

CODE NO.	ITEM	UNIT	TOTAL QUANTITY URBAN	CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
				90% FED/10% STATE	90% FED/10% STATE	90% FED/10% STATE
				ROADWAY	STRUCTURE S.N. 099-0515	LIGHTING
				0004	0004	0021
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	19,228	19,228		
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2,589	2,589		
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1,287	1,287		
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	586	586		
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	138	138		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	92	92		
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	17	17		
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	385	385		
* 78200020	CURB REFLECTORS	EACH	56	56		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	82	82		
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	14,529	14,529		
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	500 220			500 220
* 81603081	UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	2,800 2,010			2,800 2,010
* 81800300	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	2,800 2,200			2,800 2,200

* SPECIALTY ITEM



REVISSED SHEET 6/6/2023

FILE NAME = P14216-ah1-500.dgn



USER NAME = jkeh	DESIGNED - JK	REVISED -
	DRAWN - JK	REVISED -
PLOT SCALE = 2.0000' / 1in.	CHECKED - ST	REVISED -
PLOT DATE = 3/27/2023	DATE - 3/17/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 394 AT BURVILLE RD
SUMMARY OF QUANTITIES

SCALE: SHEET 9 OF 11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2021-057-N	WILL	110	11
CONTRACT NO. 62N88			ILLINOIS FED. AID PROJECT	

REV-SEP

CODE NO.	ITEM	UNIT	TOTAL QUANTITY URBAN	CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
				90% FED/10% STATE	90% FED/10% STATE	90% FED/10% STATE
				ROADWAY	STRUCTURE	LIGHTING
				0004	S.N. 099-0515	0021
				0004	0004	0021
* 82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	60 58			60 58
* 83050810	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. MAST ARM	EACH	21 14			21 14
* 83057355	LIGHT POLE WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	19			19
* X8300001	LIGHT POLE SPECIAL	EACH	14			14
* 83600358	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 8 5/8" X 8'	EACH	21 14			21 14
* 84100110	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	20 16			20 16
* 84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	15 10			15 10
* 84200804	REMOVAL OF POLE FOUNDATION	EACH	15 10			15 10
* X0300015	CONCRETE WINGWALL REMOVAL	EACH	4		4	
* X6440114	REMOVE HIGH TENSION CABLE MEDIAN BARRIER	FOOT	1,549	1,549		
* X6440116	REMOVE HIGH TENSION CABLE MEDIAN BARRIER TERMINAL	EACH	3	3		
* X6440112	REMOVE AND REINSTALL HIGH TENSION CABLE MEDIAN BARRIER	FOOT	1,352	1,352		
* X1400341	REMOVAL OF LUMINAIRE, SALVAGE	EACH	39			39
* X1400268	REMOVAL OF LIGHTING LUMINAIRE, SALVAGE	EACH	44			44
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	40	40		



* SPECIALTY ITEM

REVISION SYMBOL 1

FILE NAME = P14216-sh1t-500.dgn



USER NAME = jkehr	DESIGNED - JK	REVISED -
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PLOT SCALE = 2.0000' / 1in.	DATE - 3/17/2023	REVISED -
PLOT DATE = 3/27/2023		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 394 AT BURVILLE RD
SUMMARY OF QUANTITIES

SCALE: SHEET 10 OF 11 SHEETS STA. TO STA.

F.A.P. RTE. 332	SECTION 2021-057-N	COUNTY WILL	TOTAL SHEETS 110	SHEET NO. 12
CONTRACT NO. 62N88			ILLINOIS FED. AID PROJECT	

REV-SEP

CODE NO.	ITEM	UNIT	TOTAL QUANTITY URBAN	CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
				90% FED/10% STATE	90% FED/10% STATE	90% FED/10% STATE
				ROADWAY	STRUCTURE S.N. 099-0515	LIGHTING
				0004	0004	0021
* X2800400	PERIMETER EROSION BARRIER, SPECIAL	FOOT	1,549	1,549		
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	12		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
X7010410	SPEED DISPLAY TRAILER	CAL MO	12	12		
* X8211008	TEMPORARY LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	19 14			19 14
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	7		7	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0029604	HEADWALL REMOVAL	EACH	2	2		
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	102.8	102.8		
Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	5			5
Z0062456	TEMPORARY PAVEMENT	SQ YD	260	260		
Ø Z0076600	TRAINEES	HOURS	500	500		
Ø Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOURS	500	500		



* SPECIALTY ITEM

1 REVISED SHEET 6/6/2023

Ø 0042

FILE NAME = P14216-sh1-500.dgn

LIN ENGINEERING, LTD. Consulting Engineers Westmont, Illinois	USER NAME = jkehr	DESIGNED - JK	REVISED -
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	PLOT SCALE = 2.0000' / 1" =	CHECKED - ST	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL RTE 394 AT BURVILLE RD
SUMMARY OF QUANTITIES**

SCALE: SHEET 11 OF 11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2021-057-N	WILL	110	13
CONTRACT NO. 62N88			ILLINOIS FED. AID PROJECT	

GENERAL NOTES:

- ALL LIGHTING AND ELECTRICAL WORK SHALL CONFORM TO THE LATEST VERSION OF IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE NEC AND LOCAL CODES.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS RELATED TO THE EXISTING LIGHTING SYSTEM PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
- INSTALLATION OF ALL LIGHTING SYSTEM COMPONENTS FOR A COMPLETE SYSTEM SHALL BE PERFORMED UNDER THE LISTED PAY ITEMS, NO SEPARATE PAYMENT WILL BE MADE FOR INCIDENTAL ITEMS REQUIRED.
- ALL LUMINAIRES SHALL BE LED TYPE III DISTRIBUTION WITH **24,900** MINIMUM INITIAL LUMENS, **160** WATTS MAXIMUM INPUT POWER, 70 MINIMUM CRI, AND SHALL MEET IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND JOB SPECIAL PROVISIONS.
- ALL NEW LUMINAIRES FOR THE PROPOSED LIGHTING SHALL BE INSTALLED AT A MOUNTING HEIGHT OF 47'-6"
- ALL LUMINAIRE SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER.
- ALL PROPOSED LIGHT POLES SHALL HAVE MINIMUM SETBACK OF 21 FEET OFF THE EDGE OF TRAVELED PAVEMENT.
- SOME PERMANENT WIRING IS REQUIRED PRIOR TO THE IMPLEMENTATION OF TEMPORARY LIGHTING AS SHOWN ON THE PLANS.
- GROUND RODS SHALL BE INSTALLED AND BONDED AND SHALL MEET IDOT SPECIFICATIONS, NEC AND LOCAL CODES. SEPARATE PAYMENT WILL NOT BE MADE FOR GROUND RODS.
- LIGHT POLES SHALL BE LOCATED A MINIMUM OF 30 FEET AWAY FROM HIGH VOLTAGE LINES.
- LIGHT POLES SHALL INCLUDE FUSES IN POLE BASES AS SHOWN IN STANDARD DRAWING BE-702
- ALL UNUSED CONDUCTORS SHALL BE LEFT DISCONNECTED ON BOTH ENDS AND ENDS WATERPROOFED
- EXISTING POLE WIRING AND FUSING SHALL BE REPLACED. A NEW GROUND WIRE SHALL BE INSTALLED AS PART OF THE POLE WIRING PER BE-702. THIS COST SHALL BE INCLUDED IN THE ROADWAY LED LUMINAIRE PAY ITEM.**

ABBREVIATIONS

- A AMP
- AC ALTERNATING CURRENT
- C CONDUCTOR
- CKT CIRCUIT
- CRI COLOR RENDERING INDEX
- DIA. DIAMETER
- LED LIGHT EMITTING DIODE
- KVA KILOVOLT-AMPERE
- LT. LEFT
- M.H. MOUNTING HEIGHT
- NEC NATIONAL ELECTRICAL CODE
- PVC POLY VINYL CHLORIDE
- RT. RIGHT
- STA. STATION
- TEMP TEMPORARY

LEGEND

- PROPOSED LIGHT POLE, 47.5' MOUNTING HEIGHT, 15' MAST ARM, 190 WATT LED LUMINAIRE, TYPE III
- EXISTING LIGHTING UNIT TO REMAIN IN PLACE, REPLACE LUMINAIRE WITH 190 WATT LED LUMINAIRE, TYPE III
- EXISTING LIGHTING UNIT TO BE REMOVED
- EXISTING LIGHTING CABLE/DUCT
- PROPOSED LIGHTING CABLE/DUCT
- PROPOSED PUSHED GALVANIZED STEEL CONDUIT WITH UNIT DUCT

UNIT DUCT SCHEDULE

SIZE	TEMPORARY LIGHTING	PROPOSED LIGHTING	TOTAL ESTIMATED QUANTITY
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	100	2700	2800

BILL OF MATERIALS

DESCRIPTION	UNIT	ESTIMATED QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	500
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	2700
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	60
LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. MAST ARM	EACH	21
LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 8 5/8" X 8'	EACH	21
REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	15
REMOVAL OF POLE FOUNDATION	EACH	15
REMOVAL OF LUMINAIRE, SALVAGE	EACH	39
REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	20
TEMPORARY LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	19
LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	19
AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	2800
LIGHT POLE, WOOD, 60 FOOT, CLASS 4	EACH	1
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	5

FILE NAME = P144216-sh11-QUANTITIES-NOTES.dgn



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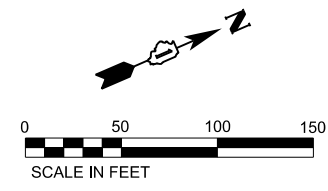
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL RTE 394 AT BURVILLE RD
QUANTITIES AND NOTES**

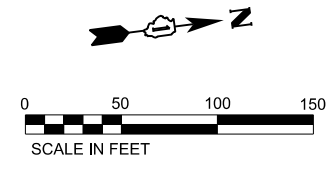
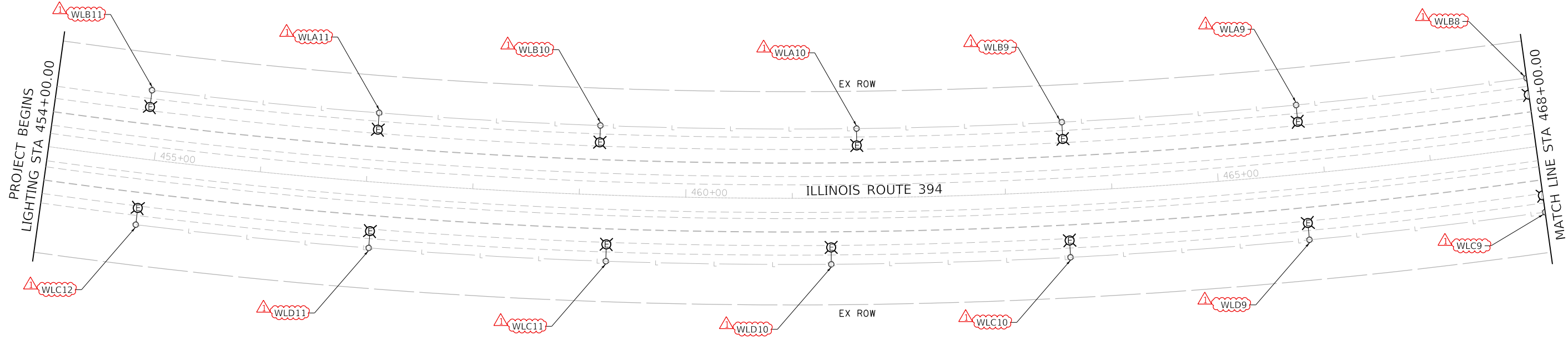
SCALE: 1"=50' SHEET 1 OF 5 SHEETS STA. 454+00 TO STA. 510+00

F.A.P. RTE. 332	SECTION 2021-057-N	COUNTY WILL	TOTAL SHEETS 110	SHEET NO. 77
CONTRACT NO. 62N88				
ILLINOIS FED. AID PROJECT				

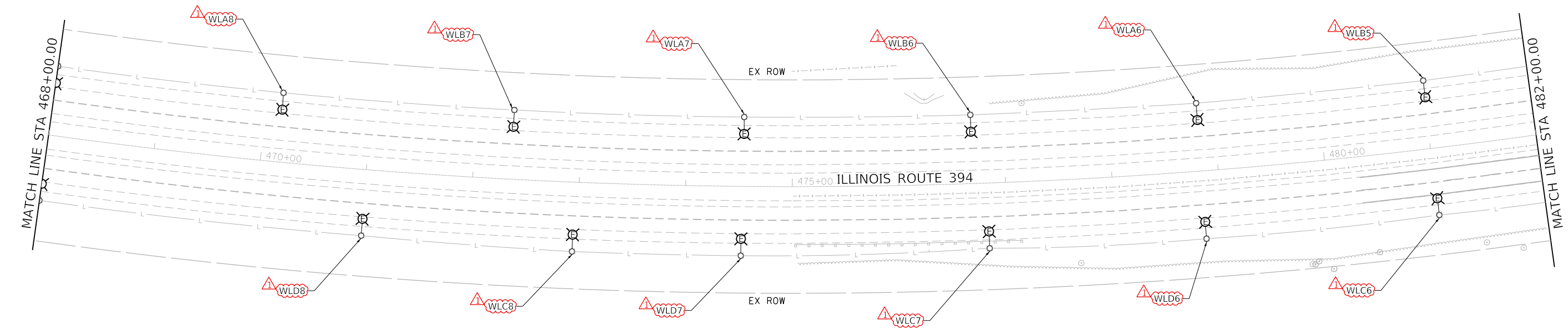
REVISION 1 **REVISED SHEET 6/6/2023**



ALL POLES AND WIRING ON BOTH SIDES OF IL394 REMAIN IN PLACE



ALL POLES AND WIRING ON BOTH SIDES OF IL394 REMAIN IN PLACE



FILE NAME = P144216-shr-Lighting_1.dgn



USER NAME = gonzo.munguia	DESIGNED - REB	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - GM	REVISED -
PLOT DATE = 5/31/2023	CHECKED - PK	REVISED -
	DATE - 3/17/2023	REVISED -

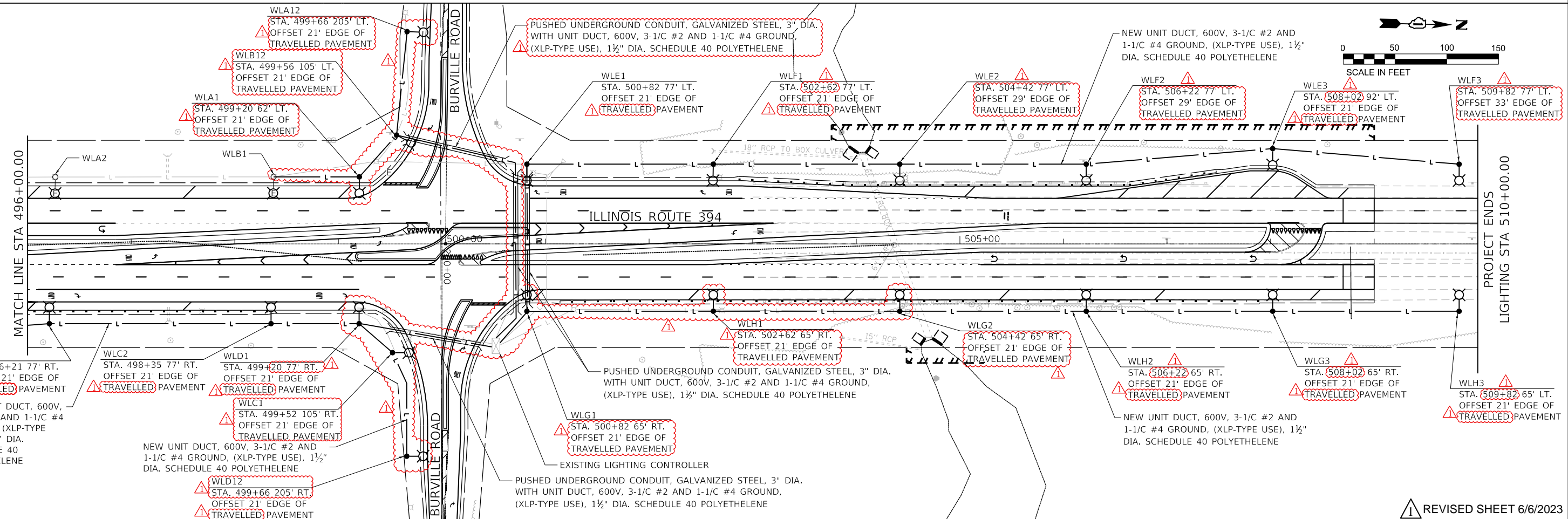
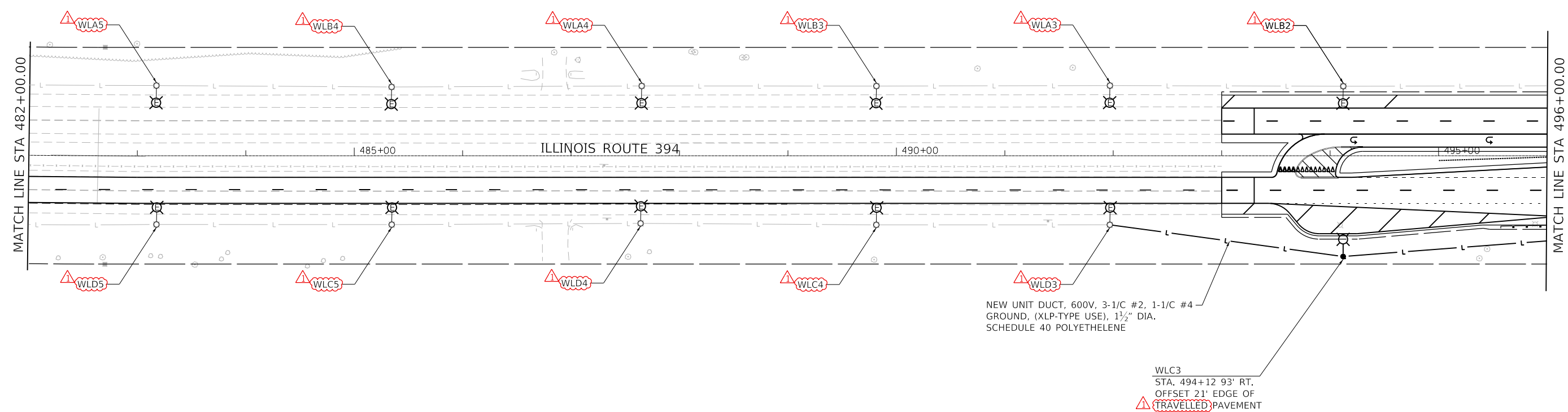
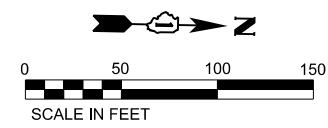
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 394 AT BURVILLE RD
PROPOSED LIGHTING PLAN

SCALE: 1"=50' SHEET 2 OF 5 SHEETS STA. 454+00 TO STA. 482+00

F.A.P. RTE. 332	SECTION 2021-057-N	COUNTY WILL	TOTAL SHEETS 110	SHEET NO. 78
CONTRACT NO. 62N88				

REVISOR SHEET 6/6/2023



FILE NAME = P144216-shr-Lighting_2.dgn



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	DATE - 3/17/2023	REVISED -

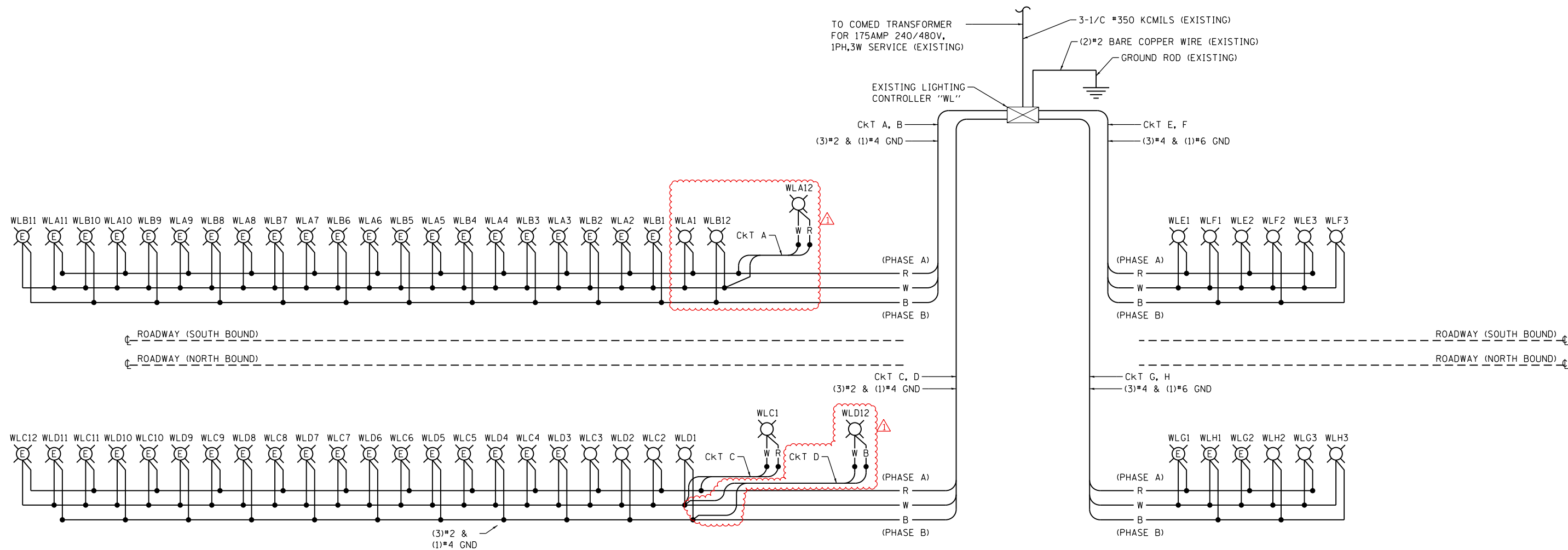
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL RTE 394 AT BURVILLE RD
PROPOSED LIGHTING PLAN**

SCALE: 1"=50' SHEET 3 OF 5 SHEETS STA. 482+00 TO STA. 510+00

F.A.P. RTE. 332	SECTION 2021-057-N	COUNTY WILL	TOTAL SHEETS 110	SHEET NO. 79
CONTRACT NO. 62N88				
ILLINOIS FED. AID PROJECT				

REVIS SHEET 6/6/2023



LOAD TABULATION FOR LIGHTING CONTROLLER "WL" BURVILLE

CIRCUIT	DESCRIPTION	PHASE A (RED) AMPS	PHASE B (BLACK) AMPS	BREAKER SIZE AMPS
A	(12) NEW FIXTURES @ 0.7A	8.4		70A, 1 POLE
B	(11) NEW FIXTURES @ 0.7A		8.4	70A, 1 POLE
C	(12) NEW FIXTURES @ 0.7A	8.4		70A, 1 POLE
D	(11) NEW FIXTURES @ 0.7A		8.4	70A, 1 POLE
E	(3) NEW FIXTURES @ 0.7A	2.1		70A, 1 POLE
F	(3) NEW FIXTURES @ 0.7A		2.1	70A, 1 POLE
G	(3) NEW FIXTURES @ 0.7A	2.1		70A, 1 POLE
H	(3) NEW FIXTURES @ 0.7A		2.1	70A, 1 POLE
TOTAL CONNECTED LOAD @ 240V, 1 PHASE		21.0	21.0	
TOTAL CONNECTED LOAD @ 240V, 1 PHASE		5.0 KVA	5.0 KVA	
TOTAL CONNECTED LOAD @ 480V, 1 PHASE		21.0 A		

NOTE: AMPERAGE SHOWN FOR PROPOSED 160 WATT LUMINAIRES.

LEGEND

- PROPOSED NEW LUMINAIRE
- EXISTING WITH NEW LED LUMINAIRE
- EXISTING LIGHTING CONTROLLER, SINGLE TYPE
- B BLACK PHASE CONDUCTOR
- W WHITE NEUTRAL CONDUCTOR
- R RED PHASE CONDUCTOR
- G GREEN GROUND CONDUCTOR

NOTE

1. SEE LIGHTING PLANS FOR STATIONS.

FILE NAME = P144216-sh1-Line Diagram.dgn



USER NAME = gonzo.munguia	DESIGNED - REB	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - GM	REVISED -
PLOT DATE = 5/31/2023	CHECKED - WPM	REVISED -
	DATE - 3/17/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL RTE 394 AT BURVILLE RD
LIGHTING CONTROLLER AT BURVILLE ROAD - ONE-LINE DIAGRAM**

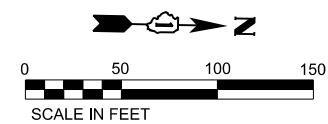
SCALE: 1"=50' SHEET 4 OF 5 SHEETS STA. 454+00 TO STA. 510+00

F.A.P. RTE. 332	SECTION 2021-057-N	COUNTY WILL	TOTAL SHEETS 110	SHEET NO. 80
CONTRACT NO. 62N88				
ILLINOIS FED. AID PROJECT				

REVISED SHEET 6/6/2023

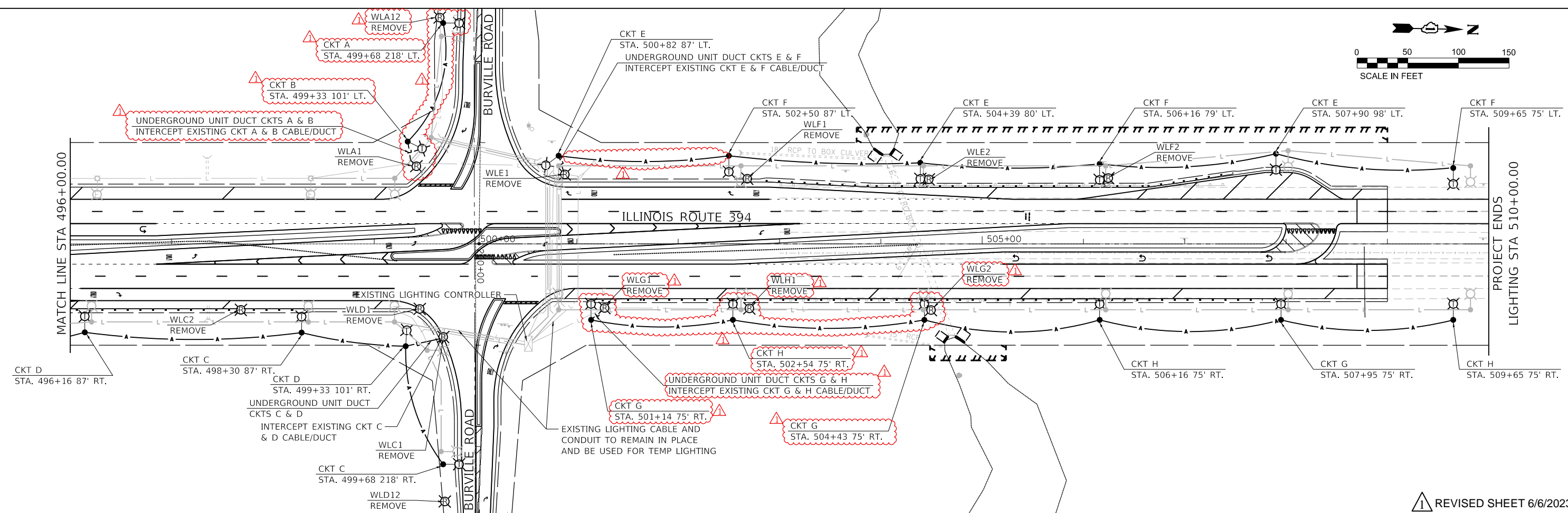
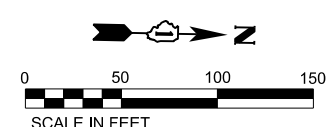
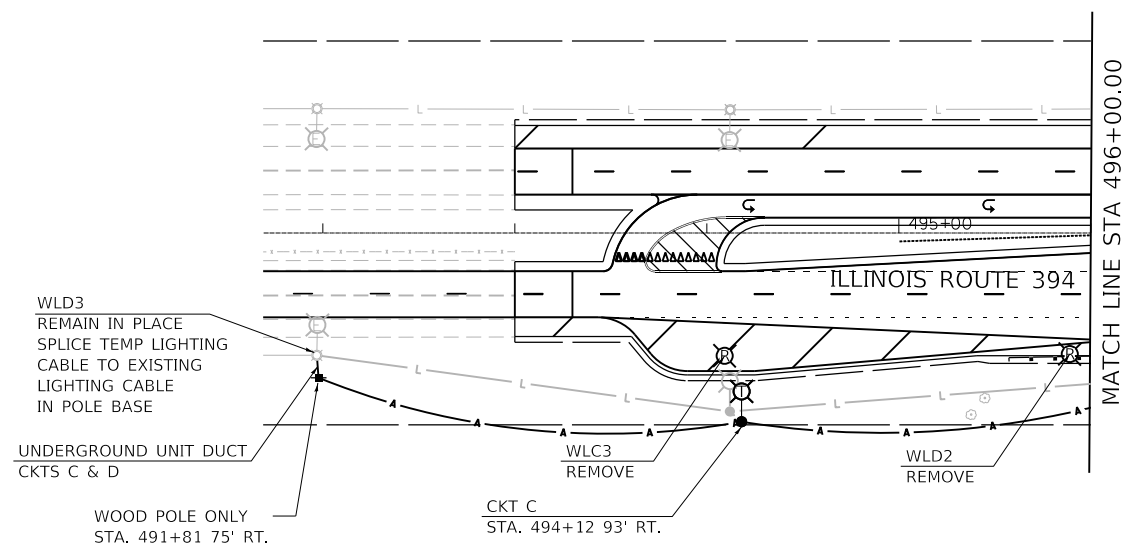
TEMP LIGHTING NOTES

1. ALL TEMPORARY LIGHTING ARE POWERED FROM EXISTING LIGHTING CONTROLLER.
2. SPLICE TEMPORARY LIGHTING CONNECTIONS TO EXISTING CIRCUIT CABLES AND USE EXISTING CIRCUITS TO POWER TEMPORARY LUMINAIRES AS SHOWN. CABLE INTERCEPT LOCATIONS FROM TEMP LIGHTING TO EXISTING CABLE ARE APPROXIMATE, EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.
3. CHANGEOVER FROM EXISTING LIGHTING TO TEMPORARY LIGHTING SHALL OCCUR AFTER ALL TEMPORARY LIGHTING IS INSTALLED AND DURING THE DAYTIME SO THAT THERE IS NO INTERRUPTION OF LIGHTING.
4. POLES SHOWN FOR REMOVAL SHALL ONLY BE DEACTIVATED AND REMOVED AFTER THE TEMPORARY LIGHTING IS INSTALLED AND FULLY OPERATIONAL.
5. ALL AERIAL CABLE IS 3-1/CZ #2 WITH MESSENGER WIRE.
6. ALL CONNECTIONS BETWEEN EXISTING CIRCUITS AND TEMPORARY POLES ARE 3-1/CZ #2, 1/CZ #4 GROUND IN 1 1/2" UNIT DUCT.
7. CHANGEOVER FROM TEMPORARY LIGHTING TO PROPOSED LIGHTING SHALL OCCUR AFTER ALL PROPOSED LIGHTING IS INSTALLED AND TESTED AND SHALL OCCUR DURING THE DAYTIME SO THAT THERE IS NO INTERRUPTION OF LIGHTING.



LEGEND

- EXISTING LIGHTING UNIT TO REMAIN IN PLACE
- TEMPORARY LIGHT POLE, 50' MOUNTING HEIGHT, 15' MAST ARM, LED LUMINAIRE 27,000 LUMENS, TYPE III, 240V (PHASE TO NEUTRAL)
- EXISTING LIGHT POLE, POLE FOUNDATION, LUMINAIRE TO BE REMOVED
- 3 1/C #2, 1/C #4 GROUND IN 1 1/2" UNIT DUCT FOR TEMP LIGHTING
- EXISTING CABLE/DUCT
- AERIAL CABLE, 3-1C #2 WITH MESSENGER WIRE
- WOOD POLE-ONLY FOR TEMP LIGHTING



FILE NAME = P144216-shr-TempLighting-1.dgn



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	DATE - 3/17/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 394 AT BURVILLE RD
TEMPORARY LIGHTING AND REMOVAL PLAN

SCALE: 1"=50' SHEET 5 OF 5 SHEETS STA. 491+81 TO STA. 510+00

F.A.P. RTE. 332	SECTION 2021-057-N	COUNTY WILL	TOTAL SHEETS 110	SHEET NO. 81
CONTRACT NO. 62N88				
ILLINOIS FED. AID PROJECT				

REVISD SHEET 6/6/2023