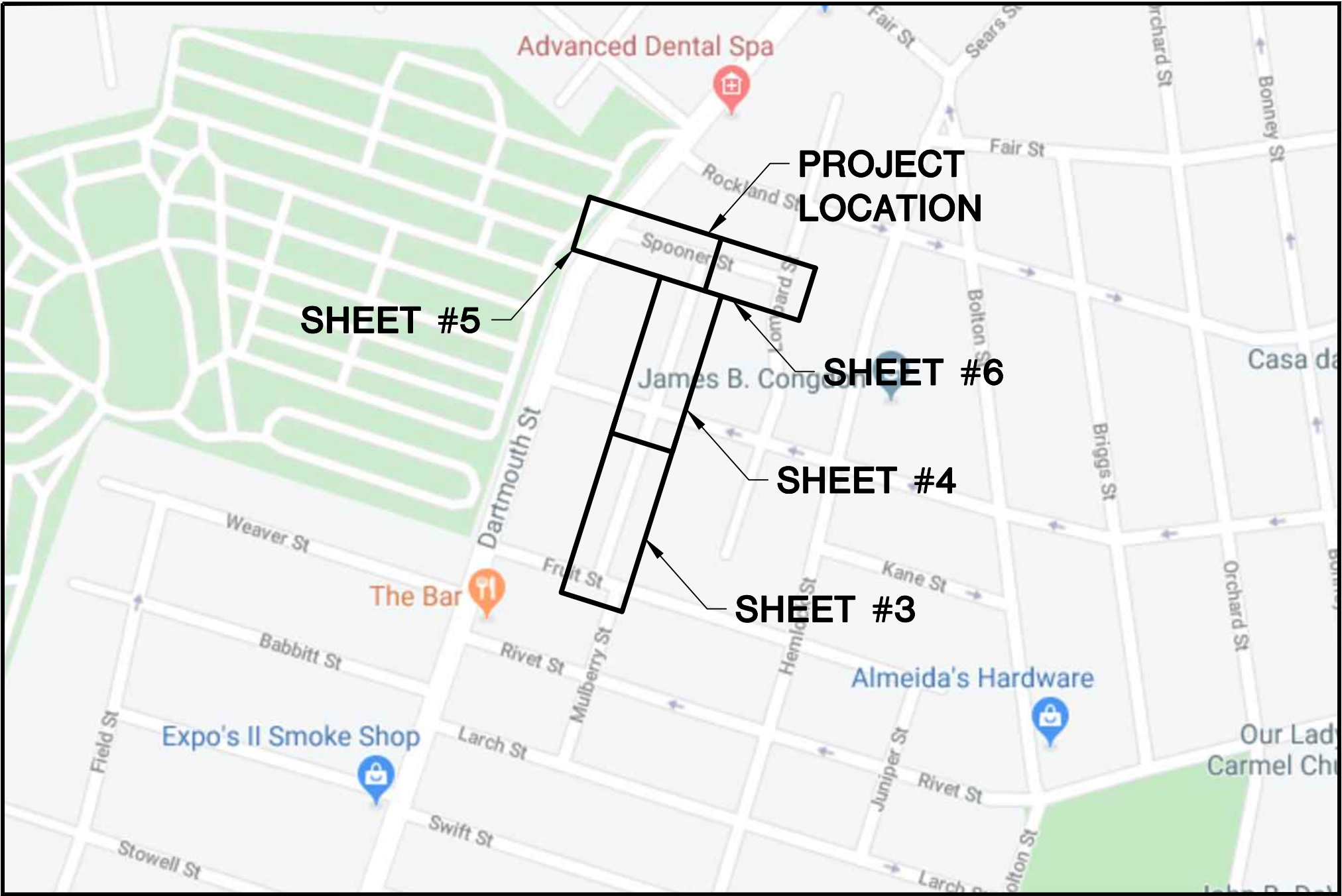


EVERSOURCE ENERGY

BOURNE STREET AND SPOONER STREET MAIN RELAY NEW BEDFORD, MASSACHUSETTS ENE PROJECT #: 2000000.23 EVERSOURCE PROJECT #: 1301031

SHEET INDEX

SHEET NUMBER	DESCRIPTION
1	SITE PLAN, DRAWING LEGEND AND SHEET INDEX
2	GENERAL NOTES AND SCHEDULE OF MATERIALS
3	INSTALLATION PLAN
4	INSTALLATION PLAN
5	INSTALLATION PLAN
6	INSTALLATION PLAN
7	INSTALLATION DETAIL #1
8	INSTALLATION DETAIL #2
9	INSTALLATION DETAIL #3
10	INSTALLATION DETAIL #4



SITE PLAN

NEW BEDFORD, MASSACHUSETTS
(NOT TO SCALE)

SCOPE OF WORK

RELAY 860' OF 4" CI LP WITH 880' OF 4" PH
LP ON SPOONER STREET FROM DARMOUTH
STREET TO LOMBARD STREET AND ON BOURNE
STREET FROM SPOONER STREET TO FRUIT
STREET DUE TO DETERIORATING CONDITIONS.

LOCUS PLAN NOT TO SCALE

DRAWING LEGEND

	UTILITY POLE		EXISTING GAS MAIN
	LIGHT POLE		RETIRED GAS MAIN
	CATCH BASIN		PROPOSED GAS MAIN
	FIRE HYDRANT		EXISTING SERVICE
	UTILITY MANHOLE		RIGHT OF WAY
	ELECTRIC MANHOLE		ELECTRIC
	TELEPHONE MANHOLE		TELEPHONE
	WATER MANHOLE		WATER
	SANITARY MANHOLE		SANITARY SEWER
	STORM MANHOLE		STORM SEWER
	EXISTING REDUCER		PROPOSED REDUCER
	EXISTING CAP		PROPOSED CAP
	EXISTING VALVE		PROPOSED VALVE
	EXISTING COUPLING		PROPOSED COUPLING

0	ISSUED FOR CONSTRUCTION	02/06/2020	RT/AB
NO.	DESCRIPTION	DATE	DW/CK/AP

REVISION STATUS

EVERSOURCE ENERGY

BOURNE STREET AND SPOONER STREET MAIN RELAY			
NEW BEDFORD, MASSACHUSETTS			
SITE PLAN, DRAWING LEGEND AND SHEET INDEX			
SCALE: NOT TO SCALE		SHEET 1 OF 10	
DRAWN BY / DATE DD 12/11/2019	CHECKED BY / DATE AB 02/06/2020	SHEET NUMBER MA-20-PIP-NEB-022-01	REV. NO. 0
APPROVED BY / DATE	MA20PIPNEB022R0		

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02/06/20

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SEALED ON:

02/10/2020

LICENSE
EXPIRATION:

06/30/2020

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FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

1.

MAINS AND SERVICES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH EVERSOURCE OM-205. AT A MINIMUM TEST PRESSURE SHALL BE 90 PSIG FOR 4 HOURS. TEST MEDIUM SHALL BE NITROGEN OR AIR.

2.

MAOP LP = 14" W.C.

3.

CONTRACTOR TO LOCATE ALL UNDERGROUND FACILITIES PRIOR TO DIGGING.

4.

BACKFILL WITH SAND WHERE PIPE TRENCH IS UNDER OR WITHIN 2' OF PAVEMENT, CURB, OR SIDEWALK.

5.

ALL RIGHT-OF-WAY MUST BE STAKED BEFORE GAS MAIN CAN BE INSTALLED, IF INSTALLED IN OFF-STREET ALIGNMENT.

6.

COORDINATE WITH EVERSOURCE GAS INSPECTOR FOR LOCATION OF UNDERGROUND UTILITIES PRIOR TO STARTING ANY EXCAVATION. EXERCISE CARE WHEN EXCAVATING NEAR EXISTING STRUCTURES.

7.

UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. CONTRACTOR SHALL CALL 811 AND LOCAL GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION FOR ALL UTILITY LOCATIONS.

8.

ALL WORK SHALL BE PERFORMED PER EVERSOURCE, LOCAL, STATE AND FEDERAL REGULATIONS & STANDARDS.

9.

CONTACT CITY OF NEW BEDFORD AND DEPARTMENT OF PUBLIC WORKS PRIOR TO COMMENCEMENT OF WORK AND PRIOR TO ANY PROPOSED ROAD CLOSURES.

10.

CONTACT MASSACHUSETTS DEPARTMENT OF TRANSPORTATION WHEN REQUIRED.

11.

ALL DISTURBED SOIL AND PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITION.

12.

CONTACT PROJECT MANAGER PRIOR TO ANY FIELD CHANGES.

13.

CONTRACTOR SHALL AVOID IMPACTING ANY AND ALL PRIVATE DRAINS AND DRIVEWAY CULVERTS.

14.

ALL SEWER LATERALS THAT ARE CROSSED SHALL BE DOCUMENTED PRIOR TO AND AFTER CONSTRUCTION TO ENSURE NO DAMAGE WAS MADE TO EXISTING PIPES & STRUCTURES.

15.

EXISTING GAS SERVICE LOCATIONS ARE APPROXIMATE & SHALL BE VERIFIED IN FIELD.

16.

ALL PIPE TO BE INSTALLED WITH A MINIMUM DEPTH IN ACCORDANCE WITH EVERSOURCE STANDARDS.

17.

ALL PROPOSED PIPE WILL BE INSTALLED VIA OPEN CUT/DIRECT BURY UNLESS OTHERWISE SPECIFIED.

18.

THIS DOCUMENT REQUIRES A REVISION IF ANY OF THE FOLLOWING ARE REQUIRED;
1) IF THE TIE IN POINT MOVES TO A DIFFERENT LOCATION THAN SHOWN.
2) IF A CHANGE TO THE GAS FLOW PATH INCLUDING BUT NOT LIMITED TO THE LOCATION OR ORIENTATION OF TEES, BRANCHES, AND HOT TAP FITTING OR A CHANGE IN THE LOCATION OF VALES IS REQUIRED.
3) IF THE WORK IS WITHIN 50 FT OF A PRESSURE REGULATING STATION, DISTRICT REGULATOR OR GATE STATION AND ADDITIONAL OFFSETS ARE REQUIRED THAN WHAT IS SHOWN.
4) A CHANGE IN PIPE SIZE, MATERIAL, OR WALL THICKNESS IS REQUIRED.

19.

EXISTING CONDITIONS INCLUDING LOCATION, SIZE, MATERIAL, INTERNAL PRESSURE, RATINGS OF GAS FACILITIES ARE BASED OFF HISTORICAL DOCUMENTATION AND HAS NOT BEEN FIELD VERIFIED. WHEN THE PIPE IS EXPOSED THIS DRAWING OR PROCEDURE REQUIRES A REVISION IF GAS FACILITIES ARE FOUND TO MEET ANY OF THE FOLLOWING;
1) PIPE IS OF A DIFFERENT MATERIAL, SIZE, WALL THICKNESS OR PRESSURE CLASS THAN SHOWN.
2) INTERNAL PRESSURE IS MEASURED AND IS FOUND NOT TO BE CONSISTENT WITH THE OPERATING SYSTEM SHOWN.
3) IF THE GAS FLOW PATH INCLUDING BUT NOT LIMITED TO THE ORIENTATION OF TEES, BRANCHES, AND HOT TAP FITTING OR THE LOCATION OF VALES IS NOT AS SHOWN.
4) IF THE MAIN IS FOUND TO BE OVER 5' FROM WHERE IS IT IS DIMENSIONED.
5) IF MULTIPLE OR ADDITIONAL MAINS AND SERVICES ARE FOUND THAN WHAT IS SHOWN.

20.

SQUEEZE LOCATIONS ARE SHOWN DIAGRAMMATICAL. SQUEEZE OPERATIONS SHOULD BE COMPLETED IN ACCORDANCE WITH OM-233.

21.

MATERIAL AND CONSTRUCTION SHALL CONFORM TO EVERSOURCE GAS STANDARDS.

22.

THE LOCATIONS OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. ADDITIONAL UNDERGROUND FACILITIES MAY EXIST THAT ARE NOT SHOWN ON THESE DRAWINGS WHICH MAY REQUIRE ADDITIONAL OFFSETS IN THE PIPELINE.

23.

LOCATIONS SHOWN ON THE DRAWING ARE APPROXIMATE. EXACT LOCATIONS OF TIE-INS SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION TO SUIT FIELD CONDITIONS. VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY WORK.

24.

ALL LIVE GAS WORK SHALL BE PERFORMED BY OR AT THE DIRECTION AND UNDER THE DIRECT SUPERVISION OF EVERSOURCE GAS PERSONNEL.

25.

ROADWAY, SIDEWALKS AND GRASS DISTURBED SHALL BE RESTORED TO THE SATISFACTION OF THE CITY OR TOWN. PLANT BEDS TO BE RELOCATED TO EXISTING REGULATOR LOCATION.

26.

SERVICES TO BE TIED INTO NEW MAIN.

27.

ENSURE ALL SERVICES HAVE UPGRADED PRESSURE REGULATORS INSTALLED PRIOR TO ACTIVATION.

28.


VENT STACKS TO BE SIZED PER EVERSOURCE STANDARD OM-225.

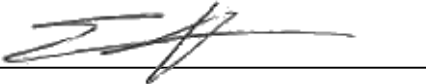
BOURNE STREET & SPOONER STREET MAIN RELAYS - SCHEDULE OF MATERIALS					
ITEM	QTY	SIZE	MAXIMO NO.	DESCRIPTION	MATERIAL
8	6	4"	501002	BALL VALVE, BUTT FUSION, IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40. FULL PORT, 1/4 TURN, KEROTEST POLYBALL OR APPROVED EQUAL.	ASTM D2513
35	AS REQUIRED	4"	500855	COUPLING, ELECTROFUSION, IPS, HDPE 3408, ASTM D3350, ASTM F1055, COMPATIBLE FOR FUSION TO HDPE 3408/4710 PIPE. GFCP OR APPROVED EQUAL.	ASTM D3350
44	AS REQUIRED	4"	545341	ELBOW, 90 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
50	AS REQUIRED	4"	545338	ELBOW, 45 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
67	AS REQUIRED	4"	542538	CAP, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	
74	3	4"	560679	TEE, STRAIGHT, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
106	1	4" X 1"	560781	TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	
108	1	6" X 1"	560785	TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	ASTM D2513
128	5	4" X 2"	584304	HV TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	ASTM D2513
134	4	4"	578189	COUPLING, BOLTED MECHANICAL, IPS TO IPS, ASTM A-53 BODY, CONFORMS TO 49 CFR 192.283(b). SMITH-BLAIR MAXI-GRIP EZ OR APPROVED EQUAL.	ASTM A-53
152	4	4"	578128	END CAP, BOLTED MECHANICAL, CIP. SMITH-BLAIR MAXI-GRIP OR APPROVED EQUAL	
170	16	4" x 2"	543028	BAND CLAMP, WITH WELDED 2" FNPT SERVICE OUTLET, 304L SS SINGLE SECTION BAND AND GAP BRIDGES, SS STUDS WITH TEFLON COATED HEX NUTS, COMPLETELY LINED WITH NITRILE RUBBER GASKET. MUELLER 540 SERVI-SEAL OR APPROVED EQUAL. COMPLETE WITH PLUG.	
265	1,135'	4"	554008	PIPE, IPS, HDPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL	ASTM D2513
8A	6	4"		BOX, VALVE, PLASTIC, SNAP-ON, ADJ, W/CI NON-LOCKING LID	

0	ISSUED FOR CONSTRUCTION	02/06/2020	RT/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVERSOURCE ENERGY			
BOURNE STREET AND SPOONER STREET MAIN RELAY			
NEW BEDFORD, MASSACHUSETTS			
GENERAL NOTES AND SCHEDULE OF MATERIALS			
SCALE: NOT TO SCALE		SHEET 2 OF 10	
DRAWN BY / DATE	CHECKED BY / DATE	SHEET NUMBER	REV. NO.
DD 12/11/2019	AB 02/06/2020	MA-20-PIP-NEB-022-02	0
APPROVED BY / DATE	MA20PIPNEB022R0		

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02/06/20

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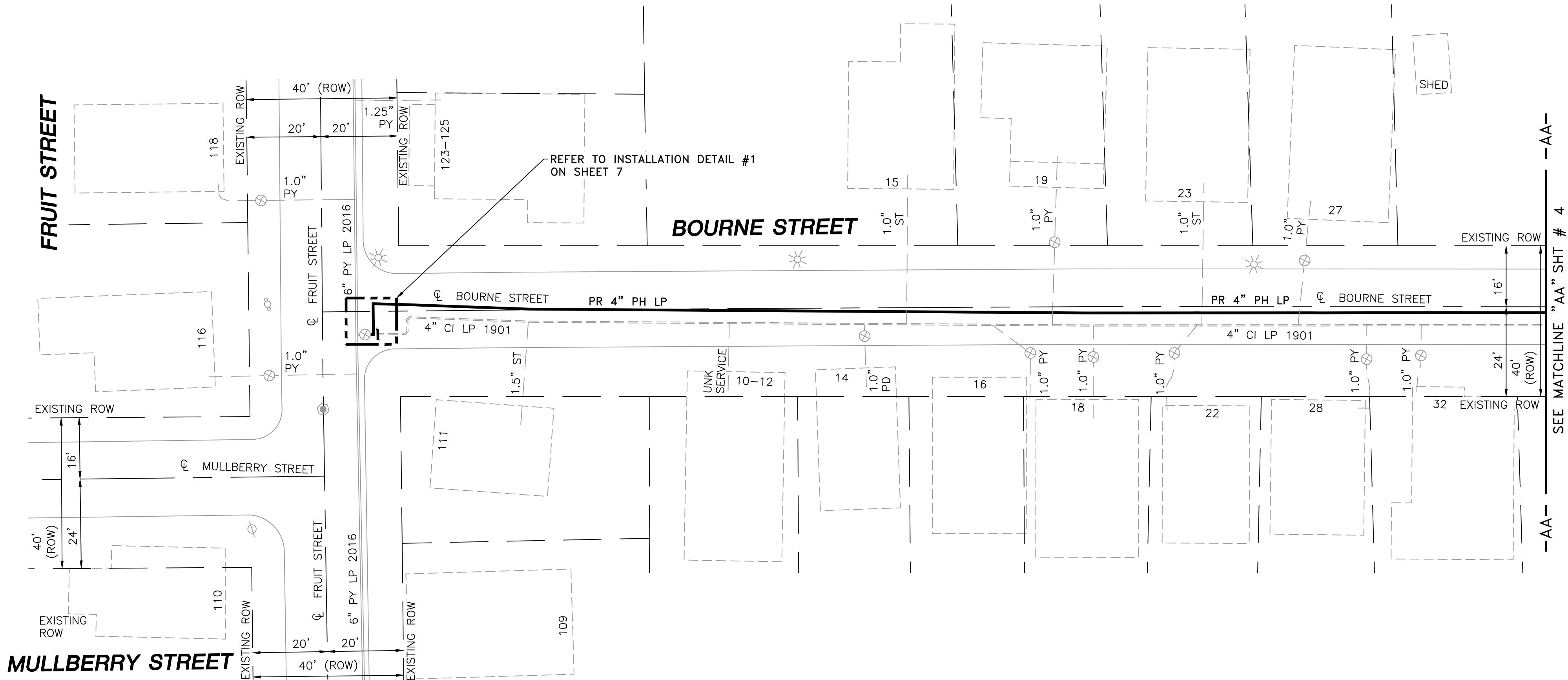
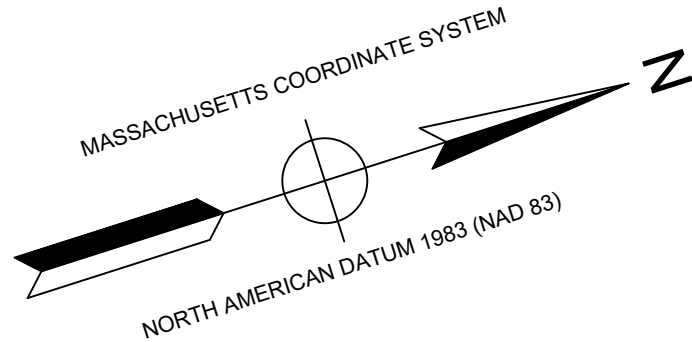
06/30/2020

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FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION



LOCUS PLAN
NOT TO SCALE

DRAWING LEGEND

	UTILITY POLE		EXISTING GAS MAIN
	LIGHT POLE		RETIRED GAS MAIN
	CATCH BASIN		PROPOSED GAS MAIN
	FIRE HYDRANT		EXISTING SERVICE
	UTILITY MANHOLE		RIGHT OF WAY
	ELECTRIC MANHOLE		ELECTRIC
	TELEPHONE MANHOLE		TELEPHONE
	WATER MANHOLE		WATER
	SANITARY MANHOLE		SANITARY SEWER
	STORM MANHOLE		STORM SEWER
	EXISTING REDUCER		PROPOSED REDUCER
	EXISTING CAP		PROPOSED CAP
	EXISTING VALVE		PROPOSED VALVE
	EXISTING COUPLING		PROPOSED COUPLING

- NOTES:
- CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION.
 - REFER TO GENERAL NOTES AND SCHEDULE OF MATERIALS ON SHEET #2.

LENGTH	SIZE	MATERIAL	DESCRIPTION
320'	4"	PH	INSTALL
315'	4"	CI	RETIRE

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NO.	DESCRIPTION	DATE	DW/CK/AP

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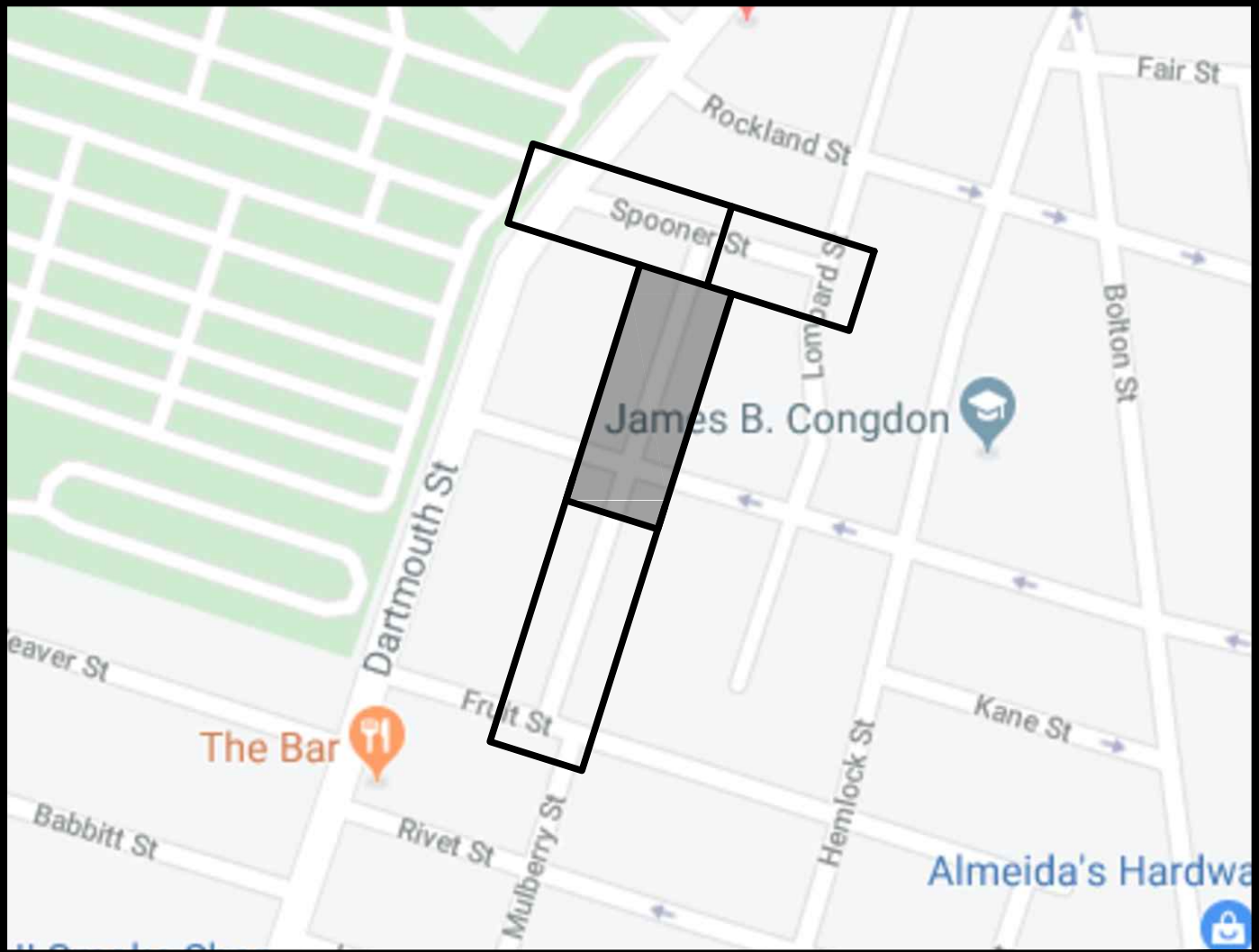
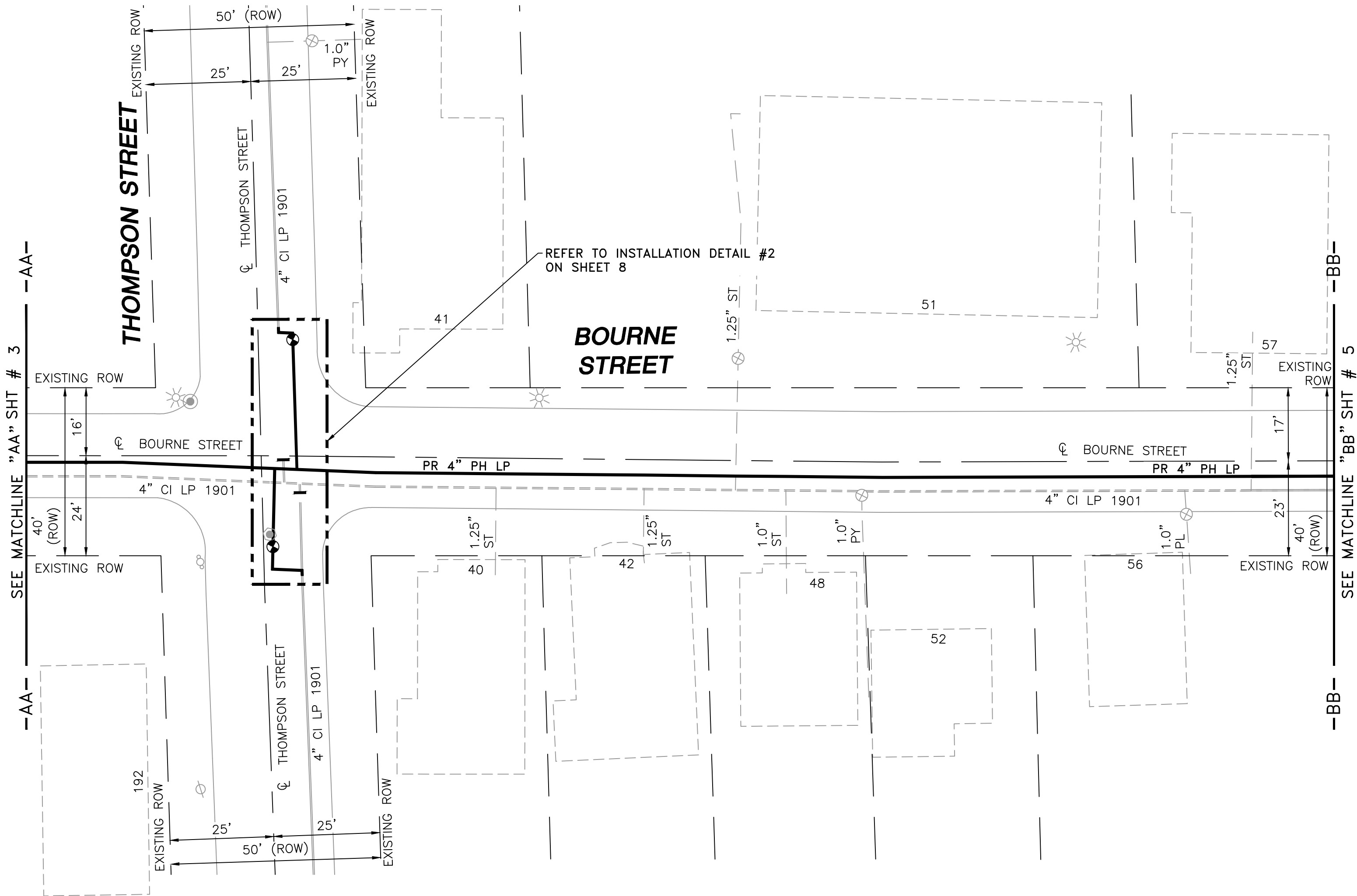
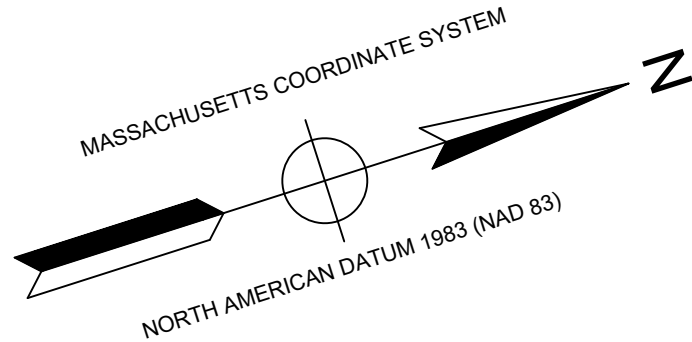
BOURNE STREET AND SPOONER STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS

INSTALLATION PLAN

SCALE: 1"=20'

SHEET 3 OF 10

DRAWN BY / DATE DD 12/11/2019	CHECKED BY / DATE AB 02/06/2020	SHEET NUMBER MA-20-PIP-NEB-022-03	REV. NO. 0
APPROVED BY / DATE	MA20PIPNEB022R0		



LOCUS PLAN
NOT TO SCALE

DRAWING LEGEND

	UTILITY POLE		EXISTING GAS MAIN
	LIGHT POLE		RETIRED GAS MAIN
	CATCH BASIN		PROPOSED GAS MAIN
	FIRE HYDRANT		EXISTING SERVICE
	UTILITY MANHOLE		RIGHT OF WAY
	ELECTRIC MANHOLE		ELECTRIC
	TELEPHONE MANHOLE		TELEPHONE
	WATER MANHOLE		WATER
	SANITARY MANHOLE		SANITARY SEWER
	STORM MANHOLE		STORM SEWER
	EXISTING REDUCER		PROPOSED REDUCER
	EXISTING CAP		PROPOSED CAP
	EXISTING VALVE		PROPOSED VALVE
	EXISTING COUPLING		PROPOSED COUPLING

- NOTES:
- CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION.
 - REFER TO GENERAL NOTES AND SCHEDULE OF MATERIALS ON SHEET #2.

LENGTH	SIZE	MATERIAL	DESCRIPTION
380'	4"	PH	INSTALL
370'	4"	CI	RETIRE

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02/06/20

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SIGNATURE

SEALED ON:

02/10/2020

LICENSE EXPIRATION:

06/30/2020

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PRIOR TO PIPE FABRICATION

NO.	DESCRIPTION	DATE	DW/CK/AP
0	ISSUED FOR CONSTRUCTION	02/06/2020	RT/AB

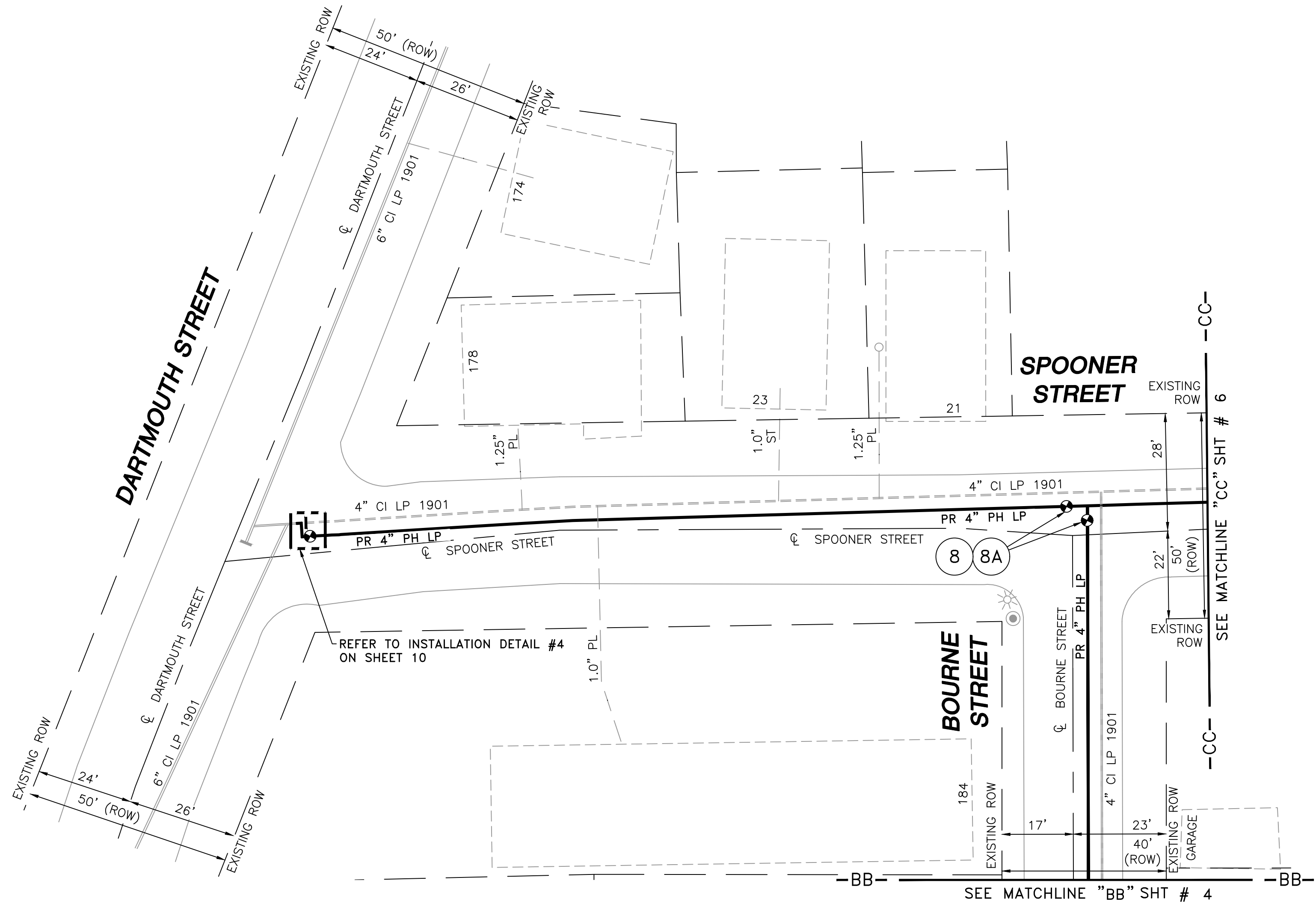
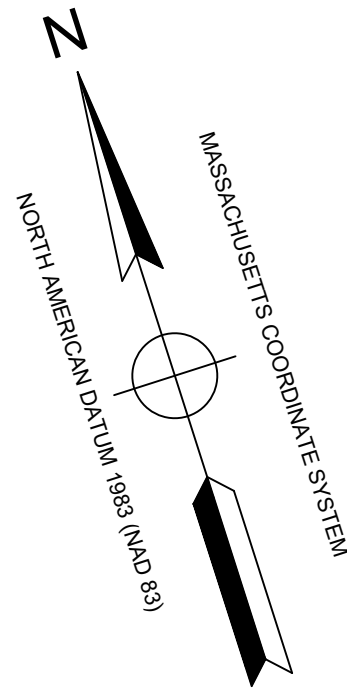
REVISION STATUS

EVERSOURCE
ENERGY

BOURNE STREET AND SPOONER STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS

INSTALLATION PLAN

SCALE: 1"=20'		SHEET 4 OF 10	
DRAWN BY / DATE DD 12/11/2019	CHECKED BY / DATE AB 02/06/2020	SHEET NUMBER MA-20-PIP-NEB-022-04	REV. NO. 0



LOCUS PLAN
NOT TO SCALE

DRAWING LEGEND

	UTILITY POLE		EXISTING GAS MAIN
	LIGHT POLE		RETIRED GAS MAIN
	CATCH BASIN		PROPOSED GAS MAIN
	FIRE HYDRANT		EXISTING SERVICE
	UTILITY MANHOLE		RIGHT OF WAY
	ELECTRIC MANHOLE		ELECTRIC
	TELEPHONE MANHOLE		TELEPHONE
	WATER MANHOLE		WATER
	SANITARY MANHOLE		SANITARY SEWER
	STORM MANHOLE		STORM SEWER
	EXISTING REDUCER		PROPOSED REDUCER
	EXISTING CAP		PROPOSED CAP
	EXISTING VALVE		PROPOSED VALVE
	EXISTING COUPLING		PROPOSED COUPLING

- NOTES:
- CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION.
 - REFER TO GENERAL NOTES AND SCHEDULE OF MATERIALS ON SHEET #2.

LENGTH	SIZE	MATERIAL	DESCRIPTION
315'	4"	PH	INSTALL
315'	4"	CI	RETIRE

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02/06/20

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SEALED ON:

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NO.	DESCRIPTION	DATE	DW/CK/AP

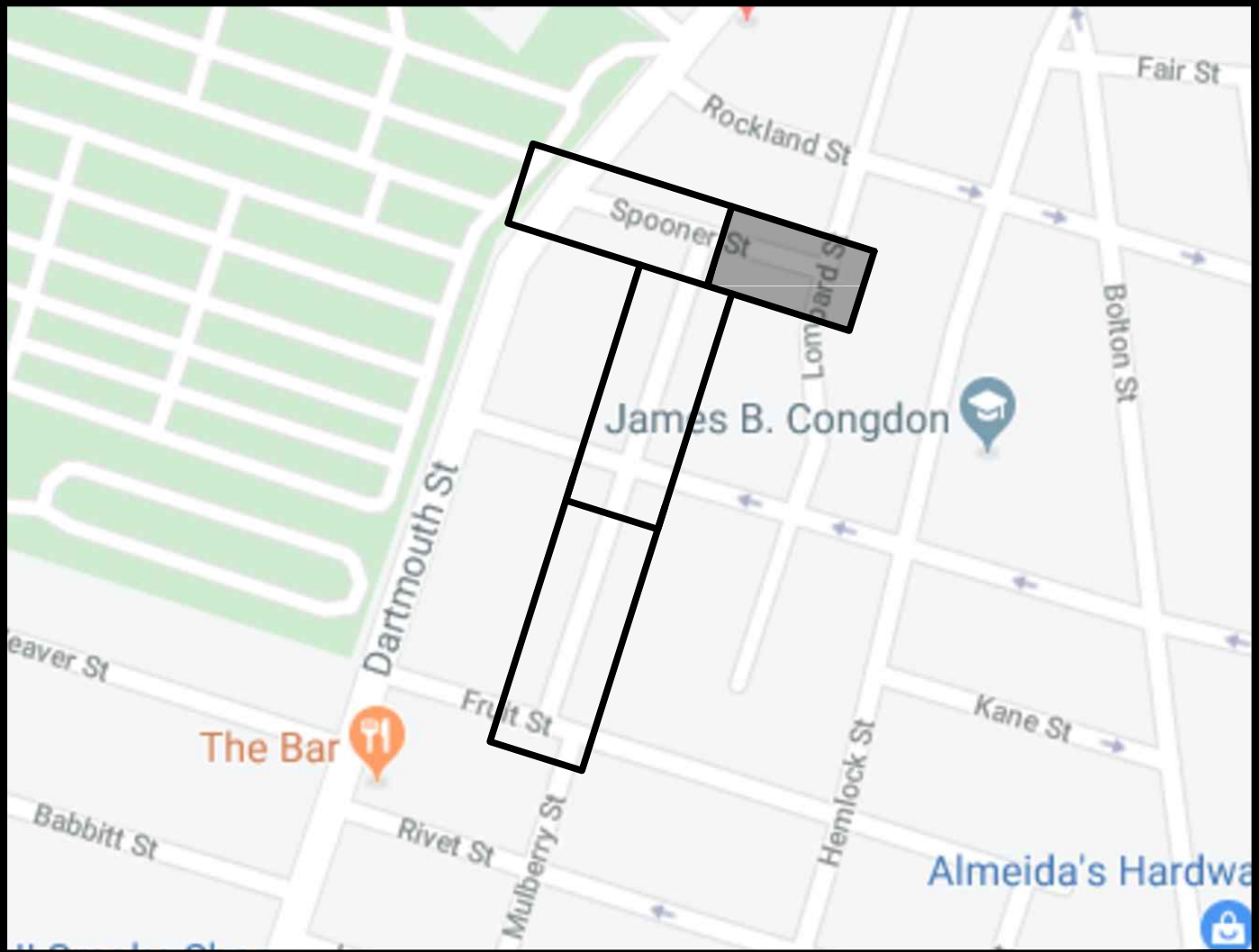
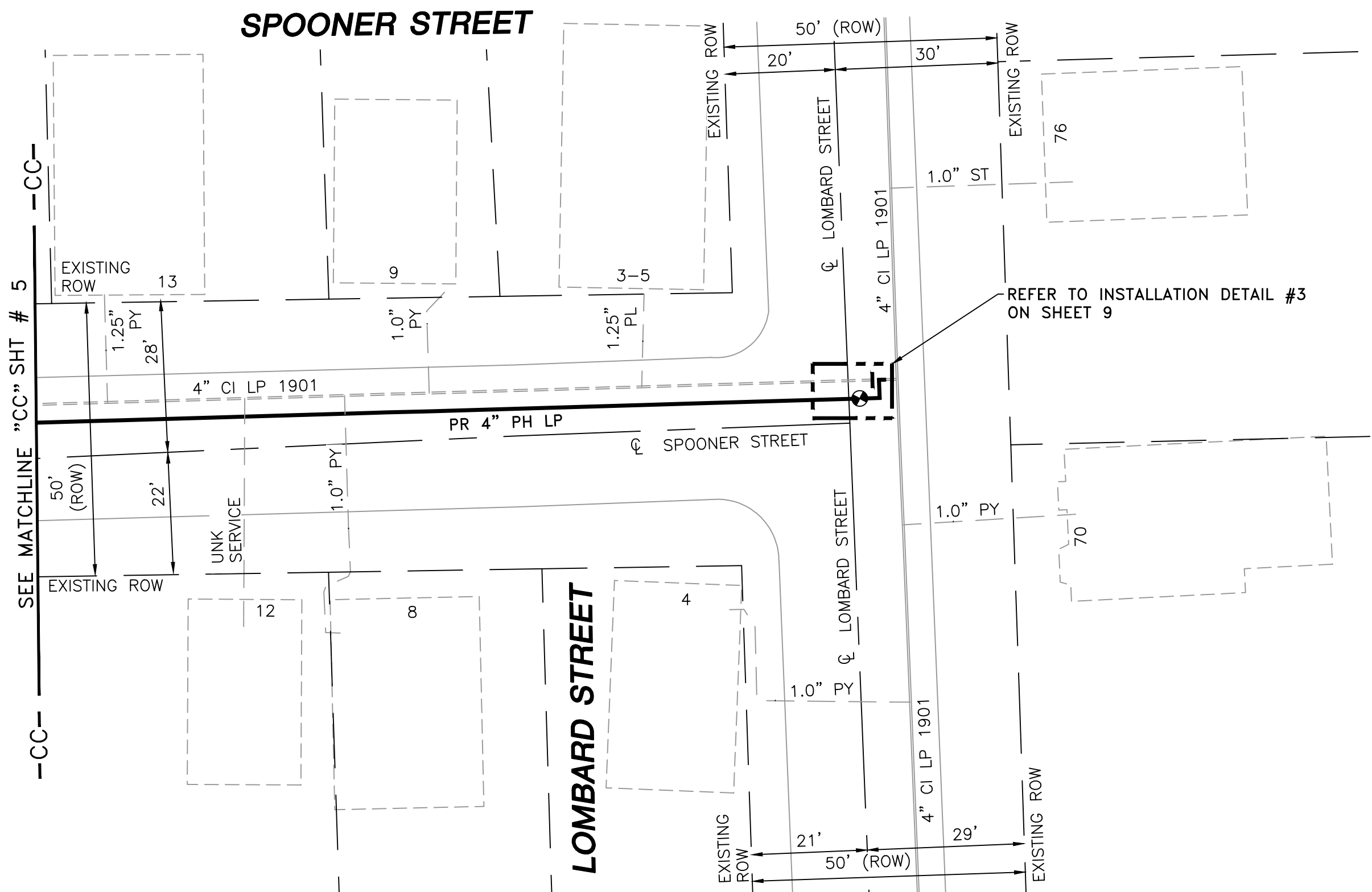
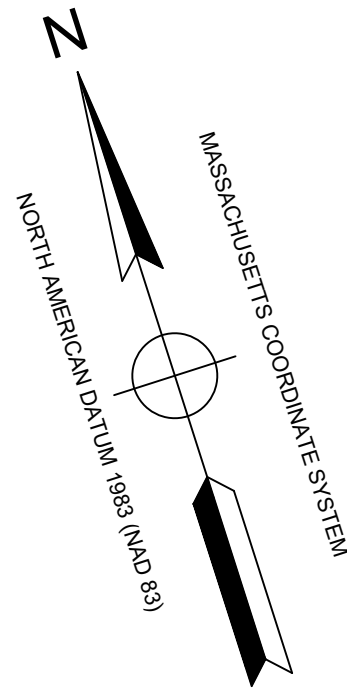
REVISION STATUS

EVERSOURCE
ENERGY

BOURNE STREET AND SPOONER STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS

INSTALLATION PLAN

SCALE: 1"=20'		SHEET 5 OF 10	
DRAWN BY / DATE DD 12/11/2019	CHECKED BY / DATE AB 02/06/2020	SHEET NUMBER MA-20-PIP-NEB-022-05	REV. NO. 0
APPROVED BY / DATE		MA20PIPNEB022R0	



LOCUS PLAN
NOT TO SCALE

DRAWING LEGEND

	UTILITY POLE		EXISTING GAS MAIN
	LIGHT POLE		RETIRED GAS MAIN
	CATCH BASIN		PROPOSED GAS MAIN
	FIRE HYDRANT		EXISTING SERVICE
	UTILITY MANHOLE		RIGHT OF WAY
	ELECTRIC MANHOLE		ELECTRIC
	TELEPHONE MANHOLE		TELEPHONE
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	SANITARY MANHOLE		SANITARY SEWER
	STORM MANHOLE		STORM SEWER
	EXISTING REDUCER		PROPOSED REDUCER
	EXISTING CAP		PROPOSED CAP
	EXISTING VALVE		PROPOSED VALVE
	EXISTING COUPLING		PROPOSED COUPLING

- NOTES:
- CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION.
 - REFER TO GENERAL NOTES AND SCHEDULE OF MATERIALS ON SHEET #2.

LENGTH	SIZE	MATERIAL	DESCRIPTION
165'	4"	PH	INSTALL
160'	4"	CI	RETIRE

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CONSTRUCTION
02/06/20

SEALED BY:



SIGNATURE

SEALED ON:

02/10/2020

LICENSE EXPIRATION:

06/30/2020

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PRIOR TO PIPE FABRICATION

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NO.	DESCRIPTION	DATE	DW/CK/AP

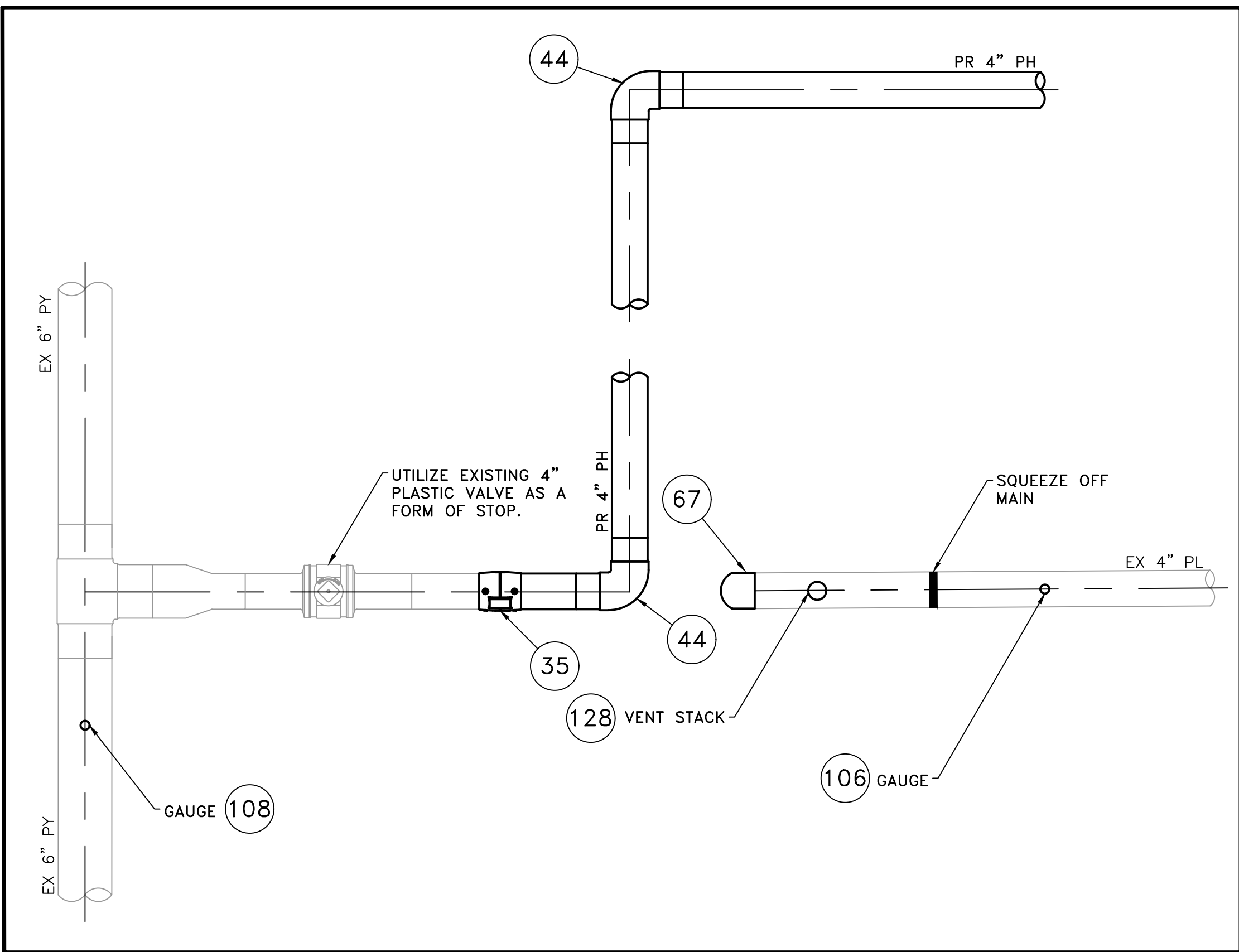
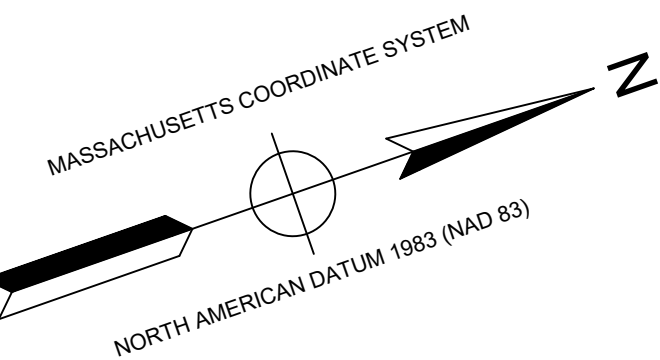
REVISION STATUS

EVERSOURCE
ENERGY

BOURNE STREET AND SPOONER STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS

INSTALLATION PLAN

SCALE: 1"=20'		SHEET 6 OF 10	
DRAWN BY / DATE DD 12/11/2019	CHECKED BY / DATE AB 02/06/2020	SHEET NUMBER MA-20-PIP-NEB-022-06	REV. NO. 0
APPROVED BY / DATE			



INSTALLATION DETAIL #1

(SCALE: 1"=1')

(REFER TO SHEET #3)

BOURNE STREET & SPOONER STREET MAIN RELAYS - INSTALLATION DETAIL #1 - SCHEDULE OF MATERIALS					
ITEM	QTY	SIZE	MAXIMO NO.	DESCRIPTION	MATERIAL
35	AS REQUIRED	4"	500855	COUPLING, ELECTROFUSION, IPS, HDPE 3408, ASTM D3350, ASTM F1055, COMPATIBLE FOR FUSION TO HDPE 3408/4710 PIPE. GFCP OR APPROVED EQUAL.	ASTM D3350
44	AS REQUIRED	4"	545341	ELBOW, 90 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
50	AS REQUIRED	4"	545338	ELBOW, 45 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
67	AS REQUIRED	4"	542538	CAP, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	
106	1	4" X 1"	560781	TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	
108	1	6" X 1"	560785	TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	ASTM D2513
128	1	4" X 2"	584304	HV TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	ASTM D2513

STANDARD DRAWING NOTES:

1. IF ANY OF THE FOLLOWING OCCUR A DRAWING REVISION IS REQUIRED AND MUST BE APPROVED AND/OR STAMPED BY THE ENGINEER OF RECORD. CHANGES CAN BE APPROVED AND/OR STAMPED BY A PROJECT ENGINEER, BUT THE ENGINEER OF RECORD MUST BE INFORMED:
 - A. IF THE TIE IN POINT MOVES TO A DIFFERENT SEGMENT OF PIPE THAN SHOWN
 - B. IF A CHANGE IN THE LOCATION OF VALVES IS REQUIRED
 - C. IF THERE IS ANY CHANGE TO WHAT IS SHOWN ON THE DRAWING WITHIN 50 FEET OF A PRESSURE REGULATING STATION, DISTRICT REGULATOR, OR GATE STATION
2. IF A CHANGE IN PIPE SIZE, MATERIAL, FITTINGS, OR WALL THICKNESS IS REQUIRED.
3. MINOR CHANGES SUCH AS OFFSETS MAY NOT REQUIRE DRAWING CHANGES.
4. EXCAVATOR SHALL CALL DIGSAFE / CALL BEFORE YOU DIG (DIAL 811) AT LEAST 72 HOURS PRIOR TO CONSTRUCTION. SATURDAYS, SUNDAYS, AND HOLIDAYS ARE EXCLUDED FROM THE 72-HOUR TIME SPAN, NOT CONSIDERED BUSINESS WORKDAYS.
5. CONSTRUCTION DRAWINGS ARE BASED ON HISTORICAL DOCUMENTATION AND HAVE NOT BEEN FIELD VERIFIED. WHEN THE PIPE IS EXPOSED AND VARIANCES TO THE CERTIFIED DRAWINGS ARE FOUND, CONTACT GAS ENGINEERING TO DETERMINE PATH FORWARD.
6. ALL WORK SHALL BE PERFORMED PER EVERSOURCE, LOCAL, STATE, OSHA, AND FEDERAL REGULATIONS AND STANDARDS.
7. MATERIAL AND CONSTRUCTION SHALL CONFORM TO EVERSOURCE GAS STANDARDS
8. THE LOCATIONS OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. ADDITIONAL UNDERGROUND FACILITIES MAY EXIST THAT ARE NOT SHOWN ON THESE DRAWINGS WHICH MAY REQUIRE ADDITIONAL OFFSETS IN THE PIPELINE.
9. LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXACT LOCATIONS OF INS SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION TO SUIT FIELD CONDITIONS ON THE SPECIFIC TIE-IN POINT. VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY TIE IN WORK.
10. ALL LIVE GAS WORK INCLUDING BUT NOT LIMITED TO TAPPING OF FITTINGS ON LIVE MAINS, STOPPING, MANIPULATING VALVE, ABANDONMENT, SHALL BE PERFORMED BY, OR AT THE DIRECTION AND UNDER THE DIRECT SUPERVISION OF EVERSOURCE GAS PERSONNEL AND IN ACCORDANCE WITH THE WRITTEN PROCEDURE. DRAWING CHANGES MAY ALSO REQUIRE A CHANGE TO THE PROCEDURE.
11. EXCAVATOR IS REQUIRED TO PROTECT EXISTING UTILITIES, STRUCTURES, LANDSCAPES FEATURES, SIGNAGE, CURBS, ETC. CARE SHOULD BE TAKEN NOT TO DISTURB OR DAMAGE SUCH ITEMS. ROADWAY, SIDEWALKS, AND GRASS DISTURBED SHALL BE RESTORED TO THE SATISFACTION OF THE CITY OR TOWN. PLANT BEDS WILL BE RELOCATED TO THEIR EXISTING REGULAR LOCATION.
12. IF THE PROJECT IS WITHIN 50 FEET OF A DISTRICT REGULATOR OR GATE STATION, ENSURE THAT A QUALIFIED I&R TECHNICIAN IS ON SITE.
13. ALL TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), INCLUDING ALL REVISIONS AND ADDENDA. ALL TRAFFIC CONTROL DEVICES WILL BE SUPPLIED BY EXCAVATOR.
14. PROPERTY LINES AND STRUCTURES DEPICTED ON PLANS ARE BASED ON GIS INFORMATION AND HAVE NOT BEEN VERIFIED BY LAND SURVEY UNLESS NOTED.
15. ANY ADDITIONAL NOTES MUST BE REVIEWED AND APPROVED BY GAS ENGINEERING.

0	ISSUED FOR CONSTRUCTION	02/06/2020	RT/AB
NO.	DESCRIPTION	DATE	DW/C/K/AP

REVISION STATUS

EVERSOURCE
ENERGY

BOURNE STREET AND SPOONER STREET MAIN RELAY

NEW BEDFORD, MASSACHUSETTS

INSTALLATION DETAIL #1 AND SCHEDULE OF MATERIALS

DRAWN BY / DATE DD 12/11/2019	CHECKED BY / DATE AB 02/06/2020	SHEET NUMBER	REV. NO.
APPROVED BY / DATE	MA20PIPNEB022R0	MA-20-PIP-NEB-022-07	0

NOTE:

1. REFER TO GENERAL NOTES ON SHEET #2.

ISSUED FOR
CONSTRUCTION
02/06/20

SEALED BY:



SIGNATURE

SEALED ON:

02/10/2020

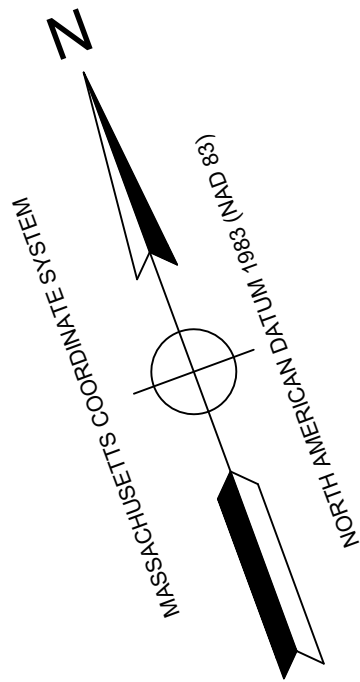
06/30/2020

DESIGNED IN ACCORDANCE WITH TITLE
49-PART 192 OF MINIMUM FEDERAL SAFETY
STANDARDS AND GPTC GUIDE FOR GAS
TRANSMISSION AND DISTRIBUTION PIPING
SYSTEMS. LATEST EDITION.

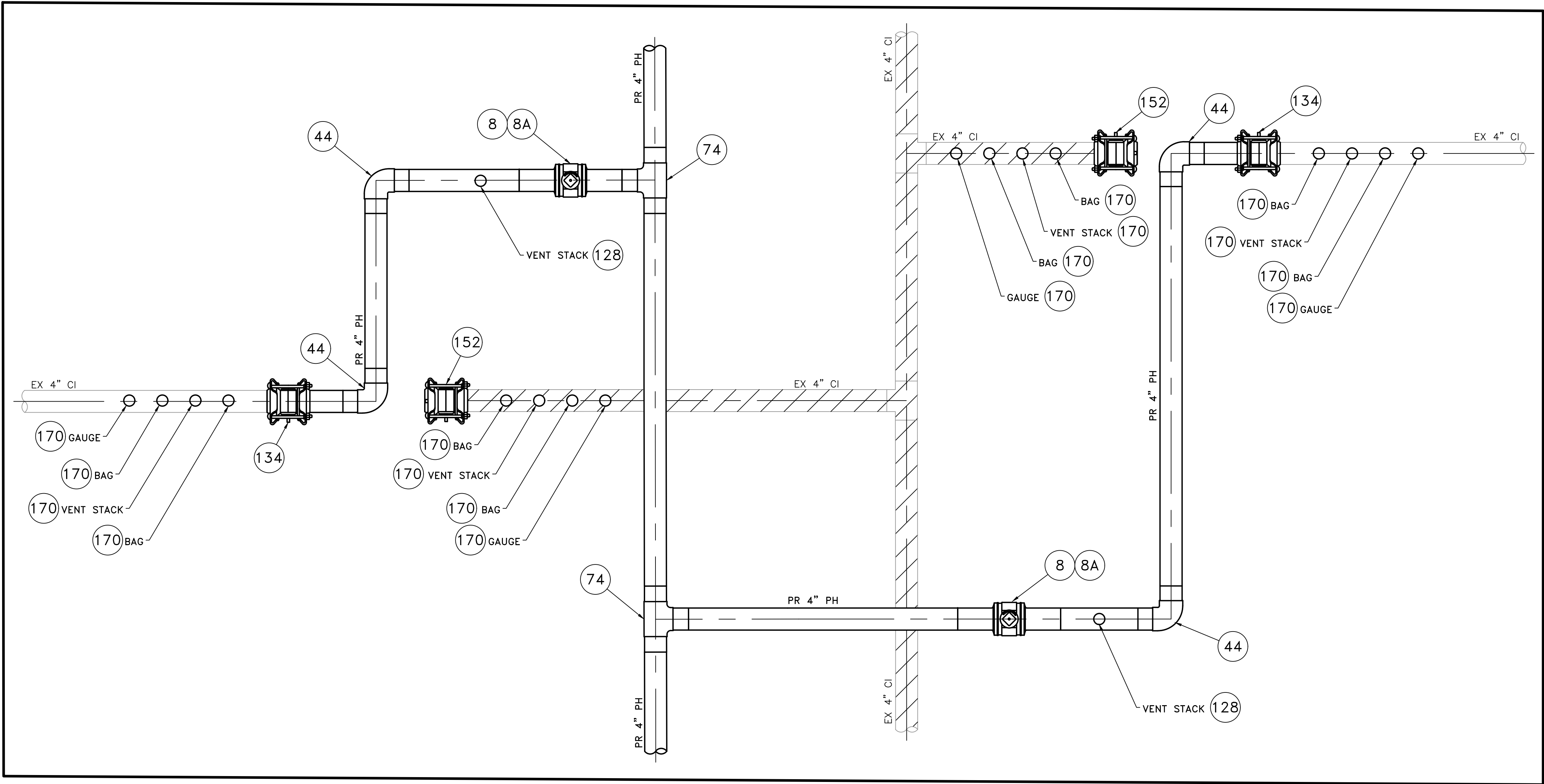
ENEngineering

29 BARTLETT STREET
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FAX (630) 535-7777
WWW.ENENGINEERING.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION



BOURNE STREET & SPOONER STREET MAIN RELAYS - INSTALLATION DETAIL #2 - SCHEDULE OF MATERIALS					
ITEM	QTY	SIZE	MAXIMO NO.	DESCRIPTION	MATERIAL
8	2	4"	501002	BALL VALVE, BUTT FUSION, IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40. FULL PORT, 1/4 TURN, KEROTEST POLYBALL OR APPROVED EQUAL.	ASTM D2513
35	AS REQUIRED	4"	500855	COUPLING, ELECTROFUSION, IPS, HDPE 3408, ASTM D3350, ASTM F1055, COMPATIBLE FOR FUSION TO HDPE 3408/4710 PIPE. GFCP OR APPROVED EQUAL.	ASTM D3350
44	AS REQUIRED	4"	545341	ELBOW, 90 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
50	AS REQUIRED	4"	545338	ELBOW, 45 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
67	AS REQUIRED	4"	542538	CAP, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	
74	2	4"	560679	TEE, STRAIGHT, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
128	2	4" X 2"	584304	HV TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	ASTM D2513
134	2	4"	578189	COUPLING, BOLTED MECHANICAL, IPS TO IPS, ASTM A-53 BODY, CONFORMS TO 49 CFR 192.283(b). SMITH-BLAIR MAXI-GRIP EZ OR APPROVED EQUAL.	ASTM A-53
152	2	4"	578128	END CAP, BOLTED MECHANICAL, CIP. SMITH-BLAIR MAXI-GRIP OR APPROVED EQUAL.	
170	8	4" x 2"	543028	BAND CLAMP, WITH WELDED 2" FNPT SERVICE OUTLET, 304L SS SINGLE SECTION BAND AND GAP BRIDGES, SS STUDS WITH TEFLON COATED HEX NUTS, COMPLETELY LINED WITH NITRILE RUBBER GASKET. MUELLER 540 SERVI-SEAL OR APPROVED EQUAL. COMPLETE WITH PLUG.	
8A	1	4"		BOX, VALVE, PLASTIC, SNAP-ON, ADJ, W/CI NON-LOCKING LID	



INSTALLATION DETAIL #2

(SCALE: 1"=1')
(REFER TO SHEET #4)

STANDARD DRAWING NOTES:

- IF ANY OF THE FOLLOWING OCCUR A DRAWING REVISION IS REQUIRED AND MUST BE APPROVED AND/OR STAMPED BY THE ENGINEER OF RECORD. CHANGES CAN BE APPROVED AND/OR STAMPED BY A PROJECT ENGINEER, BUT THE ENGINEER OF RECORD MUST BE INFORMED:
 - IF THE TIE IN POINT MOVES TO A DIFFERENT SEGMENT OF PIPE THAN SHOWN
 - IF A CHANGE IN THE LOCATION OF VALVES IS REQUIRED
 - IF THERE IS ANY CHANGE TO WHAT IS SHOWN ON THE DRAWING WITHIN 50 FEET OF A PRESSURE REGULATING STATION, DISTRICT REGULATOR, OR GATE STATION
- IF A CHANGE IN PIPE SIZE, MATERIAL, FITTINGS, OR WALL THICKNESS IS REQUIRED.
- MINOR CHANGES SUCH AS OFFSETS MAY NOT REQUIRE DRAWING CHANGES.
- EXCAVATOR SHALL CALL DIGSAFE / CALL BEFORE YOU DIG (DIAL 811) AT LEAST 72 HOURS PRIOR TO CONSTRUCTION. SATURDAYS, SUNDAYS, AND HOLIDAYS ARE EXCLUDED FROM THE 72-HOUR TIME SPAN, NOT CONSIDERED BUSINESS WORKDAYS.
- CONSTRUCTION DRAWINGS ARE BASED ON HISTORICAL DOCUMENTATION AND HAVE NOT BEEN FIELD VERIFIED. WHEN THE PIPE IS EXPOSED AND VARIANCES TO THE CERTIFIED DRAWINGS ARE FOUND, CONTACT GAS ENGINEERING TO DETERMINE PATH FORWARD.
- ALL WORK SHALL BE PERFORMED PER EVERSOURCE, LOCAL, STATE, OSHA, AND FEDERAL REGULATIONS AND STANDARDS.
- MATERIAL AND CONSTRUCTION SHALL CONFORM TO EVERSOURCE GAS STANDARDS.
- THE LOCATIONS OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. ADDITIONAL UNDERGROUND FACILITIES MAY EXIST THAT ARE NOT SHOWN ON THESE DRAWINGS WHICH MAY REQUIRE ADDITIONAL OFFSETS IN THE PIPELINE.
- LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXACT LOCATIONS OF INS SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION TO SUIT FIELD CONDITIONS ON THE SPECIFIC TIE-IN POINT. VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY TIE IN WORK.
- ALL LIVE GAS WORK INCLUDING BUT NOT LIMITED TO TAPPING OF FITTINGS ON LIVE MAINS, STOPPING, MANIPULATING VALVE, ABANDONMENT, SHALL BE PERFORMED BY, OR AT THE DIRECTION AND UNDER THE DIRECT SUPERVISION OF EVERSOURCE GAS PERSONNEL AND IN ACCORDANCE WITH THE WRITTEN PROCEDURE. DRAWING CHANGES MAY ALSO REQUIRE A CHANGE TO THE PROCEDURE.
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- IF THE PROJECT IS WITHIN 50 FEET OF A DISTRICT REGULATOR OR GATE STATION, ENSURE THAT A QUALIFIED I&R TECHNICIAN IS ON SITE.
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), INCLUDING ALL REVISIONS AND ADDENDA. ALL TRAFFIC CONTROL DEVICES WILL BE SUPPLIED BY EXCAVATOR.
- PROPERTY LINES AND STRUCTURES DEPICTED ON PLANS ARE BASED ON GIS INFORMATION AND HAVE NOT BEEN VERIFIED BY LAND SURVEY UNLESS NOTED.
- ANY ADDITIONAL NOTES MUST BE REVIEWED AND APPROVED BY GAS ENGINEERING.

0	ISSUED FOR CONSTRUCTION	02/06/2020	RT/AB
NO.	DESCRIPTION	DATE	DW/CK/AP

REVISION STATUS			
EVERSOURCE ENERGY			
BOURNE STREET AND SPOONER STREET MAIN RELAY			
NEW BEDFORD, MASSACHUSETTS			
INSTALLATION DETAIL #2 AND SCHEDULE OF MATERIALS			
SCALE: 1"=1'			SHEET 8 OF 10
DRAWN BY / DATE	CHECKED BY / DATE	SHEET NUMBER	REV. NO.
DD 12/11/2019	AB 02/06/2020	MA-20-PIP-NEB-022-08	0
APPROVED BY / DATE	MA20PIPNEB022R0		

NOTE:
1. REFER TO GENERAL NOTES ON SHEET #2.

ISSUED FOR
CONSTRUCTION
02/06/20

SEALED BY:



SIGNATURE

[Signature]

SEALED ON:

02/10/2020

LICENSE EXPIRATION:

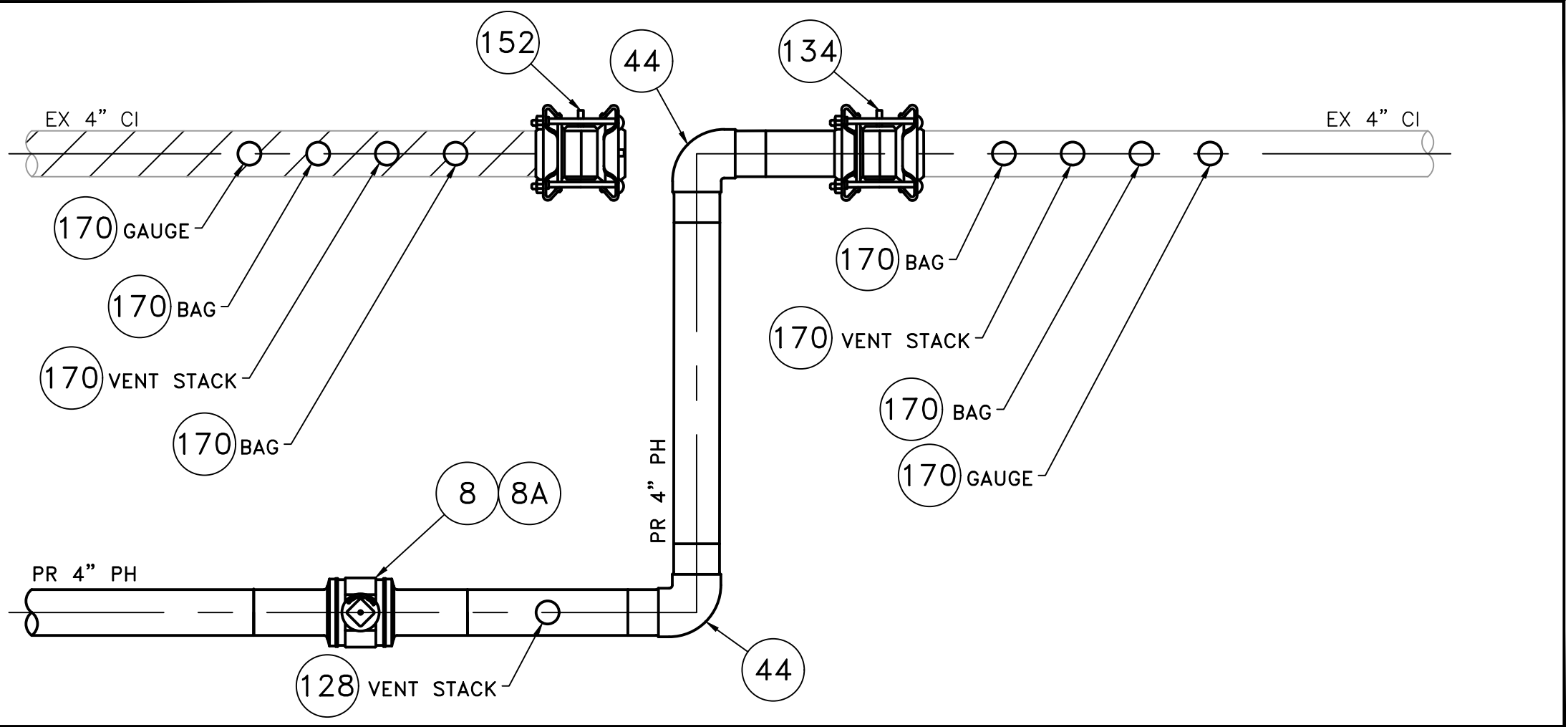
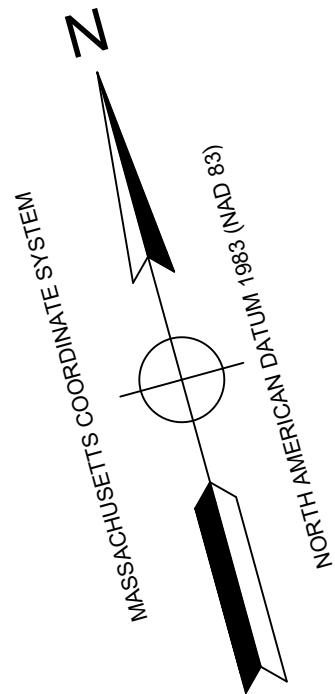
06/30/2020

DESIGNED IN ACCORDANCE WITH TITLE 49, PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS, LATEST EDITION.

ENEngineering

29 BARTLETT STREET
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WWW.ENENGINEERING.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION



INSTALLATION DETAIL #3

(SCALE: 1"=1')
(REFER TO SHEET #6)

BOURNE STREET & SPOONER STREET MAIN RELAYS - INSTALLATION DETAIL #3 - SCHEDULE OF MATERIALS					
ITEM	QTY	SIZE	MAXIMO NO.	DESCRIPTION	MATERIAL
8	1	4"	501002	BALL VALVE, BUTT FUSION, IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40. FULL PORT, 1/4 TURN, KEROTEST POLYBALL OR APPROVED EQUAL.	ASTM D2513
35	AS REQUIRED	4"	500855	COUPLING, ELECTROFUSION, IPS, HDPE 3408, ASTM D3350, ASTM F1055, COMPATIBLE FOR FUSION TO HDPE 3408/4710 PIPE. GFCP OR APPROVED EQUAL.	ASTM D3350
44	AS REQUIRED	4"	545341	ELBOW, 90 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
50	AS REQUIRED	4"	545338	ELBOW, 45 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
67	AS REQUIRED	4"	542538	CAP, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	
128	1	4" X 2"	584304	HV TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	ASTM D2513
134	1	4"	578189	COUPLING, BOLTED MECHANICAL, IPS TO IPS, ASTM A-53 BODY, CONFORMS TO 49 CFR 192.283(b). SMITH-BLAIR MAXI-GRIP EZ OR APPROVED EQUAL.	ASTM A-53
152	1	4"	578128	END CAP, BOLTED MECHANICAL, CIP. SMITH-BLAIR MAXI-GRIP OR APPROVED EQUAL.	
170	4	4" x 2"	543028	BAND CLAMP, WITH WELDED 2" FNPT SERVICE OUTLET, 304L SS SINGLE SECTION BAND AND GAP BRIDGES, SS STUDS WITH TEFLON COATED HEX NUTS, COMPLETELY LINED WITH NITRILE RUBBER GASKET. MUELLER 540 SERVI-SEAL OR APPROVED EQUAL. COMPLETE WITH PLUG.	
8A	1	4"		BOX, VALVE, PLASTIC, SNAP-ON, ADJ, W/CI NON-LOCKING LID	

STANDARD DRAWING NOTES:

- IF ANY OF THE FOLLOWING OCCUR A DRAWING REVISION IS REQUIRED AND MUST BE APPROVED AND/OR STAMPED BY THE ENGINEER OF RECORD. CHANGES CAN BE APPROVED AND/OR STAMPED BY A PROJECT ENGINEER, BUT THE ENGINEER OF RECORD MUST BE INFORMED:
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 - IF A CHANGE IN THE LOCATION OF VALVES IS REQUIRED
 - IF THERE IS ANY CHANGE TO WHAT IS SHOWN ON THE DRAWING WITHIN 50 FEET OF A PRESSURE REGULATING STATION, DISTRICT REGULATOR, OR GATE STATION
- IF A CHANGE IN PIPE SIZE, MATERIAL, FITTINGS, OR WALL THICKNESS IS REQUIRED.
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- CONSTRUCTION DRAWINGS ARE BASED ON HISTORICAL DOCUMENTATION AND HAVE NOT BEEN FIELD VERIFIED. WHEN THE PIPE IS EXPOSED AND VARIANCES TO THE CERTIFIED DRAWINGS ARE FOUND, CONTACT GAS ENGINEERING TO DETERMINE PATH FORWARD.
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- ANY ADDITIONAL NOTES MUST BE REVIEWED AND APPROVED BY GAS ENGINEERING.

0	ISSUED FOR CONSTRUCTION	02/06/2020	RT/AB
NO.	DESCRIPTION	DATE	DW/CK/AP

REVISION STATUS

EVERSOURCE
ENERGY

BOURNE STREET AND SPOONER STREET MAIN RELAY

NEW BEDFORD, MASSACHUSETTS

INSTALLATION DETAIL #3 AND SCHEDULE OF MATERIALS

SCALE: 1"=1'		SHEET 9 OF 10	
DRAWN BY / DATE DD 12/11/2019	CHECKED BY / DATE AB 02/06/2020	SHEET NUMBER MA-20-PIP-NEB-022-09	REV. NO. 0
APPROVED BY / DATE MA20PIPNEB022R0			

NOTE:
1. REFER TO GENERAL NOTES ON SHEET #2.

ISSUED FOR
CONSTRUCTION
02/06/20

SEALED BY:



SIGNATURE

SEALED ON:

02/10/2020

LICENSE
EXPIRATION:

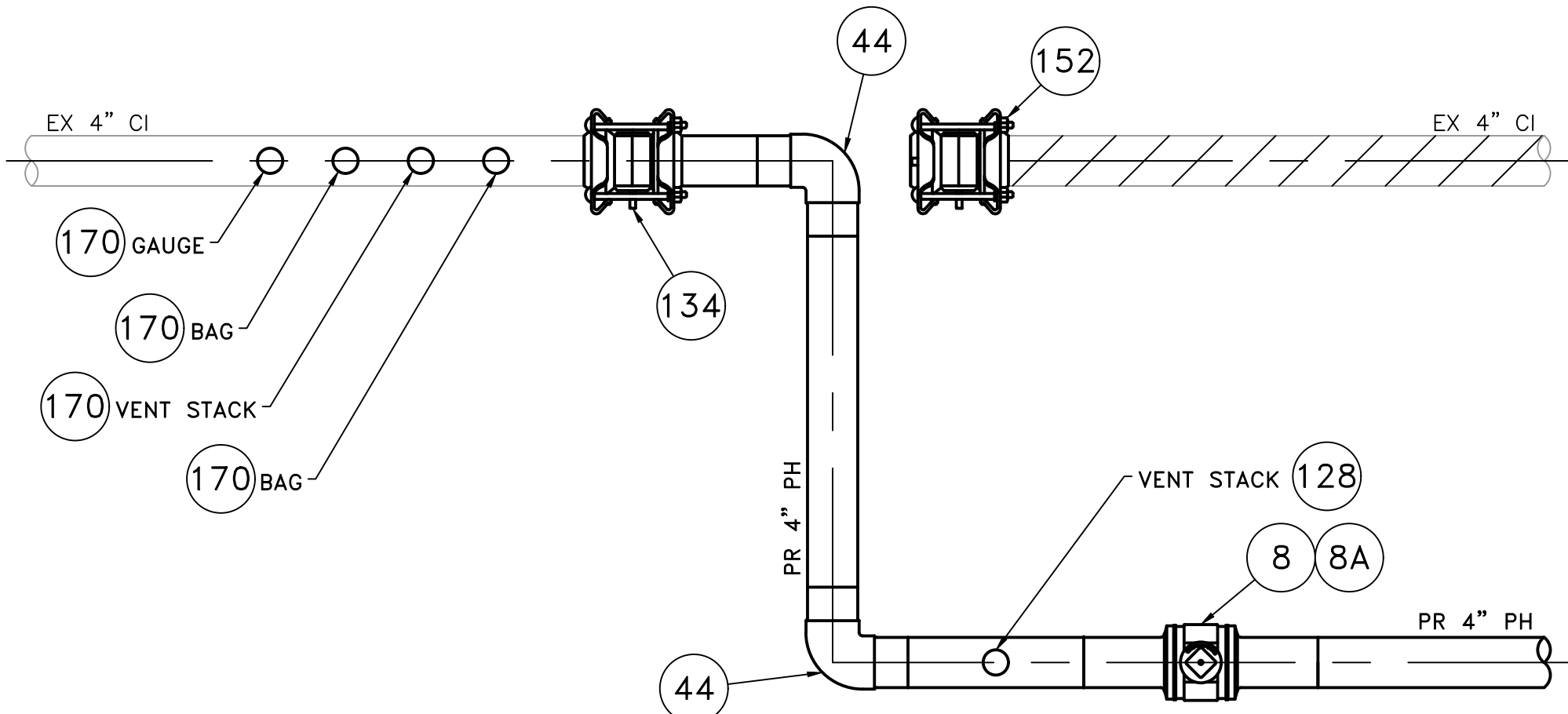
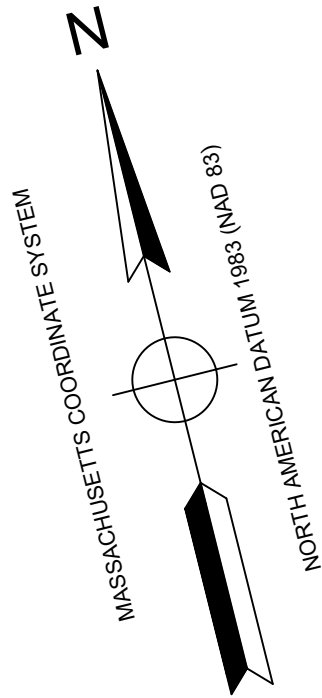
06/30/2020

DESIGNED IN ACCORDANCE WITH TITLE
49, PART 192 OF MINIMUM FEDERAL SAFETY
STANDARDS AND GPTC GUIDE FOR GAS
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FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION



INSTALLATION DETAIL #4

(SCALE: 1"=1')
(REFER TO SHEET #5)

BOURNE STREET & SPOONER STREET MAIN RELAYS - INSTALLATION DETAIL #4 - SCHEDULE OF MATERIALS					
ITEM	QTY	SIZE	MAXIMO NO.	DESCRIPTION	MATERIAL
8	1	4"	501002	BALL VALVE, BUTT FUSION, IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40. FULL PORT, 1/4 TURN, KEROTEST POLYBALL OR APPROVED EQUAL.	ASTM D2513
35	AS REQUIRED	4"	500855	COUPLING, ELECTROFUSION, IPS, HDPE 3408, ASTM D3350, ASTM F1055, COMPATIBLE FOR FUSION TO HDPE 3408/4710 PIPE. GFCP OR APPROVED EQUAL.	ASTM D3350
44	AS REQUIRED	4"	545341	ELBOW, 90 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
50	AS REQUIRED	4"	545338	ELBOW, 45 DEG, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	ASTM D2513
67	AS REQUIRED	4"	542538	CAP, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261. PERFORMANCE PIPE OR APPROVED EQUAL.	
128	1	4" X 2"	584304	HV TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	ASTM D2513
134	1	4"	578189	COUPLING, BOLTED MECHANICAL, IPS TO IPS, ASTM A-53 BODY, CONFORMS TO 49 CFR 192.283(b). SMITH-BLAIR MAXI-GRIP EZ OR APPROVED EQUAL.	ASTM A-53
152	1	4"	578128	END CAP, BOLTED MECHANICAL, CIP. SMITH-BLAIR MAXI-GRIP OR APPROVED EQUAL	
170	4	4" x 2"	543028	BAND CLAMP, WITH WELDED 2" FNPT SERVICE OUTLET, 304L SS SINGLE SECTION BAND AND GAP BRIDGES, SS STUDS WITH TEFLON COATED HEX NUTS, COMPLETELY LINED WITH NITRILE RUBBER GASKET. MUELLER 540 SERVI-SEAL OR APPROVED EQUAL. COMPLETE WITH PLUG.	
8A	1	4"		BOX, VALVE, PLASTIC, SNAP-ON, ADJ, W/CI NON-LOCKING LID	

STANDARD DRAWING NOTES:

- IF ANY OF THE FOLLOWING OCCUR A DRAWING REVISION IS REQUIRED AND MUST BE APPROVED AND/OR STAMPED BY THE ENGINEER OF RECORD. CHANGES CAN BE APPROVED AND/OR STAMPED BY A PROJECT ENGINEER, BUT THE ENGINEER OF RECORD MUST BE INFORMED:
 - IF THE TIE IN POINT MOVES TO A DIFFERENT SEGMENT OF PIPE THAN SHOWN
 - IF A CHANGE IN THE LOCATION OF VALVES IS REQUIRED
 - IF THERE IS ANY CHANGE TO WHAT IS SHOWN ON THE DRAWING WITHIN 50 FEET OF A PRESSURE REGULATING STATION, DISTRICT REGULATOR, OR GATE STATION
- IF A CHANGE IN PIPE SIZE, MATERIAL, FITTINGS, OR WALL THICKNESS IS REQUIRED.
- MINOR CHANGES SUCH AS OFFSETS MAY NOT REQUIRE DRAWING CHANGES.
- EXCAVATOR SHALL CALL DIGSAFE / CALL BEFORE YOU DIG (DIAL 811) AT LEAST 72 HOURS PRIOR TO CONSTRUCTION. SATURDAYS, SUNDAYS, AND HOLIDAYS ARE EXCLUDED FROM THE 72-HOUR TIME SPAN, NOT CONSIDERED BUSINESS WORKDAYS.
- CONSTRUCTION DRAWINGS ARE BASED ON HISTORICAL DOCUMENTATION AND HAVE NOT BEEN FIELD VERIFIED. WHEN THE PIPE IS EXPOSED AND VARIANCES TO THE CERTIFIED DRAWINGS ARE FOUND, CONTACT GAS ENGINEERING TO DETERMINE PATH FORWARD.
- ALL WORK SHALL BE PERFORMED PER EVERSOURCE, LOCAL, STATE, OSHA, AND FEDERAL REGULATIONS AND STANDARDS.
- MATERIAL AND CONSTRUCTION SHALL CONFORM TO EVERSOURCE GAS STANDARDS.
- THE LOCATIONS OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. ADDITIONAL UNDERGROUND FACILITIES MAY EXIST THAT ARE NOT SHOWN ON THESE DRAWINGS WHICH MAY REQUIRE ADDITIONAL OFFSETS IN THE PIPELINE.
- LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXACT LOCATIONS OF INS SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION TO SUIT FIELD CONDITIONS ON THE SPECIFIC TIE-IN POINT. VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY TIE IN WORK.
- ALL LIVE GAS WORK INCLUDING BUT NOT LIMITED TO TAPPING OF FITTINGS ON LIVE MAINS, STOPPING, MANIPULATING VALVE, ABANDONMENT, SHALL BE PERFORMED BY, OR AT THE DIRECTION AND UNDER THE DIRECT SUPERVISION OF EVERSOURCE GAS PERSONNEL AND IN ACCORDANCE WITH THE WRITTEN PROCEDURE. DRAWING CHANGES MAY ALSO REQUIRE A CHANGE TO THE PROCEDURE.
- EXCAVATOR IS REQUIRED TO PROTECT EXISTING UTILITIES, STRUCTURES, LANDSCAPES FEATURES, SIGNAGE, CURBS, ETC. CARE SHOULD BE TAKEN NOT TO DISTURB OR DAMAGE SUCH ITEMS. ROADWAY, SIDEWALKS, AND GRASS DISTURBED SHALL BE RESTORED TO THE SATISFACTION OF THE CITY OR TOWN. PLANT BEDS WILL BE RELOCATED TO THEIR EXISTING REGULAR LOCATION.
- IF THE PROJECT IS WITHIN 50 FEET OF A DISTRICT REGULATOR OR GATE STATION, ENSURE THAT A QUALIFIED I&R TECHNICIAN IS ON SITE.
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), INCLUDING ALL REVISIONS AND ADDENDA. ALL TRAFFIC CONTROL DEVICES WILL BE SUPPLIED BY EXCAVATOR.
- PROPERTY LINES AND STRUCTURES DEPICTED ON PLANS ARE BASED ON GIS INFORMATION AND HAVE NOT BEEN VERIFIED BY LAND SURVEY UNLESS NOTED.
- ANY ADDITIONAL NOTES MUST BE REVIEWED AND APPROVED BY GAS ENGINEERING.

0	ISSUED FOR CONSTRUCTION	02/06/2020	RT/AB
NO.	DESCRIPTION	DATE	DW/CK/AP

REVISION STATUS

EVERSOURCE
ENERGY

BOURNE STREET AND SPOONER STREET MAIN RELAY

NEW BEDFORD, MASSACHUSETTS

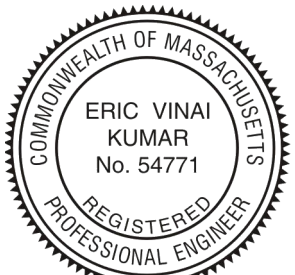
INSTALLATION DETAIL #4 AND SCHEDULE OF MATERIALS

SCALE: 1"=1'		SHEET 10 OF 10	
DRAWN BY / DATE DD 12/11/2019	CHECKED BY / DATE AB 02/06/2020	SHEET NUMBER MA-20-PIP-NEB-022-10	REV. NO. 0
APPROVED BY / DATE		MA20PIPNEB022R0	

NOTE:
1. REFER TO GENERAL NOTES ON SHEET #2.

ISSUED FOR
CONSTRUCTION
02/06/20

SEALED BY:



SIGNATURE

SEALED ON:

02/10/2020

LICENSE
EXPIRATION:

06/30/2020

DESIGNED IN ACCORDANCE WITH TITLE
49-PART 192 OF MINIMUM FEDERAL SAFETY
STANDARDS AND GPTC GUIDE FOR GAS
TRANSMISSION AND DISTRIBUTION PIPING
SYSTEMS. LATEST EDITION.

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FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION