

06-14-2019 LETTING ITEM 148

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAP ROUTE 331 (IL 13)
SECTION D9 TRAFFIC SIGNAL 2019-1

TRAFFIC SIGNAL INTERCONNECT
JACKSON COUNTY

TRAFFIC DATA

IL 13 WEST OF CARBONDALE 15,900 (6% TRUCKS)

IL 13 EAST OF CARBONDALE 27,100 (6% TRUCKS)

TOWNSHIPS

CARBONDALE TOWNSHIP

PROJECT LIMIT
INTERSECTION OF
IL 13 AND STRIEGEL ROAD

T9S
R1W

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

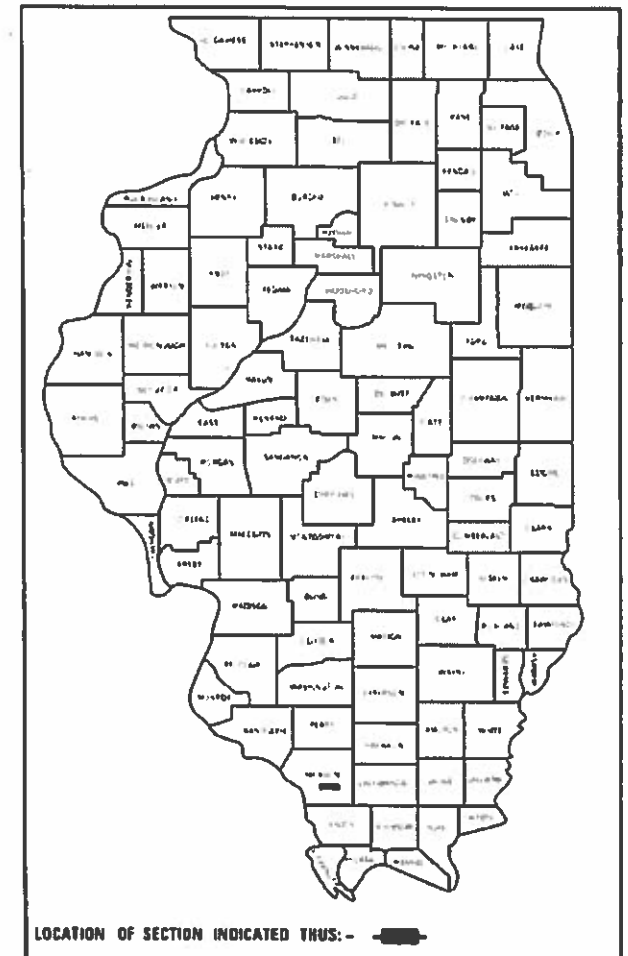
PROJECT ENGINEER SUSAN POE
PROJECT DESIGNER SUSAN POE

CONTRACT NO. 78695

GROSS LENGTH = 5.7 MILES
NET LENGTH = 5.7 MILES

FAP R/L	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	1
BLDGES			CONTRACT NO. 78695	

0-99-003-18




STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED April 18 20 19
Keith Robinson
REGION FIVE ENGINEER
May 10 20 19
EA. ERS
ENGINEER OF DESIGN AND ENVIRONMENT
May 10 20 19
Paul P. [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

REV. - MS

Examined By: 
DISTRICT MATERIALS ENGINEER

FILE NAME: 05	USER NAME = post	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGNATURE SHEET				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	2
	PLOT SCALE = 10.0000" = 1'	CHECKED -	REVISED -		SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____				CONTRACT NO. 78695				
	PLOT DATE = 4/15/2019	DATE	REVISED -										

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- 1COVER SHEET
- 2SIGNATURES SHEET
- 3LIST OF STANDARDS / INDEX OF SHEETS/CONSTRUCTION NOTES/COMMITMENTS
- 4-6SUMMARY OF QUANTITIES
- 7POINT LOCATION MAP
- 8-37PLAN SHEET - FIBER OPTIC INSTALLATION
- 38FIBER OPTIC COMMUNICATION SYSTEM TOPOLOGY SCHEMATIC
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- 40-44FIBER OPTIC CABLE SPLICE ALLOCATION AND CONNECTION DETAILS
- 45-48BACKBONE FIBER OPTIC CABLE TYPICAL SPLICE DETAILS
- 49IDOT D9 BUILDING FIBER AND CONNECTION DETAILS
- 50EQUIPMENT RACK AND NETWORK SWITCH ASSIGNMENT SCHEMATIC
- 51IDOT D9 FIBER TERMINATION SCHEDULE
- 52FIBER OPTIC MARKER, SPLICE AND GROUNDING DETAIL

- 000001-07_STANDARDSYMBOLSABBREVIATIONS&PATTERNS
- 701001-02_OF FRDOP-2L2W-15FTMINFROMEOP
- 701006-05_OF FRDOP-2L2W-15FTTOEOP
- 701101-05_OF FRDOP-MULTILN-LESSTHAN15FTTOEOP
- 701106-02_OF FRDOP-MULTILN-MORE THAN 15' AWAY
- 701301-04_LNCLOSURE2L2W-SHORTTIMEOP
- 701421-08_LNCLOSUREMULTILN-DAYOPONLY45-55MPH
- 701422-10_LNCLOSUREMULTILN-45-55MPH
- 701601-09_URBANLNCLOSUREMULTILN1W2WWITHNONTRVSABLEMED
- 701602-10_URBANLNCLOSUREMULTILN2WWITHBIDIRECTLEFTTURNLN
- 701701-10_URBANLNCLOSUREMULTILNINTERSECTION
- 701801-06_SIDEWALKCORNERORCROSSWALKCLOSURE
- 701901-08_TRAFCNTRLDEVICES

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 SIGNALS SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED CONDUIT AND FIBER OPTIC CABLE.
3. THE CONTRACTOR SHALL PROVIDE 100 FT. OF SLACK FIBER OPTIC CABLE INSIDE EACH PROPOSED COMMUNICATIONS VAULT OR AS SHOWN ON THE PLANS. SLACK QUANTITY IS INCLUDED IN THE CABLE QUANTITY.
4. THERE SHALL BE NO ADDITIONAL SPLICES IN THE FIBER OPTIC CABLE EXCEPT WHERE NOTED IN THE PLANS, OR UPON APPROVAL OF THE TRAFFIC ENGINEER.
5. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN THE REQUIRED MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
6. 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 CONDUITS.
7. FIBER OPTIC CABLE SHALL BE SPLICED TO CREATE A CONTINUOUS LINK ALONG IL 13. ALL FIBERS WITHIN THE CABLE SHALL BE FUSION SPLICED AND ALL SPLICES SHALL BE PROTECTED BY A WEATHERPROOF SPLICE ENCLOSURE. SPLICES SHALL BE MADE ONLY IN COMMUNICATION VAULTS.
8. THE LOCATION OF THE PROPOSED CONDUIT AS SHOWN ON THE PLAN SHEETS IS APPROXIMATE AND NOT DRAWN TO SCALE. THE CONDUIT SHALL BE INSTALLED AT A 36" MINIMUM DEPTH INCLUDING WHEN CROSSING WATERWAYS AND DRAINAGE FLOW LINES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING FIELD TILE, UNDERDRAIN, AND DRAINAGE STRUCTURE LOCATIONS. THE CONTRACTOR SHALL MAKE AN EFFORT TO MINIMIZE DAMAGE TO THESE FACILITIES DURING THE INSTALLATION OF CONDUIT AND COMMUNICATIONS VAULTS, IN THE EVENT THAT THESE FACILITIES ARE DAMAGED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING REPAIRS TO THESE ITEMS AND RESTORE FUNCTIONALITY TO THE SATISFACTION OF THE ENGINEER.
- 10 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 COMMJICATION VAULTS. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED ITEMS OFF OF THE JOB SITE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICES FOR THE 1 1/2" CONDUIT PAY ITEM.
- 11 THE CONTRACTOR SHALL PLAN AND CONDUCT CONDUIT AND FIBER INSTALLATION OPERATION TO MINIMIZE THE NUMBER OF ROAD LANE CLOSURES AND TO MINIMIZE TRAFFIC DISRUPTIONS AND DELAYS FOR THE MOTORING PUBLIC AS DESCRIBED IN THE TRAFFIC CONTROL SPECIAL PROVISION.

REV. - MS

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		DRAWN =	REVISED =						331		JACKSON	52	3
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	PLOT DATE = 5/7/2019	DATE =	REVISED =		SCALE:	SHEET	OF	SHEETS	STA.	TOT STA.	ILLINOIS	FED. AID PROJECT	

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SUMMARY OF QUANTITIES

COUNTY:	JACKSON
ROUTE:	FAP 331 (IL 13)
FUNDING:	100% STATE
LOCATION:	URBAN

CODE NUMBER	ITEM DESCRIPTION	UNIT	
			0021
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	11
67100100	MOBILIZATION	L SUM	1
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
81028710	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3/4" DIA.	FOOT	8
81028720	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.	FOOT	317
81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	10
81028740	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA.	FOOT	42,104
81028790	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 4" DIA.	FOOT	317
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	23
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1

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		DRAWN -	REVISED -					331		JACKSON	52	4
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SUMMARY OF QUANTITIES - CONT

COUNTY : JACKSON
ROUTE : FAP 331 (IL 13)
FUNDING : 100% STATE
LOCATION : URBAN

CODE NUMBER	ITEM DESCRIPTION	UNIT	
			0021
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	62
87900100	DRILL EXISTING FOUNDATION	EACH	19
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	19
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
X0320024	ETHERNET MANAGE SWITCH	EACH	1
X0323909	DATA NETWORK PORT ADAPTER	EACH	1
X0323914	FIBER OPTIC CABLE SPLICE - LATERAL	EACH	22
X0323957	FIBER OPTIC CABLE SPLICE - MAINLINE	EACH	2
X0324256	FIBER OPTIC CABLE SPLICE	EACH	3
X0325077	FIBER OPTIC UTILITY MARKER	EACH	146
X0326248	ATMS SOFTWARE (CORE MODULE)	L SUM	1
X0326266	ETHERNET SWITCH	EACH	22
X0326944	ATMS INTEGRATION	L SUM	1
X0327235	LOCATING UNDERGROUND UTILITIES	FOOT	525
X1400127	CAT. 6 ETHERNET CABLE	FOOT	144

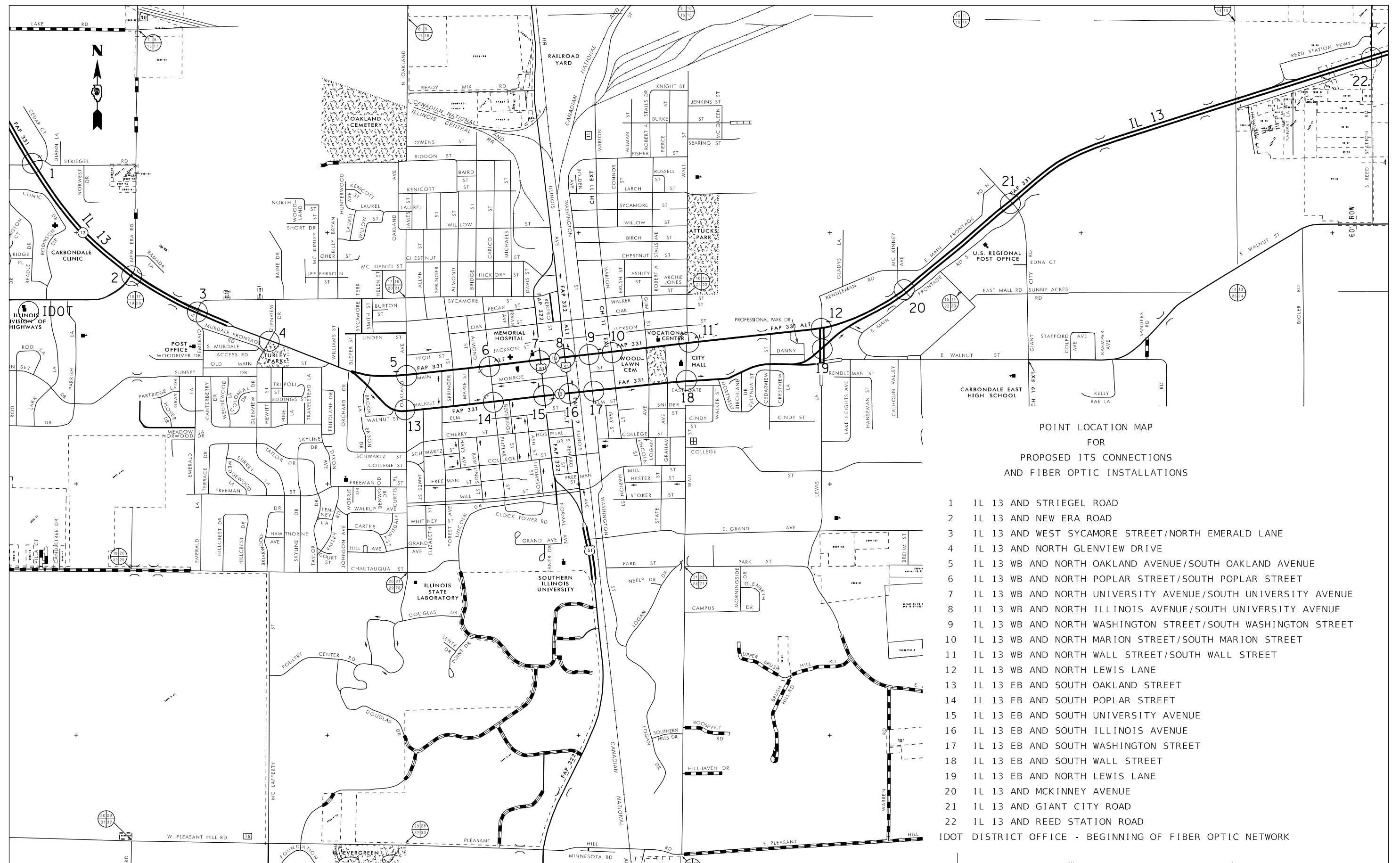
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SUMMARY OF QUANTITIES - CONT

COUNTY:	JACKSON
ROUTE:	FAP 331 (IL 13)
FUNDING:	100% STATE
LOCATION:	URBAN

CODE NUMBER	ITEM DESCRIPTION	UNIT	
			0021
X1400305	FIBER OPTIC PATCH PANEL , 144 PORT, RACK MOUNT	EACH	1
X1400307	HQ FIBER OPTIC CONNECTIVITY	L SUM	1
X8570215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	19
X8710030	FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	16,545
X8710036	FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	2,278
X8710039	FIBER OPTIC CABLE 144 FIBERS, SINGLE MODE	FOOT	32,335
X8850106	INDUCTIVE LOOP DETECTOR, RACK MOUNTED	EACH	16
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
Z0033052	COMMUNICATIONS VAULT	EACH	51
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1

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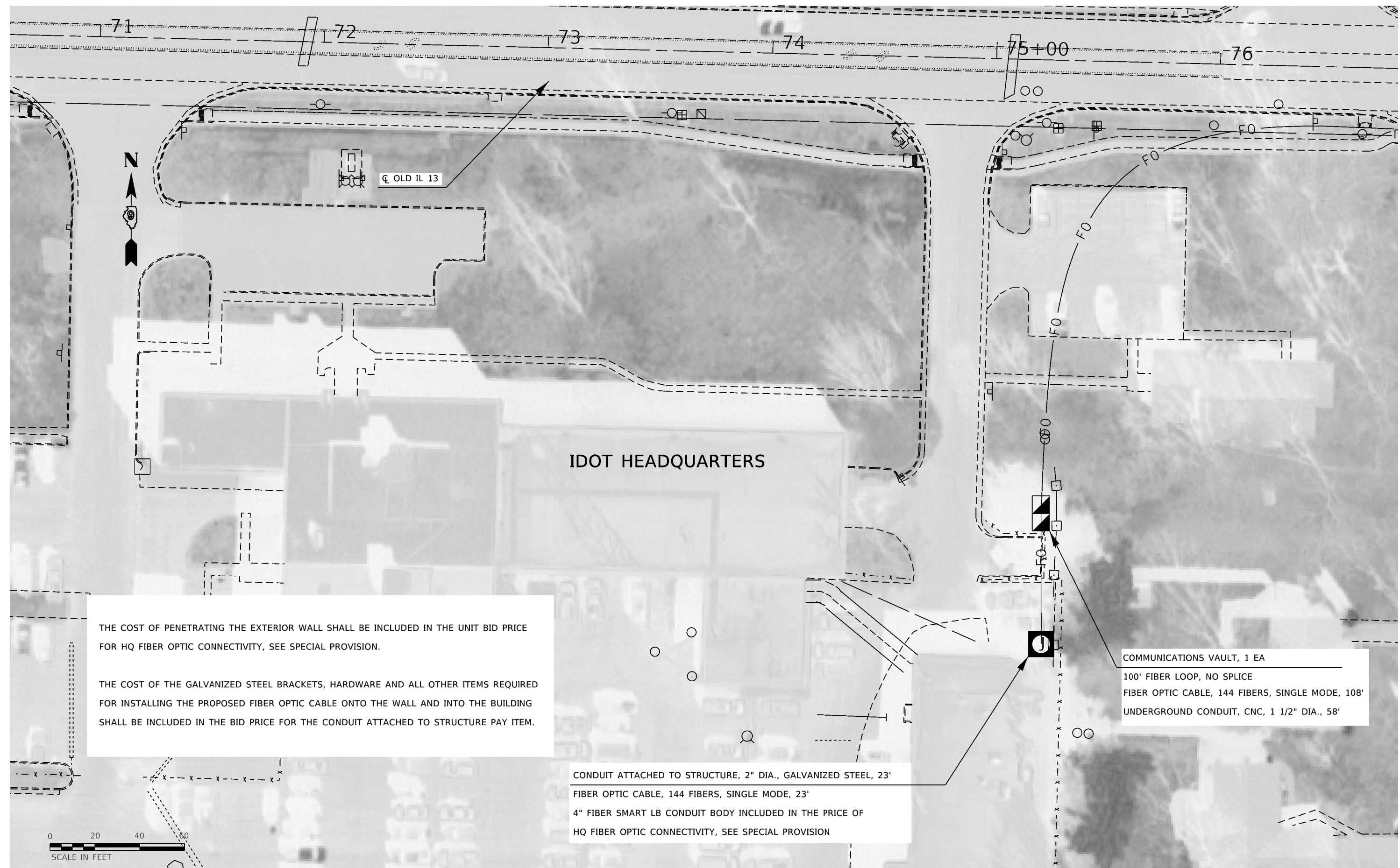
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LOCATION MAP

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	7
CONTRACT NO. 78695				
		ILLINOIS	FED. AID PROJECT	



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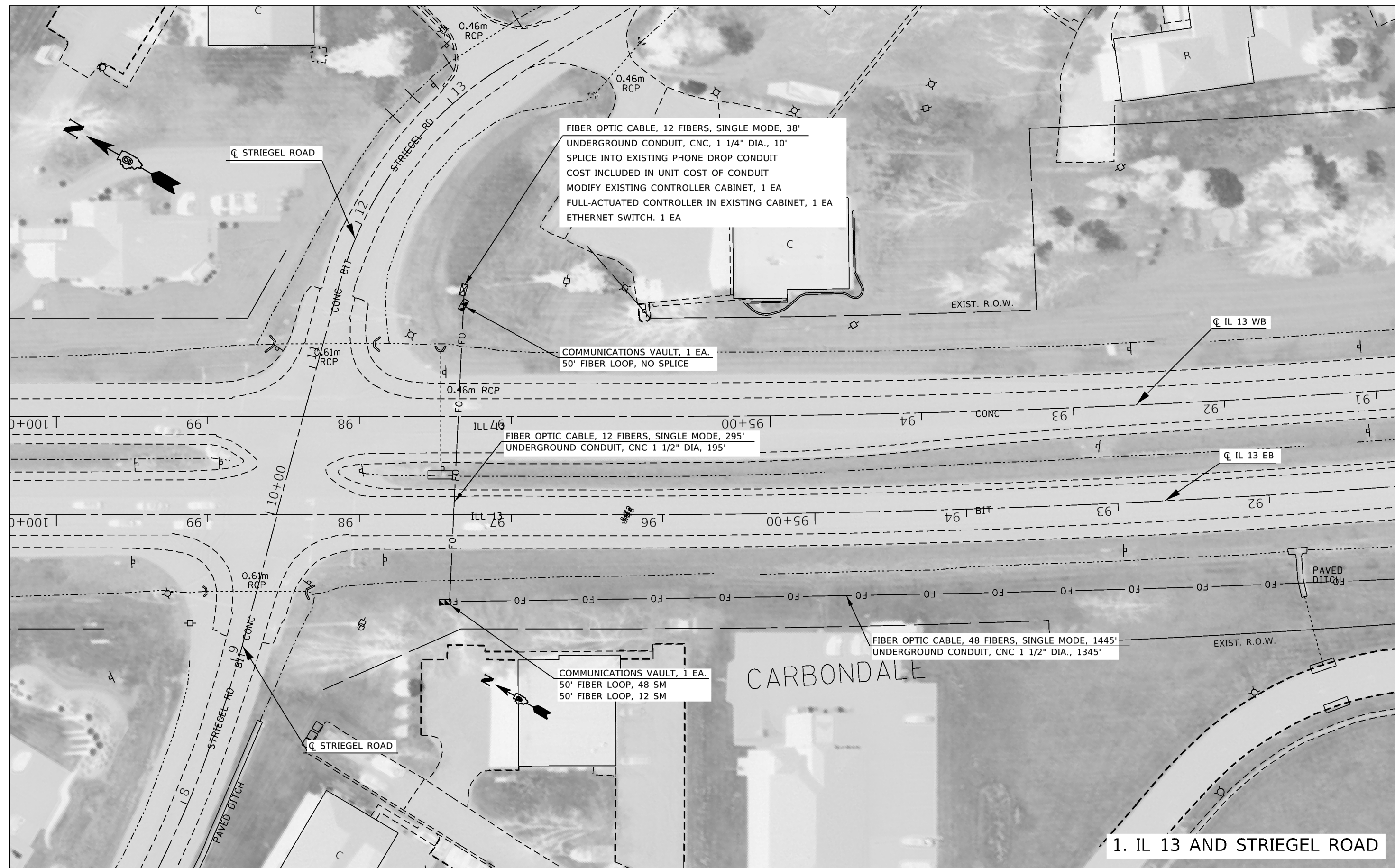
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION
OLD ILLINOIS 13

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	9
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



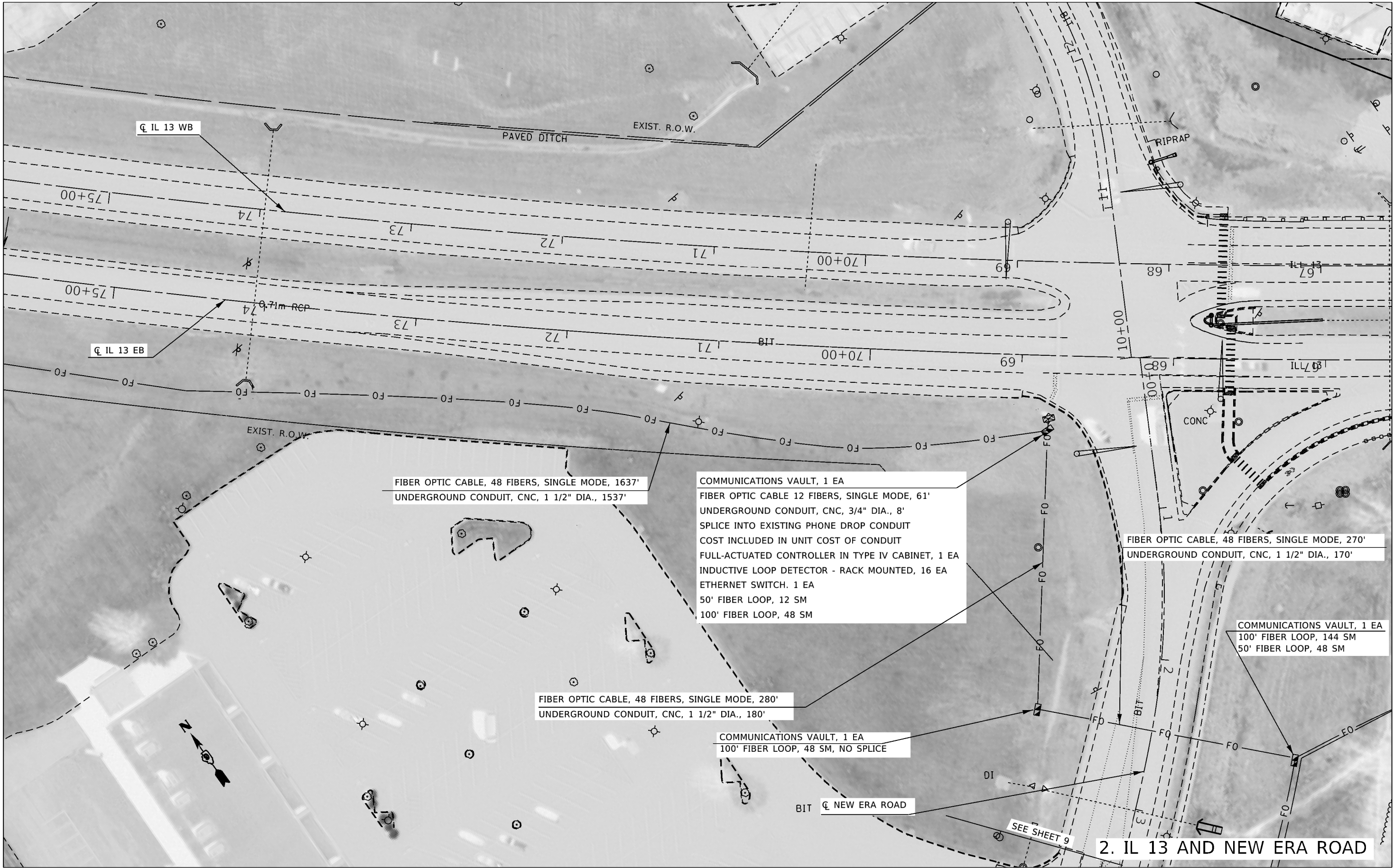
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC INSTALLATION
IL 13 AND STRIEGEL ROAD**

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 2019-1	JACKSON	52	10
		CONTRACT NO. 78695		
		ILLINOIS	FED. AID PROJECT	



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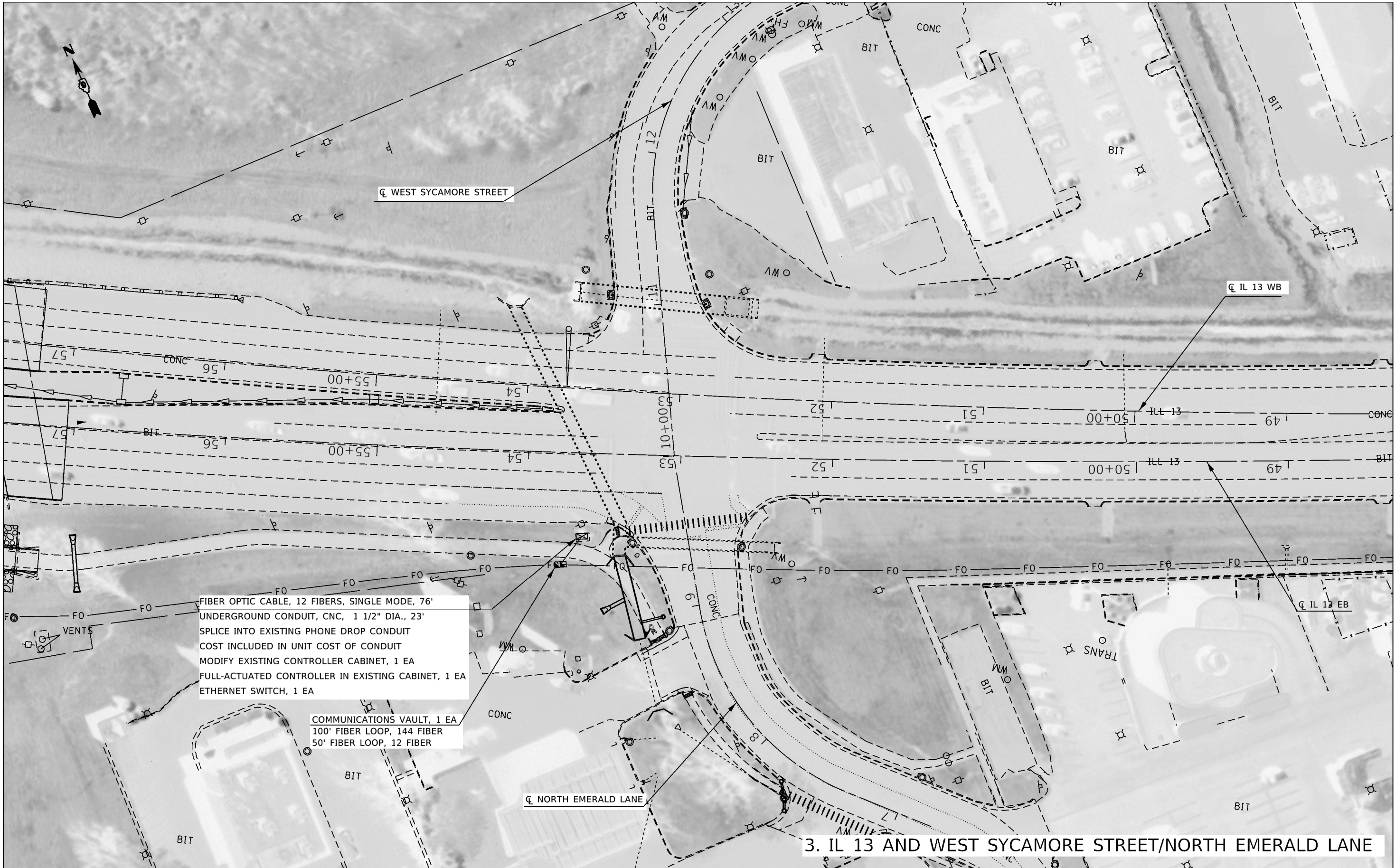
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION
IL 13 AND NEW ERA ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	12
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



FIBER OPTIC CABLE, 12 FIBERS, SINGLE MODE, 76'
UNDERGROUND CONDUIT, CNC, 1 1/2" DIA., 23'
SPLICE INTO EXISTING PHONE DROP CONDUIT
COST INCLUDED IN UNIT COST OF CONDUIT
MODIFY EXISTING CONTROLLER CABINET, 1 EA
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, 1 EA
ETHERNET SWITCH, 1 EA

COMMUNICATIONS VAULT, 1 EA
100' FIBER LOOP, 144 FIBER
50' FIBER LOOP, 12 FIBER

3. IL 13 AND WEST SYCAMORE STREET/NORTH EMERALD LANE

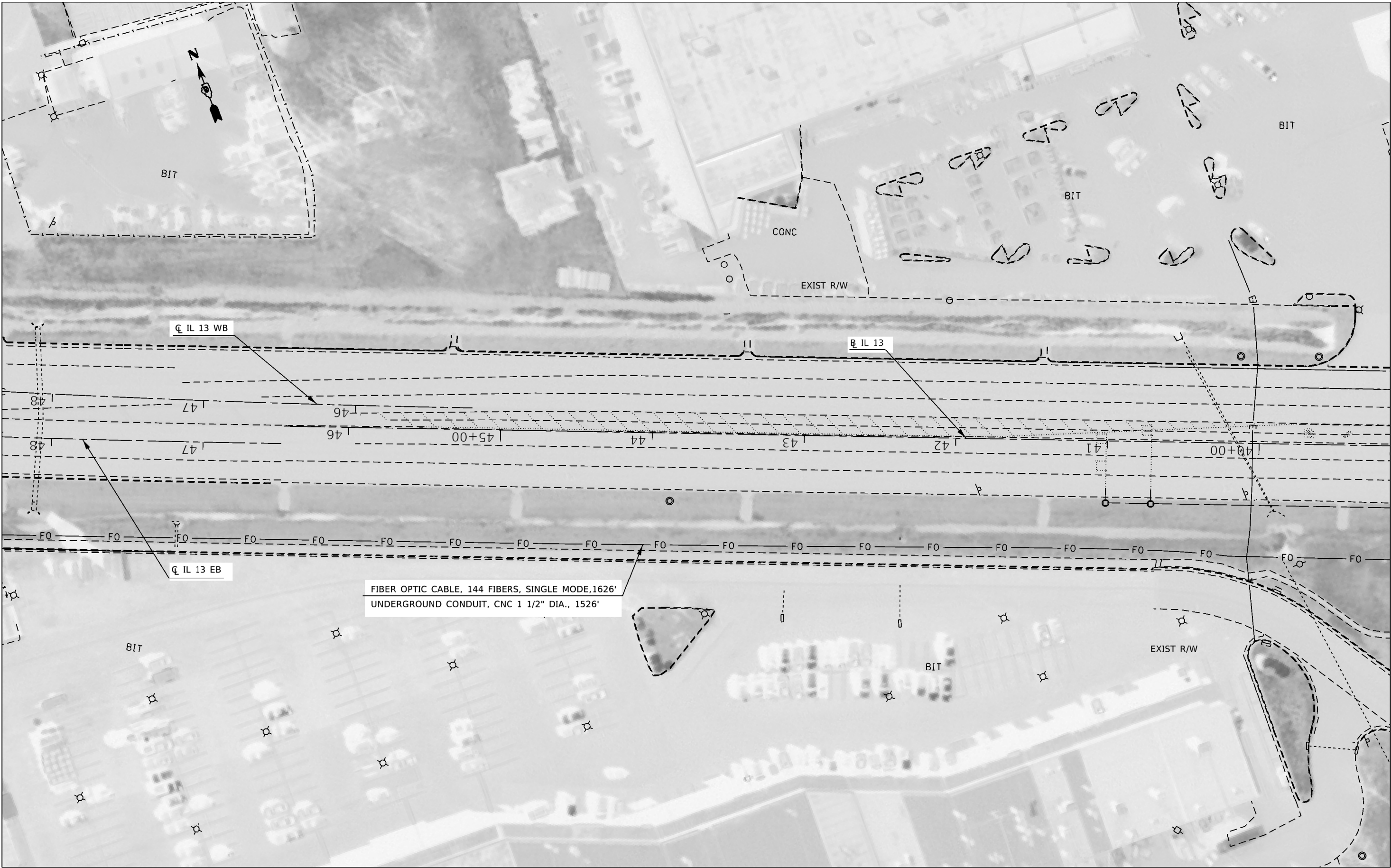
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION IL 13W, SYCAMORE/N. EMERALD			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	14
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



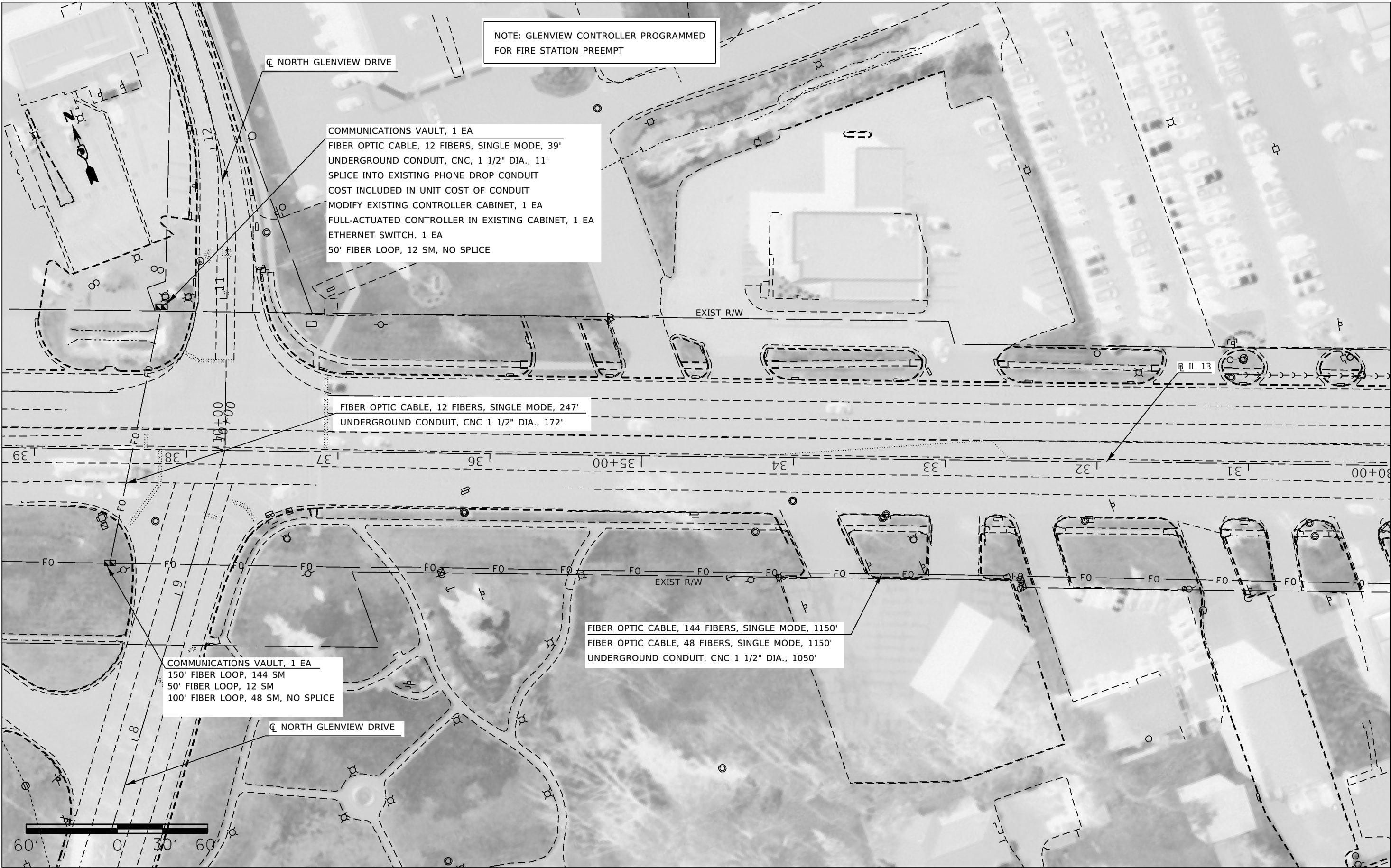
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION IL 13			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	09 TRAFFIC SIGNAL 2019-1	JACKSON	52	15
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



NOTE: GLENVIEW CONTROLLER PROGRAMMED
FOR FIRE STATION PREEMPT

CL NORTH GLENVIEW DRIVE

COMMUNICATIONS VAULT, 1 EA
FIBER OPTIC CABLE, 12 FIBERS, SINGLE MODE, 39'
UNDERGROUND CONDUIT, CNC, 1 1/2" DIA., 11'
SPLICE INTO EXISTING PHONE DROP CONDUIT
COST INCLUDED IN UNIT COST OF CONDUIT
MODIFY EXISTING CONTROLLER CABINET, 1 EA
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, 1 EA
ETHERNET SWITCH, 1 EA
50' FIBER LOOP, 12 SM, NO SPLICE

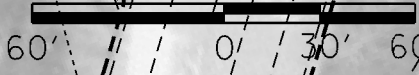
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UNDERGROUND CONDUIT, CNC 1 1/2" DIA., 172'

IL 13

FIBER OPTIC CABLE, 144 FIBERS, SINGLE MODE, 1150'
FIBER OPTIC CABLE, 48 FIBERS, SINGLE MODE, 1150'
UNDERGROUND CONDUIT, CNC 1 1/2" DIA., 1050'

COMMUNICATIONS VAULT, 1 EA
150' FIBER LOOP, 144 SM
50' FIBER LOOP, 12 SM
100' FIBER LOOP, 48 SM, NO SPLICE

CL NORTH GLENVIEW DRIVE



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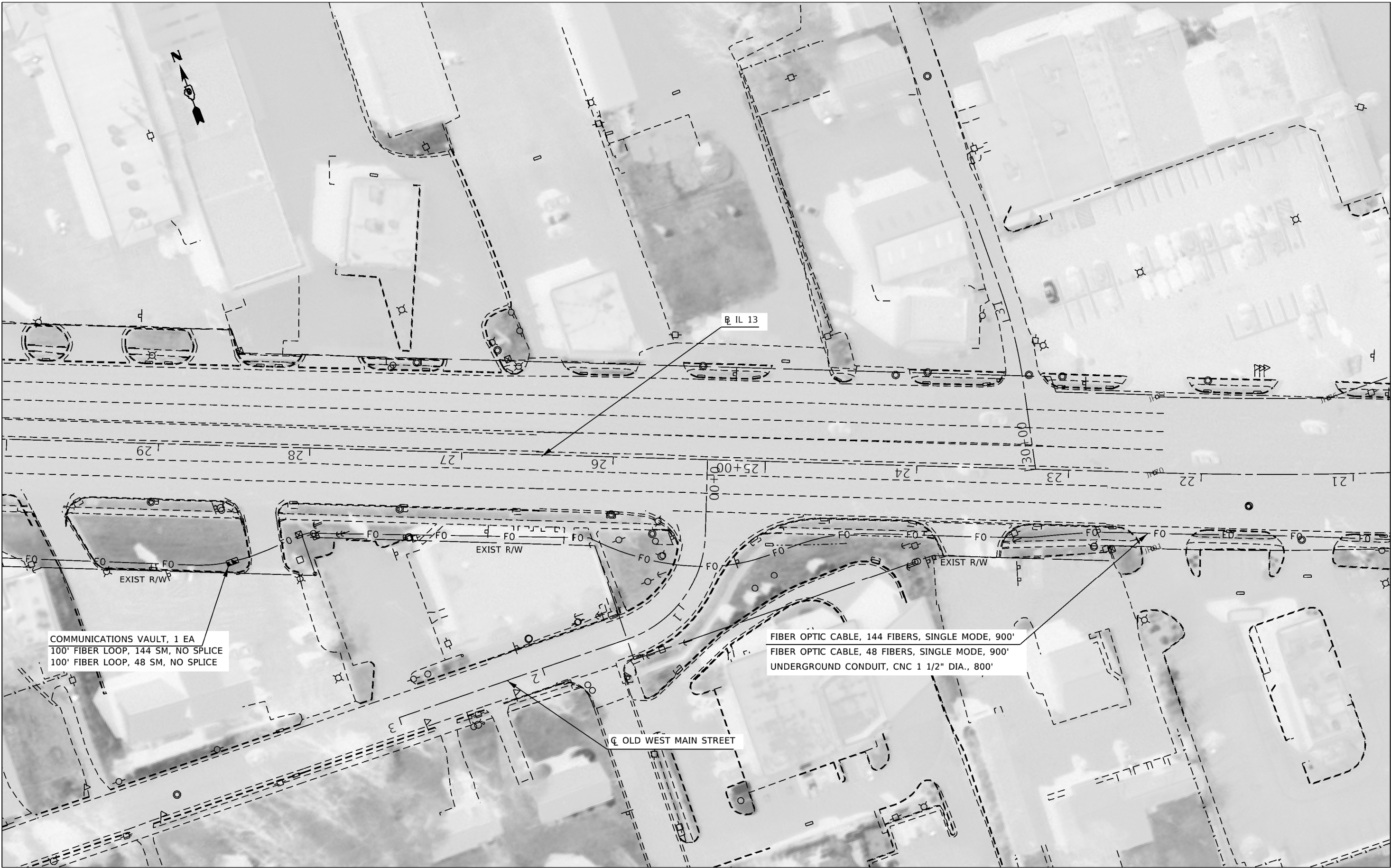
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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION
IL 13

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	16
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



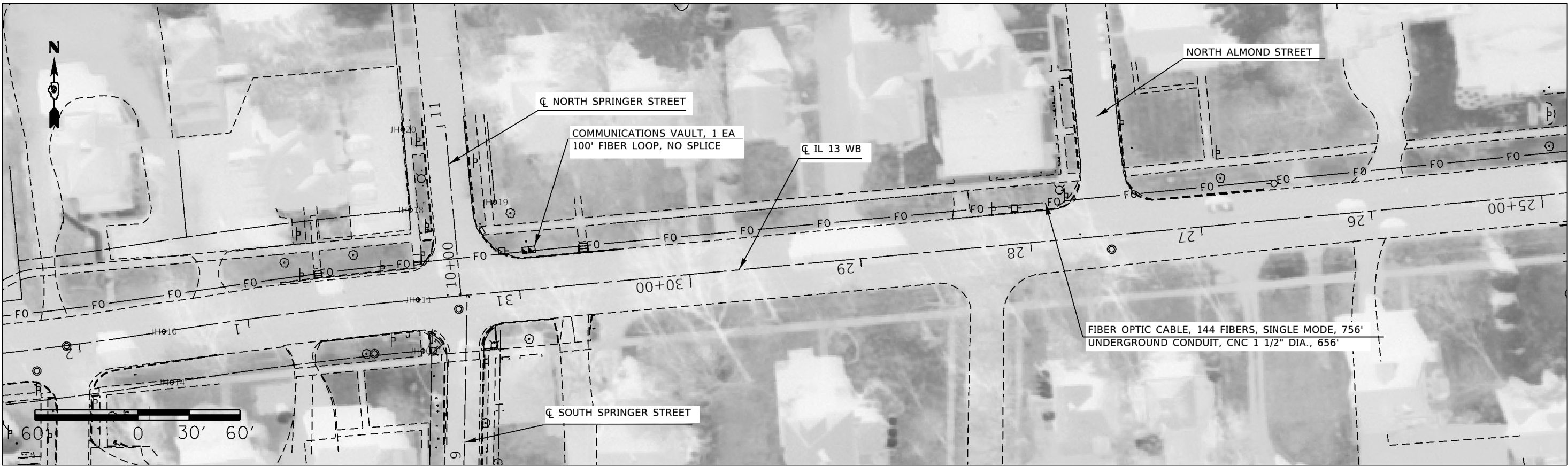
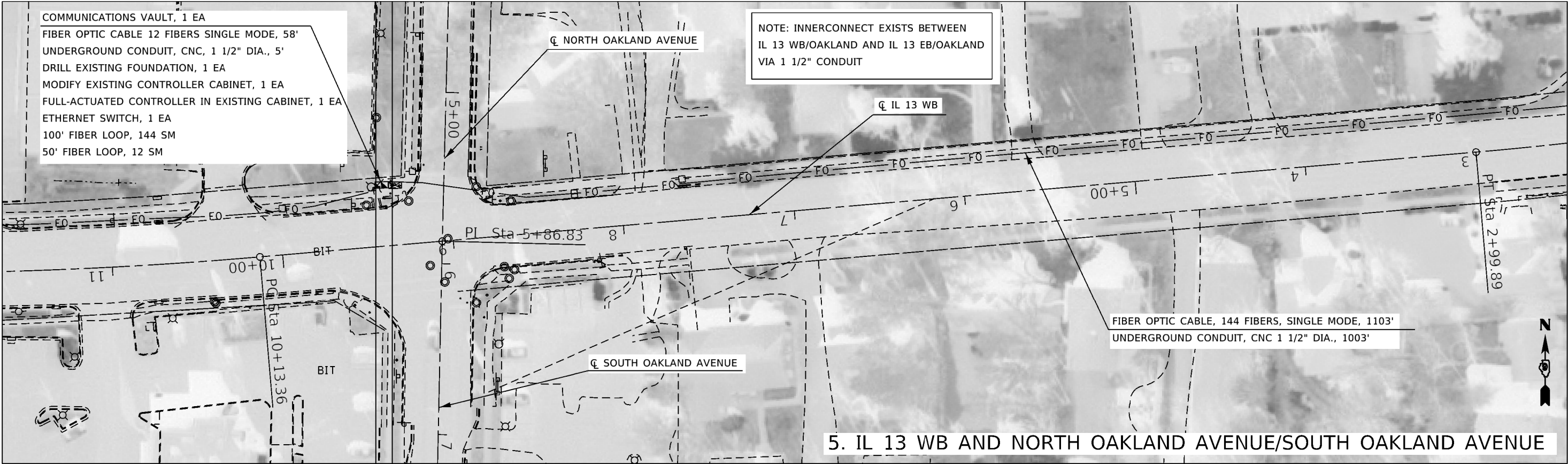
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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION IL 13			
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	17
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



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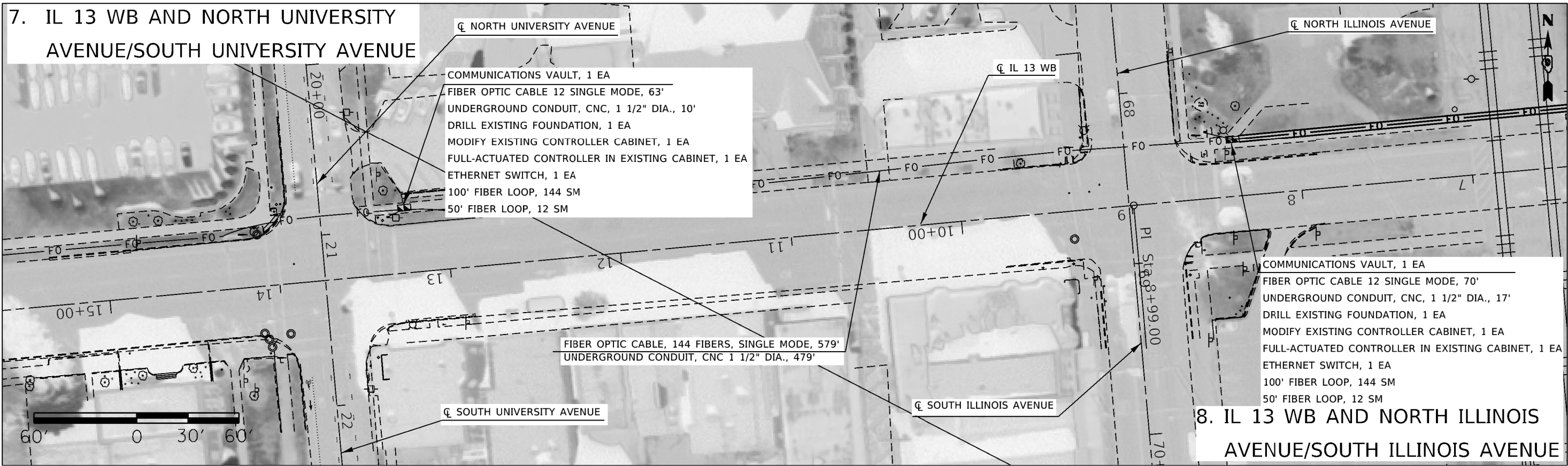
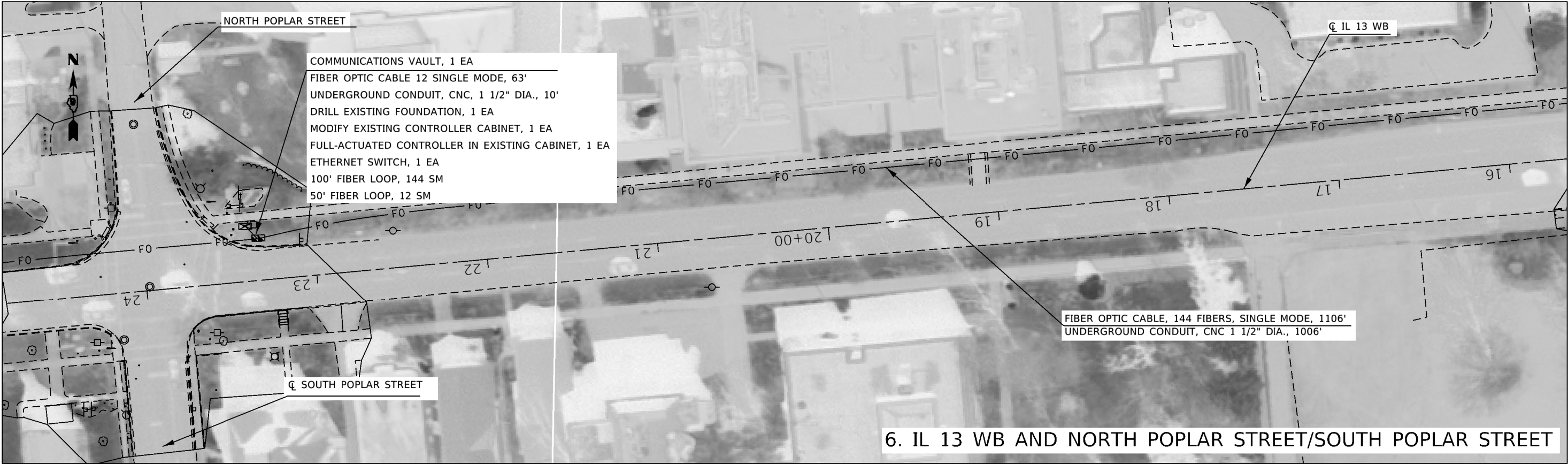
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

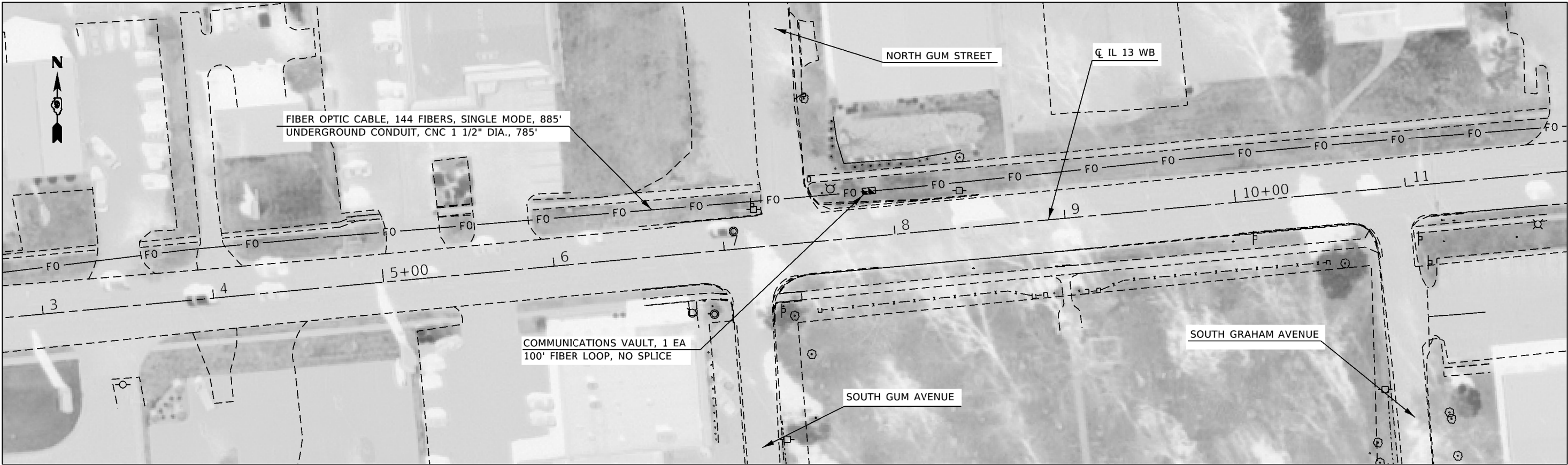
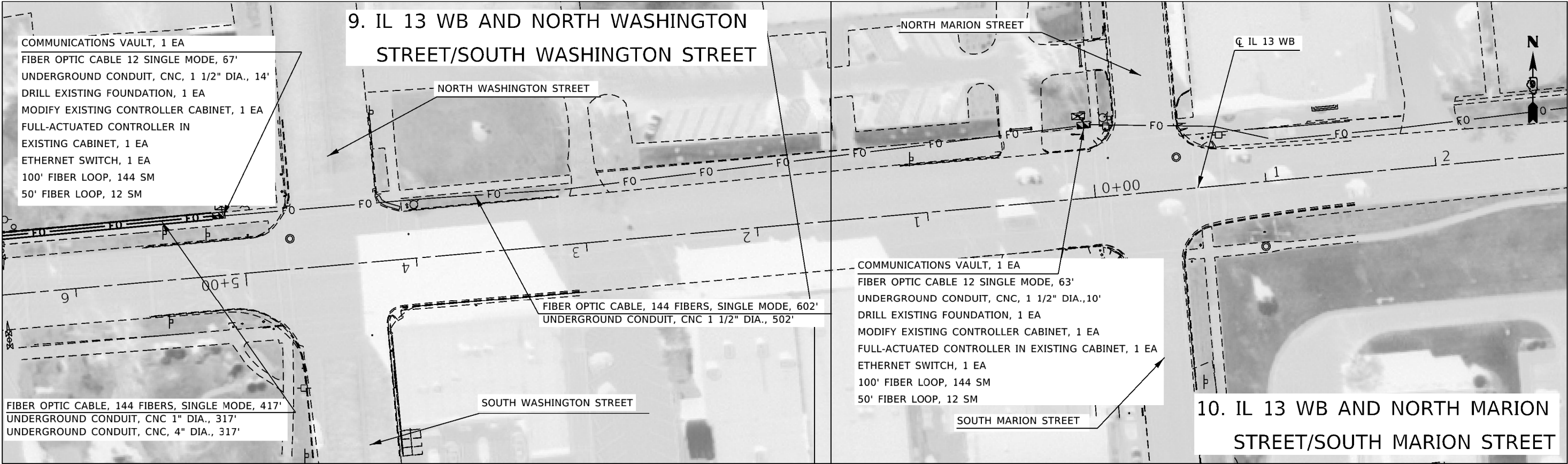
FIBER OPTIC INSTALLATION
IL 13 WB/OAKLAND

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	19
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



	USER NAME = poesi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIBER OPTIC INSTALLATION				F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -		331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	20				
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	PLOT DATE = 5/2/2019	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		



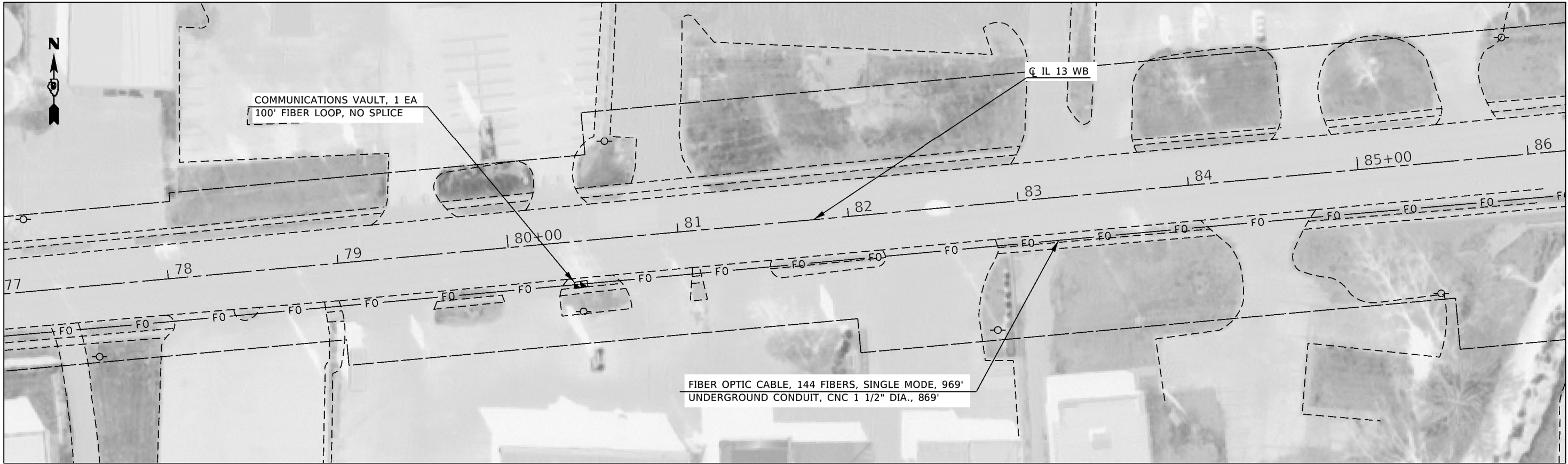
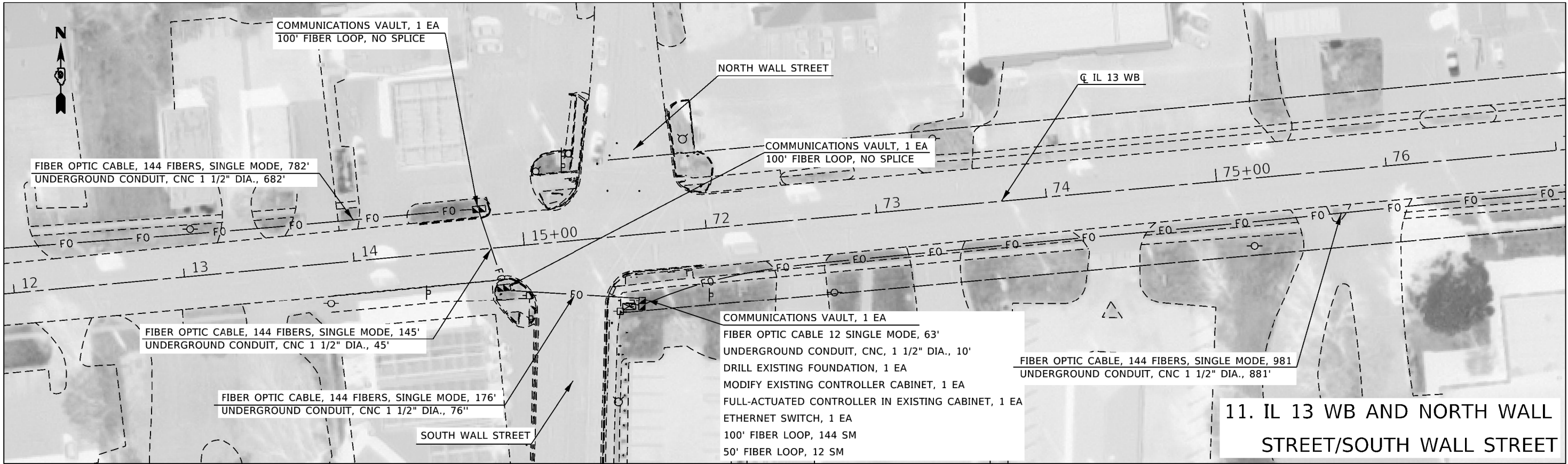
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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION IL 13 WBWASHINGTONMARION			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	21
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



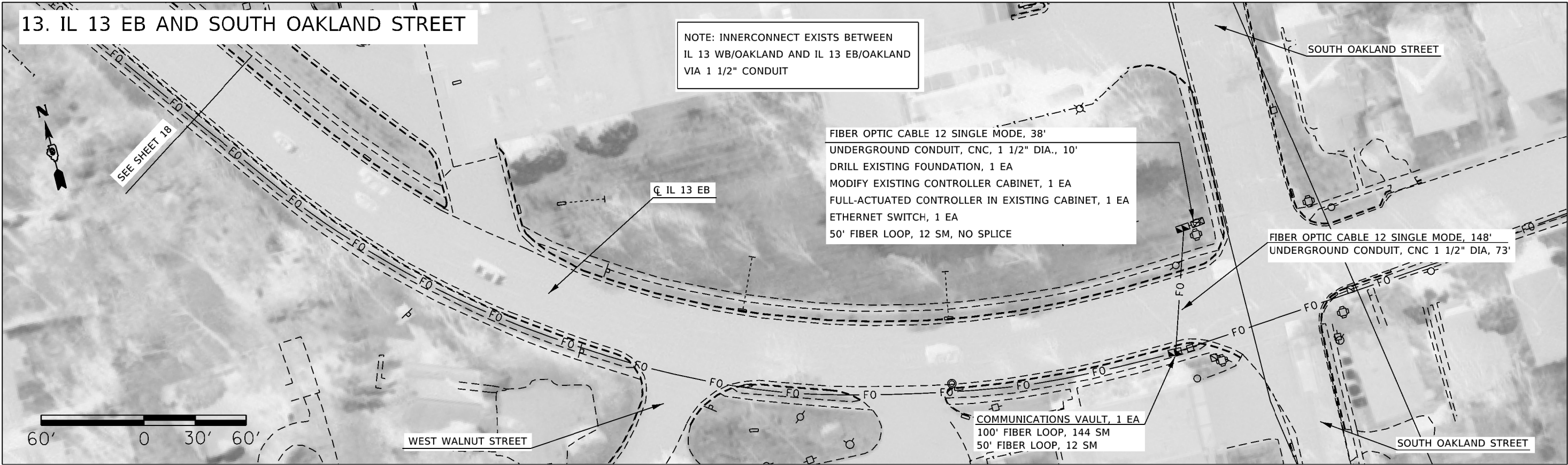
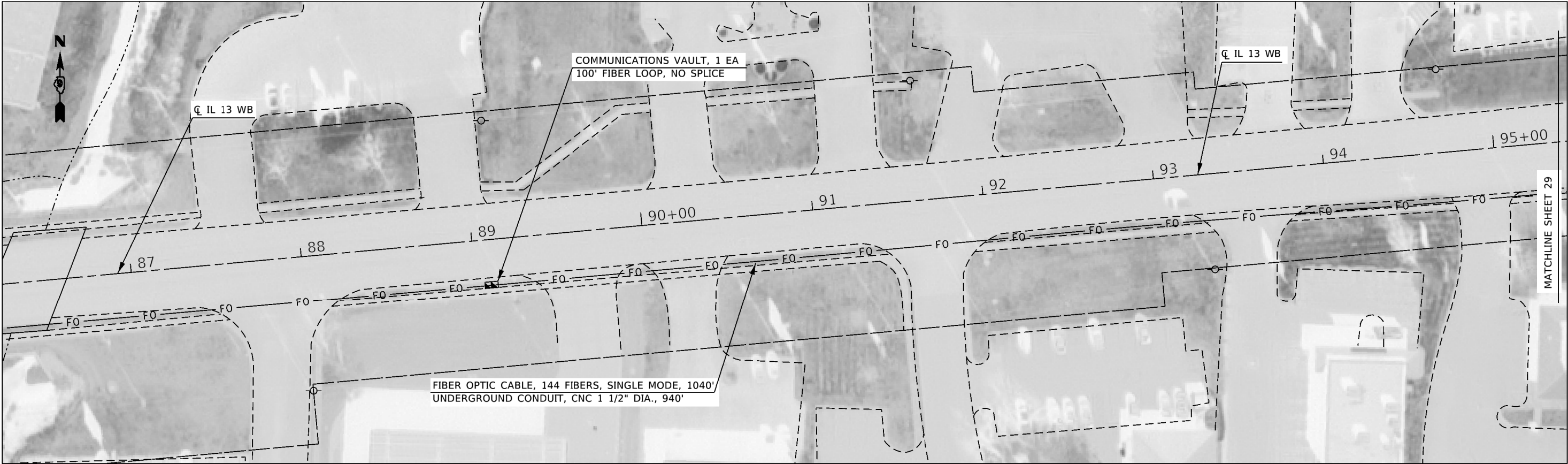
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	DRAWN -	REVISED -
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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION IL 13 WB AND WALL			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	22
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



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	DRAWN -	REVISED -
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PLOT DATE = 5/3/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION
IL 13 WB/IL 13 EB AND OAKLAND

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	23
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



14. IL 13 EB AND SOUTH POPLAR STREET

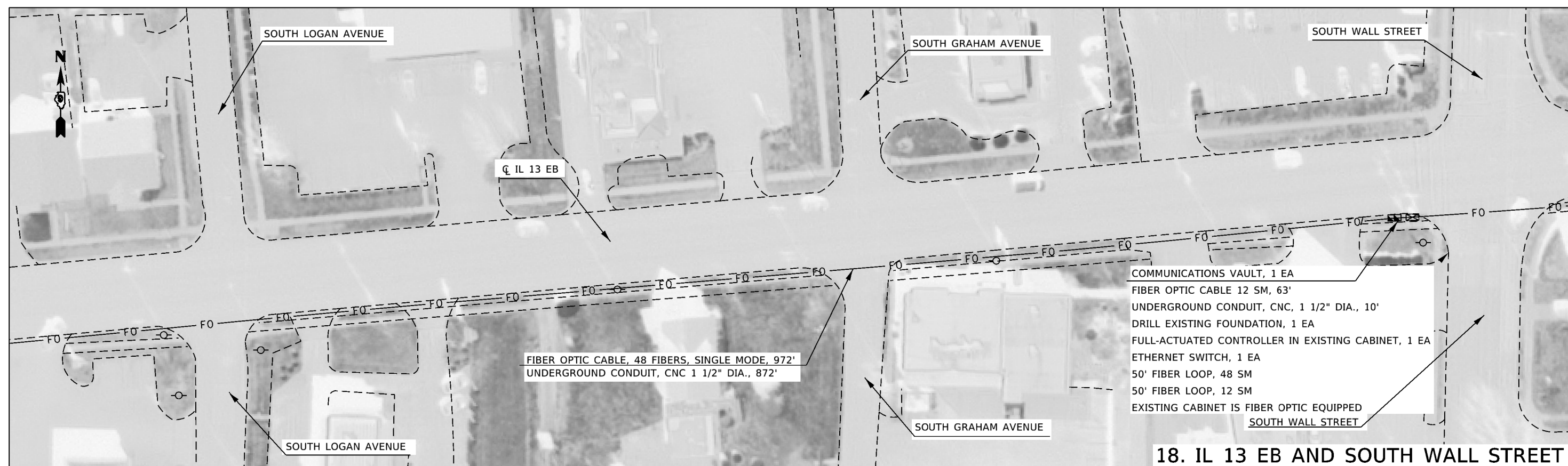
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	DRAWN -	REVISED -
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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION IL 13 AND POPLAR			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	24
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



18. IL 13 EB AND SOUTH WALL STREET

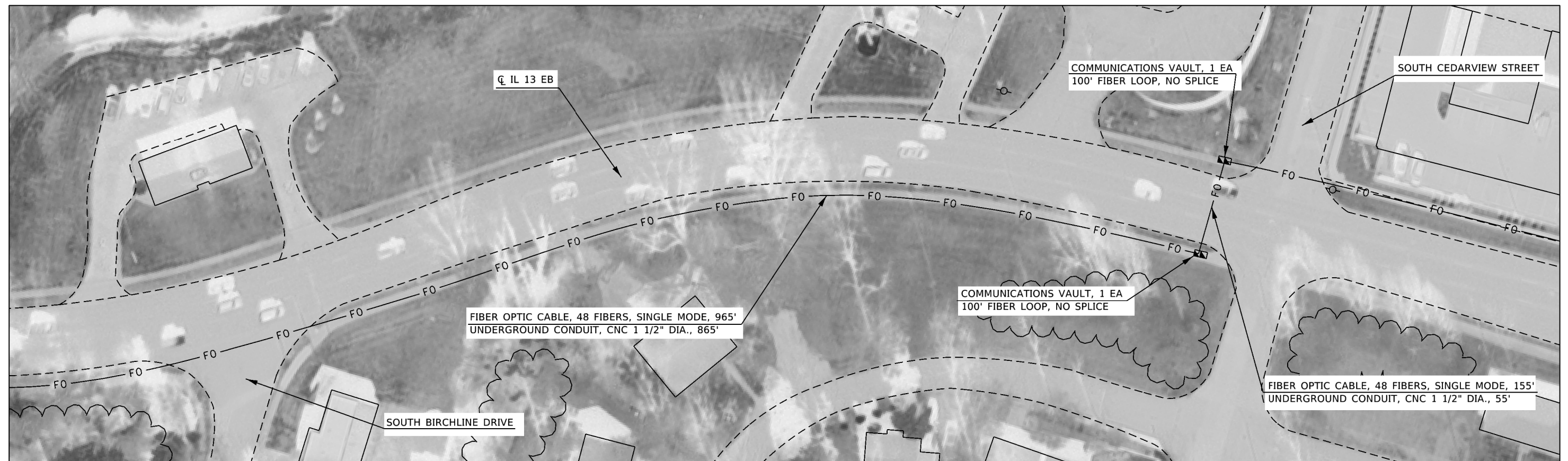
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PLOT DATE = 5/2/2019	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

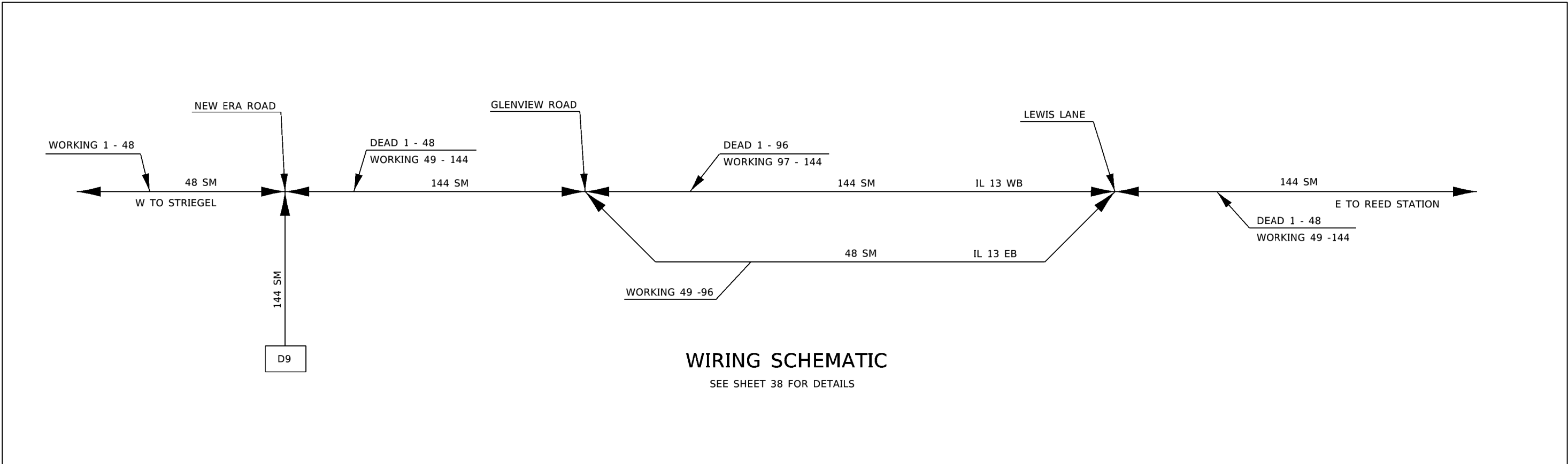
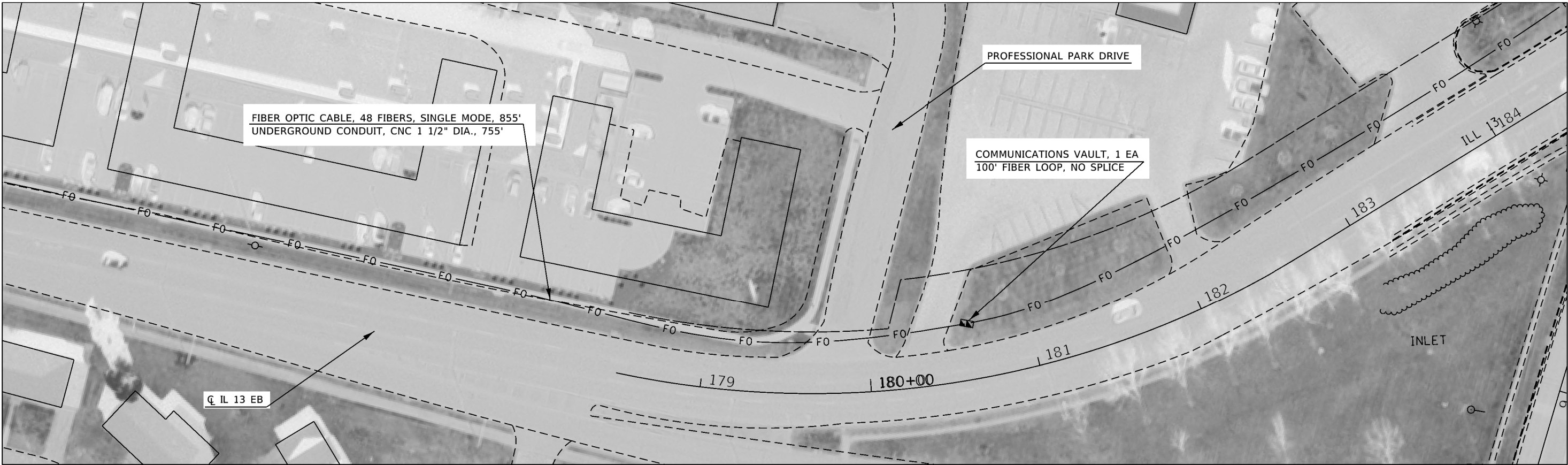
FIBER OPTIC INSTALLATION
IL 13 EB AND WALL

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 2019-1	JACKSON	52	26
		CONTRACT NO. 78695		
ILLINOIS		FED. AID PROJECT		



USER NAME = poesi	DESIGNED -	REVISED -	<div>STATE OF ILLINOIS</div> <div>DEPARTMENT OF TRANSPORTATION</div>	<div>FIBER OPTIC INSTALLATION</div> <div>IL 13 EB</div>			F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -					331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	27
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PLOT DATE = 5/2/2019	DATE -	REVISED -		SCALE:	SHEET OF SHEETS	STA. TO STA.					



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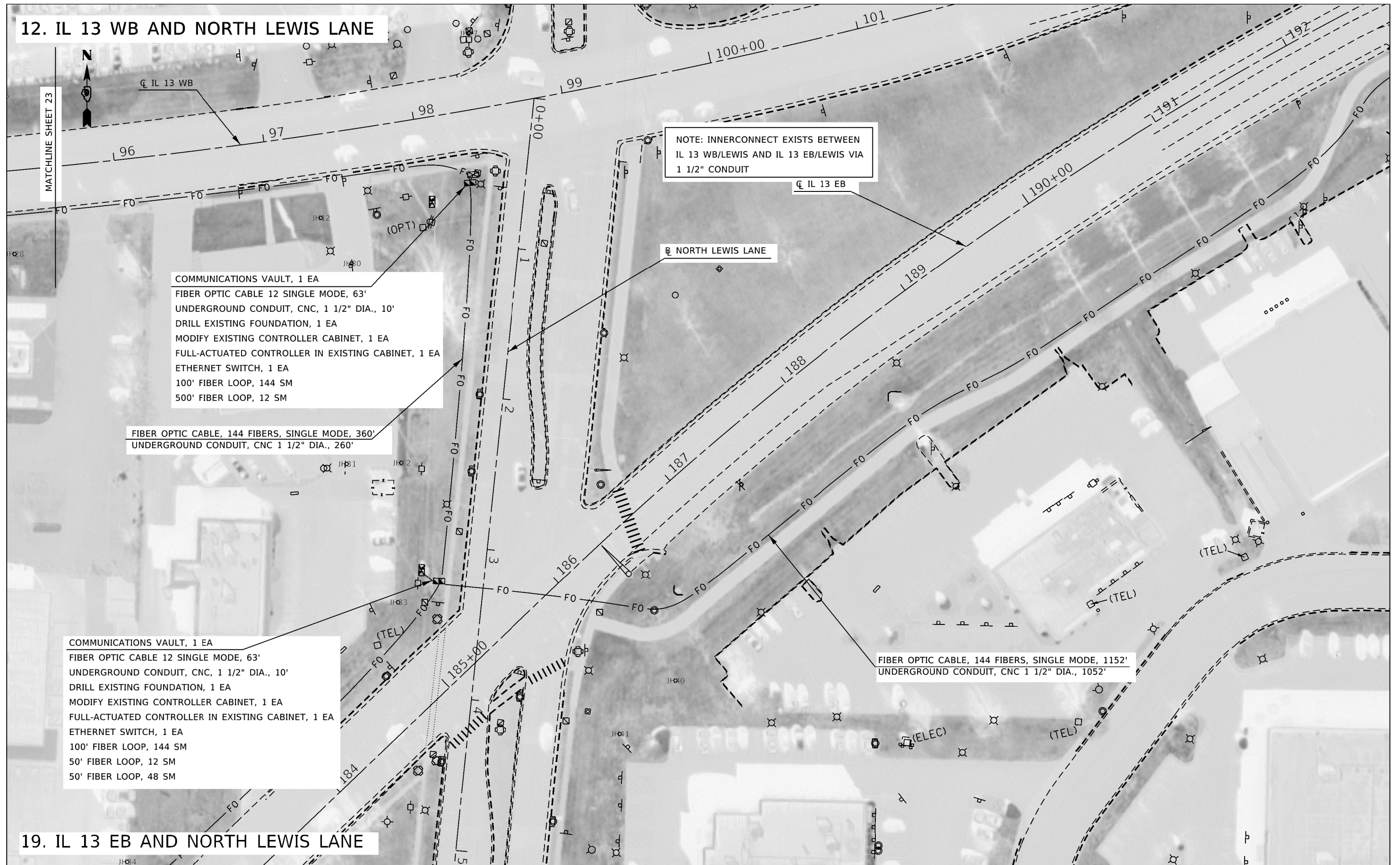
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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION IL 13 WIRING SCHEMATIC			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	28
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				

12. IL 13 WB AND NORTH LEWIS LANE



NOTE: INNERCONNECT EXISTS BETWEEN
IL 13 WB/LEWIS AND IL 13 EB/LEWIS VIA
1 1/2" CONDUIT

COMMUNICATIONS VAULT, 1 EA
FIBER OPTIC CABLE 12 SINGLE MODE, 63'
UNDERGROUND CONDUIT, CNC, 1 1/2" DIA., 10'
DRILL EXISTING FOUNDATION, 1 EA
MODIFY EXISTING CONTROLLER CABINET, 1 EA
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, 1 EA
ETHERNET SWITCH, 1 EA
100' FIBER LOOP, 144 SM
500' FIBER LOOP, 12 SM

FIBER OPTIC CABLE, 144 FIBERS, SINGLE MODE, 360'
UNDERGROUND CONDUIT, CNC 1 1/2" DIA., 260'

COMMUNICATIONS VAULT, 1 EA
FIBER OPTIC CABLE 12 SINGLE MODE, 63'
UNDERGROUND CONDUIT, CNC, 1 1/2" DIA., 10'
DRILL EXISTING FOUNDATION, 1 EA
MODIFY EXISTING CONTROLLER CABINET, 1 EA
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, 1 EA
ETHERNET SWITCH, 1 EA
100' FIBER LOOP, 144 SM
50' FIBER LOOP, 12 SM
50' FIBER LOOP, 48 SM

FIBER OPTIC CABLE, 144 FIBERS, SINGLE MODE, 1152'
UNDERGROUND CONDUIT, CNC 1 1/2" DIA., 1052'

19. IL 13 EB AND NORTH LEWIS LANE

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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION IL 13 EB/IL 13 WB/LEWIS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	29
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION IL 13			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	30
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



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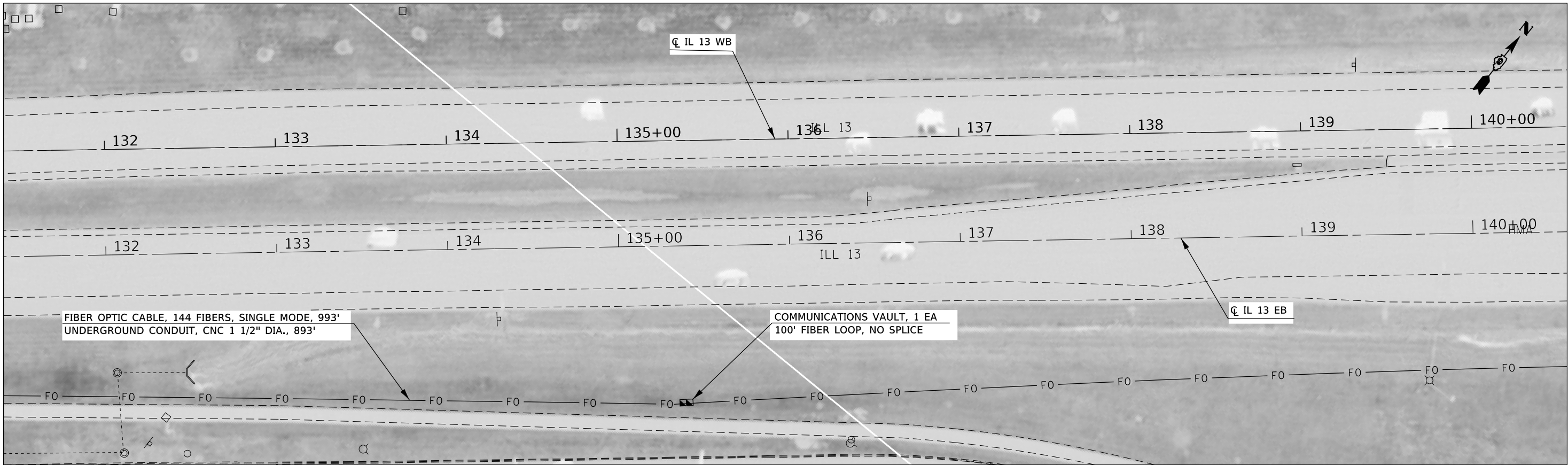
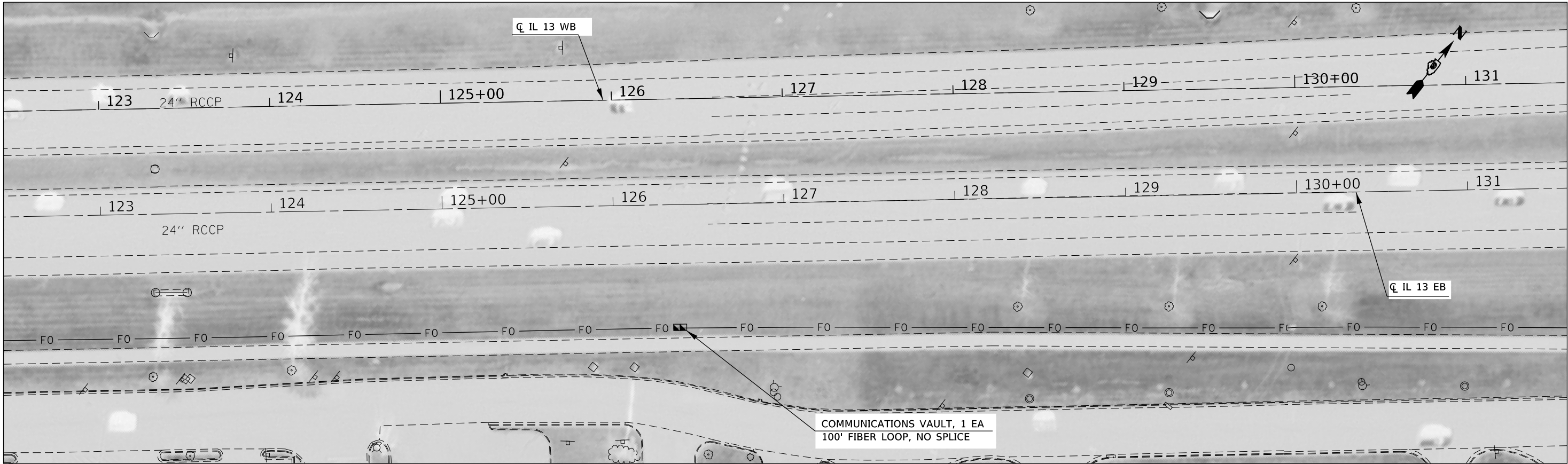
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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION
IL 13 AND MCKINNEY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	31
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



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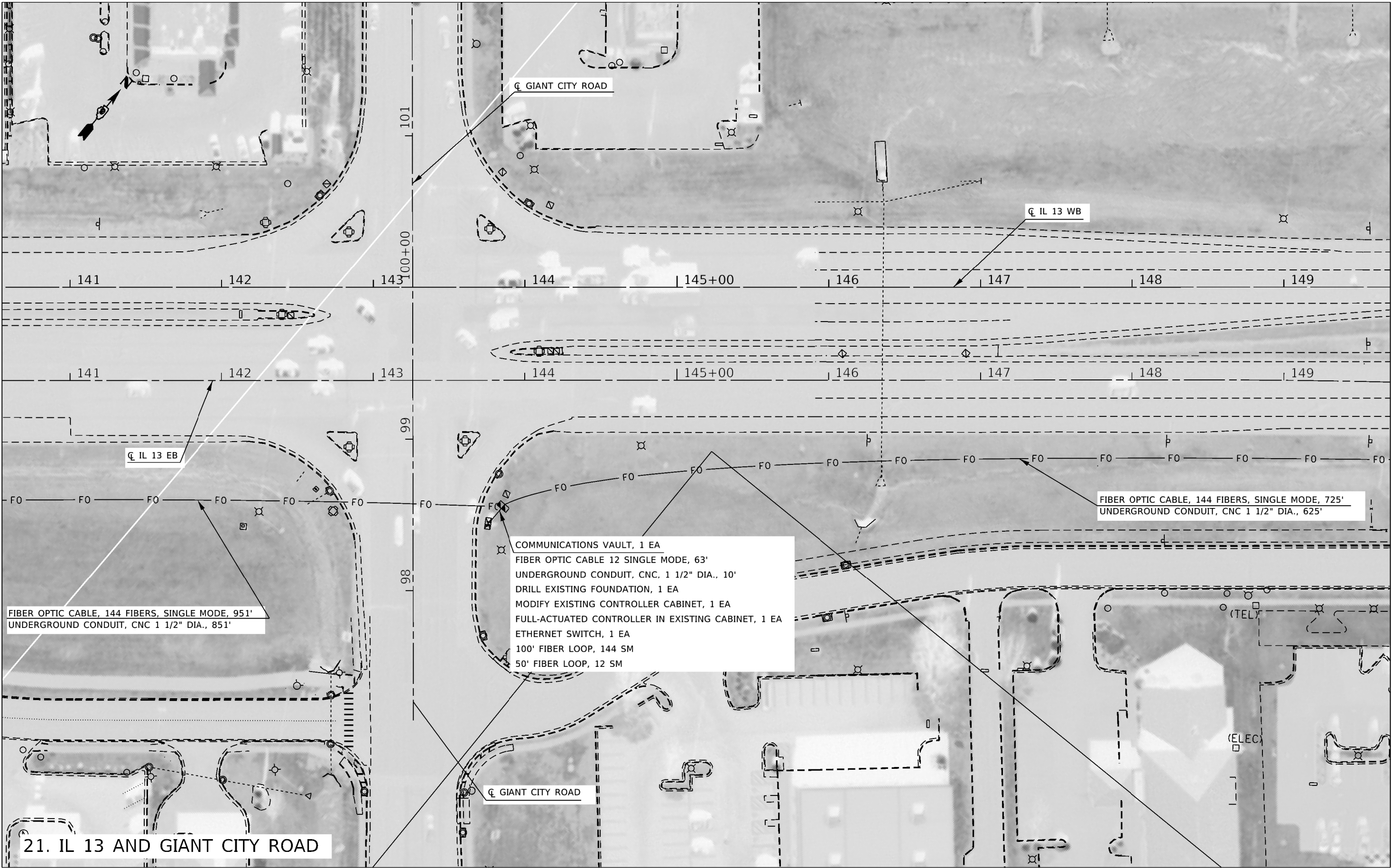
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION
IL 13

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
13	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	32
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



21. IL 13 AND GIANT CITY ROAD

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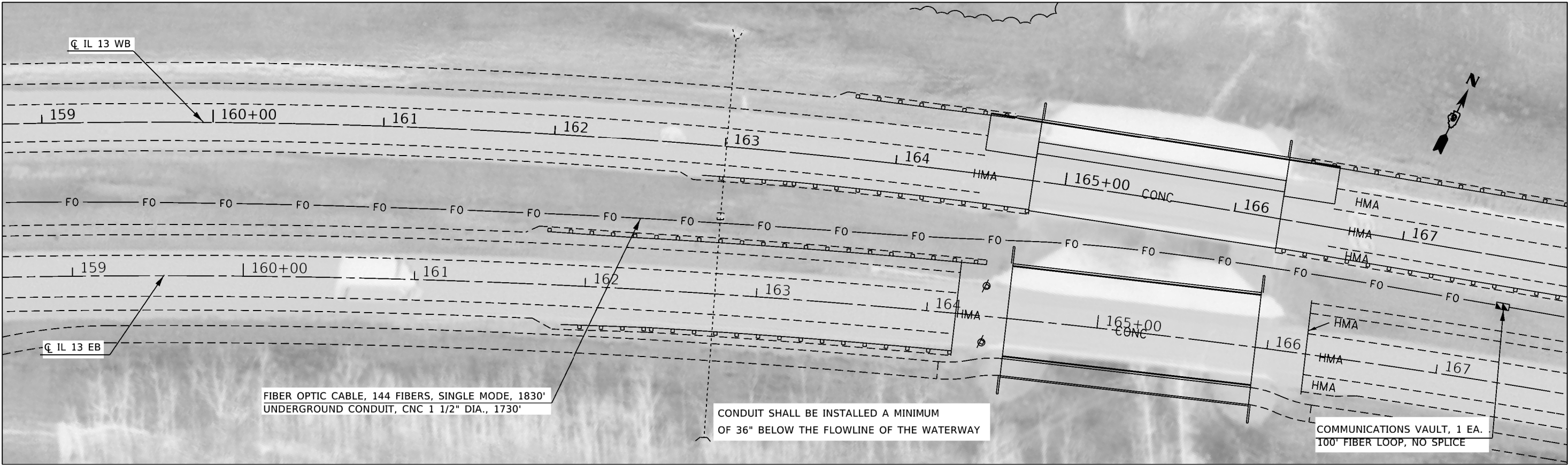
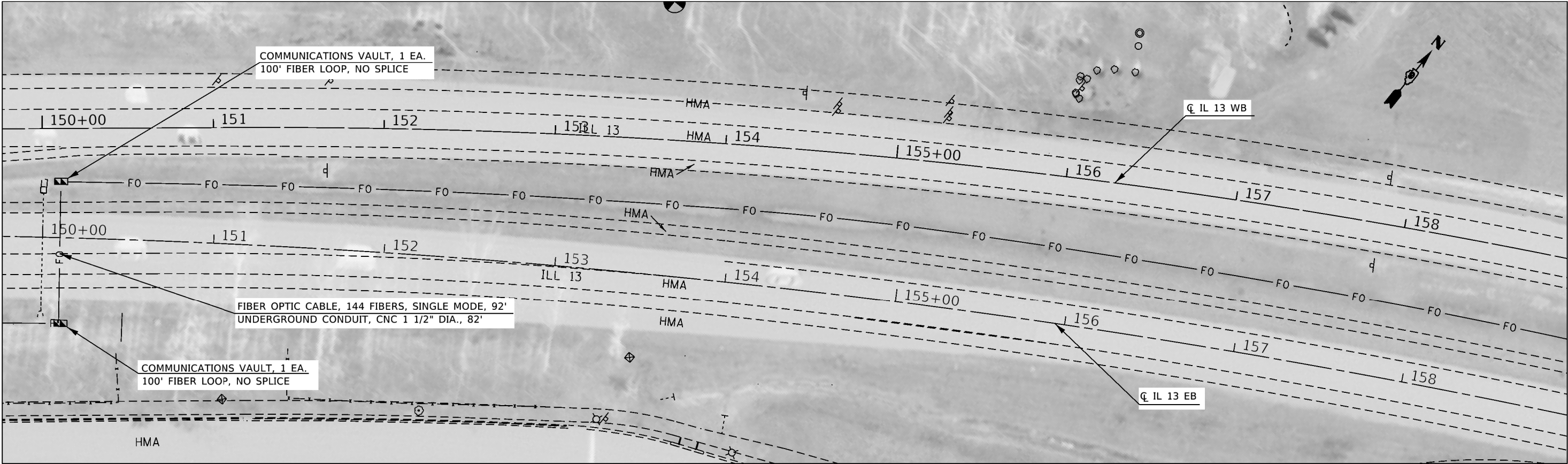
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION
IL 13 AND GIANT CITY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	33
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



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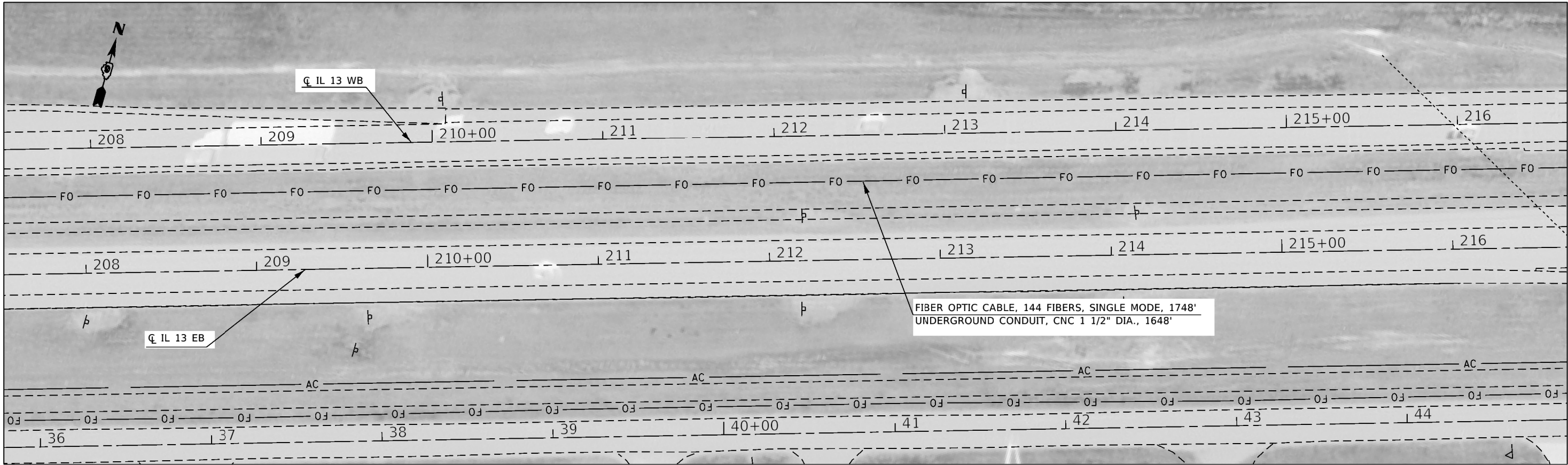
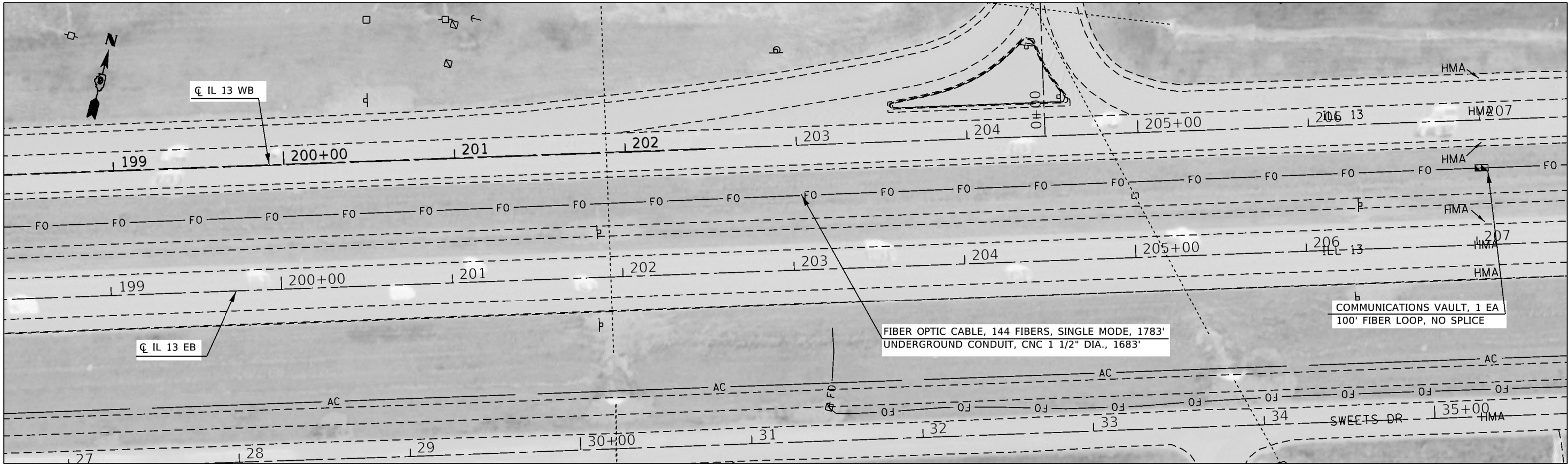
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION
IL 13

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	34
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



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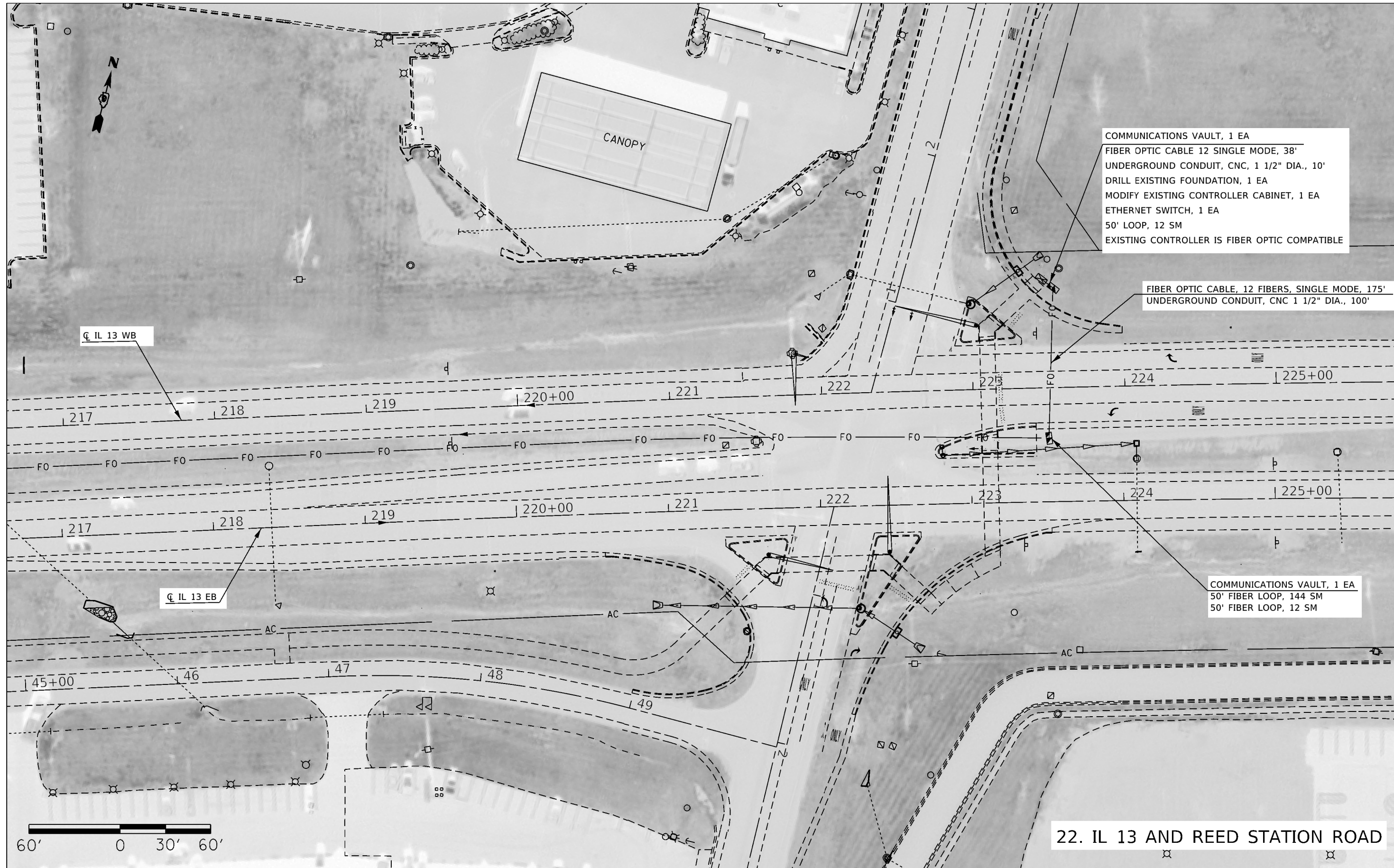
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PLOT DATE = 5/2/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INSTALLATION
IL 13

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	36
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



22. IL 13 AND REED STATION ROAD

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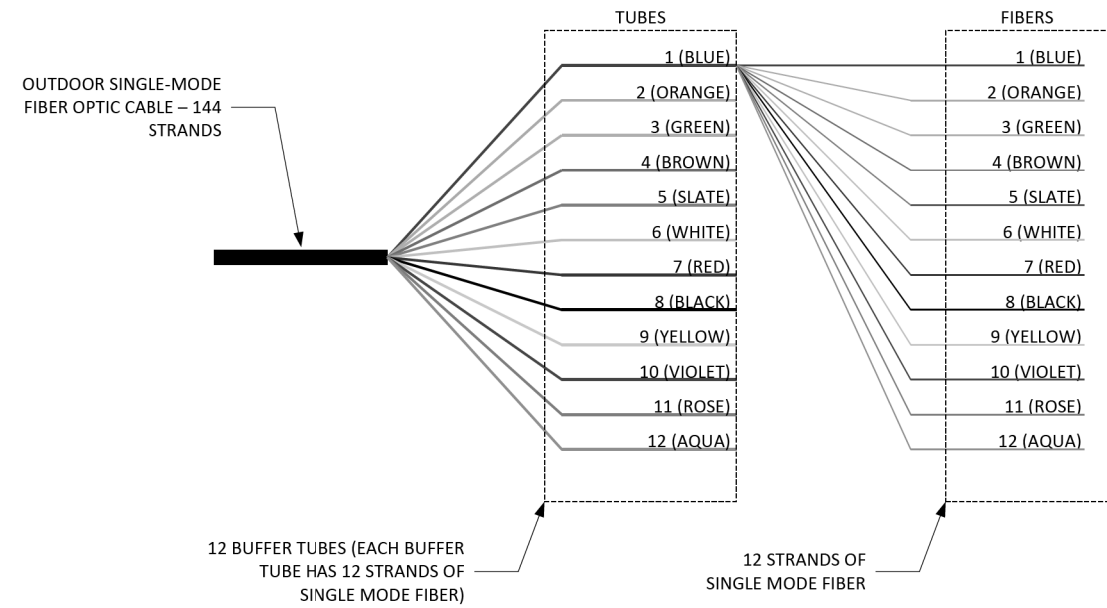
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

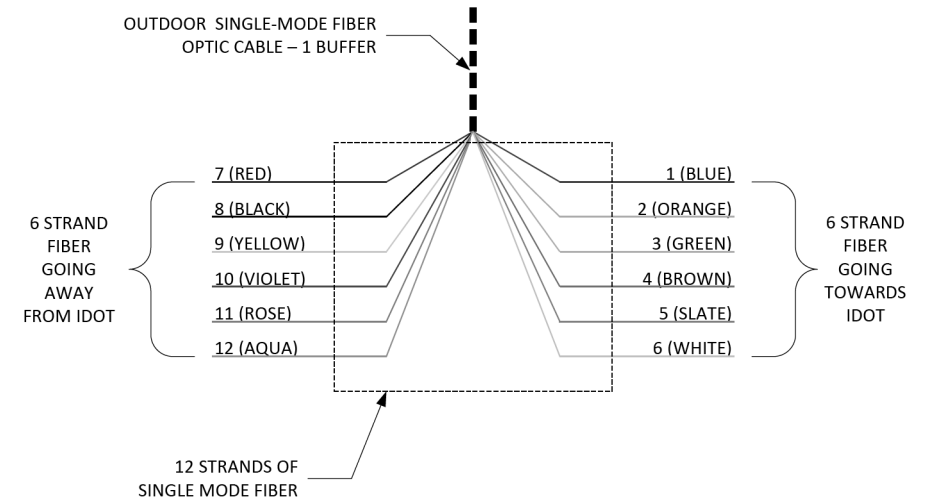
FIBER OPTIC INSTALLATION
IL 13 AND REED STATION

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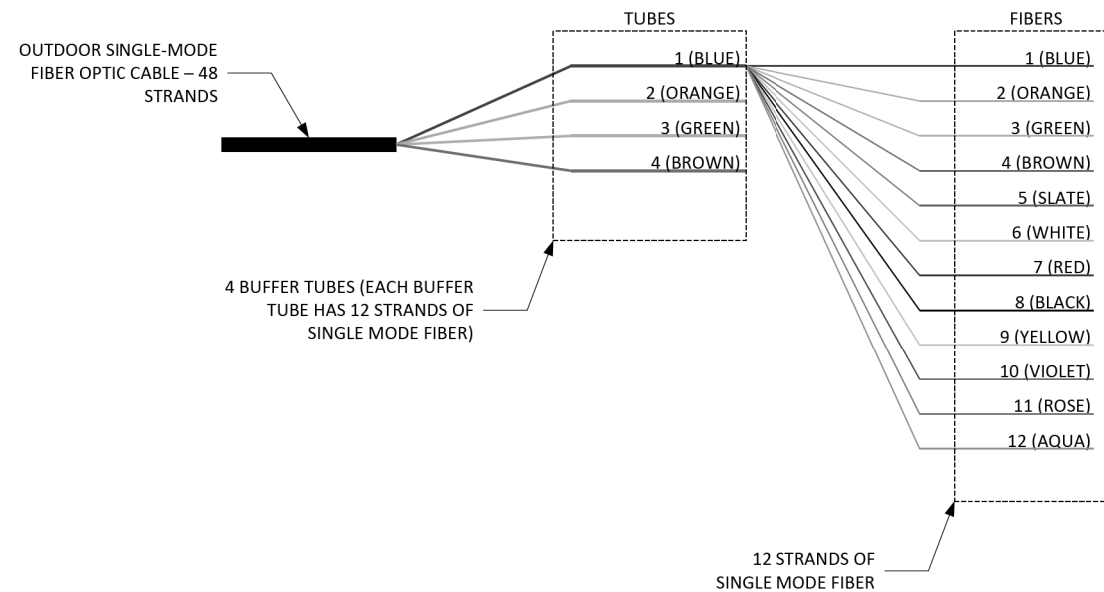
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	D9 TRAFFIC SIGNAL 2019-1	JACKSON	52	37
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



144 SINGLE MODE FIBER CABLE COLOR CODE



LATERAL FIBER OPTIC CABLE COLOR CODE



48 SINGLE MODE FIBER CABLE COLOR CODE

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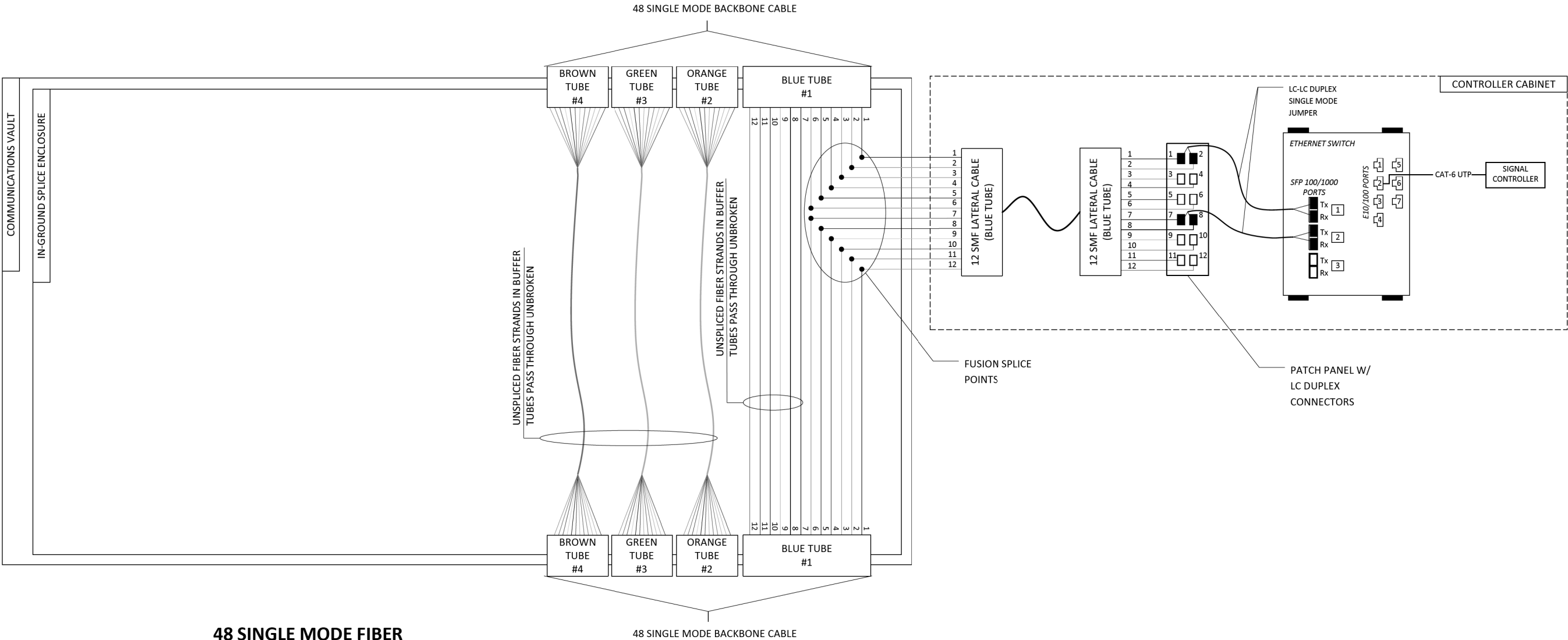
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Lateral Fiber Optic Cable
Typical Splice Details

SCALE: SHEET OF SHEETS STA. TO STA.

** D9 TRAFFIC SIGNAL 2019-1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	39
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



48 SINGLE MODE FIBER
TYPICAL SPLICING DETAIL

IDOT D9 PATCH PANEL	144 SMF	SPLICE TO	48 SMF	SPLICE TO	NEW ERA RD. LATERAL FIBER		SPLICE TO	48 SMF	SPLICE TO	STRIEGEL RD. LATERAL FIBER	
1	1	-	1	-	1	7	-	1	-	1	7
2	2	-	2	-	2	8	-	2	-	2	8
3	3	-	3	-	3	9	-	3	-	3	9
4	4	-	4	-	4	10	-	4	-	4	10
5	5	-	5	-	5	11	-	5	-	5	11
6	6	-	6	-	6	12	-	6	-	6	12

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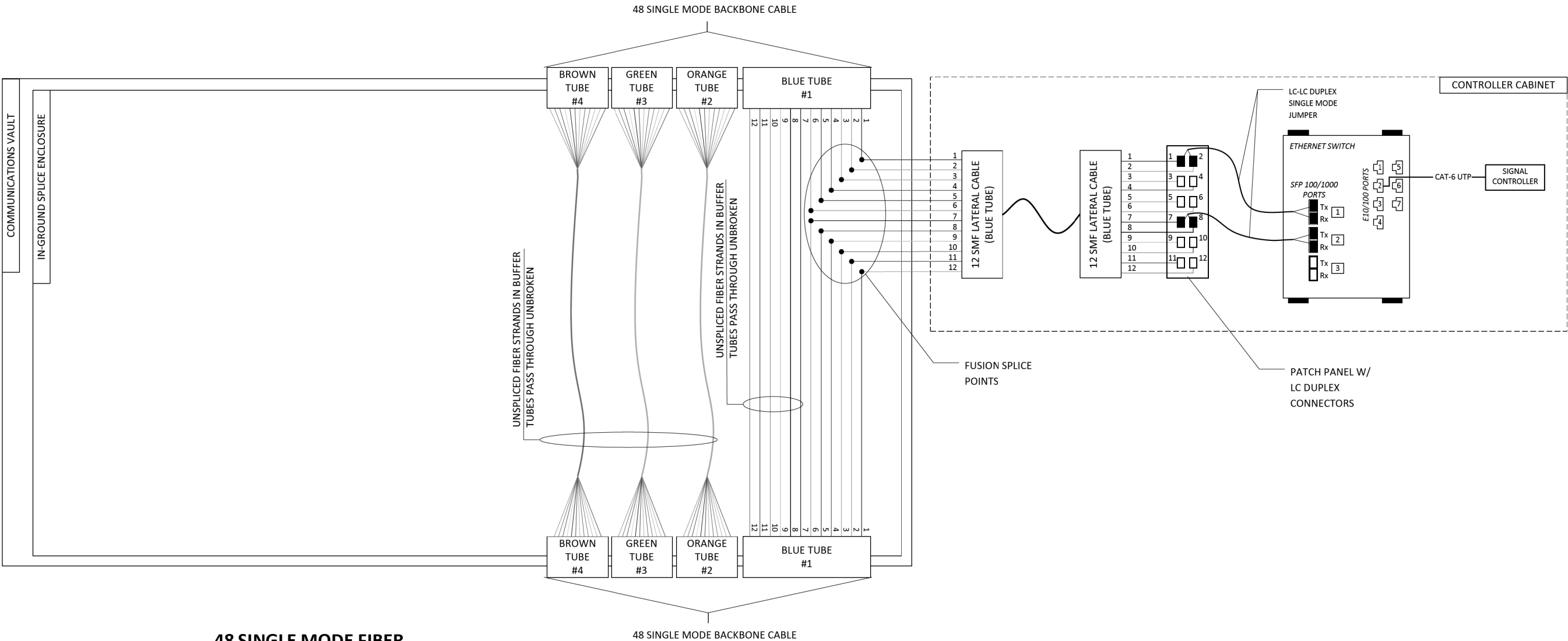
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Fiber Optic Cable Splice
Allocation and Connection Details

SCALE: SHEET OF SHEETS STA. TO STA.

* D9 TRAFFIC SIGNAL 2019-1				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	40
CONTRACT NO. 78695				
		ILLINOIS	FED. AID PROJECT	



**48 SINGLE MODE FIBER
TYPICAL SPlicing DETAIL**

IDOT D9 PATCH PANEL	144 SMF	SPLICE TO	48 SMF	SPLICE TO	S. OAKLAND LATERAL FIBER		SPLICE TO	48 SMF	SPLICE TO	S. UNIVERSITY LATERAL FIBER		SPLICE TO	48 SMF	SPLICE TO	S. WASHINGTON LATERAL FIBER		SPLICE TO	48 SMF
49	49	-	1	-	1	7	-	1	-	1	7	-	1	-	1	7	-	1
50	50	-	2	-	2	8	-	2	-	2	8	-	2	-	2	8	-	2
51	51	-	3	-	3	9	-	3	-	3	9	-	3	-	3	9	-	3
52	52	-	4	-	4	10	-	4	-	4	10	-	4	-	4	10	-	4
53	53	-	5	-	5	11	-	5	-	5	11	-	5	-	5	11	-	5
54	54	-	6	-	6	12	-	6	-	6	12	-	6	-	6	12	-	6

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* D9 TRAFFIC SIGNAL 2019-1

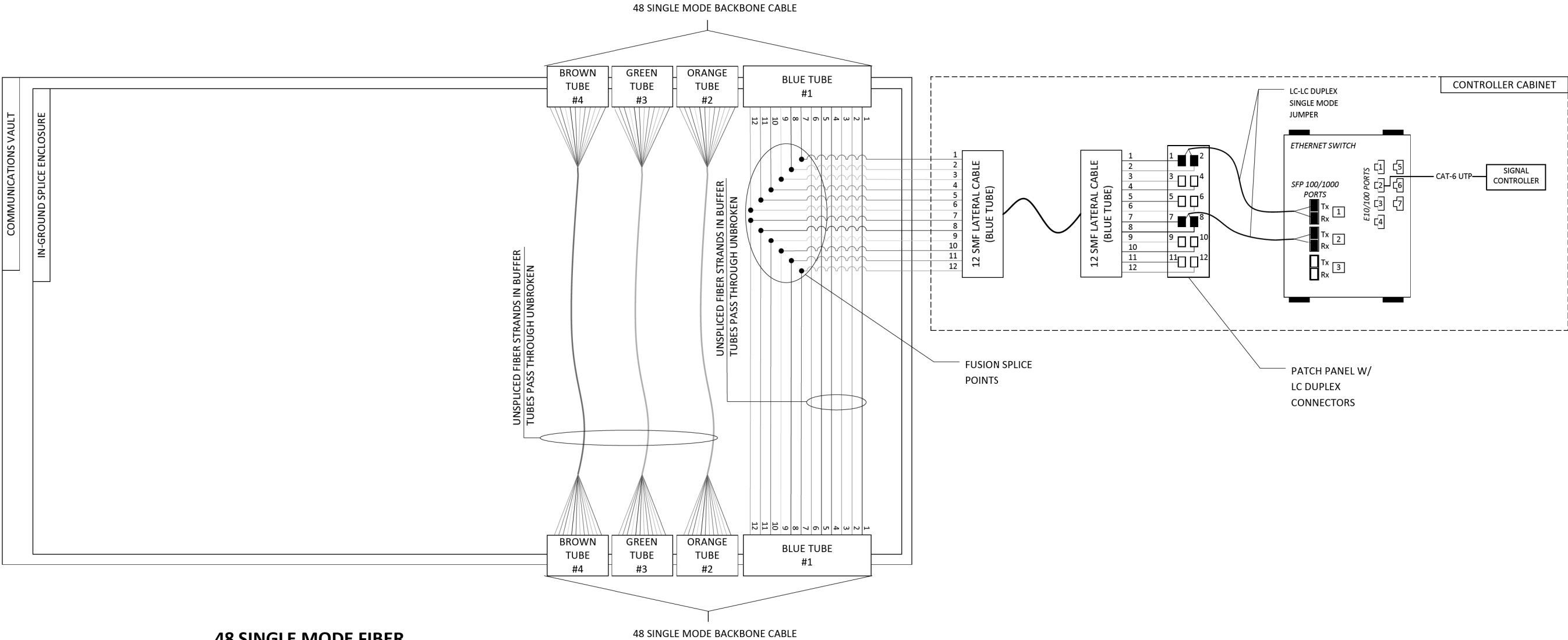
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Fiber Optic Cable Splice
Allocation and Connection Details

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	41
CONTRACT NO. 78695				
		ILLINOIS	FED. AID PROJECT	



**48 SINGLE MODE FIBER
TYPICAL SPLICING DETAIL**

IDOT D9 PATCH PANEL	144 SMF	SPLICE TO	48 SMF	SPLICE TO	S. POPLAR		SPLICE TO	48 SMF	SPLICE TO	S. ILLINOIS		SPLICE TO	48 SMF	SPLICE TO	S. WALL STREET		SPLICE TO	48 SMF
					LATERAL FIBER					LATERAL FIBER					LATERAL FIBER			
55	55	-	7	-	1	7	-	7	-	1	7	-	7	-	1	7	-	7
56	56	-	8	-	2	8	-	8	-	2	8	-	8	-	2	8	-	8
57	57	-	9	-	3	9	-	9	-	3	9	-	9	-	3	9	-	9
58	58	-	10	-	4	10	-	10	-	4	10	-	10	-	4	10	-	10
59	59	-	11	-	5	11	-	11	-	5	11	-	11	-	5	11	-	11
60	60	-	12	-	6	12	-	12	-	6	12	-	12	-	6	12	-	12

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* D9 TRAFFIC SIGNAL 2019-1

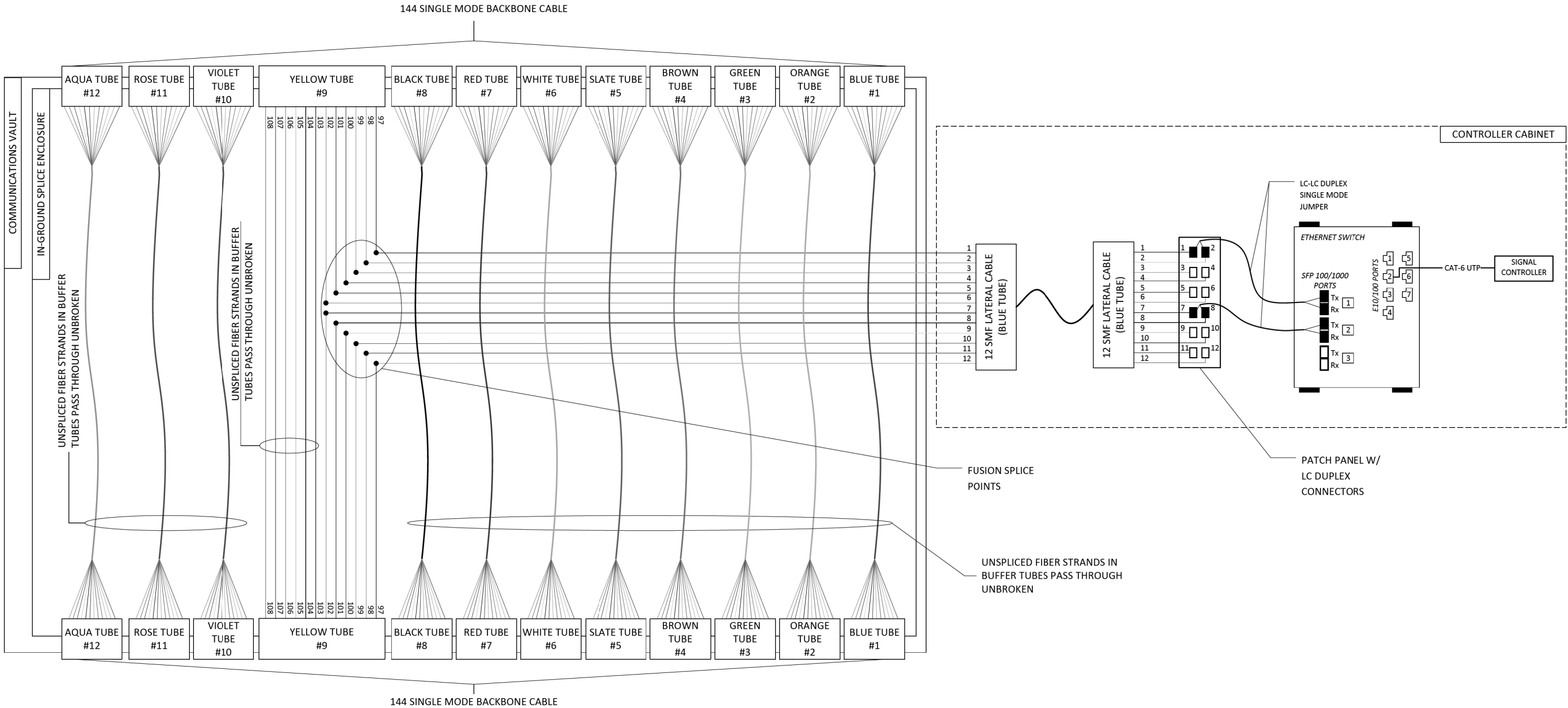
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PLOT DATE = 4/26/2019	DATE -	FILE -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Fiber Optic Cable Splice
Allocation and Connection Details

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	42
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



**144 SINGLE MODE FIBER
TYPICAL SPLICING DETAIL**

IDOT D9 PATCH PANEL	144 SMF	SPLICE TO	W.SYCAMORE		SPLICE TO	144 SMF	SPLICE TO	OAKLAND		SPLICE TO	144 SMF	SPLICE TO	UNIVERSITY		SPLICE TO	144 SMF	SPLICE TO	WASHINGTON		SPLICE TO	144 SMF	SPLICE TO	WALL ST.		SPLICE TO	144 SMF	SPLICE TO	N. LEWIS		SPLICE TO	144 SMF	SPLICE TO	GIANT CITY		SPLICE TO	144 SMF
			LATERAL FIBER					LATERAL FIBER					LATERAL FIBER					LATERAL FIBER					LATERAL FIBER					LATERAL FIBER					LATERAL FIBER			
97	97	-	1	7	-	97	-	1	7	-	97	-	1	7	-	97	-	1	7	-	97	-	1	7	-	97	-	1	7	-	97	-	1	7	-	97
98	98	-	2	8	-	98	-	2	8	-	98	-	2	8	-	98	-	2	8	-	98	-	2	8	-	98	-	2	8	-	98	-	2	8	-	98
99	99	-	3	9	-	99	-	3	9	-	99	-	3	9	-	99	-	3	9	-	99	-	3	9	-	99	-	3	9	-	99	-	3	9	-	99
100	100	-	4	10	-	100	-	4	10	-	100	-	4	10	-	100	-	4	10	-	100	-	4	10	-	100	-	4	10	-	100	-	4	10	-	100
101	101	-	5	11	-	101	-	5	11	-	101	-	5	11	-	101	-	5	11	-	101	-	5	11	-	101	-	5	11	-	101	-	5	11	-	101
102	102	-	6	12	-	102	-	6	12	-	102	-	6	12	-	102	-	6	12	-	102	-	6	12	-	102	-	6	12	-	102	-	6	12	-	102

*D9 TRAFFIC SIGNAL 2019-1

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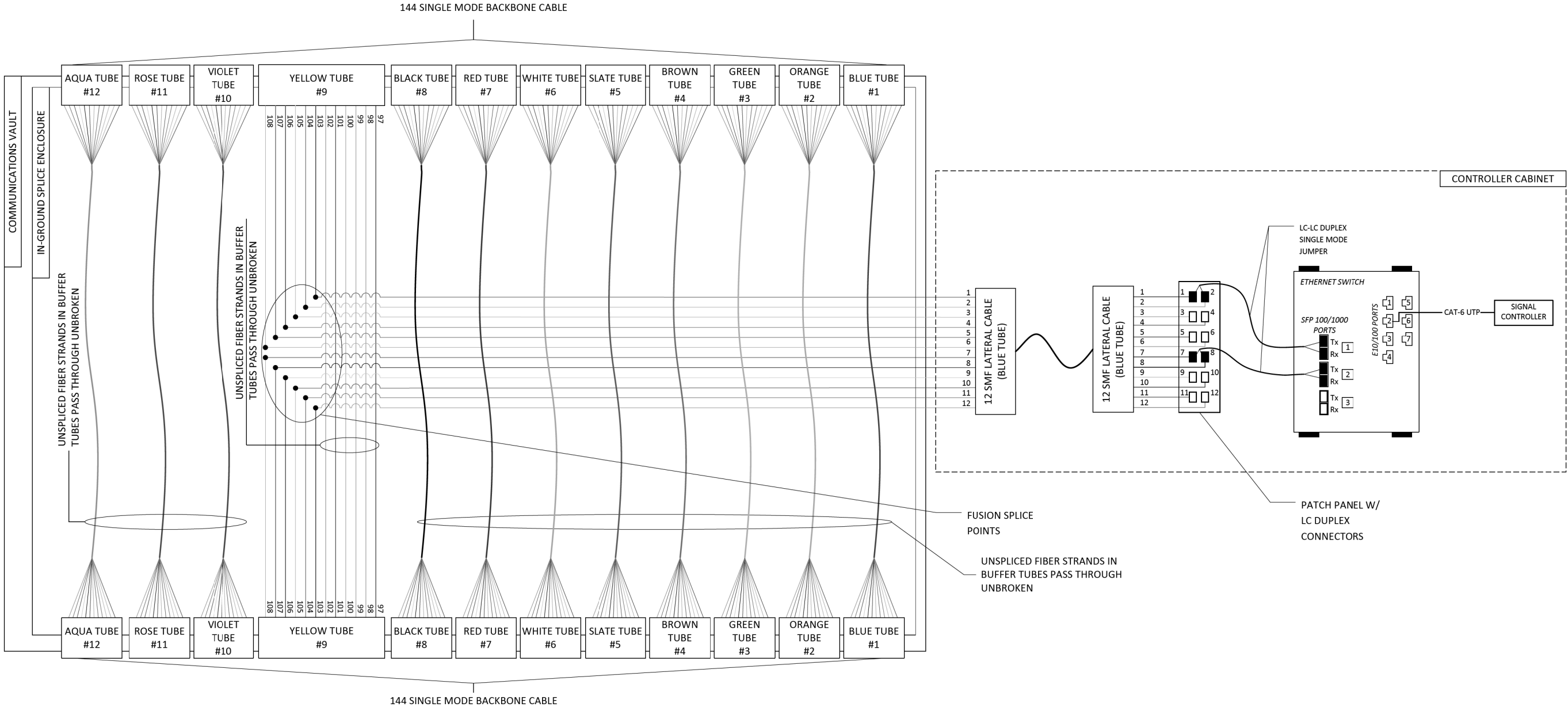
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PLOT DATE = 4/26/2019	DATE -	FILE -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Fiber Optic Cable Splice
Allocation and Connection Details

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	43
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



**144 SINGLE MODE FIBER
TYPICAL SPLICING DETAIL**

IDOT D9 PATCH PANEL	144 SMF	SPLICE TO	N. GLENVIEW LATERAL FIBER		SPLICE TO	144 SMF	SPLICE TO	POPLAR LATERAL FIBER		SPLICE TO	144 SMF	SPLICE TO	ILLINOIS LATERAL FIBER		SPLICE TO	144 SMF	SPLICE TO	MARION LATERAL FIBER		SPLICE TO	144 SMF	SPLICE TO	LEWIS LATERAL FIBER		SPLICE TO	144 SMF	SPLICE TO	McKINNEY LATERAL FIBER		SPLICE TO	144 SMF	SPLICE TO	REED STATION LATERAL FIBER		SPLICE TO	144 SMF
103	103	-	1	7	-	103	-	1	7	-	103	-	1	7	-	103	-	1	7	-	103	-	1	7	-	103	-	1	7	-	103	-	1	7	-	97
104	104	-	2	8	-	104	-	2	8	-	104	-	2	8	-	104	-	2	8	-	104	-	2	8	-	104	-	2	8	-	104	-	2	8	-	98
105	105	-	3	9	-	105	-	3	9	-	105	-	3	9	-	105	-	3	9	-	105	-	3	9	-	105	-	3	9	-	105	-	3	9	-	99
106	106	-	4	10	-	106	-	4	10	-	106	-	4	10	-	106	-	4	10	-	106	-	4	10	-	106	-	4	10	-	106	-	4	10	-	100
107	107	-	5	11	-	107	-	5	11	-	107	-	5	11	-	107	-	5	11	-	107	-	5	11	-	107	-	5	11	-	107	-	5	11	-	101
108	108	-	6	12	-	108	-	6	12	-	108	-	6	12	-	108	-	6	12	-	108	-	6	12	-	108	-	6	12	-	108	-	6	12	-	102

* D9 TRAFFIC SIGNAL 2019-1

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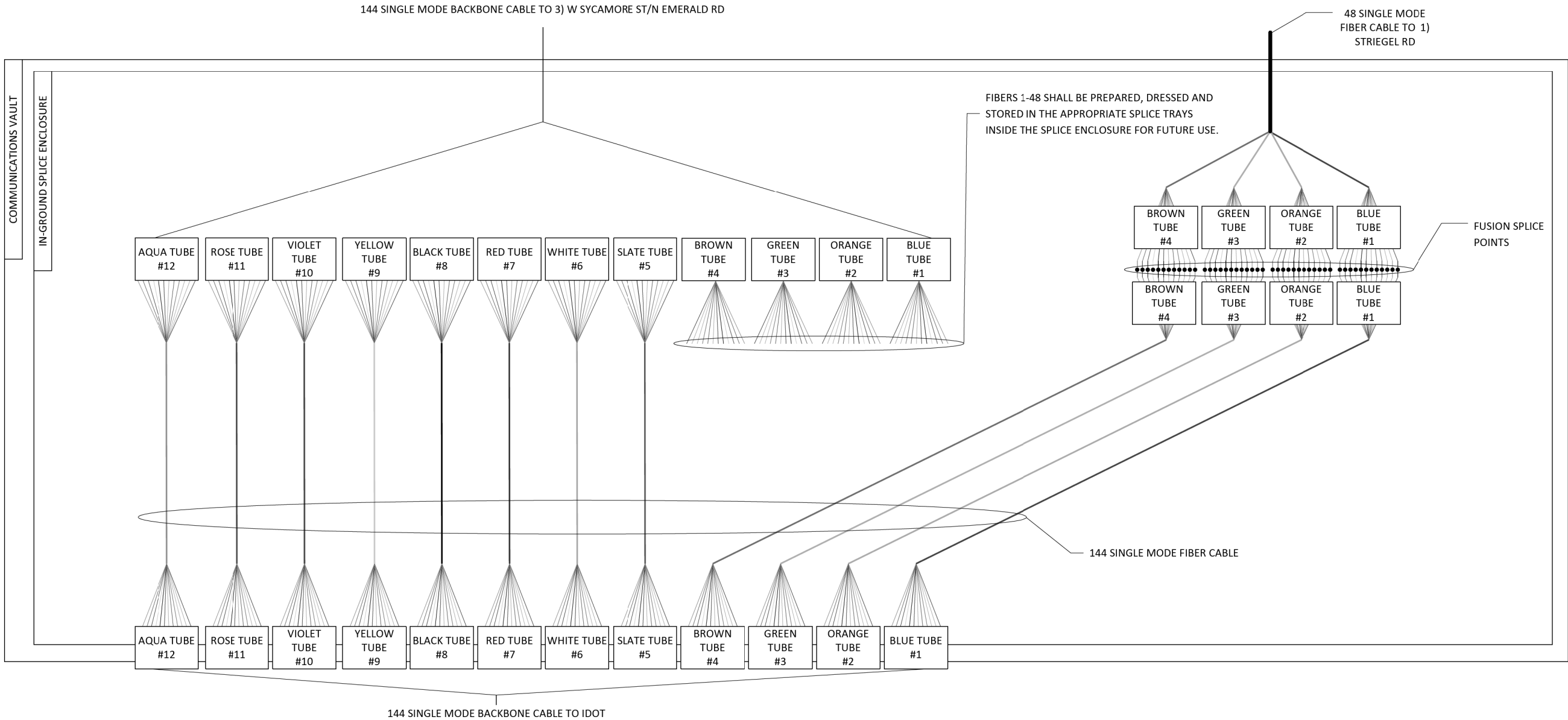
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PLOT DATE = 4/26/2019	DATE -	FILE -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Fiber Optic Splice
Allocation and Connection Details

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	44
CONTRACT NO. 78695				
		ILLINOIS	FED. AID PROJECT	



144 SINGLE MODE FIBER TO 48 SINGLE MODE FIBER
SPLICING DETAIL AT
NEW ERA ROAD

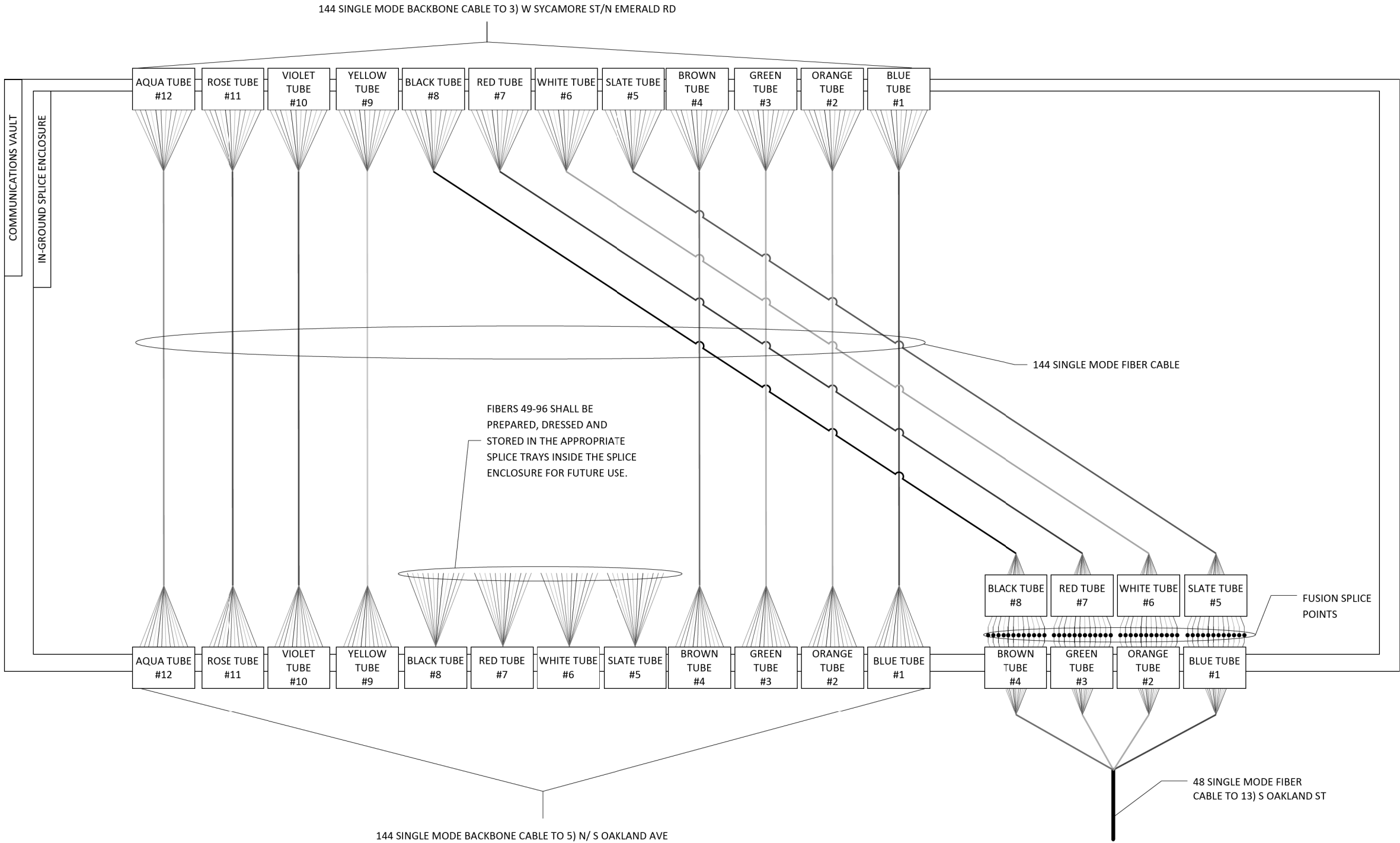
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PLOT SCALE = 2,0000' / In.	CHECKED -	REVISED -
PLOT DATE = 4/26/2019	DATE -	FILE -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Backbone Fiber Optic Cable Typical Splice Details			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

* D9 TRAFFIC SIGNAL 2019-1				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	45
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				



144 SINGLE MODE FIBER TO 48 SINGLE MODE FIBER
SPLICING DETAIL AT
NORTH GLENVIEW ROAD

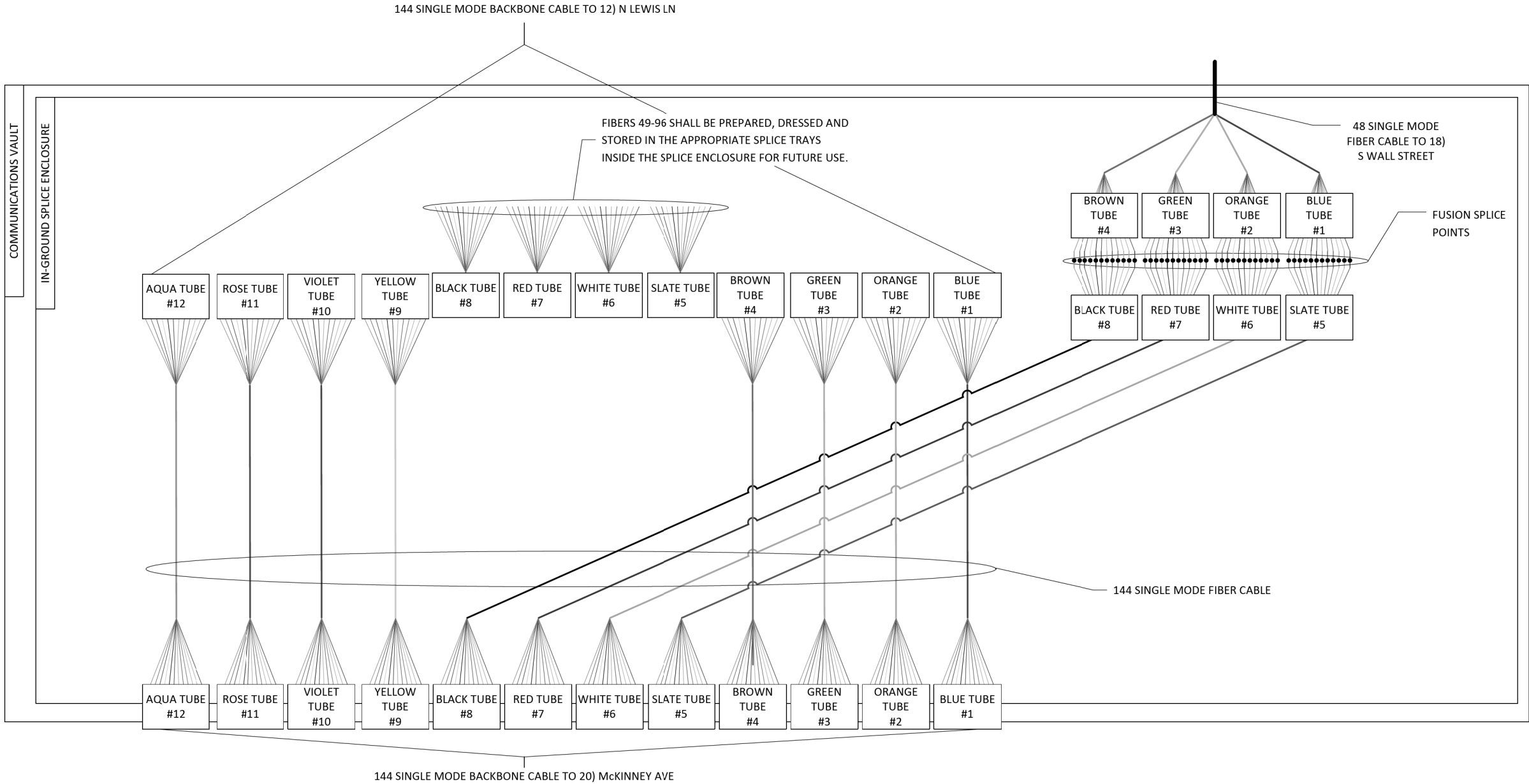
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PLOT DATE = 4/26/2019	DATE -	FILE -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Backbone Fiber Optic Cable Typical Splice Details			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

* D9 TRAFFIC SIGNAL 2019-1				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	46
CONTRACT NO. 78695				
ILLINOIS		FED. AID PROJECT		



144 SINGLE MODE FIBER TO 48 SINGLE MODE FIBER
SPLICING DETAIL AT
N LEWIS LN

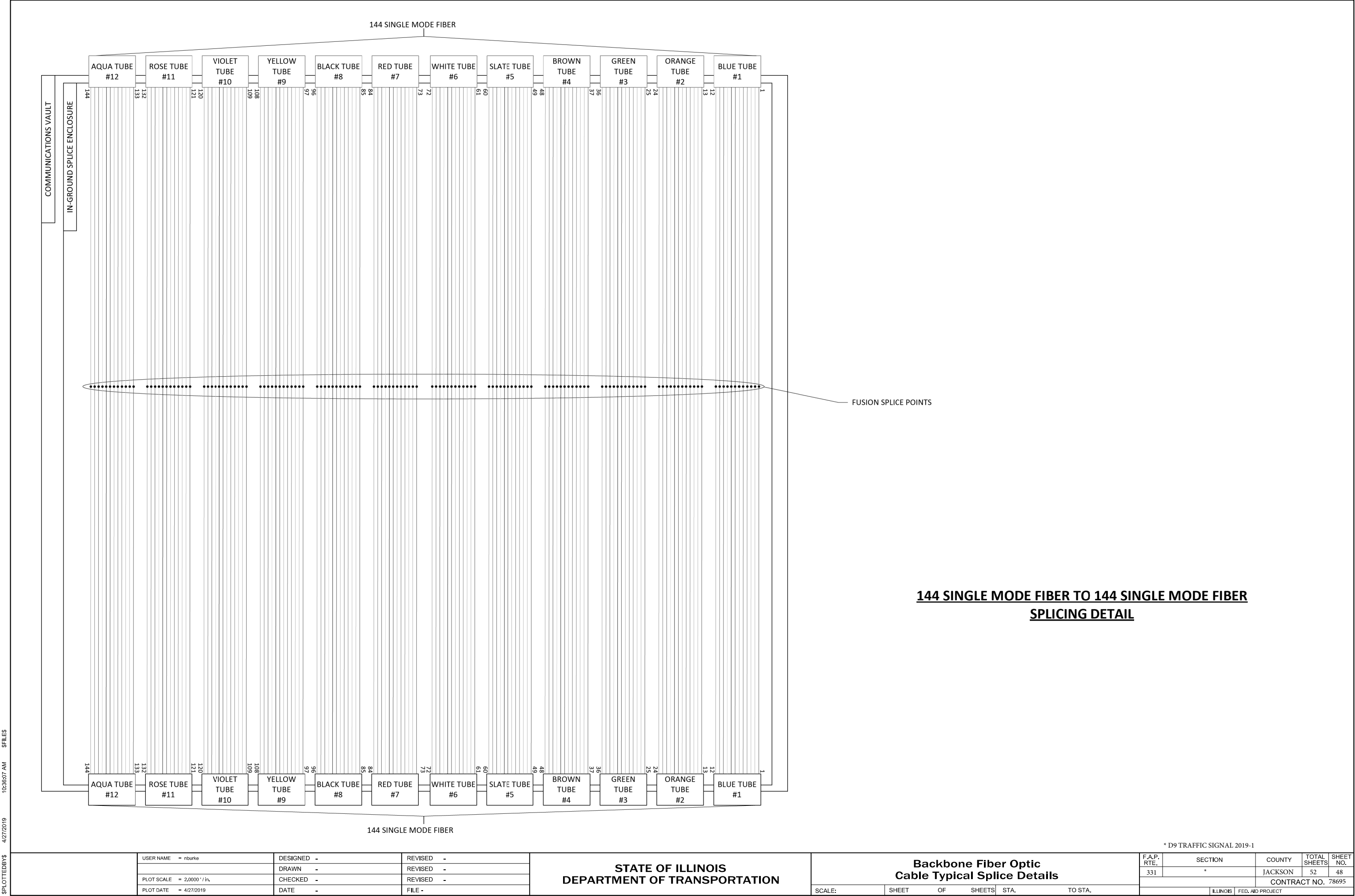
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PLOT DATE = 4/27/2019	DATE -	FILE -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Backbone Fiber Optic Cable Typical Splice Details			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

* D9 TRAFFIC SIGNAL 2019-1				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	47
			CONTRACT NO. 78695	
		ILLINOIS	FED. AID PROJECT	



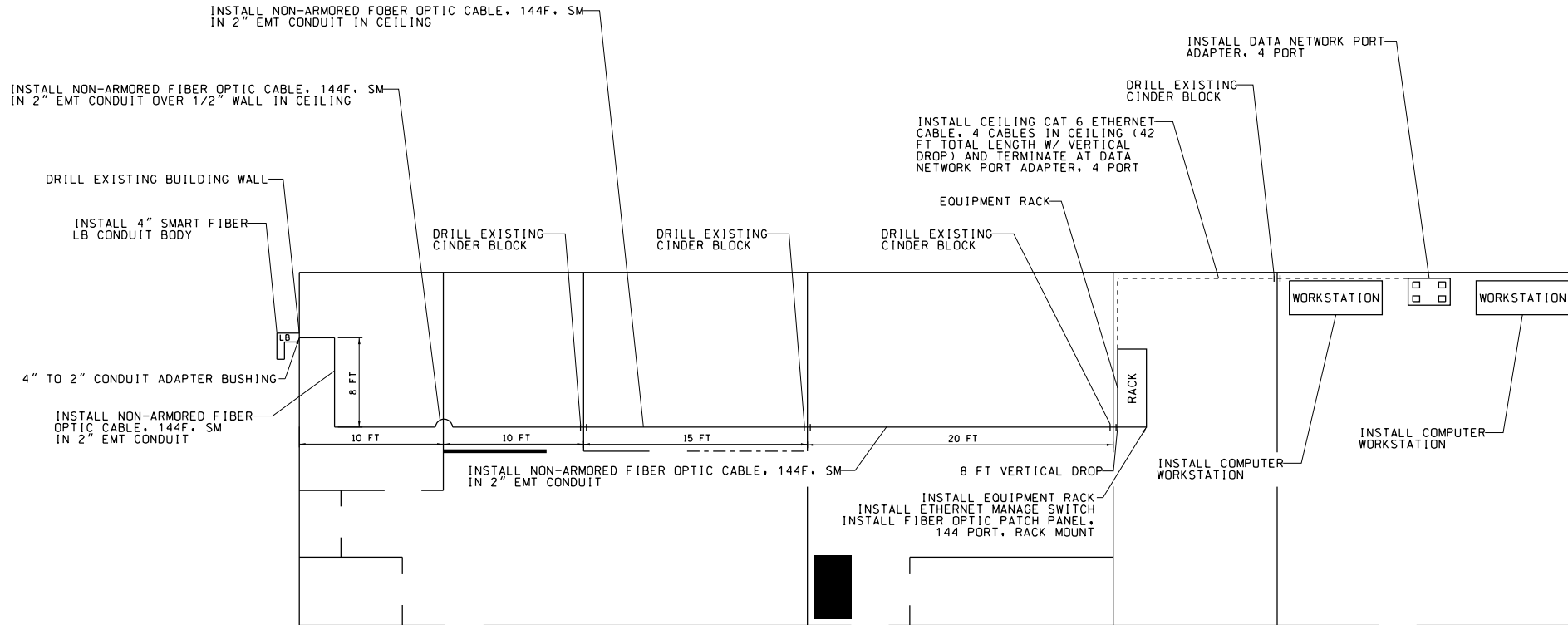
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PLOT SCALE = 2,0000' = 1 in.	CHECKED -	REVISED -
PLOT DATE = 4/27/2019	DATE -	FILE -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Backbone Fiber Optic Cable Typical Splice Details			
SCALE:	SHEET	OF	SHEETS
	STA.		TO STA.

* D9 TRAFFIC SIGNAL 2019-1			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
331	*	JACKSON	52
			SHEET NO. 48
CONTRACT NO. 78695			
ILLINOIS FED. AID PROJECT			



NOTES:

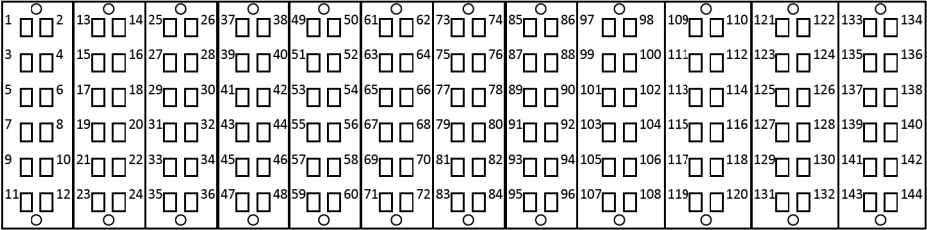
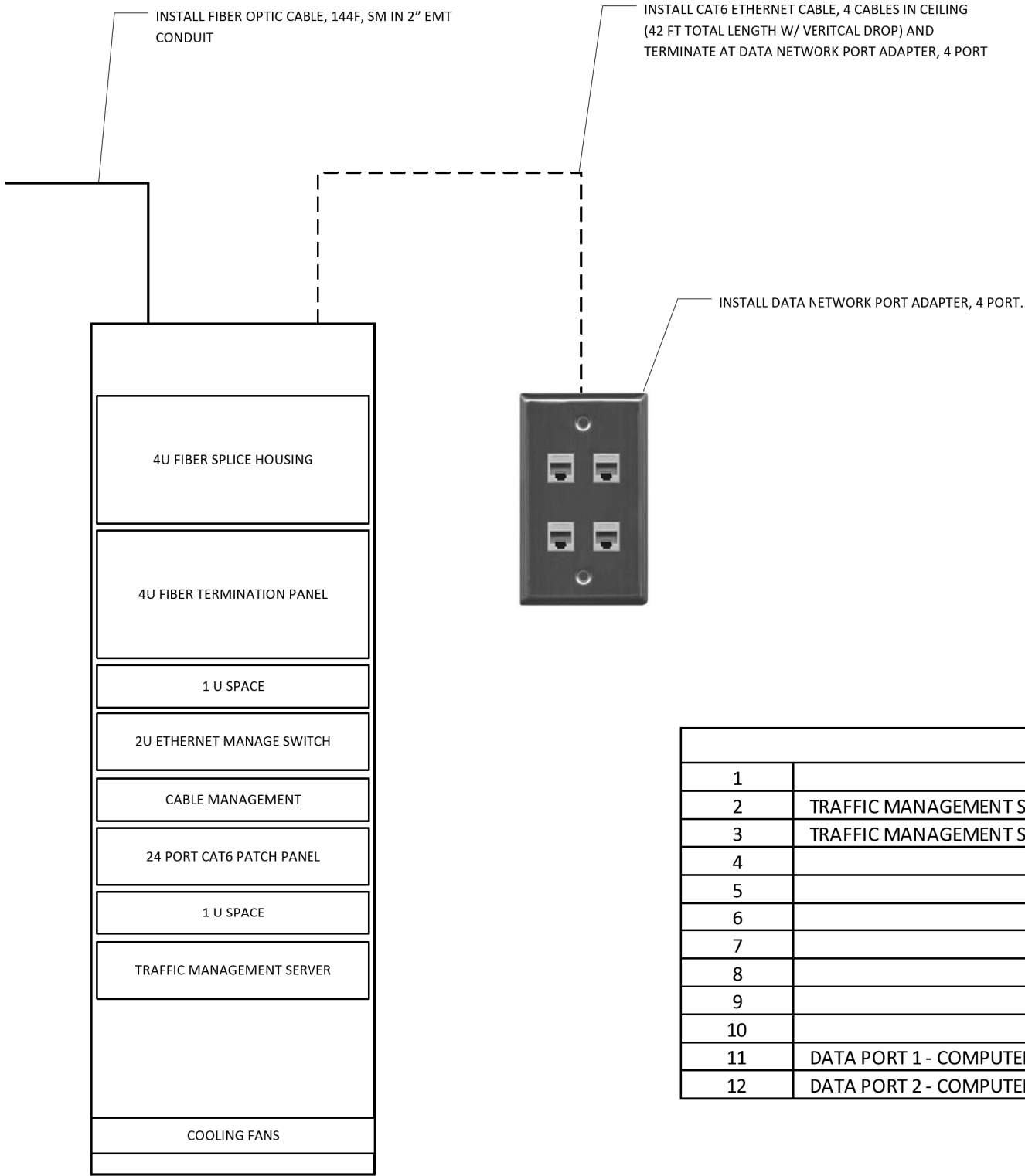
- CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR FINAL INSTALL LOCATIONS OF SMART CONDUIT LB, EQUIPMENT RACK, DATA NETWORK PORT ADAPTER AND COMPUTER WORKSTATIONS PRIOR TO ANY INSTALLATION.
- CONDUIT(S) INSIDE BUILDING SHALL BE PROPERLY SECURED WITH APPROVED CONDUIT HANGERS ABOVE DROP-DOWN T-BAR CEILING.
- CONTRACTOR TO LABEL ALL EQUIPMENT, CABLES, PIGTAILS, AND JUMPERS AS DIRECTED BY THE ENGINEER.
- CONTRACTOR TO BOND EQUIPMENT AND RACK TO GROUND PER NEC AND TELECOMMUNICATIONS INDUSTRY STANDARDS (ANSI/TIA/EIA/BICSI/IEEE)
- SEE EQUIPMENT RACK LAYOUT AT LOCATIONS AS SHOWN FOR ETHERNET MANAGE SWITCH AND FIBER OPTIC PATCH PANEL, 144 PORT, RACK MOUNT.
- CONTRACTOR SHALL VERIFY CONDUIT PATH AND ROUTING WITH ENGINEER PRIOR TO INSTALLATION.
- INSTALL FIBER OPTIC PATCH PANEL WITH SPLICE HOUSING IN NEW EQUIPMENT RACK AT THE LOCATION AS SHOWN AND AS DIRECTED BY THE ENGINEER. SPLICE, TERMINATE, AND TEST THE 144 SMF. INSTALL, CONNECT, AND TEST THE ETHERNET MANAGE SWITCH AND CORRESPONDING EQUIPMENT.
- INSTALL, TERMINATE, AND TEST 4 NEW DATA NETWORK PORTS AND CONNECT WITH CAT 6 ETHERNET PATCH CABLES TO NEW COMPUTER WORKSTATIONS.
- ALL NETWORK SWITCH CONNECTIONS SHALL BE PERFORMED IN PRESENCE OF ENGINEER, AND FINAL PORT ASSIGNMENTS ARE TO BE PROVIDED BY THE ENGINEER PRIOR TO CONNECTIONS AND TESTING.

NOT TO SCALE (NTS)
DIMENSIONS ARE APPROXIMATE AND FOR INFORMATION ONLY.

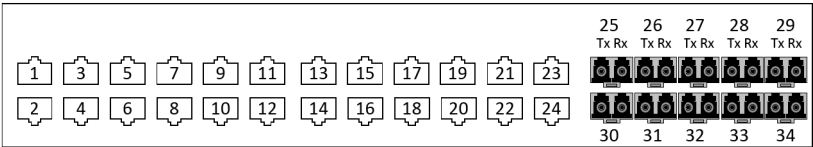
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	USER NAME = nburke	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IDOT D9 Building Fiber and Connection Details		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVIS	ED -				331	*	JACKSON	52	49
	PLOT SCALE = 2,000' = 1" IN.	CHECKED -	REVISED -				CONTRACT NO. 78695				
	PLOT DATE = 5/6/2019	DATE -	FILE -				SCALE:	SHEET OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT

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FIBER OPTIC PATCH PANEL



ETHERNET MANAGE SWITCH

ETHERNET MANAGE SWITCH - 24 PORT GIGABIT ETHERNET SCHEDULE				
1			13	DATA PORT 3 - SPARE
2	TRAFFIC MANAGEMENT SERVER		14	DATA PORT 4 - SPARE
3	TRAFFIC MANAGEMENT SERVER		15	
4			16	
5			17	
6			18	
7			19	
8			20	
9			21	
10			22	
11	DATA PORT 1 - COMPUTER WORKSTATION		23	
12	DATA PORT 2 - COMPUTER WORKSTATION		24	

USER NAME = nburke	DESIGNED -	REVISED -
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PLOT SCALE = 2,0000" / In.	CHECKED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Equipment Rack and Network
Switch Assignment Schematic

SCALE: SHEET OF SHEETS STA. TO STA.

*D9 TRAFFIC SIGNAL 2019-1				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	50
CONTRACT NO. 78695				
ILLINOIS FED. AID PROJECT				

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144 FIBER OPTIC CABLE TERMINATION SCHEDULE															
SPliced TO 48 SMF TOWARDS STREIGEL RD															
FIBER BUFFER TUBE	IDOT D9	ETHERNET MANAGE SWITCH PORT	PORT FUNCTION	FIBER BUFFER TUBE	IDOT D9	ETHERNET MANAGE SWITCH PORT	PORT FUNCTION	FIBER BUFFER TUBE	IDOT D9	ETHERNET MANAGE SWITCH PORT	PORT FUNCTION	FIBER BUFFER TUBE	IDOT D9	ETHERNET MANAGE SWITCH PORT	PORT FUNCTION
	PATCH PANEL PORT				PATCH PANEL PORT				PATCH PANEL PORT				PATCH PANEL PORT		
BLUE	1	25	Rx SIGNAL	ORANGE	13		FUTURE	GREEN	25		FUTURE	BROWN	37		FUTURE
	2		Tx SIGNAL		14		FUTURE		26		FUTURE		38		FUTURE
	3		SPARE		15		FUTURE		27		FUTURE		39		FUTURE
	4		SPARE		16		FUTURE		28		FUTURE		40		FUTURE
	5		SPARE		17		FUTURE		29		FUTURE		41		FUTURE
	6		SPARE		18		FUTURE		30		FUTURE		42		FUTURE
	7		FUTURE		19		FUTURE		31		FUTURE		43		FUTURE
	8		FUTURE		20		FUTURE		32		FUTURE		44		FUTURE
	9		FUTURE		21		FUTURE		33		FUTURE		45		FUTURE
	10		FUTURE		22		FUTURE		34		FUTURE		46		FUTURE
	11		FUTURE		23		FUTURE		35		FUTURE		47		FUTURE
	12		FUTURE		24		FUTURE		36		FUTURE		48		FUTURE
SPliced TO 48 SMF TOWARDS S OAKLAND ST															
SLATE	49	26	Rx SIGNAL	WHITE	61		FUTURE	RED	73		FUTURE	BLACK	85		FUTURE
	50		Tx SIGNAL		62		FUTURE		74		FUTURE		86		FUTURE
	51		SPARE		63		FUTURE		75		FUTURE		87		FUTURE
	52		SPARE		64		FUTURE		76		FUTURE		88		FUTURE
	53		SPARE		65		FUTURE		77		FUTURE		89		FUTURE
	54		SPARE		66		FUTURE		78		FUTURE		90		FUTURE
	55	27	Rx SIGNAL		67		FUTURE		79		FUTURE		91		FUTURE
	56		Tx SIGNAL		68		FUTURE		80		FUTURE		92		FUTURE
	57		SPARE		69		FUTURE		81		FUTURE		93		FUTURE
	58		SPARE		70		FUTURE		82		FUTURE		94		FUTURE
	59		SPARE		71		FUTURE		83		FUTURE		95		FUTURE
	60		SPARE		72		FUTURE		84		FUTURE		96		FUTURE
SPliced TO 144 SMF TOWARDS N GLENVIEW RD															
YELLOW	97	28	Rx SIGNAL	VIOLET	109		FUTURE	ROSE	121		FUTURE	AQUA	133		FUTURE
	98		Tx SIGNAL		110		FUTURE		122		FUTURE		134		FUTURE
	99		SPARE		111		FUTURE		123		FUTURE		135		FUTURE
	100		SPARE		112		FUTURE		124		FUTURE		136		FUTURE
	101		SPARE		113		FUTURE		125		FUTURE		137		FUTURE
	102		SPARE		114		FUTURE		126		FUTURE		138		FUTURE
	103	29	Rx SIGNAL		115		FUTURE		127		FUTURE		139		FUTURE
	104		Tx SIGNAL		116		FUTURE		128		FUTURE		140		FUTURE
	105		SPARE		117		FUTURE		129		FUTURE		141		FUTURE
	106		SPARE		118		FUTURE		130		FUTURE		142		FUTURE
	107		SPARE		119		FUTURE		131		FUTURE		143		FUTURE
	108		SPARE		120		FUTURE		132		FUTURE		144		FUTURE

*D9 TRAFFIC SIGNAL 2019-1

USER NAME = nburke	DESIGNED -	REVISED -
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PLOT SCALE = 2,000' / In.	CHECKED -	REVISED -
PLOT DATE = 4/30/2019	DATE -	FILE -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT D9 Fiber Termination Schedule			
SCALE:	SHEET	OF	SHEETS
	STA.		TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	*	JACKSON	52	51
CONTRACT NO. 78695				
		ILLINOIS	FED. AID PROJECT	



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.



1. FOR ALL SPLICE AND COMMUNICATION VAULTS, NUMBER DECALS WILL BE APPLIED AFTER INSTALLATION IS COMPLETED AND AT THE DIRECTION OF THE ENGINEER
2. COIL FIBER OPTIC CABLE SLACK IN COMMUNICATION 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 BOTH SHEATHS OF THE ARMORED FIBER OPTIC CABLE 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.



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FIBER OPTIC MARKER, SPLICE, AND GROUNDING DETAIL

*D9 TRAFFIC SIGNAL 2019-1

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