



Public Facilities Committee Agenda

City of Newton In City Council

Wednesday, October 18, 2023

The Public Facilities Committee will hold this meeting as a hybrid meeting on Wednesday, October 18, 2023, at 7:00 PM in Room 204. To view this meeting using Zoom use this link: <https://newtonma-gov.zoom.us/j/81737569099> or call 1-646-558-8656 and use the following Meeting ID: 817 3756 9099

Item Scheduled for Discussion:

Public Hearing

#320-23 Request for a grant of location in Grove Street

VERIZON NEW ENGLAND INC. requests permission to lay and maintain underground conduits, with the wires and cables to be placed therein, under the surface of the following public way or ways:

- Place one new four- inch (4") conduit approximately 4' westerly from existing pole, P.185/34 to private property. Said pole is located on the westerly side of Grove Street.
- Place two new four- inch (4") conduits approximately 1132' southwesterly from existing pole, P.185/34 to the City/DOT jurisdiction line. Said pole is located on the westerly side of Grove Street.
- This petition is necessary to relocate facilities for the MBTA.

Public Facilities Held 6-0 (Councilors Danberg and Laredo Not Voting); Public Hearing Opened on 10/04/23

Public Hearing

#321-23 Request for a grant of location in Chestnut Hill Road

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

- 325'+ of 8" plastic in Chestnut Hill Road from the existing 12" Cast Iron in Beacon St to replace 325' of 6" cast iron.
- 420' + of 4" plastic main in Chestnut Hill Ter from Chestnut Hill Rd and Gate House Rd to replace 420' of 6" cast iron.
- 40' + of 8" plastic in the intersection of Chestnut Hill Rd and Gate House Rd to replace 40' of 6" cast iron.

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.

Public Facilities Held 7-0 (Councilor Danberg Not Voting); Public Hearing Opened on 10/04/23

#332-23 Discussion on the Sustainable Materials Management Division
COUNCILOR LEARY requesting the Sustainable Materials Management Director provide an update to the Public Facilities Committee on her report titled, Recommendations to Rethink Curbside Collection Services.

#323-23 Request for discussion on Countryside Elementary, Lincoln Eliot, Franklin, and Horace Mann Elementary School Projects
HER HONOR THE MAYOR on behalf of the Commissioner of Public Buildings requests a discussion to provide an update on the Countryside Elementary School Building Project. Commissioner of Public Buildings will also provide a brief status update on the Lincoln-Eliot, Franklin, and Horace Mann Elementary School Projects.

Referred to Public Facilities and Finance Committees

#326-23 Appropriate funds for Phase III of the Gath Memorial Renovation Project
COMMUNITY PRESERVATION COMMITTEE requesting authorization to appropriate and expend the sum of one million, two hundred thousand dollars (\$1,200,000) for a total of seven million, thirty four thousand and three hundred and sixty two dollars (\$7,034,362), issuing any bonds or notes that may be necessary for that purpose, as authorized by General Laws Chapter 44B, Sect. 11, or any other general or special law, for a period of 30 years, with all proceeds to be the deposited in the Community Preservation Act fund established under the control of the Planning & Development Department to complete Phase III of the Gath Memorial Renovation Project, which includes all remaining design and construction work necessary to renovate and replace the existing facility according to the approved plans.

Referred to Public Facilities and Finance Committees

#334-23 Request to transfer \$300,000 from Reserve Funds-Budget Reserve – Phase III Gath Memorial Pool Renovation Project
HER HONOR THE MAYOR requesting authorization to transfer and expend the sum of three-hundred thousand dollars (\$300,000) from Acct # 0110498-579400 – Reserve Funds-Budget Reserve, to complete the Phase III Gath Memorial Pool Renovation, including the FF&E and contingency.

Respectfully submitted,

Alison M. Leary, Chair

CITY OF NEWTON
Department of Public Works
ENGINEERING DIVISION

Memorandum

To: Councilor Alison Leary, Facilities Committee Chair.
From: John Daghlian, Associate City Engineer
Re: 355 Grove Street GOL
Date: September 19, 2023
CC: Jim Mcgonagle, Commissioner
Shawna Sullivan, Chief of Staff
Lou Taverna, PE City Engineer
Thomas Fitzgerald, Director of Utilities
Doug Valovcin, Deputy Director
Evan Cudmore, Committee Clerk

In reference to the above location, the following are my comments for a plan entitled:

verizon **PETITION PLAN**

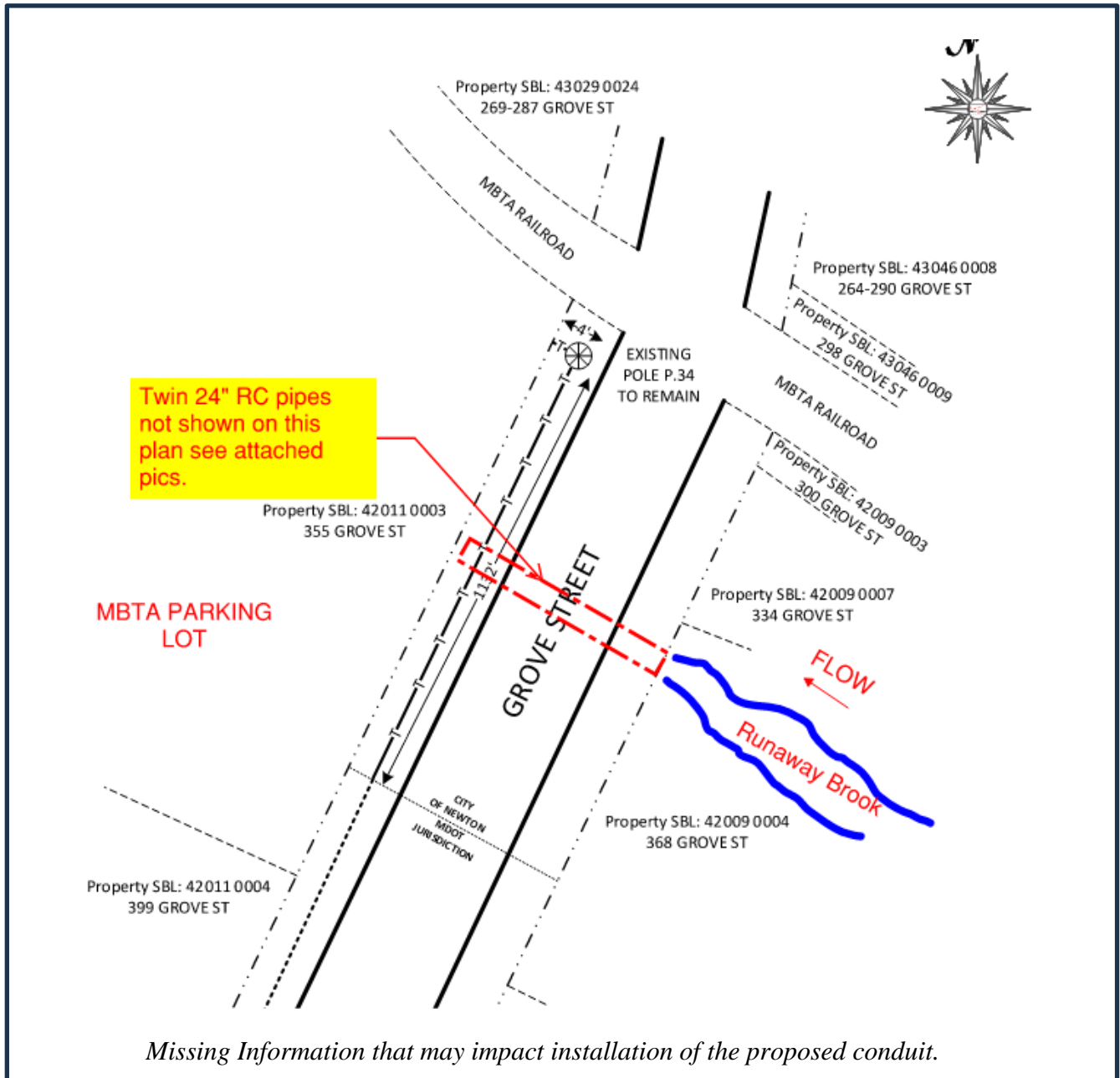
MUNICIPALITY NEWTON VZ N.E. Inc. No. 4A0U2KP

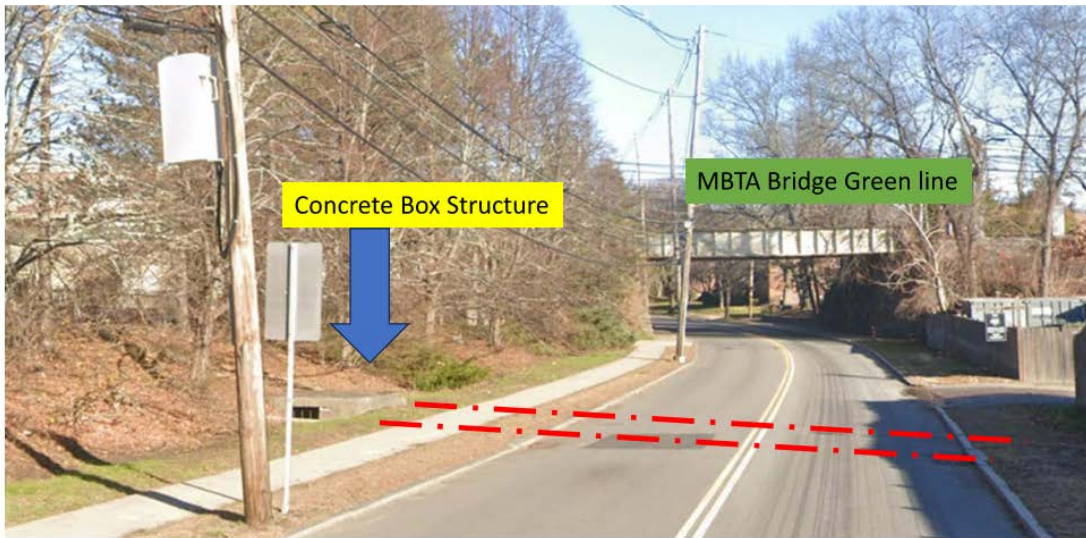
VERIZON NEW ENGLAND INC. DATE : SEPTEMBER 15, 2023

SHOWING PROPOSED INSTALLATION OF CONDUIT ON GROVE STREET

Executive Summary:

The plan submitted is missing a critical drainage crossing within the proposed work zone. Twin 24” diameter reinforced concrete pipes cross beneath Grove Street the depth of these pipes is relatively shallow, see following photos.





There are two 24" reinforced concrete pipes (see following photo) that cross underneath Grove Street which transmits Runaway Brook from the golf course right side of the photo (behind the fence) to the concrete box structure shown on the right side of Grove Street. The pipe are relatively shallow
The contractor of record needs to be made aware of this. This crossing is not shown on the submitted plan.

1



Twin 24" drainpipe on upstream side of the crossing Runaway Brook

Prior to any construction a Traffic Management Plan will be required for review and approval by the Traffic Division & Police Department. A preconstruction meeting will be required with the DPW, Newton Police & Utilities and the contractor of record prior to commencement.

Appropriate construction ahead warning signs, variable message boards and neighborhood notifications shall be executed a minimum of two weeks prior to the start of construction.

Catch basins within the construction zone shall be retrofitted with an approved type of siltation control devices, details of this shall be submitted to the City Engineer for approval. The contractor of record shall maintain these catch basins throughout the construction process and ensure that street and property flooding does not occur during construction.

Pedestrian access around the construction zone shall be accommodated by the contractor for the duration of the construction in accordance with the DPW requirements. This is a heavily traveled pedestrian sidewalk for commuters to the Greenline.

Conditions & Special Provisions:

1. All restoration shall be per the Sidewalk Crossing Permit requirements.
2. If any service connections are disturbed by the contractor of record during construction, they shall be updated and replaced to the City's current Construction Standards.
3. The contractor of record shall obtain a Trench, Street Opening, Sidewalk Crossing, and Utility Connection Permits with the DPW prior to construction.
4. The contractor of record shall obtain appropriate Permits with the Inspectional Services Department for all electrical, telecommunications construction.
5. The contractor of record shall contact the Newton Police Department 48 hours in advanced and arrange for Police detail to help residents & commuters navigate around the construction activity.
6. Upon final installation & inspections of the various underground construction; an As Built drawing [plan & profile] indicating manhole, hand-hole, and all conduit installation shall be submitted in digital and hard copy (Mylar) format to the City Engineer.

If you have any questions or concerns, please call me at 617-796-1023.

Gabriel Albisu
Right of Way Manager



125 Lundquist Drive
Braintree, MA 02184

Mobile: 781-805-5090
Gabriel.Albisu@one.verizon.com

September 15, 2023

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

**RE: Petition for Verizon job # 4A0U2KP
Grove Street, Newton, MA**

Dear Honorable City Council:

Enclosed find the following items in support of the above-referenced project:

1. Petition;
2. Petition Plan;
3. Order;
4. Abutters.

A Public Hearing and notice to abutters is required. A Verizon representative will attend the Public Hearing. Should any questions or comments arise concerning this matter prior to the hearing, please contact me at 781-805-5090. Your assistance is greatly appreciated.

Sincerely,

Gabriel Albisu
Right of Way Manager

Enc

PETITION FOR CONDUIT LOCATION

To the City Council

of NEWTON, Massachusetts

VERIZON NEW ENGLAND INC. requests permission to lay and maintain underground conduits, with the wires and cables to be placed therein, under the surface of the following public way or ways:

Grove Street:

Place one new four- inch (4") conduit approximately 4' westerly from existing pole, P.185/34 to private property. Said pole is located on the westerly side of Grove Street.

Place two new four- inch (4") conduits approximately 1132' southwesterly from existing pole, P.185/34 to the City/DOT jurisdiction line. Said pole is located on the westerly side of Grove Street.

This petition is necessary to relocate facilities for the MBTA.

Also for permission to lay and maintain underground conduits, manholes, cables and wires in the above or intersecting public ways for the purpose of making connections with such poles and buildings as it may desire for distributing purposes.

Plan marked-VZ N.E. Inc. No. **4A0U2KP** dated **September 15, 2023** showing location of conduit to be constructed is filed herewith.

VERIZON NEW ENGLAND INC.

By *Gabriel albisu*
Gabriel Albisu
Manager - Rights of Way

Dated this 15th day of September, 2023.



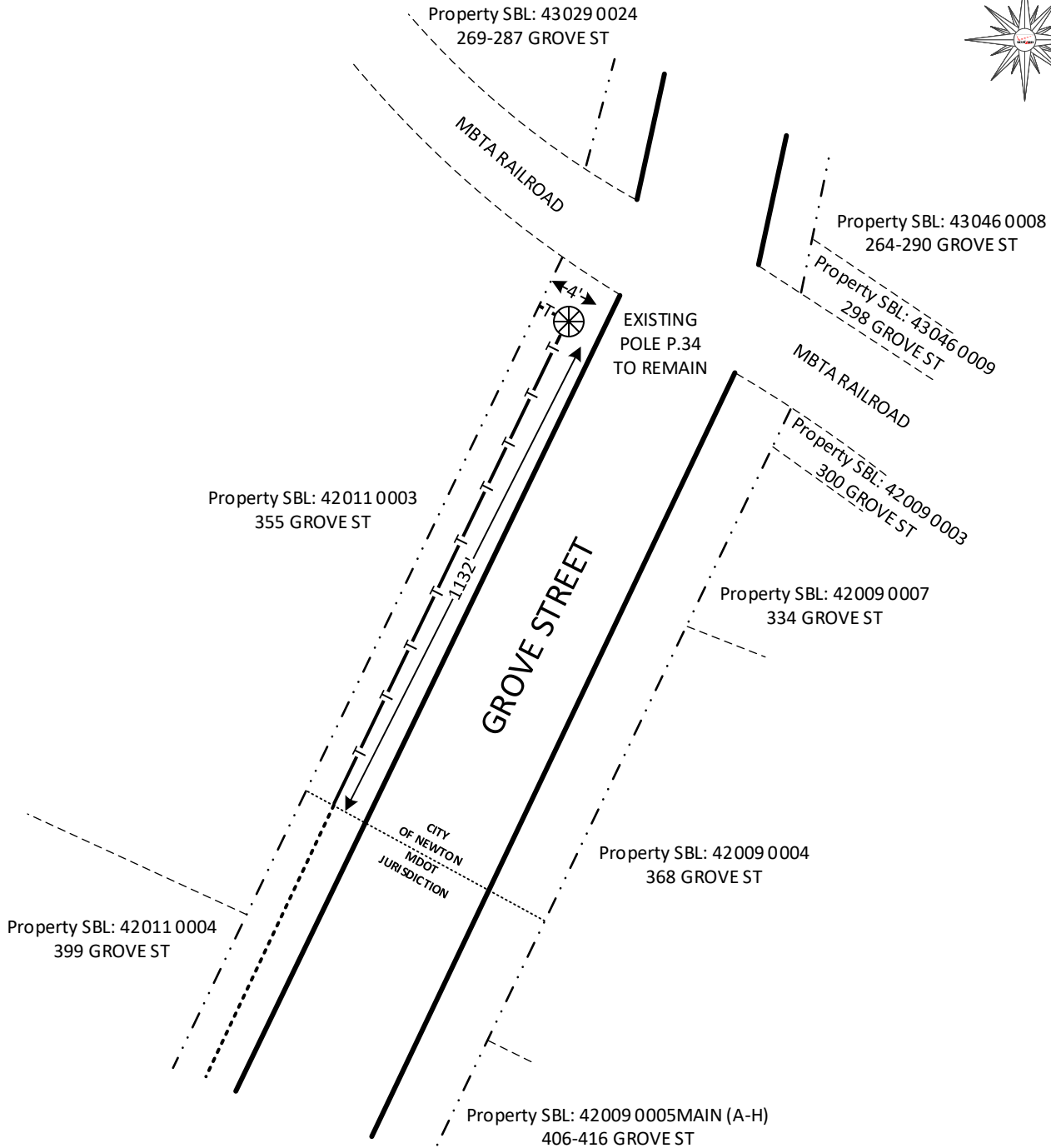
PETITION PLAN

320-23

MUNICIPALITY NEWTON VZ N.E. Inc. No. 4A0U2KP

VERIZON NEW ENGLAND INC. DATE : SEPTEMBER 15, 2023



SHOWING PROPOSED INSTALLATION OF CONDUIT ON GROVE STREET



NOT TO SCALE

LEGEND

-  PROPERTY LINE
-  EDGE OF PAVEMENT
-  EDGE OF ROADWAY

-  EXISTING JOINTLY OWNED POLE TO REMAIN
-  PROPOSED CONDUIT TO BE INSTALLED

MASS BAY TRANS AUTHORITY
10 PARK PLAZA STE 5610
BOSTON, MA 02116

WOODLAND GOLF CLUB OF
1897 WASHINGTON ST
AUBURNDALE, MA 02466

HUANG JACK C
WU I-CHEN
406-416 GROVE ST A1
NEWTON, MA 02462

NEWTON HOUSING AUTHORITY
82 LINCOLN ST
NEWTON, MA 02461

SUDHALTER JUDITH TR
JUDITH SUDHALTER 2018
406-416 GROVE ST C1
NEWTON, MA 02462

TAMIR IDO
YAKUBOVICH REBECCA T/C
406-416 GROVE ST A2
NEWTON, MA 02462

JIEWU MEI
LINGHUA FAN
406-416 GROVE ST B2
NEWTON, MA 02462

REDDY SUCHETHA M
416 GROVE ST C2
NEWTON, MA 02462

YU JONATHAN JIANAN
416 GROVE ST A3
NEWTON, MA 02462

SETO MAE U
SETO NICHOLE M
22 CONVERSE AVE
NEWTON, MA 02458

WONG CHRISTINA & ARTHUR
18 FISHER AVE
WELLESLEY, MA 02482

WOODLAND GOLF CLUB OF
1897 WASHINGTON ST
AUBURNDALE, MA 02466

COMMONWEALTH OF
MDC
20 SOMERSET ST
BOSTON, MA 02108

MASSACHUSETTS TURNPIKE
80 BOYLSTON ST
BOSTON, MA 02116

COMMONWEALTH OF
MDC
20 SOMERSET ST
BOSTON, MA 02108

MASS BAY TRANSIT
10 PARK PLAZA STE 5610
BOSTON, MA 02116

MS RIVERSIDE FEE OWNER
275 GROVE ST SUITE 2-150
AUBURNDALE, MA 02466

MS RIVERSIDE FEE OWNER
275 GROVE ST SUITE 2-150
AUBURNDALE, MA 02466

BIG GRP 275 GROVE OWNER
300 SOUTH TRYON ST STE 2500
CHARLOTTE, NC 28202

MASS BAY TRANS AUTHORITY
10 PARK PLAZA STE 5610
BOSTON, MA 02116

WOODLAND GOLF CLUB OF
1897 WASHINGTON ST
AUBURNDALE, MA 02466

WOODLAND GOLF CLUB OF
1897 WASHINGTON ST
AUBURNDALE, MA 02466

COMMONWEALTH OF
MDC
20 SOMERSET ST
NEWTON, MA 02465

CADMAN ALAN J
SHEEHAN LIANE M
59 OAKWOOD RD
AUBURNDALE, MA 02466

PARADISO ROBERT M TR
ROBERT M PARADISO TRUST
62 OAKWOOD RD
AUBURNDALE, MA 02466

STUART DAVID & MARSHA
88 WILLISTON RD
AUBURNDALE, MA 02466

BERMAN MARJORIE F TR
MARJORIE F BERMAN TRUST
245 GROVE ST
AUBURNDALE, MA 02466

MCVITTIE ELIZABETH &
TO B-E OR NOT TO B-E
11 NORUMBEGA CT
AUBURNDALE, MA 02466

PRAKASH MAYANK & ARCHANA
PRAKASH FAMILY 2020
19 NORUMBEGA CT
AUBURNDALE, MA 02466

SANGIOLO JOHN & AMY MAH
387 389 CENTRAL ST
AUBURNDALE, MA 02466

GROSS IRA K & ROBYN M TRS
IRA K & ROBYN M GROSS
399 CENTRAL ST
AUBURNDALE, MA 02466

BEAUDRY EDWARD J
BEAUDRY LAUREN A
407 CENTRAL ST
AUBURNDALE, MA 02466

WOODLAND PARK PARTNERS
39 BRIGHTON AVE
BOSTON, MA 02134

WOODLAND GOLF CLUB OF
1897 WASHINGTON ST
AUBURNDALE, MA 02466

CITY OF NEWTON
Department of Public Works
ENGINEERING DIVISION

Memorandum

To: Councilor Alison Leary, Facilities Committee Chair.
From: John Daghlian, Associate City Engineer
Re: NGrid Gas Main Replacement Essex Rd and various locations
Date: September 13, 2023
CC: Jim Mcgonagle, Commissioner
Shawna Sullivan, Chief of Staff
Lou Taverna, PE City Engineer
Evan Cudmore, Committee Clerk

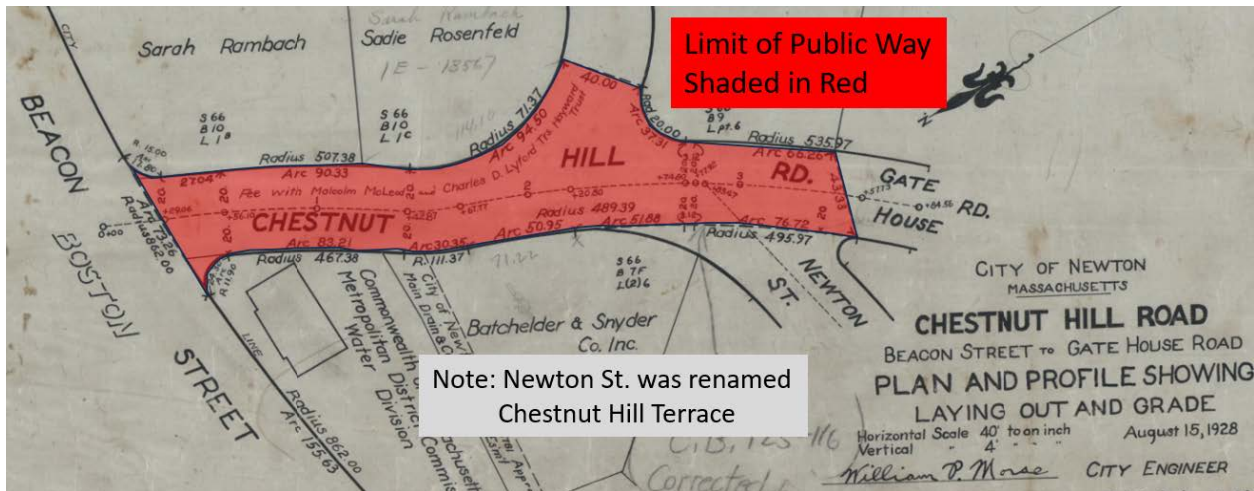
In reference to the above location, the following are my comments for a plan entitled:

1-109 Essex Road
Gas Min Replacement
Essex Rd, Chestnut Hill Rd, Chestnut Hill Terrace, Gate House Rd,
Nancy Rd, Meigh Rd, Newton MA
Cover – Location Map
Dated: 4/28/2023
Revised: 6/27/2023

Executive Summary:

This petition from NGrid has various locations within the Chestnut Hill area, however; most of the streets listed are private ways and the city has no jurisdiction over these privately owned streets.

Chestnut Hill Terrace is public way, and a short portion of Chestnut Hill Road is public, see the following plan that shows the limits of the public way. The remaining roads are all private ways as listed on the following table.



Note: Newton Street was renamed Chestnut Hill Road

Road	Public Way	Private Way
Chestnut Hill Terrace	467 ft	
Chestnut Hill Rd	325 ft	3,360 ft
Essex Rd		1,792 ft
Gate House Rd		1,529 ft
Meigh Rd		214 ft
Nancy Rd		723 ft

Prior to any construction a Traffic Management Plan will be required for review and approval by the Traffic Division & Police Department.

A preconstruction meeting will be required with the DPW, Newton Police & Utilities and the contractor of record prior to commencement. Appropriate construction ahead warning signs, variable message boards and neighborhood notifications shall be executed a minimum of two weeks prior to the start of construction.

Conditions & Special Provisions:

1. The contractor of record shall apply for a Street Opening & Trench Permits with the DPW prior to any construction with appropriate Bonds, Certificate of Insurance & Dig Safe clearance. The Utilities Division must be contacted for utility mark outs as the City is not a member of Dig Safe call 617-796-1640.

2. If any service connections or private utilities are disturbed by the contractor of record during construction, they shall be updated and replaced to the City's current Construction Standards.
3. All downstream catch basins shall be retrofitted with an approved type of siltation control devices, details of this shall be submitted to the City Engineer for approval. The contractor of record shall maintain these catch basins throughout the construction process and ensure that street and property flooding does not occur during construction.
4. Pedestrian access around the construction zone shall be accommodated by the contractor for the duration of the construction in accordance with the DPW requirements.
5. Upon final installation & activation of the gas main an As Built drawing [plan & profile] indicating depth of pipe shall be submitted in digital and hard copy format to the City Engineer.
6. The contractor of record shall contact the Newton Police Department 48 hours in advanced and arrange for Police detail to help residents & commuters navigate around the construction activity.

If you have any questions or concerns, please call me at 617-796-1023.

**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 Standard Requirements for Plans 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

I. IDENTIFICATION (Please Type or Print Clearly)

Company Name NATIONALGRID

201 Rivermoor Street

Address _____

West Roxbury, MA 02132

Phone Number 617-894-3896

Fax Number _____

Mary Mulrone

Permit Representative

Contact Person _____

Title _____

Mary Mulrone

July 21, 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 Cast Iron Main Replacement Program on Leak Prone Pipe Nationlgrid recommends the relay of: approximately 40 feet of 1.25- inch, Plastic (1998), approximately 1630 feet of 6- inch, Cast Iron (1927/1928) and approximately 5 feet of 6- inch, Plastic (1998) with approximately 1675 feet of 8-inch, plastic in Gate House Rd from the existing 12- inch, Cast Iron in Beacon St to Essex Rd, approximately 420 feet of 6- inch, Cast Iron (1923) with approximately 420 feet of 4- inch, Plastic in Chestnut Hill Ter from Gate House Rd, approximately 40 feet of 6- inch, Cast Iron (1928) with approximately 40 feet of 8-inch, Plastic stub in the intersection of Chestnut Hill Rd and Gate House Rd (cut and cap the existing 6- inch Cast Iron at #22 Chestnut Hill Rd), approximately 210 feet of 6- inch, Cast Iron (1928) with approximately 210 feet of 4- inch, Plastic in Meigh Rd from Gate House Rd to end of main at #14 Meigh Rd, approximately 50 feet of 4- inch/6- inch, Cast Iron (1905/1927) with approximately 50 feet of 6- inch, Plastic in the intersection of Nancy Rd and Gate House Rd (cut and cap the existing 4- inch Cast Iron at #85 Gate House Rd), approximately 325 feet of 6- inch, Plastic (1998) and approximately 1110 feet of 6- inch, Cast Iron (1924/1928) with approximately 1435 feet of 6- inch, Plastic in Essex Rd from #3 Essex Rd to #109 Essex 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 _____

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:

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V. RECOMMENDATION TO PUBLIC FACILITIES COMMITTEE:

Commissioner, Public Works

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 Cast Iron Main Replacement Program on Leak Prone Pipe Nationalgrid recommends the relay of:

approximately 40 feet of 1.25- inch, Plastic (1998), approximately 1630 feet of 6- inch, Cast Iron (1927/1928) and approximately 5 feet of 6- inch, Plastic (1998) with approximately 1675 feet of 8-inch, plastic in Gate House Rd from the existing 12- inch, Cast Iron in Beacon St to Essex Rd, approximately 420 feet of 6- inch, Cast Iron (1923) with approximately 420 feet of 4- inch, Plastic in Chestnut Hill Ter from Gate House Rd,

approximately 40 feet of 6- inch, Cast Iron (1928) with approximately 40 feet of 8-inch, Plastic stub in the intersection of Chestnut Hill Rd and Gate House Rd (cut and cap the existing 6- inch Cast Iron at #22 Chestnut Hill Rd),

approximately 210 feet of 6- inch, Cast Iron (1928) with approximately 210 feet of 4- inch, Plastic in Meigh Rd from Gate House Rd to end of main at #14 Meigh Rd,

approximately 50 feet of 4- inch/6- inch, Cast Iron (1905/1927) with approximately 50 feet of 6- inch, Plastic in the intersection of Nancy Rd and Gate House Rd (cut and cap the existing 4- inch Cast Iron at #85 Gate House Rd),

approximately 325 feet of 6- inch, Plastic (1998) and approximately 1110 feet of 6- inch, Cast Iron (1924/1928) with approximately 1435 feet of 6- inch, Plastic in Essex Rd from #3 Essex Rd to #109 Essex Rd.

Date: July 21, 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 July 21, 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 this _____ day of _____, 20____.

I hereby certify that the foregoing order was duly adopted by the _____ of the City of _____, MA on the _____ day of _____, 20____.

WO # 1505036

By:

**Questions for NGRID From the City Council:
1 – 109 Essex Road, Newton 1505036**

Request/ Description of work:

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?

There are two open leaks within the scope of wo#1505036 (1-109 ESSEX RD, NEW) as shown in table below (as of 7/25/2023). Please note the leaks are grade 2 and grade 3.

LEAK_NO	MAIN_SERVICE	CLASS	Date Reported	Division	Leak Source	WONUM	RPT_TOWN	ST_NUM	PT_ST_NAN	RPT_ST_SFX	INT_ST_N	INT_ST_N	bk Status
7375092	ACTIVE	2	12-May-22	Waltham	Public	1478830	NEW	88	ESSEX	RD		GATE HO RD	Monitoring
305519	ACTIVE	3	23-Aug-07	Waltham	Walking Survey	572020	NEW	50	CHESTNUT	RD		GATE HO RD	Monitoring

The cast iron gas mains within the scope of wo#1505036 (1-109 ESSEX RD, NEW) have been repaired several times and replacement is needed given all the factors, such as frequency of leaks. Lining is not an option in this case due to the concentration of service laterals in scope.

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

The decision to replace is primarily driven by public safety concerns. Pipes in scope of wo#1505036 have a history of leakage and should be replaced. In accordance with *CFR title 49 Subtitle B Chapter I Subchapter D Part 192 Subpart P § 192.1007 (c)* National Grid evaluate and rank risk to make determination and prioritization of replacement. Additionally, under the requirements of GSEP National Grid is obligated to replace all leak prone pipes which includes cast iron mains.

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

New customers are not connected as part of main replacement projects.

Have there been complaints of water intrusion or other problems?

The Company is not aware of water intrusion within scope of wo#1505036.

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

Streets are not under moratorium

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

The standard process will be followed.

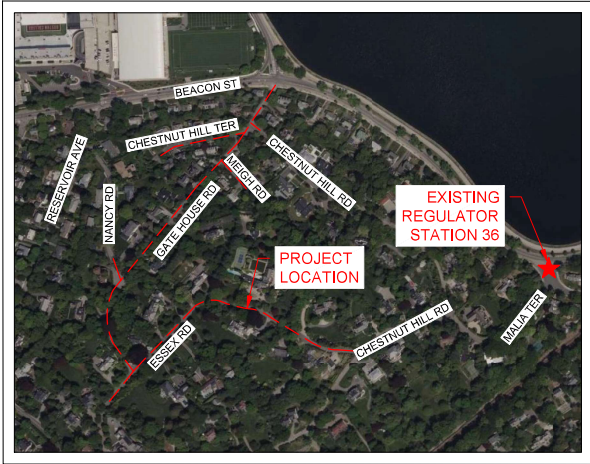
Have all the gate boxes been located and protected? Are they all operable and accessible?

Thank you,
Cassidy Flynn
Deputy City Clerk
City of Newton
(617) 796-1213

nationalgrid

1-109 ESSEX RD GAS MAIN REPLACEMENT 1.25" & 6" PL (LP) & 4" & 6" CI (LP) TO 4", 6", & 8" PL (22 PSIG) ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD, NANCY RD, & MEIGH RD, NEWTON, MA W.O. NO.: 1505036

PIPE TOTALS			
DIAMETER	MATERIAL	ABANDONED	INSTALLED
1.25"	PL	40 LF (LP)	--
4"/6"	CI	50 LF (LP)	--
6"	CI	3410 LF (LP)	--
4"	PL	--	630 LF (22#)
6"	PL	330 LF (LP)	1485 LF (22#)
8"	PL	--	1715 LF (22#)



INDEX OF SHEETS		
SHEET	NAME	TITLE
1	DDS-NEW-71230080 G-001	COVER - LOCATION MAP
2	DDS-NEW-71230080 G-002	CONSTRUCTION NOTES
3	DDS-NEW-71230080 G-003	CONSTRUCTION NOTES & BILL OF MATERIALS
4	DDS-NEW-71230080 C-001	OVERALL SCOPE OF WORK
5	DDS-NEW-71230080 C-002	LAYOUT SHEET
6	DDS-NEW-71230080 C-003	LAYOUT SHEET
7	DDS-NEW-71230080 C-004	LAYOUT SHEET
8	DDS-NEW-71230080 C-005	LAYOUT SHEET
9	DDS-NEW-71230080 C-006	LAYOUT SHEET
10	DDS-NEW-71230080 C-007	LAYOUT SHEET
11	DDS-NEW-71230080 C-008	LAYOUT SHEET
12	DDS-NEW-71230080 C-009	LAYOUT SHEET
13	DDS-NEW-71230080 C-101	TIE-IN & ABANDONMENT DETAILS
14	DDS-NEW-71230080 C-201	STANDARD DETAILS
15	DDS-NEW-71230080 C-202	STANDARD DETAILS
16	DDS-NEW-71230080 C-203	STANDARD DETAILS
17	DDS-NEW-71230080 C-204	STANDARD DETAILS

LOCATION MAP
 LAT/LON: 42°19'56.8"N, 71°09'51.4"W
 NEWTON, MA
 SCALE: 1:300



THE DDS COMPANIES
 46 NEWBOLD ROAD
 WEST HENRIETTA, NY 14566
 PHONE (888) 289-7240
 FAX (888) 559-7541

BOSTON GAS COMPANY
 d/b/a
nationalgrid
 170 DATA DRIVE
 WALTHAM, MA 02451

IPC



1	REVIEWS TO VALVE LOCATIONS, NOTES, BOM	06/27/2023	SZT	ESP	MEP
0	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP
NO.	DESCRIPTION	DATE	DR:R	CHK:Y	APP:R

1-109 ESSEX RD
 GAS MAIN REPLACEMENT
 ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
 NANCY RD, & MEIGH RD, NEWTON, MA
COVER - LOCATION MAP

DWG SIZE: 227x34"
 DESIGNER: DDS COMPANIES
 ENGINEER: S. TRSULIS
 DATE: 02/27/2023
 ASSET I.D.: XXXXXXXX
 W.O. NO.: 1505036

PAGE 01 OF 17	
DRAWING NO. G-001	SHEET NO. 01

SCOPE OF WORK:

NATIONAL GRID WORK ORDER NUMBER: 1505036
 PROJECT NAME AND LOCATION: 1-109 ESSEX RD, NEWTON, MA
 PROJECT SCOPE: AS PART OF THE DIMNRPL-10 PROGRAM, LPP INTEGRITY MANAGEMENT RECOMMENDS THE RELAY OF:
 • APRX 40 FEET OF 1.25 INCH, LP PLASTIC (1998), APRX 1630 FEET OF 6 INCH, LP CAST IRON (1927/1928) AND
 APRX 5 FEET OF 6 INCH, LP PLASTIC (1998) WITH APRX 1675 FEET OF 6 INCH, 22 PSIG PLASTIC IN GATE
 HOUSE RD FROM THE EXIST 12 INCH, 22 PSIG CAST IRON IN BEACON ST TO ESSEX RD.
 • APRX 420 FEET OF 6 INCH, LP CAST IRON (1923) WITH APRX 420 FEET OF 4 INCH, 22 PSIG PLASTIC IN
 CHESTNUT HILL TER FROM GATE HOUSE RD.
 • APRX 40 FEET OF 6 INCH, LP CAST IRON (1928) WITH APRX 40 FEET OF 8 INCH, 22 PSIG PLASTIC STUB IN
 THE INTERSECTION OF CHESTNUT HILL RD AND GATE HOUSE RD (CUT AND CAP THE EXIST 6 INCH LP CAST IRON
 AT #22 CHESTNUT HILL RD).
 • APRX 210 FEET OF 6 INCH, LP CAST IRON (1928) WITH APRX 210 FEET OF 4 INCH, 22 PSIG PLASTIC IN MEIGH
 RD FROM GATE HOUSE RD TO END OF MAIN AT #14 MEIGH RD.
 • APRX 50 FEET OF 4 INCH/6 INCH, LP CAST IRON (1905/1927) WITH APRX 50 FEET OF 6 INCH, 22 PSIG
 PLASTIC STUB IN THE INTERSECTION OF NANCY RD AND GATE HOUSE RD (CUT AND CAP THE EXIST 4 INCH LP
 CAST IRON AT #85 GATE HOUSE RD).
 • APRX 325 FEET OF 6 INCH, LP PLASTIC (1998) AND APRX 1110 FEET OF 6 INCH, LP CAST IRON (1924/1928)
 WITH APRX 1435 FEET OF 6 INCH, 22 PSIG PLASTIC IN ESSEX RD FROM #3 ESSEX RD TO #109 ESSEX RD (DO
 NOT CONNECT TO THE EXIST 6 INCH, LP CAST IRON IN CHESTNUT HILL RD).
 1 MAIN CONNECTION, 3 CUT-OFFS

GENERAL CONSTRUCTION:

- NO FIELD CHANGES SHALL BE MADE TO THIS PLAN WITHOUT APPROVAL OF ASSIGNED NATIONAL GRID PROJECT ENGINEER.
 ENGINEER: NICOLE ARABIE
 PHONE: (774) 406-9844
 EMAIL: NICOLE.ARABIE@NATIONALGRID.COM
- NEW MAINS SHALL BE INSTALLED IN ACCORDANCE WITH THE TYPICAL TRENCH DETAIL INCLUDED IN THESE DRAWINGS, UNLESS NOTED OTHERWISE.
 - 36 INCHES OF COVER FROM FINAL GRADE WHERE PRACTICAL
 - STATE HIGHWAY MINIMUM COVER: 36 INCHES
 - DISTRIBUTION MAIN MINIMUM COVER: 24 INCHES
 - SAND PADDING IN ALL DIRECTIONS, 6 INCHES MINIMUM.
 - CAUTION TAPE SHALL BE INCLUDED ONE FOOT BELOW GRADE.
- SERVICES SHOULD BE INSTALLED WITH 24 INCHES OF COVER.
 - MINIMUM IN PUBLIC ROW: 18 INCHES
 - MINIMUM IN PRIVATE PROPERTY: 12 INCHES
 - SAND PADDING IN ALL DIRECTIONS, 6 INCHES MINIMUM.
 - CAUTION TAPE SHALL BE INCLUDED ONE FOOT BELOW GRADE.
- REFER TO ENG-6030 FOR SHALLOW MAINS. PRIOR TO INSTALLING GAS MAINS WITH LESS THAN 24 INCHES OF COVER, COMPLETE REQUEST FOR WAIVER FORM AND CONTACT GAS PIPELINE SAFETY & COMPLIANCE FOR APPROVAL.
 - JENNIFER GILLIS - (617) 594-5157 (MA EXCLUDING CAPE AND WEBSTER)
 - LIEN GAUTHIER - (617) 438-9069 (MA EXCLUDING CAPE AND WEBSTER)
 - IF A PROPOSED TOP TEE CONNECTION RESULTS IN A SHALLOW MAIN THAT CANNOT MEET THE WAIVER CRITERIA, A FULL TEE CONNECTION IS AN ACCEPTABLE ALTERNATIVE. A SPHERICAL TEE IS ONLY ACCEPTABLE WITH APPROVAL FROM NATIONAL GRID STRATEGIC ASSET AND SYSTEM PLANNING.
- ALL MAINS SHOULD BE INSTALLED WITH A CLEARANCE OF 12 INCHES FROM OTHER FACILITIES.
 - DISTRIBUTION MINIMUM CLEARANCE: 6 INCHES
 - APPROPRIATE PROTECTIVE MEASURES SHALL BE USED TO PROTECT THE GAS FACILITY IF MINIMUMS CANNOT BE ATTAINED. APPROVAL IS REQUIRED BY GAS SYSTEMS ENGINEERING.
- THE PIPE ALIGNMENT IS SHOWN FOR REFERENCE ONLY AS APPROXIMATELY 3 FEET FROM THE EXISTING MAIN (BASED ON AVAILABLE RECORD INFORMATION). THE ACTUAL ROUTE AND ALL VERTICAL AND HORIZONTAL OFFSETS ARE TO BE FIELD ROUTED WITHIN THE PUBLIC RIGHT-OF-WAY BASED ON THE ACTUAL LOCATION OF EXISTING UTILITIES. ADDITIONAL FITTINGS NOT SHOWN WILL BE REQUIRED.
 - ELBOWS SHOWN ARE ASSUMED TO BE 45 DEGREES IN MOST APPLICATIONS. 90 DEGREE ELBOWS MAY BE NEEDED BASED ON FIELD CONDITIONS.
- VALVES DEPICTED IN THE DESIGN ARE THE MINIMUM REQUIRED FOR SECTIONALIZING, ISOLATION, CRITICAL VALVES, AND/OR TO ACCOMMODATE TIE-INS. ADDITIONAL FULL PORT VALVES MAY BE ADDED TO ACCOMMODATE CONSTRUCTION.
 - VALVES FOR BRANCHES AT INTERSECTIONS SHOULD BE FIELD LOCATED JUST OUTSIDE OF THE INTERSECTION WHERE EASILY ACCESSIBLE, PRIOR TO THE FIRST SERVICE.
- ELECTROFUSION COUPLINGS MAY BE INTERCHANGED WITH BUTT FUSION WHERE APPLICABLE.
- TIE-IN LOCATIONS MAY VARY UP TO 100 FEET OF THE PROPOSED LOCATION TO ACCOMMODATE CONSTRUCTION, EXCEPT FOR WHEN THE FOLLOWING CONDITIONS APPLY:
 - REGULATOR STATION WITHIN THE SCOPE OF THE JOB OR WITHIN 200 FEET OF THE TIE-IN LOCATION.
 - CHANGE TO THE NUMBER OF CONNECTIONS (ADDITIONAL ADDED FROM AN INTERSECTION OR OTHERWISE).
 - MATERIAL/SIZE CHANGE AT NEW LOCATION.
- NOT ALL BYPASSES, GAUGES, PURGES AND OTHER MISCELLANEOUS FITTINGS ARE SHOWN. CONSTRUCTION SHALL INSTALL THESE FITTINGS AS NEEDED IN ACCORDANCE WITH THE APPROVED SOP.
- WHEN CONNECTING NEW "DEAD" MAIN TO NEW "DEAD" MAIN: AS LONG AS THE CONNECTION BRANCH SIZE SHOWN IN THE DRAWINGS CAN BE ACHIEVED, THE FOLLOWING CONNECTION TYPES ARE ACCEPTED AND INTERCHANGEABLE:
 - INLINE TEE
 - PLASTIC HIGH VOLUME TAPPING TEE (2" BRANCH SIZE OR LESS)
 - PLASTIC BRANCH SADDLE (WITH MAIN CUTTER SIZE SHOWN IN NATIONAL GRID POLICIES)
 - STEEL THREE-WAY TEE (WITH MAIN CUTTER SIZE SHOWN IN NATIONAL GRID POLICIES)
- THE LIVE MAIN CONNECTION DETAIL SHOWN IN THE DRAWINGS SHALL BE FOLLOWED, ANY CHANGES TO THE TIE IN CONNECTION TYPE SHALL BE APPROVED BY THE NATIONAL GRID ENGINEER PRIOR TO CONSTRUCTION.
- WHEN RELAYING A LOWER PRESSURE MAIN WITH A HIGHER PRESSURE MAIN, ALL SERVICES SHALL BE RELAYED OR INSERTED.
- PIPE AND FITTING QUANTITY DESCRIBED IN SCOPE MAY VARY FROM AMOUNTS SHOWN ON THE BILL OF MATERIALS TO ACCOMMODATE FIELD CONDITIONS AND CONSTRUCTION.
- CONTRACTOR TO REFER TO NATIONAL GRID SERVICE RECORD INFORMATION, ASSOCIATED CONSTRUCTION STANDARDS AND NATIONAL GRID INSTRUCTION FOR ALL SERVICE WORK WITHIN THE SCOPE OF LIMITS OF THIS PROJECT.
- ANY FITTINGS (SUCH AS BUT NOT LIMITED TO, PURGES, VENTS & GAUGES) WHICH ARE REPRESENTED ON THESE PLANS AND DETAILS WITHOUT ASSOCIATED PART ON THE BILL OF MATERIALS ARE TO BE SIZED AND SELECTED PER CURRENT NATIONAL GRID STANDARDS BY THE CONTRACTOR.
- THE CONTRACTOR SHALL CALL DIG-SAFE (DIAL 811) OR 888-344-7233 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION. SATURDAYS, SUNDAYS AND HOLIDAYS ARE EXCLUDED.

- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES AND STRUCTURES DEPICTED OR NOT DEPICTED ON THIS PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PHYSICALLY LOCATE ON-SITE UTILITIES THROUGH TEST PIT EXCAVATION OF SAID UTILITIES W/ PRIOR AUTHORIZATION FROM UTILITY OWNER.
- NOTIFY NATIONAL GRID I&R IF THE PROJECT IS WITHIN 200 FEET OF A REGULATOR STATION.
- DIMENSIONS SHOWN ILLUSTRATE THE INTENT OF MAIN PLACEMENT. SLIGHT VARIATIONS ARE EXPECTED. ANY SIGNIFICANT CHANGE NEEDS TO BE BROUGHT TO THE OWNERS (NATIONAL GRID) ATTENTION PRIOR TO PLACEMENT.
- CONTRACTOR TO VERIFY PRESSURE AND GAS FEE DIRECTION OF EXISTING MAINS, NEW MAINS, AND MAINS TO BE ABANDONED PRIOR TO ANY AND ALL TIE INS BEING PERFORMED.
- LOCATION OF ANY IDENTIFIED UNDERGROUND UTILITIES IS APPROXIMATE ONLY, AND IS NOT WARRANTED TO BE CORRECT. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT INDICATED ON THESE PLANS. ALL EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR FOR SERVICE, SIZE, INVERT ELEVATIONS, LOCATION, ETC.
- CONTRACTOR SHALL PROTECT AND MAINTAIN DIG SAFE FIELD MARKS, ANY EXISTING PROPERTY LINE MONUMENTATION OR OTHER EXISTING SURVEY STAKES OR FIELD MARKS. THE CONTRACTOR SHALL REPLACE AT THEIR EXPENSE ANYTHING DISTURBED OR DESTROYED.
- CONTRACTOR SHALL COMPLETE MISCELLANEOUS WORK NOT SPECIFICALLY SHOWN ON THE CONTRACT DRAWINGS SUCH AS PAVEMENT PATCHING, TRENCH & EQUIPMENT BLOCKING, TREE TRIMMING, ETC.
- ANY SUBSURFACE UTILITIES, STRUCTURES AND/OR FIXED OBJECTS SHOWN AT, BELOW OR ABOVE GRADE SHOWN ON THESE PLANS HAVE BEEN PLACED BASED ON AVAILABLE RECORD MAPPING, AERIAL IMAGERY AND OTHER DESIGN RESOURCES. CONTRACTOR IS WARNED THAT EXACT OR APPROXIMATE LOCATION OF SUBSURFACE UTILITIES, STRUCTURES AND/OR FIXED OBJECTS SHOWN AT, BELOW OR ABOVE GRADE IN THE PROJECT AREA MAY DIFFER FROM THAT SHOWN OR MAY NOT BE SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO PERFORM FIELD VERIFICATION PRIOR TO EXECUTING ANY WORK.
- ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST NATIONAL GRID, APPLICABLE STATE, DOT AND LOCAL MUNICIPAL STANDARDS.
- CONTRACTOR SHALL MAINTAIN ALL TRAFFIC IN ALL AREAS IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ALL NECESSARY PRECAUTION FOR THE SAFETY OF THE PUBLIC SHALL BE TAKEN. ALL BARRIERS, WARNING LIGHTS AND OTHER DEVICES AND EQUIPMENT REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES SHALL BE MAINTAINED.
- CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO ALL OTHER EXISTING UTILITIES. DAMAGED UTILITIES SHALL BE IMMEDIATELY REPAIRED BY CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR MAY INSTALL ADDITIONAL VALVES NOT SHOWN IN THE PLANS IF DEEMED NECESSARY IN THE FIELD. NEW VALVES ASSOCIATED WITH TIE INS (SEE DETAILS ON SHEET 1-3) MUST BE INSTALLED PER THE DETAIL. FINAL LOCATION OF THE NEW VALVES IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. ANY SIGNIFICANT CHANGE MUST BE BROUGHT TO THE OWNERS (NATIONAL GRID) ATTENTION PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUAINTING WITH THE CONDITIONS FOR THE SITE AND FOR ESTIMATING PROPERLY THE DIFFICULTY AND COST TO SUCCESSFULLY PERFORM THE WORK.
- NATIONAL GRID RESERVES THE RIGHT TO EXAMINE ANY WORK DONE ON THIS PROJECT AT ANY TIME TO DETERMINE THE CONFORMANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OF THIS PROJECT, AS INTENDED AND INTERPRETED BY NATIONAL GRID.

DESIGN CRITERIA:

- DESIGN IN ACCORDANCE WITH THE FOLLOWING:
 - ENGO2001: DESIGN OF GAS SERVICES
 - ENGO4001: DESIGN OF DISTRIBUTION MAINS
 - ENGO4010: DESIGN REQUIREMENTS FOR INSTALLATION OF CASINGS
- PROPOSED PIPING:
 - DESIGN CLASS LOCATION: 4
 - NOMINAL SIZE: 4, 6, & 8 INCH
 - MATERIAL: MDPE
 - MAOP: 22 PSIG
- PIPE SIZE DETERMINED BY NATIONAL GRID STRATEGIC ASSET AND SYSTEM PLANNING

PROJECT CONSTRUCTION REQUIREMENTS:

- PER NATIONAL GRID GAS POLICY DOC# ENGO5004, ALL COMPLEX PROJECTS ARE REQUIRED TO PREPARE AN SOP IN ACCORDANCE WITH THE STAMPED PLANS, WHICH MUST BE APPROVED BY A PROFESSIONAL ENGINEER. THE SOP MUST INCLUDE AN URGENT PROPOSED PROJECT SPECIFIC STEPS AND PROCEDURES TO DEFINE AN ADEQUATE SEQUENCE FOR CONSTRUCTION OF THE MCR.
- IN ACCORDANCE WITH MASSACHUSETTS 220 MCR 105.00, THE STAMPED SOP IS CONSIDERED A REQUIRED PROJECT SPECIFIC PACKAGE TO PERFORM ANY COMPLEX PROJECT CONSTRUCTION. THEREFORE, FOR ANY COMPLEX PROJECT CONSTRUCTION WORK, THE CONTRACTOR MUST FOLLOW THE PE STAMPED SOP.
- PROJECT IS OVER 2500 FEET IN LENGTH. PLEASE CONTACT I&R PRIOR TO EXECUTING THE PROJECT FOR SUPPLEMENTAL ODOORIZATION, INRO6002 - SUPPLEMENTAL ODOORIZATION FOR NEW PIPING.
- THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN. ENSURE ALL SERVICES ARE RELAYED AND CORRECTLY FITTED WITH SERVICE REGULATORS IN ACCORDANCE WITH ENGO2001.

CODES & STANDARDS

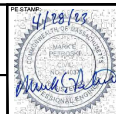
- WORK SHALL CONFORM TO ALL LOCAL, STATE, AND FEDERAL CODES IN ADDITION TO NATIONAL GRID GAS POLICIES AND WORK METHODS. WHERE ANY CONFLICTS OF CODES, STANDARDS AND REGULATIONS MAY EXIST, THE MOST STRINGENT CODE, STANDARD, OR REGULATION SHALL APPLY.
- ALL REFERENCES SHALL BE IN ACCORDANCE WITH THE MOST CURRENT REVISION AVAILABLE AT THE TIME OF CONSTRUCTION.
- FEDERAL & STATE:
 - TITLE 49: PART 192 TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS
 - 220 CMR: DEPARTMENT OF PUBLIC UTILITIES
100.00 - 113.00: MASSACHUSETTS GAS DISTRIBUTION CODE
 - AMERICAN SOCIETY OF MECHANICAL ENGINEERS
831.8: GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS
 - 248 CMR 4-7: MA FUEL GAS CODE
- CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL GRID GAS POLICIES AND WORK METHODS, INCLUDING BUT NOT LIMITED TO:
 - CNST01003: BACKFILL AND RESTORATION
 - CNST01005: PREPARATION OF GAS FACILITY HISTORICAL RECORDS
 - CNST01006: COMMERCIALY AVAILABLE SHORING SYSTEMS
 - CNST02014: ENCAPSULATING CAST IRON JOINTS
 - CNST03001: SQUEEZE-OFF OPERATIONS
 - CNST03002: STOP-OFF OPERATIONS ON LOW PRESSURE MAINS
 - CNST03005: PURGING REQUIREMENTS FOR GAS PIPELINES
 - CNST03006: PURGING OPERATIONS - DIRECT DISPLACEMENT
 - CNST03007: PURGING OPERATIONS - COMPLETE INERT FILL
 - CNST03008: PURGING OPERATIONS - SLUG METHOD
 - CNST03014: STOP OFF OPERATIONS FOR KLEISS EQUIPMENT
 - CNST04005: INSTALLING STEEL DISTRIBUTION MAINS
 - CNST04007: FIELD COLD BENDING OF LINE PIPE
 - CNST04008: INSTALLING PLASTIC MAINS
 - CNST04011: ABANDONMENT OF MAINS
 - CNST04012: GROUTING ABANDONED PIPELINES
 - CNST04030: RAISING MAIN AND SERVICE GATE BOKES
 - CNST05001: JOINING OF PLASTIC PIPE
 - CNST05010: GENERAL CONSTRUCTION REQUIREMENTS AND PIPE HANDLING
 - DAMO01011: EXCAVATION NOTIFICATION REQUIREMENTS FOR UNDERGROUND FACILITIES FOR MASSACHUSETTS AND RHODE ISLAND
 - DAMO01015: LOCATE AND MARK-OUT REQUIREMENTS FOR UNDERGROUND GAS FACILITIES
 - DAMO01016: LOCATE AND MARK-OUT OF UNDERGROUND FACILITIES
 - GCON02001: SYSTEM OPERATING PROCEDURE (SOP)
 - GENO1100: OPERATOR QUALIFICATION PLAN
 - GENO3002: PROCESSING GAS MAIN AND NEW SERVICE WORK PACKAGES
 - CNST03004: CHANGE CONTROL PROCEDURE FOR STANDARD CONSTRUCTION PROJECTS
 - INRO6002: SUPPLEMENTAL ODOORIZATION FOR NEW PIPING
 - NOTIFY I&R FOR PROJECTS IN EXCESS OF 2500 FEET. ODOR MONITORING AND/OR SUPPLEMENTAL ODOORIZATION MAY BE REQUIRED.
 - MAINS030: INSTALLATION OF POLYETHYLENE PIPE
 - MECH5010: JOINTS OTHER THAN WELDED
 - OS00018-CS: SPECIFICATION AND HANDLING OF TRAFFIC PLATES
 - CNST01001: HORIZONTAL DIRECTIONAL DRILLING
 - CNST03011: NO-INTERRUPT SERVICE TRANSFER
 - CNST6061: TRACER WIRE INSTALLATIONS FOR PLASTIC MAINS AND SERVICES
 - MECH6010: CONNECTION OF DISSIMILAR POLYETHYLENE PLASTIC PIPE WITH ELECTROFUSION OR MECHANICAL COUPLING
 - CS-CNST002: TYPICAL UTILITY CROSSING AND TRENCH GUIDELINES
- SERVICE SPECIFIC CONSTRUCTION STANDARDS, GAS POLICIES AND WORK METHODS:
 - CMS03002: CUSTOMER METER AND SERVICE REGULATOR DESIGN AND INSTALLATION POLICY
 - CMS04002: PURGING PROCEDURES FOR CUSTOMER METER SERVICES
 - CNST03011: NO-INTERRUPT SERVICE TRANSFER
 - CNST06002: INSTALLING DISTRIBUTION SERVICES
 - CNST06003: INSTALLATION & MAINTENANCE POLICY FOR CURB VALVES ON SERVICE LINES WITH INSTALLED METER CAPACITIES OVER 1,000 SOFH THAT DON'T HAVE EXCESS FLOW VALVES
 - CNST06009: METER/SERVICE RELOCATION GUIDELINE
 - CNST06020: COMPLETION AND PROCESSING OF GAS SERVICE RECORD CARDS
 - CNST06030: NOTIFICATION OF CUSTOMERS INVOLVED IN THE INTERRUPTION OF GAS SERVICE
 - CS-SERV001: TYPICAL 1/2" SERVICE OUTSIDE SETS
 - CS-SERV002: TYPICAL 1" SERVICE OUTSIDE SETS
 - CS-SERV003: TYPICAL 1-1/4" SERVICE OUTSIDE SETS
 - CS-SERV004: TYPICAL 2" SERVICE
 - CS-SERV005: EXCESS FLOW VALVE REQUIREMENTS ON HP SERVICES
 - CS-SERV009: TYPICAL 1/2" SERVICE INSIDE SETS
 - CS-SERV010: TYPICAL 1" SERVICE INSIDE SETS
 - HTAP-6010: NO-INTERRUPT 1 INCH CTS AND 1-1/4 INCH CTS SERVICE TRANSFER (NIST) LP TO 60 PSIG MAINS
 - SERV-6075: RELOCATION OF METER SET ASSEMBLIES INSIDE TO OUTSIDE
 - SERV0076: 1-1/4" LP PLASTIC SERVICE WITH 1 AL-250 TC METER
 - SERV0077: 1-1/4" LP PLASTIC INSERT WITH 1 AL-250 TO EQUIV. METER INSIDE
 - SERV-6185: HOT TAPPING MD BRANCH SADDLES OFF 4IN - 12IN 60 PSIG MAOP LIVE PLASTIC GAS MAIN USING ACCELERY HOT TAPPING TOOL
 - VALV610: 1/2" INCH - 3 INCH POLYETHYLENE GAS SERVICE VALVE INSTALLATION
- SEE TIE IN DETAILS FOR APPLICABLE MAIN CONNECTION REFERENCES.
- SEE BILL OF MATERIAL FOR MATERIAL SPECIFICATION, STANDARD AND/OR APPLICABLE NATIONAL GRID "PITS" REFERENCE.
 - FOR THIS PROJECT, GRADE B, X42, X52 AND EQUIVALENT ARE ACCEPTABLE STEEL MATERIAL STRENGTHS IF APPLICABLE. ALTERNATES TO THE BOM ARE ALLOWED WITHIN THIS RANGE BASED ON MATERIAL AVAILABILITY.



45 NEWTON ROAD
 WEST NEWTON, MA 02459
 PHONE (888) 369-7440
 FAX (888) 559-7441



170 BATH STREET
 WALTHAM, MA 02451



NO.	DESCRIPTION	DATE	DRYR	CHKY	APPBY
1	REVISIONS TO VALVE LOCATIONS, NOTES, BOM	04/27/2023	SZT	ESP	MEP
0	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP
0					

1-109 ESSEX RD GAS MAIN REPLACEMENT		PAGE 02 OF 17	
ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD, NANCY RD, & MEIGH RD, NEWTON, MA		DRAWING NO.	SHEET NO.
CONSTRUCTION NOTES		G-002	02
DWG DATE	DESIGNER	ENGINEER	DATE
2/23/24	DDS COMPANIES	S. TSOUZIS	02/27/2023
ASSET I.D.	W.O. NO.		
XXXXXXX	1505036		

PRESSURE TESTING REQUIREMENTS:

- 1. PRESSURE TEST ALL DISTRIBUTION PIPING IN ACCORDANCE WITH:
A. CNST04003: PRESSURE TESTING MAINS OPERATING BELOW 125 PSIG
B. TEST PRESSURE (MINIMUM): 90 PSIG
C. TEST DURATION BASED ON LENGTH AND DIAMETER IN ACCORDANCE WITH TABLE 1 OF CNST04003.
D. TEST MEDIUM: AIR AND/OR NITROGEN

- 2. PRESSURE TEST SERVICES IN ACCORDANCE WITH:
A. CNST06008: PRESSURE TESTING SERVICE LINE

WELDING:

- 1. NATIONAL GRID WELDING POLICIES AND PROCEDURES INCLUDE:
A. CNST05002: WELDING POLICY
B. CNST05003: PIPE WELDING SAFETY
C. CNST05005: WELDING PROCEDURE SPECIFICATIONS
D. MS-030: WELDING FILLER MATERIALS
2. PRIOR TO THE START OF ANY WORK THE CONTRACTOR SHALL SUBMIT WELDER CERTIFICATION DOCUMENTS FOR EACH OF THE WELDERS EMPLOYED ON THIS PROJECT.
3. WELDING PROCEDURE SPECIFICATIONS REQUIRED:
A. BUTT WELDS (GROOVE): WPS-SMAW-66010/7010 (LATEST REVISION)
B. FILLET WELDS (BRANCH): WPS-SMAW-66010/7010 (LATEST REVISION)
4. 10% (AT LEAST 1) OF WELDS SHALL BE SUBJECT TO NON-DESTRUCTIVE EXAMINATION (NDE):
A. BUTT WELDS 2-INCH AND GREATER: 10% RADIOGRAPH
B. BUTT WELDS < 2-INCHES: 10% MAGNETIC PARTICLE
C. FILLET WELDS: 10% MAGNETIC PARTICLE
5. NDE AND WELD MAP SHALL BE PROVIDED BY SKYTESTING.
6. SKYTESTING SCHEDULING CONTACT:
WILLIAM (BILL) CLARK
CELL: 704-858-7794
EMAIL: WCLARK@SKYTESTING.COM

CATHODIC PROTECTION:

- 1. IF EXISTING TEST STATIONS, WIRES, AND/OR MAGNESIUM ANODES ARE DISTURBED OR DAMAGED, NOTIFY THE NATIONAL GRID CORROSION DEPARTMENT:
DAVE HALLEN: 781-379-7831 (CONSTRUCTION)
ALANNA GRONDINE: 339-225-5378 (DESIGN REVIEW)
ALISSIA APHIAN-MARGIOS: 781-296-7569 (ATMOSPHERIC)
2. 24 HOUR NOTICE IS REQUIRED PRIOR TO INSTALLATION OF INSULATED FITTINGS TO ALLOW FOR ACCEPTANCE TESTING.
3. NATIONAL GRID CORROSION GAS POLICIES AND WORK METHODS INCLUDE:
A. COR01100: CORROSION DESIGN CRITERIA
B. COR02001: APPLICATION OF COATING SYSTEMS
C. COR02020: INSPECTING EXPOSED STEEL PIPE FOR CORROSION
D. COR02021: INSPECTING EXPOSED CAST OR DUCTILE PIPING FOR GRAPHITIZATION
E. COR03001: TESTING OF PIPE COATING (JEEP TESTING)
F. COR04001: INSTALLATION OF MAGNESIUM ANODES
G. COR04002: INSTALLATION OF TEST STATIONS FOR CATHODIC PROTECTION
H. COR04004: INSTALLATION OF WIRE CONNECTIONS
I. COR04005: INSTALLATION OF INSULATING JOINTS FOR CATHODIC PROTECTION
J. COR0031-CR: FACILITY COATING GUIDE
4. CORROSION DESIGN:
P. SEE TIE-IN DETAIL A ON SH 13
* INSTALL A 1-WIRE TEST STATION TO EACH PROPOSED INSULATED COUPLING (PIPE END SPACER AND INSULATOR SLEEVE FACING THE CAST IRON) BY USING THE CLIP ON THE COUPLING. INCLUDE 1-17 LB ANODE FOR EACH INSULATED COUPLING SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN. ROUTE ALL WIRES INTO ONE SHARED TEST BOX. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION.
B. SEE TIE-IN DETAILS B, C, & D ON SH 13
* INSTALL A 1-WIRE TEST STATION TO THE PROPOSED ACTIVE INSULATED STEEL MECHANICAL END CAP. INCLUDE 1-17 LB ANODE SPACED AT LEAST 1 FT BELOW THE MAIN. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION.
5. STEEL PIPE, FITTINGS, VALVES AND OTHER CARBON STEEL COMPONENTS TO BE BURIED WHICH ARE NOT FACTORY COATED FOR BURIED SERVICE SHALL BE FIELD COATED.

ENVIRONMENTAL:

- 1. WORK SHALL CONFORM TO THE NATIONAL GRID ENVIRONMENTAL POLICY.
2. NATIONAL GRID ENVIRONMENTAL CONTACT:
NAME: JAIME WALKER
PHONE: (978) 551-1156
EMAIL: JAIME.WALKER@NATIONALGRID.COM
3. CONTRACTOR SHALL REVIEW THE PROJECT WORK ORDER PACKAGE FOR ENVIRONMENTAL GUIDANCE FORMS, FOR EXAMPLE EG-301, FOR THE RESPECTIVE STATE.
4. WHEN SOILS OR LIQUIDS ARE ENCOUNTERED THAT ARE BELIEVED TO BE CONTAMINATED WITH OIL AND/OR HAZARDOUS MATERIAL, EXCAVATION WORK SHALL BE HALTED AND FIELD PERSONNEL SHALL NOTIFY THEIR IMMEDIATE SUPERVISOR.
5. NO EXCAVATED SOIL THAT IS CONTAMINATED SHALL LEAVE THE WORK SITE UNTIL ENVIRONMENTAL HAS MADE A DETERMINATION FOR ITS PROPER DISPOSAL.
6. NATIONAL GRID ENVIRONMENT POLICIES AND PROCEDURES INCLUDE:
A. SHE02001: HANDLING CONTAMINATED MATERIALS AND PIPING
B. SHE02002: REMOVING MERCURY REGULATORS AND DEVICES
C. SHE02003: ENCOUNTERING CONTAMINATION WHILE EXCAVATING
D. EG303-NE: BEST MANAGEMENT PRACTICES
E. EG140: USED GAS PIPE MANAGEMENT
7. ENVIRONMENTAL REQUIREMENTS:
* PROPOSED WORK IS LOCATED WITHIN 100 FEET OF WETLANDS AND/OR BODIES OF WATER / WITHIN 200 FEET OF A RIVER OR A STREAM (*25 FEET IN BOSTON, BROOKTON, CAMBRIDGE, CHELSEA, EVERETT, FALL RIVER, LAWRENCE, LOWELL, MALDEN, NEW BEDFORD, SOMERVILLE, SPRINGFIELD, WINTHROP OR WORCESTER) WITHIN A FLOODPLAIN. ENVIRONMENTAL PERMIT AND/OR THE USE OF ENVIRONMENTAL BMPs MAY BE REQUIRED. SEE ENVIRONMENTAL MEMO FOR DETAILS.

SAFETY:

- 1. WORK SHALL CONFORM TO THE NATIONAL GRID EMPLOYEE SAFETY HANDBOOK AND OSHA REQUIREMENTS.
2. REQUIRED PPE SHALL BE WORN AND UTILIZED IN ACCORDANCE WITH THE CURRENT NATIONAL GRID SAFETY POLICY.
3. A NATIONAL GRID APPROVED CONTRACTOR HEALTH AND SAFETY PLAN (HASP) IS REQUIRED PRIOR TO CONSTRUCTION.
4. CONSTRUCTION SIGNING, DRUMS, BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) PART VI AND SHALL BE MAINTAINED BY THE CONTRACTOR.
5. NATIONAL GRID SAFETY PROCEDURES COVER THE FOLLOWING CATEGORIES:
A- ADMINISTRATIVE; B- INSPECTIONS; C- WALKING WORKING SURFACES; D- MEANS OF EGRESS; E- MATERIAL HANDLING AND STORAGE; F- TOXIC AND HAZARDOUS SUBSTANCES; G- HAZARDOUS MATERIALS; H- PERSONAL PROTECTIVE EQUIPMENT; I- GENERAL ENVIRONMENTAL CONTROLS; J- ACCIDENT INVESTIGATION; K- MACHINERY AND GUARDING; L- WELDING/CUTTING/BRAZING; M- EXCAVATIONS; N- CONTRACTORS; FIRE PROTECTION; O- FLEET AND ROADWAY SAFETY
6. NATIONAL GRID SAFETY POLICIES AND PROCEDURES INCLUDE:
A. SHE01001: GENERAL SAFETY REQUIREMENTS
B. SHE01002: SUPPLIED-AIR RESPIRATORS
C. SHE01003: USING AND MAINTAINING PORTABLE GAS MONITORS
D. SHE01004: USING AND MAINTAINING FLAME IONIZATION UNITS
E. SHE01005: DISSIPATING STATIC ELECTRICAL CHARGES ON PLASTIC PIPE
F. SHE01006: ENTERING GAS UTILITY VAULTS
G. SHE01008: USING AND MAINTAINING THE GAS EXPLORER
H. SHE01009: DISSIPATING STATIC ELECTRICAL CHARGES ON PLASTIC PIPE
I. SHE01010: THE APPLICATION OF FORMAL PROCESS SAFETY ASSESSMENTS TO HIGHER-RISK GAS ACTIVITIES PERFORMED IN THE FIELD
7. JOB BRIEFINGS, AT A MINIMUM, SHALL BE CONDUCTED BEFORE THE START OF THE FIRST JOB ON EACH DAY OR SHIFT. ADDITIONAL BRIEFINGS MAY BE REQUIRED AFTER EXTENDED WORK BREAKS.
8. ANY AND ALL WORKERS THAT HAVE ANY POTENTIAL TO COME INTO CONTACT WITH SOIL AND/OR GROUNDWATER MUST HAVE UP-TO-DATE OSHA 40-HOUR HAZWOPER TRAINING. COPIES OF OSHA CERTIFICATES/TRAINING REFRESHERS SHALL BE PROVIDED TO NATIONAL GRID FOR REVIEW PRIOR TO THE START OF WORK.

OTHER PERMITTING REQUIREMENTS:

- 1. CITY OF NEWTON STREET OPENING PERMIT
2. GRANT OF LOCATION
3. MWRA WATER PERMIT REQUIRED FOR WORK WITHIN BEACON ST
4. ENVIRONMENTAL PERMIT MAY BE REQUIRED

UTILITY OWNER INFORMATION:

SEWER: NEWTON DPW - UTILITIES DIVISION
#1000 COMMONWEALTH AVE.
NEWTON CENTRE, MA 02459
DRAIN: NEWTON DPW - UTILITIES DIVISION
#1000 COMMONWEALTH AVE.
NEWTON CENTRE, MA 02459
WATER: NEWTON DPW - UTILITIES DIVISION
#1000 COMMONWEALTH AVE.
NEWTON CENTRE, MA 02459
MWRA
#2 GRIFFIN WAY
CHELSEA, MA 02150
ELECTRIC: EVERSOURCE ELECTRIC "A"
#1165 MASSACHUSETTS AVE.
DORCHESTER, MA 02125
GAS: NATIONAL GRID GAS
#170 DATA DR.
WALTHAM, MA 02451
TELEPHONE: VERIZON
#385 MYLES STANDISH BLVD.
WALTON, MA 02780
CABLE: RCN
#956 MASSACHUSETTS AVE.
ARLINGTON, MA 02476

REFERENCE DRAWINGS:

- 1. LOCATION OF IDENTIFIED UNDERGROUND UTILITIES ARE AN APPROXIMATE BASED ON AVAILABLE RECORD AND FIELD INFORMATION IN ACCORDANCE WITH C/ASSE 38-02. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT IDENTIFIED ON THESE PLANS. ALL EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR FOR SERVICE, SIZE, INVERT ELEVATIONS, LOCATIONS, ETC.

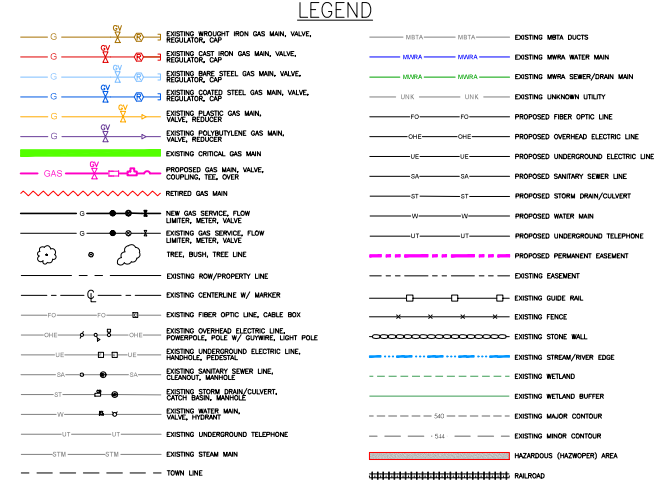


Table with columns: ITEM, QTY, UOM, DESCRIPTION, SIZE (IN), NATIONAL GRID REFERENCE, SAP ID NUMBER. Lists materials like PIPE, ELBOW, REDUCER, VALVE, COUPLING, etc.

* MOST QUANTITIES LABELED ON LAYOUT SHEETS



45 NEWBURY ROAD
WEST NEWBURY, MA 01586
PHONE: (988) 389-7540
FAX: (988) 389-7541



Revision table with columns: NO., DESCRIPTION, DATE, DRW, CHK, APPR.

BOSTON GAS COMPANY
d/b/a
ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD, NANCY RD, & MEIGH RD, NEWTON, MA
CONSTRUCTION NOTES & BILL OF MATERIALS

Table with columns: DWG DATE, DESIGNER, ENGINEER, DATE, ASSET I.D., W.O. NO., DOS COMPANIES, S. TSOULOS, 02/27/2023, XXXXXXXX, 1505936

DESIGN PARAMETERS:
 WO #1505036 - 1-109 ESSEX RD - NEW
 SYSTEM NUMBER: BOSTON IP 22#
 SYSTEMS' MOPS (PSIG , OR "LP "): 22 PSIG
 EXPECTED OPERATING PRESSURE RANGE: 3 PSIG - 22 PSIG
 DESIGN DAY TEMPERATURE (°F): 0°F
 MIN & MAX OPERATING TEMPERATURE RANGE (°F): -20°F TO +73°F

STREET NAME: GATE HOUSE RD, CHESTNUT HILL RD
 SIZING RECOMMENDATION: 8IN PL
 NEW MAINS' DESIGN PRESSURE: 22 PSIG
 DESIGN DAY FLOW IN NEW PIPELINE SEGMENTS (MCFH): 15
 SINGLE FEED SYSTEM: NO

STREET NAME: CHESTNUT HILL TER, MEIGH RD
 SIZING RECOMMENDATION: 4IN PL
 NEW MAINS' DESIGN PRESSURE: 22 PSIG
 DESIGN DAY FLOW IN NEW PIPELINE SEGMENTS (MCFH): 2
 SINGLE FEED SYSTEM: YES

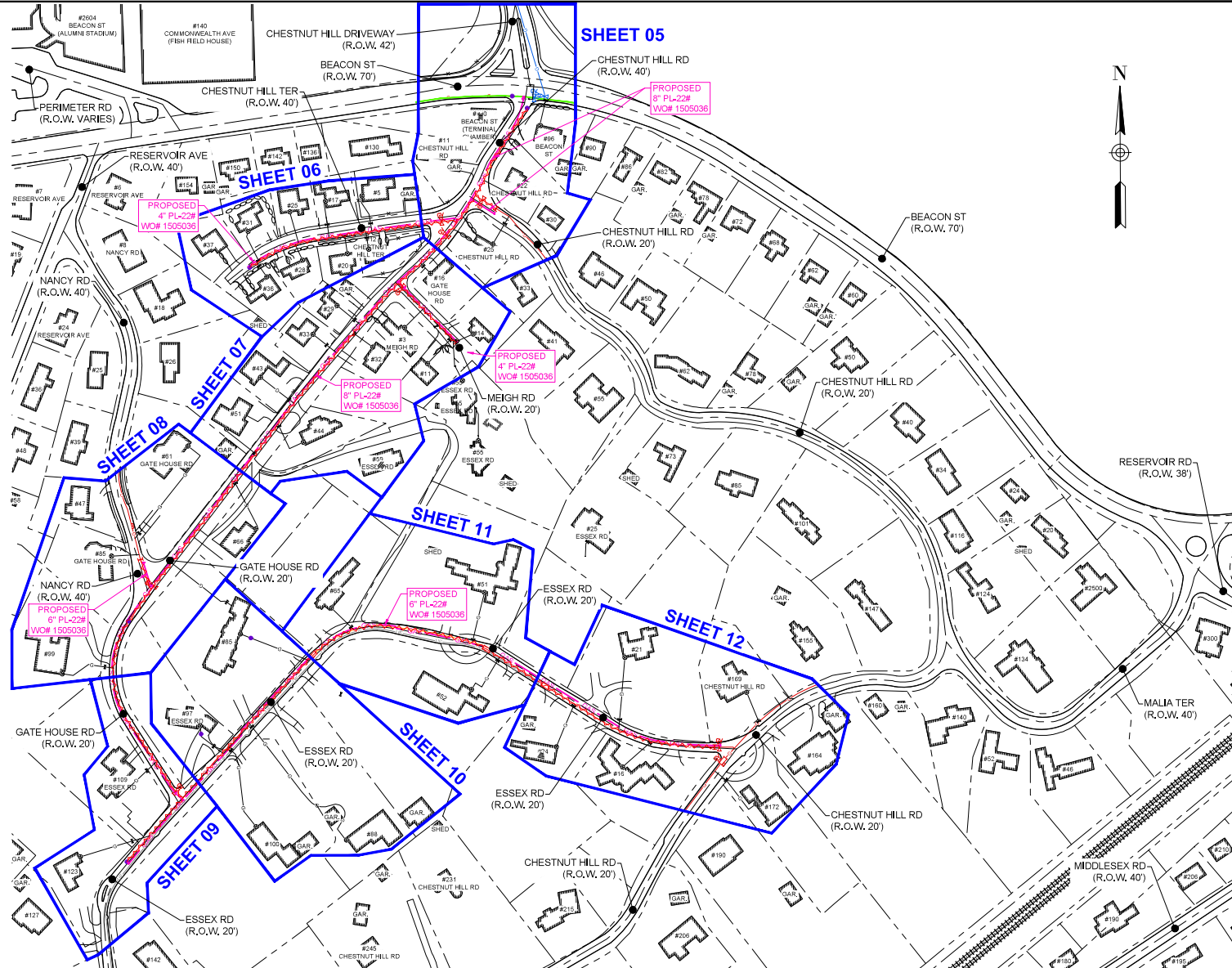
STREET NAME: NANCY RD, ESSEX RD
 SIZING RECOMMENDATION: 6IN PL
 NEW MAINS' DESIGN PRESSURE: 22 PSIG
 DESIGN DAY FLOW IN NEW PIPELINE SEGMENTS (MCFH): 5
 SINGLE FEED SYSTEM: NO

NOTE: ENSURE ALL SERVICES WITHIN SCOPE OF WORK HAVE BEEN RELAYED TO NEW MAIN PRIOR TO ABANDONMENT.

REVIEWED BY: KASEY ELKIN, REVIEW DATE: 10/24/2022

PROJECT SCOPE:
 AS PART OF THE CIMRPL<10 PROGRAM, LPP INTEGRITY MANAGEMENT RECOMMENDS THE RELAY OF:

- APRX 40 FEET OF 1.25 INCH, LP PLASTIC (1998), APRX 1630 FEET OF 6 INCH, LP CAST IRON (1927/1928) AND APRX 5 FEET OF 6 INCH, LP PLASTIC (1998) WITH APRX 1675 FEET OF 8 INCH, 22 PSIG PLASTIC IN GATE HOUSE RD FROM THE EXST 12 INCH, 22 PSIG CAST IRON IN BEACON ST TO ESSEX RD.
- APRX 420 FEET OF 6 INCH, LP CAST IRON (1923) WITH APRX 420 FEET OF 4 INCH, 22 PSIG PLASTIC IN CHESTNUT HILL TER FROM GATE HOUSE RD.
- APRX 40 FEET OF 6 INCH, LP CAST IRON (1928) WITH APRX 40 FEET OF 8 INCH, 22 PSIG PLASTIC STUB IN THE INTERSECTION OF CHESTNUT HILL RD AND GATE HOUSE RD (CUT AND CAP THE EXST 6 INCH LP CAST IRON AT #22 CHESTNUT HILL RD).
- APRX 210 FEET OF 6 INCH, LP CAST IRON (1928) WITH APRX 210 FEET OF 4 INCH, 22 PSIG PLASTIC IN MEIGH RD FROM GATE HOUSE RD TO END OF MAIN AT #14 MEIGH RD.
- APRX 50 FEET OF 4 INCH/6 INCH, LP CAST IRON (1905/1927) WITH APRX 50 FEET OF 6 INCH, 22 PSIG PLASTIC STUB IN THE INTERSECTION OF NANCY RD AND GATE HOUSE RD (CUT AND CAP THE EXST 4 INCH LP CAST IRON AT #85 GATEHOUSE RD).
- APRX 325 FEET OF 6 INCH, LP PLASTIC (1998) AND APRX 1110 FEET OF 6 INCH, LP CAST IRON (1924/1928) WITH APRX 1435 FEET OF 6 INCH, 22 PSIG PLASTIC IN ESSEX RD FROM #3 ESSEX RD TO #109 ESSEX RD (DO NOT CONNECT TO THE EXST 6 INCH, LP CAST IRON IN CHESTNUT HILL RD).



170 DATA DRIVE
 WALTHAM, MA 02451



1	REVIEWS TO VALVE LOCATIONS, NOTES, BOM	04/27/2023	SZT	ESP	MEP
0	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP
NO.	DESCRIPTION	DATE	DRY	CHK	APP

1-109 ESSEX RD
 GAS MAIN REPLACEMENT
 ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
 NANCY RD, & MEIGH RD, NEWTON, MA

OVERALL SCOPE OF WORK

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22X34"	DDS COMPANIES	S. STROUSS	02/2023	XXXXXXXX	1505036

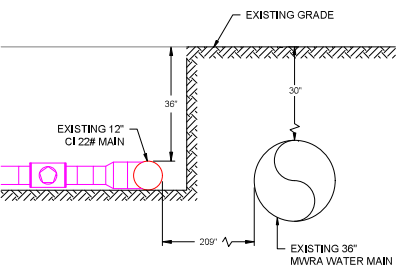
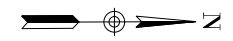
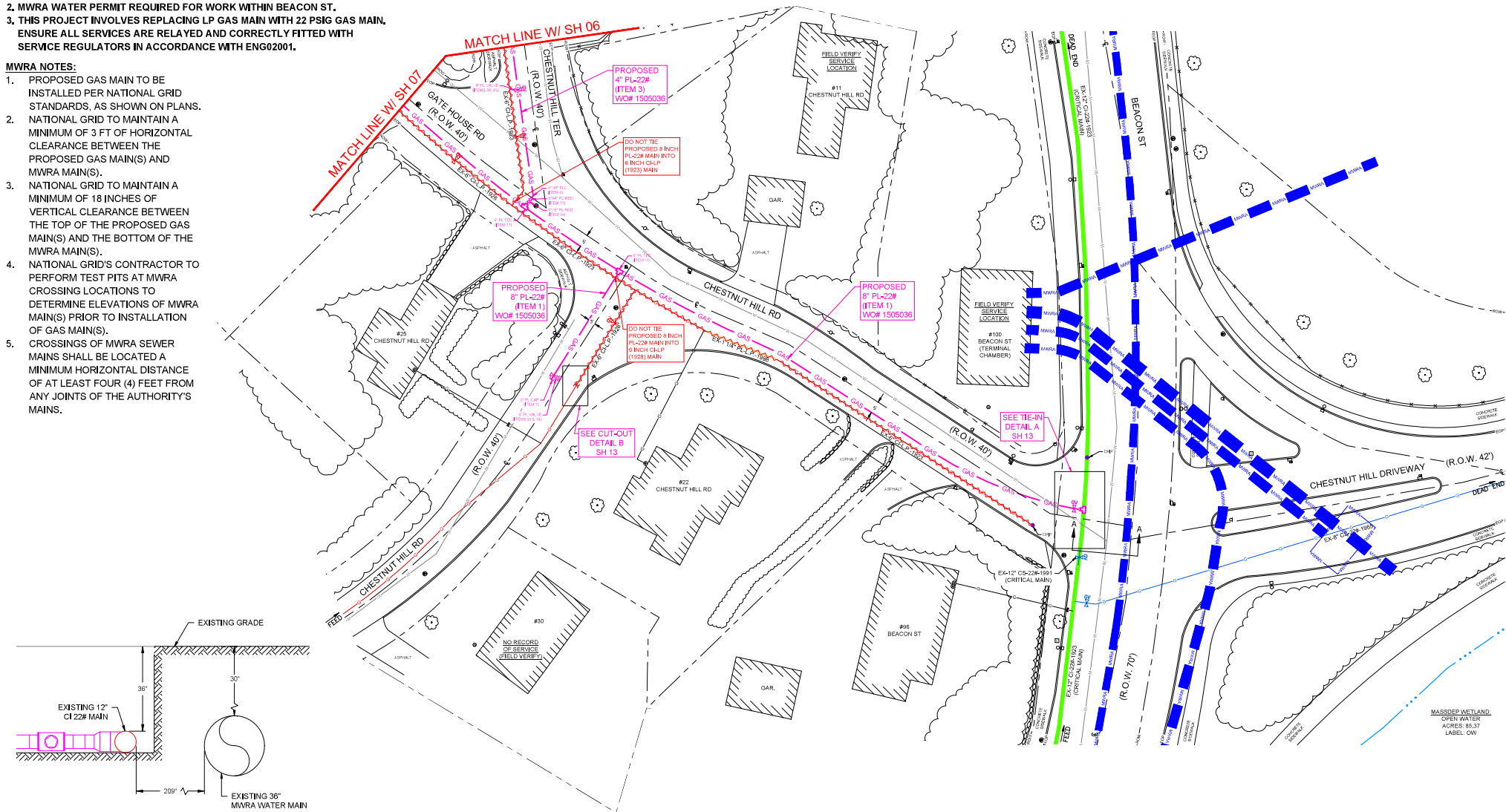
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DRAWING NO.	SHEET NO.
C-001	04

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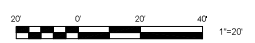
1. PROJECT IS OVER 2500 FEET IN LENGTH. PLEASE CONTACT I&R PRIOR TO EXECUTING THE PROJECT FOR SUPPLEMENTAL ODORIZATION. INR06002 - SUPPLEMENTAL ODORIZATION FOR NEW PIPING
2. MWRA WATER PERMIT REQUIRED FOR WORK WITHIN BEACON ST.
3. THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN. ENSURE ALL SERVICES ARE RELAYED AND CORRECTLY FITTED WITH SERVICE REGULATORS IN ACCORDANCE WITH ENG02001.

MWRA NOTES:

1. PROPOSED GAS MAIN TO BE INSTALLED PER NATIONAL GRID STANDARDS, AS SHOWN ON PLANS.
2. NATIONAL GRID TO MAINTAIN A MINIMUM OF 3 FT OF HORIZONTAL CLEARANCE BETWEEN THE PROPOSED GAS MAIN(S) AND MWRA MAIN(S).
3. NATIONAL GRID TO MAINTAIN A MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE BETWEEN THE TOP OF THE PROPOSED GAS MAIN(S) AND THE BOTTOM OF THE MWRA MAIN(S).
4. NATIONAL GRID'S CONTRACTOR TO PERFORM TEST PITS AT MWRA CROSSING LOCATIONS TO DETERMINE ELEVATIONS OF MWRA MAIN(S) PRIOR TO INSTALLATION OF GAS MAIN(S).
5. CROSSINGS OF MWRA SEWER MAINS SHALL BE LOCATED A MINIMUM HORIZONTAL DISTANCE OF AT LEAST FOUR (4) FEET FROM ANY JOINTS OF THE AUTHORITY'S MAINS.

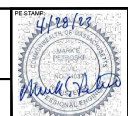


TYPICAL ADJACENT DETAIL: SECTION A-A AT MWRA
NTS



THE DDS COMPANIES
45 NEWBOLD ROAD
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FAX (888) 559-7541

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d/b/a
nationalgrid
170 DATA DRIVE
WALTHAM, MA 02451



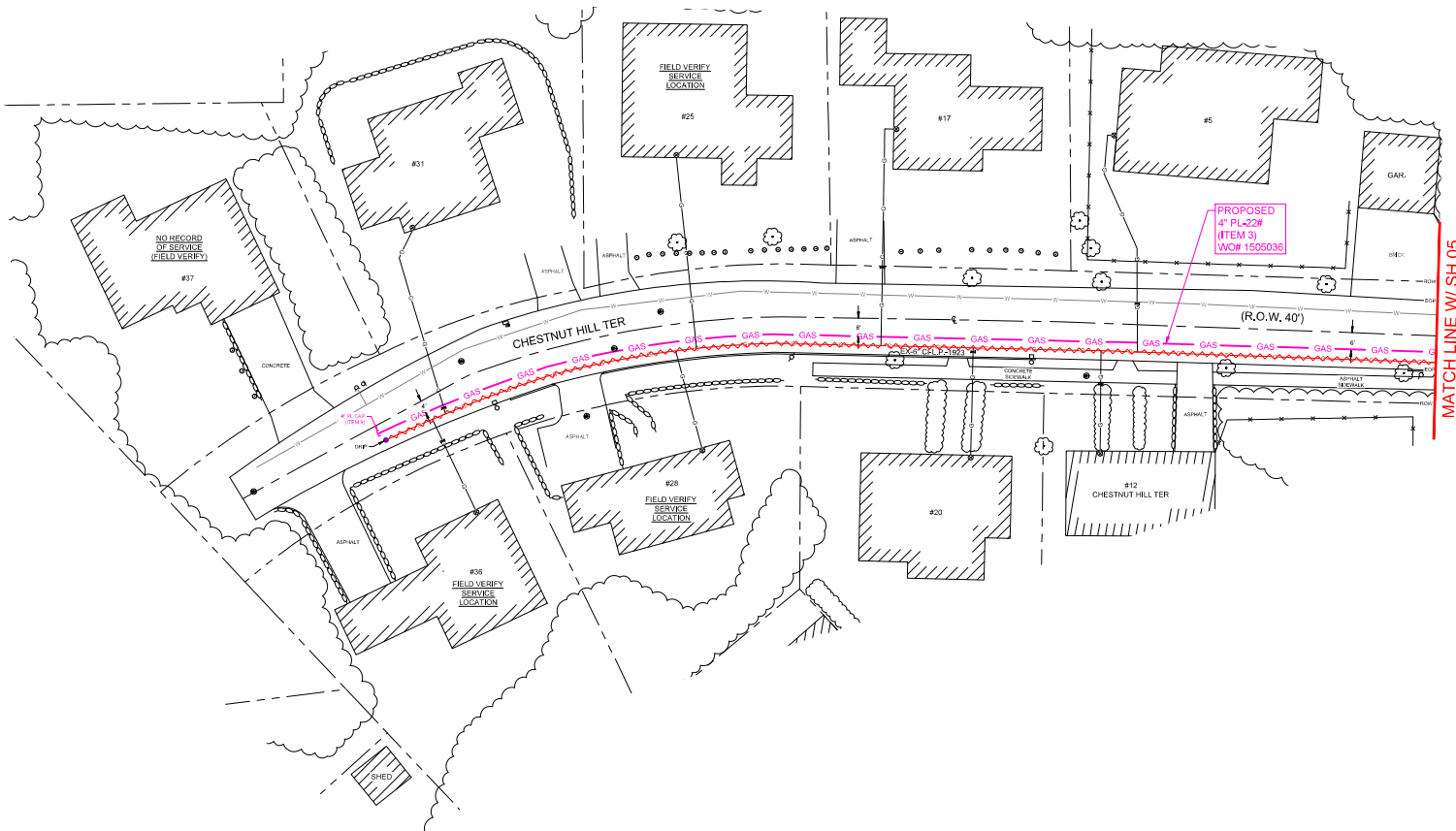
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0	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP
NO.	DESCRIPTION	DATE	DRY	CHKY	APPY

DWG BZTE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22734*	DDS COMPANIES	S. TSOLIS	02/2023	XXXXXXXX	1505036

PAGE 05 OF 17	
DRAWING NO.	SHEET NO.
C-002	05

1-109 ESSEX RD
GAS MAIN REPLACEMENT
ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
NANCY RD, & MEIGH RD, NEWTON, MA
LAYOUT SHEET

NOTE:
 1. PROJECT IS OVER 2500 FEET IN LENGTH, PLEASE CONTACT I&R PRIOR TO EXECUTING THE PROJECT FOR SUPPLEMENTAL ODORIZATION, INR06002 - SUPPLEMENTAL ODORIZATION FOR NEW PIPING
 2. THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN, ENSURE ALL SERVICES ARE RELAYED AND CORRECTLY FITTED WITH SERVICE REGULATORS IN ACCORDANCE WITH ENG02001.



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nationalgrid
 170 DATA DRIVE
 WALTHAM, MA 02451

IPC



1	REVIEWS TO VALVE LOCATIONS, NOTES, BOM	06/27/2023	SZT	EXP	MEP
0	ISSUED FOR CONSTRUCTION	06/28/2023	SZT	NMC	MEP
NO.	DESCRIPTION	DATE	DR./R	CHK./Y	APP./R

1-109 ESSEX RD
 GAS MAIN REPLACEMENT
 ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
 NANCY RD, & MEIGH RD, NEWTON, MA

LAYOUT SHEET

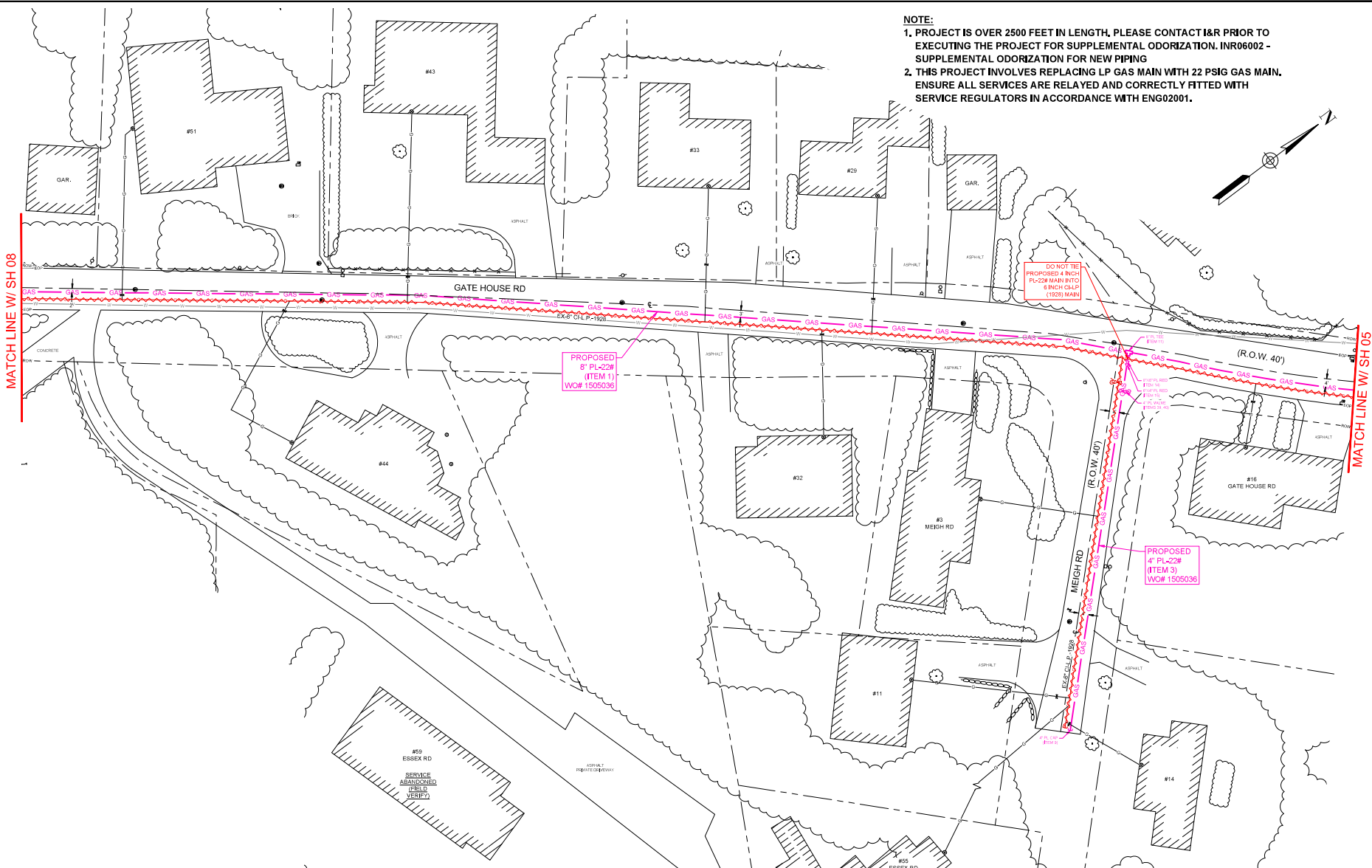
DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22X34"	DDS COMPANIES	S. TSOLIS	02/2023	XXXXXXXX	1505036

PAGE 06 OF 17	
DRAWING NO.	SHEET NO.
C-003	06

- NOTE:**
1. PROJECT IS OVER 2500 FEET IN LENGTH. PLEASE CONTACT I&R PRIOR TO EXECUTING THE PROJECT FOR SUPPLEMENTAL ODORIZATION. INR06002 - SUPPLEMENTAL ODORIZATION FOR NEW PIPING
 2. THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN. ENSURE ALL SERVICES ARE RELAYED AND CORRECTLY FITTED WITH SERVICE REGULATORS IN ACCORDANCE WITH ENG02001.

MATCH LINE W/ SH 08

MATCH LINE W/ SH 05



THE DDS COMPANIES
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 FAX (585) 269-7241

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 WALTHAM, MA 02451



NO.	DESCRIPTION	DATE	DRY	CHK	APP
1	REVIEWS TO VALVE LOCATIONS, NOTES, BOM	04/27/2023	SZT	ESP	MEP
2	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP

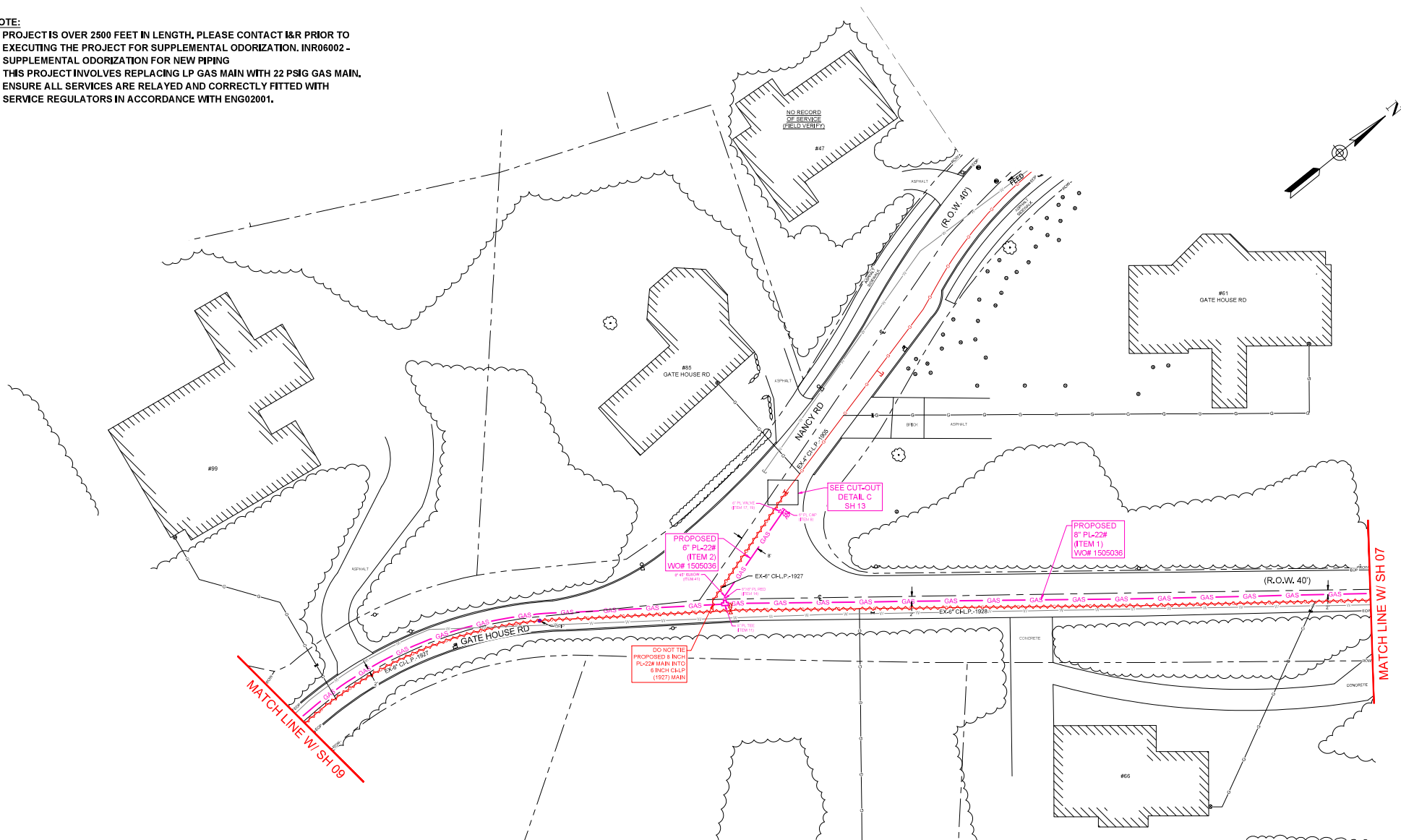
1-105 ESSEX RD
 GAS MAIN REPLACEMENT
 ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
 NANCY RD, & MEIGH RD, NEWTON, MA
LAYOUT SHEET

PAGE 07 OF 17	
DRAWING NO.	SHEET NO.
C-004	07

IPC

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22X34"	DDS COMPANIES	S. TSOLIS	02/2023	XXXXXXXX	1505036

- NOTE:**
1. PROJECT IS OVER 2500 FEET IN LENGTH, PLEASE CONTACT I&R PRIOR TO EXECUTING THE PROJECT FOR SUPPLEMENTAL ODORIZER. INR06002 - SUPPLEMENTAL ODORIZER FOR NEW PIPING
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WALTHAM, MA 02451

IPC



NO.	DESCRIPTION	DATE	DRY	CHK	APP
1	REVISIONS TO VALVE LOCATIONS, NOTES, BOM	04/27/2023	SZT	EXP	MEP
2	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP

1-109 ESSEX RD
GAS MAIN REPLACEMENT
ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
NANCY RD, & MEIGH RD, NEWTON, MA

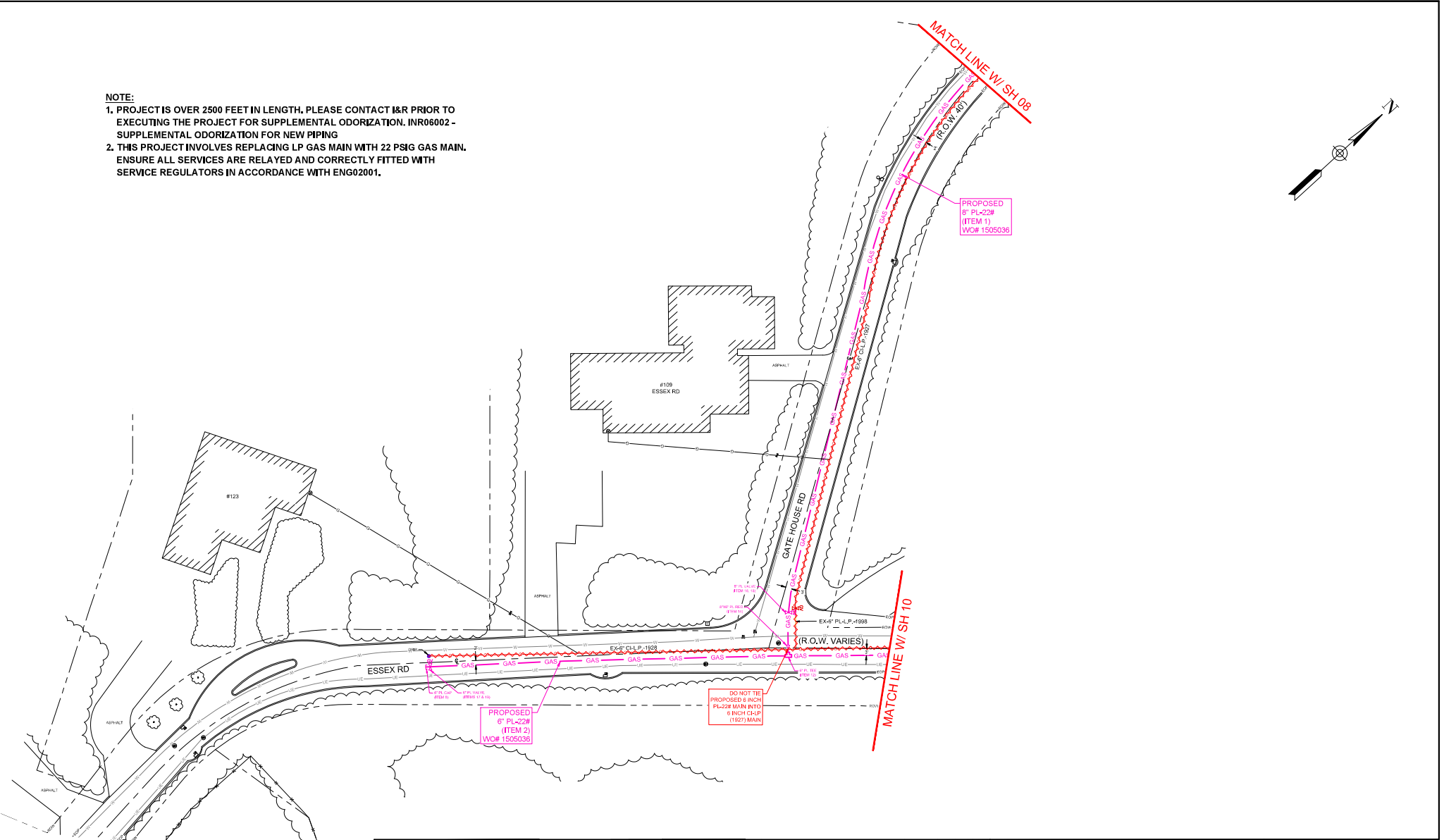
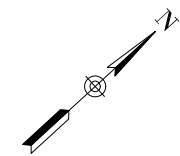
LAYOUT SHEET

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22734"	DDS COMPANIES	S. TSOLIS	6/27/2023	XXXXXXXX	1505036

PAGE 05 OF 17	
DRAWING NO.	SHEET NO.
C-005	08

NOTE:

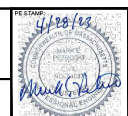
1. PROJECT IS OVER 2500 FEET IN LENGTH. PLEASE CONTACT I&R PRIOR TO EXECUTING THE PROJECT FOR SUPPLEMENTAL ODORIZING. INR06002 - SUPPLEMENTAL ODORIZING FOR NEW PIPING
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THE DDS COMPANIES
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IPC



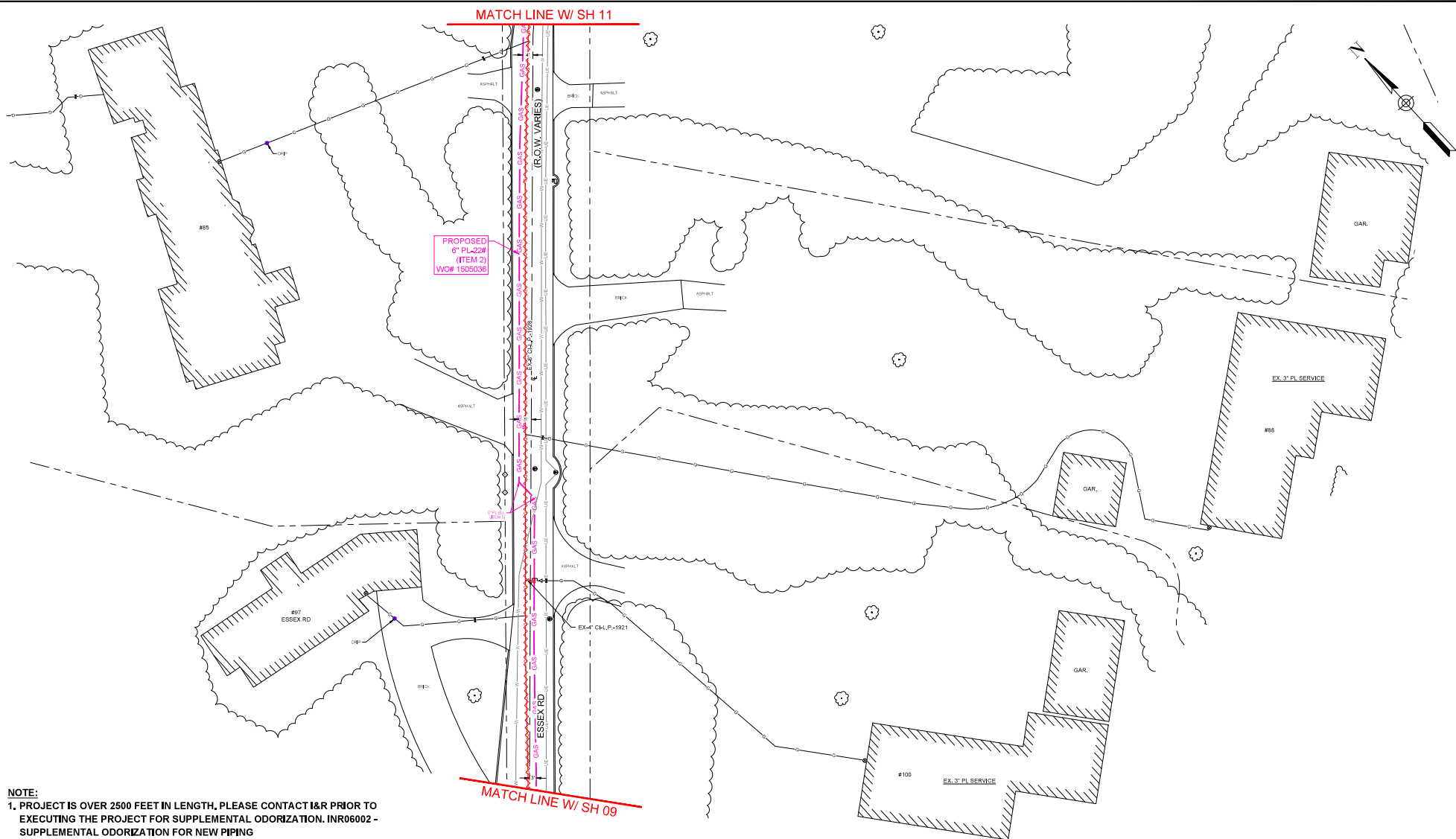
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1	REVIEWS TO VALVE LOCATIONS, NOTES, BOM	04/27/2023	SZT	EXP	MEP
2	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP

1-109 ESSEX RD
 GAS MAIN REPLACEMENT
 ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
 NANCY RD, & MEIGH RD, NEWTON, MA

LAYOUT SHEET

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22X34"	DDS COMPANIES	S. TSOLIS	02/2023	XXXXXXXX	1505036

PAGE 09 OF 17	
DRAWING NO.	SHEET NO.
C-006	09



NOTE:
 1. PROJECT IS OVER 2500 FEET IN LENGTH, PLEASE CONTACT I&R PRIOR TO EXECUTING THE PROJECT FOR SUPPLEMENTAL ODORIZAION. INR06002 - SUPPLEMENTAL ODORIZAION FOR NEW PIPING
 2. THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN. ENSURE ALL SERVICES ARE RELAYED AND CORRECTLY FITTED WITH SERVICE REGULATORS IN ACCORDANCE WITH ENG02001.



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nationalgrid
 170 DARTMOUTH DRIVE
 WALTHAM, MA 02451



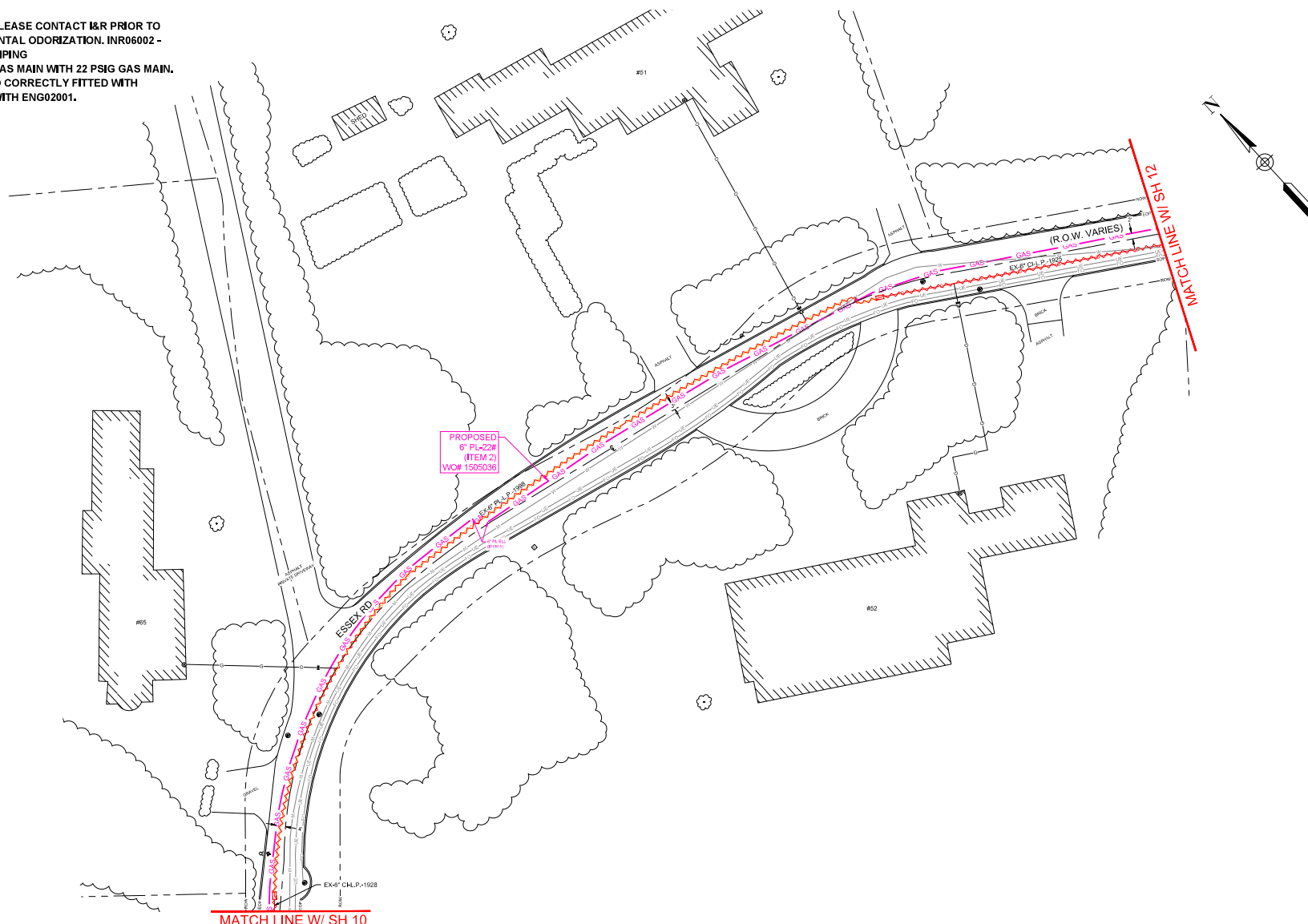
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0	ISSUED FOR CONSTRUCTION	06/28/2023	SZT	NMC	MEP
NO.	DESCRIPTION	DATE	DR. BY	CHK. BY	APP. BY

1-109 ESSEX RD
 GAS MAIN REPLACEMENT
 ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
 NANCY RD, & MEIGH RD, NEWTON, MA
LAYOUT SHEET

PAGE 10 OF 17	
DRAWING NO.	SHEET NO.
C-007	10

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22X34	DDS COMPANIES	S. TSOLIS	6/27/2023	XXXXXXXX	1505036

- NOTE:**
1. PROJECT IS OVER 2500 FEET IN LENGTH. PLEASE CONTACT I&R PRIOR TO EXECUTING THE PROJECT FOR SUPPLEMENTAL ODORIZING. INR06002 - SUPPLEMENTAL ODORIZING FOR NEW PIPING
 2. THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN. ENSURE ALL SERVICES ARE RELAYED AND CORRECTLY FITTED WITH SERVICE REGULATORS IN ACCORDANCE WITH ENG02001.



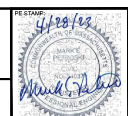
THE DDS COMPANIES

45 HENRIK ROAD
WEST HENRIETTA, NY 14586
PHONE (585) 269-7540
FAX (585) 269-7541

BOSTON GAS COMPANY
d/b/a
nationalgrid

170 DARTMOUTH DRIVE
WALTHAM, MA 02451

IPC



NO.	DESCRIPTION	DATE	DR.	CHK.	APP.
1	REVIEWS TO VALVE LOCATIONS, NOTES, BOM	06/07/2023	SZT	EXP	MEP
2	ISSUED FOR CONSTRUCTION	06/28/2023	SZT	NMC	MEP

1-109 ESSEX RD
GAS MAIN REPLACEMENT
ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
NANCY RD, & MEIGH RD, NEWTON, MA

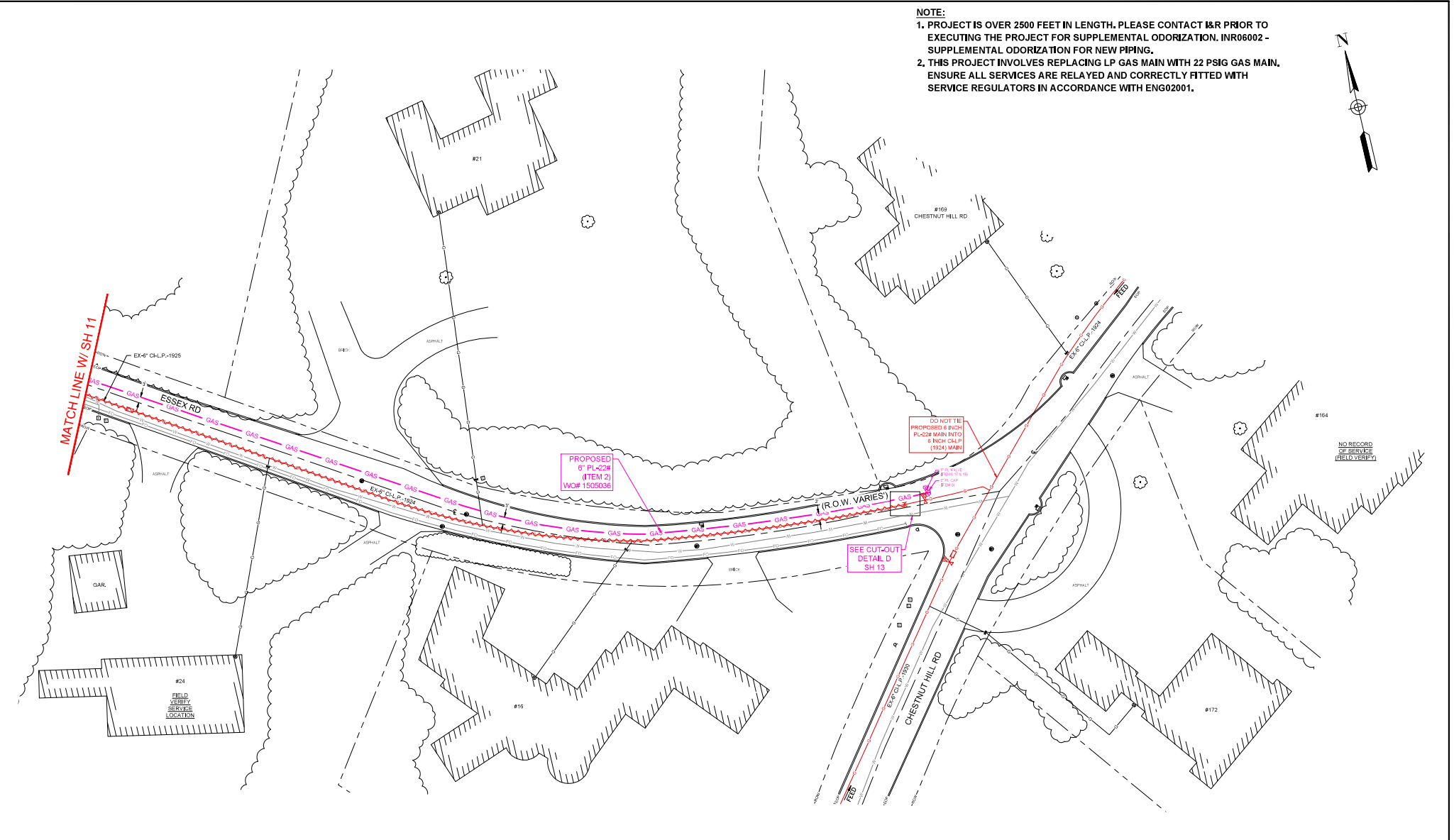
LAYOUT SHEET

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22X34"	DDS COMPANIES	S. TSOUJIS	6/27/2023	XXXXXXXX	1505036

PAGE 11 OF 17	
DRAWING NO.	SHEET NO.
C-008	11

NOTE:

1. PROJECT IS OVER 2500 FEET IN LENGTH. PLEASE CONTACT I&R PRIOR TO EXECUTING THE PROJECT FOR SUPPLEMENTAL ODORIZATION. INR06002 - SUPPLEMENTAL ODORIZATION FOR NEW PIPING.
2. THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN. ENSURE ALL SERVICES ARE RELAYED AND CORRECTLY FITTED WITH SERVICE REGULATORS IN ACCORDANCE WITH ENG02001.



45 HENRIK ROAD
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FAX (888) 559-7441

BOSTON GAS COMPANY
d/b/a
nationalgrid
170 DATA DRIVE
WALTHAM, MA 02451

IPC

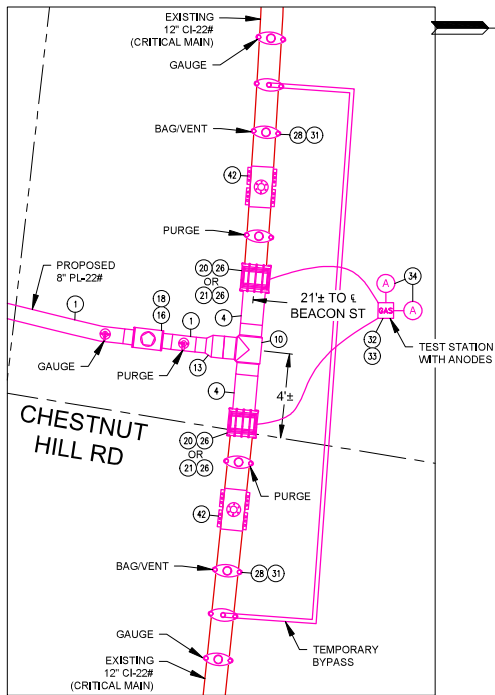


1	REVIEWS TO VALVE LOCATIONS, NOTES, BOM	04/27/2023	SZT	ESP	MEP
0	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP
NO.	DESCRIPTION	DATE	DRY	CKLBY	APPBY

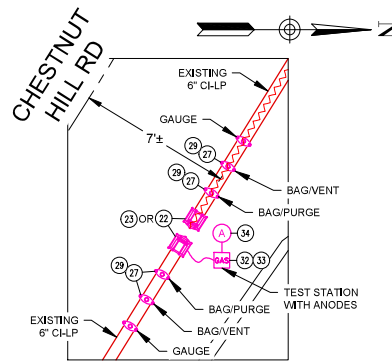
1-109 ESSEX RD
GAS MAIN REPLACEMENT
ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
NANCY RD, & MEIGH RD, NEWTON, MA
LAYOUT SHEET

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22X34"	DDS COMPANIES	S. TSOUJIS	02/2023	XXXXXXXX	150536

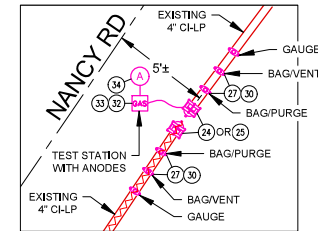
PAGE 12 OF 17	
DRAWING NO.	SHEET NO.
C-009	12



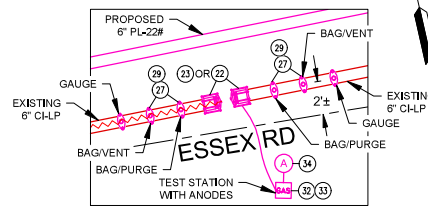
DETAIL A: TIE-IN
(BEACON ST & CHESTNUT HILL RD)
SCALE - 1:3
SEE NOTES 1, 2, & 4



DETAIL B: CUT-OFF
(CHESTNUT HILL RD)
SCALE - 1:3
SEE NOTES 3 & 4



DETAIL C: CUT-OFF
(NANCY RD)
SCALE - 1:3
SEE NOTES 3 & 4



DETAIL D: CUT-OFF
(ESSEX RD)
SCALE - 1:3
SEE NOTES 3 & 4

NOTE:

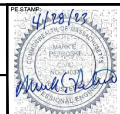
1. BYPASS REQUIREMENT TO BE DETERMINED AND SIZED BY NATIONAL GRID, AND INCLUDED IN SOP.
2. INSTALL A 1-WIRE TEST STATION TO EACH PROPOSED INSULATED COUPLING (PIPE END SPACER AND INSULATOR SLEEVE FACING THE CAST IRON) BY USING THE CLIP ON THE COUPLING. INCLUDE 1-17 LB ANODE FOR EACH INSULATED COUPLING SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN. ROUTE ALL WIRES INTO ONE SHARED TEST BOX. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION.
3. INSTALL A 1-WIRE TEST STATION TO THE PROPOSED ACTIVE INSULATED STEEL MECHANICAL END CAP. INCLUDE 1-17 LB ANODE SPACED AT LEAST 1 FT BELOW THE MAIN. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION.
4. IF USING A NON-RESTRAINING COUPLING OR CAP, THE COUPLING OR CAP SHALL BE RESTRAINED IN ACCORDANCE WITH MAIN-6190.



THE DDS COMPANIES
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FAX (585) 269-7541

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WALTHAM, MA 02451

IPC



NO.	DESCRIPTION	DATE	DR.	CHK.	APP.
1	REVISIONS TO VALVE LOCATIONS, NOTES, BOM	06/27/2023	SZT	ECF	MEP
0	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP

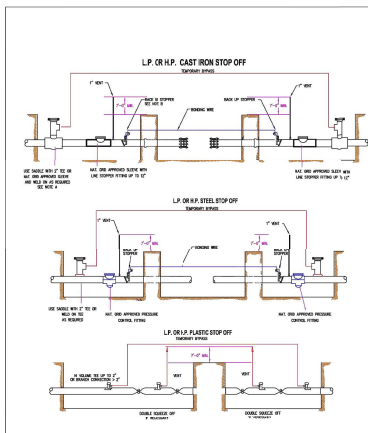
1-109 ESSEX RD
GAS MAIN REPLACEMENT
ESSEX RD, CHESTNUT HILL TER, GATE HOUSE RD,
NANCY RD, & MEIGH RD, NEWTON, MA

TIE-IN & ABANDONMENT DETAILS

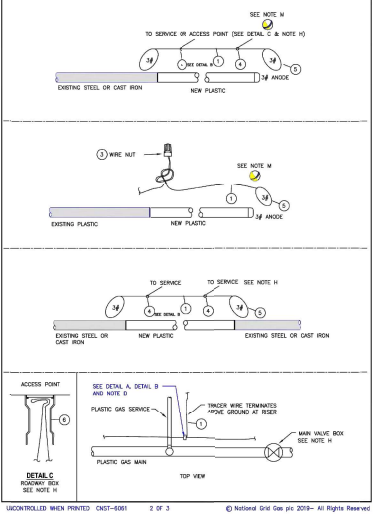
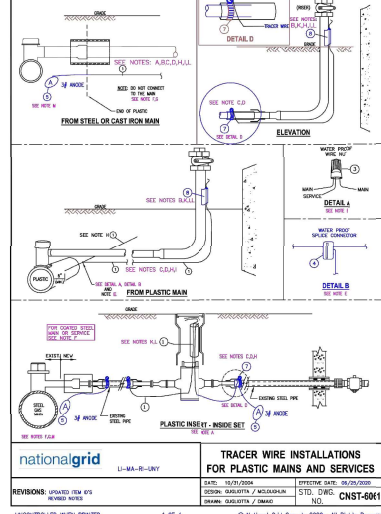
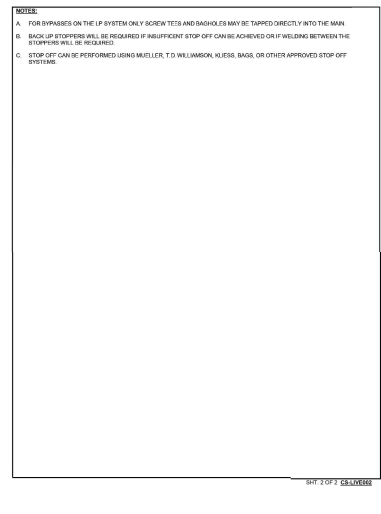
DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22X34"	DDS COMPANIES	S. TSOULOS	02/2023	XXXXXXXX	1505036

PAGE 13 OF 17

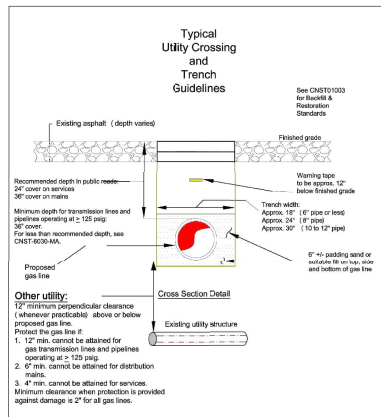
DRAWING NO.	SHEET NO.
C-101	13



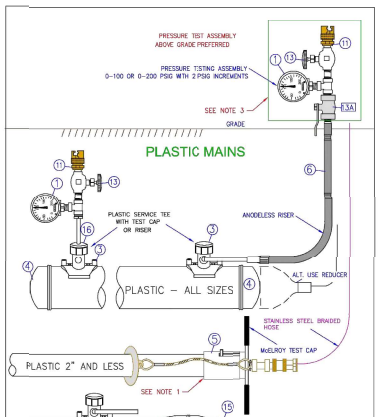
TEMPORARY BYPASSES ON PLASTIC, CASTIRON OR STEEL MAINS	
DATE: 06/15/2018	DATE: 06/15/2018
SCALE: 1/4" = 1'-0"	SCALE: 1/4" = 1'-0"
NO. CS-LVEM02	NO. CS-LVEM02



ITEM	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	TRACER WIRE SNAP 1/2" (approx. steel size)	100	EA	0.05	5.00
2	TRACER WIRE SNAP 1/4" (approx. steel size)	100	EA	0.05	5.00
3	TRACER WIRE SNAP 1/8" (approx. steel size)	100	EA	0.05	5.00
4	WIRE NUT	100	EA	0.05	5.00
5	WIRE NUT	100	EA	0.05	5.00
6	WIRE NUT	100	EA	0.05	5.00
7	WIRE NUT	100	EA	0.05	5.00
8	WIRE NUT	100	EA	0.05	5.00
9	WIRE NUT	100	EA	0.05	5.00
10	WIRE NUT	100	EA	0.05	5.00



TYPICAL UTILITY CROSSING AND TRENCH GUIDELINES	
DATE: 06/15/2018	DATE: 06/15/2018
SCALE: 1/4" = 1'-0"	SCALE: 1/4" = 1'-0"
NO. CS-INT020A	NO. CS-INT020A



PRESSURE TESTING OF NEW MAINS MAP OF 124 PSIG OR LESS	
DATE: 12/23/2017	DATE: 12/23/2017
SCALE: 1/4" = 1'-0"	SCALE: 1/4" = 1'-0"
NO. CS-MAIN004	NO. CS-MAIN004

ITEM	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	INSTALL PER MANUFACTURER'S INSTRUCTIONS	1	EA	100.00	100.00
2	PLASTIC SERVICE TEE	1	EA	10.00	10.00
3	ACKNOWLEDGERS	1	EA	10.00	10.00
4	STEEL WIRE TAPPED PIPE GROUND AT REAR	1	EA	10.00	10.00
5	MAINTENANCE BOX	1	EA	10.00	10.00

ITEM	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	CAP END PLASTIC MEDIUM DENSITY YELLOW BUTT FUSE	2	NON STOCK		
2	CAP END PLASTIC HIGH DENSITY BLACK BUTT FUSION	2	NON STOCK		
3	FLANGE 10M WELD END FLAT FACE	2	NON STOCK		
4	BLIND FLANGE CLASS 150M ASTM A 105	2	NON STOCK		

ITEM	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	END CAPS - STEEL WELD END STANDARD WALL - GRADE B	2	NON STOCK		
2	THOR TITING	1	NON STOCK		
3	THOR TITING	1	NON STOCK		
4	THOR TITING	1	NON STOCK		

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WEST HENRIETTA, NY 14568
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FAX: (585) 389-7541

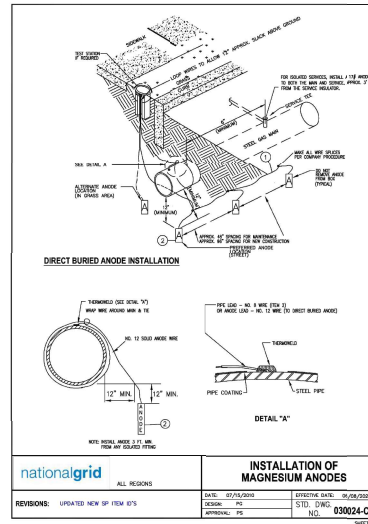
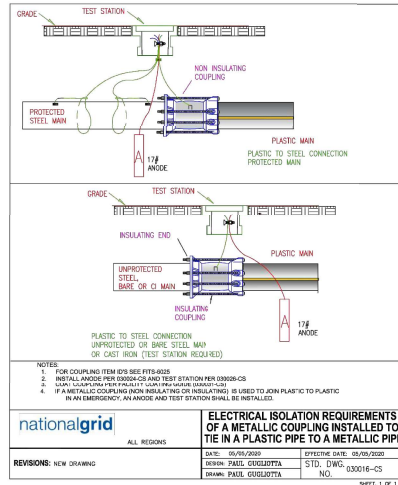
BOSTON GAS COMPANY
d/b/a
nationalgrid
170 SOUTH WALTHAM ST.
WALTHAM, MA 02451

REVISIONS TO VALVE LOCATIONS, NOTES, BOM
1 06/28/2023 SZT EEP MEP
2 06/28/2023 SZT NMC MEP
3 06/28/2023 SZT OLSBY APP-B

1-109 ESSEX RD
GAS MAIN REPLACEMENT
ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
NANCY RD, & MEIGH RD, NEWTON, MA
STANDARD DETAILS


PAGE 14 OF 17
DRAWING NO. C-201
SHEET NO. 14

NO.	DESCRIPTION	DATE	DRY	CHK	APP-B	DWG BZTE	DESIGNER	ENGINEER	DATE	ASSET LVL	W/L NO.
22734							S. TSOULOS	6/27/2023		XXXXXXX	156538

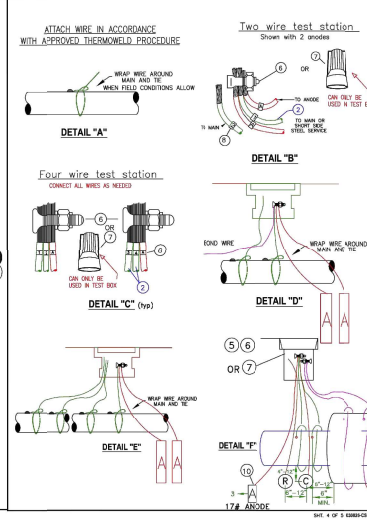
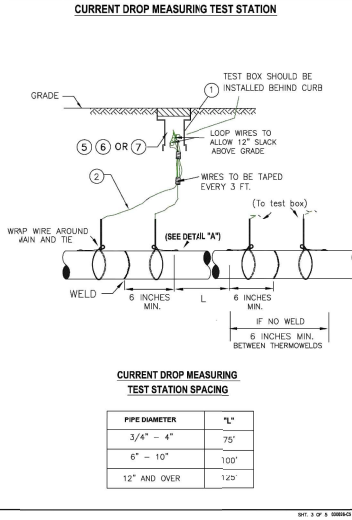
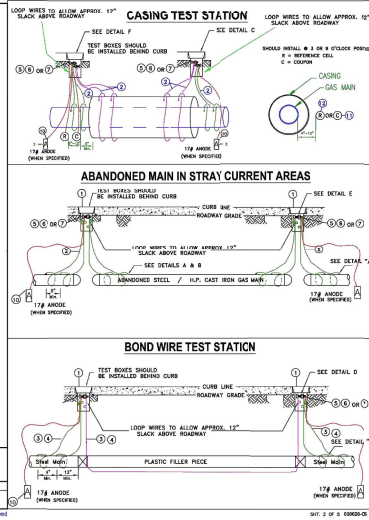
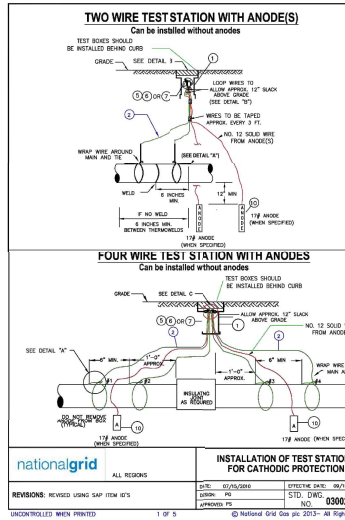


MATERIAL LIST

Description	Down State Item ID	Update NY Item ID	New England Item ID	Rhode Island Item ID	MATERIAL NOTES
1 CABLE NO. 8 - 1/2"	9334425	9311214	9334425	9311214	Update and RI cable has 19 strands
2 ANODE, MAGNESIUM 17 LB	9311183	9311183	9311183	9311183	
3 ANODE, MAGNESIUM 3 LB	9315645	9315645	9315645	9315645	Use on Tracer wire and all isolated strings
4 ANODE, MAGNESIUM 3 LB	9308624	9308624	9308624	9308624	Use on Service Risers ONLY
CLAMP, GROUNDING 1/2" - 1/4" DIA.	9386544	9386544	9386544	9386544	Grounding clamp for attaching spike anode lead wire to service riser
CLAMP, GROUNDING 1/2" - 1/4" DIA.	9386559	9386559	9386559	9386559	Grounding clamp for attaching spike anode lead wire to service riser



* Spike Anode Ground Clamp



MATERIAL LIST

Description	Down State Item ID	Update NY Item ID	New England Item ID	Rhode Island Item ID	MATERIAL NOTES
1 TEST BOX WITH COVER FOR 1/2" SQUARE HEAVY DUTY	9338992	9312201	9338992	9312201	NON-LOCKING COVER, DRICARD FOOT PIECE
2 WIRE NO. 8 STRAND	9338991	9312202	9338991	9312202	WEIGH 95 LB. STREET USE, ULTIMATE DUTY
3 WIRE NO. 6 STRAND	9338997	9312203	9338997	9312203	NON-LOCKING COVER
4 WIRE NO. 8 STRAND	9337539	9307535	9337539	9307535	TEST WIRE ONLY, NOT FOR GROUND BOND, UPDATE AND RI WIRE HAS 19 STRANDS
5 WIRE NO. 6 STRAND	9311795	9311795	9311795	9311795	BOND WIRE ONLY, NOT FOR GROUND BOND
6 CONNECTOR SPLIT SOLE, TYPE 8	9334171	9334171	9334171	9334171	USE IN STRAY CURRENT AREAS
7 CONNECTOR SPLIT SOLE, TYPE 101	9331612	9331612	9331612	9331612	USE WITH NO. 6 CABLE
8 WIRE NO. 8 STRAND	9330683	9314631	9330683	9314631	LABEL WITH #1 OR ORILL COMPATIBLY TO BR OR (W) USE TO LABEL ANODES
9 ANODE, MAGNESIUM 17 LB	9307918	9307918	9307918	9307918	AS SPECIFIED BY CORROSION ENGINEERING
10 ANODE, MAGNESIUM 3 LB	9307985	9307985	9307985	9307985	SATURATE WITH WATER BEFORE ANODE. ANODE MAY BE INSTALLED VERTICALLY OR HORIZONTAL
11 COPPON	9386100	By Corrosion	9386100	By Corrosion	NO MILLER OR EQUAL
12 REFERENCE CELL	9300768	By Corrosion	9300768	By Corrosion	BORN MFR IN OR EQUAL

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SHEET 5 OF 5

NOTE:
1. CATHODIC PROTECTION DETAILS ARE NOT COVERED UNDER PE STAMP.

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d/b/a
nationalgrid

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WALTHAM, MA 02451

IPC



NO.	DESCRIPTION	DATE	DRY	CHKY	APP'R
1	REVISIONS TO VALVE LOCATIONS, NOTES, BOM	04/27/2023	SZT	ECF	MEP
0	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP

1-109 ESSEX RD
GAS MAIN REPLACEMENT
ESSEX RD, CHESTNUT HILL TER, GATE HOUSE RD,
NANCY RD, & MEIGR RD, NEWTON, MA

STANDARD DETAILS

DWG BZTE
22734*

DESIGNER
DOS COMPANIES

ENGINEER
S. TROUSIS

DATE
8/27/2023

ASSET I.D.
XXXXXXXX

W.O. NO.
150538

1-109 ESSEX RD
GAS MAIN REPLACEMENT
ESSEX RD, CHESTNUT HILL TER, GATE HOUSE RD,
NANCY RD, & MEIGR RD, NEWTON, MA

STANDARD DETAILS

DWG BZTE
22734*

DESIGNER
DOS COMPANIES

ENGINEER
S. TROUSIS

DATE
8/27/2023

ASSET I.D.
XXXXXXXX

W.O. NO.
150538

PAGE 15 OF 17

DRAWING NO. C-202

SHEET NO. 15

nationalgrid L1-MA-NIC
 VALVE BOXES UP TO 4\"/>
 REVISIONS: SEE ITEM 11 REVISIONS AND COVER WITH HAZARD TECHNOLOGY ADDED ADDITIONAL ARROW ON ITEM 1.
 DATE: 05/29/2023 EFFECTIVE DATE: 06/29/2024
 DESIGN: A. SULLIVAN/AMM STD. DWG. NO. VALV-6020
 DRAWN: C. DONALDO, P. DIMAO

nationalgrid L1-MA-NIC
 VALVE BOXES UP TO 4\"/>
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 VALVE BOXES UP TO 4\"/>
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INSTALLATION NOTES:

- VALVE FOOT PIECE TO BE INSTALLED AROUND THE VALVE THEN INSERTED INTO THE BOTTOM FLANGE OF THE VALVE BOX. SEE EXTENSION TUBE STOCK CODES 030085.
- THE RANGE OF THE VALVE BOX FROM TOP OF GRADE TO TOP OF VALVE IS 24\"/>

MANUFACTURING NOTES:

- ALL TOPS & BOTTOMS SHALL BE INTERCHANGEABLE.
- THE TOP OF THE BOX ASSEMBLY SHALL BE FINISHED TO FIT BENCH. THE BOTTOM SECTION...
- MATERIAL SHALL CONFORM TO ASTM SPECIFICATIONS FOR GREY CAST IRON CASTINGS, DESIGNATED CLASS 20.
- COVER SHALL CREATE A TIGHT FIT WITH TOP OF CASTING TO PREVENT BATTING. FOR CODES 030085 & 030086 COVER SHALL BE MADE OF STAINLESS STEEL. FOR OTHER ITEM CODES THE COVER SHALL INCLUDE A DIRECTIONAL ARROW. THIS SHALL BE DESIGNED TO ALLOW THE ARROW TO BE POSITIONED AT 90 DEGREES.
- ALL SURFACES SHALL BE COVERED WITH ONE COAT OF FLAT/NOX INHALT PROTECTIVE COATING, CLASS C-13E OR APPROVED EQUIV.
- THE PLASTIC USED FOR THE TUBES SHALL BE PROTECTED FROM UV RAYS AND HAVE THE PROPER INHIBITORS TO PREVENT FROM WITHSTANDING 50 YEARS.
- EMPHASIS SHALL BE PLACED ON AS TO EXACT CHAMFER PROFILES ON EACH JOINT TO SUPPORT EXACT ALIGNMENT IN EXTENDED POSITION.
- INDUSTRIAL TOLERANCES MANUFACTURE SHALL ADHERE TO THE FOLLOWING DIMENSIONAL TOLERANCES ALL DIMENSIONS SHALL BE TO UNLESS OTHERWISE SPECIFIED IN THE DRAWING. ALL CASTINGS SHALL BE MANUFACTURED IN BRITAIN TO BS 2000 TO THE DIMENSIONS SHOWN ON THE DRAWING.
- DIMENSIONS SHALL BE CONSISTENT THROUGHOUT THE CASTING.
- TOP SECTION OF VALVE BOX SHALL HAVE THE PLASTIC TUBE FORCED FIT AND CEMENTED INTO THE CASTING. THIS JOINT SHALL BE MADE AS BEING IMPERMEABLE TO THE FULL DEPTH OF 20 DEGREES.
- MANUFACTURER SHALL SUBMIT SAMPLES TO THE ENGINEER FOR APPROVAL PRIOR TO BIG ACCEPTANCE.
- FRITTED BONES SHALL BE DESIGNED TO HANDLE 15 AN INCH ROADLOADING.
- TOP FLANGE OF ROADWAY BOX SHALL BE FLAT AND WIRE ENOUGH TO ACCOMMODATE A 3/8\"/>

BILL OF MATERIAL:

No.	ITEM	N.G. CODE NO.
1	1\"/>	

BILL OF MATERIAL:

No.	ITEM	N.G. CODE NO.
18	FRONT/BACK KEY FOR ITEMS 8 AND 11B (NOT SHOWN)	030444
19	2\"/>	

nationalgrid L1-MA-NIC
 2'-12\"/>
 REVISIONS: UPDATED ITEM 6'S
 DATE: 05/29/2023 EFFECTIVE DATE: 06/29/2024
 DESIGN: A. SULLIVAN/AMM STD. DWG. NO. VALV-6020
 DRAWN: C. DONALDO, P. DIMAO

nationalgrid L1-MA-NIC
 SUPPORT REQUIREMENTS FOR EXPOSED & UNDERMINED STEEL OR PLASTIC GAS FACILITIES

REVISIONS	UPDATED	SAP ID	AND NOTE	DATE	05/29/2023	EFFECTIVE DATE	06/29/2024	DESIGN	A. SULLIVAN/AMM	STD. DWG.	NO.	CNST-6045
1	UPD	1	SEE NOTE A	05/29/2023	06/29/2024							

nationalgrid L1-MA-NIC
 SUPPORT REQUIREMENTS FOR EXPOSED & UNDERMINED STEEL OR PLASTIC GAS FACILITIES

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NOTES:

- THIS CONSTRUCTION STANDARD SHALL BE USED TO SUPPORT PLASTIC OR STEEL GAS FACILITIES WHICH ARE UNDERMINED AND REMOVED BY CONSTRUCTION ACTIVITIES.
- IF AN EXCAVATION IS MADE AT ANY DISTANCE PARALLEL TO THE GAS FACILITY WITH ADEQUATE OSHA STRUCTURAL BORINGS AS SHOWN IN DETAIL 'B', THESE SUPPORTS ARE NOT REQUIRED. UNLESS SOLES ARE SOLEFAS AS SHOWN WITH CAN GAGES OR BY OTHER TEST METHODS. MINIMUM SOLE DEPTH SHALL BE 2\"/>

TABLE 1
 SUGGESTED MAXIMUM PIPE SUPPORT SPACING 1\"/>

PIPE SIZE (INCHES)	CAST IRON (FEET)
12"	12'
18"	12'
24"	12'
30"	12'
36"	12'
42"	12'
48"	12'
54"	12'
60"	12'
66"	12'
72"	12'
78"	12'
84"	12'
90"	12'
96"	12'
102"	12'
108"	12'
114"	12'
120"	12'
126"	12'
132"	12'
138"	12'
144"	12'
150"	12'
156"	12'
162"	12'
168"	12'
174"	12'
180"	12'

nationalgrid L1-MA-NIC
 TEMPORARY SUPPORT SPACING GUIDELINES FOR CAST IRON MAINS

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 TEMPORARY SUPPORT SPACING GUIDELINES FOR CAST IRON MAINS

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 170 SOUTH BRIDGE
 WALTHAM, MA 02451

ESSEX
 1-109 ESSEX RD
 GAS MAIN REPLACEMENT
 ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
 NANCY RD, & MEIGH RD, NEWTON, MA

STANDARD DETAILS

No.	DESCRIPTION	DATE	DRYLY	CLBY	APP'R	DWG. SITE	DESIGNER	ENGINEER	DATE	ASSET ID	W.O. NO.
1	REVISIONS TO VALVE LOCATIONS, NOTES, BOM	06/27/2023	G23	SZT	ECF	MEP			02/27/2023	XXXXXXX	150536
0	ISSUED FOR CONSTRUCTION	04/28/2023	SZT	NMC	MEP				02/27/2023	XXXXXXX	150536

ESSEX RD, CHESTNUT HILL RD, CHESTNUT HILL TER, GATE HOUSE RD,
 NANCY RD, & MEIGH RD, NEWTON, MA

DRAWING NO. C-203 SHEET NO. 16

LAUGHLIN CONAN & BROOKE H
109 ESSEX RD
CHESTNUT HILL, MA 02467

WALKER DAVID E & LISA A
123 ESSEX RD
CHESTNUT HILL, MA 02467

SAMARAWEERA ROHAN J
382 HAMMOND ST
CHESTNUT HILL, MA 02467

ODONOGHUE FERGUS
MANSFIELD CAROLYN
92 RESERVOIR AVE
CHESTNUT HILL, MA 02467

GROVE HILARY TR
HILARY GROVE TRUST
85 GATE HOUSE RD
CHESTNUT HILL, MA 02467

GATE HOUSE CHESTNUT HILL
2150 WASHINGTON ST
NEWTON, MA 02462

MCCULLEN ELEANOR H TR
ELEANOR H MCCULLEN REV
97 ESSEX RD
NEWTON, MA 02467

FARB SHOSHANA TR
100 ESSEX RD TRUST
100 ESSEX RD
CHESTNUT HILL, MA 02467

RECOMMENDATIONS TO RETHINK CURBSIDE COLLECTION SERVICES

CITY OF NEWTON
OCTOBER 2023



Contents

Executive Summary.....	2
Introduction	3
Background	3
Section 1: Thinking Big Picture.....	4
Section 2: Residential Collection Services Options for Consideration.....	12
Moving Forward.....	22
References	23
Appendix 1: Newton Curbside Collection Services Summary FY23	24

Executive Summary

This recommendations report was developed by Newton DPW with technical assistance from MassDEP. The scope of this report is focused narrowly on recommendations for improvements to the residential curbside trash and recycling programs with the goals of cost savings, future cost avoidance, environmental benefits, and customer service.

The timing of this report will help inform decision making for the next curbside hauling collection contract that includes recyclables processing (which expires in June 2025) and the trash disposal contract (which expires in June 2028). With anticipated significant cost increases on the horizon due to myriad factors, it is Newton DPW's hope that these recommendations can help us consider programmatic changes to minimize the added cost burden.

Recommendations detailed in the report are summarized below in two sections: Thinking Big Picture and Residential Collection Services.

Section 1: Thinking Big Picture Recommendations

1. Implement a competitive request for proposal (RFP) process for residential services and consider decoupling procurement of services (trash collection, recycling collection, recycling processing, and trash disposal).
2. Enhance collection and processing contracts with incentive programs, education clauses, and innovation clauses.
3. Factor greenhouse gas emissions from residential collection services into the City's Climate Action Plan and evaluate existing route maps to optimize for reduced GHG emissions.
4. Enhance the recycling processing contract to increase fairness of terms for the City.
5. Update the Recycling and Trash Ordinance to clearly define who receives city collection services.
6. Reduce holiday delay schedule for contractors down to the six major holidays.

Section 2: Residential Collection Services Options for Consideration

1. Get more food waste out of the trash by considering a pilot for in-home food waste processing capacity. The advantages of in-home food waste processing include relatively low costs, the costs to City can be paid for using grant funds, fewer logistical challenges, significantly reduced "ick-factor" for residents, low carbon footprint. Three other models were analyzed and deemed less feasible due to costs or logistical challenges.
2. Consider adopting a curbside collection model to increase trash reduction incentives for residents. Options investigated include:
 - a. Reduce the standard issue trash cart size to 35-gallons.
 - b. Phase in a transition from a tax-based funding model to a utility-based funding model between 2025 and 2028 and potentially add variable cart sizing.
 - c. Introduce variable cart sizing with at least two cart sizes and an annual fee in 2025 to offset cost increases.
3. Change cart ownership to the hauler.

Public feedback will be gathered regarding these recommendations to further inform the Mayor and City Council in their decision-making process. Engaged stakeholder groups including the Sustainable Materials Management Commission and Green Newton are important allies to Newton DPW in engaging with the public to gather feedback.

Introduction

In Fall 2020, Newton DPW was awarded a technical assistance grant from MassDEP to develop program recommendations to significantly reduce residential trash tonnage with the primary goals of cost savings, future cost avoidance, and maximizing environmental benefits. The scope of this report is limited to recommendations to advance residential trash and recycling services based on those goals.

This recommendations report focuses on residential collection, particularly curbside collection services, because the city is responsible for providing these services for residents and has a significant amount of control over the service model. Conversely, a larger portion of waste is generated by the commercial sector in most cities. A comprehensive analysis of waste flows within the city would be needed to better understand the extent of waste generated in other sectors including municipal, commercial, institutional, multi-family residential, and construction and demolition.

The current hauling and recyclables processing contract with WM started on July 1, 2020 and expires June 30, 2025. Recommendations in this report are intended for consideration for structural program changes to take effect in future contracts. In addition, Newton will need to seek a new waste disposal contract to take effect on July 1, 2028. The current waste disposal contract with Wheelabrator Millbury started on July 1, 2008, with a term of 20 years.

Significant cost increases in hauling, recyclables processing, and waste disposal services are anticipated in the upcoming contract cycles. Supply chain and labor impacts, only some of which relate to the 2020 pandemic, are anticipated to impact costs for the next hauling and processing contract. Cities that have entered new disposal contracts within the past three years have seen cost increases of 40%.

Refer to Appendix 1 for a full program summary of curbside collection services in Newton.

Background

Since the peak of trash generation in FY04 (31,758 tons), Newton has reduced trash generation by 47% (to 16,714 tons in FY23). This reduction trend has been stagnant over the past 6 years, although there was a temporary tonnage increase during the pandemic shut down. Trash generation averaged 22.8 pounds per household per week in FY23.

Essentially, there are four major services relating to residential management of trash and recycling: trash collection at the curb and hauling to a disposal site, trash disposal (known as the tip fee), recycling collection at the curb and hauling to a processing site, and recyclables processing (also referred to as the tip fee, though this cost is variable based on a formula). Each of these services has its own terms, methodology, and pricing structure. Costs for these services include staffing; vehicles; fuel (variable by distance from starting and end sites); and operation, maintenance, and improvement of facilities.

In 2009-2010, Newton launched its current curbside collection model which uses automated side-load trucks for collection each week of trash and recycling using 64-gallon wheeled carts. This model established an equitable waste set-out limit by volume, which was a significant change from previously having no trash limit. Overflow bags are available for purchase for occasional trash generation over the limit and around 430 residents pay for one or more additional trash carts each year. While some residents recall the implementation of this program as being initially challenging and even controversial at times, the program was soon enough widely accepted and has been successfully running for 13 years.

The waste and materials management landscape in Massachusetts has changed dramatically since the adoption of the automated cart collection program in 2010. Solid waste disposal capacity in Massachusetts and throughout the Northeast has steadily been shrinking as more landfills close and have not been replaced by new in-state or regional disposal capacity. This tightening of disposal capacity has weakened the resiliency of the Massachusetts waste disposal infrastructure, and facility outages that were routinely managed in the past are causing more frequent operational challenges. It is no longer newsworthy when trash is left at the curb for 1-2 days because of a facility outage. Changes in global recycling markets have led to tight recycling capacity, volatile prices, and an overall trend of increased recycling costs in the Commonwealth. The 2018 closure of a large glass processor in Massachusetts also added stress to the recycling markets.

The 2017 Newton DPW *Moving Beyond Solid Waste to Sustainable Materials Management Framework Report* detailed existing city services, programs, and policies and provided ten actionable recommendations to improve residential collection services. Between 2017 and 2022, five of those recommendations have been acted upon in some fashion. The actions taken include

- placing a fee on bulky waste items,
- opening a permanent Swap Shop at the Resource Recovery Center,
- improving the management of the curbside cart fleet,
- restructuring the household hazardous waste collection program,
- and increasing recovery of household food waste.

In 2021, Newton's Sustainable Materials Management Commission (SMMC) published the *Setting the Path to Zero Waste: Recommendations on the Future of Residential Curbside Waste Management in Newton* report. This report includes a robust analysis of how shrinking waste capacity is already and will continue to impact Newton. Further, the SMMC pinpointed six large scale recommendations including:

1. Set residential zero waste goals
2. Implement a citywide curbside organics collection program
3. Incentivize trash reduction with a fee-based variable rate system and/or alternate week collection
4. Strengthen support for extended producer responsibility legislation
5. Increase staffing for the Sustainable Materials Management Division
6. Develop a comprehensive Zero Waste Plan

Understanding how the waste and materials management landscape is evolving in Massachusetts is critical to be proactive in program planning. Broad education of residents about this changing landscape and how it impacts the city budget will be key to gain buy-in and implement further program changes.

Section 1: Thinking Big Picture

Massachusetts is facing a well-documented trash disposal capacity crisis. There are only 3 remaining landfills accepting municipal solid waste, the state's seven waste-to-energy facilities are aging, there is a moratorium on siting new facilities, and neighboring states have begun restricting imports of trash from

Massachusetts¹. These circumstances are resulting in significant cost increases for trash disposal and an increase in exporting of trash to other states, such as Ohio. Refer to the November 2021 report [Setting the Path to Zero Waste](#) published by the Newton Sustainable Materials Management Commission for further information on the need for Newton to reduce waste disposal.

Newton's long-term trash disposal contract expires on June 30, 2028. The bundled service contract for trash and recycling collection service and recycling processing expires on June 30, 2025. Planning and decision making is essential now to consider recommendations and potentially implement changes as new contracts are negotiated and take effect.

Recommendations below could have significant impacts on the next curbside collection contract and/or the next disposal contract:

1. Implement a competitive request for proposal (RFP) process for residential services and consider decoupling procurement of services.

REQUESTS FOR PROPOSALS:

Under Massachusetts General Law (MGL) Chapter 30B, Section 1(b)(30), solid waste contracts are exempt from public bidding requirements. However, it is recommended by the Massachusetts Department of Environmental Protection (MassDEP) that municipalities competitively procure solid waste and recycling services through an Invitation for Bids (IFB) or Request for Proposals (RFP) process to ensure competitive pricing and service quality. If a competitive bid process is used, it is then beneficial to include a clause that allows the municipality to make procurement decisions outside of the formal bidding process, should it deem this to be in the municipality's best interest. The exemption for solid waste services under M.G.L. Chapter 30B gives municipalities the discretion to follow a formal bid process for comparison purposes, and still negotiate with the selected firm to best meet their needs.

An RFP allows a municipality to evaluate and rank vendors based on best overall value, which combines qualifications, technical approach, and cost. Price is very likely to be the most important criteria when ranking proposals to determine best overall value, but it is not a limiting factor in the decision. According to a 2020 guidance document published by MassDEP titled [A Checklist for Successful Recycling Procurements and Contracts for Curbside Recycling Services](#), an RFP is the most appropriate approach when services cannot be reduced to pre-defined specifications and performance standards. It is the recommended best practice for solid waste collection, recycling collection, and recycling processing services.

Should an RFP process be the direction Newton moves toward, US EPA case studies encourage local governments to provide as much background information as possible, such as waste diversion goals, zero waste plans, relevant local regulations, ordinances, operating statistics, program participation levels, costs by line item, material composition and residue rates.

Highlights in the RFP should include how multiple goals will be weighted and evaluated based on Newton's priorities such as diversion from landfill and incineration, price, qualifications and

¹ *Note: only publicly owned landfills can restrict imports of trash; privately owned facilities would violate interstate commerce laws with restrictions.

experience, services proposed, exceptions to the proposed contract, local jobs, and local economic development.

In addition, RFP's offer a degree of flexibility for municipalities to examine proposals and pricing for services that may be significant changes from the status quo. Massachusetts is unique in that each municipality handles its own waste collection, as opposed to county or regional waste collection systems that are common practice in other states. This is especially inefficient because each municipality is quite small geographically. Borders between municipalities are all too often arbitrary, occurring in the middle of a neighborhood or street. This creates operational inefficiencies where trucks must cross into neighboring communities in order to turn around. To seek operational efficiencies instead, Massachusetts municipalities should consider partnerships or even creating regional waste districts in the long-term.

It would greatly benefit Newton to speak with neighboring communities of Waltham, Watertown, Brookline, Boston, Needham, Wellesley, and Weston to discuss mutually beneficial partnerships on waste collection services that may align with the timing of pursuing an RFP. Potential benefits of such partnerships for curbside collection services include increased purchasing power, creation of operational efficiencies, offset cost increases, reduced administrative burden, reduced fuel use and emissions, and providing better service. Instead of each municipality duplicating work, synergies can be found with educational programming, contract oversight, and customer service. Naturally, there are also possible challenges with the potential for partnership including timing of contracting, services desired, procurement processes, and the risk of damaging neighborly relations.

DECOUPLING OF SERVICES FOR PROCUREMENT:

It may be advantageous for pricing and service terms for a municipality to pursue separate contracts for residential collection of trash, residential collection of recycling, recyclables processing, and disposal contracts. Newton already has a separate disposal contract from residential collection and recyclables processing services. There are numerous vendors in the greater Boston area that could perform these services with the degree of quality Newton residents expect. Newton has thus far opted for a bundled procurement approach for residential trash and recycling collection services along with recycling processing since moving to contracted service. Reflecting on whether this is still the best approach is a worthwhile exercise.

Reasons Newton should consider decoupling procurement of collection and recyclables processing:

- Decoupling can increase the pool of qualified vendors for each service, thus increasing competition
- The cost basis of each service is fundamentally different – residential collection of trash, residential collection of recycling, and processing of recyclables
- Separate proposals will make it easier to evaluate vendors' offerings
- Decoupling provides the opportunity to achieve the lowest cost for each service, resulting in the lowest overall cost for curbside services
- Contractual language for each service can be easier to define clearly in separate agreements
- Each service and service provider can be better monitored, evaluated, and held accountable

The advantages of keeping the current bundled procurement process include:

- Consistent customer service experience for residents
- Potentially lower administrative burden for oversight with fewer contracts

- Possible loss of synergies and efficiencies from a combined collection and processing contract

Services needing to be contracted to maintain existing service levels could be decoupled or bundled in any combination. The extent of services included in the current bundled contract include:

- Curbside collection of trash and hauling to a disposal site
- Curbside collection of bulky waste items (large non-recyclable items) and hauling to a disposal site
- Curbside collection of recycling and hauling to materials recovery facility
- Processing of recyclables at a materials recovery facility
- Dumpster collection service at city buildings and select residential properties
- Curbside collection of whitegoods items (large recyclable items) and hauling to the Newton Resource Recovery Center
- Cart management services including procurement, maintenance, deliveries, swaps, and removals

Dumpster service, bulky waste collection, whitegoods collection, and cart fleet maintenance services are significantly smaller in scale compared to weekly curbside residential collection and less complex in nature. If a decoupled procurement strategy is pursued, each of these services could be procured through individual RFP processes. There is also potential to bundle curbside collection of trash and hauling to a disposal site with the disposal contract. Although, the timing of this combination would be more challenging because of the three-year gap between current hauling and disposal contracts.

This document serves to aid in strategy development for Newton's next procurement process of curbside collection services. Haulers need 18-24 months' notice to plan for procurement of trucks and additional staff to take on a new contract as large as Newton. Five to six trucks for each trash and recycling collection with 13-15 staff are needed to provide weekly service to our 18 square-mile municipality, which takes significant coordination and planning before service starts.

MassDEP has numerous contract resources, including template contract language that can be very useful in RFP and contract development. Several Massachusetts municipalities have incorporated an RFP process and moved to a decoupled model in recent years.

BEDFORD:

In November 2022, Bedford (population 14,100) entered a negotiation with their existing hauler to receive a proposal. By December an agreement was not reached and Bedford released a request for proposals that they had prepared in the event that the negotiation with the existing hauler did not yield the desired outcome. The RFP was crafted as in an "ala carte" style that allowed proposals to be submitted for one or more services contained within the RFP. Services sought included trash collection and haul, recycling collection and haul, recycling processing, yard waste collection, organics collection (which would have been a new service), and trash disposal. Bedford received six proposals for bundled curbside collection services. Bedford moved forward with their original hauler with pricing that was 1.5% lower per year than the previously failed negotiation proposed pricing.

LEXINGTON:

The Town of Lexington had a traditional bundled contract like Newton (including trash, recycling, and yard waste collection) from 1988 through 2019. In FY17, after much consideration, consultation,

public input and program assessment, Lexington DPW determined that a request for proposals for a bundled service contract would be advantageous to combat increasing costs and lackluster service. In 2019 the four proposals received differed drastically, ranging from \$9,078,622 to \$15,419,000. After a variety of factors were evaluated, the low bidder was determined to be the best value. Transition to the new service provider began in July 2019. This change in service providers was communicated to residents via a town-wide mailer, email, and social media. The transition period lasted a few weeks as new drivers learned the routes. Overall, the transition was well received by residents. Lexington will continue to request proposals for services in the future.

CAMBRIDGE:

Cambridge has never bundled recycling collection from recyclables processing, meanwhile Cambridge DPW has maintained operational control of trash collection using city-owned rear-load packer trucks. Additionally, Cambridge has used an RFP process for recyclables collection and recyclables processing since 2000. In Cambridge's last RFP for recycling collection, the two bids received were \$15M and \$23M over five years. Separating out the two services, allows the City more clarity on the true costs of both collection and processing of recyclables. Cambridge will continue to request proposals for decoupled recycling services in the future.

2. Enhance collection and processing contracts with incentive programs, education clauses, and innovation clauses.

Programs can be sculpted within contracts to align the hauler's performance with helping to achieve city waste diversion goals. Such programs could include route optimization, alternative fueled vehicles, and more efficient routes leading to fewer miles driven and lower costs for both the hauler and Newton, in addition to educational programs.

Mechanisms of how the recycling hauler can influence a decrease in recycling contamination could include education and outreach efforts or curbside enforcement. This method of incentivizing waste diversion has been used by cities on the West Coast. Some local governments require very specific outreach and education programs to be implemented in contracts. Contracts can set community education and outreach requirements on specific topics such as:

- Benefits of waste reduction, reuse, recycling, and separating out food waste
- Program implementation information, such as holiday delays
- Information on proper sorting and how to manage commonly confusing materials

Some communities require a separate contractor be used for education and outreach to obtain specialized marketing or multilingual outreach capabilities. Although Newton has one dedicated staff person who implements education and enforcement, many hauling and processing companies in the area have their own marketing campaigns that have already been developed, and in some cases have enormous marketing departments that can customize education materials to meet Newton's needs and quickly distribute educational information citywide. Examples of outreach methods that can be specified in contracts include:

- Traditional outreach: Citywide mailings, bin tags, bill inserts, brochures (can require multilingual materials)
- Direct outreach: Community event outreach and/or door-to-door customer visits (can require multilingual outreach capacity)

- Online and social media: Websites, campaigns or competitions using specified online platforms and tools

Including an "Innovations" clause in a contract can allow Newton flexibility to address issues and change service terms to take advantage of innovation without having to renegotiate the entire agreement. Innovations could include additional materials for recovery (e.g., food waste, cartons, flexible film packaging); collection changes such as separating glass from single stream; or new technology, such as the use of artificial intelligence to reduce contamination.

3. Factor greenhouse gas emissions from residential collection services into the City's Climate Action Plan and evaluate existing route maps to optimize for reduced GHG emissions.

With the current vendor, trash trucks travel an average of 198 miles per day. This includes the drive from WM's fleet yard in Norton to Newton, performing the routes in Newton, traveling to Millbury to dump the trash, and then traveling back to Norton. With six trash trucks servicing the City each day this equates to 1,068 miles per day, 5,340 miles per week, and a total of 277,680 miles per year.

Recycling trucks travel an average of 110 miles per day. These trucks travel from Norton to Newton, perform the routes in Newton, offload the recyclables at the Avon materials recovery facility, and return to Norton. For six trucks this equates to 660 miles per day, 3,300 miles per week, and a total of 171,600 miles per year.

These mileage totals should be included within the City's greenhouse gas emissions inventory and potentially addressed in the next iteration of the Climate Action Plan.

The number of households served among the five trash day areas (i.e., Monday route, Tuesday, route, etc.) ranges from 6,382 to 7,772. By using route optimization software, the trash day areas could be rebalanced with a more equal number of households per day and the shortest distances to complete each route day could be determined. This has potential to reduce miles traveled within Newton for collection.

Reporting of GHG emissions could be required in a hauling, waste disposal or recyclables processing contract. Reduction in GHG emissions could be incentivized in contract pricing terms.

4. Enhance the recycling processing contract to increase fairness of terms.

After collection, single stream recycling is taken to a material recovery facility (MRF) where materials are mechanically and manually sorted into individual commodity types (e.g., paper, glass, metal, plastic). This is what recycling processing entails.

The cost formula to calculate the monthly per ton recycling processing charge is complex. Essentially, the cost formula calculates a monthly value for one ton of sorted recyclables and subtracts that value from a fixed annual per ton processing fee that is established in the contract. Then the per ton charge is multiplied by the tons collected from Newton each month. The value of the recyclables is determined using a weighted average of each commodity sorted from the recycling stream as a percentage of the total stream (the composition of the recycling stream) multiplied by each commodity's monthly value. Each commodity's monthly value is set by a

commodity index, which is only available through a subscription. Newton subscribes to index pricing from RecyclingMarkets.net through a MassDEP subsidized price.

A common practice among MRFs is to set the monthly composition of the recycling stream based on the *outgoing* commodities, i.e., the sorted stream. The outgoing, now-sorted commodities originate from municipal and commercial unsorted material that was brought to the MRF. This means that Newton's pricing is not currently based on the recyclables that Newton residents generate. Instead, the pricing is based on the output of the MRF, which the City does not have control over.

To ensure that the terms of the formula are fairer to Newton, the pricing must be based on the composition of the recyclables collected in Newton. This composition can be determined by an audit performed at a regular, agreed upon interval. The audit should be performed by a 3rd party or by the MRF while witnessed by city officials using a methodology agreed upon by both parties.

This one change to the formula will significantly enhance the value of Newton's recycling and strengthen Newton's control over pricing as the quality of recycling improves with added investments to educational outreach.

Should an RFP process be used for future procurement of recycling processing services, language pertaining to an annual, biannual, or quarterly composition audit of Newton's material should be included along with a stipulation that monthly pricing be based on the periodic composition audits.

5. Update the Recycling and Trash Ordinance to clearly define who receives city collection services.

Current ordinance language does not clearly state which residential properties shall receive city collection services:

“The department of public works, or its contractor, shall remove and process or dispose of all refuse, recyclable materials and garbage from residential premises, except those residential premises which are required pursuant to special permit or other zoning requirements to make their own private arrangements therefor, which are properly placed in accordance with the requirements of this chapter.”

There has never been a tracking system developed to denote which residential premises are required to provide their own private collection arrangements as specified in a special permit. Therefore, it is currently unknown precisely which properties should and should not receive city service.

Equity, inclusion, and access to recycling services could be improved in city services by specifying in the ordinance that properties with a specified number of units shall receive city service. Best practices include all condominium properties because property owners are assessed at the same property tax rates as single-family properties and multi-family properties with 4 or fewer units. Multi-family properties with more than 4 units should be considered businesses, similarly to how these properties are managed by banks, and should be required to make their own private arrangements.

Newton DPW does not currently know the exact number of households served by the curbside collection program. An estimate of 28,500 households is used. It is common among municipalities

not to know how many households are served. However, it is a figure that would prove useful when considering an RFP for collection services or planning for future cart fleet procurement.

There are 37 large condo and apartment complexes that receive dumpster service provided by the city. Dumpster service for these properties cost \$233,490 in FY23. These properties were all grandfathered into receiving city service because, anecdotally, they were serviced by the city before services were contracted out. Ten of these properties are managed by the Newton Housing Authority. The cost of providing trash and recycling dumpsters at NHA properties totaled just over \$63,000 in FY23.

Implications of this recommendation require further analysis to better understand costs, the increased waste diversion potential, and potential to increase equity of recycling access.

6. Reduce holiday delay schedule down to the six major holidays.

When the City performed in-house collection services, city staff were granted holidays off, collection was delayed by one day with service completed on Saturday on overtime. After the City began contracting for residential collection services, the holiday delay schedule was kept the same in an effort to maintain resident expectations. The theory was that residents would expect a collection delay if there were a federal holiday.

Newton currently delays collection services for 12 federal holidays. The only functional purpose to delay collection is to allow staff time off for holidays. While the delays offer contracted staff an opportunity to observe the holidays, there is minimal benefit for contracted staff to observe the same holiday schedule as city staff because there are still five collection day areas within Newton to complete regardless of a holiday, so a collection day on Saturday is always needed to provide service to the entire city each week. This practice results in contracted staff having the holiday off but having a one-day weekend afterward.

Collection service companies find fewer holiday delays to be more efficient for the operation and more desirable by staff. In addition to being administratively burdensome, delays in the collection schedule can lead to unusual problems. For example, in February 2022, a large snowstorm during a holiday week led to a cancellation of a collection day. This was the result of collection week already planned to run on Saturday due to the holiday, a major snowstorm that started early in the morning, and strict Department of Transportation rules controlling the maximum number of hours worked within any 7-day period (hence collection could not take place on Sunday, then restart a new week on Monday because drivers are required to have rest time).

Further, the twelve holiday collection delays consistently generate the most call volume to Customer Service due to resident confusion. There is an average uptick in call volume of about XX% around every federal holiday.

By reducing the holiday delay schedule to the “major six” federal holidays (Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas Day, New Year’s Day) and thoroughly communicating this change to residents, contracted staff would experience less disruption in operational (and personal) routine, there would be less confusion among residents, and less potential for unplanned operational disruptions.

Section 2: Residential Collection Services Options for Consideration

Trash and recycling services are one of, if not the most, public facing municipal service. Most Newton residents engage with the program at least once per week by setting out their blue and green carts. When any changes are made to programs and services, it is easier to enact those changes as a new contract starts than to make a change and work with a vendor during a contract term.

Municipal trash and recycling collection policy requires a sensitive approach because it involves changing residents' behaviors around waste materials in their homes. It is important for all stakeholders to be attuned to this dynamic when planning for materials management policy changes.

There are significant cost implications when a new contract starts for collection and processing services. Part of the cost depends on how much trash and recycling are generated to be managed, so it is logical to enact policies that encourage or incentivize residents to reduce the amount of waste generated.

Further, there are significant environmental sustainability implications from waste and recycling generation. Upwards of 80% of the greenhouse gas emissions in most consumer-goods categories occur in the supply chain to produce and distribute goods to stores. However, that 80% is not within the sphere of control of Newton. If even half of the remaining 20% of GHG emissions from consumer goods come from managing the waste byproducts of the goods (packaging, one-time use items, obsolete or broken durable goods, food waste), Newton has a substantial amount of impact within its sphere of control.

The recommendations below are being put forward with consideration to cost, environmental impact, and convenience for Newton residents.

1. Get more food waste out of the trash.

All the resources that contribute to putting food on the table are wasted when food goes uneaten, including the land, water, labor, capital, chemical inputs, and energy used. Globally, food that is harvested, but not consumed, accounts for about twenty-five percent of all water used in the agricultural sector each year and requires cropland the size of China.

In the United States, over 2% of the nation's energy use is dedicated to growing, manufacturing, transporting, refrigerating, and cooking food that is not eaten. That's the equivalent of 16 billion gallons of gasoline (enough to cover 6 weeks of gasoline use by everyone in the U.S.) or 586 billion kilowatt-hours of electricity (enough to cover the electricity needs of 54 million households for a year).

Food production and disposal create greenhouse gases, contributing to climate change. Globally, food that's harvested but not consumed generates about 8 percent of global greenhouse gas annually making it the world's third-largest greenhouse gas emitter behind China and the United States. Most of these emissions occur during production, so it is imperative to use the food that is grown and divert food waste from disposal.

Currently, Newton encourages backyard composting of food waste and has a preferred vendor agreement with Black Earth Compost who provides subscription curbside organics collection service. There is no data available to know how many residents compost their food waste at home, however, we know that through the city's subsidized compost bin sales that XXX residents have purchased backyard compost bins since 2016. There are over 2,900 subscribers to the preferred vendor curbside subscription service. In FY23, the curbside program diverted 783 tons of food waste from the trash. The cost to dispose of those 783 tons of food waste as trash would have been \$59,585.

Currently, Vermont and California have statewide mandatory food waste diversion laws. Vermont's law is a disposal ban similar to the regulatory approach Massachusetts uses for recyclable materials. MassDEP implemented a commercial organics ban in 2014 for generators of 1 ton of food waste per week or more. In November 2022 the threshold was reduced to include generators of ½ ton of food waste per week or more. This trend indicates that MassDEP may eventually ban all commercial organics and further into the future may put a disposal ban into effect for residential food waste, as well.

Because there is a significant cost to add curbside food waste collection service citywide, pilot programs are a cost-effective next step for Newton to find a sustainable model to divert more food waste. Below are four pilot program models that have been investigated. Each has benefits and challenges. There is no simple, one-size-fits-all solution to getting more food waste out of the trash. The pilot program models are listed in order of recommendation and feasibility.

A. Pilot in-home food waste processing capacity.

Technology has been advancing in recent years to develop residential on-site food waste processing devices, better known as electric countertop composting units. Managing food waste at the point of generation eliminates the logistics burdens and emissions impacts of curbside collection. The countertop composting units are a relatively low one-time cost, which may be favorable over incurring higher annually escalating costs.

Countertop composter units work by creating laboratory-like conditions for organic matter to break down quickly using naturally occurring microorganisms. The conditions created stimulate and accelerate aerobic decomposition through drying, mixing, and cooling. Essentially, these units act as aerobic digesters that are sized for a residential home. A cycle takes between 3-8 hours and reduces the weight and volume of food waste by about 90%. The remaining byproduct, which has a consistency ranging from sawdust to granola, is dry and sterile, thus eliminating odors. The byproduct, sometimes referred to as pre-processed food waste, can be mixed into potting soil or tilled into garden beds in the spring as a beneficial nutrient amendment. Another option is to store the byproduct and drop it off at a food waste drop-off location. If the byproduct is placed on top of soil the food waste will rehydrate and attract wildlife.

Units are typically the size of a bread machine or similar countertop appliance. They are extremely energy efficient, using approximately 0.8 kWh per cycle, which is similar energy use to having a desktop computer run for the same period of time. Sensors within the unit automatically stop a cycle when the moisture level reaches zero.

One company, Foodcycle Science, is actively working with municipal governments to pilot their countertop composter units, called the FoodCycler, as a solution for cities to get food waste out of residential trash. In the municipal pilot program they have designed there are two FoodCycler models available: the FC-30 can process 2.5L per cycle and the Eco 5 model can process 5L per cycle. The municipal pricing of the units, which is reduced compared to retail pricing, is \$249 for the FC-30 and \$349 for the Eco 5, plus shipping. This company has over 80 municipal partnerships currently. Nelson, British Columbia (population 10,600) has purchased units for every household to serve as their primary food waste diversion method after running a successful pilot.

An initial pilot program in Newton would consist of 750 households. The pilot program offered by the company includes all educational training materials and surveys of pilot participants. Customer service and technical assistance are also offered by the company during the pilot.

Through pilots run by other municipalities, a subsidy model has proven to be cost effective and well-received by residents. The municipal subsidy (i.e., cost covered by Newton) proposed by Foodcycle Science is \$100 per unit. The municipal subsidy can be paid by grant funds received from MassDEP for the Recycling Dividend Program. Costs of a pilot program are outlined below.

Total Invoiced Amount

	Price	Quantity	Total
FoodCycler FC-30 Municipal Rate	\$249	325	\$80,925
FoodCycler Eco 5 Municipal Rate	\$349	425	\$148,325
Shipping Estimate			\$8,100
Total Invoice Amount			\$237,350

Net Municipal Cost

	Price	Quantity	Total
Total Invoice Amount			\$237,350
Less Resident Contribution: FC-30	\$149	325	\$-48,425
Less Resident Contribution: Eco 5	\$249	425	\$-105,825
Net Municipal Cost			\$83,100

This model serves as a good alternative for reluctant residents that find traditional food waste diversion systems to be messy or inconvenient. There is strong potential long-term for countertop composter units to be part of a multi-pronged approach to get food waste out of the trash in Newton.

Cost to City per household: \$110.80

Pros: Relatively low cost, cost to City can be paid for using grant funds, few logistical challenges, significantly reduced ick-factor for residents, low carbon footprint, low administrative burden

Cons: Less convenient than curbside collection model that residents are accustomed to, residential cost for unit, minor residential cost for ongoing electricity use

Feasibility: Highly feasible to launch a pilot program within 1 year; ongoing program could be modeled after backyard compost bins sold at a subsidized price

B. Pilot separate food waste collection performed by DPW for one year.

Following the model that Cambridge uses for curbside food waste collection and leaning on DPW's experience with yard waste collection, one packer truck could be rented, and two new positions created or two existing staff temporarily reassigned. The pilot program would provide weekly curbside food waste collection for approximately 1,000 participating households in each trash day area. Residents would be required to opt-in for the no-cost pilot program service. Software can be used to create routes and track the set-out rate among participants. Routes would be created to collect only from participating households instead of going down every street each week. In this model, collected food waste would be transported to a nearby facility accepting residential food waste. The two nearest facilities are the WM CORE in Charlestown (13mi) and Hidden Acres Farm in Medway (20mi).

Using an estimate of 12 pounds of food waste collected per household per week, that equates to 30 tons per week. In this model, with Newton paying a tip fee at a commercial facility that is expected to be roughly the same as the trash tip fee (\$75/ton), there is no cost savings by removing food waste from the trash. In addition, costs would increase compared to current service to cover the truck, staff, and routing software.

Estimated costs for a pilot include:

1-year rental of one rear load packer truck + fuel	\$120,000
Two staff (inc. benefits)	\$200,000
Tip fees	\$117,000
Locking carts	\$30,000
Routing software	\$10,000
	<hr/>
	\$477,000
Grant fund contribution	<hr/> (\$120,000)
Total cost to City	\$357,000

Although there is a cost increase for piloting this service model, this increase is minimal when compared to contracting out for collection service.

Cost to City per household: \$357

Pros: Similar collection model to current yard waste collection program, optimized collection efficiency using routing technology, no out-of-pocket cost to residents, convenient for residents

Cons: Relatively high cost, grant funding is not available to pay for full cost, numerous logistical and coordination challenges, high administrative burden

Feasibility: Low feasibility to launch pilot within 3 years due to significant cost

C. Pilot co-collection of food waste with yard waste.

This model has been a common practice in many West Coast municipalities for over a decade and other municipalities have found value in combining these services. If co-collection is deemed a feasible option for Newton there would be no additional costs for weekly curbside collection since Newton DPW now operates yard waste collection. MassDEP has indicated there is no immediately obvious regulatory barrier to piloting this model.

Newton DPW offloads yard waste at the Resource Recovery Center at Rumford Avenue, which is a big factor in how DPW can provide yard waste collection service cost effectively. A hauler is then contracted to transport the yard waste to a commercial compost site. The co-collection model would be feasible by working with a commercial compost site that would accept yard waste mixed with food waste.

Concerns that would need to be solved before launching a pilot effort include ensuring that co-collected materials are mixed well during the high-volume yard waste seasons of spring and fall and arranging for hauling of the material as quickly as possible in the summer when temperatures are warmer and yard waste is less voluminous. Because the intention is not to compost the co-collected materials onsite, with ample hauling of the material to a commercial composting site there should be a low risk of odors and pests.

Winter poses an interesting dilemma to this collection model primarily because DPW staff are responsible for snow and ice management operations. One option is to make the co-collection program seasonal and match the food waste collection service with seasonal yard waste collection. Evanston, IL runs their co-collection program in this manner. Aside from the co-collection service, they have a food waste contractor that offers “winter gap” seasonal service for a fee. Another option is to run fewer trucks in the winter to only collect food waste. There would be expected occasional service disruptions due to snowstorms, but it would be highly unlikely for a resident to experience more than a one-day delay in service. Alternatively, residents who want winter food waste collection could be required to opt-in for service. This would allow DPW to develop routes to only service participating households, thus increasing efficiency.

Cost estimates for this model are difficult to pinpoint but are expected to be insignificant. Newton is charged by the yard waste hauler by the cubic yard. Although food waste is heavy, it does not generally have a high volume. Thus, there would be a negligible increase in volume of yard waste hauled out.

Cost to City per household: nearly zero, exact figure undetermined

Pros: No out-of-pocket cost to residents, convenient for residents, low carbon footprint compared to adding additional trucks for separate food waste collection, minimal operational impact for curbside collection, potential for low administrative burden in the long-term

Cons: Numerous operational, logistical and coordination challenges with properly managing collected material; high administrative burden to achieve an effective model; potentially high risk of failing

Feasibility: Low feasibility to launch pilot within 3 years due to numerous operational, logistical and coordination challenges

D. Pilot phased opt-in contracted curbside collection service.

If pilot efforts above are tested and do not provide a sustainable solution to get more food waste out of the trash, the city could consider contracting out for curbside collection service. A phased-in pilot program could be designed to allow for financial planning.

Watertown has recently started a program following this model. Their City Council approved funds of just under \$2 million for a three-year pilot that will provide service for 1,500, 3,000, and 5,000 households in respective years. The phased approach will allow time for fiscal analysis of the program and planning of next steps.

Cost to City per household: at least \$400, exact figure undetermined

Pros: No out-of-pocket cost to residents, convenient for residents, low administrative burden

Cons: High cost, difficult to plan for scaling up as costs fluctuate

Feasibility: Low feasibility to launch pilot within 3 years due to significant cost

2. Enhance incentives for residents to generate less trash.

In 2010, Newton established its first incentive to reduce trash generation through an ordinance change and by issuing one 64-gallon trash cart to each eligible household. This policy change leveled the playing field among households by setting an equitable trash volume limit. Trash generated over this limit requires the purchase of overflow bags or the purchase of an annual permit for an additional trash cart. Before the establishment of a limit, one household could set out four full trash cans while another household could set out one half-full can and both households were paying the same amount for curbside services through property taxes.

Volume limits create fairness, but they can also act as a ceiling that disincentivizes further reduction of trash. For example, in Newton's cart system, 35-gallon carts have been offered since the start of the program. However, since there is no incentive to move to a smaller cart, they have not been widely adopted.

Various options and timelines for trash reduction were analyzed. Of these options, more details will be needed to make a decision. Should the City pursue an RFP, additional details such as cost will be provided in proposals from haulers that will further inform a decision.

A. Reduce the standard issue trash cart size to 35-gallons with weekly curbside collection.

As of May 2022, 16 municipalities in Massachusetts have switched to 35-gallon carts and have experienced an average trash tonnage reduction of 3.7% the first year. For Newton, a 3.7% trash tonnage reduction would save approximately \$50,000 annually based on FY23 pricing and tonnage data. Data collected at the curb in summer 2022 from 1,180 households indicated 68% of households set out carts that are less than 80% full. Further, data from MassDEP demonstrates that Newton's current trash disposal rate of 0.61 tons per household per year is already lower than 11 of the 16 municipalities that have made the switch to 35-gallon carts. From this data it can be inferred that most residents could adjust to a cart volume decrease, similar to the adjustment that was made when the original cart limit of 64 gallons was established.

In this model, overflow bags would be available for purchase at local retailers with the bags being appropriately priced to cover all disposal, collection, and administrative costs. Annual permits for additional carts would also be available for an appropriately priced fee. Both services are currently administered in Newton's program.

This approach is best implemented with robust food waste collection options. By removing food waste from the trash, residents can remove approximately 30% of the weight of their trash. Additionally, education and outreach about waste reduction strategies would be increased to assist residents in adapting to the change in the volume limit.

Refer to recommendation #3 below regarding cost implications of a new cart fleet.

B. Transition from a tax-based funding model to a utility-based funding model using a phased-in approach between 2025 and 2028.

In a utility-based program residents pay a per-unit fee for disposal of household trash. Most programs utilize pre-printed trash bags in which the price of the bag reflects the cost to dispose of the waste contained within the bag. The bag serves as an equitable volume limit. Alternative programs include annual tags purchased and placed on carts. Residents typically are not charged a direct fee for recycling in a utility-based system, or recycling may have a significantly lower charge than trash. As residents pay directly for trash they dispose, they have a financial incentive to reduce their waste through recycling, composting, and waste reduction. This collection model enables municipalities to simultaneously reduce waste tonnage disposed and more equitably distribute the cost of disposal among residents.

The advantages of a utility-based payment model include:

- **Fairness.** Residents pay for only the amount of trash that they generate. Households generating less trash pay less than households that generate more.
- **Decrease in Trash Tons Disposed & Associated Cost Savings.** Utility pricing has been shown to decrease a community's residential trash tonnage disposed by 25 to 50 percent, significantly reducing solid waste disposal costs. In Newton, a 25-50% trash tonnage decrease would save between \$316,000 and \$631,000 annually based on FY23 pricing.

- **Increased Recycling, Composting, & Waste Reduction.** Utility-based programs encourage recycling, composting, and waste reduction through increased diversion to reuse, repair, and donation.
- **Improved Environmental Quality.** By diverting more trash from disposal, utility-based programs extend the life of landfills, decrease air pollution from trash incinerators, and reduce the need for new disposal facilities. As communities increase reuse, recycling, and composting, natural resources such as land, air, and water, are protected and preserved and greenhouse gas emissions are reduced.

Utility-based payment models are most effective when they cover the full municipal costs for the collection services that the municipality offers. An enterprise fund is used by some communities to manage utility-based waste collection system funding.

Utility-based payment collection programs have four pricing structure options which include proportional/linear (a flat rate per container), variable container (different rates for different sized containers), two-tiered (a flat fee typically charged on a quarterly or annual basis and a unit-based fee), and multi-tiered (a flat fee typically charged on a quarterly or annual basis and different rates for different sized containers).

With any new program, concerns arise that need to be considered before implementation, including:

- Some residents may perceive the unit-based pricing program as a new tax. To avoid this perception, many communities make their programs revenue-neutral by reducing the flat fee by the amount that unit-based fees are expected to generate. Many residents wind up paying less for trash disposal after a PAYT program is implemented since they can control their costs by throwing less away.
- Because unit-based pricing fees for trash service represent a higher percentage of a low-income family's income, steps may be taken to minimize the impact on these households. Just as electric, gas, and water utilities provide special rates for low-income users, a unit-based pricing program may also include lowered rates for residents who demonstrate hardship.
- While some officials have expressed a fear that residents may resort to illegal dumping in commercial or public waste bins in a unit-based system, studies of unit-based programs in Massachusetts and around the nation indicate that increased illegal dumping is not a problem in most communities.
- With any new program, additional staff time may be needed for planning and implementation. However, these costs are generally recovered through savings associated with reduced waste disposal.

A timeline for a phased-in approach, based on steps Natick took in 2003, to a utility-based model could be adapted by the proposed timeline below:

- 2025 – Educate public on the utility nature of waste collection services by communicating current program costs per household and holding public forums.
- 2026 – Implement a visible fee on water/sewer bills showing what each household currently pays for services (through funds that are allocated from the general fund).

Include a supplemental educational flyer explaining the line item, detailing the current waste collection system costs and advantages of a utility-based system. Send out educational letters to all residents informing them of the new program start date.

- c. 2027 – Begin quarterly or annual billing for trash and recycling services at a flat rate. Potential to add organics collection at a utility rate.
- d. 2028 – An option could be added to have a variable cart size and/or collection frequency. This provides residents with more choice and control over how much they want to pay for collection services. The challenge with this model is that it can be administratively burdensome, however, software exists to track and operationally manage all aspects of this model from billing to tracking cart serial numbers.
 - i. Goal would be to fund 75% of waste and recycling collection services and reduce trash by 5% each year for 5 years.
 - ii. Ex. Basic suite of services available for \$300/year includes one 35-gal trash cart with weekly service and a 64-gal recycling cart with weekly service. One resident could choose a 64-gal trash cart with weekly service for \$500*/year while another resident could opt to pay less for a 35-gal cart with alternate week service at a rate of \$175*/year.

*Actual rates would be determined per hauling contract and administrative costs.

C. Introduce variable cart sizing with an annual fee in 2025 to offset cost increases.

As previously mentioned, the City expects to incur significant cost increases in 2025 with the next hauling contract and again in 2028 with the disposal contract. A fee model and variable cart sizing could be considered as these new costs are incurred to offset these increases to the City's operating budget. Annual fees would include whole cost accounting of program cost increases, including administration of the program. From the outset this model prevents additional allocation of funds being needed to balance the operating budget. This model provides residents with choice over how much they pay for collection services.

A timeline to implement this approach could be adapted by the proposed timeline below:

- a. 2024 – Proposed pricing for curbside collection services is received and reviewed by the City. City officials award the contract to one or more service providers and the contract price is planned for the in the FY26 budget. Cost increases to residential collection services between FY25 and the subsequent 3 years would be determined. A fee would then be set for residential service to make up the cost differential. Two or more cart sizes could be offered at variable rates with the goal of the fees to cover the cost increase to the City. Larger cart sizes would have higher fees due to cover the costs of the increased trash generated.
- b. 2025 – As the new contract starts, the variable cart sizes would be distributed and a billing system established.
- c. 2027 – The City plans for the next trash disposal contract (current contract expires June 30, 2028). As new costs are determined with a vendor, the cost increase from the current contract will become known. Fees on variable cart sizes would be increased to account for the increase in trash tonnage disposal from the new contract.

3. Change the cart ownership model.

Under Newton's current program model, the City originally purchased the carts and owns the cart fleet. By ordinance, one trash cart and one recycling cart are issued to each eligible household. It is the City's expectation that the carts will be cleaned and cared for by residents. Since the City owns the carts, when there is damage to the cart through regular use, the City fixes the cart using parts it has procured, or replaces the cart at no cost.

Because the City owns the carts, the hauler does not have a financial incentive to prevent cart damage. As carts are damaged through general use or even if the carts are damaged by inappropriate handling of the carts by our hauler, which is difficult to prove, the City must pay for replacement carts if they cannot be repaired.

Newton has seen a high rate of unrepairable cart damage (i.e., cracked carts), averaging 5.6% of the cart fleet each year between 2014 and 2020. The carts from the original roll out in 2010 are now beyond the 10-year lifespan that is typical for collection carts. Although newer carts are covered under warranty, broken carts are almost never covered by the cart manufacturer. This is because the manufacturer has contested that the hauler is causing the damage. Meanwhile, the hauler states that the carts are not manufactured to specifications needed for weekly pickup. Newton has been left in the middle burdened with the costs of replacing numerous carts each year.

In the current hauling contract, language was included to attempt to remedy this situation. However, the cart damage has continued, and it is yet undetermined whether the contract language will protect the city as intended.

To create a fairer system, carts should be owned and maintained by the hauler. While the cost of the carts would be included within the collection contract, the vendor will be responsible for purchasing, repairing, and replacing carts. This model creates a financial incentive for carts to be kept in working order, thus creating less maintenance and replacement of carts overall, which should improve customer service for residents.

One example of a municipality that opted out of cart ownership is Maynard, MA. Maynard included the following contract language when they adopted recycling carts:

"The contractor shall supply to each household one (1) 96-gallon wheeled cart for use in the curbside collection of single stream recyclables. The contractor will continue to own the carts throughout the term of this contract and at the end of the contract. Throughout the term and any extension the Contractor shall, at the Contractor's sole cost and expense, maintain, repair or replace carts if necessary. Repairs that may be performed at the curbside shall be made within two weeks' notice to the Contractor. Delivery of new carts and swapping out damaged carts shall occur once a week on a day agreed upon by the City and the Contractor. The Contractor shall maintain an inventory of carts for distribution to new households and for replacement carts."

Moving Forward

Decisions must be made relatively quickly to determine the next steps with Newton's materials management system. The contract expiration dates in 2025 for hauling and recycling processing and 2028 for trash disposal may seem distant, however, planning for any of the aforementioned recommendations will take a substantial amount of time.

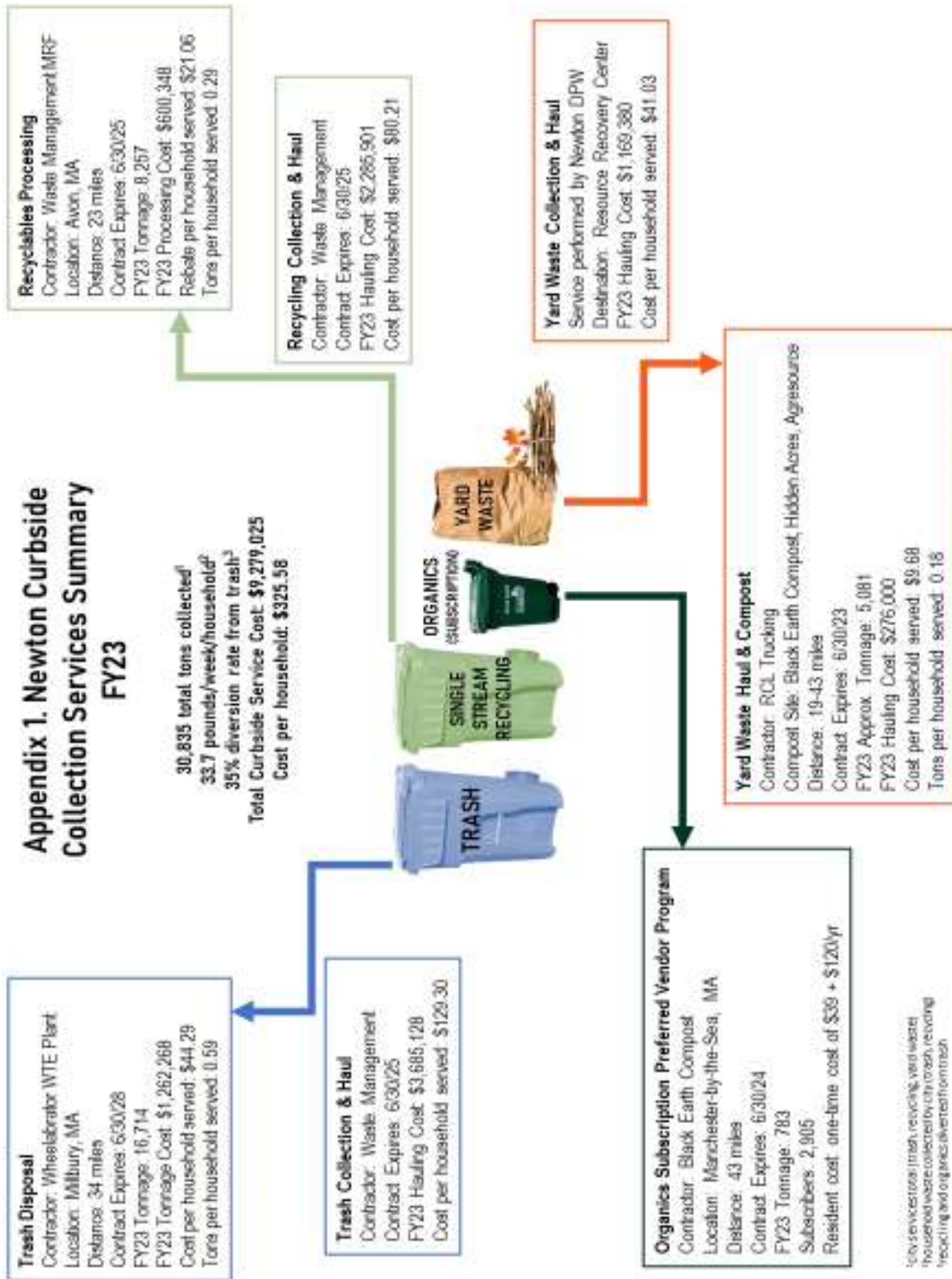
Decisions regarding any policy changes, such as a reduction in cart size, should include resident feedback. This can be done through surveys, community engagement sessions, and focus groups. Engaged stakeholder groups including the Sustainable Materials Management Commission, Green Newton, and others may be able to assist with education and engagement about any potential changes.

More broadly, community education sessions will offer an opportunity for residents to learn more about why it is imperative to reduce trash generation through increased waste diversion and waste reduction. At these sessions, residents can ask questions and offer feedback on recommended program changes.

References

1. [US EPA Sustainable Materials Management website: Managing and Transforming Waste Streams – A Tool for Communities](#)
2. MassDEP Solid Waste Master Plan
3. [MassDEP Best Practices for Municipalities Developing Private Hauler Regulations](#)
4. [MassDEP Pay-As-You-Throw \(PAYT\)/Save-Money-And-Reduce-Trash \(SMART\)](#)
5. [MassDEP Best Practices: A Checklist for Successful Recycling Procurements and Contracts for Curbside Recycling Services, October 2020](#)
6. [McKinsey Sustainability, “Starting at the source: Sustainability in supply chains,” 2016](#)
7. Newton Sustainable Materials Management Commission Setting the Path to Zero Waste report & presentation, November 2021
8. Center for Food Loss and Waste Solutions
9. City of Evanston, IL

Appendix 1: Newton Curbside Collection Services Summary FY23





Ruthanne Fuller
Mayor

City of Newton, Massachusetts

323-23

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(617) 796-1089

Email
rfuller@newtonma.gov

September 14, 2023

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

Honorable City Councilors:

I respectfully submit this docket item to your Honorable Council requesting that the Public Facilities Committee receive an update from the Public Buildings Department regarding the Countryside Elementary School Project at their October 18 meeting. He will also provide a brief status update on the Lincoln-Eliot, Franklin, and Horace Mann Elementary School Projects.

Attached is a memo from Public Buildings Commissioner Morse requesting the opportunity to provide this update.

Thank you for your consideration of this matter.

Sincerely,

Mayor Ruthanne Fuller

RECEIVED
2023 SEP 14 PM 1:37

CITY CLERK
NEWTON, MA. 02459



323-23

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

September 13, 2023

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

Re: Countryside Elementary School

Dear Mayor Fuller:

The Public Buildings Department would like to update Public Facilities on the Countryside School Project on October 18, 2023. Please see the project website page located at: <https://www.newtonma.gov/government/public-buildings/capital-projects-investing-now-for-newton-s-future/school-projects/countryside>

Sincerely,

Josh Morse
Public Buildings Commissioner

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

CITY COUNCIL

CITY OF NEWTON

DOCKET REQUEST FORM

DEADLINE NOTICE: Council Rules require items to be docketed with the Clerk of the Council NO LATER THAN 7:45 P.M. ON THE MONDAY PRIOR TO A FULL COUNCIL MEETING.

To: Clerk of the City Council

Date: September 18, 2023From (Docketer): Lara Kritzer, Community Preservation Program ManagerAddress: Planning Department, Newton City Hall, 1000 Commonwealth Avenue Newton MA 02459Phone: 617-796-1144E-mail: lkritzer@newtonma.govAdditional sponsors: Community Preservation Committee

1. Please docket the following item (it will be edited for length if necessary):

Recommendation from the Community Preservation Committee that the City Council authorize the treasurer to borrow an additional \$1,200,000 for a total of \$7,034,362, issuing any bonds or notes that may be necessary for that purpose, as authorized by General Laws Chapter 44B, Sect. 11, or any other general or special law, for a period of 30 years, with all proceeds to be the deposited in the Community Preservation Act fund established under the control of the Planning & Development Department to complete Phase III of the Gath Memorial Renovation Project, which includes all remaining design and construction work necessary to renovate and replace the existing facility according to the approved plans.

2. The purpose and intended outcome of this item is:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Fact-finding & discussion | <input type="checkbox"/> Ordinance change |
| <input checked="" type="checkbox"/> Appropriation, transfer, | <input type="checkbox"/> Resolution |
| <input checked="" type="checkbox"/> Expenditure, or bond authorization | <input type="checkbox"/> License or renewal |
| <input type="checkbox"/> Special permit, site plan approval, | <input type="checkbox"/> Appointment confirmation |
| <input type="checkbox"/> Zone change (public hearing required) | <input type="checkbox"/> Other: _____ |

3. I recommend that this item be assigned to the following committees:

- | | | |
|---|---|--|
| <input type="checkbox"/> Programs & Services | <input checked="" type="checkbox"/> Finance | <input type="checkbox"/> Real Property |
| <input type="checkbox"/> Zoning & Planning | <input type="checkbox"/> Public Safety | <input type="checkbox"/> Special Committee |
| <input checked="" type="checkbox"/> Public Facilities | <input type="checkbox"/> Land Use | <input type="checkbox"/> No Opinion |

4. This item should be taken up in committee:

- Immediately (Emergency only, please). Please state nature of emergency:

- As soon as possible, preferably within a month
- In due course, at discretion of Committee Chair
- When certain materials are made available, as noted in 7 & 8 on reverse
- Following public hearing

PLEASE FILL OUT BOTH SIDES

5. I estimate that consideration of this item will require approximately:

- | | |
|---|--|
| <input checked="" type="checkbox"/> One half hour or less | <input type="checkbox"/> Up to one hour |
| <input type="checkbox"/> More than one hour | <input type="checkbox"/> An entire meeting |
| <input type="checkbox"/> More than one meeting | <input type="checkbox"/> Extended deliberation by subcommittee |

6. The following people should be notified and asked to attend deliberations on this item. (Please check those with whom you have already discussed the issue, especially relevant Department Heads):

City personnel

Citizens (include telephone numbers/email please)

Lara Kritzer _____

Luis Perez Demorizi _____

Nicole Banks _____

Josh Morse _____

7. The following background materials and/or drafts should be obtained or prepared by the Clerk's office prior to scheduling this item for discussion:

8. I have or intend to provide additional materials and/or undertake the following research independently prior to scheduling the item for discussion. *

CPC Funding Recommendation, the Gath Pool Amendment Funding

*(*Note to docketer: Please provide any additional materials beyond the foregoing to the Clerk's office by 2 p.m. on Friday before the upcoming Committee meeting when the item is scheduled to be discussed so that Councilors have a chance to review all relevant materials before a scheduled discussion.)*

Please check the following:

9. I would like to discuss this item with the Chairman before any decision is made on how and when to proceed.
10. I would like the Clerk's office to contact me to confirm that this item has been docketed. My daytime phone number is:
11. I would like the Clerk's office to notify me when the Chairman has scheduled the item for discussion.

Thank you.

Lara Kritzer

 Signature of person docketing the item

[Please retain a copy for your own records]



Ruthanne Fuller
Mayor

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Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

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Barney S. Heath
Director

Community Preservation Committee Funding Recommendation for Gath Memorial Pool Funding Amendment

Date: September 15, 2023
From: Community Preservation Committee
To: The Honorable City Council
CC: Her Honor Mayor Ruthanne Fuller

PROJECT GOALS & ELIGIBILITY

This proposal requests additional CPA Recreation Funding to complete the construction work necessary to renovate and replace the existing Gath Memorial Pool Facility. At nearly 60 years of age, the Gath Memorial Pool's equipment, systems, and infrastructure have reached the end of their useful life. CPA funding was used in 2021 to hire consultants Bargmann Hendrie + Archetype, Inc. (BH+A) to complete an initial feasibility study which looked at the existing conditions and needs for the facility and developed preliminary plans for its renovation and restoration. Additional CPA funds awarded in 2022 allowed the City to continue its work with BH+A to develop "shovel ready" new designs which met the community's needs and goals as well as the bid documents needed to begin construction. In June, City Council voted to approve fully funding the construction phase of the project through a 30 year bond. The project has since been sent out to bid and received a single qualified contractor bid which is higher than originally anticipated. This amendment will provide additional construction and contingency funding to allow the Parks, Recreation, and Culture Department to move forward with the reconstruction of the facility to include two new swimming pools and their associated decks, mechanical and support equipment, a new spray deck, and a renovated and redesigned bathhouse for improved accessibility and useability.

The project is eligible for CPA funding for the preservation, rehabilitation and restoration of a city-wide Recreation resource.

RECOMMENDED FUNDING At its monthly meeting on Tuesday, September 12, the Community Preservation Committee unanimously recommended, with a vote of 7 to 0, to increase the prior debt authorization (30 years) for the Gath Memorial Renovation Project by \$1,200,000 for a total of \$7,034,362 in Community Preservation Act funding to be used to complete the construction work necessary to renovate and replace the existing swimming pool facility according to the approved plans. The CPC continues to recommend that the bond be issued for 30 years and that its future payments be taken from the Current Year Undesignated Fund.

www.newtonma.gov/cpa

Lara Kritzer, Community Preservation Program Manager
lkritzer@newtonma.gov 617.796.1144

SPECIAL ISSUES CONSIDERED BY THE CPC

Community Needs: This amendment will allow the applicants to complete the final step in the ongoing Recreation project to replace, restore and improve the existing 60 year old Gath Memorial Pool Complex. The CPC has received numerous letters of support from organizations and individuals who regularly use Newton's only public swimming pool facility, which the Parks, Recreation and Culture Department estimates serves 30,000 Newton residents each summer, at each phase of this project. The Phase I feasibility study highlighted the critical need for this project as the facility's systems and features are now well beyond their useful life, while Phase II developed the recently approved plans to replace and rehabilitate the facility with input from the community. The current proposal will provide the additional funding needed to complete the construction of the new and improved facility which will include two new pools, a new spray deck, accessibility improvements and a rehabilitated bathhouse.

This project has been included in the City of Newton's Capital Improvement Plan (CIP) for several years. In 2021, the City recognized the increased urgency of the work needed and listed it as Priority #44 in the FY22-26 CIP. The project is also noted on Page 11, "Protecting Woods and open Spaces and Caring for our Parks and Recreational Spaces," both for its increased priority and the work then underway to complete a study of its needs and options for the future.

The Open Space and Recreation Plan Update for 2020-2027 mentioned the "Possible Aquatic Project" in Goal 2, Objective 2B, #25 which includes "Replacing the pool, kiddie pool, and bath house" (<https://www.newtonma.gov/Home/ShowDocument?id=47207>, Section 9, Pages 151-152). The current proposal also notes that this project meets additional goals in Section 8 of the OSRP including the following:

- Section 8, Page 141, Goal 2, Objective 2B: Improve City Parks, Playgrounds and other Recreational Facilities.
- Section 8, Page 141, Goal 3, Objective 3A: Increased accessibility in the City's Park land.
- Section 8, Page 142, Goal 4, Objective 4A: Improved existing open space resources where need is greatest.

Funding Uses and Sources: CPA funding will be used to cover additional construction and contingency costs associated with the new aquatic facility. Phase I and II project consultants Bargmann Hendrie + Archetype, Inc. (BH+A) will continue to work with the City during this phase to oversee the construction administration and bidding process. While a portion of the CPA funding will be used to cover BH+A, the majority is being used to hire the contractor and complete the actual construction. The City plans has already completed the bidding process and plans to begin work in Fall 2023. The CPA construction funds will be matched by a Commonwealth of Massachusetts Earmark and City of Newton ARPA funds, both of which will go towards the construction costs of the project, and City staff time for project management and oversight.

Project Finances: This request provides additional funding for the third and final step in the process of replacing and renovating the Gath Memorial Pool Facility to ensure that it will continue to be a resource for Newton residents in the future. The CPC anticipates that this will be the final request for funds for Gath Pool and that this request will be sufficient to complete the overall project.

Accessibility: The existing pool facility has a number of accessibility challenges which were identified in the feasibility study and addressed in the approved plans. Both the pool deck and bathhouse will have new accessible designs with new ramps installed for access, as will both pools. The new spray deck is also proposed to be universally accessible and available for use at times when the pool itself cannot be open.

ADDITIONAL RECOMMENDATIONS (*funding conditions*)

1. CPA funding is limited to the hiring of a consultant to oversee the construction administration and a construction firm to complete the physical work involved in the Gath Memorial Pool Renovation Project.
2. The funding must be used within one year of the City Council's approval of this recommendation. If this funding deadline cannot be met, the Applicants must submit a written request to extend that deadline to the CPC.
3. Any periodic reports or interim deliverables prepared as part of this project, and any City or State reviews of those deliverables, must be shared with the CPC for online posting.
4. A copy of the final plans from the consultants must be submitted to the CPC for posting online.
5. Any remaining CPA funds at the completion of construction on the Gath Memorial Pool Facilities will be returned to the Newton Community Preservation Fund.

KEY OUTCOMES

The Community Preservation Committee will evaluate this project based on its success in completing the construction of the new Gath Memorial Pool Facility according to the approved plans, on time and on budget.

ATTACHMENTS

- August 18, 2023 Proposal and selected attachments submitted to the CPC for the September 12, 2023 public hearing

Additional information not attached to this recommendation, including petitions and letters of support, are available on the CPC's website at:

<https://www.newtonma.gov/government/planning/community-preservation-program/proposals-projects/gath-memorial-pool-renovation-project>



**Newton, Massachusetts Community Preservation Program
FUNDING REQUEST**

(For staff use)
date rec'd:

PRE-PROPOSAL

PROPOSAL

Last updated October 2020.

Please submit this completed file directly – do not convert to PDF or other formats.

For full instructions, see www.newtonma.gov/cpa or contact:

Lara Kritzer, Community Preservation Program Manager

City of Newton Planning & Development Department, 1000 Commonwealth Ave., Newton, MA 02459

lkritzer@newtonma.gov

617.796.1144

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.

Project TITLE	GATH POOL PROJECT FUNDING AMENDMENT															
Project LOCATION	256 Albemarle Road, Newtonville MA 02460															
Project CONTACTS	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Name & title or organization</th> <th style="width: 25%;">Email</th> <th style="width: 20%;">Phone</th> <th style="width: 20%;">Mailing address</th> </tr> </thead> <tbody> <tr> <td>Project Manager Luis Perez Demorizi, Open Space Coordinator Parks, Recreation & Culture/ Rafik Ayoub, Project Manager, Public Buildings Department</td> <td>lpdemorizi@newtonma.gov rayoub@newtonma.gov</td> <td>617-769-1500 617-796-1621</td> <td>246 Dudley Road, Newton MA, 02459/52 Elliot Street, Newton, 02461</td> </tr> <tr> <td>Other Contacts Nicole Banks, Commissioner Parks, Recreation & Culture/ Josh Morse, Commissioner Public Buildings</td> <td>nbanks@newtonma.gov jmorse@newtonma.gov</td> <td>617-796-1500 617-796-1608</td> <td>246 Dudley Road, Newton MA, 02459/ 52 Elliot Street, Newton, 02461</td> </tr> </tbody> </table>				Name & title or organization	Email	Phone	Mailing address	Project Manager Luis Perez Demorizi, Open Space Coordinator Parks, Recreation & Culture/ Rafik Ayoub, Project Manager, Public Buildings Department	lpdemorizi@newtonma.gov rayoub@newtonma.gov	617-769-1500 617-796-1621	246 Dudley Road, Newton MA, 02459/52 Elliot Street, Newton, 02461	Other Contacts Nicole Banks, Commissioner Parks, Recreation & Culture/ Josh Morse, Commissioner Public Buildings	nbanks@newtonma.gov jmorse@newtonma.gov	617-796-1500 617-796-1608	246 Dudley Road, Newton MA, 02459/ 52 Elliot Street, Newton, 02461
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Project FUNDING	A. CPA funds requested: (Additional amount requested is \$1,500,000) \$5,834,362.00– Previously funded Construction Phase – Total Amended CPA funding \$7,334,362	B. Other funds to be used: \$ 1,439,200.00 – Approximate cost of staff time, state earmark funds and ARPA funding. (Same as previous funding application)	C. Total project cost (A+B): \$8,773,562.00													
Project SUMMARY	Explain how the project will use the requested CPA funds. You may provide more detail in attachments, but your PROJECT SUMMARY MUST FIT IN THE SPACE BELOW. Use a cover letter for general information about the sponsoring organization’s accomplishments.															

The Gath Pool is situated within the Russell J. Halloran Sports and Recreation Complex, a.k.a. Albemarle Playground (Currently under Improvements Design Phase through separate CPA design funding). The property is owned and operated by the City of Newton under the care and control of the Parks, Recreation & Culture Department.

Gath Pool is the sole public outdoor swimming pool for Newton's +85,000 residents. The pool also serves many non-resident guests. It welcomes 30,000 users per season. Newton Parks, Recreation & Culture (PRC) has managed Gath Memorial Pool since it was constructed nearly 60 years ago. During summers, the pool is used daily, hosting swim lessons, summer camps, recreational and lap swimming, Special Athletes programs, senior programs and the City's coed Bluefish Swim Team made up of 200 members ages 5-18. Gath Pool also hosts the annual Summer Suburban Swim League regional championships with teams from 12 nearby communities and over 5,000+ visitors.

Neither the pools nor the bathhouse meet current ADA or MAAB accessibility guidelines; the 60-year old pools, deck, systems and equipment are past end-of-life; the pool leaks significantly; the decks are tripping hazards, marred by cracks, drains and other infrastructure; there is a need for more lap lanes.

Over the span of the past 16 months (September 2021 thru January 2023), the Parks, Recreation and Culture Department (PRC), in concert with the Public Buildings Department (PB) and with support of the consultant Bargmann Hendrie + Archetype, Inc. (BH+A) herein referred to as "The Team" has managed a series of Community and focus group meetings so seek input from a number of stake holders including, the Friends of Albemarle, Newton Bluefish, Commission on Disability, Conservation Commission, and the Parks and Recreation Commission, Athletes Unlimited, along with members of groups representing the LGBTQ+ and 55+ community and with much input from Newton Residents as a whole to help steer the direction of the pool improvements. The pool complex evaluation and improvements plan have been funded, to date, utilizing CPA funds for Design Phases 1 and 2.

As a result of continuing to work through the design phases covered by the Community Preservation Act funds, the team has advanced the pool design and cost estimate for construction. The design funds from phase 2 have also allowed the team to get additional input from the Design Review Committee, additional approval by the Parks and Recreation Commission for design changes (December 2022). The changes to the pool design include modifications to separate the pool originally designed into 2 bodies of water in order to meet the needs, demands and expectations of the community, along with improved management of the pool complex. Additionally, the team has been able to refine the designs, providing additional details, critical to the construction of the new pool and incorporate modifications to the existing bath house to ensure accessibility and better flow of both patrons and staff.

The application for funding herein is a request for construction phase funds **to be amended because of recent bid received for the project on August 10th, 2023. The project received one bidder on the project, Construction Dynamics. They are a solid general contractor with ample public pool construction experience. There were two other interested general contractors, but one was too busy putting a bid together for another large-scale project, and the other not only could not bid due to some subcontractor issues, but they are the only general contractor the city has had to pursue legal action against due to extremely poor construction and subsequent building system failures.**

Currently, the city is at a point of needing to reengage with the CPC for supplemental funding to cover the gap in available construction funds. The city is currently working on executing the contract with the General contractor to ensure construction schedules remain as close to projected as possible so the new pool can be opened by next summer.

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.

Project TITLE	GATH POOL PROJECT FUNDING AMENDMENT		
USE of CPA FUNDS	RECREATION		
	Preservation		X
	Rehabilitate/ Restore		X
COMMUNITY NEEDS	From each of at least 2 plans linked to the Guidelines & Forms page of www.newtonma.gov/cpa , provide a brief quote with plan title, year, and page number, showing how this project meets previously recognized community needs. You may also list other community benefits not mentioned in any plan.		
<p><u>Open Space and Recreation Plan Update 2020-2027</u></p> <ul style="list-style-type: none"> Section 8, Page 141 Goal 2 Objective 2B: Improved City parks, playgrounds, and other recreational facilities. Section 8, Page 141 Goal 3 Objective 3A: Increased accessibility in the City’s Park land. Section 8, Page 142 Goal 4 Objective 4A: Improved existing open space resources where need is greatest. Section 9, Pages 145-146 Goal 2 Objective 2A #25: Gath Pool: Develop feasibility study and implement an improvement plan that addresses: Replacing the pool, kiddie pool, and bath house <p><u>Capital Improvement Plan FY2022-2026</u></p> <ul style="list-style-type: none"> Page 11, <i>Protecting Woods and Open Spaces & Caring for our Parks and Recreational Spaces</i> – “...The need to renovate or replace the Gath Pool has been raised in priority in this CIP. A study will be conducted this year to analyze the maintenance needs and provide possible options for more substantial renovations...” CIP by Priority FY 2022-2026, Priority 44: “Gath Memorial Pool has served Newton residents for over 50 years. Though the building was recently renovated in 2013, the swimming pool and all attendant components (i.e. pump, filter, piping, decking, electrical, and chemical feeder) require complete renovation and replacement work to ensure continued enjoyment by the community.” “A renovation plan is needed to determine the cost to upgrade systems and restore the pool shell to stop water loss through leaks.” 			
COMMUNITY CONTACTS	List at least 3 Newton residents or organizations willing and able to comment on the project and its manager’s qualifications. No more than 1 should be a supervisor, employee or current work colleague of the project manager or sponsor. Consult staff on the community contacts required for your specific proposal.		
Name & title or organization	Email	Phone	Mailing address
Arthur Magni, Chairman Parks & Recreation Commission	magni@rcn.com		
Cedar Pruitt, President Friends of Albemarle	friendsofalbemarle@gmail.com cpruitt@gmail.com		
Sean Nickerson	snickerson@newtonma.gov		

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.
 Full proposals must include separate, detailed budgets in addition to this page.

Project TITLE	GATH POOL PROJECT FUNDING AMENDMENT	
SUMMARY CAPITAL/DEVELOPMENT BUDGET		
Uses of Funds		
Phase II: Design Consultant Contract Amendment – Construction Administration.		\$96,000.00
Construction Phase: Building Construction		\$1,074,031.00
Construction Phase: Site and Pool Construction		\$6,064,331.00
Approximate staff time for the duration of Phase II Design @ 20/hrs per week for 10 months (49,00/HR)		\$39,200.00
Additional funding needs based on BIDS, FF&E, and supplemental contingency		\$1,500,00.00
D. TOTAL USES (should equal C. on page 1 and E. below)		\$8,773,562.00
Sources of Funds	Status <small>(requested, expected, confirmed)</small>	
Commonwealth of Massachusetts State Earmark	Confirmed	\$400,000.00
City of Newton ARPA funds	Confirmed	\$1,000,000.00
CPA funds	Confirmed	\$5,834,362.00
Approximate staff time for the duration of project	Confirmed	\$39,200.00
CPA funds	Requested	1,500,000.00
E. TOTAL SOURCES (should equal C. on page 1 and D. above)		\$8,773,562.00
SUMMARY ANNUAL OPERATIONS & MAINTENANCE BUDGET (cannot use CPA funds)		
Uses of Funds		
Approximate Staff Payroll		\$141,316.00
Pool testing supplies		\$500.00
Pool treatment materials (chlorine, Carbon Dioxide, Calcium Chloride and Sodium bicarbonate)		\$17,520.00
Pool water – Includes filling, backwashes & leak		\$140,000.00
Staff Uniforms		\$500.00
F. TOTAL ANNUAL COST (should equal G. below)		\$284,068.00
Sources of Funds		
Revolving Fund Account (Part-time and seasonal staff only)		\$70,316.00
Operating budget (Aquatics manager salary and supplies)		\$159,520.00
G. TOTAL ANNUAL FUNDING (should equal F. above)		\$284,068.00
Project TIMELINE	Phase or Task	Season & Year
Bidding		April-May 2023
Construction Phase		August-September 2023 – May 2024
Construction Phase Duration		10 Months

Project TITLE		GATH POOL PROJECT FUNDING AMENDMENT	
↓ Check off submitted attachments here.			
REQUIRED.		PHOTOS	of existing site or resource conditions (2-3 photos may be enough)
		MAP	of site in relation to nearest major roads (omit if project has no site)
Pre-proposals: separate attachments not required, just use page 3 of form. Full proposals: separate, detailed budget attachments REQUIRED.	PROJECT FINANCES printed and as computer spreadsheets, with both uses & sources of funds		
		Development budget: include total cost, hard vs. soft costs and contingencies, and project management – amount and cost of time from contractors or staff (in-kind contributions by existing staff must also be costed) Operating/maintenance budget, projected separately for each of the next 10 years (CPA funds may not be used for operations or maintenance)	
		Non-CPA funding: commitment letters, letters of inquiry to other funders, fundraising plans, etc., including both cash and est. dollar value of in-kind contributions	
		Purchasing of goods & services: briefly summarize sponsor’s understanding of applicable state statutes and City policies	
REQUIRED for all full proposals.	SPONSOR FINANCES & QUALIFICATIONS, INSTITUTIONAL SUPPORT		
		For sponsoring department or organization, most recent annual operating budget (revenue & expenses) & financial statement (assets & liabilities); each must include both public (City) and private resources (“friends” organizations, fundraising, etc.)	
		For project manager: relevant training & track record of managing similar projects	
REQUIRED for all full proposals involving City govt., incl. land acquisition.		CAPITAL IMPROVEMENT PLAN	current listing/ranking & risk factors for this project
		COVER LETTER	from head of City department, board or commission confirming: current custody, or willingness to accept custody, of the resource and commitment of staff time for project management
	ZONING & PERMITTING		
		Permits required: including building permits, environmental permitting, parking waivers, demolition, comprehensive permit, or special permits (if applicable)	
		Other approvals required: Newton Conservation Commission, Newton Historical Commission, Newton Commission on Disabilities, Parks and Recreation Commission, Massachusetts Historical Commission, Massachusetts Architectural Access Board, etc.	
	DESIGN & CONSTRUCTION		
		Professional design & cost estimates: include site plans, landscape plans, etc.	
	Materials & finishes; highlight “green” or sustainable features & materials		
OPTIONAL for all proposals.		LETTERS of SUPPORT	from Newton residents, organizations, or businesses



CITY OF NEWTON, MASSACHUSETTS

PUBLIC BUILDINGS DEPARTMENT52 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

October 3rd, 2023

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

Re: Gath Pool

Dear Mayor Fuller:

The Public Buildings Department requests \$300,000; the balance of the funds needed to fully complete the Phase III Gath Memorial Pool Renovation, including the FF&E and contingency.

Sincerely,

Josh Morse
Public Buildings Commissioner

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



City of Newton, Massachusetts

RECEIVED

Office of the Mayor

2023 OCT 11 PM 3:58

RUTHANNE FULLER

MAYOR

CITY CLERK
NEWTON, MA. 02459

334-23

Telephone
(617) 796-1100

Telefax
(617) 796-1113

TDD
(617) 796-1089

E-mail
rfuller@newtonma.gov

October 10, 2023

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

Councilors:

I respectfully ask for authorization to transfer three-hundred thousand dollars (\$300,000) from Acct# 0110498-579400 – Reserve Funds-Budget Reserve, to complete the Phase III Gath Memorial Pool Renovation, including the FF&E and contingency.

The Commissioner of Public Buildings, Josh Morse, will be available to answer any questions you might have.

Thank you for your consideration of this matter.

Sincerely,

Ruthanne Fuller
Mayor

Gath Memorial Pool, Furniture, Fixtures & Equipment.

Name	Unit Price	Quantity in Stock	Inventory Value	Description	Supplier
5-ft Lifeguard Chair	\$1,849.67	6	#####	Astral Portable Lifeguard Chair 72 Inches	Poolweb
Blue Lifeguard Umbrella	\$218.03	6	\$1,308.18	Lifeguard Umbrella, 6.5' Acrylic, Blue	Rec Supply
Pool Wheelchair	\$1,091.95	1	\$1,091.95	Aqua Creek Pool Access Chair 18 in, Mesh Seat	Rec Supply
Patio Clock	\$44.46	2	\$88.92	18" Patio Clock	Rec Supply
Rescue Blanket	\$18.88	2	\$37.76	Wool Blend Rescue Blanket - 60 x 84 Inches	PoolWeb
Shepard's Crook pole	\$141.50	1	\$141.50	Aluminum Handle, 16 ft	Rec Supply
Shepard's Crook Hook	\$42.36	1	\$42.36	Rainbow #153 Pool Safety Hook	Rec Supply
Ring Buoys	\$198.49	2	\$396.98	USCG Solid Foam 24 Inch Life Ring Buoy - Orange	Poolweb
Spine Board	\$495.25	2	\$990.50	CJ6 Spineboard Flow-Thru System	Rec Supply
Eyewash station	\$102.56	1	\$102.56	Double Eyewash Wall Station - Two 32 Oz. Bottles	Poolweb
Thermometer	\$21.07	2	\$42.14	E-Z Read Combo Sink/Float Thermometer	Poolweb
Pool Brush	\$24.34	2	\$48.68	White Poly Curved Aluminum Backed Wall Brush - 18 Inch	Poolweb
Hand Skimmer	\$47.99	2	\$95.98	Heavy Duty Commercial Leaf Skimmer	Rec Supply
Telescopic Vacuum Pole	\$392.92	1	\$392.92	9.25 to 31 Foot Super Duty Series 5432 Ultra Long Telescopic Pole	Poolweb
Tow Vacuum Head	\$193.69	1	\$193.69	Rainbow #229 Pro Vac Commercial Vacuum Head, 29"	Rec Supply
Vacuum Hose	\$315.35	2	\$630.70	Commercial Vacuum Hose 2" x 75'	Rec Supply
Vaccum Cart	\$2,972.46	1	\$2,972.46	UltraVac Portable Filtration Cart, 1 HP, Dual Stage	Rec Supply
Site Benches	\$2,000.00	20	#####	DuMor Bench 163	M.E. Obrien
Steel Office Desk	\$858.82	3	\$2,576.46	Alera Double Pedestal Steel Desk (Cherry/Putty)	WBMASON
Mesh Swivel Office Chair	\$257.07	3	\$771.21	id-Back Black Mesh Swivel Ergonomic Task Office Chair With Flip-Up Arms	WB MASON
Conference Desk	\$1,263.43	1	\$1,263.43	Safco Mirella Conference Table (Sand Dune)	WB MASON
Trash receptacles Restrooms	\$59.97	5	\$299.85	Untouchable 23 Gal. Vented Trash Can with Lid	Home Depot
Misc. items	#####	1	#####	Miscellaneous Items and supplies	
TOTAL FF&E BUDGET #####					
SAY #####					

			Funding					Total	
			58D11409	58D60213	58D60214	AR602-AR60208C	31882023 CPC	TBD/DOCKET REQUEST	
FF&E	\$75,000	0.8%						75,000.00	75,000.00
Soft Cost Contingency	\$48,462	0.5%		48,462.00					48,462.00
Designer	\$519,000	5.6%	59,000.00		460,000.00				519,000.00
Environmental / Site Testing	\$30,000	0.3%		30,000.00				-	30,000.00
Construction	\$8,188,000	88.2%		408,038.00	5,374,362.00	1,000,000.00	400,000.00	1,005,600.00	8,188,000.00
Construction Contingency	\$419,400	4.5%						194,400.00	419,400.00
TOTAL	\$9,279,862	99.5%	59,000.00	486,500.00	5,834,362.00	1,000,000.00	400,000.00	1,200,000.00	9,279,862.00