

COORDINATE SYSTEM: EPSG:102671 NAD 1983 STATE PLANE ILLINOIS EAST FIPS 1201 FEET

DESIGN DESIGNATION: 2896(24) - OTHER PRINCIPAL ARTERIAL 3.20 (FD-20) (PCC-20)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

04-25-2025 LETTING ITEM 136

FOR INDEX OF SHEETS, SEE SHEET NO. 3

FOR STRUCTURAL PAVEMENT DESIGN INFORMATION, SEE SHEET NO. 4

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 5-14

FUNCTIONAL CLASSIFICATION
OTHER PRINCIPAL ARTERIAL

IL 13 (SPILLWAY RD TO CAMBRIA RD) 2021 ADT=23400 P.V.=95.8% S.U.=2.2% M.U.=1.9%	IL 13 (CAMBRIA RD TO GREENBRIAR RD) 2021 ADT=21300 P.V.=94.0% S.U.=3.8% M.U.=2.2%	IL 13 (GREENBRIAR RD TO DIVISION ST) 2021 ADT=23400 P.V.=96.2% S.U.=2.4% M.U.=1.4%	CAMBRIA RD 2021 ADT=4500
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POSTED SPEED: 55 MPH
TOWNSHIP: CARTERVILLE

PROPOSED
HIGHWAY PLANS

FAP ROUTE 331 (IL 13)
SECTION (1-4)R-5,RS-2,B-1,B-2,B-3,B-4
PROJECT BR-NHPP-3BX2(535)

WIDENING, RESURFACING, MULTI-USE PATH, BRIDGE REPLACEMENT
WILLIAMSON COUNTY

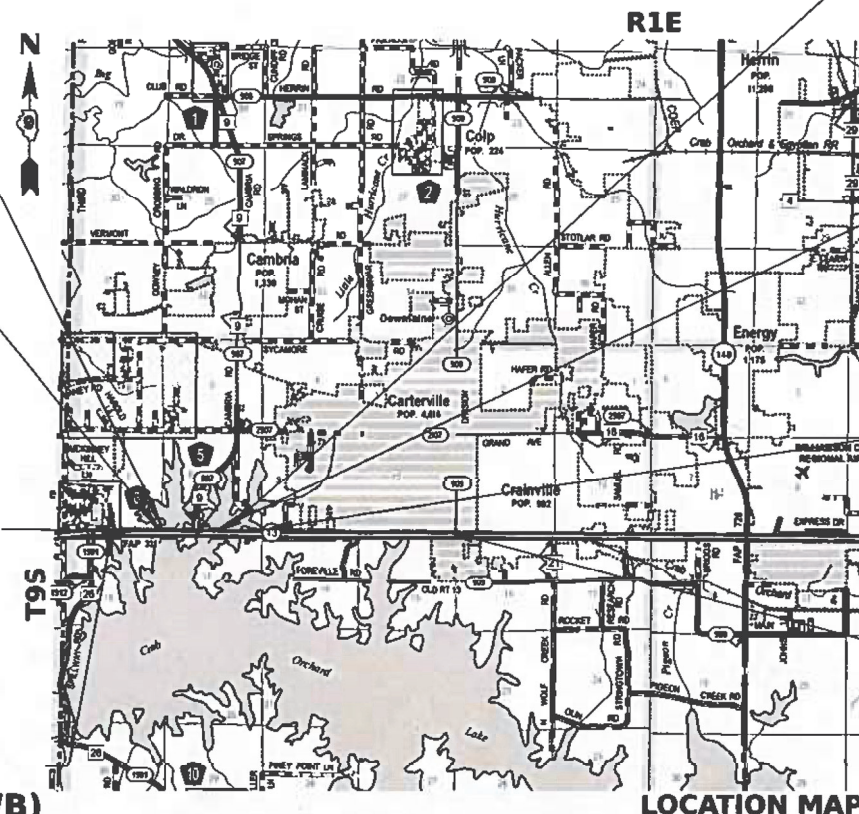
C-99-045-13

BRIDGE
REPLACEMENT
PR SN 100-0107
EX SN 100-0066
STA. 309+50.0
IL 13 WB

BRIDGE
REPLACEMENT
PR SN 100-0106
EX SN 100-0018
STA. 309+50.0
IL 13 EB

BEGIN PROPOSED
IMPROVEMENT
STA. 288+25.5 (IL 13 EB)

BEGIN PROPOSED
IMPROVEMENT
STA. 273+00.0 (IL 13 WB)



LOCATION MAP

GROSS LENGTH = 19,197.7 FT. = 3.636 MILES (IL 13 WB)
NET LENGTH = 18,789.7 FT. = 3.559 MILES (IL 13 WB)

STATION EQUATION (IL 13 WB)
STA. 445+97.70 BK =
STA. 446+00.00 AH
STATION EQUATION (IL 13 EB)
STA. 445+98.33 BK =
STA. 446+00.00 AH
RESURFACING OMISSION
(IL 13 EB)
STA. 410+46.0 TO STA. 413+60.0
RESURFACING OMISSION
(IL 13 WB)
STA. 411+02.5 TO STA. 415+10.5

BRIDGE
REPLACEMENT
PR SN 100-0109
EX SN 100-0067
STA. 336+00.0
IL 13 WB

BRIDGE
REPLACEMENT
PR SN 100-0108
EX SN 100-0020
STA. 336+00.0
IL 13 EB

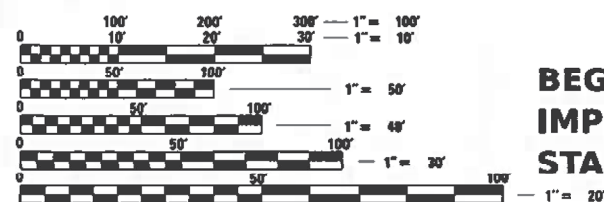
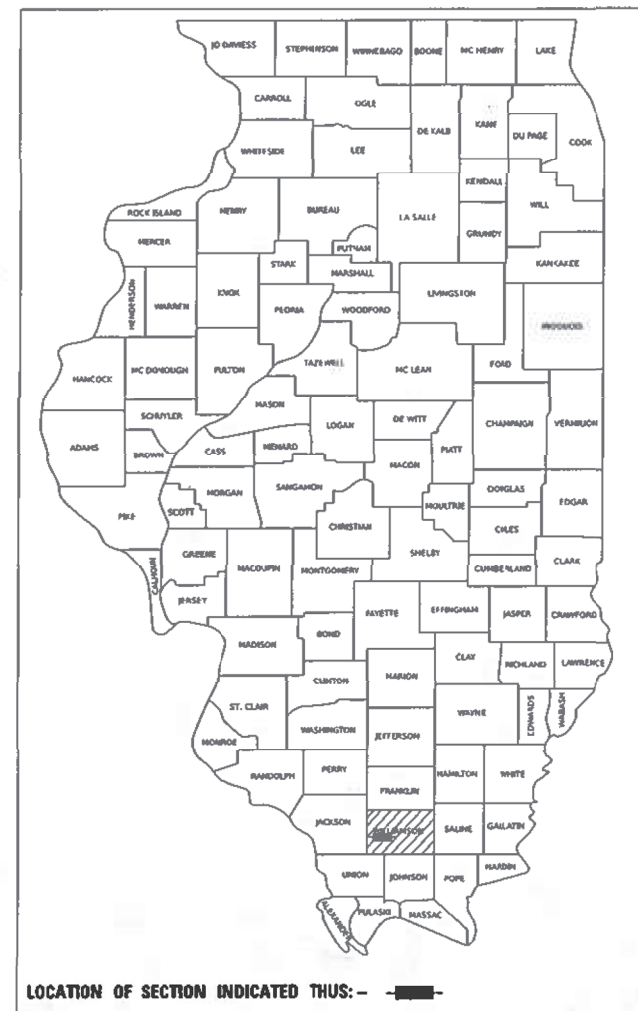
END PROPOSED
WIDENING
STA. 364+00.0
(IL 13 EB/WB)

END PROPOSED
IMPROVEMENT
STA. 464+00.0 (IL 13 EB)
STA. 465+00.0 (IL 13 WB)

P.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,RS-2,B-1,B-2,B-3,B-4	WILLIAMSON	519*	1
ILLINOIS			CONTRACT NO. 78373	

* 519 + 1 = 520 TOTAL SHEETS

D-99-042-13



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER SEAN GREENLEE, PE
PROJECT MANAGER SEAN GREENLEE, PE

CONTRACT NO. 78373

CDI
CIVIL DESIGN, INC.
WBE / DBE
LICENSE #184.003222

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUBMITTED Dec 18 20 24
Kirk H. Bramm REGIONAL ENGINEER
March 21 2025
Scott A. Etk ENGINEER OF DESIGN AND ENVIRONMENT
March 21 2025
Harry 5
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

REVISD 4-16-2025

				CONSTRUCTION CODE													
				FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE							
				ROADWAY	ROADWAY	BRIDGE	BRIDGE	BRIDGE	BRIDGE	HIGHWAY LIGHTING							
				0003	0005	0010	0010	0010	0010	0021							
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	URBAN	100-0106	100-0107	100-0108	100-0109	URBAN							
*	78011065	GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	3404	3093	311											
*	78011125	GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	69	69												
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	734	734												
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	74	74												
*	78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	16	16												
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	113	113												
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	802	802												
	78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	48228	48228												
*	80300100	LOCATING UNDERGROUND CABLE	FOOT	9100						9100							
*	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1						1							
*	80500010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1						1							
*	81028320	UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	4025						4025							
*	81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	110						110							
*	81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	43						43							
CIVIL DESIGN, INC. WBE / DBE EFFINGHAM, IL LICENSE #184,003222 USER NAME = kulrich DESIGNED - DRAWN - PLOT SCALE = 0.16666633" / in. PLOT DATE = 1/30/2025 REVISED - REVISED - CHECKED - DATE -				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			SUMMARY OF QUANTITIES					F.A.P. RTE. 331	SECTION (1-4)R-5,RS-2,B-1,B-2,B-3,B-4		COUNTY WILLIAMSON	TOTAL SHEETS 519	SHEET NO. 17
SCALE:		SHEET 13 OF 18 SHEETS		STA. ____+____ TO STA. ____+____							ILLINOIS FED. AID PROJECT						

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FILE NAME: P:\13\XKS\00X-51\XKS000 - IDOT P1B 200-038 09 IL 13 Crab Orchard Bridges\26-Trans\CAD\Project Drawings\0978373.sht_Summary of Quantities.dgn

CODE NO. ITEM UNIT TOTAL QUANTITY				CONSTRUCTION CODE						
				FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE
				ROADWAY	ROADWAY	BRIDGE	BRIDGE	BRIDGE	BRIDGE	HIGHWAY LIGHTING
				0003	0005	0010	0010	0010	0010	0021
				URBAN	URBAN	100-0106	100-0107	100-0108	100-0109	URBAN
*	81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	331						331
*	81028770	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA.	FOOT	679						679
*	81400100	HANDHOLE	EACH	4						4
*	81400300	DOUBLE HANDHOLE	EACH	1						1
*	81600120	GULFBOX JUNCTION, COMPOSITE CONCRETE	EACH	3						3
*	81603010	UNIT DUCT, 600V, 2-1C NO. 10, 1/C NO. 10 GROUND, (XLP-TYPE USE), 3/4" DIA POLYETHYLENE	FOOT	4298						4298
*	81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	16122						16122
*	81702450	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	776						776
*	82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	27						27
*	82500335	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240 VOLT, 100 AMP	EACH	1						1
*	83002350	LIGHT POLE, ALUMINUM, 40 FT. M.H., 8 FT. DAVIT ARM -TWIN	EACH	2						2
*	83002600	LIGHT POLE, ALUMINUM, 40 FT. M.H., 15 FT. DAVIT ARM	EACH	12						12
*	83003600	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. DAVIT ARM	EACH	8						8
*	83060450	LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., 15 FT. MAST ARM	EACH	1						1
*	83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	138.5						138.5
	84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	10						10



CIVIL DESIGN, INC.
WBE / DBE
EFFINGHAM, IL
LICENSE #184-003222

USER NAME = kulrich

DESIGNED -

DRAWN -

PLOT SCALE = 0.16666633 ' / in.

PLOT DATE = 1/30/2025

REVISED -

REVISED -

REVISED -

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 14 OF 18 SHEETS STA. + TO STA. +

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,RS-2,B-1,B-2,B-3,B-4	WILLIAMSON	519	18
CONTRACT NO. 78373			ILLINOIS FED. AID PROJECT	

* SPECIALTY ITEM

1 REVISED 4-16-2025

				CONSTRUCTION CODE						
				FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE
				ROADWAY	ROADWAY	BRIDGE	BRIDGE	BRIDGE	BRIDGE	HIGHWAY LIGHTING
				0003	0005	0010	0010	0010	0010	0021
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	URBAN	100-0106	100-0107	100-0108	100-0109	URBAN
*	87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10						10
*	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13						13
*	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4						4
*	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3						3
*	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2						2
*	88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	9						9
	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4620						4620
	X1200247	TURBIDITY CURTAIN	SQ YD	8412						8412
	X1700006	STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL)	SQ FT	8891	8891					
	X2503100	MOWING	UNIT	228	228					
	X2600030	MILE MARKER POST	EACH	5	2	3				
*	X2600031	SIGN PANEL - TYPE 1 (SPECIAL) DOUBLE SIDED	SQ FT	6	3	3				
	X3110103	COARSE AGGREGATE BACKFILL (SPECIAL)	TON	114056	114056					
	X4403300	CONCRETE MEDIAN REMOVAL	SQ FT	13833	13833					

CIVIL DESIGN, INC.
WBE / DBE

EFFINGHAM, IL

LICENSE #184.003222

USER NAME = kulrich

DESIGNED -

DRAWN -

PLOT SCALE = 0.16666633 ' / in.

PLOT DATE = 1/30/2025

REVISD -

REVISD -

REVISD -

REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 16 OF 18 SHEETS STA. + TO STA. +

F.A.P. RTE. 331

SECTION (1-4)R-5,RS-2,B-1,B-2,B-3,B-4

COUNTY WILLIAMSON

TOTAL SHEETS 519

SHEET NO. 20

CONTRACT NO. 78373

ILLINOIS | FED. AID PROJECT

				CONSTRUCTION CODE										
				FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE	FAP 331 80%/20% STATE				
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	ROADWAY	BRIDGE	BRIDGE	BRIDGE	BRIDGE	HIGHWAY LIGHTING				
				0003	0005	0010	0010	0010	0010	0021				
				URBAN	URBAN	100-0106	100-0107	100-0108	100-0109	URBAN				
*	X8710101	ETHERNET MANAGE SWITCH	EACH	1						1				
*	X8710304	FIBER OPTIC CABLE SPLICE - LATERAL	EACH	1						1				
*	X8710318	FIBER OPTIC UTILITY MARKER	EACH	1						1				
*	X8891301	VIDEO AND RADAR HYBRID DETECTION SYSTEM	EACH	1						1				
*	XP000179	GROUND ROD, 8', COPPER CLAD	EACH	5						5				
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.15	0.15	0.14	0.14	0.14	0.14				
	X6050208	FILLING EXISTING CULVERTS	CU YD	85	85									
	Z0024475	TUBULAR MARKER	EACH	99	99									
	Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	4961			1207	1234	1415	1105				
*	Z0033024	MAINTAIN EXISTING LIGHTING SYSTEM	L SUM	1						1				
	Z0065100	SETTLEMENT PLATFORMS	EACH	16	16									
Ø	Z0076600	TRAINEES	HOUR	2000	2000									
Ø	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	2000	2000									
				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
										331	(1-4)R-5,RS-2,B-1,B-2,B-3,B-4	WILLIAMSON	519	22
										ILLINOIS FED. AID PROJECT				

Civil Design, Inc.
WBE | DBE

EFFINGHAM, IL

LICENSE #184.003222

DESIGNED -

DRAWN -

CHECKED -

DATE -

REVISED -

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REVISED -

REVISED -

FILE NAME: P:\3\XXX\00XX-31\X15\000 - IDOT P18 200-018 D9 IL 13 Crab Orchard Bridges\28-Trans\CA00\Project Drawings\10918373-enl_Summary of Quantities.dgn

LIGHTING SUMMARY OF QUANTITIES

CODE NO.	DESCRIPTION	UNIT	QUANTITY
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
81028770	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA	FOOT	679
81603010	UNIT DUCT, 600V, 2-1C NO. 10, 1/C NO. 10 GROUND, (XLP-TYPE USE), 3/4" DIA POLYETHYLENE	FOOT	4,298
82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	24
82500335	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 100AMP	EACH	1
83002600	LIGHT POLE, ALUMINUM, 40FT. M.H., 15 FT. DAVIT ARM	EACH	12
83003600	LIGHT POLE, ALUMINUM, 45FT. M.H., 15 FT. DAVIT ARM	EACH	8
83002350	LIGHT POLE, ALUMINUM, 40FT. M.H., 8 FT. DAVIT ARM-TWIN	EACH	2
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	132
84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	10
84200804	REMOVAL OF POLE FOUNDATION	EACH	10
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1
84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1

GENERAL NOTES

1. IN NO INSTANCE SHALL THE CONTRACTOR INSTALL A LIGHT POLE AND/OR LIGHTING CONTROLLER WITHIN 5 FOOT OF THE BACK OF GUARDRAIL POST.
2. THE CONTRACTOR SHALL ENSURE CONTINUITY OF THE CIRCUITS VIA UNDERGROUND OR AERIAL CABLE INSTALLATION, AS NECESSARY, DURING CONSTRUCTION STAGES. THIS WORK SHALL BE PAID FOR AS "MAINTAIN EXISTING LIGHTING SYSTEM".
3. OFFSET FOR PROPOSED GROUND MOUNTED LIGHT POLES IS MEASURED FROM ROADWAY BASELINES.

HIGHWAY STANDARDS

814001-03	HANDHOLES
821101-03	LUMINAIRE WIRING IN POLE
825011-04	LIGHTING CONTROLLER PEDESTAL MOUNTED, 240V
830006-05	LIGHT POLE ALUMINUM DAVIT ARM
836001-05	LIGHT POLE FOUNDATION
838001-01	BREAKAWAY DEVICES

LIGHTING LEGEND

	PROPOSED LIGHTING CONTROLLER, PEDESTAL MOUNTED
	PROPOSED LIGHTING UNIT, 40 FT. M.H., 15 FT DAVIT ARM, LED LUMINAIRE, OUTPUT TYPE H (30,000 LUMENS), 240V
	PROPOSED LIGHTING UNIT, 45 FT. M.H., 15 FT. DAVIT ARM, LED LUMINAIRE, OUTPUT TYPE H (30,000 LUMENS), 240V
	PROPOSED LIGHTING UNIT, ALUMINUM, 40FT. M.H., 15 FT. DAVIT ARM-TWIN, LED LUMINAIRE, OUTPUT TYPE H (30,000 LUMENS), 240V
	PROPOSED UNDERGROUND CONDUIT, PVC, 1" DIA., ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10.
	EXISTING UNDERGROUND ELECTRIC CABLE
	EXISTING LIGHTING UNIT TO BE REMOVED
	EXISTING LIGHTING CONTROLLER TO BE REMOVED
	EXISTING ELECTRIC SERVICE TO BE REMAIN
	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA.

CABLE TAGS

 2-#10 AWG, 1-#10 GND IN 1" CONDUIT

SERVICE AMPERAGE TABLE

VOLTAGE	MAIN BREAKER	CIRCUIT	BRANCH CIRCUIT DESIGN LOAD (AMPS)	BRANCH CIRCUIT BREAKER
CONTROLLER #1 120/240VAC (SERVICE)	100A	L1	11.0	20A
		L2	12.0	20A
		L3	1.0	20A

MODEL Lighting Legend (Sheet)
FILE NAME: E:\CONTRACTS\2024\8385\Lighting\CADD_Sheets\DJ78372-sheet-lighting Legend.dgn



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PLOT SCALE	=	0.16666667"/in.
PLOT DATE	=	4/10/2025

DESIGNED	-	JRV
DRAWN	-	BLY
CHECKED	-	MJO
DATE	-	10/11/2024

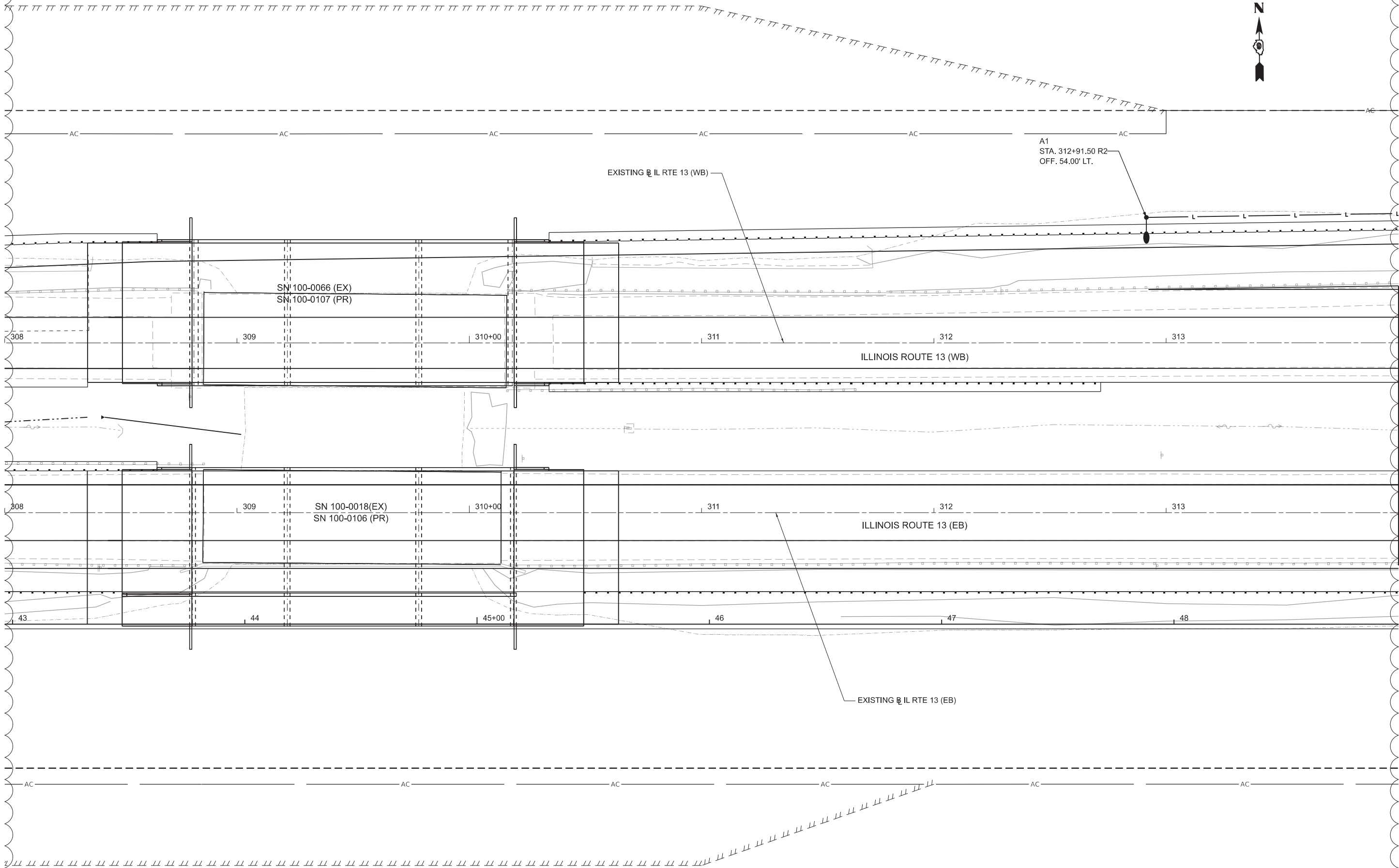
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REVISED	-	
REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING LEGEND, NOTES, AND SUMMARY OF QUANTITIES
ILLINOIS ROUTE 13

SCALE: 1"=20'	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,B-1,B-2,B-4	WILLIAMSON	519	202
		CONTRACT NO. 78373		
		ILLINOIS FED. AID PROJECT		



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DESIGNED	- JRV
DRAWN	- BLY
PLOT SCALE	= 0.16666667" / in.
CHECKED	- MJO
DATE	- 10/11/2024
PLOT DATE	= 4/10/2025

REVISED	- A - MLC 4/10/2025
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLAN
ILLINOIS ROUTE 13

SCALE: 1"=20'

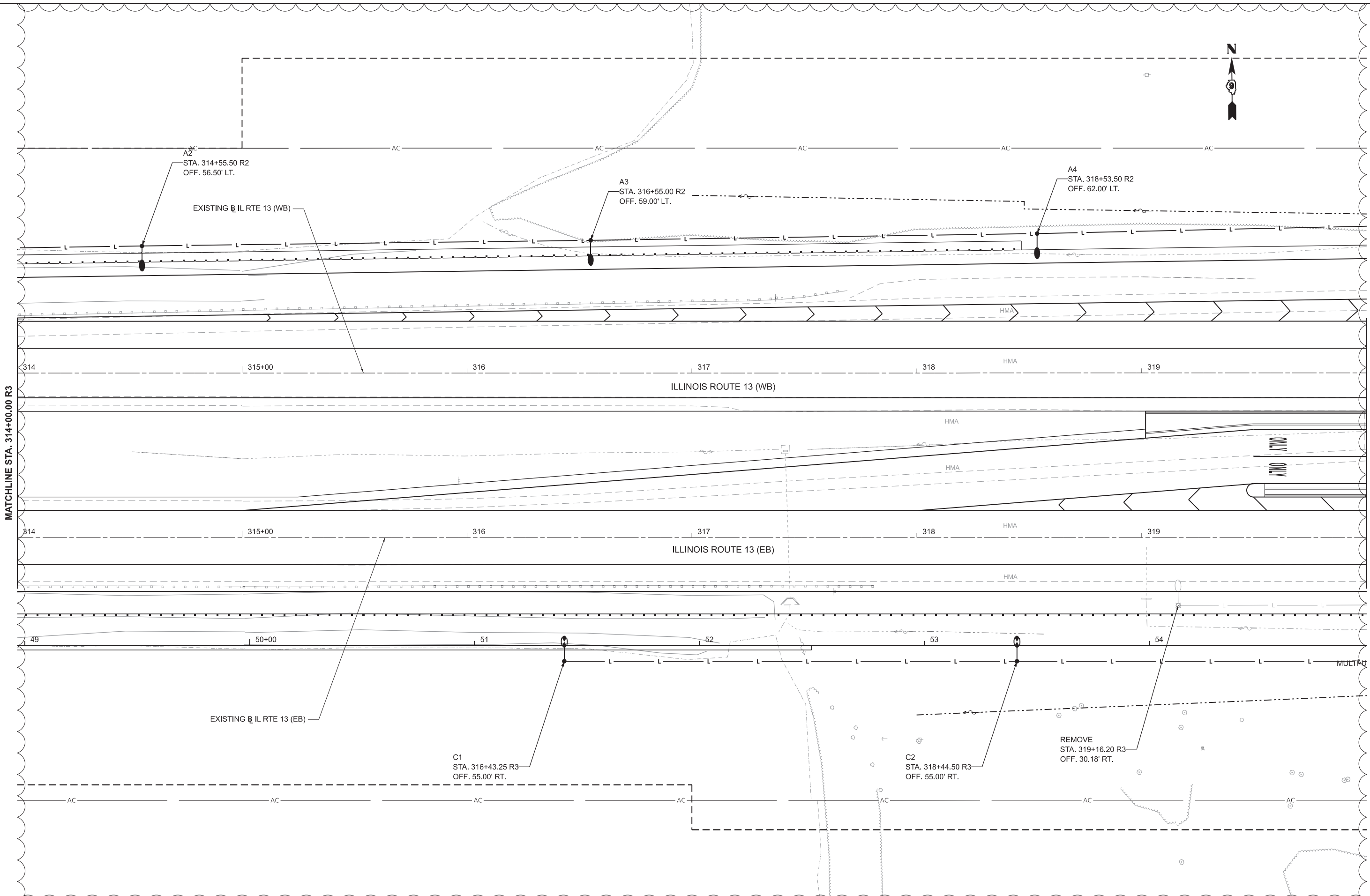
SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,B-1,B-2,B-4	WILLIAMSON	519	203
CONTRACT NO. 78373				

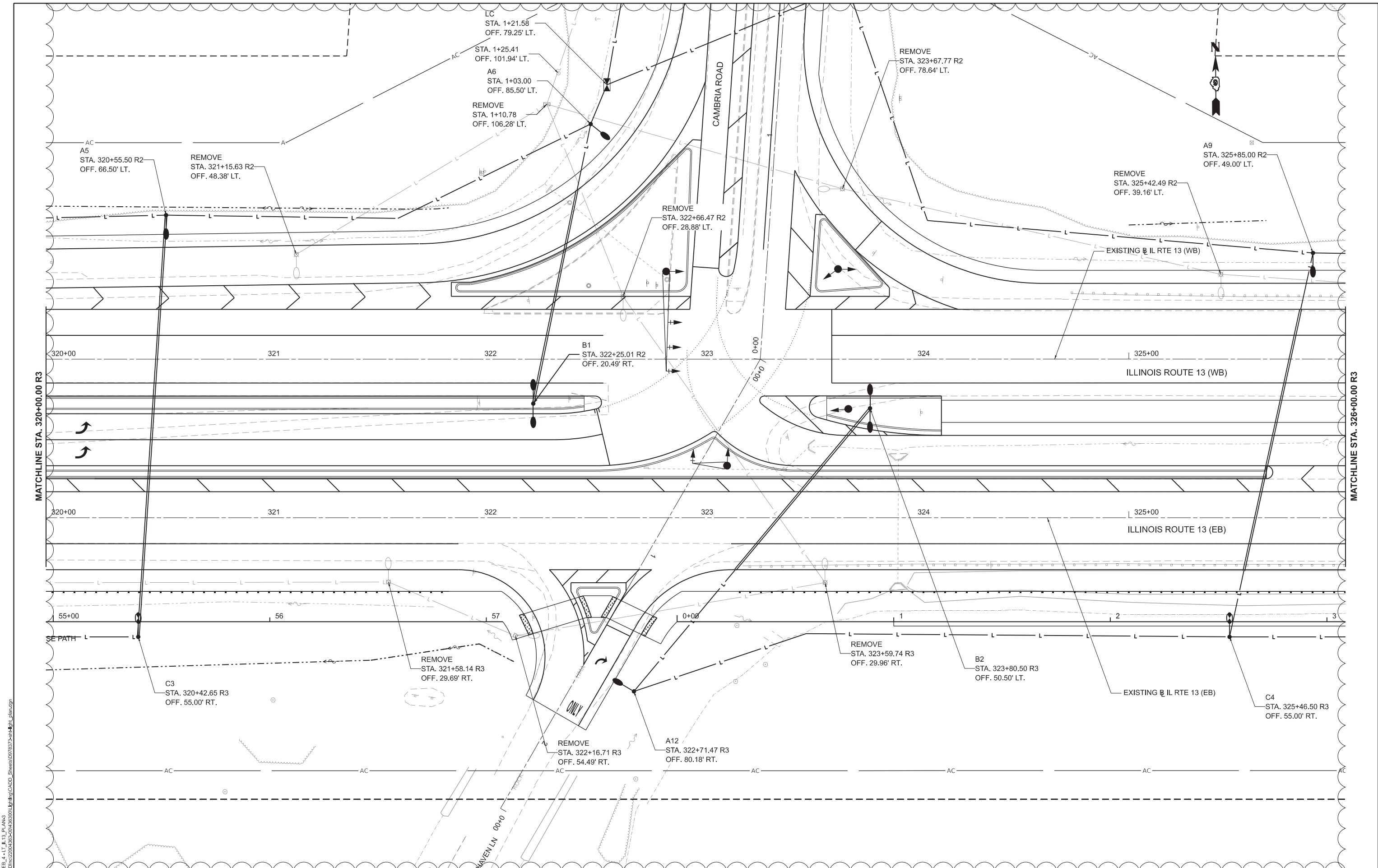
ILLINOIS FED. AID PROJECT

SHEET REVISED 4-16-2025

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 License No. 184-000613 © Copyright CMT, Inc.	USER NAME = mcochrane		DESIGNED - JRV		REVISED - - MLC 4/10/2025		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION										LIGHTING PLAN										F.A.P. RTE.		SECTION		COUNTY		TOTAL SHEETS		SHEET NO.	
	PLOT SCALE = 0.16666667" / in.		DRAWN - BLY		REVISED -												331		(1-4)R-5,B-1,B-2,B-4		WILLIAMSON		519		204											
	PLOT DATE = 4/10/2025		CHECKED - MJO		REVISED -												CONTRACT NO. 78373																			
			DATE = 10/11/2024		REVISED -		SCALE: 1"=20'										SHEET		OF		SHEETS		STA.		TO STA.		ILLINOIS		FED. AID PROJECT							



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DESIGNED	- JRV
DRAWN	- BLY
CHECKED	- MJO
DATE	- 10/11/2024
PLOT SCALE	= 0.16666667"/in.
PLOT DATE	= 4/11/2025

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

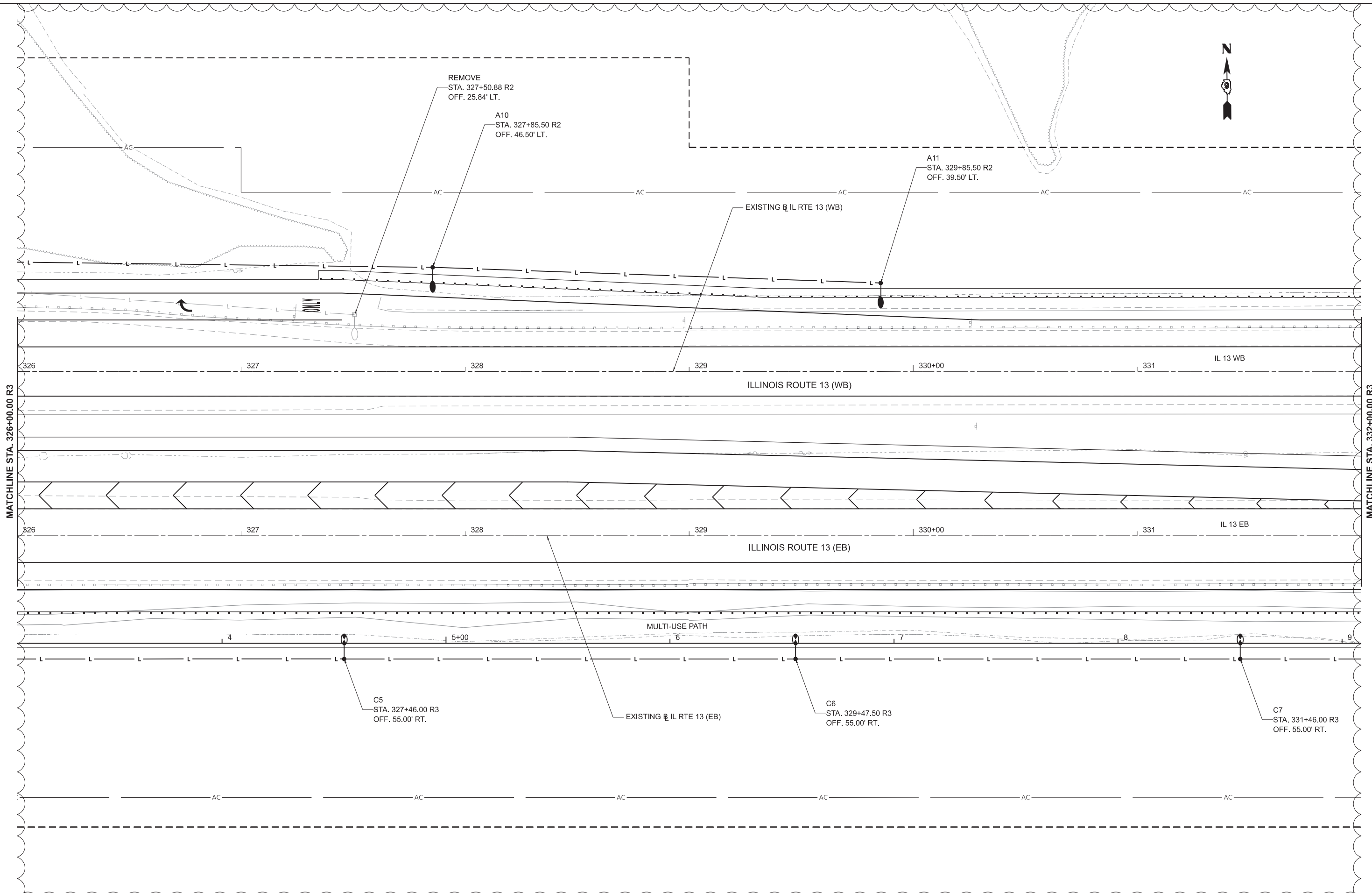
LIGHTING PLAN
ILLINOIS ROUTE 13

SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,B-1,B-2,B-4	WILLIAMSON	519	205
CONTRACT NO. 78373				

ILLINOIS FED. AID PROJECT
SHEET REVISED 4-16-2025

MODEL: SUT_13EB_4_11_13_Plan.dgn
FILE NAME: E:\CONTRACTS\2024\13EB_4_11_13_Plan.dgn



USER NAME = mcochrane	DESIGNED - JRV	REVISED - A - MLC 4/10/2025
	DRAWN - BLY	REVISED -
PLOT SCALE = 0.16666667" / in.	CHECKED - MJO	REVISED -
PLOT DATE = 4/10/2025	DATE - 10/11/2024	REVISED -

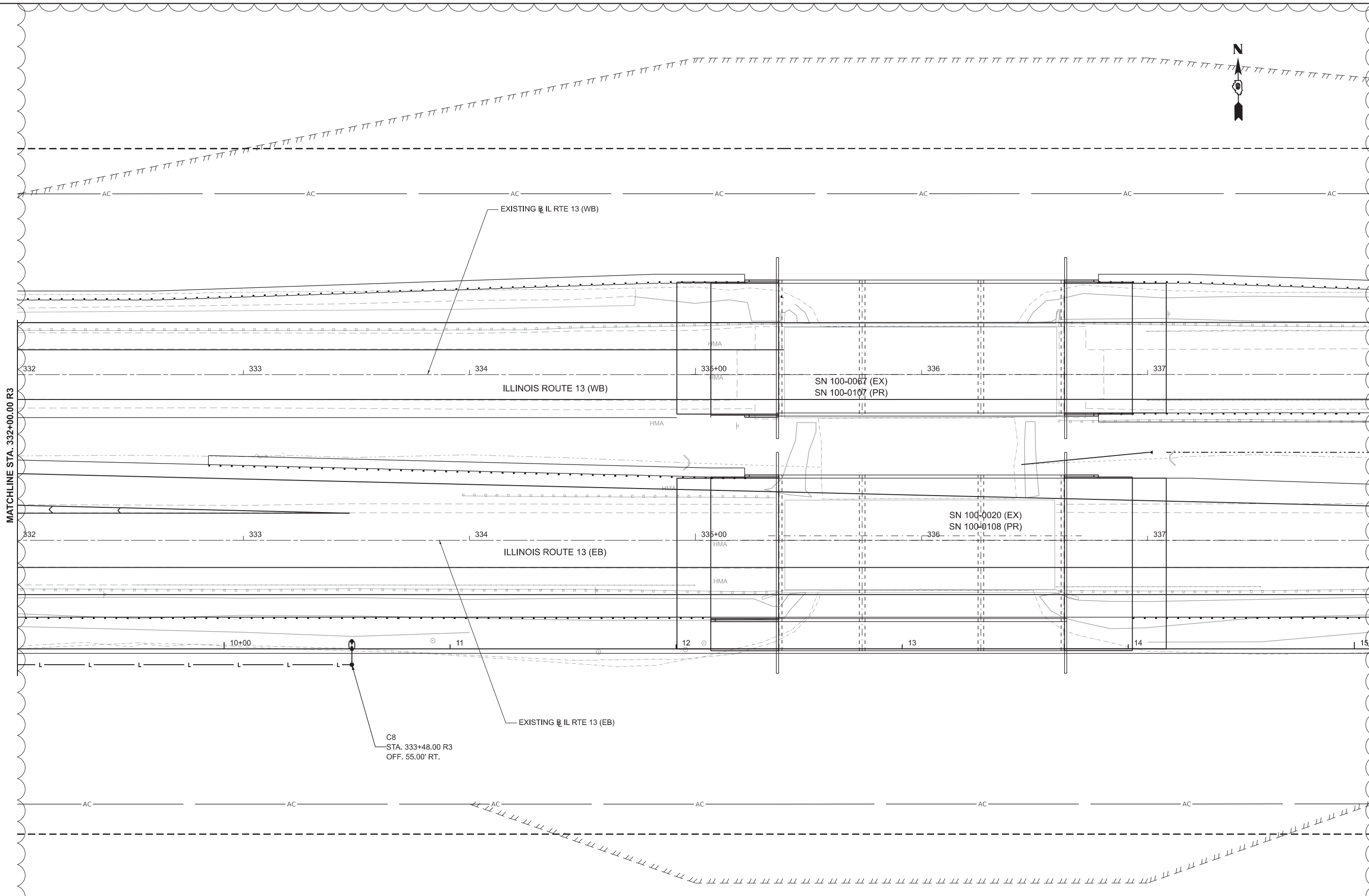
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLAN ILLINOIS ROUTE 13			
SCALE: 1"=20'	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,B-1,B-2,B-4	WILLIAMSON	519	206
CONTRACT NO. 78373				
ILLINOIS FED. AID PROJECT				

1 SHEET REVISED 4-16-2025

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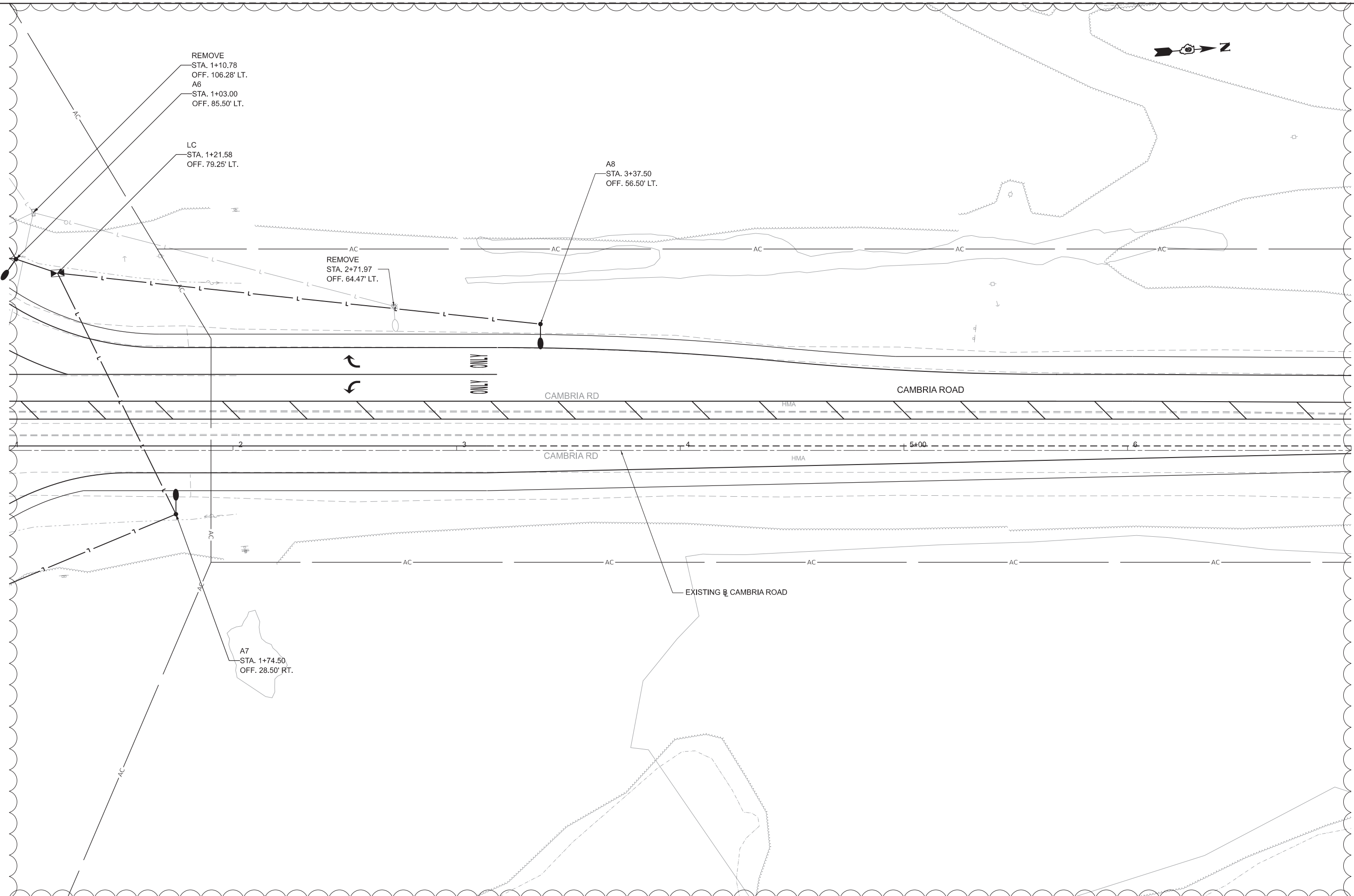


MATCHLINE STA. 332+00.00 R3

MATCHLINE STA. 338+00.00 R3

 License No. 184-000613 © Copyright CMT, Inc.	USER NAME = mcochrn		DESIGNED - JRV		REVISED -  - MLC 4/10/2025		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		LIGHTING PLAN ILLINOIS ROUTE 13				F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN - BLY		REVISED -								331	(1-4)R-5,B-1,B-2,B-4		WILLIAMSON	519	207
	PLOT SCALE = 0.16666667" / in.		CHECKED - MJO		REVISED -				CONTRACT NO. 78373									
	PLOT DATE = 4/10/2025		DATE - 10/11/2024		REVISED -													
								SCALE: 1"=20'	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS	FED.AID PROJECT		

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USER NAME = mcochrane	DESIGNED - JRV	REVISED - MLC 4/10/2025
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PLOT SCALE = 0.16660000"/In.	CHECKED - MJO	REVISED -
PLOT DATE = 4/10/2025	DATE - 10/11/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLAN ILLINOIS ROUTE 13			
SCALE: 1"=20'	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,B-1,B-2,B-4	WILLIAMSON	519	208
CONTRACT NO. 78373				

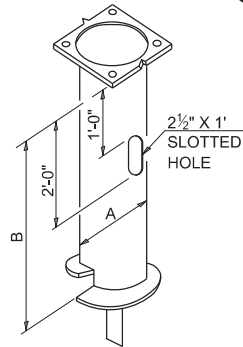
ILLINOIS FED. AID PROJECT
SHEET REVISED 4-16-2025

LIGHT POLE FOUNDATION

DATA, STEEL ** FOUNDATION TABLE			
BOLT CIRCLE	A	B	MOUNTING HEIGHT
1'-3"	10"	6'-0"	45'-0" OR 50'-0" *
1'-3"	8"	6'-0"	45'-0"
11"	8"	6'-0"	40'-0" OR LESS

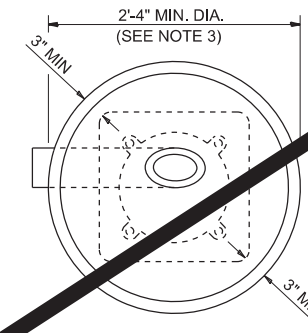
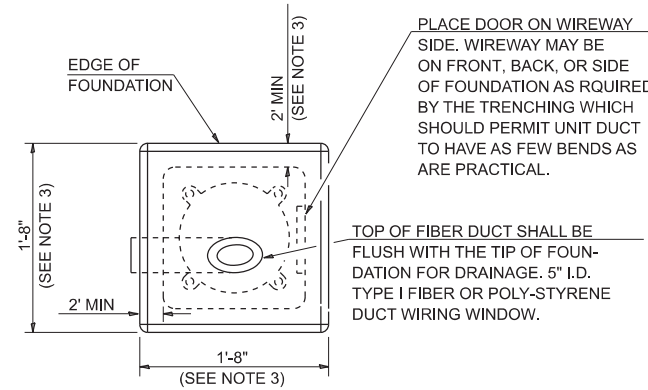
FOR USE ON POLES
* W/TWIN TENON

MINIMUM TORQUE
REQ'D TO INSTALL
FOUNDATIONS SHALL
BE 5,000 LBS

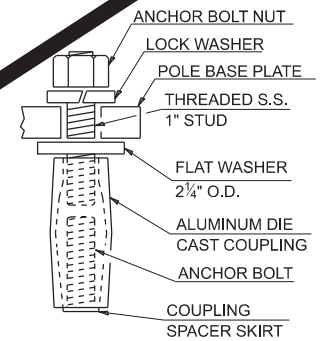


STEEL POLE FOUNDATION

LOW MOUNTING FOUNDATION TABLE		
HEIGHT	DEPTH	BOLT CIRCLE
30'-0"	5'-0"	11"
31'-0" - 35'-0"	6'-0"	11"
36'-0" - 40'-0"	7'-0"	1'-3"
41'-0" - 45'-0"	7'-6"	1'-3"
46'-0" - 50'-0"	8'-0"	1'-3"



ALT. FOUNDATION

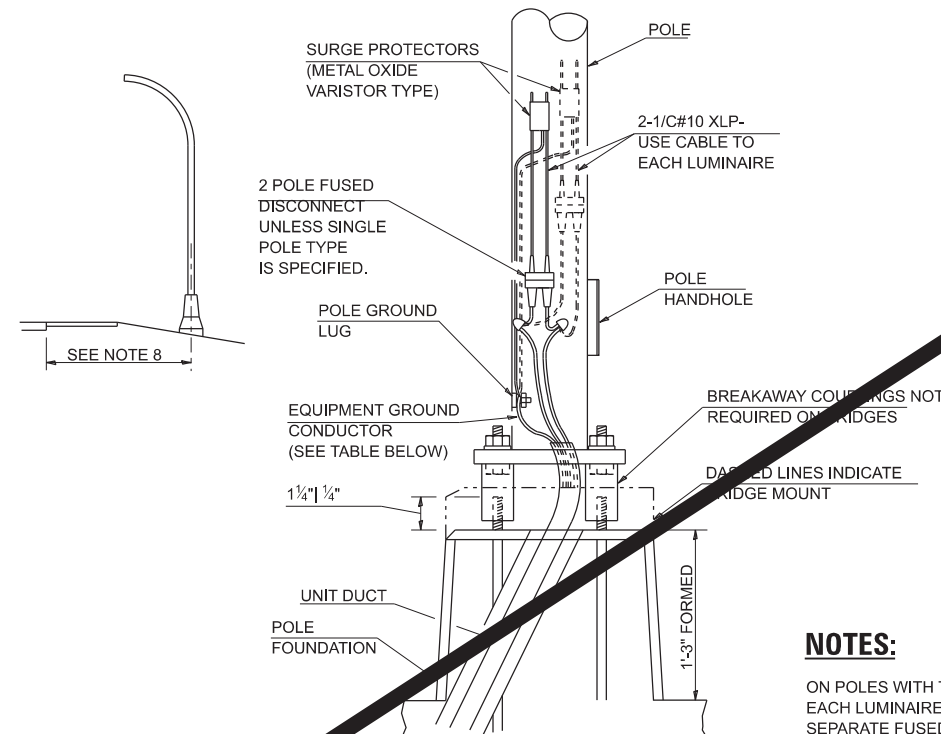


TYP. COUPLING

GENERAL NOTES

1. AFTER POURING CONCRETE, THE FORM SHALL REMAIN UNDISTURBED OVERNIGHT.
2. THE TOP 15" ONLY SHALL BE FORMED. CONCRETE BOUNDED BY UNDISTURBED EARTH ONLY SHALL FILL THE REMAINDER OF THE HOLE.
3. MINIMUM CLEARANCE FROM THE OUTSIDE EDGE OF FOUNDATION TO ANY PART OF THE POLE BASEPLATE SHALL BE 3".
4. THE DEPTH OF THE FOUNDATION MAY BE REDUCED 6" FOR EVERY 12" OF ROCK ENCOUNTERED WITH A MINIMUM DEPTH OF 4'-6". WHEN THE DEPTH OF THE FOUNDATION IS DECREASED TO LESS THAN 6' THE ANCHOR BOLTS SHALL BE CUT, THREADED, AND A STEEL PLATE 20" X 20" X 1/4" SHALL BE INSTALLED ON THE ANCHOR BOLTS 6" ABOVE THE BOTTOM OF THE EXCAVATION. THE COST SHALL BE INCIDENTAL THE FOUNDATION.
5. ON PARAPET WALLS USE 1 1/4" DIA. ANCHOR BOLTS. USE SELF-LOCKING NUT AND FLAT WASHER. DO NOT USE LOCKWASHER. (FOR DETAILS SEE STANDARD III/2.35 OF BRIDGE DESIGN MANUAL.
6. BEND RADIUS SHALL BE FOUR TIMES BOLT DIAMETER.
7. CONNECT GROUND WIRES TO POLE BASE GROUND LUG, NOT ANCHOR BOLTS OR TRANSFORMER BASE.
8. LOW MOUNT POLE FOUNDATION SETBACK: FOR HORIZONTAL MOUNTED LUMINAIRES, SETBACK SHALL BE A MINIMUM OF 20' FROM EDGE OF PAVEMENT.

FOR VERTICAL MOUNT LUMINAIRES, SETBACK SHALL BE A MINIMUM OF 30' FROM EDGE OF PAVEMENT. POLES SHALL BE LOCATED 5' BEHIND GUARDRAIL OR OTHER PROTECTIVE BARRIERS, OR AS DIRECTED BY THE ENGINEER.

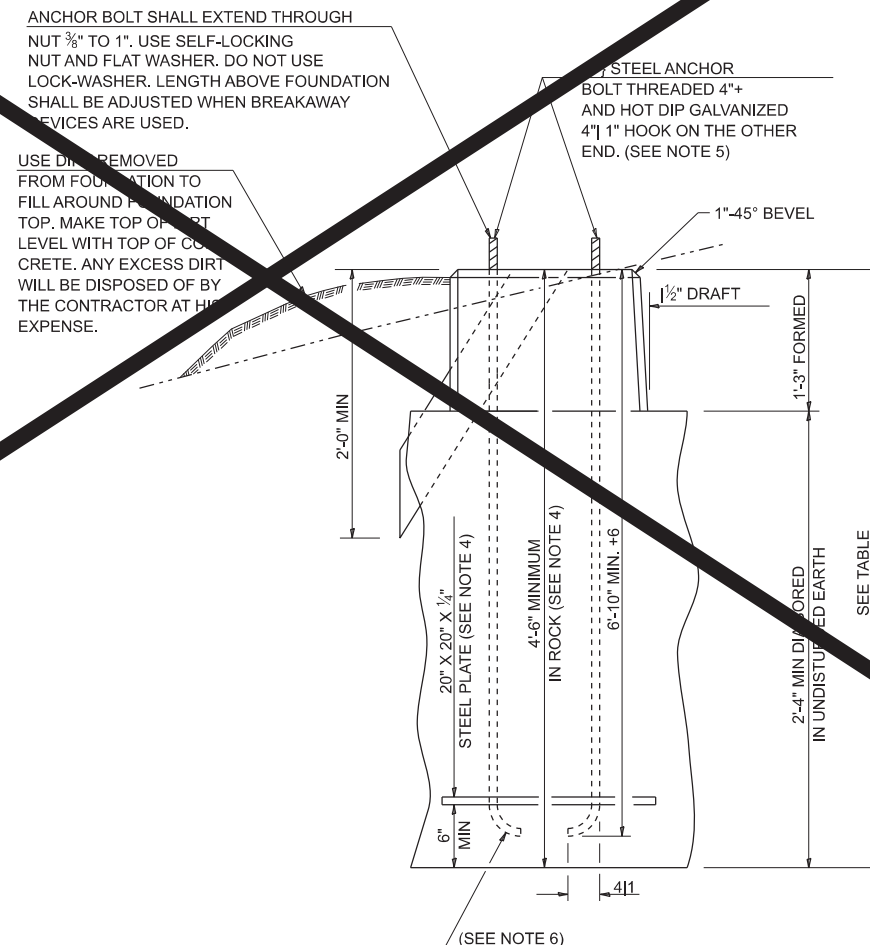


NOTES:

ON POLES WITH TWO LUMINAIRES,
EACH LUMINAIRE SHALL HAVE A
SEPARATE FUSED DISCONNECT.

INSTALLATION INSTRUCTIONS:

SCREW COUPLINGS ON TO ANCHOR BOLTS TO END OF THREADS, LEVEL COUPLINGS, VERY IMPORTANT, AS COUPLINGS WILL BECOME OVER-STRESSED AND EITHER CRACK OR STRIP THREADS INSIDE COUPLING.

☐ **METAL**

OR

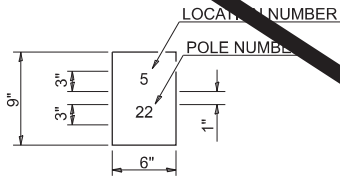
☒ **CONCRETE**

EQUIPMENT GROUND TABLE	
BREAKER SIZE	CONDUCTOR SIZE
30 AMP.	#10 COPPER
40 AMP.	#10 COPPER
60 AMP.	#10 COPPER
100 AMP.	#8 COPPER

POLE STANDARDS

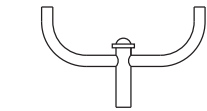
"INSTALL AND ORIENT ARM BRACKET OVER POLE TENON AND FIRMLY HAND TIGHTEN THE TWO SET SCREWS. USE THIRD POLE IN ARM BRACKET AS A GUIDE TO DRILL A 2 1/4" DIAMETER HOLE THROUGH TENON. INSTALL AND TIGHTEN SELF-TAPPING SCREW. TIGHTEN SET SCREWS AN ADDITIONAL 1/4 TO 3/8 TURN WITH HEX KEY (NOT PROVIDED). INSTALL LOCKNUTS ON SET SCREWS IF THREADED PROJECTION ALLOWS."

POLE SHALL MEET AASHTO STANDARD SPECIFICATIONS FOR 80 MPH WIND LOADING AND 1 LB. 4.0 SQ. FT E.P.A. LUMINAIRE.

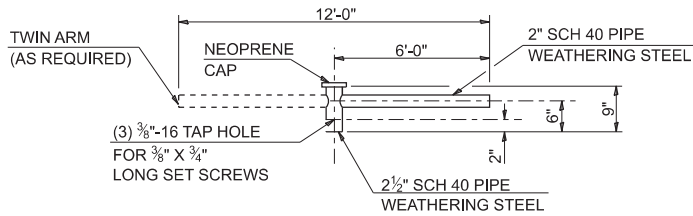


THE CONTRACTOR SHALL FURNISH AND INSTALL A LIGHT POLE IDENTIFICATION OF EACH NEW LIGHT POLE, AS SHOWN ABOVE, INCIDENTAL TO THE RESPECTIVE LIGHT POLE PAY ITEM IN ACCORDANCE WITH ART, 1069.06

THE LIGHT POLE IDENTIFICATION SHALL BE APPLIED TO SIGN BASE MATERIAL AS SPECIFIED IN ART. 1069.06, APPROXIMATELY 7" ABOVE THE ADJACENT PAVEMENT GRADE VISIBLE TO APPROACHING TRAFFIC IN ACCORDANCE WITH HIGHWAY STANDARD 720001.

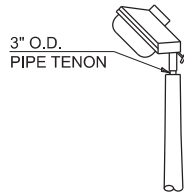


TWIN TENON

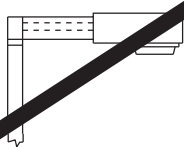


TENON MOUNT BRACKET ARM

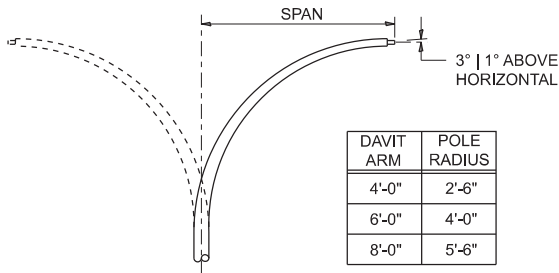
NOTE: SINGLE OR TWIN ARM ASSEMBLY SHALL BE TILTED 3° ABOVE HORIZONTAL.



TENON



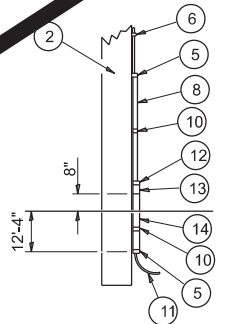
SHORT BRACKET



DAVIT ARM (AND OR)

DAVIT ARM-TWIN

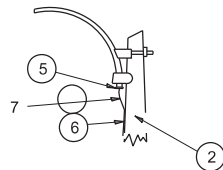
DAVIT ARM	POLE RADIUS
4'-0"	2'-6"
6'-0"	4'-0"
8'-0"	5'-6"



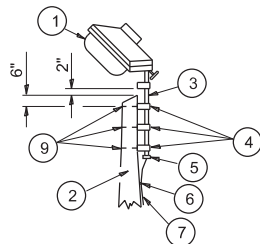
DETAILS FOR UNDERGROUND DISTRIBUTION IF REQUIRED

POLE, WOOD

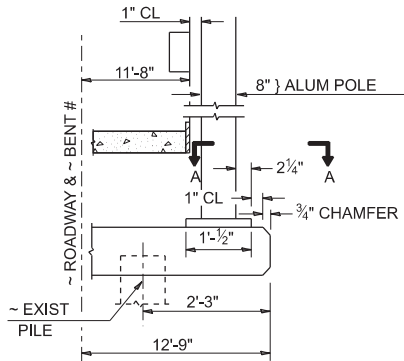
POLE LENGTH	DEPTH IN GROUND
65'-0"	12'-0"
60'-0"	10'-0"
55'-0"	9'-0"
50'-0"	8'-0"
45'-0"	7'-0"
40'-0"	6'-6"
35'-0"	6'-0"
30'-0"	5'-6"



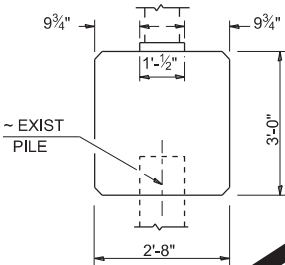
MAST ARM



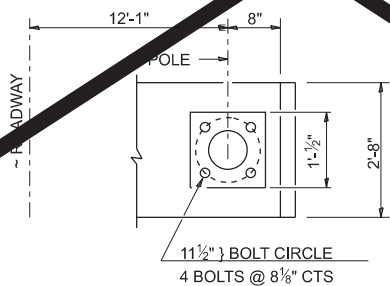
TENON



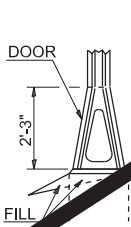
BENT # (LOOKING)



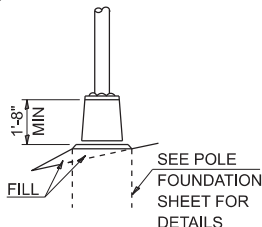
BRIDGE PIER MOUNT



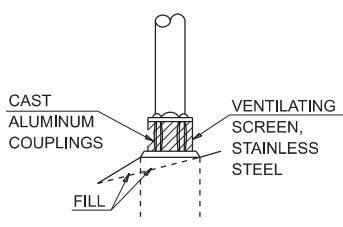
SECTION A-A



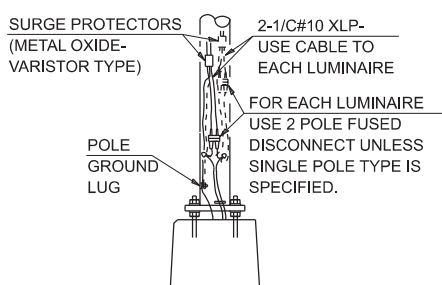
STAINLESS STEEL FLAIR BASE



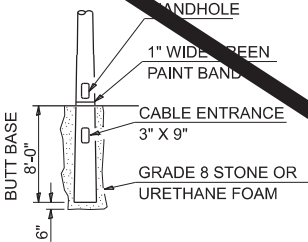
TRANSFORMER BASE FRANGIBLE



BREAKAWAY COUPLING



ANCHOR



BUTT BASE

- 1 LUMINAIRE
- 2 WOOD POLE, CLASS 3 OR BETTER
- 3 2 1/2" GALV. STEEL CONDUIT
- 4 SINGLE OFFSET POLE BAND
- 5 CONDUIT BUSHING
- 6 CABLE CLAMPS ON 2' CENTERS
- 7 1/2" C#12 TYPE USE CABLE
- 8 1" GALV. STEEL CONDUIT 10' IN LENGTH
- 9 5/8" Ø HOT DIPPED GALVANIZED BOLT WITH FLAT WASHER & LOCKNUT (3 REQ'D)
- 10 CONDUIT CLAMPS ON 3' CENTERS
- 11 UNIT DUCT
- 12 THREADED REDUCER
- 13 "C" CONDULET, THREADED
- 14 1 1/2" GALV. STEEL CONDUIT FOR 1 UNIT DUCT OR 3" GALV. STEEL CONDUIT FOR 2 OR 3 UNIT DUCTS.

MODEL Pole Standards (Sheet)
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PLOT DATE = 12/12/2024	CHECKED - MJO	REVISED -
	DATE - 10/11/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING - DISTRICT DETAILS
ILLINOIS ROUTE 13

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	CONTRACT NO.	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,B-1,B-2,B-4	WILLIAMSON	519	210
		CONTRACT NO. 78373		

ILLINOIS FED. AID PROJECT
SHEET REVISED 4-16-2025

LIGHTING CONTROLLER



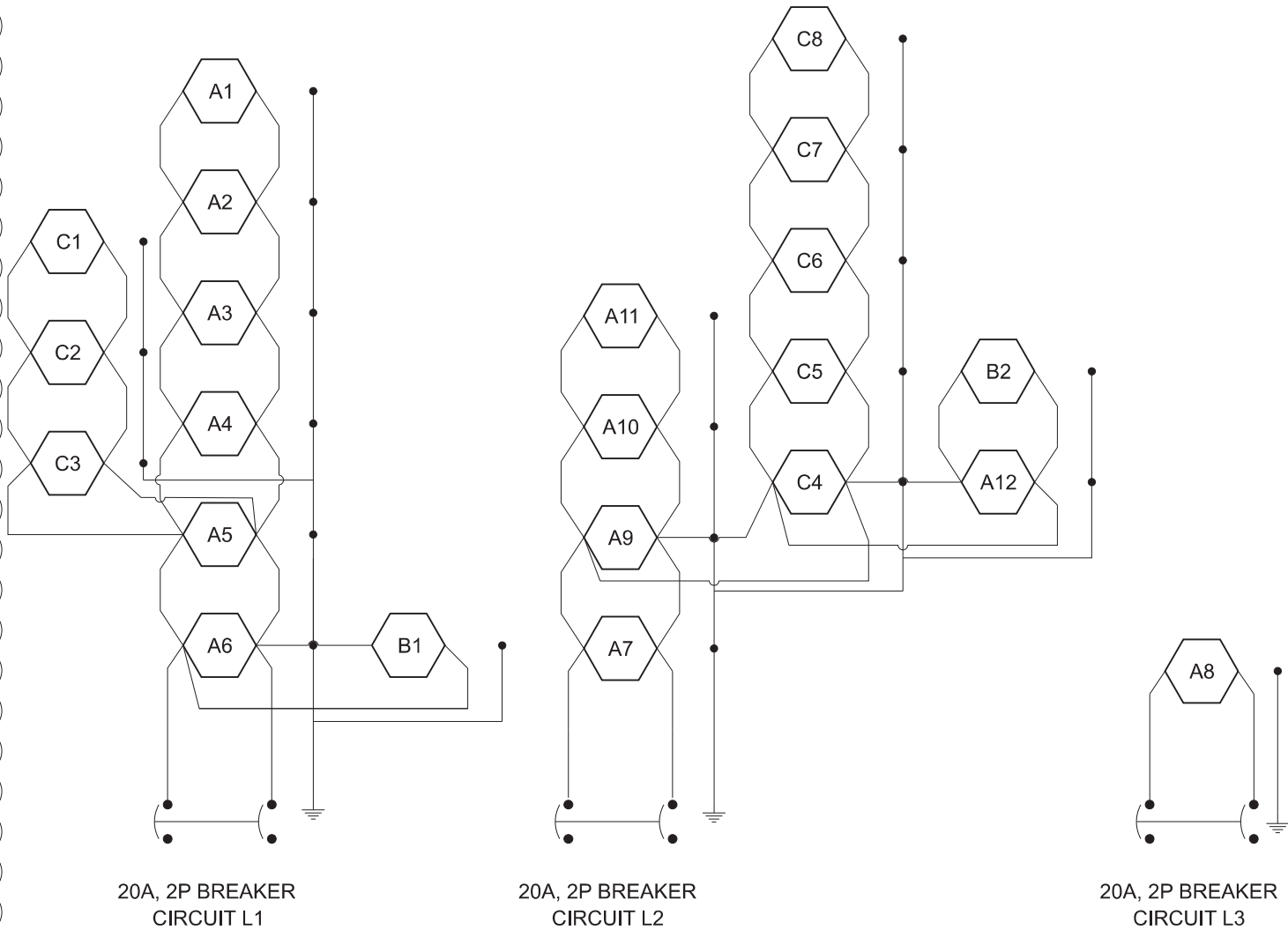
PROPOSED ROADWAY LUMINAIRE



GROUND ROD

NOTES:

ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER



LIGHTING CONTROLLER #1
120/240VAC, 100A



Luminaire Performance Table

Project

Date	Contract Number	Section Number	County
04/14/25	78373		Williamson

Marked Route Number	Municipality
IL 13	Unincorporated

Roadway

Lane Width (see note 4)	Number and Direction of lanes	Median Width	Surface Classification	Q-Zero Value
12 ft	2 in 1 direction only	N/A	R3	0.07

Structure

Mounting Height	Arm Length	Set-Back (see note 1)	Number of Luminaires
45 ft	15 ft	20 ft	N/A

Luminaire

Description	Transverse Distribution	Lateral Distribution
Roadway - Output Designation H	Type III	Medium

Total Light Loss Factor (LLF)	B-U-G Rating	Shields	Dimming Protocol
Refer to Notes 6 and 7	U=0	N/A	0-10V

Layout

Spacing	Configuration
155 ft	Single Sided

Performance (see notes 5 and 6)

Average Illuminance, E_{AVE} (fc)	Uniformity Ratio, E_{AVE}/E_{MIN}
≥ 1.3	$\leq 3:1$

Average Luminance, L_{AVE} (cd/m ²)	Uniformity Ratio, L_{AVE}/L_{MIN}	Uniformity Ratio, L_{MAX}/L_{MIN}	Veiling Luminance Ratio, L_v/L_{AVE}
≥ 0.9	$\leq 3:1$	$\leq 5:1$	$\leq 0.3:1$

Light Trespass (see notes 5 and 7)

Distance to ROW (behind pole)	Max. Horizontal Illuminance at ROW, E_H	Max. Vertical Illuminance at ROW, E_v
N/A	N/A	N/A

Notes

- Set-Back is from Edge of Pavement (white line).
- Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
- Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.
- Lane width is the width of each individual lane, not to be confused with total roadway width.
- Compliance with performance criteria shall be held to one significant digit.
- Photometric calculations for roadways shall be performed with a total light loss factor of 0.7
- Light trespass calculations shall be performed with a total light loss factor of 1.0 and with horizontal calculations performed at grade and vertical calculations performed with calculation points located three feet above grade.
- Luminaire performance table is intended to define the luminaire and does not necessarily match any specific roadway geometry, mounting height, setback, or arm length.

Printed 04/14/25

BDE 5630 (Rev. 06/06/24)

MODEL LIGHTING DIAGRAM-1 (Sheet)
FILE NAME: E:\CONTRACTS\2025\78373\Lighting\CADD_Sheets\DJ78373-sheet-1.dgn



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	DRAWN - BLY	REVISED -
PLOT SCALE = 0.16666667" = 1 in.	CHECKED - MJO	REVISED -
PLOT DATE = 4/15/2025	DATE - 10/11/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING DIAGRAM
ILLINOIS ROUTE 13

SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,B-1,B-2,B-4	WILLIAMSON	519	210A
CONTRACT NO. 78373				
ILLINOIS FED. AID PROJECT				

SHEET ADDED 4-16-2025

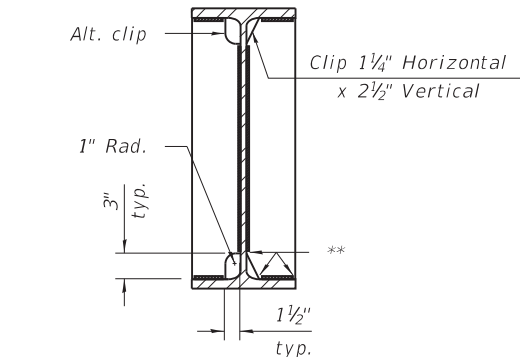
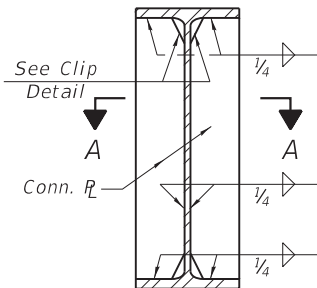
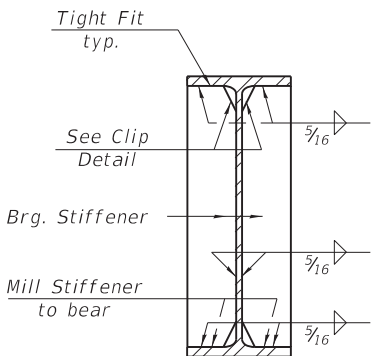
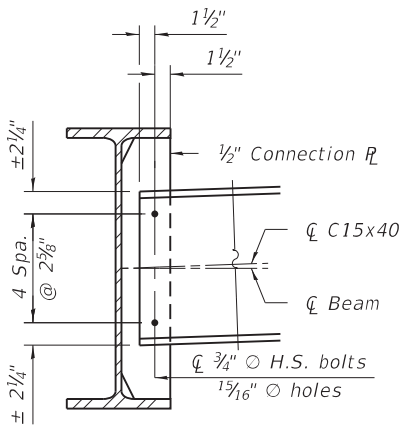
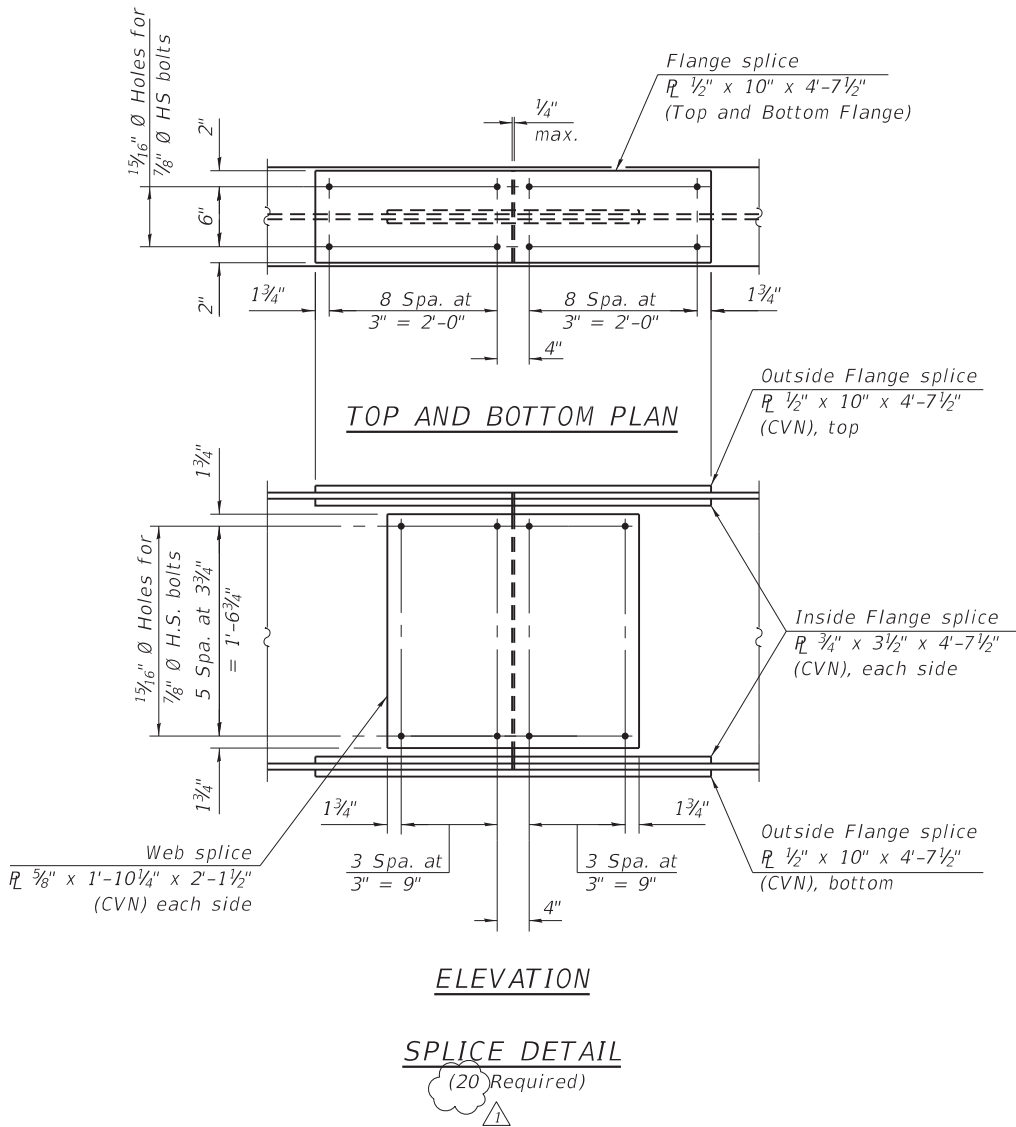
TOP OF WEB ELEVATIONS (FOR FABRICATION ONLY)

Location / Beam	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9	Girder 10
℄ Brg. W. Abut.	414.04	414.16	414.29	414.41	414.53	414.64	414.73	414.71	414.62	414.50
℄ Brg. Pier 1	414.15	414.25	414.37	414.49	414.62	414.72	414.81	414.79	414.70	414.58
℄ Splice #1	414.12	414.25	414.37	414.49	414.62	414.72	414.81	414.79	414.70	414.58
℄ Brg. Pier 2	414.13	414.25	414.37	414.50	414.62	414.73	414.82	414.80	414.71	414.59
℄ Splice #2	414.10	414.22	414.35	414.47	414.59	414.70	414.79	414.77	414.68	414.56
℄ Brg. E. Abut.	414.05	414.18	414.30	414.42	414.55	414.65	414.75	414.73	414.63	414.52

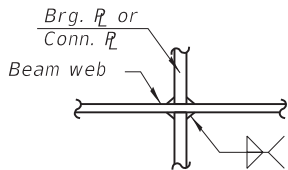
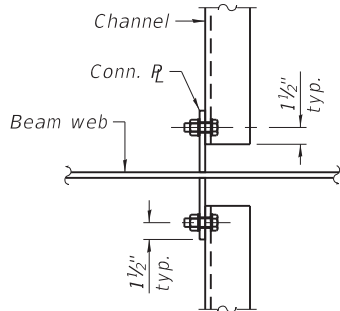
Notes:

Alternate channels of equal depth and larger weight are permitted to facilitate material acquisition. Alternate channels, if utilized, shall be provided at no additional cost to the Department.

Two hardened washers required for each set of oversized holes.



** Stop welds 1/4" (±1/8") from edges as shown. Typical.



MODEL: Default
FILE NAME: P:\5\XXXX\50XX-51XX\5000 - IDOT PTE 200-038 D9 IL 13 Crab Orchard Bridges\24-Structures\CAD-M5\100-0109-78373-016-Structural Steel Details.dgn



CIVIL DESIGN, INC.
WBE / DBE
EFFINGHAM, IL
LICENSE #184.003222

USER NAME =	DESIGNED - JAG	REVISED - JGS 4/14/2025
	CHECKED - JGS	REVISED -
PLOT SCALE =	DRAWN - JAG	REVISED -
PLOT DATE =	CHECKED - JGS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS 1
STRUCTURE NO. 100-0109

SHEET 16 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(1-4)R-5,RS-2,B-1,B-2,B-3,B-4	WILLIAMSON	519	335
CONTRACT NO. 78373				

ILLINOIS FED. AID PROJECT

REVISED 4-16-2025