and reliability of the existing gas distribution network in the Lowell area through the use of new inspection technology



Project Objectives

- Improve safety process for natural gas network using inline inspection (ILI) along 5.8 mile route in Tewksbury, Chelmsford and Lowell
- Deploy state-of-the-art *Smart Pigs* including:
 - Sensors capable of detecting changes in pipe wall thickness and internal and external anomalies (ex: third-party damage or corrosion)
 - Tools for cleaning prior to ILI launch
- Standardize pipe diameter to enable *Pig* to operate effectively
- Wherever possible, engineer the project within right-of-way to limit disturbance to abutters, businesses and roadways



Future inspection process will enable comprehensive internal inspection of gas pipe – a significant improvement over current process which employs external survey only and months of above-ground testing and excavation.

Scope

- Standardize ~2.5 miles of existing pipe to 12" diameter between Riverneck Road (Chelmsford) and Wilbur Street (Lowell) for effective *Smart Pig* operation
- Use Horizontal Directional Drilling under Rte. 495 and Lowell Connector to eliminate need for highway excavation or road closure
- Replace small sections of pipe in Tewksbury and Chelmsford
- Install inspection device launcher at Tewksbury Take Station
- Install inspection device receiver at Wilbur Regulator Station in Lowell
 - Install fittings to support future use of inspection device at Doane Lateral
- National Grid expects to begin construction in Spring 2019, with completion expected in late Fall 2020

Benefits

- ~ \$30 million investment to improve safety of existing local energy infrastructure using state-of-the-art inspection devices
- Comprehensive inline inspection (ILI) process focused on pipe safety
 - Less disruptive and much more efficient than today's method
 - Inspection capabilities across 5.8 miles of pipe using a method that is rapidly becoming industry best practice
- Provision for future inspection upgrades along Doane Lateral (0.93 miles) to Doane Regulator Station - at Lowell Connector near National Amusements



Next Steps

- Permitting
- Final project design
- Meetings with agencies and municipal officials
- Ongoing community outreach

Activity	Target Date
Stakeholder Outreach	November 2017 – October 2021
MEPA Environmental Notification Form (ENF) Filing MEPA ENF Certificate Received	November 2017 January 2018
Energy Facilities Siting Board (EFSB) Application Filing	March 2018
MEPA Draft Environmental Impact Report (DEIR) Filing	Summer 2018
Construction Start	Spring/Summer 2019
Construction Complete	Fall 2020
Internal inspection of main line and Wilbur Lateral	By October 2021

Addendum 1

COMMUNITY OUTREACH

Project Communications

- Door-to-door outreach to abutters and businesses
 - Door hangers
 - Fact Sheet and FAQs
 - Mailings to 500 project neighbors
- Public Open House
- Dedicated website:
 - <https://www.lowellareamodernization.com>
- Toll-free hotline:
 - 844-569-3551 / 844-LOWELL1



Outreach (as of May 2018)

Municipal

- Lowell:
 - City Council
 - City Manager's Office
 - DPW/Engineering
 - Planning & Development Services
- Chelmsford:
 - Town Manager's Office
- Tewksbury:
 - Town Manager's Office
 - Community Development
 - Planning/Conservation

Other

- Public Open House
- Highlands Association
- Project abutters
- Agencies: MEPA, MassDOT, Army Corps of Engineers
- The project will undergo a rigorous review by federal, state and local permitting agencies

