Public Facilities Committee Report

City of Newton
In City Council

Wednesday, December 4, 2024

Present: Councilors Albright (Chair), Getz, Kelley, Gentile, Leary, Laredo, and Danberg

Absent: Councilor Kalis

Also Present: Councilors Greenberg and Malakie

City Staff: Associate City Engineer John Daghlian and Design Engineer Alfredo Vargas

Others Present: Amy Smith, Mary Mulroney, Tammy Saporito, and Mark Rielly from National Grid

All Public Facilities agendas and reports, both past and present, can be found at the following link: https://www.newtonma.gov/government/city-clerk/city-council/council-standing-committees/public-facilities-committee

For more information regarding this meeting, a video recording can be found at the following link: Public Facilities Committee - December 4, 2024

Referred to Public Facilities and Finance Committees

#467-24 **Request to appropriate $997,942 for Union Street main drainage extension**
HER HONOR THE MAYOR requesting authorization to appropriate and expend nine-hundred ninety-seven thousand nine-hundred forty-two dollars ($997,942) and authorize a general obligation borrowing of an equal amount for the construction of the Union Street main drainage extension.

Action: **Public Facilities Approved 6-0 (Councilor Laredo Recused)**

Note: Associate City Engineer John Daghlian joined the committee to discuss this main drainage extension. Mr. Daghlian explained this is a 650-foot stormwater collection system to prevent localized flooding in the roadway near it. He expects construction to begin in mid-January, be completed in late March or early April, and work will take place primarily at night to minimize any impact on the surrounding businesses and residents.

A councilor explained that some years ago, a building owner on Union Street tried to connect their drain to the city's stormwater system and discovered that there was no stormwater pipe in Union Street. They expressed their support for the project.

Councilor Danberg motioned to approve which passed 6-0 with Councilor Laredo recused.

#396-24 **Request for a grant of location in Centre Street**

NATIONAL GRID petition for a grant of location to install and maintain gas main in Centre Street as follows:

- Approximately 1135 ft of 12 in. plastic main in Centre St. from the existing 12 in. coated steel in Centre Ave. to the existing 10 in. Cast Iron at #543 Centre St. to replace approximately 65 ft. of 10- in. Cast Iron (1899), approximately 85 feet of 12 in., Bare Steel (1964), approximately 935 feet of 10 in. Cast Iron (1899), approximately 15 ft. of 10 in. Bare Steel (1899), approximately 20 ft. of 12 in. Coated Steel and approximately 15 ft. of 10 in. Coated Steel
- Approximately 1125 ft. of 12 in. plastic main in Vernon St. from Centre St. to Park St. to replace approximately 50 feet of 4- inch, Cast Iron (1898), approximately 775 feet of 6- inch, Cast Iron (1930) and approximately 300 feet of 6- inch, Bare Steel (1933)
- Approximately 100 ft. of 6 in. plastic main in the intersection of Eldredge St. and Vernon St. to replace approximately 85 feet of 6- inch, Cast Iron (1930) and approximately 15 feet of 6 -inch, Bare Steel (1933)
- Approximately 40 ft. of 6 inch plastic main in the intersection of Baldwin St. and Vernon St. to replace approximately 40 feet of 6 -inch, Cast Iron (1930)
- Approximately 320 ft. of 8 in. plastic main in Mt Ida St. from Centre St. to the existing 6 in. plastic main in Newtonville Ave. to replace approximately 320 feet of 6- inch, Bare Steel (1938)
- Approximately 720 in. plastic main in Hollis St. from the existing 10 in., Cast Iron (1899) at #515 Center St. to the existing 10 in. Cast Iron (1899) at #543 Centre St. to replace approximately 405 feet of 3- inch, Wrought Iron (1933) and approximately 315 feet of 3- inch, Cast Iron (1903)
- Approximately 610 ft. of 8 in. plastic in Church St. from Centre St. to the existing 8 in. plastic (2015) at #120 Church St. to replace approximately 595 ft. of 4 in. Cast Iron (1910) and approximately 15 ft. of 6 in. plastic (1999)
- Abandonment of approximately 40 ft. of 4 in. Bare Steel (1953) in Wesley St. (South) and approximately 30 ft. of 4 in. Bare Steel (1948) in Wesley St. (North)

https://newtonma.viewpointcloud.com/records/840282

Public Facilities Held 6-0 on 10-23-24; Public Hearing Continued
Public Facilities Held 6-0 (Councilor Kalis Not Voting) on 11-6-24; Public Hearing Continued

Action: **Public Facilities Approved 4-2-1 (Councilors Leary and Kelley Opposed and Councilor Danberg Abstained); Public Hearing Closed 7-0**

Note: Please see item #419-24 for committee discussion on this item.

#397-24 Request for a grant of location in Walnut Street

NATIONAL GRID petition for a grant of location to install and maintain gas main in Walnut Street as follows:

- Approximately 220 ft. of 12 in. plastic in Walnut St. from #1136 Walnut St. to #1170 Walnut St. to replace approximately 220 ft. of 12 in. Cast Iron (1904)
- Approximately 695 ft. of 12 in. plastic in Walnut St. from #1162 Walnut St. (south of bridge) to #1208 Walnut St. to replace approximately 695 ft. of 10 in. Cast Iron (1898)
- Approximately 310 ft. of 8 in. plastic in Lincoln St. from Walnut St. to the existing 8 in. plastic at #34 Lincoln St. to replace approximately 310 ft. of 10 in. Cast Iron (1906)
- Approximately 1535 feet of 8 in. plastic in Floral St. from Hyde St. to #123 Floral St. to replace approximately 30 ft. of 4 in. plastic (2008/2006), approximately 10 ft. of 4 in. Bare Steel (1954), approximately 1360 ft. of 4 in. Cast Iron (1898) and approximately 10 ft. of 4 in. Bare Steel (1954)
- Approximately 210 ft. of 4 in. plastic in Floral Pl. from Floral St. to end of main at #13 Floral Pl. to replace approximately 195 ft. of 4 in. Cast Iron (1911) and approximately 15 ft. of 4 in. plastic
- Approximately 370 ft. of 6 in. plastic in Hyde St. from the existing 4 in. plastic at #120 Hyde St. to Centre St. to replace approximately 40 ft. of 4 in. plastic (1992), approximately 275 ft. of 4 in. Cast Iron (1909) and approximately 55 ft. of 4 in. Bare Steel (1956)

https://newtonma.viewpointcloud.com/records/840300

Public Facilities Held 6-0 on 10-23-24; Public Hearing Continued
Public Facilities Held 6-0 (Councilor Kalis Not Voting) on 11-6-24; Public Hearing Continued

Action: **<u>Public Facilities Approved 4-2-1 (Councilors Leary and Kelley Opposed and Councilor Danberg Abstained); Public Hearing Closed 7-0</u>**

Note: Please see item #419-24 for committee discussion on this item.

#398-24 Request for a grant of location in Washington Street

NATIONAL GRID petition for a grant of location to install and maintain gas main in Washington Street as follows:

- Approximately 3210 ft. of 8 in. plastic in Washington St. from the existing 24 in. Cast Iron in Commonwealth Ave. to the railroad crossing at #1940 Washington St. to replace approximately 3105 ft. of 10 in. LP Cast Iron (1899) and approximately 15 ft. of 10 in. Coated Steel (1976)
- Approximately 250 ft. of 2 in. plastic in Bonmar Cir. from the new 8 in. plastic in Washington St. to the end of main at #15 Bonmar Cir. to replace approximately 250 ft. of 6 in. Cast Iron (1926)

- Approximately 230 ft. of 2 in. plastic in Angier Cir. from the new 8 in. plastic in Washington St. to end of main at #19 Angier Cir. to replace approximately 230 ft. of 6 in. Cast Iron (1927)
- Abandonment of approximately 25 ft. of 10 in. Cast Iron in the intersection of Washington St. and Woodland Rd. (cut and cap the existing 6 in. Cast in Woodland Rd.)
- Approximately 30 ft. of 6 in. plastic stub in the intersection of Washington St. and Hope St. (cut and cap the existing 6 in. Cast Iron in Hope St.) to replace approximately 30 ft. of 6 in. Cast Iron (1928)
- Approximately 320 ft. of 2 in. plastic in Seton Hill Rd. from the new 8 in. plastic in Washington St. to end of main at #20 Seton Hill Rd. to replace approximately 25 ft. of 4 in. Cast Iron (1899), approximately 20 ft. of 4 in. plastic (2000) and approximately 275 ft. of 4 in. Coat Steel (1951)
- Approximately 30 ft. of 6 in. plastic stub in the intersection of Washington St. and Leslie Rd. (cut and cap the existing 6 in. Cast Iron in Leslie Rd.) to replace approximately 30 ft. of 6 in. Cast Iron (1927)
- Approximately 20 ft. of 6 in. plastic stub in the intersection of Washington St. and Day St. (cut and cap the existing 4 in. Bare Steel in Day St.) to replace approximately 20 ft. of 4 in. Bare Steel (1940)
- Approximately 745 ft. of 6 in. plastic in Aspen Ave. from the new 8 in. plastic Washington St. to the existing 6 in. at #115 Aspen Ave. to replace approximately 745 of 6 in. Cast Iron (1914)
- Installation of 85 ft. of 6 in. 22 plastic in Aspen Ave. between the gap at #112 and #115 Aspen Ave.
- Approximately 55 ft. of 2 in. plastic in the intersection of Forest Ave. and Aspen Ave. to replace 55 ft. of 6 in. Cast Iron (1914)
- Abandonment of approximately 95 ft. of 4 in. plastic (1998) in private property between Stanton Ave. to Day St. and approximately 330 ft. of 2in. plastic in Stanton Ave. from the new 8 in. plastic in Washington St. to end of main at #25 Stanton Ave. to replace 330 ft. of 4 in. plastic (1998)

https://newtonma.viewpointcloud.com/records/840322

Public Facilities Held 6-0 on 10-23-24; Public Hearing Continued
Public Facilities Held 6-0 (Councilor Kalis Not Voting) on 11-6-24; Public Hearing Continued

Action: **Public Facilities Approved 4-2-1 (Councilors Leary and Kelley Opposed and Councilor Danberg Abstained); Public Hearing Closed 7-0**

Note: Please see item #419-24 for committee discussion on this item.

#399-24 Request for a grant of location in Canterbury Road

NATIONAL GRID petition for a grant of location to install and maintain gas main in Canterbury Road as follows:

- Approximately 660 ft. of 4 in. plastic in Boylston St. from the existing 2 in. plastic at #1121 Boylston St. to the existing 3 in. plastic at #1173 Boylston St. to replace approximately 660 ft. of 2 in. plastic (1979)
- Approximately 280 ft. of 4 in. plastic in Bacon Pl. from Boylston St. to Waldorf Rd. to replace 280 ft. of 4 in. Cast Iron (1907/1910)
- Approximately 750 ft. of 4 in. plastic in Waldorf Rd. from Canterbury Rd. to Bacon Pl. to replace approximately 90 ft. of 4 in. plastic (2008) and approximately 660 ft. of 4 in. Cast Iron (1907/1911/1915)
- Approximately 955 ft. of 4 in. plastic in Canterbury Rd. from Meredith Ave. to #73 Canterbury Rd. to replace approximately 620 ft. of 4 in. Cast Iron (1914) and 335 ft. of 6 in. Cast Iron (1926)
- Approximately 230 ft. of 4 in. plastic in Ridgeway Ter. from Canterbury Rd. to end of main at #18 Ridgeway Ter. to replace 230 ft. of 6 in. Cast Iron (1926)
- Approximately 270 ft. of 4 in. plastic in Meredith Ave. from #4 Meredith Ave. to #22 Meredith Ave. (dead end main at #22 Meredith Ave.) to replace approximately 270 ft. of 8 in. Cast Iron (1904) and abandon approximately 75 ft. of 6 in. LP plastic (1974) and approximately 125 ft. of 8 in. Cast Iron (1904) between #22 Meredith Ave. and the intersection of Harrison St. and Lincoln St.

https://newtonma.viewpointcloud.com/records/841964

Public Facilities Held 6-0 on 10-23-24; Public Hearing Continued
Public Facilities Held 6-0 (Councilor Kalis Not Voting) on 11-6-24; Public Hearing Continued

Action: **Public Facilities Approved 4-2-1 (Councilors Leary and Kelley Opposed and Councilor Danberg Abstaining); Public Hearing Closed 7-0**

Note: Please see item #419-24 for committee discussion on this item.

#419-24 Request for a grant of location in Beacon Street

NATIONAL GRID petition for a grant of location to install and maintain gas main in Beacon Street as follows:

- Approximately 1460 ft of 12 in. plastic in Beacon St. from the existing 8 in. Cast Iron at #1038 Beacon St. to the existing 12 in. Cast Iron at #1150 to replace approximately 60 ft. of 12 in. Cast Iron (1930), approximately 710 ft. of 10 in. Cast Iron (1904/1916), approximately 10 ft. of 10 in. Coated Steel (1997), and approximately 680 ft. of 8 in. Cast Iron (1904)
- Approximately 10 ft. of 4 in. plastic at #1121 Beacon St. to replace approximately 10 ft. of 4 in. plastic (1997)
- Approximately 600 ft. of 8 in. plastic in Garland Rd. from Beacon St. to the existing 6 in. plastic (2018) in Brentwood Ave. to replace approximately 600 ft. of 6 in. Cast Iron (1924/1928)
- Abandonment of approximately 65 ft. of 12 in. Cast Iron (1910) [north]

- Approximately 55 ft. of 12 in. plastic in the intersection of Beacon St. and Walnut St. [south of the 10 in. Cast Iron in Beacon St.] to replace approximately 55 ft. of 12 in. Cast Iron (1910) [south]
- Approximately 50 ft. of 6 in. plastic in the intersection of Beaconwood Rd. and Beacon St. to replace approximately 50 ft. of 6 in. Cast Iron (1916)

https://newtonma.viewpointcloud.com/records/844264

Public Facilities Held 6-0 (Councilor Kalis Not Voting) on 11-6-24; Public Hearing Continued

Action: **Public Facilities Approved 4-2-1 (Councilors Leary and Kelley Opposed and Councilor Danberg Abstained); Public Hearing Closed 7-0**

Note: Amy Smith, Mary Mulroney, Tammy Saporito, and Mark Rielly from National Grid joined the committee to discuss items #396-24, 397-24, 398-24, 399-24 and 419-24. National Grid provided answers to all the questions raised at the first public hearing on 11/6. Please see the attached responses.

The public hearing continued.

Peter Barrer of 60 Endicott Rd expressed support for continuing to hold these items. He pointed out that the petitions propose abandoning pipes in major streets throughout Newton and asked if the Department of Public Works agrees with the proposal to abandon these pipes. Chair Albright answered that she has asked this question to the DPW and is waiting for a response. Mr. Barrer also expressed concern over incomplete engineering drawings for some of the items. Associate City Engineer John Daghlian explained that while they had received some drawings the day before the meeting, the drawings they did have prior were sufficient to make their comments. Mr. Barrer also argued that sometimes National Grid installs new Gas System Enhancement Plan (GSEP) pipes without getting a petition for a grant of location. Chair Albright responded that she had asked the DPW about the specific requirements for needing a grant of location and is waiting for the answer. Tammy Saporito answered that grants of location are at the request of city or town governments so requirements would be put in place by the city or town not by the state. She commented that the rule in Newton is that if a pipe is being replaced within two feet of another pipe, National Grid does not have to ask for a Grant of Location. She also said that National Grid works with Newton's DPW to identify where they are working and if they can coordinate work to be done at the same time. Mr. Barrer stated that he was participating in the public comment period for the current GSEP application to the Department of Public Utilities and encouraged members of the committee to do the same.

A councilor asked if National Grid would pay to remove abandoned pipe from Newton's streets. Ms. Saporito stated (and it was confirmed after the meeting) that National Grid would not remove the abandoned pipe. If the city wanted to remove a pipe, it would be at the City's expense as National Grid could not pass that cost on to rate payers.

Ronda Jacobson of 35 Garland Rd expressed her support for repairing pipes rather than replacement.

Lindsey Gulden of 19 Garland Rd argued that National Grid is requesting to replace a portion of Garland Road pipe that is not leaking and provided a document which is attached to this report. Ms. Gulden also expressed concern that these new pipes were being installed to potentially prepare the system for a transition to hydrogen.

Dr. Enrique Rosero of 19 Garland Rd explained that he was a former employee of National Grid and expressed concern that these pipes may be used to transport hydrogen in the future. Dr. Rosero supported denying these petitions.

Marcia Cooper of 170 Evelyn Road expressed support for denying these petitions noting she is a former resident of Garland Road.

Doug Stuart of 55 West Pine Street and a member of Eliot Church that abuts one of the pipeline replacement projects. Mr. Stuart expressed support for denying these petitions.

Jon Regosin of 32 Garland Road expressed opposition to National Grid's pipe replacement program and supports fixing pipes on an as-needed basis. Mr. Regosin explained that these projects are not aligned with Newton's and the Commonwealth's net zero by 2050 goals. He and other Garland Road residents expressed that many residents are using electrification and have ceased using gas.

Ellen Fisher of Canterbury Road argued that the proposed projects address very few active leaks in the City. Ms. Fisher instead supported fixing gas leaks to increase public safety and to reduce methane emissions contributing to climate change.

Ellie Goldberg of 79 Elmore St asked for these petitions to be held and advocated for the gas system to be retired not replaced.

Cindy Calloway of 83 Grove Hill Avenue expressed support for fixing gas leaks until the City can get off the current gas system rather than pipe replacement. Ms. Calloway asked for these petitions to be held and pointed to the new MA climate bill as evidence of state level support for moving away from gas.

Susan Lyon of 367 Woodward Street expressed concern over the number of active gas leaks in Newton and support for fixing leaks rather than replacement.

A councilor asked for clarification on whether the Committee's legal authority regarding delaying these petitions had changed due to the new climate bill and Chair Albright said that it had not as the new climate bill does not apply to these requests. The same councilor then stated that while the Committee can disagree with the process, they have an obligation to move these petitions forward under the law.

A councilor expressed support for holding these petitions until more information was provided on the drawings and DPW review.

Chair Albright asked the National Grid representatives to address some of the concerns raised including repair versus replacement and hydrogen. Amy Smith said that in Massachusetts, National Grid has no plans to blend hydrogen into the streets. She said National Grid is replacing these pipes because they are old and prone to breakage. National Grid has an obligation under federal law to have a distribution integrity management plan to manage the risk on their system and one of the biggest risks of the system is the leak prone cast iron and bare steel pipe throughout the city. Ms. Smith said that while she might prefer to repair pipes, some pipes are in such bad condition that they are unable to be repaired. She also gave an update on conversations with Eversource who owns the electric system in Newton about starting a pilot electrification project. A problem they are having is that Eversource cannot share customer data with National Grid currently so there is a waiver in front of the DPU right now and they hope to get that approved by the end of the year.

A councilor asked if National Grid plans to fix leaks in the future at the same rate they did last year, and Ms. Smith answered that was their intention. The same councilor asked Ms. Smith to elaborate on a potential timeline for a pilot electrification project in Newton and Ms. Smith answered that while they are working with Eversource and other stakeholders on this, she does not have a way of funding all the needed upgrades to the homes included in the project and she would have to submit a proposal to the DPU which would take time to be processed.

A councilor asked how many existing gas leaks there are currently in the City and Ms. Smith answered that there are about 165 grade one leaks, 55 grade two leaks and 800 grade three leaks. The same councilor asked how long it would take for National Grid to reduce the backlog of unfixed gas leaks and Ms. Smith answered that she did not have the material with her at the meeting but that she could provide it later.

A councilor encouraged the Committee to vote to send these petitions to the full Council. The same councilor expressed support for approving these petitions because it will make the City safer and repairing leaks does not prevent new leaks.

Chair Albright thanked Amy Smith for her willingness to engage with the Committee and the City on plans for an electrification pilot program.

A councilor asked if National Grid has a plan for sunsetting the gas system and Ms. Smith answered that on April 1st, they are required to file a Climate Compliance Plan which will show a roadmap for the utility company for how they will meet climate goals and how they will transition their gas system to electrification options over time.

Tammy Saporito of National Grid encouraged Councilors to express their concerns at the state and DPU level for systemic change rather than to National Grid because the company is mandated by those entities to do this work.

A councilor repeated support for a city-wide plan on climate goals and expressed gratitude for the new climate bill at the state level. The same councilor asked for more information on the risk scores that are generated by National Grid and Ms. Smith said they could add this to petitions in the future.

The public hearing was closed.

Councilor Gentile motioned to approve which passed 4-2-1 with Councilors Leary and Kelley opposed and Councilor Danberg abstaining.

The Committee adjourned at 9:15PM.

Respectfully Submitted,

Susan Albright, Chair

Mark R. Rielly
Asst. General Counsel & Director

nationalgrid

via email

November 26, 2024

City Council of the City of Newton
Newton City Hall, Room 105
1000 Commonwealth Avenue
Newton, MA 02459

Re: National Grid's Four Pending Petitions for Grants of Location to Replace Leak-Prone Pipe

Dear City Councilors:

The Boston Gas Company d/b/a National Grid ("National Grid" or the "Company") has four petitions for grants of location ("GOLs") under G.L. c. 164, § 70 currently pending before the City Council. These petitions would allow the Company to replace leak-prone pipe at the following locations: 1-73 Canterbury Road; 1750-1940 Washington Street; 430-497 Centre Street; and 1136-1208 Walnut Street. The City Council sent the Company a list of 18 questions (5 from the Council and 13 from the public) and stated that it would not act upon the pending petitions unless and until the Company provided written responses justifying the need and cost of these projects. The City Law Department, however, has advised the City Council that it lacks the authority to withhold review and approval of the Company's GOL petitions until it receives the Company's responses. The Company believes that the City Law Department's legal opinion is well founded. Nevertheless, in the spirit of cooperation, the Company encloses written responses to the questions. We look forward to the Council acting on the pending GOL petitions at its next regularly scheduled meeting on December 4, 2024.

Yours truly,

Mark R Rielly

Assistant General Counsel
National Grid Service Company Inc.

Encls
cc: Andrew Lee, Asst. City Solicitor
Amy Smith, National Grid
Mary Mulroney, National Grid

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Responses of Boston Gas Company d/b/a National Grid to

Questions from October 23, 2024 Public Facilities Committee Meeting

Regarding Grants of Location for Centre Street (GOL-24-47),

Walnut Street (GOL-24-48), Washington Street (GOL-24-29),

Canterbury Road (GOL-24-55), and Beacon Street (GOL-24-54).

Questions from Council Members:

1. **Please show the Council the federal regulations that require National Grid to replace gas pipes of the type and age of Newton's targeted pipes.**

Answer:
Local distribution companies ("LDCs") are responsible for the safe and reliable delivery of natural gas to customers across the Commonwealth and for compliance with all federal and state pipeline safety regulations.

Recognizing the public benefit of removing leak prone pipes ("LPP") from the system, the Massachusetts legislature enacted a law in 2014 to increase the pace of replacement of LPP and ancillary facilities. Specifically, Mass. Gen. Laws c. 164, § 145 ("Section 145") requires each LDC to create a plan to accelerate the replacement of LPP and ancillary facilities in its service territory over time.

Section 145(c) mandates that each LDC shall ensure that its plan is prioritized to implement the federal gas Distribution Integrity Management Program ("DIMP") submitted to the Department of Public Utilities in accordance with the federal pipeline safety code at 49 C.F.R. § 192, subpart P. The DIMP requires gas operators to undertake a risk-based assessment of the distribution system and to identify threats to the system in the following seven categories: (i) corrosion; (ii) natural forces; (iii) excavation damage; (iv) other outside force damage; (v) material and weld failure; (vi) equipment failure/malfunction; and (vii) inappropriate operation. The DIMP requires evaluation and prioritization of the risk that the foregoing threats pose and the implementation of measures to address the highest risks with an emphasis on leak management, enhanced damage prevention, operator qualification to reduce human error, and system replacement. Overall, the rule specifies implementation of an organized approach to managing risks on gas distribution systems and is designed to result in a repeatable, justifiable, and uniform approach to system knowledge, threat determination, risk ranking, mitigation, regulatory compliance, and reporting. National Grid's DIMP identifies its cast iron pipe as a threat to its system.

Pursuant to its DIMP, National Grid relies on a leak-based assessment analysis that prioritizes the replacement of distribution piping using a balanced approach of incorporating viable risks with high consequences and other known attributes of facilities within the distribution system, including key factors such as material, leak history, pressure, density and building consequence.

The segments of pipe that the Company included in its pending Grant of Location petitions were chosen based on the risk score, history of repairs, and current leak history for each location. The response to Question 2 below provides details for each such segment.

2. **Please create a table that has the existing and replacement pipe information in it showing the totals by type and dimension and age of pipeline being replaced.**

Answer:

1750-1940 WASHINGTON ST, NEW & ANGIER CIR

Existing Pipe Information						Replacement Pipe Information			
Street	**Total Footage**	**Material**	**Diameter (inch)**	**Pressure**	**Age**	**Total Footage**	**Diameter (inch)**	**Pressure**	**Material**
Washington St	3105	cast iron	10	Low	1899	3120	8	22 psig	Plastic
	15	coated steel	10	Low	1976				
Bonmar Cir	250	cast iron	6	Low	1926	250	2	22 psig	Plastic
Angier Cir	230	cast iron	6	Low	1927	230	2	22 psig	Plastic
Washington St & Woodland Rd Intersection	25	cast iron	10	Low	1899	Abandonment only			
Washington St and Hope St	30	cast iron	6	Low	1928	30	6	22 psig	plastic
Seton Hill Rd	25	cast iron	4	Low	1899	320	2	22 psig	Plastic
	20	plastic	4	Low	2000				
	275	coated steel	4	Low	1951				
Washington St & Leslie Rd	30	cast iron	6	Low	1927	30	6	22 psig	Plastic
Washington St & Day St	20	bare steel	4	Low	1940	20	6	22 psig	Plastic
Aspen Av	745	cast iron	6	Low	1914	745	6	22 psig	Plastic
#112 - 115 Aspen Av	Install only					85	6	22 psig	Plastic
Forest Av and Aspen Av	55	cast iron	6	Low	1914	55	2	22 psig	Plastic
Stanton Av & Day St (Private Property)	95	plastic	4	Low	1998	Abandonment only			
Stanton Av	330	plastic	4	Low	1998	330	2	22 psig	Plastic

1-73 CANTERBURY RD, NEW & 2-70 WALDORF RD

Existing Pipe Information						Replacement Pipe Information			
Street	**Total Footage**	**Material**	**Diameter (inch)**	**Pressure**	**Age**	**Total Footage**	**Diameter (inch)**	**Pressure**	**Material**
Boylston St	660	plastic	2	22 psig	1979	660	4	22 psig	plastic
Bacon Pl	280	cast iron	4	Low	1907/1910	280	4	22 psig	plastic
Waldorf Rd	90	plastic	4	Low	2008	750	4	22 psig	plastic
	660	cast iron	4	Low	1907/1911/1915				
Canterbury Rd	620	cast iron	4	Low	1914	955	4	22 psig	plastic
	355	cast iron	6	Low	1926				
Ridgeway Ter	230	cast iron	6	Low	1926	230	4	22 psig	plastic
Meredith Av	270	cast iron	8	Low	1904	270	4	22 psig	plastic
#22 Merdith Av	75	plastic	6	Low	1974	Abandonment only			
	125	cast iron	8	Low	1904				

430-543 CENTRE ST , NEW & 124-490 CHURCH , HOLLIS , MT. IDA ST

Existing Pipe Information					Replacement Pipe Information			
Total Footage	Material	Diameter (inch)	Pressure	Age	Total Footage	Diameter (inch)	Pressure	Material
65	cast iron	10	Low	1989	1135	12	Low	plastic
85	bare steel	12	Low	1964				
935	cast iron	10	Low	1899				
15	bare steel	10	Low	1899				
20	coated steel	20	Low	2011				
15	coated steel	10	Low	2011				
50	cast iron	4	Low	1989	1125	12	Low	plastic
775	cast iron	6	Low	1930				
300	bare steel	6	Low	1933				
85	cast iron	6	Low	1930	100	6	Low	plastic
15	bare steel	6	Low	1933				
40	cast iron	6	Low	1930	40	6	Low	plastic
320	bare steel	6	Low	1938	320	8	Low	plastic
405	wrought iron	3	Low	1933	720	6	Low	plastic
315	cast iron	3	Low	1903				
595	cast iron	4	Low	1910	610	8	Low	plastic
15	plastic	6	Low	1999				
40	bare steel	4	Low	1953	Abandonment only			
30	bare steel	4	Low	1948				

1136-1208 WALNUT ST, NEW, 1-123 FLORAL ST

Existing Pipe Information					Replacement Pipe Information			
Total Footage	Material	Diameter (inch)	Pressure	Age	Total Footage	Diameter (inch)	Pressure	Material
220	cast iron	12	Low	1904	220	12	Low	plastic
695	cast iron	10	Low	1898	695	12	Low	plastic
310	cast iron	10	Low	1906	310	8	Low	plastic
30	plastic	4	Low	2008/2006	1535	8	Low	plastic
10	bare steel	4	Low	1954				
1360	cast iron	4	Low	1898				
135	cast iron	6	Low	1933				
195	cast iron	4	Low	1911	210	4	Low	plastic
15	plastic	4	Low	2018				
40	plastic	4	Low	1992	370	6	Low	plastic
275	cast iron	4	Low	1909				
55	bare steel	4	Low	1956				

1038-1150 BEACON ST, NEW

Existing Pipe Information					Replacement Pipe Information			
Total Footage	Material	Diameter (inch)	Pressure	Age	Total Footage	Diameter (inch)	Pressure	Material
60	cast iron	12	Low	1930	1460	12	Low	plastic
710	cast iron	10	Low	1904/1916				
10	coated steel	10	Low	1997				
680	cast iron	8	Low	1904				
10	plastic	4	Low	1997	10	4	Low	plastic
10	plastic	2	Low	1997	10	4	Low	plastic
600	cast iron	6	Low	1924/1928	600	8	Low	plastic
65	cast iron	12	Low	1910	Abandonment Only			
55	cast iron	12	Low	1910	55	12	Low	plastic
50	cast iron	6	Low	1916	50	6	Low	plastic

3. **Please explain why the plastic pipe must be replaced.**

Answer:
The replacement of plastic pipe is required for operational efficiency. The Company must remove sections of older plastic main operating at low pressure and replace it with new

plastic main that can be operated at higher pressure in order to connect that older segment of the system to the existing 22 psi system in a manner that ensures that sufficient pressures can be maintained in an efficient manner.

4. **What is the scientific evidence that these projects must be replaced as opposed to repaired?**

Answer:
The decision to replace pipe is grounded not only in sound science, as discussed below, but also in National Grid's extensive experience operating and maintaining cast iron pipe as the operator of the second oldest gas system in the United States, and in the Company's obligation to comply with statutory and regulatory requirements. National Grid's most recent DIMP (2023) contains detailed information, citing to academic studies and government reports, on the risks associated with cast iron pipe and the need to replace cast iron pipe. Specifically, Section 6.2.2.1 of the DIMP, entitled *Cast Iron Pipe*, states as follows:

> The natural gas industry considers cast iron mains, non-cathodically protected steel mains, and services to be higher risk materials. Cast Iron mains are among the oldest materials remaining in gas distribution systems, often pre-dating the 1900's. Gas facilities in most large older cities (particularly in the Northeast) account for the largest amounts of cast iron dating back before the turn of the 20th century. The cast iron system in National Grid's Boston Gas region is the second oldest in the United States (after Philadelphia Gas Works). The changeover from the use of cast iron to steel started slowly in the 1920s. During the 1940s, following the discovery of electric arc welding which provided a tight joint, steel pipe gradually replaced cast iron entirely. The industry has since replaced steel pipe with plastic pipe and cathodically protected coated steel pipe as the primary materials for distribution systems. Similar to unprotected or bare steel mains, the USDOT no longer permits installations of cast iron mains or service lines.
>
> There are 15,812 miles of buried cast iron pipe still in service in the United States distributing natural gas as of 2023. Much of this pipe has provided excellent service over its life. However, aging cast iron mains have experienced gradual deterioration and are susceptible to breaks, cracks, and other failures such as joint leaks.
>
> As the owner and operator of nearly 18 percent of all the cast iron distribution main in the United States, National Grid has unparalleled experience in dealing with cast iron mains in a safe and reliable manner. Extensive research has been done throughout the years by National Grid's legacy companies and National Grid's cast iron replacement programs have been carefully designed to continue cost-effective operation in the safest and most reliable way possible.
>
> In 2013, National Grid also participated in the development of an American Gas Association ("AGA") white paper to Congress entitled "Managing the Reduction of the Nation's Cast Iron Inventory".

> Experience from companies that operate greater mileage of cast iron has identified certain parameters associated with higher leak and failure rates. Many of these parameters are useful to evaluate in identifying pipe segments more prone to failure. The predominant among these are:
>
> - Pipe graphitization history
> - Manufacture and original wall thicknesses, sometimes associated with vintage pipe diameter size and flexural resistance
> - Loading and stresses associated with:
>   - Operating pressures
>   - Weather induced loads such as depth of winter frost penetration and frost action
>   - Traffic loads
>   - Construction impacts
>   - Block supports
>   - Settlement
>   - Undermining
>   - Washouts
>   - Direct impact
>
> Moreover, under research contracts with Cornell University that started in the early 1980's, the former Brooklyn Union (now part of National Grid) and other NY Gas Group companies sponsored research that has developed into a library of technical papers on cast iron main condition, performance, and evaluation. National Grid's cast iron related policies are informed by those studies, the most recent of which was prepared in 2008. …

Section 6.2.2.6 of National Grid's DIMP covers cast iron loading and impact and provides further scientific support for replacement of cast iron pipes:

> Cast iron is much more brittle than steel and is susceptible to cracks or breaks due to loading and impact. Main breaks are a major concern due to the large amount of gas that may be released in such instances. This is made worse when the driving force behind the cast iron main leak is the operating pressure. Medium or high-pressure cast iron aggravates the safety threat posed by cast iron mains.
>
> Cast iron breaks are often more severe than the typical corrosion leak. A cracked main may leak at a high rate, quickly saturating the area around the break with natural gas, migrating and entering conduits and following the path of other utilities to homes or other confined spaces such as utility vaults and sewers. Cast iron main breaks are of particular concern during periods of cold temperatures when frost actions may cause additional stresses on these mains and when frost caps create an impermeable barrier of the earth's surface, preventing leaking gas from safely venting to the atmosphere. Such leaks may be difficult to pinpoint as they can cause high gas readings at appreciable distances from the actual leak site. The difficulty of leak investigation is aggravated under frost conditions and with depth of frost penetration. The inability of the gas to safely escape increases the

risk to nearby residents, as gas follows the path of least resistance, often to nearby habitable structures.

The inventory of small diameter cast iron in National Grid's service territory varies. Small diameter cast iron is most susceptible to bending stress and impact. National Grid policies define the replacement criteria for cast iron adjacent to parallel trenches or exposed due to crossing excavations. Additional consideration is given to conditions such as system performance and removal of pavement over shallow cast iron mains during road reconstruction.

For additional information regarding cast iron hazards, the consequences associated with cast iron failures, and the need to replace cast iron pipe, please see the US DOT Pipeline and Hazardous Material Safety Administration (PHMSA) report to the National Association of Regulatory Commissioners entitled, "White Paper on State Pipeline Infrastructure Replacement Programs" (December 2011). The report is available at this link: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/PHMSA%20111011-002%20NARUC.pdf.

Notably, over the last five years across the country, there were 208 pipeline incidents—excluding those attributed to third-party excavation damage—that resulted in 25 fatalities and 88 injuries necessitating in-patient hospitalization due to pipeline failures. Detailed information can be found at https://www.phmsa.dot.gov/data-and-statistics/pipeline/pipelineincident-20-year-trends.

In addition to the scientific reasons for replacing cast iron pipe, the Company must comply with state regulation. Specifically, 220 CMR 113.05 recognizes the hazard associated with cast iron pipe and requires gas companies to establish replacement plans, as follows:

113.05: Replacement and Abandonment Program and Procedures

(1) Each operator of buried cast-iron pipelines shall develop and implement, in accordance with 220 CMR 113.05, a written, comprehensive program and procedures regarding the replacement and abandonment of cast-iron pipelines. The program and procedures shall include, but not be limited to: (a) categorizing pipe by size and age; (b) determining the methodology for selecting and prioritizing pipeline segments for replacement or abandonment; and (c) replacing or abandoning within ten years of April 12, 1991, all cast-iron pipe with a nominal diameter of eight inches or less that is known, or has been determined, to have been installed before the year 1860.

(2) Each operator, to meet the requirements of 220 CMR 113.05(1)(b), shall consider, but not be limited by, the following criteria. In considering these criteria, each operator shall give reasonable regard to incorporating each criterion into the operator's program and procedures required by 220 CMR 113.05(1)(b). If any criterion is not included in the program and procedures, the operator shall make a detailed explanation of the consideration given the excluded criterion and the reason for the exclusion. (a) mechanical properties of the pipe, including the extent that graphitic corrosion

(graphitization) has occurred and affected those properties; (b) chemical properties and corrosiveness of the soil in which the pipe is buried; (c) external loads to which the pipe is subjected; (d) operating pressure of the pipe; (e) location and/or depth of the pipe; (f) leak history of pipe segments; (g) repair and maintenance history of pipe segments; (h) the probability and consequences of pipe rupture and gas leakage; (i) the existence of redundant gas mains in a street; (j) repavement or reconstruction of streets in which pipelines are buried; (k) capacity of a pipeline to meet gas supply requirements; and (l) any known abnormal condition to which a pipe segment has been, or will be, subjected.

(3) Each operator shall establish a written time schedule for replacement or abandonment of cast-iron pipe. The schedule may be updated at any time during each year by the operator and shall include, as practicable, the size, length and location of pipe segments to be replaced or abandoned for each of the next three consecutive calendar years.

5. **A public comment stated that the drawings were not submitted for all Centre St. repairs. If this is true, when will these drawings be submitted. (Commentor stated: “Centre St. GOL – National Grid issued stamp drawings that were an incomplete set (only one of 5 drawings actually appeared”)**

   Answer:
   The remaining drawings will be submitted once the job is complete. The Company estimates the job will be completed in early December.

Public Questions

1. **Please confirm that in 2023, National Grid spent 17 million dollars on replacing pipes in Newton and spent $200,000 on fixing leaks in Newton (this information was gathered from an investigation Newton residents completed in 2023 using public records of Gas System Enhancement Program (GSEP) plans, end-of-year accounting reports (GREC), end-of-year Service Quality reports (SQARs), and quarterly gas leak reports filed with the Mass. Department of Public Utilities (DPU), in addition to street surveys and other data from Newton public records).**

   Answer
   The total pipe replacement costs in Newton during 2023 were $16,923,098.12.

   National Grid notes that only grade 3 environmentally sensitive leaks (G3SEIs) were used for the estimated cost of leak repair referenced in the question. Reviewing all 275 leaks that were repaired in Newton in 2023 shows that approximately $3M was spent on repairs. National Grid is expecting to exceed this number of leak repairs in Newton in 2024. Replacement is a prudent course of action since repairing known leaks will not prevent new leaks from occurring on the leak prone pipe as it continues to age. Only retirement of the pipe will eliminate the potential for new leaks occurring year over year, and most likely at increasing rates as the pipe ages in place. Nor does repair reduce the risk associated with the pipe failing or breaking and the associated consequences of pipe failure, which may include harm to people and property.

2. **Please confirm that in 2023, the $200,000 spent was found to be much more effective in reducing leaks than the 17 million spent on replacing pipes (this information was gathered from an investigation Newton residents completed in 2023 using public records of Gas System Enhancement Program (GSEP) plans, end-of-year accounting reports (GREC), end-of-year Service Quality reports (SQARs), and quarterly gas leak reports filed with the Mass. Department of Public Utilities (DPU), in addition to street surveys and other data from Newton public records).**

   Answer:
   Please see the response Public Question #1 above. The Company spent approximately $3M in 2023 effectively fixing all 275 leaks. Again, repairing leaks does not prohibit new leaks from occurring on the existing leak prone pipe. Nor does it reduce the risk associated with the pipe failing or breaking and the associated consequences of pipe failure which may include harm to people and property. Since leak rates and leak repair costs in Newton are likely to increase year over year if pipe is not replaced, the Company concludes that pipe replacement is a more efficient and effective way of preventing new leaks from occurring and has the added benefit of reducing risk.

   For example, replacing one mile of cast iron pipe costs an average of $3M. Cost will vary based on location, size of the pipe and other factors including permit restrictions. One mile of cast iron pipe has 440 joints – one every 12 feet. To prevent the pipe from leaking, all 440 joints would need to be sealed. At an average cost of $7K per joint, the total cost of repairing the main over time would be a little over $3M. For approximately the same costs, the main can be retired and the risk can be reduced, making repair a much less efficient option.

3. **Please confirm that approximately 15,000 feet of pipe will be replaced in these four Grants of Location. Please also confirm the historical cost for pipe installation for National Grid was $575 per foot so these four GOLs will cost 8.9 million dollars.**

   Answer:
   Approximately 16,705 feet of pipe will be replaced in connection with the four pending GOL petitions. Including the fifth GOL petition for Beacon Street, the total increases to 18,325 feet of pipe to be replaced.

   Estimated costs for the locations for which the Company has petitioned for GOLs is provided in the table below. Note that costs for actual replacement will vary based on the type of pipe, location of the pipe, size of the pipe, underground congestion, and required permit conditions which may restrict work hours and require additional measures that add cost to the main replacement such as additional paving and restoration requirements, traffic plans and police details. Furthermore, it is important to consider that the replacement of the main is being undertaken to reduce risk on the gas system of a pipe failure that could lead to harm to people or property. In addition, pipe replacement will eliminate the occurrence of future leaks in the area, which cannot be achieved by repairing known leaks.

Address	WONUM	Cost Estimate
1 -73 Canterbury Rd, NEW	1424821	$2,067,763.13
430 – 497 Centre St., NEW	1421233	$4,632,123.83
1136 - 1208 Walnut St., NEW	1456549	$3,130,769.04
1750 – 1940 Washington St., NEW	1421256	$2,648,020.86
1038 - 1150 Beacon Street, NEW	1421129	$3,212,809.82

4. **Please confirm the current average cost of fixing a leak is $7,500 per leak.**

   Answer:
   In 2023, the unit cost for leak repairs of leak prone pipe for Boston Gas was $7,115. As noted, the actual cost of repair will vary based on the type of leak, location of the leak, size of the pipe, underground congestion, and required permit conditions which may restrict work hours and impose additional measures that add cost to the leak repair, such as additional paving and restoration requirements, traffic plans and police details.

5. **Please confirm that pipe replacement doesn't prevent new leaks (another study done by members of the public in 2023 found that during a pipe replacement project, five leaks appeared on that length of pipe in that segment on those streets and two leaks were reported after the replacement was finished. In 2022, 8 grade one leaks appeared during the replacement period (so the replacement caused leaks) and three leaks were reported after the replacement was finished).**

   Answer
   Pipe replacement prevents the occurrence of new leaks on the specific segment of pipe replaced. It does not prevent new leaks occurring due to third-party damage or nearby construction on the new pipe – such as when a water, sewer or telecom company damages the main by not adhering to DigSafe requirements. Nor does replacement prevent leaks on other gas pipe that may be located in the same area. Until each segment of leak prone pipe is replaced, new leaks can occur on the segments of leak prone pipe still in service. Indeed, leaks on the existing cast iron pipe would be expected to occur at an increasing rate year over year. The Company does not have the details referred to in the question and, thus, does not know how the leaks were identified and measured; whether the source of the gas readings is on the same or different pipe determined after an investigation done in accordance with procedure, which may include excavation to determine the exact source of the leak; whether other factors such as nearby construction contributed to new gas leaks; and whether the member of the public used properly calibrated leak detection equipment and followed required leak investigation procedures.

The Company strongly urges the public to call National Grid and report anytime a gas odor is detected.

6. **Canterbury Rd GOL – Please address how National Grid intends to serve all houses in the area that are currently getting low pressure but will potentially be getting high pressure pipe system installed through this GOL? Is National Grid going to have to install pressure-reducing valves and replace pipes to the houses for even more expense for each house along the street?**

   Answer:
   For those locations currently on the low-pressure system that are being upgraded to the elevated pressure system (note: 22 psig is intermediate pressure, not high pressure), a service pressure regulating device will be installed to reduce the pressure going into the premises. It is not necessary to replace house piping since the regulator will reduce the pressure to an appropriate level for the premises and end use gas appliances. In addition, any leak prone services that had not be previously replaced with plastic services will be replaced as part of the project. It is more cost effective to replace gas services during a planned main replacement project rather than reactively due to leaks or failures which may occur with no prior notice to an impacted customer. In addition, it is less disruptive to customers to replace the service as part of the main replacement project since the gas interruption is planned, and service interruption and access to the customer premises only needs to occur once.

7. **According to members of the public, there are no reported leaks on Floral St so why are those pipes being replaced?**

   Answer:
   The Company has repaired four leaks on Floral Street. The driver for replacing the pipe is to eliminate the risk associated with new leaks and pipe failure. Please see the links to the US DOT PHMSA reports provided in response to City Council Question 4 for further discussion of these risks.

8. **Since National Grid indicated that they are completing these projects due to public safety concerns, a member of the public asked about how much danger they are actually in from these gas leaks and if they would be noticed of what specific types of danger they are in by National Grid?**

   Answer:
   Potentially hazardous incidents such as Grade 1 gas leaks and main breaks occur throughout the year. National Grid has robust emergency response and repair procedures in place to respond and make the situation safe in a timely manner. The best way to ensure the safety of the public is to reduce the risk on the system where possible. With leak prone pipe, that means removing that pipe from service. While the potential for harm associated with a gas safety incident is low, the consequences are high, including harm to people and property.

Please see the links to the US DOT PHMSA reports provided in response to City Council Question 4.

Regarding the pipes that are the subject of the pending GOL petitions, there are two primary safety risks. The first is the potential for Grade 1 leaks, which are defined as hazardous and must be repaired as soon as possible. Grade 1 leaks are hazardous either due to the amount of gas that is present in the air, proximity to buildings or other conditions which might allow the gas to migrate into buildings or structures. In 2023, National Grid repaired 165 Grade 1 leaks in Newton and, on average over the last five years, National Grid has repaired 169 Grade 1 leaks in Newton annually. National Grid also repaired 55 Grade 2 leaks in 2023, which are defined as leaks that have the potential to become hazardous within 12 months. In addition, over the last five years, National Grid responded to and replaced 35 small diameter broken cast iron mains. Eighteen of the 35 breaks occurred on 4-inch cast iron mains. All 35 main breaks occurred during the months of January, February and during the first week of March. The repairs were done reactively, and customers gas service was interrupted without notice during the coldest months of the year.

9. **A member of the public interpreted the Centre St GOL as an increase in capacity on Church St. - please confirm that this project will not be an increase in capacity.**

   Answer:
   The 4-inch, low-pressure cast iron installed in 1910 will be upgraded to 8-inch low-pressure plastic. The reason for the replacement is to remove system risk, not to increase capacity on the system. National Grid's engineers determined that 8" plastic was the minimum pipe size required to support current load and maintain system reliability given the surrounding gas system configuration to which the pipe will be connected.

10. **A member of the public said the leaks they are aware of are not in the gas mains but in the connections between the main and the house so in the Centre St. GOL, would National Grid fix these leaks as well?**

    Answer:
    National Grid did not receive any information that would allow the Company to investigate and determine if the statements made by the member of the public are accurate. However, the Company notes that leaks identified on gas services are addressed immediately, typically by replacing the gas service due to the risk of gas migrating into a premise. The Company also notes that until excavation occurs, the exact location of a leak cannot be determined. Nonetheless, any leak prone services connected to the main segments in the GOL requests will be replaced as part of the job.

11. **How much disruption will the replacement on Church St. cause and if approved, what kind of notice will the public have before work starts?**

    Answer:
    The full scope of the Centre Street job is estimated to take up to eight months to complete. The Church Street section of that is estimated to take up to six weeks to complete. The estimated timeframes do not consider any permit restrictions that may be placed on the project by the City, including, for example, restricted work hours. Estimated timeframes may also vary based on weather conditions and whether any unknown underground conditions are found during excavation, such as unexpected underground congestion, rock ledge, or water which require remediation.

12. **Please provide the committee with the number of households in Newton that have had problems with water intrusion through leaky pipes into appliances.**

    Answer:
    The Company identified 331 customers in the areas where water intrusion has caused an interruption to gas service.

13. **Please clarify the definition of leak prone pipe compared to leaky pipes.**

    Answer:
    There is no formal definition of leaky pipes. Leak prone pipe is formally defined in the Company's procedures and in GSEP as non-cathodically protected steel, cast iron, wrought iron, and pre-1985 Aldyl-A plastic prioritized for replacement to implement the federal gas distribution pipeline integrity management plan (DIMP) annually submitted to the Department of Public Utilities consistent with 49 C.F.R. §§ 192.1001 through 192.1015. Leak prone cast iron includes pipe with diameters up to and including 14". Leak prone non-cathodically protected steel includes all diameter of pipe.

    Cathodic protection is a technique to reduce the corrosion of a metal surface by making that surface work as the cathode of an electrochemical cell. See NACE International SP0169-2013, Standard Practice, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems," at § 2, revised October 4, 2013.

    The cast iron category applies to gray-cast iron that is a cast ferrous material in which a major part of the carbon content occurs as free carbon in the form of flakes interspersed through the metal. See American Gas Association, Gas Piping Technology Committee, Guide for Gas Transmission Distribution, and Gathering Piping Systems, at § 192.3, Subpart A, Glossary of Commonly Used Terms (2015 Ed.). Compared to steel or plastic, it is relatively brittle and, like steel, is susceptible to corrosion. See U.S. Department of Transportation, Pipeline & Hazardous Materials Safety Administration, Pipeline Glossary, https://primis.phmsa.dot.gov/comm/glossary/index.htm#CastIron (last visited October 26, 2023).

Together with cast iron, wrought iron pipelines are among the oldest energy pipelines constructed in the United States. The degrading nature of iron alloys, the age of the pipelines, and the pipe joint designs have greatly increased the risk involved with the continued use of such pipelines. See United States Department of Transportation, Pipeline & Hazardous Materials Safety Administration, Pipeline Replacement Background, available at: https://opsweb.phmsa.dot.gov/pipeline_replacement/default.asp (last updated March 22, 2023).

Aldyl-A is a trademarked name referring to a finished polyethylene pipe manufactured by DuPont. The industry has recognized that early generations of Aldyl-A pose a danger of failure due to slow crack growth.

GOL Review
Peter J. Barrer
Dec 4, 2024 6:00 pm

#396-24 Request for a grant of location in Centre Street

Incomplete DPW review.

Complete engineering drawings were submitted Dec 3, 2024. DPW review is dated Oct 16, 2024, preceding receipt of drawings. Also insufficient time for public review and comment.

#397-24 Request for a grant of location in Walnut Street

Retiring the gas pipes on Floral St and Floral Pl. and electrifying homes might be a better future choice than replacing the pipes now.

#398-24 Request for a grant of location in Washington Street

Incomplete. No published DPW review and recommendation

Each of Aspen Ave, Stanton Ave, Seton Hill Rd, Angier Cir. and Bonmar Cir., being single fed from only one direction, are potential electrification zones where the gas pipe could be retired.

#399-24 Request for a grant of location in Canterbury Road

Incomplete. No published DPW review and recommendation

Except for the Boylston St pipe, the entire GOL is a potential electrification zone where the gas pipes could be retired. (It appears that one purpose of this GOL is to abandon the 8” low pressure cast iron pipe running under the MBTA tracks. The same purpose might be accomplished by electrifying all of the homes in this GOL being served now by low pressure pipe.)

#419-24 Request for a grant of location in Beacon Street

Retiring the leak-prone pipe in this part of Garland Rd. by electrifying all of its homes would be a better choice.

National Grid's Garland Road proposal – overview

- There is one active gas leak on Garland Rd.
- National Grid requests a permit to replace 600 feet of non-leaking pipe on Garland Rd.
- The leak on Garland Rd. will not be repaired by this effort.
- National Grid would spend ~50 times as much of ratepayers' money replacing the non-leaking pipe as they would by simply fixing the active leak.

National Grid's plan doesn't reflect the clearly decreasing demand for natural gas

- Garland Road alone has a growing share of residents using heat pumps
- Several of us have replaced our gas stoves with induction cooktops
- This trend toward decreased gas demand is likely to accelerate
- National Grid's plan either maintains or increases the volume of gas that can be pumped through their system.
- We're paying for infrastructure we'll never use.

From: Amy Smith <Amy.Smith@nationalgrid.com>
Sent: Monday, January 6, 2025 11:52 AM
To: Susan Albright <salbright@newtonma.gov>
Subject: RE: [EXTERNAL] question before our Monday night council meeting

[DO NOT OPEN links/attachments unless you are sure the content is safe.]

Susan,

As we have been discussing, National Grid and Eversource are committed to finding a pilot electrification project in Newton. Our best options will be on segments of pipe that are deemed lower risk by our engineers and allow sufficient time to work with customers to upgrade their homes prior to disconnecting gas service. Unfortunately, the project that includes the pipe on Garland Rd is higher risk pipe that must be replaced this year to ensure safety. Thus, National Grid requests that the City Council vote to approve the grant of location request for the work that includes Garland Rd. National Grid cannot agree to delay replacement long enough to determine if the Garland Rd customers that still use their gas service for one or more uses are willing to have their gas service disconnected. While it is true that some of the customer on Garland Rd have stated they no longer use gas, they have not yet requested National Grid to disconnect their gas service, choosing to keep their gas service as a backup energy supply. And there are still other customers on Garland Rd that continue to use gas service to heat their homes.

In addition, even if all customers on Garland Rd agree to have their gas service cut off, we do not currently have a mechanism to fund the costs of full electrification of each home. This means that homeowners will have to pay any costs not covered by current subsidy programs. To secure funding to cover homeowner costs requires National Grid and Eversource to file a petition with the MA DPU for a pilot program on Garland Rd, and there is no guarantee the request could be reviewed and approved within the time needed to avoid replacing the pipe. And finally, until the MA DPU grants our waiver request to share customer data with Eversource, we cannot determine if there is sufficient electric capacity to serve these customers without building new electric infrastructure.

National Grid needs to move forward now and plan the main replacement project to ensure we can address the safety risk. Nonetheless, we are willing to work with the customers on Garland Rd. In the event they are all willing to disconnect their gas services and convert their homes at their own cost to all electric before the end of this year's construction season, and if we are able to share data with Eversource during this time to ensure sufficient electric capacity, at the request of all customers on Garland Rd served by the gas main included in the project, we would retire the pipe without replacing it with new pipe. We also note that each customer may request disconnection of their gas service at any time, including as part of the main replacement project. However, we respectfully request approval of the grant of location today so that project planning is not delayed if is not possible to electrify all customers served by the gas main by the end of construction season.

Please let me know if you would like to discuss prior to tonight's meeting.

Amy