

APPLICATION/AGREEMENT

Permit # 41-2021

For Trench/Disturbance Permit within the City of New Bedford

Dig Safe: 20210400339

Date: 1/25/2021

TO THE MAYOR AND CITY COUNCIL:

DISTURBANCE PERMIT/TRENCH SAFETY PERMIT

Permission is hereby requested to excavate the surface of : X City Property and/or X Private Property

Provide Sketch

Location of Work: Pleasant St.

Wking from Walnut St to Bedford St

Relay Gas Main and Services

Work will begin (weather permitting) on: February 8, 2021

Applicant Name: Kevin O'Sullivan (ra) Excavator(s) Name: _____

Company Name: Eversource Hoisting Equipment License Number: _____

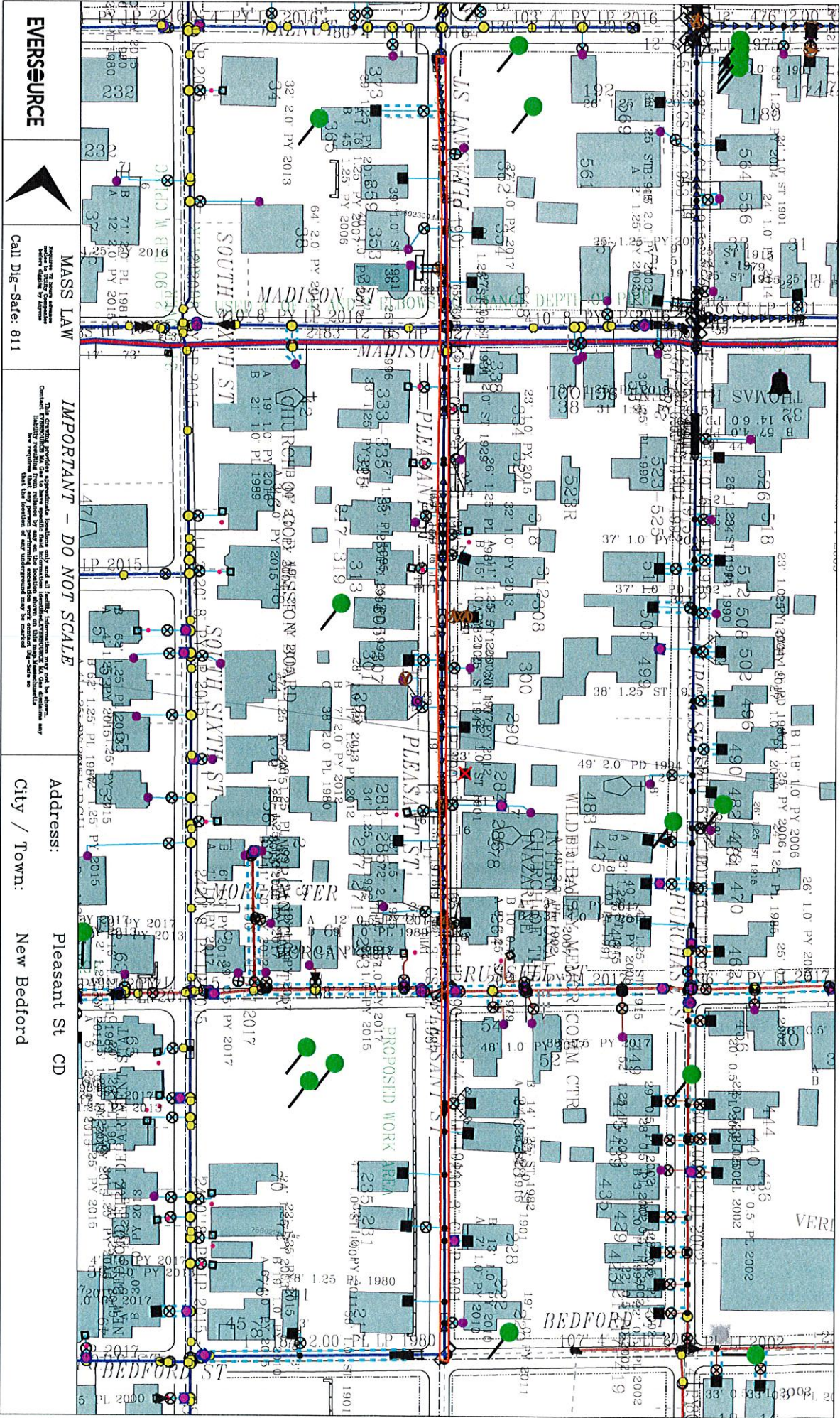
Grade: _____ Expiration Date: _____

Contact Number: 508-441-5817 Name & Contact Number of Insurer: _____

Competent Person on Work Site: ON FILE APPROVED BY: _____ DATE: _____

TITLE: _____

This permit shall be posted at the work site, and shall remain until the work is completed. It is subject to inspection at all times.



EVERSOURCE



MASS LAW

Call Dig-Safe: 811

IMPORTANT - DO NOT SCALE

The Agency has provided approximate location only and is not responsible for the accuracy of the information. Any use of this information for purposes other than those intended is at the user's risk. The user is responsible for obtaining the necessary permits and approvals for any work to be done on the property.

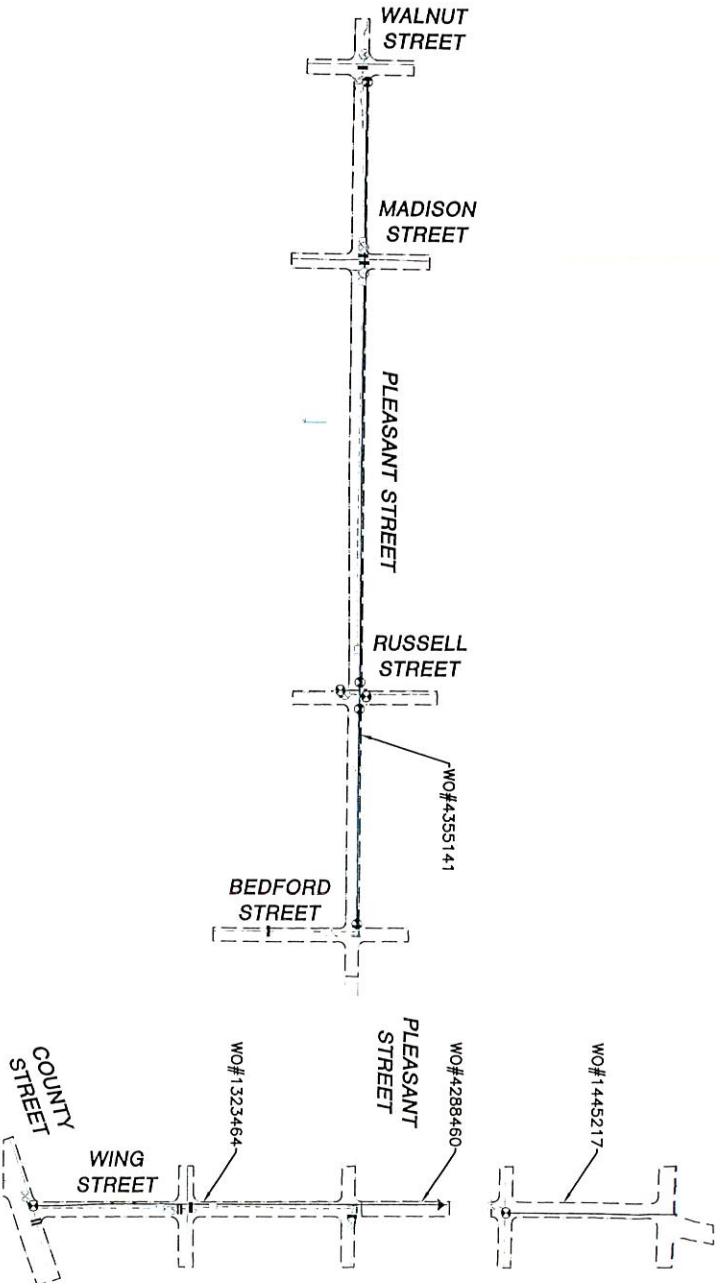
Address: Pleasant St CD
City / Town: New Bedford

EVERSOURCE MA GAS
One NSTAR Way
Westwood, MA 02090
Phone 1-800-582-2000

GENERAL 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, THE ENGINEER OF RECORD, OR THE DESIGNER.
 - IF A CHANGE IN THE LOCATION OF VALVES IS REQUIRED
 - IF A CHANGE IN THE LOCATION OF FITTINGS IS REQUIRED
 - 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 (CALL 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 EVERSOURCE 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 PRELIM.
- WORK LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXACT LOCATIONS OF TIE-INS SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION TO SUIT FIELD CONDITIONS AT 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, LANDSCAPE FEATURES, SIGNAGE, CURBS, ETC. CARE SHOULD BE TAKEN NOT TO DISTURB OR DAMAGE SUCH ROADWAY, SIDEWALKS, AND GRASS TO THEIR EXISTING RESURFACING LOCATION.
- IF THE PROJECT IS WITHIN 50 FEET OF A DISTRICT REGULATION OR GATE STATION, ENSURE THAT A QUALIFIED AIR 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, STRUCTURES, AND EXISTING CONDITIONS DEPICTED ON PLANS ARE BASED ON EVERSOURCE GIS INFORMATION AND HAVE NOT BEEN VERIFIED BY LAND SURVEY UNLESS NOTED.
- EXISTING SERVICES SHOWN ON PLANS ARE FOR INFORMATION ONLY. PROPOSED SERVICES ARE NOT SHOWN ON PLANS AND ARE TO BE INSTALLED PER EVERSOURCE CONSTRUCTION STANDARDS.
- PROPOSED WORK SHALL BE PERFORMED AND COMPLETED IN COMPLIANCE WITH ALL PERMITS AND APPROVALS.
- MAINS AND SERVICES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH EVERSOURCE OM-305.
- MAOP:
 - LP - 147 M.S.C.
 - LP - 35 PSIG
 - IP - 60 PSIG
 - HP - 90 PSIG
- ALL WORK SHALL BE PERFORMED PER EVERSOURCE, LOCAL, STATE AND FEDERAL REGULATIONS AND STANDARDS.
- ALL PIPE WILL BE INSTALLED WITH A MINIMUM DEPTH IN ACCORDANCE WITH EVERSOURCE STANDARDS.
- SQUEEZE OPERATIONS SHOULD BE COMPLETED IN ACCORDANCE WITH OM-433.
- ENSURE ALL SERVICES BEING TRANSFERRED TO A HIGHER PRESSURE SYSTEM HAVE UPGRADED PRESSURE REGULATORS INSTALLED PRIOR TO ACTIVATION.
- ENSURE VALVES ON EXISTING MAIN, WHERE PROPOSED MAIN WILL BE INSERTED HAVE BEEN MADE INOPERABLE.
- ADDITIONAL VALVES AND TEES THAT ARE INCLUDED IN THE SCHEDULE OF MATERIALS MAY BE INSTALLED TEMPORARILY WHEN NEEDED TO FACILITATE TIE-INS AND PURGES.
- METRIC FITTINGS MAY BE SUBSTITUTED FOR ELECTROFUSION FITTINGS WHERE NEEDED.
- DO NOT SCALE FROM DRAWINGS.

WORK ORDER KEY MAP
(NOT TO SCALE)



ISSUED FOR
CONSTRUCTION
01/20/2021



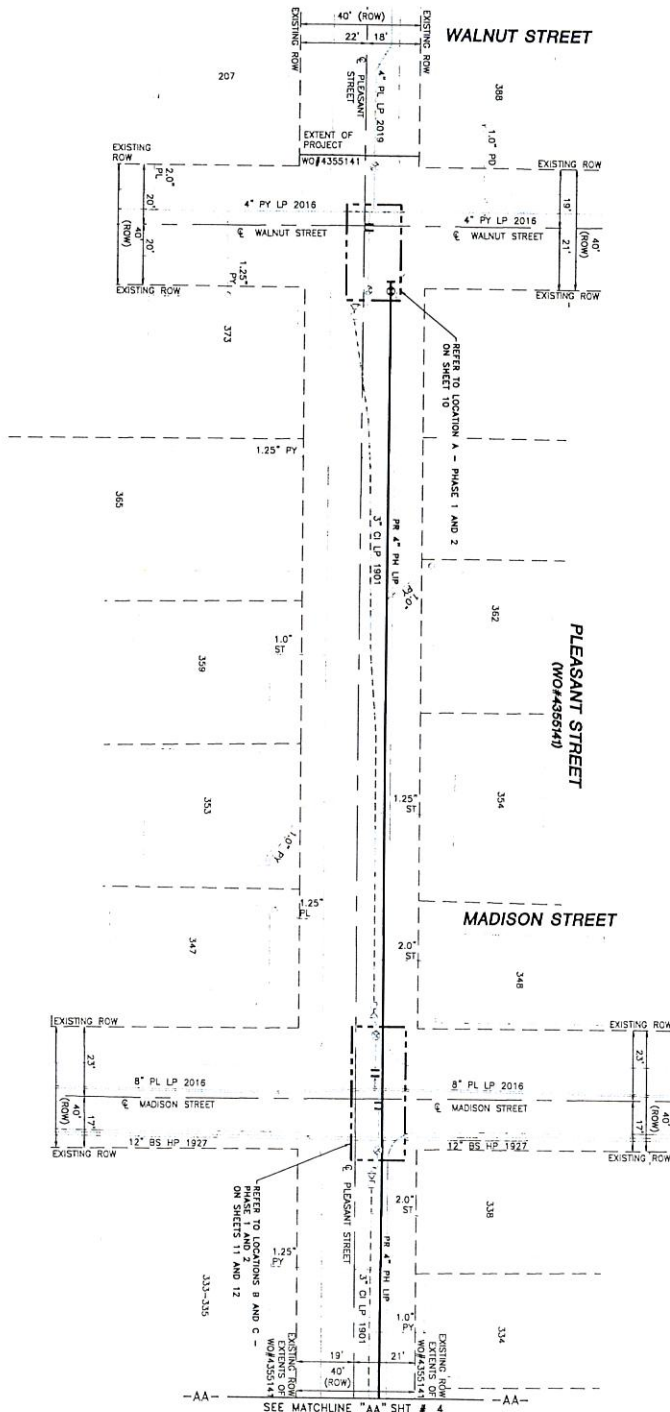
01/20/2021
06/30/2022

ENGINEERING
www.bengineering.com

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

REVISION STATUS			
NO.	DESCRIPTION	DATE	DESIGNED
0	ISSUED FOR CONSTRUCTION	01/20/2021	WS/AGK

EVSOURCE ENERGY			
PLEASANT STREET AND WING STREET MAIN RELAY			
NEW BEDFORD, MASSACHUSETTS			
GENERAL NOTES AND WORK ORDER KEY MAP			
SCALE: NOT TO SCALE	CHECKED BY: LATE	SHEET NUMBER: 2 OF 24	DATE: 01/20/2021
MANEED11P00000	MAHEED11P00000	0	



- NOTES
1. CONTRACTOR TO PINGHOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION
 2. ALL UTILITY LOCATIONS SHOWN ON THIS SHEET ARE BASED ON FIELD SURVEY DATA
 3. HOPE ADJUST TO ALLOW FOR BEING INSTALLED AS REQUIRED TO FACILITATE OFFSETS IN FIELD

LENGTH	SIZE	MATERIAL	DESCRIPTION
312'	4"	PH	INSTALL
312'	3"	CI	REPAIR
312'	4"	PP	REPAIR

ISSUED FOR
CONSTRUCTION
01/20/2021



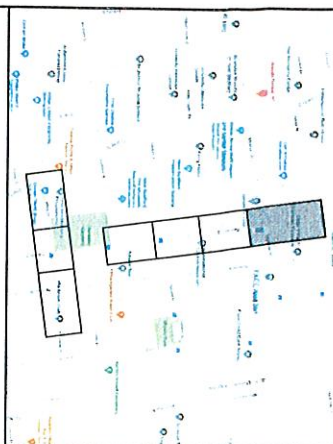
SCALE: 1" = 20'

DATE: 01/20/2021

DESIGNED BY: **Benjamin**
CHECKED BY: **Benjamin**
DATE: 01/20/2021

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

LOCUS PLAN
NOT TO SCALE



DRAWING LEGEND

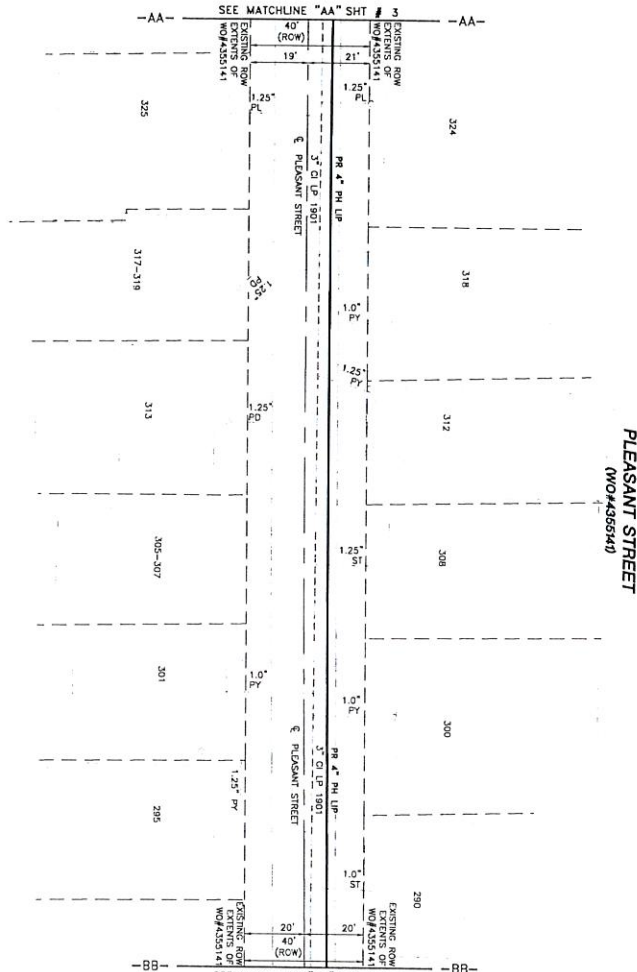
UTILITY POLE	EXISTING GAS MAIN
UTILITY POLE	RETIRED GAS MAIN
CATCH BASIN	PROPOSED GAS MAIN
FIRE HYDRANT	EXISTING SERVICE
UTILITY MANHOLE	RIGHT OF WAY
ELECTRIC MANHOLE	ELECTRIC
TELEPHONE MANHOLE	TELEPHONE
WATER MANHOLE	WATER
SANITARY MANHOLE	SANITARY SEWER
STORM MANHOLE	STORM SEWER
EXISTING REDUCER	PROPOSED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

REVISION STATUS

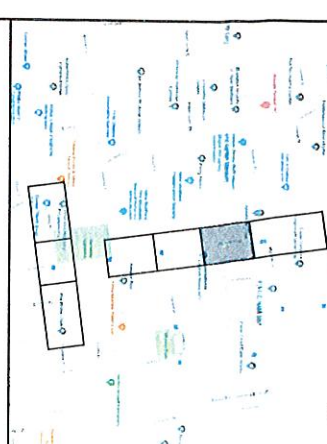
NO.	DESCRIPTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	01/20/2021	WS/ABK

EVERSOURCE

PROJECT: PLEASANT STREET AND WALNUT STREET MAIN RELAY
LOCATION: NEW BEDFORD, MASSACHUSETTS
INSTALLATION PLAN
SHEET: 3 OF 24
DATE: 01/20/2021
MANAGER: PIPERNO
MAINT: PIPERNO



PLEASANT STREET
(WMA435514)



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 ANODE

NO.	DESCRIPTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	01/20/2021	WS/ABK

EVERSOURCE

PLEASANT STREET AND WING STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS
INSTALLATION PLAN

SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)	SHEET 4 OF 24
DATE: 01/20/2021	REV. NO.
APPROVED BY: [Signature]	MA-NEB-21-PP-029-04
DATE: 01/20/2021	0

ISSUED FOR
CONSTRUCTION
01/20/2021



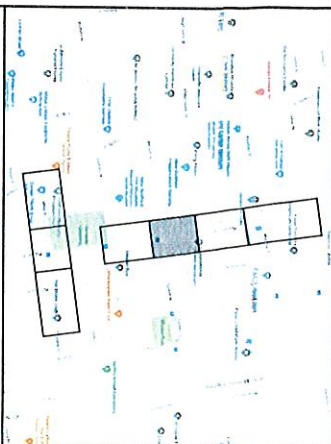
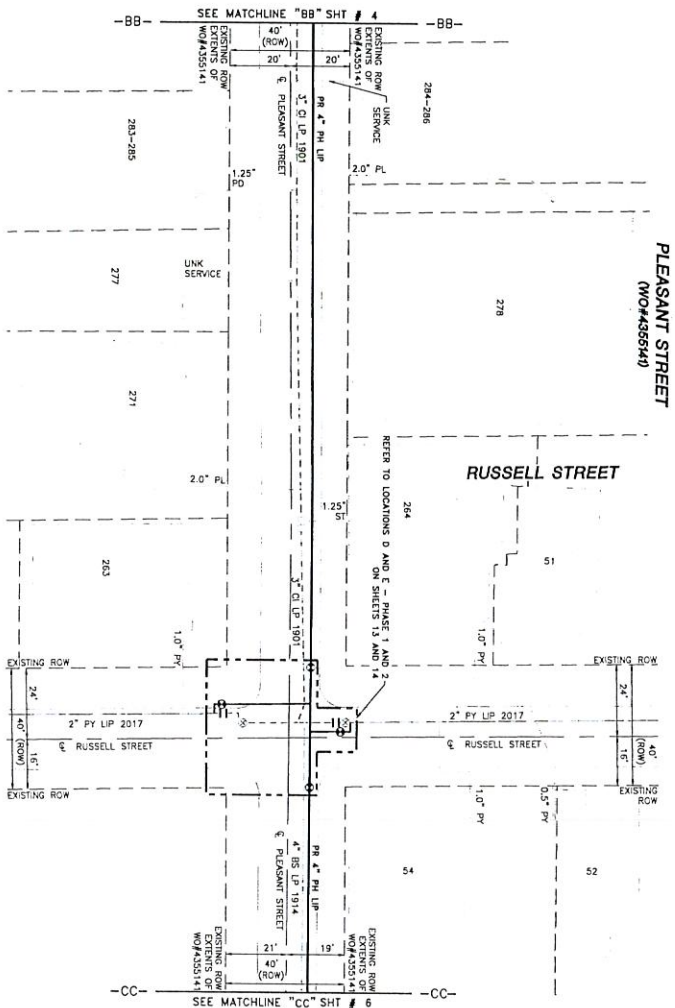
SCALE: 1"=20'
DATE: 01/20/2021
BY: [Signature]

EVERSOURCE
MA-NEB-21-PP-029-04

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

LENGTH	SIZE	MATERIAL	DESCRIPTION
315	4"	PM	INSTALL
315	3"	CI	RETIRED

NOTES:
1. REFER TO SHEET 3 FOR GENERAL NOTES.
2. AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION
3. REFER TO GENERAL NOTES AND SCHEDULE OF MATERIALS ON SHEET 2.
4. HOPE JOINTING ELBOWS TO BE INSTALLED AS REQUIRED TO INDICATE OFFSETS IN FIELD



LOCUST 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 ANODE

NOTE:
1. CONTRACTOR TO PROTECT EXISTING UTILITIES.
2. AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A PERMIT TO EXCAVATE FROM THE CITY OF BOSTON.
3. HOPE KENNEDY ELEVATION TO BE INSTALLED AS REQUIRED TO MAINTAIN OFFSETS IN FIELD.

LENGTH	SIZE	MATERIAL	DESCRIPTION
40'	2"	PM	INSTALL
300'	4"	PM	INSTALL
30'	2"	PM	RETIRED
5'	3"	CS	RETIRED
200'	3"	CS	RETIRED
50'	4"	BS	RETIRED

ISSUED FOR
CONSTRUCTION
01/20/2021



DATE: 01/20/2021
BY: [Signature]

Eversource
MASSACHUSETTS
100 STATE STREET
BOSTON, MA 02109
WWW.EVERSOURCE.COM

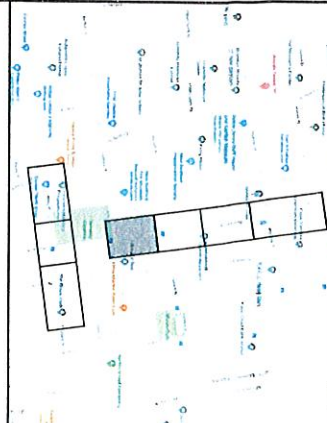
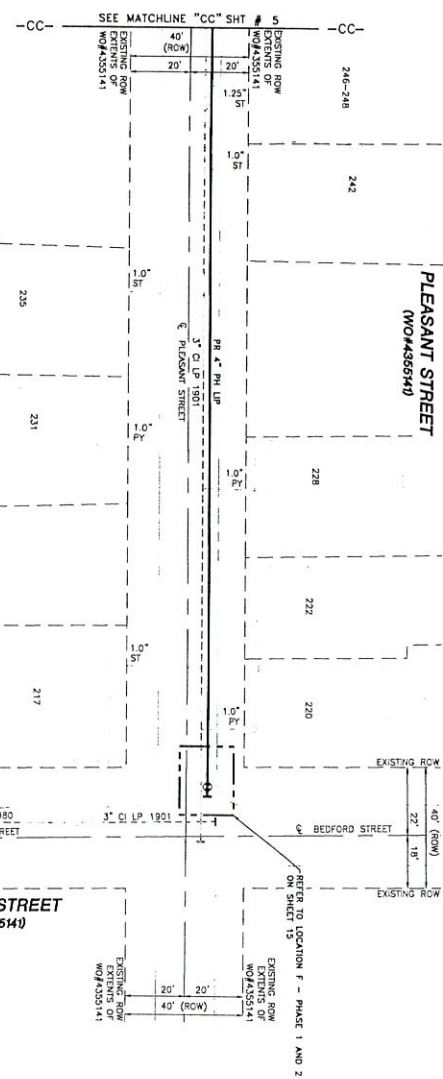
FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

EVERSOURCE

ENERGY
PLEASANT STREET AND WING STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS
INSTALLATION PLAN

NO.	DESCRIPTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	01/20/2021	WS/MSK

SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)
SHEET 5 OF 24
DATE: 01/20/2021
MAN: E2-1-PP-029-05
0



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 ANODE

- NOTES:
1. CONTRACTOR TO PROTECT EXISTING UTILITIES.
 2. REFER TO GENERAL NOTES AND SCHEDULE OF MATERIALS ON SHEET 2.
 3. REFER TO GENERAL NOTES AND SCHEDULE OF MATERIALS ON SHEET 2.
 4. REFER TO GENERAL NOTES AND SCHEDULE OF MATERIALS ON SHEET 2.

LENGTH	SIZE	MATERIAL	DESCRIPTION
25'	4"	PI	INSTALL
85'	2"	PL	REFINE
25'	3"	CI	REFINE
30'	4"	BS	REFINE

ISSUED FOR CONSTRUCTION
01/20/2021



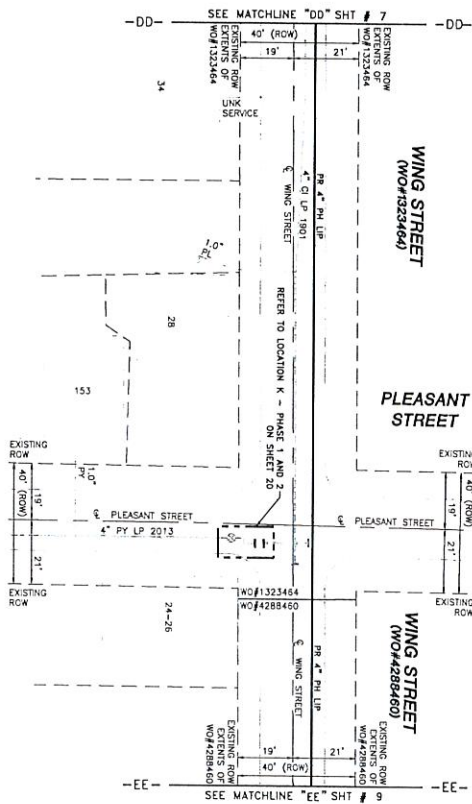
DATE	DESCRIPTION
01/20/2021	ISSUED FOR CONSTRUCTION
06/30/2022	REVISION

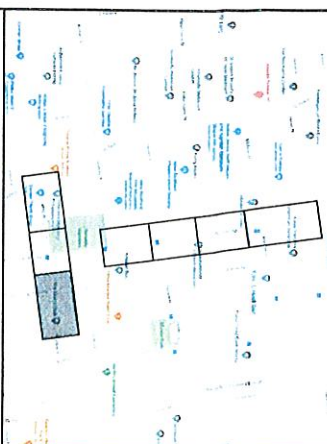
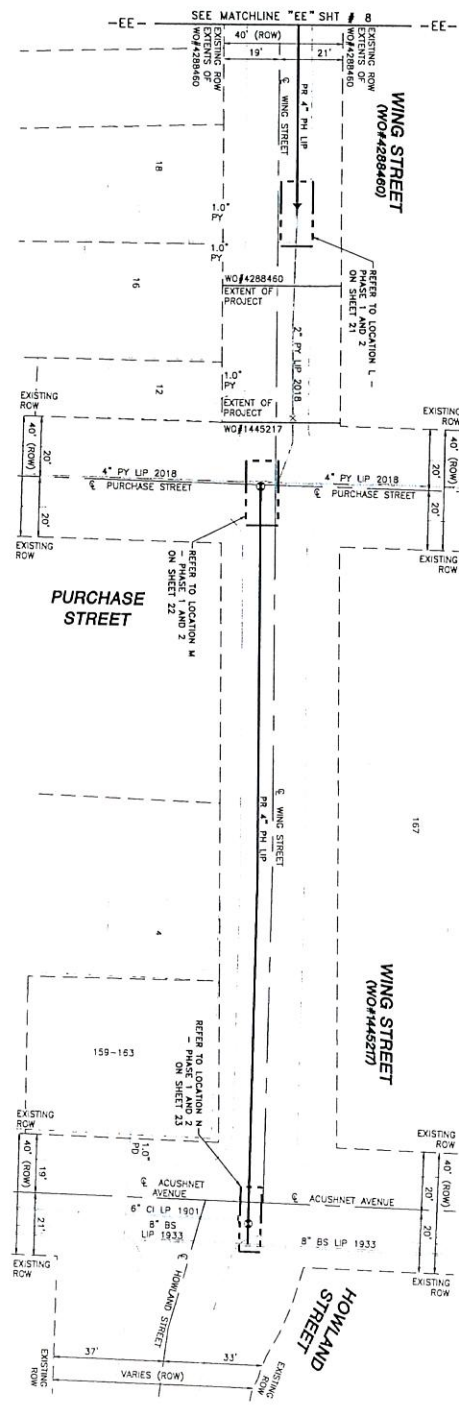
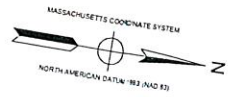
Engineering
www.Engineering.com

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

EVERSOURCE

NO.	DESCRIPTION	REVISION STATUS	DATE	DATE	DATE
0	ISSUED FOR CONSTRUCTION		01/20/2021	VSABEK	
1	NEW BEDFORD, MASSACHUSETTS				
2	INSTALLATION PLAN				
3	SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)				
4	SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)				
5	SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)				
6	SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)				
7	SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)				
8	SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)				
9	SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)				
10	SCALE: 1"=20' (DO NOT SCALE FROM DRAWINGS)				





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 ANODE

NO.	DESCRIPTION	REVISION STATUS	DATE	BY/CHK/APP
0	ISSUED FOR CONSTRUCTION		01/20/2021	WS/ABK

EVERSOURCE

ENERGY

PLEASANT STREET AND WING STREET MAIN RELAY

NEW BEDFORD, MASSACHUSETTS

INSTALLATION PLAN

SHEET 3 OF 24

DATE: 01/20/2021

BY: 01/20/2021

MAN: 01/20/2021

0

ISSUED FOR CONSTRUCTION
01/20/2021



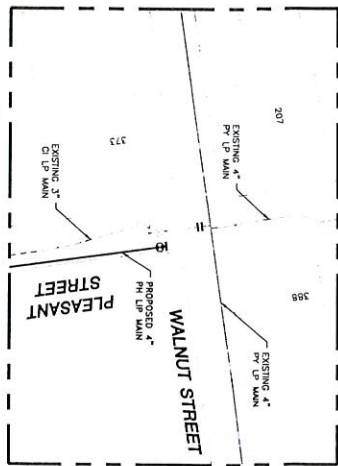
DATE: 01/20/2021

EVERSOURCE
100 BEDFORD STREET
NEW BEDFORD, MA 01900
www.eversource.com

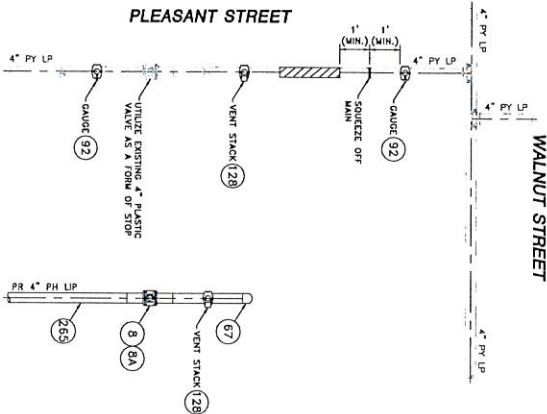
FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

- NOTES
1. CONTRACTOR TO PROTECT EXISTING UTILITIES.
 2. AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL INSTALL A 2\"/>

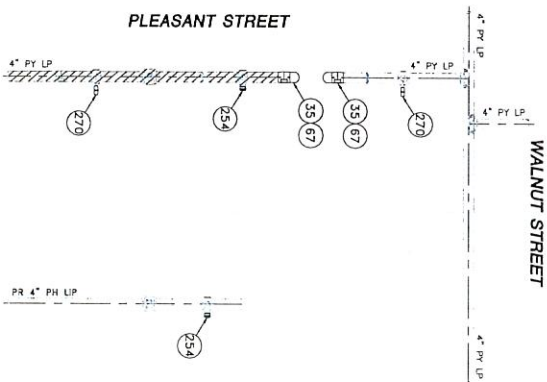
LENGTH	SIZE	MATERIAL	DESCRIPTION
315'	4"	PH	INSTALL
5'	7"	PH	INSTALL
5'	7"	PH	RETIME



LOCATION A - PLAN VIEW
(SCALE 1"=20')
(REFER TO SHEET A3)
(DO NOT SCALE FROM DRAWINGS)



LOCATION A - PHASE 1
(SCALE 1"=2')
(REFER TO SHEET A3)
(DO NOT SCALE FROM DRAWINGS)



LOCATION A - PHASE 2
(SCALE 1"=2')
(REFER TO SHEET A3)
(DO NOT SCALE FROM DRAWINGS)

PLEASANT STREET AND WALNUT STREET MAIN RELAY - LOCATION A - SCHEDULE OF MATERIALS				
ITEM	QTY	SIZE	MAXIMUM NO.	DESCRIPTION
8	1	4"	501002	BALL VALVE, BUTT FUSION, IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/4 TURN, KEROTEST POLYBALL OR APPROVED EQUAL.
8A	1	4"		BOX, VALVE, PLASTIC, SNAP-ON, ADJ. W/CI NON-LOCKING LID
35	AS REQUIRED	4"	500855	COUPLING, ELECTROFUSION, IPS, HOPE 3408, ASTM D3350, COMPATIBLE FOR FUSION TO HOPE 3408/4710 PIPE, GFCP OR APPROVED EQUAL.
67	AS REQUIRED	4"	542538	CAP, BUTT FUSION, IPS, HOPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, PERFORMANCE PIPE OR APPROVED EQUAL.
92	2	4" X 1/2"	500867	TAPPING TEE, ELECTROFUSION, IPS X CTS, HOPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, PERFORMANCE PIPE OR APPROVED EQUAL.
128	2	4" X 2"	584304	W/T TAPPING TEE, ELECTROFUSION, IPS X IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, PERFORMANCE PIPE OR APPROVED EQUAL.
254	AS REQUIRED	2"	584308	END CAP MECHANICAL COMPRESSION, SDR 11 IPS, DUPONT ZTTEL, ST-804 NITCON BODY, 316SS COMPRESSION RING, INTERNAL STIFFENER, ASTM D2513, ASTM F1924, WETTEL OR APPROVED EQUAL.
265	10'	4"	584308	PIPE, IPS, HOPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL.
270	AS REQUIRED	1/2"	544609	END CAP, MECHANICAL STAB, CTS, HOPE, PE 4710/3408, ASTM D2513, WITH SS GRIPPING SUPPORT RING, ACTUAL COLLET AND SPACER RETAINER RING, PE THRUST WASHER, BUNA-N O-RING, ZINC-PLATED CS INSERT STIFFENER, PERFECTION WITH END CAP OR APPROVED EQUAL.

NOTE:
1. REFER TO GENERAL NOTES ON SHEET A2

ISSUED FOR
CONSTRUCTION
01/20/2021



ENGINEERING
Eversource Energy
100 State Street
Boston, MA 02109
www.eversource.com

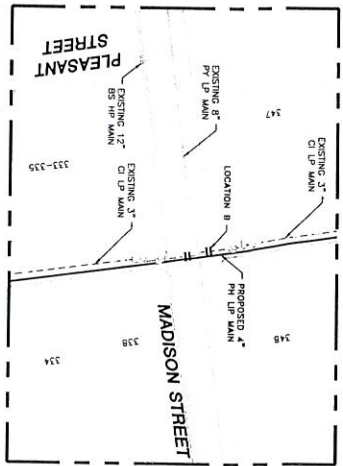
FIELD VERIFY DIMENSIONS
PRIOR TO PIPE INSTALLATION

EVERSOURCE ENERGY			
PLEASANT STREET AND WING STREET MAIN RELAY NEW BEDFORD, MASSACHUSETTS			
LOCATION - PHASE 1, 2 AND SCHEDULE OF MATERIALS			
SCALE: AS NOTED			
ISSUED BY/DATE DANIEL G. RYAN 05/12/2020	CREATED BY/DATE AB 01/20/2021	SHEET NUMBER SHEET 10 OF 24	REV IN 0
APPROVED BY/DATE MANUEL P. PROSPERO			
MA-NEED-2-1RP-029-10			

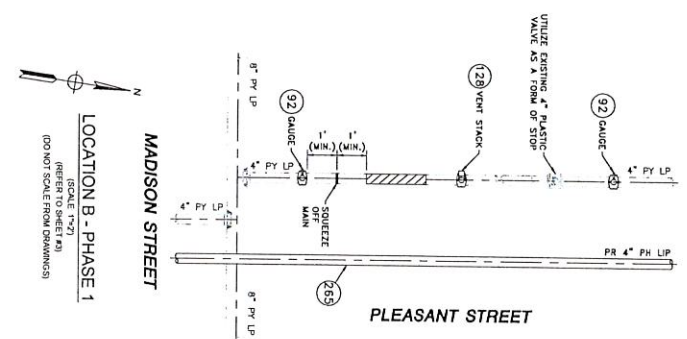
EVERSOURCE

PLEASANT STREET AND WALNUT STREET MAIN RELAY
NEWBEDFORD, MASSACHUSETTS

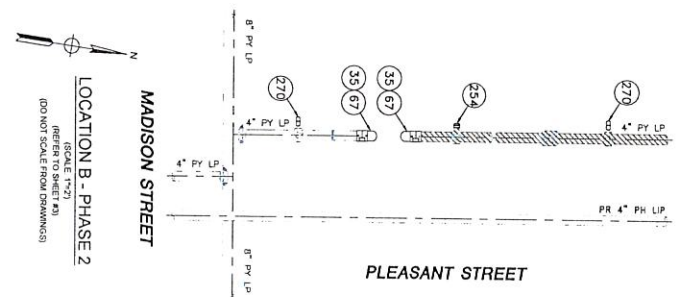
SCALE AS NOTED	SCALE AS NOTED	SHEET NUMBER	REV. NO.
AS NOTED	AS NOTED	MA-NEB-2-PIP-025-10	0



LOCATION B - PLAN VIEW
(SCALE 1"=20')
(REFER TO SHEET #3)
(DO NOT SCALE FROM DRAWINGS)



LOCATION B - PHASE 1
(SCALE 1"=2')
(REFER TO SHEET #3)
(DO NOT SCALE FROM DRAWINGS)



LOCATION B - PHASE 2
(SCALE 1"=2')
(REFER TO SHEET #3)
(DO NOT SCALE FROM DRAWINGS)

PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION B - SCHEDULE OF MATERIALS				
ITEM	QTY	SIZE	MAXIMUM NO.	MATERIAL
35	AS REQUIRED	4"	500855	Coupling, Electrofusion, IPS, HDPE 3408, ASTM D3350, ASTM F1555, COMPATIBLE FOR FUSION TO HDPE 3408/4710 PIPE, GFCP OR APPROVED EQUAL.
67	AS REQUIRED	4"	542538	CAP, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, PERFORMANCE PIPE OR APPROVED EQUAL.
92	2	4" X 1/2"	500867	TAPPING TEE, ELECTROFUSION, IPS X CTS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM F1555, CENTRAL PLASTICS OR APPROVED EQUAL.
128	1	4" X 2"	504304	HY TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, END CAP MECHANICAL COMPRESSION, SDR 11 IPS, DUPONT ZITEL 51-801 NYLON BODY, 316 SS COMPRESSION RING, INTERNAL STIFFENER, ASTM D 2513, ASTM F1554, METTIT OR APPROVED EQUAL.
254	AS REQUIRED	2"	581633	END CAP MECHANICAL COMPRESSION, SDR 11 IPS, DUPONT ZITEL 51-801 NYLON BODY, 316 SS COMPRESSION RING, INTERNAL STIFFENER, ASTM D 2513, ASTM F1554, METTIT OR APPROVED EQUAL.
255	20'	4"	554008	PIPE, IPS, HDPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL.
270	AS REQUIRED	1/2"	542609	END CAP, MECHANICAL STAB, CTS, HDPE, PE 4710/3408, ASTM D2513, WITH SS GRIPPING SUPPORT RING, ACTUAL COLLET AND SPACER REMAINDER RING, PE THRUST WASHER, BUNA-N O-RING, ZINC-PLATED CS INSERT STIFFENER, PREFECTION WITH END CAP OR APPROVED EQUAL.

ISSUED FOR
CONSTRUCTION
01/20/2021



01/20/2021

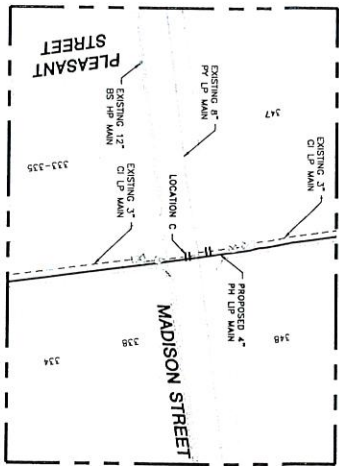
Eversource
Engineering
www.eversource.com

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

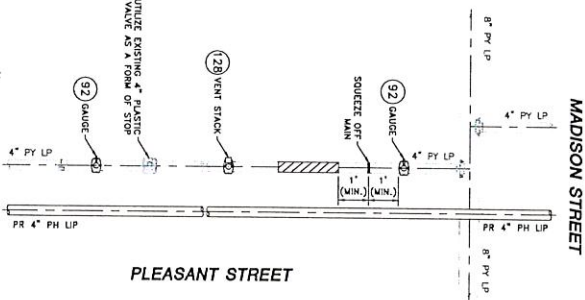
REVISION STATUS			
NO.	DESCRIPTION	DATE	BY/CHKD
0	ISSUED FOR CONSTRUCTION	01/20/2021	WASABEK

ENERGY			
PLEASANT STREET AND WING STREET MAIN RELAY			
NEW BEDFORD, MASSACHUSETTS			
SCALE AS NOTED	DATE	SHEET NUMBER	SHEET TOTAL
AS 12/29/2020	01/20/2021	11 OF 24	24
BY 01/20/2021	01/20/2021	MAN-EB-21-PP-029-11	0

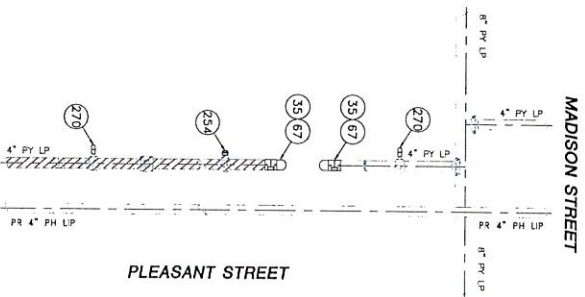
NOTE
REFER TO GENERAL NOTES ON SHEET #2



LOCATION C - PLAN VIEW
(SCALE 1\"/>



LOCATION C - PHASE 1
(SCALE 1\"/>



LOCATION C - PHASE 2
(SCALE 1\"/>

PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION C - SCHEDULE OF MATERIALS			
ITEM	QTY	SIZE	MAXIMUM NO.
35	AS REQUIRED	4"	500855
67	AS REQUIRED	4"	542538
92	2	4" X 1/2"	500867
128	1	4" X 2"	584304
254	AS REQUIRED	2"	581633
265	25'	4"	554008
270	AS REQUIRED	1/2"	542609
COUPLING, ELECTROFUSION, IPS, HDPE 3408, ASTM D3500, COMPATIBLE FOR FUSION TO HDPE 3408/4710 PIPE, GFCP OR APPROVED EQUAL.			
CAR, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3500, PERFORMANCE PIPE OR APPROVED EQUAL.			
TAPPING TEE, ELECTROFUSION, IPS X CTS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3500, PERFORMANCE PIPE OR APPROVED EQUAL.			
FUSION, CENTRAL PLASTICS OR APPROVED EQUAL.			
FUSION, CENTRAL PLASTICS OR APPROVED EQUAL.			
END CAP, MECHANICAL COMPRESSION, SDR 11 IPS, DUCTILE IRON BODY, 316 SS COMPRESSION RING, INTERNAL STRENGTH, ASTM D-2513, ASTM F392, WELTIT OR APPROVED EQUAL.			
END CAP, MECHANICAL STAB, CTS, HDPE, PE 4710/3408, PERFORMANCE PIPE OR APPROVED EQUAL.			
COLLET AND SPACER RETAINER RING, PE THRUSET WASHER, BUNA-N O-RING, ZINC-PLATED CS INSERT STIFFENER, PERFECTION WITH END CAP OR APPROVED EQUAL.			

NOTE
1. REFER TO GENERAL NOTES ON SHEET #2

ISSUED FOR
CONSTRUCTION
01/20/2021



SEAL/DATE
01/20/2021
06/20/2022

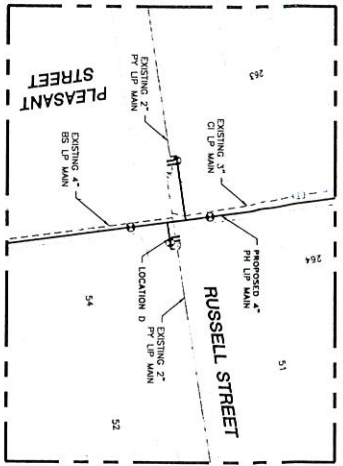
Engineering
280 WASHINGTON STREET
SUITE 200
BOSTON, MA 02108
WWW.EVERSOURCE.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

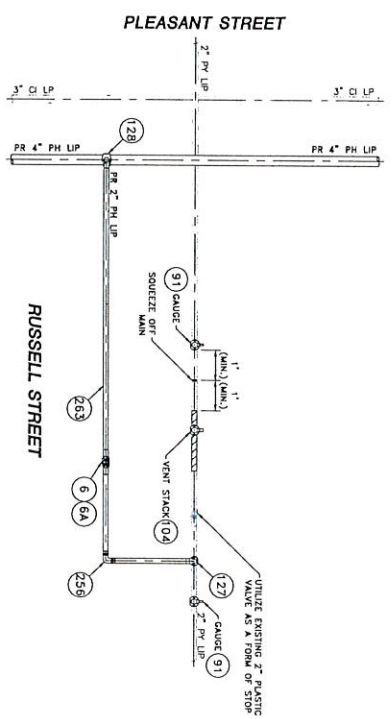
REVISION STATUS			
NO.	DESCRIPTION	DATE	DRAWN
0	ISSUED FOR CONSTRUCTION	01/20/2021	WISABER

EVERSOURCE
ENERGY

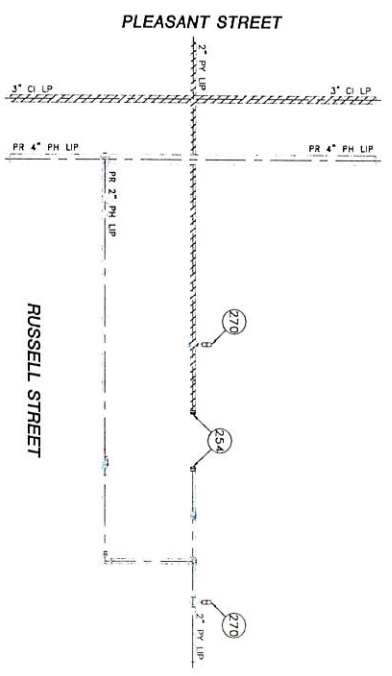
PLEASANT STREET AND WING STREET MAIN RELAY			
NEW BEDFORD, MASSACHUSETTS			
LOCATION C - PHASE 1, 2 AND SCHEDULE OF MATERIALS			
SCALE AS NOTED	DATE	SHEET 17 OF 24	NO.
AS 01/20/2021	01/20/2021	17	0
MANED21PH028RD	MANED21PH028RD	MANED21PH028RD	0



LOCATION D - PLAN VIEW
(SCALE 1"=50')
(DO NOT SCALE FROM DRAWINGS)



LOCATION D - PHASE 1
(SCALE 1"=2')
(DO NOT SCALE FROM DRAWINGS)



LOCATION D - PHASE 2
(SCALE 1"=2')
(DO NOT SCALE FROM DRAWINGS)

PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION D - SCHEDULE OF MATERIALS				
ITEM	QTY	SIZE	MAXIMO NO.	DESCRIPTION
6	1	2"	56087	BALL VALVE, BUTT FUSION, IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/4" TURN, KENOTEST POTENTIAL OR APPROVED EQUAL.
6A	1	2"	50086	BOX VALVE, PLASTIC, SNAP ON, AD, W/CI NON-LOCKING LID, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/4" TURN, KENOTEST POTENTIAL OR APPROVED EQUAL.
91	2	2" x 1/2"	56077	TAPPING TEE, ELECTROFUSION, IPS X IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/4" TURN, KENOTEST POTENTIAL OR APPROVED EQUAL.
104	1	2" x 1"	56077	TAPPING TEE, ELECTROFUSION, IPS X IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/4" TURN, KENOTEST POTENTIAL OR APPROVED EQUAL.
127	1	2" x 2"	56077	TAPPING TEE, ELECTROFUSION, IPS X IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/4" TURN, KENOTEST POTENTIAL OR APPROVED EQUAL.
128	1	4" x 2"	56077	TAPPING TEE, ELECTROFUSION, IPS X IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/4" TURN, KENOTEST POTENTIAL OR APPROVED EQUAL.
254	AS REQUIRED	2"	56077	END CAP, MECHANICAL, COMPRESSION, SDR 11 IPS, DUPONT ZYTEL ST-801 NYLON BODY, 316 SS COMPRESSION RING, INTERNAL STRENGTHEN, ASTM D-2513, ASTM F1924, METEIT OR APPROVED EQUAL.
256	AS REQUIRED	2"	56077	ENDOW, 90 DEG, MECHANICAL, COMPRESSION, SDR 11 IPS, DUPONT ZYTEL ST-801 NYLON BODY, 316 SS COMPRESSION RING, INTERNAL STRENGTHEN, ASTM D-2513, ASTM F1924, METEIT OR APPROVED EQUAL.
263	20	2"	554005	PIPE, IPS, HOPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL.
265	15	4"	554008	PIPE, IPS, HOPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL.
270	AS REQUIRED	1/2"	540269	END CAP, MECHANICAL, STRA, CIS, HOPE, PE 4710/3408, ASTM D2513, WITH SS GRIPPING SUPPORT RING, ACTUAL COLLET AND SPACER RETAINER RING, PE THRUST WASHER, BUNA-N O-RING, ZINC-PLATED CS INSERT STRENGTHEN, PERFECTION WITH END CAP OR APPROVED EQUAL.

ISSUED FOR
CONSTRUCTION
01/20/2021



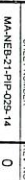
01/20/2021
09/28/2022

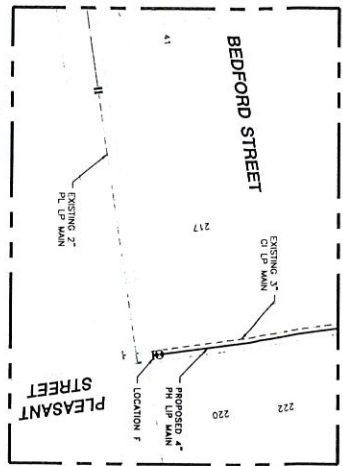
Benge Engineering
STEVEN J. BENGE, P.E.
MASSACHUSETTS
84771
WWW.BENGEENGINEERING.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

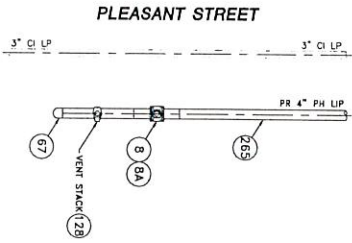
EVERSOURCE ENERGY			
PLEASANT STREET AND WING STREET MAIN RELAY			
NEW BEDFORD, MASSACHUSETTS			
LOCATION D - PHASE 1, 2 AND SCHEDULE OF MATERIALS			
SCALE: AS NOTED			
NO.	DESCRIPTION	DATE	REVISION
0	ISSUED FOR CONSTRUCTION	01/20/2021	WS/AREK
1	DATE	01/20/2021	DW/CKAP
2	DATE	01/20/2021	DW/CKAP
3	DATE	01/20/2021	DW/CKAP
4	DATE	01/20/2021	DW/CKAP
5	DATE	01/20/2021	DW/CKAP
6	DATE	01/20/2021	DW/CKAP
7	DATE	01/20/2021	DW/CKAP
8	DATE	01/20/2021	DW/CKAP
9	DATE	01/20/2021	DW/CKAP
10	DATE	01/20/2021	DW/CKAP
11	DATE	01/20/2021	DW/CKAP
12	DATE	01/20/2021	DW/CKAP
13	DATE	01/20/2021	DW/CKAP
14	DATE	01/20/2021	DW/CKAP
15	DATE	01/20/2021	DW/CKAP
16	DATE	01/20/2021	DW/CKAP
17	DATE	01/20/2021	DW/CKAP
18	DATE	01/20/2021	DW/CKAP
19	DATE	01/20/2021	DW/CKAP
20	DATE	01/20/2021	DW/CKAP
21	DATE	01/20/2021	DW/CKAP
22	DATE	01/20/2021	DW/CKAP
23	DATE	01/20/2021	DW/CKAP
24	DATE	01/20/2021	DW/CKAP
25	DATE	01/20/2021	DW/CKAP
26	DATE	01/20/2021	DW/CKAP
27	DATE	01/20/2021	DW/CKAP
28	DATE	01/20/2021	DW/CKAP
29	DATE	01/20/2021	DW/CKAP
30	DATE	01/20/2021	DW/CKAP
31	DATE	01/20/2021	DW/CKAP
32	DATE	01/20/2021	DW/CKAP
33	DATE	01/20/2021	DW/CKAP
34	DATE	01/20/2021	DW/CKAP
35	DATE	01/20/2021	DW/CKAP
36	DATE	01/20/2021	DW/CKAP
37	DATE	01/20/2021	DW/CKAP
38	DATE	01/20/2021	DW/CKAP
39	DATE	01/20/2021	DW/CKAP
40	DATE	01/20/2021	DW/CKAP
41	DATE	01/20/2021	DW/CKAP
42	DATE	01/20/2021	DW/CKAP
43	DATE	01/20/2021	DW/CKAP
44	DATE	01/20/2021	DW/CKAP
45	DATE	01/20/2021	DW/CKAP
46	DATE	01/20/2021	DW/CKAP
47	DATE	01/20/2021	DW/CKAP
48	DATE	01/20/2021	DW/CKAP
49	DATE	01/20/2021	DW/CKAP
50	DATE	01/20/2021	DW/CKAP
51	DATE	01/20/2021	DW/CKAP
52	DATE	01/20/2021	DW/CKAP
53	DATE	01/20/2021	DW/CKAP
54	DATE	01/20/2021	DW/CKAP
55	DATE	01/20/2021	DW/CKAP
56	DATE	01/20/2021	DW/CKAP
57	DATE	01/20/2021	DW/CKAP
58	DATE	01/20/2021	DW/CKAP
59	DATE	01/20/2021	DW/CKAP
60	DATE	01/20/2021	DW/CKAP
61	DATE	01/20/2021	DW/CKAP
62	DATE	01/20/2021	DW/CKAP
63	DATE	01/20/2021	DW/CKAP
64	DATE	01/20/2021	DW/CKAP
65	DATE	01/20/2021	DW/CKAP
66	DATE	01/20/2021	DW/CKAP
67	DATE	01/20/2021	DW/CKAP
68	DATE	01/20/2021	DW/CKAP
69	DATE	01/20/2021	DW/CKAP
70	DATE	01/20/2021	DW/CKAP
71	DATE	01/20/2021	DW/CKAP
72	DATE	01/20/2021	DW/CKAP
73	DATE	01/20/2021	DW/CKAP
74	DATE	01/20/2021	DW/CKAP
75	DATE	01/20/2021	DW/CKAP
76	DATE	01/20/2021	DW/CKAP
77	DATE	01/20/2021	DW/CKAP
78	DATE	01/20/2021	DW/CKAP
79	DATE	01/20/2021	DW/CKAP
80	DATE	01/20/2021	DW/CKAP
81	DATE	01/20/2021	DW/CKAP
82	DATE	01/20/2021	DW/CKAP
83	DATE	01/20/2021	DW/CKAP
84	DATE	01/20/2021	DW/CKAP
85	DATE	01/20/2021	DW/CKAP
86	DATE	01/20/2021	DW/CKAP
87	DATE	01/20/2021	DW/CKAP
88	DATE	01/20/2021	DW/CKAP
89	DATE	01/20/2021	DW/CKAP
90	DATE	01/20/2021	DW/CKAP
91	DATE	01/20/2021	DW/CKAP
92	DATE	01/20/2021	DW/CKAP
93	DATE	01/20/2021	DW/CKAP
94	DATE	01/20/2021	DW/CKAP
95	DATE	01/20/2021	DW/CKAP
96	DATE	01/20/2021	DW/CKAP
97	DATE	01/20/2021	DW/CKAP
98	DATE	01/20/2021	DW/CKAP
99	DATE	01/20/2021	DW/CKAP
100	DATE	01/20/2021	DW/CKAP

NOTE
1- REFER TO GENERAL NOTES ON SHEET #2

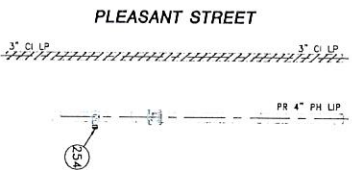




LOCATION F - PLAN VIEW
(SCALE: 1"=20')
(REFER TO SHEET #6)
(DO NOT SCALE FROM DRAWINGS)



BEDFORD STREET
LOCATION F - PHASE 1
(SCALE: 1"=20')
(REFER TO SHEET #6)
(DO NOT SCALE FROM DRAWINGS)



BEDFORD STREET
LOCATION F - PHASE 2
(SCALE: 1"=20')
(REFER TO SHEET #6)
(DO NOT SCALE FROM DRAWINGS)

PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION F - SCHEDULE OF MATERIALS				
ITEM	QTY	SIZE	DESCRIPTION	MATERIAL
8	1	4"	BALL VALVE, BUTT FUSION, IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/4 TURN, KEROTEST POLYVAL OR APPROVED EQUAL	ASTM D2513
8A	1	4"	BOX VALVE, PLASTIC, SNAP-ON, ADO, W/CI NON-LOCKING LID	PLASTIC
67	AS REQUIRED	4"	CPV, BUTT FUSION, IPS, HOPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D2461, PERFORMANCE PIPE OR APPROVED EQUAL	ASTM D2513
128	1	4" X 2"	HV TAPPINGTEE, ELECTROFUSION, IPS X IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3361, ASTM F1055, CENTRAL PLASTICS OR APPROVED EQUAL	ASTM D2513
254	AS REQUIRED	2"	END CAP MECHANICAL COMPRESSION, SDR 11 IPS, DUPONT ZYTEL ST-801 NYLON BODY, 316 SS COMPRESSION RING, INTERNAL STIFFENER, ASTM D-2513, ASTM F1924, WETITT OR APPROVED EQUAL	ASTM D2513
265	10	4"	PIPE, IPS, HOPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL	ASTM D2513

SCALE:
1"=20' REFER TO GENERAL NOTES ON SHEET #2

ISSUED FOR
CONSTRUCTION
01/20/2021



DATE: 01/20/2021
DESIGNER: [Signature]
SCALE: 1"=20'

EVERSOURCE
MASSACHUSETTS
100 STATE STREET
BOSTON, MA 02109
WWW.EVERSOURCE.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

REVISION STATUS			
NO.	DESCRIPTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	01/20/2021	WSABER

EVERSOURCE
ENERGY

PLEASANT STREET AND WING STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS

SCALE: AS NOTED
DATE: 01/20/2021
MAN: EBP00880
SHEET NUMBER: 15 OF 24
REV: 0

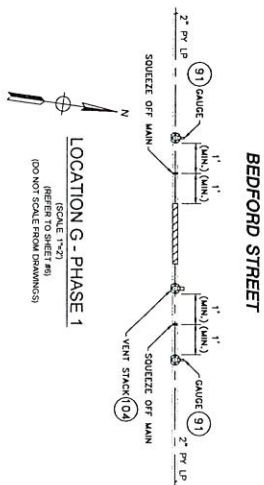
 N

LOCATION G - PLAN V

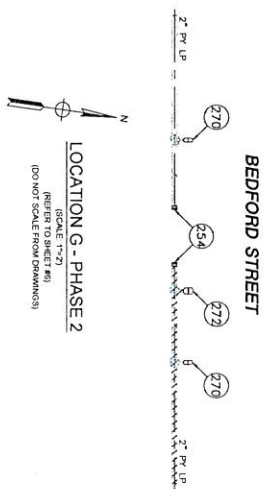
(SCALE 1"=30')

(REFER TO SHEET #0)

(DO NOT SCALE FROM DRAWINGS)



BEDFORD STREET



BEDFORD STREET

NOTE
1 REFER TO GENERAL NOTES ON SHEET #2

ISSUED FOR
CONSTRUCTION
01/20/2021



OF SHIPPED IN ACCORDANCE WITH TITLE 48, PART 192 OF MINIMUM TECHNICAL SAFETY STANDARDS AND CODES FOR GAS TRANSMISSION AND DISTRIBUTION PIPE SYSTEMS, LATEST EDITION.

**FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION**

EVERSOURCE
ENERGY

PLEASANT STREET AND WING STREET MAIN RELAY

LOCATION G - PHASE 1, 2 AND SCHEDULE OF MATERIALS

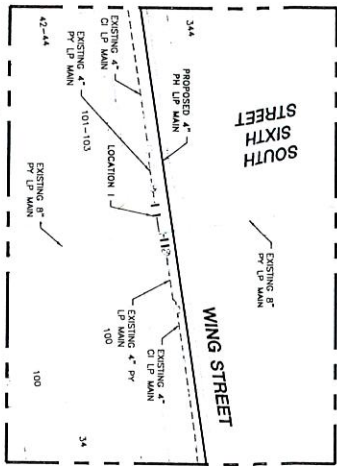
SCALE: AS NOTED
DRAWN BY / DATE

CHECKED BY / DATE

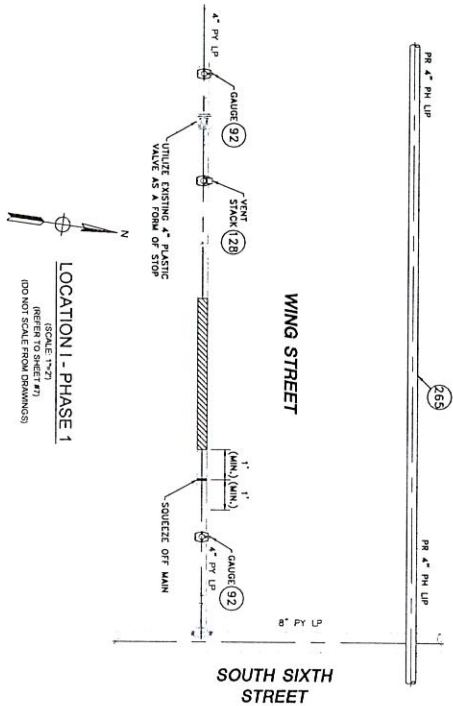
SHEET 1

REV

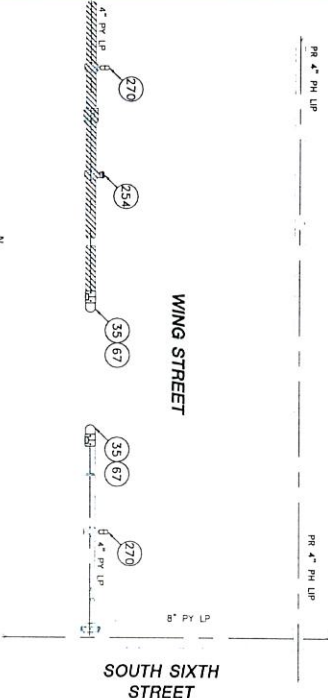
--	--	--	--



LOCATION 1 - PLAN VIEW
(SCALE: 1/2"=1'-0")
(DO NOT SCALE FROM DRAWINGS)



LOCATION 1 - PHASE 1
(SCALE: 1/2"=1'-0")
(DO NOT SCALE FROM DRAWINGS)



LOCATION 1 - PHASE 2
(SCALE: 1/2"=1'-0")
(DO NOT SCALE FROM DRAWINGS)

PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION 1 - SCHEDULE OF MATERIALS				
ITEM	QTY	SIZE	MARKING NO.	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 D3513
67	AS REQUIRED	4"	54538	CAP, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D361, PERFORMANCE PIPE OR APPROVED EQUAL. ASTM D2513
92	2	4" x 1/2"	500867	TAPPING TEE, ELECTROFUSION, IPS X CT, HDPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, ASTM D361, ASTM D2513
128	1	4" x 2"	584304	HY TAPPING TEE, ELECTROFUSION, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D361, ASTM D2513
254	AS REQUIRED	2"	584633	END CAP MECHANICAL COMPRESSION, SDR 11 IPS, DUPONT ZYTEL ST-801 NYLON BODY, 316 SS COMPRESSION RING, INTERNAL STIFFENER, ASTM D-2513, ASTM F1924, METTIT OR APPROVED EQUAL. ASTM D2513
265	20	4"	554008	PIPE, IPS, HDPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL. ASTM D2513
270	AS REQUIRED	1/2"	54609	COLLET AND SPACER BETWEEN RING, PE THIRUST WASHER, BUNA-N O-RING, ZINC-PLATED CS INSERT STIFFENER, PERFECTION WITH END CAP OR APPROVED EQUAL. ASTM D2513

ISSUED FOR
CONSTRUCTION
01/20/2021



DATE: 01/20/2021
PROJECT: NEW BEDFORD, MASSACHUSETTS
SHEET: 18 OF 24

Engineering
200 STATE STREET
SUITE 200
NEW BEDFORD, MA 01905
WWW.ENGINEERINGMA.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

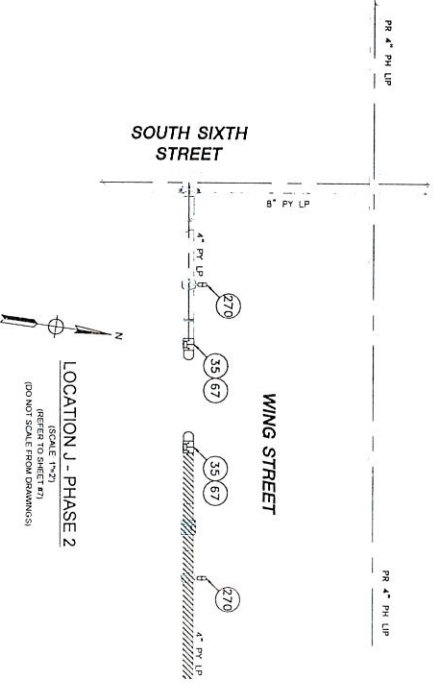
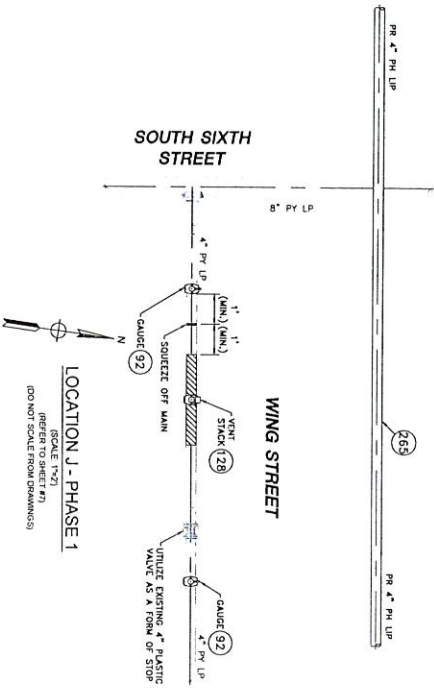
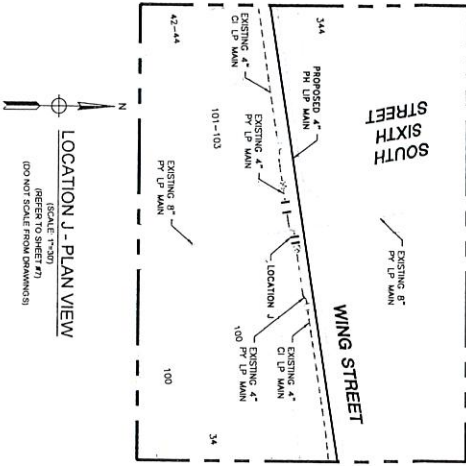
EVERSOURCE
ENERGY

PLEASANT STREET AND WING STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS
LOCATION 1 - PHASE 1, 2 AND SCHEDULE OF MATERIALS
SCALE: AS NOTED
DATE: 01/20/2021
MANE: 21-PH-025-18

NO.	DESCRIPTION	DATE	DRAWN
0	ISSUED FOR CONSTRUCTION	01/20/2021	WS/AGK

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

PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION 1 - SCHEDULE OF MATERIALS				
ITEM	QTY	SIZE	MAXIMUM NO.	MATERIAL
35	2	4"	500855	COPING, ELECTROFUSION, IPS, HOPE 3408, ASTM D3350, COMPATIBLE FOR FUSION TO HOPE 3408/4710 PIPE, GFCP OR APPROVED EQUAL.
67	2	4"	542538	CAP, BUTT FUSION, IPS, HOPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, PERFORMANCE PIPE OR APPROVED EQUAL.
92	2	4" X 1/2"	500867	TAPPING TEE, ELECTROFUSION, IPS X CTS, HOPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM D3513
128	1	4" X 2"	508304	HY TAPPING TEE, ELECTROFUSION, IPS X IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261, ASTM D3513
255	20	4"	554008	PIPE, IPS, HOPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL.
270	AS REQUIRED	1/2"	542699	END CAP, MECHANICAL STAB, CTS, HOPE PE 4710/2408, ASTM D2513, WITH SS GRIPPING SUPPORT RING, ACETAL COLLET AND SPACER BETWEEN RING, PCTRUST WASHER, BLANK O-RING, ZINC-PLATED CO INSERT STIFFENER, ASTM D2513



NOTE
1. REFER TO GENERAL NOTES ON SHEET #2

ISSUED FOR
CONSTRUCTION
01/20/2021



01/20/2021
06/20/2022

Engineering
www.bengineering.com

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

EVERSOURCE
ENERGY

PLEASANT STREET AND WING STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS
LOCATION 1 - PHASE 1, 2 AND SCHEDULE OF MATERIALS

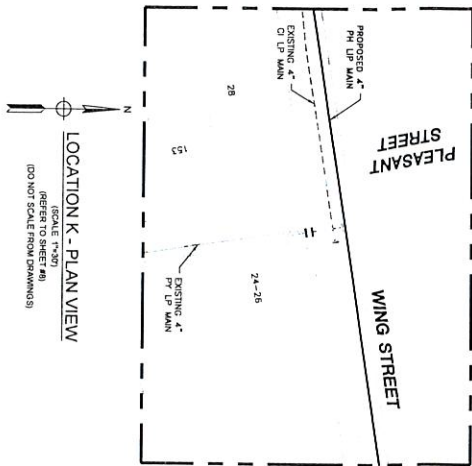
NO.	DESCRIPTION	DATE	DRAWN BY
0	ISSUED FOR CONSTRUCTION	01/20/2021	WES/ABK

DATE	DESIGNED BY	CHECKED BY	DATE
01/20/2021	WES/ABK	WES/ABK	01/20/2021

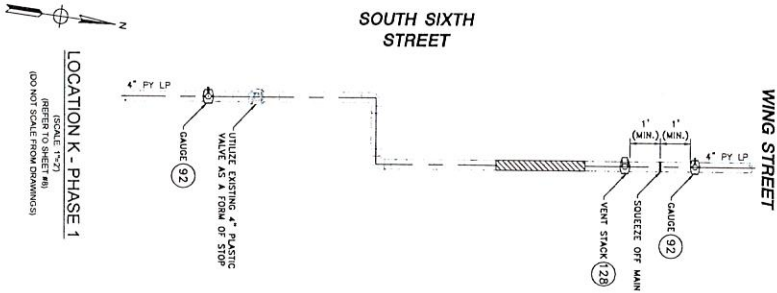
SHEET NO.	TOTAL SHEETS
18 OF 24	24

MANEER21-PP-025-19	0
--------------------	---

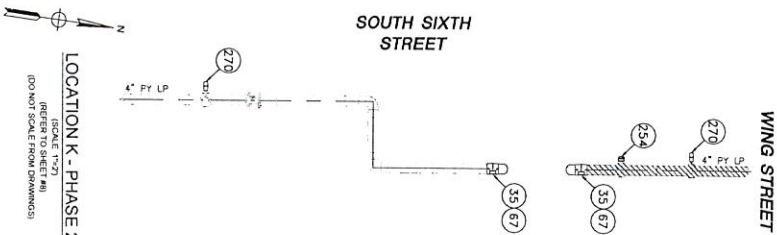
PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION K - SCHEDULE OF MATERIALS					DESCRIPTION		MATERIAL	
ITEM	QTY	SIZE	MAXIMO NO.					
35	AS REQUIRED	4"	500855		COUPLING, ELECTROFUSION, IPS, HDPE 3408, ASTM D3350, ASTM F1055, COMPATIBLE FOR FUSION TO HDPE 3408/4710 PIPE, GFCP OR APPROVED EQUAL.		ASTM D3350	
67	AS REQUIRED	4"	542538		CAP, BUTT FUSION, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3361, PERFORMANCE PIPE OR APPROVED EQUAL.		ASTM D2513	
92	2	4" X 1/2"	500867		TAPPING TE, ELECTROFUSION, IPS X CTS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3361, ASTM D2513		ASTM D2513	
128	1	4" X 2"	594304		F1055, CENTRAL PLASTICS OR APPROVED EQUAL.		ASTM D2513	
270	AS REQUIRED	1/2"	542509		ASTM F1055, CENTRAL PLASTICS OR APPROVED EQUAL.		ASTM D2513	
					END CAP, MECHANICAL STRAP, CTS, HDPE, PE 4710/3408, ASTM D2513, WITH SS GRIPPING SUPPORT RING, ACETAL COLLET AND SPACER RETAINER RING, PE THRUFAST WASHER, BULK-N-O-RING, ZINC-PLATED CS INSERT STIFFENER, PERFECTION WITH END CAP OR APPROVED EQUAL.		ASTM D2513	



LOCATION K - PLAN VIEW
(SCALE 1"=20')
(REFER TO SHEET #6)
(DO NOT SCALE FROM DRAWINGS)



LOCATION K - PHASE 1
(SCALE 1"=20')
(REFER TO SHEET #1)
(DO NOT SCALE FROM DRAWINGS)



LOCATION K - PHASE 2
(SCALE 1"=20')
(REFER TO SHEET #1)
(DO NOT SCALE FROM DRAWINGS)

NOTE
1. REFER TO GENERAL NOTES ON SHEET #1

ISSUED FOR
CONSTRUCTION
01/20/2021



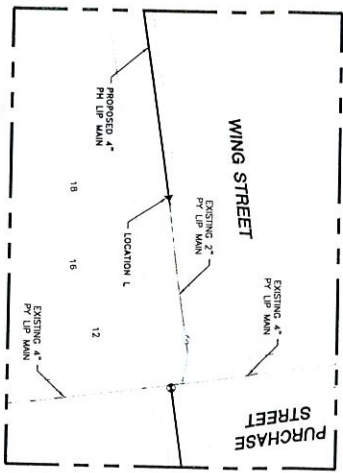
01/20/2021
06/20/2022

ENGINEERING
MASSACHUSETTS
WWW.ENGINEERINGMASS.COM

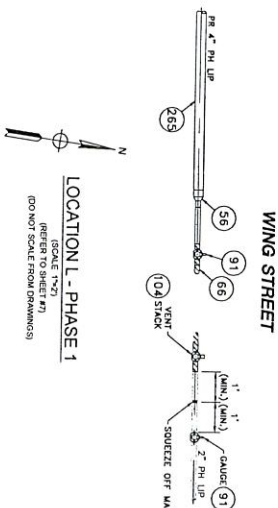
FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

REVISION STATUS			
NO.	DESCRIPTION	DATE	BY/CHK
0	ISSUED FOR CONSTRUCTION	01/20/2021	WES/ABER

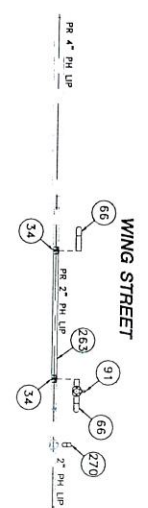
EVERSOURCE ENERGY			
PLEASANT STREET AND WING STREET MAIN RELAY			
NEW BEDFORD, MASSACHUSETTS			
LOCATION K - PHASE 1, 2 AND SCHEDULE OF MATERIALS			
SCALE AS NOTED	DATE	SHEET NUMBER	REV NO.
AS NOTED	01/20/2021	20 OF 24	0
DESIGNED BY	DATE	BY/CHK	REV NO.
WES/ABER	01/20/2021	WES/ABER	0
REVISION NO.	DATE	BY/CHK	REV NO.
MANEB21PH02380	01/20/2021	MANEB21PH02380	0



LOCATION L - PLAN VIEW
(SCALE: 1"=20')
(REFER TO SHEET #8)
(DO NOT SCALE FROM DRAWINGS)



LOCATION L - PHASE 1
(SCALE: 1"=20')
(REFER TO SHEET #1)
(DO NOT SCALE FROM DRAWINGS)



LOCATION L - PHASE 2
(SCALE: 1"=20')
(REFER TO SHEET #1)
(DO NOT SCALE FROM DRAWINGS)

PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION L - SCHEDULE OF MATERIALS				
ITEM	QTY	SIZE	MANUFACTURE NO.	MATERIAL
34	AS REQUIRED	2"	500854	Coupling, Electro-fusion, IPS, HDPE 3408, ASTM D3350, COMPATIBLE FOR FUSION TO HDPE 3408/4710 PIPE, GFCP OR APPROVED EQUAL.
56	1	4" X 2"	555593	Reducer, Butt Fusion, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3361, PERFORMANCE PIPE OR APPROVED EQUAL.
66	AS REQUIRED	2"	542572	Cap, Butt Fusion, IPS, HDPE 4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3361, PERFORMANCE PIPE OR APPROVED EQUAL.
91	3	2" X 1/2"	500866	Tapping Tee, Electro-fusion, IPS X CTS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3361, PERFORMANCE PIPE OR APPROVED EQUAL.
104	1	2" X 1"	560779	Tapping Tee, Electro-fusion, IPS X IPS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3361, PERFORMANCE PIPE OR APPROVED EQUAL.
263	5'	2"	554075	Pipe, IPS, HDPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL.
265	10'	4"	554008	Pipe, IPS, HDPE 3408/4710 SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL.
270	AS REQUIRED	1/2"	544209	End Cap, Mechanical, STAB, CTS, HDPE, PE 4710/3408, ASTM D2513, WITH SS GRIPPING SUPPORT RING, AGTAL COLLET AND SPACER REMAINER RING, PE THURST WASHER, BUMA-N O-RING, ZINC-PLATED CS INSERT STIFFENER, PERFECTION WITH END CAP OR APPROVED EQUAL.

ISSUED FOR CONSTRUCTION
01/20/2021



01/20/2021
05/20/2022

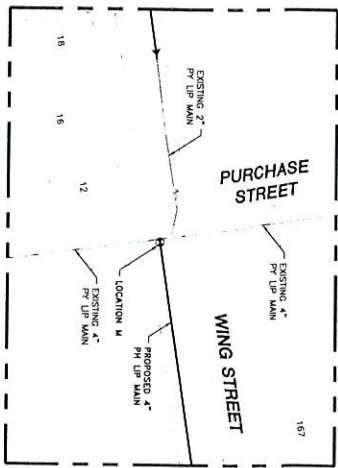
ENGINEERING
www.eversource.com

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

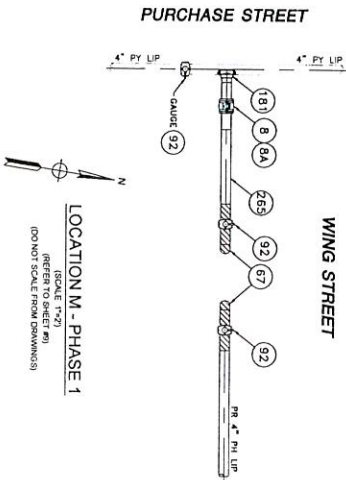
REVISION STATUS
EVERSOURCE ENERGY
NEW BEDFORD MASSACHUSETTS
LOCATION L - PHASE 1, 2 AND SCHEDULE OF MATERIALS
SHEET 21 OF 24
MA-NEB-21-PP-029-21

NO.	DESCRIPTION	DATE	DRAWN BY
0	ISSUED FOR CONSTRUCTION	01/20/2021	MS/AGK

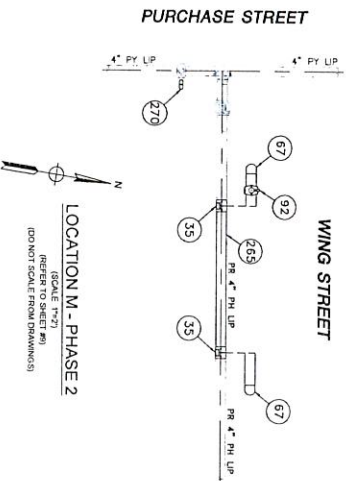
NOTE
1. REFER TO GENERAL NOTES ON SHEET #2



LOCATION M - PLAN VIEW
(SCALE 1/8")
(REFER TO SHEET #0)
(DO NOT SCALE FROM DRAWING)



LOCATION M - PHASE 1
(SCALE 1/8")
(REFER TO SHEET #0)
(DO NOT SCALE FROM DRAWING)



LOCATION M - PHASE 2
(SCALE 1/8")
(REFER TO SHEET #0)
(DO NOT SCALE FROM DRAWING)

PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION M - SCHEDULE OF MATERIALS				
ITEM	QTY	SIZE	MAXIMO NO.	MATERIAL
8	1	4"	501002	BALL VALVE, BUTT FUSION, IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/4 TURN, KEROTEST POLYBALL OR APPROVED EQUAL
8A	1	4"		BOX VALVE PLASTIC SNAP-ON, AOT, W/C NON-LOCKING IJD
35	AS REQUIRED	4"	500855	Coupling, ELECTROFUSION, IPS, HOPE 3408, ASTM D3350, ASTM F1055, COMPATIBLE FOR FUSION TO HOPE 3408/4710 PIPE, GFCI OR APPROVED EQUAL
67	AS REQUIRED	4"	542538	CAP, BUTT FUSION, IPS, HOPE 4710, SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL
92	4	4" X 1/2"	500867	TAPPING TEL, ELECTROFUSION, IPS X CTS, HOPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, PERFORMANCE PIPE OR APPROVED EQUAL
181	1	4" X 4"	584552	BRANCH SADDLE, ELECTROFUSION WITH BUTT FUSION BRANCH, IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, CENTRAL PLASTICS OR APPROVED EQUAL
265	15"	4"	554008	END CAP, MECHANICAL STAB, CTS, HOPE, PE 4710/3408, ASTM D2513, WITH SS GRIPPING SUPPORT RING, ACETAL COLLET AND SPACER RETAINER RING, PE THRU-FAST WASHER, BUNA-N O-RING, ZINC-PLATED CS INSERT STIFFENER, PERFECTION WITH END CAP OR APPROVED EQUAL
270	AS REQUIRED	1/2"	540509	PERFECTION WITH END CAP OR APPROVED EQUAL

NOTE
1. REFER TO GENERAL NOTES ON SHEET #2

ISSUED FOR
CONSTRUCTION
01/20/2021

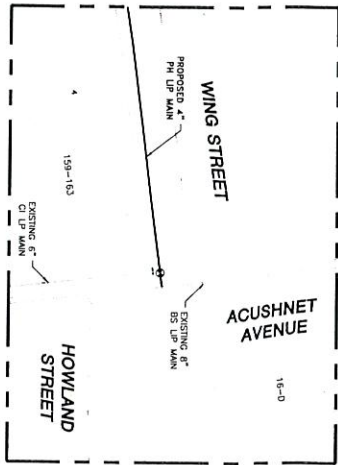


SCALE BY
01/20/2021
DESIGNER
06/20/2022

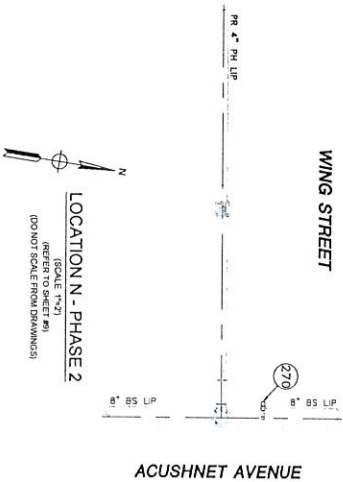
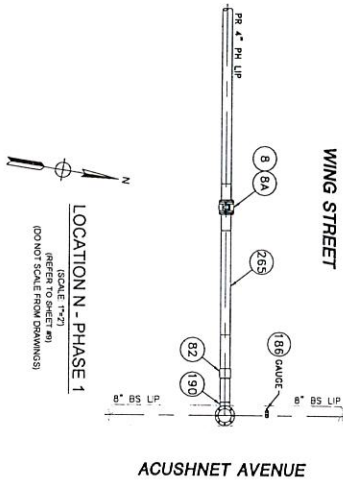
EVERSOURCE ENERGY
1000 STATE STREET, 10TH FLOOR
NEW BEDFORD, MASSACHUSETTS 01903
WWW.EVERSOURCE.ENERGY.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

REVISION STATUS			
NO.	DESCRIPTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	01/20/2021	WS/ABEK
1	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
2	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
3	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
4	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
5	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
6	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
7	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
8	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
9	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
10	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
11	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
12	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
13	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
14	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
15	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
16	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
17	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
18	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
19	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
20	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
21	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
22	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
23	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
24	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
25	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
26	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
27	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
28	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
29	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
30	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
31	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
32	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
33	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
34	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
35	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
36	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
37	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
38	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
39	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
40	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
41	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
42	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
43	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
44	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
45	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
46	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
47	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
48	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
49	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
50	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
51	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
52	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
53	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
54	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
55	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
56	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
57	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
58	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
59	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
60	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
61	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
62	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
63	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
64	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
65	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
66	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
67	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
68	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
69	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
70	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
71	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
72	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
73	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
74	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
75	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
76	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
77	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
78	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
79	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
80	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
81	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
82	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
83	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
84	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
85	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
86	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
87	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
88	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
89	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
90	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
91	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
92	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
93	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
94	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
95	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
96	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
97	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
98	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
99	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK
100	DESIGN FOR CONSTRUCTION	01/20/2021	WS/ABEK



LOCATION N - PLAN VIEW
(SCALE 1"=20')
(REFER TO SHEET #0)
(DO NOT SCALE FROM DRAWINGS)



PLEASANT STREET AND WING STREET MAIN RELAY - LOCATION N - SCHEDULE OF MATERIALS			
ITEM	QTY	SIZE	MAXIMO NO.
8	1	4"	501023
8A	1	4"	501023
82	1	4"	546254
186	1	3/4" x 42"	578022
190	1	4"	578327
265	20	4"	554008
AS REQUIRED	1/2"	542809	
DESCRIPTION			
BALL VALVE, BUTT FUSION, IPS, HOPE 3408/4710, SDR 11, ASTM D2513, ASME B16.40, FULL PORT, 1/2" TURN, KENOTEST POLYBALL OR APPROVED EQUAL.			
BOX, VALVE, PLASTIC, SNAP-ON, ADJ, W/CI NON-LOCKING UD			
TRANSITION FITTING, STEEL TO HDPE, SDR 11, ASTM A53 STEEL W/ WELD END, HDPE 3408 W/ BUTT FUSION END, ASTM D2513, ASTM F1973, ANSI B31.8, PERFECTION OR APPROVED EQUAL.			
SERVICE TEE, WELD X MECHANICAL COUPLING FOR HDPE, CTS, PRESSER STYLE 90 TAP-N-VALVE WITH STYLE 501 TRANSITION COUPLING OUTLET, FORGED STEEL BODY BEVELED FOR WELDING, STYLE 501 TRANSITION COUPLING TO HAVE THREADED BODY, INTERNAL STIFFENER WITH GASKET, SPRING WASHER AND GRIP RING WITH THREADED NUT.			
3-WAY TEE, WELD X WELD, TO WILLIAMSON, ASTM A105 OR ASTM A234 W/ BODY, WITH FLANGED CAP AND COMPLETION PLUG.			
PIPE, IPS, HOPE 3408/4710 SDR 11, ASTM D2513, ASTM D3320, PERFORMANCE PIPE OR APPROVED EQUAL, END CAP, MECHANICAL STAB, CTS, HDPE, PE 4710/3408, ASTM D2513, WITH SS GRIPPING SUPPORT RING, ACTUAL COUPLER AND SPACER RETAINER RING, PE THRUST WASHER, BUNA-N O-RING, ZINC-PLATED CS INSERT STIFFENER, PERFECTION WITH END CAP OR APPROVED EQUAL.			
MATERIAL			
ASTM D2513			
PLASTIC			
ASTM A53, HOPE 3408			
ASTM A105			
ASTM D2513			
ASTM D2513			

ISSUED FOR
CONSTRUCTION
01/20/2021



SCALE: AS NOTED
01/20/2021
06/20/2022
Eversource Energy
www.eversource.com

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

REVISION STATUS			
NO.	DESCRIPTION	DATE	DW/CHK/APP
0	ISSUED FOR CONSTRUCTION	01/20/2021	WS/AB/CK
PLEASANT STREET AND WING STREET MAIN RELAY NEW BEDFORD, MASSACHUSETTS			
SHEET 23 OF 24			
SCALE: AS NOTED			
DRAWN BY: J. L. O'DONNELL			
CHECKED BY: J. L. O'DONNELL			
APPROVED BY: J. L. O'DONNELL			
MANAGER: J. L. O'DONNELL			
SHEET NUMBER: 23			
REV. NO.: 0			

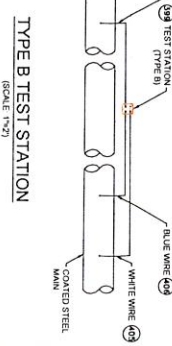
EVERSOURCE
ENERGY

MA-NEB-21-PIP-025-23

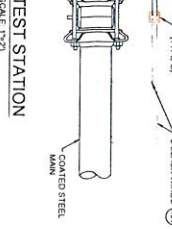
0

TYPE A TEST STATION
(SCALE 1"=2')





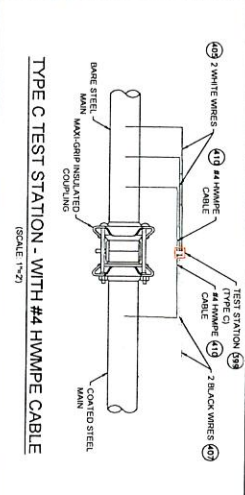
COOP LING
TYPE C -



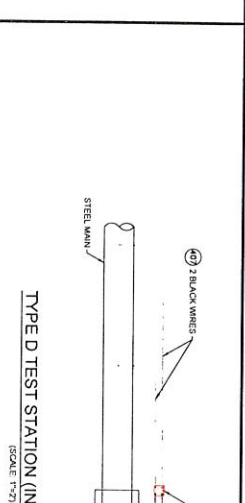
CATHODIC PROTECTION BILL OF MATERIALS			
ITEM	QTY	SIZE	DESCRIPTION
396	X	EA	57776
397	X	EA	51052
398	X	EA	59008
399	X	EA	59063
400	X	BOX	59065
401	X	EA	59918
402	X	ES	56406
403	X	ES	60313
404	X	ROLL	60314
405	X	ROLL	57815
406	X	ROLL	60314
407	X	ROLL	60313
408	X	EA	59004
409	X	EA	59005
410	X	FT	51360

NOTES:

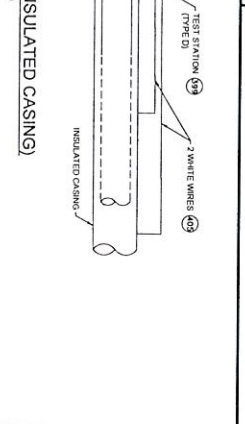
1. SAFETY OPENING AND ACCESS DOORS SHOULD BE INSTALLED IN STEEL COLLAR WHERE AN INDIVIDUAL CLIMB ON THE WIRES SO THEY CAN EXTEND A MINIMUM OF 17" ABOVE GRADE.
2. FOR TYPE "A" TEST STATIONS, THE TWO WIRES SHOULD BE THERMATE WELDED TO THE COATED STEEL MANHOLE BE THE SAME COLOR. (COUPONS COULD BE ADDED TO THIS TEST STATION TYPE).
3. FOR TYPE B TEST STATIONS, EACH OF THE FOUR WIRES SHOULD BE A DIFFERENT COLOR AND
4. FOR TYPE C TEST STATIONS, THE WIRES SHOULD BE THE SAME COLOR ON EACH SIDE OF THE INSULATED COUPLING. (ANODES AND DIAPHRAGMS COULD BE ADDED TO THIS TEST STATION TYPE).
5. FOR TYPE D TEST STATIONS WHICH ARE AT A CASING, WHITE WIRES ARE NORMALLY INSTALLED ON THE STEEL CASING AND BLACK WIRES ON INSTALLED ON THE CARRIER PIPE. (ANODES AND/OR COUPONS COULD BE ADDED TO THIS TEST STATION TYPE).
6. FOR TYPE E TEST STATIONS, THE TWO WIRES THERMATE WELDED TO THE CARRIER PIPE SHOULD BE THE SAME COLOR. (COUPONS COULD BE ADDED TO THIS TEST STATION TYPE).
7. FOR THE WIRE COLORED TYPICALLY GRAYED FOR THE ANODES, IF THE ANODE WIRES ARE INSTALLED IN BOX THE WIRE COLOR, USUALLY BLACK, THE ANODE FENDER CABLE SHOULD BE A WHITE OR RED DIFFERENT COLOR WHILE THAN THE WIRE THAT WAS THERMATE WELDED TO THE CARRIER PIPE AT A TYPE A TEST STATION. NO AGGRESSIVE ANODES SHOULD BE DIRECTLY THERMATE WELDED TO THE CARRIER PIPE OR IN CONTACT WITH THE CARRIER PIPE. THE ANODE HEADER WIRE OR INDIVIDUAL ANODE WIRES SHOULD BE INSTALLED FROM EACH OTHER END AND A MINIMUM OF 01' SEPARATION BETWEEN THE TWO ENDS OF THE CARRIER PIPE. IF COUPONS ARE TO BE INSTALLED, FIRST REMOVE THE PROTECTIVE LAYER, COVERING THE STEEL SURFACE AND THE REBAR'S COVERING EACH SENSING PORT. CLEAN THE ENTIRE STEEL COUPON UNIFORM WITH ALCOHOL, TO REMOVE THE COMPOSITION INHIBITOR. PLACE THE COUPON ASSEMBLY APPROXIMATELY 17" FROM THE GAS MAIN BEING MONITORED WITH THE SENSING PORTS FACING THE GAS MAIN. ANYWHERE BETWEEN A UTILITY AND AN OUTCROP, THERE SHOULD BE TWO PORTS AND THE MAIN SHOULD BE WELL COMPACTED AND CONTAIN NO ROCKS, LARGE ROOTS OR A CENTIMETER IN DIAMETER OR FOREIGN MATERIAL.



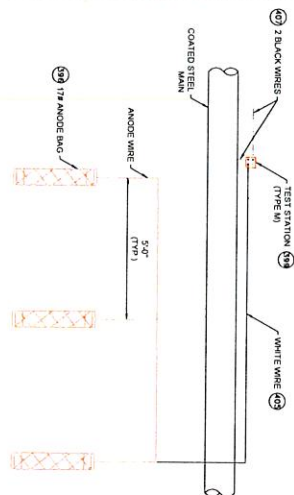
ESTIMATION - WITH #4 HWIPE CABLE



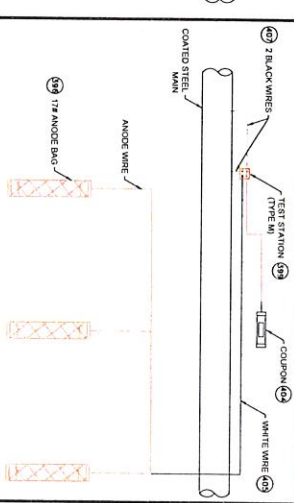
TYPE D TEST STATION (IN
(SCALE 1"=2')



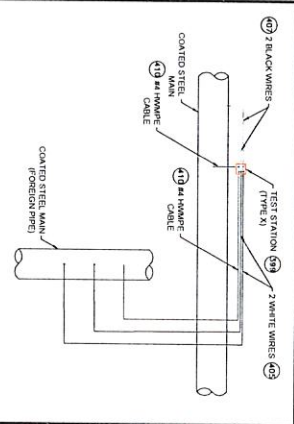
INSULATED CASING)



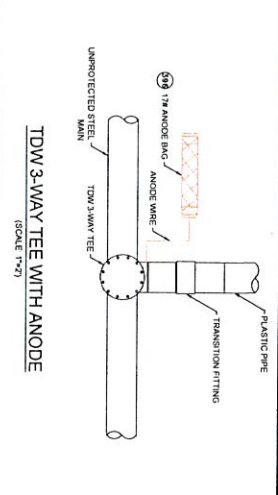
TYPE M TEST STATION - WITH ANODES
(SCALE: 1"=2')



TYPE M TEST STATION - WITH COUPON AND ANODES

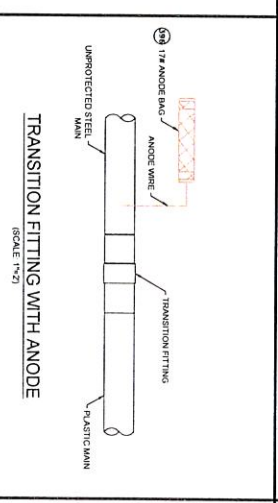


TYPE X TEST STATION



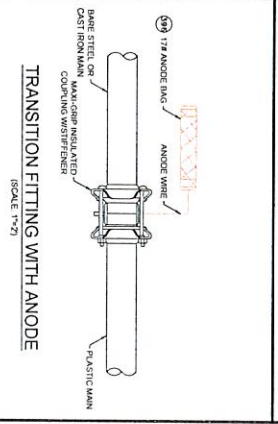
LOW 3-WATT TEE WITH ANODE

(SCALE 1"=2')



TRANSITION FILLING WITH ANODE

(SCALE 1"=2')



TRANSITION FITTING WITH ANODE (SCALE 1"=2')

*THESE DETAILS WERE PROVIDED BY EVERSOURCE FOR TYPICAL INSTALLATIONS AND ARE FOR REFERENCE USE ONLY

ISSUED FOR
CONSTRUCTION
01/20/2021



01/20/2021	LICENSE EXPIRATION
------------	-----------------------

49 PART 112 OF NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS AND CODES GUIDE FOR GAS TRANSDUCERS AND TRANSDUCER PIPING SYSTEMS, LATEST EDITION

**FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION**

PLEASANT STREET AND WING STREET MAIN RELAY
NEW BEDFORD, MASSACHUSETTS
STANDARD CORROSION DETAILS

SCALE: 1"=2' (DO NOT SCALE FROM DRAWINGS)

DRAWN BY: DATE: CHECKED BY: DATE: SHEET NUMBER: SHEET 24 OF 24