

FOR INDEX OF SHEETS, SEE SHEET NO. 3

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-6

**TRAFFIC DATA**

IL 13 EAST OF IL 127: 13,300 – 16,600

IL 127 NORTH OF IL 13: 8,700 – 10,500

**TOWNSHIP**CARBONDALE  
MURPHYSBORO**POSTED SPEED**

IL ROUTE 13: 40-55 MPH

IL ROUTE 127: 45 MPH



10-10-2024

P. BRIEN FUNK II  
EXPIRES: 11-30-2025

DATE

**iteris**ITERIS, INC.  
319 W STATE STREET, SUITE 200  
GENEVA, IL 60134

IL DESIGN FIRM NO: 184007145-0002

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811PROJECT ENGINEER SUSAN POE  
PROJECT DESIGNER SUSAN POE

CONTRACT NO. 78998

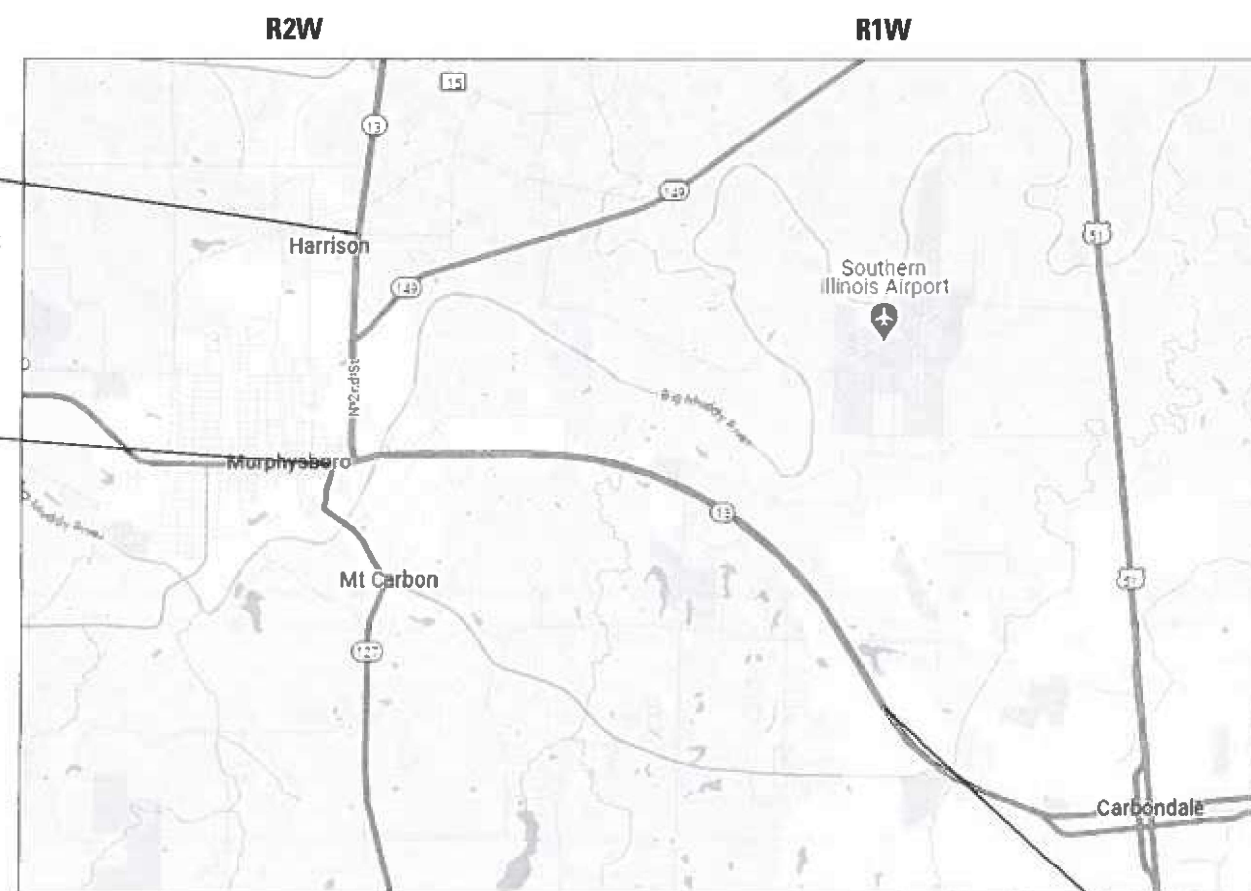
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
**PROPOSED  
HIGHWAY PLANS**

FAP ROUTE 331 (IL 13)  
FAP ROUTE 42 (IL 127)

SECTION D9 TRAFFIC SIGNAL 2024-1

TRAFFIC SIGNAL IMPROVEMENT  
JACKSON COUNTY

C-99-045-23

GROSS LENGTH = 16.5 MILES  
NET LENGTH = 16.5 MILESPROJECT LIMIT  
INTERSECTION OF  
IL 13 AND STRIEGEL RD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	1
		ILLINOIS	CONTRACT NO. 78998	

D-99-032-23



LOCATION OF SECTION INDICATED THUS: —

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATIONSUBMITTED October 11 20 24Kirk H. Brown

REGION FIVE ENGINEER

December 6, 2024

ENGINEER OF DESIGN AND ENVIRONMENT

December 6, 2024

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	2
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

Prepared By: Susan R  
DISTRICT STUDIES & PLANS ENGINEER

Examined By: Nancy Lee  
DISTRICT LAND ACQUISITION ENGINEER

Examined By: Car Miller  
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: D. C. C.  
DISTRICT OPERATIONS ENGINEER

Examined By: Dan J. Theis  
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: Brian Wilk  
DISTRICT CONSTRUCTION ENGINEER

Examined By: Ann Harg  
DISTRICT MATERIALS ENGINEER



INDEX OF SHEETS

1	COVER SHEET
2	SIGNATURE SHEET
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7	LOCATION MAP
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46	FIBER OPTIC MARKER, SPLICE, AND GROUNDING DETAIL

IDOT HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15’ TO 24’’ FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15’ AWAY
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, SPEEDS ≥ 45 MPH TO 55 MPH
701422-10	LANE CLOSURE, MULTILANE, SPEEDS ≥ 45 MPH TO 55 MPH
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-10	TRAFFIC CONTROL DEVICES
001006	DECIMAL OF AN INCH AND OF A FOOT
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814006-03	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
878001-11	CONCRETE FOUNDATION DETIALS

GENERAL NOTES

1. THE LOCATIONS FOR COMMUNICATION VAULTS ARE PROVIDED FOR REFERENCE ONLY. THE ENGINEER OF TRAFFIC SHALL BE NOTIFIED FOR LOCATION VERIFICATION BEFORE INSTALLATION.
2. THE EXISTING TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED CONDUIT AND FIBER OPTIC CABLE.
3. THERE SHALL BE NO ADDITIONAL SPLICES IN THE FIBER OPTIC CABLE EXCEPT WHERE NOTED IN THE PLANS, OR UPON APPROVAL OF THE ENGINEER.
4. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN THE REQUIRED MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES. LOCATIONS OF ANTICIPATED GREATER THAN MINIMUM DEPTH CONDUIT ARE NOTED IN THE PLANS.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES OF THE CONDUIT.
6. THE LOCATION OF THE PROPOSED CONDUIT AS SHOWN IN THE PLAN SHEETS IS APPROXIMATE. THE CONDUIT SHALL BE INSTALLED AT A 36’’ MINIMUM DEPTH INCLUDING CROSSING DRAINAGE FLOW LINES, EXCEPT AS NOTED IN THE PLANS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING FIELD TILES, UNDERDRAINS, AND DRAINAGE STRUCTURE LOCATIONS. THE CONTRACTOR SHALL MAKE AN EFFORT TO MINIMIZE DAMAGE TO THESE FACILITIES DURING INSTALLATION OF CONDUIT AND COMMUNICATIONS VAULTS. IN THE EVENT ANY OF THESE FACILITIES ARE DAMAGED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING REPAIRS AND RESTORE FUNCTIONALITY TO THE SATISFACTION OF THE ENGINEER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MOWING, BRUSH AND SHRUB REMOVAL, AND SMALL TREE (10’’ DIAMETER OR LESS) REMOVAL REQUIRED TO INSTALL THE PROPOSED CONDUIT AND COMMUNICATIONS VAULTS. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED ITEMS OFF THE JOB SITE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE CONDUIT PAY ITEM.

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DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS, HIGHWAY STANDARDS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	3
CONTRACT NO. 78998				
		ILLINOIS	FED. AID PROJECT	

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COUNTY :				JACKSON
ROUTE :				FAP 331 ( IL 13 )
FUNDING :				100% STATE
LOCATION :				URBAN
CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	
				0021
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12
67100100	MOBILIZATION	L SUM	1	1
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	1
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1	1
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1
80300100	LOCATING UNDERGROUND CABLE	FOOT	2000	2000
80500010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	3	3
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	408	408
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	23	23
81028740	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA.	FOOT	36294	36294
81702450	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	166	166
85700300	FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	7	7
86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	5	5



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	4
CONTRACT NO. 78998				
		ILLINOIS	FED. AID PROJECT	

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COUNTY :				JACKSON
ROUTE :				FAP 331 (IL 13)
FUNDING :				100% STATE
LOCATION :				URBAN
CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	
				0021
87301815	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	166	166
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	5116	5116
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	3	3
87900100	DRILL EXISTING FOUNDATION	EACH	14	14
89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	4	4
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	8	8
X0328016	TRAFFIC COUNT DATA COLLECTION SYSTEM	EACH	1	1
X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	120	120
X1400307	HQ FIBER OPTIC CONNECTIVITY	L SUM	1	1
X1400499	SIGNAL PERFORMANCE MEASURES SERVICE	EACH	1	1
X1400500	COMMUNICATIONS VAULT, 24"X36"	EACH	25	25
X1400501	COMMUNICATIONS VAULT, 48"X48"	EACH	6	6
X1700066	POTHOLING	EACH	200	200
X7340100	CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	1.5	1.5
X8100105	CONDUIT SPLICE	EACH	3	3
X8710010	FIBER LAYOUT	L SUM	1	1



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	5
CONTRACT NO. 78998				
		ILLINOIS	FED. AID PROJECT	

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			COUNTY :	JACKSON
			ROUTE :	FAP 331 (IL 13)
			FUNDING :	100% STATE
			LOCATION :	URBAN
CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	
				0021
X8710030	FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	38525	38525
X8710036	FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	1275	1275
X8710094	FIBER OPTIC INTERCONNECT CENTER, 48 PORT	EACH	3	3
X8710101	ETHERNET MANAGE SWITCH	EACH	1	1
X8710103	ETHERNET SWITCH	EACH	6	6
X8710304	FIBER OPTIC CABLE SPLICE - LATERAL	EACH	7	7
X8710306	FIBER OPTIC CABLE SPLICE - MAINLINE	EACH	4	4
X8710318	FIBER OPTIC UTILITY MARKER	EACH	91	91
X8891301	VIDEO AND RADAR HYBRID DETECTION SYSTEM	EACH	7	7
XP000179	GROUND ROD, 8', COPPER CLAD	EACH	50	50
X0322921	INSTALL COMMUNICATIONS CABINET	EACH	1	1

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	6
CONTRACT NO. 78998				
		ILLINOIS	FED. AID PROJECT	



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SUMMARY OF LOCATIONS

NO.	SHEET	INTERSECTION/INTERCONNECT
1	8	IL ROUTE 13 AND STRIEGEL ROAD
2	10	IL ROUTE 13 AND COUNTRY CLUB ROAD
3	12	IL ROUTE 13 AND WATSON ROAD
4	14	IL ROUTE 13 AND WILLIAMS STREET
5	16	IL ROUTE 13 AND IL ROUTE 127 / 149 (2ND STREET)
6	19	IL ROUTE 149 AND IL ROUTE 127 (5TH STREET)
7	21	IL ROUTE 13 AND IL ROUTE 127 / 149 (6TH STREET)
8	23	IL ROUTE 13 / 127 AND INDUSTRIAL PARK DRIVE



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LOCATION MAP

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	7
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

NOTES:

- CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
- VIDEO DETECTION ZONE LAYOUT SHALL BE DRAWN TO PROVIDE FULL SIGNAL PERFORMANCE MEASURES (SPM) CAPABILITIES.
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.

TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- PROPOSED BATTERY BACKUP SYSTEM
- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- VIDEO/RADAR DETECTION ZONE
- PROPOSED GROUND ROD, 8', COPPER CLAD (IN HANDHOLE)
- PROPOSED ELECTRIC CABLE IN EXISTING CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
- EXISTING HANDHOLE

STA 7+665, 29.92 m RT

50 mm PVC  
20 m A - 20 m T

STA 7+649.000, 10.00 m LT

IL ROUTE 13

17+600

17+650

17+700

17+750

STA 7+689.001, 9.50 m LT

STA 7+680.000, 9.81 m RT

STA 0+987.500, 8.80 m RT

40 mm PVC  
10 m T

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- |   |      |                         |
|---|------|-------------------------|
| 1 | EACH | DIAL UP MODEM           |
| 8 | EACH | INDUCTIVE LOOP DETECTOR |

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY DELIVER THE EQUIPMENT TO IDOT CARBONDALE FACILITY AT THEIR EXPENSE. CONTACT IDOT ELECTRICAL MAINTENANCE FOR LOCATION AND TIME.

- |   |      |  |
|---|------|--|
| 1 | EACH | TRAFFIC SIGNAL CABINET                   |
| 1 | EACH | TRAFFIC SIGNAL CONTROLLER                |
| 1 | EACH | UNINTERRUPTABLE POWER SUPPLY AND CABINET |

RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CONTROLLER AND CABINET. THIS WORK SHALL BE PAID FOR UNDER "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- |   |      |                |
|---|------|----------------|
| 1 | EACH | NETWORK SWITCH |
|---|------|----------------|

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 13 AND STRIEGEL ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	8
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	621
DRILL EXISTING FOUNDATION	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO AND RADAR HYBRID DETECTION SYSTEM	EACH	1
GROUND ROD, 8', COPPER CLAD	EACH	5

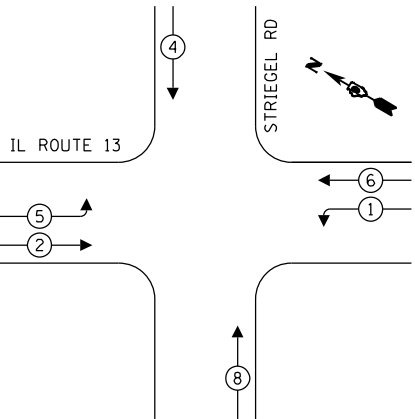
LEGEND

- INDICATES POLYCARBONATE SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED.
- INDICATES POLYCARBONATE SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED
- INDICATES 3 SECTION POLYCARBONATE SIGNAL HEAD WITH BACK PLATE, MAST ARM MOUNTED.
- INDICATES TERMINAL BLOCK IN MAST ARM POLE BASE (SEE SPECIAL PROVISIONS) SEE NOTE NO. 1.
- INDICATES 1.8 m x 1.8 m DETECTOR LOOP WITH 50mm CORE DRILLED CORNERS.
- INDICATES 1.5 m x 1.5 m DETECTOR LOOP WITH 50 mm CORE DRILLED CORNERS. THESE LOOPS REQUIRE AMPLIFIERS WITH SYSTEM OUTPUT
- INDICATES 2/C TWISTED, SHIELDED CABLE IN CONDUIT.
- NUMBER IN CIRCLE INDICATES NUMBER OF CONDUCTORS IN THAT CABLE.
- INDICATES MULTIPLE CABLES.
- NUMBER IN PARENTHESIS INDICATES PHASE.
- NUMBER INDICATES PHASE: LETTER OR LETTERS IDENTIFY AMPLIFIER.
- NOTE: ALL CABLES SHALL BE A.W.G. #14 UNLESS OTHERWISE NOTED.
- 50 mm PROPOSED PVC CONDUIT. NUMBER INDICATES DIAMETER OF CONDUIT.

TRAFFIC SIGNAL LEGEND

- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- PROP. ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO 6 1C
- MA MAST ARM
- SP SIGNAL POST
- HH HANDHOLE

EXISTING CONTROLLER SEQUENCE



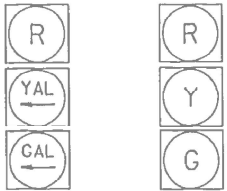
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN  
IL ROUTE 13 AND STRIEGEL ROAD

TRAFFIC SIGNAL FACES



TO BE USED:  
(1,5)

TO BE USED:  
(2,4,6,8,)

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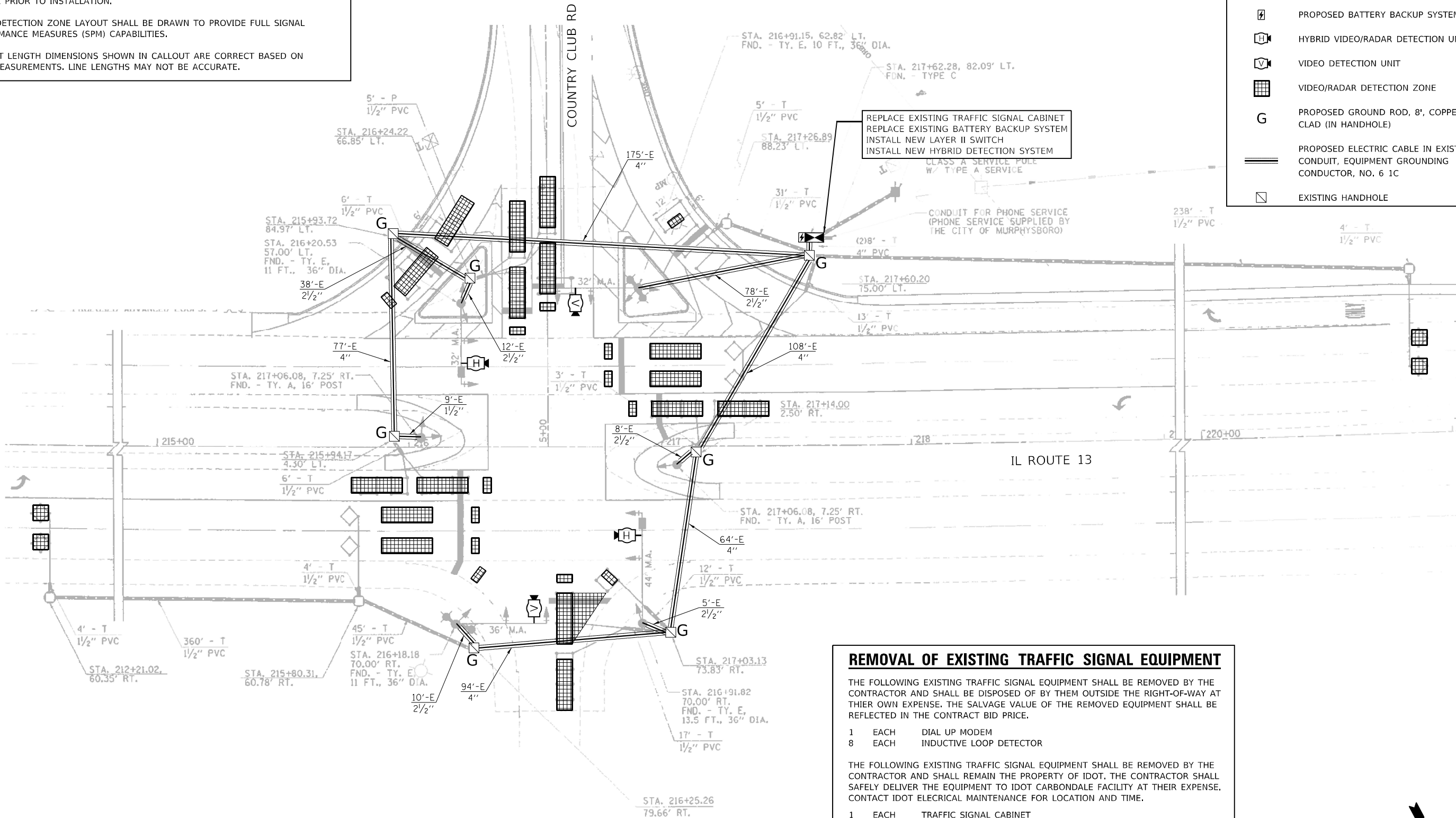
F.A.P. RTE. 331/42	SECTION D9 TRAFFIC SIGNAL 2024-1	COUNTY JACKSON	TOTAL SHEETS 46	SHEET NO. 9
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

NOTES:

- CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
- VIDEO DETECTION ZONE LAYOUT SHALL BE DRAWN TO PROVIDE FULL SIGNAL PERFORMANCE MEASURES (SPM) CAPABILITIES.
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.

TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- PROPOSED BATTERY BACKUP SYSTEM
- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- VIDEO/RADAR DETECTION ZONE
- PROPOSED GROUND ROD, 8', COPPER CLAD (IN HANDHOLE)
- PROPOSED ELECTRIC CABLE IN EXISTING CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
- EXISTING HANDHOLE



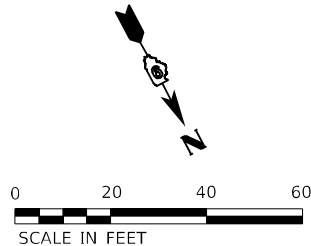
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH DIAL UP MODEM
- 8 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY DELIVER THE EQUIPMENT TO IDOT CARBONDALE FACILITY AT THEIR EXPENSE. CONTACT IDOT ELECTRICAL MAINTENANCE FOR LOCATION AND TIME.

- 1 EACH TRAFFIC SIGNAL CABINET
- 1 EACH TRAFFIC SIGNAL CONTROLLER
- 1 EACH UNINTERRUPTABLE POWER SUPPLY AND CABINET



USER NAME = bfunk  
PLOT SCALE = 100,000' / in.  
PLOT DATE = 10/8/2024

DESIGNED - BF  
DRAWN - BF  
CHECKED - ASG  
DATE - 10/8/24

REVISED -  
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REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 13 AND COUNTRY CLUB ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

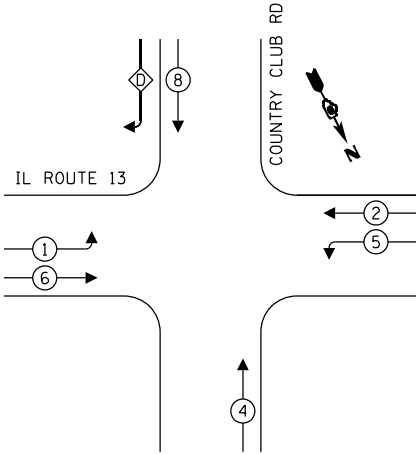
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	10
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL LEGEND

- [H] HYBRID VIDEO/RADAR DETECTION UNIT  
[V] VIDEO DETECTION UNIT  
--- PROP. ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO 6 1C  
MA MAST ARM  
SP SIGNAL POST  
HH HANDHOLE

EXISTING CONTROLLER SEQUENCE



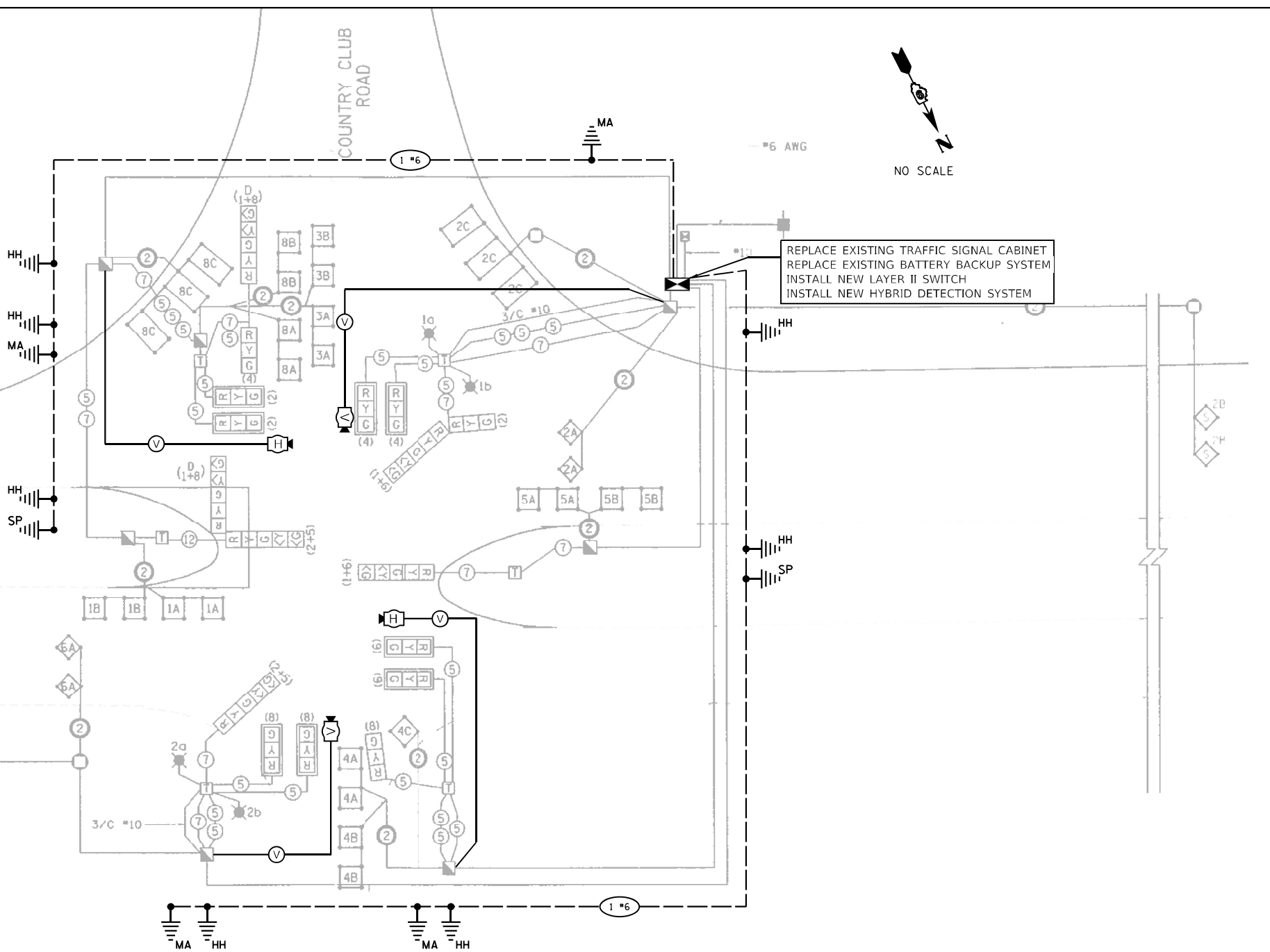
LEGEND:

- ← \* → PROTECTED PHASE  
← \* - - PROTECTED/PERMITTED PHASE  
← \* → PEDESTRIAN PHASE  
← \* OL → OVERLAP

LEGEND

- [T] INDICATES TERMINAL BLOCK IN MAST ARM POLE BASE  
[G] 12" TRAFFIC SIGNAL SECTION  
[R Y G] SIGNAL FACE WITH BACKPLATE  
[ ] TRAFFIC SIGNAL CONTROLLER CABINET  
[ ] HANDHOLE  
[V] VIDEO DETECTION CAMERA  
[ ] SERVICE INSTALLATION, TYPE B  
[ ] LUMINAIRE  
⑦ NUMBER IN CIRCLE INDICATES NUMBER OF CONDUCTORS IN THAT CABLE  
② INDICATES 2/C TWISTED, SHIELDED CABLE IN CONDUIT  
⑤ INDICATES MULTIPLE CABLES  
(4) NUMBER IN PARENTHESIS INDICATES PHASE  
[ ] PROPOSED LIGHT CONTROLLER  
[ ] GULFBOX JUNCTION  
[ ] PROPOSED DETECTOR LOOPS, 6' x 6'  
[ ] PROPOSED ADVANCED LOOPS, 5' x 5'  
②B INDICATES 5' x 5' ADVANCE LOOP: NUMBER INDICATES PHASE, LETTER INDICATES AMPLIFIER, "S" INDICATES SYSTEM LOOP

TRAFFIC SIGNAL CABLE DIAGRAM  
(NOT TO SCALE)



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	816
DRILL EXISTING FOUNDATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ETHERNET SWITCH	EACH	1
VIDEO AND RADAR HYBRID DETECTION SYSTEM	EACH	1
GROUND ROD, 8', COPPER CLAD	EACH	7

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USER NAME = bfunk  
PLOT SCALE = 100,000' / in.  
PLOT DATE = 10/8/2024

DESIGNED - BF  
DRAWN - BF  
CHECKED - ASG  
DATE - 10/8/24

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REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN  
IL ROUTE 13 AND COUNTRY CLUB ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

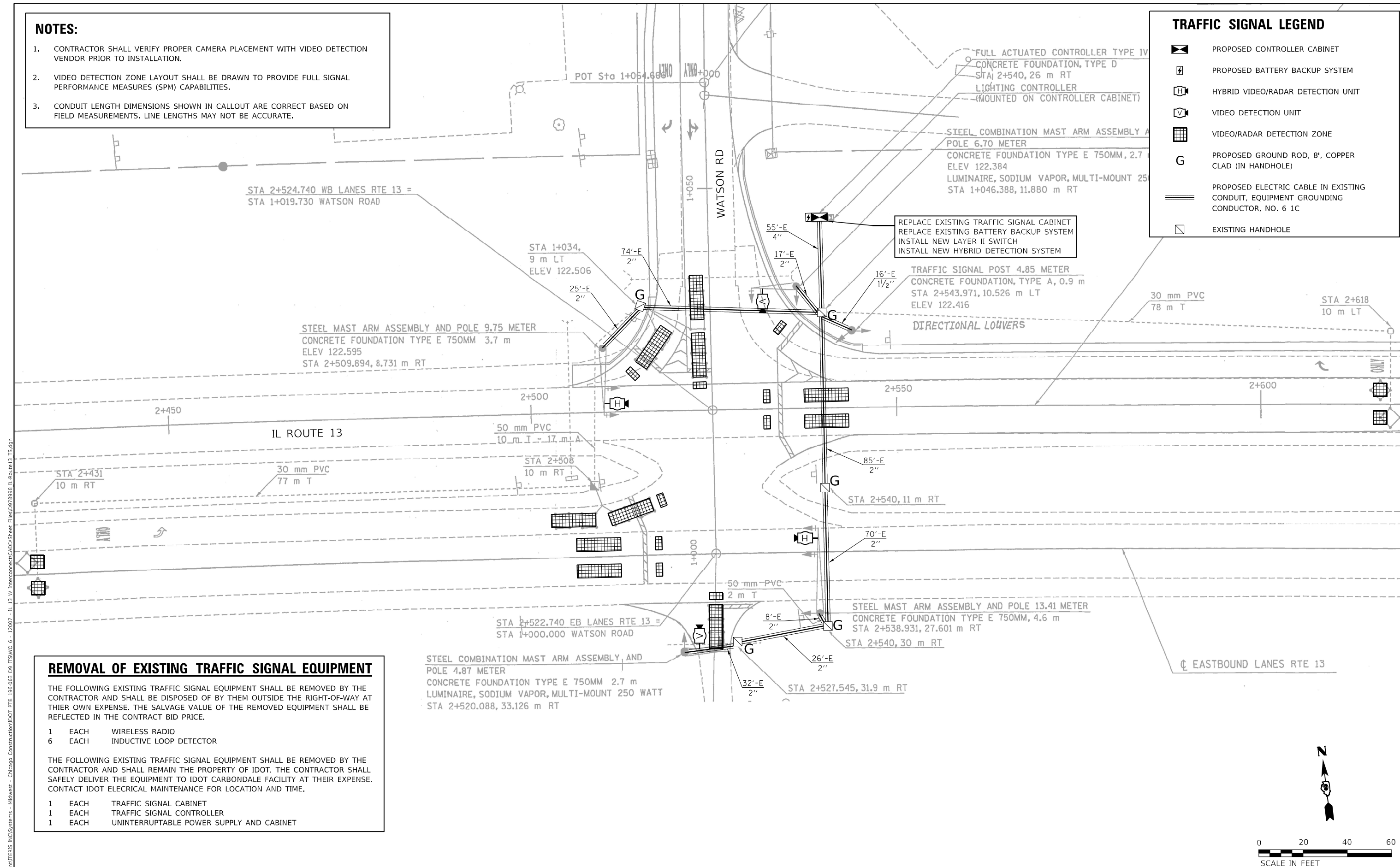
F.A.P. RTE. 331/42 SECTION D9 TRAFFIC SIGNAL 2024-1 COUNTY JACKSON TOTAL SHEETS 46 SHEET NO. 11 CONTRACT NO. 78998 ILLINOIS FED. AID PROJECT

NOTES:

- CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
- VIDEO DETECTION ZONE LAYOUT SHALL BE DRAWN TO PROVIDE FULL SIGNAL PERFORMANCE MEASURES (SPM) CAPABILITIES.
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.

TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- PROPOSED BATTERY BACKUP SYSTEM
- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- VIDEO/RADAR DETECTION ZONE
- PROPOSED GROUND ROD, 8', COPPER CLAD (IN HANDHOLE)
- PROPOSED ELECTRIC CABLE IN EXISTING CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
- EXISTING HANDHOLE



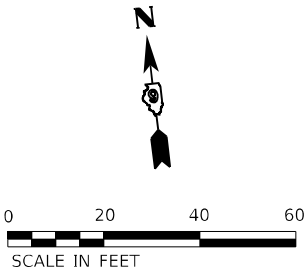
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH WIRELESS RADIO
- 6 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY DELIVER THE EQUIPMENT TO IDOT CARBONDALE FACILITY AT THEIR EXPENSE. CONTACT IDOT ELECTRICAL MAINTENANCE FOR LOCATION AND TIME.

- 1 EACH TRAFFIC SIGNAL CABINET
- 1 EACH TRAFFIC SIGNAL CONTROLLER
- 1 EACH UNINTERRUPTABLE POWER SUPPLY AND CABINET



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PLOT SCALE = 100,0000 ' / in.	CHECKED - ASG	REVISED -
PLOT DATE = 10/8/2024	DATE - 10/8/24	REVISED -

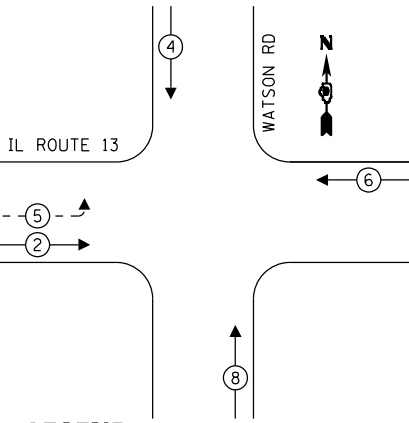
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 13 AND WATSON ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 331/42	SECTION D9 TRAFFIC SIGNAL 2024-1	COUNTY JACKSON	TOTAL SHEETS 46	SHEET NO. 12
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE

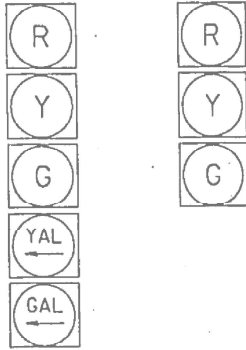


- LEGEND:
- ← \* → PROTECTED PHASE
  - ← \* - PROTECTED/PERMITTED PHASE
  - ← \* → PEDESTRIAN PHASE
  - ← \* OL → OVERLAP

LEGEND

- INDICATES POLYCARBONATE SIGNAL HEAD, 1-FACE, 3-SECTION OR 5-SECTION, BRACKET MOUNTED
- INDICATES POLYCARBONATE SIGNAL HEAD, 1-FACE, 3-SECTION OR 5-SECTION WITH BACK PLATE, MAST ARM MOUNTED.
- INDICATES TERMINAL BLOCK IN MAST ARM POLE BASE SEE NOTE NO. 2.
- INDICATES 1.8 m x 1.8 m DETECTOR LOOP WITH 50mm CORE DRILLED CORNERS.
- INDICATES 1.5 m x 1.5 m DETECTOR LOOP WITH 50 mm CORE DRILLED CORNERS. THESE LOOPS REQUIRE AMPLIFIERS WITH SYSTEM OUTPUT
- INDICATES 2/C TWISTED, SHIELDED CABLE IN CONDUIT.
- NUMBER IN CIRCLE INDICATES NUMBER OF CONDUCTORS IN THAT CABLE.
- INDICATES MULTIPLE CABLES.
- (4) NUMBER IN PARENTHESIS INDICATES PHASE.
- 1a NUMBER INDICATES PHASE; LETTER OR LETTERS IDENTIFY AMPLIFIER.
- NOTE: ALL CABLES SHALL BE A.W.G. #14 UNLESS OTHERWISE NOTED.
- 50 mm PROPOSED PVC CONDUIT. NUMBER INDICATES DIAMETER OF CONDUIT.

TRAFFIC SIGNAL FACES



TO BE USED: (5) TO BE USED: (2,4,6,8,)

TRAFFIC SIGNAL LEGEND

- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- PROP. ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO 6 1C
- MA MAST ARM
- SP SIGNAL POST
- HH HANDHOLE

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	FOOT	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	EACH	508
DRILL EXISTING FOUNDATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ETHERNET SWITCH	EACH	1
VIDEO AND RADAR HYBRID DETECTION SYSTEM	EACH	1
GROUND ROD, 8', COPPER CLAD	EACH	5



USER NAME = bfunk	DESIGNED - BF	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN - BF	REVISED -
PLOT DATE = 10/8/2024	CHECKED - ASG	REVISED -
	DATE - 10/8/24	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN  
IL ROUTE 13 AND WATSON ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

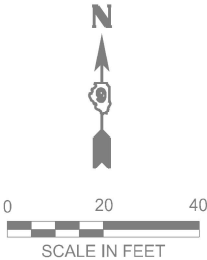
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	13
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

NORTHWEST RADIUS				
75' MAST ARM	325+36.24	30.61 RT	384.63	IL13TIRTL
14' SIGNAL POLE	324+61.68	33.20 RT	385.13	IL13TIRTL
HANDHOLE	321+55.33	55.33 RT	382.83	IL13TIRTL
NORTH MEDIAN ISLAND				
24' MAST ARM	323+68.77	34.38 RT	385.90	IL13TIRTL
NORTHEAST RADIUS				
HANDHOLE	323+54.02	71.03 RT	384.31	IL13TIRTL
CONTROLLER	323+20.47	70.81 RT	384.42	IL13TIRTL

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY DELIVER THE EQUIPMENT TO IDOT CARBONDALE FACILITY AT THEIR EXPENSE. CONTACT IDOT ELECTRICAL MAINTENANCE FOR LOCATION AND TIME.

- 1 EACH UNINTERRUPTABLE POWER SUPPLY AND CABINET



ALL CONDUIT IS, UNDERGROUND CONDUIT, PVC, 4" DIAMETER, UNLESS OTHERWISE SHOWN.

REPLACE EXISTING BATTERY BACKUP SYSTEM  
INSTALL NEW LAYER II SWITCH

LOCATION AND ITEM TYPE	STATION	OFFSET (FT)	ELEVATION	ALIGNMENT
SOUTHWEST RADIUS				
10' SIGNAL POLE	325+60.31	53.11 LT	384.92	A_IL13
HANDHOLE	325+59.27	66.33 LT	384.76	A_IL13
SOUTH MEDIAN ISLAND				
32' MAST ARM	325+18.29	27.14 LT	386.09	A_IL13
PED. PUSH BUTTON POLE	325+10.02	36.01 LT	386.00	A_IL13
SOUTHEAST RADIUS				
16' SIGNAL POLE	324+43.86	36.37 LT	384.84	A_IL13
HANDHOLE	324+36.80	54.64 LT	383.48	A_IL13
75' COMBINATION MAST ARM	324+16.23	33.75 LT	383.00	A_IL13
HANDHOLE	323+53.93	29.81 LT	383.91	A_IL13

TRAFFIC SIGNAL LEGEND

EXISTING CONTROLLER CABINET

EXISTING VIDEO DETECTION UNIT

PROPOSED GROUND ROD, 8', COPPER CLAD (IN HANDHOLE)

EXISTING HANDHOLE

UNDERGROUND CONDUIT, PVC, 2" DIAMETER,

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PLOT DATE	= 10/8/2024

DESIGNED	- BF
DRAWN	- BF
CHECKED	- ASG
DATE	- 10/8/24

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REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 13 AND WILLIAMS STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	14
CONTRACT NO. 78998				
ILLINOIS		FED. AID PROJECT		



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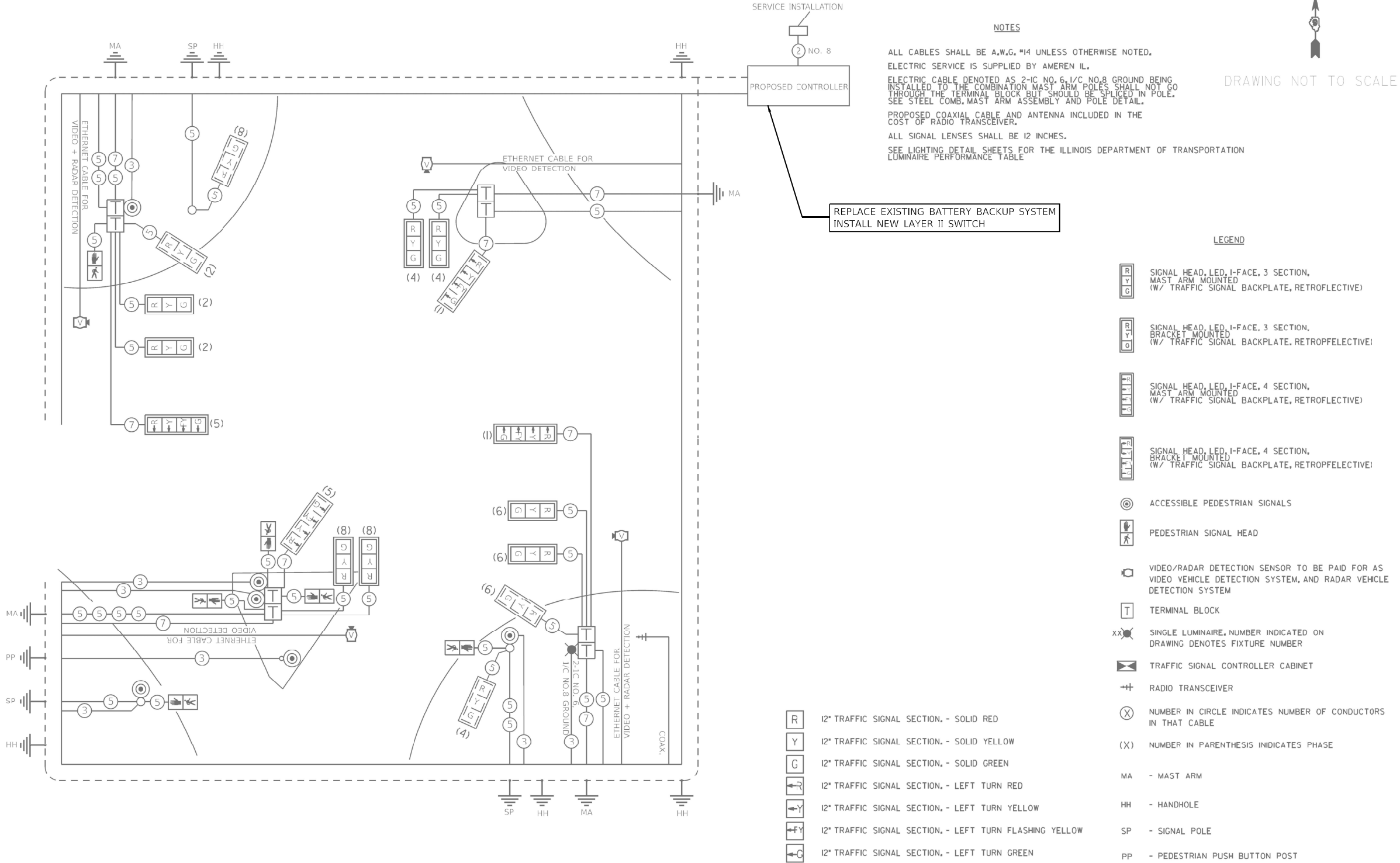
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CHECKED - ASG  
DATE - 10/8/24

REVISED -  
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REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN  
IL ROUTE 13 AND WILLIAMS STREET  
SCALE: SHEET OF SHEETS STA. TO STA.

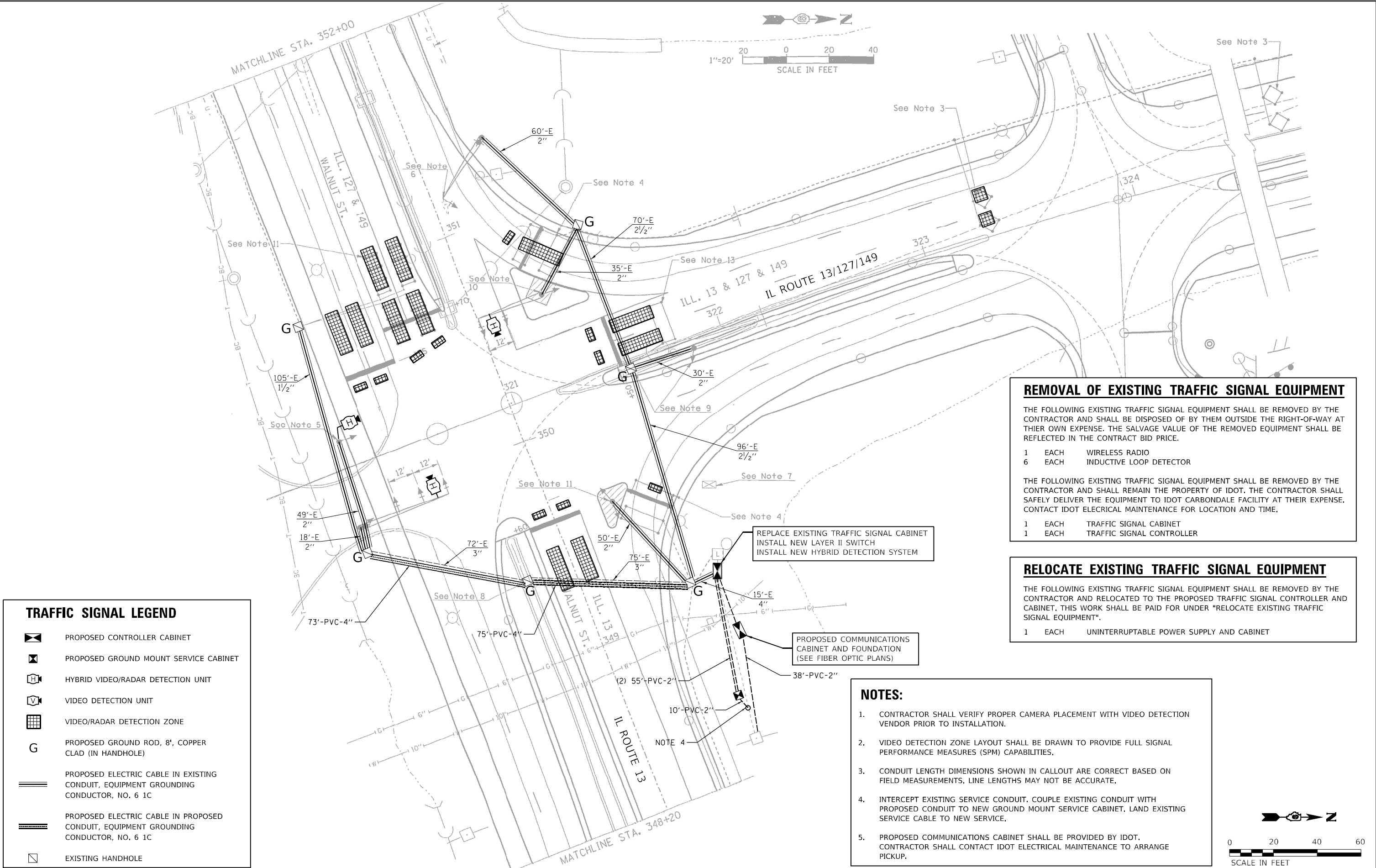
F.A.P. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
331/42 D9 TRAFFIC SIGNAL 2024-1 JACKSON 46 15  
CONTRACT NO. 78998  
ILLINOIS FED. AID PROJECT



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
DRILL EXISTING FOUNDATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ETHERNET SWITCH	EACH	1
GROUND ROD, 8', COPPER CLAD	EACH	5

MODEL: Default  
FILE NAME: C:\Sharepoint\ITERIS Inc\Systems - Midwest - Chicago Construction\IDOT PTL 196-063 D9 TSWO 6 - 12007 - IL 13 W Interconnect\CADD\Sheet Files\0979998 IL Route 13.dgn



### TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- PROPOSED GROUND MOUNT SERVICE CABINET
- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- VIDEO/RADAR DETECTION ZONE
- PROPOSED GROUND ROD, 8', COPPER CLAD (IN HANDHOLE)
- PROPOSED ELECTRIC CABLE IN EXISTING CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
- PROPOSED ELECTRIC CABLE IN PROPOSED CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
- EXISTING HANDHOLE

### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH WIRELESS RADIO
- 6 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY DELIVER THE EQUIPMENT TO IDOT CARBONDALE FACILITY AT THEIR EXPENSE. CONTACT IDOT ELECTRICAL MAINTENANCE FOR LOCATION AND TIME.

- 1 EACH TRAFFIC SIGNAL CABINET
- 1 EACH TRAFFIC SIGNAL CONTROLLER

### RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CONTROLLER AND CABINET. THIS WORK SHALL BE PAID FOR UNDER "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- 1 EACH UNINTERRUPTABLE POWER SUPPLY AND CABINET

### NOTES:

- CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
- VIDEO DETECTION ZONE LAYOUT SHALL BE DRAWN TO PROVIDE FULL SIGNAL PERFORMANCE MEASURES (SPM) CAPABILITIES.
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- INTERCEPT EXISTING SERVICE CONDUIT. COUPLE EXISTING CONDUIT WITH PROPOSED CONDUIT TO NEW GROUND MOUNT SERVICE CABINET. LAND EXISTING SERVICE CABLE TO NEW SERVICE.
- PROPOSED COMMUNICATIONS CABINET SHALL BE PROVIDED BY IDOT. CONTRACTOR SHALL CONTACT IDOT ELECTRICAL MAINTENANCE TO ARRANGE PICKUP.



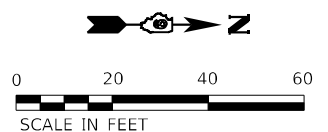
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	DRAWN - BF	REVISED -
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

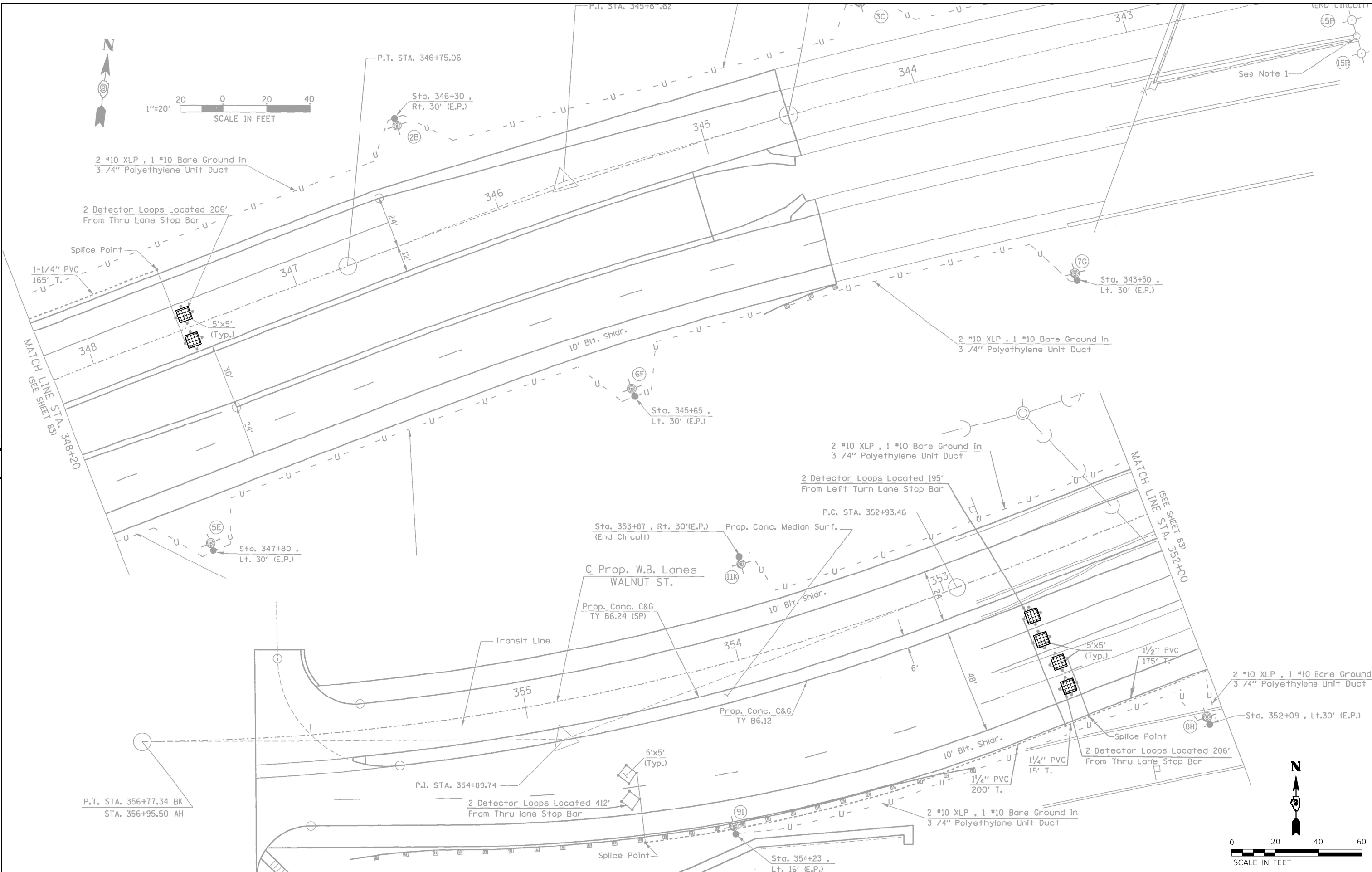
TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 13 AND IL ROUTE 13 / 127 / 149 (2ND STREET)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	16
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				



MODEL: Default  
FILE NAME: C:\Sharepoint\ITERIS - Midwest - Chicago Construction\DOT - PTL 196-063 D9 ITS\WG 6 - 12007 - IL 13 W Interconnect\CADD\Sheet Files\0979998 IL Route 13.dgn



USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
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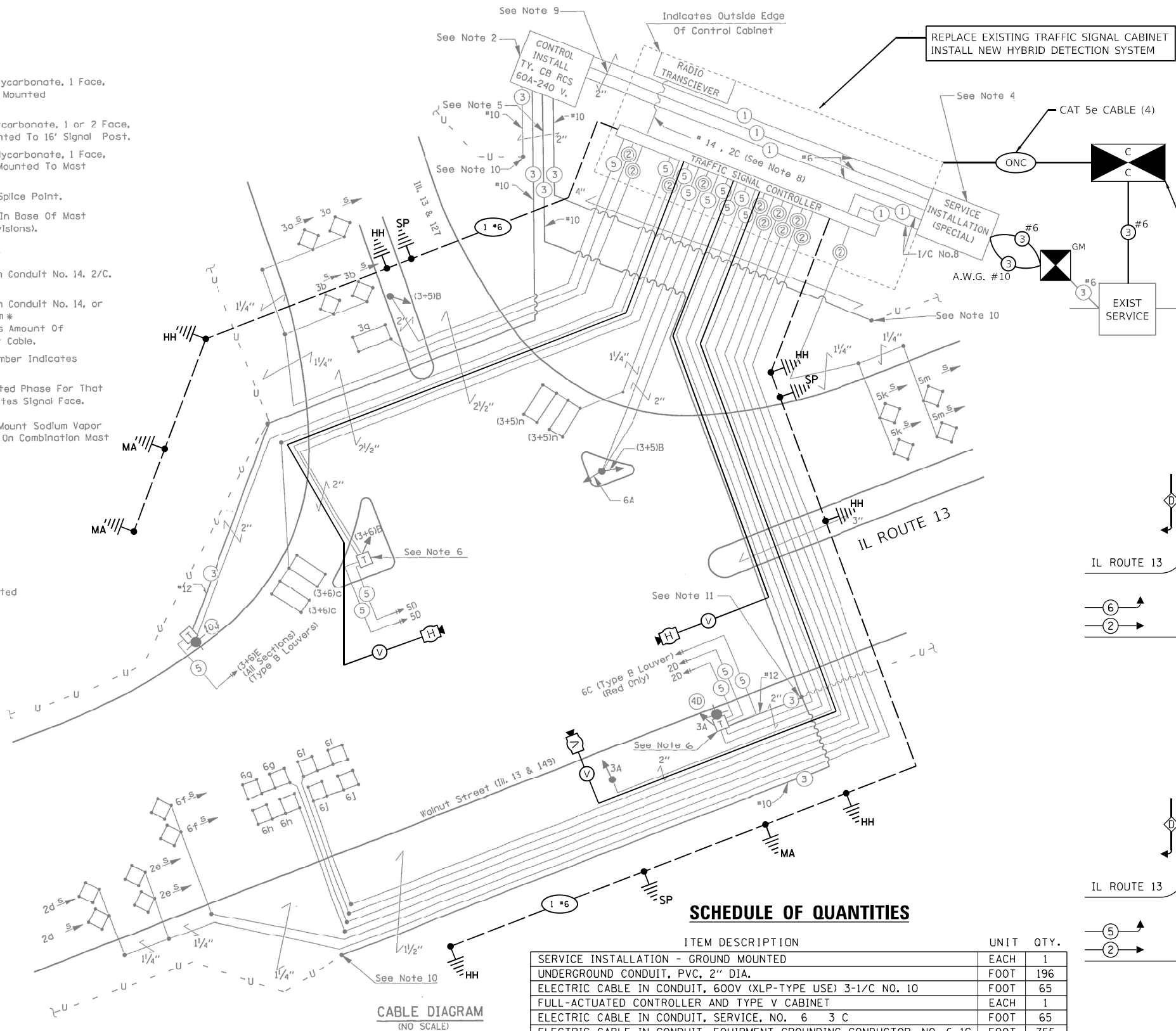
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 13 AND IL ROUTE 13 / 127 / 149 (2ND STREET)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 331/42	SECTION D9 TRAFFIC SIGNAL 2024-1	COUNTY JACKSON	TOTAL SHEETS 46	SHEET NO. 17
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

- LEGEND**
- Proposed Signal Head, Polycarbonate, 1 Face, 3 or 5 Section, Mast Arm Mounted With Backplate.
  - Proposed Signal Head, Polycarbonate, 1 or 2 Face, 3 or 5 Sec., Bracket Mounted To 16' Signal Post.
  - Proposed Signal Head, Polycarbonate, 1 Face, 3 or 5 Section, Bracket Mounted To Mast Arm Pole.
  - Proposed Detector Loop Splice Point.
  - Proposed Terminal Block In Base Of Mast Arm Pole (See Special Provisions).
  - Proposed Detector Loops.
  - Proposed Electric Cable In Conduit No. 14, 2/C. Twisted, Shielded \*
  - Proposed Electric Cable In Conduit No. 14, or As Noted On Cable Diagram \*
  - \*No. In Circle Denotes Amount Of Conductors In That Cable.
  - Proposed PVC Conduit, Number Indicates Diameter Of Conduit.
  - Number Indicates Associated Phase For That Signal Face. Letter Denotes Signal Face.
  - Proposed 250 Watt Multi-Mount Sodium Vapor Luminaire To Be Installed On Combination Mast Arm Poles.
  - \*6G Ground Conductors.
  - \*6PH Phase Conductors.
  - \*6N Neutral Conductors.
  - 5d Indicates Induction Loop Detector Amplifier \*
  - 6h S Indicates Induction Loop Detector Amplifier With System Output \*
  - \* Number Indicates Associated Phase
  - Unit Duct #10



CABLE DIAGRAM  
(NO SCALE)

**SCHEDULE OF QUANTITIES**

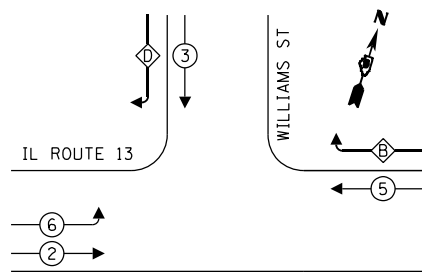
ITEM DESCRIPTION	UNIT	QTY.
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	196
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	65
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	65
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	755
CONCRETE FOUNDATION, TYPE D	FOOT	3
DRILL EXISTING FOUNDATION	EACH	3
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	120
CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5
CONDUIT SPLICE	EACH	1
ETHERNET MANAGE SWITCH	EACH	1
VIDEO AND RADAR HYBRID DETECTION SYSTEM	EACH	1
GROUND ROD, 8', COPPER CLAD	EACH	6
INSTALL COMMUNICATIONS CABINET	EACH	1

**TRAFFIC SIGNAL LEGEND**

- PROPOSED COMMUNICATIONS CABINET
- PROPOSED GROUND MOUNT SERVICE CABINET
- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- PROP. ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO 6 1C
- OUTDOOR RATED NETWORK CABLE
- EXISTING ELECTRIC SERVICE
- MA MAST ARM
- SP SIGNAL POST
- HH HANDHOLE

INSTALL NEW COMMUNICATIONS CABINET AND FOUNDATION  
INSTALL LAYER III SWITCH

**EXISTING CONTROLLER SEQUENCE**



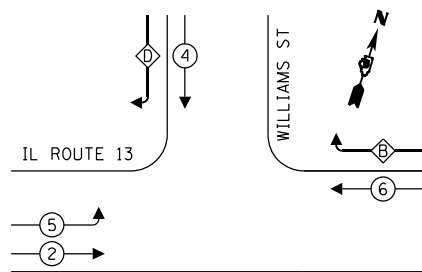
**LEGEND:**

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

**RIGHT TURN OVERLAP  
PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	5	3
D	3	6

**PROPOSED CONTROLLER SEQUENCE**



**LEGEND:**

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

**RIGHT TURN OVERLAP  
PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	6	4
D	4	5

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USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - ASG	REVISED -
PLOT DATE = 10/15/2024	DATE - 10/15/24	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION










TRAFFIC SIGNAL CABLE PLAN  
IL ROUTE 13 AND IL ROUTE 13 / 127 / 149 (2ND STREET)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	18
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL LEGEND

-  PROPOSED CONTROLLER CABINET
-  PROPOSED GROUND MOUNT SERVICE CABINET
-  HYBRID VIDEO/RADAR DETECTION UNIT
-  VIDEO DETECTION UNIT
-  VIDEO/RADAR DETECTION ZONE
-  PROPOSED GROUND ROD, 8', COPPER CLAD (IN HANDHOLE)
-  PROPOSED ELECTRIC CABLE IN EXISTING CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
-  PROPOSED ELECTRIC CABLE IN PROPOSED CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
-  EXISTING HANDHOLE

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH WIRELESS RADIO
- 1 EACH MICROWAVE DETECTION SYSTEM AND CABLE

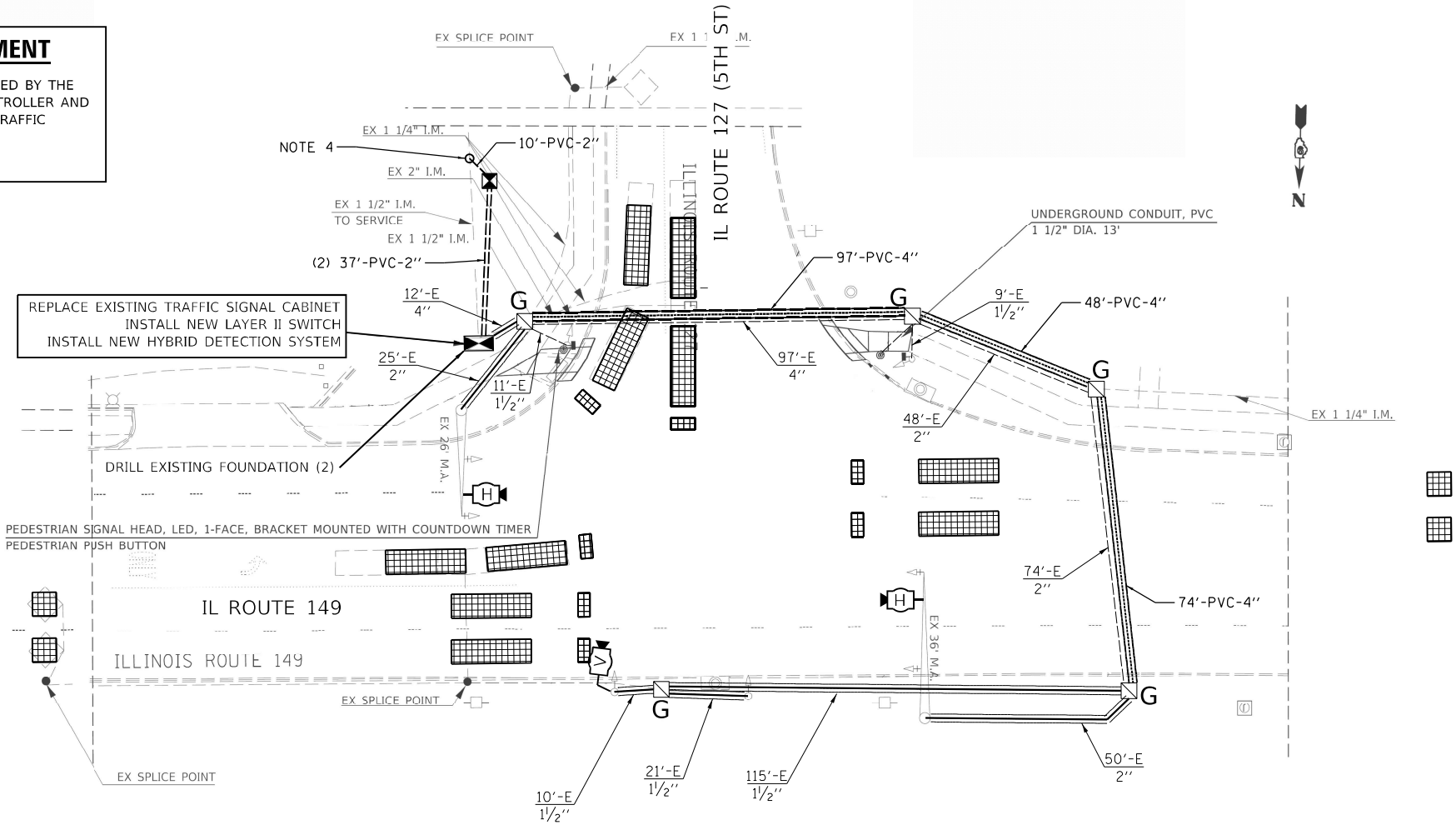
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY DELIVER THE EQUIPMENT TO IDOT CARBONDALE FACILITY AT THEIR EXPENSE. CONTACT IDOT ELECTRICAL MAINTENANCE FOR LOCATION AND TIME.

- 1 EACH TRAFFIC SIGNAL CABINET
- 1 EACH TRAFFIC SIGNAL CONTROLLER

RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT

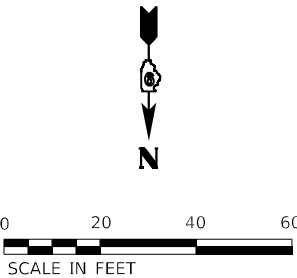
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CONTROLLER AND CABINET. THIS WORK SHALL BE PAID FOR UNDER "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- 1 EACH UNINTERRUPTABLE POWER SUPPLY AND CABINET



NOTES:

1. CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
2. VIDEO DETECTION ZONE LAYOUT SHALL BE DRAWN TO PROVIDE FULL SIGNAL PERFORMANCE MEASURES (SPM) CAPABILITIES.
3. CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
4. INTERCEPT EXISTING SERVICE CONDUIT, COUPLE EXISTING CONDUIT WITH PROPOSED CONDUIT TO NEW GROUND MOUNT SERVICE CABINET. LAND EXISTING SERVICE CABLE TO NEW SERVICE.



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USER NAME = bfunck	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - ASG	REVISED -
PLOT DATE = 10/15/2024	DATE - 10/15/24	REVISED -

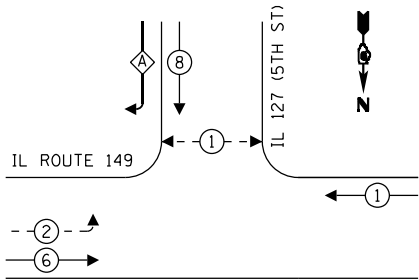
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 149 AND IL ROUTE 127 (5TH STREET)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	19
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



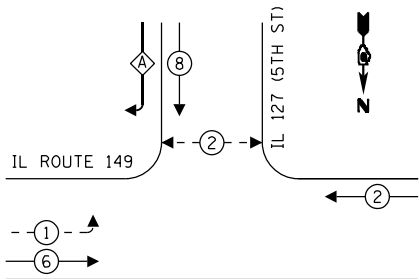
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

RIGHT TURN OVERLAP  
PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	8	2

PROPOSED CONTROLLER SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

RIGHT TURN OVERLAP  
PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	8	1

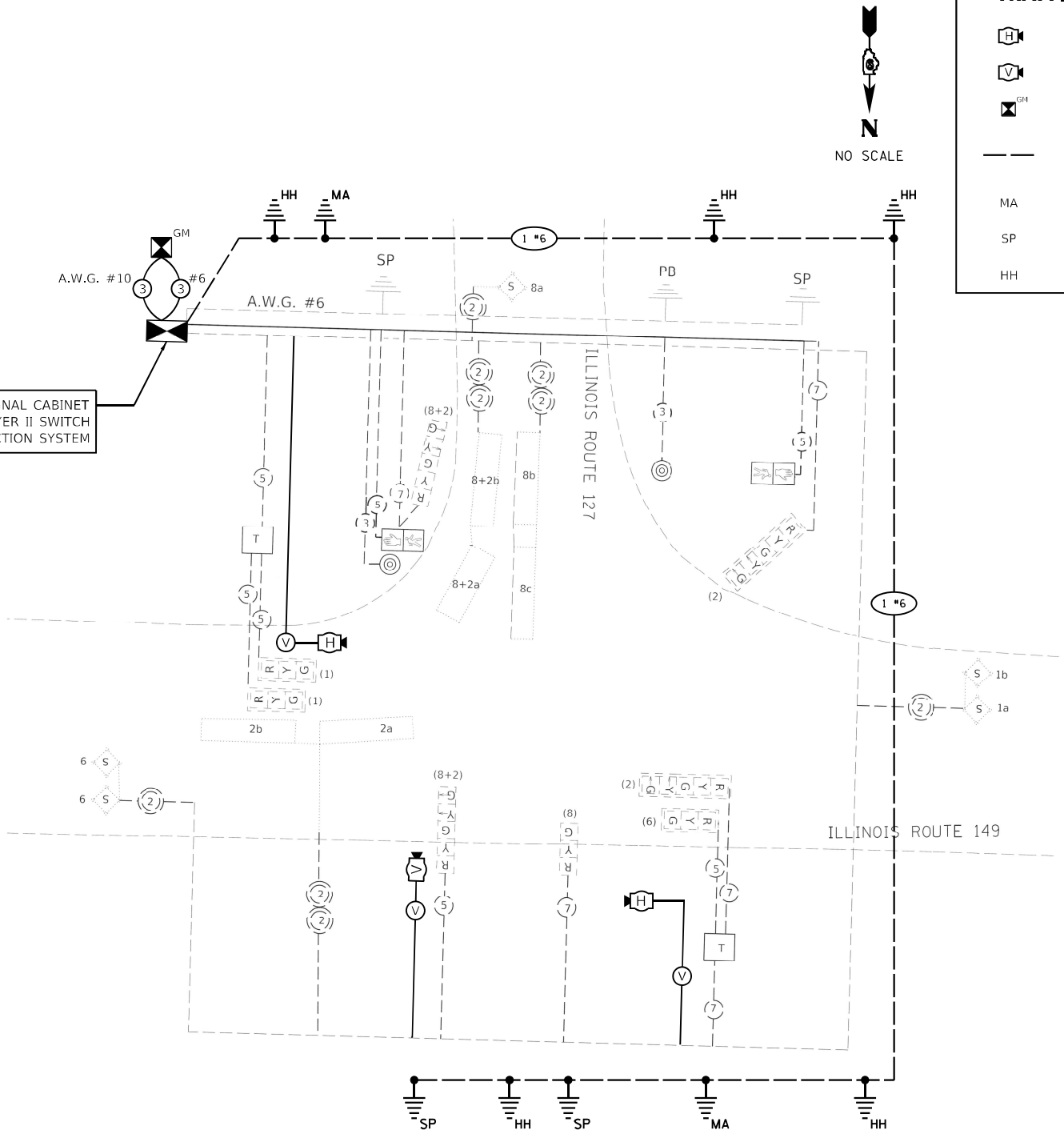
SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	99
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	47
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	47
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	605
DRILL EXISTING FOUNDATION	EACH	3
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5
CONDUIT SPLICE	EACH	1
ETHERNET SWITCH	EACH	1
VIDEO AND RADAR HYBRID DETECTION SYSTEM	EACH	1
GROUND ROD, 8', COPPER CLAD	EACH	5

TRAFFIC SIGNAL LEGEND

- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- PROPOSED GROUND MOUNT SERVICE CABINET
- PROP. ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO 6 1C
- MA MAST ARM
- SP SIGNAL POST
- HH HANDHOLE

REPLACE EXISTING TRAFFIC SIGNAL CABINET  
INSTALL NEW LAYER II SWITCH  
INSTALL NEW HYBRID DETECTION SYSTEM



NOTES:

- CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
- VIDEO DETECTION ZONE LAYOUT SHALL BE DRAWN TO PROVIDE FULL SIGNAL PERFORMANCE MEASURES (SPM) CAPABILITIES.
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- INTERCEPT EXISTING SERVICE CONDUIT. COUPLE EXISTING CONDUIT WITH PROPOSED CONDUIT TO NEW GROUND MOUNT SERVICE CABINET. LAND EXISTING SERVICE CABLE TO NEW SERVICE.

TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- PROPOSED GROUND MOUNT SERVICE CABINET
- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- VIDEO/RADAR DETECTION ZONE
- PROPOSED GROUND ROD, 8', COPPER CLAD (IN HANDHOLE)
- PROPOSED ELECTRIC CABLE IN EXISTING CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
- EXISTING HANDHOLE

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- |   |      |                         |
|---|------|-------------------------|
| 1 | EACH | WIRELESS RADIO          |
| 8 | EACH | INDUCTIVE LOOP DETECTOR |

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY DELIVER THE EQUIPMENT TO IDOT CARBONDALE FACILITY AT THEIR EXPENSE. CONTACT IDOT ELECTRICAL MAINTENANCE FOR LOCATION AND TIME.

- |   |      |                           |
|---|------|---------------------------|
| 1 | EACH | TRAFFIC SIGNAL CABINET    |
| 1 | EACH | TRAFFIC SIGNAL CONTROLLER |

RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CONTROLLER AND CABINET. THIS WORK SHALL BE PAID FOR UNDER "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- |   |      |  |
|---|------|--|
| 1 | EACH | UNINTERRUPTABLE POWER SUPPLY AND CABINET |
|---|------|--|

General Telephone-North  
Buried Cable

Central Illinois Public Service  
Company 3" Gas Main

REPLACE EXISTING TRAFFIC SIGNAL CABINET  
INSTALL NEW LAYER II SWITCH  
INSTALL NEW HYBRID DETECTION SYSTEM

Sta. 51+84, Lt. 38'  
C Sixth Street

Sta. 52+33, Lt. 67'  
C Sixth Street

Sta. 369+17, Lt. 47'  
C Ill. 13 & 127

Sta. 52+37, Lt. 60'  
C Sixth Street

Sta. 368+68, Lt. 59'  
C Ill. 13 & 127 (See

Sta. 369+65, Rt. 6'  
C Ill. 13 & 127

Sta. 370+87, Lt. 65'  
C ILL. 13 & 127

IL ROUTE 13/127

IL ROUTE 149

City of Murphysboro 6"  
Water Line

iteris

USER NAME = bfunk  
PLOT SCALE = 100,0000' / in.  
PLOT DATE = 10/15/2024

DESIGNED - BF  
DRAWN - BF  
CHECKED - ASG  
DATE - 10/15/24

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 13 / 127 AND IL ROUTE 149 (6TH STREET)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	21
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

# TRAFFIC SIGNAL LEGEND

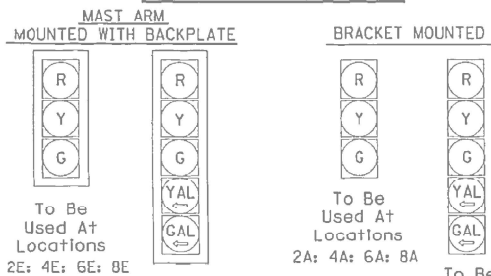
- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- PROPOSED GROUND MOUNT SERVICE CABINET
- PROP. ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO 6 1C
- MA MAST ARM
- SP SIGNAL POST
- HH HANDHOLE

REPLACE EXISTING TRAFFIC SIGNAL CABINET  
INSTALL NEW LAYER II SWITCH  
INSTALL NEW HYBRID DETECTION SYSTEM

Indicates Outside Edge  
of Controller Cabinet.

**NOTE:**  
ADVANCE LOOPS FOR PHASES 4 & 8 SHALL BE ACTIVE,  
ONLY DURING PHASE GREEN

## TRAFFIC SIGNAL FACES



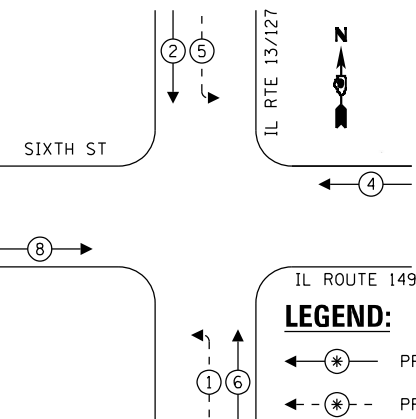
Note: All Signal Lenses Shall Be 12"

**CABLE DIAGRAM**  
(NO SCALE)

## LEGEND

- Proposed Signal Head, Polycarbonate, 1 Face, 3 or 5 Section, Mast Arm Mounted With Backplate.
- Proposed Signal Head, Polycarbonate, 1 or 2 Face, 3 or 5 Sec., Bracket Mounted To 16' Signal Post.
- Proposed Signal Head, Polycarbonate, 1 to 3 Faces, 3 or 5 Section, Bracket Mounted To Mast Arm Pole.
- Proposed Detector Loop Splice Point.
- Proposed Terminal Block In Base Of Mast Arm Pole (See Special Provisions).
- Proposed Detector Loops.
- Proposed Electric Cable in Conduit No. 14, 2/C, Twisted, Shielded \*
- Proposed Electric Cable in Conduit No. 14, or As Noted On Cable Diagram \*
- Proposed PVC Conduit, Number Indicates Diameter Of Conduit.
- Proposed 250 Watt Multi-Mount Sodium Vapor Luminaire To Be Installed On Combination Mast Arm Poles.
- #6G Ground Conductors.
- #6PH Phase Conductors.
- #6N Neutral Conductors.
- 8A Number Indicates Associated Phase For That Signal Face Letter Denotes Signal Face
- 5d Indicates Induction Loop Detector Amplifier \*
- 6h S Indicates Induction Loop Detector Amplifier With System Output \*
- Proposed 45' Steel Pole with Tenon Mounted 250 Watt Sodium Vapor Luminaire
- - U - - Unit Duct #10

## EXISTING CONTROLLER SEQUENCE



## SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	113
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	54
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	54
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1043
DRILL EXISTING FOUNDATION	EACH	3
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5
CONDUIT SPLICE	EACH	1
ETHERNET SWITCH	EACH	1
VIDEO AND RADAR HYBRID DETECTION SYSTEM	EACH	1
GROUND ROD, 8', COPPER CLAD	EACH	10

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USER NAME = bfunck	DESIGNED - BF	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN - BF	REVISED -
PLOT DATE = 10/15/2024	CHECKED - ASG	REVISED -
	DATE - 10/15/24	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN  
IL ROUTE 13 / 127 AND IL ROUTE 149 (6TH STREET)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	22
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

NOTES:

- CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
- VIDEO DETECTION ZONE LAYOUT SHALL BE DRAWN TO PROVIDE FULL SIGNAL PERFORMANCE MEASURES (SPM) CAPABILITIES.
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.

TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER CABINET
- PROPOSED BATTERY BACKUP SYSTEM
- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- VIDEO/RADAR DETECTION ZONE
- PROPOSED GROUND ROD, 8', COPPER CLAD (IN HANDHOLE)
- PROPOSED ELECTRIC CABLE IN EXISTING CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
- PROPOSED ELECTRIC CABLE IN PROPOSED CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
- EXISTING HANDHOLE

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH WIRELESS RADIO
- 18 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY DELIVER THE EQUIPMENT TO IDOT CARBONDALE FACILITY AT THEIR EXPENSE. CONTACT IDOT ELECTRICAL MAINTENANCE FOR LOCATION AND TIME.

- 1 EACH TRAFFIC SIGNAL CABINET
- 1 EACH TRAFFIC SIGNAL CONTROLLER
- 1 EACH UNINTERRUPTABLE POWER SUPPLY AND CABINET

MODEL: Default  
FILE NAME: C:\Sharepoint\ITRIS - Midwest - Chicago Construction\IDOT - P1B 195-063 D9 ITS\WD 6 - 12007 - IL 13 W Interconnect\CADD\SHEET FILES\D979998 IL Route 13.TS.dgn

iteris

USER NAME	= bfunk
DESIGNED	- BF
DRAWN	- BF
PLOT SCALE	= 100,0000 ' / in.
PLT DATE	= 10/8/2024
CHECKED	- ASG
DATE	- 10/8/24
REVISED	-

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REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN  
IL ROUTE 13 / 127 AND INDUSTRIAL PARK DRIVE

SCALE: SHEET OF SHEETS STA. TO STA.

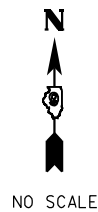
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331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	23
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				



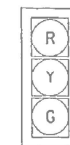
## TRAFFIC SIGNAL LEGEND

- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- PROP. ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO 6 1C
- MA MAST ARM
- SP SIGNAL POST
- HH HANDHOLE

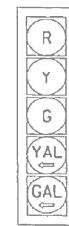
## TRAFFIC SIGNAL FACES



NO SCALE

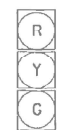
MAST ARM  
MOUNTED WITH BACKPLATETo Be  
Used At  
Locations

2E: 4E: 6E: 8E

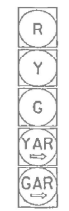
To Be  
Used At  
Locations

1D: 3D: 5D: 7D

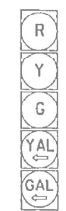
## BRACKET MOUNTED

To Be  
Used At  
Locations

2A: 4A: 8A

To Be  
Used At  
Locations

(6+7)B

To Be  
Used At  
Locations

1C: 3C: 5C: 7C

Note: All Signal Lenses Shall Be 12"

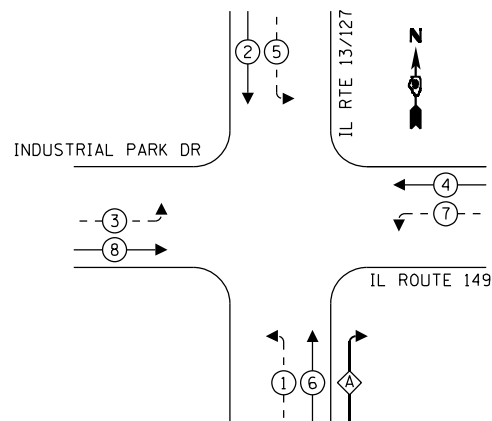
## LEGEND

- ➔ Proposed Signal Head, Polycarbonate, 1 Face, 3 or 5 Section, Mast Arm Mounted Or Back Mounted With Backplate.
- Proposed Signal Head, Polycarbonate, 1 or 2 Face, 3 or 5 Sec. Bracket Mounted To 16' Signal Post.
- ➔ Proposed Signal Head, Polycarbonate, 1 Face, 3 or 5 Section, Bracket Mounted To Mast Arm Pole.
- Proposed Detector Loop Splice Point.
- T Proposed Terminal Block In Base Of Mast Arm Pole (See Special Provisions).
- ▭ Proposed Detector Loops.
- ② Proposed Electric Cable In Conduit No. 14, 2/C, Twisted, Shielded \*
- ⑦ Proposed Electric Cable In Conduit No. 14, or As Noted On Cable Diagram \*
- 2" Proposed PVC Conduit, Number Indicates Diameter Of Conduit.
- 5C Number Indicates Associated Phase For That Signal Face. Letter Denotes Signal Face.
- ⊙ Proposed 250 Watt Multi-Mount Sodium Vapor Luminaire To Be Installed On Combination Mast Arm Poles.
- #6G Ground Conductors.
- #6PH Phase Conductors.
- #6N Neutral Conductors.
- 5d Indicates Induction Loop Detector Amplifier \*
- 6h ➔ Indicates Induction Loop Detector Amplifier With System Output \*

## SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	768
DRILL EXISTING FOUNDATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ETHERNET SWITCH	EACH	1
VIDEO AND RADAR HYBRID DETECTION SYSTEM	EACH	1
GROUND ROD, 8', COPPER CLAD	EACH	7

## EXISTING CONTROLLER SEQUENCE



## LEGEND:

- ← (\*) PROTECTED PHASE
- ← (\*) - PROTECTED/PERMITTED PHASE
- ← (\*) ➔ PEDESTRIAN PHASE
- ⬢ OL OVERLAP

## RIGHT TURN OVERLAP

## PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	6	7

CABLE DIAGRAM  
(NO SCALE)STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATIONTRAFFIC SIGNAL CABLE PLAN  
IL ROUTE 13 / 127 AND INDUSTRIAL PARK DRIVE

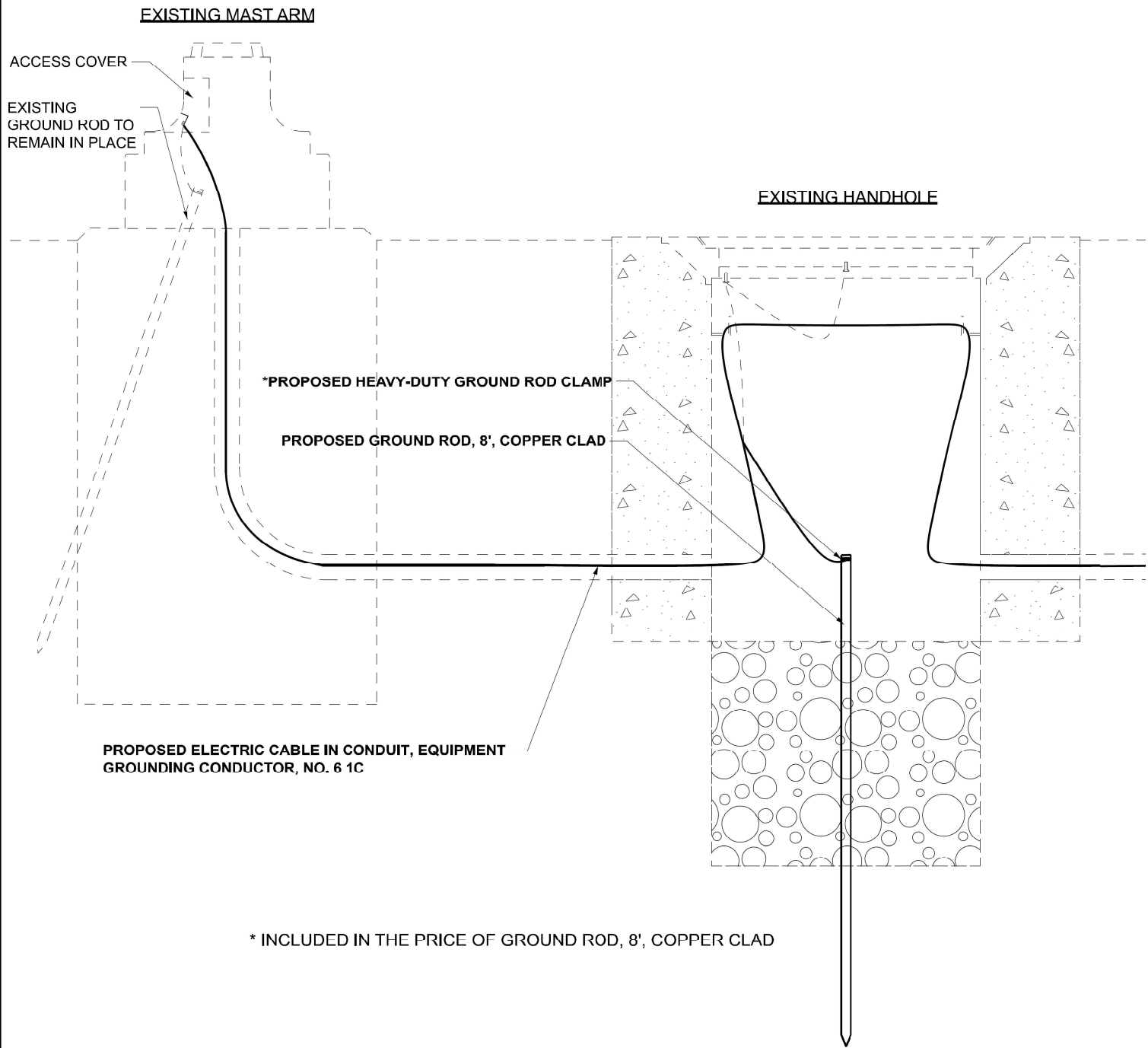
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	24
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

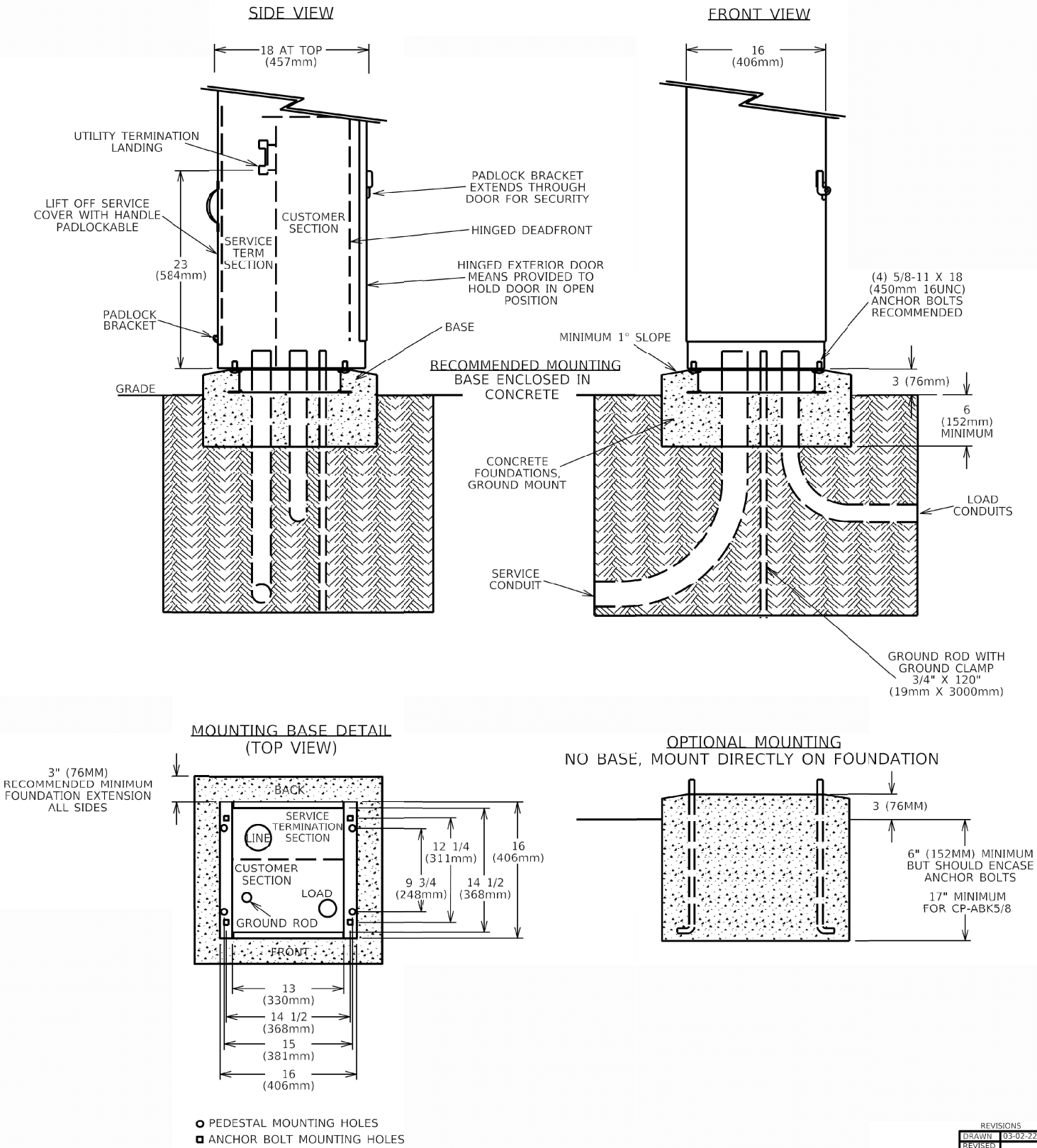
iteris

USER NAME = bfunk	DESIGNED - BF	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN - BF	REVISED -
PLOT DATE = 10/8/2024	CHECKED - ASG	REVISED -
	DATE - 10/8/24	REVISED -

HANDHOLE AND MAST ARM GROUNDING



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



REVISIONS	
DRAWN	03-02-22
REVIS	
REVIS	
REVIS	

STD. 9-51

iteris

USER NAME = bfunk	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/10/2024	DATE - 9/4/24	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

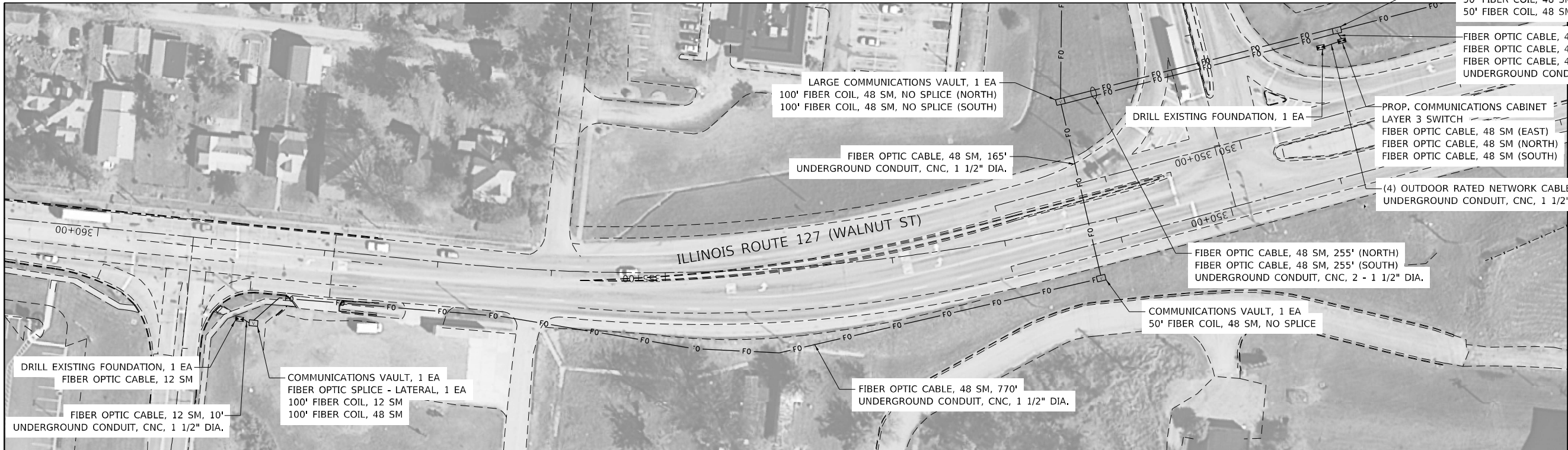
HANDHOLE AND MAST ARM GROUNDING DETAIL  
GROUND MOUNT SERVICE DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	25
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

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PROJECT LIMIT

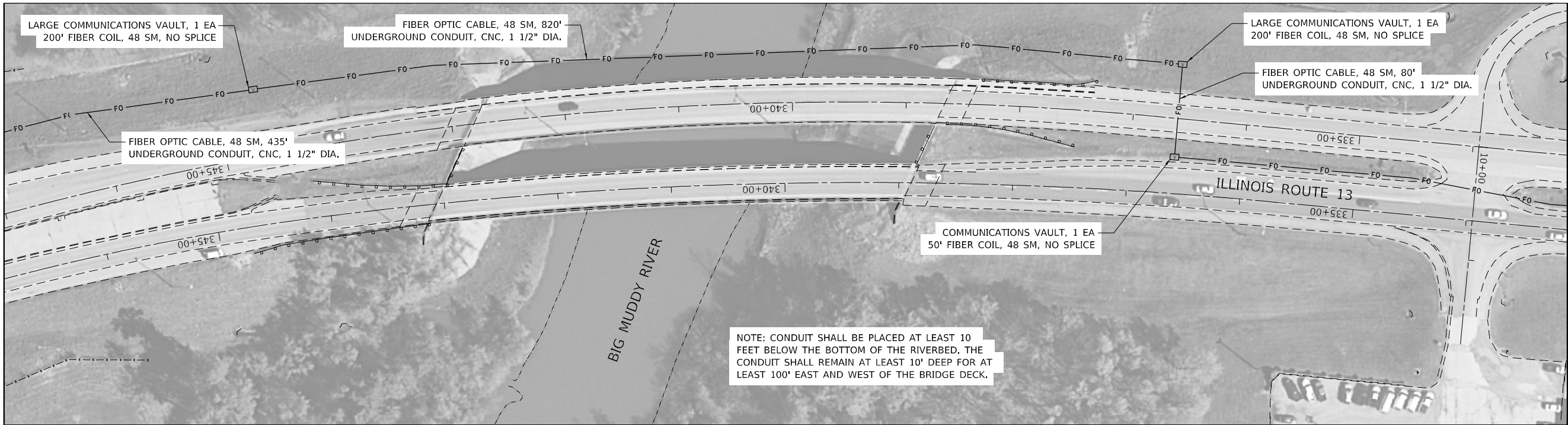


5TH STREET

MATCH LINE STA. 347+02



MATCH LINE STA. 347+02



iteris

USER NAME = bfunk  
PLOT SCALE = 100,0000 ' / in.  
PLOT DATE = 10/10/2024

DESIGNED - BF  
DRAWN - BF  
CHECKED - AD  
DATE - 10/8/24

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13

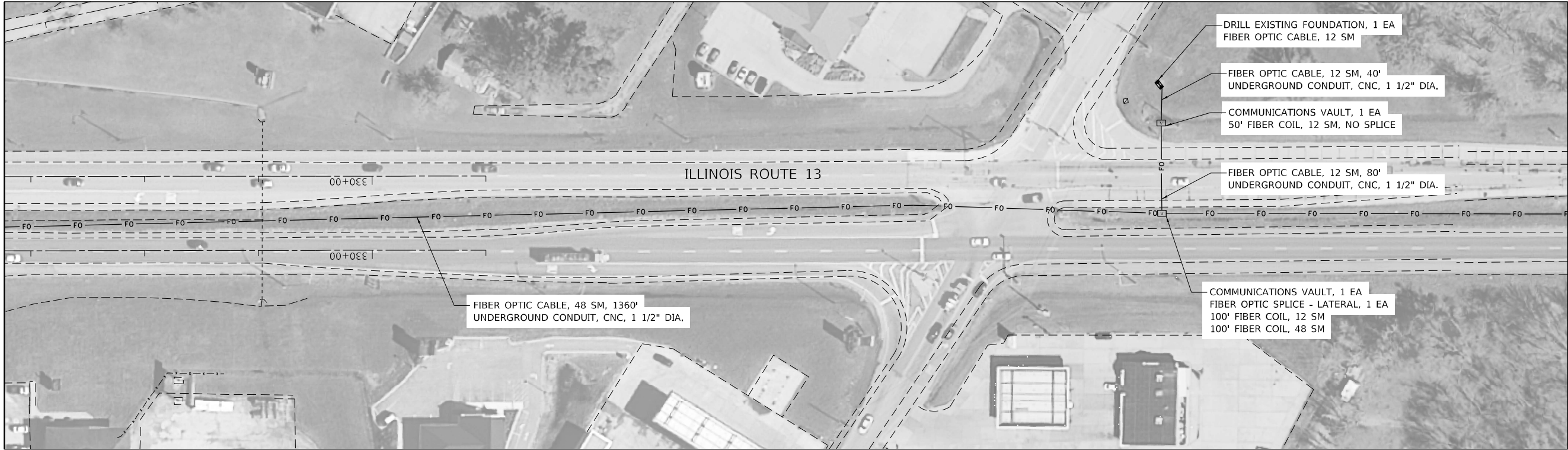
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	26
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				



MODEL: Default  
FILE NAME: C:\Sharepoint\ITERIS INC\Systems - Midwest - Chicago Construction\DOT\_PTB\_196-063 D9 ITS\WG 6 - 12007 - IL 13 W Interconnect\CADD\Sheet Files\0979998 IL Route 13\_FIBER2.dgn

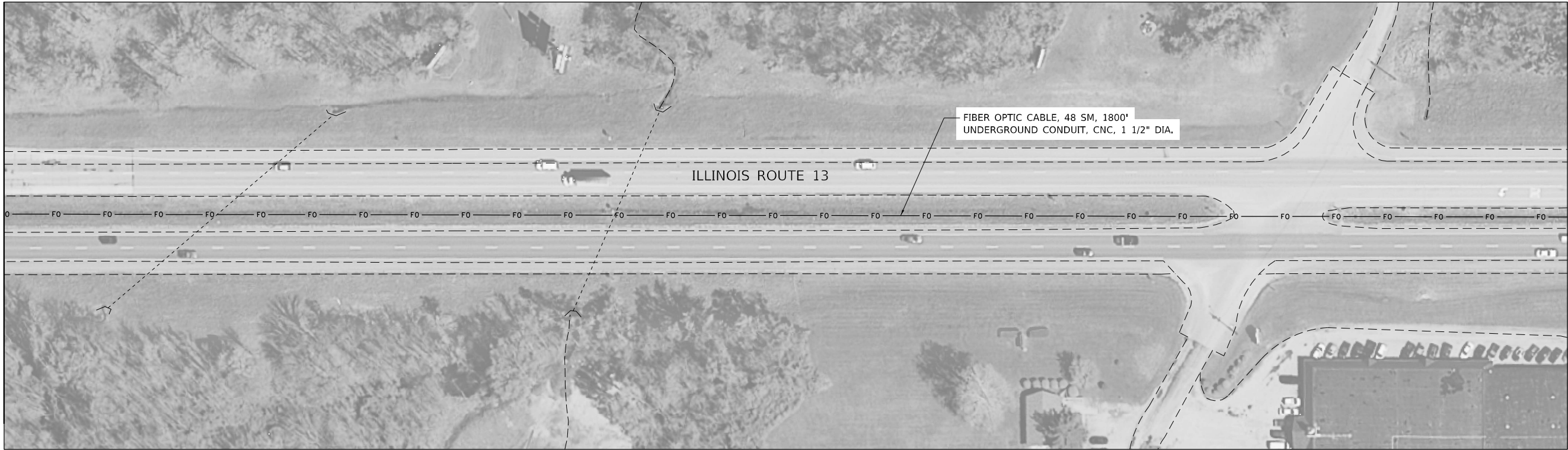
MATCHLINE STA. 333+17



MATCH LINE STA. 319+50



MATCH LINE STA. 319+50



MATCH LINE STA. 305+76



iteris

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PLOT SCALE	= 100,0000 ' / in.
PLOT DATE	= 10/8/2024

DESIGNED -	BF
DRAWN -	BF
CHECKED -	AD
DATE -	10/8/24

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

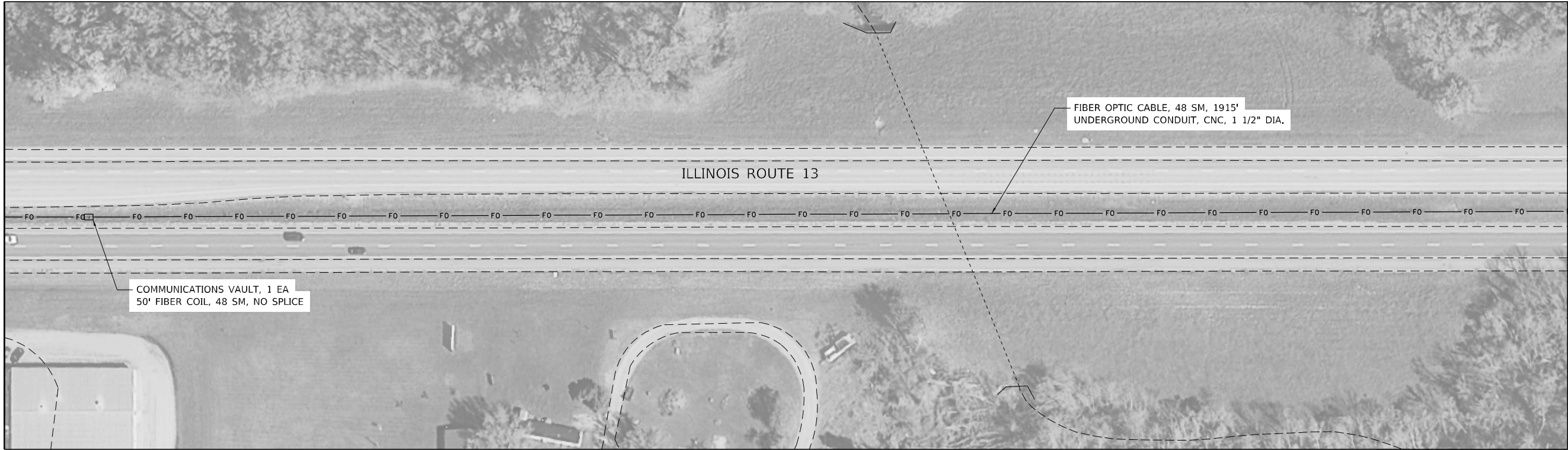
FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	27
CONTRACT NO. 78998				
		ILLINOIS	FED. AID PROJECT	

MODEL: Default  
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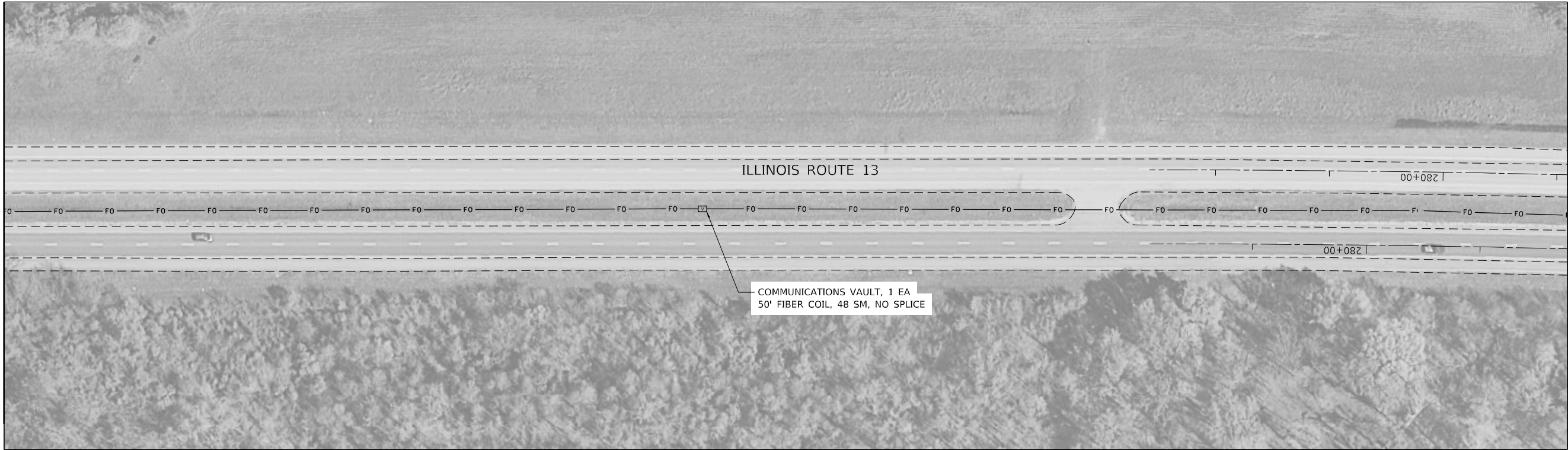
MATCHLINE STA. 305+76



MATCH LINE STA. 292+02



MATCH LINE STA. 292+02



MATCH LINE STA. 278+91



**iteris**

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PLOT DATE	= 9/14/2023

DESIGNED -	BF
DRAWN -	BF
CHECKED -	AD
DATE -	9/14/23

REVISED -	
REVISED -	
REVISED -	
REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13**

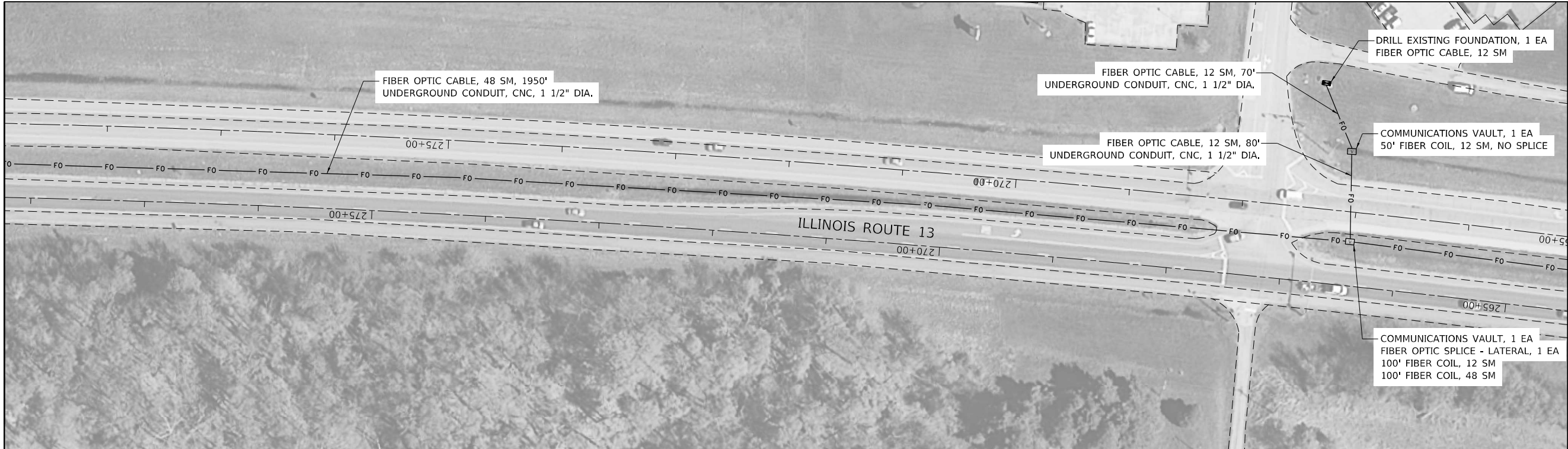
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2023-1	JACKSON	46	28
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

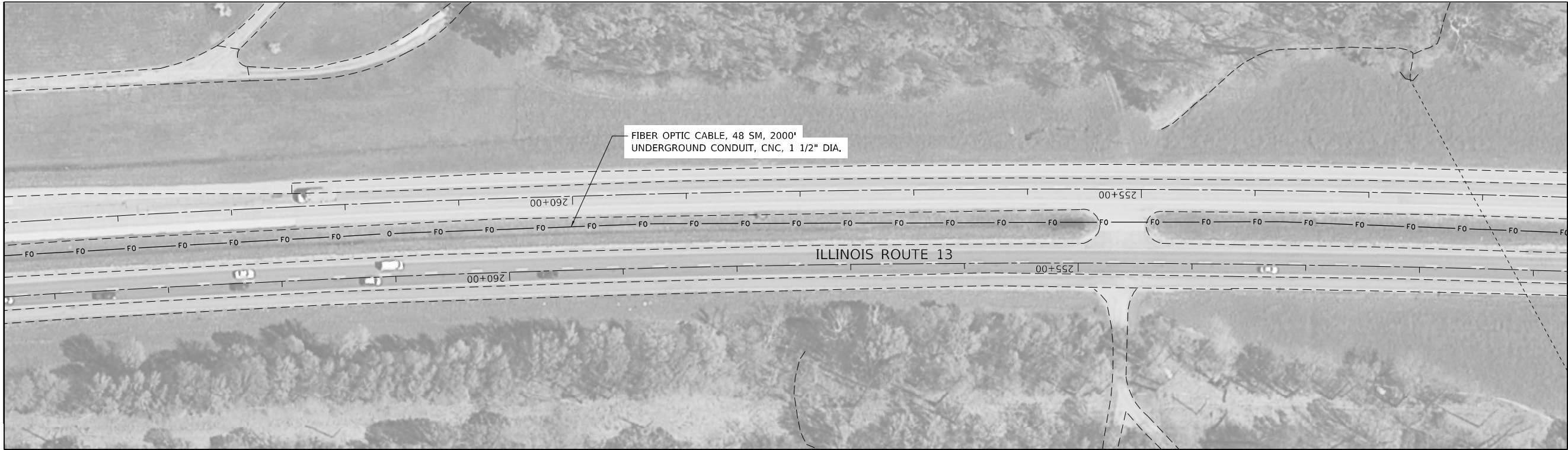


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MATCHLINE STA. 278+91



MATCH LINE STA. 265+13



iteris

USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - AD	REVISED -
PLOT DATE = 9/14/2023	DATE - 9/14/23	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

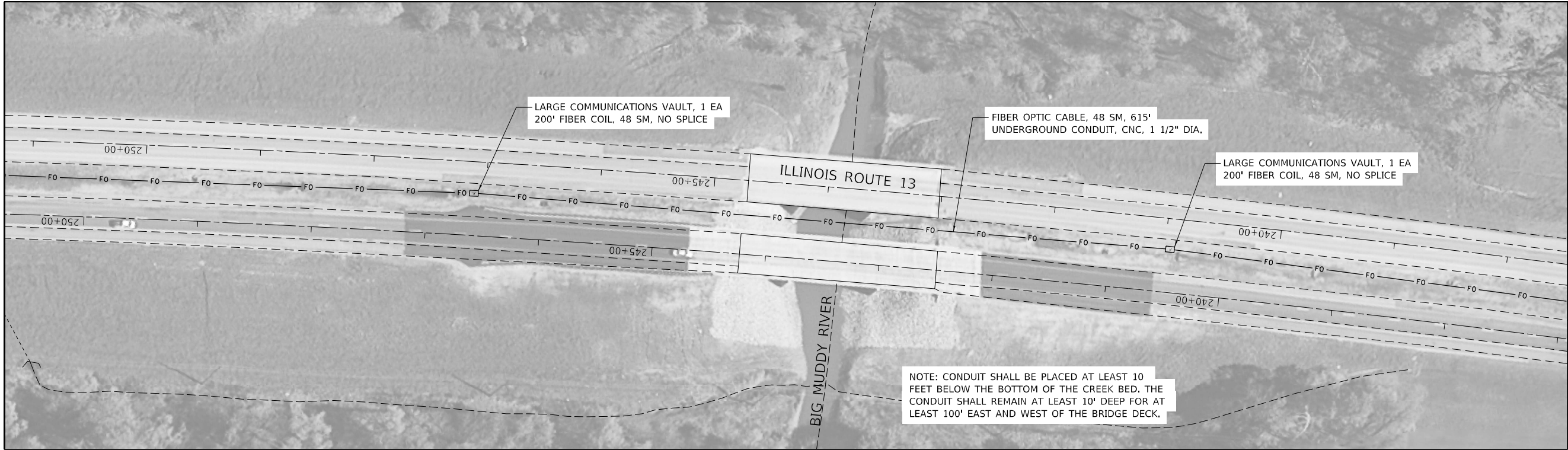
FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2023-1	JACKSON	46	29
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
FILE NAME: C:\Sharepoint\ITERIS INC\Systems - Midwest - Chicago Construction\DOT\_PTB\_196-063\_D9 ITS\VO 6 - 12007 - IL 13 W Interconnect\CADD\Sheet Files\0979998 IL Route 13\_FIBER2.dgn

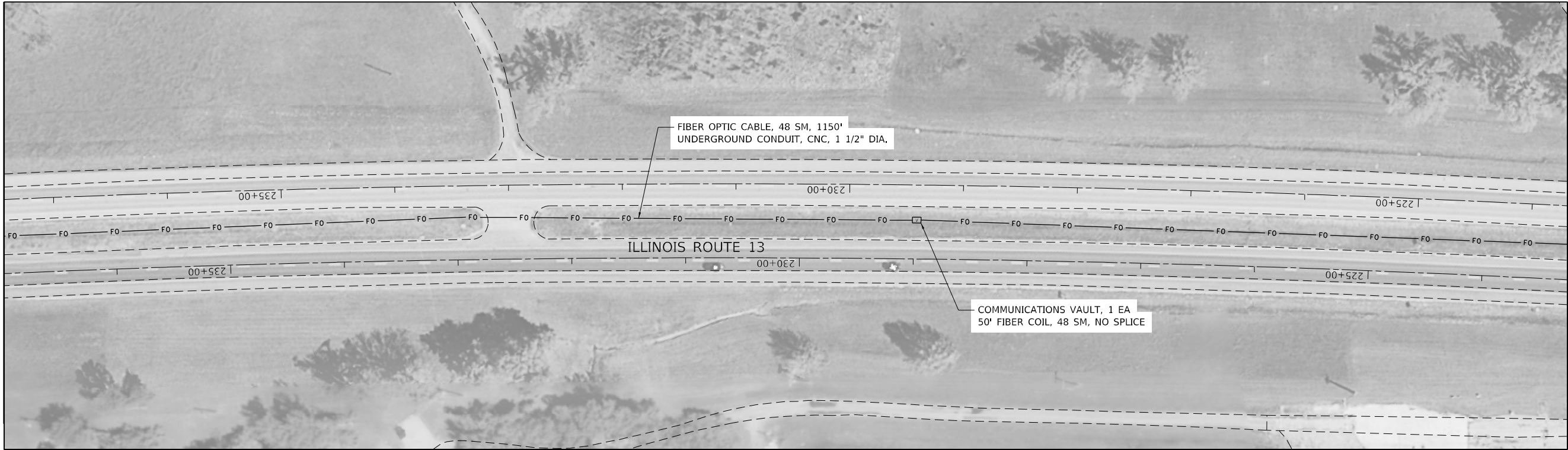
MATCHLINE STA. 251+25



MATCH LINE STA. 237+47



MATCH LINE STA. 237+47



MATCH LINE STA. 223+69



iteris

USER NAME	= bfunk
PLOT SCALE	= 100,0000 ' / in.
PLOT DATE	= 10/8/2024

DESIGNED -	BF
DRAWN -	BF
CHECKED -	AD
DATE -	9/14/23

REVISED -	
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REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13

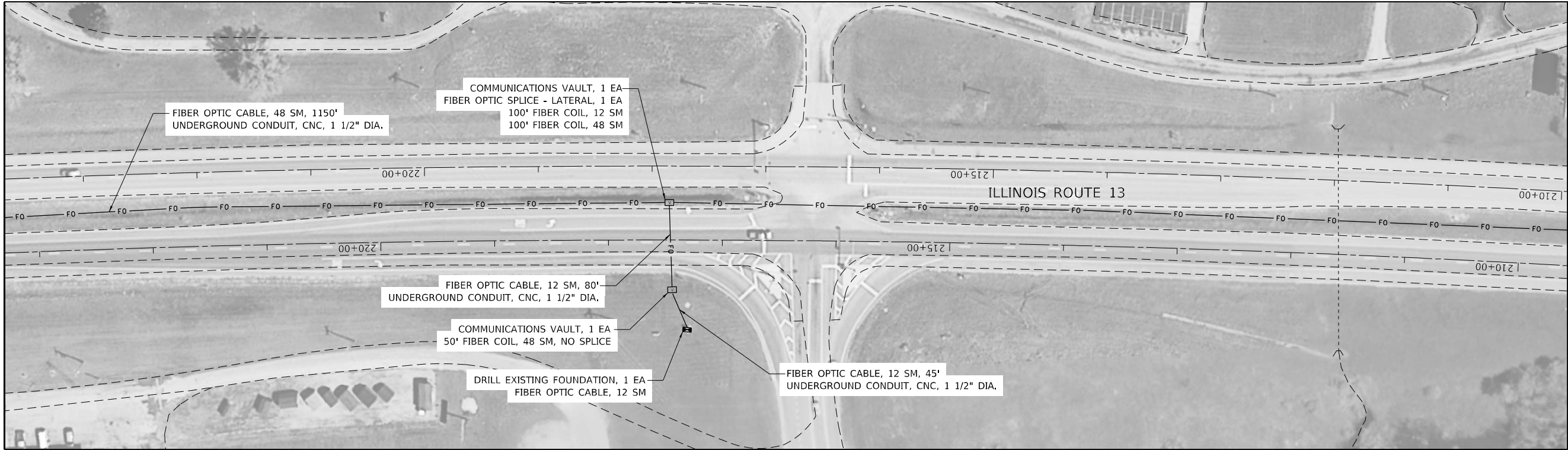
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	30
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				



Model: Default  
File Name: C:\Sharepoint\ITERIS\INC\Systems - Midwest - Chicago Construction\DOT\_PTB\_196-063\_D9 ITS\VO 6 - 12007 - IL 13 VI Interconnect\CADD\Sheet Files\D979998\_IL-Route13\_FIBER2.dgn

MATCHLINE STA. 223+69



MATCH LINE STA. 209+95



MATCH LINE STA. 209+95



MATCH LINE STA. 196+20



iteris

USER NAME	= bfunk
PLOT SCALE	= 100,0000 ' / in.
PLOT DATE	= 9/14/2023

DESIGNED -	BF
DRAWN -	BF
CHECKED -	AD
DATE -	9/14/23

REVISED -	
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REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2023-1	JACKSON	46	31
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				





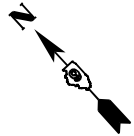
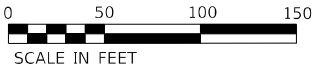
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MATCHLINE STA. 168+58

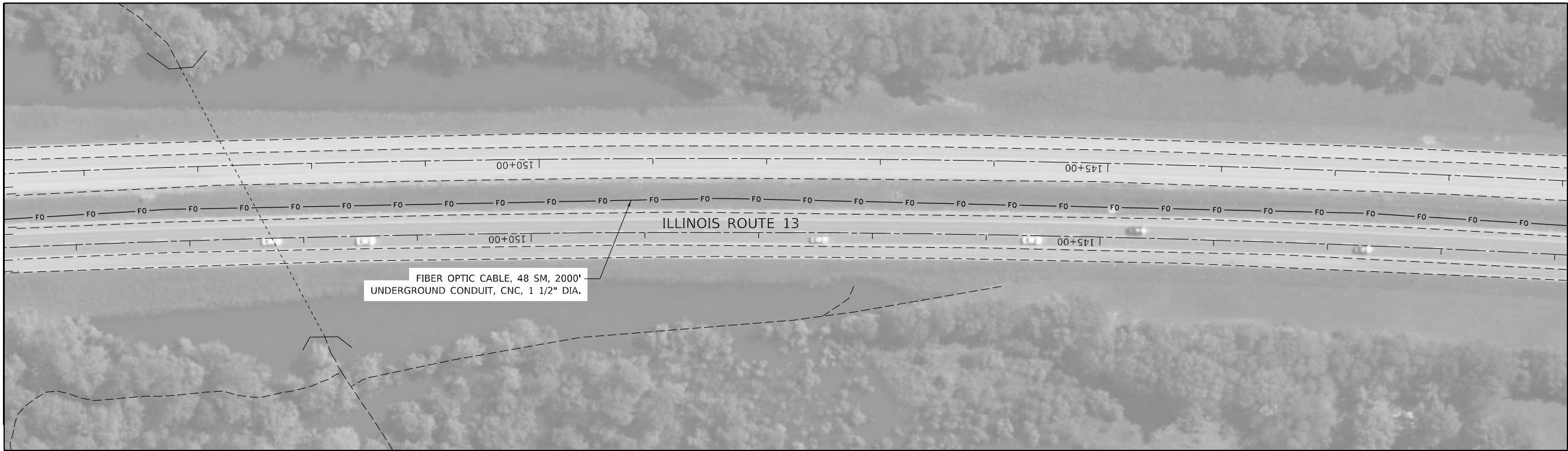


MATCH LINE STA. 154+77

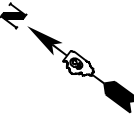
WOOD ROAD



MATCH LINE STA. 154+77



MATCH LINE STA. 140+96



iteris

USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - AD	REVISED -
PLOT DATE = 10/8/2024	DATE - 9/14/23	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13

SCALE: SHEET OF SHEETS STA. TO STA.

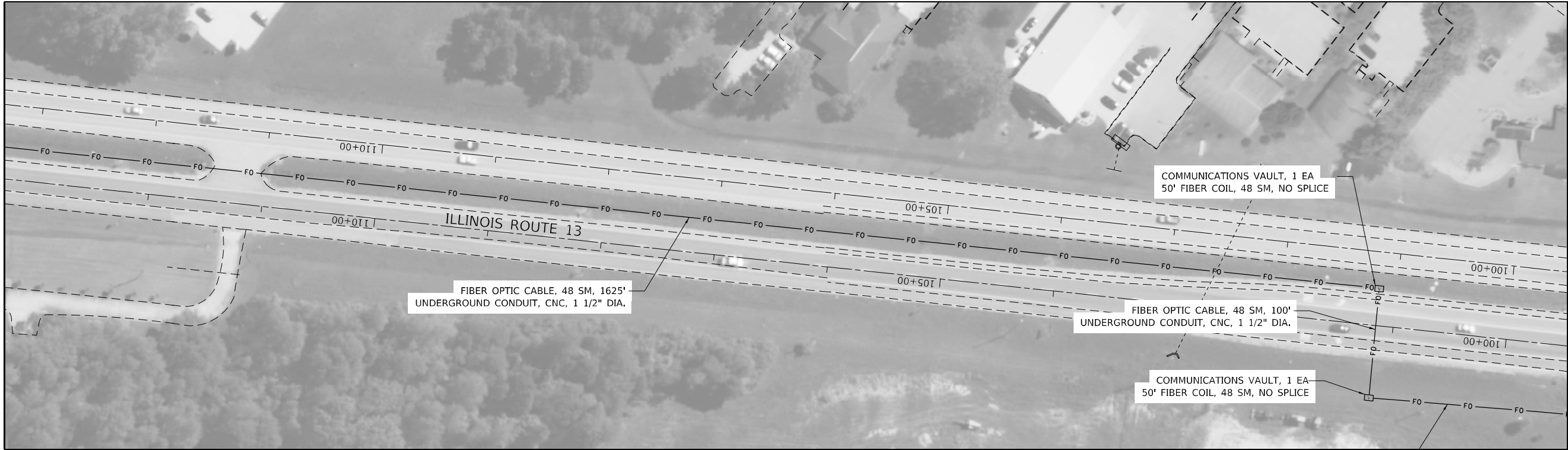
F.A.P. RTE. 331/42	SECTION D9 TRAFFIC SIGNAL 2024-1	COUNTY JACKSON	TOTAL SHEETS 46	SHEET NO. 33
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				





Model: Default  
File Name: C:\Sharepoint\ITERIS\INC\Systems - Midwest - Chicago Construction\IDOT\_PTB\_196-063\_D9 ITS\WG 6 - 12007 - IL 13 W Interconnect\CADD\Sheet Files\0979998 IL Route 13\_FIBER2.dgn

MATCHLINE STA. 113+34

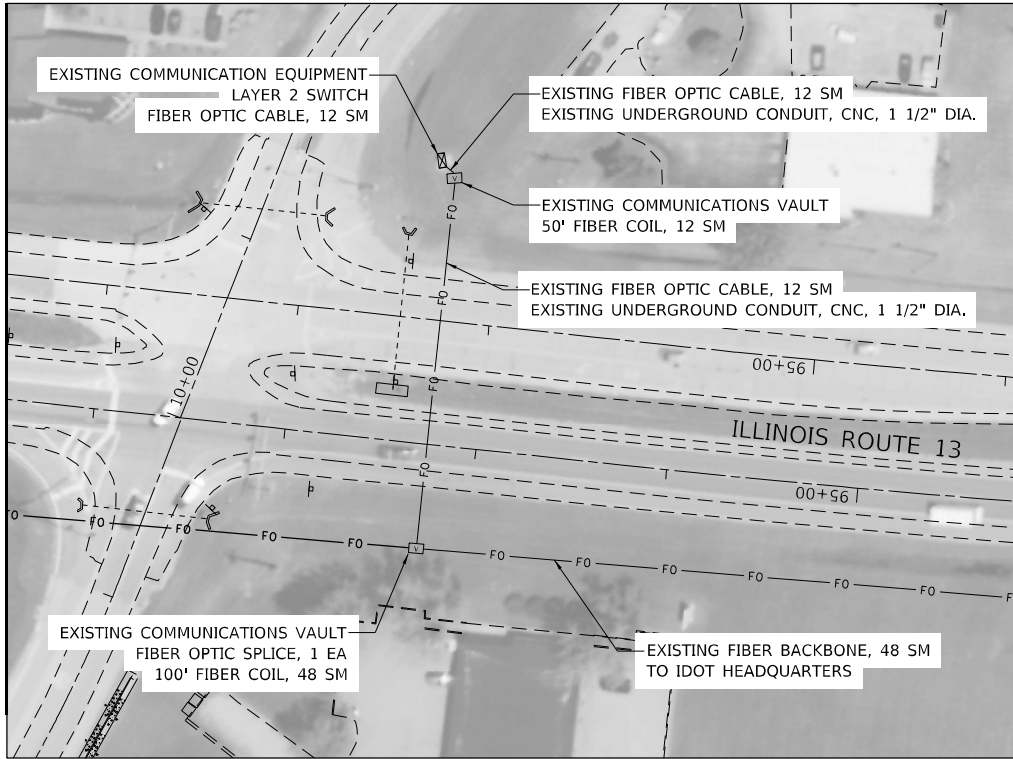


MATCH LINE STA. 99+53

FIBER OPTIC CABLE, 48 SM, 390'  
UNDERGROUND CONDUIT, CNC, 1 1/2" DIA.



MATCH LINE STA. 99+53



PROJECT LIMIT

NOTE: CONDUIT SHALL ACCESS THE EXISTING COMMUNICATIONS VAULT FROM THE BOTTOM. NO ACCESS SHALL BE DRILLED INTO THE SIDES OF THE EXISTING VAULT.



iteris

USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - AD	REVISED -
PLOT DATE = 10/15/2024	DATE - 10/8/24	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

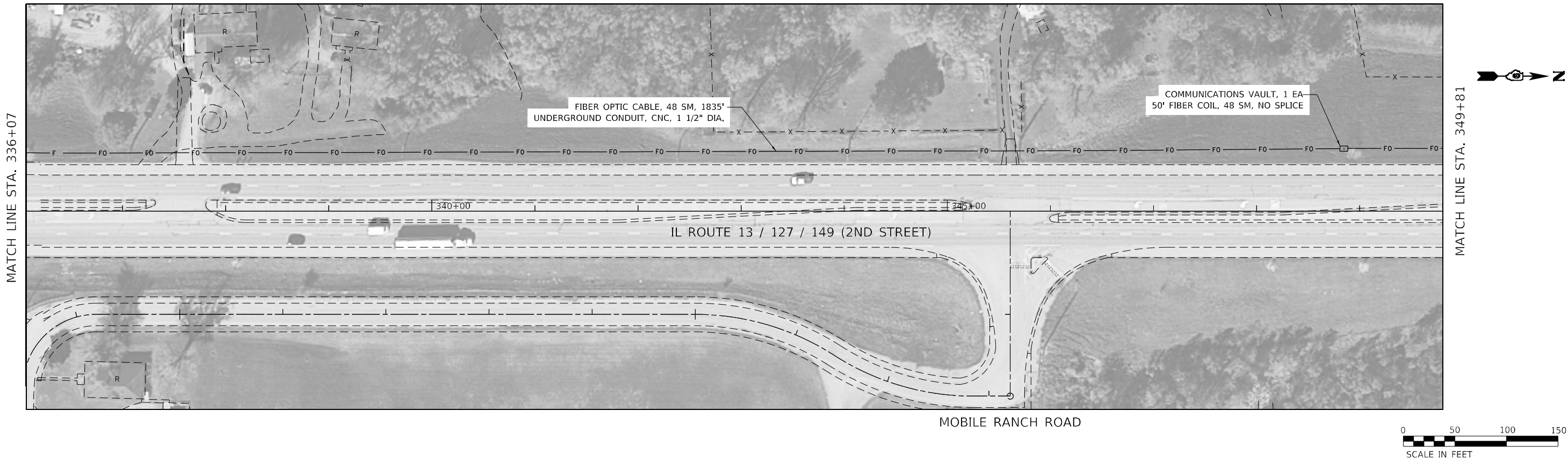
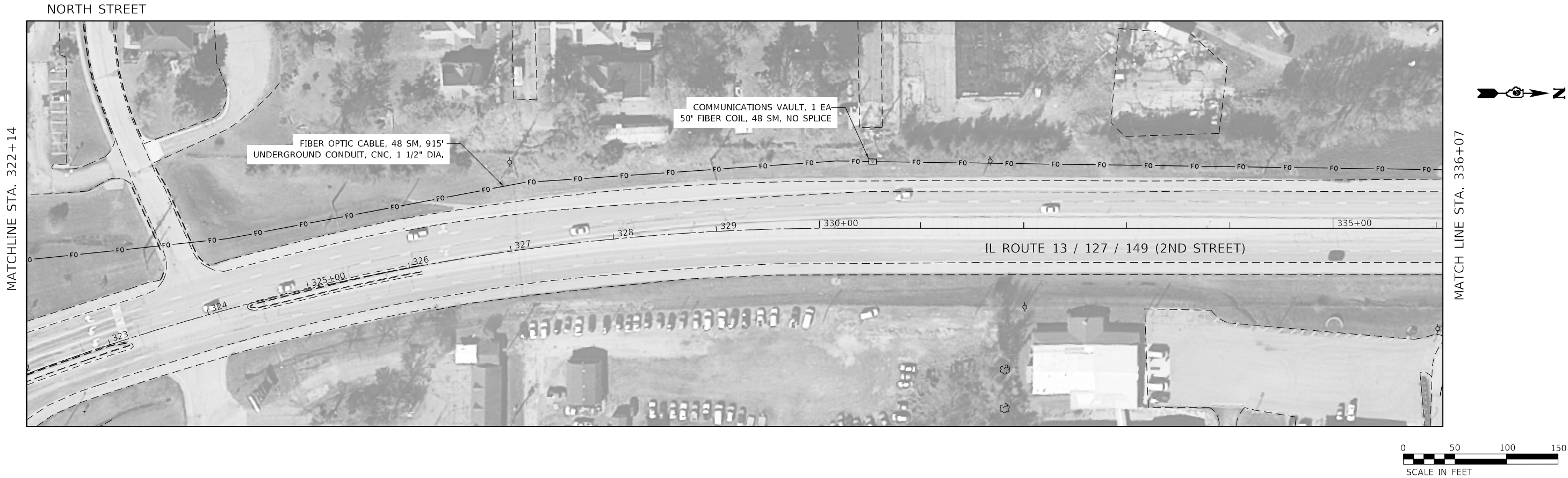
FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	35
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				



MODEL: Default  
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iteris

USER NAME	= bfunk
PLOT SCALE	= 100,0000 ' / in.
PLOT DATE	= 10/8/2024

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DATE	-	10/8/24

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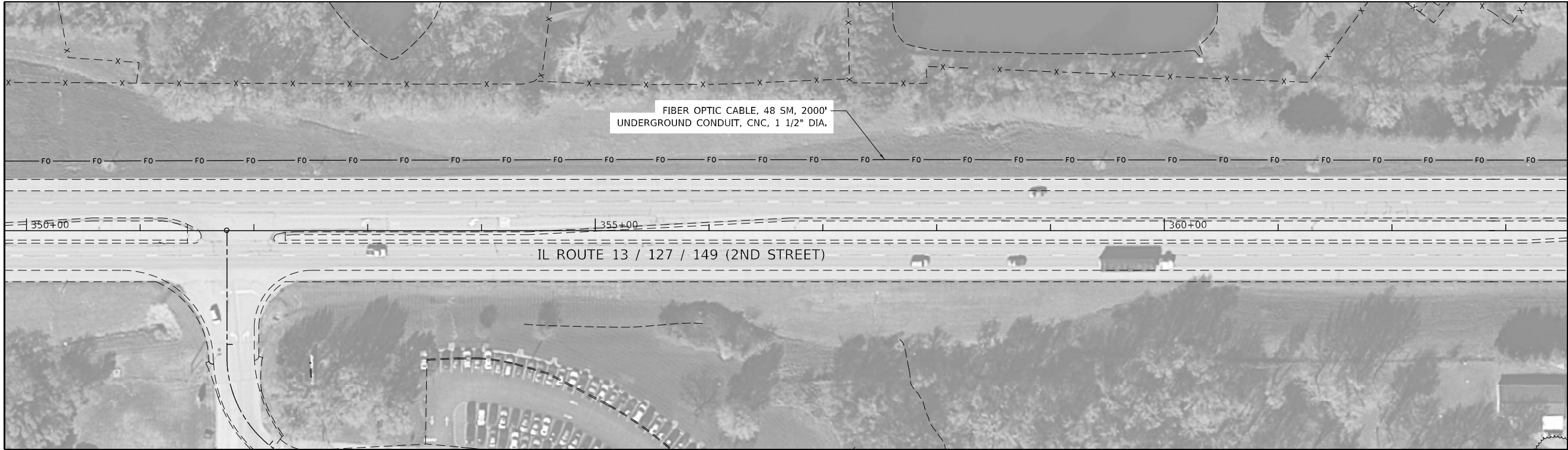
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN IL ROUTE 13 /127 /149 (2ND STREET)			
SCALE:	SHEET	OF	SHEETS
STA.	TO	STA.	TO

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	36
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
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MATCHLINE STA. 349+81

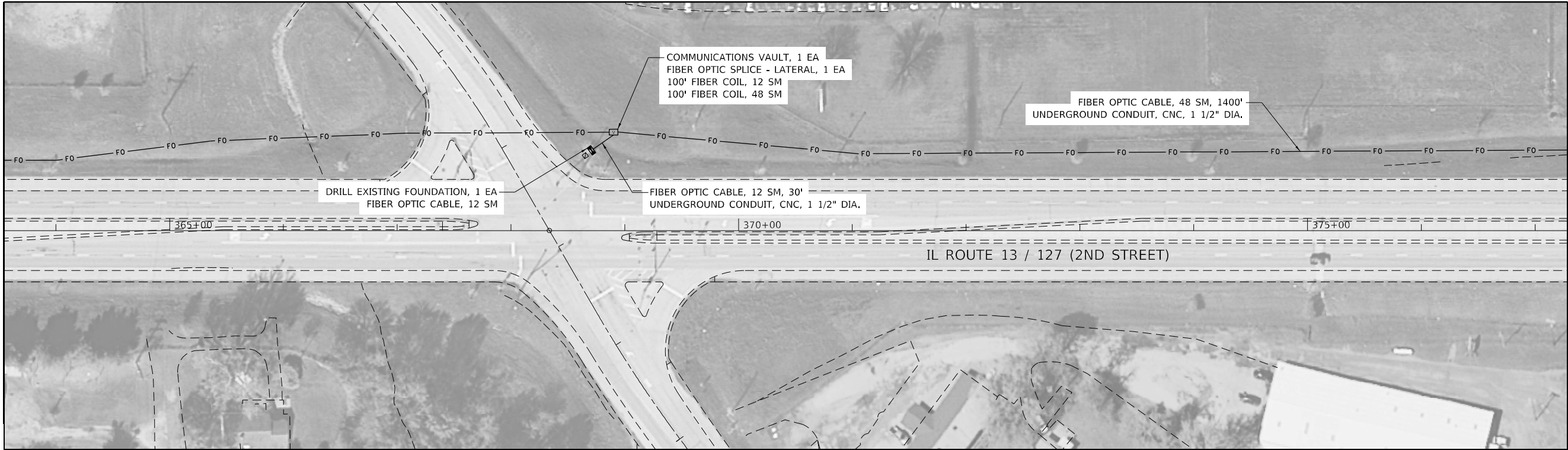


MATCH LINE STA. 363+54

HOSPITAL DRIVE



MATCH LINE STA. 363+54



MATCH LINE STA. 377+29

IL ROUTE 149 (6TH STREET)



USER NAME	= bfunk
PLOT SCALE	= 100,0000 ' / in.
PLOT DATE	= 10/8/2024

DESIGNED	-	BF
DRAWN	-	BF
CHECKED	-	AD
DATE	-	10/8/24

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13 /127 /149 (2ND STREET)

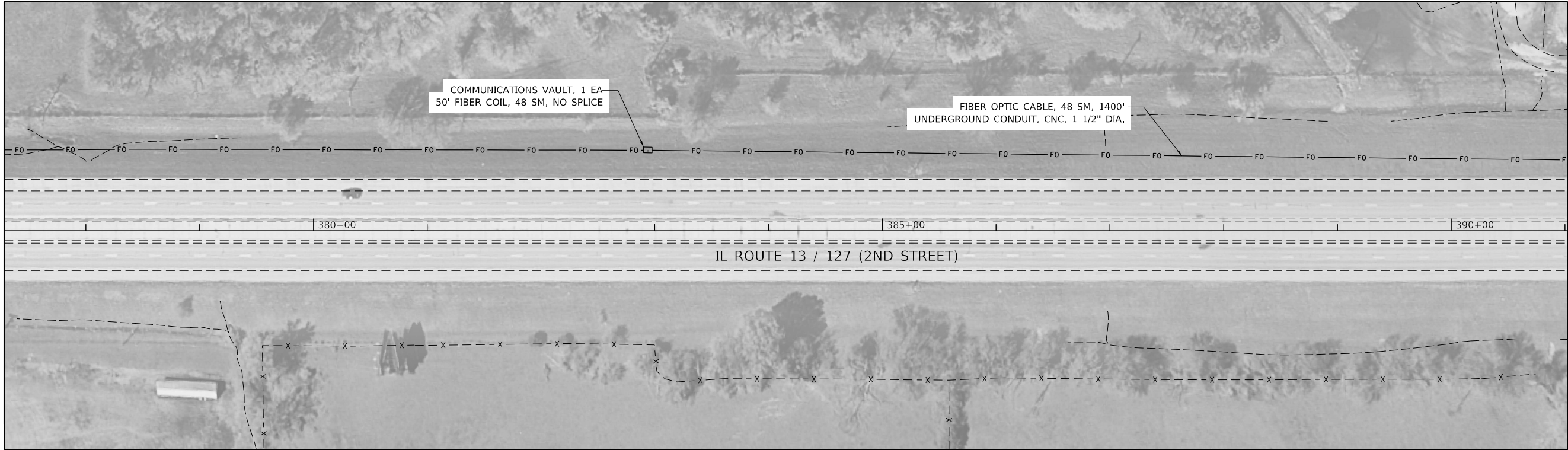
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	37
CONTRACT NO. 78998				
ILLINOIS		FED. AID PROJECT		



MODEL: Default  
FILE NAME: C:\Sharepoint\ITERIS - INCLSystems - Midwest - Chicago Construction\DOT\_PTB\_196-063 D9 ITS\VO 6 - 12007 - IL 13 W Interconnect\CADD\Sheet Files\0979998 IL Route 13\_FIBER2.dgn

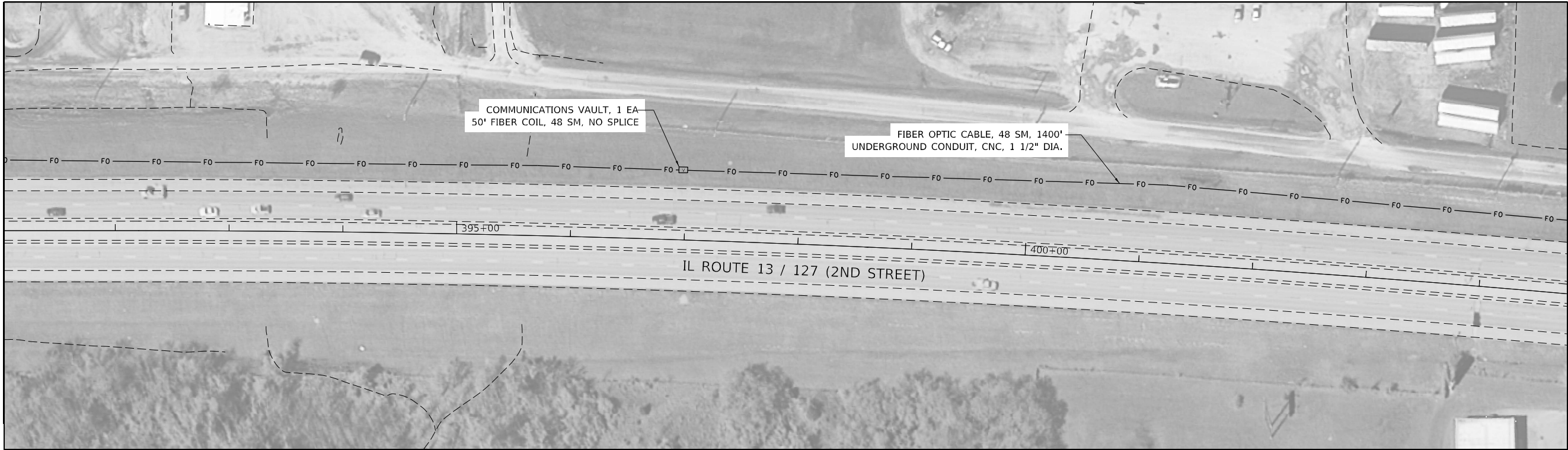
MATCH LINE STA. 377+29



MATCH LINE STA. 391+02



MATCH LINE STA. 391+02



MATCH LINE STA. 404+78



iteris

USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - AD	REVISED -
PLOT DATE = 10/8/2024	DATE - 10/8/24	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

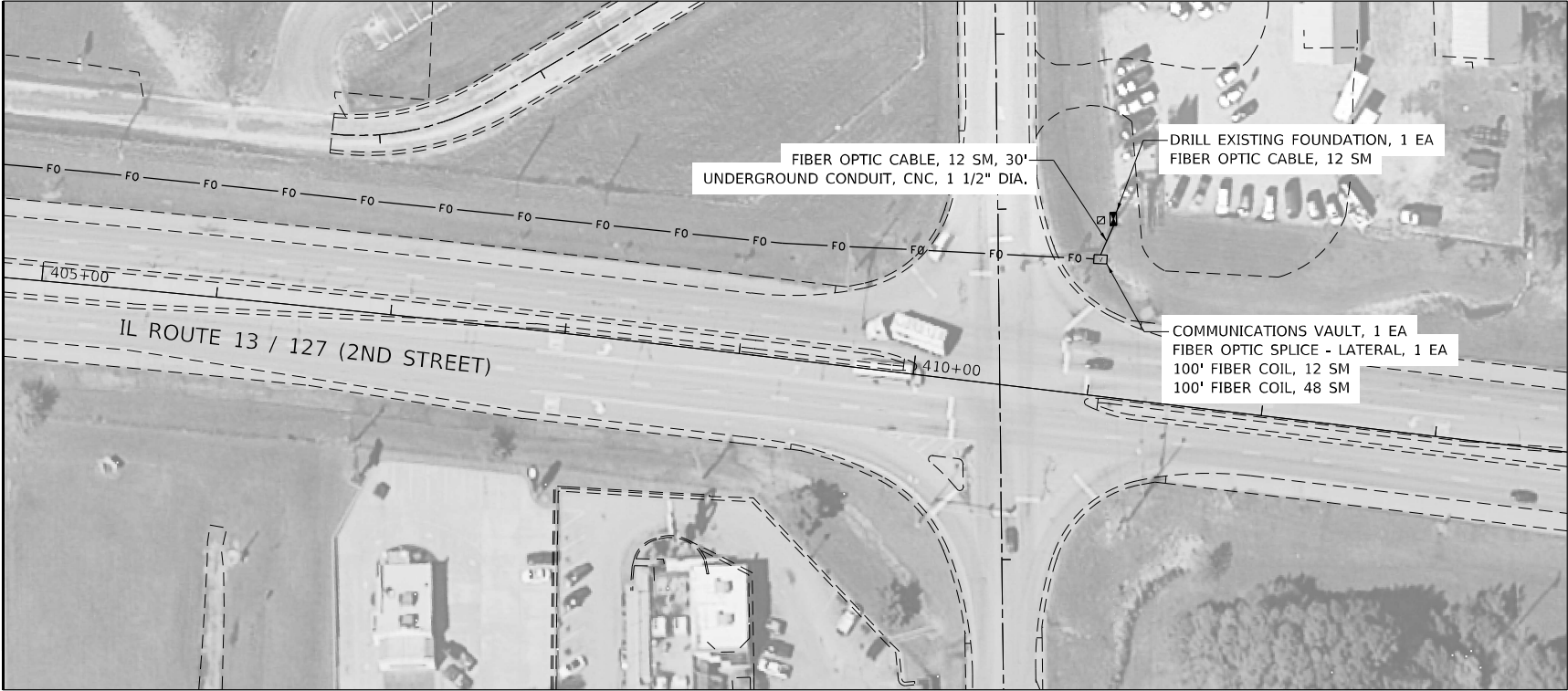
FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13 /127 (2ND STREET)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	38
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

MODEL Default  
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MATCH LINE STA. 404+78



USER NAME	= bfunk
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PLOT DATE	= 10/8/2024

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DATE	-	10/8/24

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REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION PLAN  
IL ROUTE 13 /127 (2ND STREET)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	39
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

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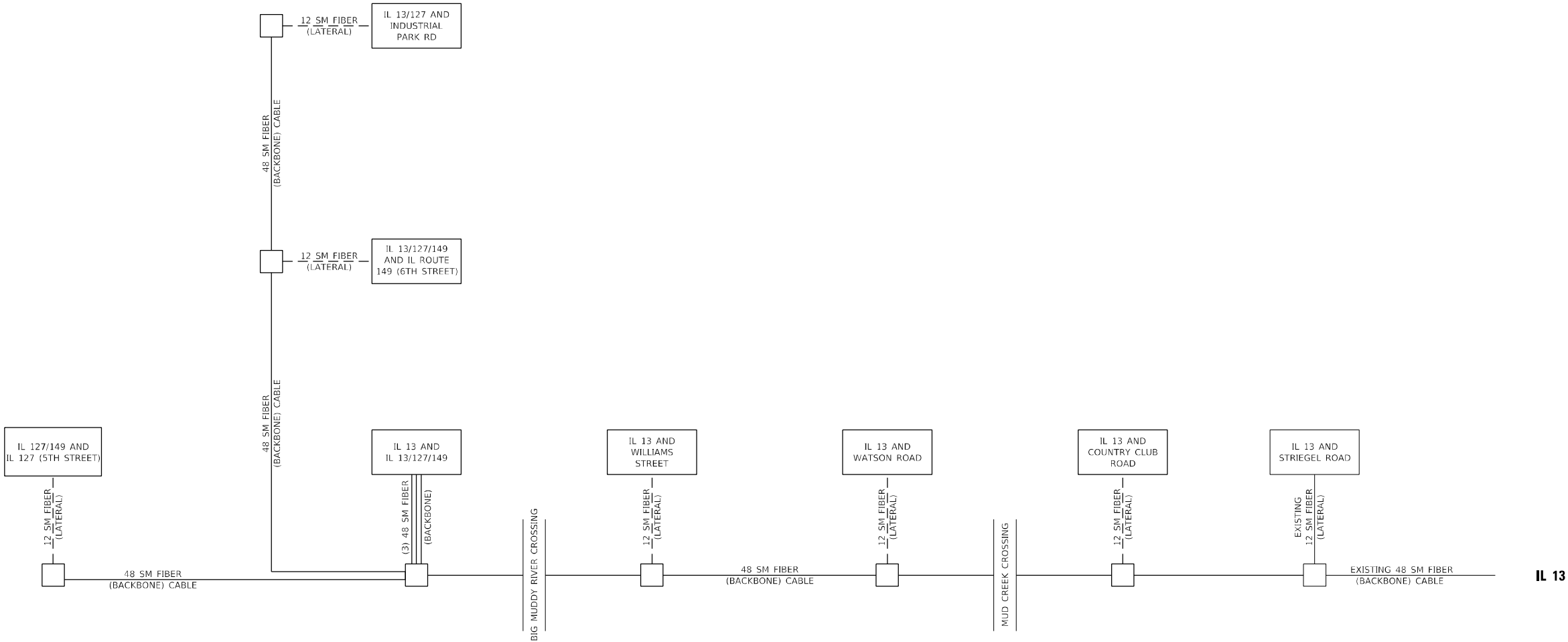
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PLOT DATE = 10/10/2024	DATE - 10/8/24	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER COMMUNICATIONS SYSTEM TOPOLOGY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	40
CONTRACT NO. 78998				
ILLINOIS		FED. AID PROJECT		

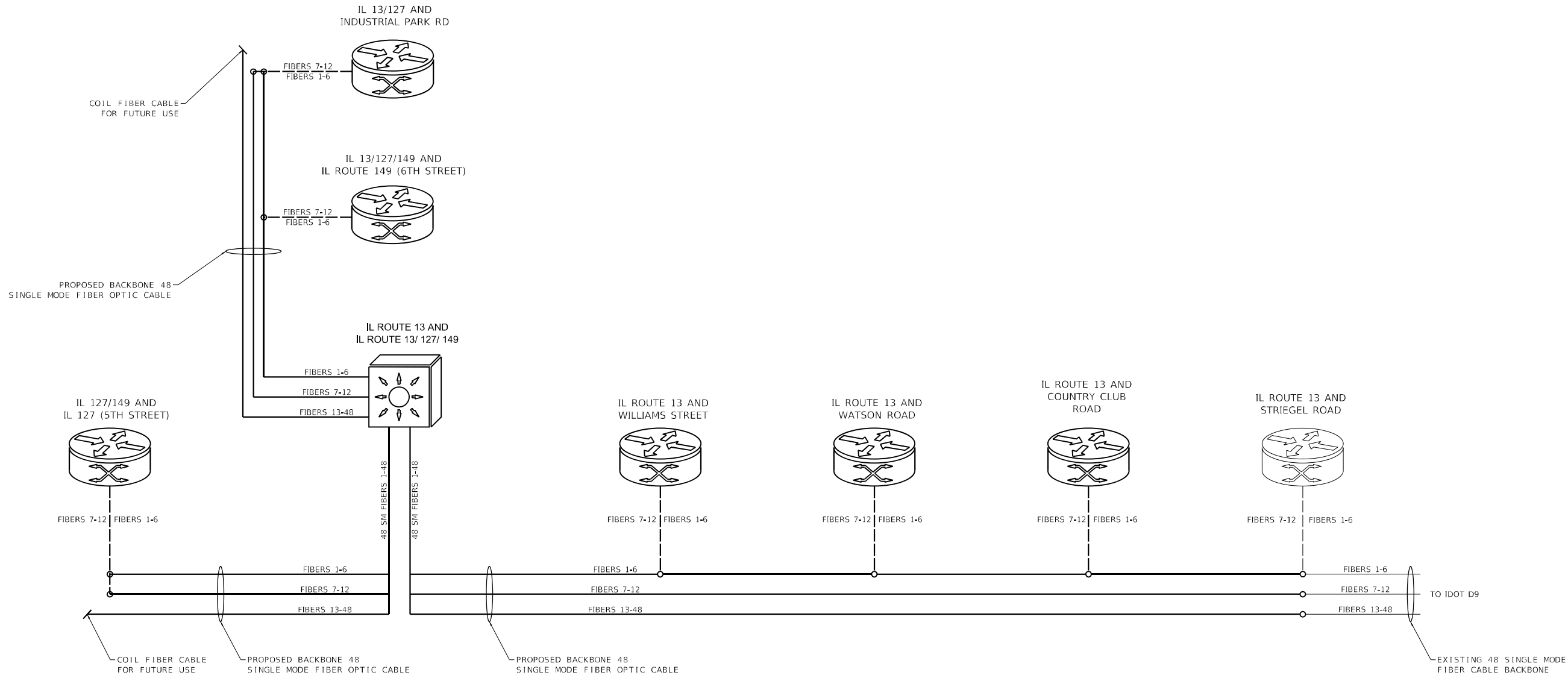


LEGEND

EXISTING	PROPOSED	
<div>INTERSECTION NAME</div>	<div>INTERSECTION NAME</div>	INTERSECTION STREET NAME
<div></div>	<div></div>	COMMUNICATIONS VAULT
<div>-----</div>	<div>-----</div>	12 SINGLE MODE FIBER (LATERAL) CABLE
<div>_____</div>	<div>_____</div>	48 SINGLE MODE FIBER (SMF) DISTRIBUTION





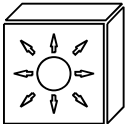


LEGEND

PROPOSED



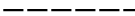
LAYER 2 SWITCH



LAYER 3 SWITCH



FIBER OPTIC SPLICE LOCATION



12 SINGLE MODE FIBER (SMF) LATERAL



48 SINGLE MODE FIBER (BACKBONE) CABLE

MODEL: Default  
FILE NAME: C:\Sharepoint\ITERIS - Midwest - Chicago Construction\IDOT - PTH 196-063 D9 ITS\WG 6 - 12007 - IL 13 V Interconnect\CADD\Sheet Files\ID979998 IL-Route13\_Network\_Topology.dgn



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DRAWN	- AD
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DATE	- 10/10/24
PLOT SCALE	= 2,800 in / in.
PLOT DATE	= 10/10/2024

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DATE	- 10/10/24
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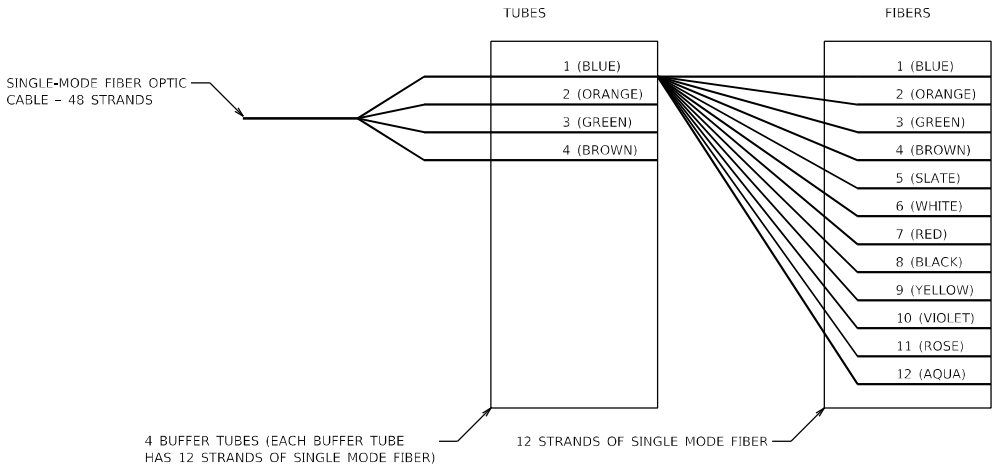
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER COMMUNICATIONS SYSTEM SCHEMATIC

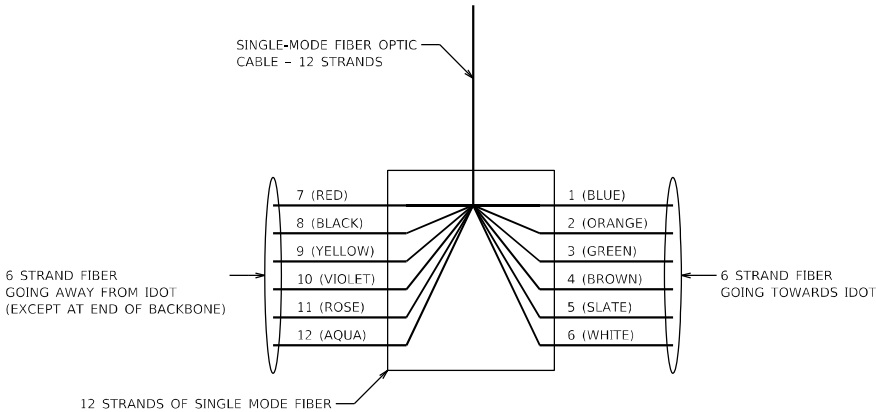
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	41
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
FILE NAME: C:\Sharepoint\ITERIS INC\Systems - Midwest - Chicago Construction\IDOT\_PTB\_196-063\_D9 ITS\WG 6 - 12007 - IL 13 W Interconnect\CADD\Sheet Files\ID979998\_IL-Route13\_Network\_Topology.dgn



48 SINGLE MODE FIBER CABLE COLOR CODE



LATERAL 12 SINGLE MODE FIBER CABLE COLOR CODE  
(WEST/EAST)



USER NAME = bfunk	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
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PLOT DATE = 9/12/2024	DATE - 9/12/24	REVISED -

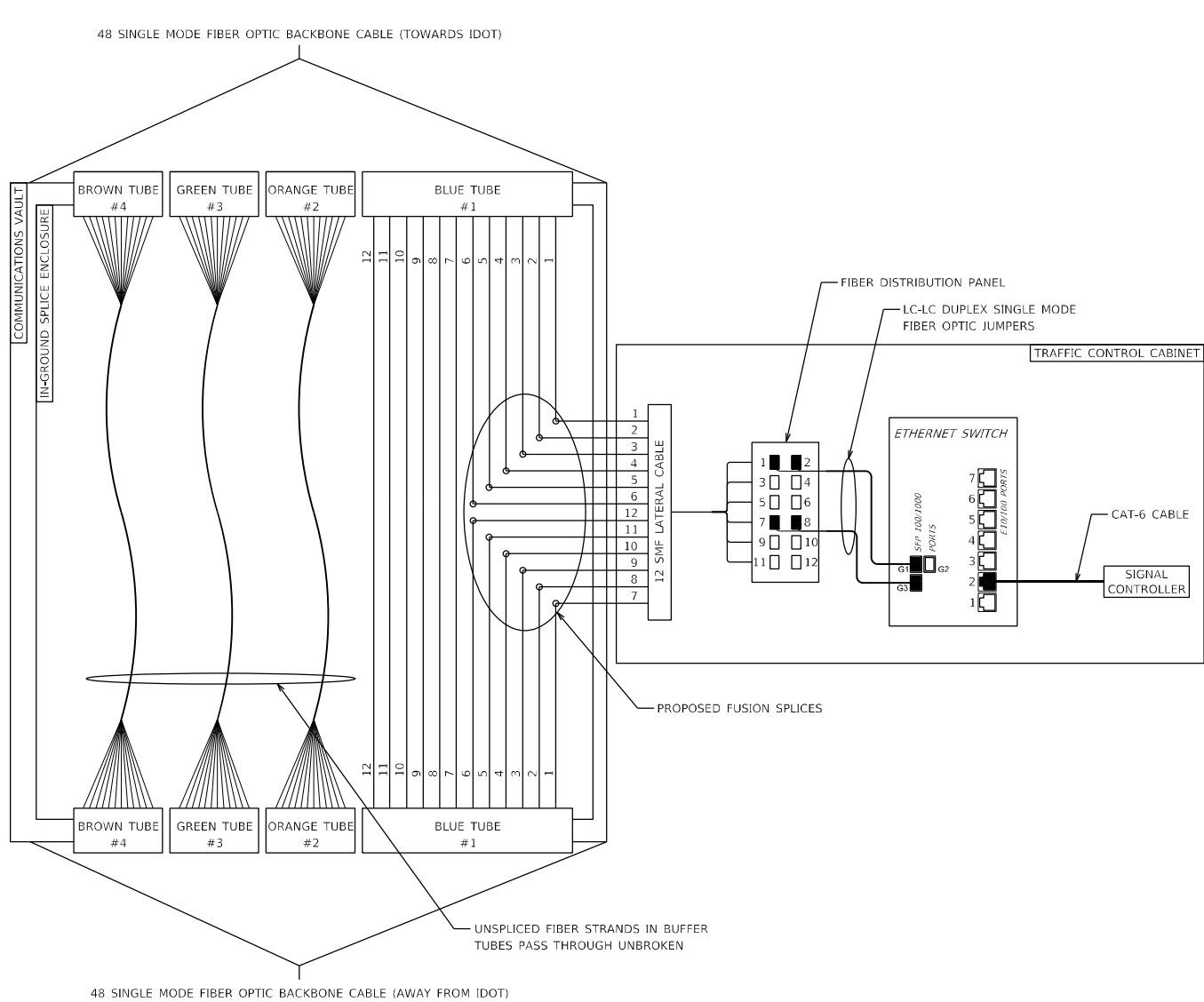
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC CABLE TYPICAL DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

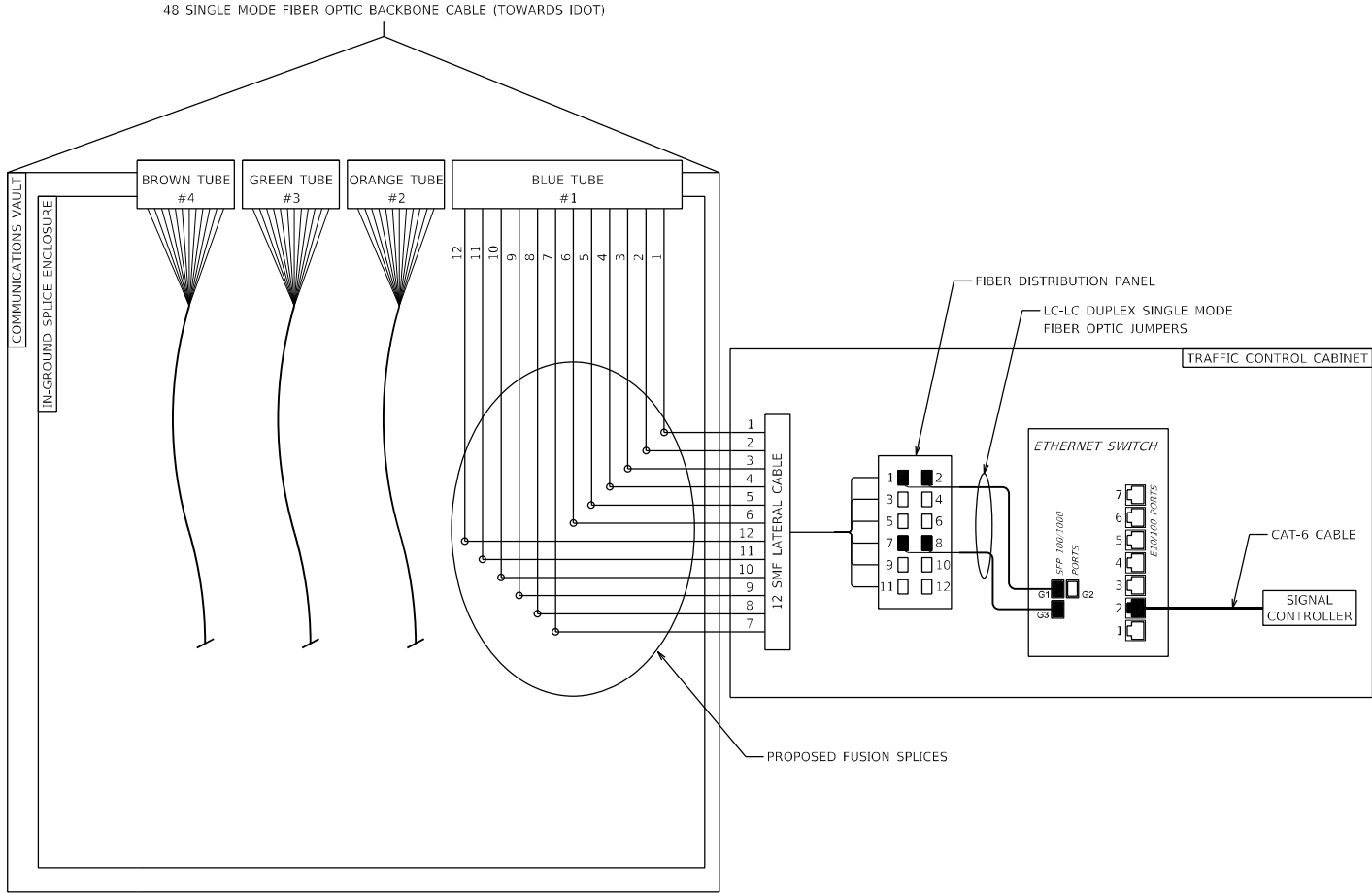
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	42
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
FILE NAME: C:\Sharepoint\ITERIS - INCLSystems - Midwest - Chicago Construction\IDOT - P1B 196-063 D9 ITS\WG 6 - 12007 - IL 13 VI Interconnect\CADD\SHEET Files\ID97998 IL-Route13\_Network\_Topology.dgn



**TYPICAL 48 SINGLE MODE (BACKBONE) FIBER  
TO 12 SINGLE MODE (LATERAL) FIBER SPLICING DETAIL**

IL ROUTE 13 AND IL ROUTE 13/ 127/ 149  * EAST PATCH PANEL	48 SMF	SPLICE TO	IL ROUTE 13 AND WILLIAMS STREET		SPLICE TO	48 SMF	SPLICE TO	IL ROUTE 13 AND WATSON ROAD		SPLICE TO	48 SMF	SPLICE TO	IL ROUTE 13 AND COUNTRY CLUB ROAD		SPLICE TO	48 SMF	SPLICE TO	IL ROUTE 13 AND STRIEGEL ROAD		SPLICE TO	48 SMF
			LATERAL FIBER					LATERAL FIBER					LATERAL FIBER					LATERAL FIBER			
1	1	-	7	1	-	1	-	7	1	-	1	-	7	1	-	1	-	7	1	-	1
2	2	-	8	2	-	2	-	8	2	-	2	-	8	2	-	2	-	8	2	-	2
3	3	-	9	3	-	3	-	9	3	-	3	-	9	3	-	3	-	9	3	-	3
4	4	-	10	4	-	4	-	10	4	-	4	-	10	4	-	4	-	10	4	-	4
5	5	-	11	5	-	5	-	11	5	-	5	-	11	5	-	5	-	11	5	-	5
6	6	-	12	6	-	6	-	12	6	-	6	-	12	6	-	6	-	12	6	-	6



**TYPICAL 48 SINGLE MODE (BACKBONE) FIBER  
TO 12 SINGLE MODE (LATERAL) FIBER SPLICING DETAIL  
AT END OF BACKBONE**

IL ROUTE 13 AND IL ROUTE 13/ 127/ 149 * SOUTH PATCH PANEL	48 SMF	SPLICE TO	IL ROUTE 127 AND 5TH STREET LATERAL FIBER
1	1	-	1
2	2	-	2
3	3	-	3
4	4	-	4
5	5	-	5
6	6	-	6
7	7	-	7
8	8	-	8
9	9	-	9
10	10	-	10
11	11	-	11
12	12	-	12

IL ROUTE 13 AND IL ROUTE 13/ 127/ 149  * NORTH PATCH PANEL	48 SMF	SPLICE TO	IL ROUTE 149 AND IL ROUTE 127 (5TH STREET)		SPLICE TO	48 SMF	SPLICE TO	IL ROUTE 149 AND IL ROUTE 13/127 (6TH STREET)	
			LATERAL FIBER					LATERAL FIBER	
1	1	-	1	7	-	1	-	1	
2	2	-	2	8	-	2	-	2	
3	3	-	3	9	-	3	-	3	
4	4	-	4	10	-	4	-	4	
5	5	-	5	11	-	5	-	5	
6	6	-	6	12	-	6	-	6	
7	7	-			-	7	-		7
8	8	-			-	8	-		8
9	9	-			-	9	-		9
10	10	-			-	10	-		10
11	11	-			-	11	-		11
12	12	-			-	12	-		12



USER NAME = bfunk  
PLOT SCALE = 2,800 in / in.  
PLOT DATE = 9/12/2024

DESIGNED - AD  
DRAWN - AD  
CHECKED - BF  
DATE - 9/12/24

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL FIBER SPLICING DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P.  
RTE.  
331/42

SECTION  
D9 TRAFFIC SIGNAL 2024-1

COUNTY  
JACKSON

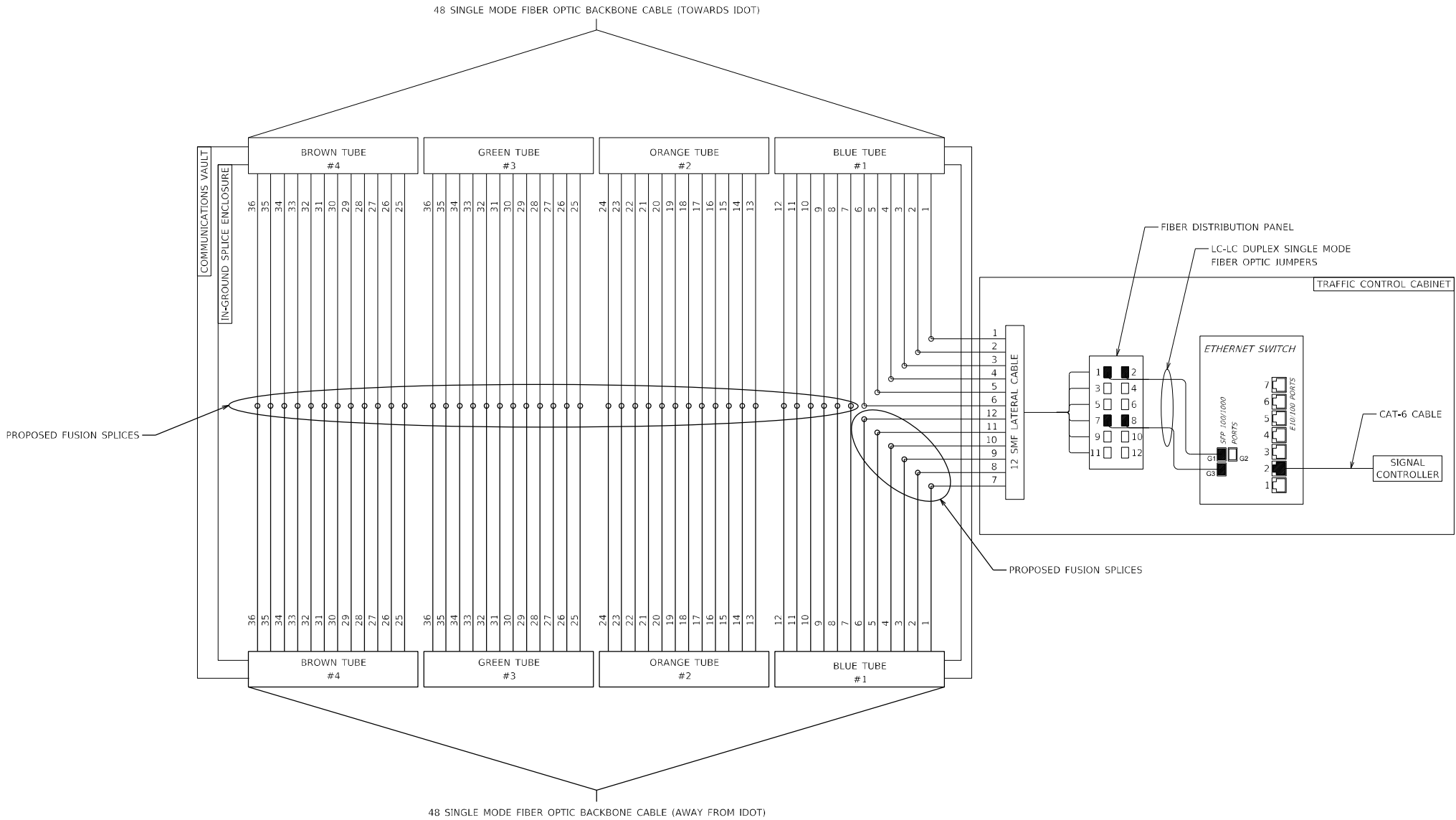
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SHEETS  
46

SHEET  
NO.  
43

CONTRACT NO. 78998

ILLINOIS FED. AID PROJECT

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**48 SINGLE MODE (BACKBONE) FIBER  
TO 48 SINGLE MODE (BACKBONE) FIBER SPLICING DETAIL  
AT IL ROUTE 13 AND STRIEGEL ROAD**



USER NAME = bfunk	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
PLOT SCALE = 2,8800 in / in.	CHECKED - BF	REVISED -
PLOT DATE = 9/12/2024	DATE - 9/12/24	REVISED -

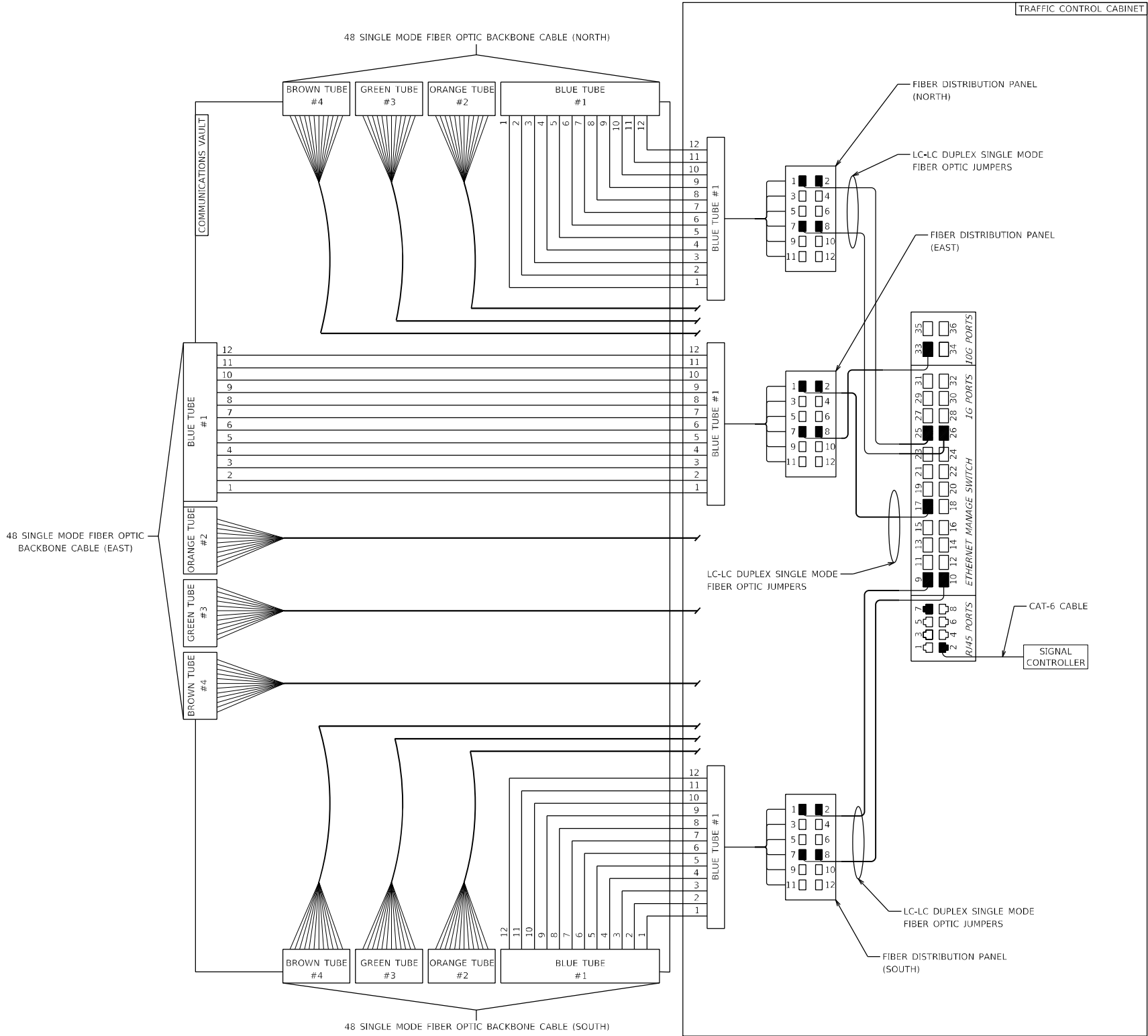
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL FIBER SPLICING DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	44
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

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**48 SINGLE MODE (BACKBONE) FIBER  
TO LAYER III SWITCH SPLICING DETAIL  
AT IL ROUTE 13 AND IL ROUTE 13 /127/149**

- NOTES:
- ETHERNET SWITCH PORT ASSIGNMENTS TO BE AT THE DIRECTION OF THE ENGINEER.
  - COIL FIBER OPTIC CABLE SLACK IN CABINET.



USER NAME = bfunck	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
PLOT SCALE = 2,800 in / in.	CHECKED - BF	REVISED -
PLOT DATE = 9/12/2024	DATE - 9/12/24	REVISED -

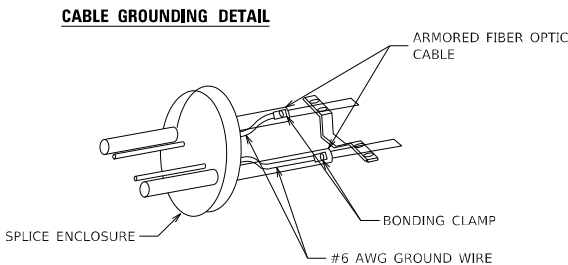
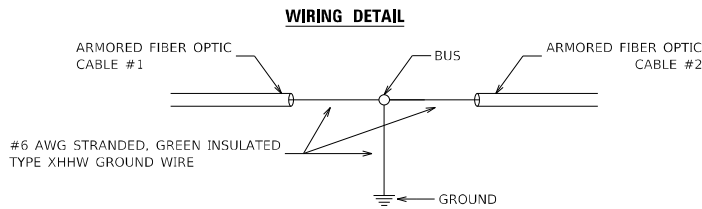
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL FIBER SPLICING DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

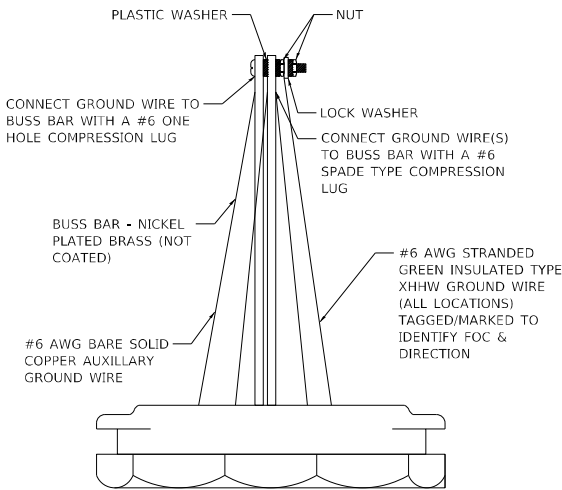
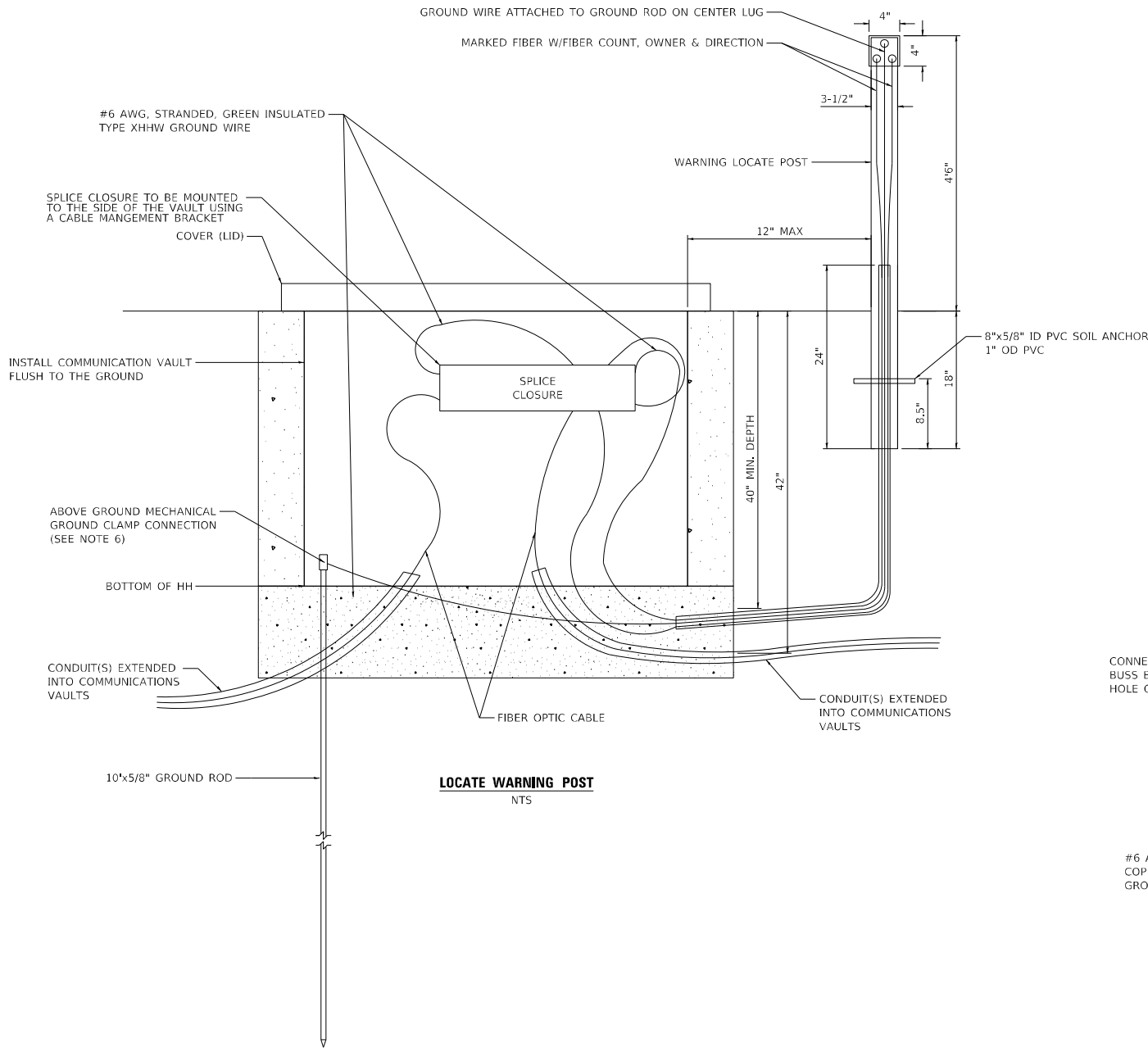
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331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	45
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				

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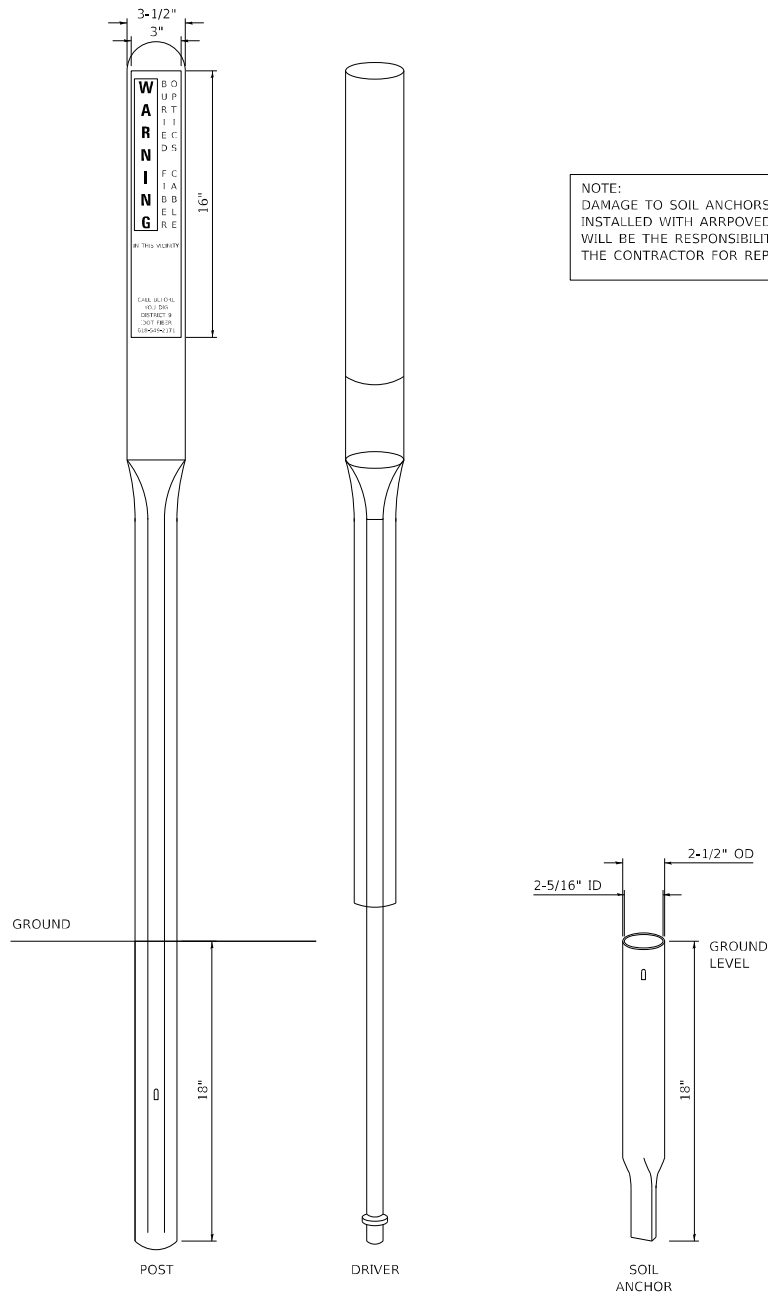


**INSTALLATION OF MARKER POST**

1. USE A POST DRIVER TO RAPIDLY INSTALL THE POST IN MOST SOIL CONDITIONS.
2. THE SOIL ANCHOR IS DRIVEN UNTIL FLUSH WITH GROUND LEVEL OR SLIGHTLY BELOW THE SURFACE.
3. PUSH THE POST DOWN INTO THE ANCHOR APPROXIMATELY 9", THEN PULL UP UNTIL IT LOCKS INTO PLACE.



**MARKER POST TOP HAT BOND PLATE**  
NTS



NOTE:  
DAMAGE TO SOIL ANCHORS NOT  
INSTALLED WITH APPROVED DRIVER  
WILL BE THE RESPONSIBILITY OF  
THE CONTRACTOR FOR REPLACEMENT

**NOTES:**

1. FOR ALL SPLICE AND COMMUNICATION VAULTS NUMER DECALS WILL BE APPLIED AFTER INSTALLATION IS COMPLETED AND AT THE DIRECTION OF THE ENGINEER.
2. COIL FIBER OPTIC CABLE SLACK IN COMMUNICATIONS VAULTS ENSURING THAT THE BEND RADIUS DOES NOT EXCEED THE MINIMUM BEND RADIUS OF THE FIBER.
3. 1-1/2" CONDUIT AND #6 AWG GROUND WIRE AND ASSOCIATED WORK ARE INCLUDED AS PART OF THE FIBER OPTIC UTILITY MARKER AND WILL NOT BE PAID FOR SEPARATELY.
4. GROUND WIRE SHALL BE BONDED TO THE ARMOR OF THE ARMORED FIBER OPTIC CABLE(S) IN THE SPLICE ENCLOSURE USING THE #6 AWG GROUND WIRE, AND EACH GROUND SHALL BE ISOLATED, WITHIN THE ENCLOSURE.
5. A WATERPROOF SIMPLEX FIBER OPTIC INNERDUCT SPLIT PLUG WITH BUSHING ASSEMBLY OF APPROPRIATE SIZE OR APPROVED EQUIVALENT SHALL BE INSTALLED AROUND THE FIBER OPTIC CABLE TO SEAL AROUND THE DUCT FOR THE CONDUIT(S) ENTERING ALL COMMUNICATION VAULTS, AND IS INCLUDED AS PART OF THE FIBER OPTIC CABLE(S) PAY ITEM AND WILL NOT BE PAID SEPARATELY.
6. ALL MATERIALS FOR MECHANICAL CONNECTION SHALL BE UL LISTED AND INSTALLED PER NEC ARTICLE 250, CADDWELD UNDER PEA GRAVEL CONNECTIONS MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.

**iteris**

USER NAME = bfunck	DESIGNED - AD	REVISED -
	DRAWN - AD	REVISED -
PLOT SCALE = 2,8800 in / in.	CHECKED - BF	REVISED -
PLOT DATE = 9/12/2024	DATE - 9/12/24	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC MARKER, SPLICE, AND GROUNDING DETAIL**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331/42	D9 TRAFFIC SIGNAL 2024-1	JACKSON	46	46
CONTRACT NO. 78998				
ILLINOIS FED. AID PROJECT				