

06-16-2023 LETTING ITEM 246

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

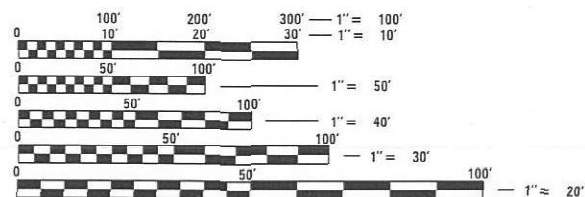
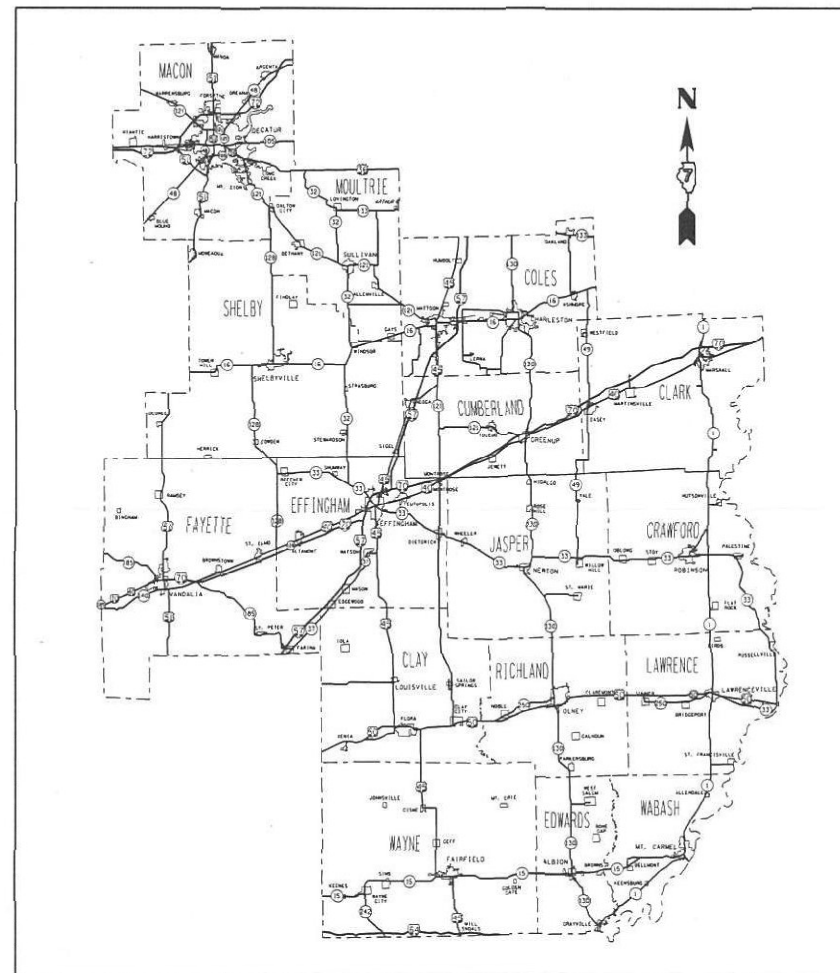
VARIOUS ROUTES
SECTION D7 ELECTRICAL REPAIRS 2023-1
ELECTRICAL MAINTENANCE
VARIOUS COUNTIES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	VARIOUS	ILLINOIS	7	1
D7 ELECTRICAL REPAIRS 2023-1			CONTRACT NO. 74C18	

D-97-062-23



C-97-068-23



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

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

PROJECT ENGINEER MATT BOWER
PROJECT MANAGER KYLE PRICE

CONTRACT NO. 74C18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED February 23 20 23

Jeffrey P. Reynolds REGIONAL ENGINEER

March 24, 2023 Joe A. Etk

ENGINEER OF DESIGN AND ENVIRONMENT

March 24, 2023 Stephen M. Smith

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS & GENERAL NOTES
- 3-5 SUMMARY OF QUANTITIES
- 6-7 DETAILS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 5:

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
- 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701011-04 OFF-ROAD MOVING OPERATION, 2L, 2W, DAY ONLY
- 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
- 701201-05 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
- 701206-05 LANE CLOSURE, 2L, 2W, NIGHT ONLY FOR SPEEDS ≥ 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701400-11 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701401-13 LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701406-13 LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
- 701411-09 LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
- 701421-08 LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
- 701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
- 701427-05 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS < 40 MPH
- 701428-01 TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
- 701456-05 PARTIAL EXIT RAMP CLOSURE FREEWAY/EXPRESSWAY
- 701501-06 URBAN LANE CLOSURE, 2L, 2W UNDIVIDED
- 701502-09 URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
- 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701602-10 URBAN LANE CLOSURE, MULTILANE, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
- 701606-10 URBAN LANE CLOSURE MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701611-01 URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-06 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-08 TRAFFIC CONTROL DEVICES
- 878001-11 CONCRETE FOUNDATION DETAILS
- 886001-01 DETECTOR LOOP INSTALLATIONS
- 886006-01 TYPICAL LAYOUT FOR DETECTION LOOPS
- 805001-01 ELECTRICAL SERVICE INSTALLATION DETAILS
- 821101-02 LUMINAIRE WIRING IN POLE
- 825011-04 LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240V
- 825016-04 LIGHTING CONTROLLER, PEDESTAL MOUNTED, 480V
- 825026-04 LIGHTING CONTROLLER, BASE MOUNTED, 480V
- 838001-01 BREAKAWAY DEVICES
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES

GENERAL NOTES

THIS PROJECT IS LOCATED ON VARIOUS ROUTES IN MACON, MOULTRIE, SHELBY, FAYETTE, COLES, CUMBERLAND, CLARK, EFFINGHAM, JASPER, CRAWFORD, CLAY, RICHLAND, LAWRENCE, WAYNE, EDWARDS, AND WABASH COUNTIES, ALL LOCATED WITHIN REGION 4-DISTRICT 7. THE WORK INCLUDED IN THIS SECTION CONSISTS OF MAINTAINING AND REPAIRING THE ELECTRICAL HIGHWAY LIGHTING, ELECTRICAL HIGHWAY WARNING SYSTEMS, INTELLIGENT TRANSPORTATION SYSTEM DEVICES, FIBER OPTIC CABLE, AND ALL OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

ALL WORK IS TO BE REPLACED IN KIND OR, AS INDICATED ON THE CONTRACT PLANS OR PROVISIONS.

THE LOCATIONS OF THE REPAIR AREAS SHALL BE DETERMINED BY THE ENGINEER.

REMOVAL OF DAMAGED MATERIALS WILL INCLUDE DISMANTLING, LOADING, HAULING AND DISPOSAL. THE WORK SITE WILL BE LEFT IN A SAFE AND ORDERLY CONDITION.

NO MATERIAL SHOULD BE LEFT ON OR NEAR THE ROADWAY DURING NON-WORKING HOURS.

ANY NECESSARY TRAFFIC CONTROL WILL BE PROVIDED BY THE CONTRACTOR; APPROPRIATE STANDARDS ARE LISTED ON THIS SHEET UNDER THE INDEX OF SHEETS.

ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J. U. L. I. E. (PH. 800-892-0123) OR FOR NON-MEMBER, THE UTILITY COMPANY DIRECTLY. ILLINOIS DEPARTMENT OF TRANSPORTATION IS NOT A MEMBER OF THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (J. U. L. I. E.) SYSTEM AND MUST BE CONTACTED DIRECTLY.

ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERCEDE ANY METRIC UNITS IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE FOR THIS PROJECT TO THE CONTRACTOR.

ANY WORK ORDER MAY BE CANCELLED AT THE ENGINEER'S DISCRETION.

NO OVERNIGHT LANE CLOSURES WILL BE ALLOWED.

REV. - MS

* D7 ELECTRICAL REPAIRS 2023-1

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PLOT DATE = 2/23/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS & GENERAL NOTES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	*	VARIOUS	7	2
** VARIOUS			CONTRACT NO. 74C18	
ILLINOIS FED. AID PROJECT				

100%
STATE

100%
STATE

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0043	0021	
72700100	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	POUND	1040		1040	
81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	20		20	
81028770	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA.	FOOT	20		20	
81603000	UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	1000	1000		
82110007	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	50	50		
82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	50	50		
82110015	LUMINAIRE, LED, HIGHMAST, OUTPUT DESIGNATION H	EACH	50	50		
82500330	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	1	1		
82500335	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 100AMP	EACH	1	1		
82500340	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 480VOLT, 60AMP	EACH	1	1		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0043	0021	
82500360	LIGHTING CONTROLLER, BASE MOUNTED, 480 VOLT, 100 AMP	EACH	1	1		
85800100	FLASHER CONTROLLER	EACH	2	2		
86300300	CONTROLLER CABINET TYPE III	EACH	2		2	
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	7		7	
87900200	DRILL EXISTING HANDHOLE	EACH	2		2	
88600100	DETECTOR LOOP, TYPE I	FOOT	325		325	
88600600	DETECTOR LOOP REPLACEMENT	FOOT	300	300		
89100400	ILLUMINATED SIGN, LED	EACH	2	2		
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	200		200	
X0301242	PIEZO AXLE SENSOR, CLASS II	FOOT	24		24	
X0320023	CLOSED CIRCUIT TELEVISION DOME CAMERA, HD	EACH	5	5		
X0323388	TRAFFIC COUNTER	EACH	2		2	
X0327116	SOLAR POWER ASSEMBLY	EACH	2		2	
XP000001	JOURNEYMAN ELECTRICIAN	HOUR	200	200		
XP000002	APPRENTICE ELECTRICIAN	HOUR	50	50		

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* D7 ELECTRICAL REPAIRS 2023-1

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	*	VARIOUS	7	3
** VARIOUS		CONTRACT NO. 74C18		
ILLINOIS FED. AID PROJECT				

100%
STATE

100%
STATE

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0043	0021	
XP000009	PICK-UP TRUCK	hour	200	200		
XP000010	BUCKET TRUCK (LENGTH LESS THAN 35 FEET)	hour	50	50		
XP000011	BUCKET TRUCK (LENGTH 35 TO 65 FEET)	hour	100	100		
XP000012	ARROWBOARD (TRAILER MOUNTED)	hour	20	20		
XP000013	ATTENUATOR, CRASH (TRUCK MOUNTED)	hour	20	20		
X1400145	RADAR SPEED SIGN	EACH	2	2		
X1400427	FLASHING BEACON ASSEMBLY	EACH	2	2		
X8730810	ELECTRIC CABLE IN CONDUIT, CONOGA-30003	FOOT	200		200	
XP000028	LABOR	hour	100	100		
XP000106	BUCHANAN FUSEHOLDER KIT	EACH	5	5		
XP000124	SURGE ARRESTOR (EDCO MODEL SHA-XXX3) X=20/240/480 VOLTS	EACH	20	20		
XP000125	PHOTO CONTROL, 105V-285V (ALR-MODEL SSTPV-0N)	EACH	10	10		
XP000129	60A LIGHTING CONTACTOR	EACH	5	5		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0043	0021	
XP000130	100A LIGHTING CONTACTOR	EACH	5	5		
XP000140	1/4" X 1/4" STAINLESS STEEL MESH	SO FT	100	100		
XP000180	SPLICE KIT (3-M SCOTCHCAST #72-N1)	EACH	5	5		
XP000199	FLASHER, NEMA	EACH	10	10		
XP000304	REPLACE SERVICE INSTALLATION, COMPLETE	EACH	1	1		
XP000308	REPAIR FLASHING BEACON KNOCKDOWN	EACH	15	15		
XP000309	REPAIR HIGHWAY LIGHT POLE KNOCKDOWN	EACH	15	15		
XP000310	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, COUPLINGS	EACH	100	100		
XP000311	REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, TRANSFORMER BASE	EACH	5	5		
XP000313	REPAIR HIGH MAST LIGHT TOWER	EACH	10	10		
XP000314	REPAIR ILLUMINATED SIGN, LED	EACH	5	5		
XP000315	REPAIR RADAR SPEED SIGN	EACH	5	5		
XP000316	REPAIR DYNAMIC MESSAGE SIGN	EACH	5	5		

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* D7 ELECTRICAL REPAIRS 2023-1

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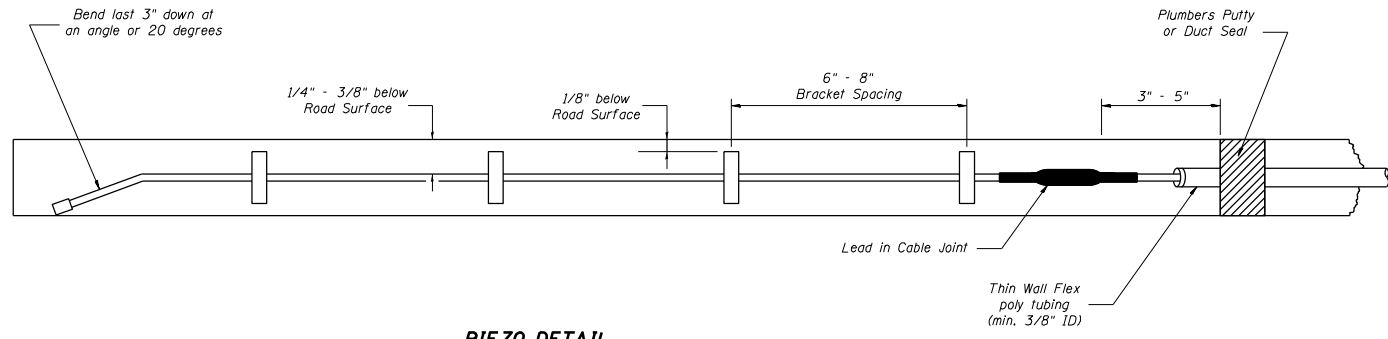
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

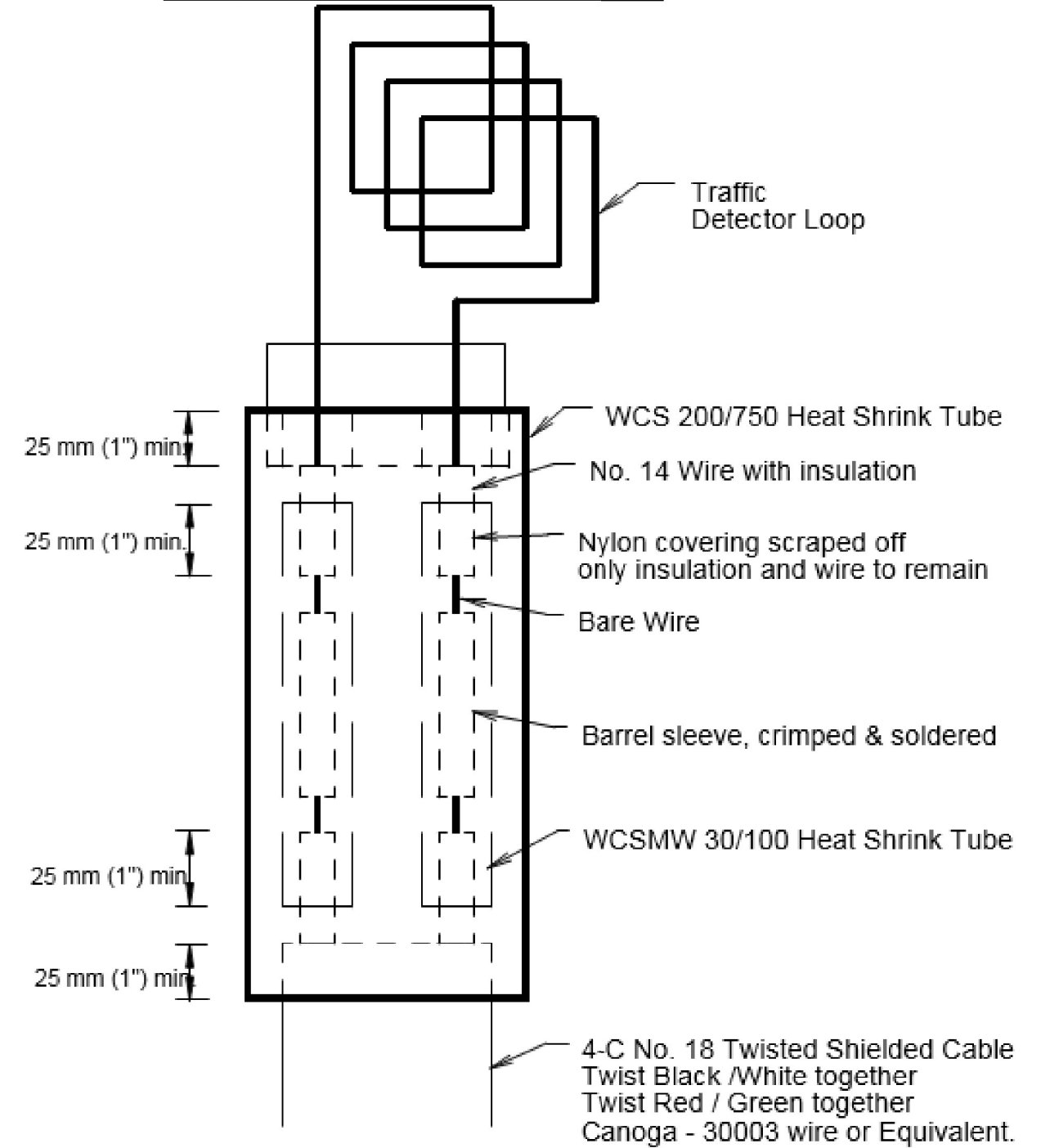
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**	*	VARIOUS	7	4
** VARIOUS		CONTRACT NO. 74C18		
ILLINOIS FED. AID PROJECT				



PIEZO DETAIL

Loop Splicing Requirements



Minimum 25 mm (1") Heat Shrink Tube overlap on wire.
 PVC & Shielded cable to form water tight seal. Note: Not to Scale

REVISIONS	
Name	Date

Illinois Department of Transportation
Office of Planning and Programming

Drawn By:	Checked By:	Date:	Scale:
R. Taylor	R. Taylor	01/20/00	NONE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ADDITIONAL DETAILS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

• D7 ELECTRICAL REPAIRS 2023-1				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
..	.	VARIOUS	7	7
.. VARIOUS			CONTRACT NO. 74C18	
ILLINOIS FED. AID PROJECT				