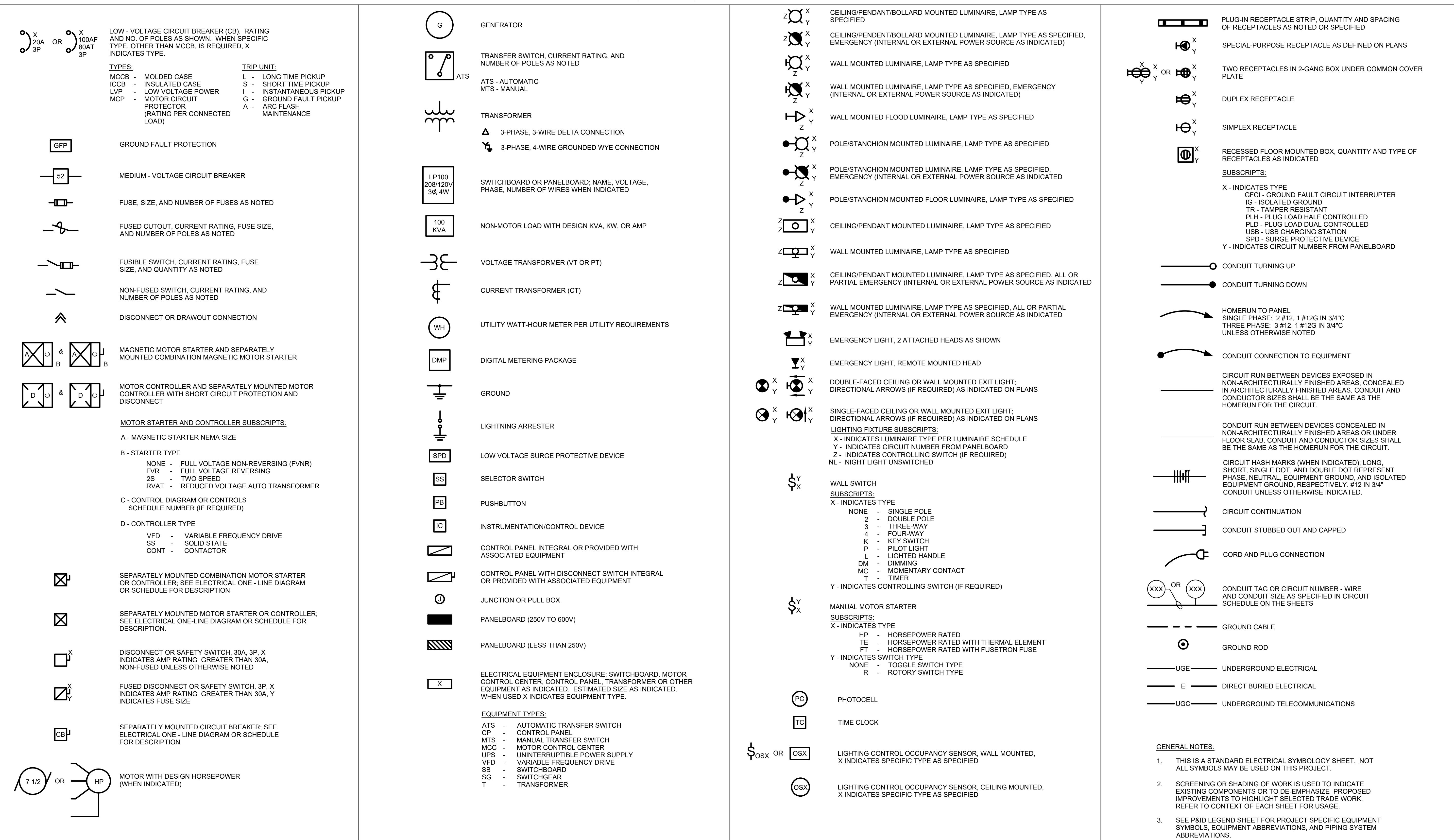
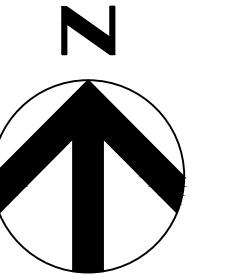


ONE-LINE, POWER, AND LIGHTING SYMBOLOGY



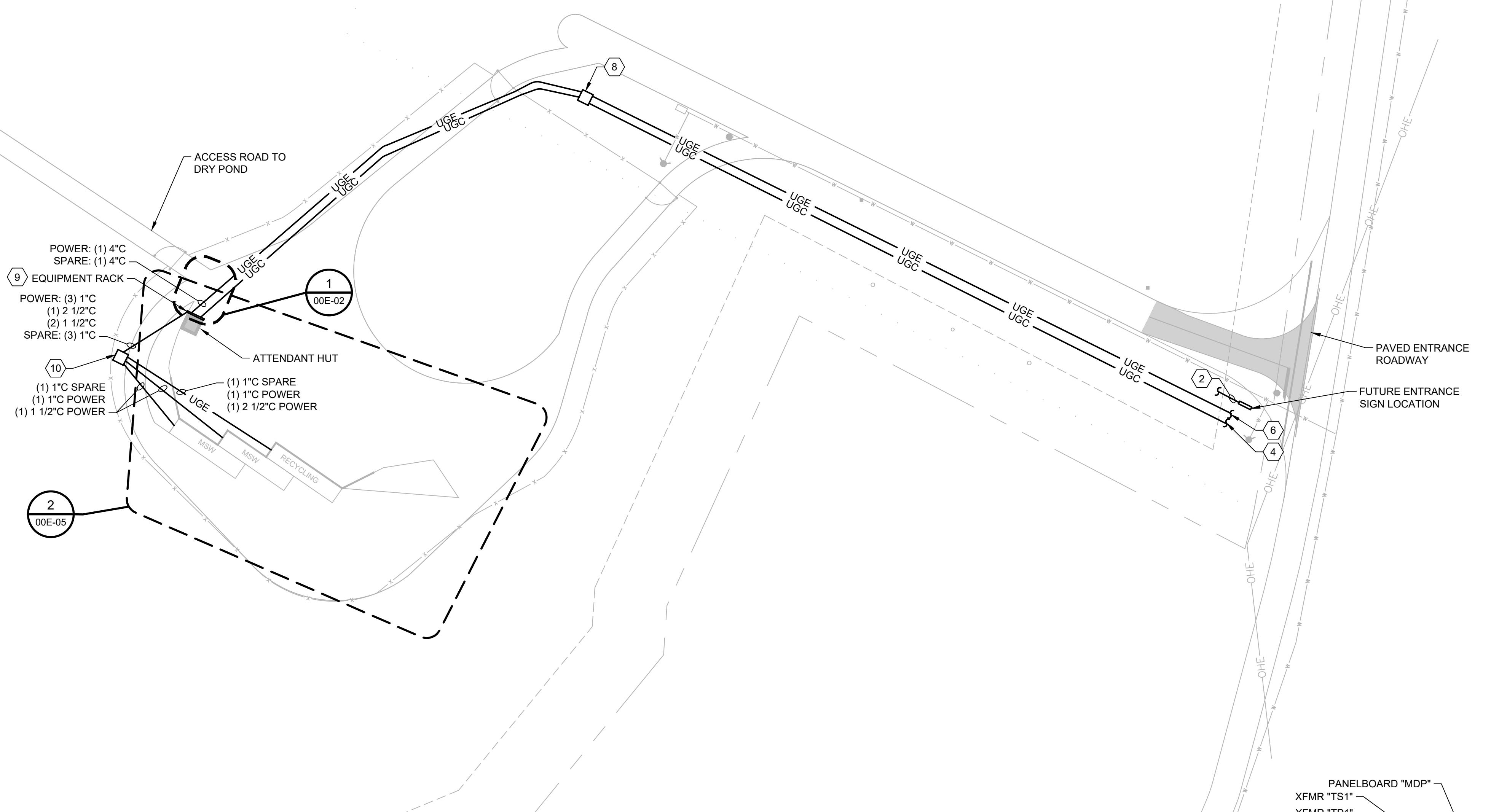


GENERAL NOTES:

- VERIFY UNDERGROUND STRUCTURES AND UTILITIES PRIOR TO BEGINNING WORK.
- UNDERGROUND CONDUITS TO BE CONCRETE ENCASED SCHEDULE 40 PVC. CONDUIT ELBOWS TO BE GALVANIZED STEEL. SEE DETAILS ON SHEET 00E-08 FOR ADDITIONAL INFORMATION.
- FIELD VERIFY AND COORDINATE WITH EACH EQUIPMENT SUPPLIER WIRING AND CONTACTS ASSOCIATED WITH THEIR RESPECTIVE EQUIPMENT PRIOR TO INSTALLATION.
- EXPOSED CONDUITS SHALL BE PVC COATED RIGID GALVANIZED STEEL.
- PROVIDE EARTH BACKFILL FOR AREAS TO BE COVERED BY ASPHALT. PROVIDE CONCRETE ENCASING FOR AREAS NOT COVERED BY ASPHALT.
- JACK AND BORE WITH APPROPRIATE SIZED STEEL CASING PIPE UNDER ASPHALT PATHS, SIDE WALKS, AND/OR ROAD CROSSINGS.
- OUTDOOR EQUIPMENT BOXES, DISCONNECTS, ETC. SHALL HAVE NEMA 4X STAINLESS STEEL (S/S) ENCLOSURES.
- DURING INSTALLATION ENSURE THAT THERE ARE NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) BETWEEN ELECTRICAL PULL POINTS.
- COMMUNICATION CONDUIT BENDS SHALL BE SWEEPS WITH A MINIMUM RADIUS OF TEN TIMES THE INTERNAL DIAMETER.
- NO SECTION OF COMMUNICATION CONDUIT SHALL CONTAIN MORE THAN 90-DEGREE BENDS OR EQUIVALENT BETWEEN PULL POINTS.
- INSTALL ELECTRICAL/COMMUNICATION HANDHOLES FOR PULLING CABLES AS NEEDED. SIZE AND PROVIDE QUANTITY OF HANDHOLES REQUIRED. PROVIDE HANDHOLE WITH TRAFFIC RATED LID. INCLUDE LOCATION OF HANDHOLES ON RECORD DRAWINGS.

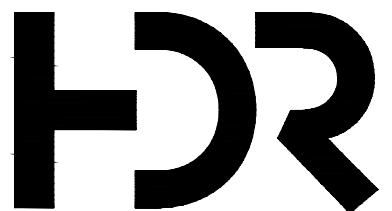
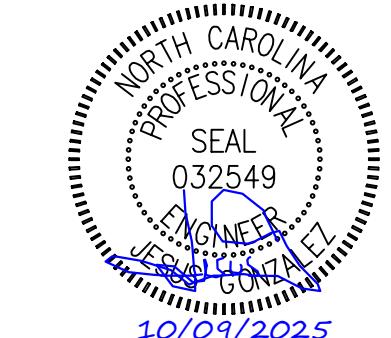
KEYNOTES:

- SEE SHEET 00E-08 FOR MODULAR EQUIPMENT RACK DETAIL.
- POWER CONNECTION FOR FUTURE ENTRANCE SIGN. RUN (1) 1" C WITH PULLSTRING FROM DISTRIBUTION PANELBOARD MDP TO LOCATION STUB-UP AND CAP OFF. COORDINATE FINAL LOCATION WITH OWNER.
- ROUTE TWO 4" CONDUITS WITH PULLSTRING BELOW GRADE FROM LOCATION SHOWN TO PROPERTY EASEMENT.
- INCOMING COMMUNICATIONS LINES (BY OTHERS) TO BE EXTENDED TO PROPERTY EASEMENT LINE. INTERCEPT UNDERGROUND LINES AND EXTEND WIRING AND CONDUIT TO TELECOMMUNICATION DEMARC BOX LOCATED AT EQUIPMENT RACK.
- 25KVA XFMR "TS1" BETWEEN "MDP" AND "S1". MOUNT XFMR ON 4" CONCRETE PAD.
- INCOMING CONDUCTORS FROM UTILITY PROVIDER (DUKE ENERGY) SERVICE TRANSFORMER. COORDINATE FINAL LOCATION WITH DUKE ENERGY. REFER TO RISER DIAGRAM FOR CONDUIT SIZE.
- INCOMING CONDUCTORS FROM UTILITY PROVIDER (DUKE ENERGY) SERVICE TRANSFORMER. REFER TO ELECTRICAL SITE PLAN FOR CONTINUATION.
- PROVIDE IN GRADE (QUAZITE) PULL-BOXES APPROXIMATELY 15 FEET FROM EDGE OF THE ROAD. ROUTE (2) 4" CONDUIT FOR ELECTRICAL AND (2) 4" CONDUIT FOR COMMUNICATION.
- EQUIPMENT RACK.
- PROVIDE IN GRADE (QUAZITE) PULL-BOXES APPROXIMATELY 15 FEET FROM EDGE OF THE ROAD. REFER TO ELECTRICAL SCHEDULES FOR CONDUIT INFORMATION.



ELECTRICAL SITE PLAN

1" = 50'

 1
 00E-02
 NOT TO SCALE


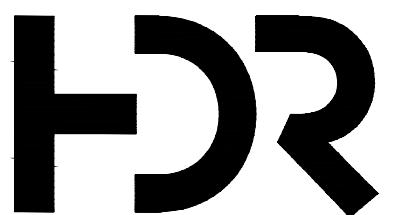
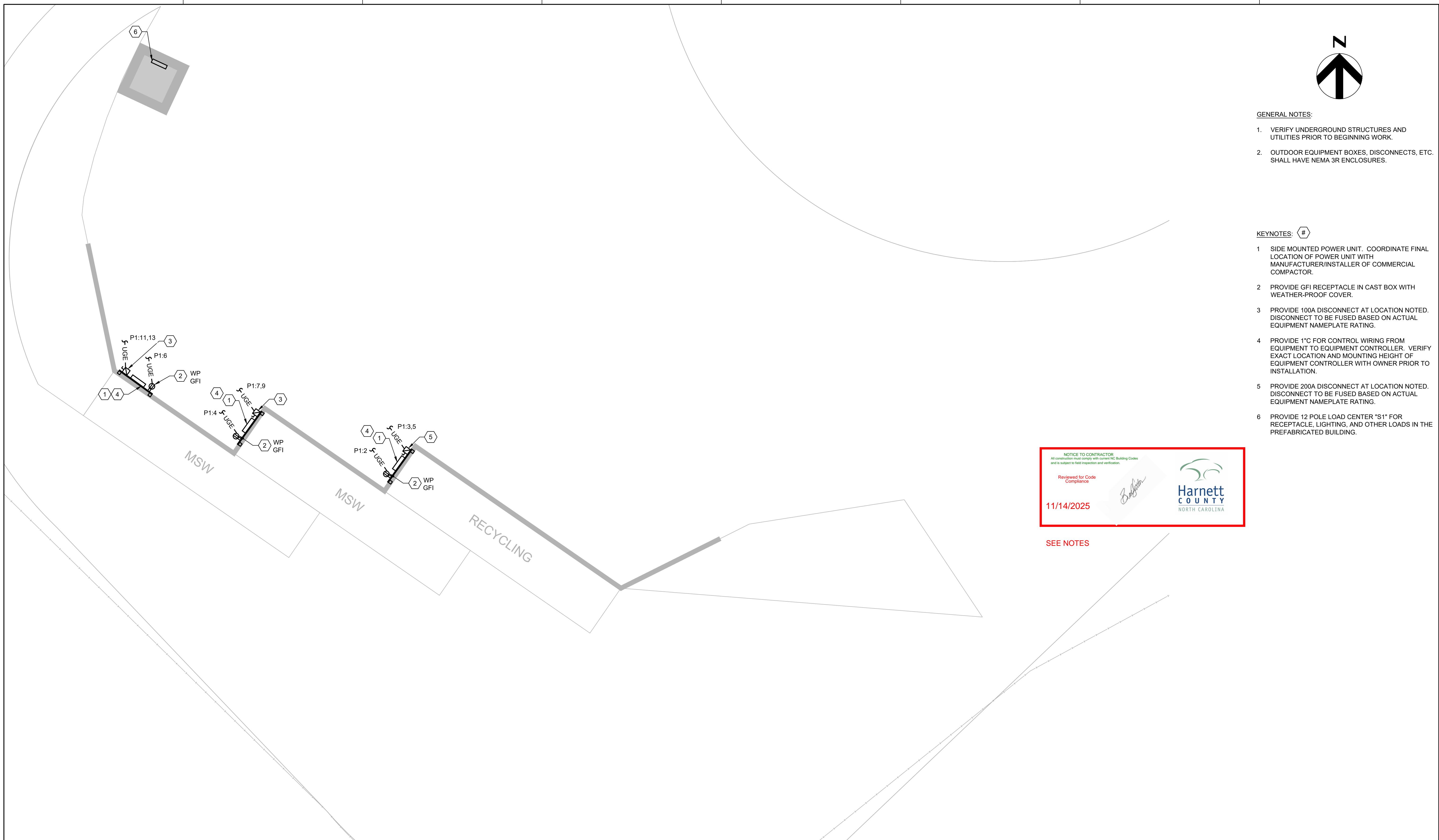
HDR Engineering, Inc. of the Carolinas
 N.C.B.E.L.S. License Number: F-0116
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 Raleigh, NC 27601
 919.232.6600

PROJECT MANAGER	J. MURRAY, PE
PROJECT ENGINEER	J. GONZALEZ, PE
DESIGNED BY	L. KOSAKOWSKI
DRAWN BY	J. SPACHER
ISSUE	10/09/2025
DATE	CHANGE ORDER NO. 1
B	05/2024
A	ISSUED FOR BIDDING
	11/2022
PROJECT NUMBER	10354679

Harnett County
 NORTHWEST CONVENIENCE CENTER
 HARNETT COUNTY
 NORTH CAROLINA

ELECTRICAL SITE PLAN

0 1" 2" FILENAME 00E-02.dwg
 SHEET 00E-02
 SCALE 1" = 50'



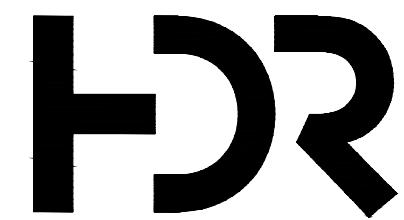
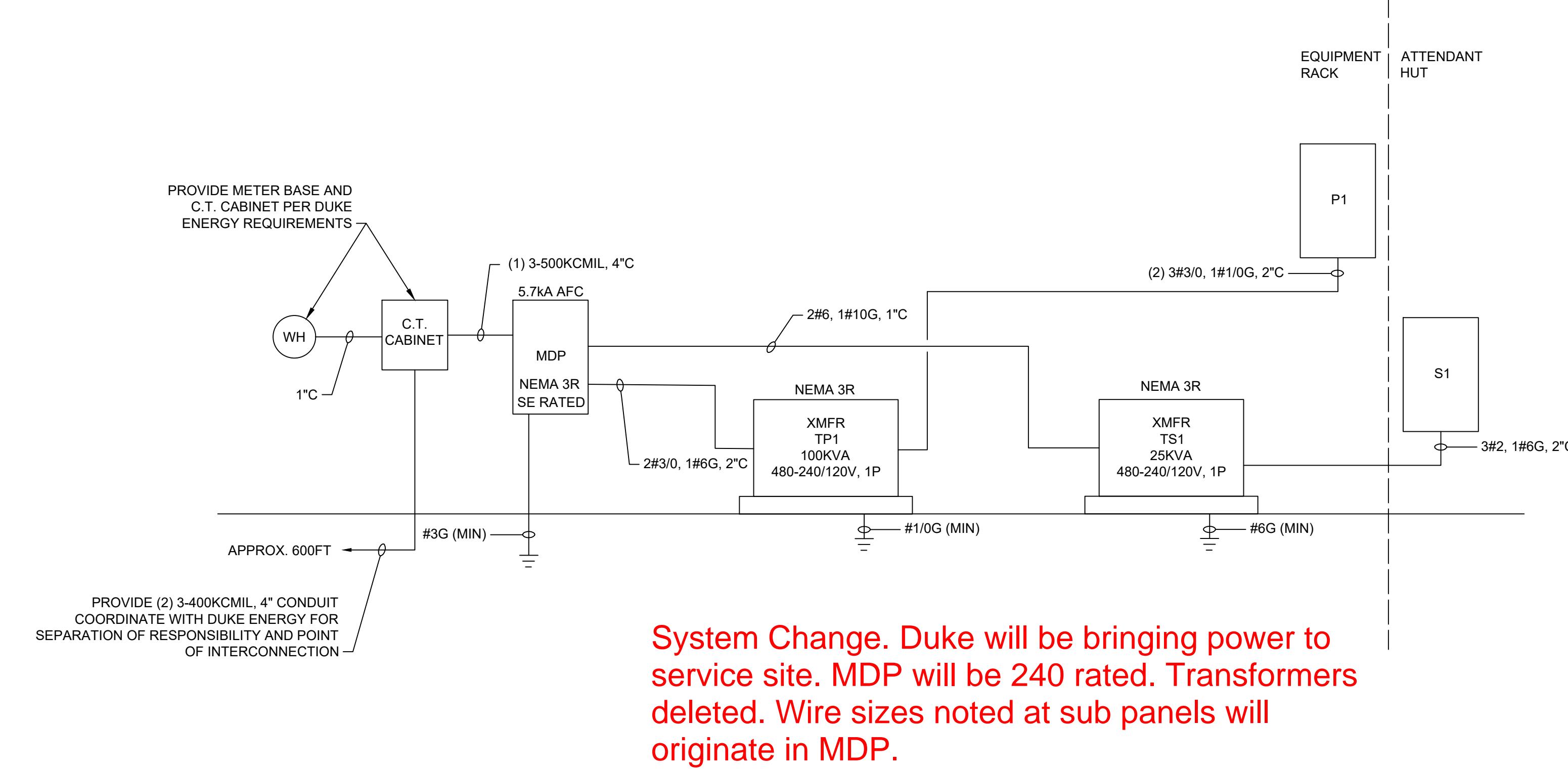
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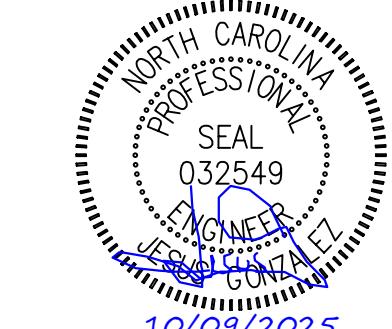
ELECTRICAL SITE ENLARGED PLAN
00E-05.dwg
SHEET 00E-05
0 1" 2"
SCALE 1" = 10'



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ISSUE	DATE	DESCRIPTION	PROJECT NUMBER
C	10/09/2025	CHANGE ORDER NO. 1	J. MURRAY, PE
B	05/2024	ISSUED FOR BIDDING	J. GONZALEZ, PE
A	11/2022	ISSUED FOR PERMITTING	L. KOSAKOWSKI

10354679



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ELECTRICAL RISER DIAGRAM

0 1" 2" FILENAME 00E-06.dwg
SCALE NONE

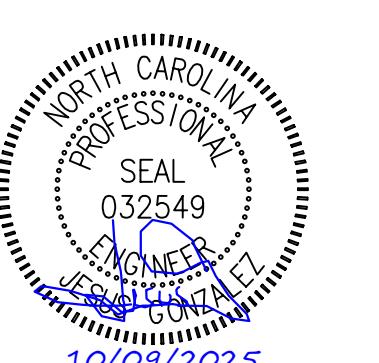
SHEET 00E-06

SWITCHBOARD NO: MDP										
VOLTAGE (L-L):	480	BUS RATING (A):	400	ENCLOSURE:	NEMA 3R					
VOLTAGE (L-N):	240	MAIN OC DEVICE (A/PHASE):	400	MOUNTING:	SURFACE					
PHASE / WIRE:	1 / 3+G	INTERRUPTING RATING (KA):	10	LOCATION:	EQUIPMENT RACK					
200% NEUTRAL:	NO	SERVICE ENTRANCE LABEL:	YES	BUILDING:						
WIRING										
PHASE	NEUT.	GRND.	COND.	CKT NO.	DESCRIPTION	CONNECTED LOAD (VA)	OCP	CONNECTED LOAD (VA)	WIRING	
						LTS REC MECH MISC	AMPS P	AMPS P	LTS REC MECH MISC	CKT NO. PHASE NEUT. GRND. COND.
1					1 FUTURE ENTRANCE SIGN					20 2 A 20 1
3										B 20 1
5										C
7					7 FUTURE SITE LIGHTING					20 1 A 20 1
9										SPARE
11										4
13										6
15										8
17										10
19										12
21										14
23										16
										18
										20
										22
										24
										26
										28
										30
										32
										34
										36
*	*	*	*		37 PANEL S1 (LOCATED AT ATTENDANT HUT)	100 0 4,400 0	40 2 A 225 2 0 540 24,360 0	TRANSFORMER 'TP1'	38 * * * *	
						0 180 4,400 0				40
										42
										L1
										L2
										L3
NOTES: *** PANEL IS A MODIFIED 480/277V, 3 PHASE PANEL WITH THE C PHASE DISCONNECTED TO CREATE 480/240 1 PHASE										
LOAD SUMMARY										NOTES: * REFER TO ONE-LINE DIAGRAM ** MISC DEMAND INCLUDES 25% OF LARGEST MOTOR KVA
CONNECTED LOAD (KVA)	0.1	0.9	57.5	0.0	--	58.5	480 LINE-TO-LINE VOLTS	PHASE A (KVA)	29	** MISC DEMAND INCLUDES 25% OF LARGEST MOTOR KVA
DEMAND FACTOR **	1.25	NEC	1.00	--	20%	--	122 CONNECTED AMPS	PHASE B (KVA)	29	
DEMAND LOAD (KVA)	0.1	0.9	57.5	3.8	11.7	74.0	154 DESIGN AMPS	PHASE C (KVA)	0	

PANELBOARD NO: P1										
VOLTAGE (L-L):	240	BUS RATING (A):	400	ENCLOSURE:	NEMA 3R					
VOLTAGE (L-N):	120	MAIN OC DEVICE (A/PHASE):	400 MCB	MOUNTING:	SURFACE					
PHASE / WIRE:	1 / 3+G	INTERRUPTING RATING (KA):	10	LOCATION:	EQUIPMENT RACK					
200% NEUTRAL:	NO	SERVICE ENTRANCE LABEL:	NO	BUILDING:						
WIRING										
PHASE	NEUT.	GRND.	COND.	CKT NO.	DESCRIPTION	CONNECTED LOAD (VA)	OCP	CONNECTED LOAD (VA)	WIRING	
						LTS REC MECH MISC	AMPS P	AMPS P	LTS REC MECH MISC	CKT NO. PHASE NEUT. GRND. COND.
12	12	12	3/4"	1	1 RECEPTACLES					180
3/0	3/0	6	2"	3	3 RECYCLING					200 2 B 20 1
				5	5 COMPACTOR					15,000 A 20 1
				7	7 MSW					15,000 180
1	1	8	1-1/2"	9						4,680 SPARE
				11	11 MSW					4,680 10
				13						4,680 12
				15	15 SPARE					20 1 B 30 1 SPARE
				17	17 SPARE					20 1 A 20 1 SPARE
				19	19 SPARE					20 1 B 30 1 20
				21	21 SPARE					20 1 A 30 1 22
				23	23 SPARE					20 1 B 20 1 24
NOTES:										NOTES: * REFER TO ONE-LINE DIAGRAM ** MISC DEMAND INCLUDES 25% OF LARGEST MOTOR KVA
LOAD SUMMARY										NOTES: * REFER TO ONE-LINE DIAGRAM ** MISC DEMAND INCLUDES 25% OF LARGEST MOTOR KVA
CONNECTED LOAD (KVA)	0.0	0.7	48.7	0.0	--	49.4	240 LINE-TO-LINE VOLTS	PHASE A (KVA)	25	
DEMAND FACTOR **	1.25	1.25	1.00	--	20%	--	206 CONNECTED AMPS	PHASE B (KVA)	25	
DESIGN LOAD (KVA)	0.0	0.2	8.8	0.0	1.8	10.9	263 DESIGN AMPS	PHASE C (KVA)	2	

System Change. Duke will be bringing power to service site. MDP will be 240 rated. Transformers deleted. Wire sizes noted at sub panels will originate in MDP.

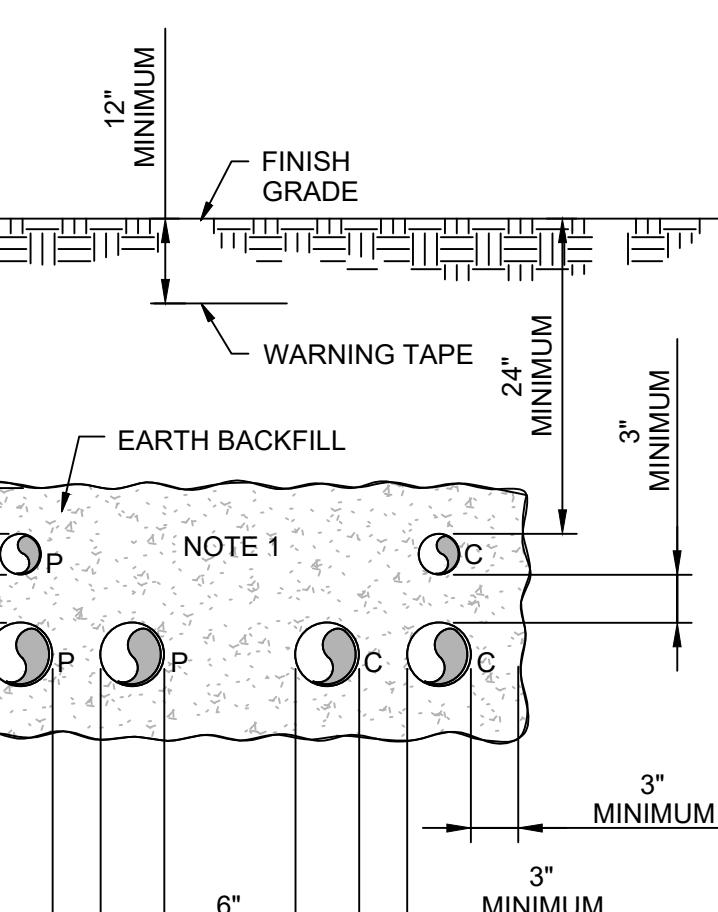
PANELBOARD NO: S1										
VOLTAGE (L-L):	240	BUS RATING (A):	100	ENCLOSURE:	NEMA 1					
VOLTAGE (L-N):	120	MAIN OC DEVICE (A/PHASE):	100 MCB	MOUNTING:	SURFACE					
PHASE / WIRE:	1 / 3+G	INTERRUPTING RATING (KA):	10	LOCATION:	CONVINIENCE CENTER					
200% NEUTRAL:	NO	SERVICE ENTRANCE LABEL:	NO	BUILDING:	MODULAR BUILDING					
WIRING										
PHASE	NEUT.	GRND.	COND.	CKT NO.	DESCRIPTION	CONNECTED LOAD (VA)	OCP	CONNECTED LOAD (VA)	WIRING	
						LTS REC MECH MISC	AMPS P	AMPS P	LTS REC MECH MISC	CKT NO. PHASE NEUT. GRND. COND.
12	12	12	3/4"	1	1 SPARE					20 1 A 30 2 2,200 2,200
				3	3 RECEPTACLES					20 1 B 30 2 2,200 FAN HVAC UNIT
				5	5 INTERIOR LIGHTING					20 1 A 30 2 2,200 HEATER UNIT
				7	7 SPARE					20 1 B 30 1 2,200 SPARE
				9	9 SPARE					20 1 A 30 1 10 3/4"
				11	11 SPARE					20 1 B 30 1 10 3/4"
NOTES:										NOTES: * REFER TO ONE-LINE DIAGRAM ** MISC DEMAND INCLUDES 25% OF LARGEST MOTOR KVA
LOAD SUMMARY										NOTES: * REFER TO ONE-LINE DIAGRAM ** MISC DEMAND INCLUDES 25% OF LARGEST MOTOR KVA
CONNECTED LOAD (KVA)	0.1	0.2	8.8	0.0	--	9.1	240 LINE-TO-LINE VOLTS	PHASE A (KVA)	4	
DEMAND FACTOR **	1.25	1.25	1.00	--	20%	--	38 CONNECTED AMPS	PHASE B (KVA)	2	
DESIGN LOAD (KVA)	0.1	0.2	8.8	0.0	1.8	10.9	46 DESIGN AMPS	PHASE C (KVA)	2	



Harnett County
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HARNETT COUNTY
NORTH CAROLINA

ELECTRICAL SCHEDULES
HARNETT COUNTY
NORTH CAROLINA
00E-07.dwg
00E-07

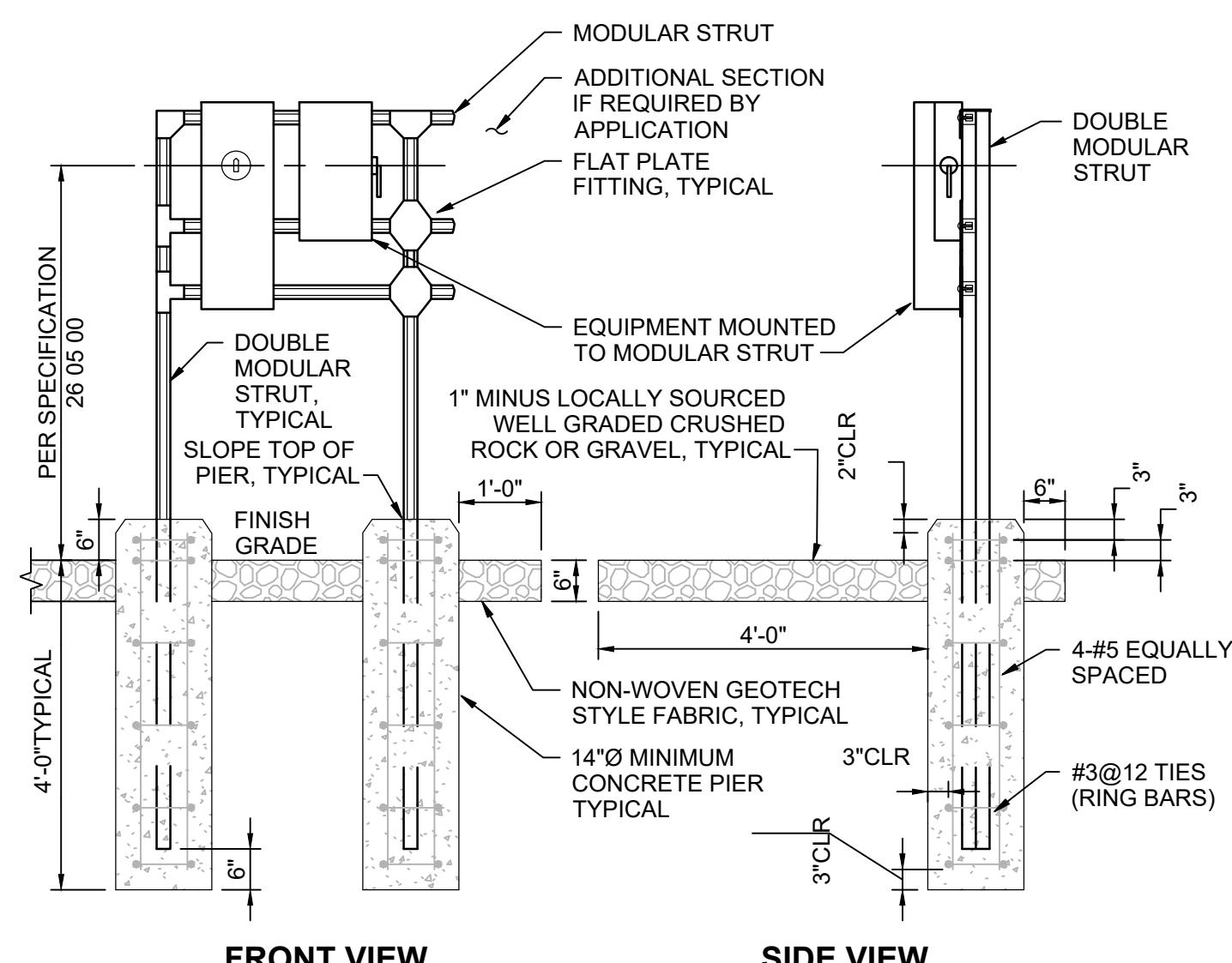


NOTES THIS SECTION:

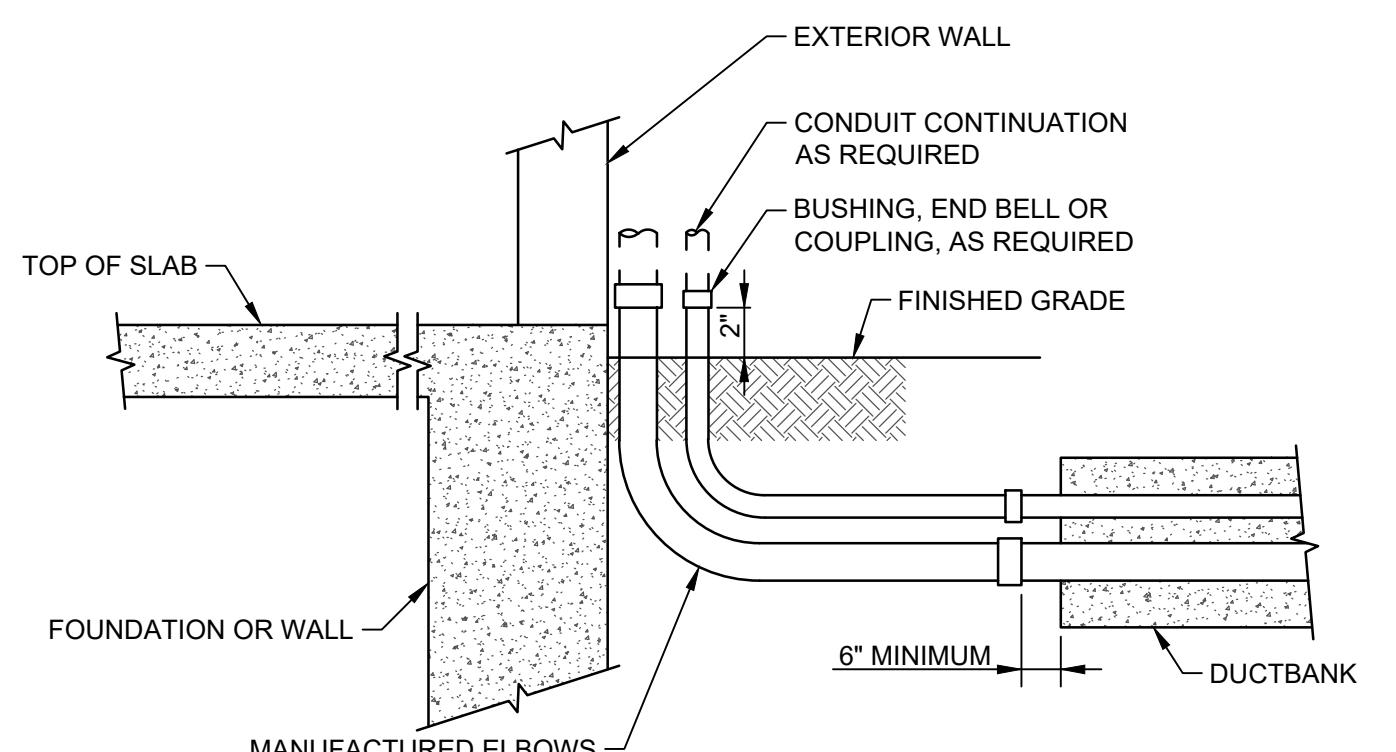
1. NUMBER OF CONDUITS AS REQUIRED FOR THE APPLICATION.
2. P SUBSCRIPT ELECTRICAL POWER OR CONTROL CONDUIT.
3. C SUBSCRIPT COMMUNICATION (TELEPHONE, DATA, INSTRUMENTATION CONDUIT).

**CONDUIT DUCTBANK SECTION
DIRECT BURIED**

1 - NOT TO SCALE

**FRONT VIEW****SIDE VIEW**NOTES THIS DETAIL:

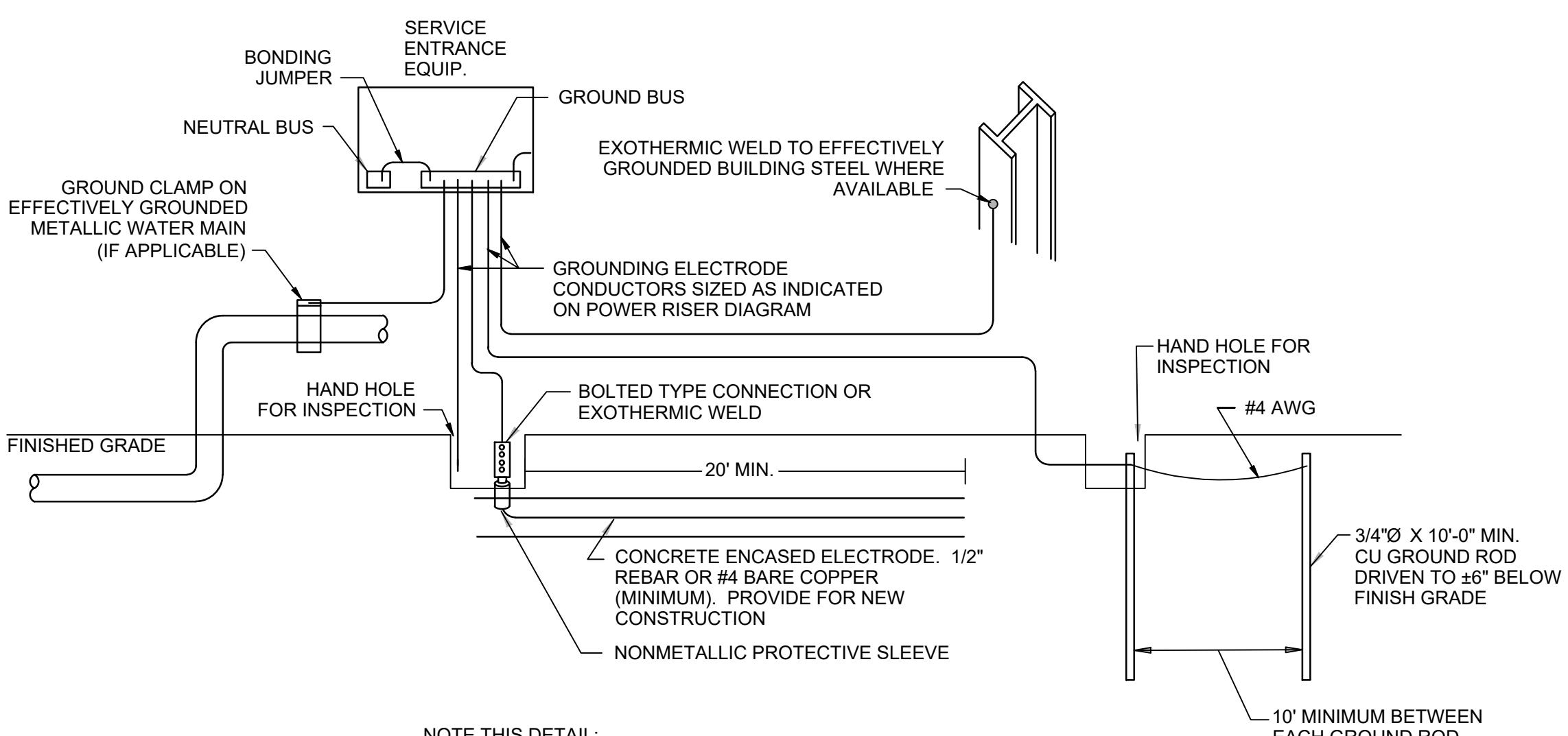
1. COMBINED EQUIPMENT LOADS PER 36" SPAN SHALL NOT EXCEED 500LBS.
2. MODULAR STRUT WIDTH: 1 5/8".
3. RACK ASSEMBLY MATERIAL: GALVANIZED PER SPECIFICATION SECTION 26.
4. REPAIR CUT ENDS AND DAMAGED SURFACES IN ACCORDANCE WITH SPECIFICATION SECTION 05.

NOTE THIS DETAIL:

1. SEE DUCTBANK DETAIL FOR ADDITIONAL REQUIREMENTS.

**CONCRETE TRANSITION TO ABOVE GRADE
(EXTERIOR TO EXTERIOR) DETAIL**

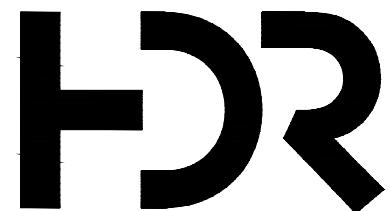
3 - NOT TO SCALE

NOTE THIS DETAIL:

1. GROUNDING ELECTRODES SHALL BE PROVIDED IN ACCORDANCE WITH NEC SECTION 250. ALL GROUNDING ELECTRODE CONDUCTORS SIZED AS INDICATED ON POWER RISER DIAGRAM. ALL METHODS OF CREATING THE GROUNDING SYSTEM MAY NOT BE REQUIRED OR AVAILABLE.

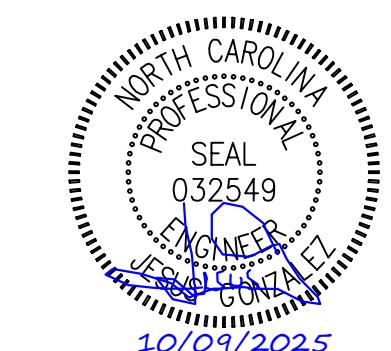
SERVICE GROUND DETAIL

4 - NOT TO SCALE



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HARNETT COUNTY
NORTH CAROLINA

ELECTRICAL DETAILS

0 1" 2" FILENAME: 00E-08.dwg
SCALE: NOT TO SCALE

SHEET: 00E-08
00E-08