

Public Facilities Committee Agenda

City of Newton In City Council

Wednesday, May 17, 2023

The Public Facilities Committee will hold this meeting as a virtual meeting on Wednesday, May 17, 2023 at 7:00 pm. To view this meeting using Zoom use this link: https://newtonma-gov.zoom.us/j/82869947386 or call 1-646-558-8656 and use the following Meeting ID: 828 6994 7386

Items Scheduled for Discussion:

#128-23 Request for a grant of location in Valentine Street

<u>NATIONAL GRID</u> petition for a grant of location to install and maintain gas main in Valentine Street as follows:

- 1905' <u>+</u> of 8" plastic main in Valentine Street from #85 Valentine Street to #240 Valentine Street to replace 1180' <u>+</u> of 8" cast iron and 25' <u>+</u> of 8" plastic main
- 40' <u>+</u> of 6" plastic main in the intersection of Howland Road and Valentine Street to replace 40' <u>+</u> of 6" cast iron main
- 40' <u>+</u> of 6" plastic main in the intersection of Bonad Road and Valentine Street to replace 40' + of 6" cast iron main
- 50' \pm 6" plastic main in the intersection of Wauwinet Rd to replace 40' \pm 6" cast iron and 10' \pm 6" plastic main
- 80' ± 8" plastic main in the intersection of Bigelow Road and Valentine Street to replace 80' ± of 6" cast iron main
- 435' + 6" plastic main in Ellis Road from Valentine Street to the existing 8", plastic main at #38 Ellis Road to replace 420' of 6" Cast Iron and 15' + 6" plastic gas main
- 80' ± 8" plastic main in the intersection of Valentine Street and Oak Cliff Road to replace 40' of 8" Cast Iron and 40' ± 6" cast iron main

Public Facilities Held 6-0; Public Hearing Closed 6-0 on 04/12/23

#134-23 Approval on roadway infrastructure improvements for Elliot Street Traffic Calming Project

HER HONOR THE MAYOR requesting the approval to make changes to roadway infrastructure as part of the Elliot Street Traffic Calming Project in Newton Upper Falls. The installation of a new crosswalk with a flashing beacon, intersection realignment, changes to roadway width, and creation of sidewalk-level bike lane requires the approval of the Public Facilities Committee.

The location of this meeting is accessible and reasonable accommodations will be provided to persons with disabilities who require assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA Coordinator, Jini Fairley, at least two business days in advance of the meeting: jfairley@newtonma.gov or (617) 796-1253. The city's TTY/TDD direct line is: 617-796-1089. For the Telecommunications Relay Service (TRS), please dial 711.

Referred to Public Facilities and Finance Committees

#165-23 Appropriate \$750,000 for the Newton Free Library's HVAC system

<u>HER HONOR THE MAYOR</u> requesting authorization to appropriate and expend the sum of seven hundred fifty thousand dollars (\$750,000) from June 30, 2022 Certified Free Cash to a Public Buildings Department Capital Account to fund the replacement of the Newton Free Library's HVAC system as detained in the FY-24-FY28 CIP.

#206-22 Adoption an Ordinance to prohibit the use of anti-coagulant rodenticides

<u>COUNCILORS NORTON, LEARY, LUCAS, BOWMAN, MALAKIE, GREENBERG, HUMPHREY AND DANBERG</u> requesting the adoption of an Ordinance to prohibit the purchase or application of anti-coagulant rodenticides by the City or City contractors.

Respectfully submitted,

Alison M. Leary, Chair

CITY OF NEWTON MASSACHUSETTS

PETITION for GRANT OF LOCATION

To the Petitioner:

City of Newton Ordinance Section 23-52 requires that each petition for grant of location be submitted to the City Council before it is sent to the Public Works Department for a preliminary review. The comments of the Public Works Commissioner will be part of the record submitted to the City Council. Upon filing with the City Council, the petition will be scheduled for a public hearing before the Public Facilities Committee of City Council. The petitioner is responsible for insuring that the petition is complete, and all required materials are in order for review. Attached please find the City Engineer's <u>Standard Requirements for Plans</u> and the Department of Public Works Permit Processing brochure.

Grant of Location Process:

- 1. Applicant submits completed Petition Form and required materials to the City Council
- 2. Public Works Department conducts preliminary review and gives written comments to the applicant
- 3. Engineering Division files Petition Form with comments with the Clerk of the City Council
- 4. City Council schedules petition for a public hearing before the Public Facilities Committee of the City Council
- 5. Public Facilities Committee recommendations are forwarded to the City Council for a final decision

Questions may be directed to:

Lou Taverna, City Engineer, 617-796-1020 Cassidy Flynn, Clerk of the Public Facilities Committee 617-796-1213 Thomas Skehill

I. IDENTIFICATION (Please Type or Print Clearly)

1 2	NATIONALGRID
201 Rivermoor	Street
Address	
West Roxbury, MA 02132	
Phone Number 617-894-3896 Mary Mulroney	Fax Number Permit Representative
Contact Person	Title
Mary Mulreney	March 24, 2023
Signature	Date
Person filing application	

If a telecommunications company, indicate how certified by the Department of Telecommunications and Energy:

II. DESCRIPTION OF PROJECT: to be completed by petitioner

Write here or attach a description of the project including, location, proposed time frame for completion, type of materials to be used, benefit provided to the City, project mitigation plan as applicable, street reconstruction plan including timetable for completion.

As part of the CIMNRPL Nationalgrid recommends the relay of:

Commissioner, Public Works

Approximately 1880 feet of 8-inch, Cast Iron (1928/1913) and approximately 25 feet of 8-inch, Plastic (2001) with approximately 1905 feet of 8-inch, Plastic in Valentine St from #85 Valentine St to #240 Valentine St, Approximately 40 feet of 6-inch, Cast Iron (1932) with approximately 40 feet of 6-inch, Plastic in the intersection of Howland Rd and Valentine St,

approximately x 40 feet of 6-inch, Cast Iron (1934) with approximately 40 feet of 6-inch, Plastic in the intersection of Bonad Rd and Valentine St,

approximately 40 feet of 6-inch, Cast Iron (1924) and approximately 10 feet of 6-inch, Plastic (2001) with approximately 50 feet of 6-inch, Plastic in the intersection of Wauwinet Rd,

approximately 80 feet of 6-inch, Cast Iron (1927) with approximately 80 feet of 8-inch, Plastic in the intersection of Bigelow Rd and Valentine St,

approximately 420 feet of 6-inch, Cast Iron (1928/1928) and approximately 15 feet of 6-inch, Plastic (2011) with approximately 435feet of 8-inch, Plastic in Ellis Rd from Valentine St to the existing 8-inch, Plastic at #38 Ellis Rd.

approximately 40 feet of 8-inch, Cast Iron (1913) and 40 feet of 6-inch, Cast Iron (1928) with approximately 80 feet of 8-inch, Plastic in the intersection of Valentine St and Oak Cliff Rd.

A. Include or attach a sketch to provide a visual description of the project. If plans are attached, provide: Title of Plan Date of plan				
III. PUBLIC WORKS DEPARTMENT REVIEW				
Date received by Public Works Department March 27, 2023				
Check One: Minor Project ☐ Major Project ☐ Lateral ☐				
(Refer to City Engineer Standard Requirements for Plans for definition of minor and major project)				
Plans Submitted: Certified Plot Plan Stamped Plans				
DATE AND COMMENTS: RECOMMENDATIONS				
See attached memo.				
John Daghlian, Associate City Engineer March 27, 2023				
March 27, 2023				
V. RECOMMENDATION TO PUBLIC FACILITIES COMMITTEE:				

Date

PETITION OF NATIONAL GRID FOR GAS MAIN LOCATIONS

City of Newton / City Council:

The Nationalgrid hereby respectfully requests your consent to the locations of mains as hereinafter described for the transmission and distribution of gas in and under the following public streets, lanes, highways and places of the **City of Newton** and of the pipes, valves, governors, manholes and other structures, fixtures and appurtenances designed or intended to protect or operate said mains and accomplish the objects of said Company; and the digging up and opening the ground to lay or place same:

As part of the CIMNRPL Nationalgrid recommends the relay of:

Approximately 1880 feet of 8-inch, Cast Iron (1928/1913) and approximately 25 feet of 8-inch, Plastic (2001) with approximately 1905 feet of 8-inch, Plastic in Valentine St from #85 Valentine St to #240 Valentine St,

Approximately 40 feet of 6-inch, Cast Iron (1932) with approximately 40 feet of 6-inch, Plastic in the intersection of Howland Rd and Valentine St,

approximately x 40 feet of 6-inch, Cast Iron (1934) with approximately 40 feet of 6-inch, Plastic in the intersection of Bonad Rd and Valentine St,

approximately 40 feet of 6-inch, Cast Iron (1924) and approximately 10 feet of 6-inch, Plastic (2001) with approximately 50 feet of 6-inch, Plastic in the intersection of Wauwinet Rd,

approximately 80 feet of 6-inch, Cast Iron (1927) with approximately 80 feet of 8-inch, Plastic in the intersection of Bigelow Rd and Valentine St,

approximately 420 feet of 6-inch, Cast Iron (1928/1928) and approximately 15 feet of 6-inch, Plastic (2011) with approximately 435 feet of 8-inch, Plastic in Ellis Rd from Valentine St to the existing 8-inch, Plastic at #38 Ellis Rd.

approximately 40 feet of 8-inch, Cast Iron (1913) and 40 feet of 6-inch, Cast Iron (1928) with approximately 80 feet of 8-inch, Plastic in the intersection of Valentine St and Oak Cliff Rd.

Date: March 24, 2023

By: Mary Mulroney
Mary Mulroney
Permit Representative

City of Newton / City Council:

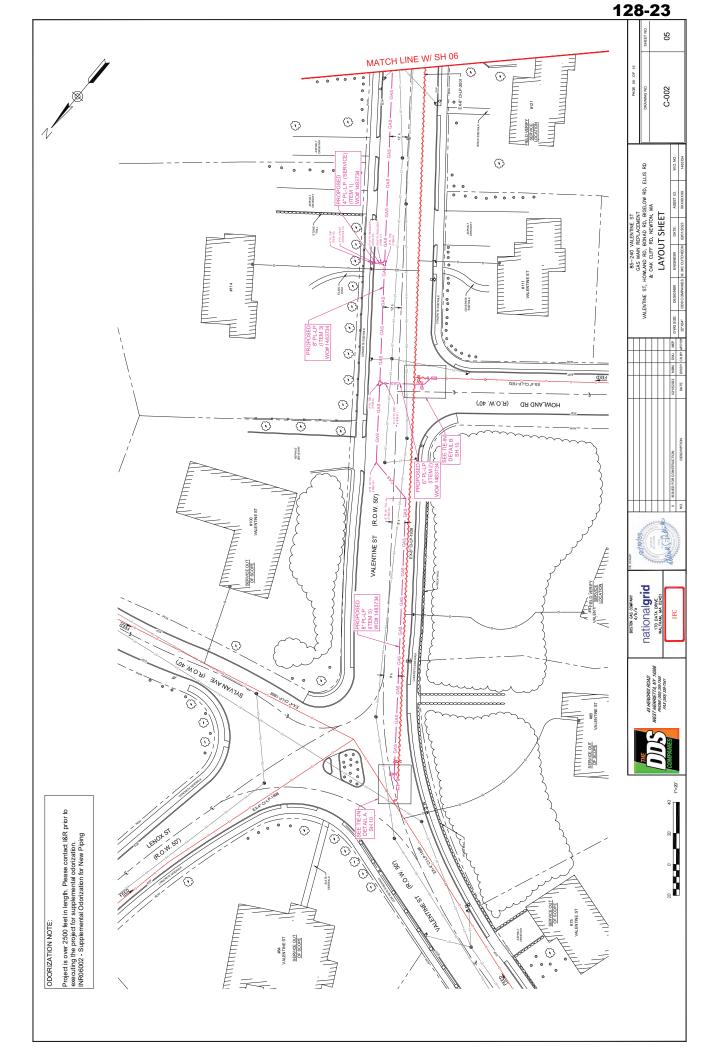
IT IS HEREBY ORDERED that the locations of the mains of the Nationalgrid for the transmission and distribution of gas in and under the public streets, lanes, highways and places of the **City of Newton** substantially as described in the petition date **March 24, 2023** attached hereto and hereby made a part hereof, and of the pipes, valves, governors, manholes and other structures, fixtures and appurtenances designed or intended to protect or operate said mains and/or accomplish the objects of said Company, and the digging up and opening the ground to lay or place same, are hereby consented to and approved.

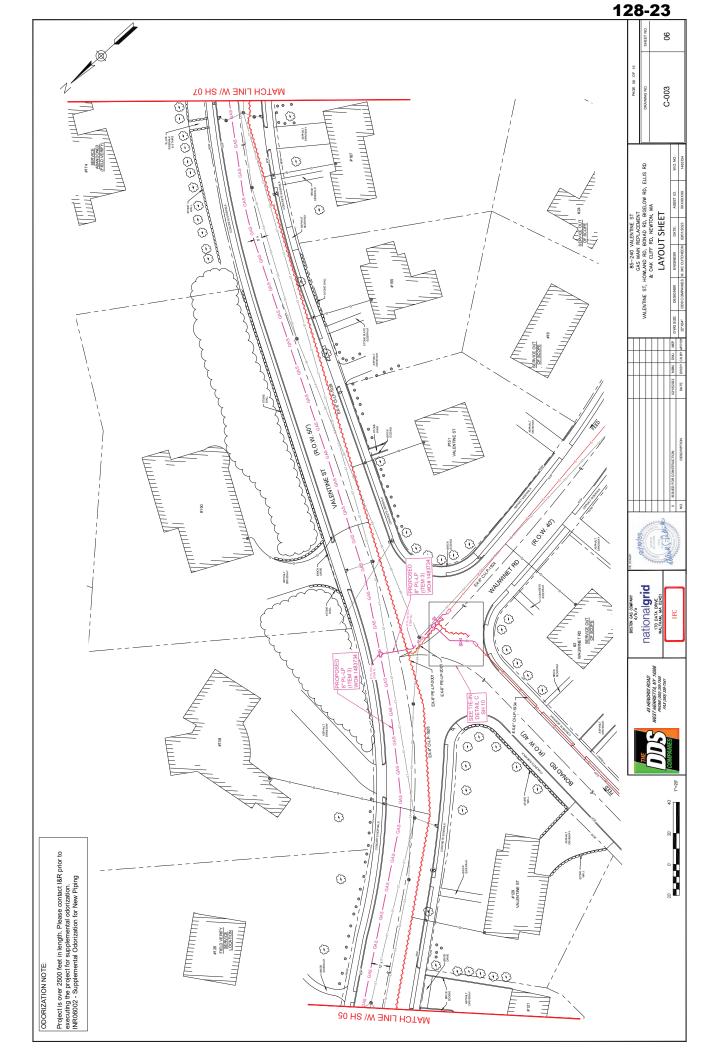
The said Nationalgrid shall comply with all applicable provisions of law and ordinances of the **City of Newton** applicable to the enjoyment of said locations and rights.

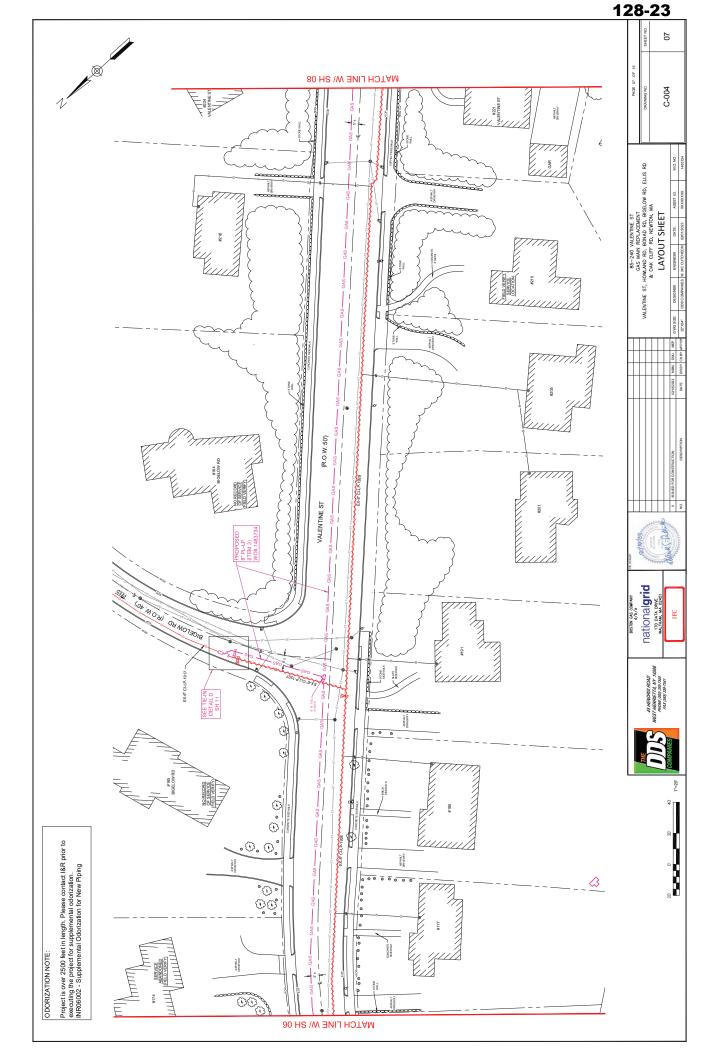
Date	th1s	day of		, 20		
I hereby cert	ify that the foregoing or	rder was duly adop	ted by the			of
the City of _		, MA on the	day of		20_	

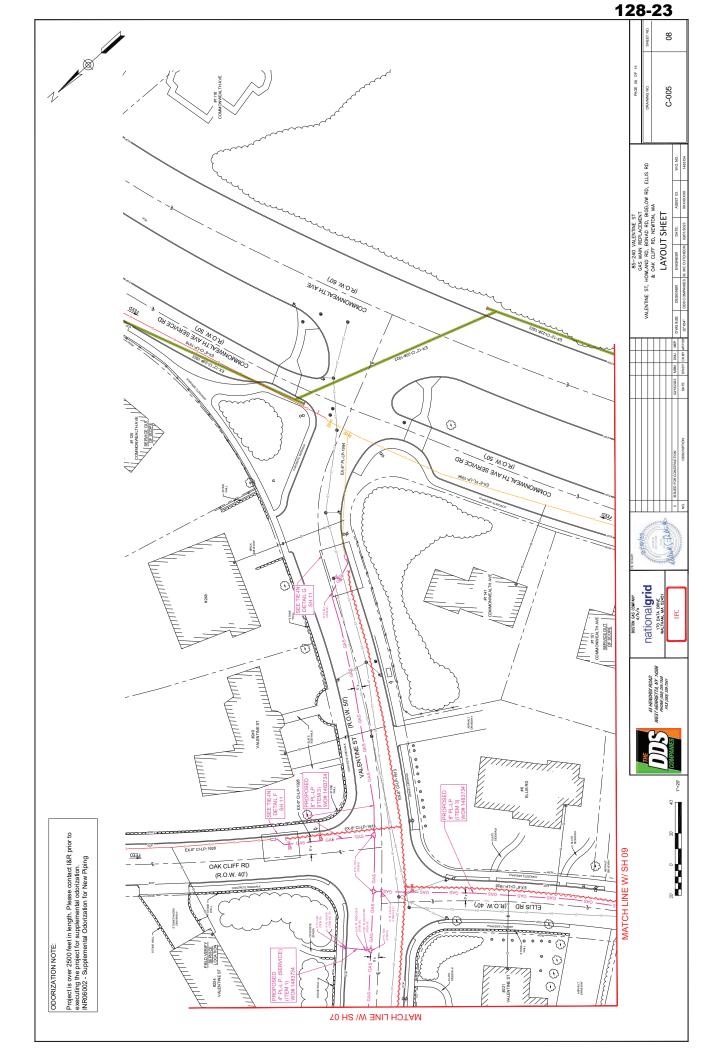
WO # 1483734

By: Title









Questions for National grid #128-23 Request for a GOL at Valentine Street

Are the pipes leaking? If so what is the grade of the leaks? Have these pipes been repaired before? If so, why can't they be repaired again? Is re-lining an option? If not, why?

How was the decision to replace versus repair is made by National grid? Please be as specific as possible.

How many oil and gas customers are connected to the pipeline that is being replaced?

Are there new customers being hooked up? (expanded service?)

Have there been complaints of water intrusion or other problems?

What is the condition of each of the streets' surface? Have the streets been paved recently? (For DPW)

What is the plan for returning the street to its original condition or are there going to be long patches susceptible to degradation?

Have all the gate boxes been located and protected? Are they all operable and accessible?

Answers:

There are 4 grade 3 leaks within the scope of the project.

135	BIGELOW	RD	ESTABROOK	RD
30	ELLIS	RD	WAUWINET	RD
151	VALENTINE	ST	WAUWINET	RD
240	VALENTINE	ST	OAKCLIFF	RD

Also, this was a request from the City of Newton

We were notified on January 6, 2023 by the City of Newton of upcoming plans to pave Valentine St from Commonwealth Ave to Chestnut St in the Fall of 2023. There was no reports of water intrusion within the scope of this project.

HALL-ARBER MADELEINE I SHORE CARYLYN A TUBRIDY KAREN L TR 240 VALENTINE ST ARBER GARY M KAREN L TUBRIDY TRUST 41 OAK CLIFF RD NEWTON. MA 02465 37 WHITTIER RD NEWTON, MA 02460 **NEWTONVILLE, MA 02460 DUPERE NELSON & SALLY** PATEL PINKU PANKAJ BRICKMAN ETHLYNNE M SAHNI SHIBANI 1125 COMMONWEALTH AVE 35 OAK CLIFF RD NEWTON, MA 02460 248 VALENTINE ST NEWTON, MA 02459 WEST NEWTON, MA 02465 SAMUELS HOWARD R & AYAKO PARKER STEPHEN & SIRIMON SORKIN BORIS E & BELLA A 34 WHITTIER RD 40 WHITTIER RD SORKIN LILYA B NEWTONVILLE, MA 02460 NEWTON, MA 02460 75 VALENTINE ST NEWTON, MA 02465 LEE SAI DOW & WENDY & WEINER JUDITH L TR HONG ALISON MEYER **85 VALENTINE STREET** THE JUDITH L WEINER TRUST HONG MICHAEL L **84 VALENTINE ST** WEST NEWTON, MA 02465 97 VALENTINE ST WEST NEWTON, MA 02465 NEWTON, MA 02465 **BROWN ERIC L COWIN WILLIAM I & COWIN** SHAHBAZIAN AMIR & 102 LENOX ST 144 BIGELOW RD 164 BIGELOW RD WEST NEWTON, MA 02465 WEST NEWTON, MA 02465 WEST NEWTON, MA 02465 **ROSENBLATT BARTON A** PREGIBON DANIEL C OJA CAROL J WEINER HELANE R ET AL TRS SUH SU KYUNG 24 OAK CLIFF RD 216 VALENTINE ST 224 VALENTINE ST NEWTON, MA 02460 NEWTON, MA 02465 NEWTON, MA 02465 SODDER ARNOLD N LUO TIANJIN ROEBUCK R ELIZABETH TR R ELIZABETH ROEBUCK TRUST WU XUFENG HINGORANI VANDANA G 30 OAK CLIFF RD 36 OAK CLIFF RD 44 OAKCLIFF RD NEWTON, MA 02460 NEWTONVILLE, MA 02460 NEWTON, MA 02460 POKROSS DAVID R JR LONG KYM S LEE JEFFREY H & BORAMI 150 VALENTINE ST 138 VALENTINE ST GILL LAURIE S 100 VALENTINE ST NEWTON, MA 02465 WEST NEWTON, MA 02465 WEST NEWTON, MA 02465 SOMMERFELD JOSHUA & CHAIKOF MELISSA K TR ROCHMAN GUY M & DEBORAH L JOSHUA W SOMMERFELD TRUST MELISSA K CHAIKOF 2010 126 VALENTINE ST 174 VALENTINE ST 165 BIGELOW RD WEST NEWTON, MA 02465 NEWTON, MA 02465 NEWTON, MA 02465 **KUECHEN JOERG** COENRAETS CHRISTOPHE MELNICK GARY J & MARY H 114 VALENTINE ST MIDY FRANCOISE M 121 VALENTINE ST NEWTON, MA 02465 111 VALENTINE ST WEST NEWTON, MA 02465

NEWTON, MA 02465

STEINBERG KEVIN BARMAZEL MICHELLE 129 VALENTINE ST NEWTON, MA 02465

ZENZEN WENDY DALY KEVIN 151 VALENTINE ST NEWTON, MA 02465

KALISH SUSAN C TR BASIL REALTY TRUST 177 VALENTINE ST NEWTON, MA 02465

LEIBNER HELEN 201 VALENTINE ST WEST NEWTON, MA 02465

GINSBURG JULIE E TR JULIE E GINSBURG 2021 221 VALENTINE ST WEST NEWTON, MA 02465

LOUIE STEPHEN & CONNIE STEPHEN WAI YING LOUIE 1141 COMMONWEALTH AVE NEWTON, MA 02465 CHERNOFF PAUL A & 3 WAUWINET RD WEST NEWTON, MA 02465

HERMAN SUSAN L TR SUSAN L HERMAN TRUST 155 VALENTINE ST NEWTON, MA 02465

BAYAT HOSSEIN ZAMANI LEILA 185 VALENTINE ST NEWTON, MA 02465

TANASIJEVIC MILENKO & 205 VALENTINE ST WEST NEWTON, MA 02465

RUBIN AUDREY 18 WAUWINET RD NEWTON, MA 02465 SCHUMACHER EVAN & SUZANNE 9 WAUWINET RD NEWTON, MA 02465

PORTER LOIS H 167 VALENTINE ST WEST NEWTON, MA 02465

LEIBHOLZ DANIEL L FLOYD SHANNON C 191 VALENTINE ST WEST NEWTON, MA 02465

JAMPEL JAMES M TR 215 VALENTINE STREET 215 VALENTINE ST NEWTON, MA 02465

NIERENBERG NATALIE 6 ELLIS RD WEST NEWTON, MA 02465



City of Newton, Massachusetts

Office of the Mayor 4: 4: 40

Telephone
(617) 796-1100
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(617) 796-1089
Email
rfuller@newtonma.gov

THEY CLERK Very Da Ozako

April 10, 2023

Honorable City Council Newton City Hall 1000 Commonwealth Avenue Newton, MA 02459

Honorable City Councilors:

I respectfully submit this docket item to this Honorable Council requesting changes to roadway infrastructure as part of the Elliot Street Traffic Calming Project in Newton Upper Falls. Certain aspects of the proposed design require the approval of the Public Facilities Committee, specifically installation of a new crosswalk with a flashing beacon, intersection realignment, changes to roadway width, and creation of sidewalk-level bike lane.

The portion of Elliot Street that is included as part of this traffic calming effort is between Linden Street and Wetherell Street, with the focus being the sharp curve at the Mechanic Street intersection. The goals of this project include:

- Improved safety for all users;
- Reduced vehicular speed on Elliot Street;
- Improved pedestrian accessibility and connectivity;
- Maintain and improve space for bicyclists riding along Elliot Street

DPW utilized an engineering consultant to develop and evaluate conceptual options and make a recommendation for a preferred alternative. Our consultant evaluated two different alternatives in the Linden Street area, six alternatives in the Mechanic Street area, and three alternatives in the Cottage St / Wetherell St area. Our consultant then created 12 different "packages" with various combinations of the alternatives in each area of the project. Each of the conceptual alternatives were reviewed and discussed in detail with City staff and the City's Complete Streets Working Group (comprised of City staff from DPW, Planning, Newton Police, Newton Fire, Parks & Rec, Schools, the Transportation Advisory Group (TAG), and Safe Routes to School (SRTS)). The complete conceptual evaluation is detailed in the attached memorandum from BETA Group, Inc., dated February 20, 2023.

Based on the work completed to date, the preferred alternative is "Package 11" and includes:

- Elliot Street and Linden Street Alternative 2. The preferred alternative provides a new crosswalk across Elliot Street, with pedestrian-actuated Rectangular Rapid Flashing Beacons (RRFB's)
- Elliot Street and Mechanic Street Alternative 3A. The preferred option for the Mechanic Street intersection proposes to:
 - Realign Mechanic Street to create a more typical intersection. The simpler intersection will reduce driver confusion and will provide clear guidance to all users to safely travel through the intersection.

1000 Commonwealth Avenue Newton, Massachusetts 02459

- Reduce roadway width in immediate vicinity of the intersection to reduce vehicle speeds.
- o Creates sidewalk level bike lanes.
- Reduces pedestrian/vehicle conflicts, with only one short crosswalk across Mechanic Street, approximately 20-24 ft long. Pedestrians crossing Mechanic Street today must cross two roadway openings and are in conflict with vehicles for a total of 50 ft)
- Cottage Street Alternative 1. The preferred option provides:
 - o A new crosswalk across Elliot Street between Cottage Street and Wetherell Street
 - Proposed to construct curb bump-outs to narrow the travel lanes and reduce pedestrian crossing distance
 - o Creates sidewalk level bicycle infrastructure for safe bicycle travel.
 - o Provides pedestrian-actuated Rectangular Rapid Flashing Beacons (RRFB's) at the new crosswalk.

The conceptual construction cost estimate for the traffic calming improvements described above is \$390,000. DPW is anticipating that both the engineering design work and construction would be funded with the Traffic Calming line item in DPW Transportation Division's operating budget.

Please see the attached memo from DPW Commissioner McGonagle and the detailed concepts development memo from the City's consultant Beta Group, Inc.

Thank you for your consideration of this matter.

Sincerely,

Mayor Ruthanne Fuller

City of Newton Ruthanne Fuller Mayor

DEPARTMENT OF PUBLIC WORKS

OFFICE OF THE COMMISSIONER 1000 Commonwealth Avenue Newton Centre, MA 02459-1449

April 7, 2023

To:

Jonathan Yeo, Chief Operating Officer

From:

James McGonagle, Commissioner

Subject:

Elliot Street Traffic Calming

The Department of Public Works (DPW) is proposing a significant traffic calming project on Elliot Street. The portion of Elliot Street that is included as part of this traffic calming effort is between Linden Street and Wetherell Street, with the focus being the sharp curve at the Mechanic Street intersection. The goals of this project include:

- Improved safety for all users;
- Reduced vehicular speed on Elliot Street;
- Improved pedestrian accessibility and connectivity;
- Maintain and improve space for bicyclists riding along Elliot Street

DPW utilized an engineering consultant to develop and evaluate conceptual options and make a recommendation for a preferred alternative. Our consultant evaluated two different alternatives in the Linden Street area, six alternatives in the Mechanic Street area, and three alternatives in the Cottage St / Wetherell St area. Our consultant then created 12 different "packages" with various combinations of the alternatives in each area of the project. Each of the conceptual alternatives were reviewed and discussed in detail with City staff and the City's Complete Streets Working Group (comprised of City staff from DPW, Planning, Newton Police, Newton Fire, Parks & Rec, Schools, the Transportation Advisory Group (TAG), and Safe Routes to School (SRTS)). The complete conceptual evaluation is detailed in the attached memorandum from BETA Group, Inc., dated February 20, 2023.

Based on the work completed to date, the preferred alternative is "Package 11" and includes:

- Elliot Street and Linden Street Alternative 2. The preferred alternative provides a new crosswalk across Elliot Street, with pedestrian-actuated Rectangular Rapid Flashing Beacons (RRFB's)
- Elliot Street and Mechanic Street Alternative 3A. The preferred option for the Mechanic Street intersection proposes to:
 - o Realign Mechanic Street to create a more typical intersection. The simpler intersection will reduce driver confusion and will provide clear guidance to all users to safely travel through the intersection.
 - o Reduce roadway width in immediate vicinity of the intersection to reduce vehicle speeds.
 - o Creates sidewalk level bike lanes.
 - o Reduces pedestrian/vehicle conflicts, with only one short crosswalk across Mechanic Street, approximately 20-24 ft long. Pedestrians crossing Mechanic Street today must cross two roadway openings and are in conflict with vehicles for a total of 50 ft)
- Cottage Street Alternative 1. The preferred option provides:
 - A new crosswalk across Elliot Street between Cottage Street and Wetherell Street

Telephone: 617-796-1009 • Fax: 617-796-1050 • Jmcgonagle@newtonma.gov



MEMORANDUM

Date:

February 20, 2023

Job No.: 10482

To:

Jason Sobel, P.E, PTOE, Department of Public Works

Cc:

Complete Streets Working Group

From:

Jeff Maxtutis, Senior Associate and Anna Sangree, Transportation Planner

Subject:

Elliot Street Traffic Calming Concepts Development

BETA Group, Inc. (BETA) was contracted by the City of Newton to develop concept plans for traffic calming measures on Elliot Street between Linden Street and Wetherell Street. This memorandum describes project priorities, existing conditions, concepts developed by BETA, feedback received from the City of Newton Complete Streets Working Group and identifies a preferred concept.

1.0 PROJECT LOCATION

The project location is an approximately 700-foot-long segment of roadway including the sharp curve on Elliot Street in Newton between Linden Street and Wetherell Street. The segment of Elliot Street is located in the Upper Falls neighborhood in western-central Newton and generally follows a southwest to northeast alignment through the neighborhood, connecting on the west to Central Avenue in Needham at the Charles River and on the northeast to Route 9 in Newton.

Elliot Street

Figure 1: Project Location on Elliot Street between Linden Street and Wetherell Street

Within the project area, Elliot Street intersects with Linden Street, Mechanic Street, Cottage Street and Wetherell Street as unsignalized T-intersections. All four intersecting streets are classified as local roadways and under City jurisdiction. Linden Street intersects Elliot Street from the south to form a three-way unsignalized intersection, stop controlled at the Linden Street northbound approach. Linden Street is 20 feet wide and provides one lane in each direction, but no centerline is marked. At the intersection with Elliot Street, Linden Street has sidewalks on both sides. Linden Street follows a north-south alignment, connecting to the Upper Falls Greenway to the south.

Mechanic Street intersects Elliot Street from the south. Mechanic Street follows a north-south alignment connecting to the Upper Falls Greenway to the south. At the Elliot Street intersection, Mechanic Street splits, creating two separate intersections, separated by a triangular landscaped traffic island. The Mechanic Street approaches are stop controlled. Mechanic Street provides one lane in each direction, but no centerline is marked. Sidewalks are provided on both sides of the roadway. Figure 2 shows the current configuration of the intersection.

Cottage Street intersects Elliot Street from the north to form a three-way unsignalized intersection, stop controlled at the Cottage Street

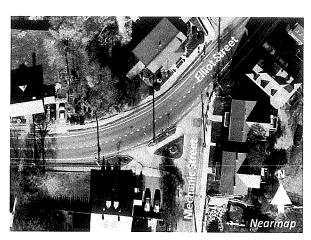


Figure 2: Mechanic Street and Linden Street

southbound approach. Cottage Street follows a north-south alignment and connects Elliot Street to the residential neighborhoods to the north. At the intersection, Cottage Street provides one lane in each direction, but no centerline is marked. Sidewalks are provided on both sides of the roadway. At the Elliot Street intersection, Cottage Street has a steep downward grade towards the intersection.

Wetherell Street intersects Elliot Street from the southeast to form a three-way unsignalized intersection, stop controlled at the Wetherell Street approach. Wetherell Street connects with Mechanic Street to the west. The road provides one lane in each direction, but no centerline is marked. Sidewalks are provided on both sides of the roadway.

On-street parking is permitted on Mechanic Street, Cottage Street, Wetherell Street and Linden Street, but "No Parking here to the Corner" signs exist on all the side streets prohibiting parking close to the Elliot Street intersections.

3.3 Crashes

MassDOT reported eight crashes in the study area on Elliot Street between 2015 and 2022, averaging one crash per year. Of the crashes, three crashes were single vehicle crashes, involving a vehicle colliding with a tree, and two crashes were rear end crashes. Two of the reported crashes resulted in a suspected injury. No crashes were reported involving pedestrians or bicyclists. A crash summary is provided in **Table 1**.



4.0 CONCEPT ALTERNATIVES

4.1 ALTERNATIVES DESCRIPTION

In order to develop concept alternatives reflecting the City of Newton priorities, BETA evaluated the best practices in traffic calming facility types, examined the feasibility of different facilities within the project corridor, created concept alternatives for each project intersection, developed cost estimates for the concepts, considered how traffic calming alternatives could be combined toward maximizing safety while minimizing cost, and worked with the City's Complete Streets Working Group to identify a preferred concept.

Facilities considered during the conceptual design process included street level bicycle lanes separated from traffic by vertical flex posts or bollards, grade separated (e.g., sidewalk-level) bicycle lanes, curb extensions, rapid rectangular flashing beacons (RRFBs), curb ramps with detectable warning panels, raised crosswalks, narrowed travel lanes, intersection realignment, and speed feedback radar signs.

One concept was developed for the crossing of Elliot Street at Wetherell Street, two concepts were developed for the crossing at Elliot Street and Cottage Street, two concepts were developed for the crossing at Elliot Street and Linden Street, and six concepts were developed for the curved section of the corridor at Mechanic Street. The preliminary project concepts were presented to the Complete Streets Working Group on August 11, 2022, and revised concepts on December 1, 2022. The concept alternatives are summarized in **Table 2**.

Table 2: Summary of Concept Alternatives

	Elliot Street at Linden Street			
Alternative 1	Separated bike lanes, a new crosswalk, curb extensions, RRFB, and upgraded curb ramps.			
Alternative 2	A new crosswalk, RRFB, and upgraded curb ramps.			
	Elliot Street at Mechanic Street			
Alternative 1A	Narrowed travel lanes, a north side bollard separated bike lane, and south side curb separated bike lane through the existing traffic island.			
Alternative 1B	Same as 1A with shortened crossing distance.			
Alternative 2A	Narrowed travel lanes, a north side sidewalk level bike lane, and a south side bollard separated bike lane.			
Alternative 2B	Narrowed travel lanes, a north side sidewalk level bike lane, and a south side curb separated bike lane through the existing traffic island.			
Alternative 3A	Intersection realignment, narrowed travel lanes, a north side and south side sidewalk separated bike lane, shortened crossing distances, and additional landscaped areas.			
Alternative 3B	Same as 3A with raised crosswalk on side street.			



Elliot Street at Mechanic Street

At the intersection of Elliot Street and Mechanic Street, the project team examined multiple alternatives. The alternatives differed in the type of protection utilized for the bike facilities, the location of crosswalks, the utilization of raised crosswalks vs. traditional crosswalks, and the location of the bike lanes. The bike treatments considered included both street level and grade-separated (or sidewalk-level) bike lanes. The bike lane on the south side of the intersection either stayed in the roadway or moved south into the existing traffic island through widening of the existing sidewalk area. The utility pole on the island was considered in all alternatives and no concept is expected to require the relocation of the pole. All bike lanes at sidewalk level required bike ramps to get cyclists from the existing shoulder bike facility to the raised facility. The concepts include lower and higher cost and maintenance alternatives.

Figure 5 and Figure 6 show Alternatives 1A and 1B for the Mechanic Street intersection. Alternative 1A and 1B both include a vertical flex-post or bollard protected bike lane on the north side of the intersection and a bike lane on the south side through the existing traffic island. Neither alternative moves the curb on Elliot Street or the existing guardrail on the southeast side of the intersection. The introduction of the flex-posts/bollards narrows the roadway to reduce vehicle speeds and creates a more comfortable space for bicyclists separated from traffic. The only difference between these two alternatives is the location of the crosswalk on the south side of the intersection. Alternative 1A extends the crosswalk to the existing gap in the guardrail, and Alternative 1B shortens the crosswalk by moving the crosswalk to meet the sidewalk south of the guardrail.

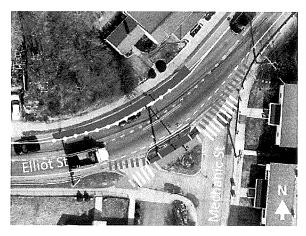


Figure 5: Mechanic Street Alternative 1A

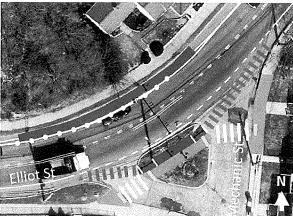
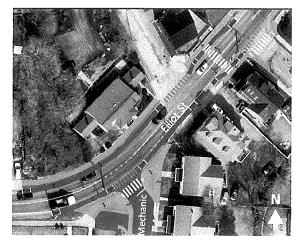


Figure 6: Mechanic Street Alternative 1B





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Figure 9: Mechanic Street Alternative 3A

Figure 10: Mechanic Street Alternative 3B

Elliot Street at Wetherell Street

The final concept in **Figure 11** shows a crosswalk across Elliot Street at Wetherell Street, an alternative to the Cottage Street crossing shown in **Figures 9** and **10**. The stopping sight distance to a potential new crosswalk on Elliot Street at Wetherell Street is longer (340 feet) than the sight distance to a potential new crosswalk at the Cottage Street intersection (250 feet), providing more time for vehicles traveling eastbound on Elliot Street to stop. The alternative again mimics the design of Alternative 1 at the Linden Street and Elliot Street crossing including a new crosswalk, RRFB, curb extensions, and bike lanes in back of the accessible ramps. The concept requires the removal of a mature large tree on the north side of Elliot Street and does not provide crossing at the existing pedestrian desire line.

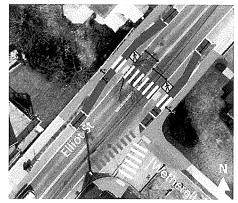


Figure 11: Elliot Street and Wetherell Street

4.2 ALTERNATIVES EVALUATION

To decide which alternatives to include in the final package of preferred corridor improvements, BETA evaluated the advantages and disadvantages of each alternative, created cost estimates for each alternative, and conducted a discussion with the Complete Streets Working Group and the City of Newton to determine the package of improvements that best advances the project goals within the limits of the project budget.

Table 3 summarizes the advantages and disadvantages of each concept alternative as identified by the BETA project team, City staff, and members of the Complete Streets Working Group.



Table 3: Evaluation of Advantages and Disadvantages and Cost Estimate (2022) of Each Alternative (continued)

- Creates permanent vertically separated bloyde accommodation on the north side of the curve - Multitarious travel lanes - Creates permanent vertically separated bloyde accommodation on both sides of curve - Marrows travel lanes	
th side of the curve les of curve	
cycle accommodation on the north side of the curve cycle accommodation on both sides of curve cycle accommodation on both sides of curve flicts, and improves vehicle sight lines cycle accommodation on both sides of curve flicts, and improves vehicle sight lines	
Creates permanent vertically separated bicycle accommodation on the nor endergon by travel lanes Formalizes bike lanes on south side of the curve Creates permanent vertically separated bicycle accommodation on both sit. Narrows travel lanes Narrows travel lanes Shortens crossing distances, reducing conflicts, and improves vehicle sight is May allow for removal of the guardrail Creates permanent vertically separated bicycle accommodation on both sic. Narows travel lanes Shortens crossing distances, reducing conflicts, and improves vehicle sight is Narrows stavel lanes Shortens crossing distances, reducing conflicts, and improves vehicle sight is Adds raised crossings across side street Adds raised crossings across side street May allow for removal of the guardrail	



Following the initial evaluation of the concept alternatives, BETA created 12 packages of improvements (shown in Table 4), combining the alternatives. The advantages and disadvantages, costs, and trade-offs of each package were discussed with the Complete Streets Working Group and City staff on December 1, 2022. During the conversation, the Complete Streets Working Group and the City expressed the importance of prioritizing packages that included alternatives 3A or 3B with the realignment of the Mechanic Street intersection which provide a significant pedestrian and bicycle improvement. The Working Group noted the importance of shortened pedestrian crossing distances, increased green space, improved sight lines, and sidewalk level bike lanes at the curve at this location. The Working Group also noted the importance of reducing ongoing maintenance costs associated with the alternatives that included flex posts/bollards. This led the Working Group to narrow the packages down to #5, #6, #11, and #12.

Table 4. Considered Packages of Improvements with 2022 Cost Estimates

#	Packages Pac	Cost (2022)
1	Linden 1 + Mechanic 1A + Wetherell (or Cottage 1)	\$333,000
2	Linden 1 + Mechanic 1B + Wetherell (or Cottage 1)	\$348,000
3	Linden 1 + Mechanic 2A + Wetherell (or Cottage 1)	\$403,000
4	Linden 1 + Mechanic 2B + Wetherell (or Cottage 1)	\$410,000
5	Linden 1 + Mechanic 3A/Cottage 1	\$480,000
6	Linden 1 + Mechanic 3B/Cottage 2	\$514,000
7	Linden 2 + Mechanic 1A + Wetherell (or Cottage 1)	\$243,000
8	Linden 2 + Mechanic 1B + Wetherell (or Cottage 1)	\$258,000
9	Linden 2 + Mechanic 2A + Wetherell (or Cottage 1)	\$313,000
10	Linden 2 + Mechanic 2B + Wetherell (or Cottage 1)	\$320,000
11	Linden 2 + Mechanic 3A/Cottage 1	\$390,000
12	Linden 2 + Mechanic 3B/Cottage 2	\$424,000



APPENDIX

A. COMPLETE STREETS WORKING GROUP MEETINGS

During the conceptual design process, the BETA project team met with the Newton Complete Streets Working Group two times; August 11, 2022, and December 1, 2022, to discuss the alternative concepts.

Concept Review on August 11, 2022

At this meeting, BETA presented preliminary concepts for the intersection of Linden Street and Elliot Street, the intersections of Mechanic Street and Cottage Street, and the intersection of Wetherell Street and Elliot Street. During the conversation, we received the following feedback.

- If the level landing area for the curb ramp is in the bike lane, consider where people will activate the RRFB.
- The roadway width is narrow to accommodate all of the amenities planned.
- Consider tactile separation between bike lane and sidewalk for people with limited vision.
- Consider pavement markings like shark teeth and signage as a visual cue to drivers to slow down on both sides of the gateway.
- If speeds are reduced, removing the guardrail would be preferred.
- Snow removal should be considered when deciding on the type of bike lane separation. Sidewalk level bike lanes would allow for plowing of sidewalks and bike lanes at the same time.
- The Cottage Street crosswalk alternatives would require moving the bus stop.
- Raised devices should be considered on the side streets but not on Elliot Street, as these receive scrutiny by the fire department.
- General consensus was in favor of Alternative 3B with the Linden and Cottage Streets curb extensions.

Concept Review on December 1, 2022

At this meeting, BETA presented updated concepts, cost estimates and a cost benefit analysis to the Complete Streets Working Group for comment. During the conversation, BETA received the following feedback:

- Consider the pros and cons of each of the alternatives, as this will assist with the public process.
- Consider the cost of maintenance when evaluating alternative concepts, and generally, any means of lowering maintenance is preferred.
- When considering tradeoffs, a more significant investment at Mechanic Street and Cottage Street is more important than a higher investment at Linden Street.
- Desire to remove the guardrail if possible.
- Consider the width of any grass strips, for ease of maintenance.
- Alternatives that increase green space are more desirable.
- Importance of engaging the public and local stakeholders early in the process.
- General preference for Mechanic Street Alternative 3A, Alternative 1 for Cottage Street, and Alternative 2 for Linden Street.



City of Newton, Massachusetts Office of the Mayor

Telephone (617) 796-1100 Telefax (617) 796-1113 TDD (617) 796-1089 E-mail rfuller@newtonma.gov

#165-23

April 26, 2023

Honorable City Council Newton City Hall 1000 Commonwealth Avenue Newton Centre, MA 02459

Councilors:

I respectfully submit a docket item to your Honorable Council requesting authorization to appropriate and expend the sum of \$750,000 from June 30, 2022, Certified Free Cash to a Public Buildings Department Capital Account to fund the replacement of the Newton Free Library's HVAC system as detailed in the FY24-FY28 C.I.P.

In FY23, \$100,000 was invested in the design of a new HVAC system to replace the aging 30+ year old systems at the Main Library. The project will replace the existing chiller, cooling towers and boilers with a heat pump chiller to provide reliable heating & cooling and simultaneously will convert the building to be fully electric.

In an effort to minimize debt service payments and free-up operating funds, and because the June 30, 2022 Certified Free Cash was much higher than is customary, we are requesting Free Cash for these one-time expenditures.

Please see the attached memo from Public Buildings Commissioner Josh Morse.

Thank you for your consideration of this matter.

Sincerely,

Ruthanne Fuller Mayor

CITY CLERK

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CITY OF NEWTON, MASSACHUSETTS

PUBLIC BUILDINGS DEPARTMENT

52 ELLIOT STREET, NEWTON HIGHLANDS, MA 02461

Ruthanne Fuller, Mayor Josh Morse, Building Commissioner Telephone (617) 796-1600 Facsimile (617) 796-1601 TDD/tty # (617) 796-1608

April 24, 2023

Ruthanne Fuller, Mayor Newton City Hall 1000 Commonwealth Avenue Newton Centre, MA 02459

Re: Library HVAC Replacement

Dear Mayor Fuller:

The Public Buildings Department requests \$750,000 to replace the HVAC system at the Newton Free Library. The existing system is beyond its useful life, needing increasing maintenance, and creating indoor climate challenges in the summer. The department is currently in design for the new system, which will be a conversion to an all-electric system.

Sincerely,

Josh Morse

Public Buildings Commissioner

cc: Maureen Lemieux, Chief Financial Officer Jonathan Yeo, Chief Operating Officer Alex Valcarce, Deputy Buildings Commissioner