

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	37-2-1L	HENRY	6	1
		CONTRACT NO. 64T25		

• 74 & 80 (I-74 & I-80)

C92-071-24

FOR INDEX OF SHEETS

1. COVER SHEET
2. SUMMARY OF QUANTITIES & UTILITIES
3. LUMINAIRE PERFORMANCE TABLE
- 4-6. LIGHTING AND COUPLING REPLACEMENT
PLAN SHEETS

STANDARDS

- 701101-05
- 701400-12
- 701406-13
- 701411-09
- 401426-09
- 701456-05
- 701401-13
- 701901-09
- 701451-05

PROPOSED HIGHWAY PLANS

FAI 74 (I-74) & FAI 80 (I-80)
SECTION (37-2-1)L

PROJECT

TYPE of IMPROVEMENT CONTRACT MAINTENANCE
HENRY COUNTY

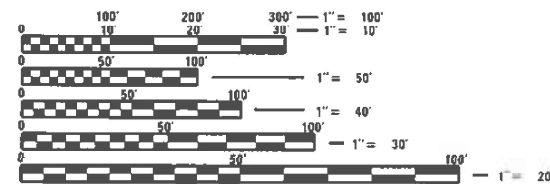
C-92-071-24



LOCATION OF SECTION INDICATED THUS: - [Symbol]



R 1 E - T 17 N
COLONA TWP



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 EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER SCOTT KULLERSTRAND (815-284-5468)
PROJECT MANAGER KRISTINE HILL

CONTRACT NO. 64T25

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 13 2024
[Signature]
REGIONAL ENGINEER

May 10, 2024 [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 10, 2024 [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

		100% STATE	
Pay Item #	Description	UOM	Quantity
			0021
67100100	MOBILIZATION	L SUM	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	1
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1
70100820	TRAFFIC CONTROL AND PROTECTION, STANDARD 701451	L SUM	1
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
82110007	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	81
83800650	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	324
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	2
Z0033024	MAINTAIN EXISTING LIGHTING SYSTEM	L SUM	1
X1400267	REMOVAL OF LIGHTING LUMINIARE, NO SALVAGE	EACH	81

NAME	UTILITIES TYPE	TELEPHONE	JULIE MEMBER
MR CHRIS DUNN GENESEO COMMUNICAITON, INC. 111 E. 1ST STREET GENESEO IL 61254	TELEPHONE	309-714-2429	YES 800-892-0123
MR NATE TEAGER MIDAMERICAN ENERGY COMPANY 2811 5TH AVENUE ROCK ISLAND IL 61201	ELECTRIC	563-333-8721	YES 800-892-0123
MR KEVIN PRICE IL DEPT OF TRANSPROTATION 2300 S. DIRKSEN PARKWAY SPRINGFIELD IL 62764		847-705-4380	
MR MIKE STEPHENS CITY OF COLONA P.O. BOX 170/100 E. 9TH AVE COLONA IL 61241		309-792-0571	YES 800-892-0123
MR DAVID VEGA LEVEL 3 (LUMEN) 71 CLINTON RD GARDEN CITY NJ 11530	COMMUNICATIONS	516-265-1764	YES 800-892-0123

MODEL: D:\work\1277\1277.dwg
 USER: jk
 PLOT DATE: 4/15/24 10:43:01 AM

DESIGNED	REVISD	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-74/80 INTERCHANGE SUMMARY OF QUANTITIES & UTILITIES		F.A.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
DRAWN	REVISD		SCALE	SHEET OF SHEETS	STA	TO STA	HEURY	6	2	
CHECKED	REVISD					CONTRACT NO. 64T25				
DATE	REVISD		ILLINOIS FED. AID PROJECT							

LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H

Project

Date	Contract Number	Section Number	County
03-21-2024	64T25	(37-2-1)	HENRY
Marked Route Number		Municipality	
FAI 74 & FAI 80 (I-74 & I-80)			

Roadway

Lane Width	*of Lanes	Median Width	I.E.S Surface Classification	O-Zero Value
12 ft	2	64 ft	R3	0.07

Structure

Mounting Height	Arm Length	Set Back	Number of Luminaires (Highmast & Sign Lighting Only)
45 ft	2 ft	30 ft	N/A

Luminaire

Description	I.E.S. Transverse Distribution	I.E.S. Lateral Distribution	
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	TYPE IV	MEDIUM	
Total Light Loss Factor (LLF)	BUG Rating	Shields	Dimming Protocol
0.7	U = 0	N/A	0-10V

Layout

Spacing (to Nearest 5 Ft)	Configuration (Opposite, Staggered, 1 Sided, or Median)
300 ft	OPPOSITE

Performance

Average Illuminance, E_{AVE} (fc)	Uniformity Ratio, E_{AVE}/E_{MIN}		
≥ 0.8	$\leq 3.0:1$		
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_{MIN}
≥ 0.5	$\leq 3.0:1$	$\leq 5.0:1$	≤ 0.3

Light Trespass

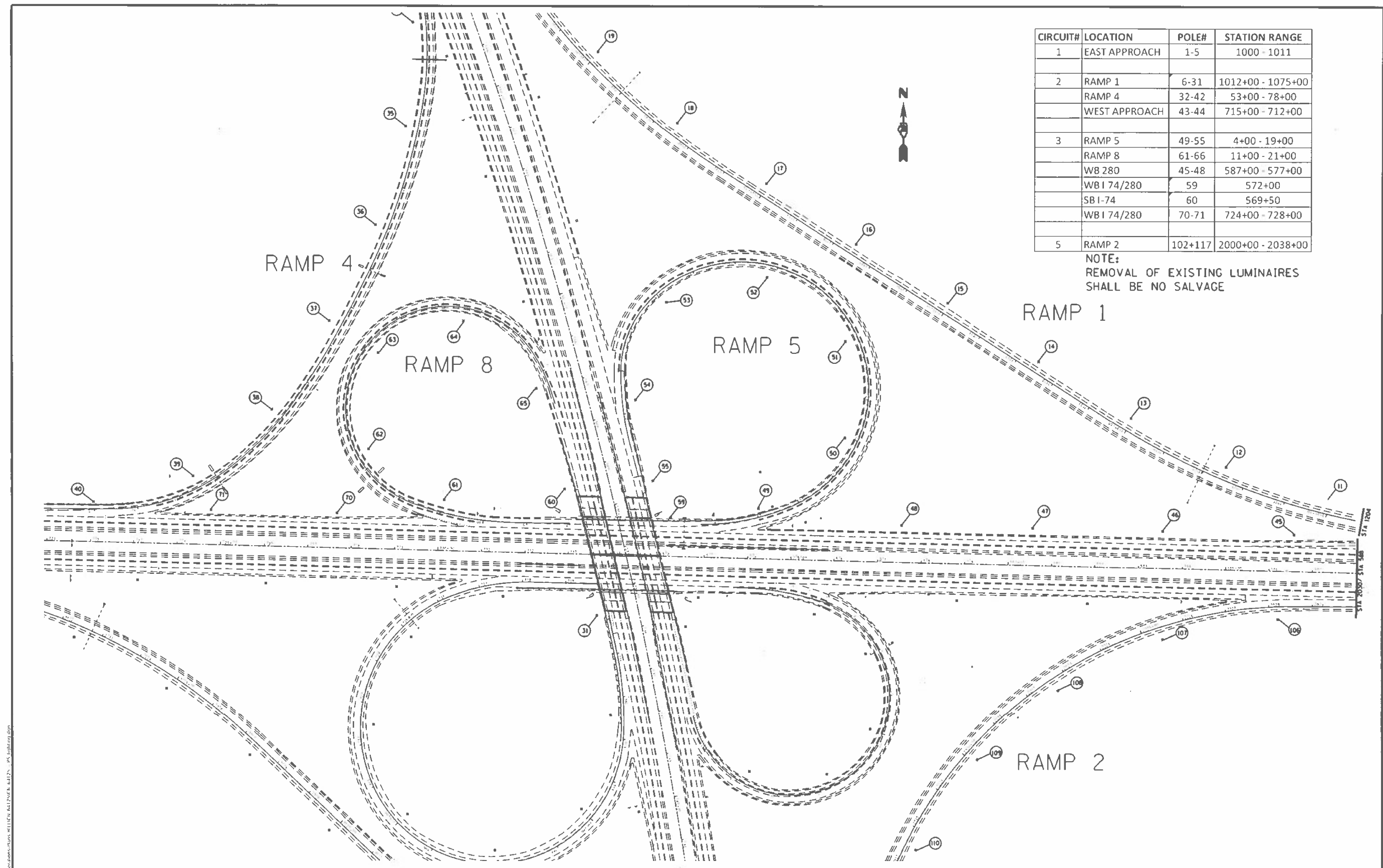
Distance to ROW (behind pole)	Max. Horizontal Illuminance at ROW, E_H	Max. Vertical Illuminance at ROW, E_V
N/A	N/A	N/A

Notes

1. Set Back is from Edge of Pavement (white line) except for sign luminaires when it is vertical and horizontal distance from the sign to the luminaire.
2. Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to roadway.
3. Total Light Loss Factor (LLF) = the product of "Lumen Maintenance" (LLD) = 0.9, "Dirt Depreciation" (LDD) = 0.8, and "Equipment Factors" (EF) = 0.95.
4. Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions above.

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	USER NAME = Kristine.Hill	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-74/80 INTERCHANGE LUMINAIRE PERFORMANCE TABLE	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 201.7850 ' / in.	DRAWN -	REVISED -			*	(37-2-1)	HENRY	6	3
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		DATE -	REVISED -				ILLINOIS FED. AID PROJECT			

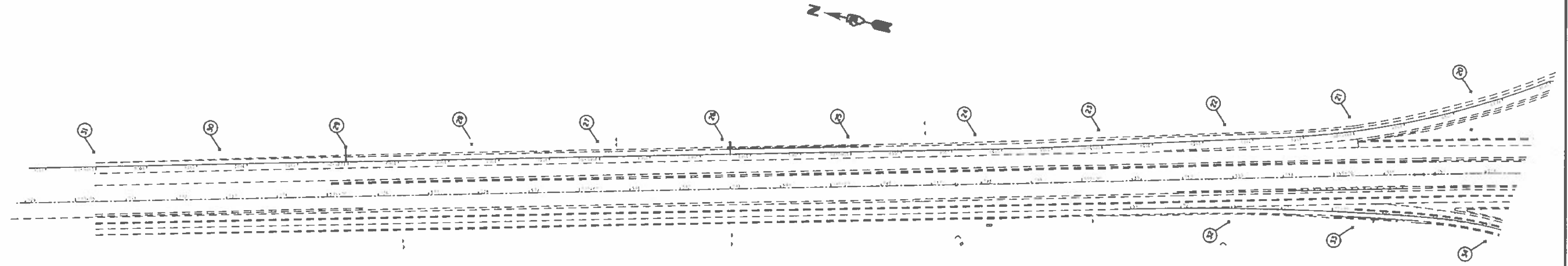


CIRCUIT#	LOCATION	POLE#	STATION RANGE
1	EAST APPROACH	1-5	1000 - 1011
2	RAMP 1	6-31	1012+00 - 1075+00
	RAMP 4	32-42	53+00 - 78+00
	WEST APPROACH	43-44	715+00 - 712+00
3	RAMP 5	49-55	4+00 - 19+00
	RAMP 8	61-66	11+00 - 21+00
	WB I 280	45-48	587+00 - 577+00
	WB I 74/280	59	572+00
	SB I-74	60	569+50
	WB I 74/280	70-71	724+00 - 728+00
5	RAMP 2	102+117	2000+00 - 2038+00

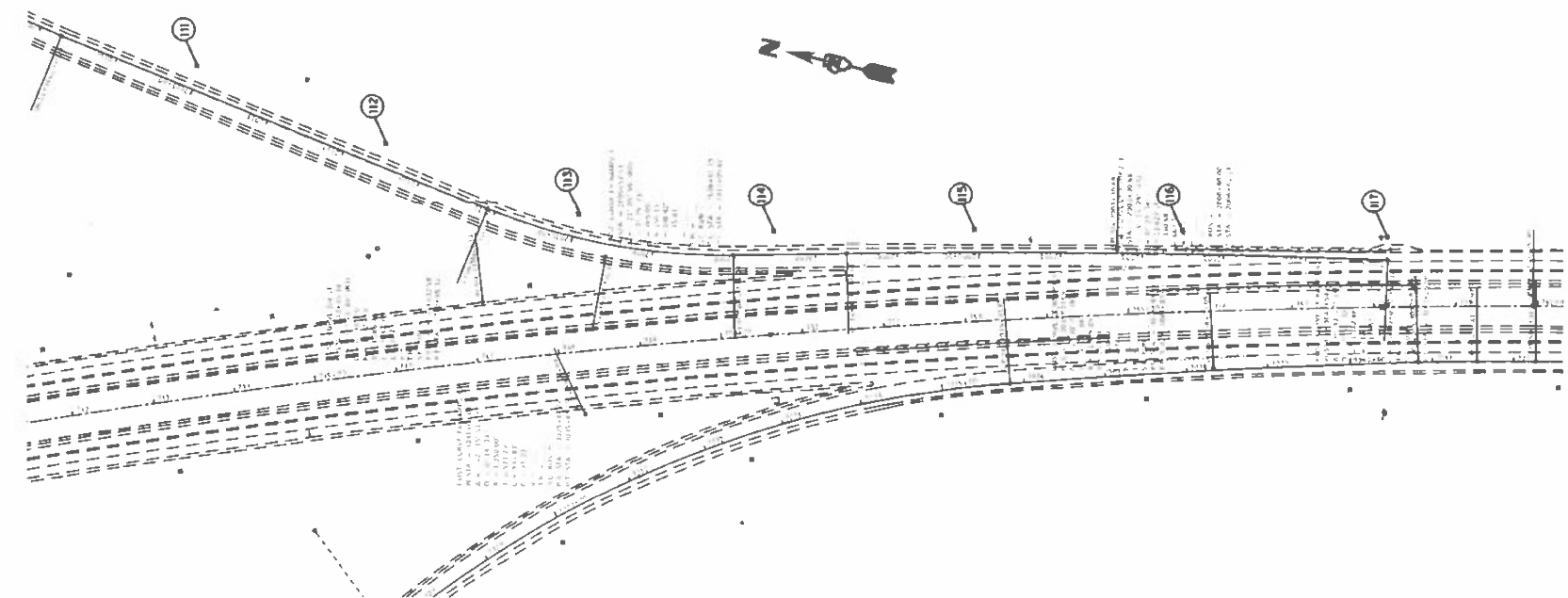
NOTE:
REMOVAL OF EXISTING LUMINAIRES
SHALL BE NO SALVAGE

USER NAME: [blank] PLOT SCALE: 1" = 200'-0" (1:200) PLOT DATE: 11/13/2024 10:44:54 AM	DESIGNED: [blank] DRAWN: [blank] CHECKED: [blank] DATE: [blank]	REVISED: [blank] REVISED: [blank] REVISED: [blank] REVISED: [blank]	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-74/80 INTERCHANGE LIGHTING AND COUPLING REPLACEMENT PLAN SHEET	F.A.1 RTE: [blank] SECTION: (37-2-1) COUNTY: HENRY TOTAL SHEETS: 6 SHEET NO: 4 CONTRACT NO: 64724 ILLINOIS FED AID PROJECT
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NORTH APPROACH



SOUTH APPROACH



MODEL: D:\work\174\174-80\174-80-100\174-80-100.dwg
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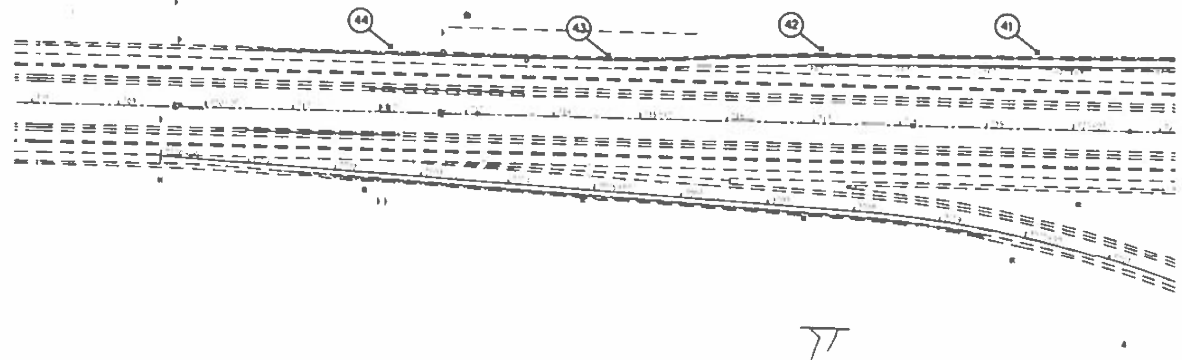
USER NAME: KENTON.H	DESIGNED: -	REVISED: -
PLOT SCALE: 20' = 1" (1/8")	DRAWN: -	REVISED: -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

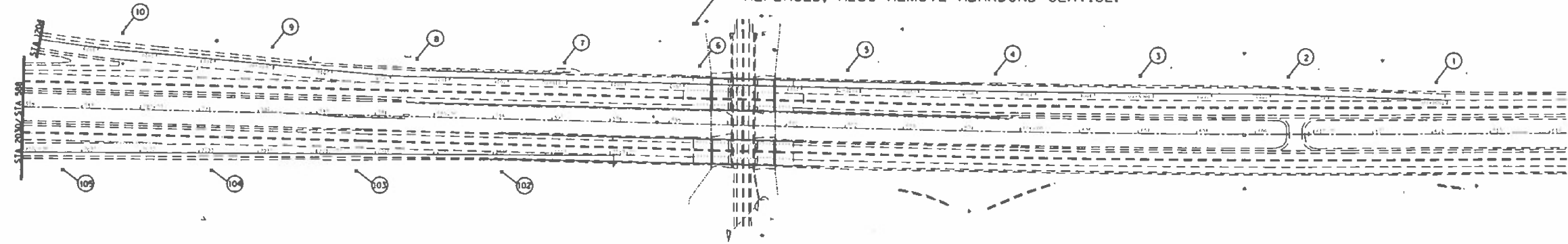
174/80/280 INTERCHANGE
LIGHTING AND COUPLING REPLACEMENT PLAN SHEET

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
-	137-2-11 L	HENRY	6	5
			CONTRACT NO. 64725	
ILLINOIS FED. AID PROJECT				

WEST APPROACH



EAST APPROACH



NOTE:
 EXISTING CONTROLLER, TYPE CB-RCS-100
 CONTROL TRANSFORMER 480v, 10 PRIMARY
 120V SECONDARY (CAPACITY TO MATCH THE
 CONTACTOR OPERATION CHARACTERISTICS)

EXISTING CONTROLLER TO REMAIN
 EXISTING SERVICE INSTALATION TO BE REMOVED AND
 REPLACED, ALSO REMOVE ABANDOND SERVICE.

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USER NAME: W-KHONG	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-74/80 INTERCHANGE LIGHTING AND COUPLING REPLACEMENT PLAN SHEETS				P&T RTS	SECTION (34-2-1)	COUNTY HENRY	TOTAL SHEETS 6	SHEET NO. 6
PLOT SCALE: 1/8" = 1'-0"	DRAWN: -	REVISED: -		SCALE	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 64T25		
PLOT DATE: 11/13/2024 10:45:15 AM	CHECKED: -	REVISED: -										