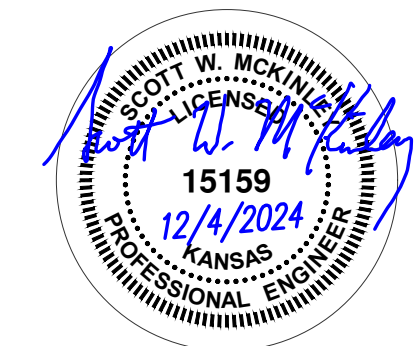


TOPEKA METRO

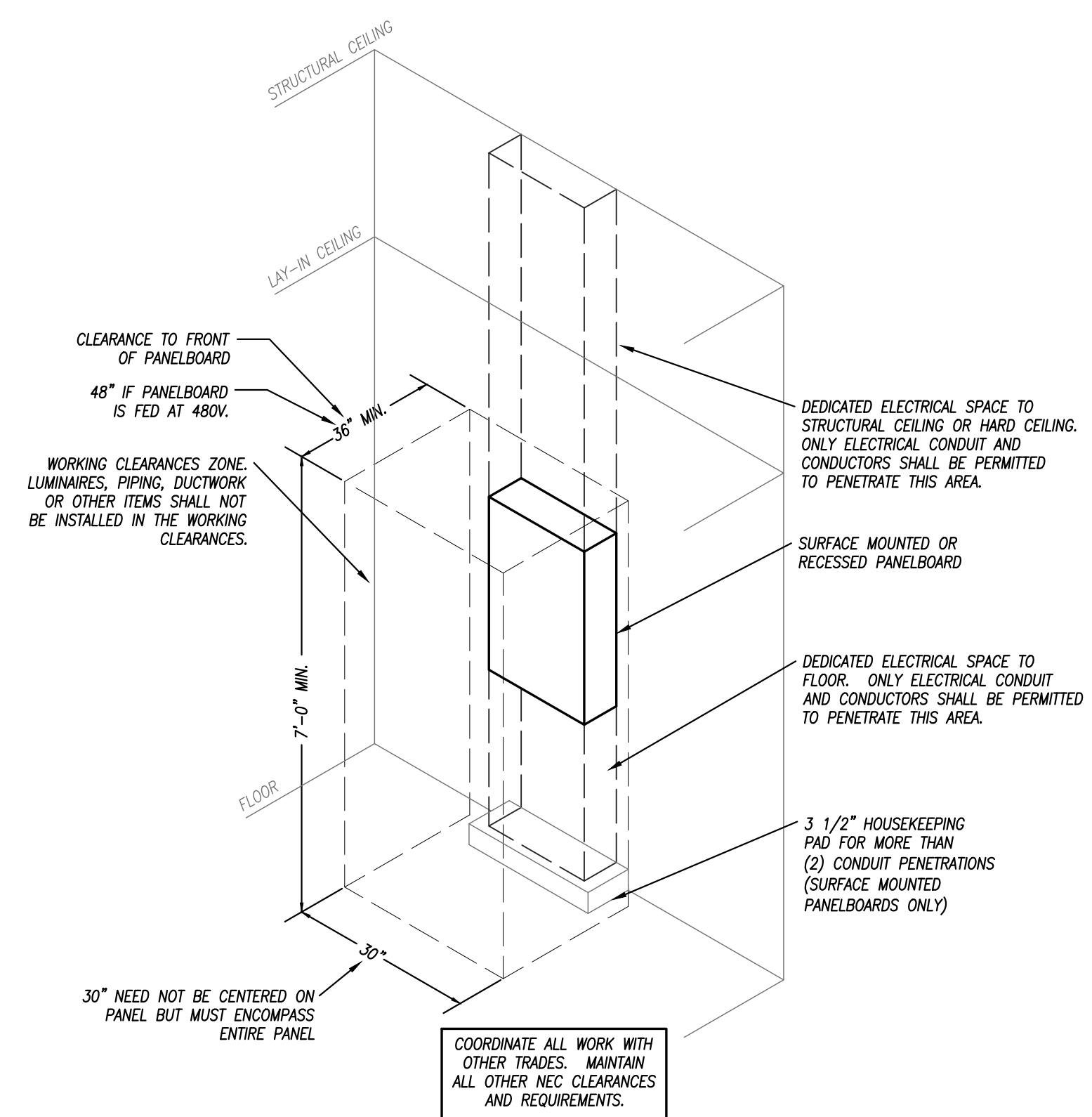
**REQUEST FOR BIDS
Electric Van Charging Infrastructure and Installation
TO-25-06**

**Appendix III
Engineering Plans**



**TOPEKA METROPOLITAN TRANSIT AUTHORITY
VEHICLE CHARGERS**

**201 N KANSAS AVE
TOPEKA, KS 66603**



TYPICAL PANELBOARD INSTALLATION DETAIL
NOT TO SCALE

SINGLE-SECTION PANELBOARD SCHEDULE													
PANEL DESIGNATION: DP1		CIRCUIT #		MAIN LUG AMPS: 600		SCCR RATING (AIC): 22,000							
MOUNTING: SURFACE				MAIN BREAKER: 600		VOLTAGE: 208/120							
LOCATION: BUS GARAGE				PHASE/WIRE: 3Ø, 4W									
DESCRIPTION	PHASE			TRIP	POLE	C/B	POLE	TRIP	PHASE			DESCRIPTION	
	A	B	C						A	B	C		
VEHICLE CHARGER	8320			100	2	1	2	2	100	8320			VEHICLE CHARGER
-		8320		-	-	3	4	-	-		8320		-
VEHICLE CHARGER			8320	100	2	5	6	2	100			8320	VEHICLE CHARGER
-	8320			-	-	7	8	-	-	8320			-
VEHICLE CHARGER		8320		100	2	9	10	2	100		8320		VEHICLE CHARGER
-			8320	-	-	11	12	-	-			8320	-
VEHICLE CHARGER	8320			100	2	13	14	2	100	-	-	-	SPARE
-		8320		-	-	15	16	-	-	-	-	-	-
SPARE				100	2	17	18	2	100	-	-	-	SPARE
-				-	-	19	20	-	-	-	-	-	-
SPARE				20	1	21	22	1	20	-	-	-	SPARE
SPARE				20	1	23	24	1	20	-	-	-	SPARE
SPARE				20	1	25	26	1	20	-	-	-	SPARE
SPARE				20	1	27	28	1	20	-	-	-	SPARE
SPARE				20	1	29	30	1	20	-	-	-	SPARE
-				-	-	31	32	1	-	-	-	-	-
-				-	-	33	34	1	-	-	-	-	-
-				-	-	35	36	1	-	-	-	-	-
-				-	-	37	38	1	-	-	-	-	-
-				-	-	39	40	1	-	-	-	-	-
-				-	-	41	42	1	-	-	-	-	-
TOTALS	24960	24960	16640							16640	16640	16640	TOTALS

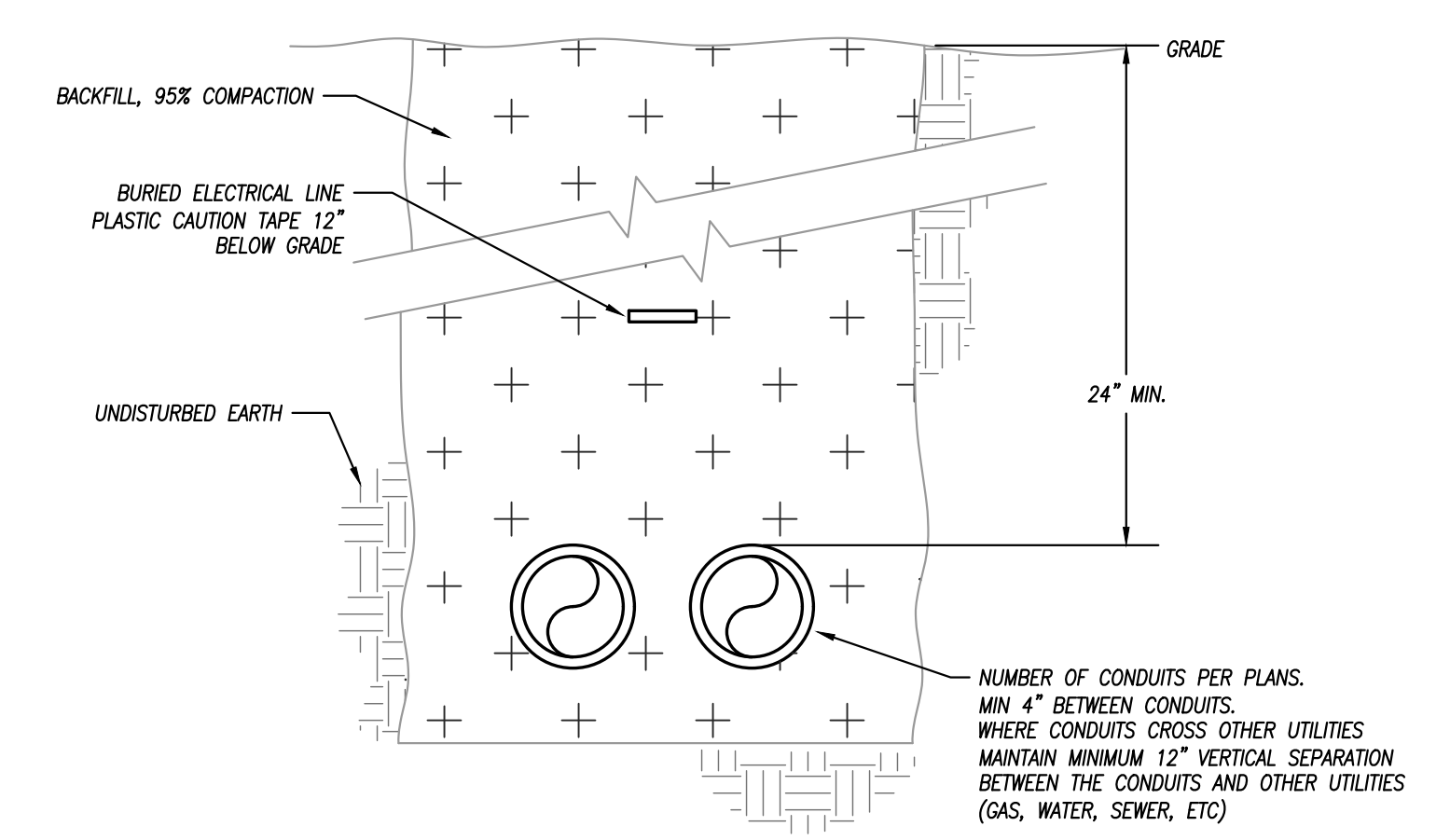
PANELBOARD SIZING LOAD			
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	0	1.25	0
RECEPTACLES	0	10KVA + 50% REST	0
MOTORS	0	LARGEST + SUM OF REST	0
AIR CONDITIONING	0	1.00	0
SPACE HEATING	0	0.00	0
HEAT PUMP	0	1.00	0
CONTINUOUS	116,480	1.25	145,600
NON-CONTINUOUS	0	1.00	0
MISC. LOADS 1	0	1.00	0
SIZING LOAD:			145,600
SIZING LOAD (AMPS):			404

CONNECTED PHASE LOADS		
PHASE	VA	AMPS
A	41,600	346.4
B	41,600	346.4
C	33,280	277.1
TOTALS	116,480	323.3

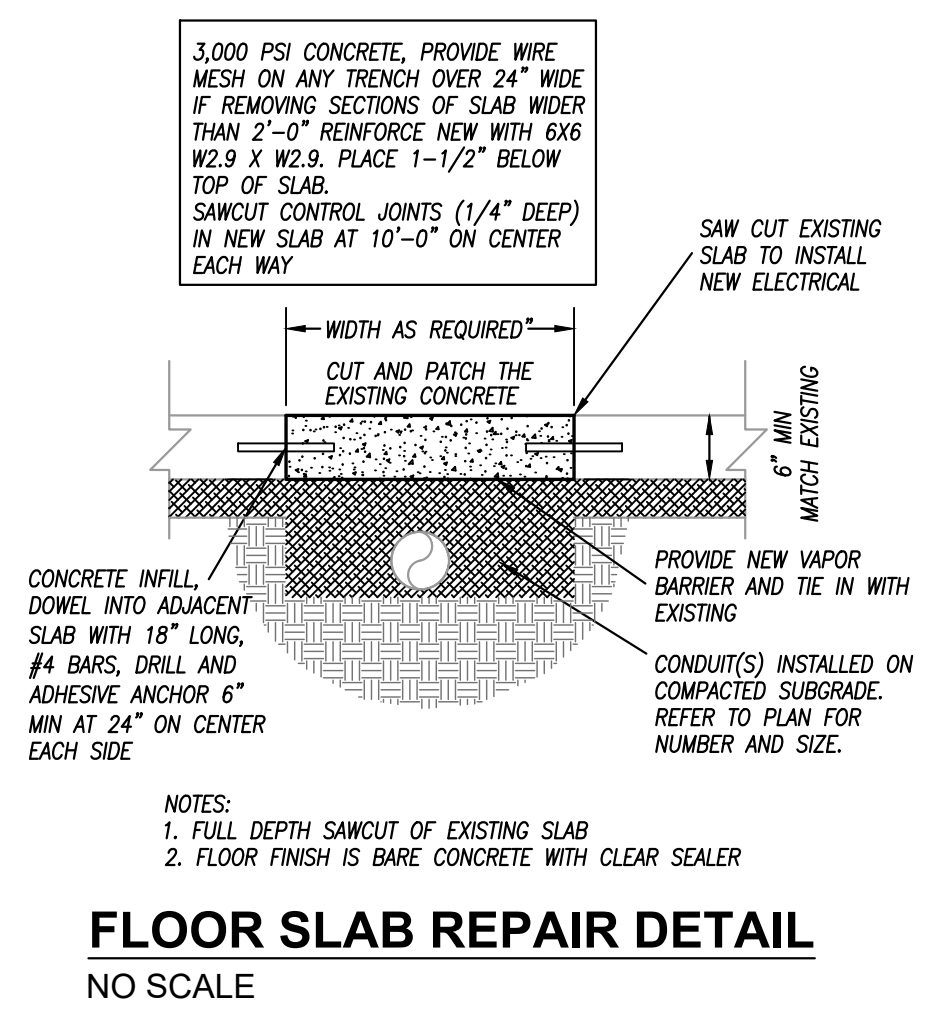
REMARKS:
1. EATON POW-R-LINE 1X OR EQUAL.

EQUIPMENT FAULT CURRENT RATING SCHEDULE				
EQUIPMENT	SCA **	SCCR	% OF RATING	NOTES
MAIN SERVICE DISCONNECT	24,238	35,000	69%	1
TRANSFORMER T-1	23,103	-	-	-
PANELBOARD DP1	9,168	22,000	42%	1

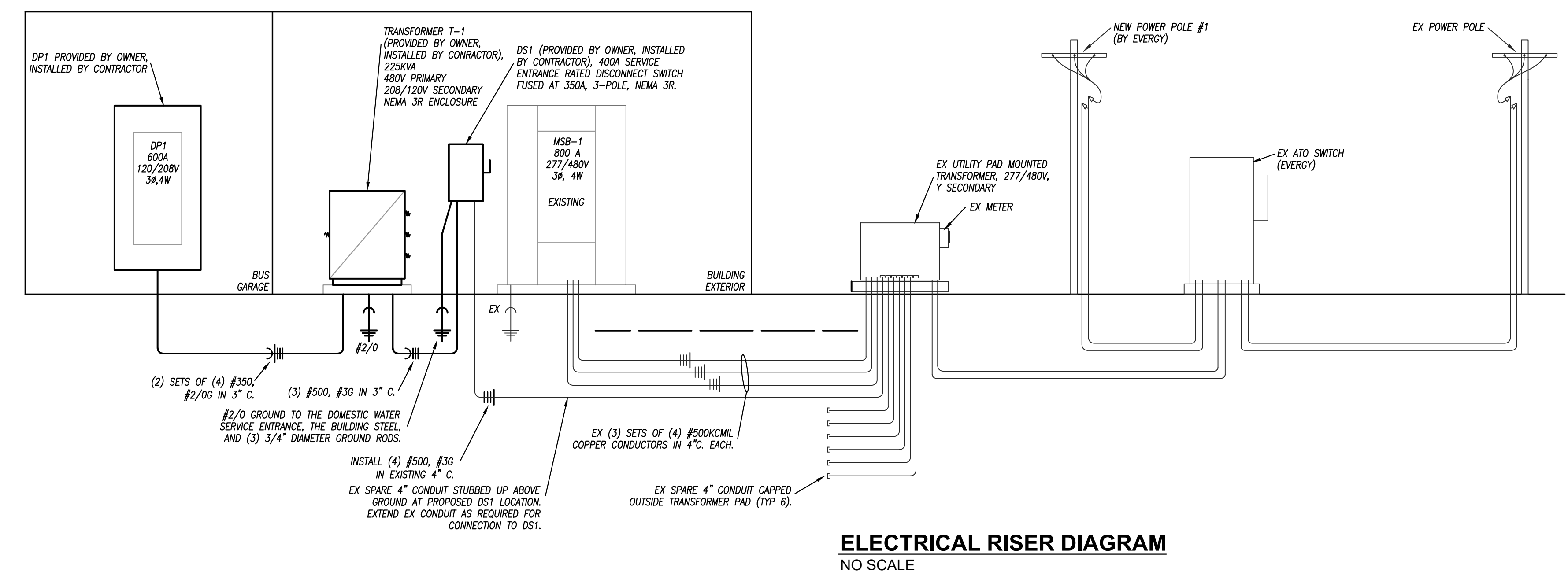
NOTES:
1. RATING BASED ON AN ASSUMED FAULT AT UTILITY CO. TRANSFORMER OF 34,368A.
** CALCULATIONS PERFORMED USING BUSSMANN POINT-TO-POINT METHOD.



UNDERGROUND ELECTRICAL CONDUITS DETAIL
NOT TO SCALE



FLOOR SLAB REPAIR DETAIL
NO SCALE



ELECTRICAL RISER DIAGRAM
NO SCALE

ISSUED FOR:	
DESCRIPTION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

© PEARSON KENT MCKINLEY RAAF ENGINEERS, LLC
DRAWN BY: KAH
CHECKED BY: SWM

SHEET TITLE:
**ELECTRICAL
DETAILS/SCHEDULES**

DATE: 12-4-24 PKMR PROJECT: 24.466

SHEET NUMBER:
E3