COVER SHEET 604-01

NOTES AND BILL OF MATERIALS 604-02 LEGEND AND BOLLARD DETAIL 604-03

604-04 **LOCATION PLAN INSTALLATION PLAN** 604-05

ENCLOSURE DETAILS 604-51

PANEL LAYOUT/BILL OF MATERIALS 604-52

TERMINAL BLOCK DETAIL 604-53

604-54 120V AC POWER DISTRIBUTION 120V AC POWER DISTRIBUTION 604-55 24V DC POWER DISTRIBUTION 604-56

GROUNDING DETAIL & CONDUIT SCHEDULE 604-57

RTU1 LOOP DETAIL 604-58 604-59 **NETWORK DETAIL**

EVERSEURCE ENERGY



WORK SCOPE

MAIN

INSTALLATION: SINGLE CABINET TELEMETRY AFFECTED STREETS: WELBY ROAD



ISSUED FOR CONSTRUCTION

	0	ISSUED FOR C	CONSTRUCTION		08/14/22	AG/E	-S
	No.		Description		Date	Dw/0	Ck
	Revision/Status						
EVERS⊕URCE							
	ENERGY						
	1 WELBY ROAD, NEW BEDFORD, MA						
	WORK ORDER #G210322Y						
			COVER SHEET	Γ			
FIELD VERIFY DIMENSIONS	SCALE:1" = 100' SHEET 01			01 OF	14		
PRIOR TO PIPE FABRICATION		Drawn by / Date	Checked by / Date	Drawi	ing Number	Rev	v. No.
AJG 08/01/22	EJS 08/14/22	MA-NEB-	TLM-21-604-0	1	0		

GENERAL NOTES:

- 1. IF ANY OF THE FOLLOWING OCCUR A DRAWING REVISION IS REQUIRED AND MUST BE APPROVED AND/OR STAMPED BY THE ENGINEER OF RECORD. CHANGES CAN BE APPROVED AND/OR STAMPED BY A PROJECT ENGINEER, BUT THE ENGINEER OF RECORD MUST BE INFORMED.
- 1.1. IF THE TIE IN POINT MOVES TO A DIFFERENT SEGMENT OF PIPE THAN SHOWN.
- 1.2. IF A CHANGE IN THE LOCATION OF VALVES IS REQUIRED.
- 1.3. 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.
- 1.4. IF A CHANGE IN PIPE SIZE, MATERIAL, OR WALL THICKNESS IS REQUIRED.
- 1.5. 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.
- 2. CONSTRUCTION DRAWINGS, LOCATIONS OF EXISTING UTILITIES, UNDERGROUND STRUCTURES AND WORK LOCATIONS ARE BASED ON BEST AVAILABLE INFORMATION BUT HAVE NOT BEEN FIELD VERIFIED.
- 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.
- 4. 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.
- 5. 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.
- 6. 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.

	BILL OF MATERIAL				
ITEM	SIZE	DESCRIPTION	QTY	UNIT	
1	1-1/4"	RMC CONDUIT, GALVANIZED, PVC COATED	40	FT	
2	1-1/4"	RMC ELBOW, 90 DEG, 24" RADIUS, GALVANIZED, PVC COATED	2	EA	
3	4"X3/4"	TAPPING TEE, ELECTROFUSION, IPS X CTS, HDPE 3408/4710, SDR 11, ASTM D2513, ASTM D3350, ASTM D3261 ASTM F1055. CENTRAL PLASTICS OR APPROVED EQUAL.	2	EA	
4	3/4"	VALVE,BALL, FULL PORT, SERVICE, 3/4 IN CTS, 0.090 WALL, SDR 9.7, PE 4710, POLYETHYLENE, BUTT FUSE, BLACK FINISH	1	EA	
5	3/4"	PIPE, 3/4 IN CTS X 0.090 IN THK WALL SDR 9.7, 7/8 IN OD, 500 FT LG COIL, POLYETHYLENE, PE3408/PE100	40	FT	
6	3/4"	RISER, SERVICE, STRAIGHT, 3/4 IN CTS X 0.090 IN THK WALL SDR 9.7	1	EA	
7	3/4"	VALVE, SERVICE, 3/4 IN, THREADED ENDS, LOCK-WING TAMPER PROOF, BLACK FINISH	1	EA	
8	3/4"	COUPLING, METFIT, 3/4 IN CTS, 0.090 IN THK WALL SDR 9.7, PLASTIC, PE-4710	3	EA	
9	4 1/4" square	BOX VALVE, CURB, W/ 4-1/4 IN SQ COVER NON-LOCKING LID, FOR 1/2 , 3/4, 1 , 1-1/4 , CURB VALVES, PAVEMENT RISER RING IN 583489, 48/SKID	1	EA	

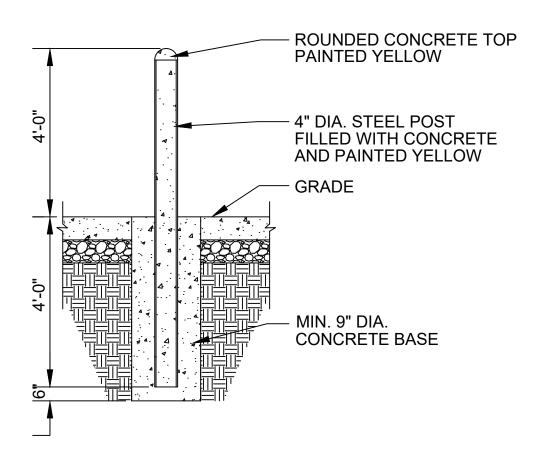
* NOTE: 1. ADDITIONAL ELBOWS MAY BE REQUIRED FOR OFFSETS IN THE FIELD

2. ALL MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

ISSUED FOR CONSTRUCTION

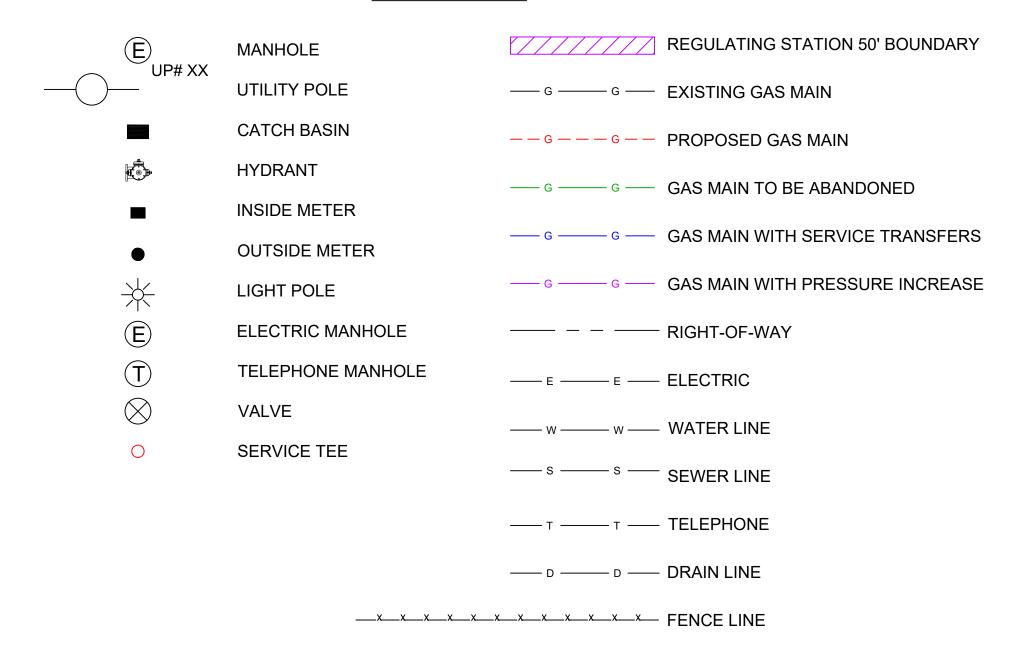


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	0	ISSUED FOR C	CONSTRUCTION		08/14/22	A	G/ES	
	No.		Description		Date	D۱	w/Ck	
		Revision/Status						
	EVERSURCE							
	ENERGY							
	1 WELBY ROAD, NEW BEDFORD, MA							
	WORK ORDER #G210322Y							
	NOTES AND BILL OF MATERIAL							
FIELD VERIEY DIMENSIONS	SCA	LE: NOT TO SC	ALE		SHEET (02 C)F 14	
PRIOR TO PIPE FABRICATION	1 WELBY ROAD, NEW BEDFORD, MA WORK ORDER #G210322Y NOTES AND BILL OF MATERIAL SCALE: NOT TO SCALE SHEET 02 C	Rev. No.						
		AJG 08/01/22	EJS 08/14/22	IRCE ENERGY EDFORD, MA 210322Y MATERIAL SHEET 02 C	0			

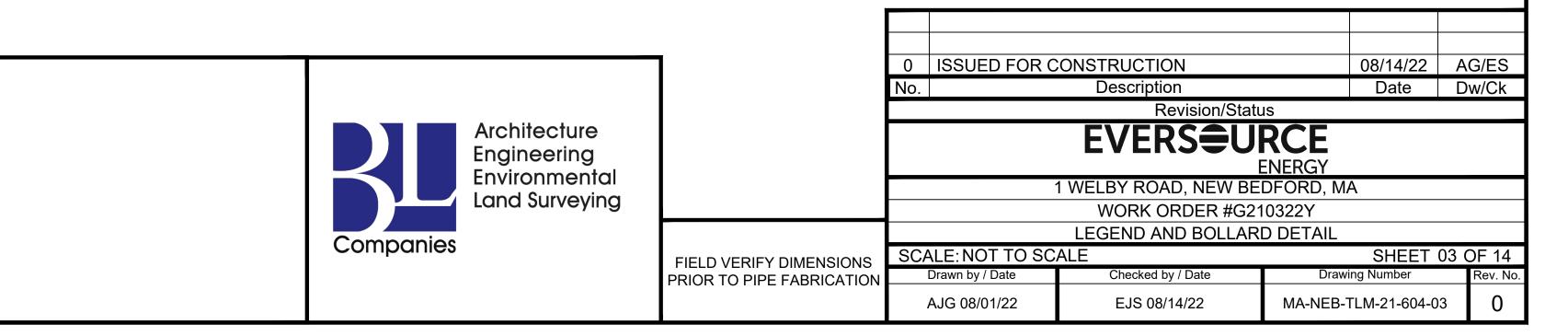


PROTECTIVE POST (BOLLARD) DETAIL SCALE: NTS

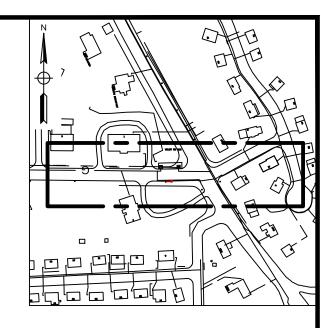
DRAWING LEGEND



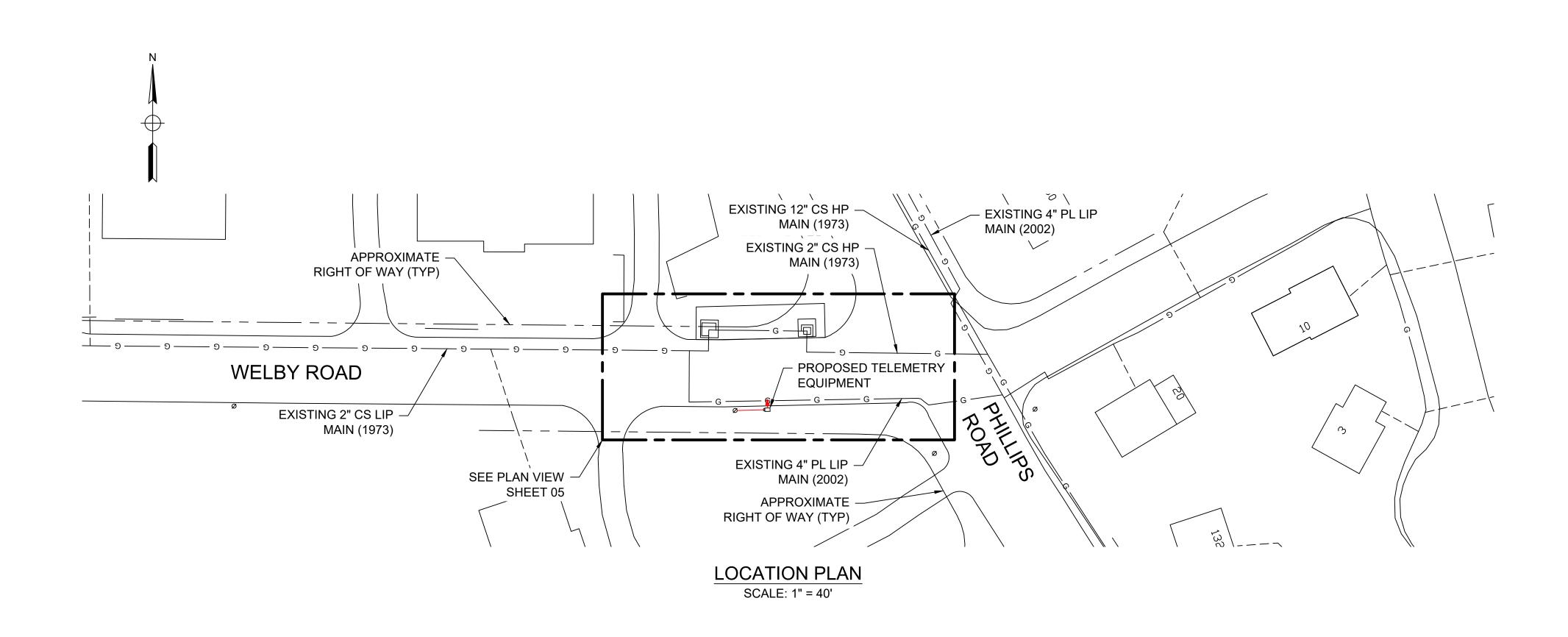
ISSUED FOR CONSTRUCTION



Aug 14, 2022 - 10:14am



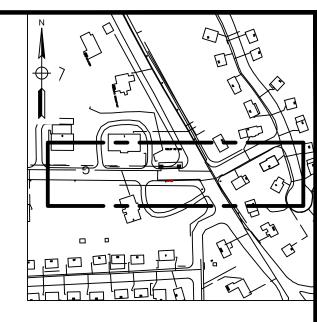
KEY MAP SCALE: N.T.S.



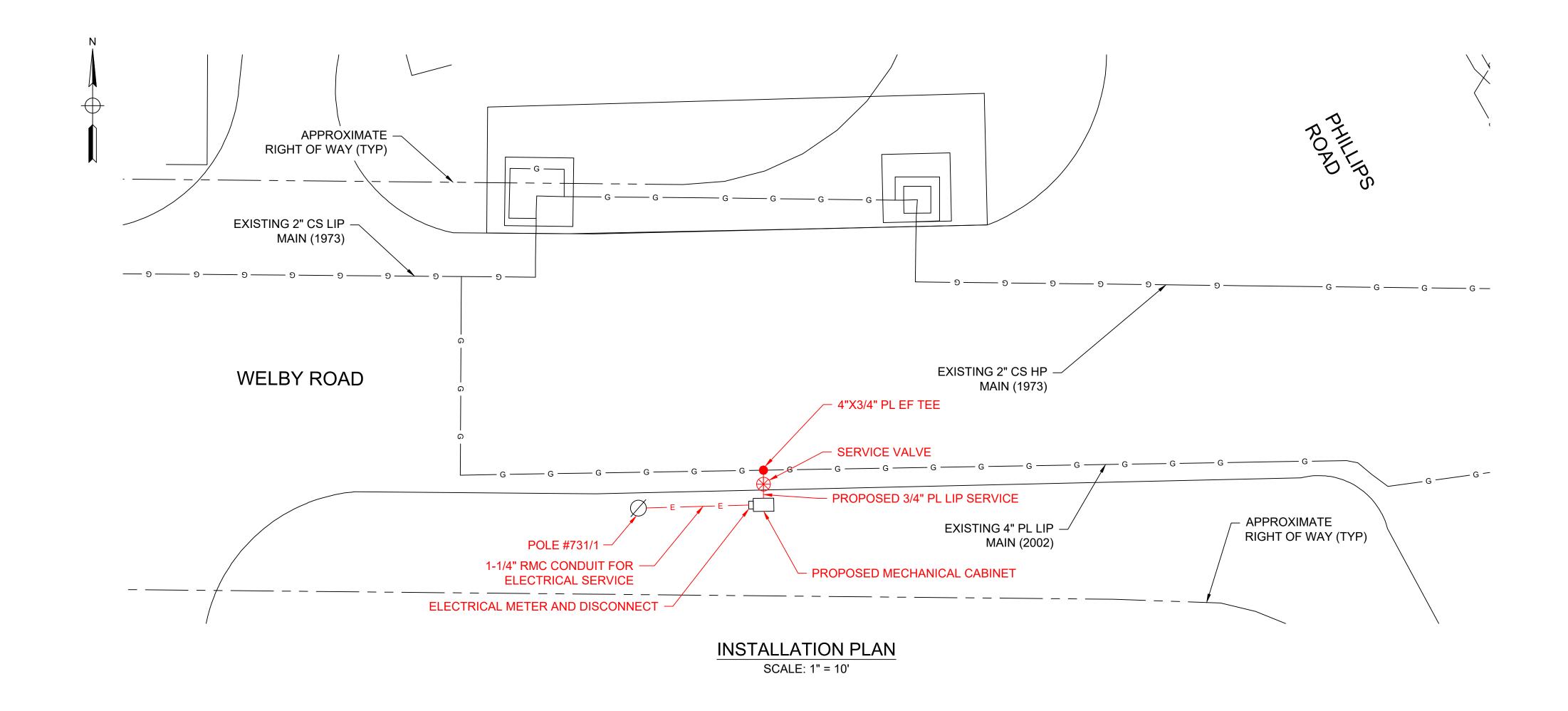
ISSUED FOR CONSTRUCTION



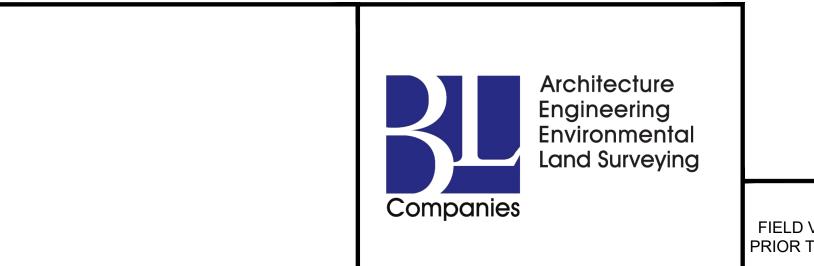
	0	ISSUED FOR C	ONSTRUCTION	08/14/22	AG/ES	
	No.		Description	Date	Dw/Ck	
			Revision/Statu	IS		
	EVERSURCE					
			E	ENERGY		
		•	1 WELBY ROAD, NEW BE	DFORD, MA		
			WORK ORDER #G21	0322Y		
			LOCATION PLA	N		
SIONS	SCA	ALE: AS NOTE	SHEET (04 OF 14		
CATION		Drawn by / Date	Checked by / Date	Drawing Number	Rev. No.	
		AJG 08/01/22	EJS 08/14/22	MA-NEB-TLM-21-604-04	1 0	



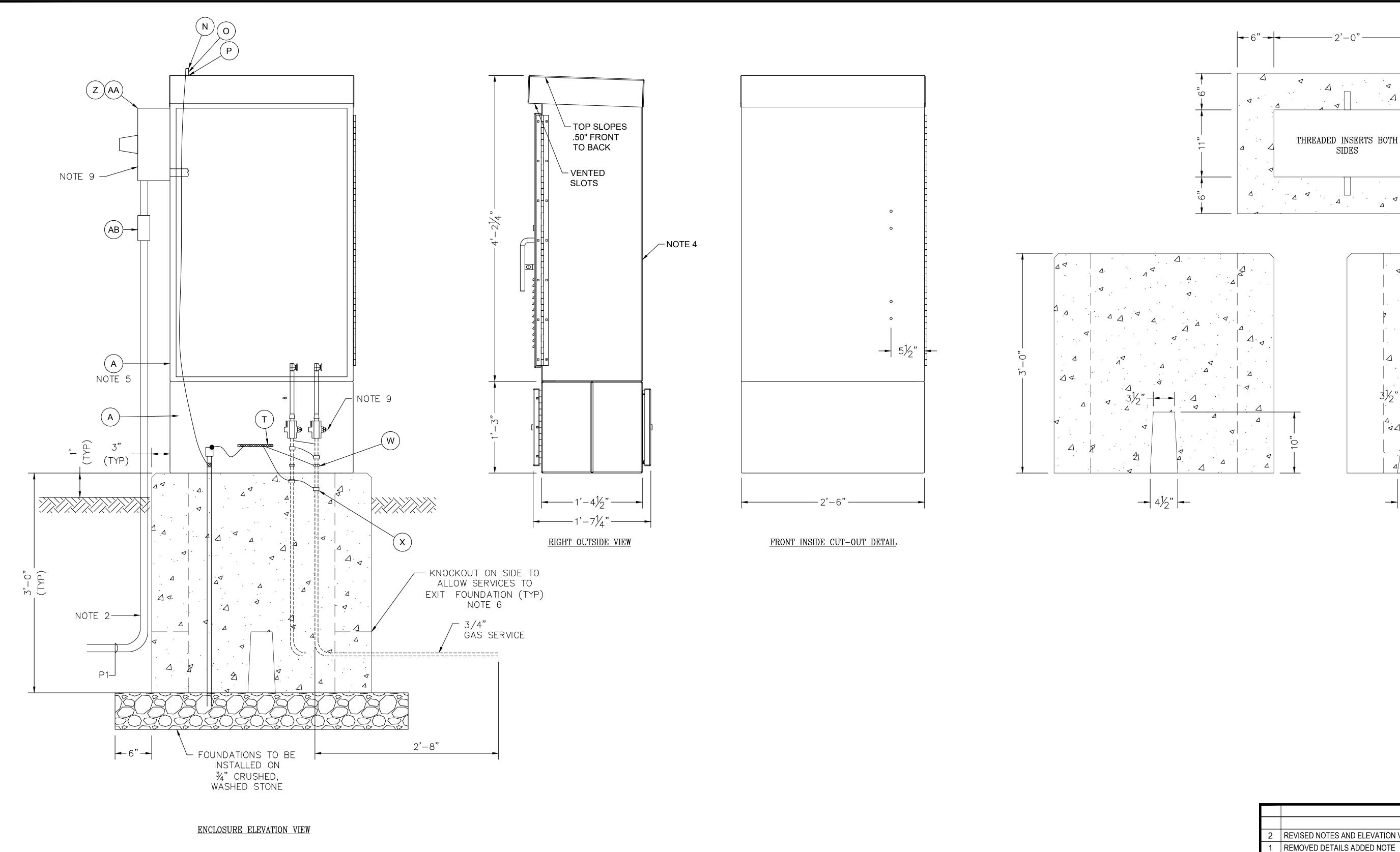
KEY MAP SCALE: N.T.S.



ISSUED FOR CONSTRUCTION

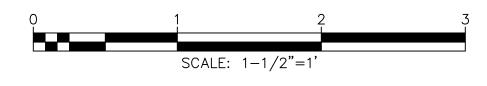


	0	ISSUED FOR C	CONSTRUCTION		08/14/22	AG/ES	
	No.		Description		Date	Dw/Ck	
			Revision/Statu	ıs			
	EVERS\$\rightarrow\$URCE						
			E	ENERGY			
	1 WELBY ROAD, NEW BEDFORD, MA						
			WORK ORDER #G21	0322Y			
			INSTALLATION PI	LAN			
VERIFY DIMENSIONS	SCA	ALE: AS NOTE	:D		SHEET 05	OF 14	
TO PIPE FABRICATION		Drawn by / Date	Checked by / Date	Drawi	ng Number	Rev. No.	
	,	AJG 08/01/22	EJS 08/14/22	MA-NEB-1	ΓLM-21-604-05	0	



NOTES:

- 1. EFV TO BE INSTALLED PER MANUFACTURERS REQUIREMENTS. EFV SHALL BE PROPERLY SIZED FOR APPLICATION PER EVERSOURCE STANDARDS AND MANUFACTURERS REQUIREMENTS.
- 2. SERVICE CONNECTION TO CABINET SHALL BE IN ACCORDANCE WITH NFPA 70, THE REQUIREMENT OF THE LOCAL UTILITY AND THE AUTHORITY HAVING JURISDICTION (AHJ). IF A METER IS REQUIRED, IT SHALL BE LOCATED EXTERNAL TO THE CABINET .
- 3. AN EFV WILL BE INSTALLED ON EACH GAS LINE TO A TRANSMITTER.
- 4. EQUIPMENT SHALL BE MOUNTED NEAT AND PLUMB.
- 5. INSTALL STANDOFFS TO THE BACK PLANE OF EACH CABINET.
- 6. ALL BELOW GRADE OPENINGS IN POLL BOX SHALL BE PARGED WITH CONCRETE. 7. MARK CONDUIT AT 18" INTERVALS WITH 1 BAND BLUE SCOTCH 35 MARKING TAPE.
- 8. METER TROUGH & CIRCUIT BREAKER SHALL BE BY ELECTRICAL CONTRACTOR, METER BY UTILITY.
- 9. MOUNT AS LOW AS POSSIBLE IN LOWER CABINET (ALL EYS CONNECTORS)



2	REVISED NOTES AND ELEVATION VIEW	02/08/22	WBH/TAN		
1	REMOVED DETAILS ADDED NOTE	08/05/21	WBH/TAN		
0	AS-BUILT	04/09/21	DBF/MPL/EJP		
No.	Description	Date	Dw/Ck/Ap		
	Revision/Status				

→ 6½" **←**

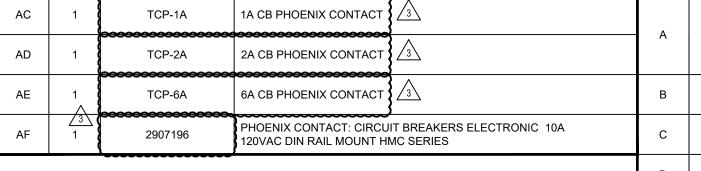
EVERS©URCE

AS-BUILT END POINT TELELMETER CABINET FOR POWER DROP, CELLULAR COMMUNICATION

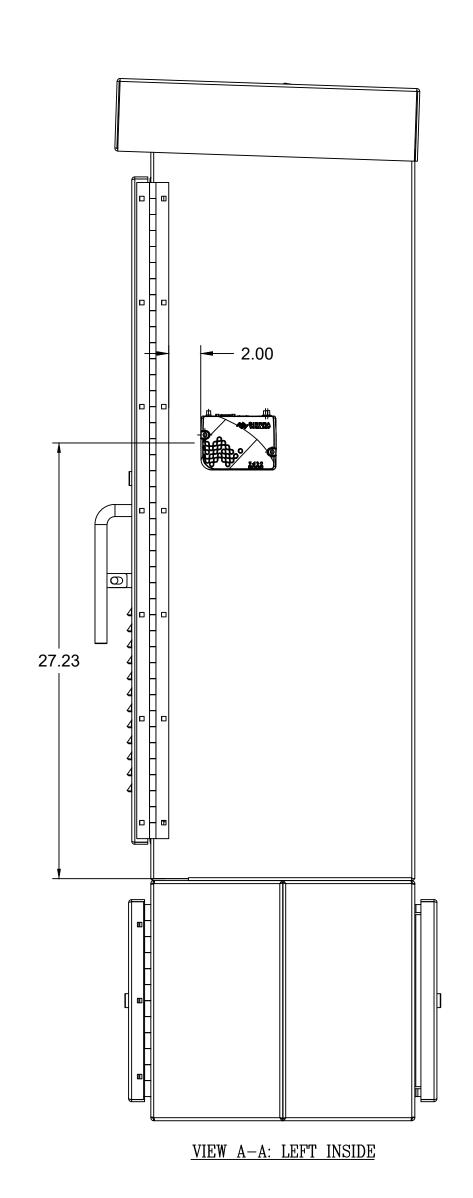
ENCLOSURE DETAILS

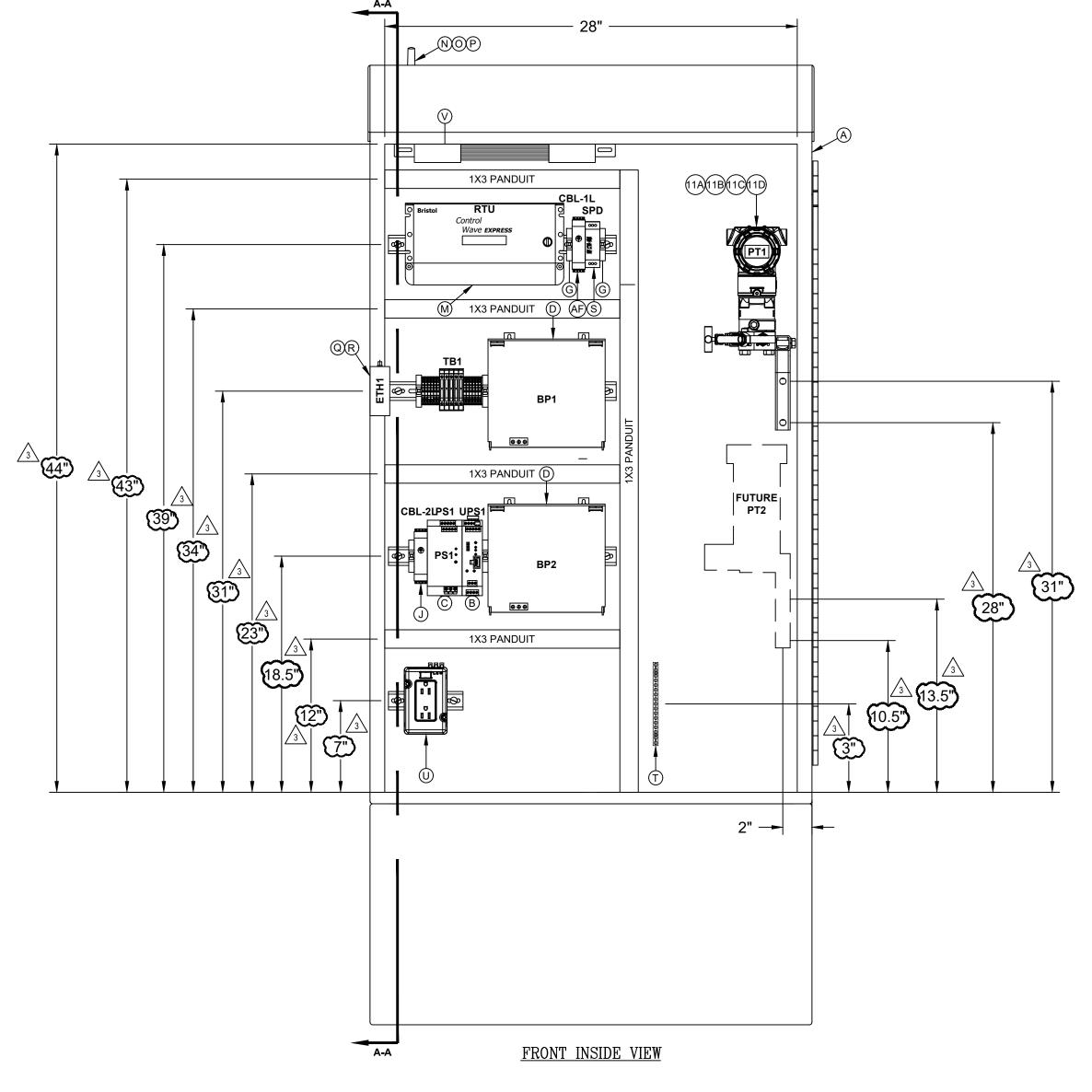
FIELD VERIFY SCALE: 1-1/2" = 1' **DIMENSIONS** PRIOR TO PIPE **FABRICATION**

SHEET 6 OF 14 Drawn by / Date DBF / 04/09/21 Approved by / Date EJP / 04/09/21 Checked by / Date MPL / 04/09/21 Filed: D-190-92.04.dwg Sheet Number MA-NEB-TLM-21-604-51



ITEM QTY PART NUMBER DESCRIPTION MARLIN ENCLOSURE: 50"H X 30"W X 16.5"D BASE MOUNT TYPE M CABINET WITH 15"H RISER CABINET IS A BASE MOUNTED, SINGLE MARLIN ENCLOSURE FRONT DOOR ENCLOSURE, 2 LOUVERS TO BOTTOM DOOR, FLOOR PLATE, 6 EA. - 3/8" X 2 STUDS TO BACKPLATE PHOENIX CONTACT: QUINT 24VDC UPS MODULE 2866763 QUINT-PS/1AC/24DC/10 10 AMP POWER SUPPLY PHOENIX CONTACT: ENERGY STORAGE DEVICE, LEAD AGM, VRLA TECHNOLOGY, 24 V DC, 12 AH





1	V(דכ	ſΕ	Ś

- 1. FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- 2. MILBANK METER BOX WITH BYPASS LEVER AND

INTEGRATED 30 AMP MAIN CIRCUIT BREAKER.

Ō		1	2
	SCALE:	2"=1'	

	Revision/Status					
No.	Description	Date	Dw/Ck/Ap			
0	AS-BUILT	04/09/21	DBF/MPL/EJP			
1	REVISED BILL OF MATERIALS	08/06/21	WBH/TAN			
2	REVISED BOM, DETAIL AND ADDED NOTES	02/08/22	WBH/TAN			
3	REVISED BOM AND DIMENSIONS	04/11/22	WBH/TAN			

PHOENIX CONTACT: MINI CB TB UKG-ISI-C

PHOENIX CONTACT: DIN RAIL END STOPS

PHOENIX CONTACT: END PLATE

ROSEMOUNT COPLANAR MANIFOLD

MALE CONNECTOR

AIRLINK RV50 CELLULAR MODEM

PROTECTION FOR 120VAC 15 AMP).

ELEC DIRECT: 15-PORT GROUND BAR

DAIRYLAND 3/4" PIPE & MTL=38 TUBING

MILBANK METER BOX WITH BYPASS LEVER

OZ GEDNEY EXPANSION FITTING

30 A CIRCUIT BREAKER

3051CG3A02A1AS5K ROSEMOUNT: 3051C PRESSURE TRANSMITTER CALIBRATED TO

0-30 PSIG LOW INTERMEDIATE PRESSURE

BULKHEAD, IT 4C/3C PHANTOM, CELLULAR LTE

EMERSON: CPU WITH ETHRNET DIN MOUNT, 9-28V, ETHERNET, 33 MHZ,

NO GAS CALCS, 2 PI/DI ON BASE CPU BASE + 2 DI/DO, 4 DI, 2 DO, 2 HSC,

3 AI, NO APPLICATIONS, CONFORMAL COATING, NO DISPLAY

LAIRD CONNECTIVITY INC. : OMNI-DIRECTIONAL ANTENNA

GEMEK: S-LMR 240 COAXIAL CABLE 10 FT SMA MALE TO N

MCMASTER: CARRI GASKET FOR PANEL MOUNT ANTENNA

SIERRA WIRELESS: DIN-RAIL BRACKET FOR MOUNTING THE

ALLEN BRADLEY: PANEL MOUNT RECEPTACLE 20A 125VAC

EATON ELECTRIC LIMITED: MTL MA15/D/1/SI SURGE

HOFFMAN: PANEL LIGHT 24VDC LED WITH ACC.

PHOENIX CONTACT: ANALOG SURGE PROTECTOR

SIERRA WIRELESS: AIRLINK RAVEN RV50X LTE ADVANCED CELLULAR

R305EC22B11B4

CWEXP-

2-1-S8-5-00-1-0

TRA6927M3PB-001

GEMEK

RV50X-NA

MA15/D/1/SI

1492-REC20G

EL1200D24V ELA02SF

ELCN124V

GROUND CLAMP

HOM130

U3741-XL-100-BL

AX135

INSULATING UNION 3/4" GROUND JOINT

11D

NOTE 1

NOTE 1

NOTE 2

AB

PHOENIX CONTACT: PUSH IN JUMPER 10 POLE

BREAKER ELECTRONIC 1POLE 20A 120VAC

PHOENIX CONTACT: HMC 11 120AC 20A C1D2 CIRCUIT

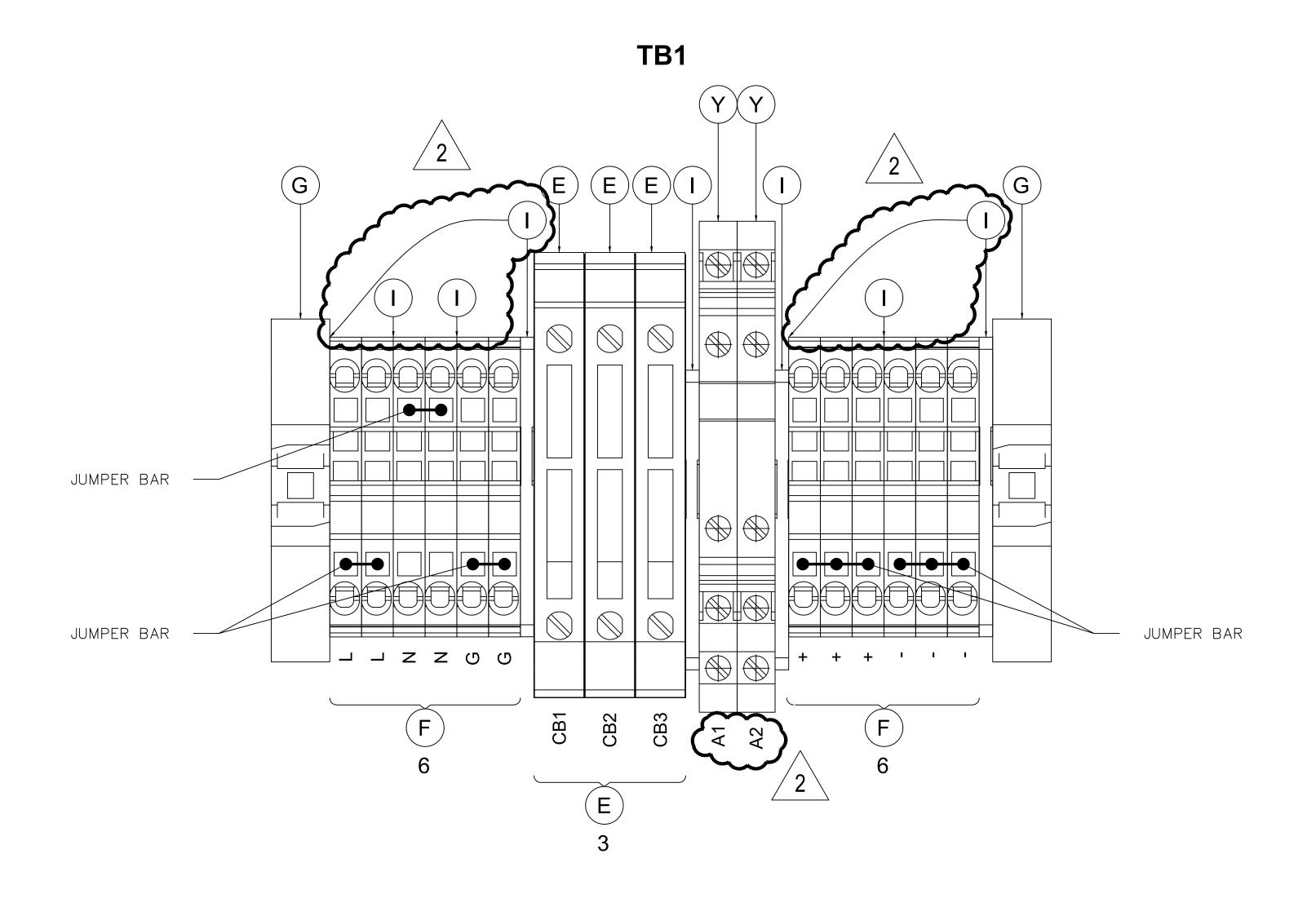
IN CONNECTION

PHOENIX CONTACT: FEED THRU TERMINAL BLOCK BLUE PUSH

EVERS©URCE

AS-BUILT END POINT TELEMETER CABINET FOR POWER DROP, CELLULAR COMMUNICATION

PANEL LAYOUT/BILL OF MATERIALS				
SCALE: 3" = 1'	SHEET 7 OF 14			
Drawn by / Date	Checked by / Date	Sheet Number	Rev. No.	
DBF / 04/09/21 Approved by / Date F.IP / 04/09/21	MPL / 04/09/21 Filed: D-190-92.04.dwg	MA-NEB-TLM-21-604-52	3	



04/04/2022 WBH/TAN 2 ADDED TEXT AND LEADERS 1 ADDED ANALOG SURGE PROTECTORS 08/06/2021 WBH/TAN 04/09/21 DBF/MPL/EJP 0 AS-BUILT Date Dw/Ck/Ap Description Revision/Status

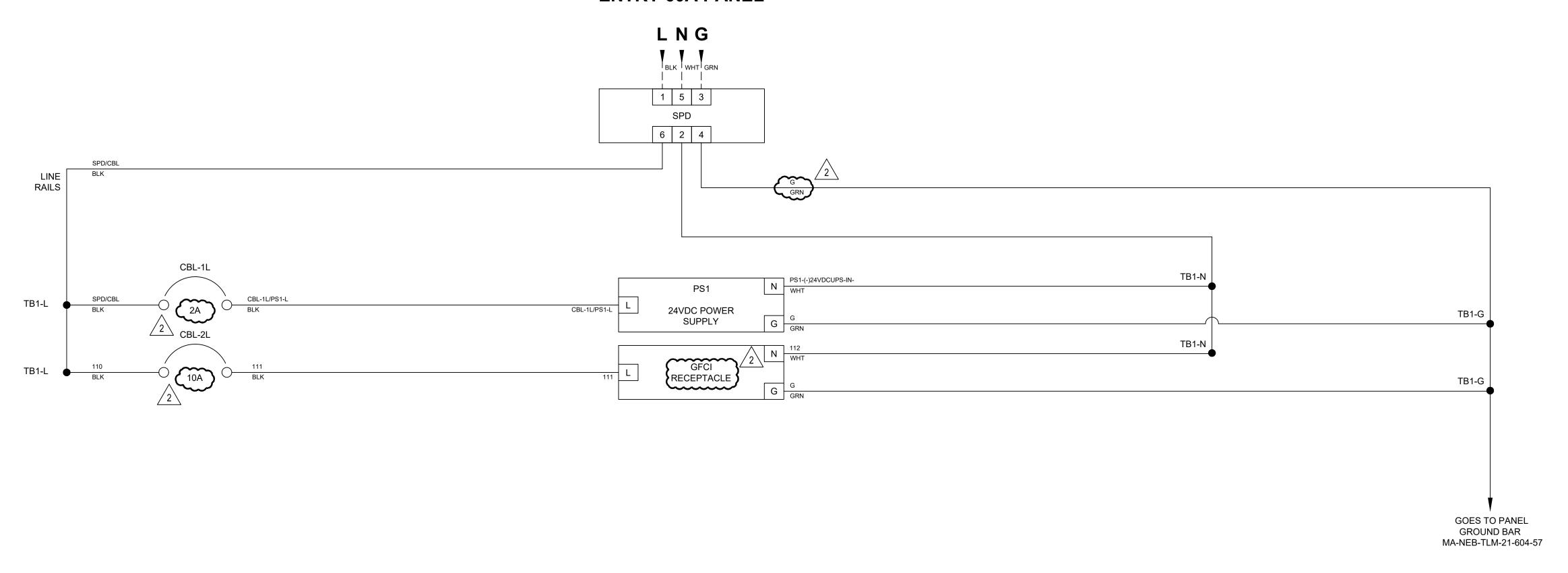
EVERS©URCE

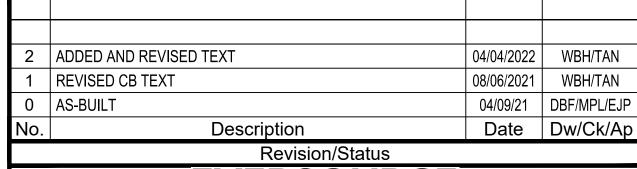
AS-BUILT END POINT TELEMETER CABINET FOR POWER DROP, CELLULAR COMMUNICATION

TERMINAL BLOCK DETAIL

SHEET 8 OF 14 SCALE: 6" = 1' Drawn by / Date DBF / 04/09/21 Approved by / Date EJP / 04/09/21 Checked by / Date MPL / 04/09/21 Filed: D-190-92.04.dwg Sheet Number MA-NEB-TLM-21-604-53

120/240 VAC FROM FIELD SERVICE ENTRY 60A PANEL

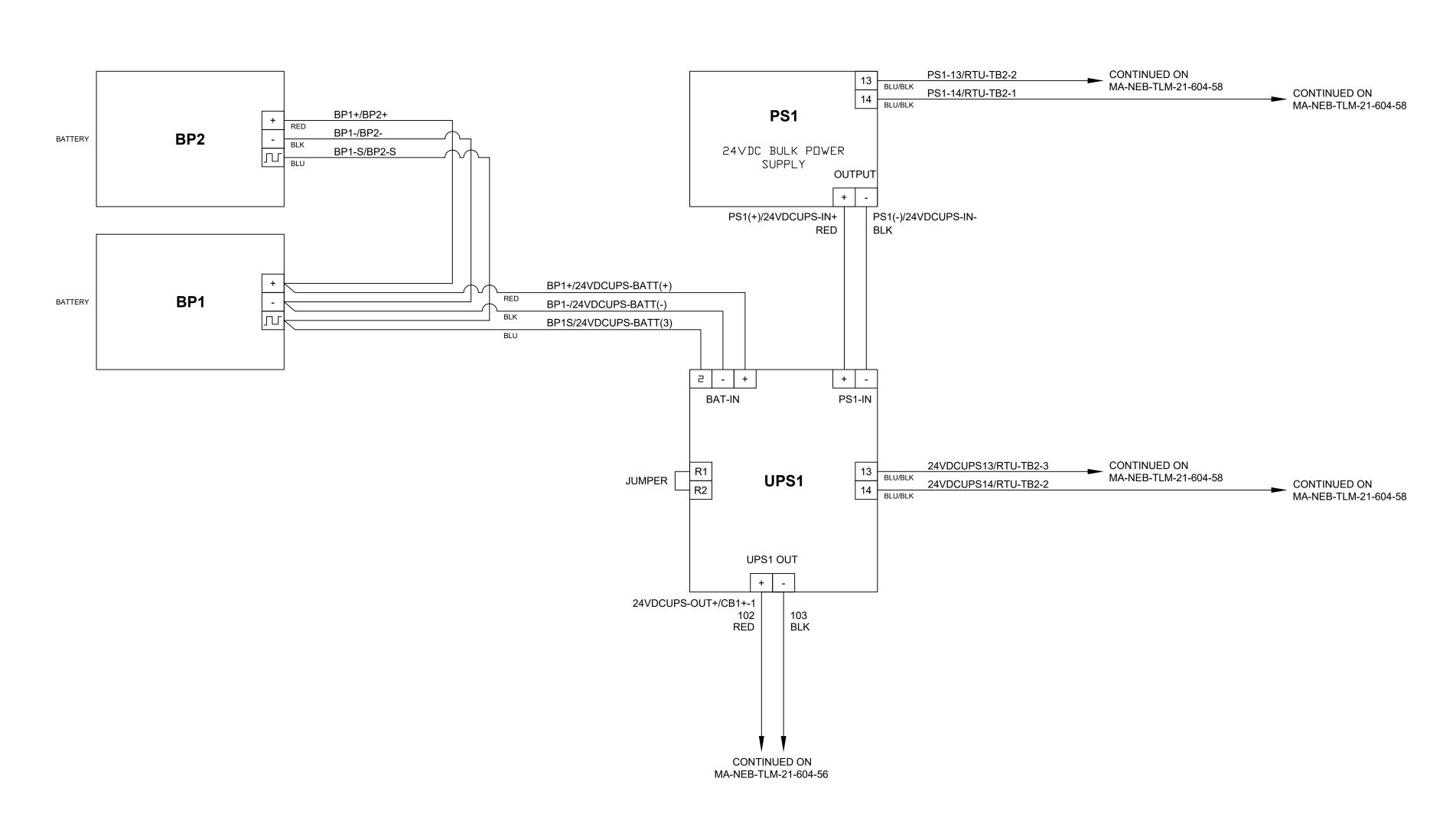




EVERS URCE ENERGY

AS-BUILT END POINT TELEMETER CABINET FOR POWER DROP, CELLULAR COMMUNICATION

120V AC POWER DISTRIBUTION				
SCALE: NTS		SHEET 9	OF 14	
Drawn by / Date	Checked by / Date	Sheet Number	Rev. No	
DBF / 04/09/21 Approved by / Date EJP / 04/09/21	MPL / 04/09/21 Filed: D-190-92.04.dwg	MA-NEB-TLM-21-604-54	2	

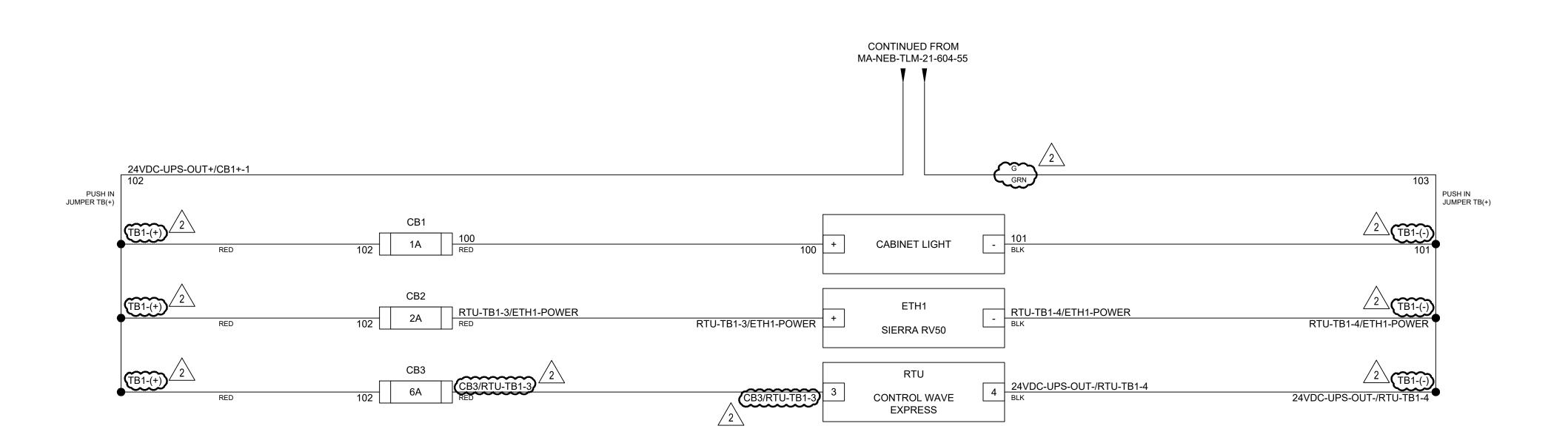


2 REVISED TEXT 12/09/21 WBH/TAN
1 REVISED TEXT LABELS 08/05/21 WBH/TAN
0 AS-BUILT 04/09/21 DBF/MPL/EJP
No. Description Date Dw/Ck/Ap
Revision/Status

EVERS URCE ENERGY

AS-BUILT END POINT TELEMETER CABINET
FOR POWER DROP, CELLULAR COMMUNICATION

FIELD VERIFY DIMENSIONS PRIOR TO PIPE FABRICATION



2 REVISED AND ADDED TEXT

1 CHANGED FUSES TO CIRCUIT BREAKERS

08/05/2021 WBH/TAN

0 AS-BUILT

No. Description

Date Dw/Ck/Ap

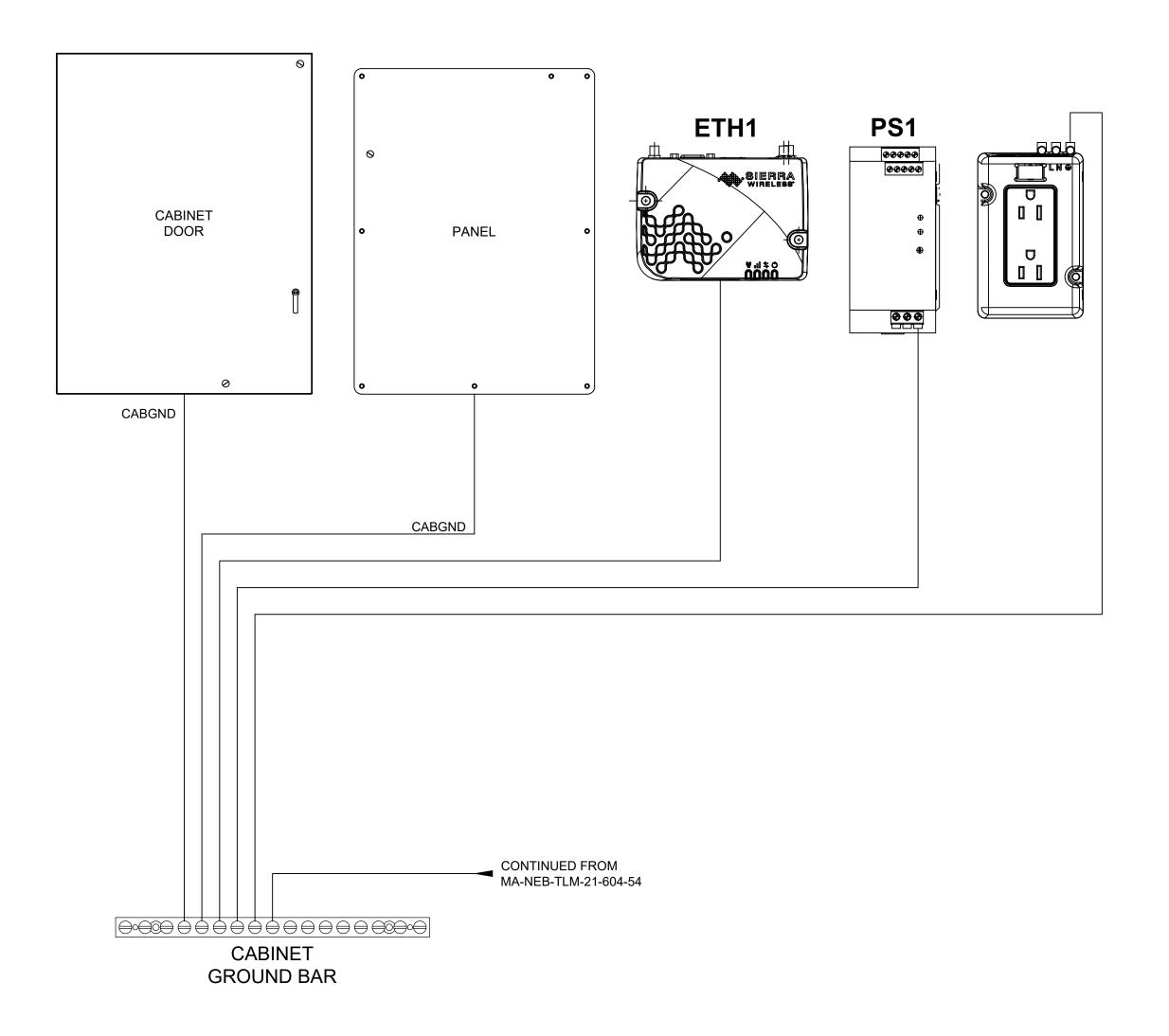
Revision/Status

EVERS URCE ENERGY

2020 AS-BUILT END POINT TELEMETER CABINET
FOR POWER DROP, CELLULAR COMMUNICATION

24V DC POWER DISTRIBUTION				
SCALE: NTS		SHEET 11	OF 14	
Drawn by / Date	Checked by / Date	Sheet Number	Rev. No	
DBF / 04/09/21 Approved by / Date EJP / 04/09/21	MPL / 04/09/21 Filed: D-190-92.04.dwg	MA-NEB-TLM-21-604-56	2	
EJP / U4/U9/Z1				

MA-NEB-TLM-21-604 Eversource Gas End Point Telemetry Box											
CONDUIT SCHEDULE / FILL CALCULATION- Based on NFPA 70, 2020 Edition											
ITEM	FROM	То	CONDUIT	WIRE/CABLE	TYPE	MFG	BELDEN PN	COLOR CODE	OD(")	Area(Sq")	Ext Area(Sq")
POWER											
P1	Utility Pole	Meter/Tele Cab	1-1/4", PVC SCH 40	BY ELEC. SERVICE / INSTALL PULL STRING							



2	REVISED CONDUIT FILL CALCULATION TABLE	02/08/22	WBH/TAN				
1	REVISED TEXT	08/05/21	WBH/TAN				
0	AS-BUILT	04/09/21	DBF/MPL/EJP				
No.	Description	Date	Dw/Ck/Ap				
Revision/Status							

Revision/Status EVERS ENERGY

AS-BUILT END POINT TELEMETER CABINET
FOR POWER DROP, CELLULAR COMMUNICATION

GROUNDING DETAIL & CONDUIT SCHEDULE							
SCALE: NTS SHEET 12 OF							
Drawn by / Date	Checked by / Date	Sheet Number	Rev. No.				
DBF / 04/09/21 Approved by / Date	MPL / 04/09/21 Filed: D-190-92.04.dwg	MA-NEB-TLM-21-604-57	2				
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