

Electrical Enclosure and Panel Upgrade
Caroline Street Development
New Bedford, MA
NBHA Project # 016-2022
A/E Project No. 22008.00

ADDENDUM NO. 1

August 23, 2022

GENERAL

1. The General Conditions of the Contract and Division 1, General Requirements, apply to work specified in this Addendum.
2. Bids must acknowledge, in the space provided on the form for General Bid that Addendum No. 1 has been received and that the bid price reflects the inclusion of these Addenda in their entirety.
3. It is the responsibility of each General Bidder to notify all Suppliers that they propose to use for the various parts of the work, of any modifications, additions, deletions, insertions, or revisions contained in this Addendum.
4. The General bid date remains unchanged.

SPECIFICATIONS

Section 262416 Panelboards

1. Paragraph 2.2 Power Panelboards
Delete paragraph 2.2, A.1 in its entirety.

DRAWINGS

Drawing AE0.01

1. Delete drawing AE0.01 in its entirety.
2. Substitute with the revised drawing AE0.01, dated 8/23/22. See attached.

Drawing AE1.01

1. Delete drawing AE1.01 in its entirety.
2. Substitute with the revised drawing AE1.01, dated 8/23/22. See attached.

Drawing AE6.01

1. Delete drawing AE6.01 in its entirety.
2. Substitute with the revised drawing AE6.01, dated 8/23/22. See attached.

Drawing AE7.01

1. Delete drawing AE7.01 in its entirety.
2. Substitute with the revised drawing AE7.01, dated 8/23/22. See attached.

Drawing AE9.02

1. Delete drawing AE9.02 in its entirety.
2. Substitute with the revised drawing AE9.02, dated 8/23/22. See attached.

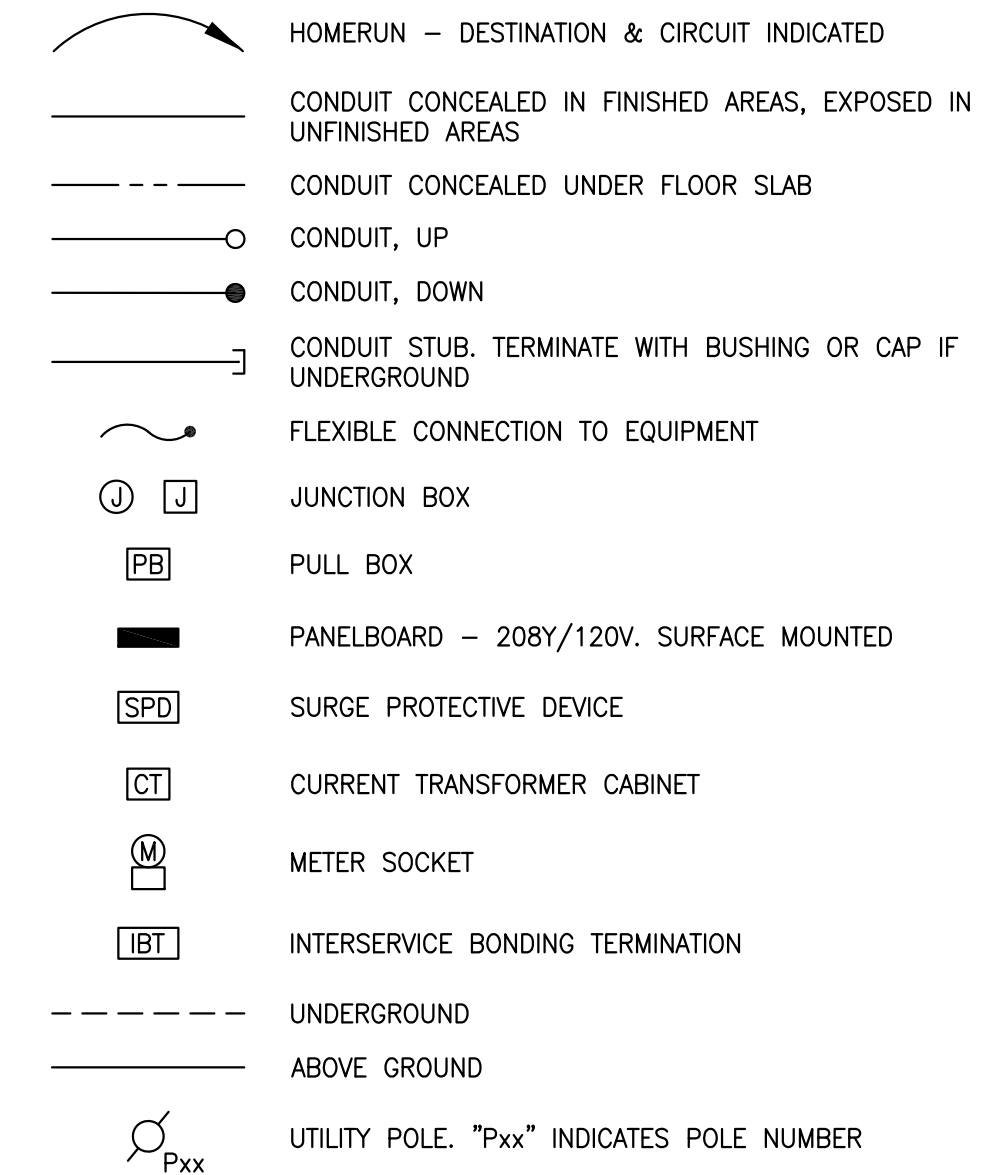
ELECTRICAL ABBREVIATIONS

#P	NUMBER OF POLES	KVA	KILOVOLT-AMPERE
#P#W	NUMBER OF POLES, NUMBER OF WIRES	KVAR	KILOVOLT-AMPERE REACTIVE
		KW	KILOWATTS
+#	NUMERAL INDICATES MOUNTING HEIGHT TO CENTERLINE ABOVE FINISHED FLOOR OR GRADE, IN INCHES.	LTC	LIGHTING
		LFGC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
		LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT
A	AMPERES	LV	LOW VOLTAGE
AC	ALTERNATING CURRENT		
A/E	ARCHITECT/ENGINEER	MAX	MAXIMUM
AF	AMP FRAME / AMP FUSE	MC	METAL CLAD CABLE
AFCI	ARC-FAULT CIRCUIT INTERRUPTER	MCC	MAIN CIRCUIT BREAKER
AFV	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AFG	ABOVE FINISHED GRADE	MCP	MOTOR CIRCUIT PROTECTOR
AHJ	AUTHORITY HAVING JURISDICTION	MFR	MANUFACTURER
AIC	AMPERE INTERRUPTING CAPACITY	MIN	MINIMUM
AL	ALUMINUM	MLO	MAIN LUG ONLY
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MTD	MOUNTED
AS	AMP SWITCH	MTG	MOUNTING
AT	AMP TRIP	MTS	MANUAL TRANSFER SWITCH
ATS	AUTOMATIC TRANSFER SWITCH	MV	MEDIUM VOLTAGE
AUX	AUXILIARY		
A/V	AUDIO / VISUAL	NAC	NOTIFICATION APPLIANCE CIRCUIT
AWG	AMERICAN WIRE GAGE	NC	NORMALLY CLOSED
		NEC	NATIONAL ELECTRIC CODE
		NEC	NATIONAL ELECTRIC CODE
BIL	BASIC IMPULSE LEVEL	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
BLDG	BUILDING	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
BPS	BOLTED PRESSURE SWITCH	NIC	NOT IN CONTRACT
		NM	NON-METALLIC SHEATHED CABLE
C	CONDUIT	NMC	NON-METALLIC CONDUIT
CAT	CATALOG	NO	NORMALLY OPEN
CATV	CABLE TELEVISION	NTS	NOT TO SCALE
CCTV	CLOSED CIRCUIT TELEVISION	#	NUMBER
CKT	CIRCUIT		
CB/CKT BKR	CIRCUIT BREAKER	O.C.	ON CENTER
CL	CENTERLINE	O/H	OVERHEAD
CO	CARBON MONOXIDE		
CP	CONTROL PANEL	PC	PLUMBING CONTRACTOR/ PERSONAL COMPUTER
CT	CURRENT TRANSFORMER		
CU	COPPER	PH / Ø	PHASE
		PIR	PASSIVE INFRARED
Δ	DELTA	PIV	POST INDICATING VALVE
DC	DIRECT CURRENT	PNL/PNLBD	PANEL/PANELBOARD
DISC	DISCONNECT	POS	POINT OF SALE
DN	DOWN	PRI	PRIMARY
DWG	DRAWING(S)	PT	POTENTIAL TRANSFORMER
		PV	PHOTOVOLTAIC
E	WIRED ON EMERGENCY CIRCUIT	PVC	POLYVINYL CHLORIDE CONDUIT
EC	ELECTRICAL CONTRACTOR	PWR	POWER
ELEC	ELECTRIC(AL)		
EM/EMER	EMERGENCY	RCP	REFLECTED CEILING PLAN
EMT	ELECTRICAL METAL TUBING	RMC	RIGID METAL CONDUIT
ENT	ELECTRICAL NON-METALLIC TUBING	RSC	RIGID STEEL CONDUIT
EOL	END OF LINE		
EPO	EMERGENCY POWER OFF	SEC	SECONDARY
		SN	SOLID NEUTRAL
F	FUSE	SS	STAINLESS STEEL
FDR	FEEDER(S)	ST	SHUNT TRIP
FLA	FULL LOAD AMPERES	STP	SHIELDED TWISTED PAIR
FLR	FLOOR	STL	STEEL
FMC	FLEXIBLE METAL CONDUIT	SW	SWITCH
		SWBD	SWITCHBOARD
G/GND	GROUND	SWGR	SWITCHGEAR
GC	GENERAL CONTRACTOR		
GEN	GENERATOR	T/D	TELEPHONE/DATA
GFCI	GROUND-FAULT CIRCUIT INTERRUPTER	TEL	TELEPHONE
GFPE	GROUND-FAULT PROTECTION FOR EQUIPMENT	TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
GRSC	GALVANIZED RIGID STEEL CONDUIT	TO	TELECOMMUNICATION OUTLET
		TYP	TYPICAL
HP	HORSEPOWER	UC	UNDER-COUNTER OR UNDER-CABINET
HV	HIGH VOLTAGE	UG	UNDERGROUND
HZ	HERTZ	UL	UNDERWRITERS LABORATORIES
		UPS	UNINTERRUPTIBLE POWER SOURCE
IDC	INITIATING DEVICE CIRCUIT	UTP	UNSHIELDED TWISTED PAIR
IDS	INTRUSION DETECTION SYSTEM		
IG	ISOLATED GROUND		
IMC	INTERMEDIATE METAL CONDUIT	V	VOLT/VOLTAGE
IR	INFRARED	VT	VOLTAGE TRANSFORMER
JB	JUNCTION BOX	W	WATT
		WH	WATT HOUR
kcmil	THOUSAND CIRCULAR MILS	WP	WEATHERPROOF
K/O	KNOCK-OUT	XFMR	TRANSFORMER
KV	KILOVOLTS	XP	EXPLOSION PROOF
		Y	WYE

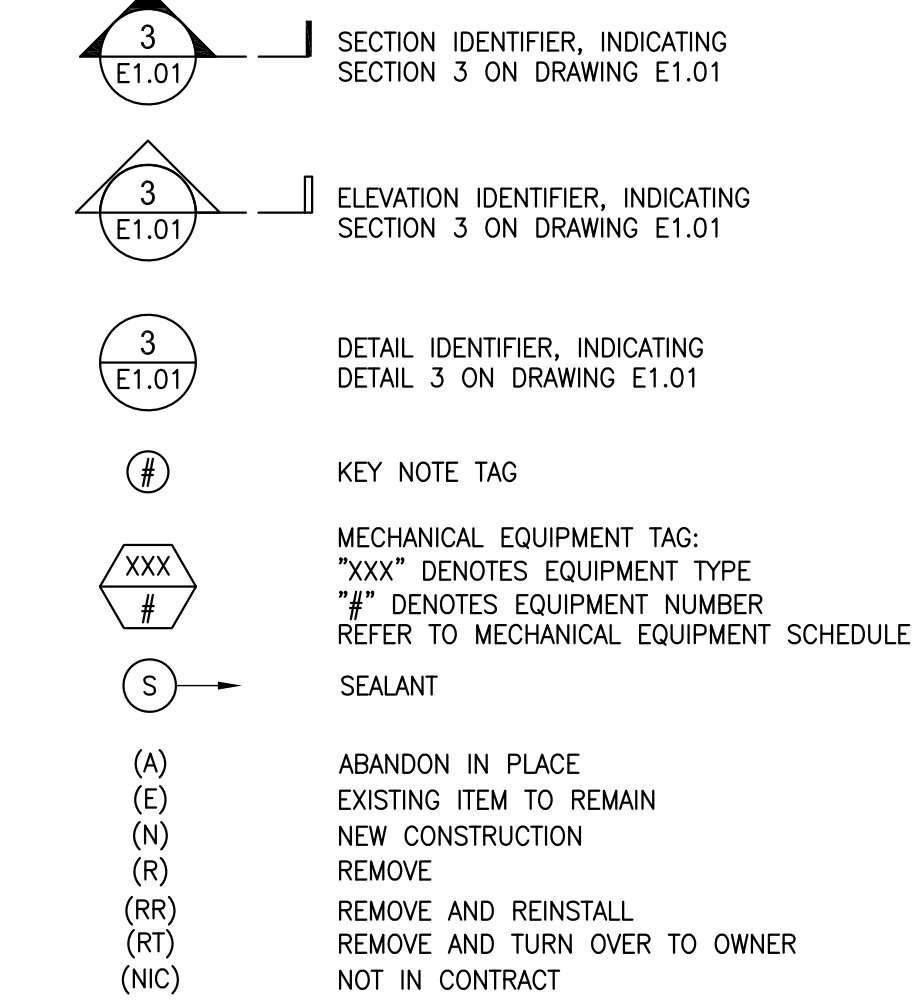
ELECTRICAL GENERAL NOTES

- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE FACILITY TO MAINTAIN ACCESS AT ALL TIMES.
- ALL WORK BEING PERFORMED SHALL NOT IN ANY WAY INTERFERE WITH THE REGULAR OPERATION OF THE FACILITY. SECURITY SHALL BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE FACILITY FOR ACCESS TO AND FROM THE FACILITY.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD BEFORE BEGINNING ANY WORK OR PURCHASING ANY MATERIAL OR EQUIPMENT.
- THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS BEFORE SUBMITTING THEIR OFFER. NO EXTRA WILL BE ALLOWED FOR FAILURE TO COMPLY WITH THE ABOVE.
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT / ENGINEER OF ANY EXISTING CONDITION DISCOVERED DURING DEMOLITION THAT WILL INTERFERE WITH THE NEW WORK.
- UTILITY CO. BACKCHARGES SHALL BE FORWARDED TO THE NBHA WITHOUT ANY MARKUP. NBHA SHALL PAY ANY BACKCHARGES DIRECTLY.

ELECTRICAL LEGEND



MISCELLANEOUS



EXISTING EQUIPMENT NOTATION LEGEND

- XM EXISTING EQUIPMENT TO REMAIN.
- XR EXISTING EQUIPMENT TO BE REMOVED.
- XRL EXISTING EQUIPMENT TO BE RELOCATED.
- XRN NEW LOCATION OF RELOCATED EXISTING EQUIPMENT.
- XRR EXISTING EQUIPMENT TO BE REMOVED AND REPLACED WITH NEW DEVICE. EXISTING BACKBOX AND ASSOCIATED WIRING TO BE REUSED.
- XB EXISTING EQUIPMENT AND ASSOCIATED WIRING TO BE REMOVED. PROVIDE NEW BLANK PLATE ON EXISTING BOX.
- XS EXISTING EQUIPMENT TO BE REMOVED, STORED, CLEANED, AND REINSTALLED IN EXISTING LOCATION.
- XA EXISTING EQUIPMENT TO BE DISCONNECTED AND ABANDONED IN PLACE

McKINNEL & TAYLOR Inc.
ARCHITECTS ENGINEERS PLANNERS
 SUITE 201
 1001 HINGHAM STREET
 ROCKLAND, MA 02370
 PHONE: (781) 878-6223
 FAX: (781) 878-8920

SEAL:

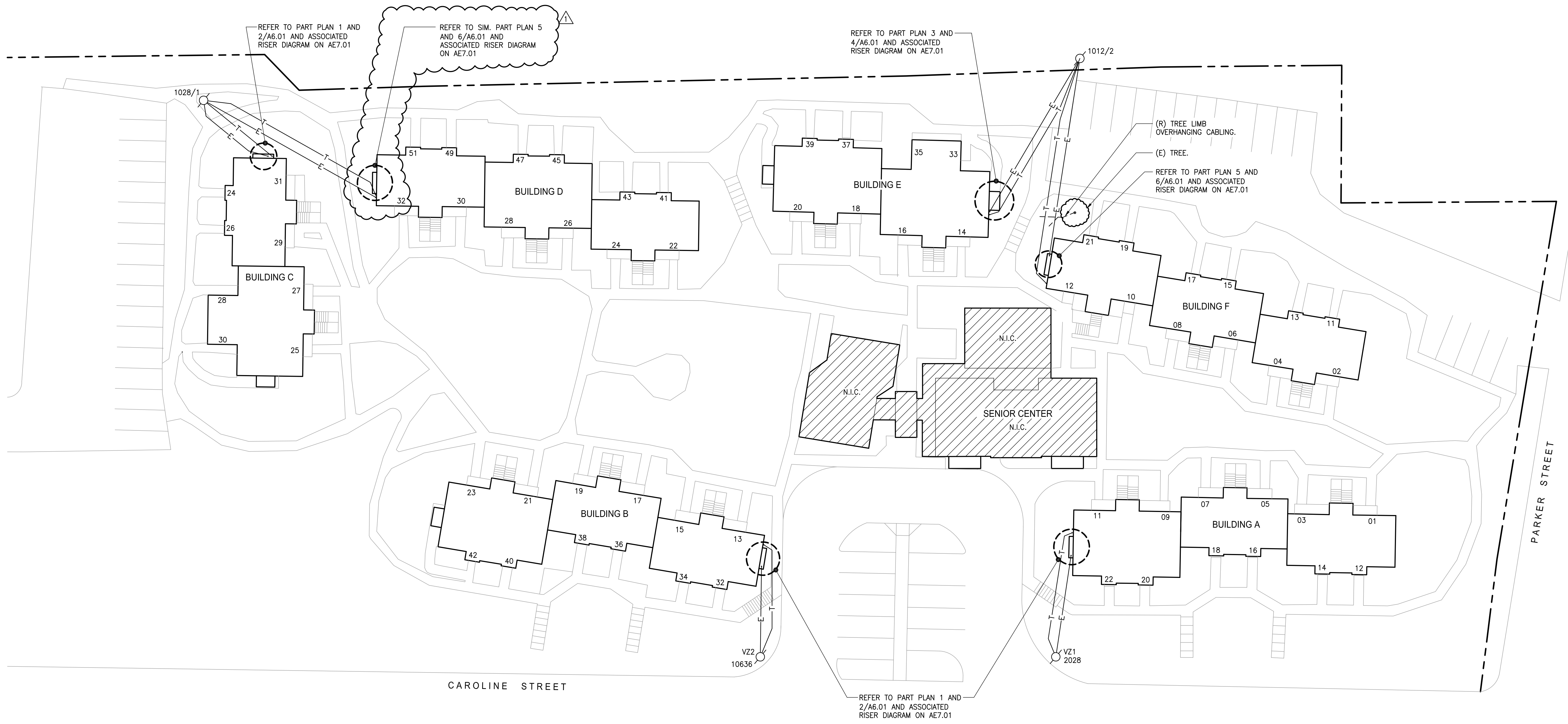
DATE: 8-23-22 BY: COL ACTION: ADD. #1

ELECTRICAL ENCLOSURE & PANEL UPGRADE
 NEW BEDFORD HOUSING AUTHORITY
 CAROLINE STREET
 NEW BEDFORD, MASSACHUSETTS 02740

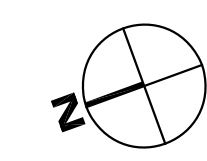
ABBREVIATIONS, NOTES, AND LEGENDS

A/E PROJECT NUMBER: **22008.00**
 NBHA PROJECT NUMBER: **016-2022**
 DATE: **08-10-22**
 DRAWN BY: **COL** CHECKED BY: **BMM**
 SCALE: **AS NOTED**

DRAWING NUMBER: **AE0.01**



1 SITE PLAN
 SCALE: 1" = 20'-0"



SEAL:

DATE: 8-23-22 BY: COL ACTION: ADD. #1

PROJECT LOCATION & TITLE

ELECTRICAL ENCLOSURE & PANEL UPGRADE
 NEW BEDFORD HOUSING AUTHORITY
 CAROLINE STREET
 NEW BEDFORD, MASSACHUSETTS 02740

DRAWING TITLE

SITE PLAN

A/E PROJECT NUMBER: 22008.00
 NBHA PROJECT NUMBER: 016-2022
 DATE: 08-10-22
 DRAWN BY: COL CHECKED BY: BMM
 SCALE: AS NOTED

DRAWING NUMBER:
AE1.01

SEAL:

DATE:	BY:	ACTION:
8-23-22	COL	ADD #1

ELECTRICAL ENCLOSURE & PANEL UPGRADE
 NEW BEDFORD HOUSING AUTHORITY
 CAROLINE STREET
 NEW BEDFORD, MASSACHUSETTS 02740

PART PLANS AND ELEVATIONS

PROJECT LOCATION & TITLE

A/E PROJECT NUMBER:
22008.00

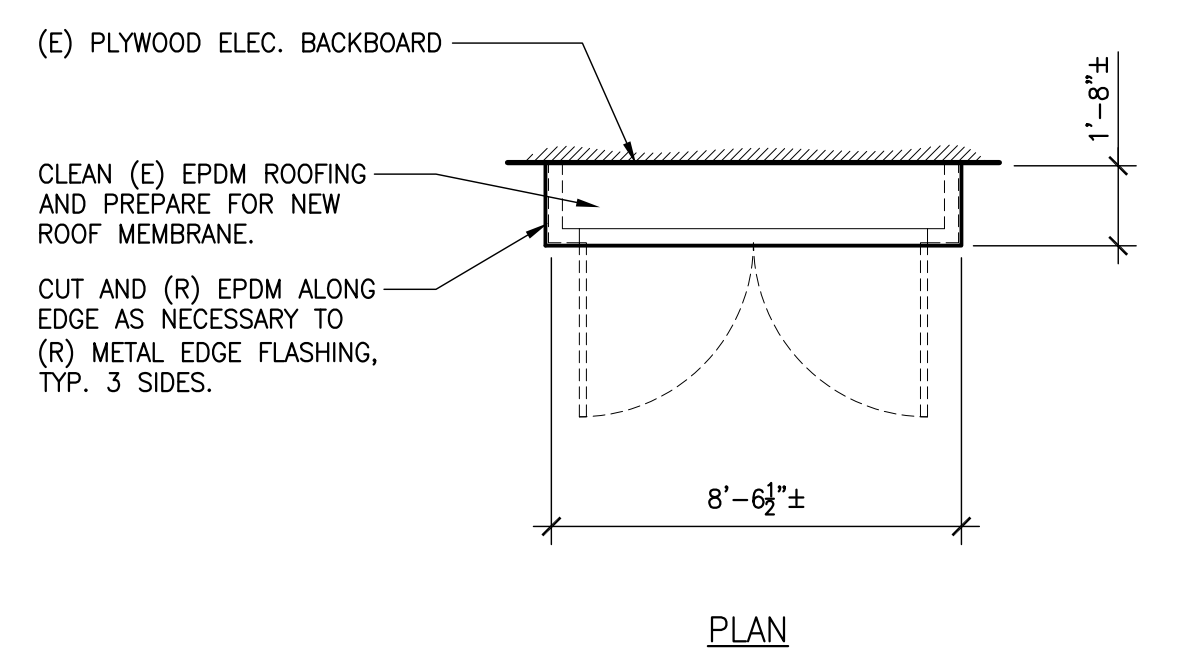
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016-2022

DATE:
08-10-22

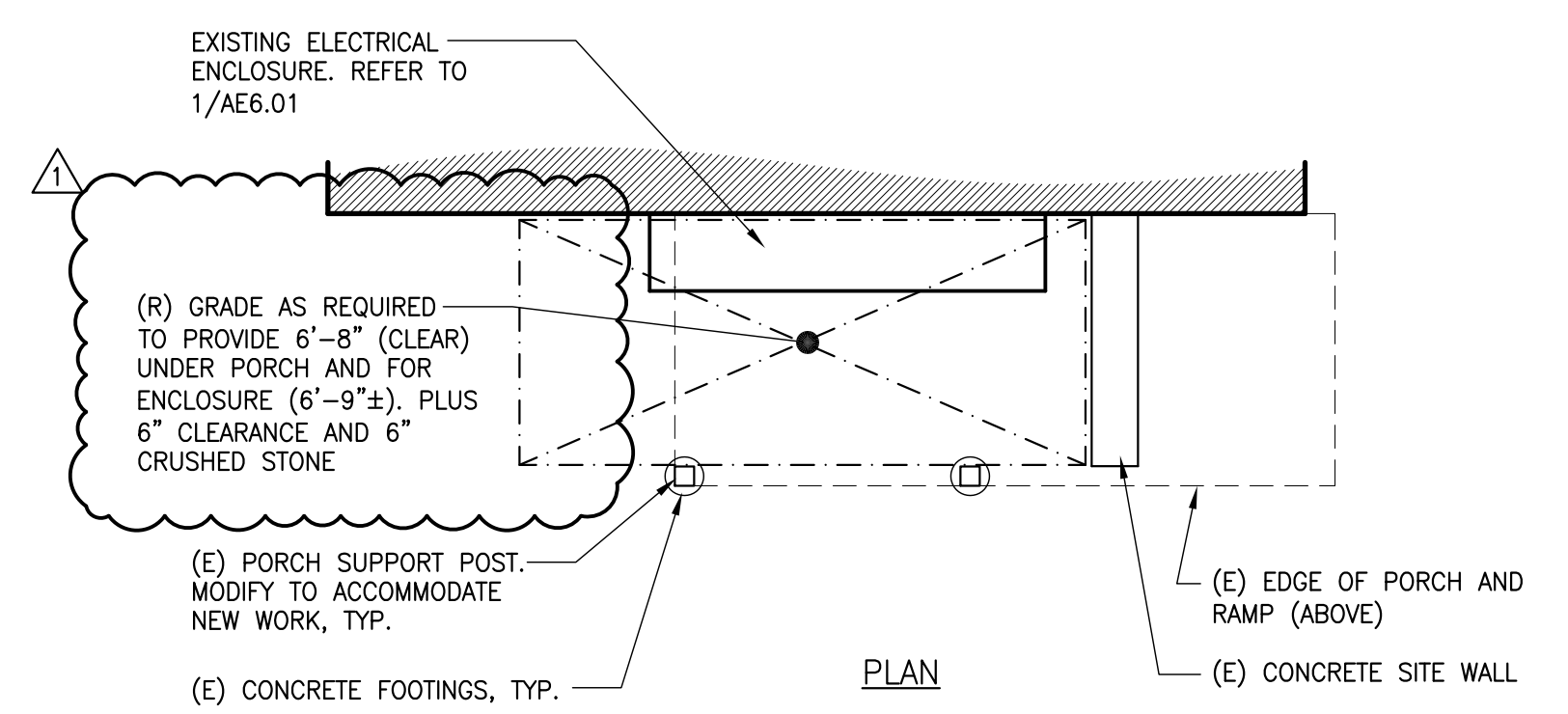
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SCALE:
AS NOTED

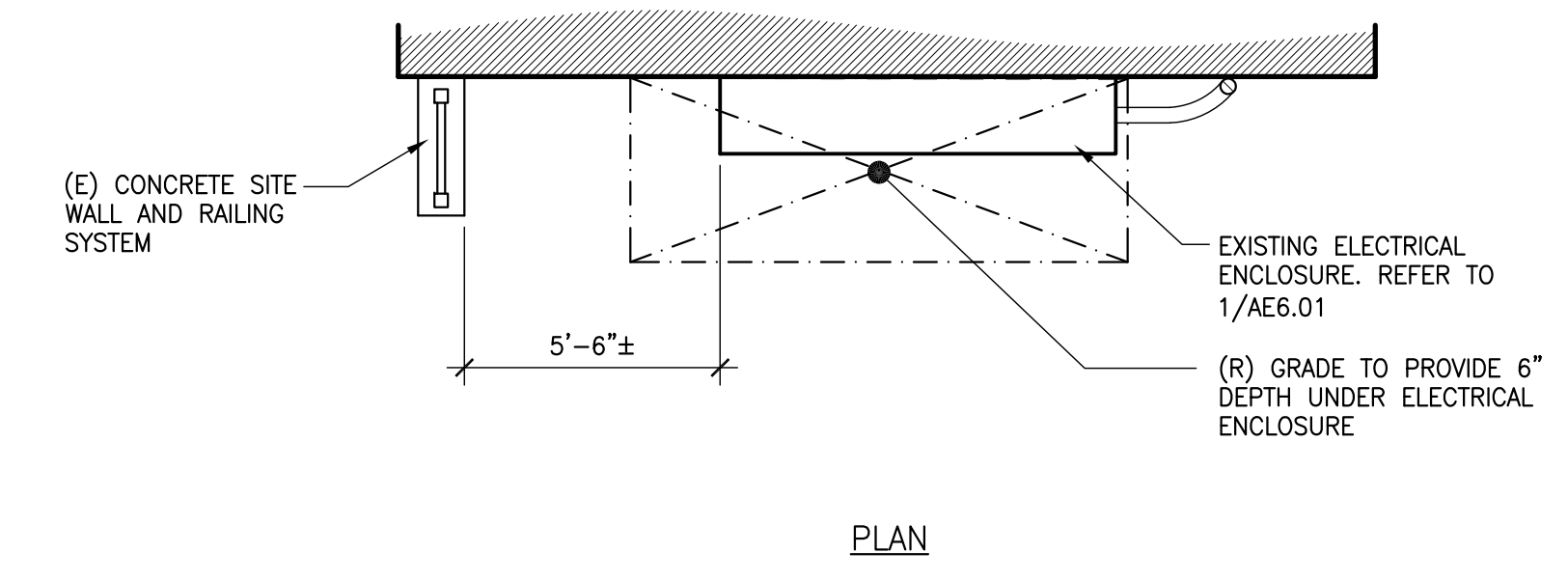
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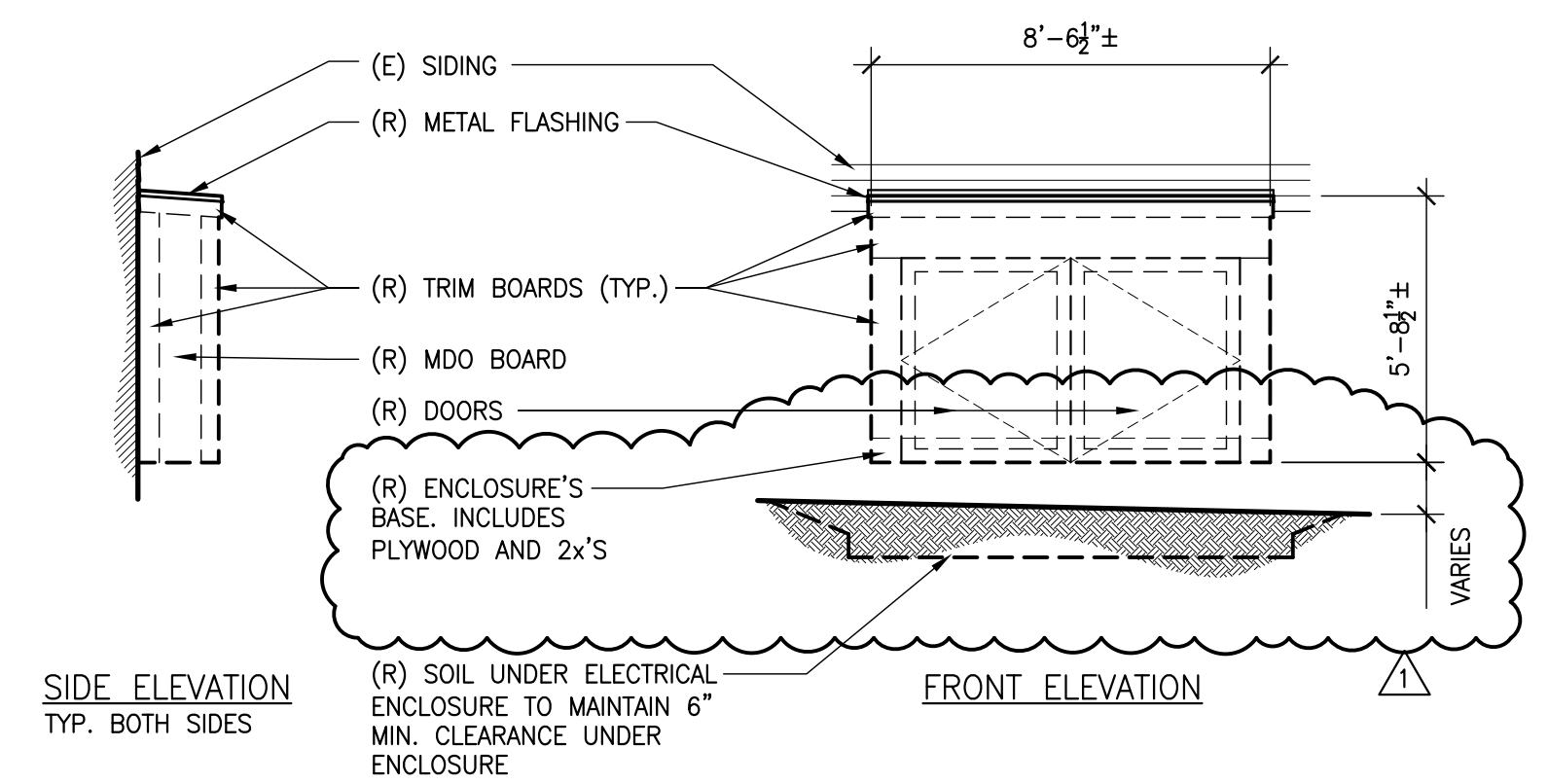
1 TYPICAL ELECTRICAL ENCLOSURE - REMOVAL
 SCALE: 1/4" = 1'-0"



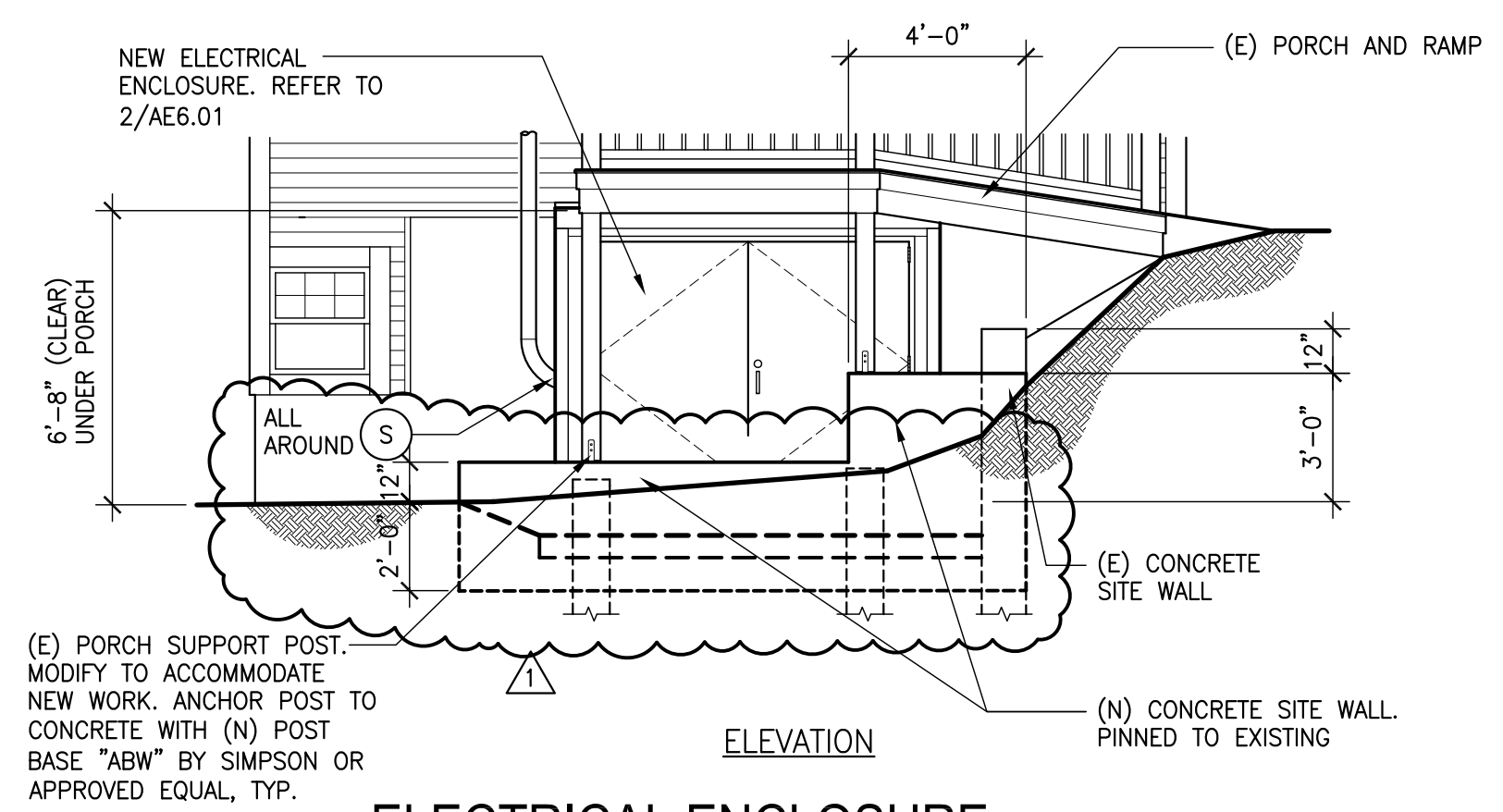
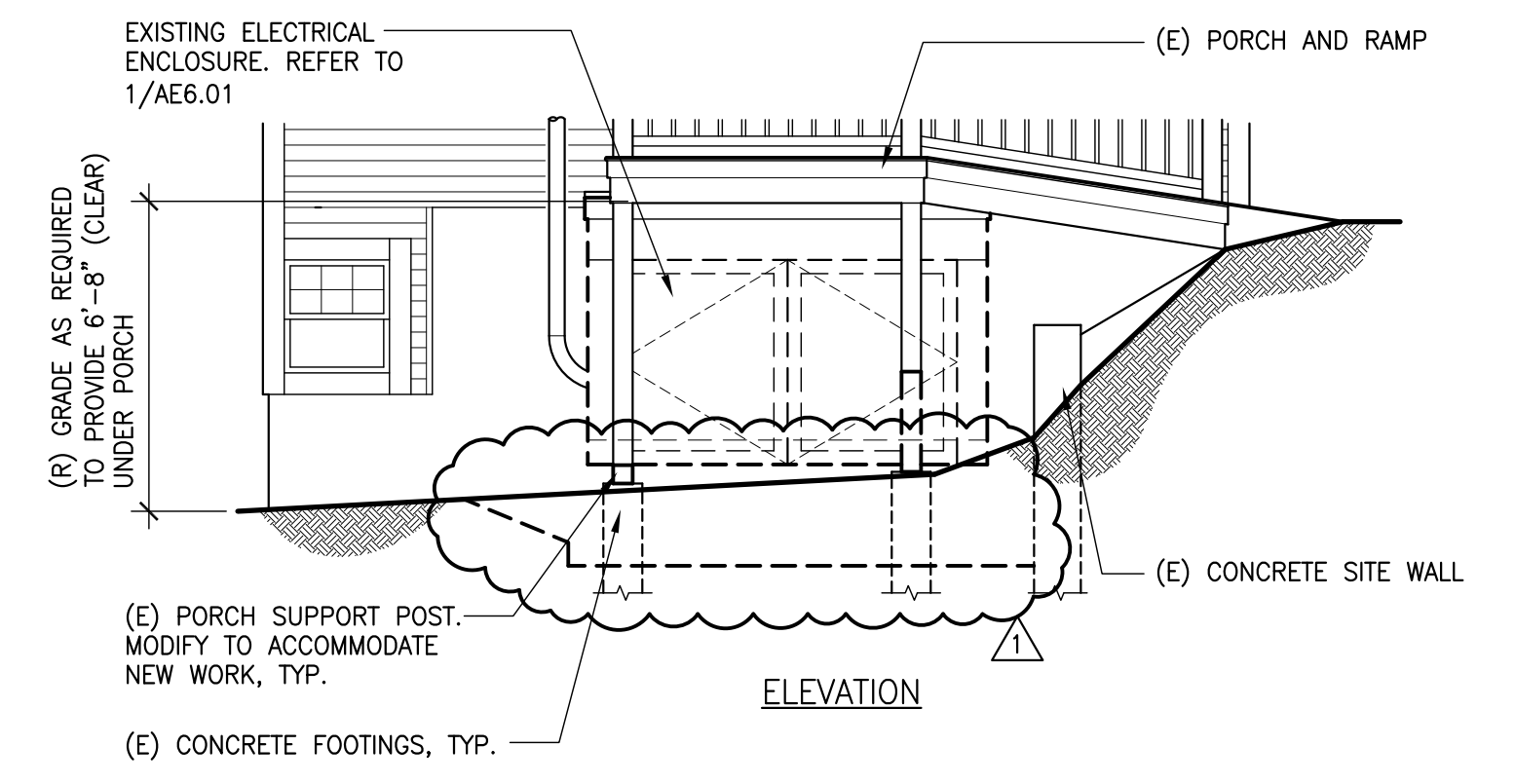
3 ELECTRICAL ENCLOSURE AT BLDG. E - REMOVAL
 SCALE: 1/4" = 1'-0"



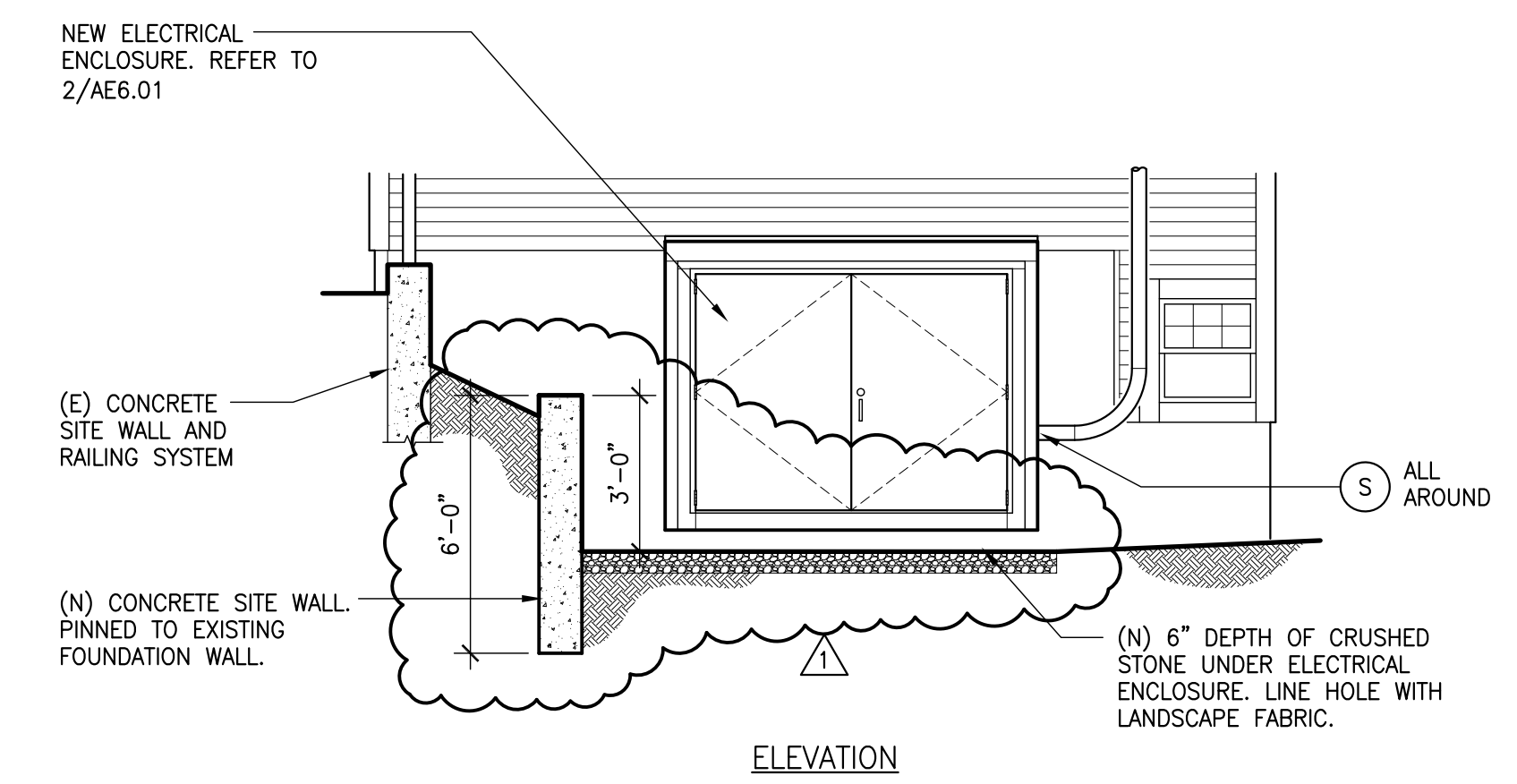
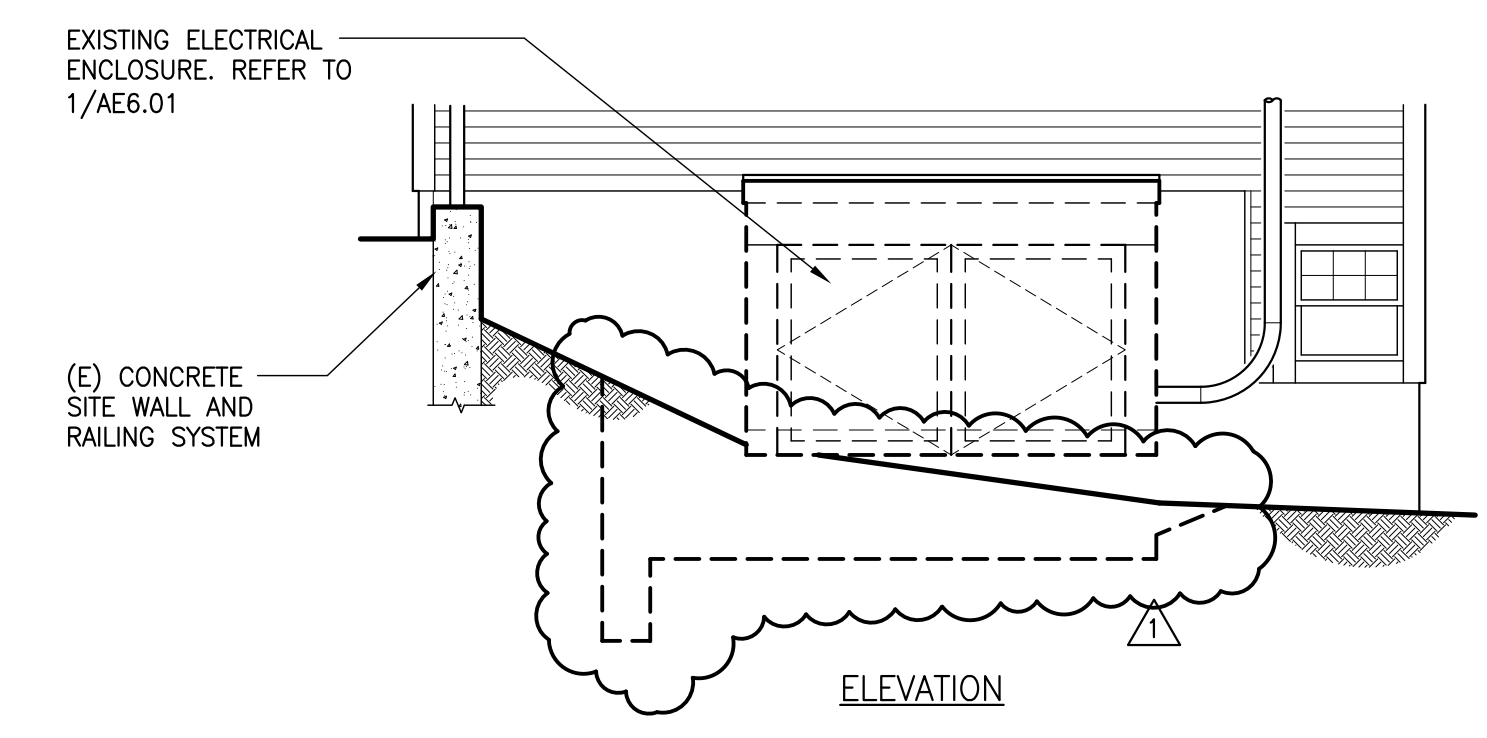
5 ELECTRICAL ENCLOSURE AT BLDG. F - REMOVAL
 SCALE: 1/4" = 1'-0"



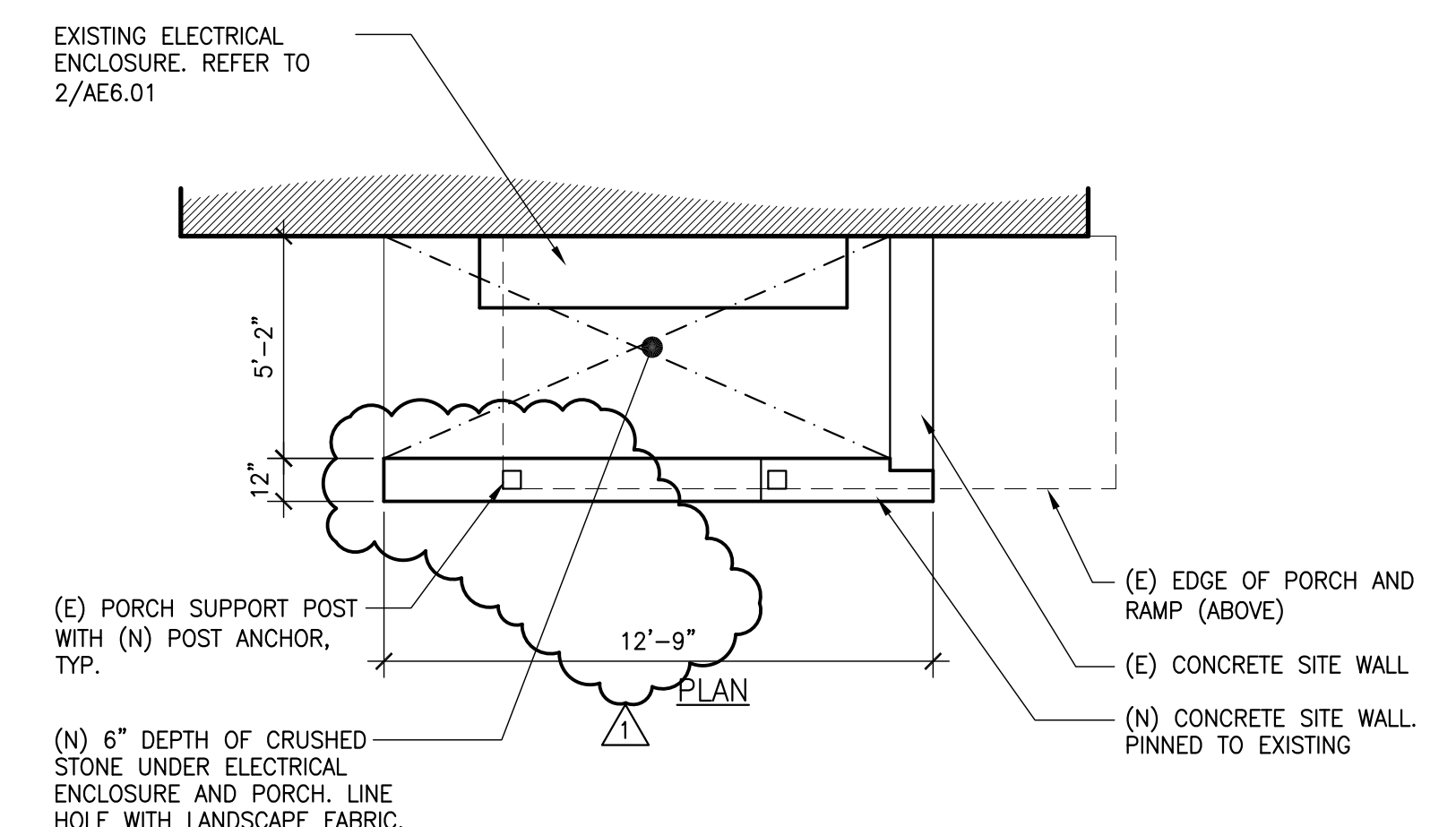
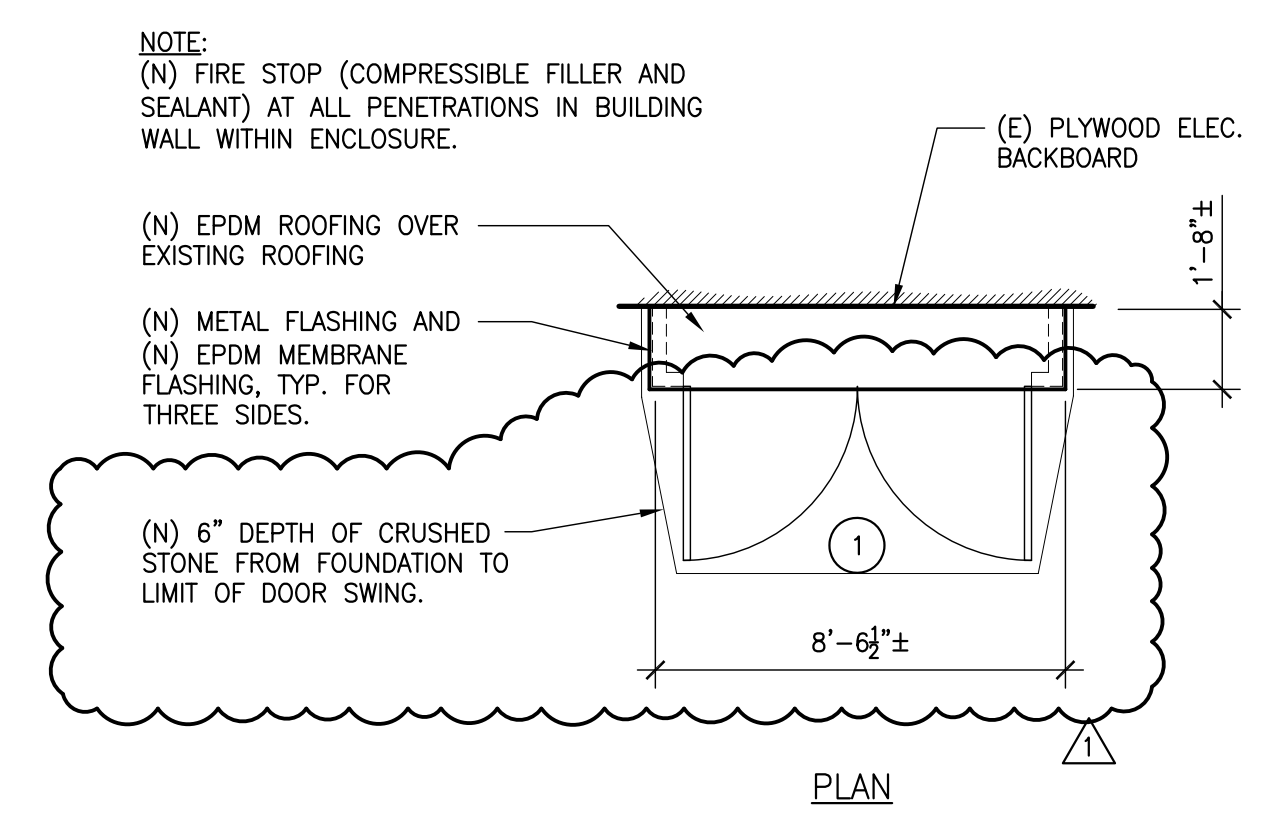
2 TYPICAL ELECTRICAL ENCLOSURE - NEW
 SCALE: 1/4" = 1'-0"



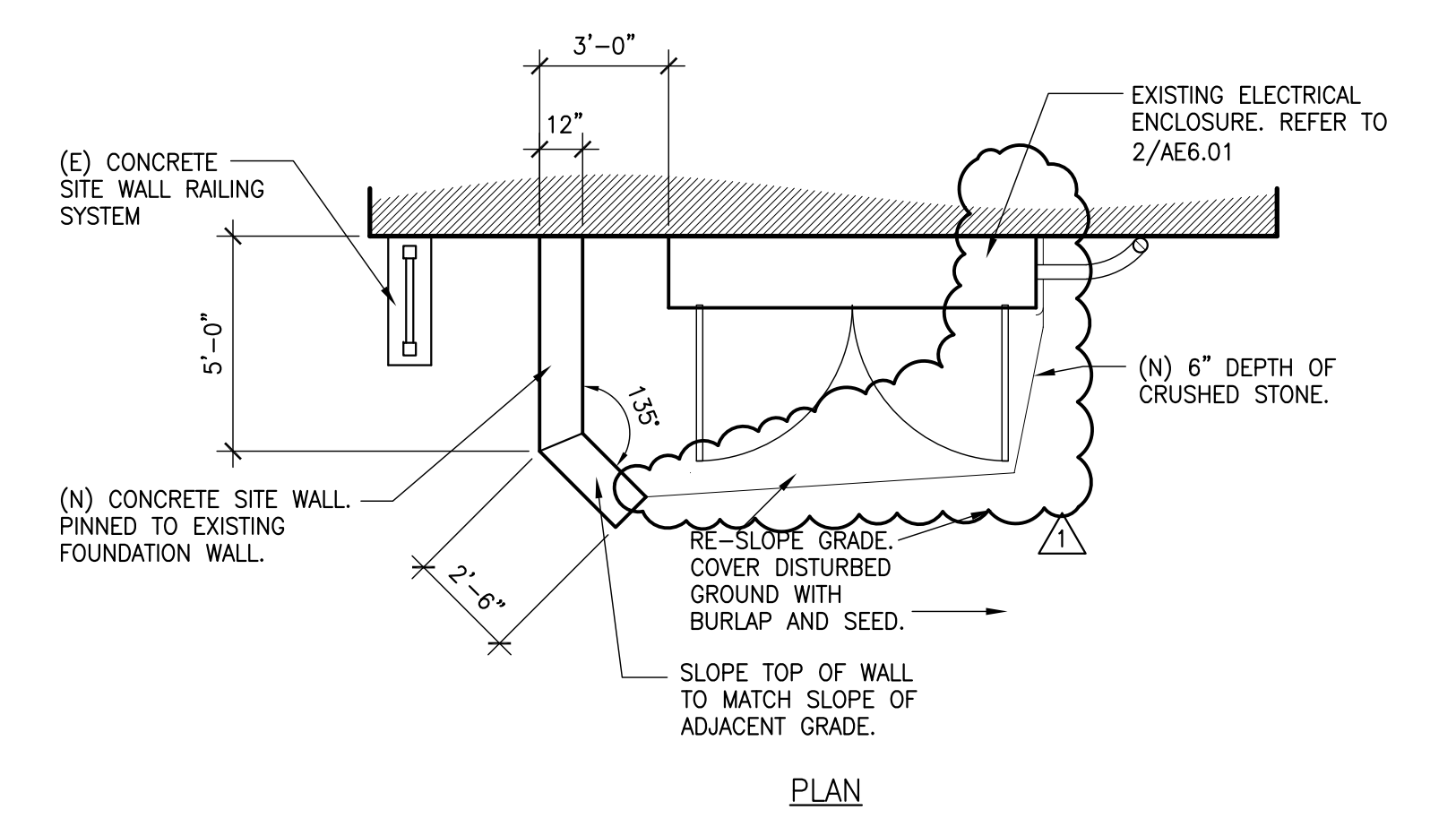
4 ELECTRICAL ENCLOSURE AT BLDG. E - NEW
 SCALE: 1/4" = 1'-0"



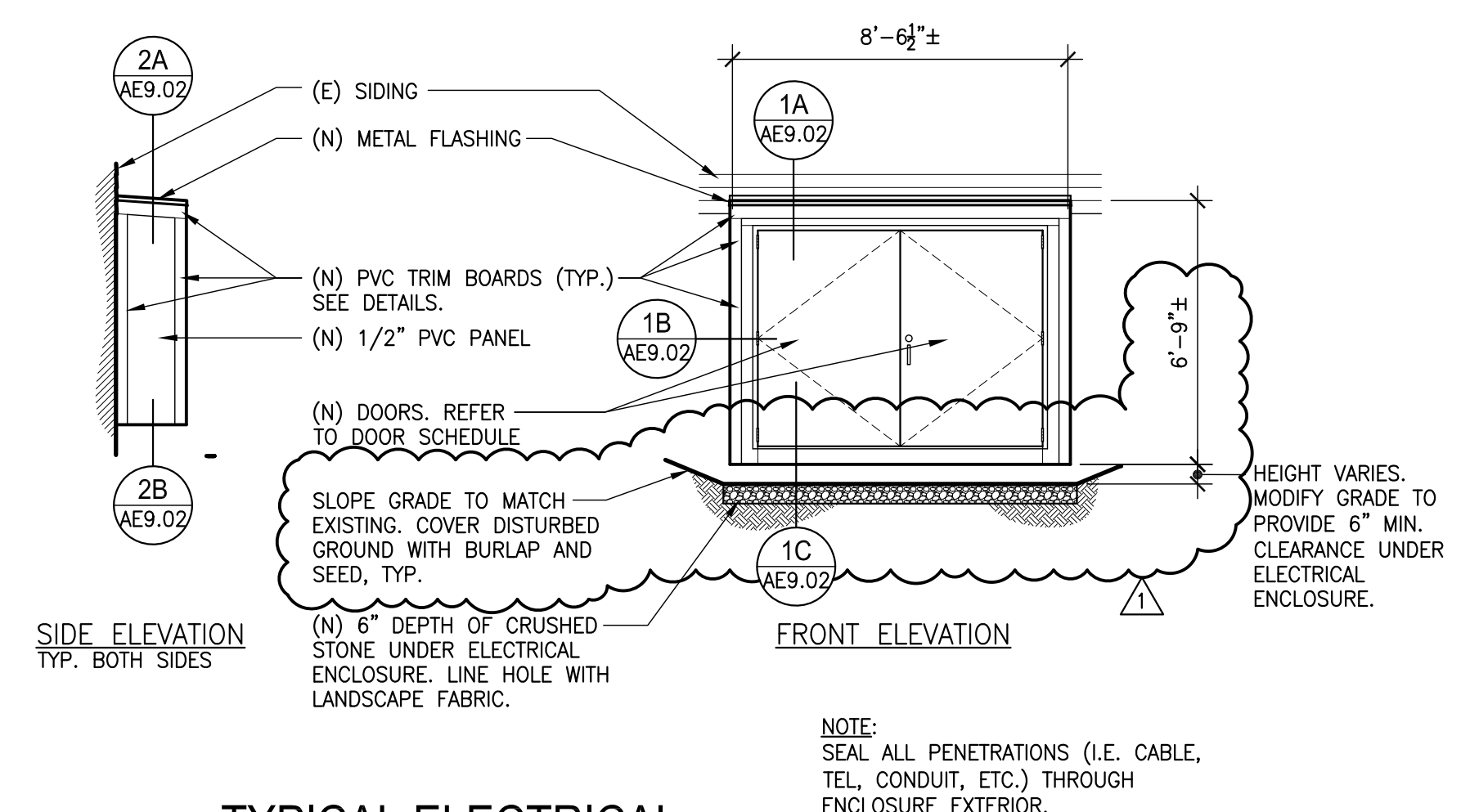
6 ELECTRICAL ENCLOSURE AT BLDG. F - NEW
 SCALE: 1/4" = 1'-0"



4 ELECTRICAL ENCLOSURE AT BLDG. E - NEW
 SCALE: 1/4" = 1'-0"



6 ELECTRICAL ENCLOSURE AT BLDG. F - NEW
 SCALE: 1/4" = 1'-0"



NOTE: SEAL ALL PENETRATIONS (I.E. CABLE, TEL. CONDUIT, ETC.) THROUGH ENCLOSURE EXTERIOR.

2 TYPICAL ELECTRICAL ENCLOSURE - NEW
 SCALE: 1/4" = 1'-0"

NOTES

- FOR ELECTRICAL LEGEND AND GENERAL NOTES REFER TO DRAWING AE0.01.
- COORDINATE ALL OUTAGES WITH UTILITY COMPANY AND OWNER PRIOR TO STARTING WORK.

KEY NOTES

- INCOMING ELECTRICAL SERVICE, SURFACE CONDUIT TO REMAIN.
- ELECTRICAL ENCLOSURE AND BACKBOARD, GENERAL CONTRACTOR TO REMOVE EXISTING AND PROVIDE NEW. REFER TO DRAWING AE6.01 FOR ADDITIONAL INFORMATION.
- REFER TO BUILDING SERVICE GROUNDING DETAIL ON DRAWING AE9.01 FOR ADDITIONAL INFORMATION.
- REFER TO ELECTRICAL FEEDER VERMIN-PROOFING DETAIL ON DRAWING AE9.01.
- REFER TO TYPICAL ENCLOSURE BACKBOARD DETAIL ON DRAWING AE9.01 FOR FURTHER INFORMATION.
- PROVIDE NEW CT'S WITH CABINET. COORDINATE WITH UTILITY COMPANY FOR REQUIRED MODEL NUMBERS. TYPICAL FOR ALL.
- PROVIDE FIRESTOPPING SEALER AT ALL PENETRATIONS TO ENCLOSURE AND BUILDING. TYPICAL FOR ALL.

SEAL:

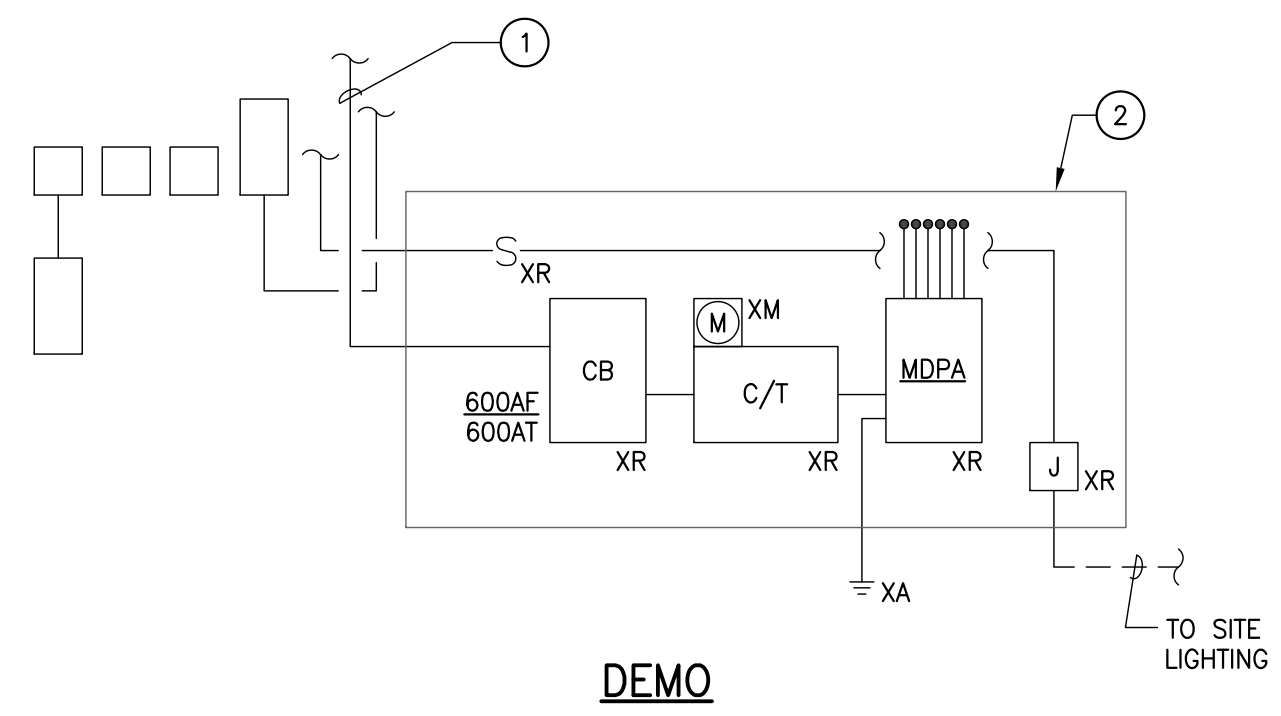
DATE:	BY:	ACTION:
8-23-22	COL	ADD. #1

PROJECT LOCATION & TITLE
ELECTRICAL ENCLOSURE & PANEL UPGRADE
 NEW BEDFORD HOUSING AUTHORITY
 CAROLINE STREET
 NEW BEDFORD, MASSACHUSETTS 02740

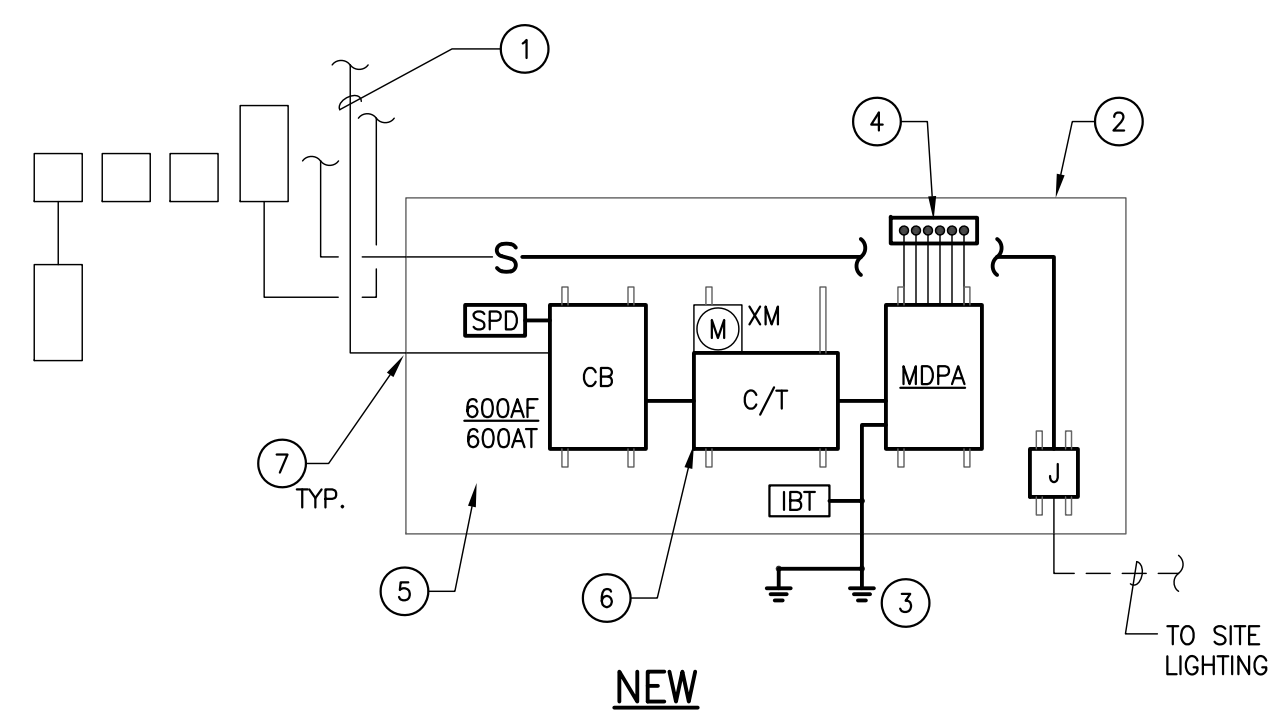
DRAWING TITLE
RISER DIAGRAMS

A/E PROJECT NUMBER:	22008.00
NBHA PROJECT NUMBER:	016-2022
DATE:	08-10-22
DRAWN BY:	COL
CHECKED BY:	BMM
SCALE:	AS NOTED

DRAWING NUMBER:
AE7.01



DEMO

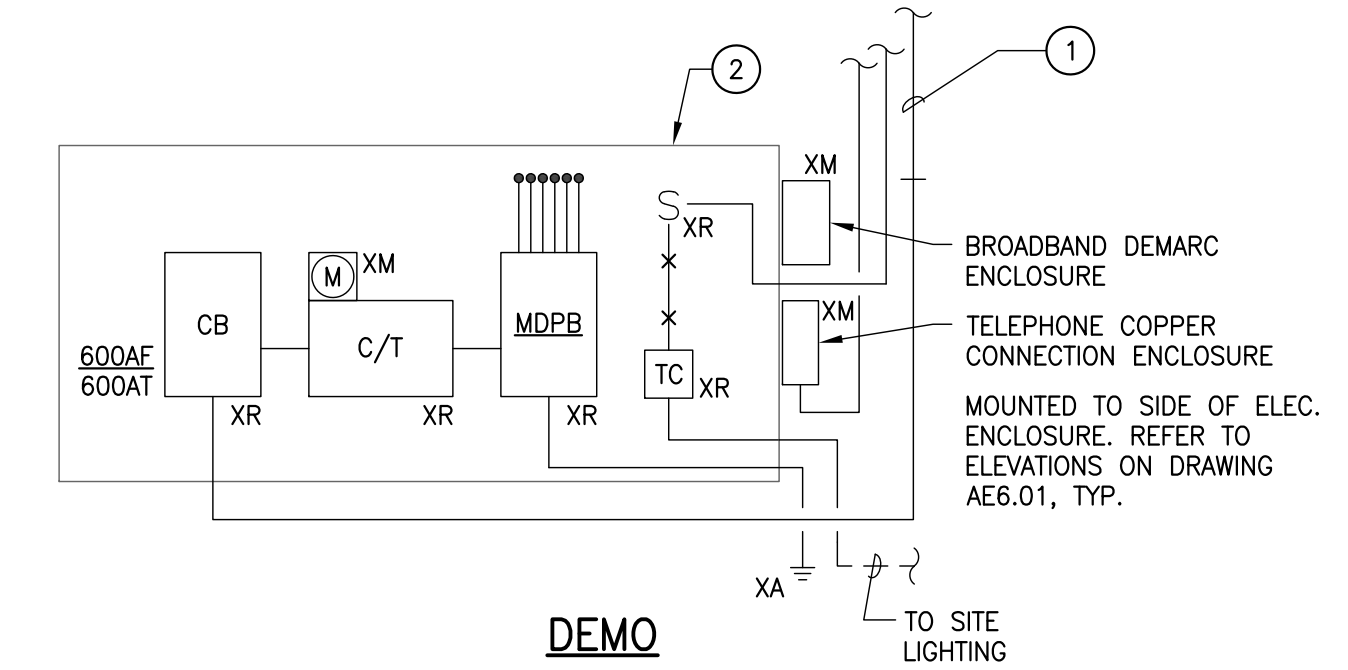


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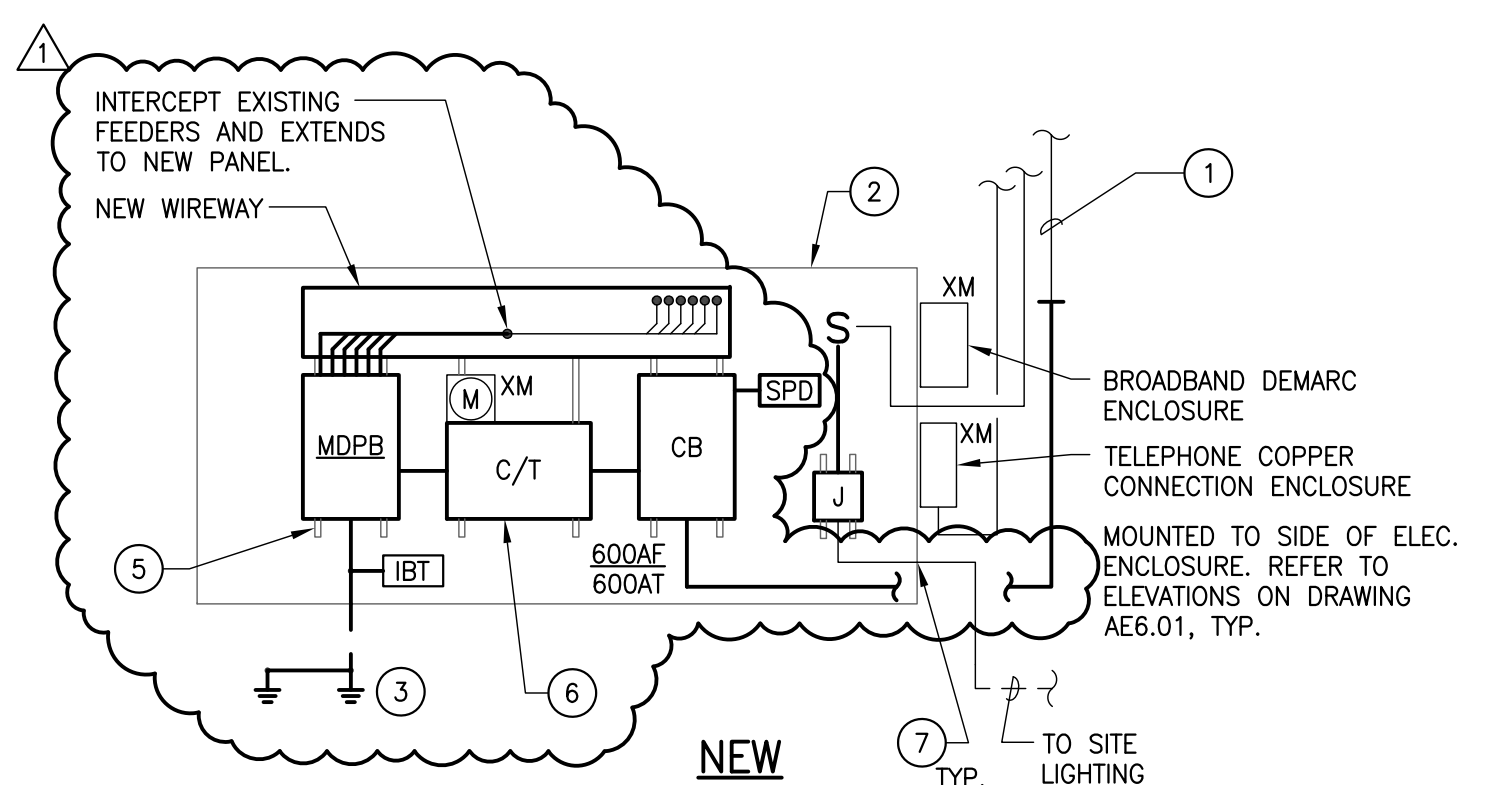
PARTIAL POWER RISER DIAGRAM - BUILDING A

1

SCALE: N.T.S.



DEMO

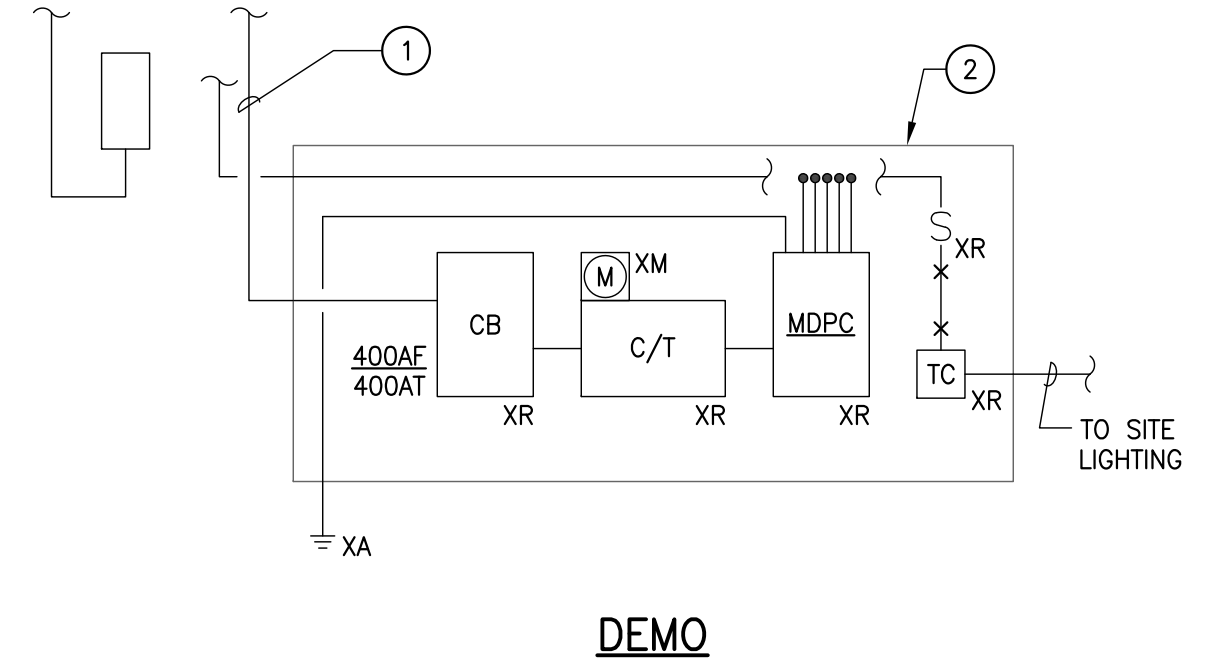


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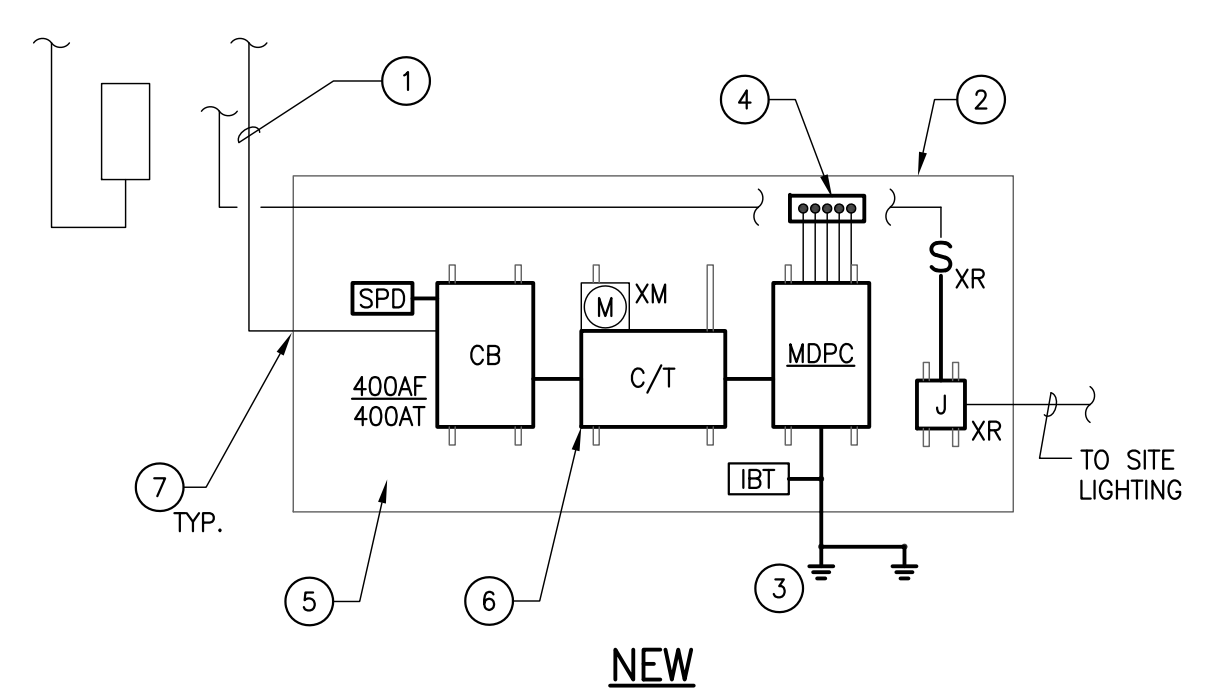
PARTIAL POWER RISER DIAGRAM - BUILDING B

2

SCALE: N.T.S.



DEMO

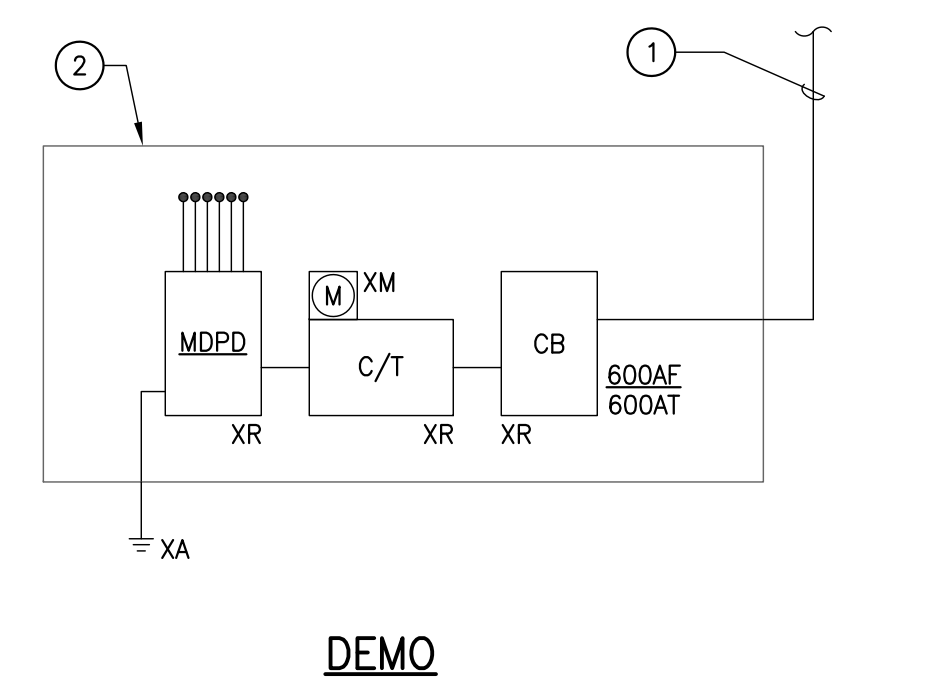


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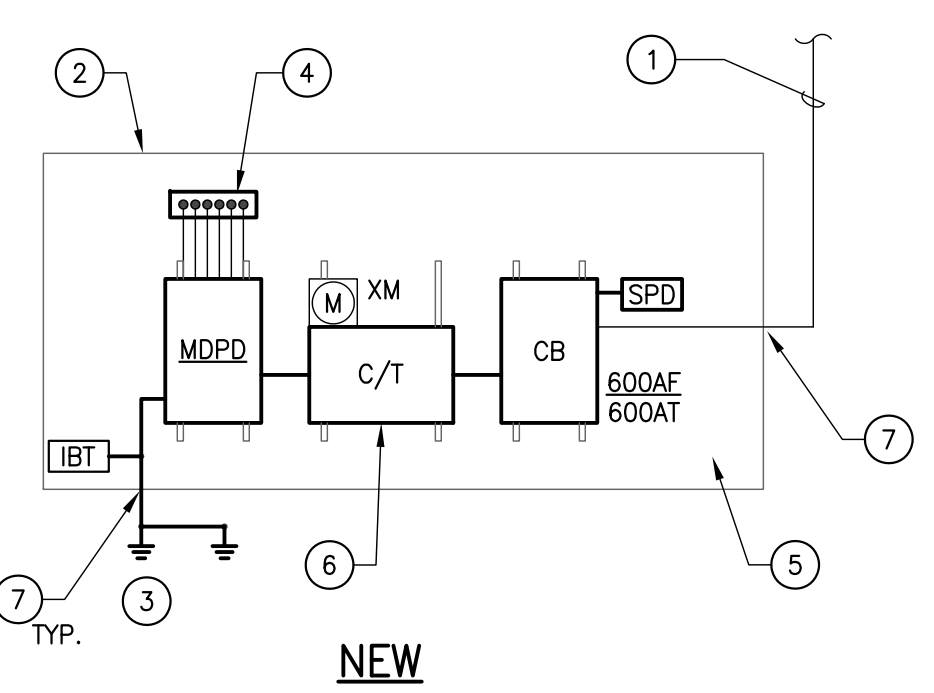
PARTIAL POWER RISER DIAGRAM - BUILDING C

3

SCALE: N.T.S.



DEMO

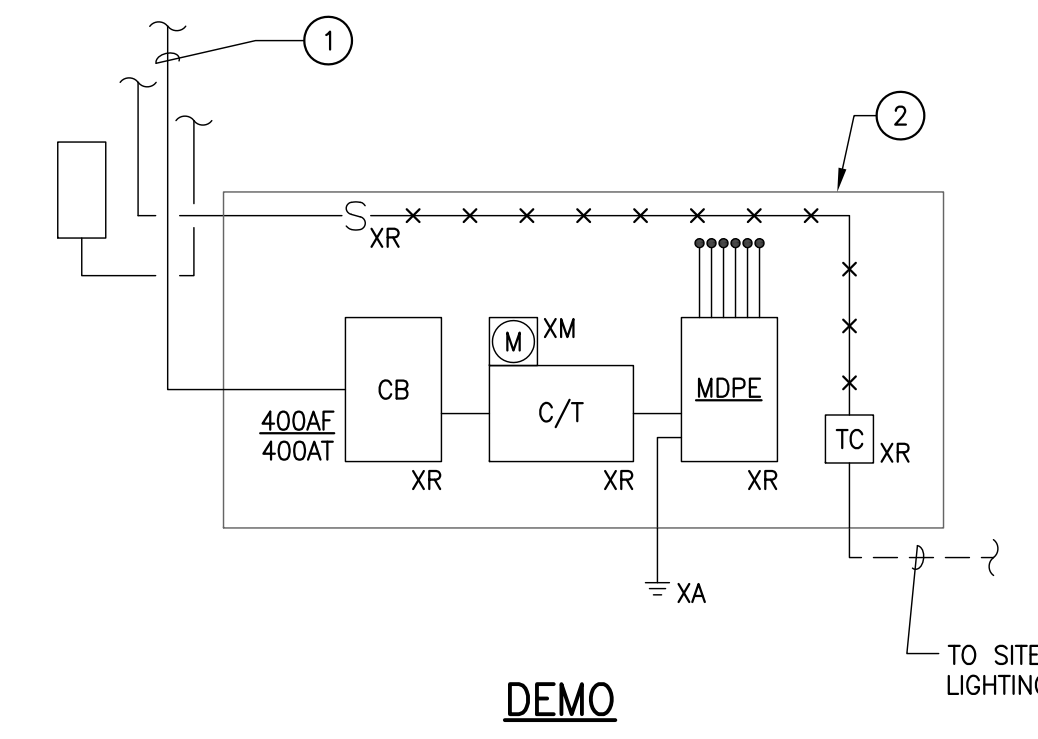


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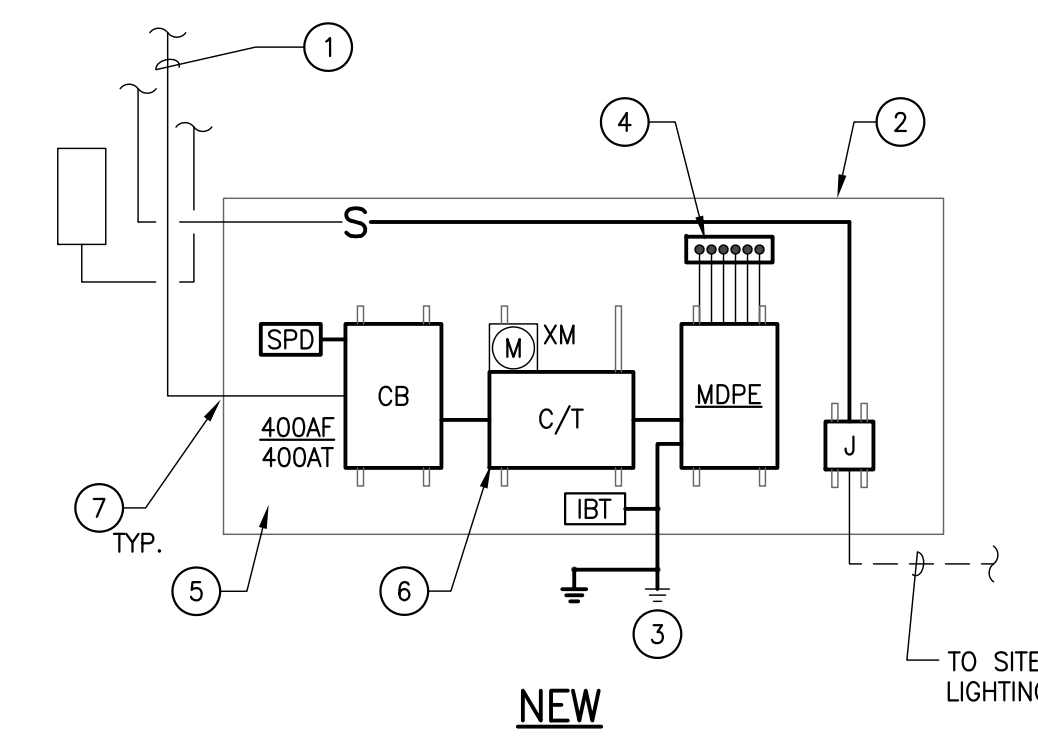
PARTIAL POWER RISER DIAGRAM - BUILDING D

4

SCALE: N.T.S.



DEMO

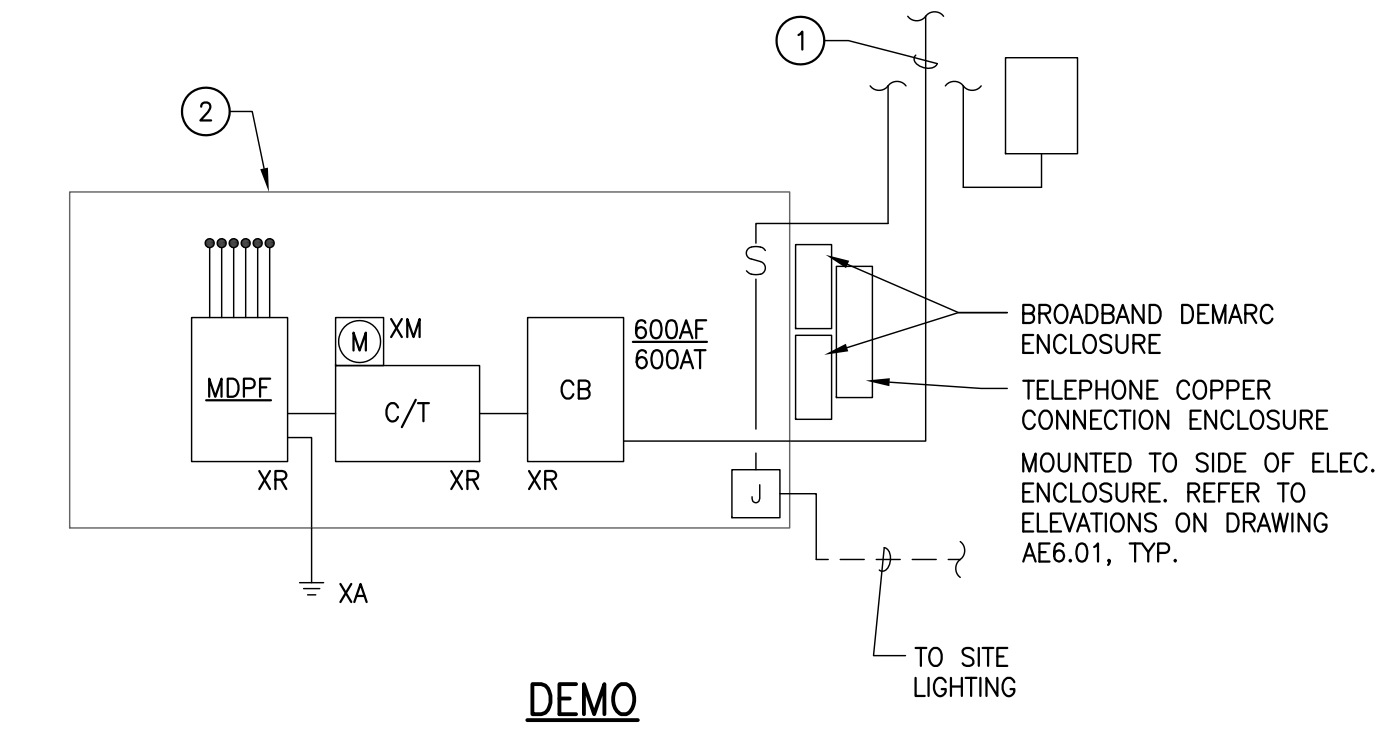


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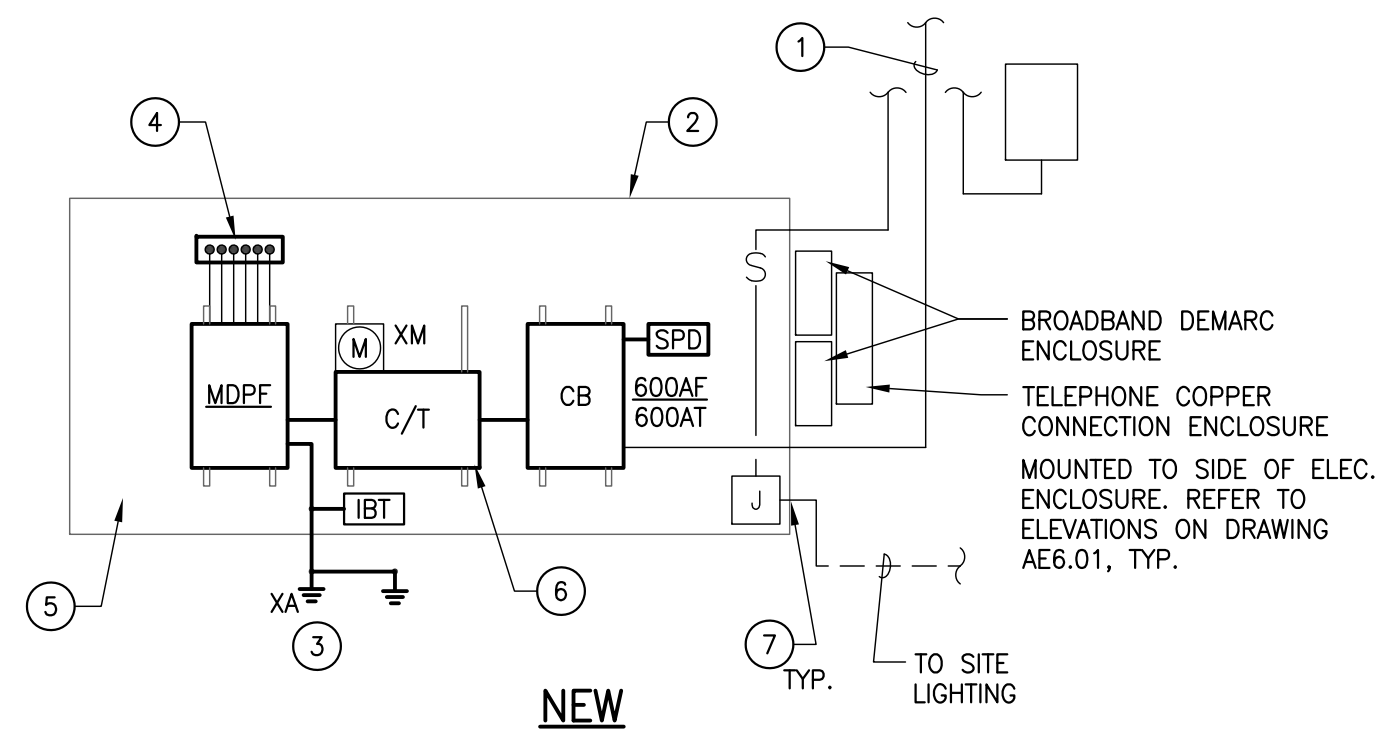
PARTIAL POWER RISER DIAGRAM - BUILDING E

5

SCALE: N.T.S.



DEMO



NEW

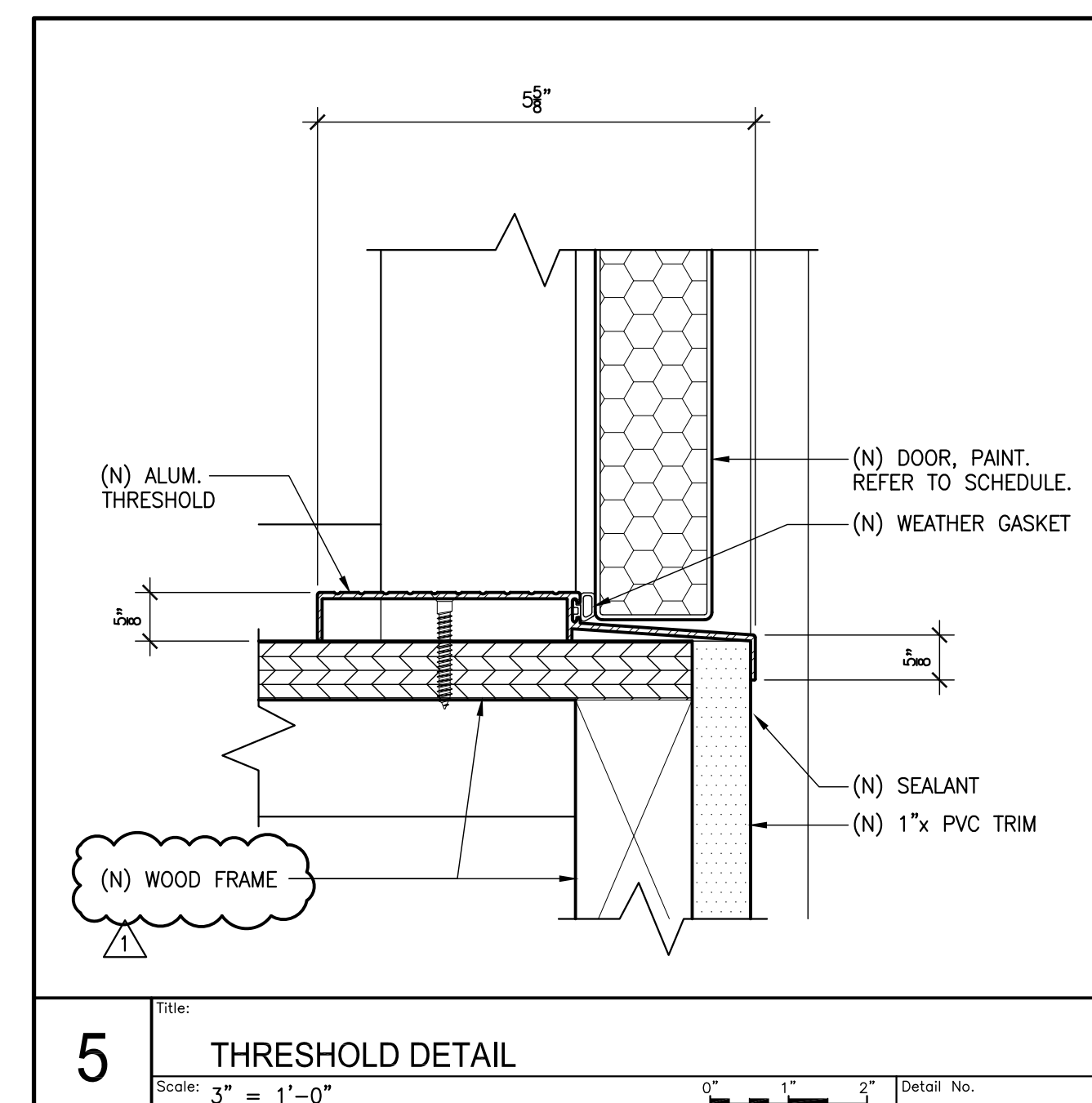
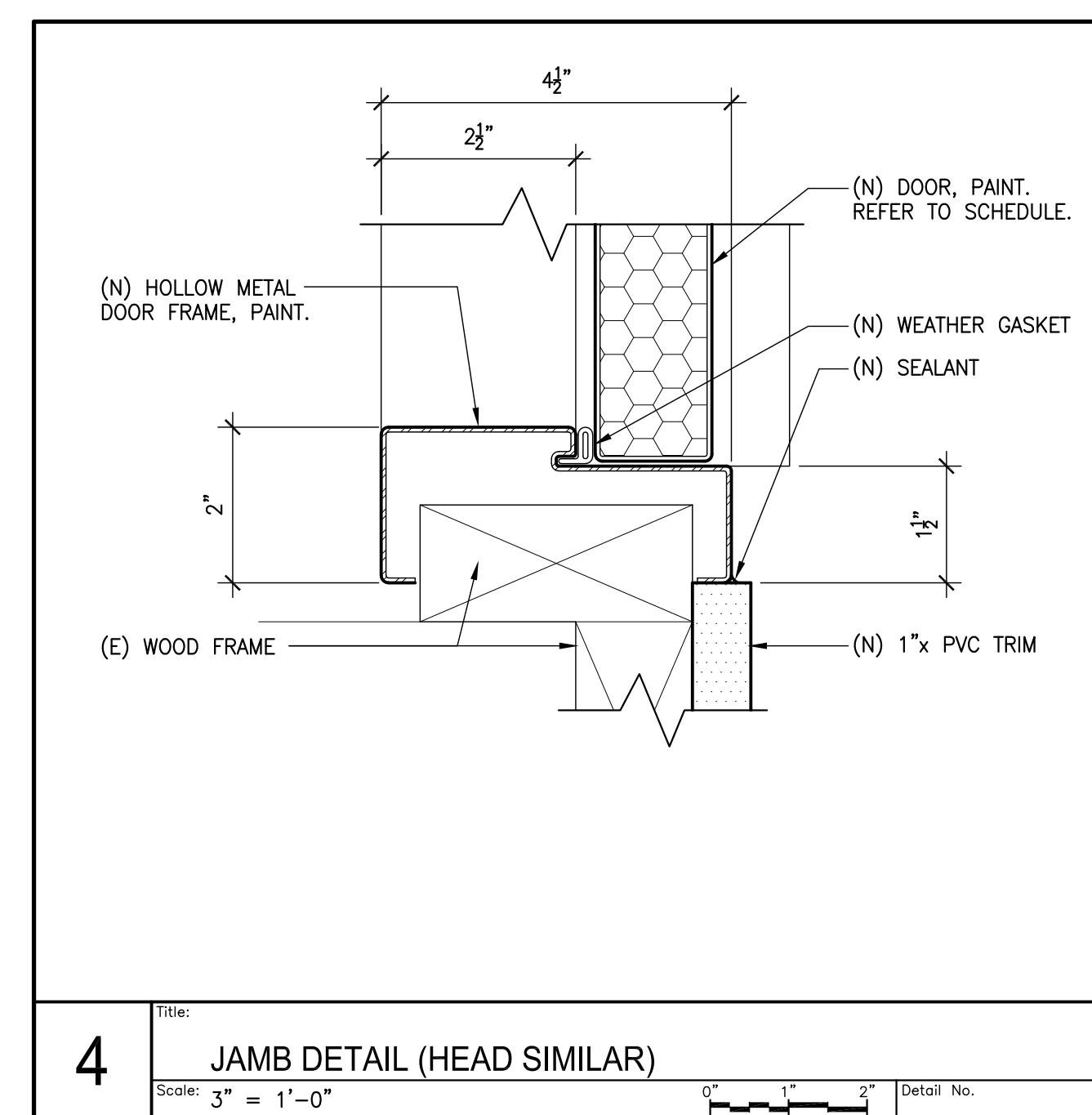
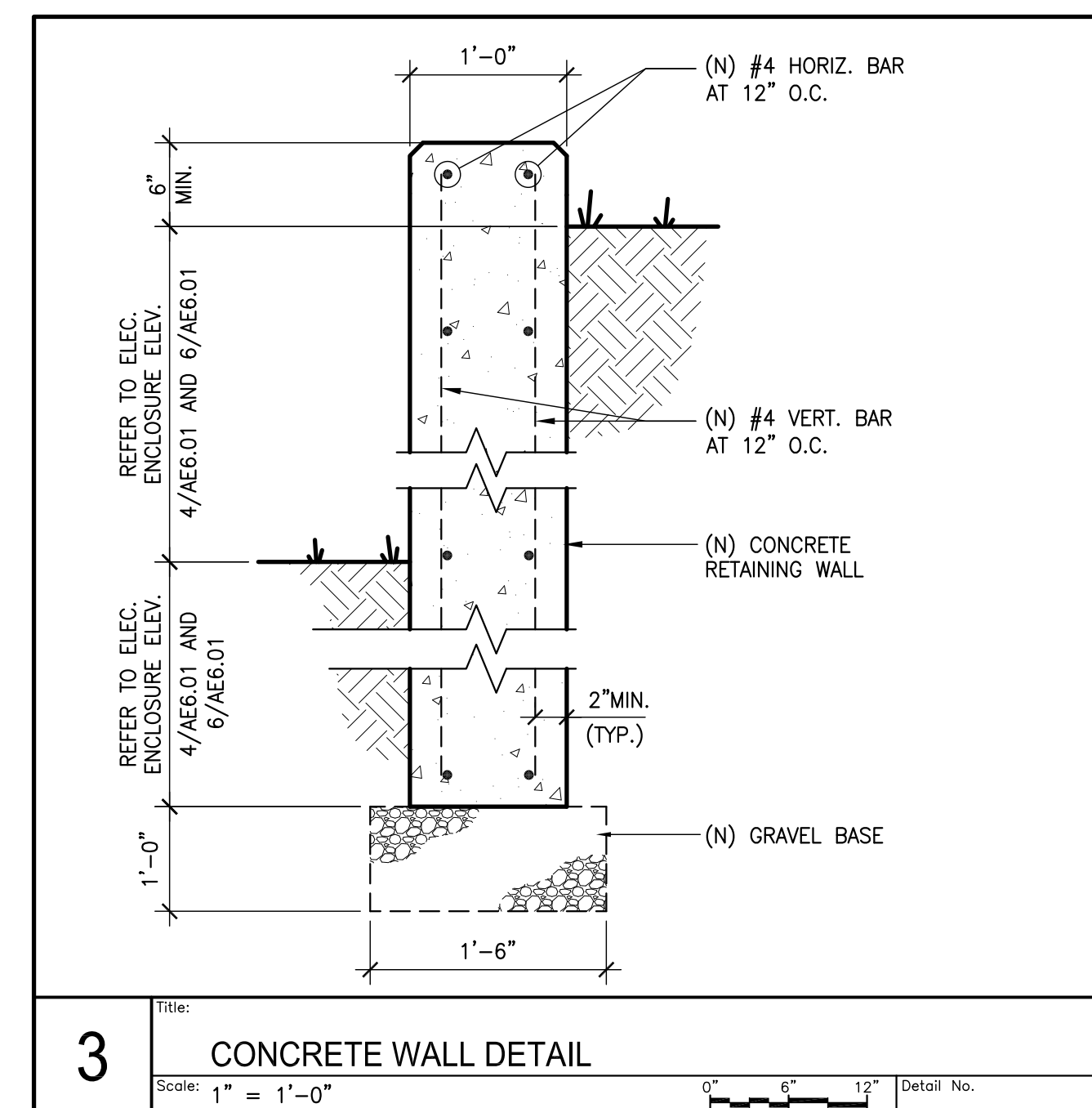
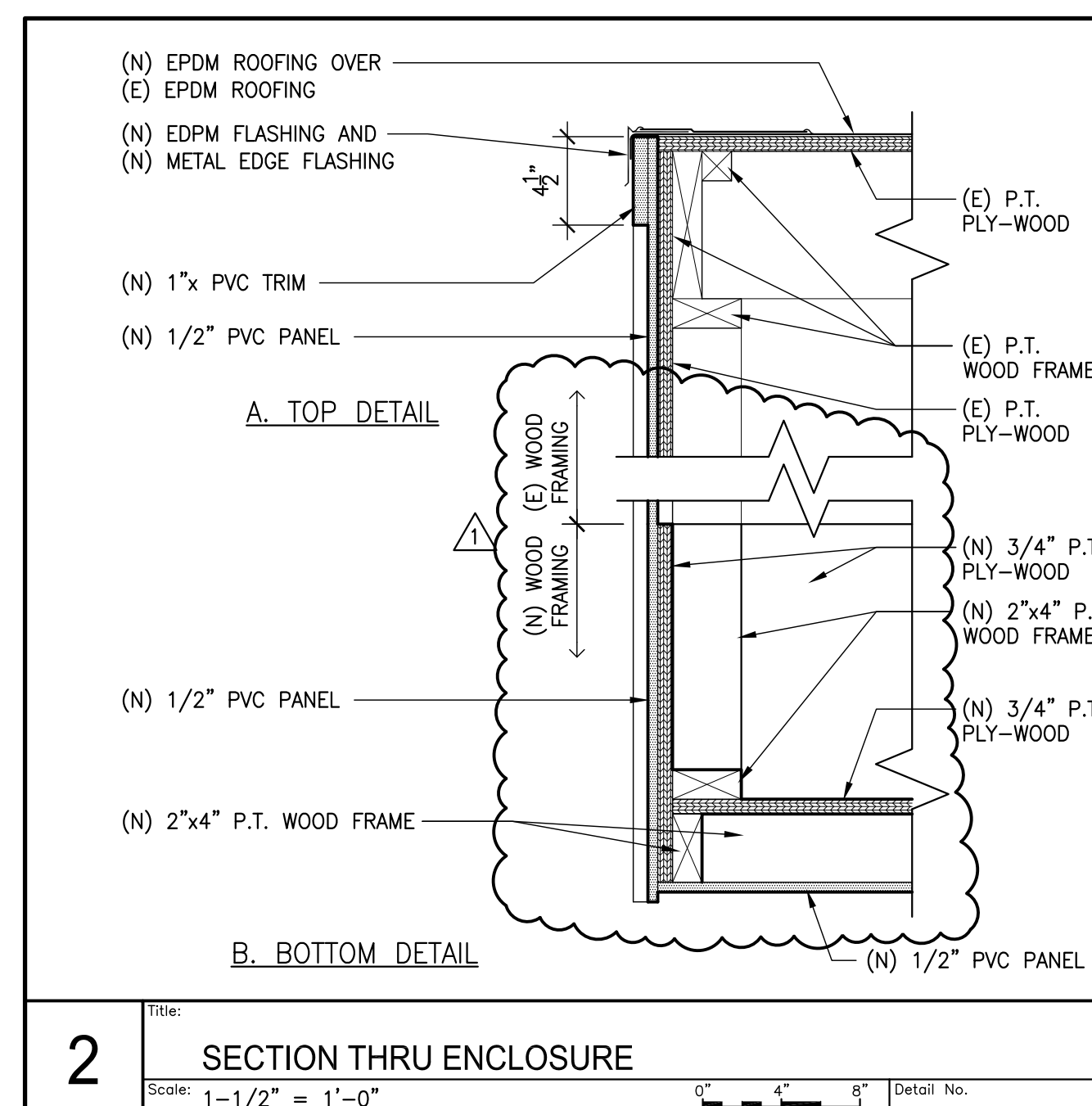
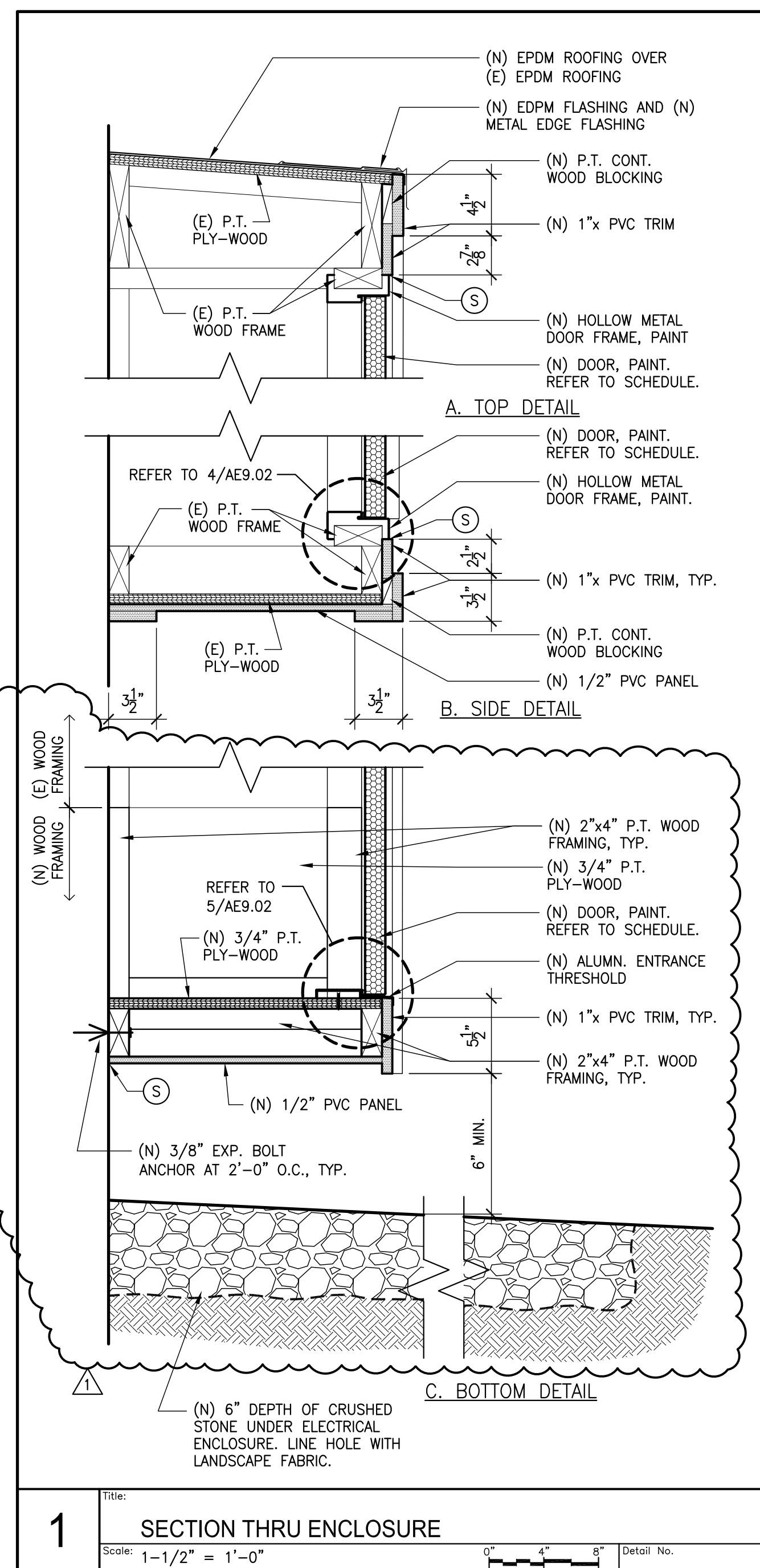
PARTIAL POWER RISER DIAGRAM - BUILDING F

6

SCALE: N.T.S.

DOOR AND FRAME SCHEDULE													
MARK	DOOR				FRAME				HARDWARE		REMARKS		
	LABEL - MARK	W	H	THK*	MTL	ELEV	MTL	ELEV	HEAD	SIDE LIGHT MULLION		BUTT JAMB	SET NUMBER
- 1	(2)42"	66"	1 3/4"	STL	A	HM	1	4/AE9.02 SM.	-	4/AE9.02	1	5/AE9.02	1. 2.
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
REMARKS: 1. DOOR AND FRAME SHALL BE PAINTED. 2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.													
DOOR ELEVATIONS NOT TO SCALE													

HM = HOLLOW METAL



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FAX: (781) 878-8920

SEAL:

DATE: 8-23-22 BY: COL ACTION: ADD #1

PROJECT LOCATION & TITLE
ELECTRICAL ENCLOSURE & PANEL UPGRADE
NEW BEDFORD HOUSING AUTHORITY
CAROLINE STREET
NEW BEDFORD, MASSACHUSETTS 02740

DRAWING NUMBER:
AE9.02

DRAWING NUMBER:
AE9.02