

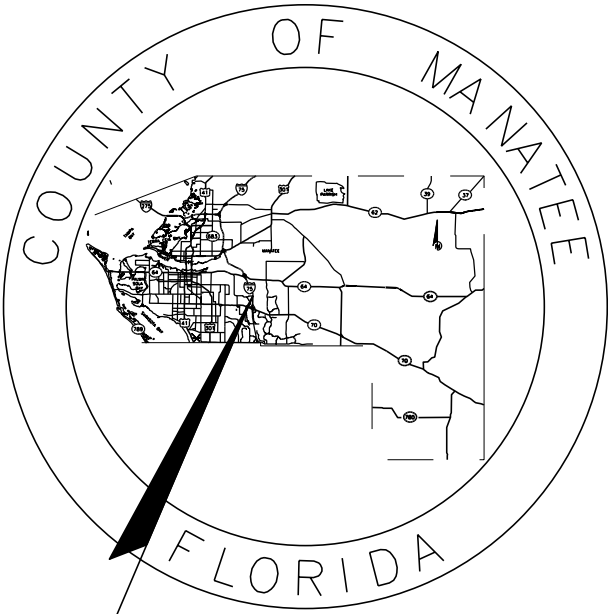
*MANATEE COUNTY
PUBLIC WORKS DEPARTMENT*

CONTRACT PLANS

**MANATEE COUNTY
PROJECT NUMBER 6045662
44TH AVENUE EAST
PHASE 2**

WEST OF I-75 TO LAKEWOOD RANCH BOULEVARD

LIGHTING PLANS



LOCATION OF PROJECT

**90% SUBMITTAL
02/2022**

**LIGHTING PLANS
ENGINEER OF RECORD:**

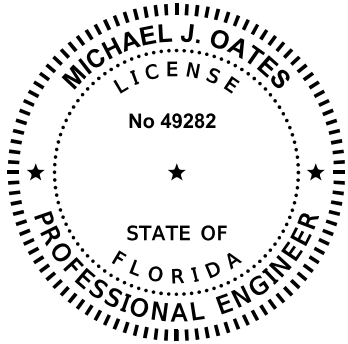
MICHAEL J. OATES, P.E.
P.E. NO.: 49282
HDR ENGINEERING, INC.
2601 CATTLEMEN ROAD, SUITE 400
SARASOTA, FLORIDA 34232
VENDOR NO. 47-0680568
CONTRACT NO. C9480

MANATEE CO. PROJECT MANAGER:
ERIC S. SHROYER, P.E.

INDEX OF LIGHTING PLANS

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FISCAL YEAR	SHEET NO.
22	L-1



THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE
NOT CONSIDERED SIGNED AND SEALED
AND THE SIGNATURE MUST BE VERIFIED ON
ANY ELECTRONIC COPIES.

HDR ENGINEERING, INC.
2601 CATTLEMEN ROAD, SUITE 400
SARASOTA, FLORIDA 34232
MICHAEL J. OATES, P.E. NO. 49282

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

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L-1	KEY SHEET
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L-27	LOAD CENTER ENCLOSURE DETAILS
L-28	DISTRIBUTION PANEL WIRING DIAGRAM

TABULATION OF QUANTITIES

[illegible]

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

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1. CONTACT THE ENGINEER, IN CONJUNCTION WITH MANATEE COUNTY'S PROJECT MANAGEMENT DIVISION BEFORE STARTING WORK.
2. ONE WEEK PRIOR TO THE BEGINNING OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY:

MANATEE COUNTY PROJECT MANAGEMENT DIVISION
ERIC S. SHROYER, P.E.
1022 26TH AVENUE EAST
BRADENTON, FLORIDA 34208
PHONE: 941-708-7450 EXT. 7344

MANATEE COUNTY TRAFFIC ENGINEERING DIVISION
VISHAL KAKKAD
2101 47TH TERRACE EAST
BRADENTON, FLORIDA 34203
PHONE: 941-749-3500 EXT. 7812
3. FOR A LIST OF UTILITY OWNERS, SEE "UTILITY CONTACTS" LISTED BELOW.

MANATEE COUNTY PROJECT MANAGEMENT DIVISION
ERIC S. SHROYER, P.E.
1022 26TH AVENUE EAST
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2101 47TH TERRACE EAST
BRADENTON, FLORIDA 34203
PHONE: 941-749-3500 EXT. 7812

3. FOR A LIST OF UTILITY OWNERS, SEE "UTILITY CONTACTS" LISTED BELOW.
4. THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR, VIA SUNSHINE STATE ONE CALL OF FLORIDA, INC AT 811 OR 1-800-432-4770. IN COORDINATION WITH UNDERGROUND AND OVERHEAD UTILITY OWNERS. A MINIMUM OF 2 FULL BUSINESS DAYS PRIOR TO DIGGING IS REQUIRED.
5. AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE WITHIN 2' TO THE LIGHTING POLE FOUNDATIONS AS DETERMINED BY THE ENGINEER, HAND DIG THE FIRST 4 FEET OF THE HOLE FOR THE POLE FOUNDATION AND/OR CONDUIT RUN(S).
6. PRIOR TO ORDERING MATERIALS, SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW FOR ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED.
7. THE ACCEPTANCE OF ANY SUBMITTED DATA FOR MATERIALS, AND EQUIPMENT SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PLACING SAME AND PROPER DIMENSIONS, CAPACITIES, SIZES, QUANTITY AND INSTALLATIONS DETAILS TO EFFICIENTLY PERFORM THE REQUIREMENTS AND INTENT OF THE CONTRACT. SUCH ACCEPTANCE SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS OF ANY SORT ON THE SUBMITTAL DATA.
8. VERIFY POLE LENGTHS REQUIRED IN ORDER TO ACHIEVE THE PROPER MOUNTING HEIGHT FOR EACH LUMINAIRE. THIS VERIFICATION SHALL OCCUR PRIOR TO THE SUBMISSION OF SHOP DRAWINGS. MOUNTING HEIGHTS ARE DETERMINED FROM THE BOTTOM OF THE LUMINAIRE HOUSING VERTICALLY TO PAVEMENT GRADE.
9. THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO PRE-CONSTRUCTION CONDITIONS WITHIN 72 HOURS OF THE CONSTRUCTION ACTIVITY, INCLUDING BUT NOT LIMITED TO: RESTORATION OF GRADE; REMOVAL OF CONSTRUCTION TRASH; REPLACEMENT OF SIDEWALK; RESTORATION OF LANDSCAPE IRRIGATION, ETC. THE CONTRACTOR SHALL VERIFY THE LOCATION AND FUNCTION OF EXISTING IRRIGATION LINES PRIOR TO INITIALIZING CONSTRUCTION.
10. THE CONTRACTOR SHALL INSTALL ALL PROJECT INFRASTRUCTURE AND FIELD ELEMENTS WITHIN THE RIGHT-OF-WAY.
11. ALL AREAS OF EXPOSED EARTH RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE SODDED AS DIRECTED BY THE COUNTY. SEEDING AND MULCHING SHALL BE APPLIED ONLY WHERE DIRECTED BY THE COUNTY.
12. ALL SPLICES SHALL BE MADE IN PULL BOXES ONLY WHEN NECESSARY WITH WATER PROOF SOLDERLESS CONNECTORS OR COMPRESSION SLEEVES AS PER CURRENT FDOT STANDARD SPECIFICATIONS. SPLICES AND CONNECTIONS MADE IN PULL BOXES SHALL BE LIMITED TO THE SERVICE POINT AND CONDUIT JUNCTION WITH MULTI-DIRECTIONAL CIRCUIT RUNS AS INDICATED ON PLANS. ALL SPlice LOCATIONS SHALL BE NOTED ON THE AS-BUILT PLANS.
13. THE LOCATIONS OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, ARE APPROXIMATE AND BASED ON THE INFORMATION FURNISHED TO THE ENGINEER BY THE UTILITY OWNER(S) AND ARE SHOWN AS NOTICE TO THE CONTRACTOR THAT UNDERGROUND UTILITIES EXIST. BEFORE EXCAVATING STAKE ALL POLE LOCATIONS AND TAKE RESPONSIBILITY FOR NOTIFYING THE UTILITY COMPANY OWNER(S) AND REQUEST THEM TO LOCATE AND STAKE THEIR UNDERGROUND FACILITIES.

UTILITY CONTACTS:

MANATEE COUNTY PUBLIC
WORKS DEPARTMENT
INFRASTRUCTURE ENGINEERING
CHRIS MOWBRAY, P.E.
1022 26TH AVENUE EAST
BRADENTON, FL 34208
(941) 708-7450
FAX: (941) 708-7431

TECO/PEOPLE GAS CO.
DAN SHANAHAN
8261 VICO COURT
SARASOTA, FL 34240
(813) 645-2700
FAX: (941) 342-4011
EMERGENCY:
1-877-832-6911
djshanahan@tecoenergy.com

FRONTIER COMMUNICATIONS
DENISE HUTTON
1701 RINGLING BLVD
SARASOTA, FL 34236
(941) 906-6722
denise.hutton@ftr.com

FLORIDA POWER & LIGHT
GREG COKER
1253 12TH AVENUE EAST
PALMETTO, FL 34221
(941) 723-4430
FAX: (941) 723-4430
EMERGENCY:
1-800-4-OUTAGE
Greg.Coker@fpl.com

MANATEE COUNTY HEALTH
DEPARTMENT
HARRY MESSICK
410 6TH AVENUE EAST
BRADENTON, FL 34208
(941) 748-0747 EXT. 1355
FAX: (941) 750-9364

**SOUTHWEST FLORIDA WATER
MANAGEMENT DISTRICT
SARASOTA SERVICE OFFICE
STEVE LOPES, P.E.
6750 FRUITVILLE ROAD
SARASOTA, FL 34240
(941) 377-3722
FAX: (941) 373-7660**

FLORIDA GAS TRANSMISSION
SAFETY HARBOR TEAM
7804 ANDERSON ROAD
TAMPA, FL 33634
JOSEPH SANCHEZ
(813) 466-3327
CELL: (727) 639-7512
joseph.e.sanchez@suq.com

CHARTER COMMUNICATIONS
JAMES CRUZAN
5413 E. STATE ROAD 64
BRADENTON, FL 34208-5535
(727) 329-2846
James.Cruzan@charter.com

DEPT OF ENVIRONMENTAL
PROTECTION
STEPHANIE BARIOS
13051 N. TELECOM PKWY
TEMPLE TERRACE, FL 33637
(813) 632-7600, EXT. 408
FAX: (813) 632-7662

PEACE RIVER ELECTRIC
COOPERATIVE, INC.
P.O. BOX 1310
WACHULA, FL 33873
DAVID MCCLINTOCK
(863) 767-4621
David.McClintock@preco.coop

MANATEE COUNTY PUBLIC
WORKS DEPARTMENT
TRAFFIC ENGINEERING
VISHAL KAKKAD, P.E.
(941) 749-3500 EXT. 7812
FAX: (941) 749-3517

SUNSHINE STATE ONE CALL
OF FLORIDA
1 (800) 432-4770

14. IF THE LUMINAIRE USED IS DIFFERENT THAN DESIGNED, THE CONTRACTOR SHALL PROVIDE SUBMITTAL DATA WHICH INCLUDES A COMPUTER PRINTOUT SHOWING HORIZONTAL FOOTCANDLE LEVELS TO BE OBTAINED, USING THE SUBMITTED LUMINAIRES THAT ARE NOT THE BASIS OF DESIGN, ON THIS PROJECT. AT FINAL INSPECTION, VERIFY THE HORIZONTAL FOOTCANDLE LEVELS ON THE ROADWAY WITH AN APPROVED CURRENTLY CALIBRATED LIGHT METER.
15. IDENTIFY ALL CIRCUITS AND EQUIPMENT WITH "LAMACOID TAGS". INSTALL SIMILAR TAGS OF STAINLESS STEEL IDENTIFYING CIRCUIT FOR EACH LUMINAIRE AT ACCESS HANDHOLE FOR EACH POLE.
16. PULLING INSTRUCTIONS: CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET AND MEET MANUFACTURER'S REQUIREMENTS. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY N.E.C. OR N.E.S.C. FOR CABLE USED.
17. ALL EXCESS DIRT AND DEBRIS EXCAVATED FROM POLE FOUNDATIONS SHALL BE REMOVED DAILY TO AREAS APPROVED BY THE ENGINEER AND SHALL BE INCLUDED IN PAY ITEM NO. 715-4-13.
18. PREPARE ACCURATELY DIMENSIONED "AS-BUILT" PLANS OF THE FINAL POLE AND LOAD CENTER LOCATIONS. PLANS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER. COST OF SUCH PREPARATION SHALL BE INCIDENTAL TO PAY ITEMS PROVIDED. UPON FINAL ACCEPTANCE OF THE PROJECT, FORWARD A COMPLETE SET OF AS-BUILT PLANS WITH ALL CHANGES MARKED IN RED TO THE ENGINEER.
19. PULL BOXES SHALL NOT BE INSTALLED WITHIN ANY DITCHES OR AREAS THAT MAY CAUSE WATER INTRUSION.

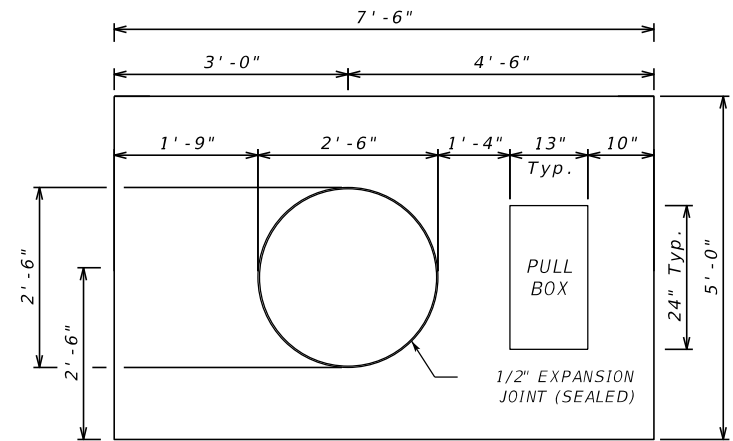
CONDUIT NOTES

1. ALL HDPE CONDUIT CONNECTIONS SHALL BE JOINED WITH A FUSION COUPLER OR FUSION SPLICE.
2. ADJUST THE CONDUIT RUNS TO AVOID ANY UTILITY CONFLICT IDENTIFIED BY THE LOCATES. ANY SIGNIFICANT CHANGE SHALL BE APPROVED BY THE ENGINEER.
3. THE CONDUITS TO BE INSTALLED ARE TO BE PLACED SO AS TO TOTALLY AVOID ANY CONFLICTS WITH EXISTING UTILITIES ALONG THE ROUTE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY INFORMATION REQUIRED TO PLAN THE WORK AHEAD FOR THE INSTALLATION OF THE REQUIRED CONDUITS WITHIN DESIGN OR SPECIFIED PARAMETERS, AND HIS TIME FRAME. THE CONTRACTOR SHALL ADJUST CONDUIT VERTICALLY OR HORIZONTALLY TO AVOID CONFLICT WITH UNDERGROUND UTILITIES. THE CONTRACTOR SHALL USE HAND EXCAVATION METHODS WHEN EXCAVATING NEAR EXISTING UTILITIES. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK. EXTREME CAUTION SHALL BE USED BY THE CONTRACTOR WHEN EXCAVATING, INSTALLING, BACK FILLING AND COMPACTING AROUND EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY.


4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE ALL ABOVE GROUND AND UNDERGROUND CONFLICTS IN ADVANCE OF THE PLACEMENT OF ANY POLES OR OTHER FACILITIES. THE CONTRACTOR SHALL FIELD MARK THE PROPOSED ALIGNMENT FOR REVIEW AND CONCURRENCE BY THE ENGINEER PRIOR TO TRENCHING AND/OR PLACEMENT.
5. ALL NEW CONDUIT SHALL BE PLACED AT A MINIMUM DEPTH OF 30" UNLESS PLACED IN AN AREA OF NEW FILL, IN WHICH CASE THE CONDUIT SHALL BE 48". DIRECTIONALLY BORED CONDUIT SHALL BE AT A MINIMUM DEPTH OF 48".
6. DURING TRENCHING OPERATIONS, THE CONTRACTOR SHALL AVOID LANDSCAPING WHICH MIGHT BE AFFECTED BY SUCH OPERATIONS.

PAY ITEM NOTES

1. 630-2-11 & 630-2-12:
CONDUITS INSTALLED WITH THE DIRECTIONAL BORE METHOD SHALL BE HDPE WITH A MINIMUM SIZE OF 2" UNLESS OTHERWISE NOTED IN THE PLANS. COST OF PULL WIRE SHALL BE INCLUDED UNDER THIS PAY ITEM.
2. 715-7-11:
INCLUDES NEMA 3R INDIVIDUALLY MOUNTED ENCLOSED CIRCUIT BREAKER ON LOAD SIDE OF METER, METER BASE, SERVICE POLE INSULATORS, WEATHERHEADS, CONTROL POWER TRANSFORMERS, ENCLOSURES, PANEL BOARDS, BREAKERS, FUSES, LIGHTING CONTACTOR, LIGHTNING ARRESTER, PHOTO-ELECTRIC ASSEMBLY, CONDUIT & FEEDER CONDUCTORS FROM POWER COMPANY POINT OF SERVICE TO LOAD CENTER, PULL BOX AND ALL MISCELLANEOUS HARDWARE FOR A COMPLETE INSTALLATION AS PER PLANS AND STANDARD PLANS INDEX 639-001 DETAIL "B". INCLUDES THE COST OF FURNISHING AND INSTALLING 12" TYPE P-II PRESTRESSED CONCRETE POLE.
3. 715-11-111:
PROVIDE FIVE (5) SPARE LUMINAIRES TO MANATEE COUNTY (SEE SHEET L-9).
4. 715-500-1:
INCLUDES THE COST OF BREAK-AWAY WATERTIGHT, IN-LINE FUSE HOLDERS, THE STRAIN RELIEF AND THE SURGE ARRESTOR PER STANDARD PLANS INDEX 715-001.



SLAB DETAILS - POLES NO. 35, 39, 41, 43, 45, 47, 49, 51, 53, 55)

				SCALE	AS NOTED	HDR ENGINEERING, INC.	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	GENERAL NOTES	SHEET NO.
				DESIGNED BY	MO	2601 CATTLEMEN ROAD, SUITE 400	02/2022		MICHAEL J. OATES		
				DRAWN BY	VD	SARASOTA, FLORIDA 34232	PROJECT NO.		FL. LICENSE NO.		
				CHECKED BY	LR		6045662		49282		
No.	REVISIONS	DATE	BY								L-6

DESIGN WIND SPEED	140 MPH
AVERAGE INITIAL ILLUMINATION	1.0 H.F.C
AVERAGE TO MIN.	4 : 1 OR LESS
MAX TO MIN.	10 : 1 OR LESS
VEILING LUMINANCE RATIO	0.3: 1 OR LESS

SYMBOLS

DESCRIPTION



136 WATT LED LUMINAIRE ATTACHED ON SHOULDER MOUNTED CONVENTIONAL LIGHT POLE. ANALYZED USING GENERAL ELECTRIC LIGHTING LUMINAIRE, PHOTOMETRIC CURVE NUMBER ERLH 15C340 AT 15000 LUMENS. POLE MOUNTING HEIGHT IS 40 FT AND ARM LENGTH IS 8 FT. SYMBOL INCLUDES LUMINAIRE, ARM, POLE WITH STANDARD FOUNDATION, BREAKAWAY TRANSFORMER BASE, CONCRETE SLAB AND POLE CABLE DISTRIBUTION SYSTEM. THE LUMINAIRE IS A CUTOFF FIXTURE DESIGNED FOR MEDIUM TYPE III DISTRIBUTION WITH ZERO TILT.



136 WATT LED LUMINAIRE ATTACHED ON SHOULDER MOUNTED CONVENTIONAL LIGHT POLE. ANALYZED USING GENERAL ELECTRIC LIGHTING LUMINAIRE, PHOTOMETRIC CURVE NUMBER ERLH_15C340 AT 15000 LUMENS. POLE MOUNTING HEIGHT IS 40 FT AND ARM LENGTH IS 8 FT. SYMBOL INCLUDES LUMINAIRE, ARM, POLE WITH STANDARD FOUNDATION, BREAKAWAY TRANSFORMER BASE, CONCRETE SLAB AND POLE CABLE DISTRIBUTION SYSTEM. THE LUMINAIRE IS A CUTOFF FIXTURE DESIGNED FOR MEDIUM TYPE III DISTRIBUTION WITH ZERO TILT.



136 WATT LED LUMINAIRE ATTACHED ON SHOULDER MOUNTED CONVENTIONAL LIGHT POLE. ANALYZED USING GENERAL ELECTRIC LIGHTING LUMINAIRE, PHOTOMETRIC CURVE NUMBER ERLH_15C340 AT 15000 LUMENS. POLE MOUNTING HEIGHT IS 35 FT AND ARM LENGTH IS 15, CONCRETE SLAB AND POLE CABLE DISTRIBUTION SYSTEM. THE LUMINAIRE IS A CUTOFF FIXTURE DESIGNED FOR MEDIUM TYPE III DISTRIBUTION WITH ZERO TILT.



136 WATT LED LUMINAIRE HEAD REPLACEMENT ONLY. EXISTING SHOULDER MOUNTED 35' HIGH CONVENTIONAL LIGHT POLE AND 15' ARM TO REMAIN. ANALYZED USING GENERAL ELECTRIC LIGHTING LUMINAIRE, PHOTOMETRIC CURVE NUMBER ERLH 15C340 AT 15000 LUMENS. SYMBOL INCLUDES LUMINAIRE ONLY. THE LUMINAIRE IS A CUTOFF FIXTURE DESIGNED FOR MEDIUM TYPE III DISTRIBUTION WITH ZERO TILT.



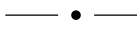
136 WATT LED LUMINAIRE ATTACHED ON SHOULDER MOUNTED CONVENTIONAL LIGHT POLE. ANALYZED USING GENERAL ELECTRIC LIGHTING LUMINAIRE, PHOTOMETRIC CURVE NUMBER ERLH_15C340 AT 15000 LUMENS. POLE MOUNTING HEIGHT IS 40 FT AND ARM LENGTH IS 8 FT. SYMBOL INCLUDES LUMINAIRE, ARM, POLE WITH STANDARD FOUNDATION, BREAKAWAY TRANSFORMER BASE, AND POLE CABLE DISTRIBUTION SYSTEM. THE LUMINAIRE IS A CUTOFF FIXTURE DESIGNED FOR MEDIUM TILT III DISTRIBUTION WITH ZERO TILT.



136 WATT LED LUMINAIRE ATTACHED ON BRIDGE OR WALL MOUNTED CONVENTIONAL LIGHT POLE. ANALYZED USING GENERAL ELECTRIC LIGHTING LUMINAIRE, PHOTOMETRIC CURVE NUMBER ERLH 15C340 AT 15000 LUMENS. POLE MOUNTING HEIGHT IS 40 FT AND ARM LENGTH IS 8 FT. SYMBOL INCLUDES LUMINAIRE, ARM, POLE ATTACHED TO PILASTER AND POLE CABLE DISTRIBUTION SYSTEM. THE LUMINAIRE IS A CUTOFF FIXTURE DESIGNED FOR MEDIUM TYPE III DISTRIBUTION WITH ZERO TILT. SEE STRUCTURES PLANS FOR PILASTER DETAILS.



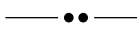
98 WATT LED LUMINAIRES ATTACHED ON MEDIAN MOUNTED CONVENTIONAL LIGHT POLE WITH DUAL ARM. ANALYZED USING GENERAL ELECTRIC LIGHTING LUMINAIRE, PHOTOMETRIC CURVE NUMBER ERLH_11C340 AT 11500 LUMENS. POLE MOUNTING HEIGHT IS 35 FT AND BOTH ARM LENGTHS ARE 8 FT. SYMBOL INCLUDES LUMINAIRE, DUAL ARMS, POLE WITH STANDARD FOUNDATION, BREAKAWAY TRANSFORMER BASE, CONCRETE SLAB AND POLE CABLE DISTRIBUTION SYSTEM. THE LUMINAIRE IS A CUTOFF FIXTURE DESIGNED FOR MEDIUM TYPE III DISTRIBUTION WITH ZERO TILT.



ONE CONDUIT INSTALLED BY OPEN TRENCH METHOD WITH CONDUCTORS INSIDE. RUN ONE (1) COPPER GROUND BONDING CONDUCTOR (GREEN INSULATION) INSIDE WITH OTHER CONDUCTORS.



ONE CONDUIT INSTALLED BY BRIDGE MOUNT METHOD WITH CONDUCTORS INSIDE. RUN ONE (1) COPPER GROUND BONDING CONDUCTOR (GREEN INSULATION) INSIDE WITH OTHER CONDUCTORS.



TWO CONDUIT INSTALLED BY DIRECTIONAL BORE METHOD WITH CONDUCTORS INSIDE. RUN ONE (1) COPPER GROUND BONDING CONDUCTOR (GREEN INSULATION) INSIDE WITH OTHER CONDUCTORS.



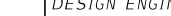
PROPOSED TYPICAL FDOT SHOULDER MOUNTED LIGHTING PULL BOX WITH MODIFIED CONCRETE SLAB OF 36" X 36". PULL BOX COVER SIZE 13" X 24" UNLESS OTHERWISE NOTED.



PROPOSED LOAD CENTER "A" AND "B" 240/ 480 VOLT, SINGLE PHASE, 3 WIRE, PER FDOT STANDARD PLANS AND SPECIFICATIONS INCLUDING THE METER ENCLOSURE WITH BASE AND SERVICE DISCONNECT PER FP&L REQUIREMENTS. INCLUDE A MANUAL BYPASS SWITCH TO THE METER BASE PER FP&L REQUIREMENTS.

POLE NO.	CIRCUIT	STATION	# OF LUMINAIRE	DIST. OR ARM	LUMINAIRE WATTAGE	MOUNTING HEIGHT	POLE SETBACK	PAY ITEM
1	A-2	309+86, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
2	A-1	311+02, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
3	A-2	312+17, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
4	A-1	313+35, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
5	A-2	314+49, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
6	A-1	315+67, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
7	A-2	316+81, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
8	A-1	317+97, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
9	A-2	319+06, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
10	A-1	320+12, LT	1	8'	136	40'	BRIDGE MOUNTED	715-4-13
11	A-2	321+11, RT	1	8'	136	40'	BRIDGE MOUNTED	715-4-13
12	A-1	322+00, LT	1	8'	136	40'	BRIDGE MOUNTED	715-4-13
13	A-2	322+99, RT	1	8'	136	40'	BRIDGE MOUNTED	715-4-13
14	A-1	324+12, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
15	A-2	325+26, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
16	A-1	326+40, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
17	A-2	327+54, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
18	A-1	328+68, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
19	A-2	329+82, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
20	A-1	330+97, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
21	A-2	332+10, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
22	A-1	333+20, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
23	A-2	333+59, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
24	A-4	334+59, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.25' FROM BOS	715-4-13
25	A-4	214+75, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.25' FROM BOS	715-4-13
26	A-4	214+68, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
27	B-2	336+32, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
28	A-3	336+29, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
29	A-3	218+18, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
30	A-3	218+17, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
31	A-3	334+57, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
32	B-2	337+16, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
33	A-3	337+34, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
34	B-2	338+35, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
35	B-1	339+00, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.25' FROM BOS	715-4-13
36	B-2	340+10, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
37	B-1	341+25, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
38	B-2	342+40, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
39	B-1	343+55, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.25' FROM BOS	715-4-13
40	B-2	344+70, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
41	B-1	345+85, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.25' FROM BOS	715-4-13
42	B-2	347+00, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
43	B-1	348+13, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.25' FROM BOS	715-4-13
44	B-2	349+25, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
45	B-1	350+36, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.25' FROM BOS	715-4-13
46	B-2	351+46, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
47	B-1	352+61, LT	1	8				


BOS - *BACK OF SIDEWALK*

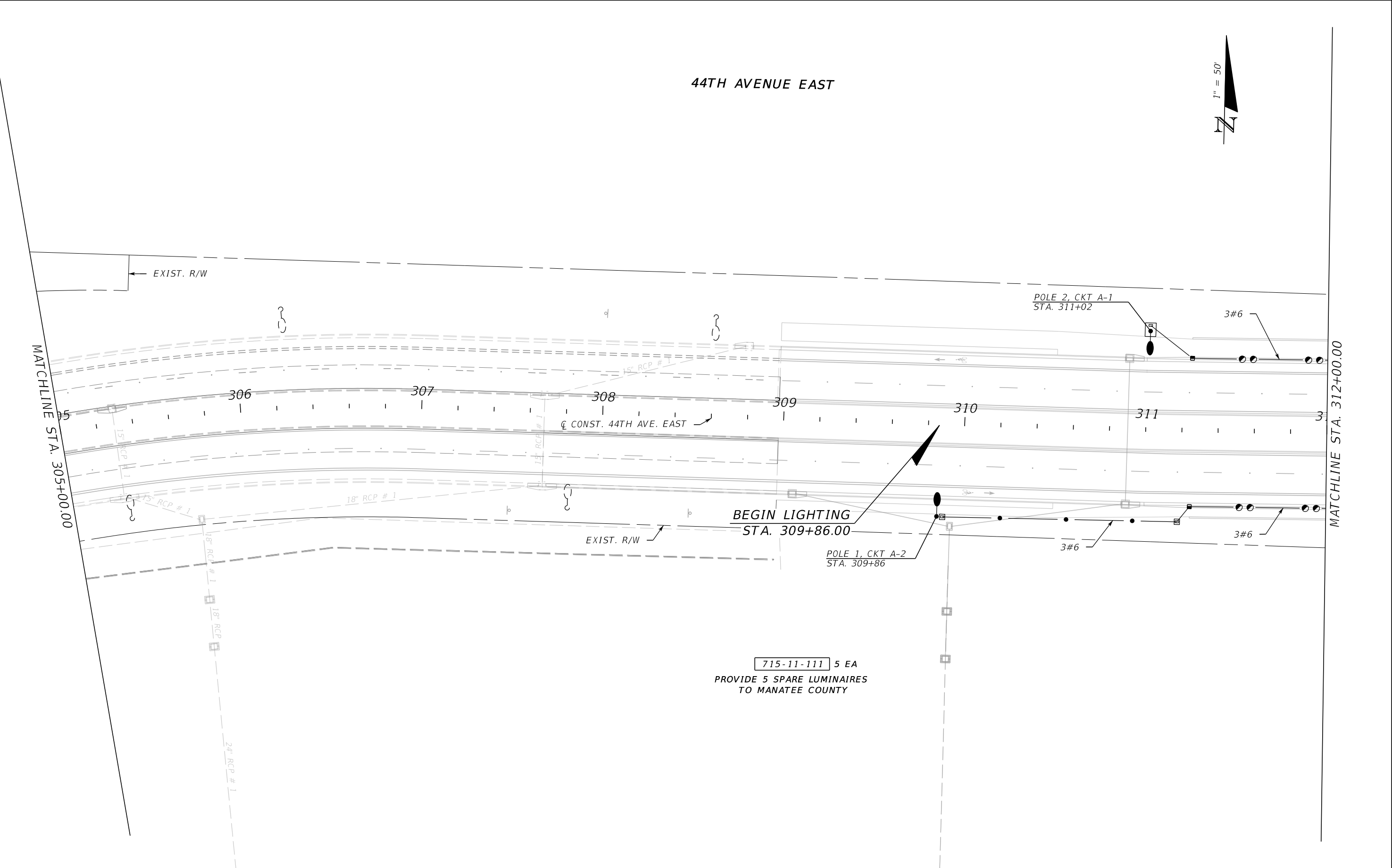
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				DESIGNED BY	MO	2601 CATTLEMEN ROAD, SUITE 400	02/2022		MICHAEL J. OATES		
				DRAWN BY	VD	SARASOTA, FLORIDA 34232	PROJECT NO.		FL. LICENSE NO.		
No.	REVISIONS	DATE	BY	CHECKED BY	LR		6045662		49282		L-7


POLE DATA

POLE NO.	CIRCUIT	STATION	# OF LUMINAIRE	DIST. OR ARM	LUMINAIRE WATTAGE	MOUNTING HEIGHT	POLE SETBACK	PAY ITEM
56	B-2	362+77, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
57	B-1	363+89, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
58	B-2	365+05, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
59	B-1	366+19, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
60	B-2	367+33, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
61	B-1	368+48, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
62	B-2	369+64, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
63	B-1	370+78, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
64	B-2	371+95, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
65	B-1	373+07, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
66	B-2	374+24, RT	1	8'	136	40'	WALL MOUNTED	715-4-13
67	B-1	375+38, LT	1	8'	136	40'	WALL MOUNTED	715-4-13
68	B-2	376+51, RT	1	8'	136	40'	EDGE OF FOUNDATION 5.0' FROM BOS	715-4-13
69	B-3	377+69, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
70	B-4	378+85, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
71	B-3	379+98, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
72	B-4	381+13, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
73	B-3	382+29, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
74	B-4	383+44, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
75	B-3	384+59, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
76	B-4	385+73, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
77	B-3	386+89, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
78	B-4	388+03, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
79	B-3	389+16, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
80	B-4	390+68, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
81	B-3	390+69, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
82	B-4	392+14, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
83	B-3	392+23, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
84	B-4	393+52, RT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
85	B-3	393+51, LT	1	8'	136	40'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-13
86	B-3	395+04, LT	1	8'	136	40'	EDGE OF FOUNDATION 6.0' FROM BOS	715-4-13
87 (71D6)	EXIST. CKT D	395+29, RT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
88 (71A6)	EXIST. CKT A	396+25, LT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
89 (71D5)	EXIST. CKT D	397+24, RT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
90 (71A5)	EXIST. CKT A	398+14, LT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
91 (71D4)	EXIST. CKT D	399+10, RT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
92 (71A4)	EXIST. CKT A	400+03, LT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
93 (71D3)	EXIST. CKT D	400+98, RT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
94 (71A3)	EXIST. CKT A	401+94, LT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
95 (71D2)	EXIST. CKT D	402+92, RT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
96 (71A2)	EXIST. CKT A	403+84, LT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
97 (71D1)	EXIST. CKT D	404+81, RT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
98 (71A1)	EXIST. CKT A	405+76, LT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
99 (71C1)	EXIST. CKT C	406+67, RT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
100 (71B1)	EXIST. CKT B	407+66, LT	1	15'	136	35'	EXISTING POLE AND ARM TO REMAIN	715-11-30
101	EXIST. CKT C	408+20, RT	1	15'	136	35'	EDGE OF FOUNDATION 1.75' FROM BOS	715-4-12
102	A-4	213+10, 0'	2	8'	98	35'	MEDIAN MOUNTED	715-4-12
103	A-4	211+30, 0'	2	8'	98	35'	MEDIAN MOUNTED	715-4-12
104	A-4	209+50, 0'	2	8'	98	35'	MEDIAN MOUNTED	715-4-12
105	A-4	207+70, 0'	2	8'	98	35'	MEDIAN MOUNTED	715-4-12
106	A-4	205+90, 0'	2	8'	98	35'	MEDIAN MOUNTED	715-4-12
107	A-4	204+10, 0'	2	8'	98	35'	MEDIAN MOUNTED	715-4-12
108	A-4	202+30, 0'	2	8'	98	35'	MEDIAN MOUNTED	715-4-12

BOS - BACK OF SIDEWALK

				SCALE	AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	POLE DATA AND LEGEND (2)	SHEET NO.	
				DESIGNED BY	MO		PROJECT NO. 6045662		MICHAEL J. OATES		FL. LICENSE NO. 49282	L-8
				DRAWN BY	VD							
				CHECKED BY	LR							
No.	REVISIONS			DATE	BY							



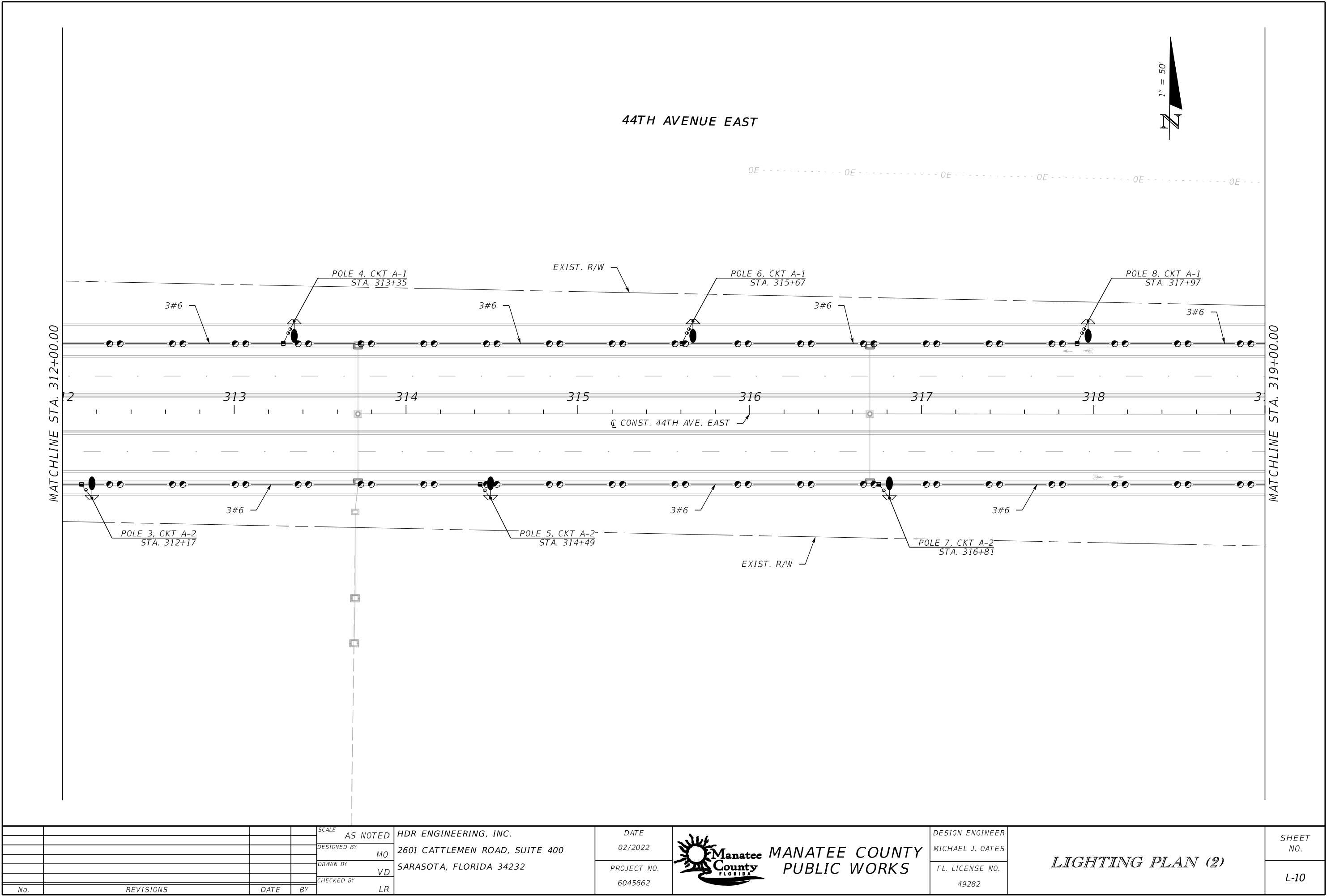
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				DESIGNED BY	MO		02/2022		MICHAEL J. OATES		
				DRAWN BY	VD		PROJECT NO. 6045662		FL. LICENSE NO. 49282		
				CHECKED BY	LR						
No.	REVISIONS			DATE	BY						

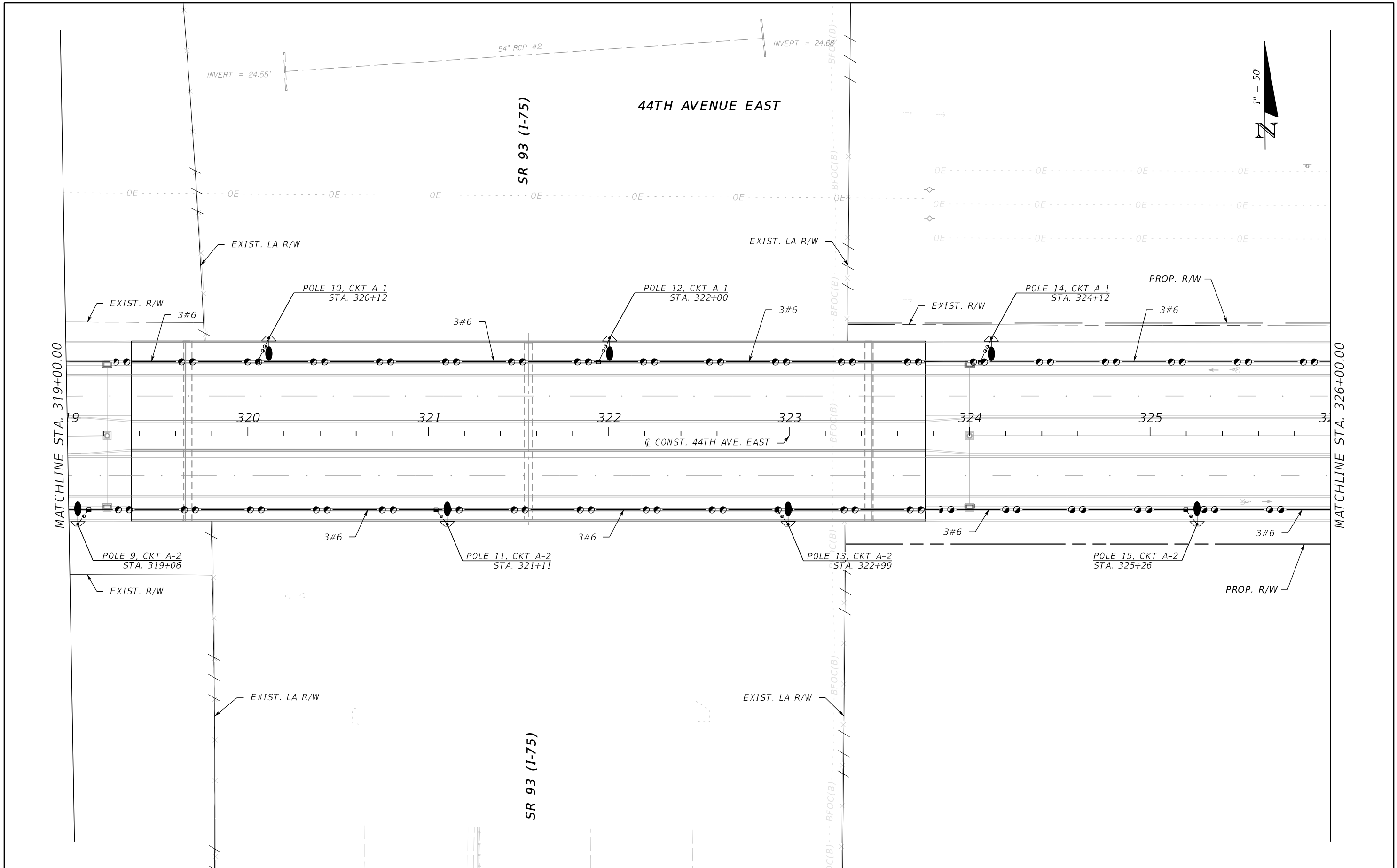
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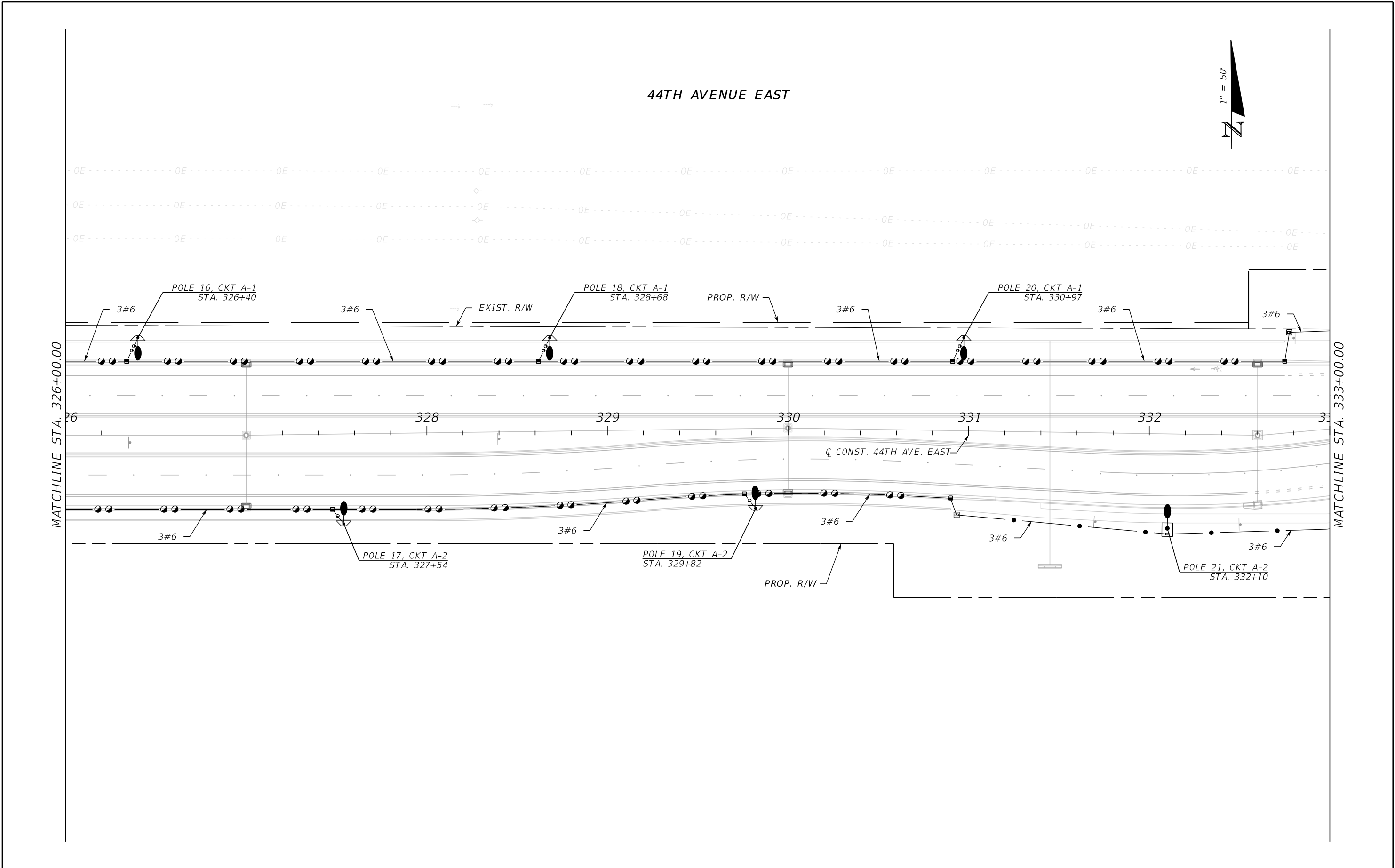
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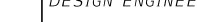
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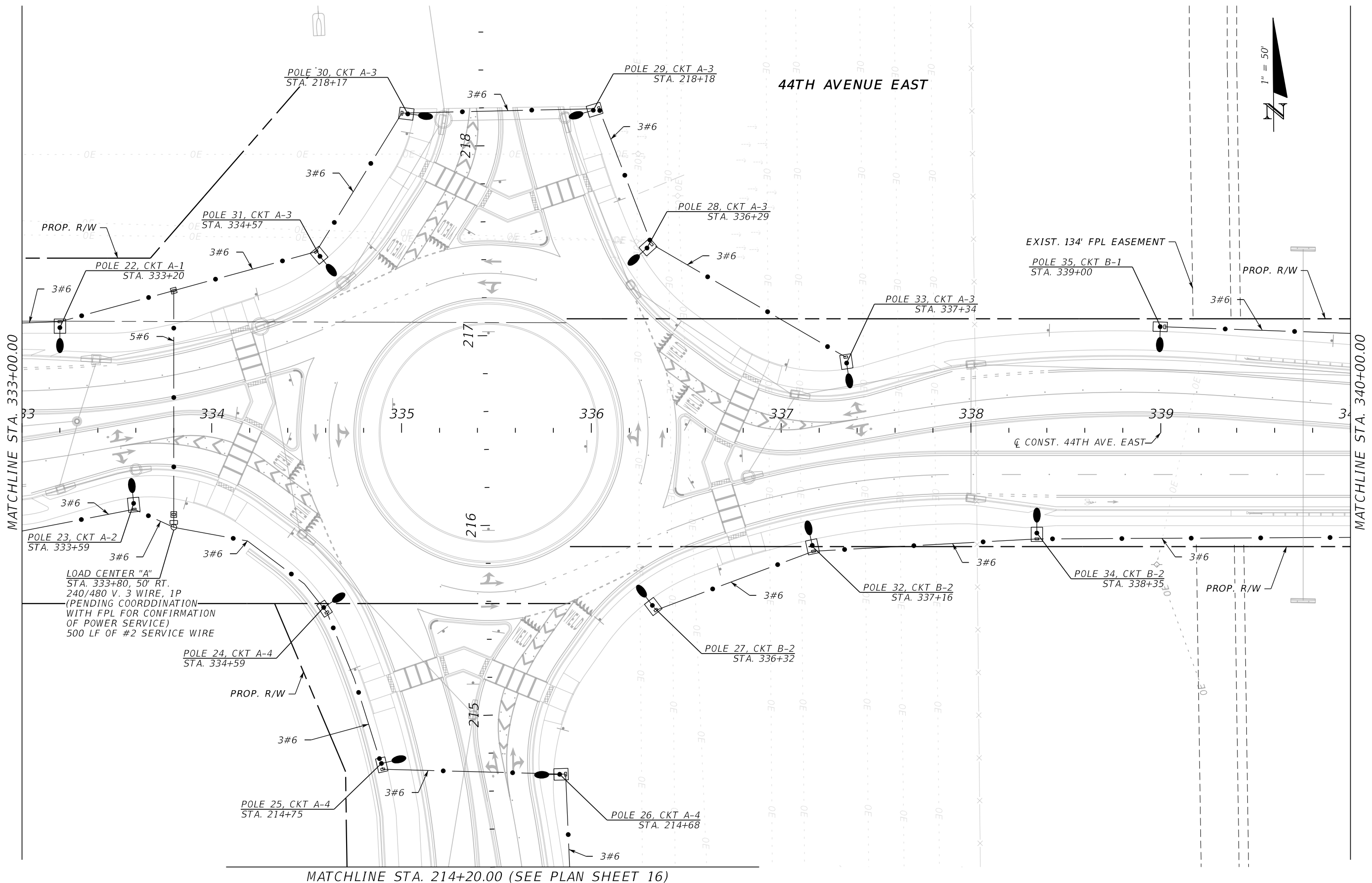



				SCALE	AS NOTED	HDR ENGINEERING, INC.	DATE		DESIGN ENGINEER	<i>LIGHTING PLAN (3)</i>	SHEET NO.
				DESIGNED BY	MO	2601 CATTLEMEN ROAD, SUITE 400	02/2022		MICHAEL J. OATES		
				DRAWN BY	VD	SARASOTA, FLORIDA 34232	PROJECT NO.		FL. LICENSE NO.		
				CHECKED BY	LR		6045662		49282		L-11
No.	REVISIONS			DATE	BY						



				SCALE	AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	MICHAEL J. OATES FL. LICENSE NO. 49282	LIGHTING PLAN (1)	SHEET NO.
				DESIGNED BY	MO		02/2022					
				DRAWN BY	VD		PROJECT NO.					
				CHECKED BY	LR		6045662					
No.	REVISIONS			DATE	BY			5:07:04 PM		2/23/2022		PW:\

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				SCALE	AS NOTED	HDR ENGINEERING, INC.	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	LIGHTING PLAN (5)	SHEET NO.
				DESIGNED BY	MO	2601 CATTLEMEN ROAD, SUITE 400	02/2022		MICHAEL J. OATES		
				DRAWN BY	VD	SARASOTA, FLORIDA 34232	PROJECT NO.		FL. LICENSE NO.		
				CHECKED BY	LR		6045662		49282		L-13
No.	REVISIONS			DATE	BY						

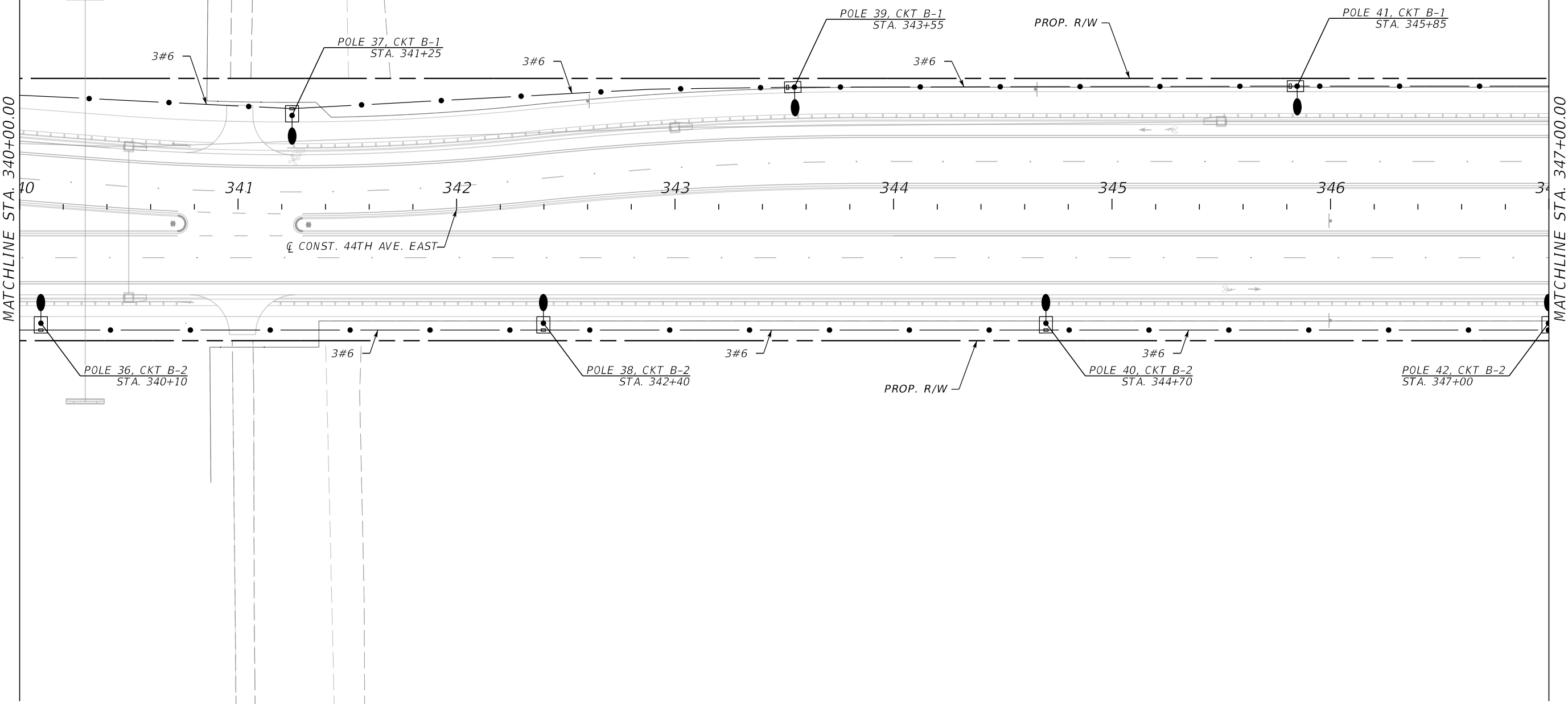
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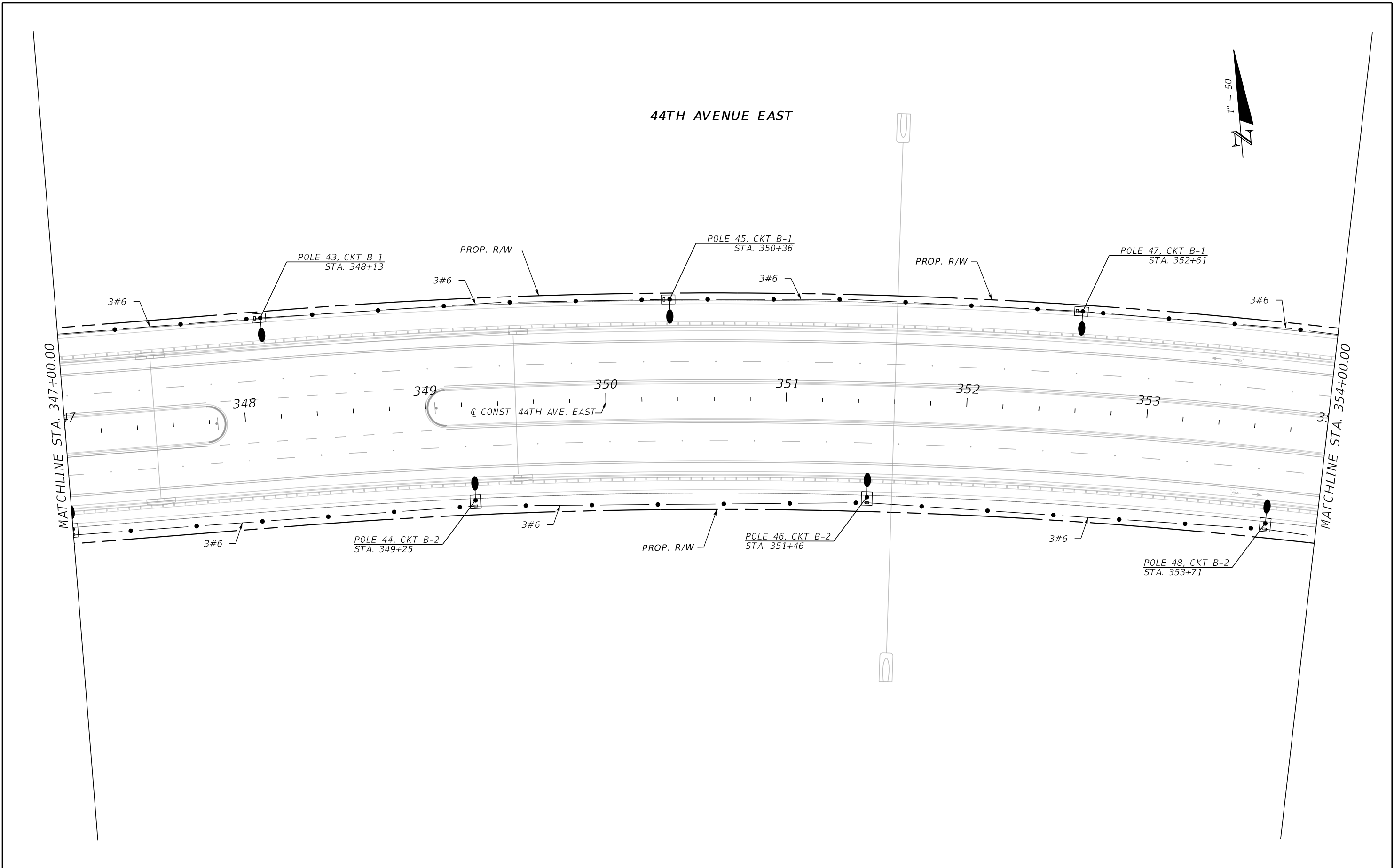
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44TH AVENUE EAST



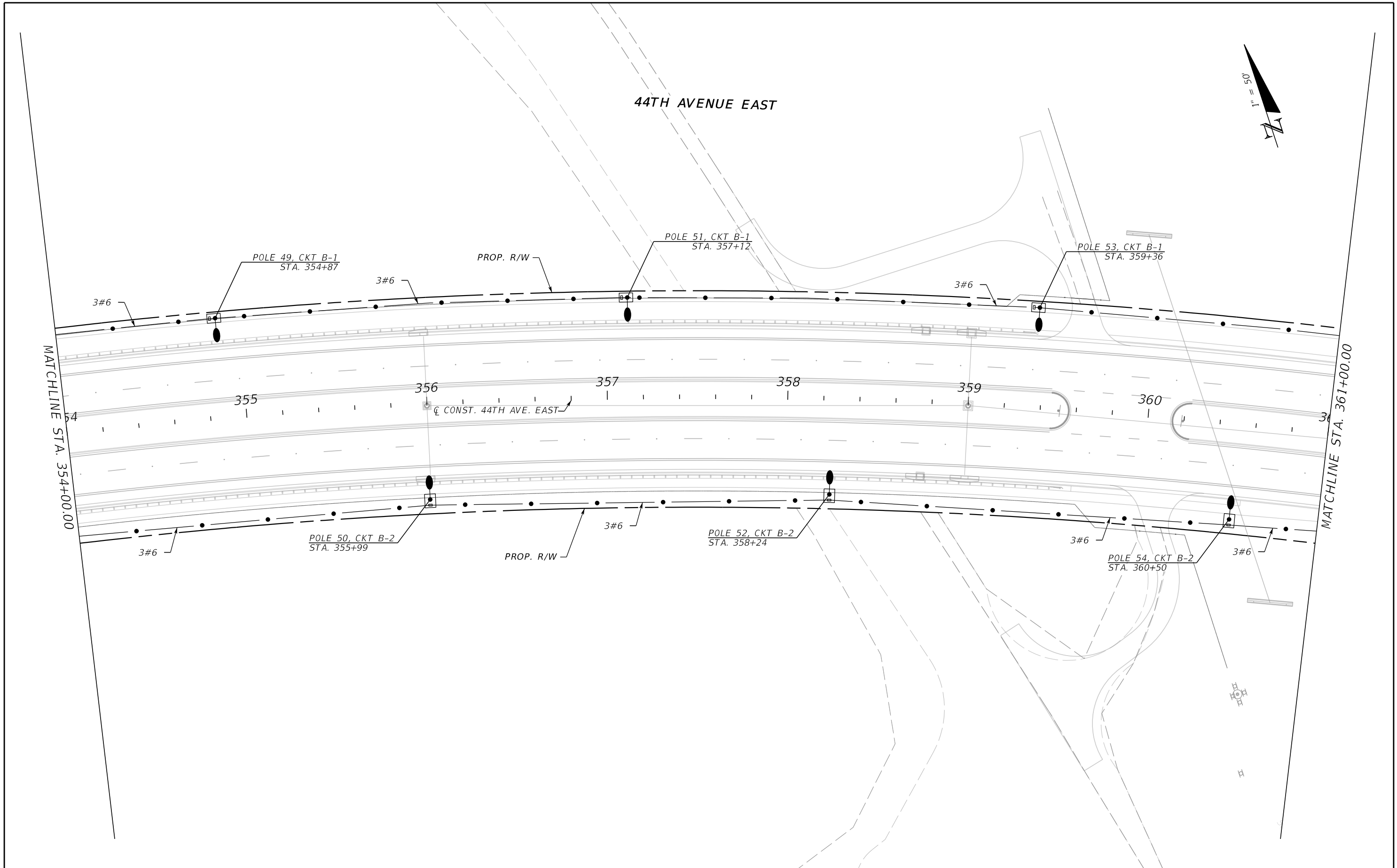
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				DESIGNED BY	MO		02/2022					
				DRAWN BY	VD		PROJECT NO.					
				CHECKED BY	LR		6045662		L-14			
No.	REVISIONS			DATE	BY			5:07:08 PM	2/23/2022	PW:\		


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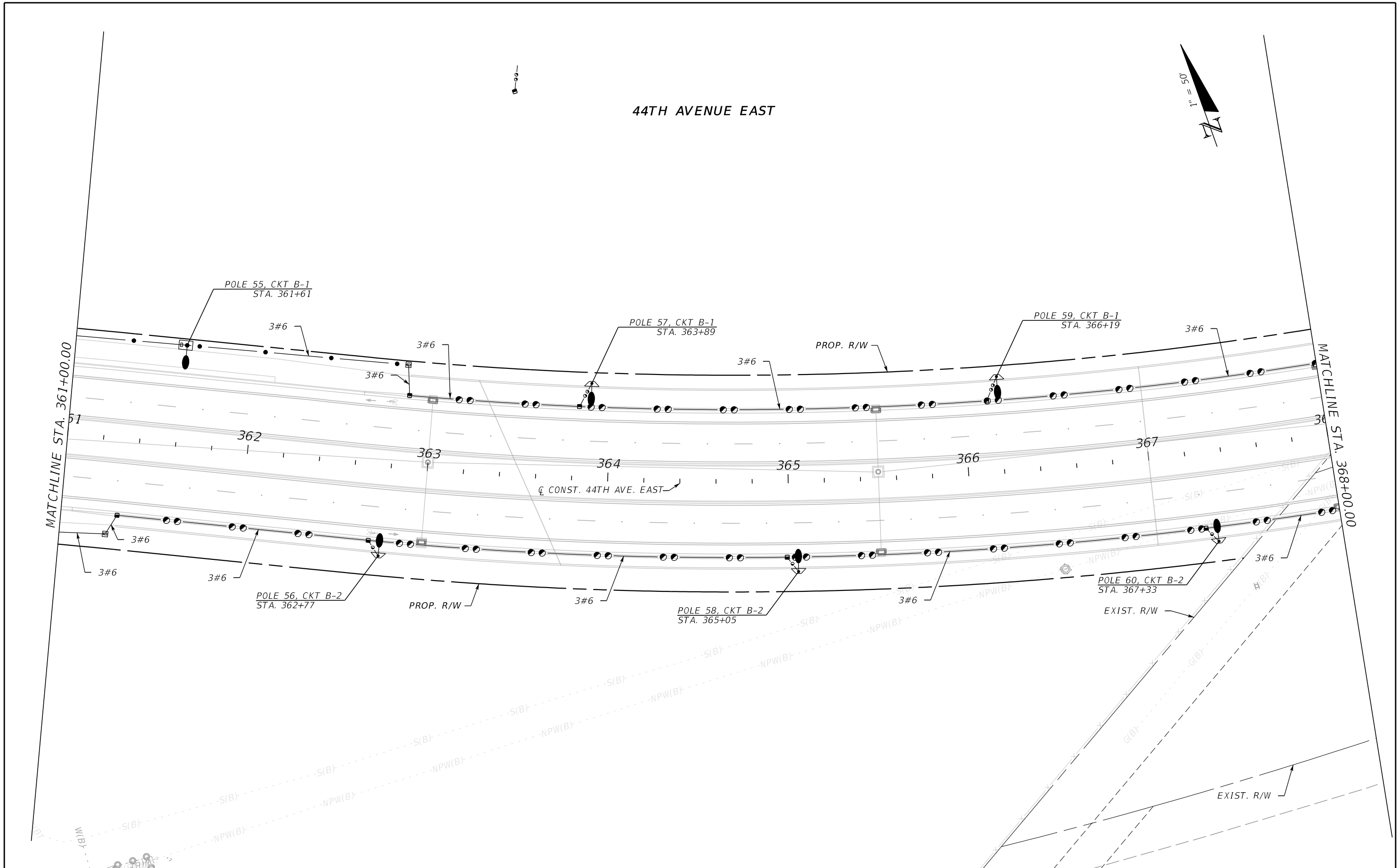
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				DESIGNED BY	MO	2601 CATTLEMEN ROAD, SUITE 400	02/2022		MICHAEL J. OATES		
				DRAWN BY	VD	SARASOTA, FLORIDA 34232	PROJECT NO.		FL. LICENSE NO.		
				CHECKED BY	LR		6045662		49282		L-15
No.	REVISIONS			DATE	BY			5:07:09 PM	2/23/2022	PW:\	


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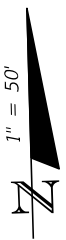
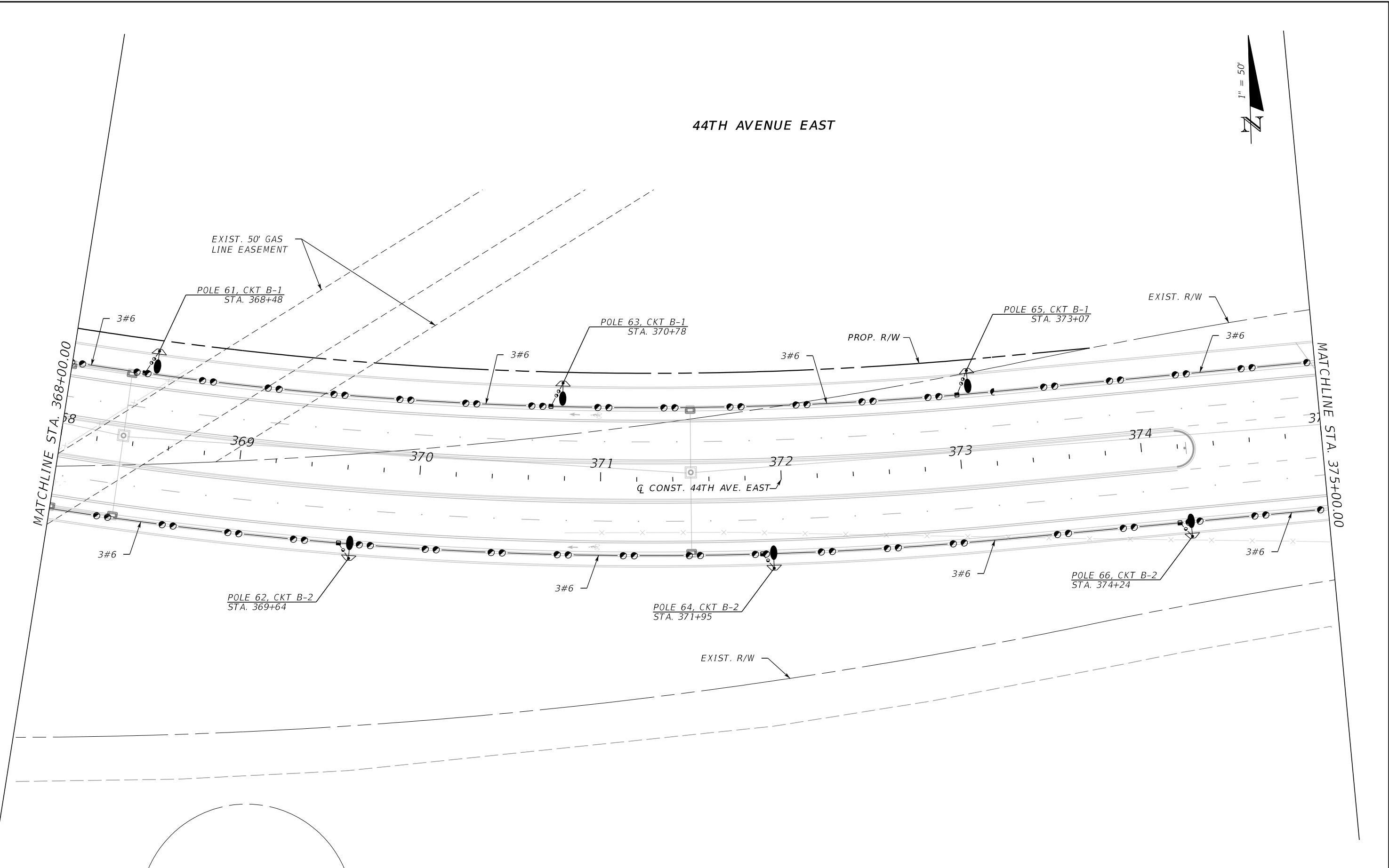
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				DESIGNED BY	MO	2601 CATTLEMEN ROAD, SUITE 400	02/2022		MICHAEL J. OATES		
				DRAWN BY	VD	SARASOTA, FLORIDA 34232	PROJECT NO.		FL. LICENSE NO.		
				CHECKED BY	LR		6045662		49282		L-16
No.	REVISIONS			DATE	BY						


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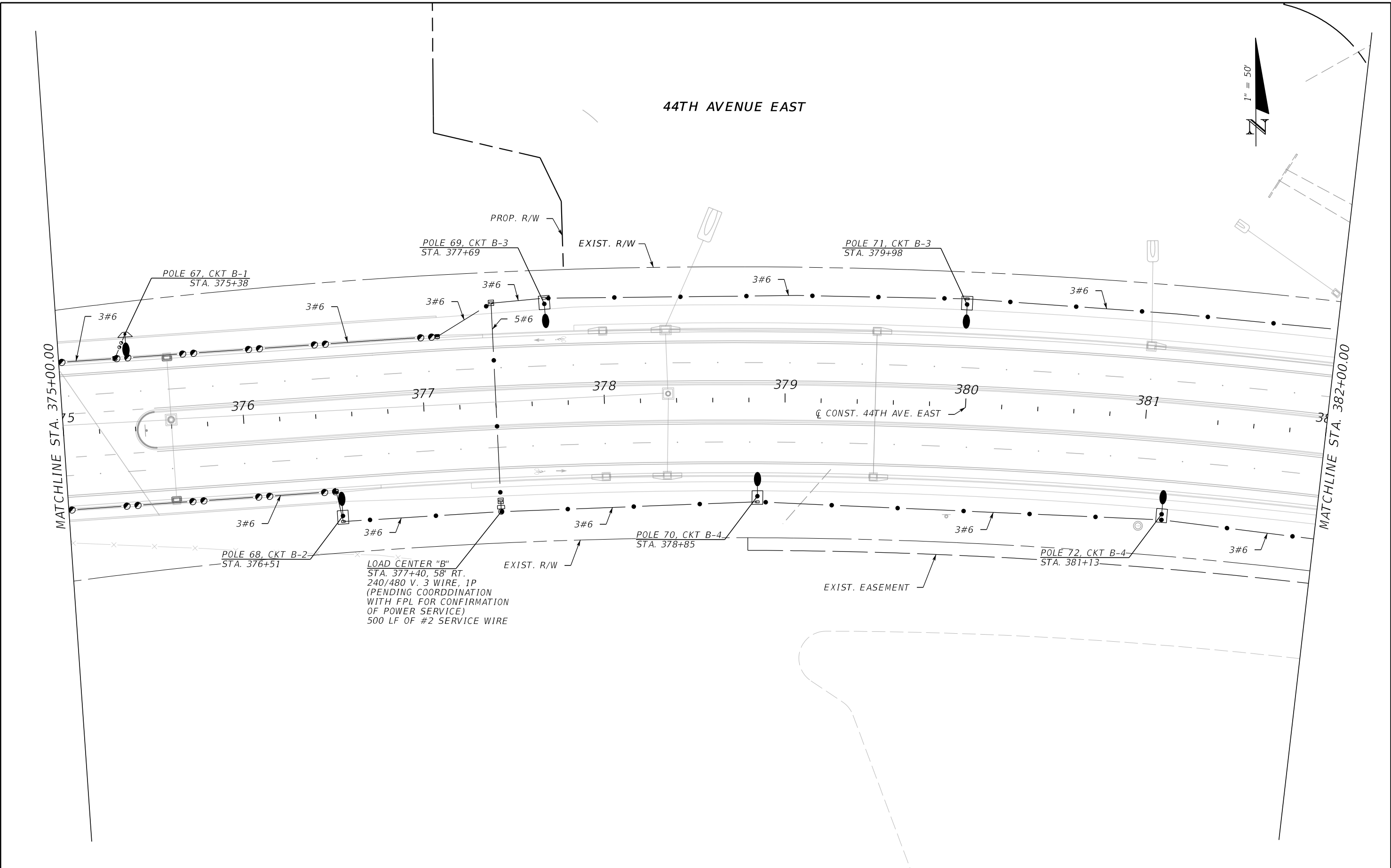
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				DESIGNED BY	MO		02/2022		PROJECT NO. 6045662			
				DRAWN BY	VD							
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No.	REVISIONS			DATE	BY			5:07:13 PM		2/23/2022	PW:\	


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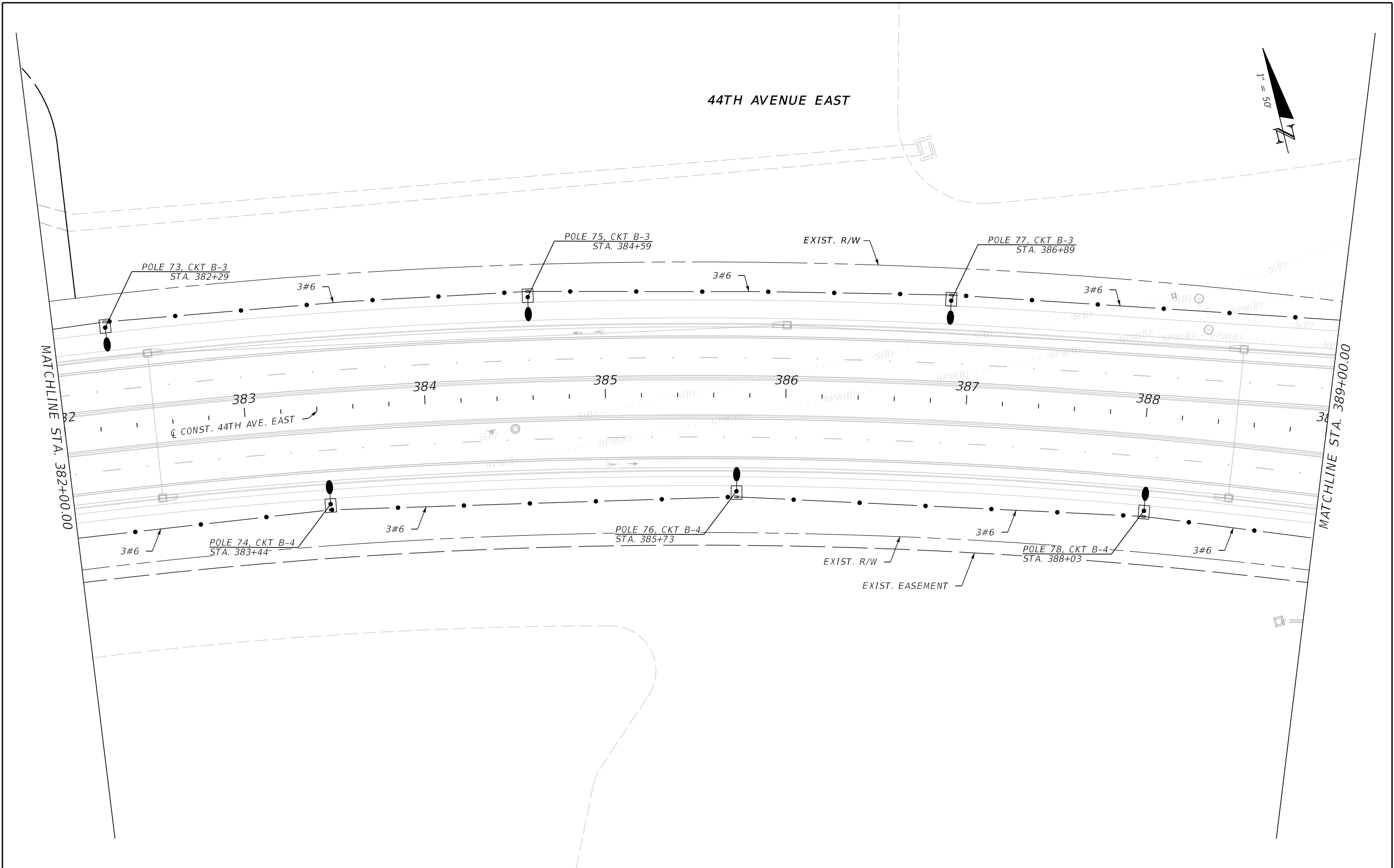
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				DESIGNED BY	MO		02/2022		MICHAEL J. OATES		
				DRAWN BY	VD		PROJECT NO. 6045662		FL. LICENSE NO. 49282		
				CHECKED BY	LR						
No.	REVISIONS			DATE	BY						


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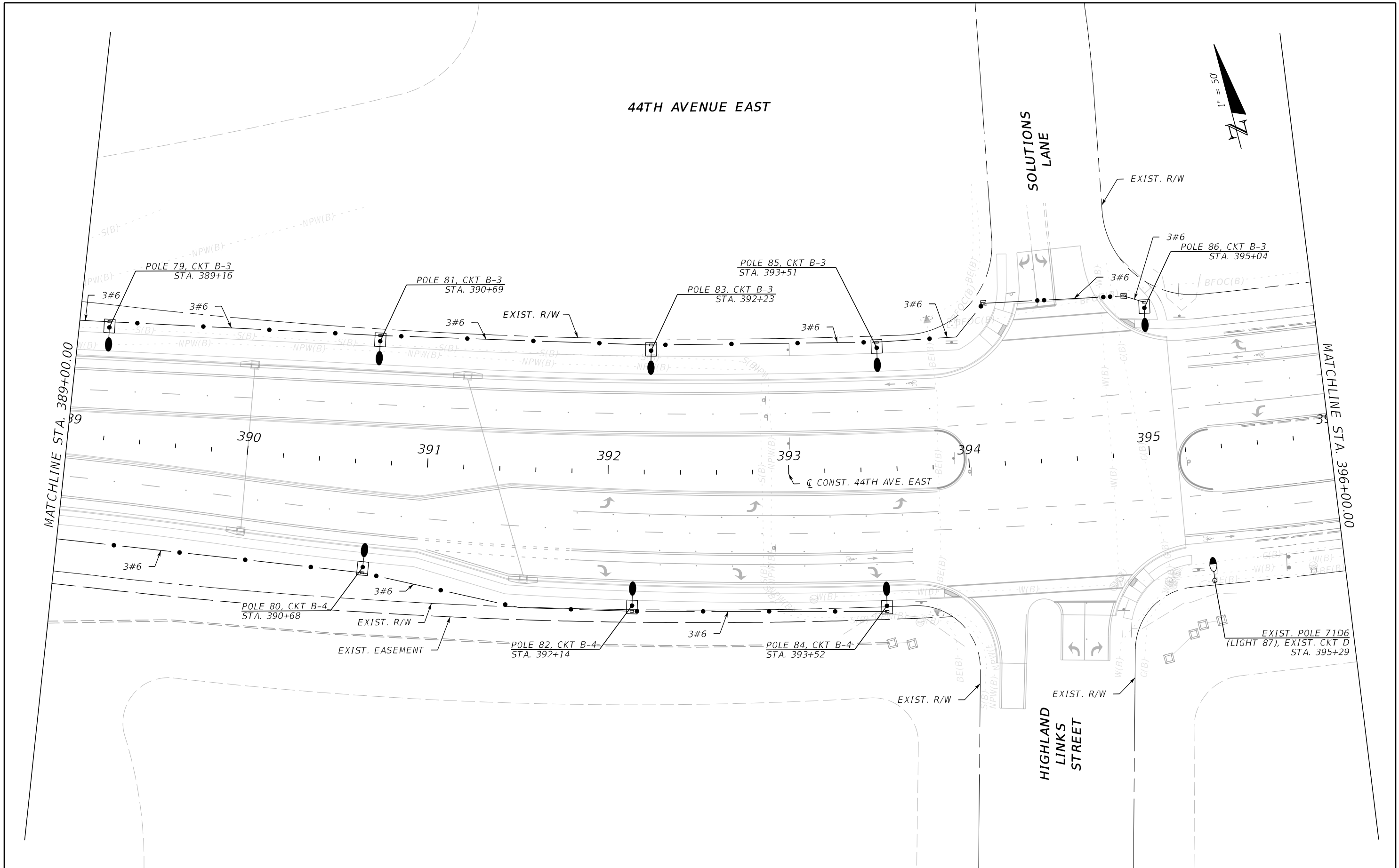
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				DESIGNED BY	MO		02/2022		PROJECT NO. 6045662			
				DRAWN BY	VD							
				CHECKED BY	LR							
No.	REVISIONS			DATE	BY							


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				SCALE	AS NOTED	HDR ENGINEERING, INC.	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	MICHAEL J. OATES	SHEET NO. L-20
				DESIGNED BY	MO	2601 CATTLEMEN ROAD, SUITE 400	02/2022				
				DRAWN BY	VD	SARASOTA, FLORIDA 34232	PROJECT NO.		FL. LICENSE NO.		
				CHECKED BY	LR		6045662		49282		
No.	REVISIONS			DATE	BY			5:07:16 PM	2/23/2022	PW:\	

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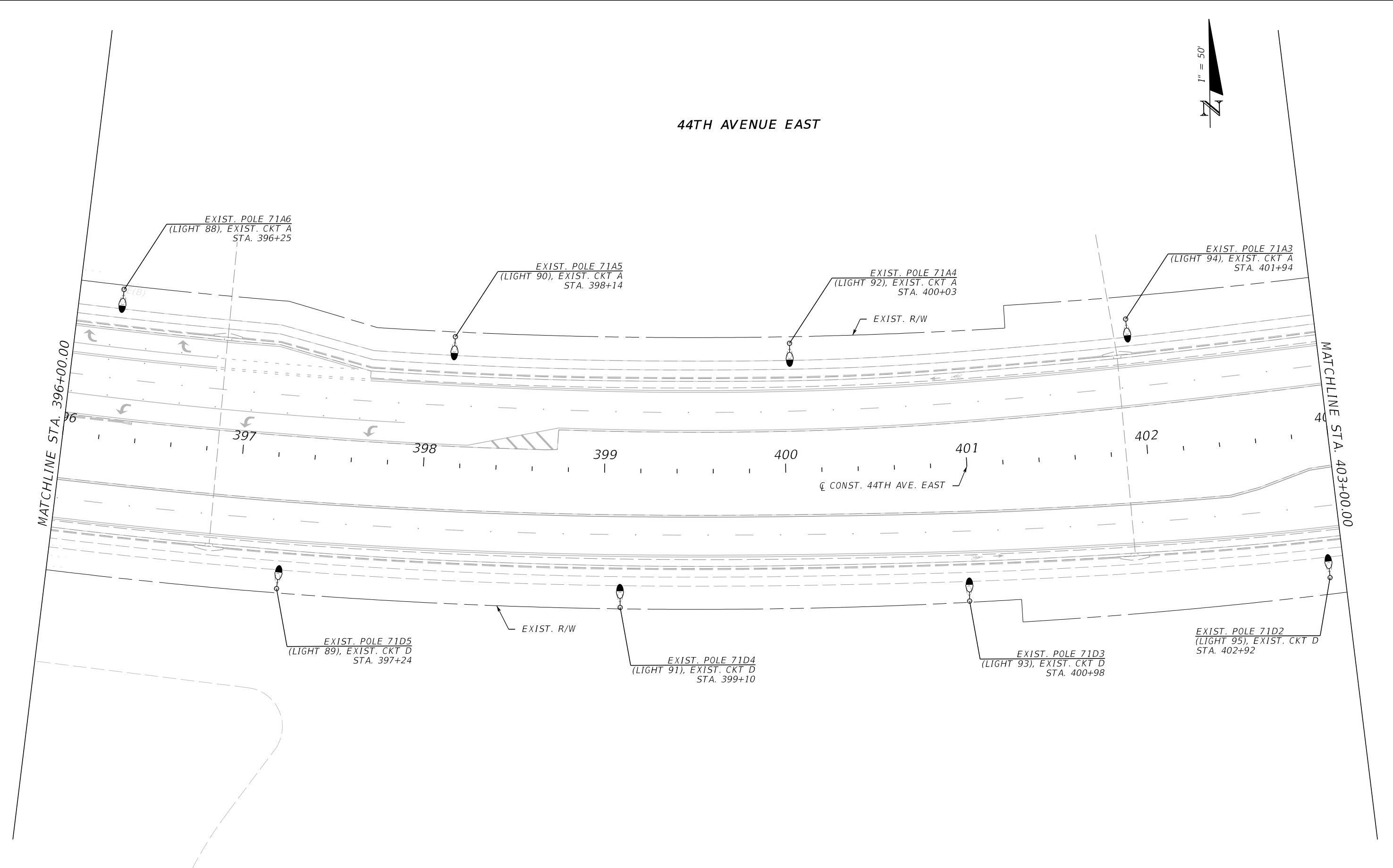
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				DESIGNED BY	MO				MICHAEL J. OATES		
				DRAWN BY	VD		PROJECT NO. 6045662		FL. LICENSE NO.		L-21
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No.	REVISIONS			DATE	BY						


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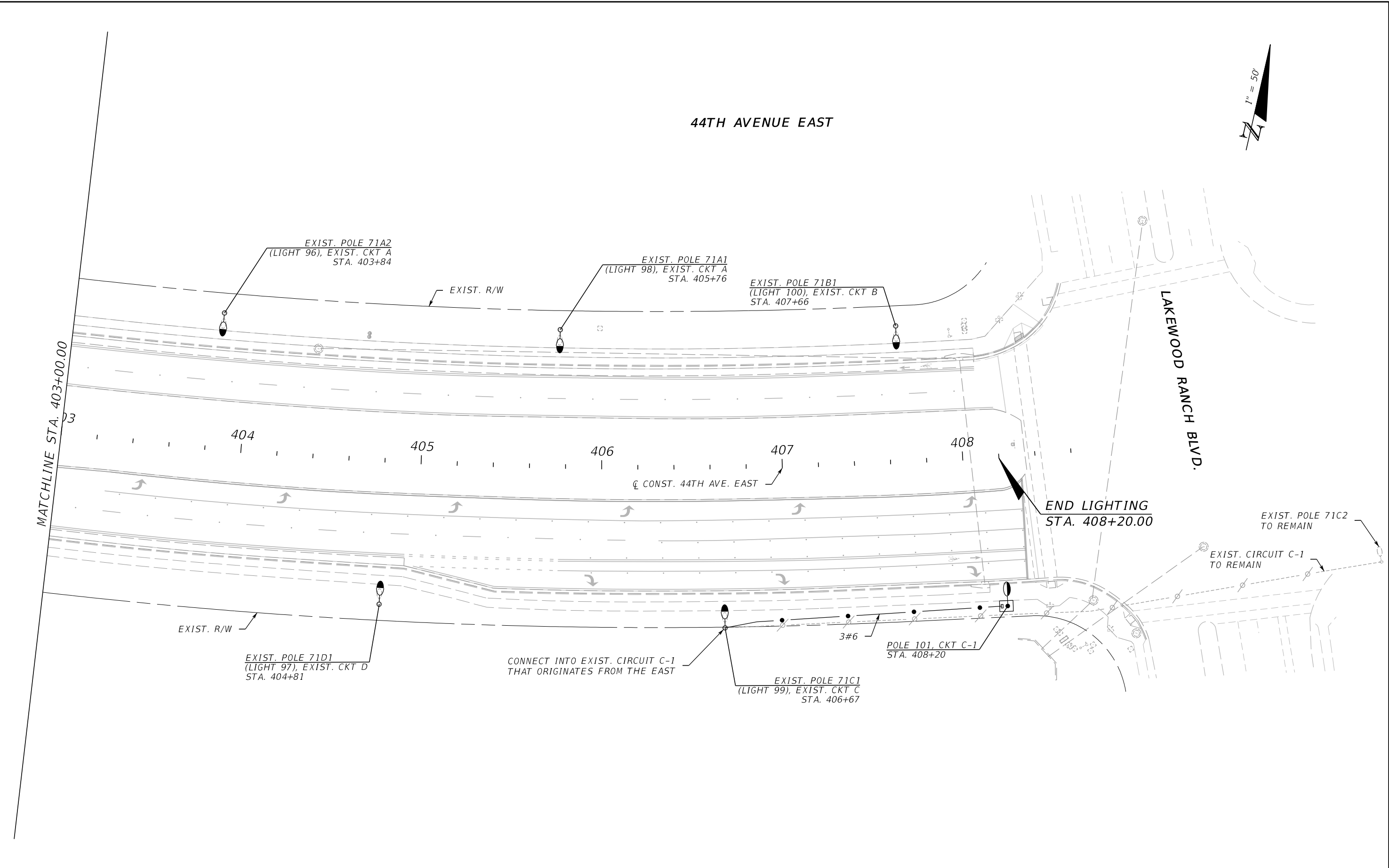
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				SCALE	AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	MICHAEL J. OATES FL. LICENSE NO. 49282	SHEET NO. L-22
				DESIGNED BY	MO		02/2022				
				DRAWN BY	VD		PROJECT NO.				
				CHECKED BY	LR		6045662				
No.	REVISIONS			DATE	BY		5:07:20 PM	2/23/2022	PW:\		

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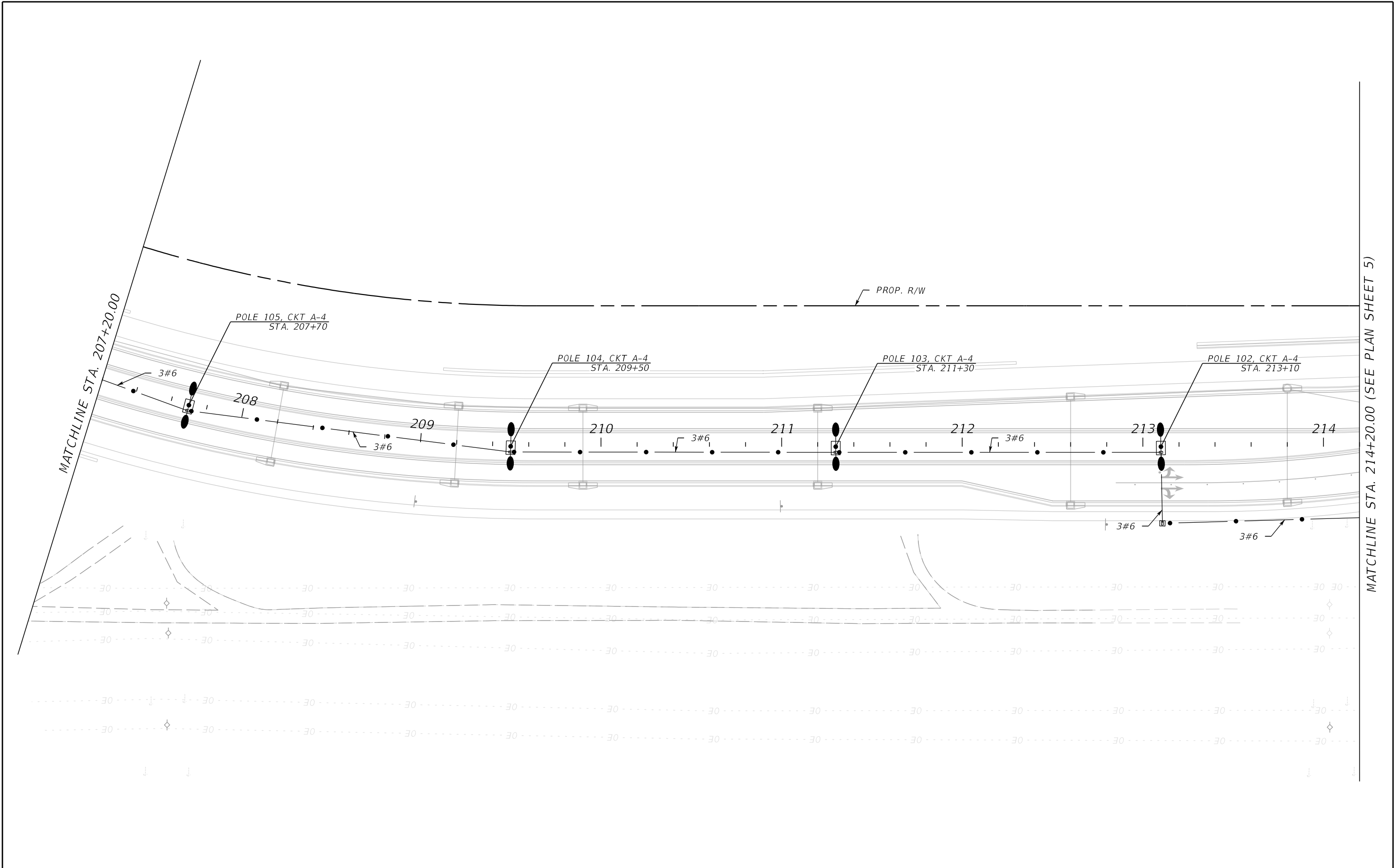
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				DESIGNED BY	MO		02/2022		MICHAEL J. OATES		
				DRAWN BY	VD		PROJECT NO. 6045662		FL. LICENSE NO. 49282		
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No.	REVISIONS			DATE	BY						


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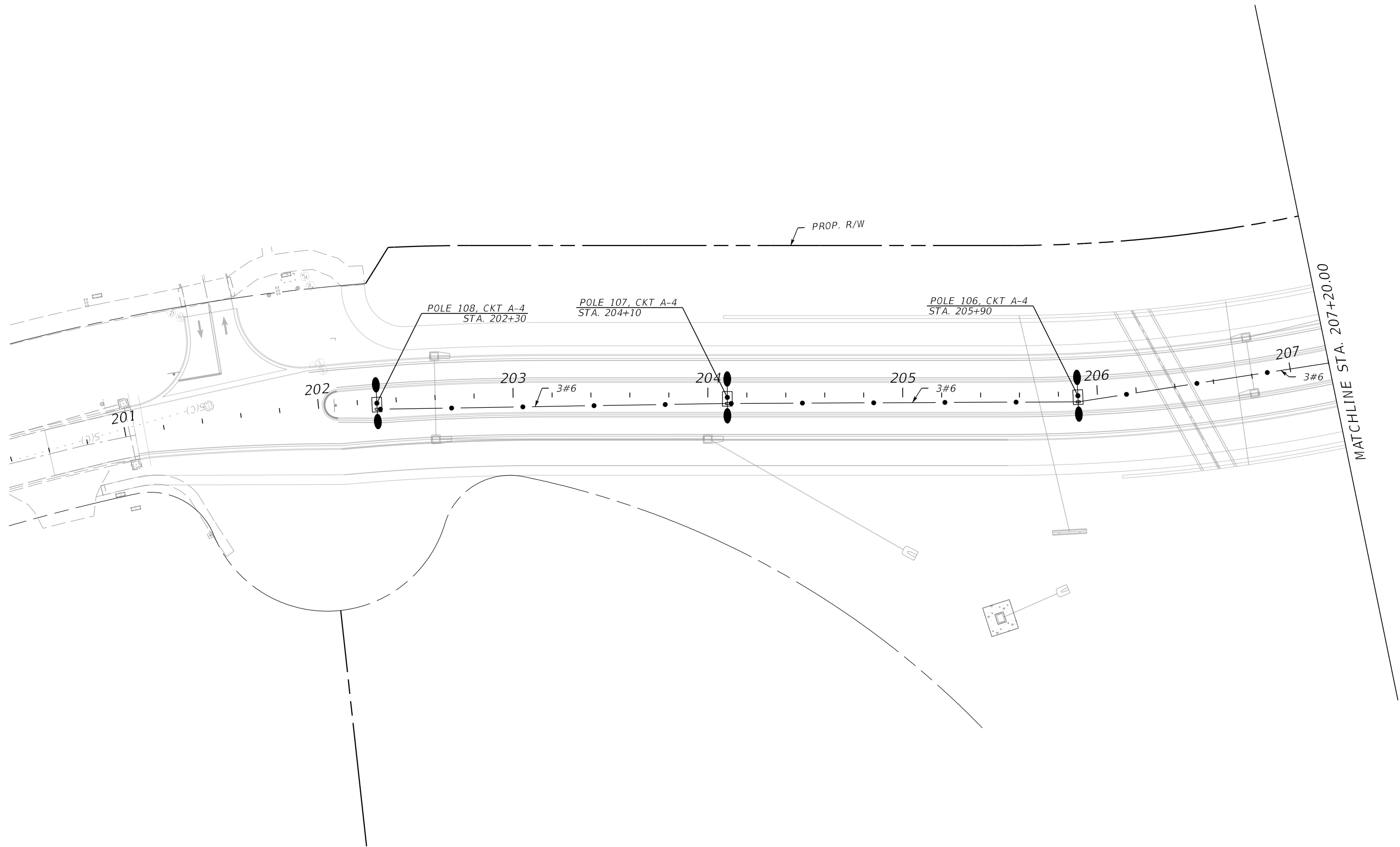
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				SCALE	AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	MICHAEL J. OATES FL. LICENSE NO. 49282	LIGHTING PLAN (16)	SHEET NO.
				DESIGNED BY	MO		02/2022		PROJECT NO. 6045662			L-24
				DRAWN BY	VD							
				CHECKED BY	LR							
No.	REVISIONS			DATE	BY							

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



				SCALE	AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	MICHAEL J. OATES FL. LICENSE NO. 49282	LIGHTING PLAN (17)	SHEET NO.
				DESIGNED BY	MO		02/2022					
				DRAWN BY	VD		PROJECT NO.					
				CHECKED BY	LR		6045662		L-25			
No.	REVISIONS			DATE	BY							

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2/23/2022

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LIGHTING CONTROL PANEL
SCHEMATIC DETAILS FOR DISTRIBUTION POINT 'A'

DISTRIBUTION SCHEDULE					
DISTRIBUTION POINT	UNDERGROUND SERVICE FEEDER	CONTROL PANEL MAIN CKT. BKR.	BRANCH CIRCUIT BREAKER	LTG. CONTACTOR	SERVICE MAIN
LIGHTING PANEL "A"	THREE # 2 AWG IN 2" CONDUIT	100 A FRAME 100 A TRIP	CKT A-1 : 30 A, 2-POLE CKT A-2 : 30 A, 2-POLE CKT A-3 : 30 A, 2-POLE CKT A-4 : 30 A, 2-POLE CKT A-5 : (SPARE) CKT A-6 : SPACE	100 A	100 A
DISTRIBUTION POINT	UNDERGROUND SERVICE FEEDER	CONTROL PANEL MAIN CKT. BKR.	BRANCH CIRCUIT BREAKER	LTG. CONTACTOR	SERVICE MAIN
LIGHTING PANEL "B"	THREE # 2 AWG IN 2" CONDUIT	100 A FRAME 100 A TRIP	CKT A-1 30 A, 2-POLE CKT A-2 30 A, 2-POLE CKT A-3 30 A, 2-POLE CKT A-4 30 A, 2-POLE CKT A-5 (SPARE) CKT A-6 SPACE	100 A	100 A

KEY NOTES:

- 1

240/480V SINGLE PHASE 3-WIRE POWER COMPANY UNDERGROUND SERVICE FEEDER, BY POWER COMPANY.
- 2

METER SOCKET BY CONTRACTOR. METER BY POWER COMPANY.
- 3

SERVICE MAIN - 480 VOLT, MINIMUM 25,000 AIC, 2 POLE, SOLID NEUTRAL NEMA 4X ENCLOSED CIRCUIT BREAKER RATED FOR SERVICE ENTRANCE. BOND NEUTRAL TO GROUND.
- 4

#2 INSULATED COPPER GROUND WIRE IN 3/4 " RIGID GALVANIZED STEEL CONDUIT. BOND THE SERVICE NEUTRAL TO GROUND
- 5

TWO TEN FOOT COPPER CLAD GROUND ROD 5/8 " DIA.
- 6

UNDERGROUND FEEDER SIZE IN RIGID GALVANIZED STEEL CONDUIT. - SEE MAIN SERVICE PANEL DETAILS.
- 6A

LIGHTING CONTROL PANEL FEEDER 3 - #2 AWG AND 1 - #6 AWG (GND.) IN 2" CONDUIT
- 7

PANEL BOARD "A", 480V, SINGLE PHASE, 3-WIRE WITH GROUND BUS IN NEMA 1 ENCLOSURE, WITH 2-POLE, 25,000 AIC BRANCH CIRCUIT BREAKERS. NUMBER AND RATING OF BRANCH CIRCUIT BREAKERS SHALL BE AS INDICATED ON DISTRIBUTION SCHEDULE.
- 8

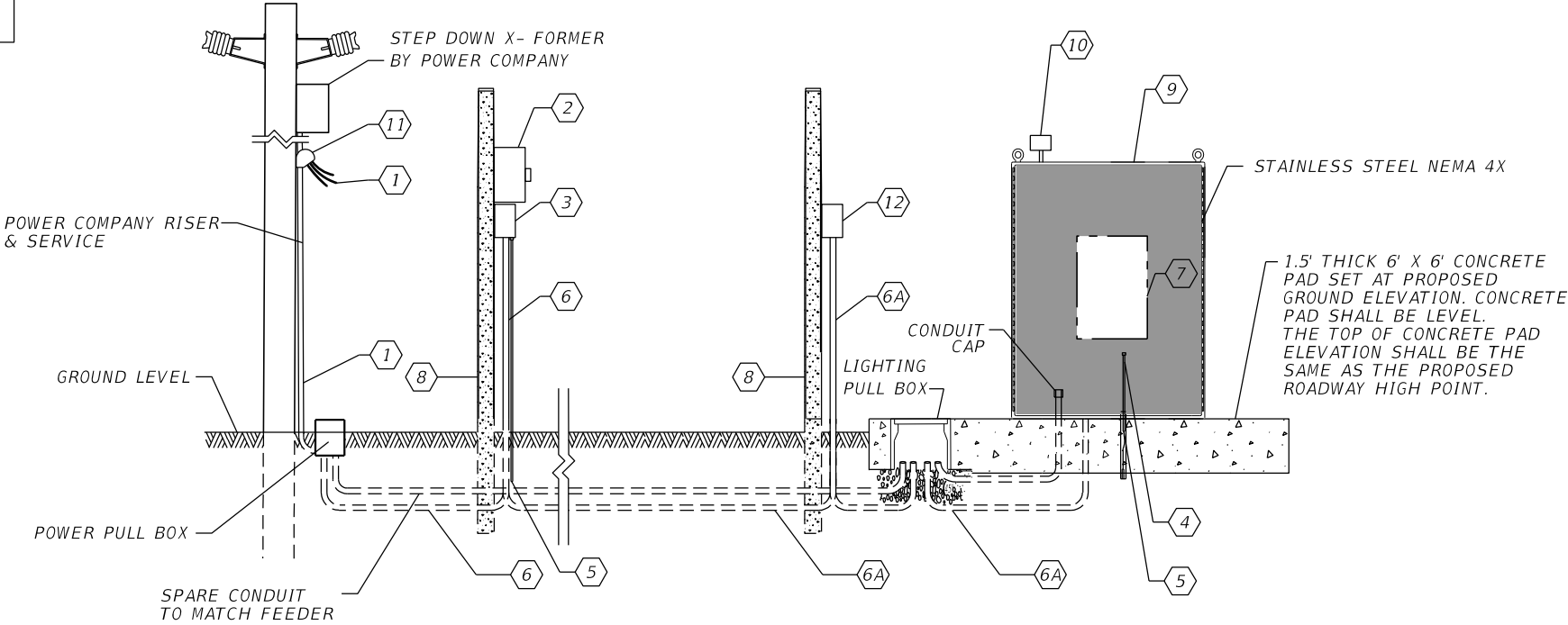
TYPE P-II CONCRETE POLE, 12 FEET HIGH TO SUPPORT ELECTRICAL
- 9

LIGHTING CONTROL PANEL NEMA 4X ENCLOSURE. DIMENSIONS AS NECESSARY FOR EQUIPMENT INSIDE. ALL WIRING BETWEEN ENCLOSURES SHALL BE IN RIGID GALVANIZED STEEL CONDUIT (RGSC).
- 10

PHOTO ELECTRIC SWITCH, 120 V RATED, SHOWN OUTSIDE FOR CLARITY.
- 11


WEATHERHEAD BY POWER COMPANY.
- 12

NON-FUSED SAFETY SWITCH, 100A, 2P, 600V.



GENERAL NOTE:

ALL ELECTRICAL EQUIPMENT INCLUDING SERVICE, MAIN CIRCUIT BREAKER, LIGHTING CONTROL PANEL LOAD CENTER, POWER TRANSFORMER, LIGHTING CONTACTOR SHALL BE PROVIDED WITH 75° C TERMINAL LUG CONNECTORS.

				SCALE	AS NOTED	HDR ENGINEERING, INC.	DATE		MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	<i>SERVICE CENTER DETAILS</i>	SHEET NO.
				DESIGNED BY	MO	2601 CATTLEMEN ROAD, SUITE 400	02/2022			MICHAEL J. OATES		
				DRAWN BY	VD	SARASOTA, FLORIDA 34232	PROJECT NO.			FL. LICENSE NO.		
				CHECKED BY	LR		6045662			49282		L-26
No.	REVISIONS		DATE	BY								

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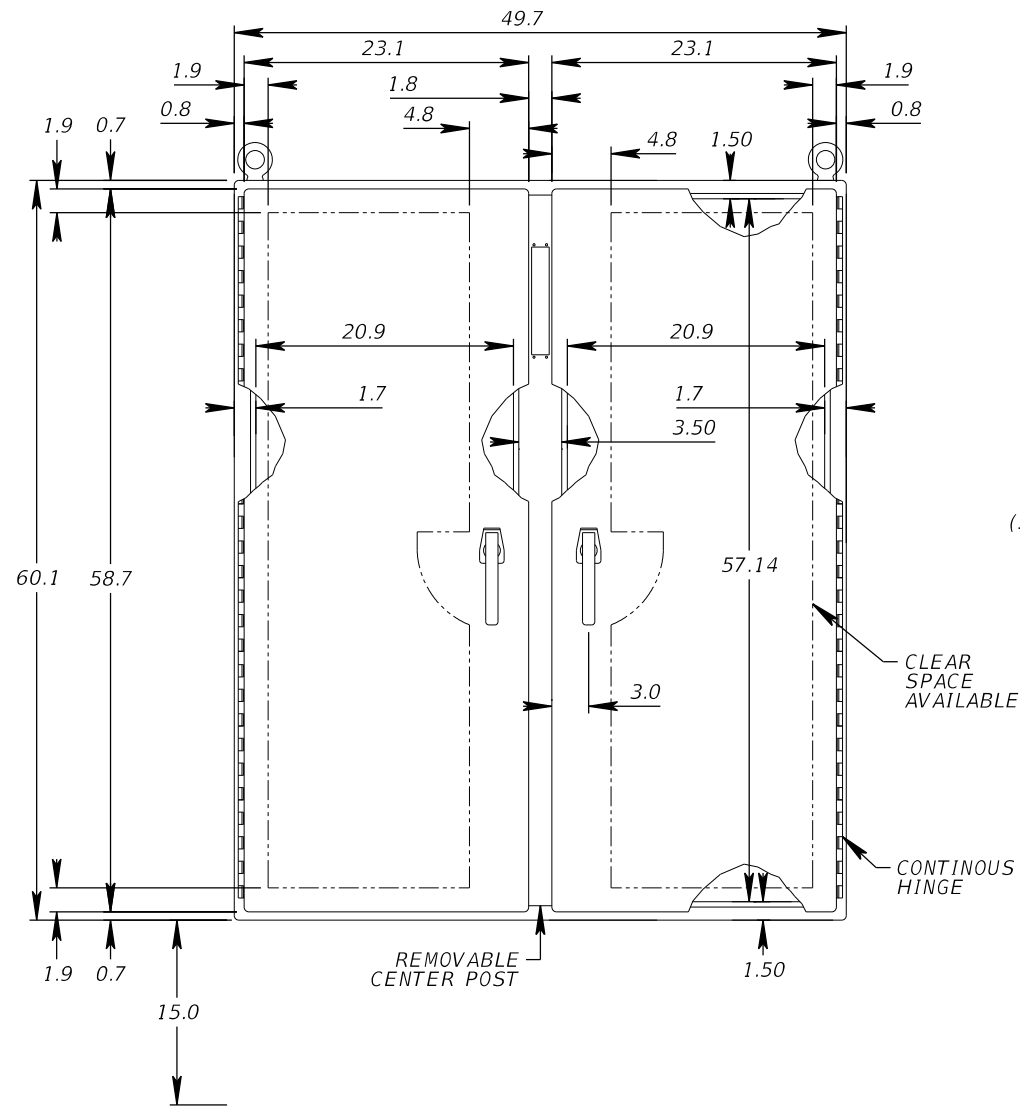
2/23/2022

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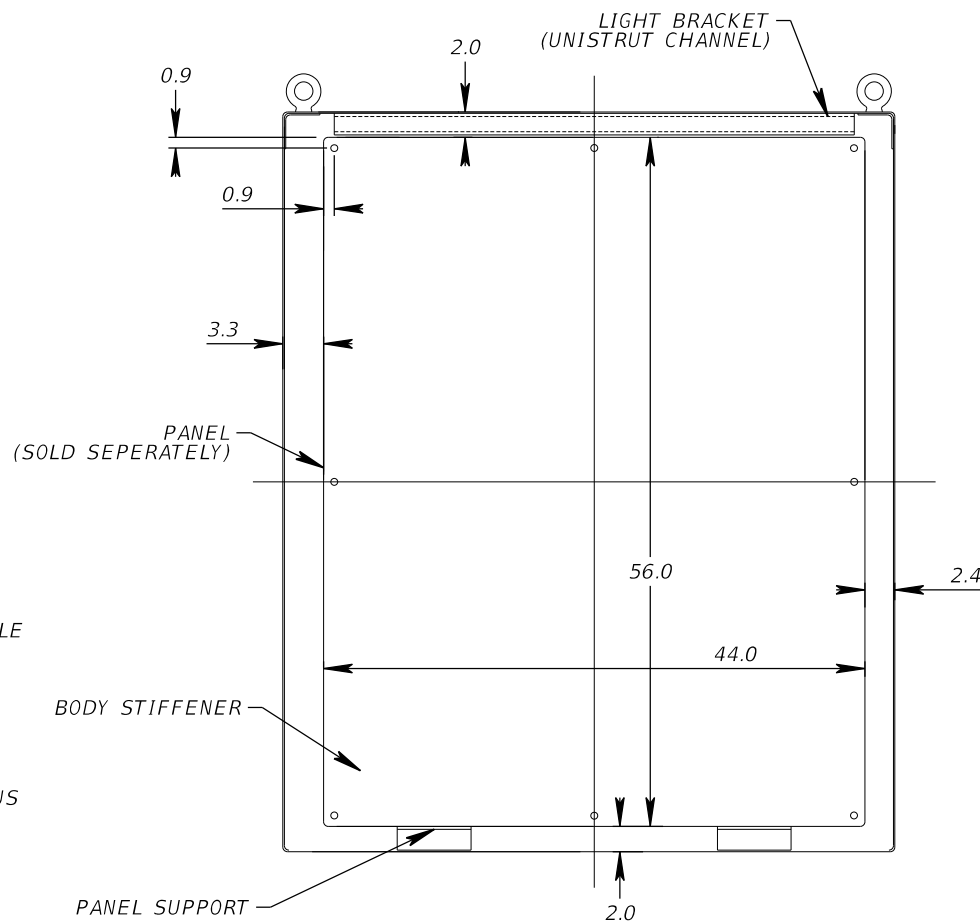
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CONSTRUCTION NOTES:

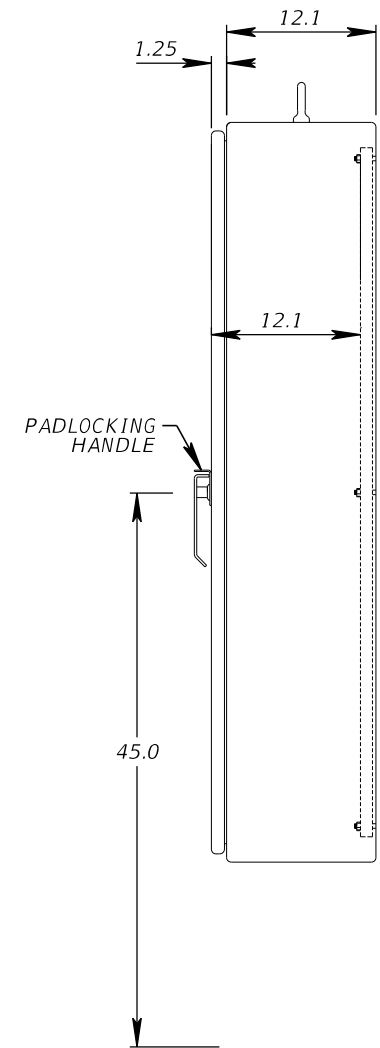
1. 10 GAUGE STAINLESS STEEL OR ALUMINUM BODIES AND DOORS.
2. CONTINUOUS WELDED SEAMS GROUND SMOOTH.
3. HEAVY GAUGE CONTINUOUS HINGES TO SECURE DOORS.
4. HEAVY DUTY 3-POINT PADLOCKING HANDLES ON ALL DOORS.
5. PRINT POCKET AND PANEL SUPPORTS.
6. 15-INCH FLOOR STANDS WELDED TO ENCLOSURE.
7. DOORS WITH CLOSED CELL NEOPRENE GASKET.
8. HEAVY DUTY LIFTING EYES AND PROVISIONS FOR FLUORESCENT LIGHTING.
9. GROUNDING PROVISIONS.
10. KEY AND LOCKS. PROVIDE FOUR (4) KEYS TO THE MANATEE COUNTY TRAFFIC OPERATIONS DIVISION.
11. ANSI 61 GRAY POLYESTER POWDER INSIDE AND OUT OVER PHOSPHATIZED SURFACES.
12. UL 508 LISTED.



FRONT VIEW




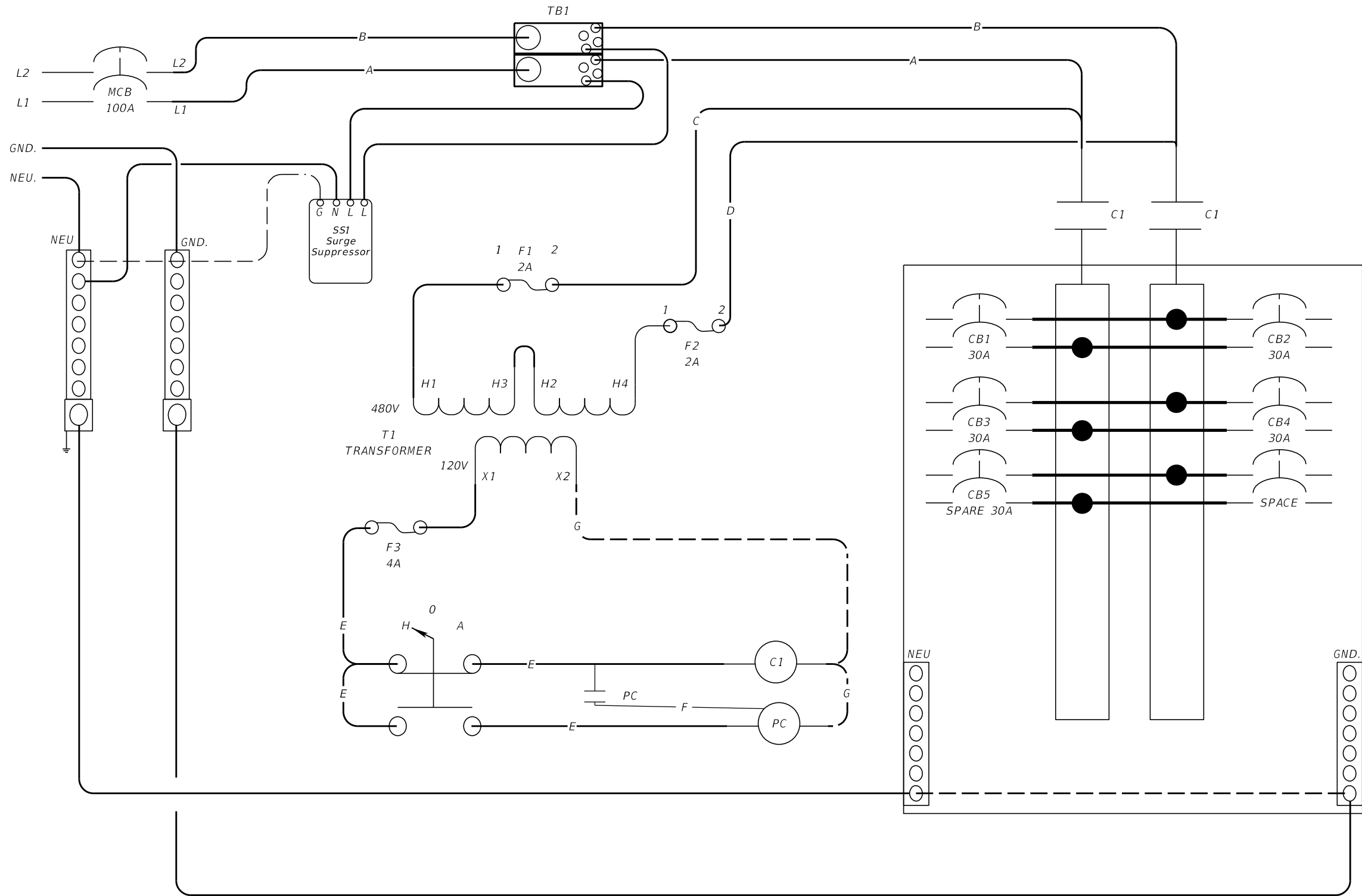
SECTION Y-Y




SIDE VIEW

ALL UNITS ARE MEASURED IN INCHES.

				SCALE	AS NOTED	HDR ENGINEERING, INC.	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	LOAD CENTER ENCLOSURE DETAILS	SHEET NO.
				DESIGNED BY	MO	2601 CATTLEMEN ROAD, SUITE 400	02/2022		MICHAEL J. OATES		
				DRAWN BY	VD	SARASOTA, FLORIDA 34232	PROJECT NO.		FL. LICENSE NO.		
				CHECKED BY	LR		6045662		49282		L-27
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	AWG	COLOR
A	#2	BROWN
B	#2	ORANGE
C	#12	BROWN
D	#12	ORANGE
E	#12	BLACK
F	#12	RED
G	#12	WHITE

				SCALE	AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	DISTRIBUTION PANEL WIRING DIAGRAM	SHEET NO.
				DESIGNED BY	MO		02/2022		MICHAEL J. OATES		
				DRAWN BY	VD		PROJECT NO.		FL. LICENSE NO.		
				CHECKED BY	LR		6045662		49282		L-28
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