

TABLE OF CONTENTS

SHEET NUMBER	DESCRIPTION
1 OF 31	WORK SCOPE AND TABLE OF CONTENTS
2 OF 31	GENERAL NOTES AND MASTER BOM
3 OF 31	LEGEND
4 OF 31	LOCATION PLAN #1
5 OF 31	TIE-IN DETAIL #1 AND BOM
6 OF 31	TIE-IN DETAIL #2 AND BOM
7 OF 31	TIE-IN DETAIL #3 AND BOM
8 OF 31	TIE-IN DETAIL #4 AND BOM
9 OF 31	LOCATION PLAN #2
10 OF 31	TIE-IN DETAIL #5 AND BOM
11 OF 31	TIE-IN DETAIL #6 AND BOM
12 OF 31	TIE-IN DETAIL #7 AND BOM
13 OF 31	TIE-IN DETAIL #8 AND BOM
14 OF 31	TIE-IN DETAIL #9 AND BOM
15 OF 31	LOCATION PLAN #3
16 OF 31	TIE-IN DETAIL #10 AND BOM
17 OF 31	LOCATION PLAN #4
18 OF 31	TIE-IN DETAIL #11 AND BOM
19 OF 31	TIE-IN DETAIL #12 AND BOM
20 OF 31	TIE-IN DETAIL #13 AND BOM
21 OF 31	LOCATION PLAN #5
22 OF 31	TIE-IN DETAIL #14 AND BOM
23 OF 31	TIE-IN DETAIL #15 AND BOM
24 OF 31	LOCATION PLAN #6
25 OF 31	TIE-IN DETAIL #16 AND BOM
26 OF 31	LOCATION PLAN #7
27 OF 31	TIE-IN DETAIL #17 AND BOM
28 OF 31	TIE-IN DETAIL #18 AND BOM
29 OF 31	LOCATION PLAN #8
30 OF 31	TIE-IN DETAIL #19 AND BOM
31 OF 31	STANDARD CORROSION DETAILS

MAIN	WO# XXXXXX	WO# XXXXXX	WO# XXXXXX	WO# XXXXXX
	W RODNEY FRENCH	GRIT STREET	WELCOME STREET	SOCIAL STREET
INSTALLATION:	(~1,905') 8" HDPE LIP MAIN	(~90) 8" HDPE LIP MAIN	(~375') 2" HDPE LIP MAIN	(~420') 2" HDPE LIP MAIN
ABANDONMENT:	(1,020') 6" CI LP MAIN (90') 6" PY LIP MAIN (450') 8" BS LIP MAIN	(85) 8" BS LIP MAIN	(380') 4" CI LP MAIN	(145') 4" PL LP MAIN (210') 4" CI LP MAIN
SERVICES				
REPLACEMENT:	8	0	2	3
TIE-OVER:	8	0	5	4
METER MOVE OUTS:	16	0	7	6
TOTAL SERVICES:	18	0	11	12

MAIN	WO# XXXXXX	WO# XXXXXX	WO# XXXXXX	WO# XXXXXX
	HARMONY STREET	GEORGE STREET	DAVID STREET	OCEANSIDE PLAZA
INSTALLATION:	(~395') 2" HDPE LIP MAIN	(~490) 4" HDPE LIP MAIN	(~590') 4" HDPE LIP MAIN	(~580') 2" HDPE LIP MAIN
ABANDONMENT:	(415') 4" CI LP MAIN	(460') 3" CI LP MAIN	(575') 4" CI LP MAIN	(290') 4" PY LP MAIN (120') 4" PL LP MAIN (185') 4" CS LP MAIN
SERVICES				
REPLACEMENT:	5	7	15	2
TIE-OVER:	4	11	7	6
METER MOVE OUTS:	10	13	16	6
TOTAL SERVICES:	11	18	20	6

EVERSOURCE
ENERGY



NOTE:
EXISTING CONDITIONS SHOWN ARE BASED ON GIS, AERIAL AND AVAILABLE RECORD DATA, NO FIELD SURVEY WAS PERFORMED. CONTRACTOR TO VERIFY EXISTING CONDITIONS AS NEEDED IN THE FIELD. PROPOSED MAIN ALIGNMENT AND OFFSETS ARE APPROXIMATE.

WORK SCOPE
NEW BEDFORD, MASSACHUSETTS
(NOT TO SCALE)

NOTE: Existing Curbing being relocated towards center of West Rodney French, Measurements from existing curb line are required at various points shown on red call out boxes on the Location Plan View pages.

11219345

WEST RODNEY FRENCH BOULEVARD, MA
WO# TBD

ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVERSOURCE ENERGY			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
WORK SCOPE AND TABLE OF CONTENTS			
SCALE: AS NOTED		SHEET 1 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-01
			REV. NO.
			A

SEALED BY:	SEALED ON:	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.	FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION
		ENEngineering	
SIGNATURE	LICENSE EXPIRATION:	29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL (630) 353-4000 FAX (630) 353-7777 WWW.ENENGINEERING.COM	

GENERAL NOTES

- A. 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.

1. IF THE TIE IN POINT MOVES TO A DIFFERENT SEGMENT OF PIPE THAN SHOWN.

2. IF A CHANGE IN THE LOCATION OF VALVES IS REQUIRED.

3. IF THERE IS ANY CHANGE TO WHAT IS SHOWN ON THE DRAWING WITHIN 50 FT OF A PRESSURE REGULATING STATION, DISTRICT REGULATOR, OR GATE STATION.

4. IF A CHANGE IN PIPE SIZE, MATERIAL, OR WALL THICKNESS IS REQUIRED.

5. ALTERNATE FITTINGS THAT ARE ACCEPTABLE FOR ANY TIE-IN DETAIL WILL BE CALLED OUT IN THE DRAWING. FITTING CHANGES NOT SHOWN AS ALTERNATIVES ON THE DRAWING WILL NEED TO FOLLOW THE DRAWING CHANGE PROCESS CONTAINED IN SECTION V.D.
- B. CONSTRUCTION DRAWINGS, LOCATIONS OF EXISTING UTILITIES, UNDERGROUND STRUCTURES AND WORK LOCATIONS ARE BASED ON BEST AVAILABLE INFORMATION BUT HAVE NOT BEEN FIELD VERIFIED.
- C. ALL WORK, MATERIAL AND CONSTRUCTION SHALL BE PERFORMED AND COMPLETED IN COMPLIANCE WITH ALL PERMITS AND APPROVALS PER EVERSOURCE, LOCAL, STATE, OSHA AND FEDERAL REGULATIONS AND STANDARDS.
- D. ALL LIVE GAS WORK EXCEPT SERVICE SIZE TAPS, 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.
- E. 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.
- F. 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.
- G. EXCAVATOR REQUIRED TO CALL DIG-SAFE/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.
- H. IF THE PROJECT IS WITHIN 50 FEET OF A DISTRICT REGULATOR OR GATE STATION, ENSURE THAT A QUALIFIED I&R TECHNICIAN IS ON SITE.
- I. PROPERTY LINES, STRUCTURES AND EXISTING CONDITIONS DEPICTED ON PLANS ARE BASED ON EVERSOURCE GIS INFORMATION AND HAVE NOT BEEN FIELD VERIFIED BY LAND SURVEY UNLESS OTHERWISE NOTED.
- J. EXISTING SERVICES SHOWN ON PLAN ARE FOR INFORMATION ONLY. PROPOSED SERVICES ARE NOT SHOWN ON PLANS AND ARE TO BE INSTALLED PER EVERSOURCE CONSTRUCTION STANDARDS.
- K. MAINS AND SERVICES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH EVERSOURCE STANDARDS.
- L. ALL PIPE SHALL BE INSTALLED WITH THE MINIMUM DEPTH REQUIRED BY EVERSOURCE STANDARDS AND APPLICABLE REGULATIONS.
- M. MAOP DEFINITIONS:

- LP = 14" W.C

- LIP = 35 PSIG

- IP = 60 PSIG

- HP = 90 PSIG
- N. ENSURE ALL SERVICES BEING TRANSFERRED TO A HIGHER PRESSURE SYSTEM HAVE UPGRADED PRESSURE REGULATORS INSTALLED PRIOR TO ACTIVATION.

West Rodney French Boulevard - MASTER BOM					
Item #	Size	Quantity	Units	Maximo #	Description
9	2"	6	EA	562087	VALVE,BALL, 2 IN IPS, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING
11	4"	4	EA	501002	VALVE,BALL, 4 IN, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING, TO BE USED W/ BRAND SADDLE INST, P100
13	8"	5	EA	500705	VALVE,BALL, 8 IN IPS, POLYETHYLENE, SDR11, BUTT WELD, W/ FULL PORT OPENING, BLACK FINISH
46	6"	2	EA	500856	COUPLING,PIPE, 6 IN IPS, ELECTROFUSION, PLASTIC, P100
57	8"	2	EA	545343	ELBOW,PIPE, 90 DEG, 8 IN SDR 11, BUTT WELD ENDS, POLYETHYLENE, P100
69	4" X 2"	2	EA	555593	REDUCER,PIPE, 4 X 2 IPS, BUTT ENDS, POLYETHYLENE, P100, SDR11
90	4"	10	EA	542538	CAP,PIPE, 4 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100
91	6"	2	EA	542539	CAP,PIPE, 6 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100
92	8"	2	EA	542540	CAP,PIPE, 8 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100
100	2"	1	EA	560705	TEE,PIPE, 2 IN IPS SDR 11, BUTT ENDS, POLYETHYLENE, P100
101	4"	1	EA	560679	TEE,PIPE, 4 IN SDR 11, BUTT ENDS, POLYETHYLENE, P100
103	8"	2	EA	560681	TEE,PIPE, 8 IN SDR 11, BUTT ENDS, POLYETHYLENE, P100
120	8"	2	EA	546255	FITTING,TRANSITION, 8 IN IPS CS X 8 IN IPS PE4710, SDR 11, STEEL WELD X PLASITC, BUTT ENDS
133	2" X 1/2"	3	EA	500866	TEE,PIPE, NON-BLOWING, 2 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100
134	4" X 1/2"	6	EA	500867	TEE,PIPE, NON-BLOWING, 4 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100, 1
136	6" X 1/2"	1	EA	500869	TEE,PIPE, NON-BLOWING, 6 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100
137	8" X 1/2"	1	EA	584713	FITTING,TEE, 8 IN IPS X 1/2 IN CTS, ELECTROFUSION TAPPING TEE WITH PERMASERT STAB OUTLET, HDPE, BLACK, NSTAR M-140
147	2" X 1"	3	EA	560779	TEE,PIPE, NON-BLOWING, 2 X 1 IN IPS SDR 11, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100
148	2" X 1"	2	EA	602892	FITTING,TEE, 2 IN IPS X 1 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT FUSION OUTLET, HDPE, BLACK
153	8" X 1"	2	EA	584301	FITTING,TEE, 8 IN IPS X 1 IN CTS, ELECTROFUSION TAPPING TEE WITH PERMASERT STAB OUTLET, HDPE, BLACK, ASTM F1055 , WAS ITEM 577628
172	4" X 2"	4	EA	584304	FITTING,TEE, 4 IN IPS X 2 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT FUSION OUTLET, HDPE, BLACK, WAS ITEM 577621
175	6" X 2"	1	EA	500870	TEE,PIPE, 6 X 2 IN IPS , ELECTROFUSION, PLASTIC, P100, W/ 1.8 IN PERF, 5/BOX
176	8" X 2"	2	EA	577623	FITTING,TEE, 8 IN IPS X 2 IN IPS, HIGH VOLUME ELECTROFUSION TAPPING TEE WITH BUTT FUSION OUTLET, HDPE, BLACK, ASTM F1055 , RESTRICTED PURCHA
200	2"	2	EA	578182	FITTING,COUPLING, VENTED, INSULATED, 2 IN, W/ END CAP, FOR STEEL PIPE, EZB2VIUMG
201	4"	12	EA	578128	FITTING,COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP , FOR CAST IRON PIPE
202	6"	2	EA	578129	FITTING,COUPLING, VENTED, INSULATED, W/ END CAP, FOR 6 CI PIPE
203	8"	4	EA	578132	FITTING,COUPLING, VENTED, INSULATED, W/ END CAP, FOR 8 IN CI PIPE
219	3" x 2"	4	EA	601627	CLAMP,PIPE, FULL CIRCLE REPAIR,SINGLE BAND, 3 IN, 5 BOLT, 304 SS, w/ 2" NPT out for 3" CI, Buna-N gasket, galv. bolts & nuts, 12.5" L
220	4" x 2"	27	EA	543028	CLAMP,PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP
221	6" x 2"	7	EA	578021	FITTING,CLAMP, SERVI-SEAL REPAIR, 6 IN DIA, 9 IN LG, W/ 2 IN OUTLET, FOR STEEL PIPE
243	8" x 4"	1	EA	500677	SADDLE,PIPE, TEE, BRANCH, 8 IN IPS SADDLE X 4 IN IPS OUTLET SDR 11, ELECTROFUSION , PLASTIC, P100
249	3/4" x 1/2"	5	EA	560709	TEE,PIPE, NON-BLOWING, 3/4 IN X 1/2 IN CTS PLASTIC X 3/8 IN PERF SDR 7, WELDED INLET X COMPRESSION OUTLET, LIGHT WALL, CS, 24/BOX
256	8"	1	EA	578139	FITTING,TEE, SHORTSTOPP, 3-WAY, 8 IN
259	2"	5	EA	578396	FITTING,TEE, SHORTSTOPP, 2 IN, WELDED
264	8"	1	EA	578400	FITTING,TEE, SHORTSTOPP, 8 IN, WELD
349	2"	11	EA	581633	FITTING,CAP, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, NSTAR M-410
350	2"	2	EA	579840	FITTING,COUPLUNG, METFIT, 2 IN X 0.216 IN THK WALL SDR 11
359	2"	1,770	LF	592668	PIPE, 2 IN IPS SDR 11, 250 FT LG COIL, HDPE PE4710, BLACK, ASTM D2513, 102 PSIG, W/ YELLOW STRIPES, REPLACING ITEM 554007
362	4"	1,080	LF	554008	PIPE, 4 IN IPS X 0.409 IN THK WALL SDR 11, 4.5 IN OD, 40 FT LG, POLYETHYLENE, PE3408/PE100, 1200 FT/BUNDLE
364	8"	2,040	LF	554010	PIPE, 8 IN IPS X 8-3/8 IN X 0.784 IN THK WALL SDR 11, 40 FT LG, POLYETHYLENE, PE3408/PE100
369	1/2"	11	EA	579972	FITTING,CAP, METFIT, 1/2 IN CTS X 0.90 IN THK WALL SDR 7, REPLACED IN 542609
371	1"	6	EA	583182	FITTING,CAP, METFIT, 1 IN IPS X 0.119 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, REPLACED IN 542612
407	3"	2	EA	578126	FITTING,CAP, VENTED, INSULATED, SEAL AND RESTRAINT, 3.80 IN OD, FOR 3 IN CI PIPE, REPLACED IN 542551
521	17 lb.	1	EA	577776	ANODE,BAG, 17 LB NET, HIGH POTENTIAL MAGNESIUM, W/ 10 FT #10 AWG TW ORANGE LEAD WIRE, PACKED IN CARDBOARD BOX 42 LB TOTAL WEIGHT
737	4 1/4" square	6	EA	577813	BOX VALVE, CURB, W/ 4-1/4 IN SQ NON-LOCKING LID, FOR 2 IN VALVES, PAVEMENT RISER RING IN 583489, 20/BOX
738	5 1/4" square	4	EA	577814	BOX VALVE, W/ 5-1/4 IN SQ NON-LOCKING LID, FOR 4 IN VALVES, PAVEMENT RISER RING IN 583488,
740	8"	5	EA	604132	BOX VALVE, W/ 5-1/4 IN SQ NON-LOCKING LID, FOR 8 IN FULL PORT VALVES, PAVEMENT RISER IN 583488. 6/BOX

*ADDITIONAL ELBOWS MAY BE REQUIRED FOR OFFSETS

ISSUED FOR REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVERSOURCE ENERGY			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
GENERAL NOTES AND MASTER BOM			
SCALE: NOT TO SCALE		SHEET 2 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-02
			A

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SIGNATURE		ENEngineering 29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL (630) 353-4000 FAX (630) 535-7777 WWW.ENENGINEERING.COM	

LEGEND

— G — G — G — G —

EXISTING GAS MAIN

— G — G — G — G —

EXISTING GAS MAIN TO BE
ABANDONED

— G — G — G — G —

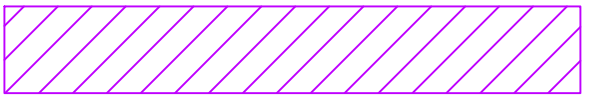
EXISTING GAS MAIN WITH SERVICE TRANSFERS

— G — G — G — G —

EXISTING GAS MAIN WITH PRESSURE INCREASE

--- G --- G --- G --- G ---

PROPOSED GAS MAIN



REGULATOR STATION 50' BOUNDARY

RIGHT OF WAY

— X — X — X —

REFERENCE

_____ W _____ W _____ W _____ W _____

WATER LINE



FIRE HYDRANT

— S — S — S — S —

SEWER LINE



SEWER MANHOLE

———— D ————— D ————— D ————— D —————

DRAIN LINE



DRAIN MANHOLE



CATCH BASIN



UTILITY POLE



ELECTRIC MANHOLE

_____E_____E_____E_____E_____

ELECTRIC LINE

_____T_____T_____T_____T_____

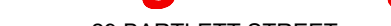
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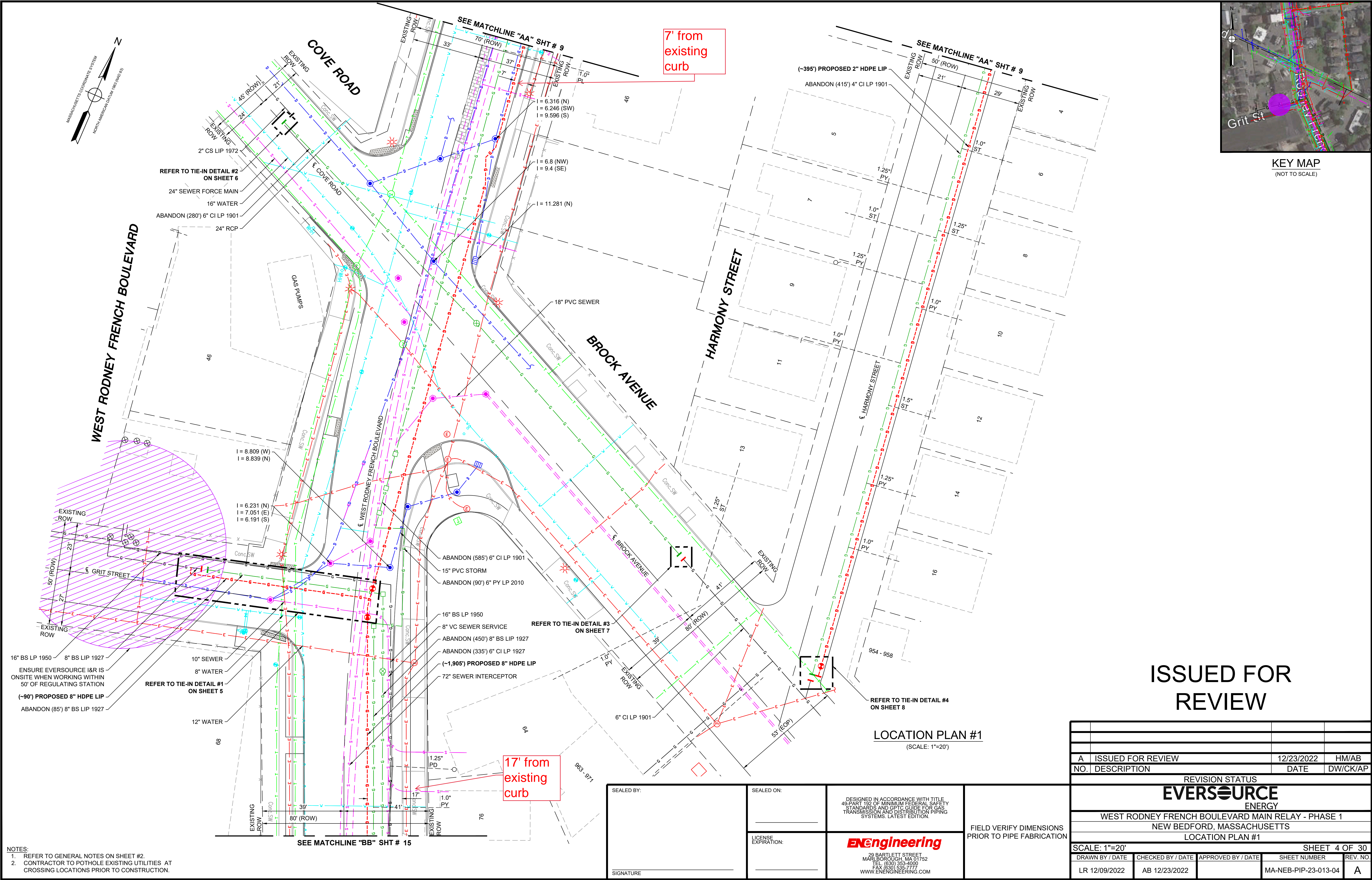


TELEPHONE MANHOLE

ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB	
NO.	DESCRIPTION	DATE	DW/CK/AP	
REVISION STATUS				
<div> <div>EVERSOURCE</div> <div>ENERGY</div> </div>				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
LEGEND				
SCALE: NOT TO SCALE			SHEET 3 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-03	A

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	LICENSE EXPIRATION: _____		



ISSUED FOR REVIEW

LOCATION PLAN #1
(SCALE: 1"=20')

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

SEALED BY:	SEALED ON:
SIGNATURE	

LICENSE EXPIRATION:

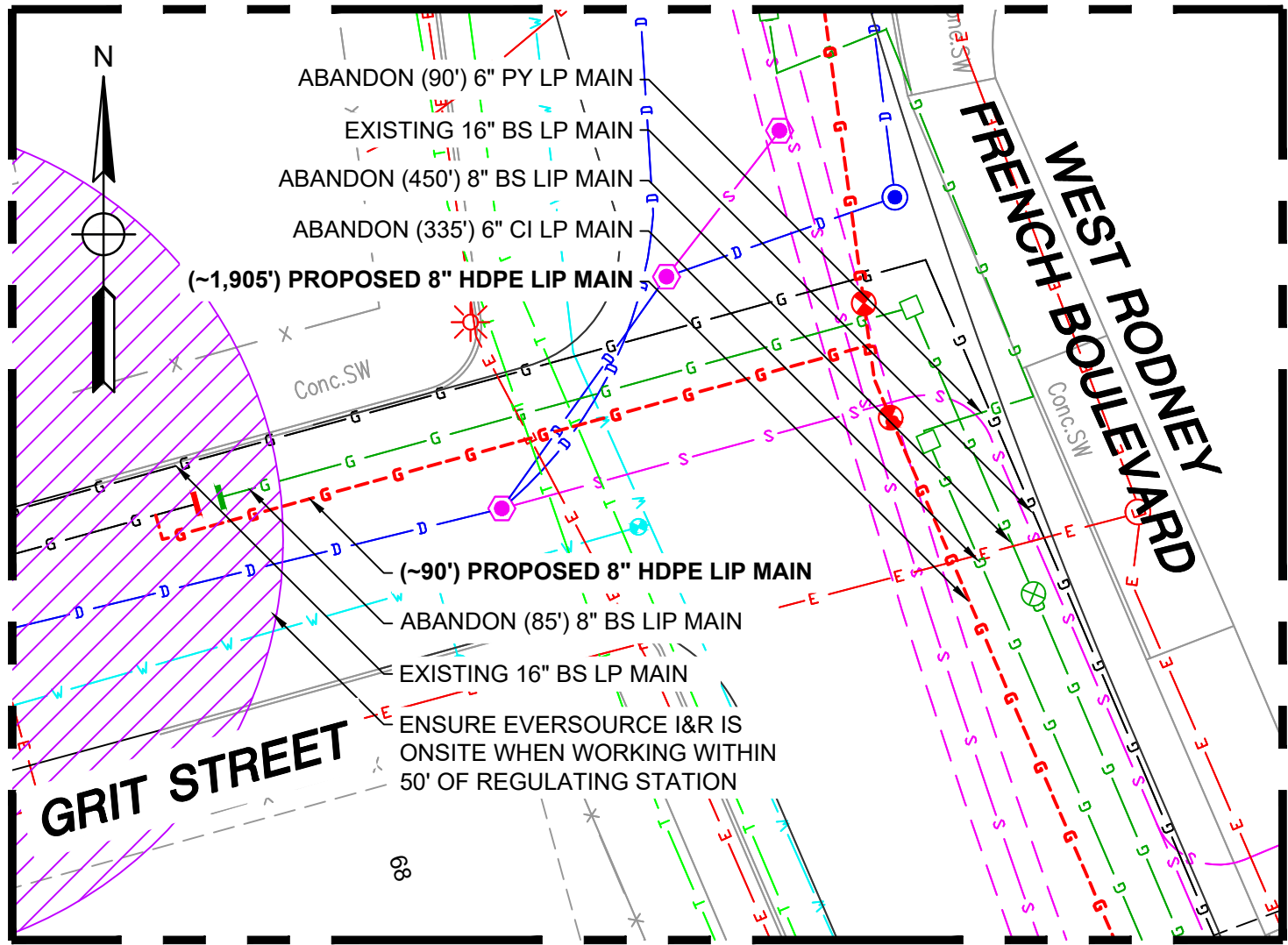
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FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

A		ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.		DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
LOCATION PLAN #1				
SCALE: 1"=20'		SHEET 4 OF 30		
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-04	A



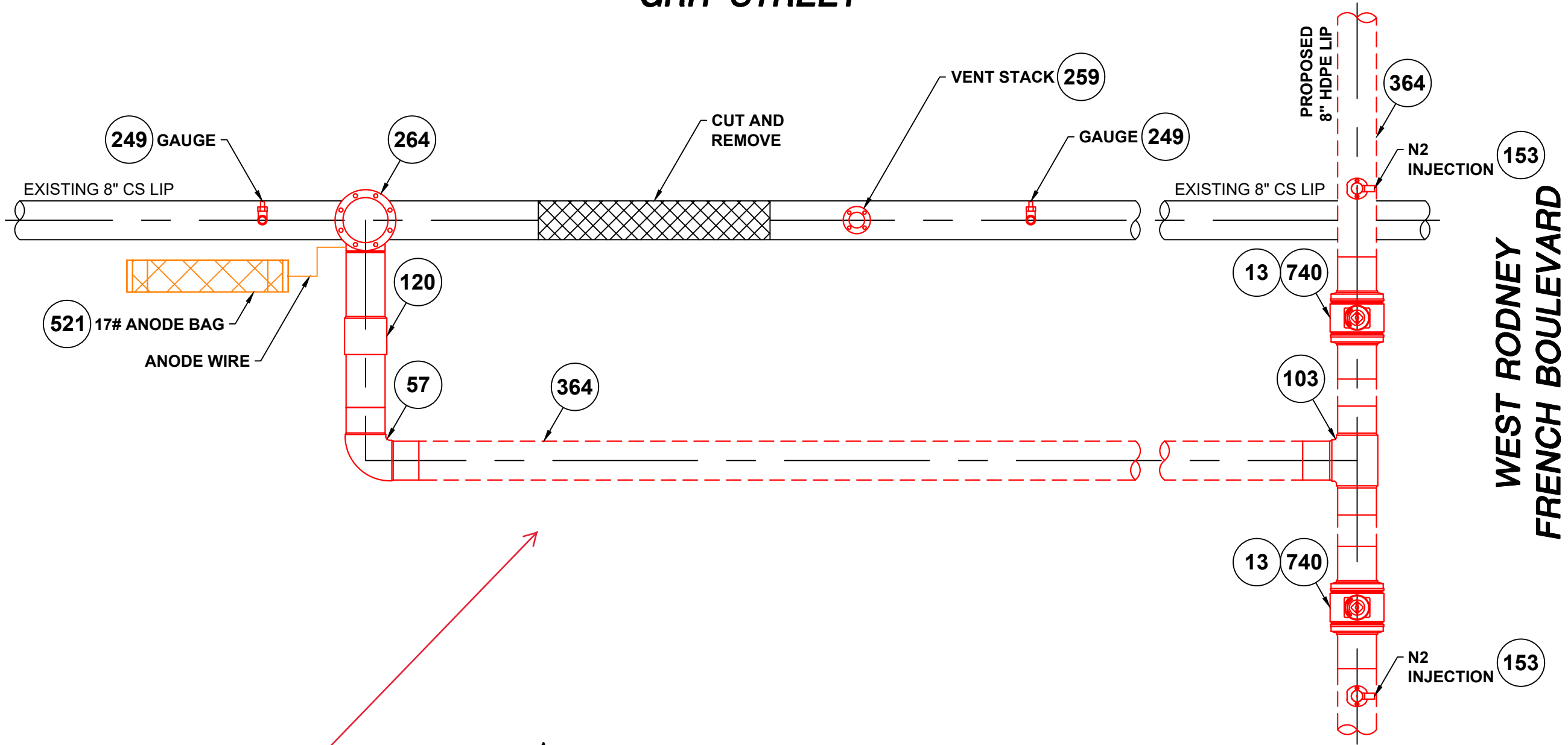
TIE-IN DETAIL #1 - PLAN VIEW

(SCALE: 1"=20')
(REFER TO SHEET #4)

WEST RODNEY FRENCH BOULEVARD - Tie-in #1: Preparatory					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
13	8"	500705	VALVE,BALL, 8 IN IPS, POLYETHYLENE, SDR11, BUTT WELD, W/ FULL PORT OPENING, BLACK FINISH	2	EA
57	8"	545343	ELBOW,PIPE, 90 DEG, 8 IN SDR 11, BUTT WELD ENDS, POLYETHYLENE, P100	1	EA
103	8"	560681	TEE,PIPE, 8 IN SDR 11, BUTT ENDS, POLYETHYLENE, P100	1	EA
120	8"	546255	FITTING,TRANSITION, 8 IN IPS CS X 8 IN IPS PE4710, SDR 11, STEEL WELD X PLASITC, BUTT ENDS	1	EA
153	8" X 1"	584301	FITTING,TEE, 8 IN IPS X 1 IN CTS, ELECTROFUSION TAPPING TEE WITH PERMASERT STAB OUTLET, HDPE, BLACK, ASTM F1055, WAS ITEM 577628	2	EA
249	3/4" x 1/2"	560709	TEE,PIPE, NON-BLOWING, 3/4 IN X 1/2 IN CTS PLASTIC X 3/8 IN PERF SDR 7, WELDED INLET X COMPRESSION OUTLET, LIGHT WALL, CS, 24/BOX	2	EA
259	2"	578396	FITTING,TEE, SHORTSTOPP, 2 IN, WELDED	1	EA
264	8"	578400	FITTING,TEE, SHORTSTOPP, 8 IN, WELD	1	EA
364	8"	554010	PIPE, 8 IN IPS X 8-3/8 IN X 0.784 IN THK WALL SDR 11, 40 FT LG, POLYETHYLENE, PE3408/PE100	90	LF
521	17 lb.	577776	ANODE,BAG, 17 LB NET, HIGH POTENTIAL MAGNESIUM, W/ 10 FT #10 AWG TW ORANGE LEAD WIRE, PACKED IN CARDBOARD BOX 42 LB TOTAL WEIGHT	1	EA
740	8"	604132	BOX VALVE, W/ 5-1/4 IN SQ NON-LOCKING LID, FOR 8 IN FULL PORT VALVES, PAVEMENT RISER IN 583488. 6/BOX	2	EA

WEST RODNEY FRENCH BOULEVARD - Tie-in #1: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
203	8"	578132	FITTING,COUPLING, VENTED, INSULATED, W/ END CAP, FOR 8 IN CI PIPE	2	EA
369	1/2"	579972	FITTING,CAP, METFIT, 1/2 IN CTS X 0.90 IN THK WALL SDR 7, REPLACED IN 542609	2	EA
371	1"	583182	FITTING,CAP, METFIT, 1 IN IPS X 0.119 IN THK WALL SDR 11, ASTM F1924, FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, REPLACED IN 542612	2	EA

GRIT STREET

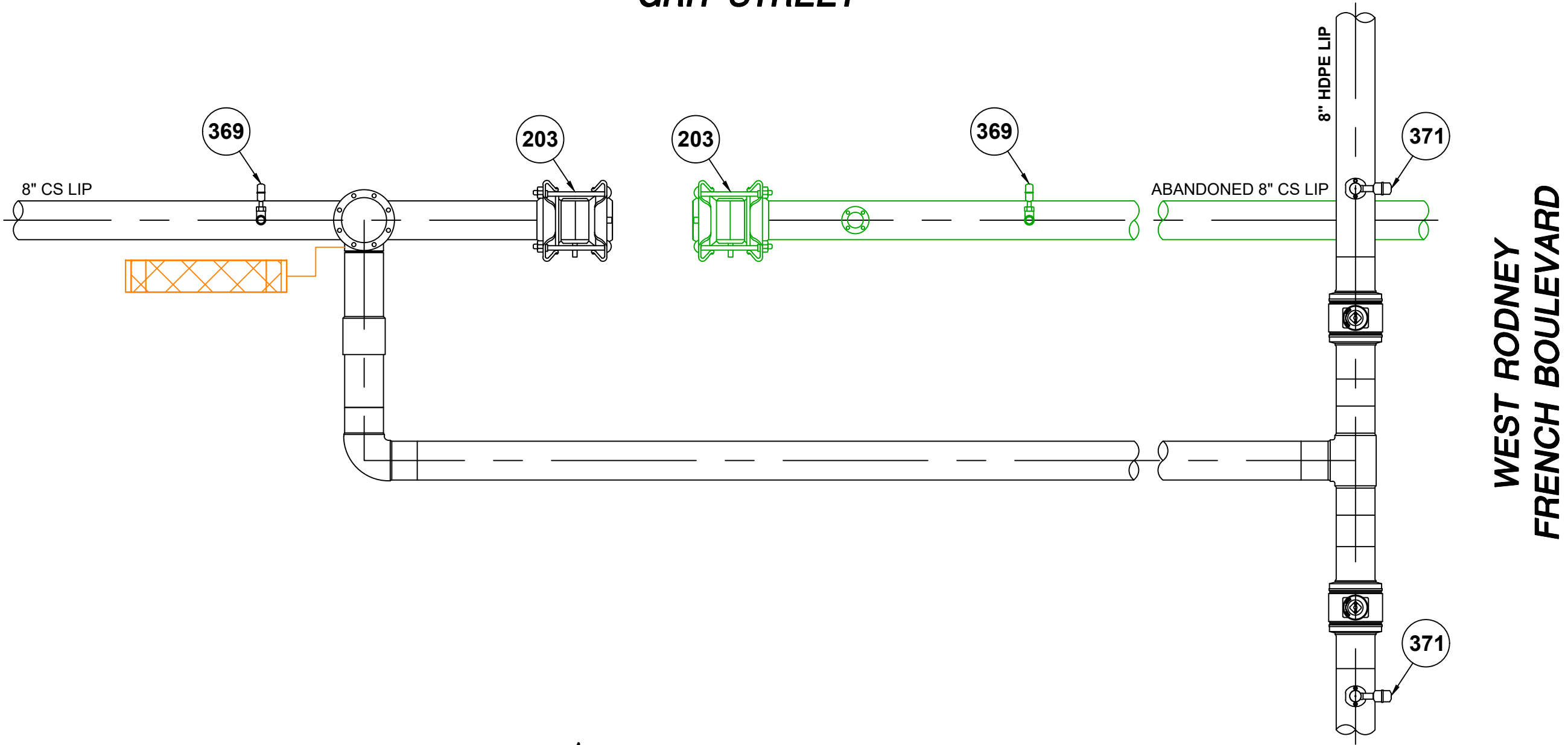


We need the cathodic protection details here. See corrosion sketch on Docuware.

PREPARATORY TIE-IN DETAIL #1

(SCALE: 1"=2')
(REFER TO SHEET #4)

GRIT STREET



FINAL TIE-IN DETAIL #1

(SCALE: 1"=2')
(REFER TO SHEET #4)

LEGEND

	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB	
NO.	DESCRIPTION	DATE	DW/CK/AP	
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
TIE-IN DETAIL #1 AND BOM				
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)				SHEET 5 OF 30
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-05	A

SEALED BY:

SIGNATURE

SEALED ON:

LICENSE EXPIRATION:

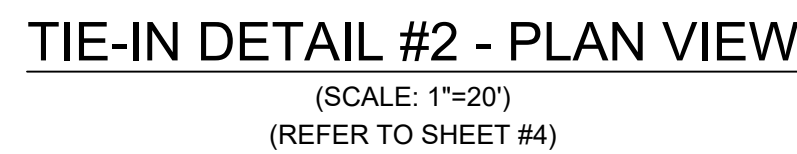
DESIGNED IN ACCORDANCE WITH TITLE 49, PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS, LATEST EDITION.

ENEngineering

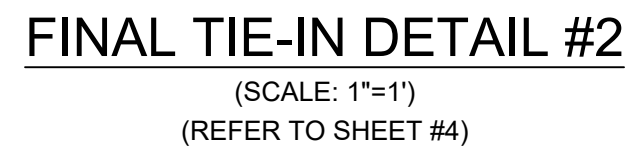
29 BARTLETT STREET
MARLBOROUGH, MA 01752
TEL: (630) 353-4000
FAX: (630) 353-7777
WWW.ENENGINEERING.COM

FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION








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




WEST RODNEY FRENCH BOULEVARD - Tie-in #2: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
221	6" x 2"	578021	FITTING, CLAMP, SERVI-SEAL REPAIR, 6 IN DIA, 9 IN LG, W/ 2 IN OUTLET, FOR STEEL PIPE	1	EA



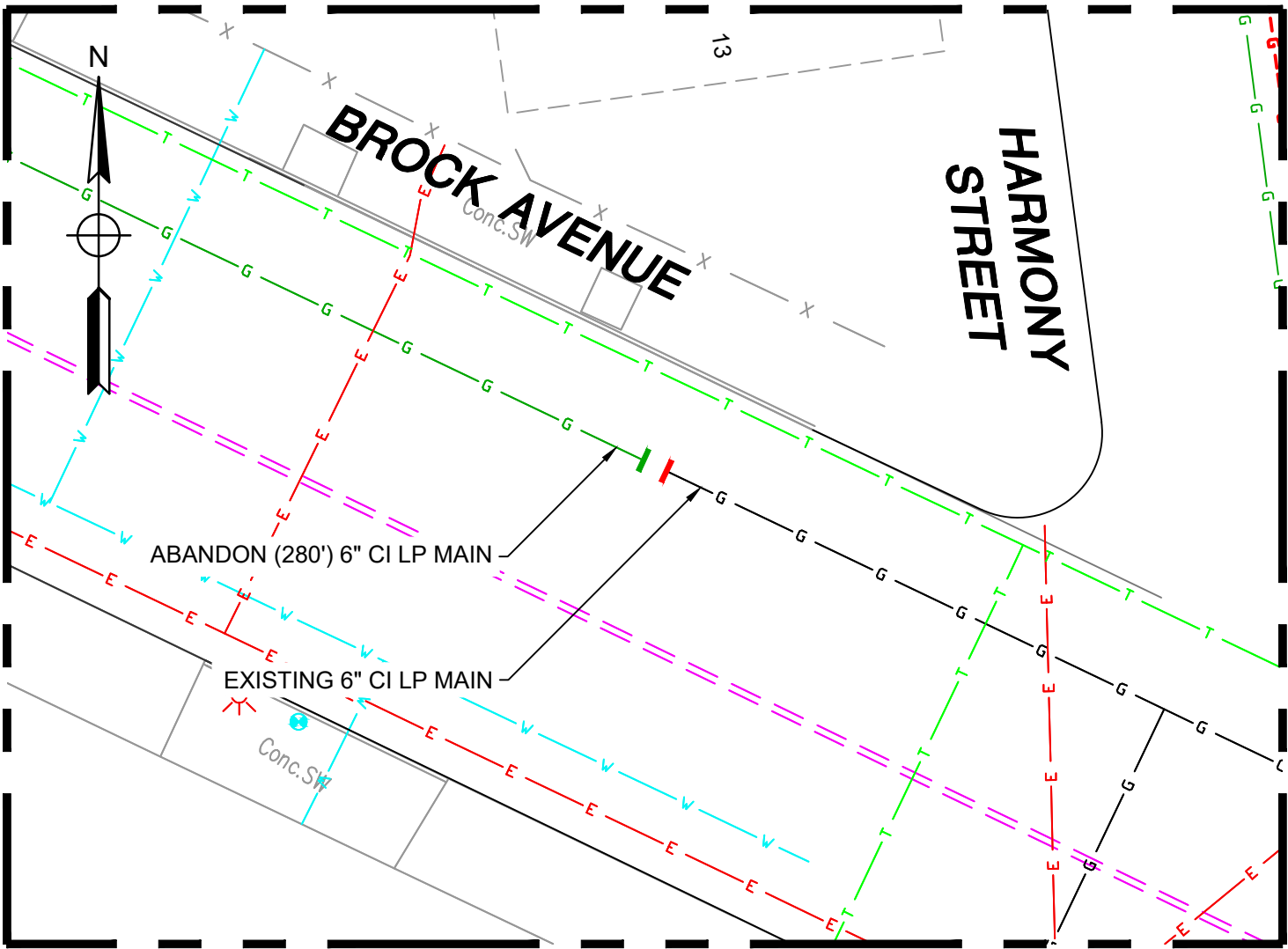
LEGEND

	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW		12/23/2022		HM/AB
NO.	DESCRIPTION		DATE		DW/CK/AP
REVISION STATUS					
<div style="text-align: center;">  </div>					
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1					
NEW BEDFORD, MASSACHUSETTS					
TIE-IN DETAIL #2 AND BOM					
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS) SHEET 6 OF 30					
DRAWN BY / DATE		CHECKED BY / DATE		APPROVED BY / DATE	
SHEET NUMBER		REV. NO.			
LR 12/09/2022		AB 12/23/2022		MA-NEB-PIP-23-013- 06	
				A	

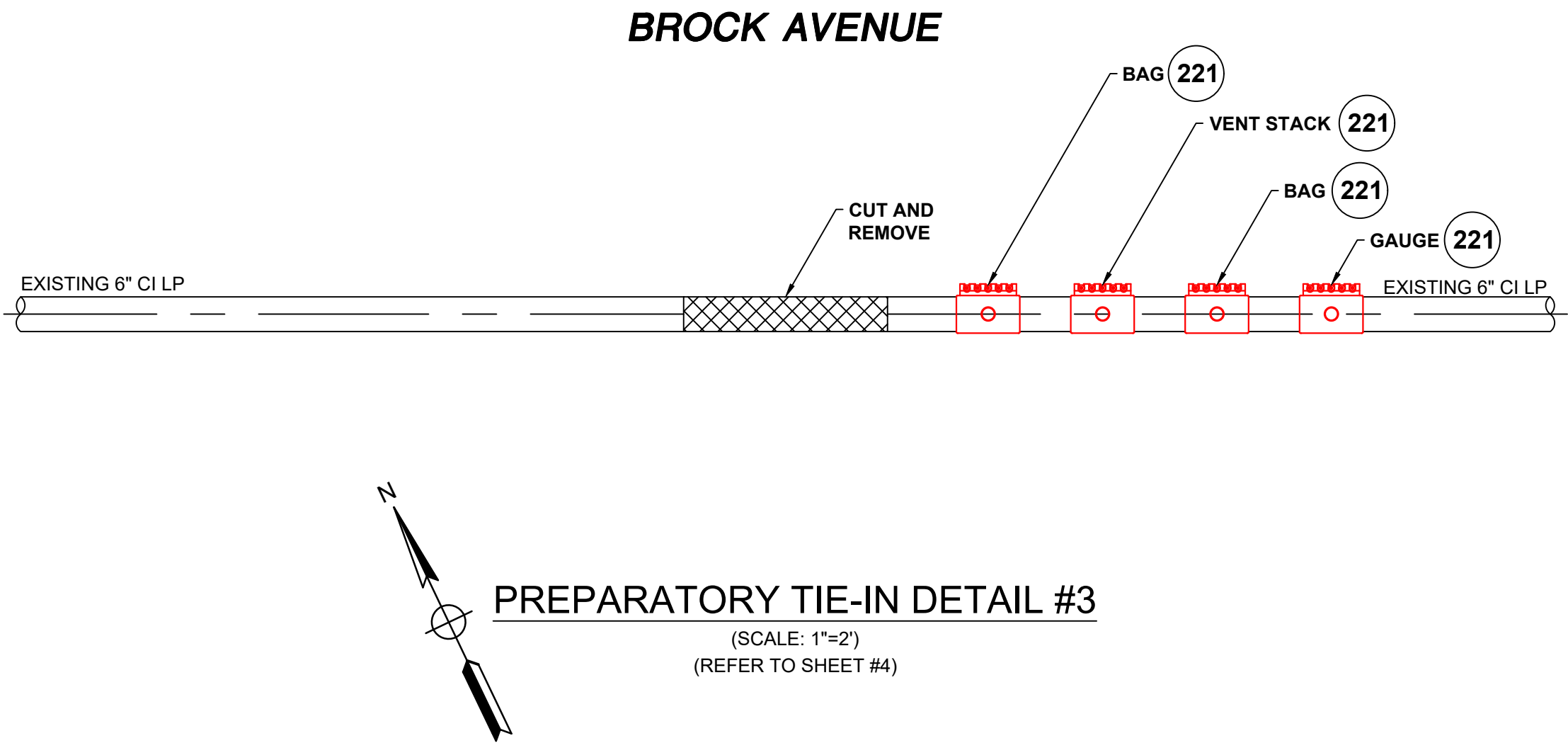
NOTES:
1. REFER TO GENERAL NOTES ON SHEET #2.



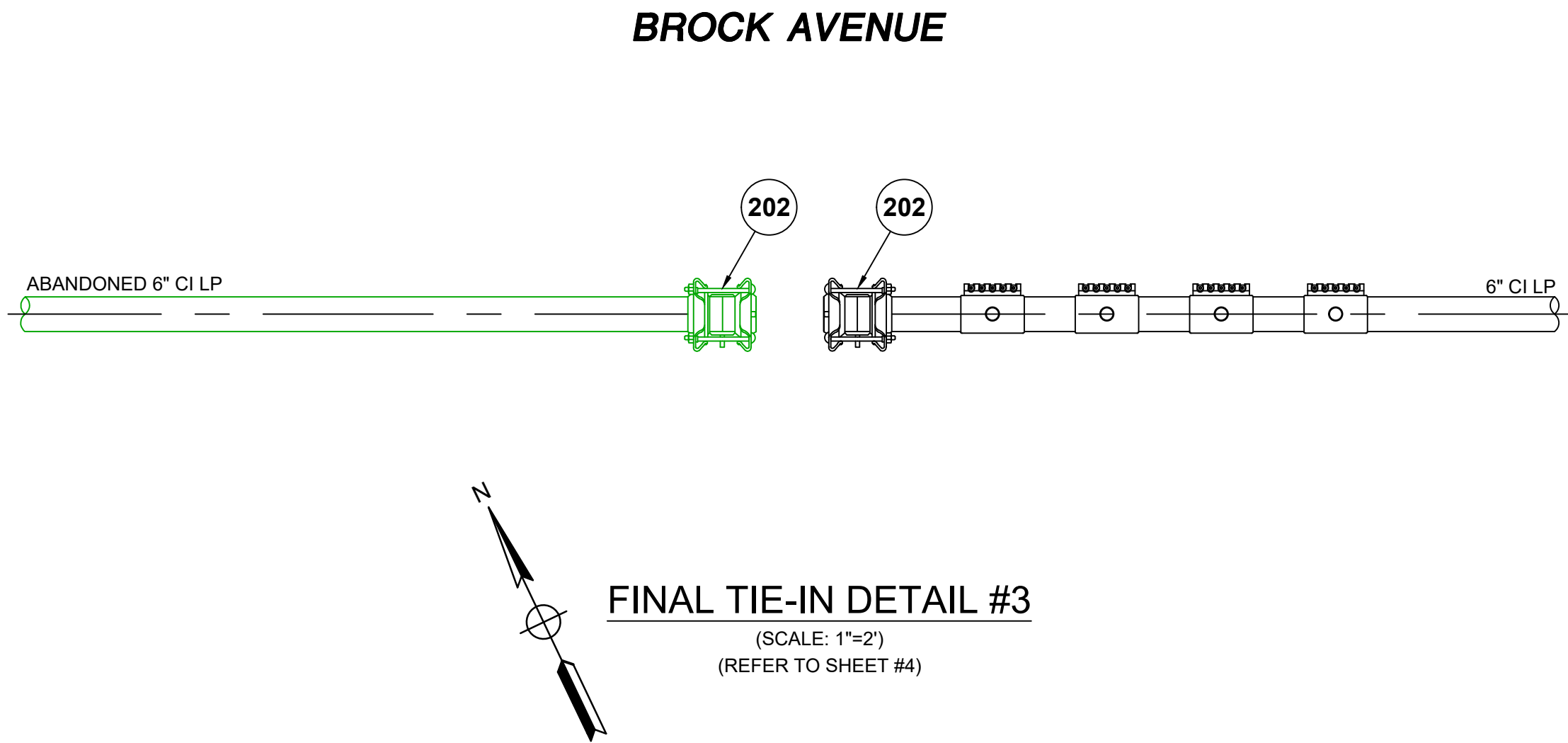
TIE-IN DETAIL #3 - PLAN VIEW
(SCALE: 1"=20')
(REFER TO SHEET #4)

WEST RODNEY FRENCH BOULEVARD - Tie-in #3: Preparatory				
REQUIRED BILL OF MATERIALS				
ITEM	SIZE	MAXIMO NO.	Description	Quantity
221	6" x 2"	578021	FITTING,CLAMP, SERVI-SEAL REPAIR, 6 IN DIA, 9 IN LG, W/ 2 IN OUTLET, FOR STEEL PIPE	4

WEST RODNEY FRENCH BOULEVARD- Tie-in #3: Final				
REQUIRED BILL OF MATERIALS				
ITEM	SIZE	MAXIMO NO.	Description	Quantity
202	6"	578129	FITTING,COUPLING, VENTED, INSULATED, W/ END CAP, FOR 6 CI PIPE	2



PREPARATORY TIE-IN DETAIL #3
(SCALE: 1"=2')
(REFER TO SHEET #4)



FINAL TIE-IN DETAIL #3
(SCALE: 1"=2')
(REFER TO SHEET #4)

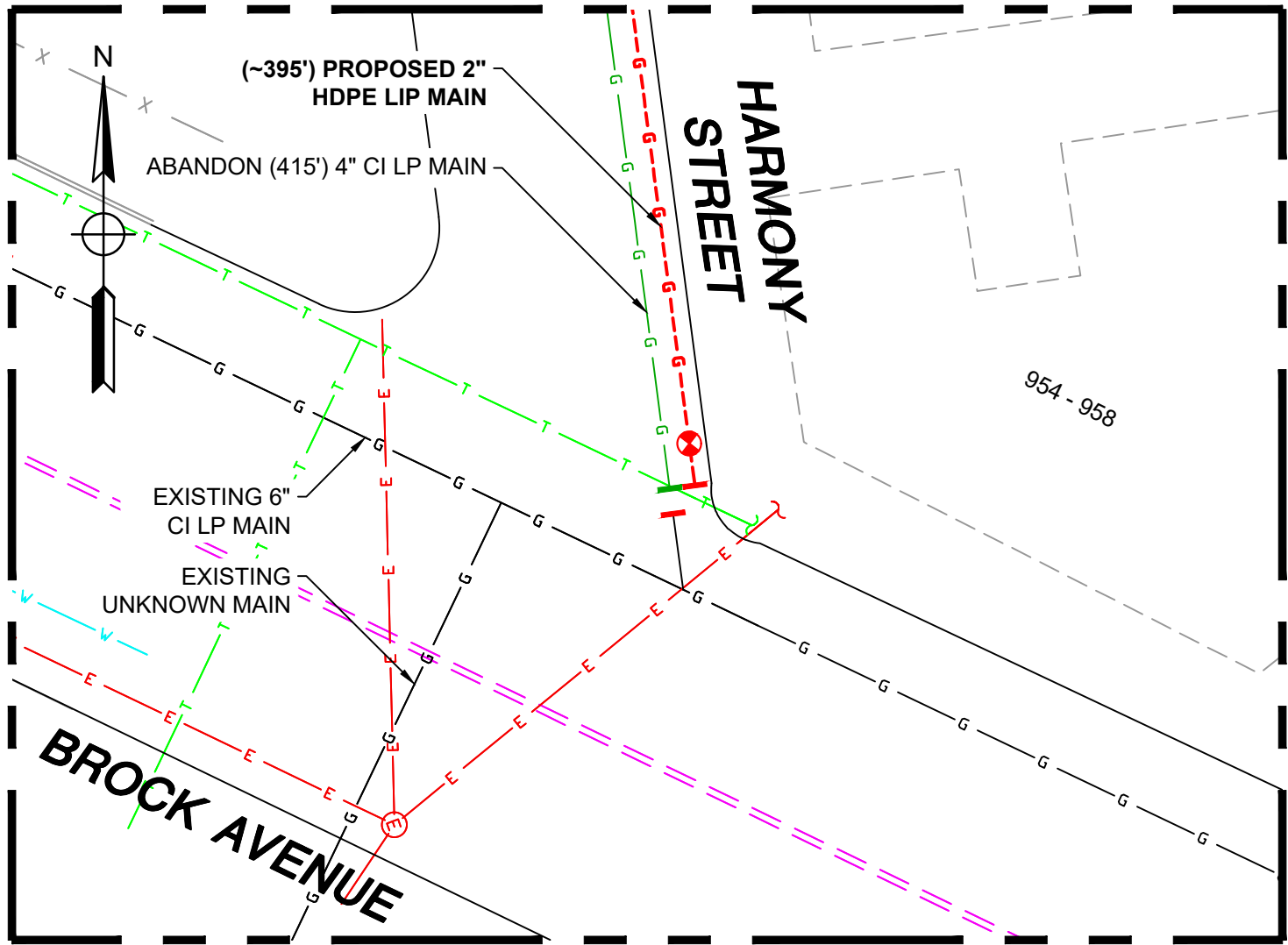
LEGEND	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVERSOURCE ENERGY			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
TIE-IN DETAIL #3 AND BOM			
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)		SHEET 7 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-07
			REV. NO.
			A

SEALED BY:	SEALED ON:	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.	FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION
	LICENSE EXPIRATION:		
SIGNATURE		EN Engineering 29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL (630) 353-4000 FAX (630) 353-7777 WWW.ENENGINEERING.COM	

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

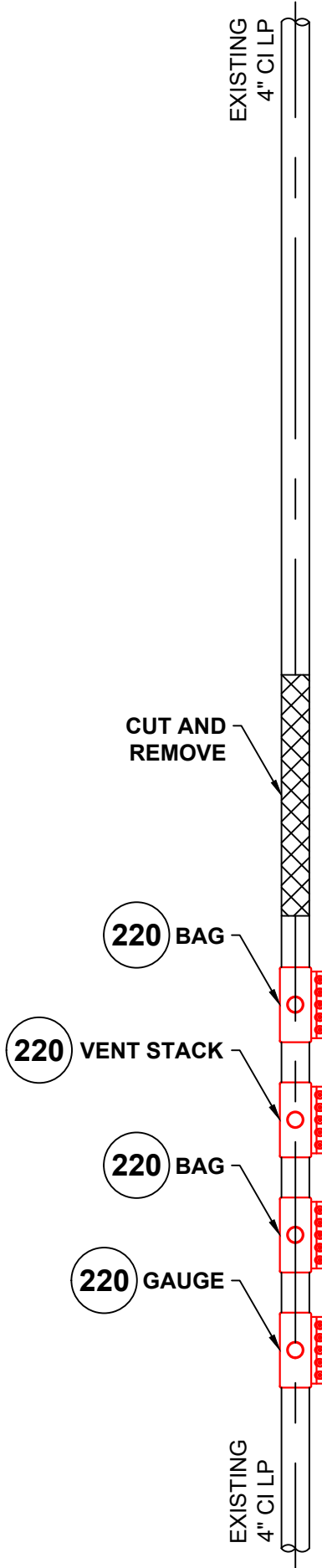


TIE-IN DETAIL #4 - PLAN VIEW
(SCALE: 1"=20')
(REFER TO SHEET #4)

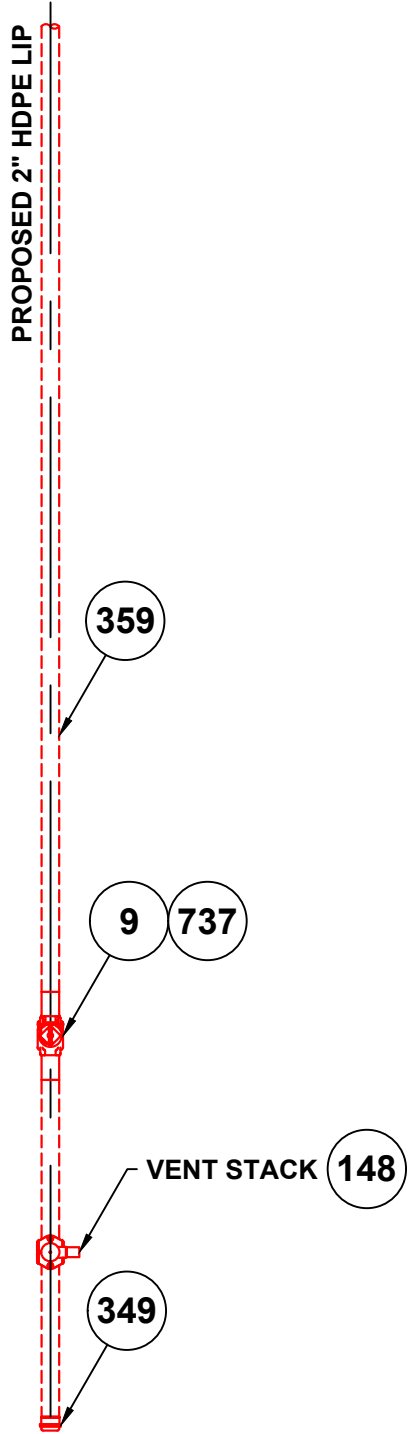
WEST RODNEY FRENCH BOULEVARD - Tie-in #4: Preparatory					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
9	2"	562087	VALVE,BALL, 2 IN IPS, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING	1	EA
148	2" X 1"	602892	FITTING,TEE, 2 IN IPS X 1 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT FUSION OUTLET, HDPE, BLACK	1	EA
220	4" x 2"	543028	CLAMP,PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP	4	EA
349	2"	581633	FITTING,CAP, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, NSTAR M-410	1	EA
359	2"	592668	PIPE, 2 IN IPS SDR 11, 250 FT LG COIL, HDPE PE4710, BLACK, ASTM D2513, 102 PSIG, W/ YELLOW STRIPES, REPLACING ITEM 554007	10	LF
737	4 1/4" square	577813	BOX VALVE, CURB, W/ 4-1/4 IN SQ NON-LOCKING LID, FOR 2 IN VALVES, PAVEMENT RISER RING IN 583489, 20/BOX	1	EA

WEST RODNEY FRENCH BOULEVARD - Tie-in #4: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
201	4"	578128	FITTING,COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP , FOR CAST IRON PIPE	2	EA
371	1"	583182	FITTING,CAP, METFIT, 1 IN IPS X 0.119 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, REPLACED IN 542612	1	EA

HARMONY STREET



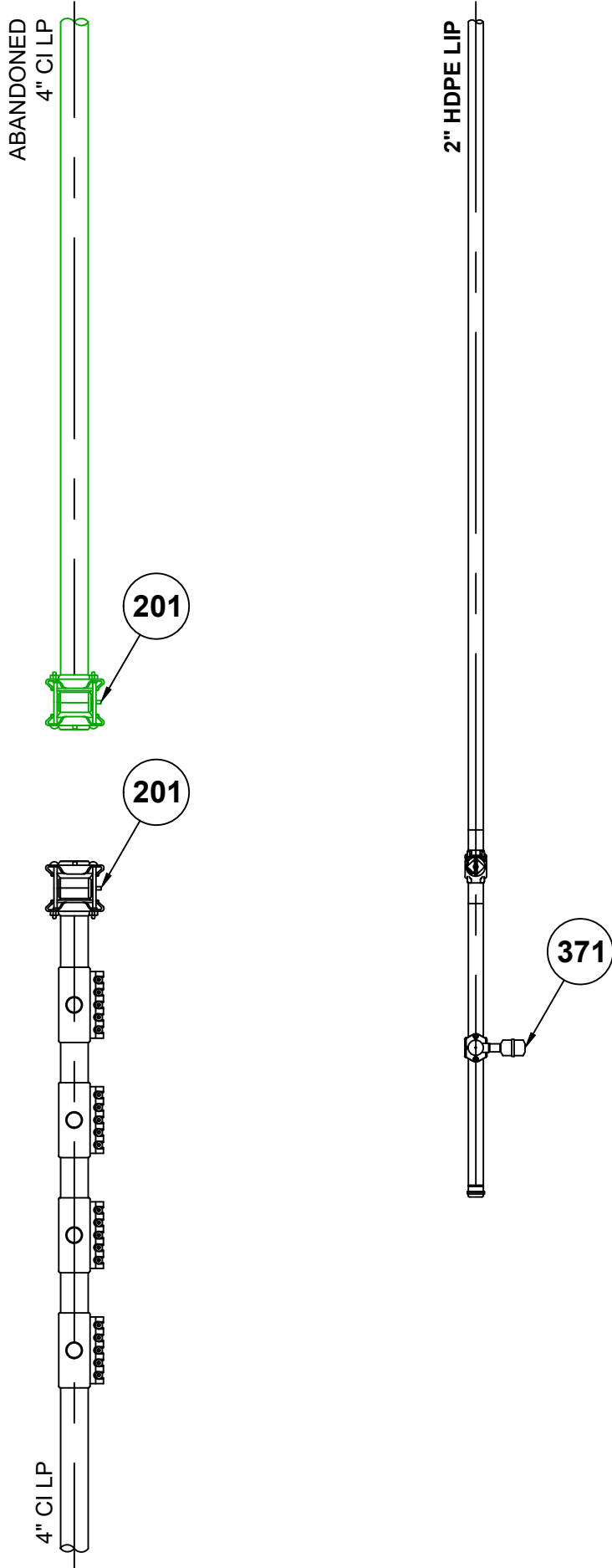
PREPARATORY TIE-IN DETAIL #4
(SCALE: 1"=2')
(REFER TO SHEET #4)



HARMONY STREET



FINAL TIE-IN DETAIL #4
(SCALE: 1"=2')
(REFER TO SHEET #4)



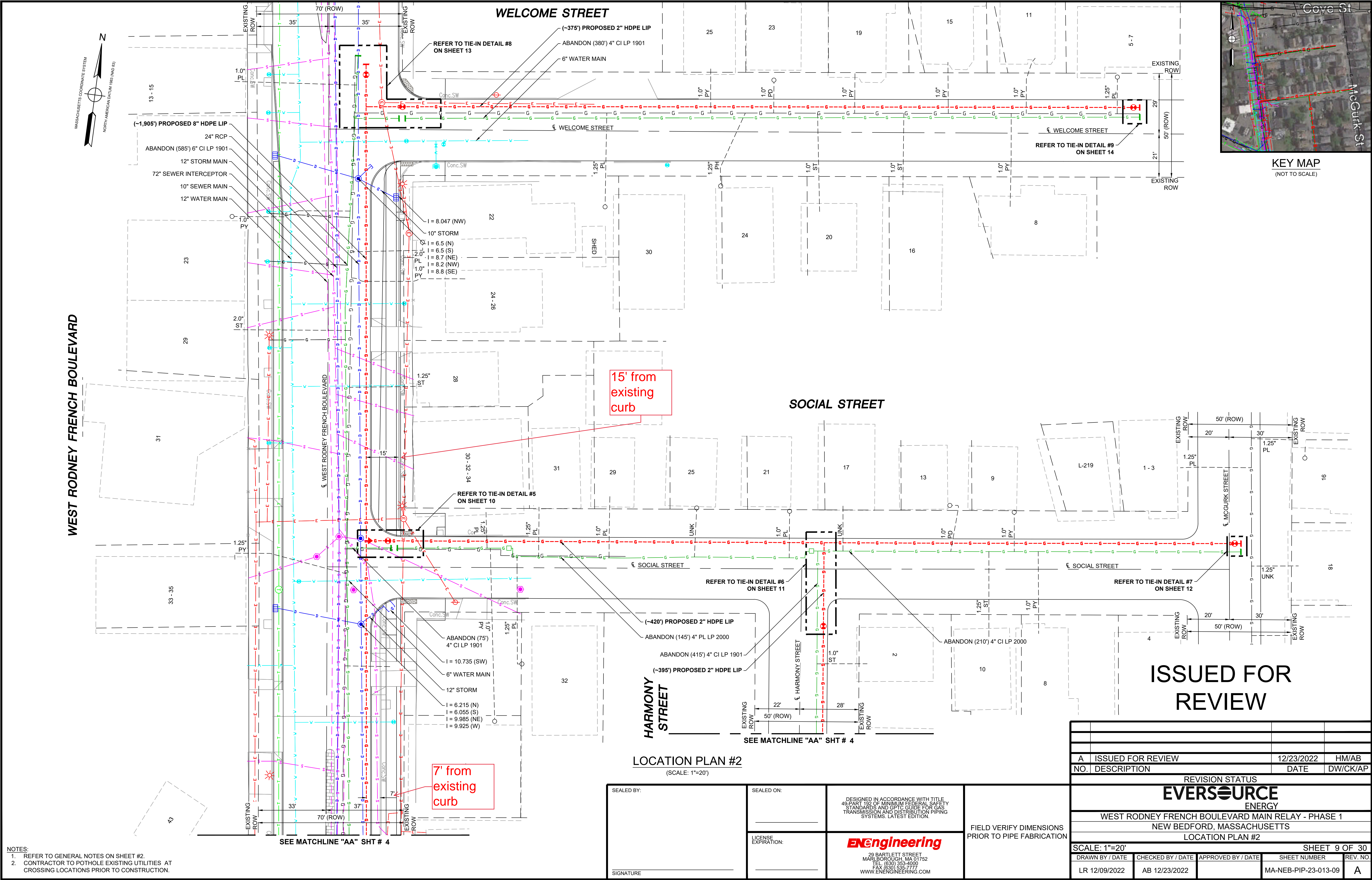
LEGEND

- EXISTING GAS MAIN
- EXISTING GAS MAIN TO BE ABANDONED
- EXISTING GAS MAIN WITH SERVICE TRANSFERS
- EXISTING GAS MAIN WITH PRESSURE INCREASE
- PROPOSED GAS MAIN
- EXISTING FITTING
- PROPOSED FITTING

ISSUED FOR REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB	
NO.	DESCRIPTION	DATE	DW/CK/AP	
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
TIE-IN DETAIL #4 AND BOM				
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)			SHEET 8 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-08	A

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



NOTES:
1. REFER TO GENERAL NOTES ON SHEET #2.
2. CONTRACTOR TO POT HOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION.

LOCATION PLAN #2
(SCALE: 1"=20')

SEALED BY:	SEALED ON:
SIGNATURE	

LICENSE EXPIRATION:

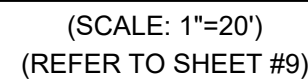
DESIGNED IN ACCORDANCE WITH TITLE 49, PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS, LATEST EDITION.

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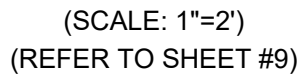
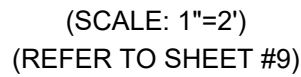
29 BARTLETT STREET
MARLBOROUGH, MA 01752
TEL (603) 353-4000
FAX (603) 353-7777
WWW.ENENGINEERING.COM


FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION


A		ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.		DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
LOCATION PLAN #2				
SCALE: 1"=20'		SHEET 9 OF 30		
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-09	A



WEST RODNEY FRENCH BOULEVARD - Tie-in #5: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
133	2" X 1/2"	500866	TEE,PIPE, NON-BLOWING, 2 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100	1	EA
201	4"	578128	FITTING,COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP , FOR CAST IRON PIPE	2	EA
349	2"	581633	FITTING,CAP, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, NSTAR M-410	2	EA
350	2"	579840	FITTING,COUPLING, METFIT, 2 IN X 0.216 IN THK WALL SDR 11	2	EA
369	1/2"	579972	FITTING,CAP, METFIT, 1/2 IN CTS X 0.90 IN THK WALL SDR 7, REPLACED IN 542609	2	EA

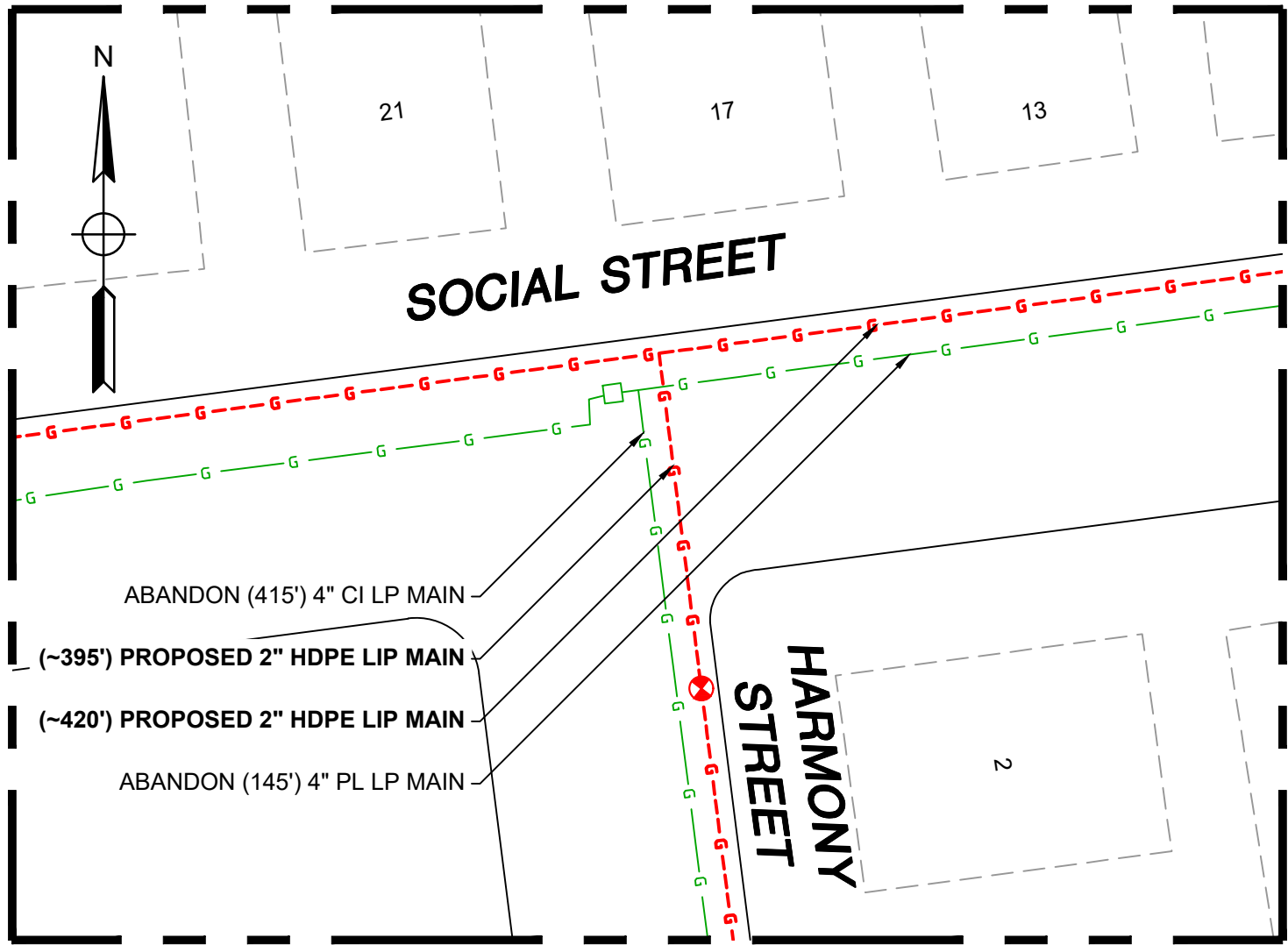


A	ISSUED FOR REVIEW	12/23/2022	HM/AB		
NO.	DESCRIPTION	DATE	DW/CK/AP		
REVISION STATUS					
					
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1					
NEW BEDFORD, MASSACHUSETTS					
TIE-IN DETAIL #5 AND BOM					
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS) SHEET 10 OF 30					
DRAWN BY / DATE		CHECKED BY / DATE		SHEET NUMBER	
LR 12/09/2022		AB 12/23/2022		MA-NEB-PIP-23-013-10	
		APPROVED BY / DATE		REV. NO.	
				A	

SEALED BY: SIGNATURE _____	SEALED ON: _____	DESIGNED IN ACCORDANCE WITH TITLE 49, PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPCC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS, LATEST EDITION.
	LICENSE EXPIRATION: _____	 29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL (508) 353-4000 FAX (508) 535-7777 WWW.ENENGINEERING.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

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

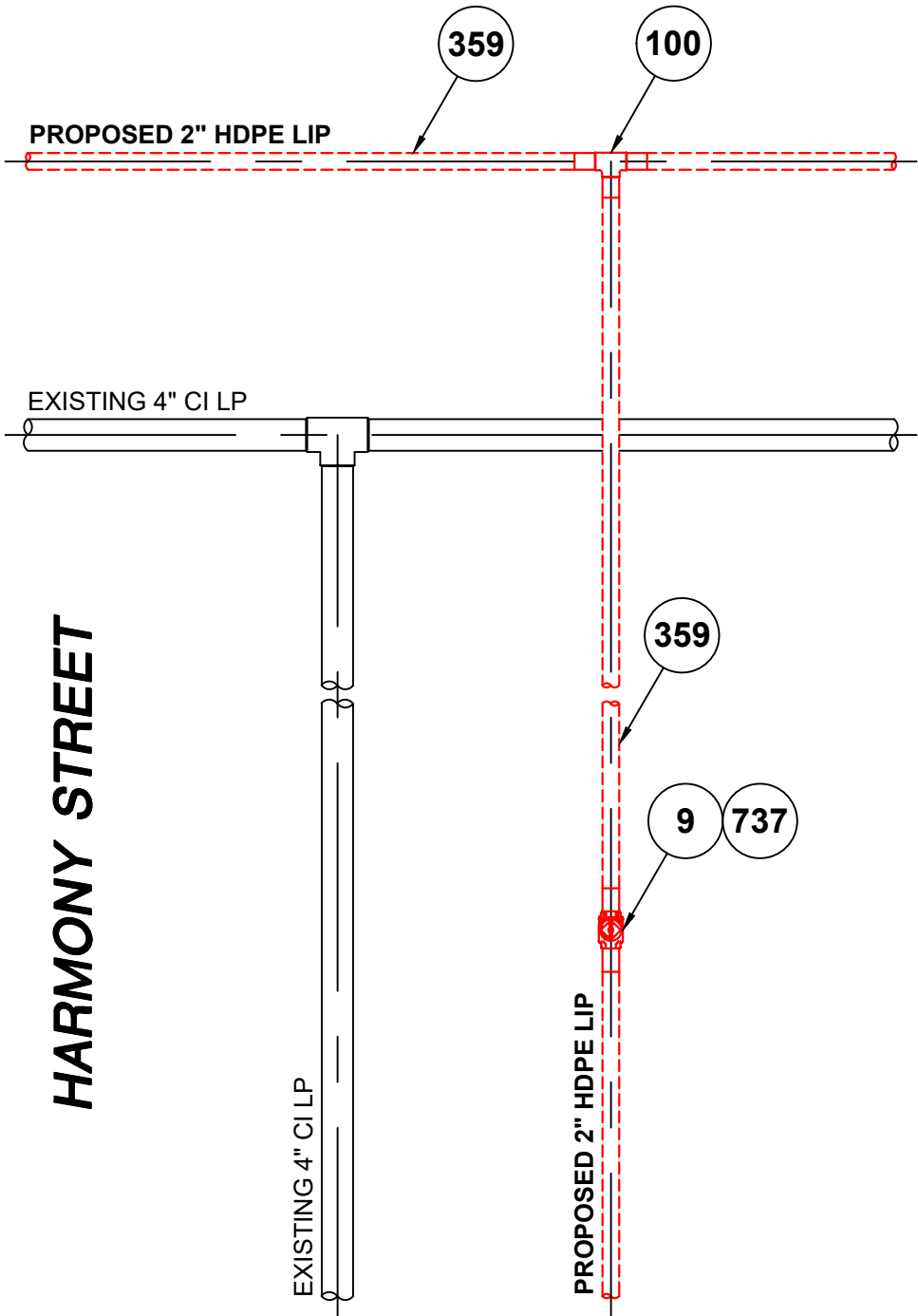


TIE-IN DETAIL #6 - PLAN VIEW

(SCALE: 1"=20')
(REFER TO SHEET #9)

WEST RODNEY FRENCH BOULEVARD - Tie-in #6: Preparatory					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
9	2"	562087	VALVE,BALL, 2 IN IPS, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING	1	EA
100	2"	560705	TEE,PIPE, 2 IN IPS SDR 11, BUTT ENDS, POLYETHYLENE, P100	1	EA
359	2"	592668	PIPE, 2 IN IPS SDR 11, 250 FT LG COIL, HDPE PE4710, BLACK, ASTM D2513, 102 PSIG, W/ YELLOW STRIPES, REPLACING ITEM 554007	15	LF
737	4 1/4" square	577813	BOX VALVE, CURB, W/ 4-1/4 IN SQ NON-LOCKING LID, FOR 2 IN VALVES, PAVEMENT RISER RING IN 583489, 20/BOX	1	EA

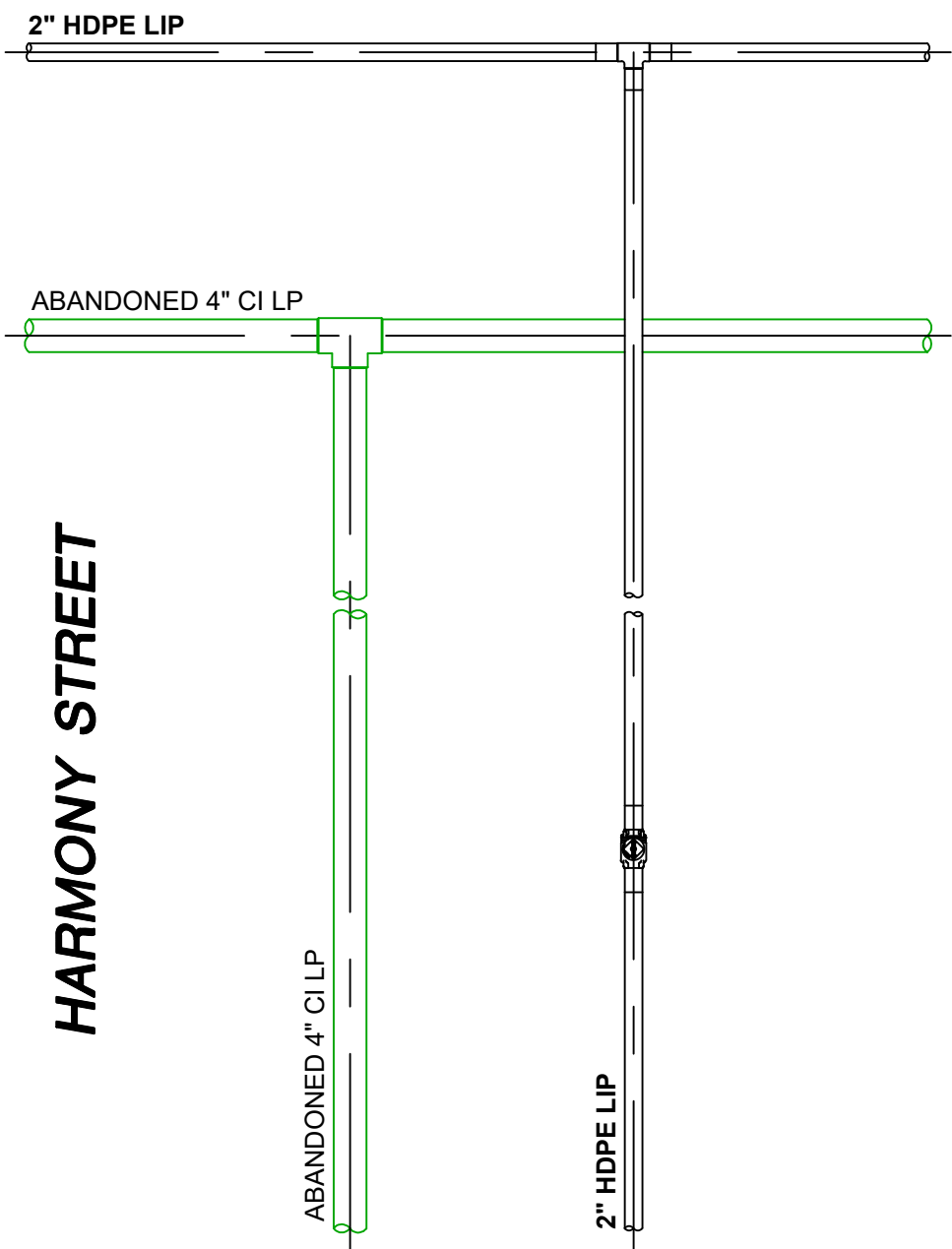
SOCIAL STREET



PREPARATORY TIE-IN DETAIL #6

(SCALE: 1"=2')
(REFER TO SHEET #9)

SOCIAL STREET



FINAL TIE-IN DETAIL #6

(SCALE: 1"=2')
(REFER TO SHEET #9)

LEGEND	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVERSOURCE ENERGY			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
TIE-IN DETAIL #6 AND BOM			
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)			SHEET 11 OF 30
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-11
			A

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

SEALED BY:	SEALED ON:
<div></div>	<div></div>
SIGNATURE	

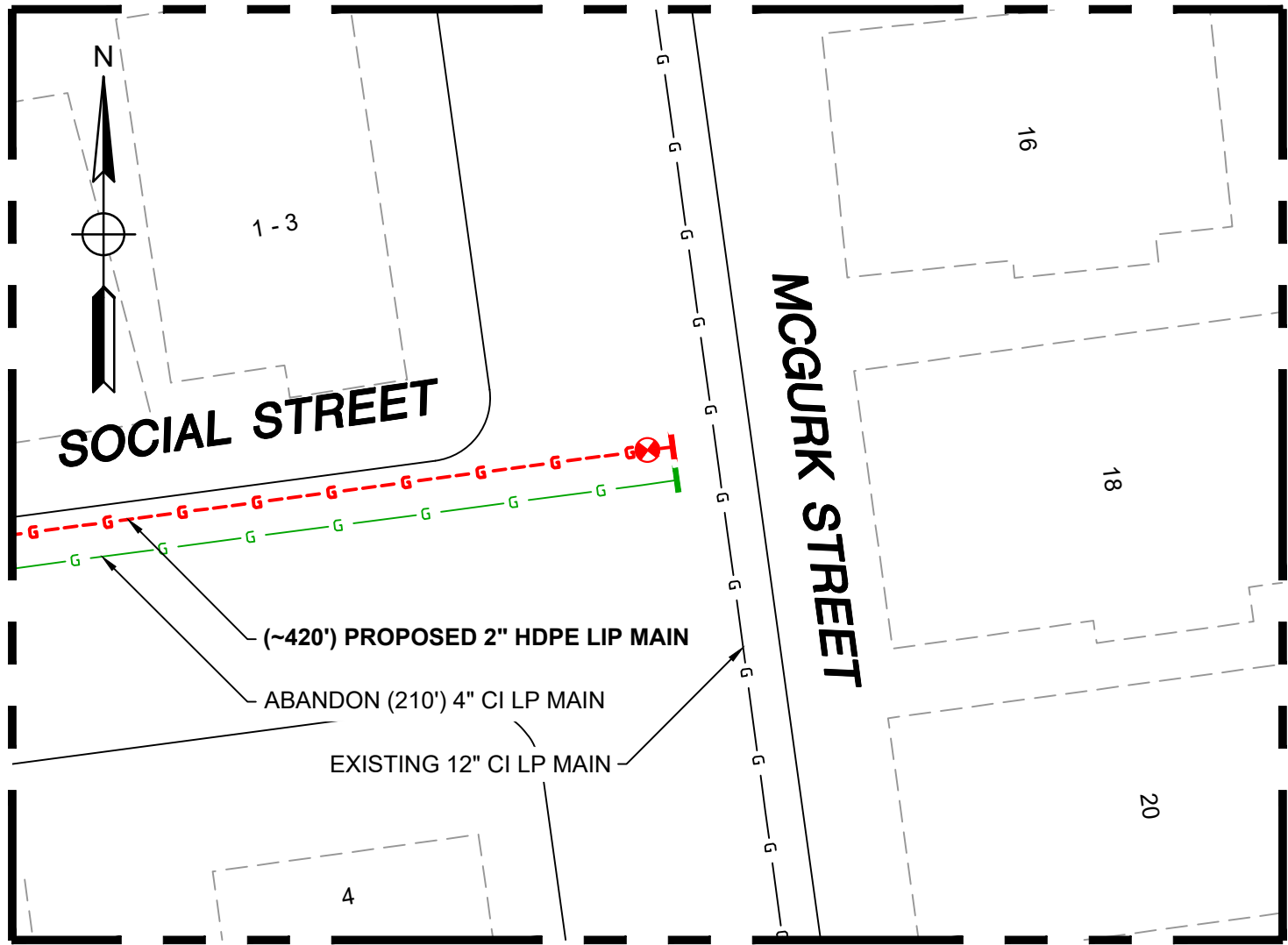
LICENSE EXPIRATION:
<div></div>

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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29 BARTLETT STREET
MARLBOROUGH, MA 01752
TEL (630) 353-4000
FAX (630) 353-7777
WWW.ENENGINEERING.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION



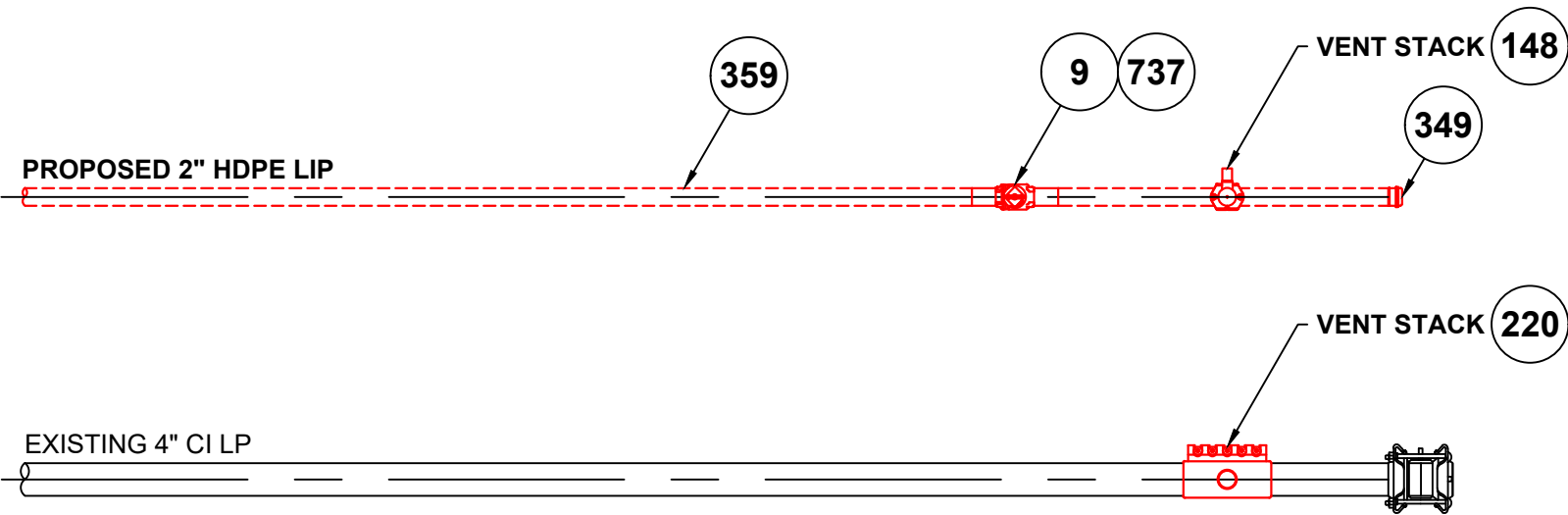
TIE-IN DETAIL #7 - PLAN VIEW

(SCALE: 1"=20')
(REFER TO SHEET #9)

WEST RODNEY FRENCH BOULEVARD - Tie-in #7: Preparatory					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
9	2"	562087	VALVE,BALL, 2 IN IPS, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING	1	EA
148	2" X 1"	602892	FITTING,TEE, 2 IN IPS X 1 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT FUSION OUTLET, HDPE, BLACK	1	EA
220	4" x 2"	543028	CLAMP,PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP	1	EA
349	2"	581633	FITTING,CAP, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, NSTAR M-410	1	EA
359	2"	592668	PIPE, 2 IN IPS SDR 11, 250 FT LG COIL, HDPE PE4710, BLACK, ASTM D2513, 102 PSIG, W/ YELLOW STRIPES, REPLACING ITEM 554007	10	LF
737	4 1/4" square	577813	BOX VALVE, CURB, W/ 4-1/4 IN SQ NON-LOCKING LID, FOR 2 IN VALVES, PAVEMENT RISER RING IN 583489, 20/BOX	1	EA

WEST RODNEY FRENCH BOULEVARD - Tie-in #7: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
371	1"	583182	FITTING,CAP, METFIT, 1 IN IPS X 0.119 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, REPLACED IN 542612	1	EA

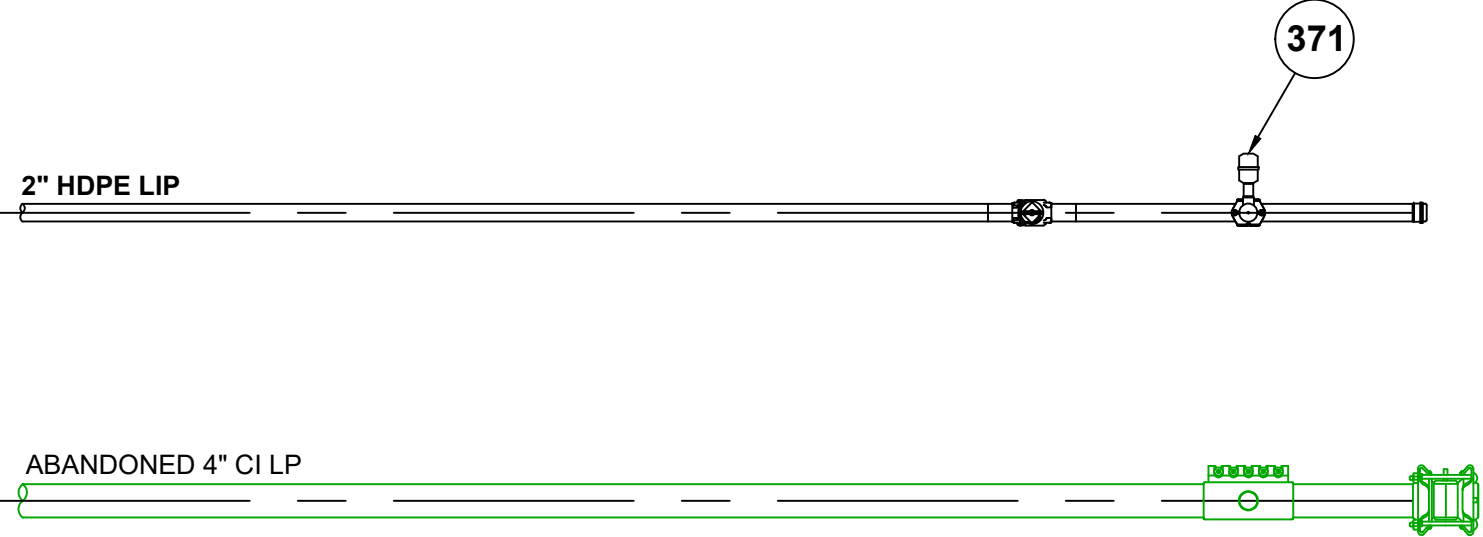
SOCIAL STREET



PREPARATORY TIE-IN DETAIL #7

(SCALE: 1"=2')
(REFER TO SHEET #9)

SOCIAL STREET



FINAL TIE-IN DETAIL #7

(SCALE: 1"=2')
(REFER TO SHEET #9)

LEGEND

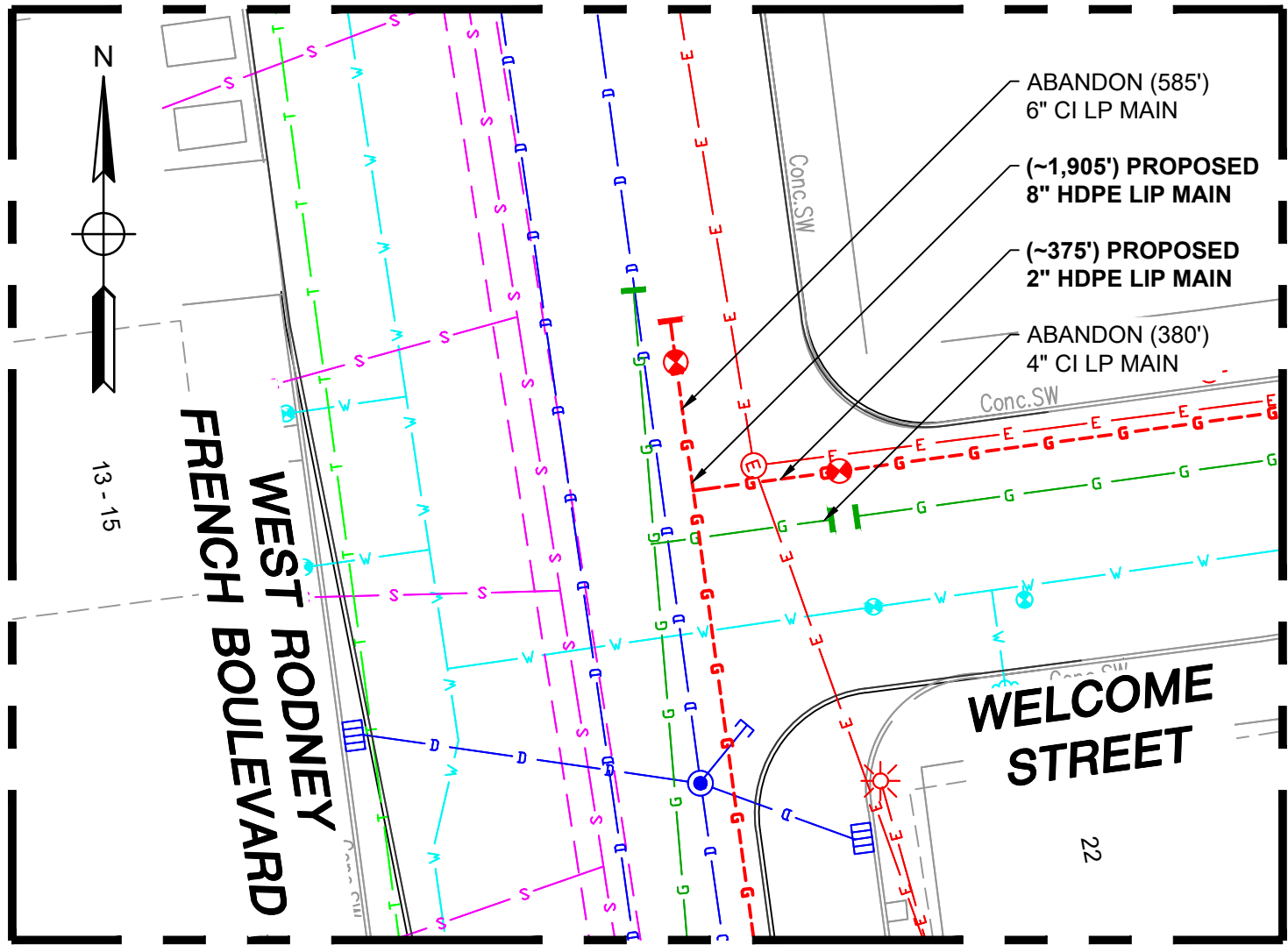
- EXISTING GAS MAIN
- EXISTING GAS MAIN TO BE ABANDONED
- EXISTING GAS MAIN WITH SERVICE TRANSFERS
- EXISTING GAS MAIN WITH PRESSURE INCREASE
- PROPOSED GAS MAIN
- EXISTING FITTING
- PROPOSED FITTING

ISSUED FOR
REVIEW

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

SEALED BY:		SEALED ON:	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.	FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION
SIGNATURE		LICENSE EXPIRATION:		
			EN Engineering	
			29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL (630) 353-4000 FAX (630) 353-7777 WWW.ENENGINEERING.COM	

A		ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP	
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
TIE-IN DETAIL #7 AND BOM				
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)		SHEET 12 OF 30		
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-12	A

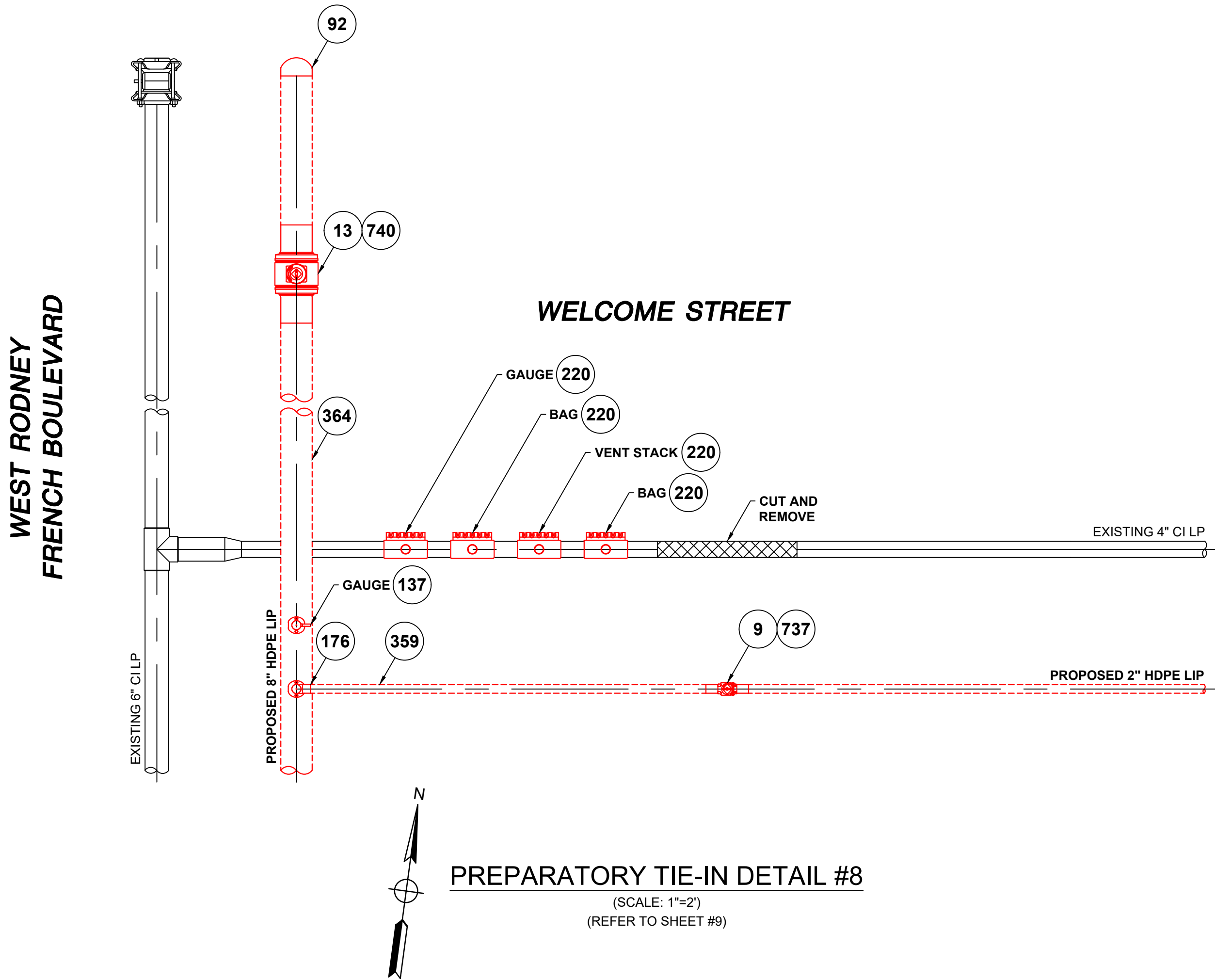


TIE-IN DETAIL #8 - PLAN VIEW

(SCALE: 1"=20")
(REFER TO SHEET #9)

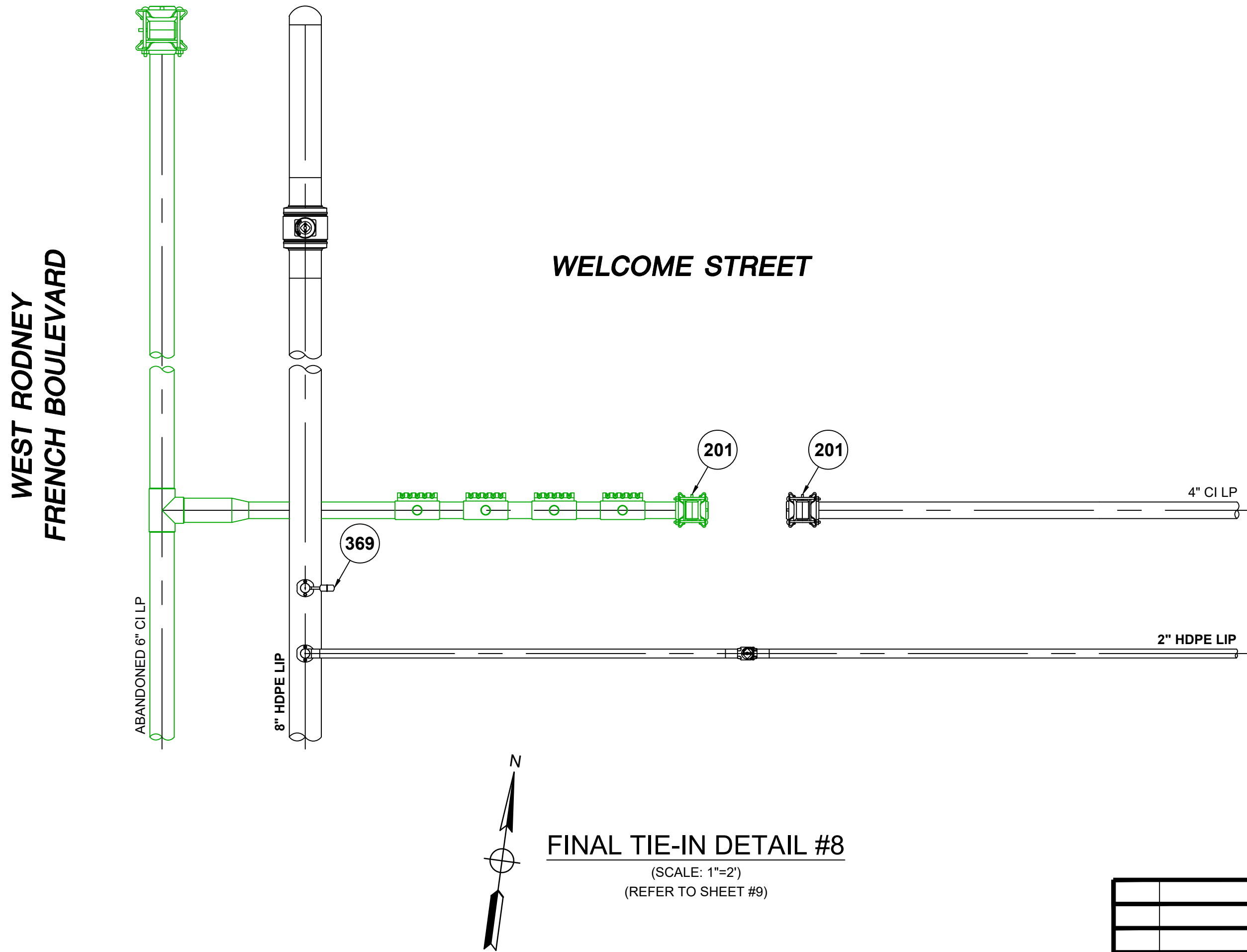
WEST RODNEY FRENCH BOULEVARD - Tie-in #8: Preparatory					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
8	1 1/2"	562051	VALVE,BALL, 1-1/2 IN, PVC, PVC BALL, SOCKET	1	EA
13	8"	500705	VALVE,BALL, 8 IN IPS, POLYETHYLENE, SDR11, BUTT WELD, W/ FULL PORT OPENING, BLACK FINISH	1	EA
92	8"	542540	CAP,PIPE, 8 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100	1	EA
137	8" X 1/2"	584713	FITTING,TEE, 8 IN IPS X 1/2 IN CTS, ELECTROFUSION TAPPING TEE WITH PERMASERT STAB OUTLET, HDPE, BLACK, NSTAR M-140	1	EA
176	8" X 2"	577623	FITTING,TEE, 8 IN IPS X 2 IN IPS, HIGH VOLUME ELECTROFUSION TAPPING TEE WITH BUTT FUSION OUTLET, HDPE, BLACK, ASTM F1055 , RESTRICTED PURCHA	1	EA
220	4" x 2"	543028	CLAMP,PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP	4	EA
359	2"	592668	PIPE, 2 IN IPS SDR 11, 250 FT LG COIL, HDPE PE4710, BLACK, ASTM D2513, 102 PSIG, W/ YELLOW STRIPES, REPLACING ITEM 554007	10	LF
364	8"	554010	PIPE, 8 IN IPS X 8-3/8 IN X 0.784 IN THK WALLS SDR 11, 40 FT LG, POLYETHYLENE, PE3408/PE100	10	LF
737	4 1/4" square	577813	BOX VALVE, CURB, W/ 4-1/4 IN SQ NON-LOCKING LID, FOR 2 IN VALVES, PAVEMENT RISER RING IN 583489, 20/BOX	1	EA
740	8"	604132	BOX VALVE, W/ 5-1/4 IN SQ NON-LOCKING LID, FOR 8 IN FULL PORT VALVES, PAVEMENT RISER IN 583488. 6/BOX	1	EA

WEST RODNEY FRENCH BOULEVARD - Tie-in #8: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
201	4"	578128	FITTING,COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP , FOR CAST IRON PIPE	2	EA
369	1/2"	579972	FITTING,CAP, METFIT, 1/2 IN CTS X 0.90 IN THK WALL SDR 7, REPLACED IN 542609	1	EA



PREPARATORY TIE-IN DETAIL #8

(SCALE: 1"=2")
(REFER TO SHEET #9)



FINAL TIE-IN DETAIL #8

(SCALE: 1"=2")
(REFER TO SHEET #9)

LEGEND	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

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

SEALED BY:

SIGNATURE

SEALED ON:

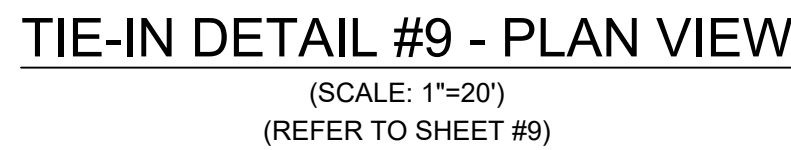
LICENSE
EXPIRATION:

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.

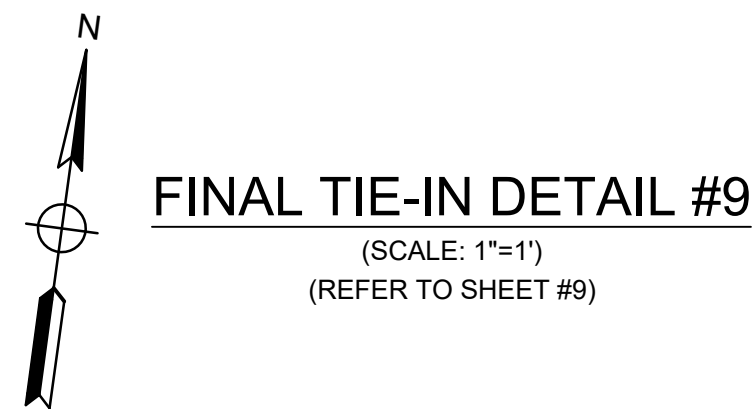
ENEngineering
29 BARTLETT STREET
MARLBOROUGH, MA 01752
TEL: (630) 353-4000
FAX: (630) 353-7777
WWW.ENENGINEERING.COM








FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

A	ISSUED FOR REVIEW	12/23/2022	HM/AB	
NO.	DESCRIPTION	DATE	DW/CK/AP	
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
TIE-IN DETAIL #8 AND BOM				
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)				SHEET 13 OF 30
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-13	A




WEST RODNEY FRENCH BOULEVARD - Tie-in #9: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
9	2"	562087	VALVE,BALL, 2 IN IPS, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING	1	EA
147	2" X 1"	560779	TEE,PIPE, NON-BLOWING, 2 X 1 IN IPS SDR 11, ELECTROFUSION X COMPRESSION ENDS, UIGHT WALL, POLYETHYLENE, PE3408/PE100	1	EA
220	4" x 2"	543028	CLAMP,PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP	1	EA
349	2"	581633	FITTING,CAP, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, NSTAR M-410	1	EA
359	2"	592668	PIPE, 2 IN IPS SDR 11, 250 FT LG COIL, HDPE PE4710, BLACK, ASTM D2513, 102 PSIG, W/ YELLOW STRIPES, REPLACING ITEM 554007	10	LF
371	1"	583182	FITTING,CAP, METFIT, 1 IN IPS X 0.119 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, REPLACED IN 542612	1	EA
737	4 1/4" square	577813	BOX VALVE, CURB, W/ 4-1/4 IN SQ NON-LOCKING LID, FOR 2 IN VALVES, PAVEMENT RISER RING IN 583489, 20/BOX	1	EA



<u>LEGEND</u>	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB		
NO.	DESCRIPTION	DATE	DW/CK/AP		
REVISION STATUS					
<div style="text-align: center;">  </div>					
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1					
NEW BEDFORD, MASSACHUSETTS					
TIE-IN DETAIL #9 AND BOM					
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS) SHEET 14 OF 30					
DRAWN BY / DATE		CHECKED BY / DATE		APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022		AB 12/23/2022			MA-NEB-PIP-23-013- 14
					A

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

2309775.49



SEALED BY:

SIGNATURE

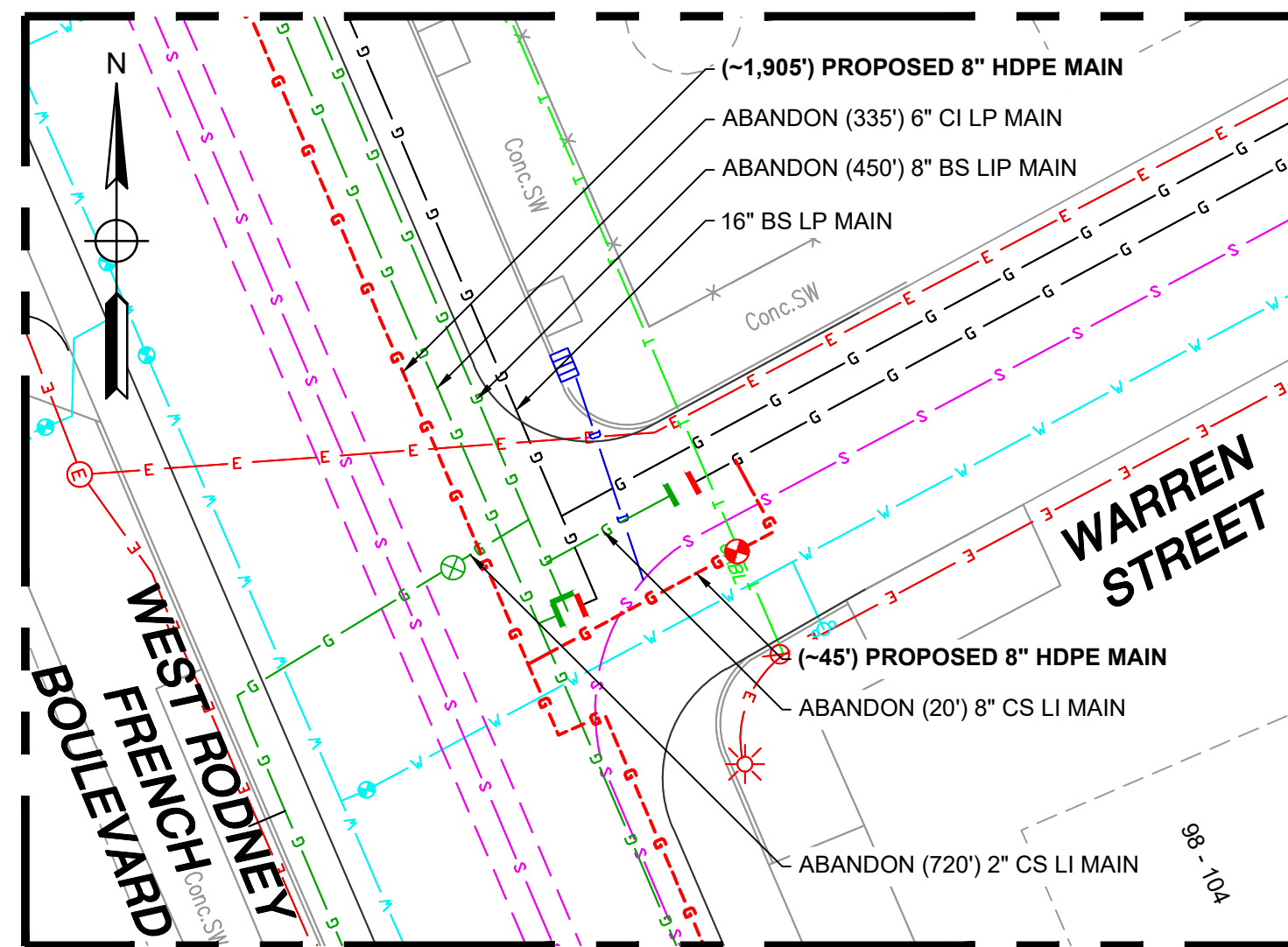
SEALED ON: _____

LICENSE EXPIRATION: _____

ENEngineering
29 BARTLETT STREET
MARLBOROUGH, MA 01752
TEL. (630) 353-4000
FAX (630) 535-7777
WWW.ENENGINEERING.COM

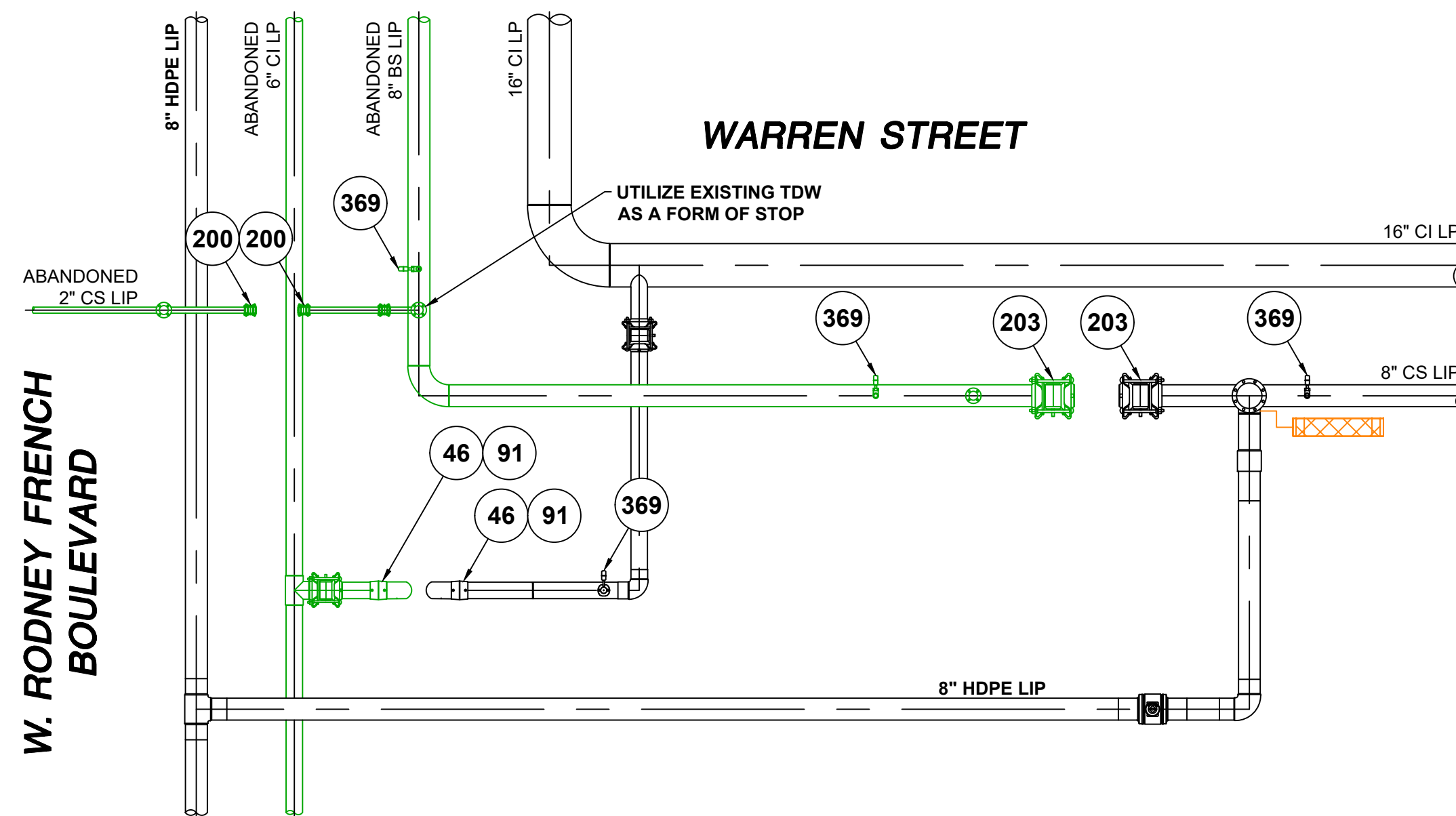
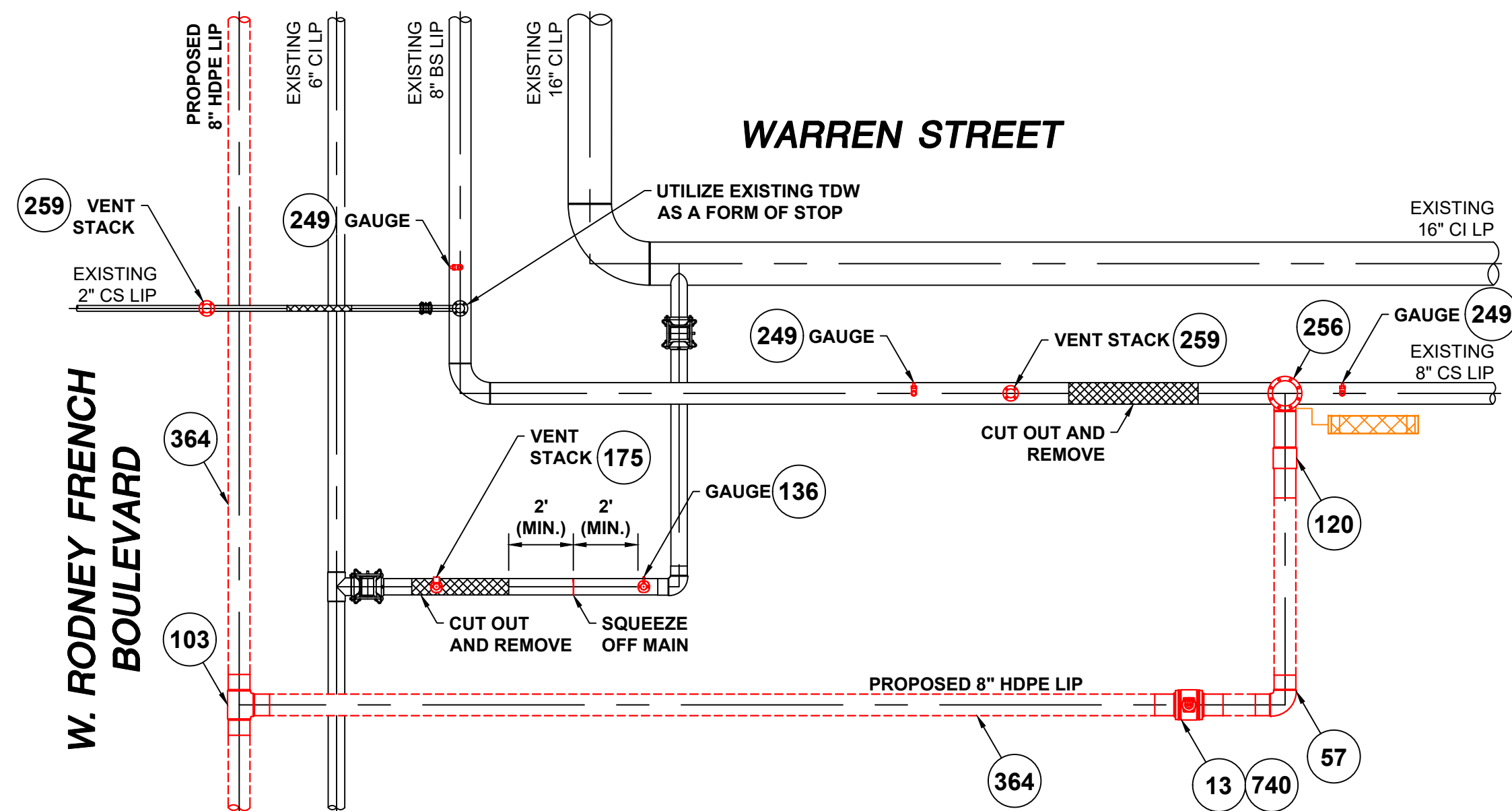
ISSUED FOR
REVIEW

2309775.49



TIE-IN DETAIL #10 - PLAN VIEW

(SCALE: 1"=20')
(REFER TO SHEET #15)



FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
<div>EVERSOURCE</div> <div>ENERGY</div>			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
TIE-IN DETAIL #10 AND BOM			
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)		SHEET 16 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-16
			A



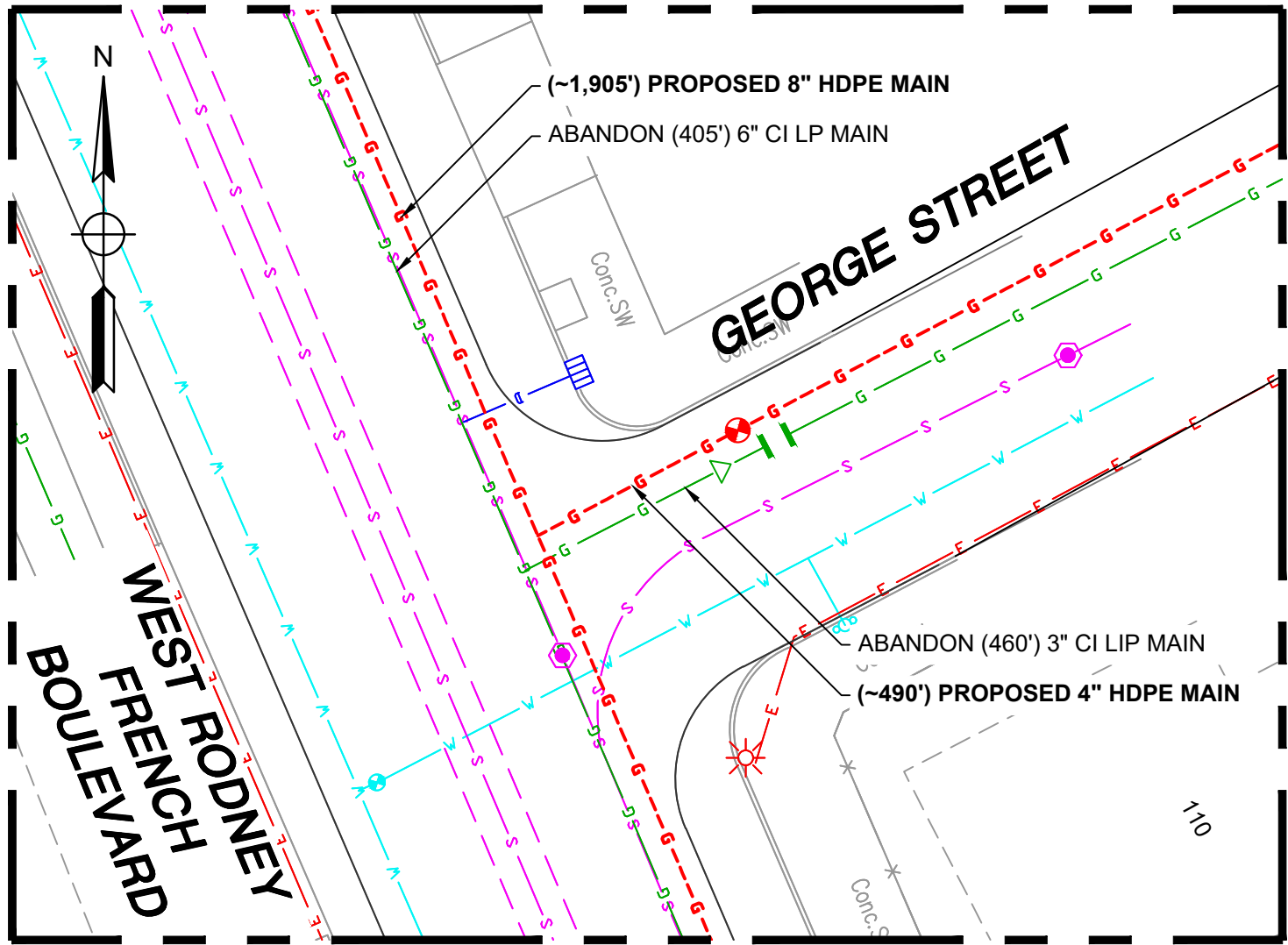
WEST RODNEY FRENCH BOULEVARD

ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVERSOURCE ENERGY			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
LOCATION PLAN #4			
SCALE: 1"=20'		SHEET 17 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-17
			A

NOTES:

1. REFER TO GENERAL NOTES ON SHEET #2.
2. CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION.

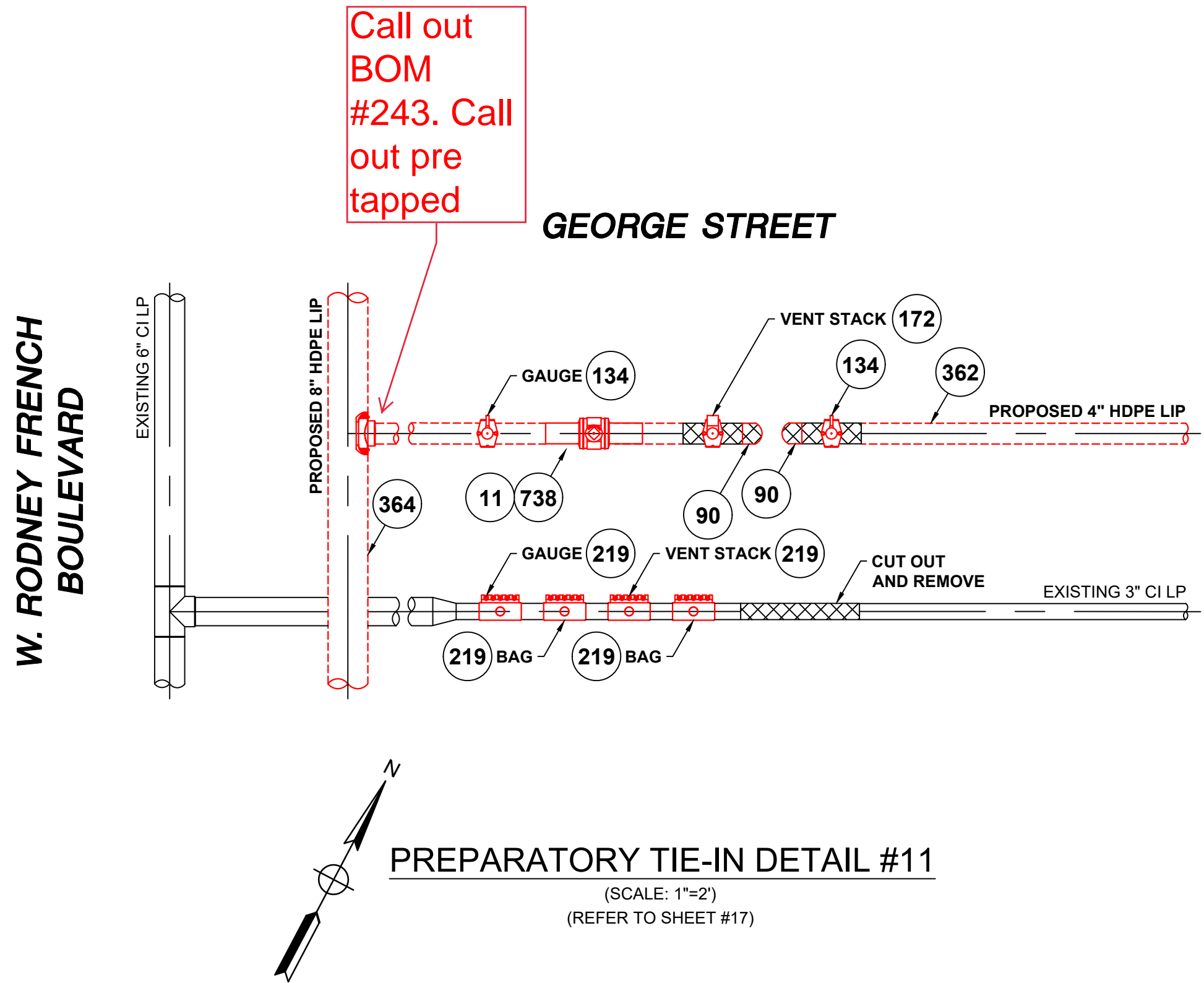


TIE-IN DETAIL #11 - PLAN VIEW

(SCALE: 1"=20')
(REFER TO SHEET #17)

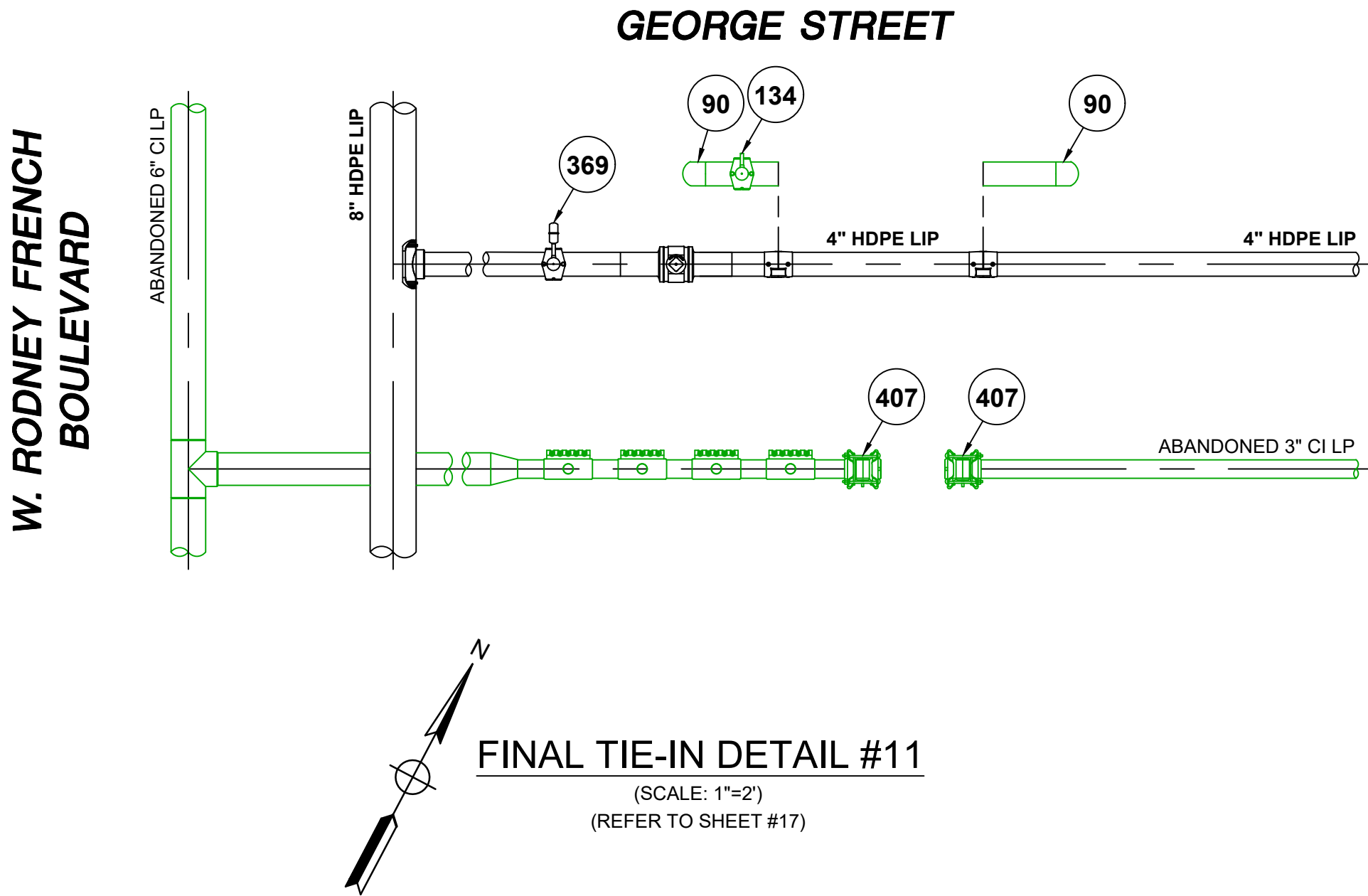
WEST RODNEY FRENCH BOULEVARD - Tie-in #12: Preparatory					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
11	4"	501002	VALVE,BALL, 4 IN, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING, TO BE USED W/ BRAND SADDLE INST, P100	1	EA
90	4"	542538	CAP,PIPE, 4 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100	2	EA
134	4" X 1/2"	500867	TEE,PIPE, NON-BLOWING, 4 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100, 1	2	EA
172	4" X 2"	584304	FITTING,TEE, 4 IN IPS X 2 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT FUSION OUTLET, HDPE, BLACK, WAS ITEM 577621	1	EA
220	4" x 2"	543028	CLAMP,PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP	4	EA
362	4"	554008	PIPE, 4 IN IPS X 0.409 IN THK WALL SDR 11, 4.5 IN OD, 40 FT LG, POLYETHYLENE, PE3408/PE100, 1200 FT/BUNDLE	10	LF
364	8"	554010	PIPE, 8 IN IPS X 8-3/8 IN X 0.784 IN THK WALL SDR 11, 40 FT LG, POLYETHYLENE, PE3408/PE100	5	LF
738	5 1/4" square	577814	BOX VALVE, W/ 5-1/4 IN SQ NON-LOCKING LID, FOR 4 IN VALVES, PAVEMENT RISER RING IN 583488,	1	EA

WEST RODNEY FRENCH BOULEVARD - Tie-in #12: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
90	4"	542538	CAP,PIPE, 4 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100	2	EA
134	4" X 1/2"	500867	TEE,PIPE, NON-BLOWING, 4 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100, 1	1	EA
201	4"	578128	FITTING,COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP , FOR CAST IRON PIPE	2	EA
369	1/2"	579972	FITTING,CAP, METFIT, 1/2 IN CTS X 0.90 IN THK WALL SDR 7, REPLACED IN 542609	1	EA



PREPARATORY TIE-IN DETAIL #11

(SCALE: 1"=2')
(REFER TO SHEET #17)



FINAL TIE-IN DETAIL #11

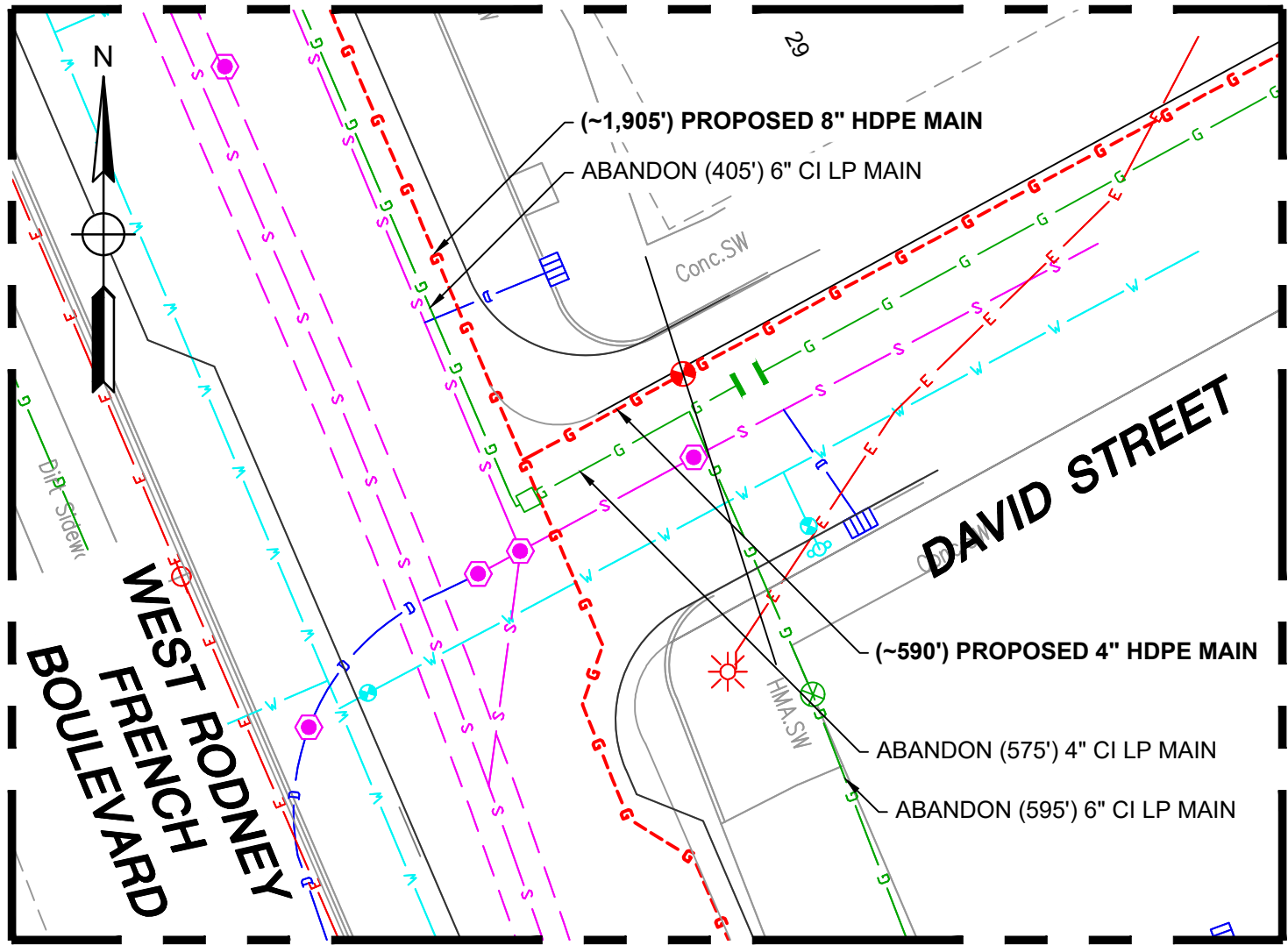
(SCALE: 1"=2')
(REFER TO SHEET #17)

LEGEND	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

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

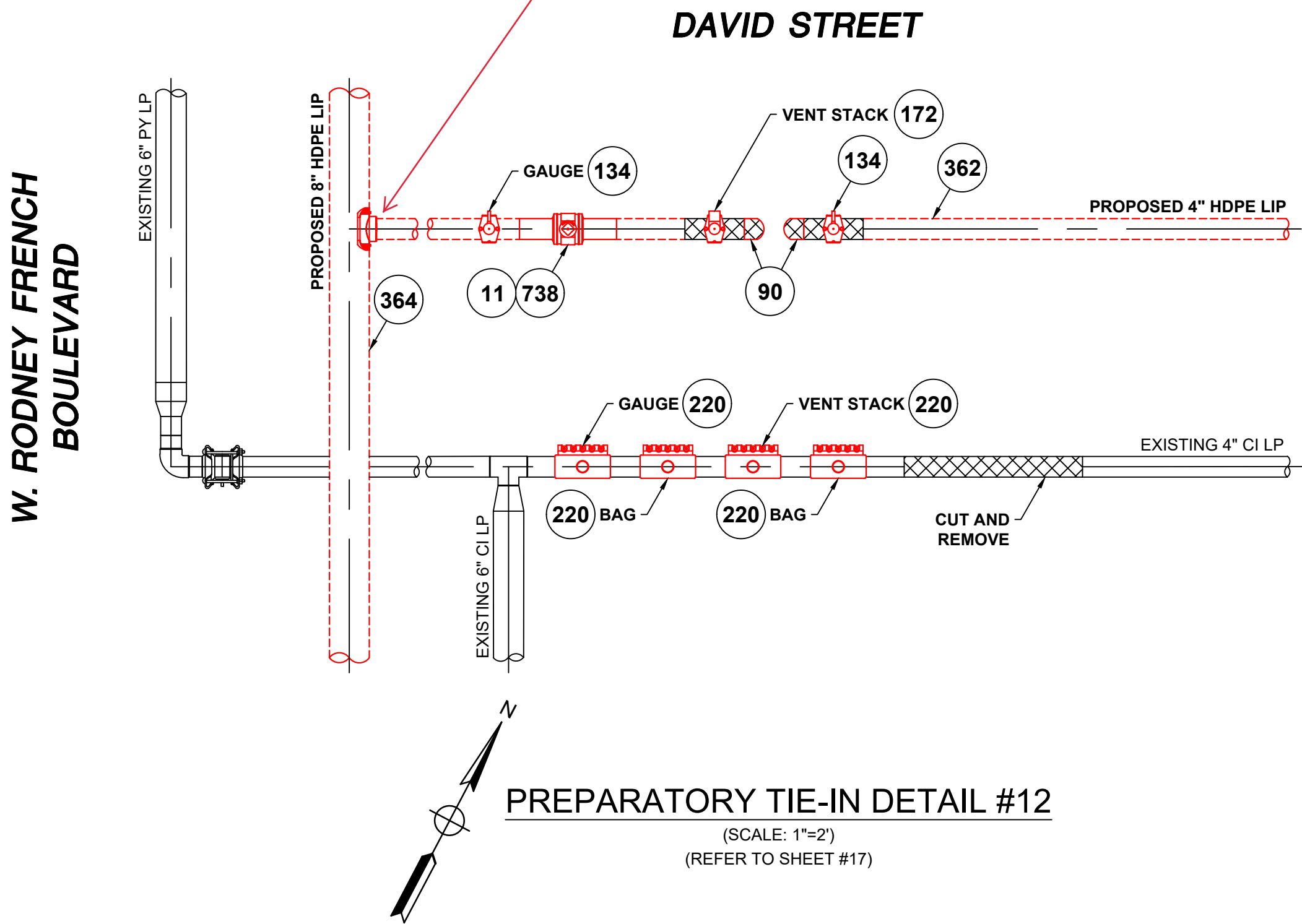
SEALED BY:		SEALED ON:	DESIGNED IN ACCORDANCE WITH TITLE 49, PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS, LATEST EDITION.	FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION
SIGNATURE _____		LICENSE EXPIRATION: _____		
			EN Engineering 29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL: (630) 353-4000 FAX: (630) 353-7777 WWW.ENENGINEERING.COM	
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
TIE-IN DETAIL #11 AND BOM				
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)				SHEET 18 OF 30
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-18	A



TIE-IN DETAIL #12 - PLAN VIEW

(SCALE: 1"=20")
(REFER TO SHEET #17)

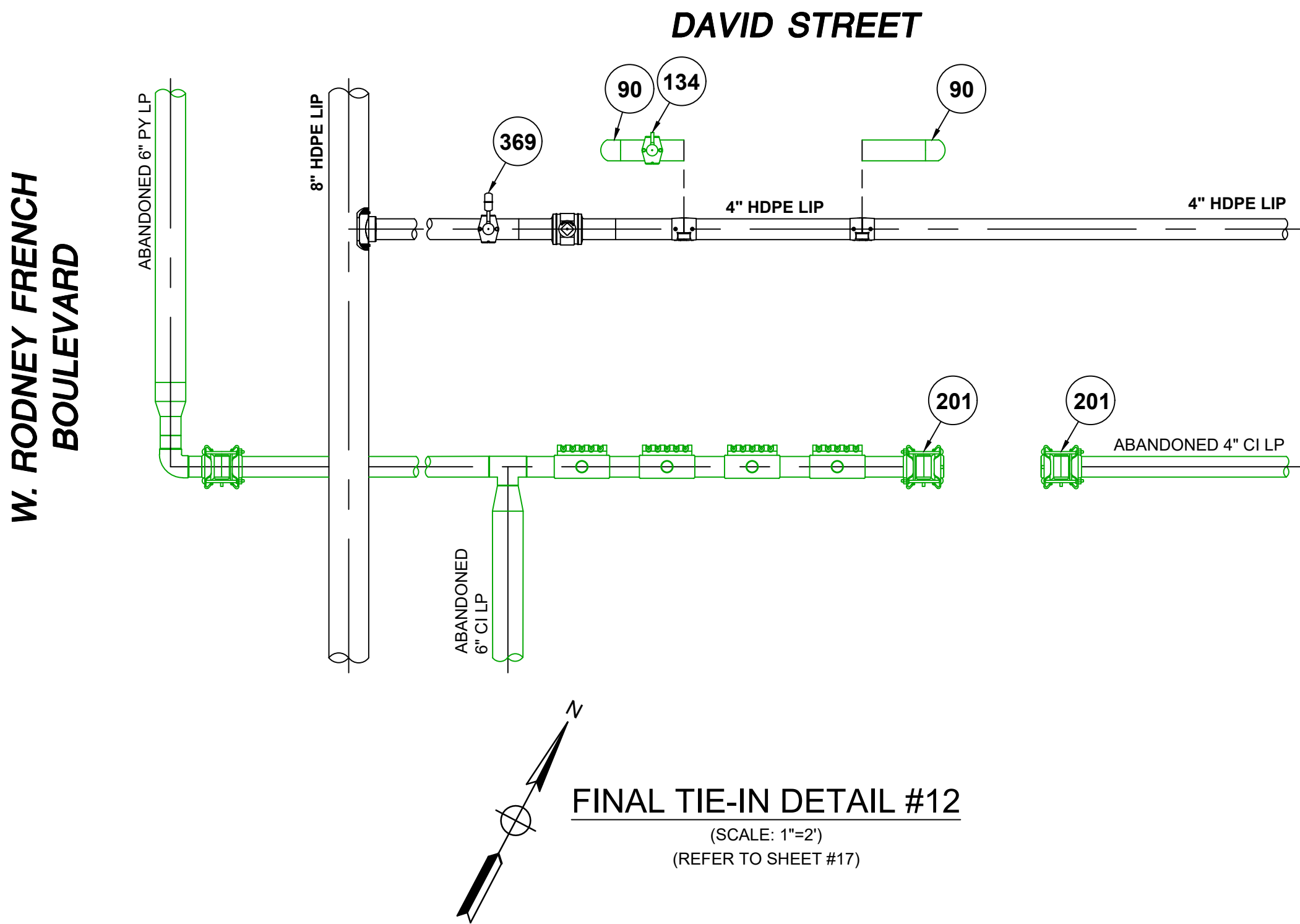
Call out
BOM
#243. Call
out pre
tapped



PREPARATORY TIE-IN DETAIL #12

(SCALE: 1"=2")
(REFER TO SHEET #17)

WEST RODNEY FRENCH BOULEVARD -Tie-in #12: Preparatory					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
11	4"	501002	VALVE,BALL, 4 IN, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING, TO BE USED W/	1	EA
90	4"	542538	CAP,PIPE, 4 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100	2	EA
134	4" X 1/2"	500867	TEE,PIPE, NON-BLOWING, 4 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X	2	EA
137	8" X 1/2"	584713	FITTING,TEE, 8 IN IPS X 1/2 IN CTS, ELECTROFUSION TAPPING TEE WITH PERMASERT STAB	1	EA
172	4" X 2"	584304	OUTLET, HDPE, BLACK, NSTAR M-140	1	EA
220	4" x 2"	543028	FITTING,TEE, 4 IN IPS X 2 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT FUSION	4	EA
362	4"	554008	OUTLET, HDPE, BLACK, WAS ITEM 577621	10	LF
364	8"	554010	CLAMP,PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP	5	LF
738	5 1/4" square	577814	PIPE, 4 IN IPS X 0.409 IN THK WALL SDR 11, 4.5 IN OD, 40 FT LG, POLYETHYLENE, PE3408/PE100,	1	EA



FINAL TIE-IN DETAIL #12

(SCALE: 1"=2")
(REFER TO SHEET #17)

WEST RODNEY FRENCH BOULEVARD -Tie-in #12: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
90	4"	542538	CAP,PIPE, 4 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100	2	EA
134	4" X 1/2"	500867	TEE,PIPE, NON-BLOWING, 4 X 1/2 IN CTS X 0.090 IN THK WALL SDR 7, ELECTROFUSION X	1	EA
201	4"	578128	COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100, 1	2	EA
369	1/2"	579972	FITTING,COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP , FOR CAST IRON PIPE	2	EA

LEGEND	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

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

SEALED BY:

SIGNATURE

SEALED ON:

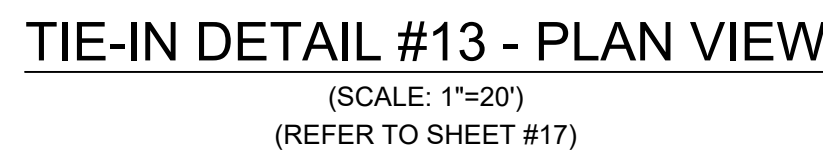
LICENSE
EXPIRATION:

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.

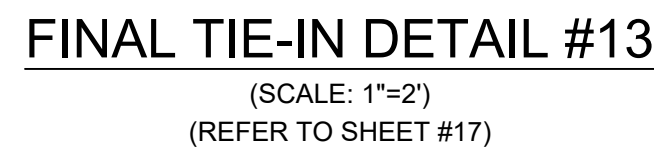
ENEngineering
29 BARTLETT STREET
MARLBOROUGH, MA 01752
TEL (630) 353-4000
FAX (630) 353-7777
WWW.ENENGINEERING.COM








FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION

A	ISSUED FOR REVIEW	12/23/2022	HM/AB	
NO.	DESCRIPTION	DATE	DW/CK/AP	
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
TIE-IN DETAIL #12 AND BOM				
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)				SHEET 19 OF 30
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-19	A



WEST RODNEY FRENCH BOULEVARD -Tie-in #13: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
9	2"	562087	VALVE,BALL, 2 IN IPS, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING	1	EA
69	4" X 2"	555593	REDUCER,PIPE, 4 X 2 IPS, BUTT ENDS, POLYETHYLENE, P100, SDR11	1	EA
101	4"	560679	TEE,PIPE, 4 IN SDR 11, BUTT ENDS, POLYETHYLENE, P100	1	EA
359	2"	592668	PIPE, 2 IN IPS SDR 11, 250 FT LG COIL, HDPE PE4710, BLACK, ASTM D2513, 102 PSIG, W/ YELLOW STRIPES, REPLACING ITEM 554007	10	LF
362	4"	554008	PIPE, 4 IN IPS X 0.409 IN THK WALL SDR 11, 4.5 IN OD, 40 FT LG, POLYETHYLENE, PE3408/PE100, 1200 FT/BUNDLE	10	LF
737	4 1/4" square	577813	BOX VALVE, CURB, W/ 4-1/4 IN SQ NON-LOCKING LID, FOR 2 IN VALVES, PAVEMENT RISER RING IN 583489, 20/BOX	1	EA

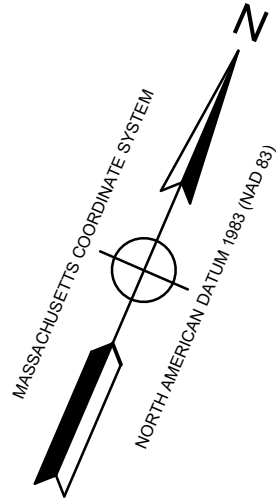


<u>LEGEND</u>	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

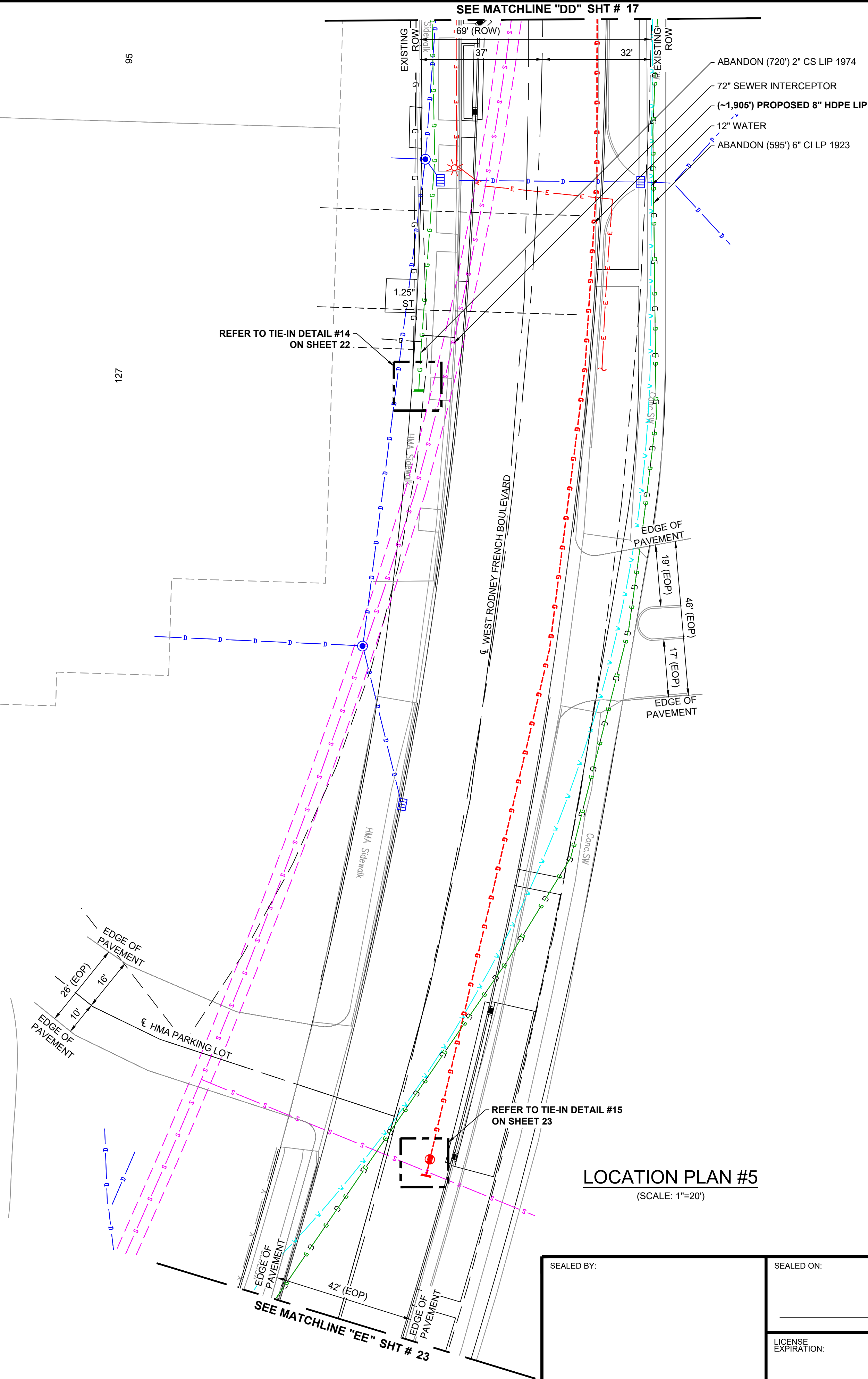
ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
<div> <div>EVERSOURCE</div> <div>ENERGY</div> </div>			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
TIE-IN DETAIL #13 AND BOM			
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS) SHEET 20 OF 30			
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-20
			REV. NO.
			A

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



WEST RODNEY FRENCH BOULEVARD

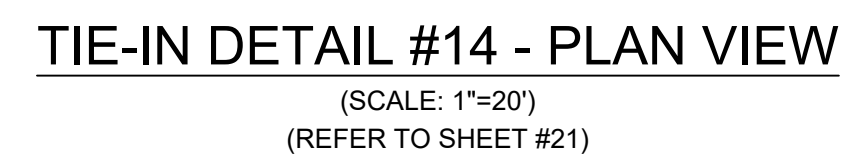


KEY MAP
(NOT TO SCALE)

ISSUED FOR
REVIEW

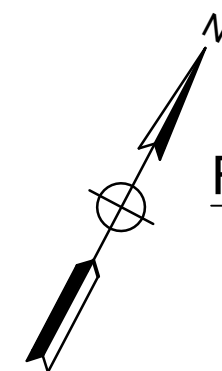
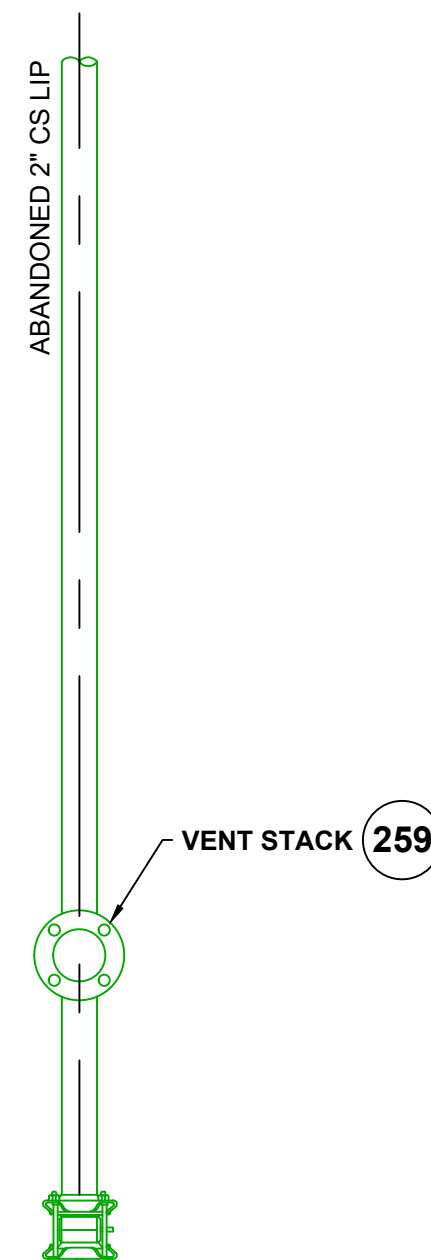
A	ISSUED FOR REVIEW	12/23/2022	HM/AB	
NO.	DESCRIPTION	DATE	DW/CK/AP	
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
LOCATION PLAN #5				
SCALE: 1"=20'		SHEET 21 OF 30		
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-21	A

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










WEST RODNEY FRENCH BOULEVARD - Tie-in #14: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
259	2"	578396	FITTING,TEE, SHORTSTOPP, 2 IN, WELDED	1	EA


WEST RODNEY FRENCH BOULEVARD



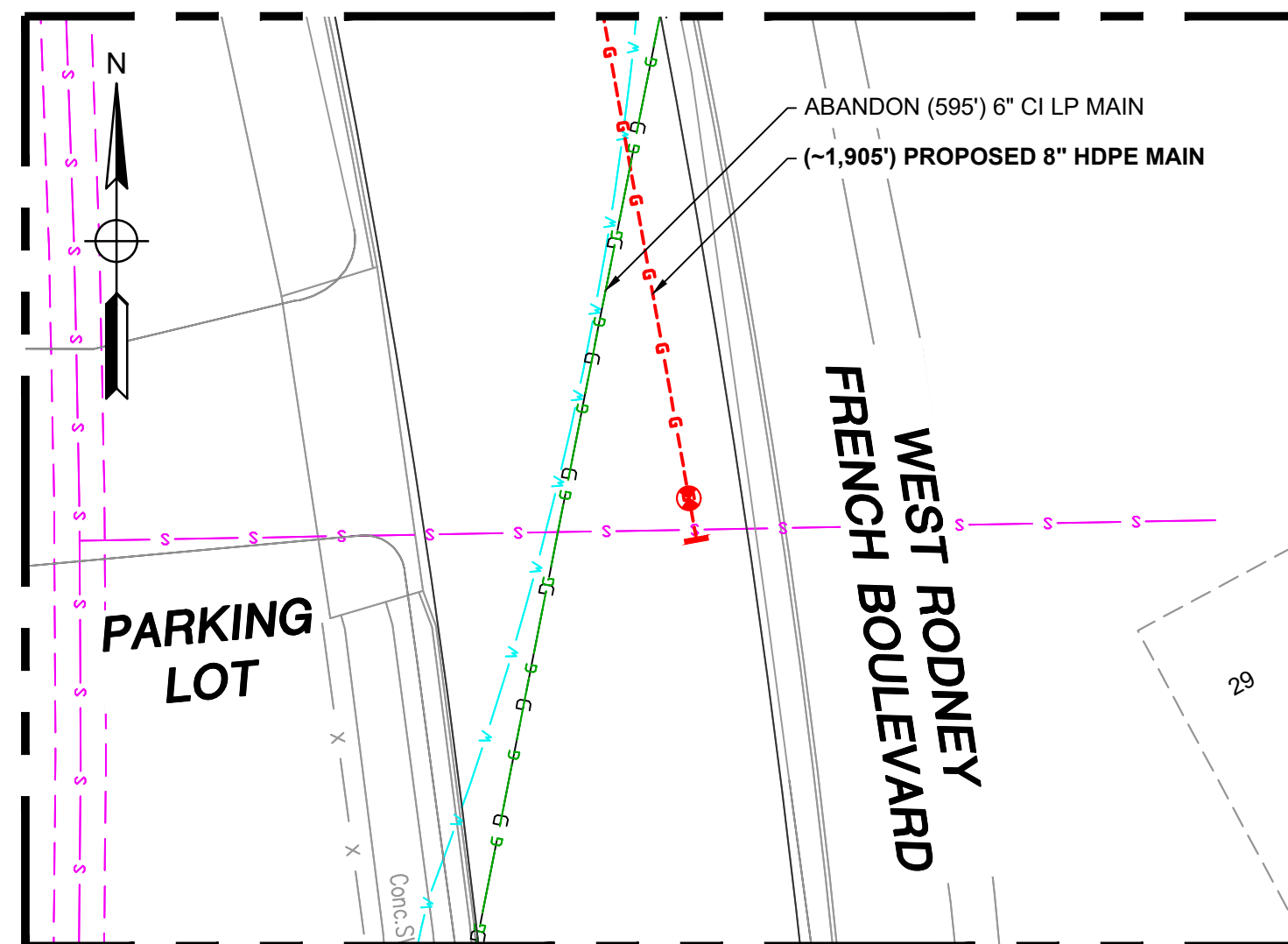
FINAL TIE-IN DETAIL #14
(SCALE: 1"=1')
(REFER TO SHEET #21)

<u>LEGEND</u>	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

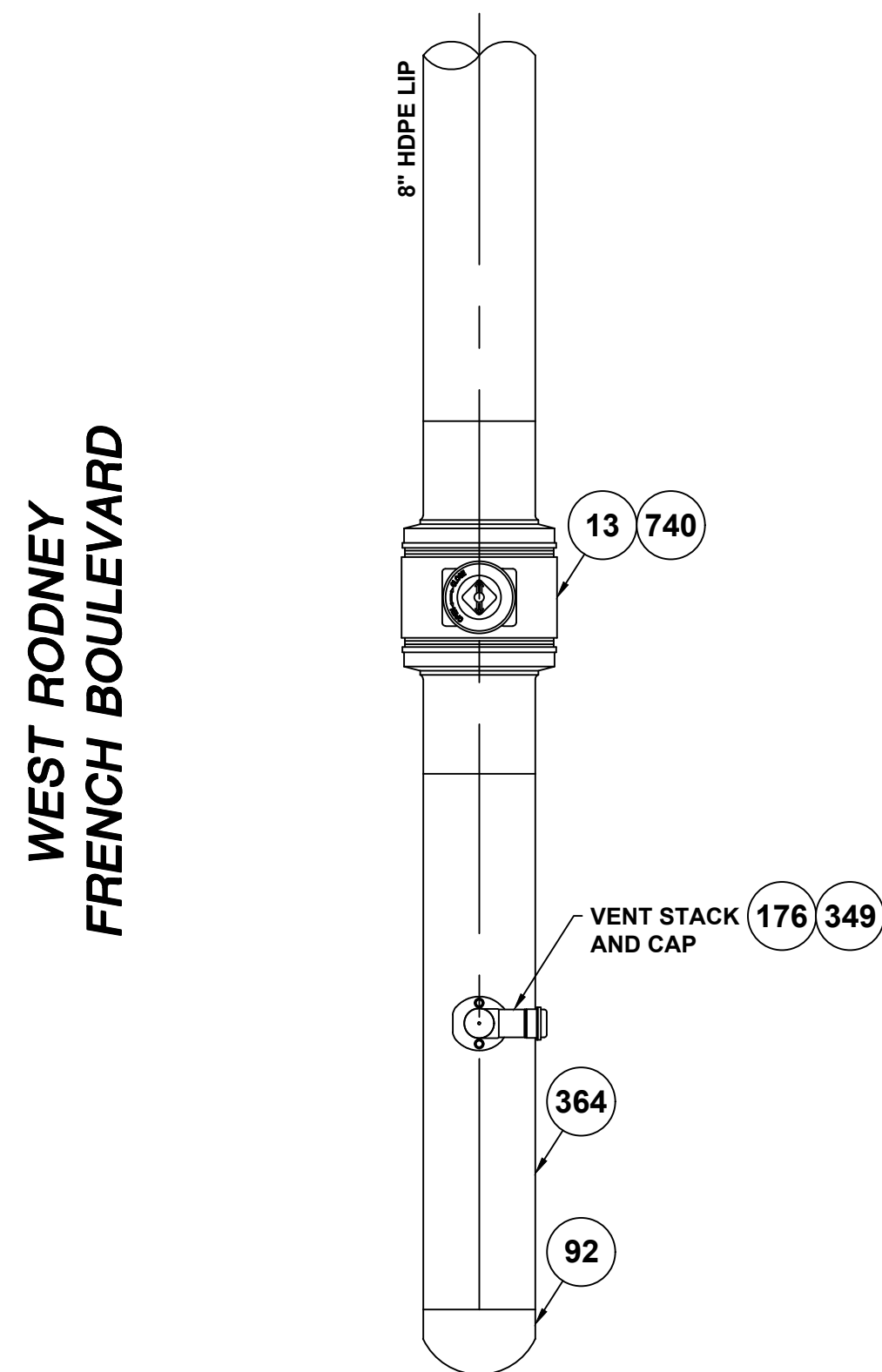
A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
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WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
TIE-IN DETAIL #14 AND BOM			
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)		SHEET 22 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	<div> SHEET NUMBER </div>
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-22
			A

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



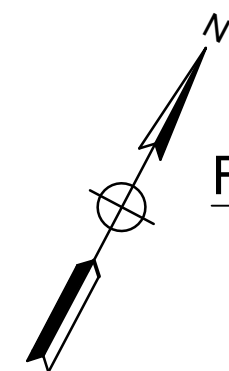
TIE-IN DETAIL #15 - PLAN VIEW

(SCALE: 1"=20')
(REFER TO SHEET #21)




FINAL TIE-IN DETAIL #15

(SCALE: 1"=1')
(REFER TO SHEET #21)



ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
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WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
TIE-IN DETAIL #15 AND BOM			
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS) SHEET 23 OF 30			
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-23
			A

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



LOCATION PLAN #6

(SCALE: 1"=20')

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVERSOURCE ENERGY			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1 NEW BEDFORD, MASSACHUSETTS			
LOCATION PLAN #6			
SCALE: 1"=20'		SHEET 24 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-24
			A

SEALED BY:

SIGNATURE

SEALED ON: _____

LICENSE
EXPIRATION: _____

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.

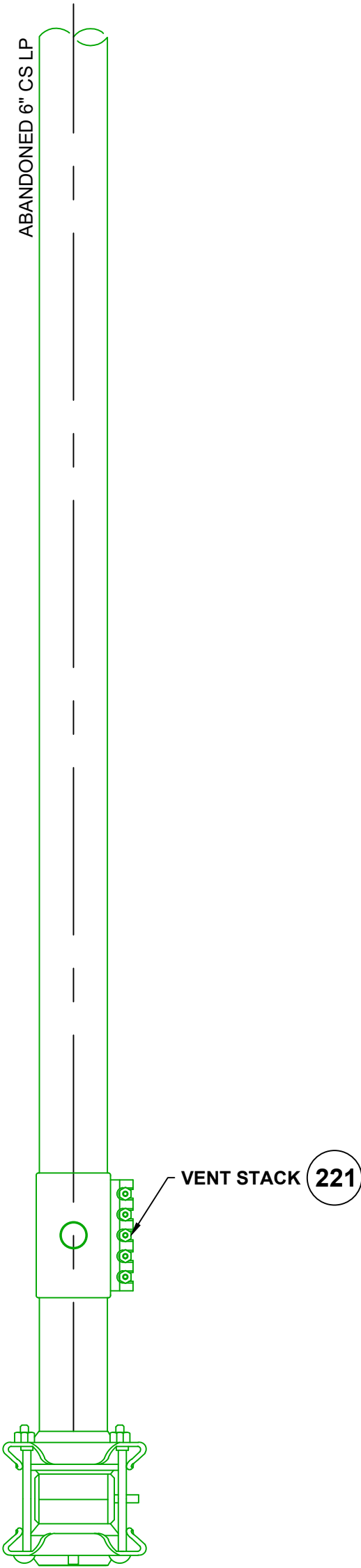
ENEngineering
29 BARTLETT STREET
MARLBOROUGH, MA 01752
TEL. (630) 353-4000
FAX (630) 535-7777
WWW.ENENGINEERING.COM

FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION



TIE-IN DETAIL #16 - PLAN VIEW
(SCALE: 1"=20')
(REFER TO SHEET #24)

WEST RODNEY FRENCH BOULEVARD



FINAL TIE-IN DETAIL #16
(SCALE: 1"=1')
(REFER TO SHEET #24)

WEST RODNEY FRENCH BOULEVARD - Tie-in #16: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
221	6" x 2"	578021	FITTING, CLAMP, SERVI-SEAL REPAIR, 6 IN DIA, 9 IN LG, W/ 2 IN OUTLET, FOR STEEL PIPE	1	EA

LEGEND	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVERSOURCE ENERGY			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
TIE-IN DETAIL #16 AND BOM			
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)			SHEET 25 OF 30
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-25
			REV. NO.
			A

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

SEALED BY:
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SIGNATURE

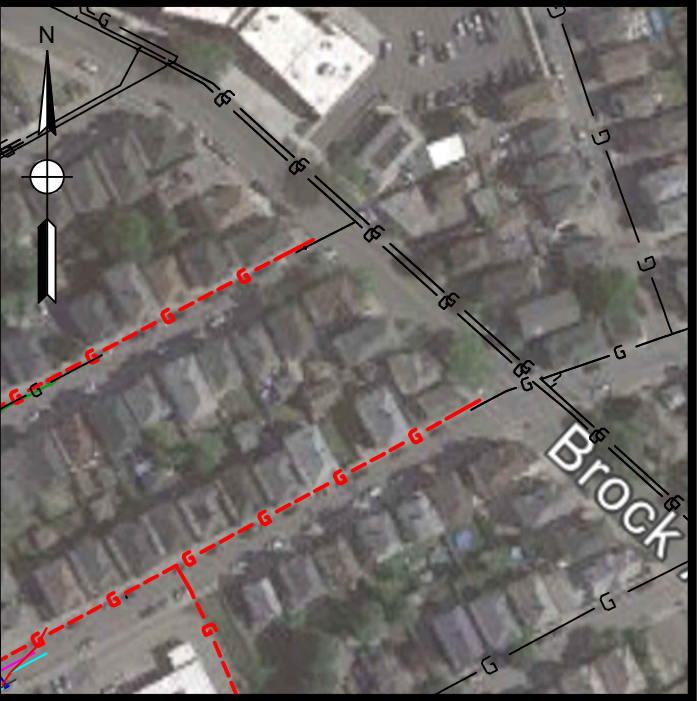
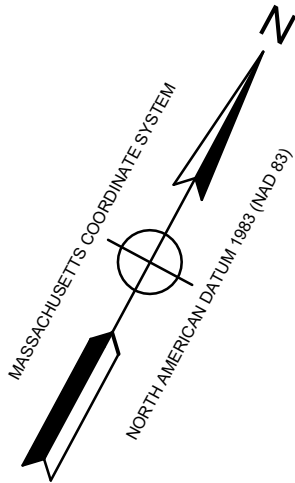
SEALED ON:
<div></div>
LICENSE EXPIRATION:
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DESIGNED IN ACCORDANCE WITH TITLE 49, PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS, LATEST EDITION.

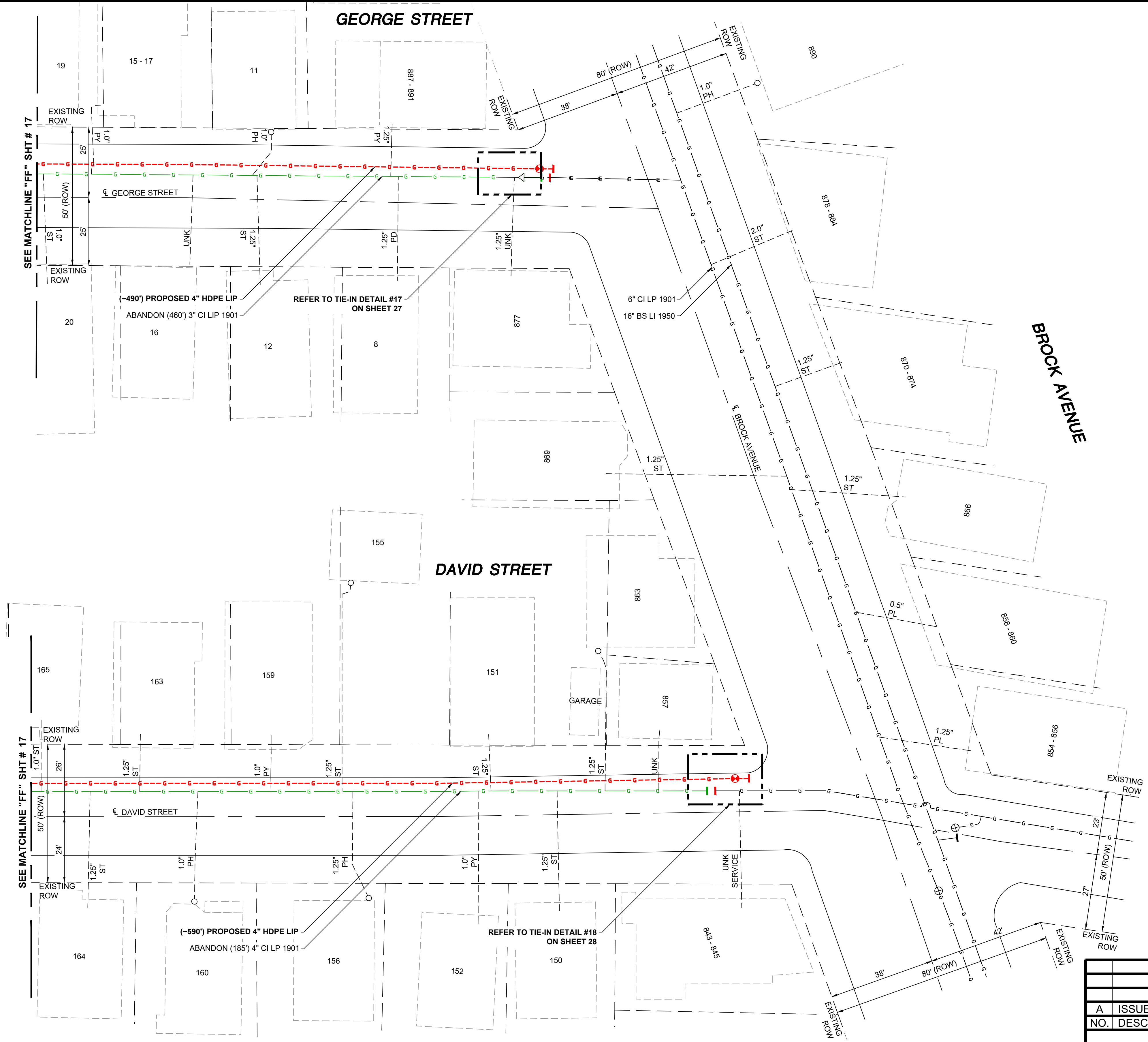
ENEngineering

29 BARTLETT STREET
MARLBOROUGH, MA 01752
TEL: (630) 353-4000
FAX: (630) 353-7777
WWW.ENENGINEERING.COM

FIELD VERIFY DIMENSIONS
PRIOR TO PIPE FABRICATION



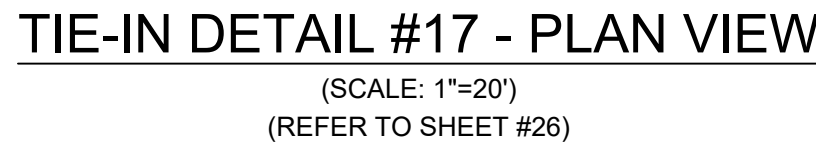
KEY MAP
(NOT TO SCALE)



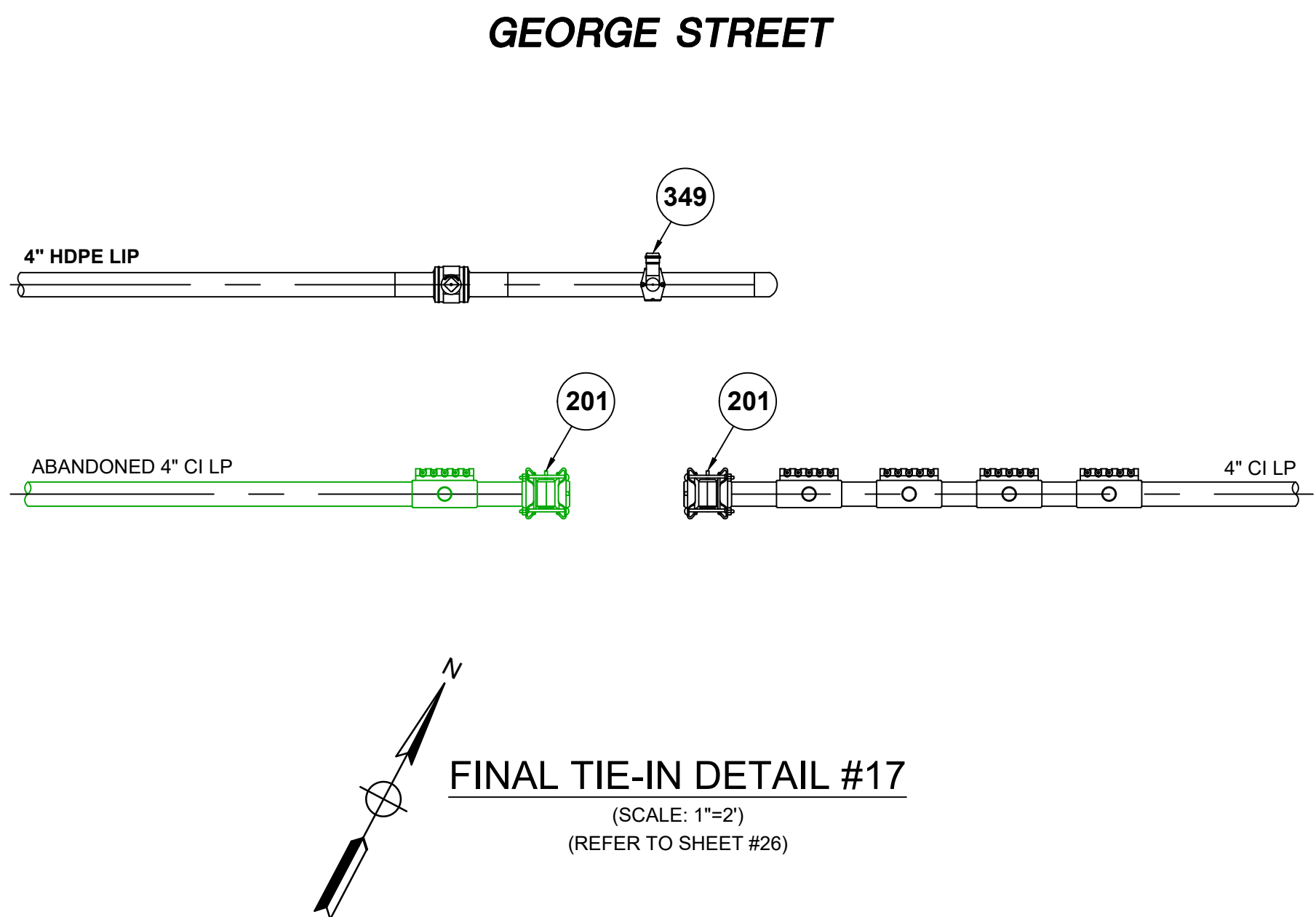
ISSUED FOR
REVIEW








A	ISSUED FOR REVIEW	12/23/2022	HM/AB	
NO.	DESCRIPTION	DATE	DW/CK/AP	
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
LOCATION PLAN #7				
SCALE: 1"=20'		SHEET 26 OF 30		
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-26	A

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



WEST RODNEY FRENCH BOULEVARD - Tie-in #17: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
201	4"	578128	FITTING,COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP , FOR CAST IRON PIPE	2	EA
349	2"	581633	FITTING,CAP, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, NSTAR M-410	1	EA



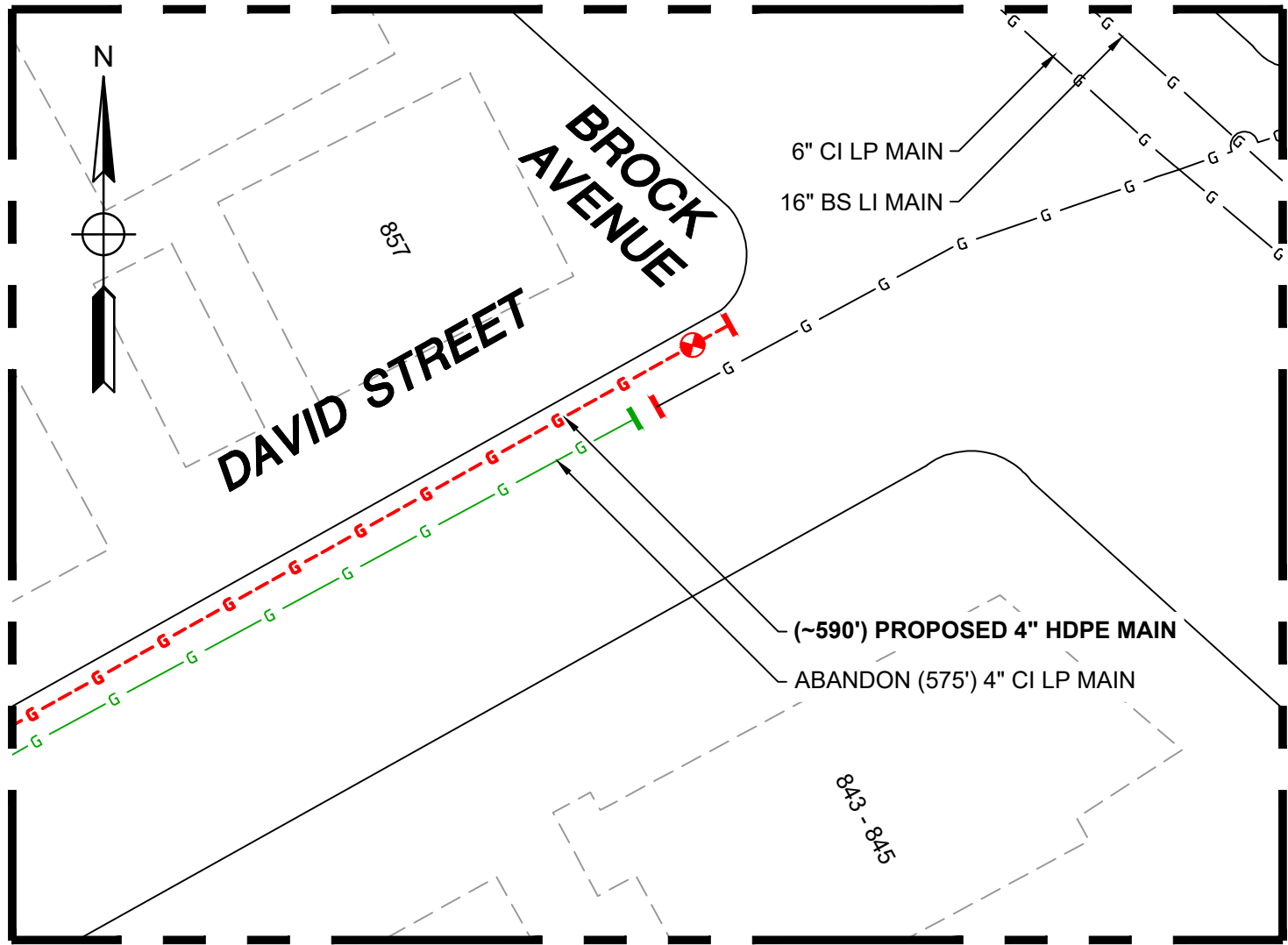
<u>LEGEND</u>	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVSOURCE			
ENERGY			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
TIE-IN DETAIL #17 AND BOM			
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)		SHEET 27 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-27
			A

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	LICENSE EXPIRATION: _____	<i>EN</i>Engineering 29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL (630) 353-4000 FAX (630) 532-7177 WWW.ENENGINEERING.COM	

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

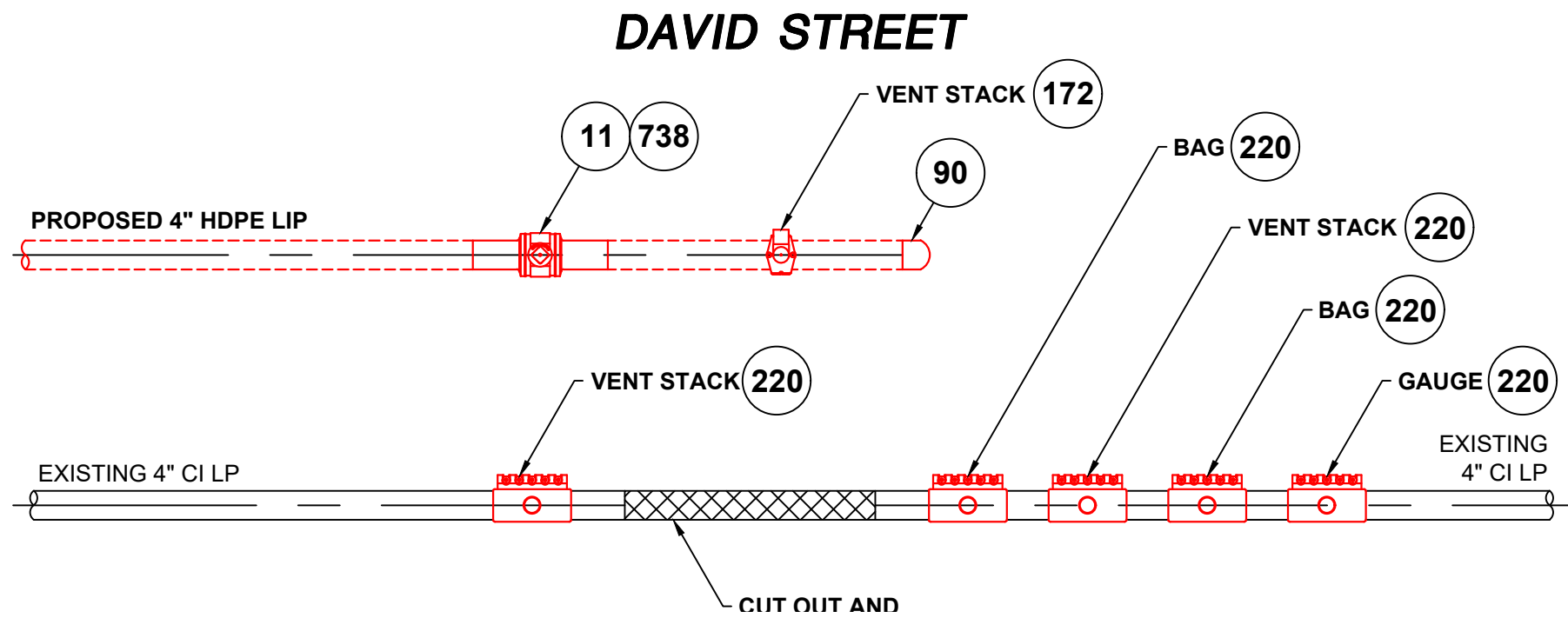


TIE-IN DETAIL #18 - PLAN VIEW

(SCALE: 1"=20')
(REFER TO SHEET #26)

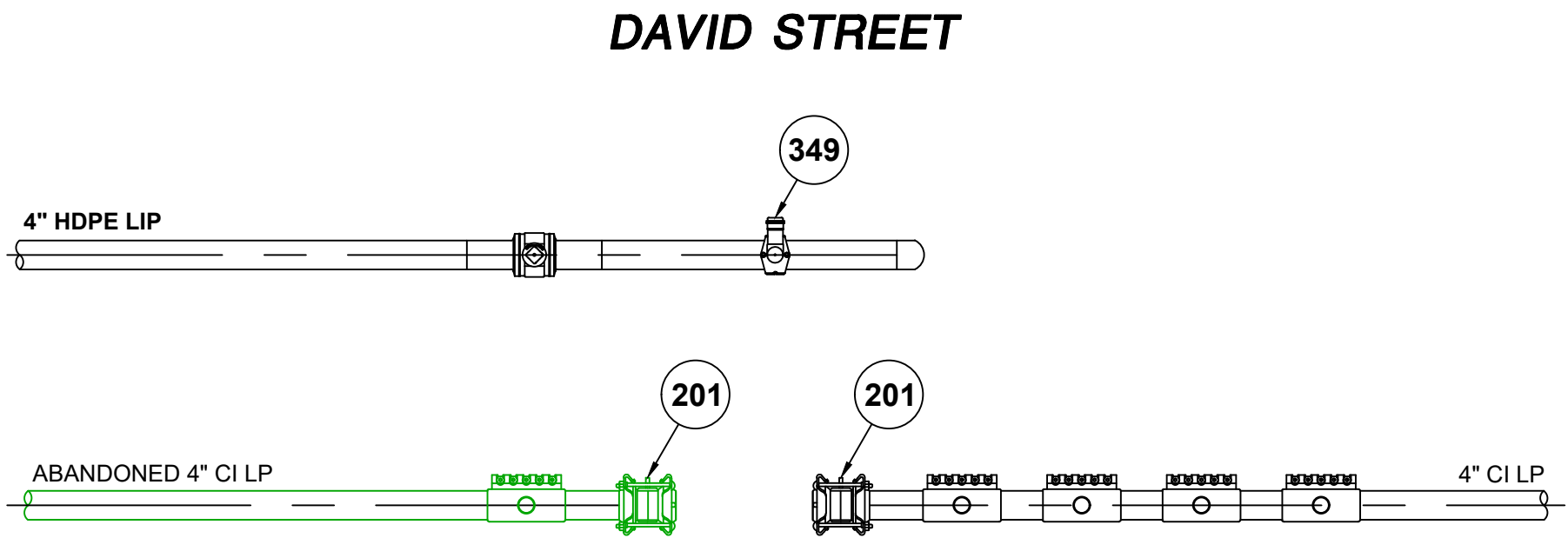
WEST RODNEY FRENCH BOULEVARD - Tie-in #18: Preparatory					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
11	4"	501002	VALVE,BALL, 4 IN, POLYETHYLENE, SDR 11, BUTT WELD, W/ FULL PORT OPENING, TO BE USED W/ BRAND SADDLE INST, P100	1	EA
90	4"	542538	CAP,PIPE, 4 IN IPS SDR 11, BUTT END, POLYETHYLENE, P100	1	EA
172	4" X 2"	584304	FITTING,TEE, 4 IN IPS X 2 IN IPS, ELECTROFUSION HIGH VOLUME TAPPING WITH BUTT FUSION OUTLET, HDPE, BLACK, WAS ITEM 577621	1	EA
220	4" x 2"	543028	CLAMP,PIPE, REPAIR, 4 IN IPS, SS, W/2 IN TAP	5	EA
738	5 1/4" square	577814	BOX VALVE, W/ 5-1/4 IN SQ NON-LOCKING LID, FOR 4 IN VALVES, PAVEMENT RISER RING IN 583488,	1	EA

WEST RODNEY FRENCH BOULEVARD - Tie-in R: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
201	4"	578128	FITTING,COUPLING, VENTED, SEAL & RESTRAINT, 4 IN, W/ END CAP , FOR CAST IRON PIPE	2	EA
349	2"	581633	FITTING,CAP, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, NSTAR M-410	1	EA



PREPARATORY TIE-IN DETAIL #18

(SCALE: 1"=2')
(REFER TO SHEET #26)



FINAL TIE-IN DETAIL #18

(SCALE: 1"=2')
(REFER TO SHEET #26)

LEGEND

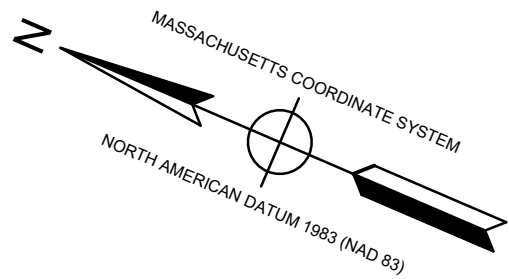
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	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

A	ISSUED FOR REVIEW	12/23/2022	HM/AB	
NO.	DESCRIPTION	DATE	DW/CK/AP	
REVISION STATUS				
EVERSOURCE ENERGY				
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1				
NEW BEDFORD, MASSACHUSETTS				
TIE-IN DETAIL #18 AND BOM				
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)			SHEET 28 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-28	A

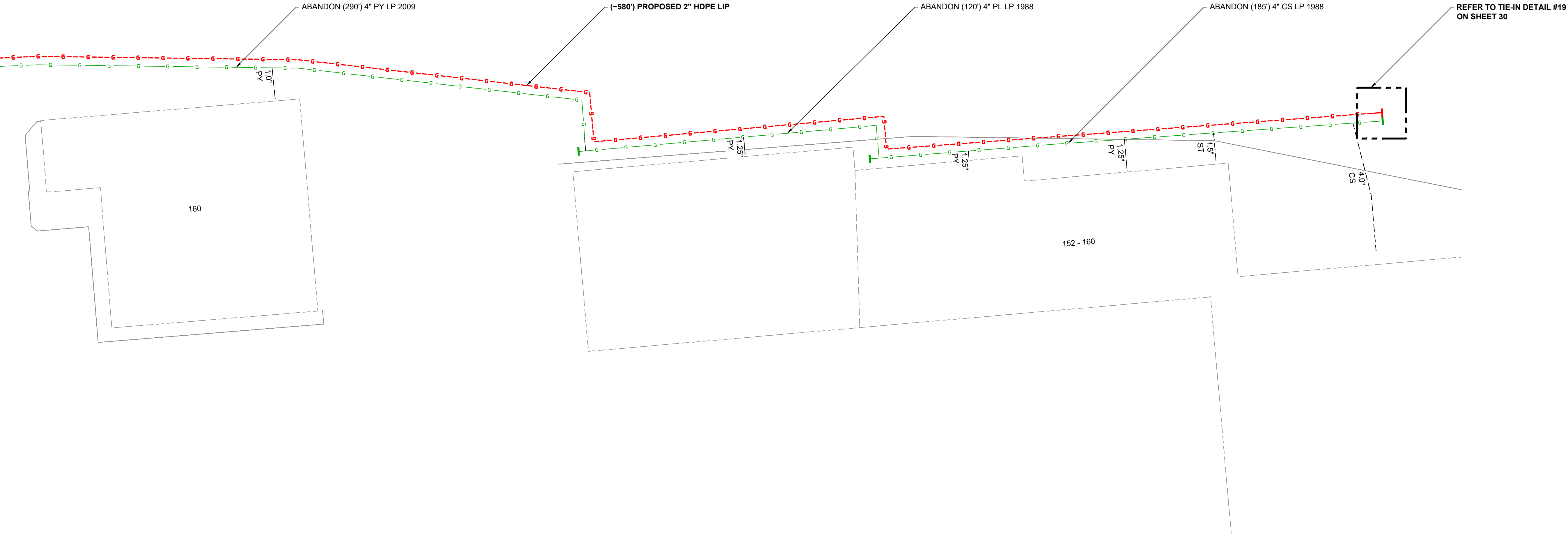
SEALED BY:	SEALED ON:	DESIGNED IN ACCORDANCE WITH TITLE 49, PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS, LATEST EDITION.	FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION
		EN Engineering	
SIGNATURE	LICENSE EXPIRATION:	29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL (630) 353-4000 FAX (630) 353-7777 WWW.ENENGINEERING.COM	

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



KEY MAP
(NOT TO SCALE)

SEE MATCHLINE "FF" SHT # 17

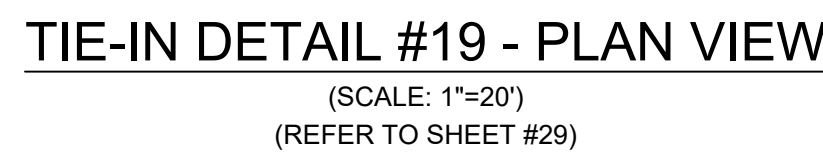


LOCATION PLAN #8
(SCALE: 1"=20')

ISSUED FOR
REVIEW

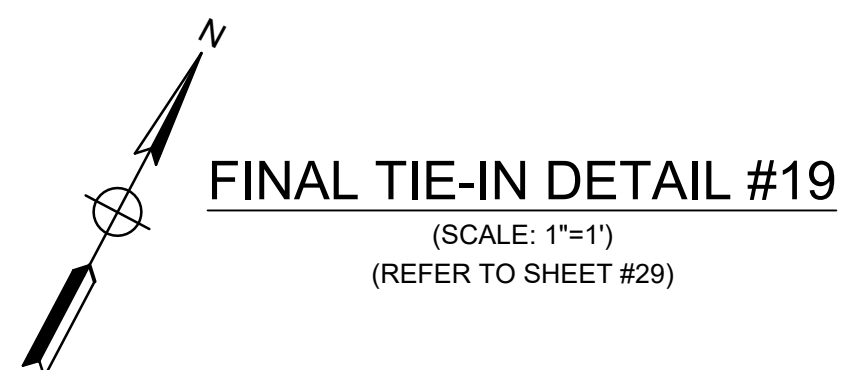
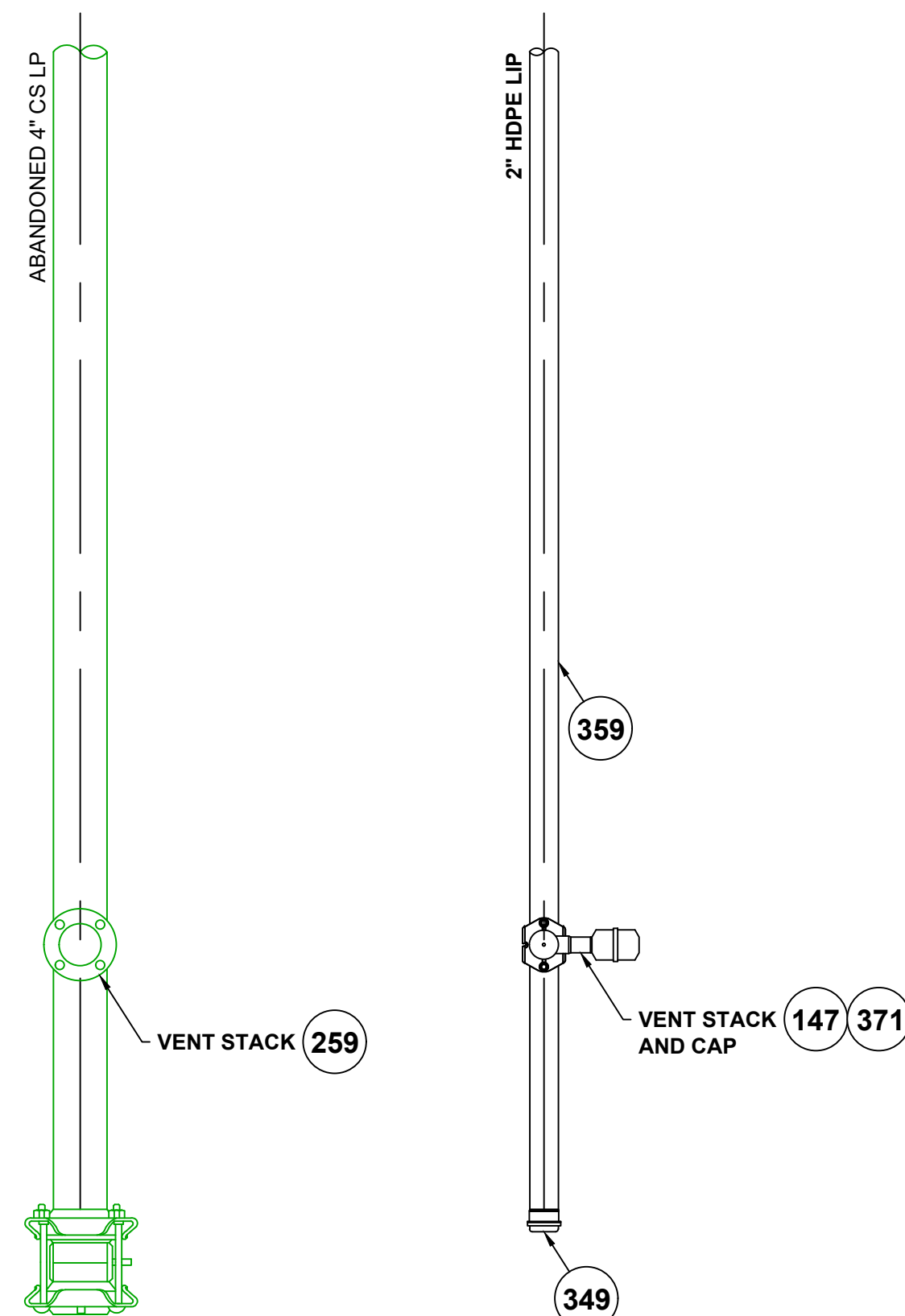
- NOTES:
- REFER TO GENERAL NOTES ON SHEET #2.
 - CONTRACTOR TO POT HOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION.








SEALED BY:		SEALED ON:		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.	FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION
SIGNATURE		EXPIRATION:			
				EN Engineering 29 BARTLETT STREET MARLBOROUGH, MA 01752 TEL (630) 353-4000 FAX (630) 353-7777 WWW.ENENGINEERING.COM	
REVISION STATUS					
EVERSOURCE ENERGY					
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1					
NEW BEDFORD, MASSACHUSETTS					
LOCATION PLAN #8					
SCALE: 1"=20' SHEET 29 OF 30					
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER	REV. NO.	
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-29	A	




WEST RODNEY FRENCH BOULEVARD - Tie-in #19: Final					
REQUIRED BILL OF MATERIALS					
ITEM	SIZE	MAXIMO NO.	Description	Quantity	Units
147	2" X 1"	560779	TEE,PIPE, NON-BLOWING, 2 X 1 IN IPS SDR 11, ELECTROFUSION X COMPRESSION ENDS, LIGHT WALL, POLYETHYLENE, PE3408/PE100	1	EA
259	2"	578396	FITTING,TEE, SHORTSTOPP, 2 IN, WELDED	1	EA
349	2"	581633	FITTING,CAP, METFIT, 2 IN IPS X 0.216 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, NSTAR M-410	1	EA
359	2"	592668	PIPE, 2 IN IPS SDR 11, 250 FT LG COIL, HDPE PE4710, BLACK, ASTM D2513, 102 PSIG, W/ YELLOW STRIPES, REPLACING ITEM 554007	10	LF
371	1"	583182	FITTING,CAP, METFIT, 1 IN IPS X 0.119 IN THK WALL SDR 11, ASTM F1924 , FOR CAPPING PE GAS DISTRIBUTION PIPE AND TUBING, REPLACED IN 542612	1	EA

OCEANSIDE PLAZA

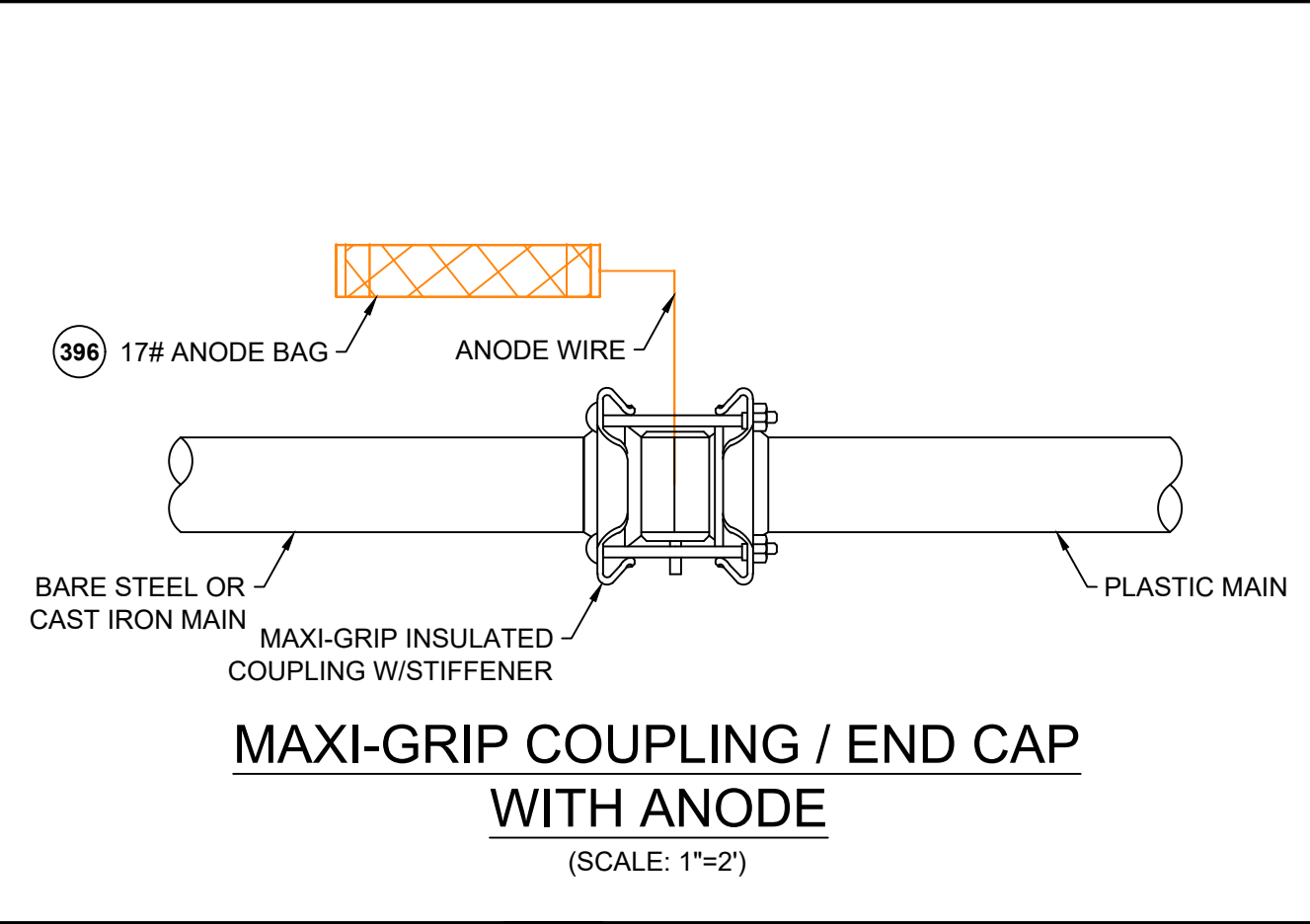
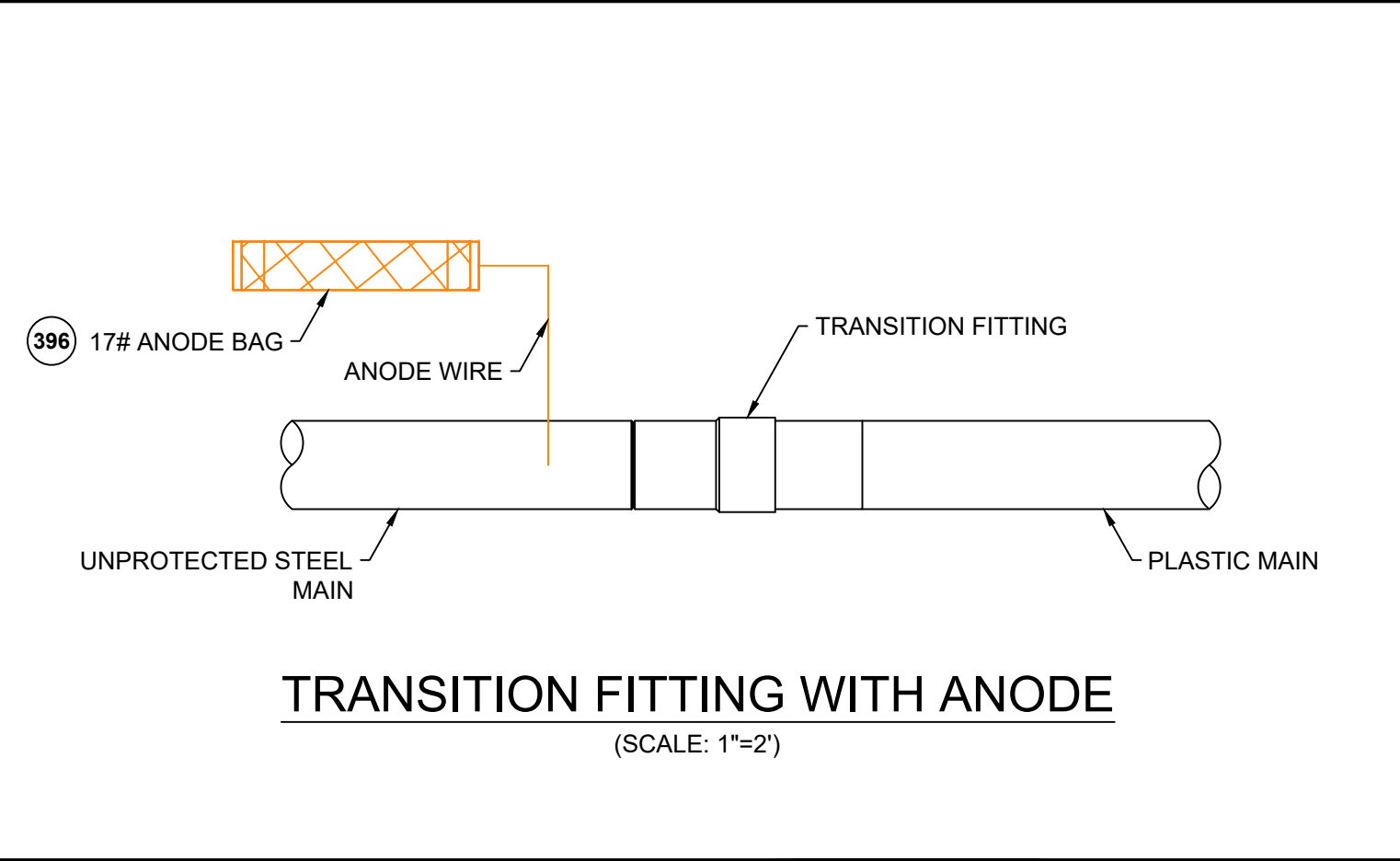
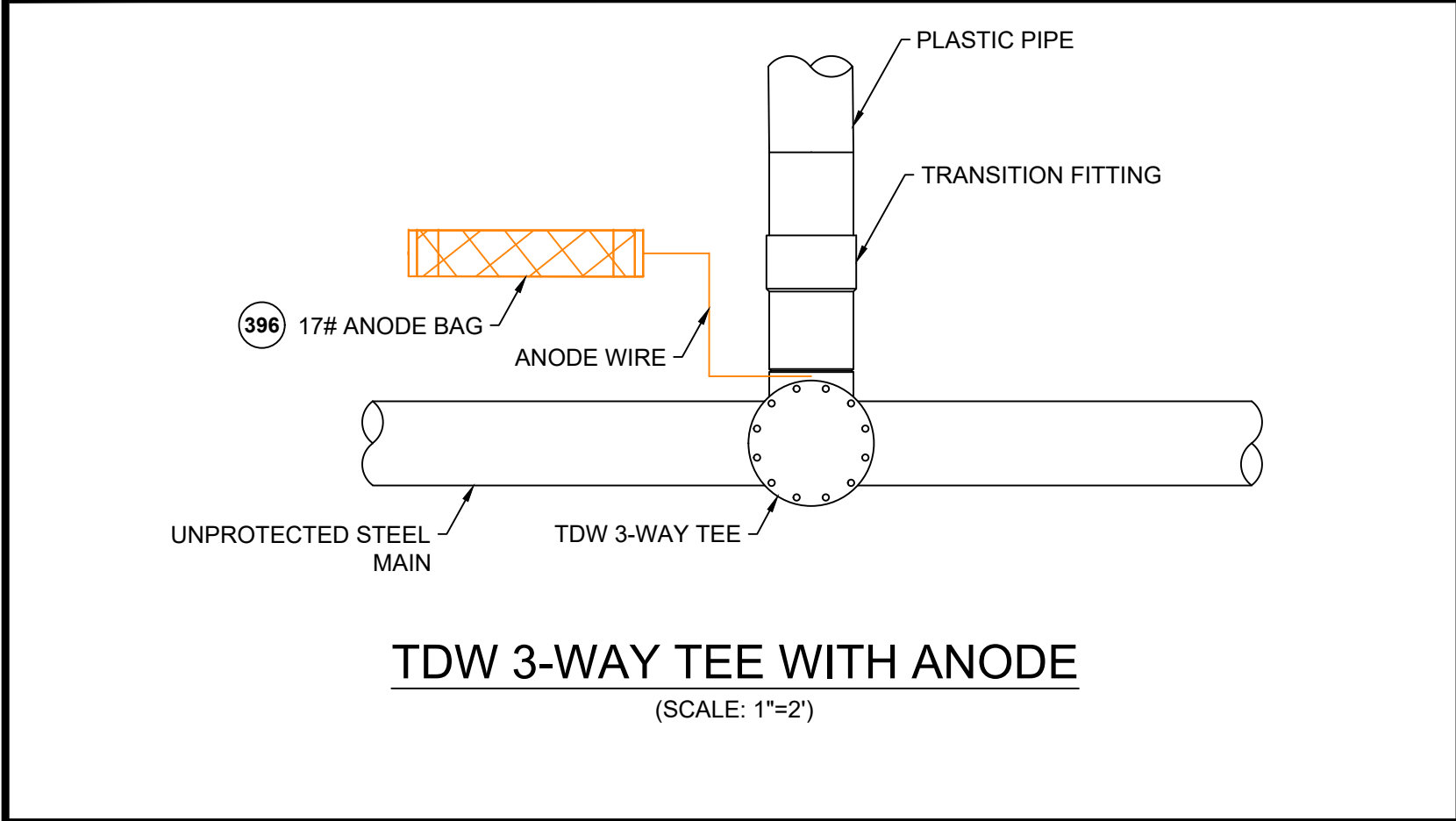
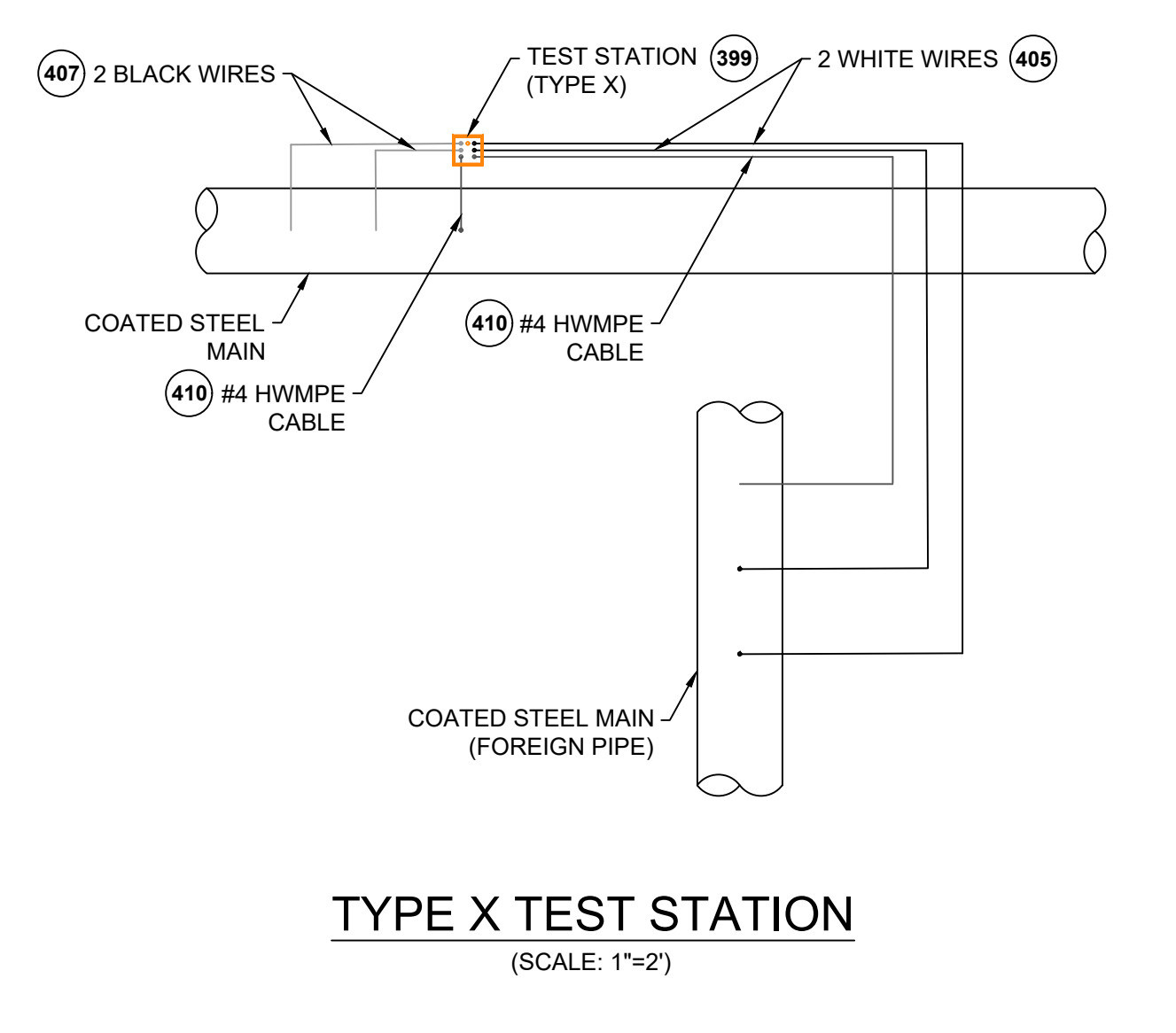
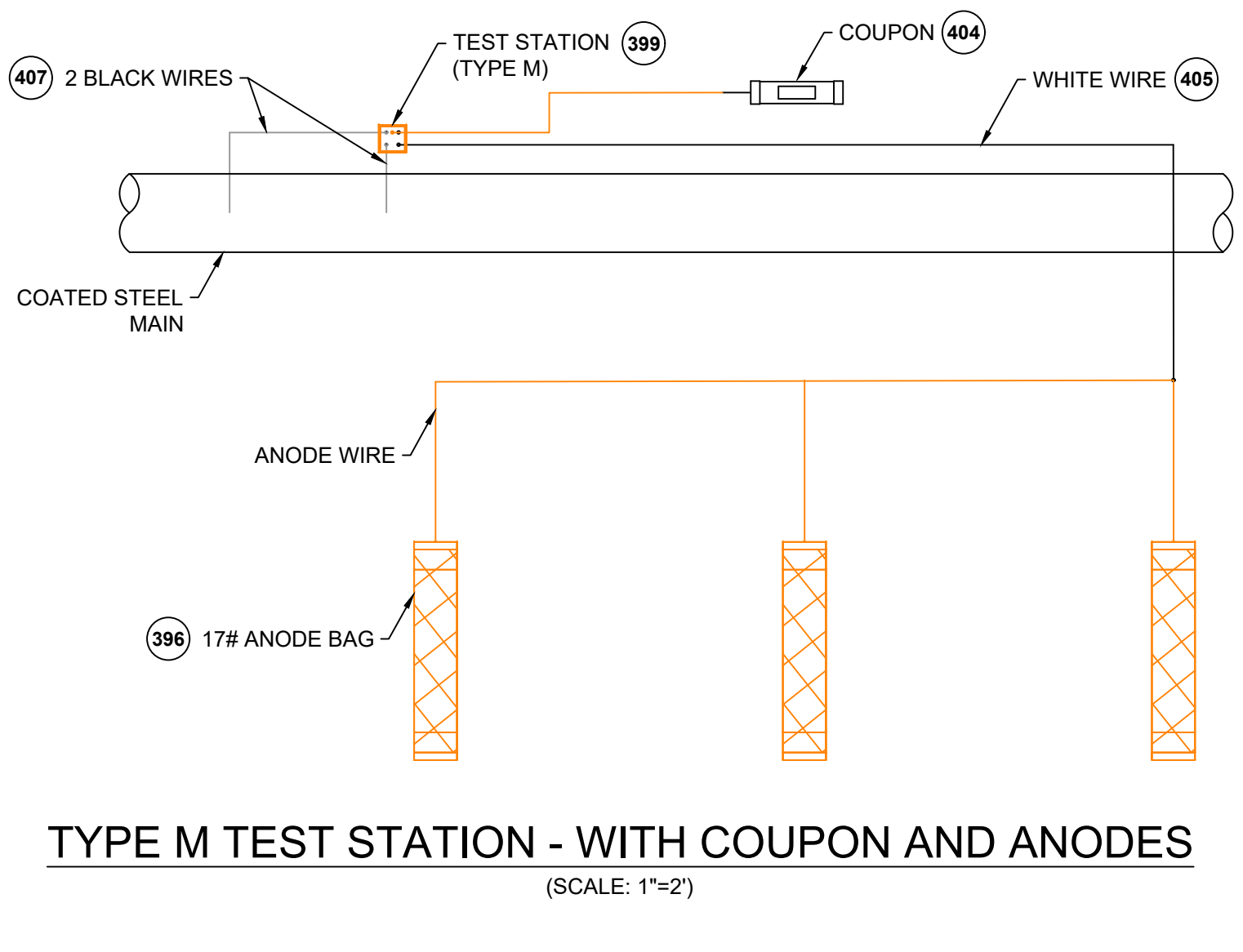
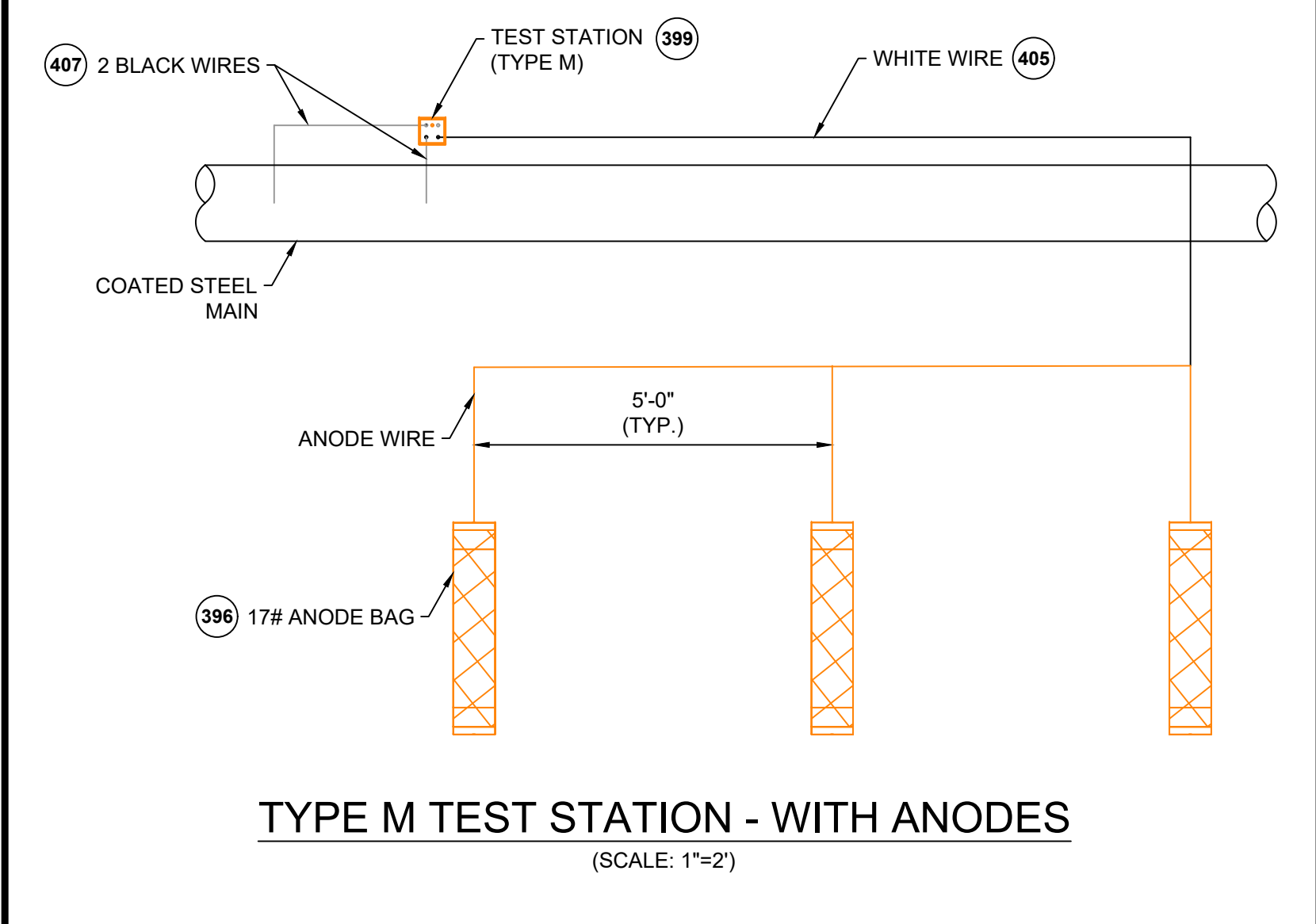
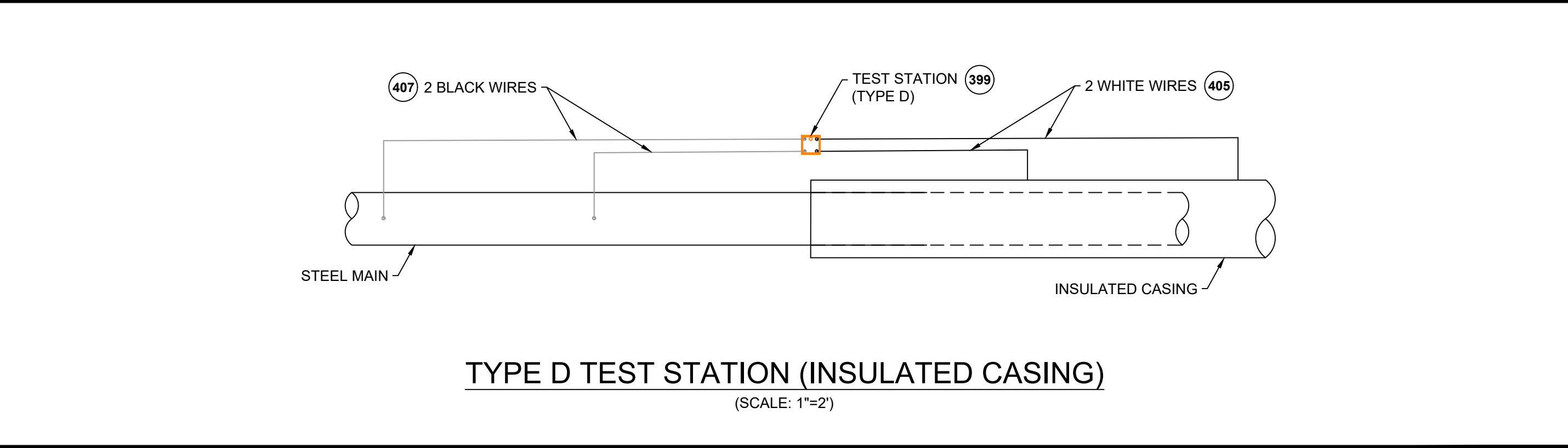
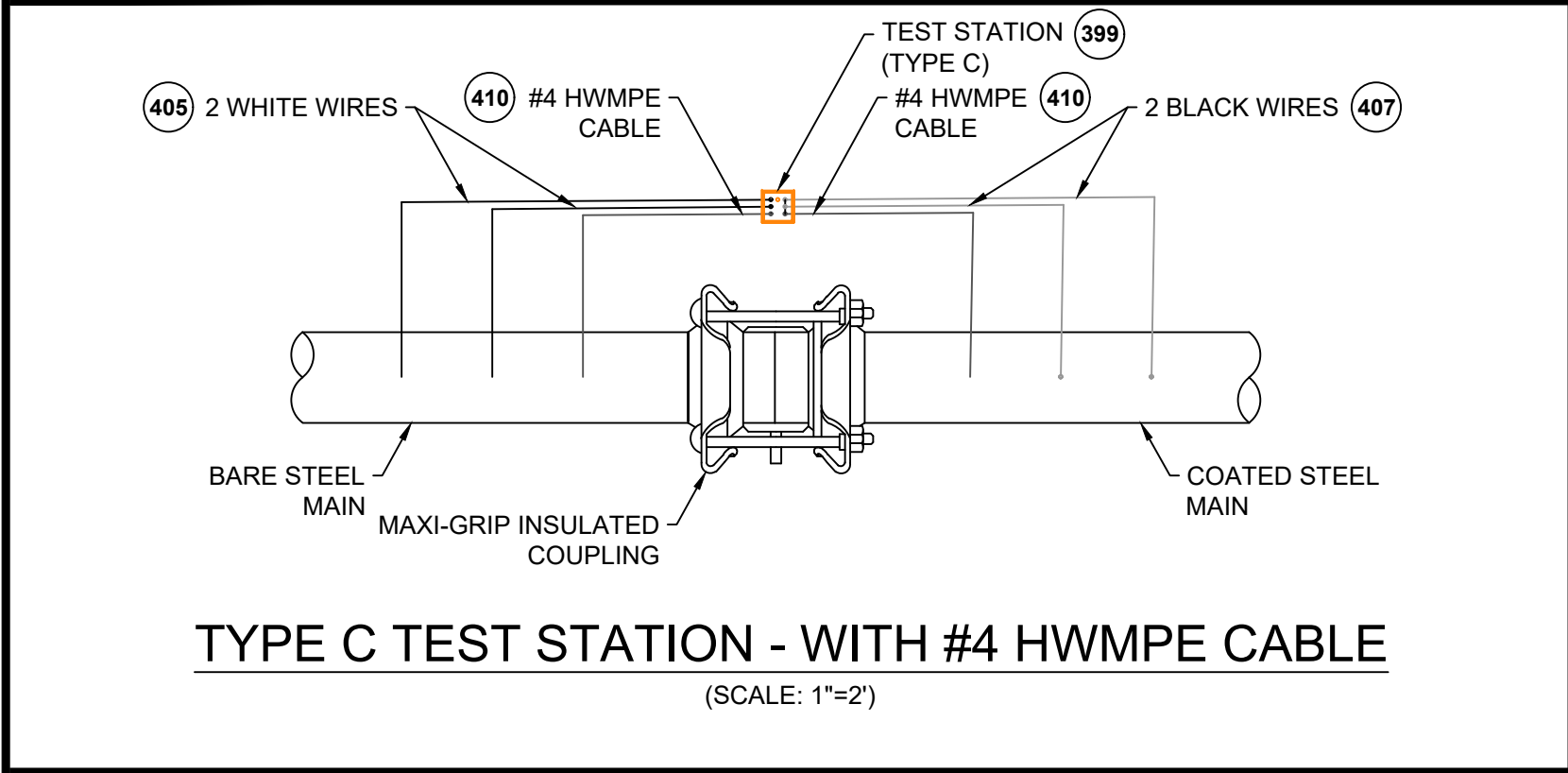
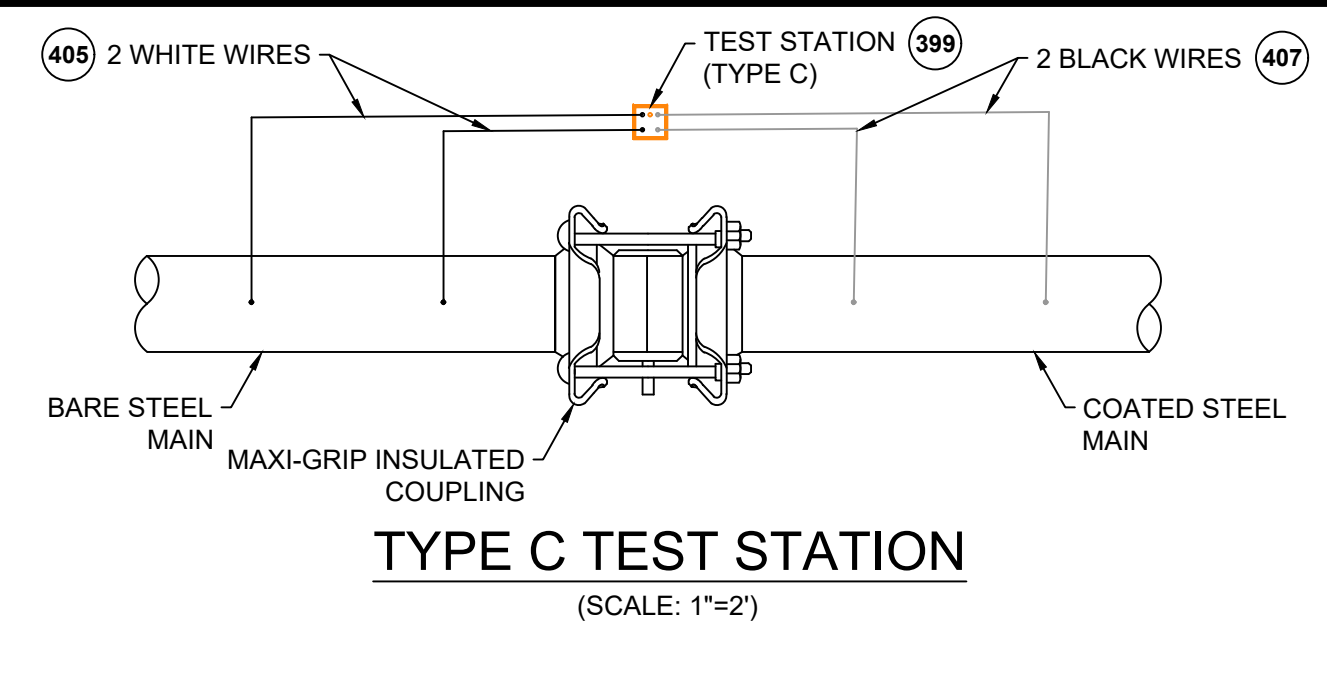
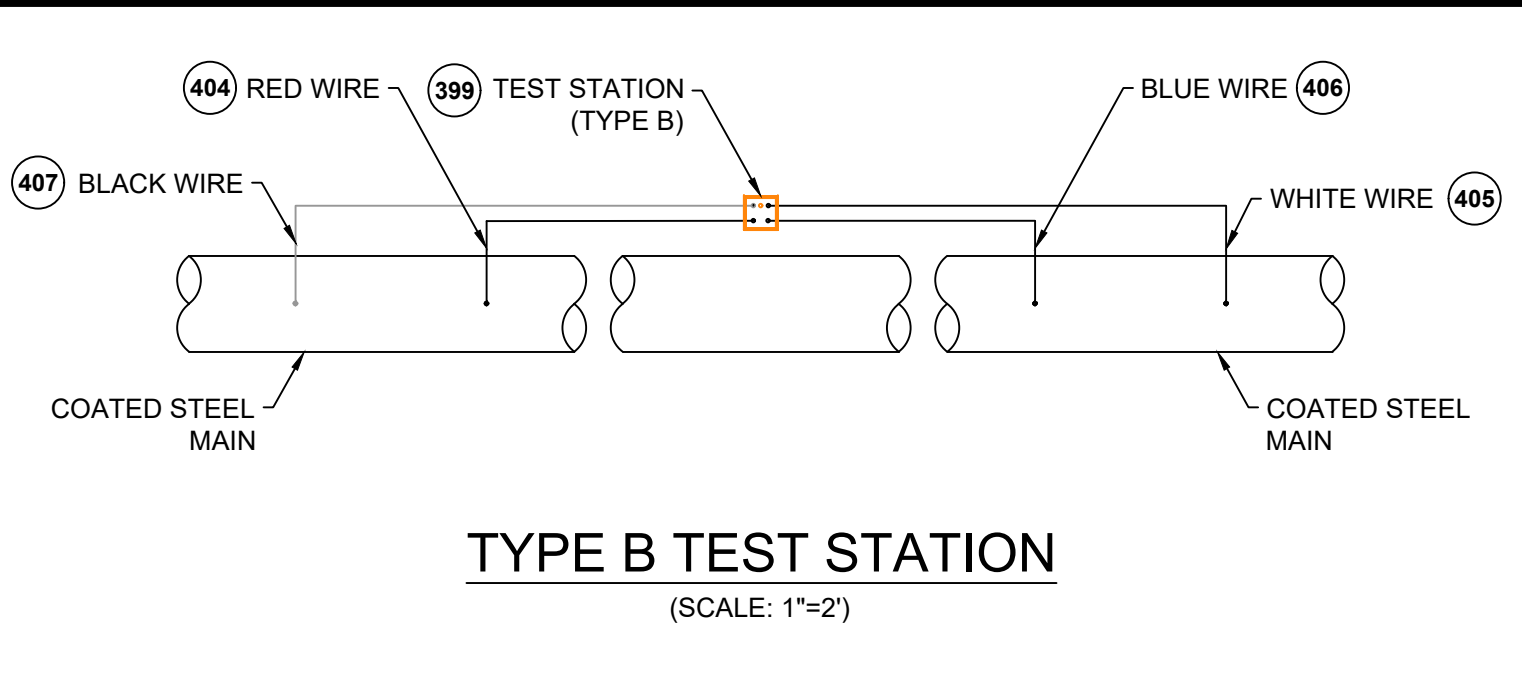
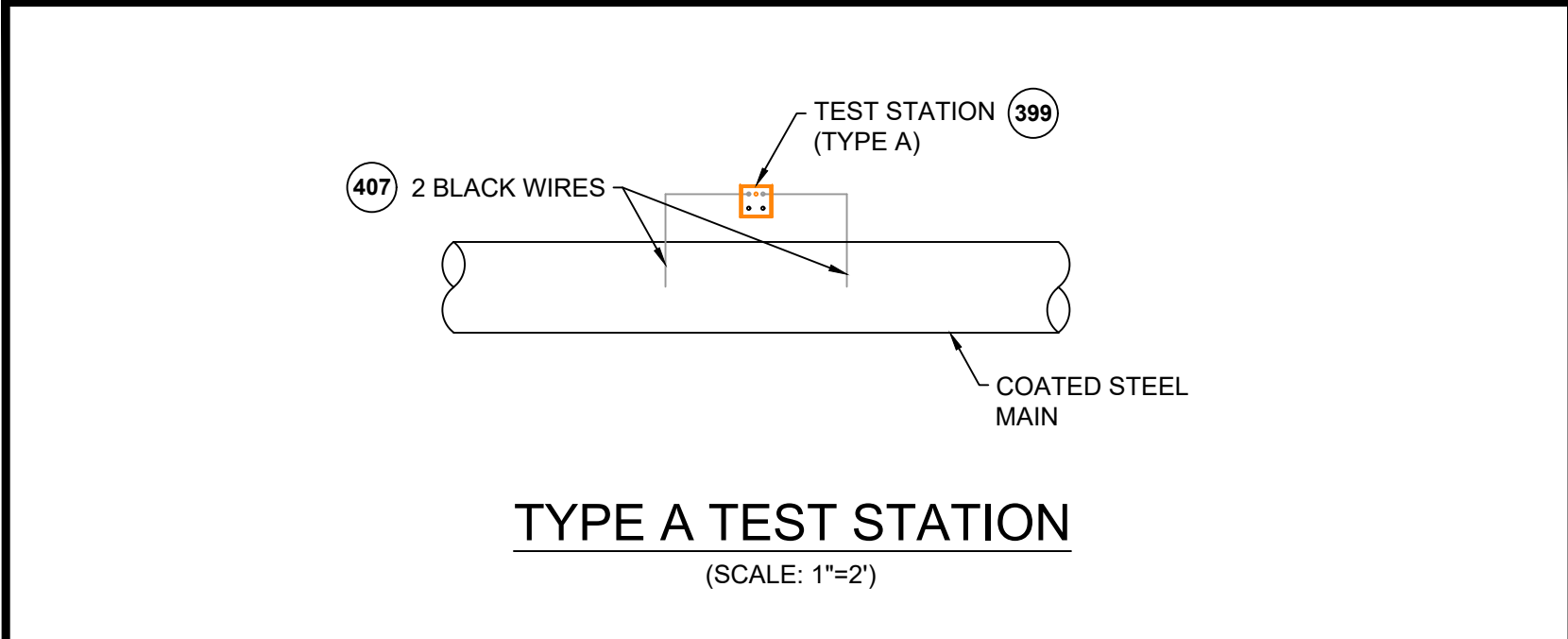


<u>LEGEND</u>	
	EXISTING GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	EXISTING GAS MAIN WITH SERVICE TRANSFERS
	EXISTING GAS MAIN WITH PRESSURE INCREASE
	PROPOSED GAS MAIN
	EXISTING FITTING
	PROPOSED FITTING

ISSUED FOR
REVIEW

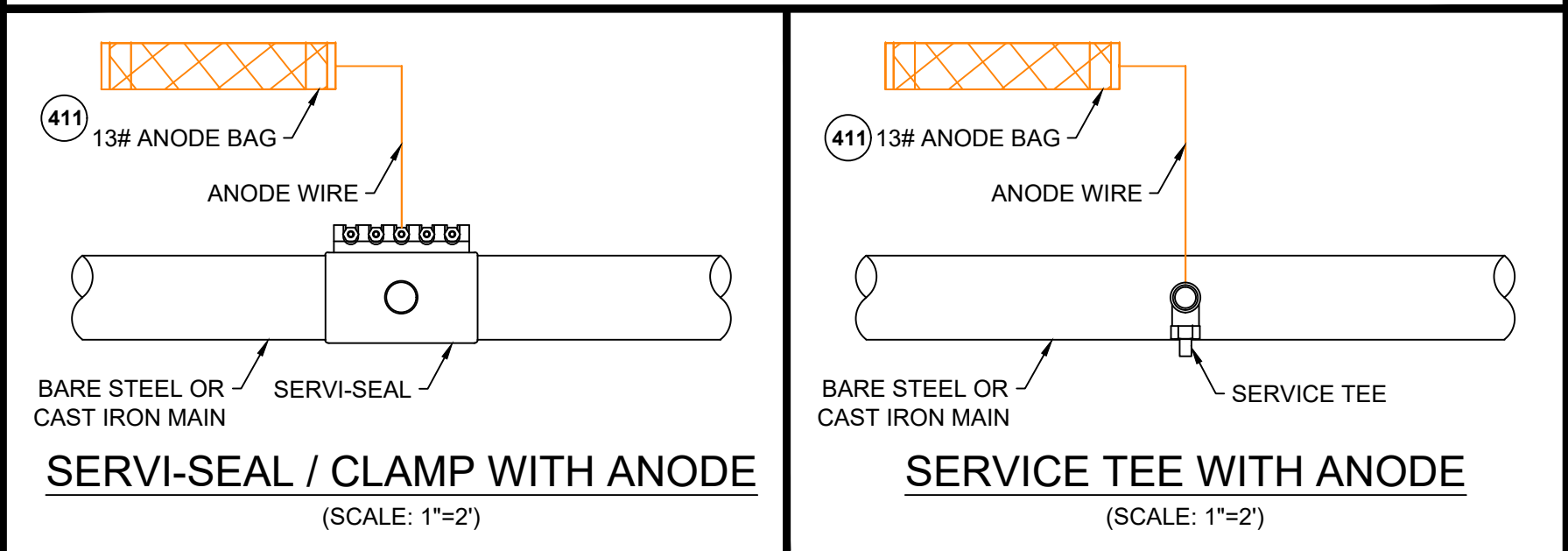
A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
TIE-IN DETAIL #19 AND BOM			
SCALE: AS NOTED (DO NOT SCALE FROM DRAWINGS)		SHEET 30 OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-30
			A

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



CATHODIC PROTECTION BILL OF MATERIALS			
ITEM	MAXIMO NO.	DESCRIPTION	UNITS
396	577776	ANODE,BAG, 17 LB NET, HIGH POTENTIAL MAGNESIUM, W/ 10 FT #10 AWG TW ORANGE LEAD WIRE, PACKED IN CARDBOARD BOX 42 LB TOTAL WEIGHT	EA
397	517626	CONNECTOR, SPLIT BOLT, 12 SOLID - 10 STRANDED, CU TO CU, HOUSING (COVER) MATE IN 590389,	EA
398	590389	HOUSING, 50 V MAX, 10 AWG MAX, FOR PROTECTING TRACER WIRE SPLICES, USED WITH CONNECTOR IN 517626, 10/BAG	EA
399	590871	BOX VALVE, TEST STATION, CP TEST #178, 10-1/4 IN DIA. LID, 8-3/8 IN I.D. 16 IN H., ASTM A48 CL 25 CAST IRON, FOR OFF-ROAD USE ONLY	EA
400	508567	POWDER, CARTRIDGE, TYPE IS F-33, ALLOY , CAP COLOR CLEAR, 15 GM CHARGE, 20/PAC, FOR STEEL PIPE	BOX
401	559168	SLEEVE,ELECTRICAL, #14 TO 10 AWG, W/ THERMITE WELDER, FOR CATHODIC PROTECTION	EA
402	584045	EDI CONCENTRIC COUPON ASSEMBLY INCLUDING UCB-ZIN-LW010, 10 FT OF CABLE	ES
403	603126	EDI CONCENTRIC COUPON ASSEMBLY INCLUDING UCB-ZIN-LW025, 25 FT OF CABLE	ES
404	603140	WIRE,ELECTRICAL, THHN, 1/C, #10 AWG, STRANDED, RED, INSULATED, CU, 500 FT SPOOL, WIRE	ROLL
405	578415	WIRE,ELECTRICAL, THHN, 1/C, #10 AWG, STRANDED, WHITE, INSULATED, CU, 500 FT SPOOL, WIRE	ROLL
406	603141	WIRE,ELECTRICAL, THHN, 1/C, #10 AWG, STRANDED, BLUE INSULATED, CU, 500 FT SPOOL, WIRE	ROLL
407	603139	WIRE,ELECTRICAL, THHN, 1/C, #10 AWG, STRANDED, BLACK, INSULATED, CU, 500 FT SPOOL,WIRE	ROLL
408	500804	WELDER,THERMITE, THERMITE, FOR GAS PIPE, #12 CABLE,HORIZONTAL STEEL PIPE 4 IN AND LARGER DIAMETER	EA
409	500805	WELDER,THERMITE, THERMITE, FOR GAS PIPE, #12 CABLE, HORIZONTAL STEEL PIPE 3/4 - 3-1/2 IN DIAMETER	EA
410	513850	CABLE, INSULATED, CATHODIC PROTECTION, 1/C, #4 AWG, 7 STR, 600 V, BLACK, HWMPE, CU, 1000 FT ROLLS	FT
411	505818	ANODE,BAG, 2.5 X 2.5 X 4.5 IN, 10 FT LG, 3 LB, MAGNESIUM, Alternate IN 577776	EA
575	508572	PRIMER, 4 GAL/CASE, BROWN, FOR WAX TAPE, APPLICATION TEMP 0 TO 230 F, TEMCOAT 3000	EA
576	503673	TAPE,WAX, 9 FT LG X 4 IN W, 24 ROLLS/CS, ABOVE AND BELOW GROUND APPLICATIONS, TR-#2A WAX, ALUMINUM	ROLL
577	603769	TRENTON-FILL POR PM-GP, 140 FA, FOR FILLING VOIDS & IRREGULAR SPACES PRIOR TO WRAPPING W/WAX TAPE, OF TO 110F APPLICATION TEMPERATURE, 6 BLOCKS/CASE,	CASE
	603423	TAPE,WAX, 9 FT LG X 6 IN W X 70-90 MIL THK, 16 ROLLS/CS, ABOVE AND BELOW GROUND APPLICATIONS, TR-#2A WAX, ALUMINUM	ROLL

- NOTES:
- ALL TEST STATION BOXES SHOULD BE INSTALLED IN A SAFE LOCATION WHERE ONE INDIVIDUAL CAN SAFELY OPEN AND ACCESS THE TEST WIRES. ALL TEST WIRES INSIDE THE BOX SHOULD HAVE ENOUGH SLACK ON THE WIRES SO THEY CAN EXTEND A MINIMUM OF 12" ABOVE GRADE.
 - FOR TYPE A TEST STATIONS, THE TWO WIRES SHOULD BE THERMITE WELDED TO THE COATED STEEL MAIN AND BE THE SAME COLOR. (COUPONS COULD BE ADDED TO THE TEST STATION TYPE).
 - FOR TYPE B TEST STATIONS, EACH OF THE FOUR WIRES SHOULD BE A DIFFERENT COLOR AND DOCUMENTED
 - FOR TYPE C TEST STATIONS, THE WIRES SHOULD BE THE SAME COLOR ON EACH SIDE OF THE INSULATED COUPLING. (ANODES AND/OR COUPONS COULD BE ADDED TO THIS TEST STATION TYPE).
 - FOR TYPE D TEST STATIONS WHICH ARE AT A CASING, WHITE WIRES ARE NORMALLY INSTALLED ON THE STEEL CASING AND BLACK WIRES ARE INSTALLED ON THE CARRIER PIPE. (ANODES AND/OR COUPONS COULD BE ADDED TO THIS TEST STATION TYPE).
 - FOR TYPE M TEST STATIONS, THE TWO WIRES THERMITE WELDED TO THE CARRIER PIPE SHOULD BE THE SAME COLOR WIRE. THERE IS ALSO MAGNESIUM ANODE(S) WIRE(S) LOCATED INSIDE THE TEST STATION BOX.THE WIRE COLOR (TYPICALLY ORANGE) FOR THE ANODES. IF THE ANODE WIRES ARE SPLICED TO A COMMON ANODE HEADER CABLE, THE ANODE HEADER CABLE SHOULD BE A (WHITE OR RED) DIFFERENT COLOR WIRE THAN THE WIRE THAT WAS THERMITE WELDED TO THE CARRIER PIPE. AT A TYPE M TEST STATION, NO MAGNESIUM ANODES SHOULD BE DIRECTLY THERMITE WELDED TO THE CARRIER PIPE OR IN CONTACT WITH THE CARRIER PIPE. THE ANODE HEADER WIRE OR INDIVIDUAL ANODE WIRES SHOULD TERMINATE INSIDE THE TEST STATION BOX. ANODES SHOULD BE SPACED A MINIMUM OF 5' ON CENTER FROM EACH OTHER AND A MINIMUM OF 12" AWAY AND BELOW THE BOTTOM OF THE STEEL MAIN.
 - IF COUPONS ARE TO BE INSTALLED , FIRST REMOVE THE PROTECTIVE LABEL COVERING THE STEEL COUPON AND THE RED STICKERS COVERING EACH SENSING PORT. CLEAN THE ENTIRE STEEL COUPON SURFACE WITH ALCOHOL TO REMOVE THE CORROSION INHIBITOR. PLACE THE COUPON ASSEMBLY APPROXIMATELY 12" FROM THE GAS MAIN BEING MONITORED WITH THE SENSING PORTS FACING THE GAS MAIN. THE COUPON ASSEMBLY SHOULD BE LOCATED ADJACENT TO THE BOTTOM PORTION OF THE GAS MAIN, ANYWHERE BETWEEN 3 O'CLOCK AND 9 O'CLOCK. THE SOIL BETWEEN THE COUPON AND THE MAIN SHOULD BE WELL COMPACTED AND CONTAIN NO ROCKS LARGER THAN A CENTIMETER IN DIAMETER OR FOREIGN MATERIAL.
 - ONE (1) 3# ANODE (MINIMUM) SHALL BE INSTALLED TO PROTECT THE CLAMPS ON EACH 10-FOOT SPAN OF PIPE. EACH 10-FOOT SPAN OF PIPE MUST BE A CONTINUOUS SECTION OF STEEL. CLAMPS ON NON-CONTINUOUS SECTIONS OF STEEL EVEN IF THEY ARE WITHIN 10 FEET OF EACH CANNOT BE PROTECTED BY THE SAME ANODE.
 - REFER TO CONSTRUCTION STANDARD CS-500 SECTION IV.G WHICH PROVIDES GENERAL GUIDANCE REGARDING "WRAPPING" FOR CORROSION PROTECTION. CS-500 SECTION IV.G.5. DESCRIBES THE BASIC STEPS REQUIRED TO WRAP LEAK REPAIR CLAMPS.



ISSUED FOR REVIEW			
A	ISSUED FOR REVIEW	12/23/2022	HM/AB
NO.	DESCRIPTION	DATE	DW/CK/AP
REVISION STATUS			
EVERSOURCE ENERGY			
WEST RODNEY FRENCH BOULEVARD MAIN RELAY - PHASE 1			
NEW BEDFORD, MASSACHUSETTS			
STANDARD CORROSION DETAILS			
SCALE: 1"=2' (DO NOT SCALE FROM DRAWINGS)		SHEET X OF 30	
DRAWN BY / DATE	CHECKED BY / DATE	APPROVED BY / DATE	SHEET NUMBER
LR 12/09/2022	AB 12/23/2022		MA-NEB-PIP-23-013-0X
			A

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

SEALED BY:

SIGNATURE

SEALED ON:

LICENSE EXPIRATION:

DESIGNED IN ACCORDANCE WITH TITLE 49, PART 192 OF MINIMUM FEDERAL SAFETY STANDARDS AND GPIC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS, LATEST EDITION.
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FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION