

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	(29X,8X)TS-2	SALINE	17	1
		ILLINOIS	CONTRACT NO. 78B06	

FAP 132/FAP 332/FAS 899

FOR INDEX OF SHEETS, SEE SHEET NO. 4-6

**PROPOSED
HIGHWAY PLANS**

**FAP 132/FAP 332/FAS 899 ROUTE (US 45/POPLAR ST.)
SECTION (29X,8X)TS-2**

TRAFFIC DATA

ADT (2023) 14,900 (US 45)
6,400 (POPLAR ST.)

**TRAFFIC SIGNAL MODIFICATION
SALINE COUNTY**

C-99-039-25

TOWNSHIP: HARRISBURG
DESIGN DESIGNATION: N/A
COORDINATE SYSTEM: US / STATE PLANE 1983
ZONE: ILLINOIS EAST 1201 FEET
POSTED SPEED: 30 MPH

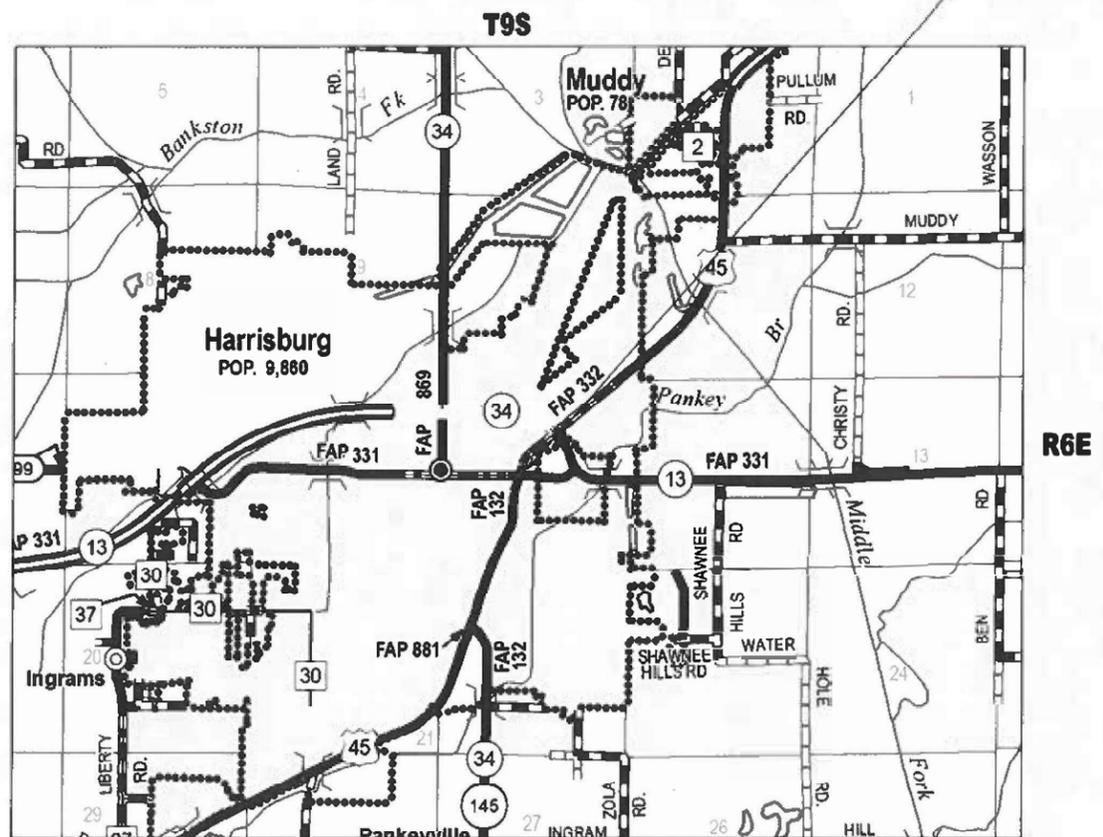


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

**PROJECT ENGINEER SEAN GREENLEE
PROJECT MANAGER SEAN GREENLEE**

CONTRACT NO. 78B06



PROJECT LOCATION
INTERSECTION OF
US 45 / POPLAR ST.



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 24, 2025
Lora S. Rasmussen
REGIONAL ENGINEER

May 9, 2025
Sean Greenlee
ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 2025
Y. Quary
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

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DISTRICT LAND ACQUISITION ENGINEER

Examined By: CM
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: Z. Coon
DISTRICT OPERATIONS ENGINEER

Examined By: _____
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: Ben Willis
DISTRICT CONSTRUCTION ENGINEER

Examined By: Aan Hays
DISTRICT MATERIALS ENGINEER

MODEL: 02-Signature (Sheet)
FILE NAME: \\pwwork\pwwork\greenlee\mkt1067819\0978806-SHA-Cover.dwg

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SIGNATURE SHEET

SCALE: SHEET 2 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(29X.8X)TS-2	SALINE	17	2

CONTRACT NO. 78B06

INDEX OF SHEETS

SHEET NO	DESCRIPTION
1	COVER SHEET
2	SIGNATURE SHEET
3	INDEX OF SHEETS, HIGHWAY STANDARDS, COMMITMENTS, GENERAL NOTES, MIX DESIGN
4-6	SUMMARY OF QUANTITIES
7	SCHEDULES
8	EXISTING TRAFFIC SIGNALS
9	PROPOSED TRAFFIC SIGNALS
10	PROPOSED WIRING DIAGRAM
11	PROPOSED LIGHTING PLAN
12	PROPOSED LIGHTING WIRING DIAGRAM AND LUMINAIRE PERFORMANCE TABLE
13	DETAILS: HANDHOLE AND MAST ARM GROUNDING SIGNAL PHASE DIAGRAM
14	DETAILS: SIGN DETAILS, CABINET FOR SERVICE INSTALLATION GROUND MOUNT AND CONCRETE FOUNDATION, GROUND MOUNT
15	DETAILS: POLE STANDARDS
16-17	DETAILS: MAST ARM BORINGS

HIGHWAY STANDARDS

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15 FT TO 24 IN FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15 FT AWAY
- 701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901-10 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720016-04 MAST ARM MOUNTED STREET NAME SIGNS
- 805001-01 ELECTRICAL SERVICE INSTALLATION DETAILS
- 814001-03 HANDHOLES
- 821101-03 LUMINAIRE WIRING IN POLE
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS & PHASE SEQUENCES
- 862001-01 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 873001-02 TRAFFIC SIGNAL GROUNDING & BONDING
- 877011-10 STEEL COMB, MAST ARM ASSEMBLY & POLE 16' THROUGH 55'
- 877012-07 STEEL COMB, MAST ARM ASSEMBLY & POLE 56' THROUGH 75'
- 878001-11 CONCRETE FOUNDATION DETAILS
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS

GENERAL NOTES

NONE

COMMITMENTS

NONE

REV - MS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, GENERAL NOTES,

SCALE: SHEET 3 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	3
CONTRACT NO. 78B06				
ILLINOIS FED. AID PROJECT				

FAP 182/FAP 332/FAS 898

SUMMARY OF QUANTITIES - CONT

COUNTY:	SALINE	SALINE
ROUTE:	US 45	US 45
FUNDING:	100% STATE RURAL	100% STATE RURAL
LOCATION:	ROADWAY	TRAFFIC SIGNALS
	0005	0021

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	0005	0021
81400100	HANDHOLE	EACH	3		3
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1,968		1,968
82110007	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	5		5
85700300	FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1		1
86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1		1
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,120		1,120
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	450		450
87501000	TRAFFIC SIGNAL POST, 14 FT.	EACH	1		1
87702900	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1		1
87702950	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	2		2
87702990	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	1		1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	3		3
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	3		3
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	36		36

MODEL: SQO-1 [Sheet]
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REV - MS

SUMMARY OF QUANTITIES - CONT

COUNTY:	SALINE	SALINE
ROUTE:	US 45	US 45
FUNDING:	100% STATE RURAL	100% STATE RURAL
LOCATION:	ROADWAY	TRAFFIC SIGNALS
	0005	0021

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY		
87900200	DRILL EXISTING HANDHOLE	EACH	2		2
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	12		12
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8		8
88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	20		20
89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1
XP000179	GROUND ROD, 8', COPPER CLAD	EACH	4		4
X1400267	REMOVAL OF LIGHTING LUMINAIRE, NO SALVAGE	EACH	4		4
X4402020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	276	276	
X8250091	COMBINATION LIGHTING CONTROLLER	EACH	1		1
Z0033062	RADIO TRANSCEIVER	EACH	1		1

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REV - MS

MEDIAN SURFACE SCHEDULE

LOCATION STATION TO STATION	WIDTH (FEET)	CONCRETE MEDIAN SURFACE REMOVAL (SQ FT)	CONCRETE MEDIAN SURFACE, 4 INCH (SQ FT)	COMMENTS
NORTHWEST RADIUS				
1075+01.39 LT TO 30+70.88 RT	5' & VAR	197	207	OLD 13 STATIONING TO US45 STATIONING
SOUTHWEST ISLAND				
1075+08.73 RT TO 1075+24.03 RT	VAR	79	79	OLD 13 STATIONING
TOTALS		276	286	

SIGNING SCHEDULE

LOCATION STATION TO STATION	SIGN PANEL - TYPE 1 (SQ FT)	COMMENTS
NORTHWEST RADIUS		
MAST ARM	7.5	Commercial St.
MAST ARM	5	LEFT TURN SIGNAL
NORTHEAST RADIUS		
MAST ARM	6	Poplar St.
MAST ARM	5	LEFT TURN SIGNAL
SOUTHWEST ISLAND		
MAST ARM	6	Poplar St.
MAST ARM	5	LEFT TURN SIGNAL
SOUTHEAST RADIUS		
MAST ARM	7.5	Commercial St.
MAST ARM	5	LEFT TURN SIGNAL
TOTALS		47

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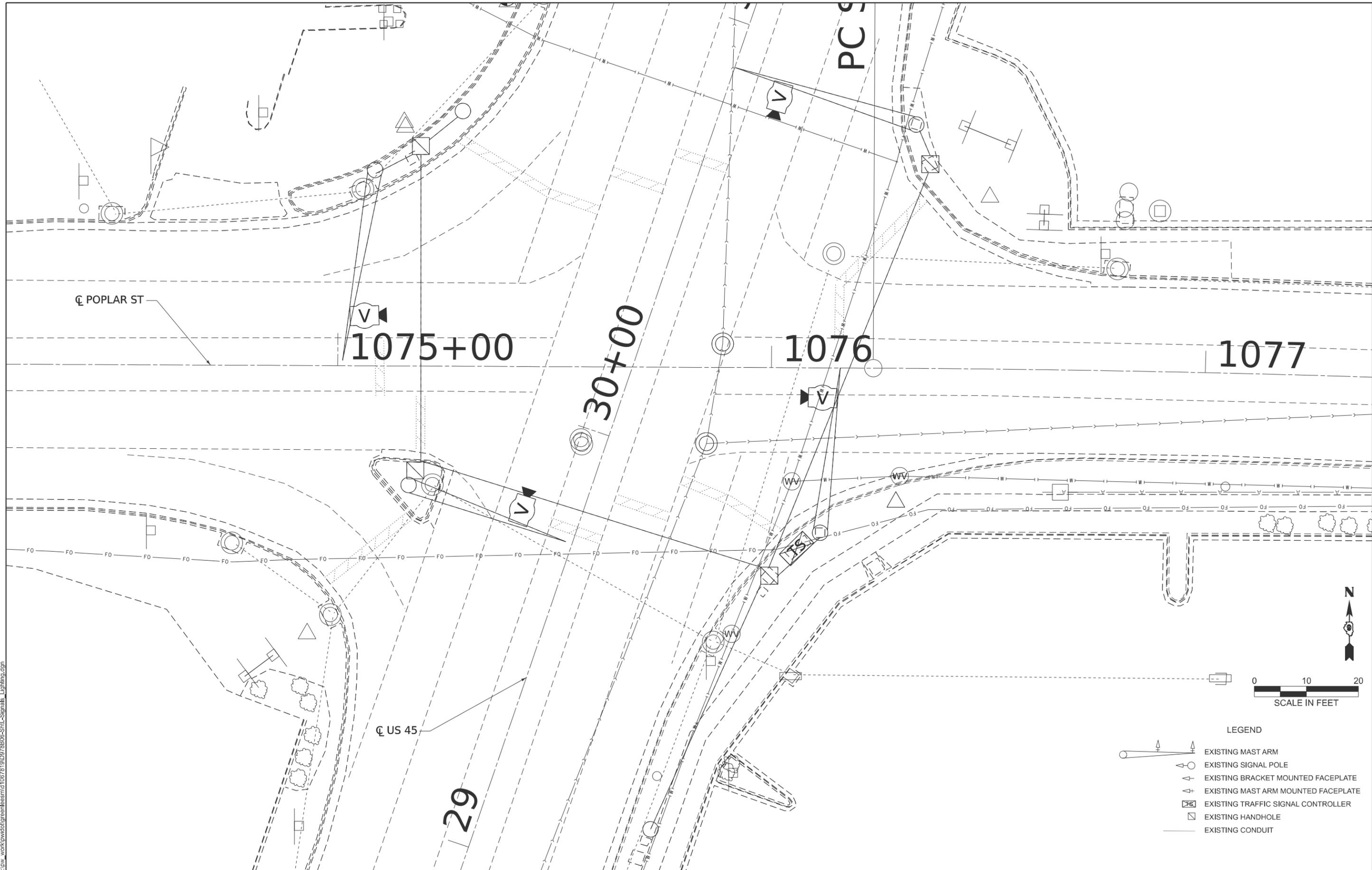
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES

SCALE: SHEET 7 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	7
CONTRACT NO. 78B06				
ILLINOIS FED. AID PROJECT				

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- LEGEND**
- EXISTING MAST ARM
 - EXISTING SIGNAL POLE
 - EXISTING BRACKET MOUNTED FACEPLATE
 - EXISTING MAST ARM MOUNTED FACEPLATE
 - EXISTING TRAFFIC SIGNAL CONTROLLER
 - EXISTING HANDHOLE
 - EXISTING CONDUIT

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

EXISTING TRAFFIC SIGNALS

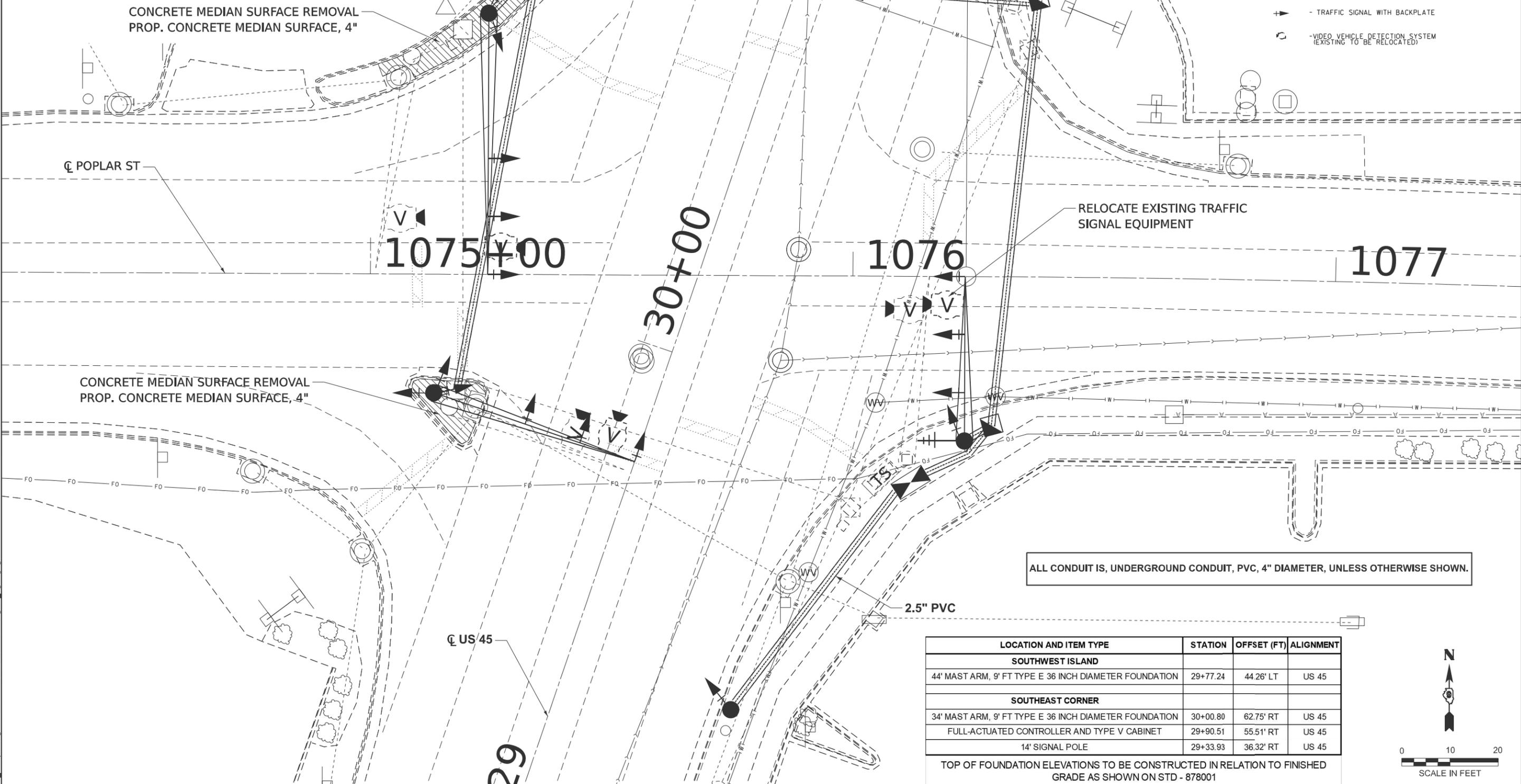
SCALE:	SHEET 8	OF 17	SHEETS	STA.	TO STA.
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	8
CONTRACT NO. 78B06				
ILLINOIS FED. AID PROJECT				

LOCATION AND ITEM TYPE	STATION	OFFSET (FT)	ALIGNMENT
NORTHWEST CORNER			
54' MAST ARM, 9' FT TYPE E 36 INCH DIAMETER FOUNDATION	30+54.64	57.22' LT	US 45
NORTHEAST CORNER			
44' MAST ARM, 9' FT TYPE E 36 INCH DIAMETER FOUNDATION	30+97.54	46.13' RT	US 45

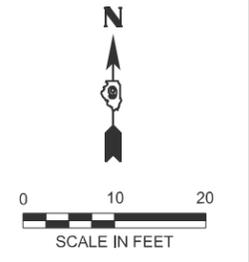
TOP OF FOUNDATION ELEVATIONS TO BE CONSTRUCTED IN RELATION TO FINISHED GRADE AS SHOWN ON STD - 878001

- LEGEND
- FULL-ACTUATED CONTROLLER AND TYPE V CABINET
 - PROPOSED UNDERGROUND CONDUIT, PVC
 - PROPOSED HANDHOLE
 - STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH 45' FIXTURE MOUNTING HEIGHT
 - TRAFFIC SIGNAL POLE
 - RADIO TRANSCIVER
 - TRAFFIC SIGNAL WITH BACKPLATE
 - VIDEO VEHICLE DETECTION SYSTEM (EXISTING TO BE RELOCATED)



LOCATION AND ITEM TYPE	STATION	OFFSET (FT)	ALIGNMENT
SOUTHWEST ISLAND			
44' MAST ARM, 9' FT TYPE E 36 INCH DIAMETER FOUNDATION	29+77.24	44.26' LT	US 45
SOUTHEAST CORNER			
34' MAST ARM, 9' FT TYPE E 36 INCH DIAMETER FOUNDATION	30+00.80	62.75' RT	US 45
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	29+90.51	55.51' RT	US 45
14' SIGNAL POLE	29+33.93	36.32' RT	US 45

TOP OF FOUNDATION ELEVATIONS TO BE CONSTRUCTED IN RELATION TO FINISHED GRADE AS SHOWN ON STD - 878001



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PROPOSED TRAFFIC SIGNALS

SCALE: SHEET 9 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	9
CONTRACT NO. 78B06				
ILLINOIS FED. AID PROJECT				



NOT TO SCALE



DRAWING NOT TO SCALE

NOTES

ALL CABLES SHALL BE A.W.G. #14 UNLESS OTHERWISE NOTED.
ELECTRIC SERVICE IS SUPPLIED BY AMEREN IL.

ELECTRIC CABLE DENOTED AS 2-IC NO. 6, 1/C NO. 8 BEING INSTALLED TO THE COMBINATION MAST ARM POLES SHALL NOT GO THROUGH THE TERMINAL BLOCK BUT SHOULD BE SPLICED IN POLE. SEE STEEL COMB. MAST ARM ASSEMBLY AND POLE DETAIL.

PROPOSED COAXIAL CABLE AND ANTENNA INCLUDED IN THE COST OF RADIO TRANSCEIVER.

ALL SIGNAL LENSES SHALL BE 12 INCHES.

SEE LIGHTING DETAIL SHEETS FOR THE ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

LEGEND

SIGNAL HEAD, LED, I-FACE, 3 SECTION, MAST ARM MOUNTED (W/ TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE)

SIGNAL HEAD, LED, I-FACE, 3 SECTION, BRACKET MOUNTED (W/ TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE)

SIGNAL HEAD, LED, I-FACE, 4 SECTION, MAST ARM MOUNTED (W/ TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE)

SIGNAL HEAD, LED, I-FACE, 4 SECTION, BRACKET MOUNTED (W/ TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE)

- 12" TRAFFIC SIGNAL SECTION. - SOLID RED
- 12" TRAFFIC SIGNAL SECTION. - SOLID YELLOW
- 12" TRAFFIC SIGNAL SECTION. - SOLID GREEN
- 12" TRAFFIC SIGNAL SECTION. - LEFT TURN RED
- 12" TRAFFIC SIGNAL SECTION. - LEFT TURN YELLOW
- 12" TRAFFIC SIGNAL SECTION. - LEFT TURN GREEN
- 12" TRAFFIC SIGNAL SECTION. - RIGHT TURN RED
- 12" TRAFFIC SIGNAL SECTION. - RIGHT TURN YELLOW

VIDEO/RADAR DETECTION SENSOR TO BE PAID FOR AS VIDEO VEHICLE DETECTION SYSTEM, AND RADAR VEHICLE DETECTION SYSTEM

TERMINAL BLOCK

SINGLE LUMINAIRE. NUMBER INDICATED ON DRAWING DENOTES FIXTURE NUMBER

TRAFFIC SIGNAL CONTROLLER CABINET

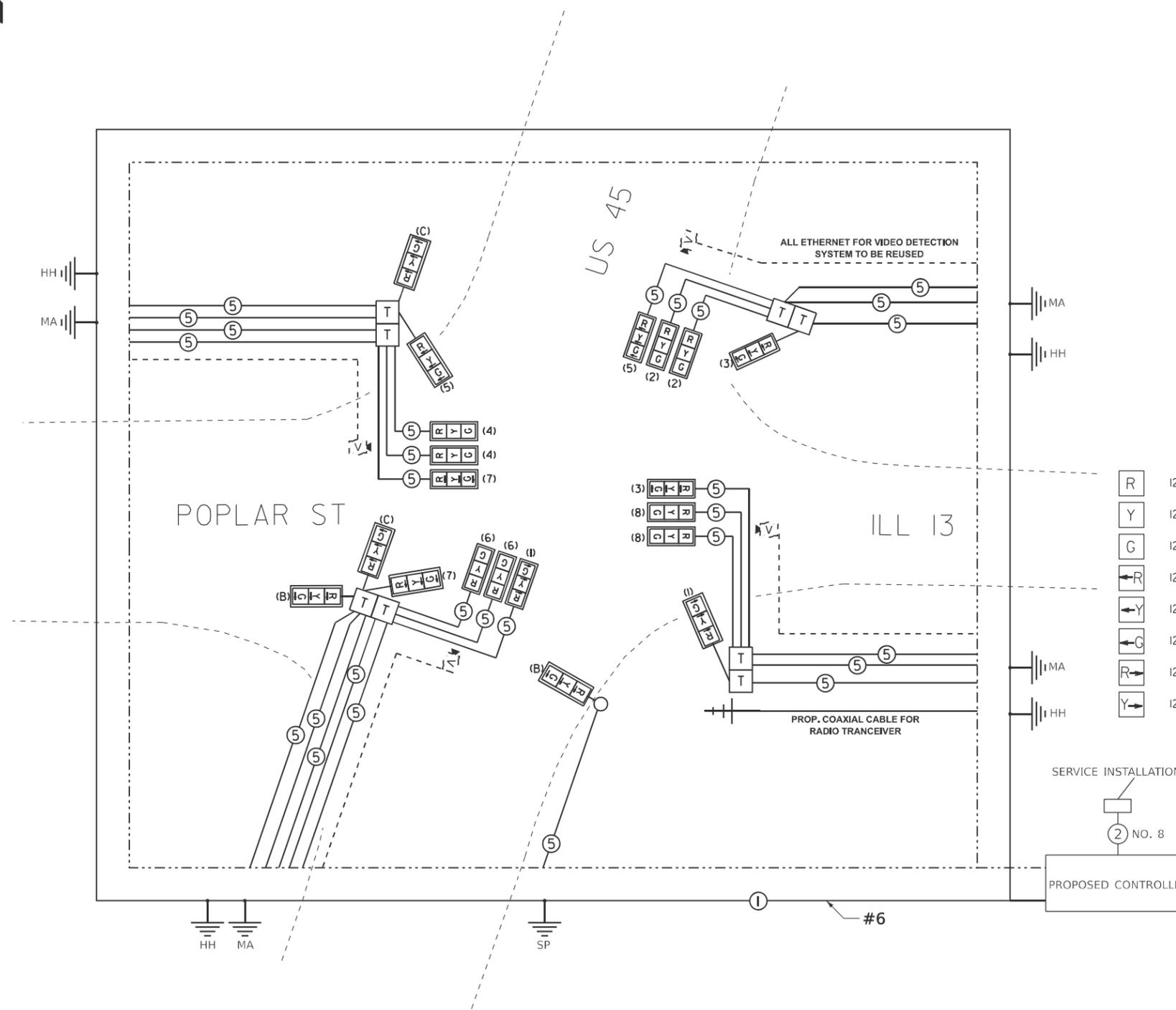
NUMBER IN CIRCLE INDICATES NUMBER OF CONDUCTORS IN THAT CABLE

NUMBER IN PARENTHESIS INDICATES PHASE

MA - MAST ARM

HH - HANDHOLE

SP - SIGNAL POLE



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED WIRING DIAGRAM

SCALE: SHEET 10 OF 17 SHEETS STA. TO STA.

F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	10
CONTRACT NO. 78B06				
ILLINOIS FED. AID PROJECT				

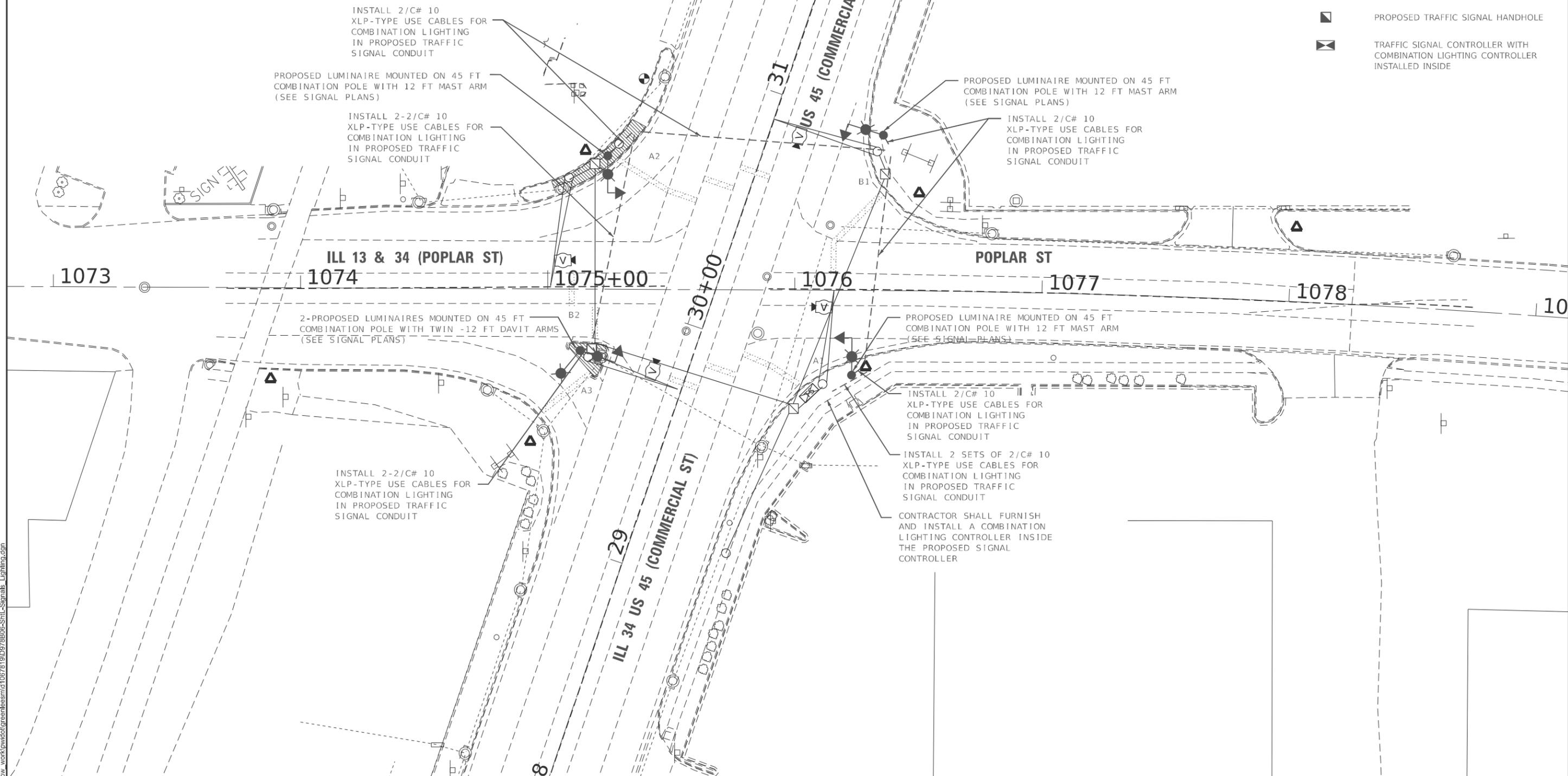
FAP 132/FAP 332/FAS 899

LIGHTING QUANTITY
ILL 13 & 34 (POPLAR ST) AT US 45 (COMMERCIAL ST)

ITEM	UNIT	TOTAL QUANTITY
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	5
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1968
COMBINATION LIGHTING CONTROLLER	EACH	1

PLAN LEGEND

- PROP LED COBRAHEAD COMBINATION LUMINAIRE ON 12' ARM MOUNTED AT 45'
- 2-PROP LED COBRAHEAD COMBINATION LUMINAIRES ON TWIN 12' ARMS MOUNTED AT 45'
- PROPOSED COMBINATION LIGHTING CABLES IN TRAFFIC CONDUIT SIGNAL
- EXISTING TRAFFIC SIGNAL HANDHOLE
- PROPOSED TRAFFIC SIGNAL HANDHOLE
- TRAFFIC SIGNAL CONTROLLER WITH COMBINATION LIGHTING CONTROLLER INSTALLED INSIDE



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING

SCALE: SHEET 11 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	11
CONTRACT NO. 78B06				
ILLINOIS FED. AID PROJECT				

Project

Date	Contract Number	Section Number	County
2/11/25	78B06	42X-I	SALINE

Marked Route Number	Municipality
US RTE 45	HARRISBURG

Roadway

Lane Width (see note 4)	Number and Direction of lanes	Median Width	Surface Classification	Q-Zero Value
12'	6 in one direction	N/A	R3	0.07

Structure

Mounting Height	Arm Length	Set-Back (see note 1)	Number of Luminaires
45'	12'	6'	N/A

Luminaire

Description	Transverse Distribution	Lateral Distribution
LUMINAIRE, LED, ROADWAY, DES. G	TYPE II	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
170'	STAGGERED

Performance (see notes 5 and 6)

Average Illuminance, E_{AVE} (fc)	Uniformity Ratio, E_{AVE}/E_{MIN}
1.7	3.0

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}
N/A	N/A	N/A	N/A

Light Trespass (see notes 5 and 7)

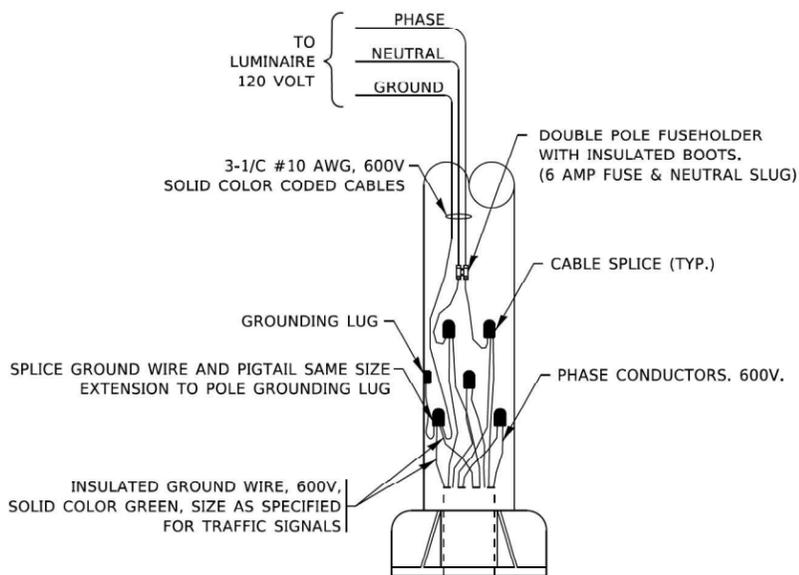
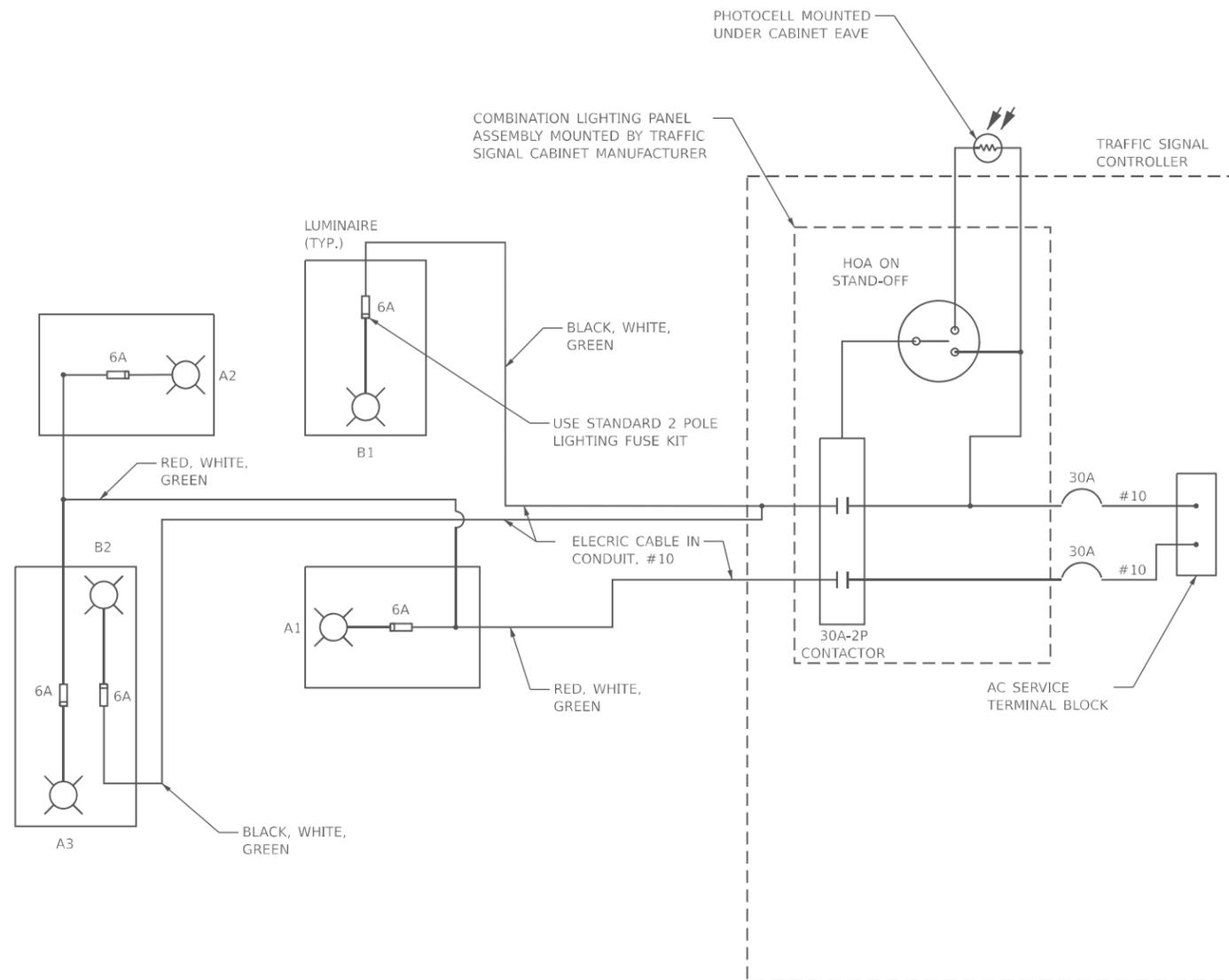
Distance to ROW (behind pole)	Max. Horizontal Illuminance at ROW, E_H	Max. Vertical Illuminance at ROW, E_v
N/A	N/A	N/A

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 10/10/24

BDE 5630 (Rev. 06/06/24)



NOTES

- 4 LUMINAIRES PER CIRCUIT, MAXIMUM.
- TWO #10 (XLP-TYPE USE) CABLES TO BE USED FOR LIGHTING CIRCUITS.
- ROUTE LIGHTING CIRCUITS IN TRAFFIC SIGNAL CONDUIT SYSTEM.
- ALL SPLICES AND CONNECTIONS FOR ROADWAY LIGHTING SHALL BE AT POLE BASE ONLY.
- FOR LIGHTING CIRCUITS, CONNECT TWO CIRCUIT BREAKERS TO AC SERVICE TERMINAL BLOCK.
- ALL WIRING SHALL BE NEATLY DRESSED, IDENTIFIED BY TAGS, AND SUPPORTED. (UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT PERMITTED).
- THE H.O.A. SWITCH SHALL BE LABELED AS "LIGHTING CONTROL" WITH THE POSITIONS "AUTO", "OFF" AND "TEST" WITH ENGRAVED NAME PLATES.
- LIGHTING CONNECTED TO UPS BYPASS CIRCUIT WHERE UPS IS INSTALLED.
- COMBINATION LIGHTING MUST BE INSTALLED PRIOR TO SIGNAL TURN ON.
- LUMINAIRE VOLTAGE SHALL BE 120V.
- POLE WIRING & FUSE KITS ARE INCLUDED IN THE LUMINAIRE PAY ITEM.
- THE UNDERGROUND EQUIPMENT GROUND WIRE IS SHOWN IN THE TRAFFIC SIGNAL PLANS AND IS INCLUDED IN THE SIGNAL PLANS. IT IS SHARED GROUND BETWEEN SIGNALS AND LIGHTING.

COMBINATION POLE WIRING DETAIL

(NOT TO SCALE)

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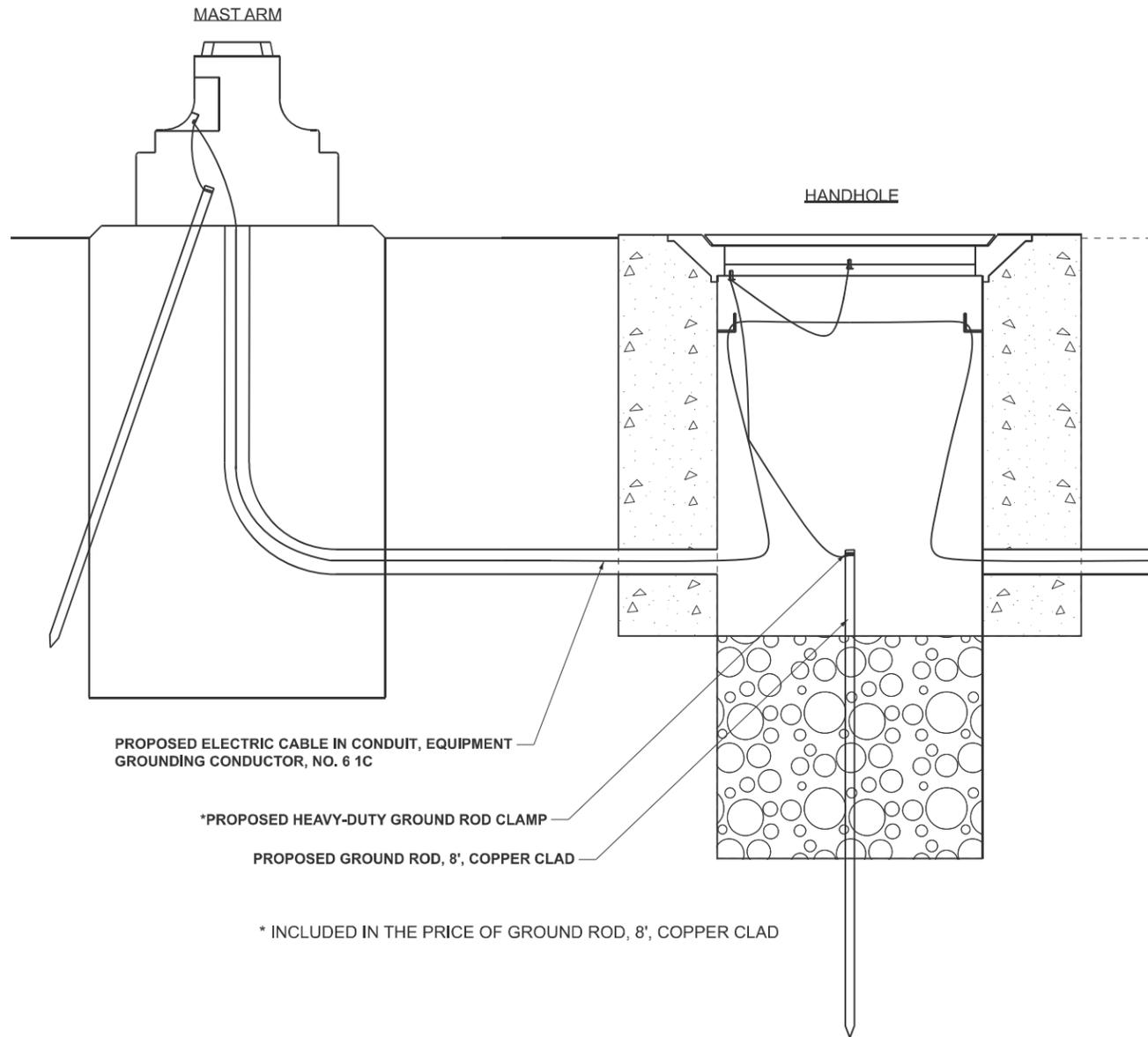
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING WIRING DIAGRAM AND
LUMINAIRE PERFORMANCE TABLE

SCALE: SHEET 12 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	12
CONTRACT NO. 78B06				
ILLINOIS FED. AID PROJECT				

HANDHOLE AND MAST ARM GROUNDING



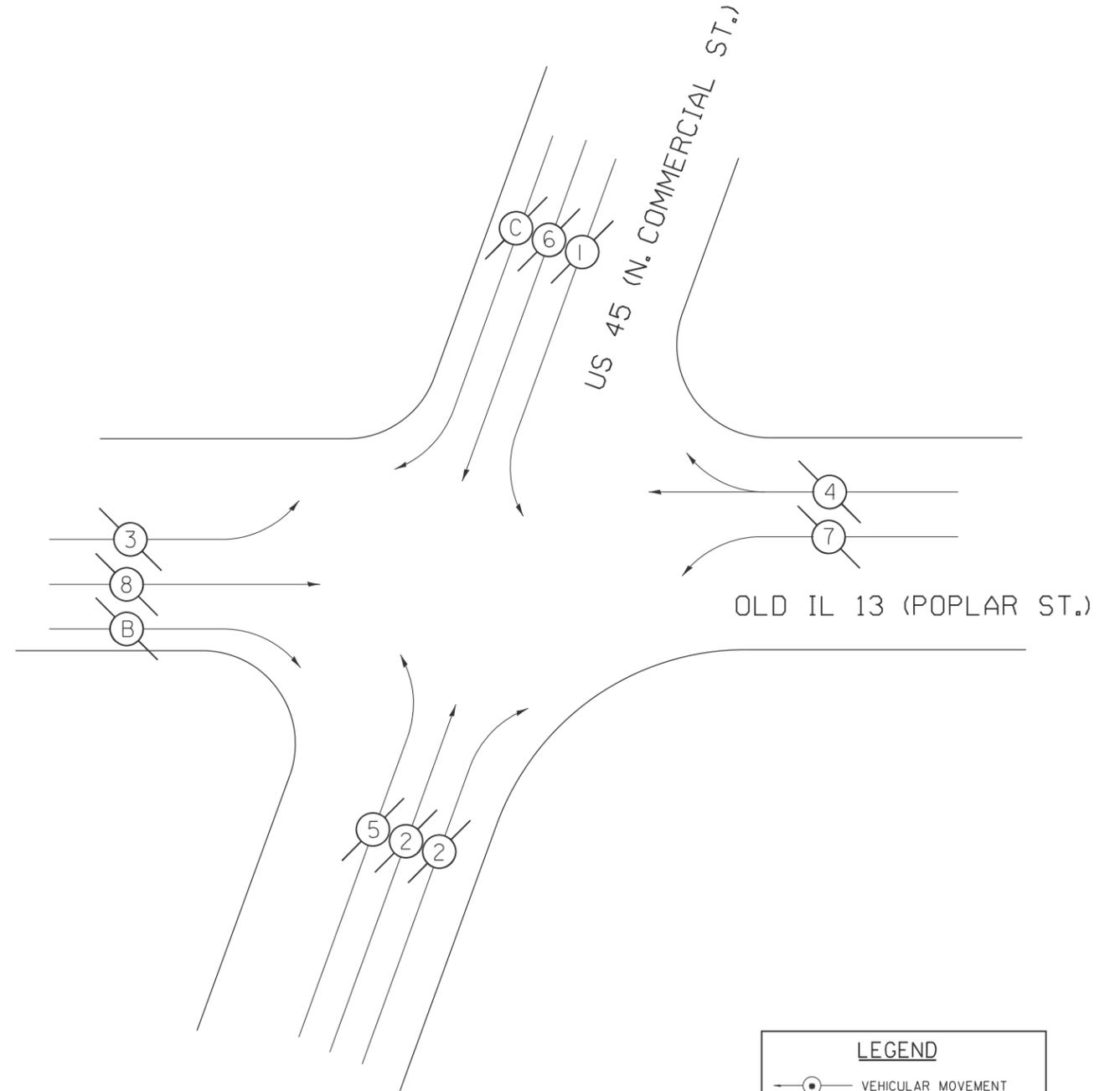
PROPOSED ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C

*PROPOSED HEAVY-DUTY GROUND ROD CLAMP

PROPOSED GROUND ROD, 8', COPPER CLAD

* INCLUDED IN THE PRICE OF GROUND ROD, 8', COPPER CLAD

PHASE DESIGNATION DIAGRAM OLD IL 13 & US 45



LEGEND

● — VEHICULAR MOVEMENT

* NUMBER REFERS TO ASSOCIATED PHASE

REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED AS SHOWN.

MODEL: Detail-1 (Sheet)
FILE NAME: c:\p\work\pwr\greenlee\smid1067819\0978B06-Signals-Districts.dgn

USER NAME = sean.greenlee	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/26/2025	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HANDHOLE AND MAST ARM GROUNDING,
SIGNAL PHASE DIAGRAM**

SCALE: SHEET 13 OF 17 SHEETS STA. TO STA.

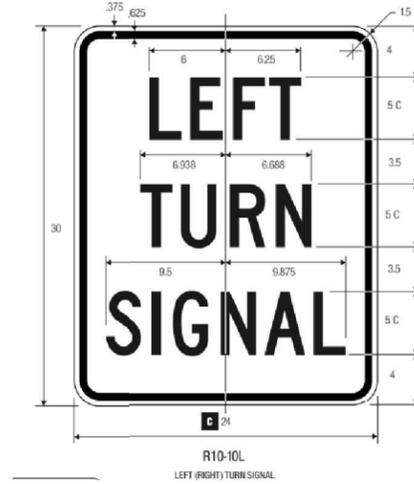
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	13
CONTRACT NO. 78B06				
ILLINOIS FED. AID PROJECT				

SIGN DETAILS

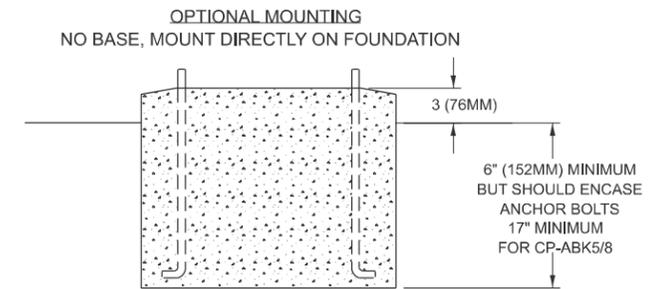
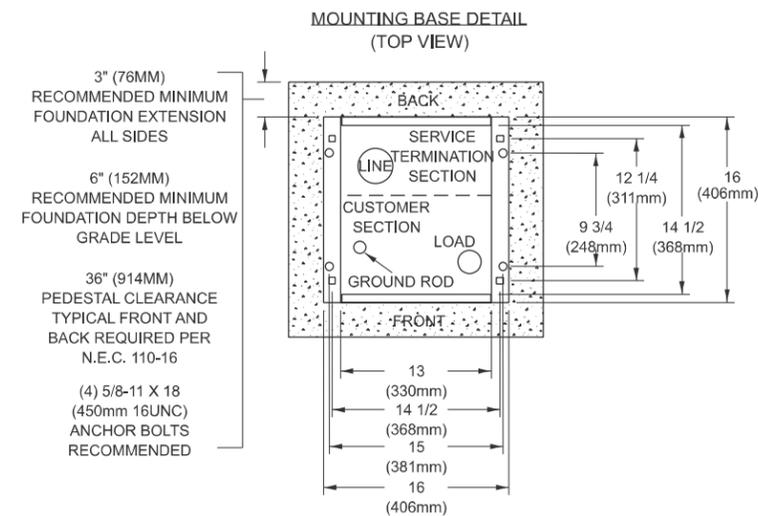
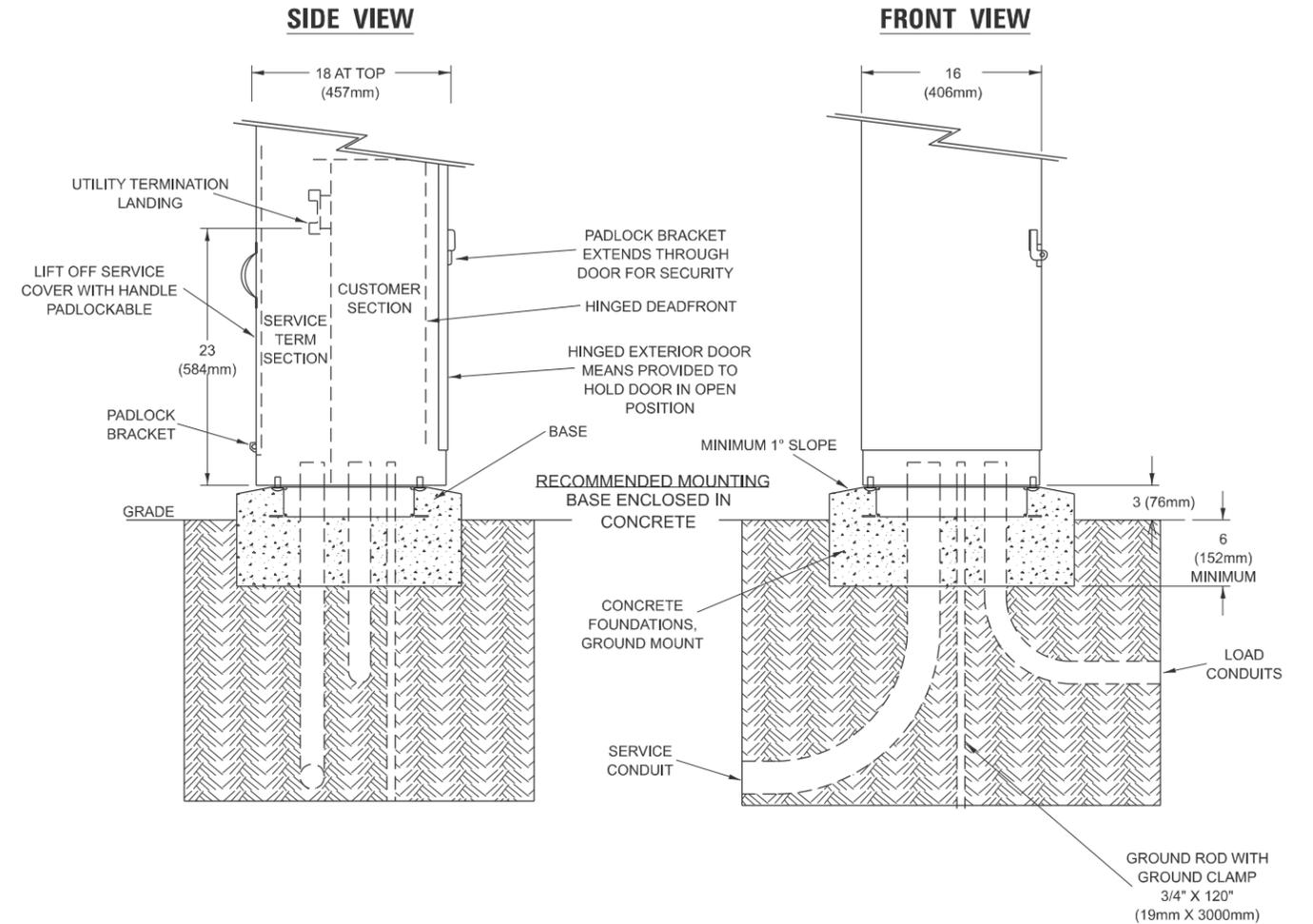
"Poplar St" SIGN
48" X 18" SIGN, 8" LETTERS, FONT T2000 HWYC
BORDER 0.7" EDGE TO EDGE WITH 1.75" RADIUS



"Commercial St" SIGN
60" X 18" SIGN, 8" LETTERS, FONT T2000 HWYC
BORDER 0.7" EDGE TO EDGE WITH 1.75" RADIUS



CABINET FOR SERVICE INSTALLATION GROUND MOUNT AND CONCRETE FOUNDATIONS, GROUND MOUNT



- PEDESTAL MOUNTING HOLES
- ANCHOR BOLT MOUNTING HOLES

DRAWN	03-02-22
REVISION	05-27-22
REVISION	
REVISION	

STD. 9-27

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SIGN DETAILS, CABINET FOR SERVICE INSTALLATION
GROUND MOUNT AND CONCRETE FOUNDATIONS, GROUND MOUNT**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	14
CONTRACT NO. 78B06				

SCALE: SHEET 14 OF 17 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

FAP 132/FAP 332/FAS 899

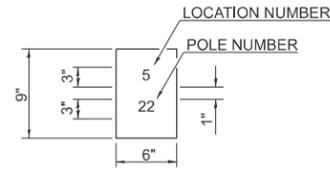
MODEL: Detail-4 (Sheet)
FILE NAME: c:\p\work\pwr\greenlee\sm1067819\0978B06-Sign-DistricStds.dgn

USER NAME	= sban.greenlee	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	= 3/25/2025	DATE	-	REVISED	-

POLE STANDARDS

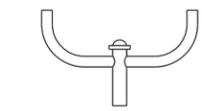
"INSTALL AND ORIENT ARM BRACKET OVER POLE TENON AND FIRMLY HAND TIGHTEN THE TWO SET SCREWS. USE THIRD HOLE IN ARM BRACKET AS A GUIDE TO DRILL A 2 1/4" DIAMETER HOLE THROUGH TENON. INSTALL AND TIGHTEN SELF-TAPPING SCREW. TIGHTEN SET SCREWS AN ADDITIONAL 1/4 TO 3/8 TURN WITH HEX KEY (NOT PROVIDED). INSTALL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

POLE SHALL MEET AASHTO STANDARD SPECIFICATIONS FOR 80 MPH WIND LOADING AND 90 LB, 4.0 SQ. FT E.P.A. LUMINAIRE.

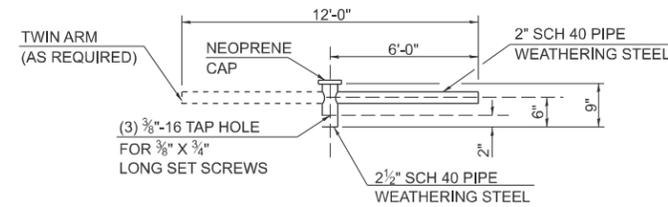


THE CONTRACTOR SHALL FURNISH AND INSTALL A LIGHT POLE IDENTIFICATION OF EACH NEW LIGHT POLE, AS SHOWN ABOVE, INCIDENTAL TO THE RESPECTIVE LIGHT POLE PAY ITEM IN ACCORDANCE WITH ART. 1069.06

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.

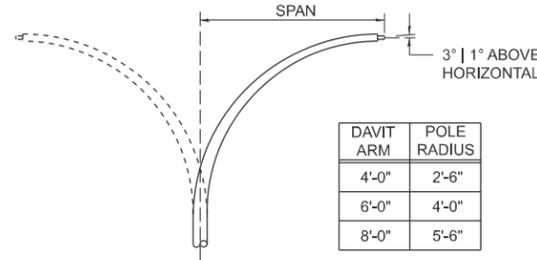


TWIN TENON



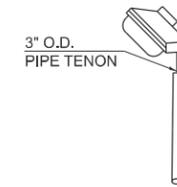
TENON MOUNT BRACKET ARM

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

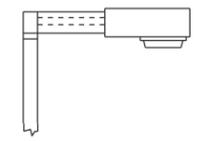


DAVIT ARM (AND OR)

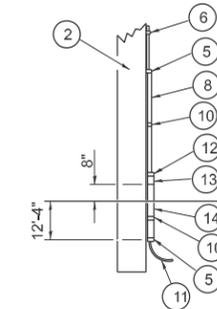
DAVIT ARM-TWIN



TENON



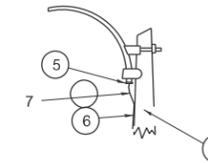
SHORT BRACKET



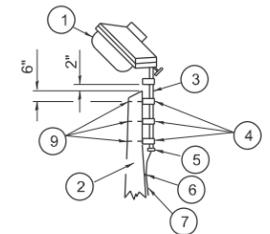
DETAILS FOR UNDERGROUND DISTRIBUTION IF REQUIRED

POLE, WOOD

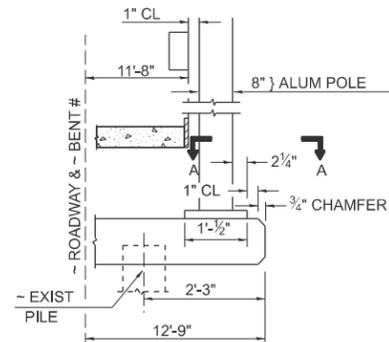
POLE LENGTH	DEPTH IN GROUND
65'-0"	12'-0"
60'-0"	10'-0"
55'-0"	9'-0"
50'-0"	8'-0"
45'-0"	7'-0"
40'-0"	6'-6"
35'-0"	6'-0"
30'-0"	5'-6"



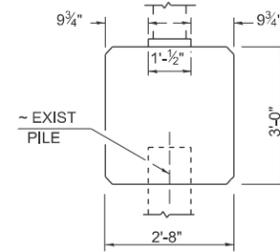
MAST ARM



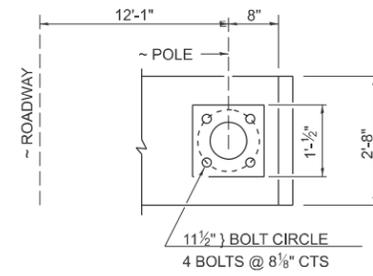
TENON



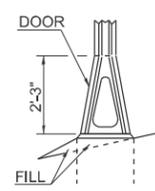
BENT #
(LOOKING)



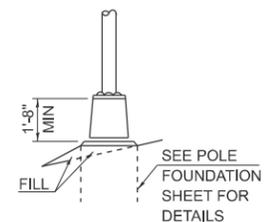
BRIDGE PIER MOUNT



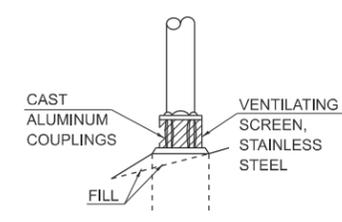
SECTION A-A



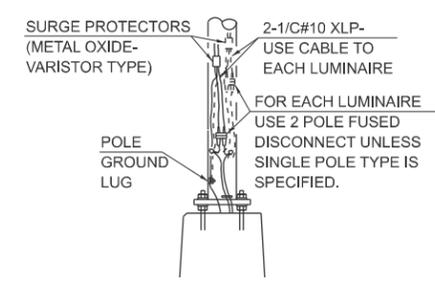
STAINLESS STEEL FLAIR BASE



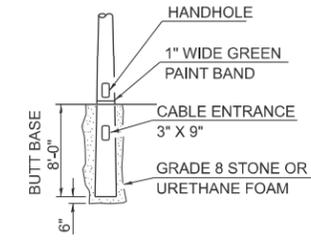
TRANSFORMER BASE
 FRANGIBLE



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 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.

STD. 9-12

DRAWN	02-09-01
REVISED	05-06-08
REVISED	10-21-21
REVISED	05-04-22

MODEL: Detail-5 (Sheet) FILE NAME: c:\p\work\wv\wv\greenlee\std1067819\0978B06-Sht5-DistricStds.dgn

USER NAME = sban.greenlee	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/26/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

POLE STANDARDS

SCALE: SHEET 15 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(29X,8X)TS-2	SALINE	17	15
CONTRACT NO. 78B06				
ILLINOIS FED. AID PROJECT				

