



Public Facilities Committee Agenda

City of Newton In City Council

Wednesday, November 17, 2021

The Public Facilities Committee will hold this meeting as a virtual meeting on Wednesday, November 17, 2021 at 7:00 pm. To view this meeting using Zoom use this link: <https://us02web.zoom.us/j/89566472141> or call 1-646-558-8656 and use the following Meeting ID: 895 6647 2141

Item Scheduled for Discussion:

Public Hearing

#416-21 Petition for Grant of Location in Wells Ave

ROSCITI CONSTRUCTION COMPANY/CROWN CASTLE petitioning for a grant of location to install 267' \pm of 1.5" pcv pipe for telecommunications from the handhold on the northeast side of Wells Avenue to a proposed handhold in front of #145 Wells Avenue then running easterly to the building at #145 Wells Avenue. (Ward 8)

Public Hearing

#415-21 Request for a grant of location in Commonwealth Ave, Mary Ellen and Evelyn Rd

NATIONAL GRID petition for a grant of location to install and maintain gas main in Commonwealth Ave, Mary Ellen Road and Evelyn Road as follows:

- 830' \pm of 8" plastic main in Commonwealth Avenue from the existing 12" cast iron main at #1324 Commonwealth Avenue to the intersection of Fuller Street and Evelyn Road to replace 60' \pm of 12" cast iron and , 425' \pm of 8", cast iron
- 1760' \pm of 8" plastic main in Evelyn Road from the intersection of Commonwealth Avenue and Fuller St to replace 1135' \pm of 6" bare steel main and 625' \pm 4" bare steel main
- 1395' \pm 4" plastic main in Mary Ellen Road from #119 Evelyn Road to #175 Evelyn Road to replace 1395' \pm of 4" bare steel main (Wards 3 & 5)

Chair's Note: *The Committee will receive an update from the Department of Public Works on the MS4 requirements.*

Respectfully submitted,

Alison M. Leary, Chair

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.

RECEIVED
Newton City Clerk

**CITY OF NEWTON
MASSACHUSETTS**

2021 NOV -8 AM 10: 21

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 : Rosciti Construction Company, LLC.

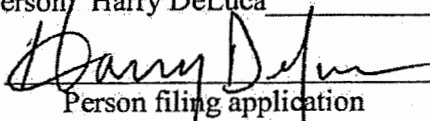
Address: 123 King Philip Street, Johnston, RI 02919

Phone Number : (401) 480-5016 _____

Fax Number (401) 351-7777 _____

Contact Person/ Harry DeLuca _____

Title : Project Coordinator

Signature 
Person filing application

Date 11/8/21

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

II. DESCRIPTION OF PROJECT: to be completed by petitioner

A. 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.

Installing 1.50" telecommunications from HH on NE side of Wells Avenue, running approx. 267' to a proposed HH installation on same side of Wells Avenue. Then coming out from proposed HH running dir. Easterly to bldg. #145 Wells Avenue. Majority of work to be performed behind curb with the exception of working around handicap ramps straddling around (1) driveway then coming back behind the curb.

B. Include or attach a sketch to provide a visual description of the project. If plans are attached, provide:
 Title of Plan: Proposed Conduit Installation_ 145 Wells Avenue, Newton
 Date of plan: 08/2021 PE Stamped

III. PUBLIC WORKS DEPARTMENT REVIEW

Date received by Public Works Department November 8, 2021

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:

This is a revised alignment of the previously submitted GOL application. Once approved by the Council the contractor of record shall obtain a Sidewalk Crossing and Trench Permits from DPW prior to installation. Pedestrian access shall be accommodated for the duration per DPW standards. All restoration shall be to current standards. Upon completion an as built plan shall submitted to Engineering in a PDF format.

John Daghljan, Associate City Engineer
November 8, 2021

V. RECOMMENDATION TO PUBLIC FACILITIES COMMITTEE:

Shawna Sullivan

Digitally signed by Shawna Sullivan
 Date: 2021.11.08 11:31:57 -05'00'

Commissioner, Public Works

Date



PROPOSED CONDUIT INSTALLATION

**AT
145 WELLS AVE
IN
NEWTON, MA**

INDEX OF DRAWING

SHT NO.	DESCRIPTION
01	PROPOSED PLAN

PREPARED BY:
FAYNET
ENGINEERING GROUP

Final Label Report

SBL	Owner	Number	Street	Unit
84034A0006	WILLOWBEND-ONE TWENTY WELLS AVE LLC	120	WELLS AVE	
84034 0002R	SOLOMON SCHECHTER DAY SCHOOL	125	WELLS AVE	
84034 0002E	G&Z RE INVESTMENT LLC	135	WELLS AVE	
84034 0002G	ESP INVESTMENTS LLC	145	WELLS AVE	
84034A0005	SRIMAN LLC	150	WELLS AVE	
84034A0005A	154 WELLS AVENUE LLC	154	WELLS AVE	
84034 0002H	SLD WELLS LLC	159	WELLS AVE	
84034A0004	HOSPICE OF GOOD SHEPHERD	160	WELLS AVE	
84034A0003	180 WELLS REALTY LLC	180	WELLS AVE	

CITY OF NEWTON
MASSACHUSETTS

RECEIVED

PETITION for GRANT OF LOCATION AM 11: 05

To the Petitioner:

CITY CLERK
NEWTON, MA. 02459

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.

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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
Address 201 Rivermoor Street
West Roxbury, MA 02132

Phone Number 617-894-3896 Fax Number _____
Contact Person Mary Mulrone Title Permit Representative

Signature *Mary Mulrone* Date October 15, 2021
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

A. 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.

Nationalgrid Integrity Management recommends the relay of: approximately 60 feet of 12- inch, cast iron (1923) and approximately 425 feet of 8- inch cast iron (1918) with approximately 830 feet of 8- inch plastic in Commonwealth Av from the existing 12- inch cast iron at #1324 Commonwealth Av to the intersection of Fuller St and Evelyn Rd,
 Relay approximately 1135 feet of 6- inch, bare steel (1950) and approximately 625 feet of 4- inch bare steel (1950/1937) with approximately 1760 feet of 8- inch plastic in Evelyn Rd from the intersection of Commonwealth Av and Fuller St, and relay approximately 1395 feet of 4- inch bare steel (1950/1951) with approximately 1395 feet of 4- inch plastic in Mary Ellen Rd from #119 Evelyn Rd to #175 Evelyn Rd.

B. 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 October 25, 2021

Check One:

Minor Project Major Project Lateral

(Refer to City Engineer Standard Requirements for Plans for definition of minor and major project)

Plans Submitted:

Certified Plot Plan Stamped Plans

DATE AND COMMENTS:

RECOMMENDATIONS:

See attached memo.	

V. RECOMMENDATION TO PUBLIC FACILITIES COMMITTEE:

Shawna Sullivan Digitally signed by Shawna Sullivan
Date: 2021.11.02 16:15:49 -04'00'

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:

Nationalgrid Integrity Management recommends the relay of: approximately 60 feet of 12- inch, cast iron (1923) and approximately 425 feet of 8- inch cast iron (1918) with approximately 830 feet of 8- inch plastic in Commonwealth Av from the existing 12- inch cast iron at #1324 Commonwealth Av to the intersection of Fuller St and Evelyn Rd, Relay approximately 1135 feet of 6- inch, bare steel (1950) and approximately 625 feet of 4- inch bare steel (1950/1937) with approximately 1760 feet of 8- inch plastic in Evelyn Rd from the intersection of Commonwealth Av and Fuller St, and relay approximately 1395 feet of 4- inch bare steel (1950/1951) with approximately 1395 feet of 4- inch plastic in Mary Ellen Rd from #119 Evelyn Rd to #175 Evelyn Rd.

Date: October 12, 2021

By: *Mary Mulrone*
Mary Mulrone
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 **October 12, 2021** 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____.

By: _____

Title

CITY OF NEWTON
Department of Public Works
ENGINEERING DIVISION

Memorandum

To: Councilor Alison Leary, Facilities Committee Chair.

From: John Daghlian, Associate City Engineer

Re: National Grid Gas Main Replacement Commonwealth Ave. Mary Ellen & Evelyn Rd

Date: November 2, 2021

CC: Jim Mcgonagle, Commissioner
Shawna Sullivan, Chief of Staff
Lou Taverna, PE City Engineer
Ted Jerdee, Director of Utilities
Doug Valovcin, Deputy Director
Cassidy Flynn, Committee Clerk

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

National Grid
Approx. 2,590'/1,395' of 8"/4" MDPE (LP to 22 psig) Gas Main Relay
5-107 Mary Ellen Road, Evelyn Rd. & Commonwealth Ave.
Newton, MA
W.O. No.: 1409992
Prepared by: BL Companies
Dated: 8/24/2021
Revised: 9/6/2021

Executive Summary:

This application entails the replacement of existing 4-inch diameter LP (low pressure) gas with 22 psig (medium pressure) gas main. Currently Mary Ellen Road & Evelyn Road both have 4" low pressure bare steel pipe dating back to 1952 & 1937 respectively that will be converted to 8" MDPE (medium density polyethylene) pipe. Commonwealth Avenue in this portion between # 1230 Commonwealth Avenue and Fuller Street has 8" \emptyset cast iron main dating to 1918; this main will also be replaced with 8" MDPE pipe. All the service connection to each home will have appropriate service regulators installed prior to transferring over from low pressure to the 22-psig

system, this is a critical step in the process that NGrid quality control teams need to verify prior to any final conversion.

A traffic mitigation plan is needed prior to construction, that plan should be submitted to the Traffic Division and Newton Police for review and approval.

Street Opening Permit:

1. Finalized utility connection plan reflecting the above changes that meets the minimal design standards of the City of Newton must be submitted for approval by the contractor of record with appropriate Bonds & Insurance. The Engineering Division makes no representations and assumes no responsibility for the design(s) in terms of suitability for the particular site conditions or of the functionality or performance of any items constructed in accordance with the design(s). The City of Newton assumes no liabilities for design assumption, error or omissions by the Engineer of Record.
2. All trenches within the roadway shall be milled 1-1/2" deep and overlaid with Type I-1 HMA. The limits will be determined in the field by the City Inspector.
3. If any municipal utilities service connections are disturbed by the contractor of record during construction, they shall be updated and replaced to the City's current Construction Standards.
4. All catch basins within the work zone & downstream (limits to be determined) by City Inspector shall be retrofitted with an approved type of siltation control devices, details of this shall be submitted to the City Engineer. 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.
5. The contractor of record shall accommodate safe pedestrian access around the construction zone, these roads are school routes, any sidewalk closure will have to comply with the DPW Construction Zone Pedestrian Access requirements. The City Inspector and contractor shall review a closure plan prior to any closures as needed.
6. Upon final installation & testing of the new gas mains an As Built drawing [plan & profile] shall be submitted in digital and hard copy format to the City Engineer.
7. 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.
8. Prior to any construction a preconstruction meeting with the DPW, Police and Fire Departments shall be required.

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

5 – 107 Mary Ellen Road, Evelyn Rd, Commonwealth Ave,
NEWTON 1409992

All Grants of Location for the City of Newton must answer the following in detail:

- A. Are there any leaks on this road? If yes, how many?
 - There are a few active leaks on Mary Ellen Rd
- B. If not, why is the gas main being extended or replaced?
 - The gas main is being replaced due to water intrusion which is resulting in the loss of pressure to a customer
- C. Is it in response to upcoming roadwork or new development?
 - No
- D. Is capacity increasing? If yes, why?
 - We are replacing the main and upgrading the system to 22 psig since there is already a 22 psig system in Commonwealth Ave.

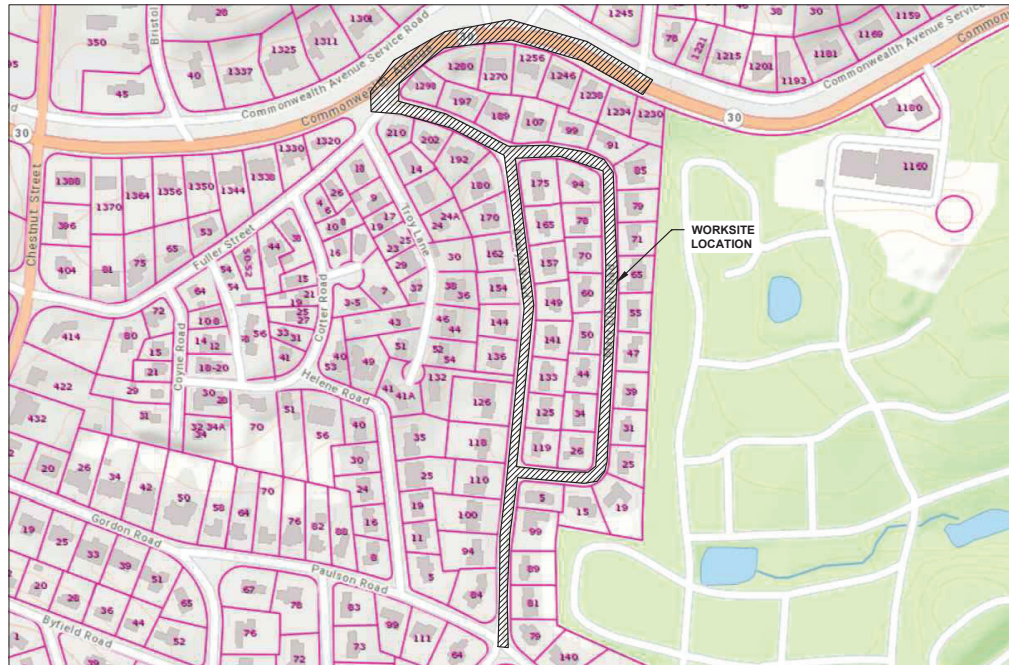
Requested by the Commissioner: When NationalGrid engineers develop the GOL plans these standard questions be answered in a written format & submitted with the GOL package.

NATIONAL GRID

APPROX. 2590'/1395' OF 8"/4" MDPE (LP TO 22 PSIG) GAS MAIN RELAY

5-107 MARY ELLEN ROAD, EVELYN RD, & COMMONWEALTH AVE, NEWTON, MA

W.O. NO.: 1409992



INDEX OF SHEETS		
PAGE	NAME	TITLE
1	NEW-1409992-01	COVER SHEET
2	NEW-1409992-02	CONSTRUCTION NOTES
3	NEW-1409992-03	BILL OF MATERIALS
4	NEW-1409992-04	PROPOSED INSTALLATION PLAN OVERVIEW
5	NEW-1409992-05	PROPOSED INSTALLATION PLAN SHEET 1 OF 5
6	NEW-1409992-06	PROPOSED INSTALLATION PLAN SHEET 2 OF 5
7	NEW-1409992-07	PROPOSED INSTALLATION PLAN SHEET 3 OF 5
8	NEW-1409992-08	PROPOSED INSTALLATION PLAN SHEET 4 OF 5
9	NEW-1409992-09	PROPOSED INSTALLATION PLAN SHEET 5 OF 5
10	NEW-1409992-10	PROPOSED LOCATION DETAIL SHEET 1 OF 2
11	NEW-1409992-11	PROPOSED LOCATION DETAIL SHEET 2 OF 2
12	NEW-1409992-12	MISCELLANEOUS DETAIL 1 OF 3
13	NEW-1409992-13	MISCELLANEOUS DETAIL 2 OF 3
14	NEW-1409992-14	MISCELLANEOUS DETAIL 3 OF 3

LOCUS
SCALE NTS



		BOSTON GAS COMPANY 4/9/6 nationalgrid 40 SYLVAN ROAD WALTHAM, MA 02451	PROPOSED GAS MAIN INSTALLATION 8"/4" MDPE (LP TO 22 PSIG) MARY ELLEN RD NEWTON, MA COVER SHEET	PAGE 1 OF 14
				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">DRAWING NO.</td> <td style="width: 50%; text-align: center;">SHEET NO.</td> </tr> <tr> <td style="text-align: center;">NEW-1409992-01</td> <td style="text-align: center;">G-001</td> </tr> </table>
DRAWING NO.	SHEET NO.			
NEW-1409992-01	G-001			
		<div style="border: 2px solid red; padding: 2px; display: inline-block;">IFC</div>	DWO SIZE: 22"x34" DESIGNER: D. CASTANG ENGINEER: A. CAVALLO DATE: 09/08/21 ASSET I.D.: DISTRIBUTION W.O. NO.: 1409992	

NO.	DESCRIPTION	DATE	DR BY	CHK BY	APP BY
1	ISSUED FOR CONSTRUCTION	09/08/21	DC	LA	AC
2	ISSUED FOR CONSTRUCTION	08/24/21	DC	LA	AC

CONSTRUCTION NOTES

SCOPE OF WORK
NATIONAL GRID WORK ORDER NUMBER 1409992
5-107 MARY ELLEN RD, EVELYN RD, & COMM. AVE, NEWTON, MA
FIELD OPS REQUEST - AS PART OF THE H20INT PROGRAM, LPP INTEGRITY MANAGEMENT RECOMMENDS THE RELAY OF:
APRX 60 FEET OF 10 INCH LP CAST IRON (1923) AND APRX 425 FEET OF 8 INCH LP CAST IRON (1918) WITH APRX 830 FEET OF 8 INCH, 22 PSIG PLASTIC IN COMMONWEALTH AV FROM THE EXIST 12 INCH, 22 PSIG CAST IRON AT #1324 COMMONWEALTH AV TO THE INTERSECTION OF FULLER ST AND EVELYN RD
APRX 1760 FEET OF 6 INCH LP BARE STEEL (1950) AND 4 INCH LP BARE STEEL (1950/1937) WITH APRX 1760 FEET OF 8 INCH, 22 PSIG PLASTIC IN EVELYN RD FROM THE INTERSECTION OF COMMONWEALTH AV AND FULLER ST
APRX 1385 FEET OF 4 INCH LP BARE STEEL (1950/1951) WITH APRX 1385 FEET OF 4 INCH, 22 PSIG PLASTIC IN MARY ELLEN RD FROM #119 EVELYN RD TO #175 EVELYN RD
4 MAIN CONNECTIONS / CUT OFFS.
ALL ACTIVE SERVICES TO BE TRANSFERRED FROM THE MAIN TO BE RETIRED.
NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN, ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM

GENERAL
1 NO FIELD CHANGES SHALL BE MADE TO THIS DESIGN WITHOUT APPROVAL FROM THE ASSIGNED NATIONAL GRID ENGINEER.
ENGINEER: GREG LOGUE
PHONE: (508) 573-0167
EMAIL: GREGORY.LOGUE@NATIONALGRID.COM

2 CONTRACTOR SHALL CALL DIGSAFE (DIAL 811 OR 888-344-7233) AT LEAST 72 HOURS PRIOR TO CONSTRUCTION, SATURDAYS, SUNDAYS, AND HOLIDAYS ARE EXCLUDED.
3 CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES AND STRUCTURES DEPICTED OR NOT DEPICTED ON THIS DESIGN PRIOR TO CONSTRUCTION.
4 NEW MAINS SHOULD BE INSTALLED IN ACCORDANCE WITH THE TYPICAL TRENCH DETAIL INCLUDED IN THESE DRAWINGS, UNLESS NOTED OTHERWISE.

- A 36 INCHES OF COVER FROM FINAL GRADE WHERE PRACTICAL.
B STATE HIGHWAY MINIMUM COVER: 36 INCHES
C DISTRIBUTION MAIN MINIMUM COVER: 24 INCHES
D SAND PADDING IN ALL DIRECTIONS, 6 INCHES MINIMUM.
E CAUTION TAPE SHALL BE INCLUDED ONE FOOT BELOW GRADE.
SERVICES SHOULD BE INSTALLED WITH 24 INCHES OF COVER.
A MINIMUM IN PUBLIC ROW: 18 INCHES
B MINIMUM IN PRIVATE PROPERTY: 12 INCHES
C SAND PADDING IN ALL DIRECTIONS, 6 INCHES MINIMUM.
D CAUTION TAPE SHALL BE INCLUDED ONE FOOT BELOW GRADE.
REFER TO CNST 6008 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.

A JENNIFER GILLIS - (617) 594-5157 (VA EXCLUDING CAPE AND WEBSTER)
B LIEN GAUTHIER - (617) 438-9099 (VA EXCLUDING CAPE AND WEBSTER)
C 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.

7 ALL MAINS SHOULD BE INSTALLED WITH CLEARANCE OF 12 INCHES FROM OTHER FACILITIES.
A DISTRIBUTION MINIMUM CLEARANCE: 6 INCHES
B APPROPRIATE PROTECTIVE MEASURES SHALL BE USED TO PROTECT THE GAS FACILITY IF MINIMUMS CANNOT BE ATTAINED. APPROVAL IS REQUIRED BY GAS SYSTEMS ENGINEERING.
8 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 RECORDED WITHIN THE PUBLIC RIGHT-OF-WAY BASED ON THE ACTUAL LOCATION OF EXISTING UTILITIES. ADDITIONAL FITTINGS NOT SHOWN WILL BE REQUIRED.

A ELBOWS SHOWN ARE ASSUMED TO BE 45 DEGREES IN MOST APPLICATIONS, 90 DEGREE ELBOWS MAY BE NEEDED BASED ON FIELD CONDITIONS.
9 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.
A VALVES FOR BRANCHES AT INTERSECTIONS SHOULD BE FIELD LOCATED JUST OUTSIDE OF THE INTERSECTION WHERE EASILY ACCESSIBLE, PRIOR TO THE FIRST SERVICE.
10 ELECTROFUSION COUPLINGS MAY BE INTERCHANGED WITH BUTT FUSION WHERE APPLICABLE.
11 TIE-IN LOCATIONS MAY VARY UP TO 100 FEET OF THE PROPOSED LOCATION TO ACCOMMODATE CONSTRUCTION, EXCEPT FOR WHEN THE FOLLOWING CONDITIONS APPLY:
A REGULATOR STATION WITHIN THE SCOPE OF THE JOB OR WITHIN 200 FEET OF THE TIE-IN LOCATION.
B CHANGE TO THE NUMBER OF CONNECTIONS (ADDITIONAL ADDED FROM AN INTERSECTION OR OTHERWISE).
C MATERIAL SIZE CHANGE AT NEW LOCATION.

12 NOT ALL BYPASSES, GAUGES, PURGES AND OTHER MISCELLANEOUS FITTINGS ARE SHOWN. CONSTRUCTION SHALL INSTALL THESE FITTINGS AS NEEDED IN ACCORDANCE WITH THE APPROVED SHOP.
13 WHEN CONNECTING NEW 'DEAD' MAIN TO NEW 'DRAW' MAIN, AS LONG AS THE CONNECTION BRANCH SIZE SHOWN IN THE DRAWINGS CAN BE ACHIEVED, THE FOLLOWING CONNECTION TYPES ARE ACCEPTED AND INTERCHANGEABLE:
A INLINE TEE
B PLASTIC HIGH VOLUME TAPPING TEE (2" BRANCH SIZE OR LESS)

- C PLASTIC BRANCH SADDLE (WITH MAIN CUTTER SIZE SHOWN IN NATIONAL GRID POLICIES)
D STEEL THREE-WAY TEE (WITH MAIN CUTTER SIZE SHOWN IN NATIONAL GRID POLICIES)
14 THE 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.
15 ALL CUSTOMER SERVICES WITHIN THE SCOPE OF MAIN TO BE ABANDONED SHALL BE TRANSFERRED OR RELAYED BY THE CONTRACTOR TO THE NEW MAIN PRIOR TO ABANDONMENT. WHEN RELAYING A LOWER PRESSURE MAIN WITH A HIGHER PRESSURE MAIN, ALL SERVICES SHALL BE RELAYED OR INSERTED.

DESIGN CRITERIA

- 1 DESIGN IN ACCORDANCE WITH THE FOLLOWING:
A ENGR20201 : DESIGN OF GAS SERVICES
B ENGR40401: DESIGN OF DISTRIBUTION MAINS
C ENGR4010: DESIGN REQUIREMENTS FOR INSTALLATION OF CASINGS
2 PROPOSED PIPING:
A DESIGN CLASS LOCATION - 4
B NOMINAL SIZE - 8 INCH / 4 INCH
C MATERIAL - MDPE
D SYSTEM MAOP - 22 PSIG
3 PIPE SIZE DETERMINED BY NATIONAL GRID STRATEGIC ASSET AND SYSTEM PLANNING.

CODES & STANDARDS

- 1 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 MORE STRINGENT CODE, STANDARD, OR REGULATION SHALL APPLY.
2 ALL REFERENCES SHALL BE IN ACCORDANCE WITH THE MOST CURRENT REVISION AVAILABLE AT THE TIME OF CONSTRUCTION.
3 FEDERAL & STATE
A TITLE 49: PART 192 TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS
B 220 CMR: DEPARTMENT OF PUBLIC UTILITIES
100.00 - 113.00: MASSACHUSETTS GAS DISTRIBUTION CODE
C AMERICAN SOCIETY OF MECHANICAL ENGINEERS
831.8: GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS
4 CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL GRID GAS POLICIES AND WORK METHODS, INCLUDING BUT NOT LIMITED TO:
A CNST01003: BACKFILL AND RESTORATION
B CNST01005: PREPARATION OF GAS FACILITY HISTORICAL RECORDS
C CNST01006: COMMERCIALLY AVAILABLE SHORING SYSTEMS
D CNST02014: ENCAPSULATING CAST IRON JOINTS
E CNST03001: SQUEEZE-OFF OPERATIONS
F CNST03002: STOP-OFF OPERATIONS ON LOW PRESSURE MAINS
G CNST03005: PURGING REQUIREMENTS FOR GAS PIPELINES
H CNST03006: PURGING OPERATIONS - DIRECT DISPLACEMENT
I CNST03007: PURGING OPERATIONS - COMPLETE INERT FILL
J CNST03008: PURGING OPERATIONS - SLUG METHOD
K CNST03014: STOP OFF OPERATIONS FOR LEAKS EQUIPMENT
L CNST04005: INSTALLING STEEL DISTRIBUTION MAINS
M CNST04007: FIELD COLD BENDING OF LINE PIPE
N CNST04008: INSTALLING PLASTIC MAINS
O CNST04011: ABANDONMENT OF MAINS
P CNST04012: GROUTING ABANDONED PIPELINES
Q CNST04030: RAISING MAIN AND SERVICE GATE BOXES
R CNST05001: JOINING OF PLASTIC PIPE
S CNST05011: INSTALLATION OF DRESSER 700 COUPLINGS
T CNST5010: GENERAL CONSTRUCTION REQUIREMENTS AND PIPE HANDLING
R DAM01011: EXCAVATION AND EXCAVATION NOTIFICATION REQUIREMENTS FOR UNDERGROUND FACILITIES FOR MASSACHUSETTS AND RHODE ISLAND
S DAM01015: LOCATE AND MARK-OUT REQUIREMENTS FOR UNDERGROUND GAS FACILITIES.
T DAM01016: LOCATE AND MARK-OUT OF UNDERGROUND FACILITIES
U GCO02001: SYSTEM OPERATING PROCEDURE (SOP)
V GEN01100: OPERATOR QUALIFICATION PLAN
W GEN03002: PROCESSING GAS MAIN AND NEW SERVICE WORK PACKAGES
X GEN03004: CHANGE CONTROL PROCEDURE FOR STANDARD CONSTRUCTION PROJECTS
Y INR06002: SUPPLEMENTAL ORODRIZATION FOR NEW PIPING
Z MAN5030: INSTALLATION OF POLYETHYLENE PIPE
AA MECH5010: JOINTS OTHER THAN WELDED
BB 030018-CS: SPECIFICATION AND HANDLING OF TRAFFIC PLATES

- 5 SERVICE SPECIFIC CONSTRUCTION STANDARDS, GAS POLICIES AND WORK METHODS:
A CMS03002: CUSTOMER METER AND SERVICE REGULATOR DESIGN AND INSTALLATION POLICY
B CMS04002: PURGING PROCEDURES FOR CUSTOMER METER SERVICES
C CNST03011: NO-INTERRUPT SERVICE TRANSFER
D CNST06002: INSTALLING DISTRIBUTION SERVICES
E CNST06003: INSTALLATION & MAINTENANCE POLICY FOR CURB VALVES ON SERVICE LINES WITH INSTALLED METER CAPACITIES OVER 1,000 SCFH THAT DON'T HAVE EXCESS FLOW VALVES

- F CNST06009: METERSERVICE RELOCATION GUIDELINE
G CNST06020: COMPLETION AND PROCESSING OF GAS SERVICE RECORD CARDS
H CNST06030: NOTIFICATION OF CUSTOMERS INVOLVED IN THE INTERRUPTION OF GAS SERVICE
I CS-SERV001: TYPICAL 1/2" SERVICE OUTSIDE SETS
J CS-SERV002: TYPICAL 1" SERVICE OUTSIDE SETS
K CS-SERV003: TYPICAL 1-1/4" SERVICE OUTSIDE SETS
L CS-SERV004: TYPICAL 2" SERVICE
M CS-SERV005: EXCESS FLOW VALVE REQUIREMENTS ON HP SERVICES
N CS-SERV009: TYPICAL 1/2" SERVICE INSIDE SETS
O CS-SERV010: TYPICAL 1" SERVICE INSIDE SETS
P HTP-6010: NO-INTERRUPT 1 INCH CTS AND 1-1/4 INCH CTS SERVICE TRANSFER (MIST) LP TO 60 PSIG MAINS
Q SERV-5075: RELOCATION OF METER SET ASSEMBLIES INSIDE TO OUTSIDE
R SERV-6185: HOT TAPPING MD BRANCH SADDLES OFF 4IN - 12IN 60 PSIG MADE UP LINE PLASTIC GAS MAIN USING MCELROY HOT TAPPING TOOL
S VALV6110: 1/2 INCH - 3 INCH POLYETHYLENE GAS SERVICE VALVE INSTALLATION
6 SEE TIE IN DETAILS FOR APPLICABLE MAIN CONNECTION REFERENCES.
7 SEE BILL OF MATERIAL FOR MATERIAL SPECIFICATION, STANDARD AND/OR APPLICABLE NATIONAL GRID "FITS" REFERENCE.
A 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.

PRESSURE TESTING

- 1 PRESSURE TEST MAIN 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.
D TEST MEDIA: AIR AND/OR NITROGEN
2 PRESSURE TEST SERVICES IN ACCORDANCE WITH:
A CNST06008 : PRESSURE TESTING SERVICE LINES

WELDING

- 1 NATIONAL GRID WELDING GAS POLICIES AND WORK METHODS INCLUDE:
A CNST05002: WELDING POLICY
B CNST05003: PIPE WELDING SAFETY
C CNST05005: WELDING PROCEDURE SPECIFICATIONS
D MS-000: 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-E6010/7010 (LATEST REVISION)
B FILLET WELDS (BRANCH): WPS-SMAW-E6010/7010 (LATEST REVISION)
4 10% (AT LEAST 1") OF WELDS IN EACH CATEGORY BELOW 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 SKYSTYTING.
6 SKYSTYTING SCHEDULING CONTACT:
WILLIAM (BILL) CLARK
CELL: 704-858-7794
EMAIL: WCLARK@SKYSTYTING.COM

CATHODIC PROTECTION

- 1 IF EXISTING TEST STATIONS, WIRES, AND/OR MAGNESIUM ANODES ARE DISTURBED OR DAMAGED, NOTIFY THE NATIONAL GRID CORROSION DEPARTMENT: BUTCH WICENT - 617-438-5192 (VA)
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 COR04003: INSTALLATION OF TEST STATIONS FOR CATHODIC PROTECTION
H COR04004: INSTALLATION OF WIRE CONNECTIONS
I COR04005: INSTALLATION OF INSULATING JOINTS FOR CATHODIC PROTECTION
J 030031-CS: FACILITY COATING GUIDE
4 CORROSION DESIGN:
A IF TIE-IN IS TO NON-CP SYSTEM OR CAST IRON - USE AN INSULATED COUPLING (RUBBER BOOT) FACING THE CAST IRON/NON-CP SYSTEM AND USE THE CLIP ON THE COUPLING TO INSTALL A TEST WIRE AND BRING IT UP INTO A TEST STATION WITH 1-17# ANODE. NOTE: IF AN INSULATED COUPLING AND TRANSITION STEEL PIECE ARE USED, INSTALL A 1-WIRE TEST STATION WITH 1-17# ANODE ON THE TRANSITION PIECE ONLY.
B INSTALL A 1-WIRE TEST STATION WITH 1-17# ANODE TO THE INSULATED ACTIVE STEEL MECHANICAL END CAP. INSTALL THE 9X3 TEST STATION IN AN ACCESSIBLE LOCATION

ENVIRONMENTAL

- 1 WORK SHALL CONFORM TO THE NATIONAL GRID ENVIRONMENTAL POLICY.
2 ENVIRONMENTAL ENGINEERING CONTACT:
ANDREW L. SHELBY
PHONE: (781) 907-1867
EMAIL: ANDREW.SHELBY@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 SHALL LEAVE THE WORK SITE UNTIL ENVIRONMENTAL HAS MADE A DETERMINATION FOR ITS PROPER DISPOSAL.
6 NATIONAL GRID ENVIRONMENT POLICIES AND PROCEDURES INCLUDE:
A SHE20001: HANDLING CONTAMINATED MATERIALS AND PIPING
B SHE20002: REMOVING MERCURY REGULATORS AND DEVICES
C SHE20003: ENCOUNTERING CONTAMINATION WHILE EXCAVATING
D EG303-NE: BEST MANAGEMENT PRACTICES
E EG140: USED GAS PIPE MANAGEMENT
7 ENVIRONMENTAL REQUIREMENTS: N/A

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 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 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 GAS WORK METHODS SAFETY 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 TIONS
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

OTHER PERMITTING REQUIREMENTS

- 1 STREET OPENING PERMIT
2 MWRA PERMIT
3 GRANT OF LOCATION

UTILITY OWNER INFORMATION

- 1 TOWN OF NEWTON

REFERENCE DRAWINGS

- 1 LOCATION OF IDENTIFIED UNDERGROUND UTILITIES ARE AN APPROXIMATE BASED ON AVAILABLE RECORD AND FIELD INFORMATION IN ACCORDANCE WITH GIANCE 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.

DESIGN CONSULTANT

1 BL COMPANIES
ANDREW J. CAVALLLO, P.E.
PHONE: (781) 619-9515
EMAIL: ACAVALLLO@BLCOMPANIES.COM

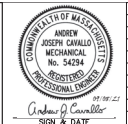


Table with columns for revision number, description, date, and initials. Includes a red box with 'IFC' and a 'nationalgrid' logo.

Table with project details: BOSTON GAS COMPANY 6/9/15, PROPOSED GAS MAIN INSTALLATION 8 7/4" MDPE (LP TO 22 PSIG), MARY ELLEN RD NEWTON, MA, CONSTRUCTION NOTES, DWG SIZE 22"x34", DESIGNER D. CASTANG, ENGINEER A. CAVALLLO, DATE 09/08/21, ASSET I.D. DISTRIBUTION, W.O. NO. 1409992.

Table with drawing and sheet information: DRAWING NO. NEW-1409992-02, SHEET NO. G-002, PAGE 2 OF 14.

BILL OF MATERIALS						
ITEM	QTY	UOM	DESCRIPTION	SIZE (IN.)	NATIONAL GRID REFERENCE	SAP ID NUMBER
1	10	FT	PIPE, PLASTIC, MDPE, SDR 13.5	12	120026-MS	9340863
2	2,600	FT	PIPE, PLASTIC, MDPE, SDR 13.5	8	120026-MS	9340862
3	1,400	FT	PIPE, PLASTIC, MDPE, SDR 11.5	4	120026-MS	9340857
4	2	EA	ELBOW, PLASTIC, 45 DEGREE, MDPE	8	CS-FIT011	9341402
5	1	EA	ELBOW, PLASTIC, 90 DEGREE, MDPE	8	CS-FIT011	9341398
6	1	EA	REDUCER, PLASTIC, MDPE	12 x 8	CS-FIT013	9342617
7	2	EA	REDUCER, PLASTIC, MDPE	8 x 6	CS-FIT013	9342616
8	2	EA	REDUCER, PLASTIC, MDPE	6 x 4	CS-FIT013	9342678
9	2	EA	TEE, PLASTIC, FULL, MDPE	8	CS-FIT012	9342070
10	1	EA	COUPLING, PLASTIC ELECTROFUSION	8	CS-FIT015	9314591
11	6	EA	VALVE, BALL, MDPE, FULL PORT	8	VALV6020	9386594
12	6	EA	VALVE, BOX ASSEMBLY	8	VALV6020	9307586
13	N/A	EA	NOT USED	N/A	N/A	N/A
14	N/A	EA	NOT USED	N/A	N/A	N/A
15	1	EA	CAP, MDPE, BUTT FUSION	8	CS-FIT010	9339559
16	1	EA	COUPLING, MECHANICAL, FOR CAST IRON, INSULATED, RESTRAINING	12	FITS6025	9308362
17	1	EA	STIFFENER, SDR 13.5	12	FITS6025	9308696
18	1	EA	FITTING, SHORTSTOPP	12	FITS6055	9341086
19	2	EA	END CAP, MECHANICAL, FOR CAST IRON, RESTRAINING	8	FITS6024	9315168
20	2	EA	END CAP, MECHANICAL, FOR STEEL, RESTRAINING	6	FITS6024	9314880
21	2	EA	END CAP, MECHANICAL, FOR STEEL, RESTRAINING	4	FITS6024	9315211
22	1	EA	SLEEVE, 50A STYLE DRESSER	12	120026-MS	9312679
GENERAL						
G1	A/R	FT	TRACER WIRE	-	CNST6061	9315005
G2	A/R	ROLL	YELLOW CAUTION TAPE - GAS MAIN - 6" WIDE	6	CNST6060	9341904
PRESSURE TESTING (TEMPORARY)						
P1	A/R	EA	CAP, MDPE, BUTT FUSION	12	CS-FIT010	9339560
P2	A/R	EA	CAP, MDPE, BUTT FUSION	8	CS-FIT010	9339559
P3	A/R	EA	CAP, MDPE, BUTT FUSION	4	CS-FIT010	9339534
CATHODIC PROTECTION						
C1	2	EA	CP TEST BOX W/ COVER	N/A	030026-CS	(SEE STD)
C2	2	EA	17# ANODE	N/A	030024-CS	9311183
C3	A/R	FT	WIRE NO. 8	N/A	030026-CS	9307539
*ACTUAL LENGTH/QUANTITY OF PIPE AND FITTINGS MAY VARY DUE TO FIELD CONDITIONS. ADDITIONAL MATERIALS MAY NOT BE REFERENCED ABOVE THAT ARE INCLUDED IN THE BOM OF NATIONAL GRID CONSTRUCTIONS STANDARDS REFERENCED IN THIS DESIGN PACKAGE.						

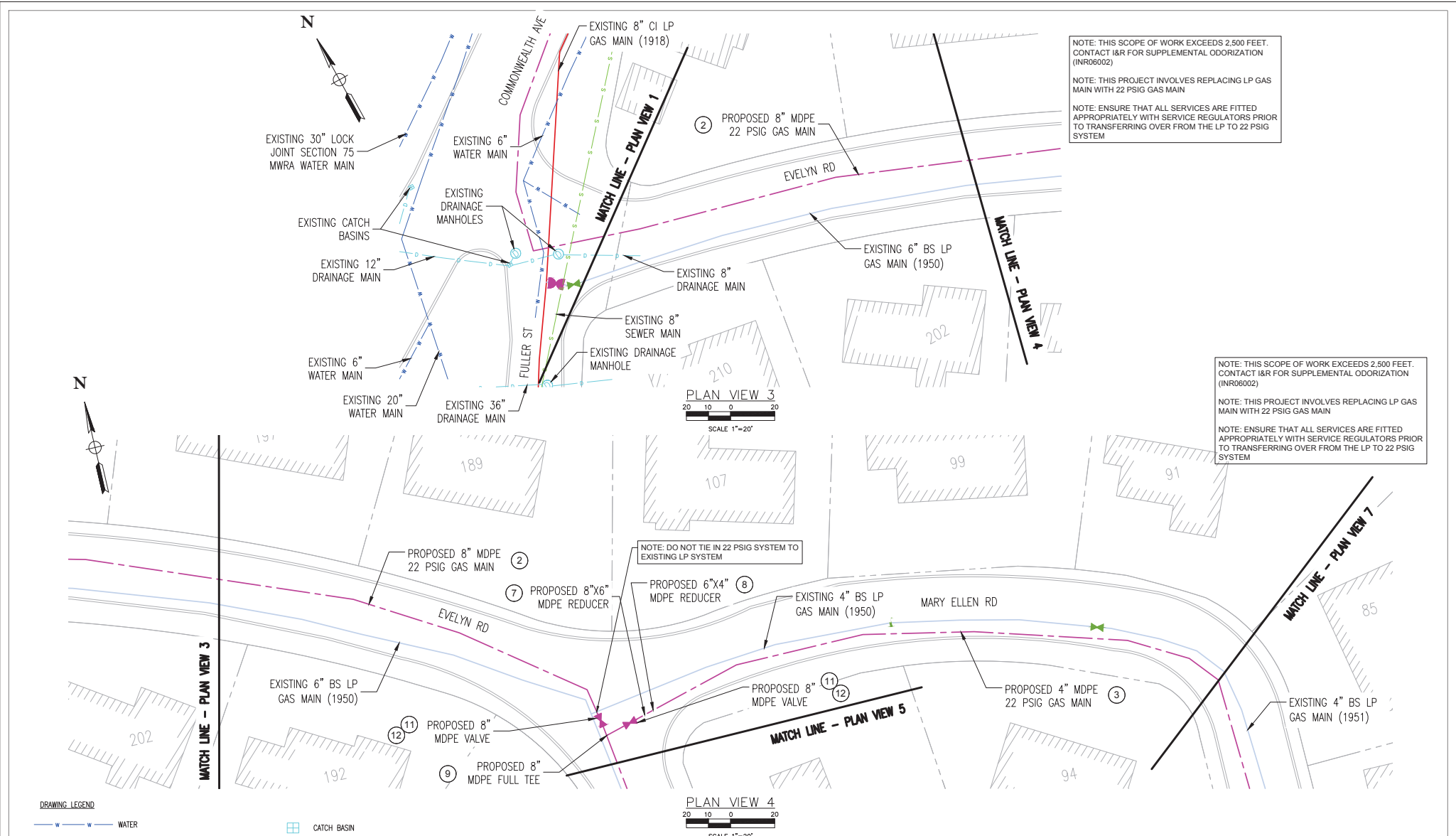


BOSTON GAS COMPANY 4/9/16		nationalgrid 40 SYLVAN ROAD WALTHAM, MA 02451	
1	ISSUED FOR CONSTRUCTION	09/08/21	DC LA AC
2	ISSUED FOR CONSTRUCTION	08/24/21	DC LA AC
NO.	DESCRIPTION	DATE	DR BY (DR BY) APP BY

PROPOSED GAS MAIN INSTALLATION 8"/4" MDPE (LP TO 22 PSIG) MARY ELLEN RD NEWTON, MA				
BILL OF MATERIALS				
DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.
22"x34"	D. CASTANG	A. CAVALLO	09/08/21	DISTRIBUTION
W.O. NO.:	1409992			

PAGE 3 OF 14	
DRAWING NO.	SHEET NO.
NEW-1409992-03	G-003

IFC



NOTE: THIS SCOPE OF WORK EXCEEDS 2,500 FEET. CONTACT I&R FOR SUPPLEMENTAL ODORIZATION (INR06002)

NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN

NOTE: ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM

NOTE: THIS SCOPE OF WORK EXCEEDS 2,500 FEET. CONTACT I&R FOR SUPPLEMENTAL ODORIZATION (INR06002)

NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN

NOTE: ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM

NOTE: DO NOT TIE IN 22 PSIG SYSTEM TO EXISTING LP SYSTEM

DRAWING LEGEND

	WATER		CATCH BASIN
	SEWER MAIN		PROPOSED VALVE
	DRAINAGE		PROPOSED END CAP
	EXISTING BS LP GAS MAIN		DRAINAGE MANHOLE
	EXISTING CI LP GAS MAIN		
	PROPOSED MDPE 22 PSIG GAS MAIN		

Architecture
Engineering
Environmental
Land Surveying
Companies

ANDREW JOSEPH CAVALLLO
MECHANICAL
No. 54234
PROFESSIONAL ENGINEER
08/24/21
SIGN & DATE

NO.	DESCRIPTION	DATE	DR BY	CHK BY	APP BY
1	ISSUED FOR CONSTRUCTION	09/09/21	DC	LA	AC
2	ISSUED FOR CONSTRUCTION	08/24/21	DC	LA	AC

BOSTON GAS COMPANY
6/2/15
nationalgrid
40 SYLVAN ROAD
WALTHAM, MA 02451

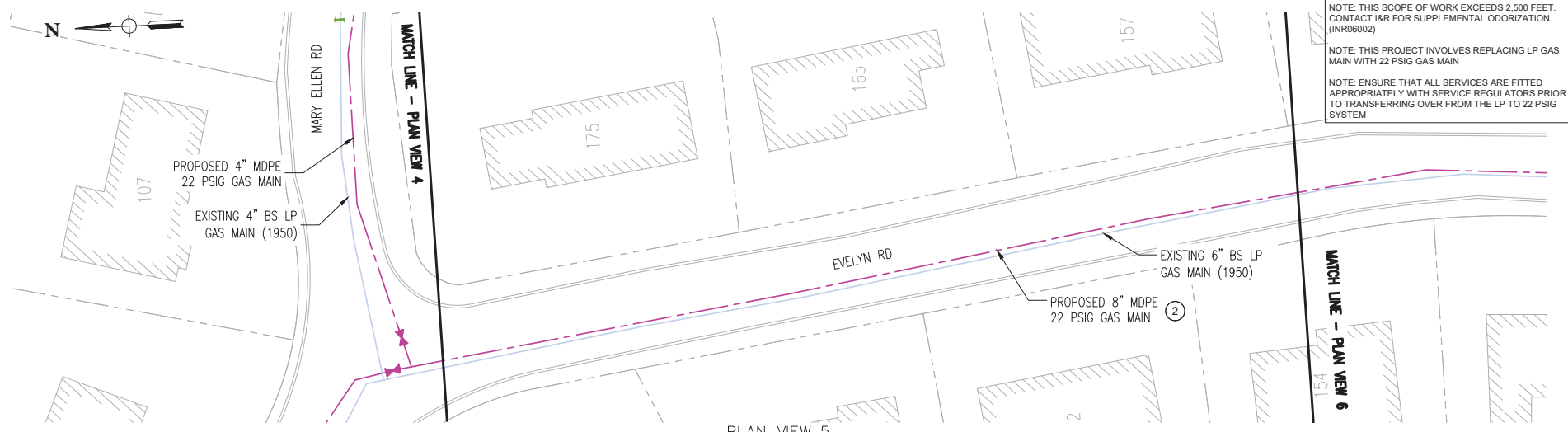
PROPOSED GAS MAIN INSTALLATION
8" / 4" MDPE (LP TO 22 PSIG)
MARY ELLEN RD
NEWTON, MA

PROPOSED INSTALLATION PLAN SHEET 2 OF 5

DWG. SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.
22"X34"	D. CASTANG	A. CAVALLLO	09/08/21	DISTRIBUTION	1409992

PAGE 6 OF 14

DRAWING NO.	SHEET NO.
NEW-1409992-06	C-003

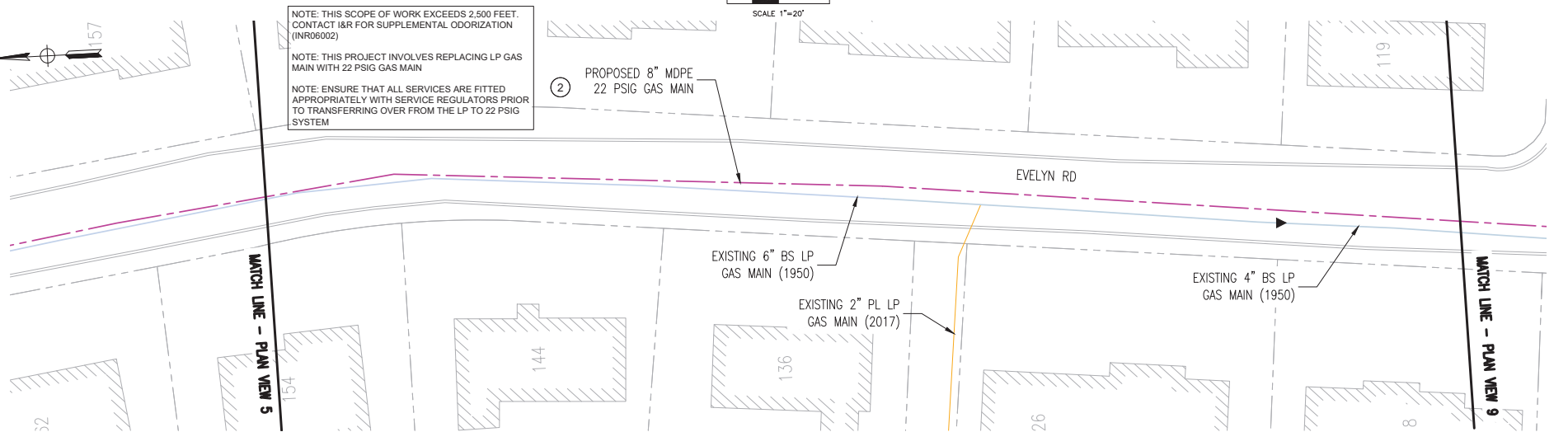


NOTE: THIS SCOPE OF WORK EXCEEDS 2,500 FEET. CONTACT I&R FOR SUPPLEMENTAL ODORIZATION (INR06002)

NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN

NOTE: ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM

PLAN VIEW 5
SCALE 1"=20'



NOTE: THIS SCOPE OF WORK EXCEEDS 2,500 FEET. CONTACT I&R FOR SUPPLEMENTAL ODORIZATION (INR06002)

NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN

NOTE: ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM

PLAN VIEW 6
SCALE 1"=20'

- DRAWING LEGEND**
- EXISTING BS LP GAS MAIN
 - EXISTING PL LP GAS MAIN
 - PROPOSED MDPE 22 PSIG GAS MAIN
 - ◆ PROPOSED VALVE

NO.	DESCRIPTION	DATE	DR BY	CHK BY	APP BY
1	ISSUED FOR CONSTRUCTION	09/08/21	DC	LA	AC
2	ISSUED FOR CONSTRUCTION	08/24/21	DC	LA	AC

BOSTON GAS COMPANY
6/2/15
nationalgrid
40 SYLVAN ROAD
WALTHAM, MA 02451

PROPOSED GAS MAIN INSTALLATION
8"/4" MDPE (LP TO 22 PSIG)
MARY ELLEN RD
NEWTON, MA

PROPOSED INSTALLATION PLAN SHEET 3 OF 5

DWG SIZE: 22"x34"
DESIGNER: D. CASTANG
ENGINEER: A. CAVALLO
DATE: 09/08/21
ASSET I.D.: DISTRIBUTION
W.O. NO.: 1409992

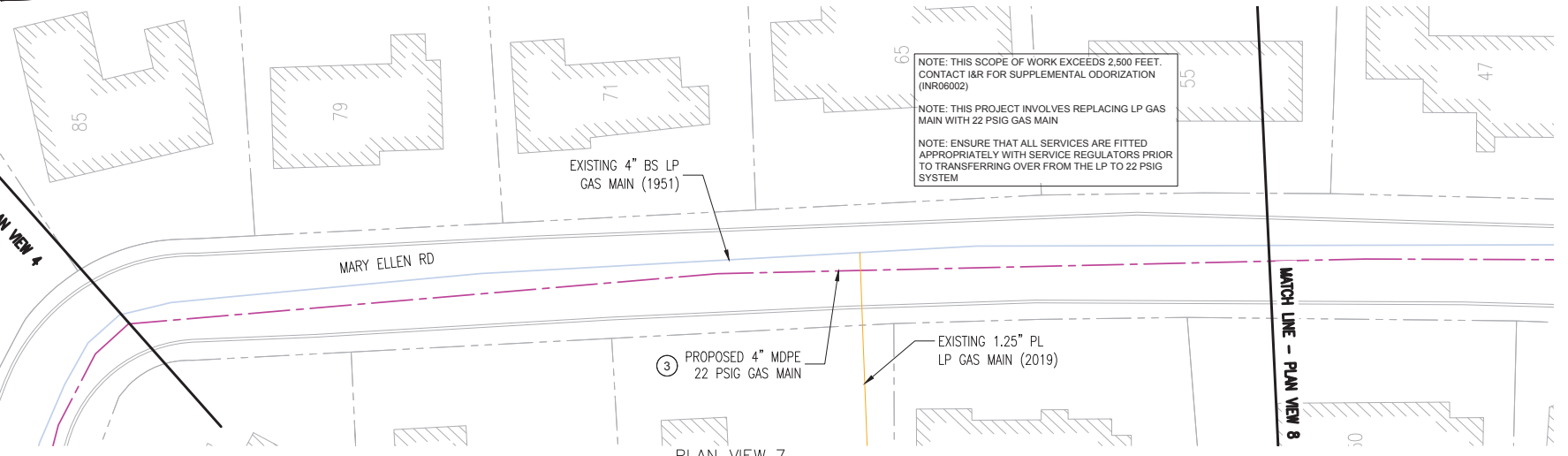
PAGE 7 OF 14

DRAWING NO.	SHEET NO.
NEW-1409992-07	C-004

IFC



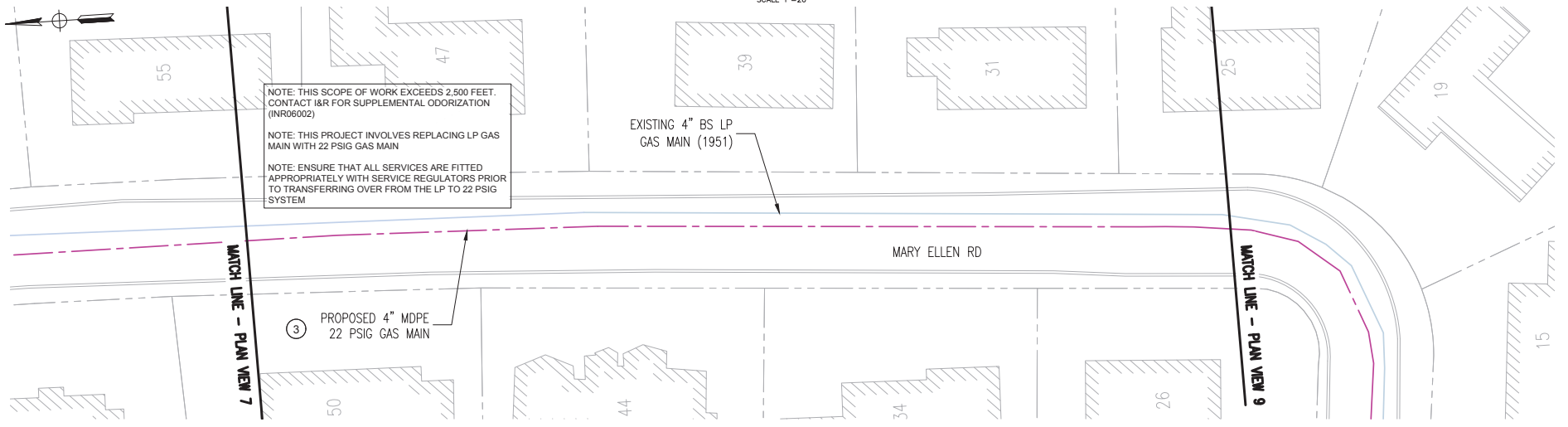
MATCH LINE - PLAN VIEW 4



PLAN VIEW 7
SCALE 1"=20'



MATCH LINE - PLAN VIEW 7



PLAN VIEW 8
SCALE 1"=20'

- DRAWING LEGEND**
- EXISTING BS LP GAS MAIN
 - EXISTING PL LP GAS MAIN
 - PROPOSED MDPE 22 PSIG GAS MAIN

NOTE: THIS SCOPE OF WORK EXCEEDS 2,500 FEET. CONTACT I&R FOR SUPPLEMENTAL ODORIZATION (INR06002)

NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN

NOTE: ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM

NOTE: THIS SCOPE OF WORK EXCEEDS 2,500 FEET. CONTACT I&R FOR SUPPLEMENTAL ODORIZATION (INR06002)

NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN

NOTE: ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM

Architecture
Engineering
Environmental
Land Surveying
Companies

ANDREW
JOSEPH CAVALLO
MECHANICAL
No. 54234
PROFESSIONAL ENGINEER
STATE OF MASSACHUSETTS

Andrew J. Cavallo
SIGN & DATE

NO.	DESCRIPTION	DATE	DR BY	CHK BY	APP BY
1	ISSUED FOR CONSTRUCTION	09/08/21	DC	LA	AC
2	ISSUED FOR CONSTRUCTION	08/24/21	DC	LA	AC

BOSTON GAS COMPANY
678/15

nationalgrid
40 SYLVAN ROAD
WALTHAM, MA 02451

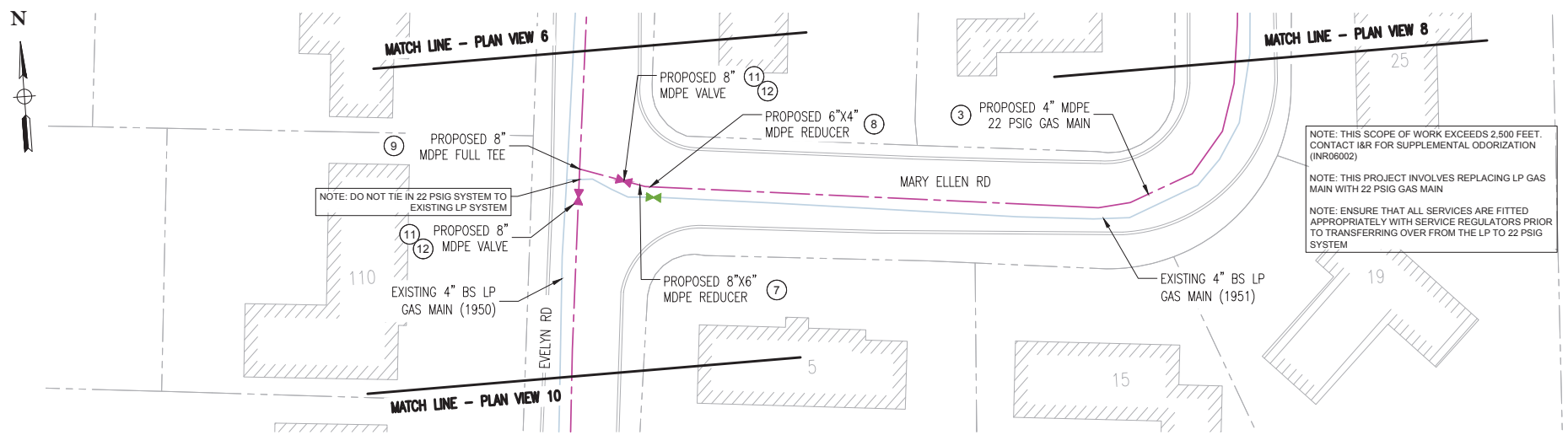
PROPOSED GAS MAIN INSTALLATION
8"/4" MDPE (LP TO 22 PSIG)
MARY ELLEN RD
NEWTON, MA

PROPOSED INSTALLATION PLAN SHEET 4 OF 5

DWG SIZE: 22"x34"
DESIGNER: D. CASTANG
ENGINEER: A. CAVALLO
DATE: 09/08/21
ASSET I.D.: DISTRIBUTION
W.O. NO.: 1409992

PAGE 8 OF 14	
DRAWING NO.	SHEET NO.
NEW-1409992-08	C-005

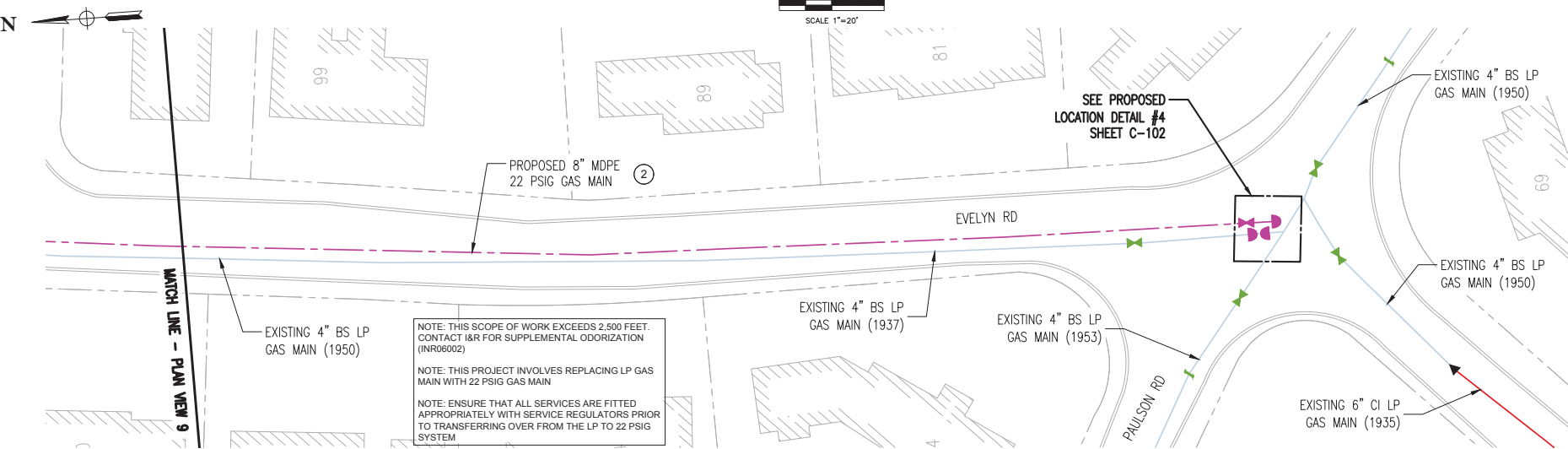
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NOTE: THIS SCOPE OF WORK EXCEEDS 2,500 FEET. CONTACT I&R FOR SUPPLEMENTAL ODORIZATION (INR06002)

NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN

NOTE: ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM



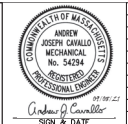
NOTE: THIS SCOPE OF WORK EXCEEDS 2,500 FEET. CONTACT I&R FOR SUPPLEMENTAL ODORIZATION (INR06002)

NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN

NOTE: ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM

DRAWING LEGEND

- EXISTING BS LP GAS MAIN
- EXISTING CI LP GAS MAIN
- - - PROPOSED MDPE 22 PSIG GAS MAIN
- ◀▶ PROPOSED VALVE
- ◐◑ PROPOSED END CAP



NO.	DESCRIPTION	DATE	DR BY	CHK BY	APP BY
1	ISSUED FOR CONSTRUCTION	09/08/21	DC	LA	AC
2	ISSUED FOR CONSTRUCTION	08/24/21	DC	LA	AC



PROPOSED GAS MAIN INSTALLATION
8"/4" MDPE (LP TO 22 PSIG)
MARY ELLEN RD
NEWTON, MA

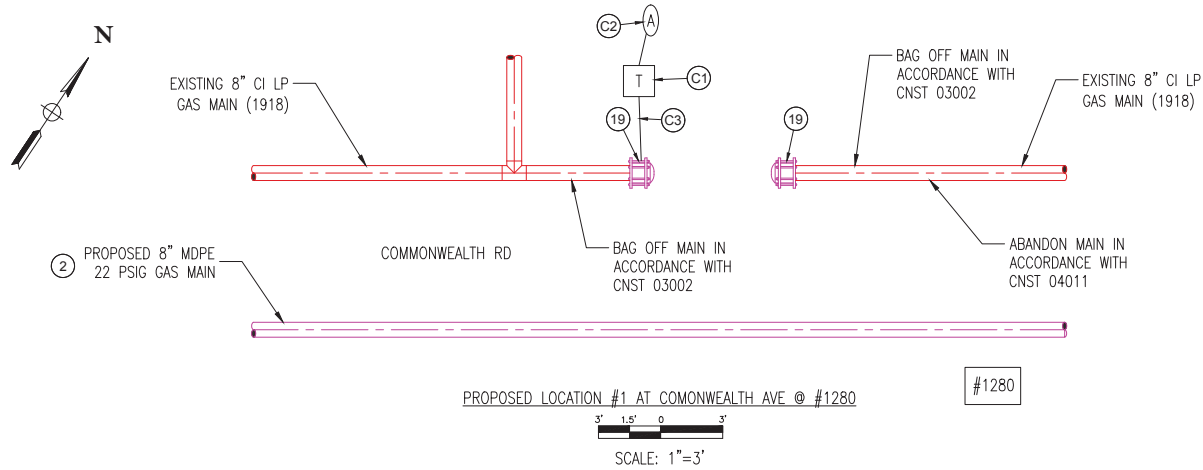
PROPOSED INSTALLATION PLAN SHEET 5 OF 5

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.:
22"x34"	D. CASTANG	A. CAVALLO	09/08/21	DISTRIBUTION	1409992

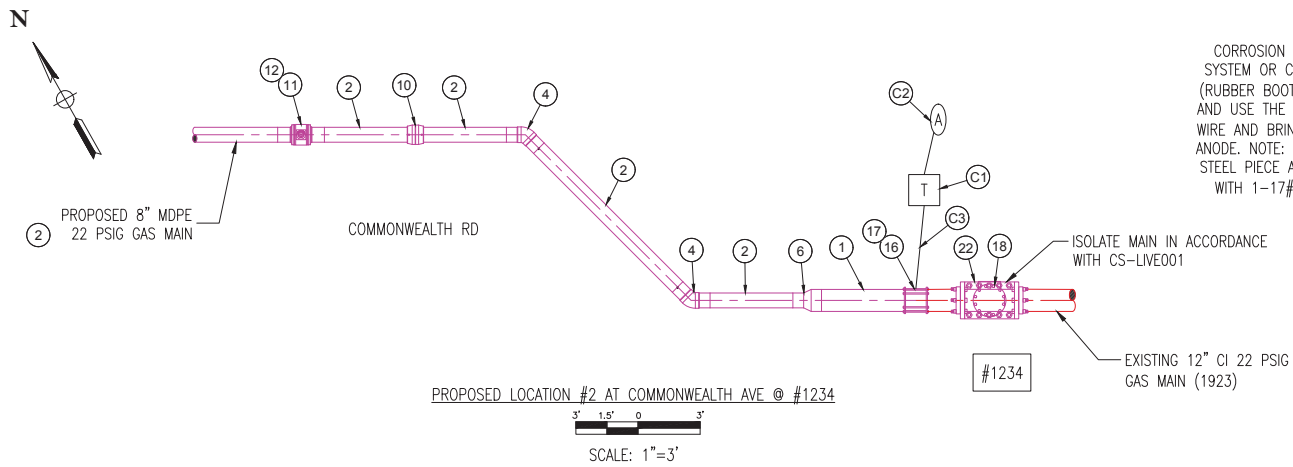
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DRAWING NO.	SHEET NO.
NEW-1409992-09	C-006

IFC



CORROSION REQUIREMENTS: INSTALL A 1-WIRE TEST STATION WITH 1-17# ANODE TO THE INSULATED ACTIVE STEEL MECHANICAL END CAP. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION



CORROSION REQUIREMENTS: IF TIE-IN IS TO NON-CP SYSTEM OR CAST IRON - USE AN INSULATED COUPLING (RUBBER BOOT FACING THE CAST IRON/NON-CP SYSTEM) AND USE THE CLIP ON THE COUPLING TO INSTALL A TEST WIRE AND BRING IT UP INTO A TEST STATION WITH 1-17# ANODE. NOTE: IF AN INSULATED COUPLING AND TRANSITION STEEL PIECE ARE USED, INSTALL A 1-WIRE TEST STATION WITH 1-17# ANODE ON THE TRANSITION PIECE ONLY

DRAWING LEGEND

- EXISTING CI GAS MAIN
- PROPOSED MDPE GAS MAIN



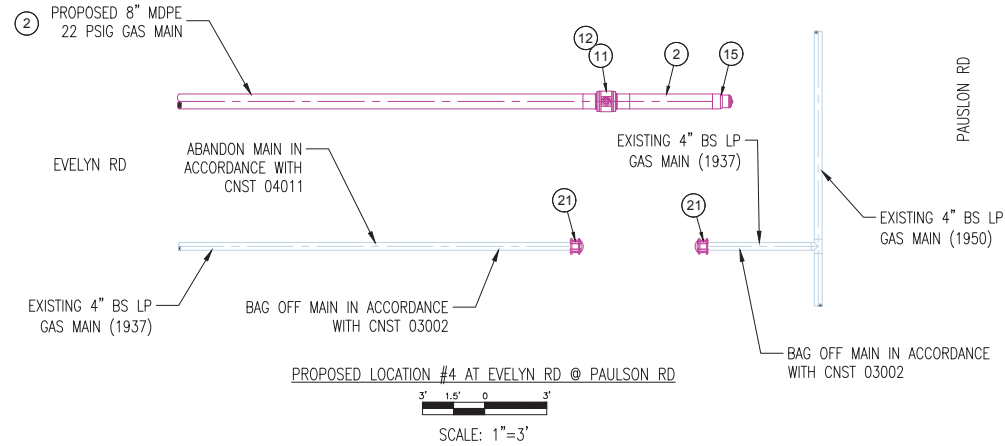
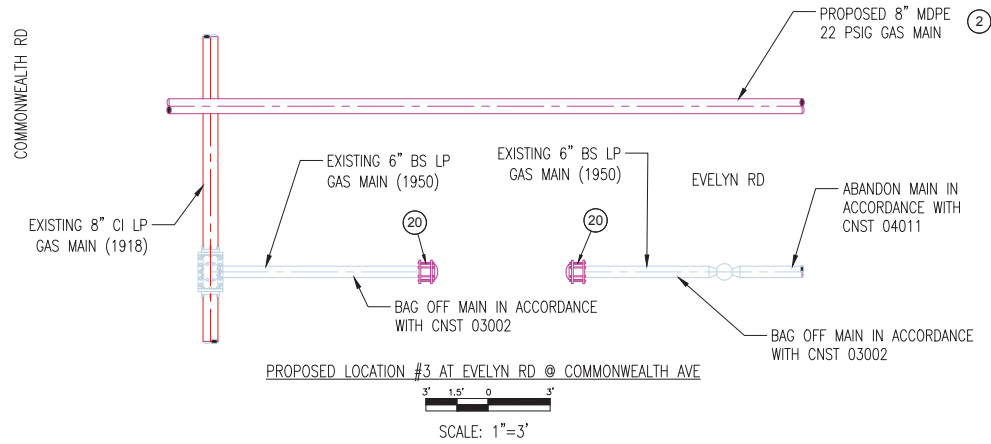
NO.	DESCRIPTION	DATE	DR BY	CHK BY	APP BY
1	ISSUED FOR CONSTRUCTION	09/08/21	DC	LA	AC
2	ISSUED FOR CONSTRUCTION	08/24/21	DC	LA	AC



BOSTON GAS COMPANY 40 SYLVAN ROAD WALTHAM, MA 02451					
PROPOSED GAS MAIN INSTALLATION 8"/4" MDPE (LP TO 22 PSIG) MARY ELLEN RD NEWTON, MA					
PROPOSED LOCATION DETAIL SHEET 1 OF 2					
DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.:
22"x34"	D. CASTANG	A. CAVALLO	09/08/21	DISTRIBUTION	1409992

PAGE 10 OF 14	
DRAWING NO.	SHEET NO.
NEW-1409992-10	C-101

IFC



DRAWING LEGEND

- EXISTING BS GAS MAIN
- PROPOSED MDPE GAS MAIN

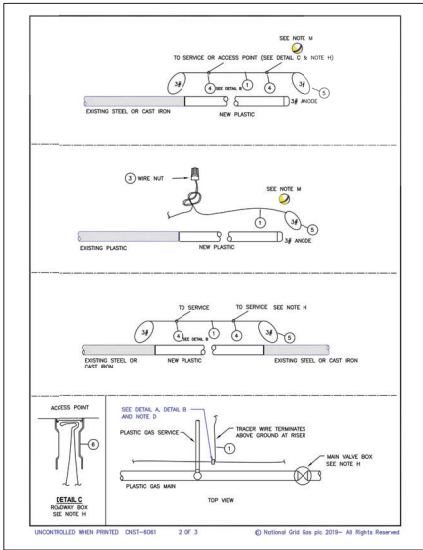
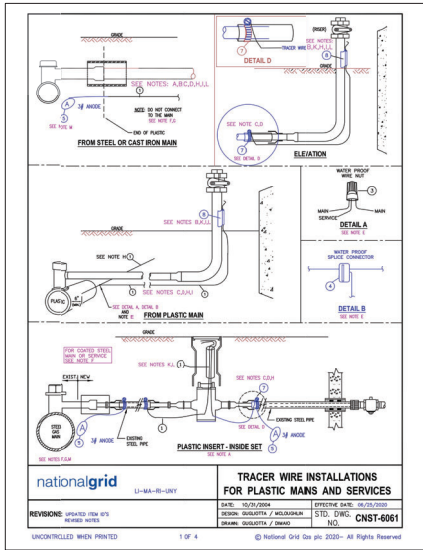
BOSTON GAS COMPANY		6/2/15	
nationalgrid		40 SYLVAN ROAD WALTHAM, MA 02451	
1 ISSUED FOR CONSTRUCTION		09/08/21	DC LA AC
2 ISSUED FOR CONSTRUCTION		08/24/21	DC LA AC
NO.	DESCRIPTION	DATE	DR BY
			APP BY

PROPOSED GAS MAIN INSTALLATION
8"/4" MDPE (LP TO 22 PSIG)
MARY ELLEN RD
NEWTON, MA

PROPOSED LOCATION DETAIL SHEET 2 OF 2

DWG SIZE	DESIGNER	ENGINEER	DATE:	ASSET I.D.	W.O. NO.:
22"x34"	D. CASTANG	A. CAVALLO	09/08/21	DISTRIBUTION	1409992

PAGE 11 OF 14	
DRAWING NO.	SHEET NO.
NEW-1409992-11	C-102



MATERIAL LIST

NO.	ITEM	BILL OF MATERIAL	SAP ITEM ID
1	TRACER WIRE SNAP, 2" (represents steel size)	UN307	UN307
2	TRACER WIRE SNAP, 1" (represents steel size)	UN307	UN307
3	TRACER WIRE SNAP, 1/2" (represents steel size)	UN307	UN307
4	TRACER WIRE SNAP, 1/4" (represents steel size)	UN307	UN307
5	TRACER WIRE SNAP, 3/16" (represents steel size)	UN307	UN307
6	TRACER WIRE SNAP, 1/8" (represents steel size)	UN307	UN307
7	CLAMP, STAINLESS	930659	930659
8	WIRE NUT, PLASTIC, WATERPROOF	930658	930658
9	WIRE, DIRECTIONAL DRILL, STAINLESS, STRANDED 10 AWG	931187	931187
10	TRACER WIRE, DIRECT BURIAL, COPPER, 12 AWG	931005	931005

Notes:

- Inside tests:** Terminate tracer wire in the curb valve box. Allow enough wire to extend 18" to 24" above grade.
- Outside tests:** Tracer wire should be extended approximately 18" above grade at riser. Connect tracer wire to the riser using a "tracer snap", item #8. If the appropriate tracer snap is not available, wrap or tie the tracer wire to the riser. Do not permanently attach tracer wire to the riser. Tracer wire should not exceed 6" above the point where it is securing the riser.
- Partially buried services:** When the abandoned portion of an existing steel service pipe is used as a sleeve for the new plastic, all cut out sections of the steel pipe to be inserted with plastic, shall be connected using a section of tracer wire to maintain continuity. If the existing service is coated steel, see *Installation of Test Stations for Cathodic Protection (030202-CS)* and *Installation of Test Stations for Cathodic Protection (030900-CS)* or contact corrosion department for more guidance.
- Thermally welded of tracer wire to abandoned steel service is only acceptable prior to insertion of the plastic tubing.** See *Installation of Test Stations for Cathodic Protection (030202-CS)*.
- Plastic Valves:** The service tracer wire shall be connected to the plastic main tracer wire using item #3 (detail A or item #4 (detail B - preferred) in accordance with *Installing Wire Connections (030900-CS)*.
- Coated steel mains:** Use not connect the tracer wire to the steel main. See *Installation of Test Stations for Cathodic Protection (030202-CS)* and *Installation of Test Stations for Cathodic Protection (030900-CS)* or contact corrosion department for more guidance.
- Cast Iron or Bare Steel Mains:** Do not connect the tracer wire to the main. It is required in LI and MA, and suggested in all other areas to terminate the tracing wire with a 3/8 anode.

Tracer Wire Installation Notes

- Install tracer wire in close proximity to the plastic pipe. Approximately 4" to 5" away from the pipe. LI & MA-Above or alongside, UNY-alongside, RI-Under or alongside. Exception: For trenchless pipe installations, the minimum clearance is waived.
- Maintain separation of approximately 4" from service riser. Do not permanently connect the tracer wire to the riser.
- For horizontal directional drill installations, use stainless wire, item #2.

K. Tracer wire installed in boxes should allow enough wire to extend 18" to 24" above grade.

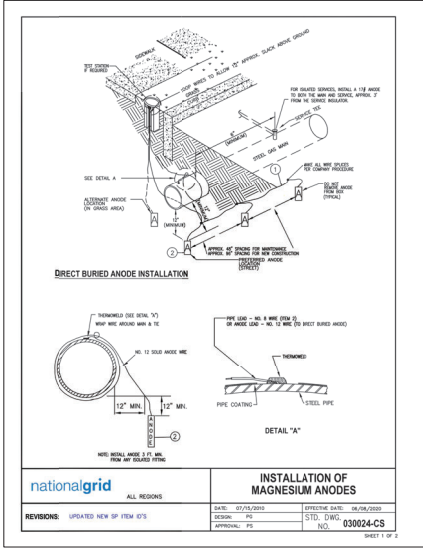
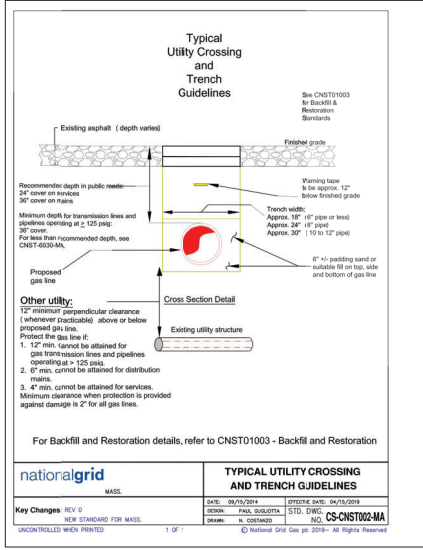
L. Verification: upon completion, the installer shall verify the location of the main or service using the tracer wire and locating device and perform a mark out using the conductive method.

M. LI and MA: Required to terminate the tracing wire with a 3/8 anode. This is to ground the tracer wire and increase signal strength when locating. This practice is recommended in all areas where signal strength is an issue.

Regional Notes

NYC ONLY: refer to *Installation of Marker Tapes and EMS Pipeline Locators for Mains and Services (CNST000-NYC)* for installation of electronic marker ball in place of tracer wire.

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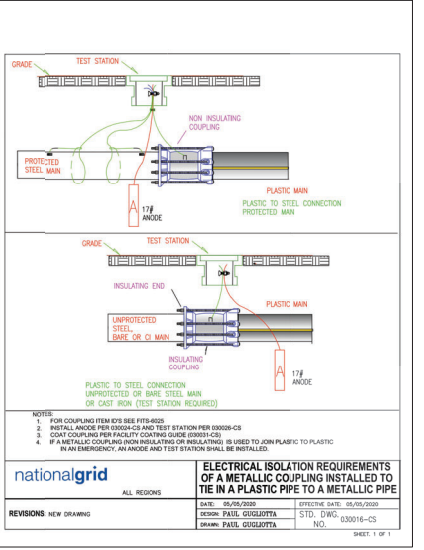
MATERIAL LIST

Description	Dowry State NY Item ID	Update NY Item ID	New England Item ID	Rhode Island Item ID	MATERIAL NOTES
1. CABLE NO. 8 - 1YC	933425	931124	933425	931124	Update and RI cable has 19 strands
2. ANODE, MAGNESIUM 12 LB	931183	931183	931183	931183	
3. ANODE, MAGNESIUM 3 LB	931565	931565	931565	931565	Use on Tracer wire and all isolated strings
4. ANODE, MAGNESIUM SERVICE 3 LB	930624	930624	930624	930624	Use on Service Risers ONLY
5. CLAMP, GROUNDING 1/2" - 1/4" DIA.	938544	938544	938544	938544	Grounding clamp for attaching spike anode lead wire to service riser
6. CLAMP, GROUNDING 1/4" - 3/16" DIA.	938559	938559	938559	938559	Grounding clamp for attaching spike anode lead wire to service riser

Notes:

- FOR COUPLING ITEM #25 SEE PFB-0205
- INSTALL ANODE PER 030024-CS AND TEST STATION PER 030028-CS
- COAT COUPLING PER FACILITY COATING GUIDE (03001-CS)
- IF A METALLIC COUPLING (NON INSULATING OR INSULATING) IS USED TO JOIN PLASTIC TO PLASTIC IN AN EMERGENCY, AN ANODE AND TEST STATION SHALL BE REINSTALLED

SPike Anode Ground Clamp



NOTE: THE ENGINEER OF RECORD HAS REVIEWED THE PROVIDED NATIONAL GRID STANDARD DETAILS AND DETERMINED THEIR APPLICABILITY TO THE WORK IN THIS PACKAGE. THE ENGINEER OF RECORD DOES NOT CERTIFY THE ACCURACY OF ANY REFERENCED STANDARDS OR PROCEDURES NOT DIRECTLY RELATED TO THE WORK DESCRIBED IN THIS PLAN SET.

Architecture
Engineering
Environmental
Land Surveying

Companies

SEAL: ANDREW JOSEPH CAVALLI MECHANICAL No. 54234 PROFESSIONAL ENGINEER

ANDREW JOSEPH CAVALLI
SIGN & DATE

BOSTON GAS COMPANY
G/C

nationalgrid
40 SYLVAN ROAD
WALTHAM, MA 02451

NO.	DESCRIPTION	DATE	DR	CR	APP
1	ISSUED FOR CONSTRUCTION	09/09/21	DC	LA	AC
2	ISSUED FOR CONSTRUCTION	08/24/21	DC	LA	AC

IFC

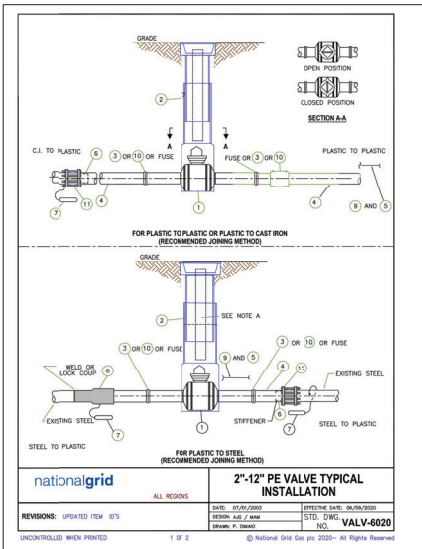
PROPOSED GAS MAIN INSTALLATION
8" / 4" MDPE (LP to 22 PSIG)
MARY ELLEN RD
NEWTON, MA

MISCELLANEOUS DETAIL 1 OF 3

DWG SIZE: 22"X34"
DESIGNER: D. CASTANO
ENGINEER: A. CAVALLI
DATE: 09/08/21
ASSET I.D.: DISTRIBUTION
W.O. NO.: 1409992

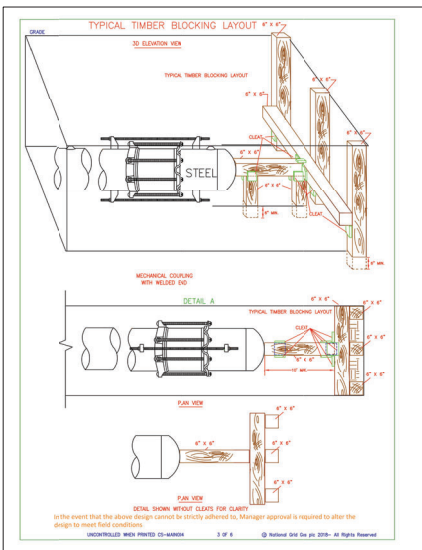
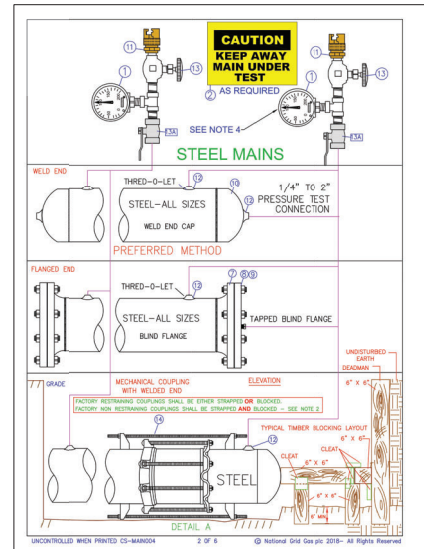
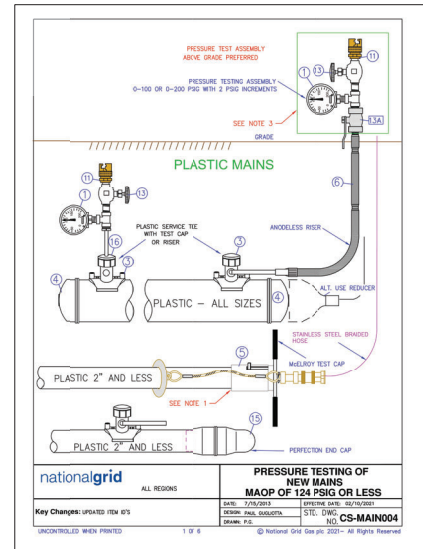
PAGE 12 OF 14

DRAWING NO.	SHEET NO.
NEW-1409992-12	C-201



NOTES:
 A. IN ANY REGION, INSTALL A LENGTH OF 2\"/>

SAP ID	LI ONLY	SAP ID	LI NYC AND NE
UNY AND RI	UNY AND RI	UNY AND RI	UNY AND RI
LP TO 100 PSIG HD	91 AND 124 PSIG HD	LP TO 60 PSIG MEDIUM DENSITY	
931203 1/2\"/>			



NOTES:
 1. INSTALL PER MICELROY MANUFACTURER'S INSTRUCTIONS.
 2. RESTRAINING MECHANICAL COUPLING AND BARRIER SHALL BE STRAPPED AND THE ENDS SHALL BE LOCKED PER APPROVED STANDARD DRAWINGS. RESTRAINING COUPLING NEED TO BE STRAPPED OR LOCKED. WHEN BARRIERS RESTRAINING COUPLING, STRAPPING NEEDS BE SAME TECH.
 3A. ON EXISTING STEEL SYSTEMS REFER TO THE TABLE BELOW FOR THE MINIMUM SAFE DISTANCE FROM THE EXISTING WALL. IF BARRIERS STRAPPED COUPLING DISTANCE IS A DISTANCE LESS THAN THE MINIMUM SAFE DISTANCE FROM THE EXISTING WALL, ALL WALL BLOCKING IS REQUIRED FOR THE PRESSURE TEST. IF AN ALL WELDED SYSTEM IS NOT TO BE COMPARTMENTED, THE PIPE SIZE 1\"/>

ITEM	DESCRIPTION	QUANTITY	UNIT	PROFESST
1	PRESSURE GAUGE 1/2\"/>			

ITEM	DESCRIPTION	QUANTITY	UNIT	PROFESST
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ITEM	DESCRIPTION	QUANTITY	UNIT	PROFESST
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Architecture
 Engineering
 Environmental
 Land Surveying

ANDREW JOSEPH CAVALLA
 MECHANICAL
 No. 54234

Professional Engineer
 State of Massachusetts
 License No. 10122

Signature and Date

NO.	ISSUED FOR CONSTRUCTION	DATE	BY	CHK	APP
1	ISSUED FOR CONSTRUCTION	09/08/21	DC	LA	AC
2	ISSUED FOR CONSTRUCTION	09/24/21	DC	LA	AC

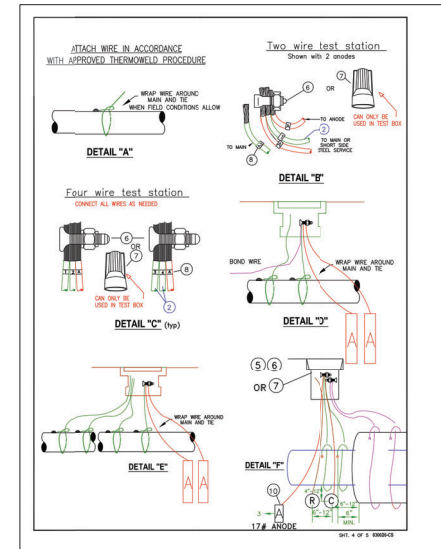
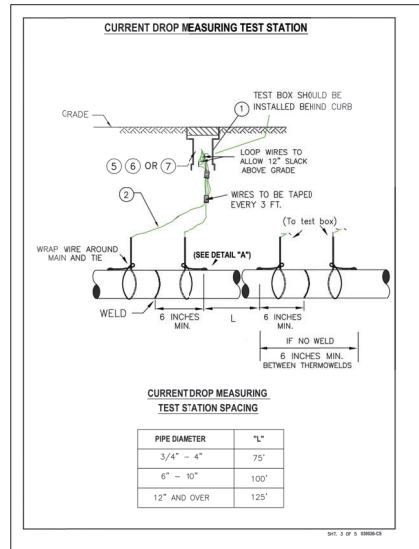
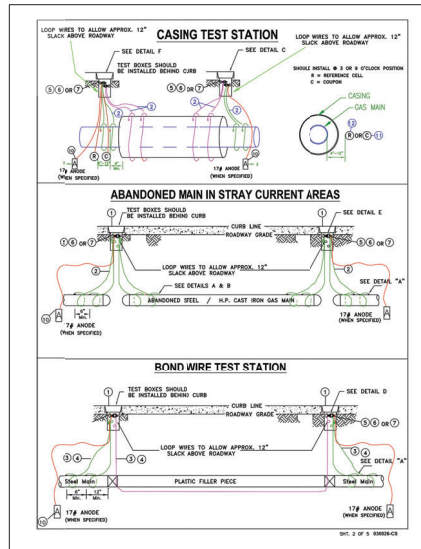
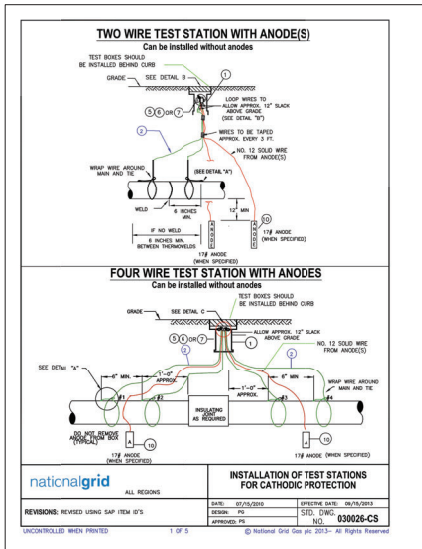
BOSTON GAS COMPANY
 40 SYLVAN ROAD
 WALTHAM, MA 02451

PROPOSED GAS MAIN INSTALLATION
 8" / 4" MDPE (LP TO 22 PSIG)
 MARY ELLEN RD
 NEWTON, MA

MISCELLANEOUS DETAIL 2 OF 3

DWG SIZE: 22" X 34"
 DESIGNER: D. CASTING
 ENGINEER: A. CAVALLA
 DATE: 09/08/21
 ASSET I.D.: DISTRIBUTION
 W.O. NO.: 1409992

DRAWING NO.	SHEET NO.
NEW-1409992-13	C-202

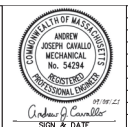


MATERIAL LIST

Description	Down State Item ID	Update SAP Item ID	New Englad SAP Item ID	Rhode Island SAP Item ID	MATERIAL NOTES
1 TEST BOX WITH COVER	9339902	9312911	9339902	9311208	NON LOCKING COVER. DISCARD FOOT PIECE.
TEST BOX 6" SQUARE HEAVY DUTY	9339398	9339398	9339391	9311208	WEIGHS 95 LBS. STREET USE, WITHOUT COVER
COVER FOR 6" SQUARE BOX	9339797	9339797	9339797	9311208	NON LOCKING COVER
2 WIRE, NO. 6, 7 STRAND	9307539	9307539	9307539	9307539	TEST WIRE ONLY, NOT FOR VEHICULAR BEARS, UP TO 141 LBS AND IN WIRE HAS 19 STRANDS
3 WIRE, NO. 6, 7 STRAND	9311795	9311795	9311795	9311795	BOND WIRE ONLY, NOT FOR GROUND BEDS
4 WIRE, 10 - 19 STRAND 800 V-11C	9334171	NON STOCK	9334171	NON STOCK	USE IN STRAY CURRENT AREAS
5 TAPE, PVC, 3/8" WIDE	9334056	9316070	9334056	9316070	NOT FOR PIPE COATING
6 CONNECTOR, SPLIT BOLT, TYPE 6	9331578	9316630	9331578	NON STOCK	USE WITH NO. 6 CABLE
CONNECTOR, SPLIT BOLT, TYPE 101	9331612	9331612	9331612	9331612	USE WITH 1/0 CABLE
7 CONNECTOR, TYPED ON WIRE NUT	9330863	9314631	9330863	9314631	
8 TAG, ADHESIVE NUMBER 1	9307918	9307918	9307918	9307918	LABEL WITH #1 (NO OR (E) CONSECUTIVELY TO (S) OR (W)
NUMBER 2	9307896	9307896	9307896	9307896	SEE DETAILS "B" AND "C"
NUMBER 3	9307895	9307895	9307895	9307895	
NUMBER 4	9307894	9307894	9307894	9307894	USE TO LABEL ANODES
LETTERS A	9307893	9307893	9307893	9307893	AS SPECIFIED BY CORROSION ENGINEERING
9 GROUNDING CELL	NON STOCK	9315642	NON STOCK	NON STOCK	
10 ANODE, MAGNESIUM 17LBS	9311183	9311183	9311183	9311183	SATURATE WITH WATER BEFORE BACKFILL. ANODE MAY BE INSTALLED VERTICALLY OR HORIZONTALLY
11 COUPON	9385100	By Corrosion	9385100	By Corrosion	MC MILLER OR EQUAL
12 REFERENCE CELL	9385108	By Corrosion	9385108	By Corrosion	BOSCH MFG OR EQUAL

UNCONTROLLED WHEN PRINTED 5 OF 5

NOTE: THE ENGINEER OF RECORD HAS REVIEWED THE PROVIDED NATIONAL GRID STANDARD DETAILS AND DETERMINED THEIR APPLICABILITY TO THE WORK IN THIS PACKAGE. THE ENGINEER OF RECORD DOES NOT CERTIFY THE ACCURACY OF ANY REFERENCED STANDARDS OR PROCEDURES NOT DIRECTLY RELATED TO THE WORK DESCRIBED IN THIS PLAN SET.



NO.	DESCRIPTION	DATE	DR BY	CR BY	APP BY
1	ISSUED FOR CONSTRUCTION	09/09/21	DC	LA	AC
2	ISSUED FOR CONSTRUCTION	08/24/21	DC	LA	AC

DATE: 09/08/21

BOSTON GAS COMPANY
674/0

nationalgrid
40 SYLVAN ROAD
WALTHAM, MA 02451

PROPOSED GAS MAIN INSTALLATION
8"/4" MDPE (LP TO 22 PSIG)
MARY ELLEN RD
NEWTON, MA

MISCELLANEOUS DETAIL 3 OF 3

DWG SIZE: 22"x34"
DESIGNER: D. CASTANG
ENGINEER: A. CAVALLO
DATE: 09/08/21
ASSET I.D.: DISTRIBUTION
W.O. NO.: 1409992

PAGE 14 OF 14

DRAWING NO.	SHEET NO.
NEW-1409992-14	C-203

Final Label Report

SBL	Owner	Number	Street	Unit
53001 0008	LOOKNER SUSAN	1298	COMMONWEALTH AVE	
32035 0001	YU STEPHEN & SUSAN L	1320	COMMONWEALTH AVE	
32035 0002	CAPASSO DONATO D	1330	COMMONWEALTH AVE	
53003 0011	BERNHARD DAVID J	118	EVELYN RD	
53002 0009	MODIANO EYTAN & ISABELLE	119	EVELYN RD	
53002 0010	DAVIS KATHRYN A	125	EVELYN RD	
53003 0010	CHAU SHU NGON & EVA YEE WAH MOK	126	EVELYN RD	
53003 0022	MCKEAG MARK S	132	EVELYN RD	
53002 0011	ZHANG CECILIA	133	EVELYN RD	
53003 0009	WINNAY JONATHON	136	EVELYN RD	
53002 0012	GOLDFINE NEIL & DEBORAH A	141	EVELYN RD	
53003 0008	HUANG SZE FENG & ANN YIEN YU	144	EVELYN RD	
53002 0013	CHANG REBECCA G TR	149	EVELYN RD	
53003 0007	SHKLAR SE KYUNG O	154	EVELYN RD	
53002 0014	HU STEPHEN	157	EVELYN RD	
53003 0006	HANDEL TODD E	162	EVELYN RD	
53002 0015	CHANG YUN & KAY	165	EVELYN RD	
53003 0005	ROSENBERG JEFFREY	170	EVELYN RD	
53002 0016	HARRIS RUTH EVANS TR	175	EVELYN RD	
53003 0004	TAM MALINDA	180	EVELYN RD	
53001 0010	MACDONALD BRUCE A	189	EVELYN RD	
53003 0003	AISENBERG HELENE & MURRAY	192	EVELYN RD	
53001 0009	YU KAM H	197	EVELYN RD	
53003 0002	KLIMOV ALEX	202	EVELYN RD	
53003 0001	EVELYN DVLPMNT PTRS LLC	208-210	EVELYN RD	
53001 0025	REICH DEBORAH L	5	MARY ELLEN RD	
53001 0024	SOIBELMAN ISRAEL	15	MARY ELLEN RD	
53001 0023	SHEMS NESSY & ALICIA S	19	MARY ELLEN RD	
53001 0022	DAVIDSON LEONARD M & LAURIE E	25	MARY ELLEN RD	
53002 0008	CHERTOW JOY A	26	MARY ELLEN RD	
53001 0021	HOPKE JOERN	31	MARY ELLEN RD	
53002 0007	DORSCH WARREN	34	MARY ELLEN RD	
53001 0020	EHRlich DANA M & NOEMY	39	MARY ELLEN RD	
53002 0006	BERTSCHINGER EDMUND W	44	MARY ELLEN RD	
53001 0019	BERGSTROM SVEN	47	MARY ELLEN RD	
53002 0005	SETH FRANCES P TR	50	MARY ELLEN RD	
53001 0018	TAUBMAN JOAN P	55	MARY ELLEN RD	
53002 0004	YU BOWEI	60	MARY ELLEN RD	
53001 0017	CUNNINGHAM KENNETH E TR	65	MARY ELLEN RD	
53002 0003	WEIN CAROL & MARJORIE S TRS	70	MARY ELLEN RD	
53001 0016	MACLEAN RODERICK G S	71	MARY ELLEN RD	
53002 0002	TANG EDDIE TAK CHI & WENDY WONG	78	MARY ELLEN RD	
53001 0015	MAO BOBBY FO CHUNG	79	MARY ELLEN RD	
53001 0014	PORT CYNTHIA TR	85	MARY ELLEN RD	
53001 0013	CHAN GARY S & LILLIAN E	91	MARY ELLEN RD	

SBL	Owner	Number	Street	Unit
53002 0001	CHANG SANDRA	94	MARY ELLEN RD	
53001 0012	FAN JOHN E	99	MARY ELLEN RD	
53001 0011	GROSS ROBIN S	107	MARY ELLEN RD	
53004 0003A	ANTHONY TODD E	3-5	TROY LN	5
53004 0003	SAVOULIDES NICHOLAS	3-5	TROY LN	3