

ADDENDUM NO. 1

HURON PUBLIC POWER SUBSTATION EXPANSION

November 12, 2025

The bidding documents for the above project dated October 2025 are hereby added to, amended and clarified as follows. This Addendum shall become a part of the Contract Documents.

REQUEST FOR BIDS

Bid Due Date is extended one week to 11/24/2025 @ 14:00.

Last day for questions will be 11/17/2025.

PROJECT MANUAL

1. Change paragraph G in Section 260110 to read:

1.1 GENERAL REQUIREMENTS

G. Any work requiring an interruption of power to HPP customers shall be arranged to be the minimum number of occurrences and durations possible and shall be coordinated and scheduled in advance with HPP to occur at times and durations acceptable to HPP including Saturdays, Sundays and Holidays. Interruptions are anticipated to be required for joining new switchgear sections bus to existing and for installing messenger cable in cable vault.

2. Add new Article to Section 260110:

1.13 TESTING AND COMMISSIONING

A. Provide Testing and Commissioning as follows:

1. Medium Voltage Switchgear – as specified in new Section 261313.
2. Medium Voltage Cables – as specified in Section 260513.
3. New Power Transformer – will be tested and commissioned by supplier. Verify that alarm and monitoring signals are correctly received at remote monitoring panel.
4. Pad Mounted Transformer – visually inspect for physical damage, proper installation and grounding. Submit Manufacturer's test report.
5. Automatic Transfer Switch – test and commission per Manufacturer's instructions.

3. Add new attached Section 261313 Medium Voltage Switchgear Testing and Commissioning.

DRAWINGS

Sheet E-211 CONTROL HOUSE PLAN (Refer to Revised Sheet Attached)

Add the following note to South Wall Interior Elevation:
Provide temporary bypass wiring to minimize interruption of control house power while relocating existing transfer switch and installing new.

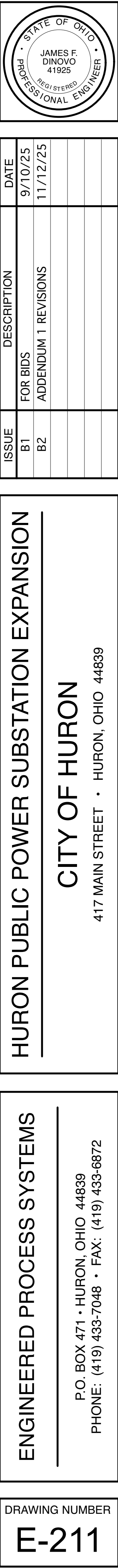
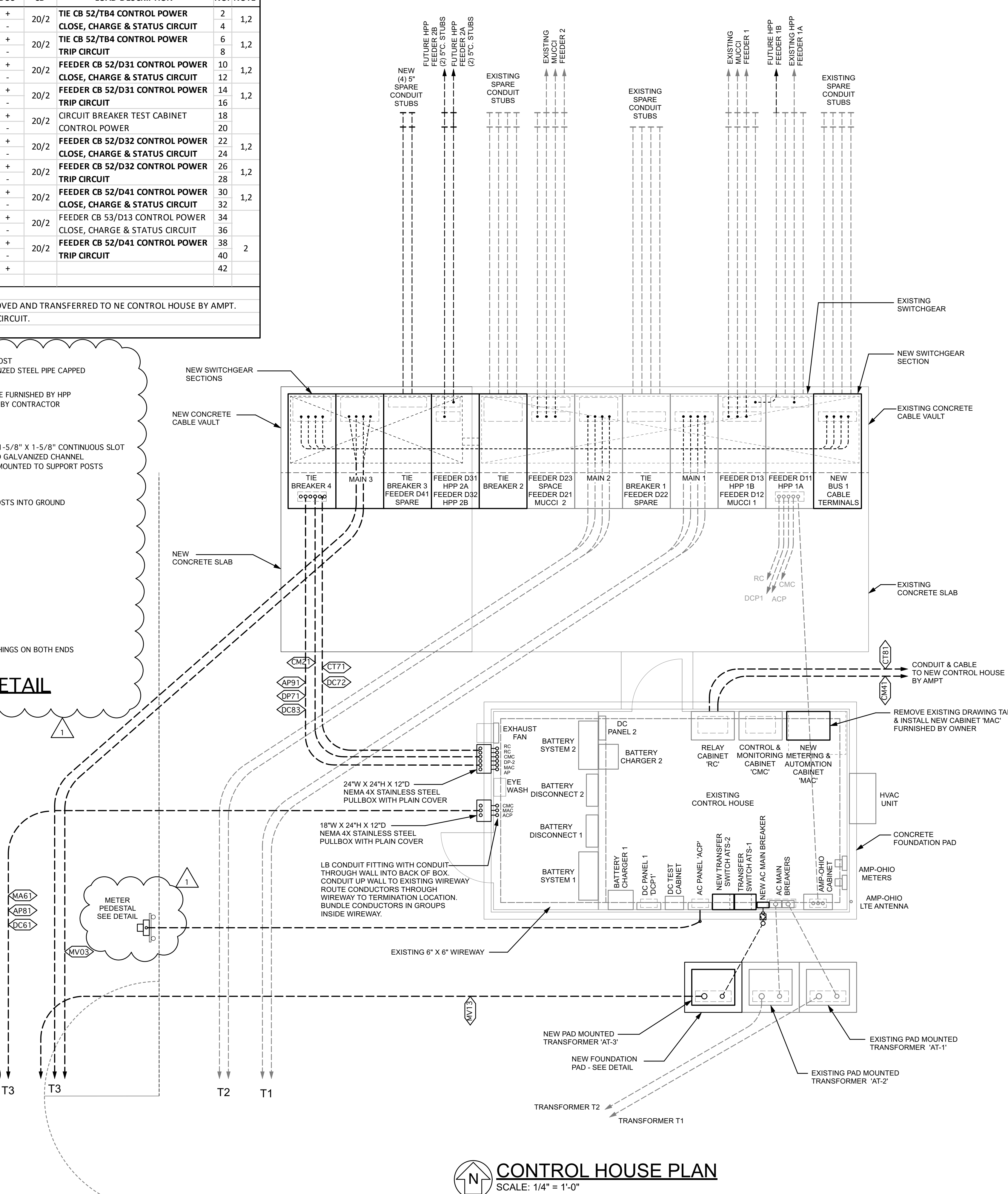
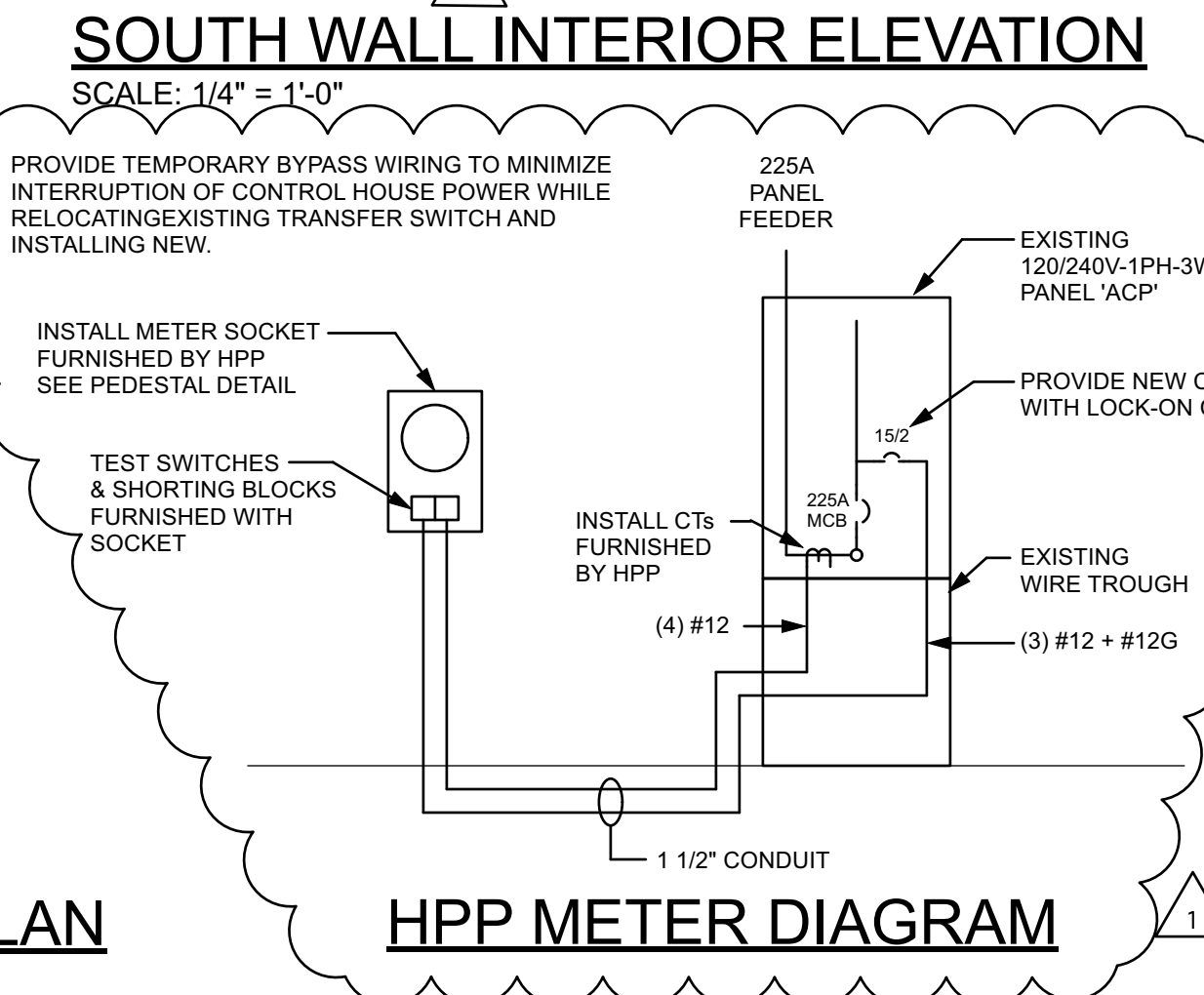
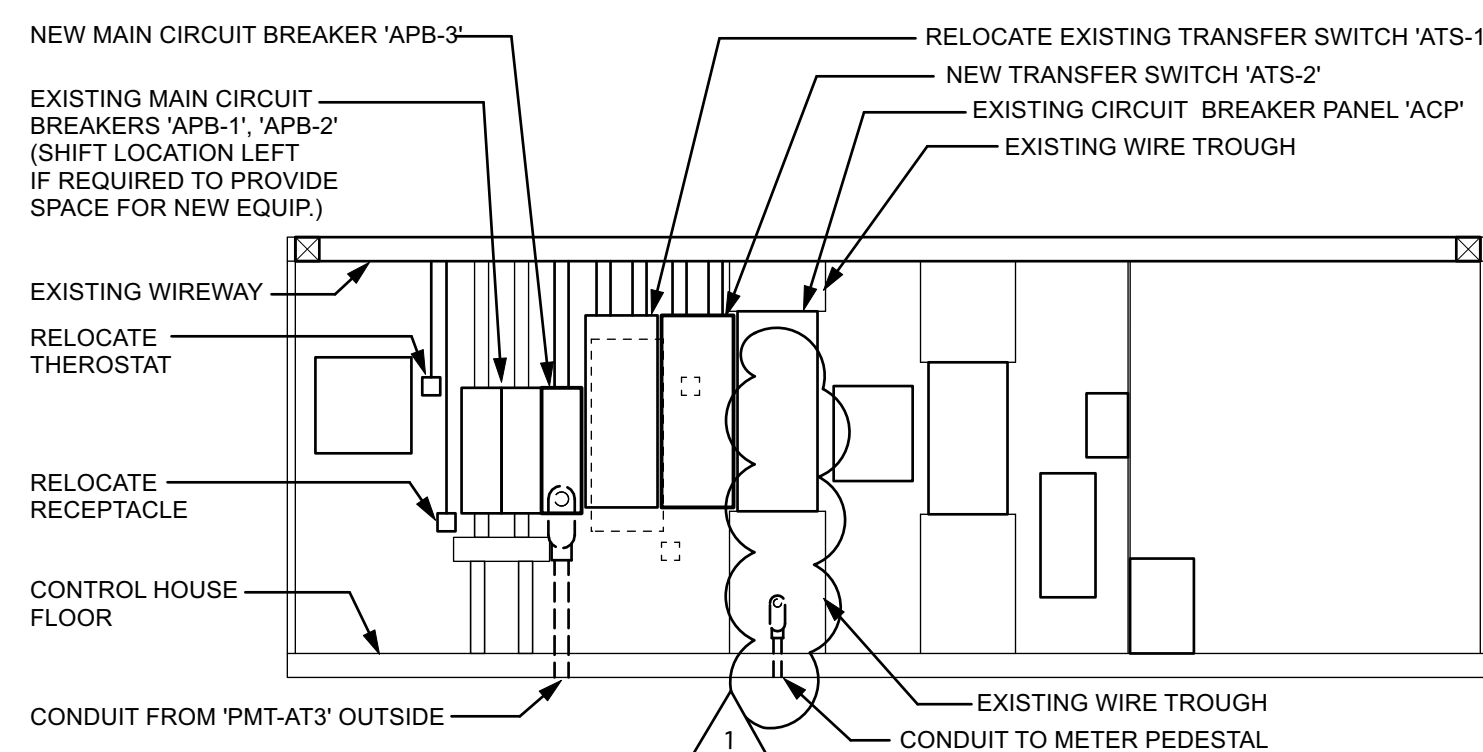
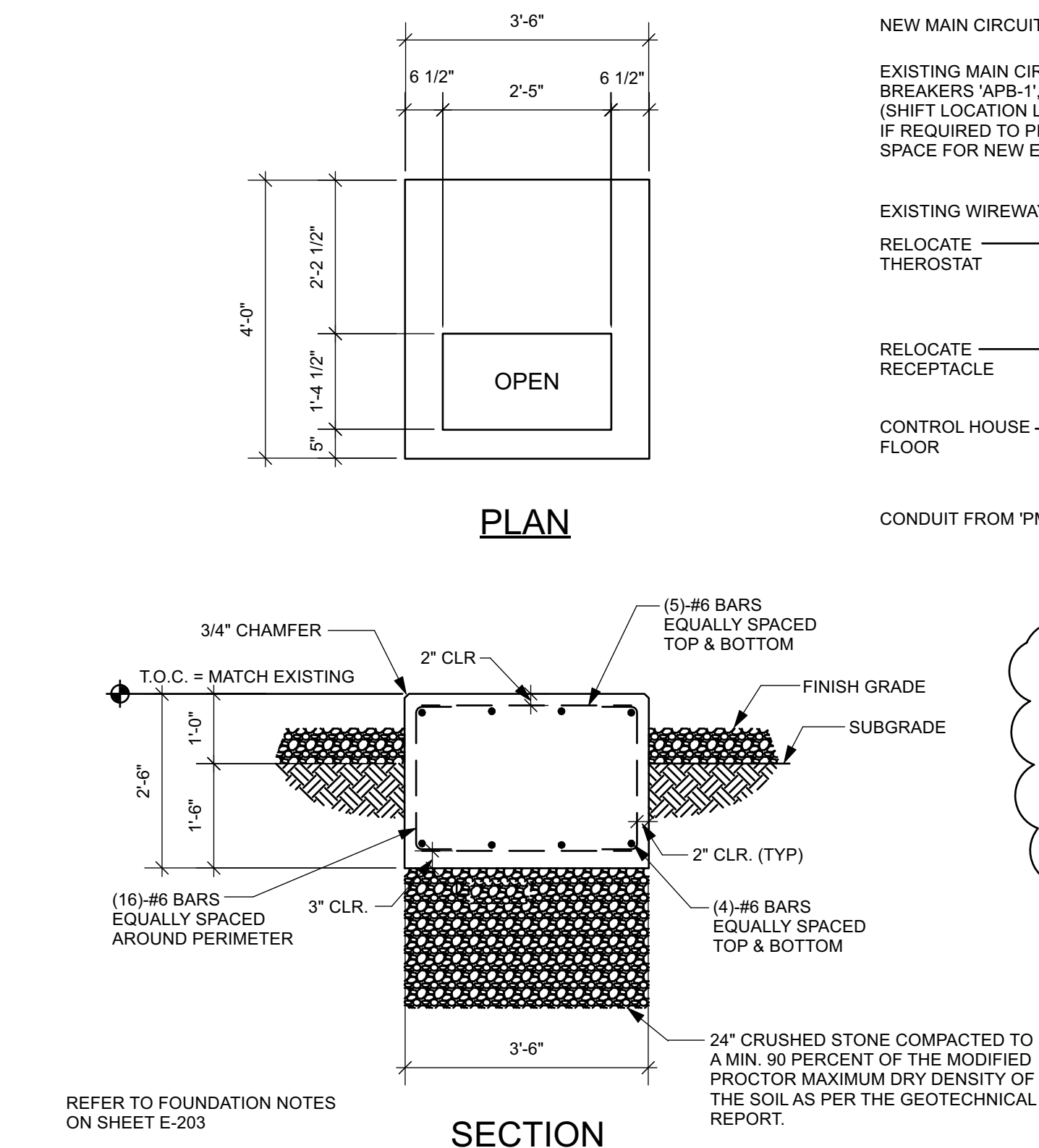
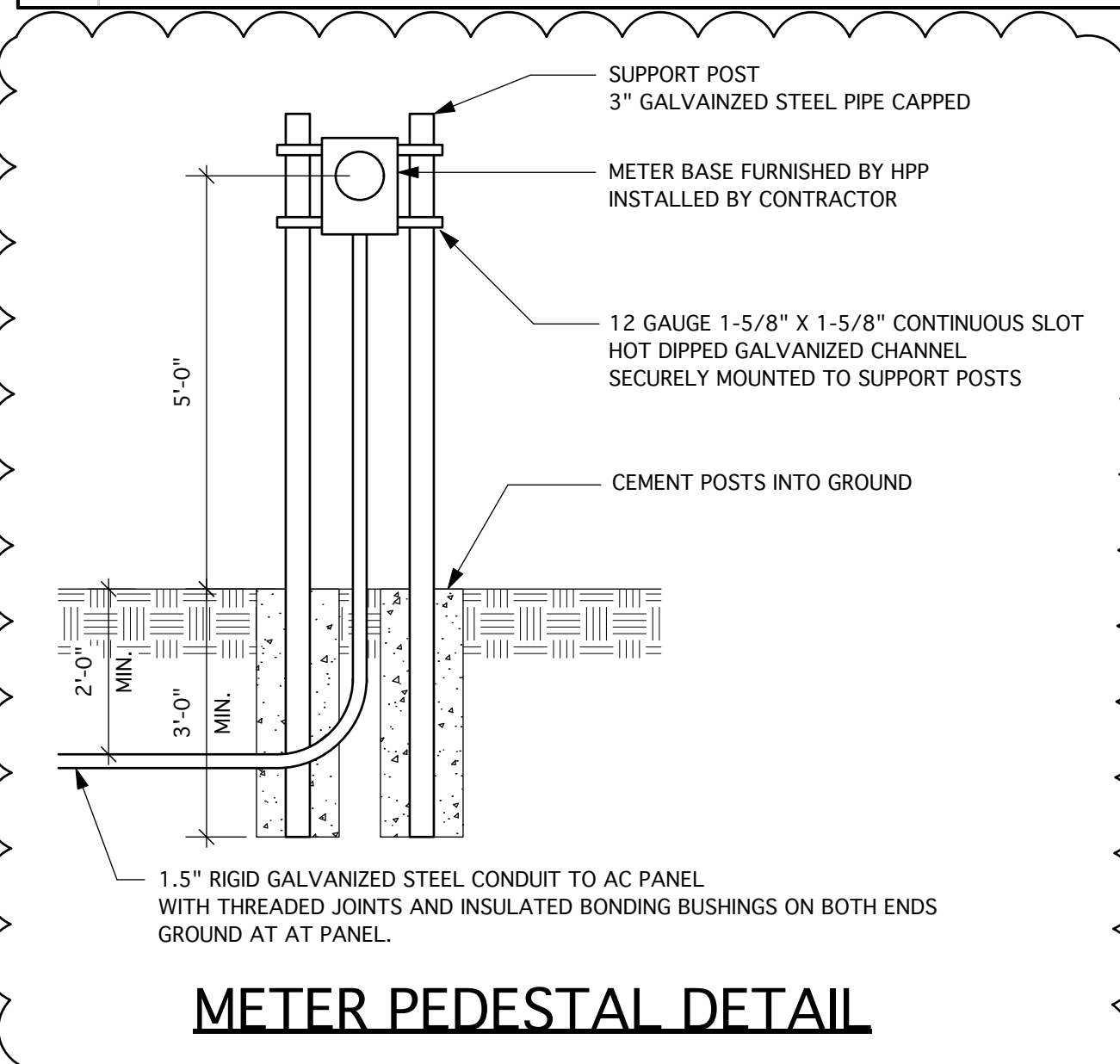
Revise HPP Meter for AC Panel to be instrument type outside substation fence.

END OF ADDENDUM NO. 1

EXISTING DC CIRCUIT BREAKER PANEL SCHEDULE 'DP-1'										
		MAIN:			150 A MCB		125 VDC			
NOTE	NO.	LOAD DESCRIPTION	C/B	BUS	CB	LOAD DESCRIPTION	NO.	NOTE		
	1	MAIN CB 52/MB1 CONTROL POWER	20/2	+	20/1	MAIN CB 86/MB1 TRIP CIRCUIT	2			
	3	CLOSE & CHARGE CIRCUIT		-		MAIN CB 52/MB1 STATUS CIRCUIT	4			
	5	MAIN CB 52/MB1 CONTROL POWER	20/2	+	20/1	TIE CB 52/TB1 CONTROL POWER	6			
	7	TRIP CIRCUIT		-		CHARGE & STATUS CIRCUIT	8			
	9	TIE CB 52/TB1 CONTROL POWER	20/2	+	20/1	MAIN CB 86/MB2 TRIP CIRCUIT	10			
	11	TRIP CIRCUIT		-		MAIN CB 52/MB2 STATUS CIRCUIT	12			
	13	MAIN CB 52/MB2 CONTROL POWER	20/2	+	20/1	MAIN CB 52/MB2 CONTROL POWER	14			
	15	TRIP CIRCUIT		-		CLOSE & CHARGE CIRCUIT	16			
	17	FEEDER CB 52/D11 CONTROL POWER	20/2	+	20/1	FEEDER CB 52/D11 CONTROL POWER	18			
	19	TRIP CIRCUIT		-		CLOSE, CHARGE & STATUS CIRCUIT	20			
	21	FEEDER CB 52/D12 CONTROL POWER	20/2	+	20/1	FEEDER CB 52/D12 CONTROL POWER	22			
	23	TRIP CIRCUIT		-		CLOSE, CHARGE & STATUS CIRCUIT	24			
	25	FEEDER CB 52/D21 CONTROL POWER	20/2	+	20/1	FEEDER CB 52/D21 CONTROL POWER	26			
	27	TRIP CIRCUIT		-		CLOSE, CHARGE & STATUS CIRCUIT	28			
	29	FEEDER CB 52/D22 CONTROL POWER	20/2	+	20/1	FEEDER CB 52/D22 CONTROL POWER	30			
	31	TRIP CIRCUIT		-		CLOSE, CHARGE & STATUS CIRCUIT	32			
	33	FEEDER CB 52/D23 CONTROL POWER	20/2	+	20/1	FEEDER CB 52/D23 CONTROL POWER	34			
	35	TRIP CIRCUIT		-		CLOSE, CHARGE & STATUS CIRCUIT	36			
	37	BATTERY CHARGER 1	40/2	+	20/1	PORT SERVER IN SWITCHGEAR	38			
	39			-				40		
	41			+				42		

EXISTING DC CIRCUIT BREAKER PANEL SCHEDULE 'DP-2'									
MAIN:			150 A MCB			125 VDC			
NOTE	NO.	LOAD DESCRIPTION	C/B	BUS	CB	LOAD DESCRIPTION	NO.	NOTE	
1,2	3	MAIN CB 52/MB3 CONTROL POWER CLOSE & CHARGE CIRCUIT	20/2	+	20/2	TIE CB 52/TB4 CONTROL POWER CLOSE, CHARGE & STATUS CIRCUIT	2	1,2	
	5	MAIN CB 52/MB3 CONTROL POWER TRIP CIRCUIT	20/2	-		TIE CB 52/TB4 CONTROL POWER TRIP CIRCUIT	6		
1,2	9	MAIN CB 86/MB3 TRIP CIRCUIT	20/2	+	20/2	FEEDER CB 52/D31 CONTROL POWER CLOSE, CHARGE & STATUS CIRCUIT	8	1,2	
	11	MAIN CB 52/MB3 STATUS CIRCUIT	20/2	-		FEEDER CB 52/D31 CONTROL POWER TRIP CIRCUIT	10		
1,2	13	TIE CB 52/TB2 CONTROL POWER CLOSE, CHARGE & STATUS CIRCUIT	20/2	+	20/2		12	1,2	
	15		20/2	-			14		
1,2	17	TIE CB 52/TB2 CONTROL POWER TRIP CIRCUIT	20/2	+	20/2	CIRCUIT BREAKER TEST CABINET CONTROL POWER	16	1,2	
	19		20/2	-			18		
1,2	21	TIE CB 52/TB3 CONTROL POWER CLOSE, CHARGE & STATUS CIRCUIT	20/2	+	20/2	FEEDER CB 52/D32 CONTROL POWER CLOSE, CHARGE & STATUS CIRCUIT	22	1,2	
	23		20/2	-		FEEDER CB 52/D32 CONTROL POWER TRIP CIRCUIT	24		
	25	CMC CABINET CONTROL POWER	20/2	+	20/2		26	1,2	
	27		20/2	-			28		
2	29	TIE CB 52/TB3 CONTROL POWER TRIP CIRCUIT	20/2	+	20/2	FEEDER CB 52/D41 CONTROL POWER CLOSE, CHARGE & STATUS CIRCUIT	30	1,2	
	31		20/2	-		FEEDER CB 53/D13 CONTROL POWER CLOSE, CHARGE & STATUS CIRCUIT	32		
	33	FEEDER CB 52/D13 CONTROL POWER TRIP CIRCUIT	20/2	+	20/2		34		
	35		20/2	-			36		
	37	BATTERY CHARGER 2	40/2	+	20/2	FEEDER CB 52/D41 CONTROL POWER TRIP CIRCUIT	38	2	
	39		40/2	-			40		
	41			+			42		

EXISTING AC CIRCUIT BREAKER PANEL SCHEDULE 'ACP'									
MAIN:				225 A MCB		120/240V-1PH-3W			
NOTE	NO.	LOAD DESCRIPTION	C/B	PHASE	CB	LOAD DESCRIPTION	NO.	NOTE	
	1	HVAC UNIT	60/2	A	20/2	SPARE	2		
	3			B			4		
	5	BATTERY CHARGER 1	30/2	A	30/2	BATTERY CHARGER 2	6		
	7			B			8		
	9	SPARE	20/1	A	30/1	SPARE	10		
	11	SPARE	20/1	B	30/1	SPARE	12		
	13	SWGR HEATERS - SECTION 1	15/1	A	15/1	SWGR HEATERS - SECTIONS 2 & 3	14		
	15	SWGR HEATERS - SECTIONS 4 & 5	15/1	B	15/1	SWGR HEATERS - SECTION 6	16		
	17	HYDROGEN DETECTOR & EXH. FAN	15/1	A	15/1	SMOKE DETECTOR	18		
	19	INDOOR RECEPTACLES	20/1	B	20/1	INDOOR RECEPTACLES	20		
	21	EXTERIOR LIGHTING	20/1	A	20/1	INDOOR LIGHTING	22		
2	23	NEW SWGR HTR - SECTION N1	15/1	B	20/1	NEW SWGR HTRS - SECTIONS N2 & N3	24	2	
2	25	NEW SWGR HTRS - SECTIONS N4 & N5	20/1	A	20/1	NEW SWGR HTR - SECTION N6	26	2	
	27	NEW CABINET 'MAC' - METERING	20/1	B	20/1	SPARE	28		
	29	NEW CABINET 'MAC' - AUTOMATION	20/1	A	20/1	SPARE	30		
	31	SPARE	20/1	B	20/1	SPARE	32		
	33	SPARE	20/1	A	20/1	SPARE	34		
1	35	HPP METER	L15/2	A	80/2	TRANSFORMER T1 FANS/AUX	36		
	37			B			38		
1	39	NEW TRANSFORMER T3 FANS/AUX	80/2	B	80/2	TRANSFORMER T2 FANS/AUX	40		
	41			A			42		
NOTES:									
1	INSTALL NEW CB IN EXISTING SPACE.								
2	REPLACE EXISTING 20/1 CB WITH 15/1 CB.								



SECTION 261313 - MEDIUM VOLTAGE SWITCHGEAR TESTING & COMMISSIONING

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections and Section 260110 apply to this Section.

1.2 DESCRIPTION

- A. This section covers the field testing, inspection, adjustment, and commissioning of 15 kV metal-clad switchgear and associated control, protection, and metering equipment.
- B. The intent is to verify that all equipment is installed correctly, functions as designed, and meets specified performance criteria prior to energization.

1.3 REFERENCES

- A. Work under this section shall be furnished and installed in accordance with applicable governing codes and industry standards including.
 - 1. ANSI/IEEE C37.20.2 – Metal-Clad Switchgear.
 - 2. ANSI/IEEE C37.09 – Standard Test Procedure for AC High-Voltage Circuit Breakers.
 - 3. NETA ATS – Acceptance Testing Specifications for Electrical Power Equipment and Systems (latest edition).
 - 4. NFPA 70 – National Electrical Code.
 - 5. NFPA 70E – Standard for Electrical Safety in the Workplace.
 - 6. Manufacturer’s installation and maintenance instructions.

1.4 SUBMITTALS

- A. Submit following documentation to Engineer.
 - 1. Certified test reports documenting all field tests and results.
 - 2. Calibration certificates for all test instruments (dated within 12 months).
 - 3. Commissioning checklist and start-up documentation.

1.5 QUALIFICATIONS

- A. Testing agency shall be independent of the Manufacturer and Installation Contractor.
- B. Testing personnel shall be NETA-certified technicians or equivalent.
- C. All testing shall be supervised by a licensed professional engineer experienced in medium-voltage systems.

PART 2 - PRODUCTS

2.1 TEST EQUIPMENT

- A. Provide calibrated instruments suitable for medium-voltage testing including:
 - 1. Insulation resistance megohmmeter rated for 15 kV systems.
 - 2. High-potential (Hi-Pot) test set rated minimum 60 kV DC.
 - 3. Circuit breaker analyzer / timing test set.
 - 4. Primary and secondary current injection test sets.
 - 5. Contact resistance micro-ohmmeter.
 - 6. Relay test set (for protective relay verification).

PART 3 - EXECUTION

3.1 INSPECTION

- A. Verify that switchgear is clean, properly installed, grounded, and free from damage.
- B. Confirm correct phasing, labeling, and torque of all bolted connections.
- C. Verify all control wiring is correctly terminated and tagged.
- D. Check interlocks, mechanical operation, and alignment of draw-out units.

3.2 RELAY AND METER SETTINGS

- A. Enter settings as directed by Engineer into all protective relays and meters.
- B. Provide record files of all settings.

3.3 FIELD TESTING

TEST	APPLY TO	ACCEPTANCE CRITERIA
Visual and Mechanical Inspection	All new and modified sections	Clean, aligned, mechanically sound
Insulation Resistance	Bus, cables, breakers	$\geq 100 \text{ M}\Omega$ phase-to-ground and phase-to-phase at 2.5 kV DC minimum
High-Potential (Hi-Pot) Test	Bus and switchgear insulation	Withstand per ANSI C37.20.2 without flashover
Contract Resistance	Circuit breaker main contacts	$\leq 100\Omega$ or per manufacturer
Circuit Breaker Operation Test	All breakers	Operate within manufacturer time tolerances
Secondary Injection	Protective relays	Correct trip and coordination characteristics verified
Function Control Test	All control circuits	Correct indication, interlocks, and trip operations
Grounding System Test	Entire switchgear assembly	$\leq 1\Omega$ to ground grid

3.4 COMMISSIONING PROCEDURE

- A. After successful testing, perform a functional system simulation, verifying interlocks, synchronizing, and protection coordination.
- B. Verify that trip and alarm signals are correctly received at remote control and monitoring panels.
- C. Conduct energization sequence.

3.5 REPORTS AND DOCUMENTATION

- A. Submit report with:
 1. Description of tests performed.
 2. Test data and results.
 3. Comparison to acceptance criteria.
 4. List of any deficiencies and corrective actions taken.

END OF SECTION 261313