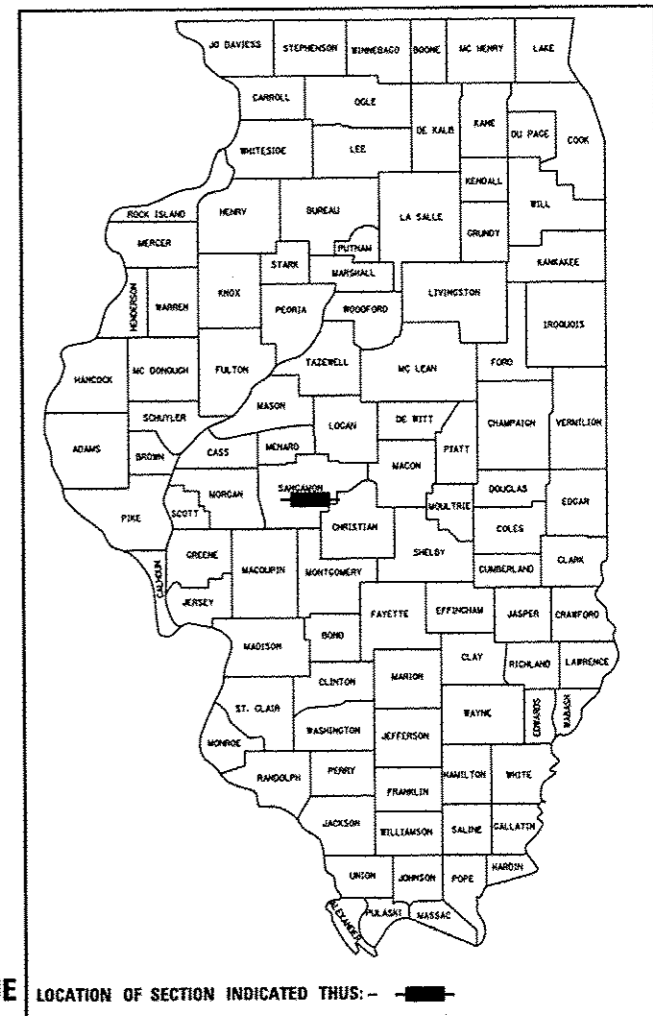


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	1
		ILLINOIS	CONTRACT NO. 93639	

DOT#294294Y MP 184.10
DOT#294295F MP 184.15

D-96-226-15



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- 2 HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS
- 3-5 SUMMARY OF QUANTITIES
- 6 TRAFFIC SIGNAL PLAN
- 7 SIGNING AND PAVEMENT MARKING PLAN
- 8 TRAFFIC SIGNAL CABLE DIAGRAM AND SCHEDULE OF QUANTITIES
- 9 TRAFFIC SIGNAL SEQUENCE OF OPERATION
- 10 RAILROAD PREEMPTION SEQUENCE OF OPERATION
- 11 CONDUIT INSTALLATION UNDER RAILROAD TRACKS DETAIL
- 12 TRAFFIC CONTROL AND PROTECTION, STANDARD 701701, SPECIAL DETAIL
- 13 VIDEO VEHICLE DETECTION SYSTEM INSTALLATION DETAIL
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

**F.A.U. ROUTE 7972 (N. GRAND AVENUE)
SECTION 15-HSRT3-02-RR
PROJECT
INTERCONNECT MODIFICATIONS
SANGAMON COUNTY /CITY OF SPRINGFIELD**

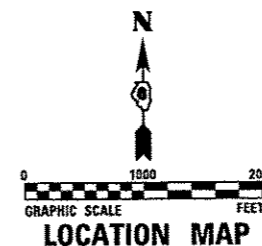
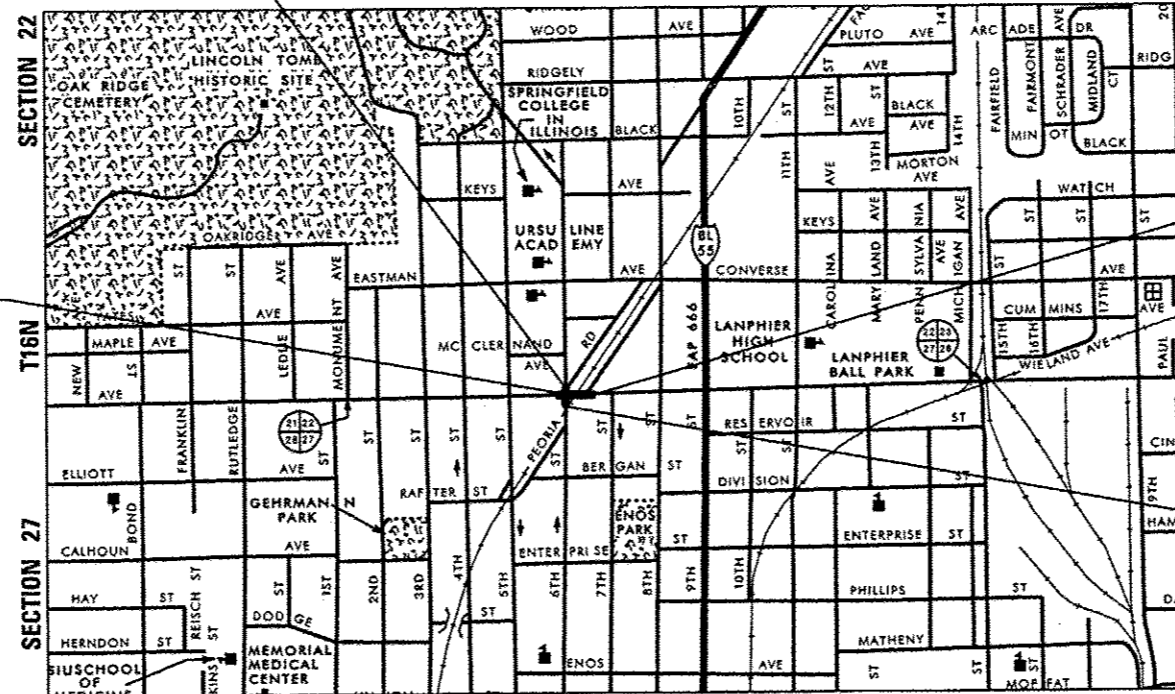
FUNCTIONAL CLASSIFICATION

URBAN MINOR ARTERIAL (N. GRAND AVENUE)
2013 ADT = 13,700
P.V. = NA S.U. = NA M.U. = NA

URBAN MINOR ARTERIAL (N. 6TH STREET)
2013 ADT = 3,300
P.V. = NA S.U. = NA M.U. = NA

END PROJECT
N. 6TH STREET
STA. 99 + 67.00

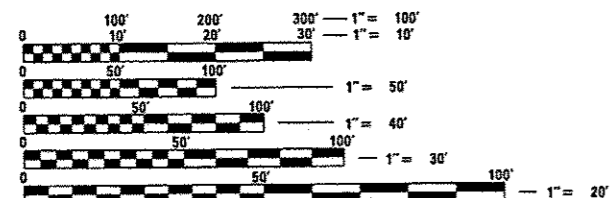
C-96-226-15



END PROJECT
N. GRAND AVENUE
STA. 51 + 07.00

BEGIN PROJECT
N. GRAND AVENUE
STA. 48 + 31.00

BEGIN PROJECT
N. 6TH STREET
STA. 98 + 80.00



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

DISTRICT 6 NO. (217) 782-7301
PROJECT ENGINEER: JAY WAVERING (217) 785-9046
TOWNSHIP: CAPITAL

CONTRACT NO. 93639

	NET LENGTH	GROSS LENGTH
N. GRAND AVENUE	276.00 FT (0.052 MI)	276.00 FT (0.052 MI)
N. 6TH STREET	87.00 FT (0.016 MI)	87.00 FT (0.016 MI)
PROJECT TOTAL	363.00 FT (0.068 MI)	363.00 FT (0.068 MI)



MATTHEW J. LETOURNEAU
IL. REG. P.E. NO. 062-055763
EXPIRES: 11/30/2017
DATE: 12/22/2016

FINAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Jan 6, 2016
Deputy Director of Highways, Region Engineer

Jan 27, 2017
Maureen M. Addis P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 27, 2017
Director of Highways, Chief Engineer

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

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-06	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-03	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
857006-01	SUPERVISED RAILROAD INTERCONNECT CIRCUIT
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
878001-10	CONCRETE FOUNDATION DETAILS

GENERAL NOTES

1. NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET. THE CONTRACTOR SHALL DEVELOP A PLAN TO ACCOMPLISH THIS WORK AND MINIMIZE DISRUPTION OF VEHICULAR, RAIL, AND PEDESTRIAN TRAFFIC. THIS PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. ALL UTILITIES, SCHOOL DISTRICTS, LOCAL POLICE, AND FIRE DEPARTMENTS SHALL BE NOTIFIED BY THE CONTRACTOR A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
3. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE AND MAINTAIN ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT.
4. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITY FACILITIES. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR THEIR MARKING OF THE EXACT LOCATION PRIOR TO CONSTRUCTION.
6. BEFORE STARTING ANY WORK, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (MINIMUM 48 HOURS NOTIFICATION IS REQUIRED). THE CONTRACTOR SHALL CALL THE UNION PACIFIC "CALL BEFORE YOU DIG" OPERATION AT 1-800-336-9193 FOR FIELD LOCATIONS OF UNION PACIFIC OWNED BURIED FIBER OPTIC CABLES IN UNION PACIFIC RIGHT OF WAY.
7. MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:
 1. AMEREN ILLINOIS
 2. AT&T
 3. CITY OF SPRINGFIELD, PUBLIC WORKS
 4. CITY WATER LIGHT AND POWER
 5. COMCAST
 6. SPRINGFIELD METRO SANITARY DISTRICT
 7. SPRINT
8. NON-MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:
 1. UNION PACIFIC RAILROAD COMPANY (FIBER OPTIC)
 2. UNION PACIFIC RAILROAD, IL HSR PROGRAM (RAILROAD SIGNALS)
9. THE CONTRACTOR SHALL COORDINATE WITH THE UPRR SIGNAL DEPARTMENT FOR ITEMS REMOVED OR INSTALLED BY THE UPRR SIGNAL DEPARTMENT.
10. UPRR FLAGGERS SHALL BE PRESENT WHEN WORKING WITHIN THE UPRR RIGHT-OF-WAY. THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH JOHN JEROME, UPRR, VIA E-MAIL AT JR.JEROME@UP.COM TO ASSURE THAT FLAGGERS ARE PRESENT DURING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
11. FOR STABILIZATION, ALL TYPE III BARRICADES (WHERE NEEDED) SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.
12. SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION. THE AREAS TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT-OF-WAY. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.
13. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF "MODIFY EXISTING CONTROLLER FOUNDATION".
14. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB NUMBER SHOWN IN THE LIST OF HIGHWAY STANDARDS INCLUDED ON THIS SHEET OR REFERENCED IN THESE PLANS.
15. THE CONTRACTOR SHALL KEEP EXISTING ADJACENT STREETS CLEAN OF DIRT, MUD, AND OTHER DEBRIS AND, WHEN NECESSARY, CLEAN SAID PAVEMENTS ON A DAILY BASIS OR WHEN DIRECTED BY THE ENGINEER. NO EXTRA COMPENSATION SHALL BE ALLOWED THE CONTRACTOR FOR THIS WORK.
16. THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO FULL SIZE PLANS AND NOT TO THE REDUCED SIZE PLANS. REDUCED SIZED PLANS CAN BE PRINTED TO SCALE FOR USE IN THE FIELD.
17. WHERE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED OF ANY SECTION OR SUB-SECTION MONUMENTS, BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER OR AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

COMMITMENTS

NONE.
December 22, 2016

FILE NAME: FILES



USER NAME: *USERS*	DESIGNED - KMO	REVISED -
	DRAWN - KMO	REVISED -
PLOT SCALE: *SCALES*	CHECKED - MJL	REVISED -
PLOT DATE: *DATE*	DATE - 12/22/2016	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS
NORTH GRAND AVENUE AND SIXTH STREET**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
797Z	15-HSRT3-02-RR	SANGAMON	14	2
			CONTRACT NO. 93639	
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE
				SIGNALS N. GRAND AVE.
				100% HSR
				0021
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	55	55
25200100	SODDING	SQ YD	55	55
* 42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	265	265
* 42400800	DETECTABLE WARNINGS	SO FT	10	10
* 44000600	SIDEWALK REMOVAL	SO FT	265	265
67100100	MOBILIZATION	LSUM	1	1
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	LSUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	2
72000100	SIGN PANEL - TYPE 1	SO FT	24	24
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	60	60
81028360	UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT	44	44
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	15	15
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	230	230
81400100	HANDHOLE	EACH	3	3

* DENOTES SPECIALTY ITEM

FILE NAME = *FILE*



USER NAME = *USER*
 PLOT SCALE = *SCALE*
 PLOT DATE = *DATE*

DESIGNED - KMO
 DRAWN - KMO
 CHECKED - MJL
 DATE - 12/22/2016

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
 NORTH GRAND AVENUE AND SIXTH STREET**

SCALE: NONE SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	3
CONTRACT NO. 93639				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE
				SIGNALS
				N. GRAND AVE.
				100% HSR
				0021
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1
85900100	TRANSCEIVER	EACH	1	1
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1248	1248
87301715	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18 6 PAIR	FOOT	206	206
87301750	ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	242	242
87502630	TRAFFIC SIGNAL POST, ALUMINUM 9 FT.	EACH	1	1
87502680	TRAFFIC SIGNAL POST, ALUMINUM 14 FT.	EACH	1	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8	8
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	4
87900200	DRILL EXISTING HANDHOLE	EACH	1	1
88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2	2
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2	2
88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	4	4
88500100	INDUCTIVE LOOP DETECTOR	EACH	17	17
89502215	MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	206	206

FILE NAME: 1-RTILE*



USER NAME: *USER*	DESIGNED - KMO	REVISED -
	DRAWN - KMO	REVISED -
PLOT SCALE: *SCALE*	CHECKED - MJL	REVISED -
PLOT DATE: *DATE*	DATE - 12/22/2016	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES	
NORTH GRAND AVENUE AND SIXTH STREET	
SCALE: NONE	SHEET 2 OF 3 SHEETS STA. TO STA.

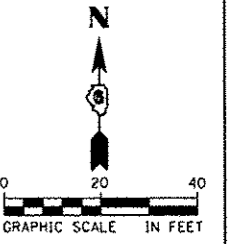
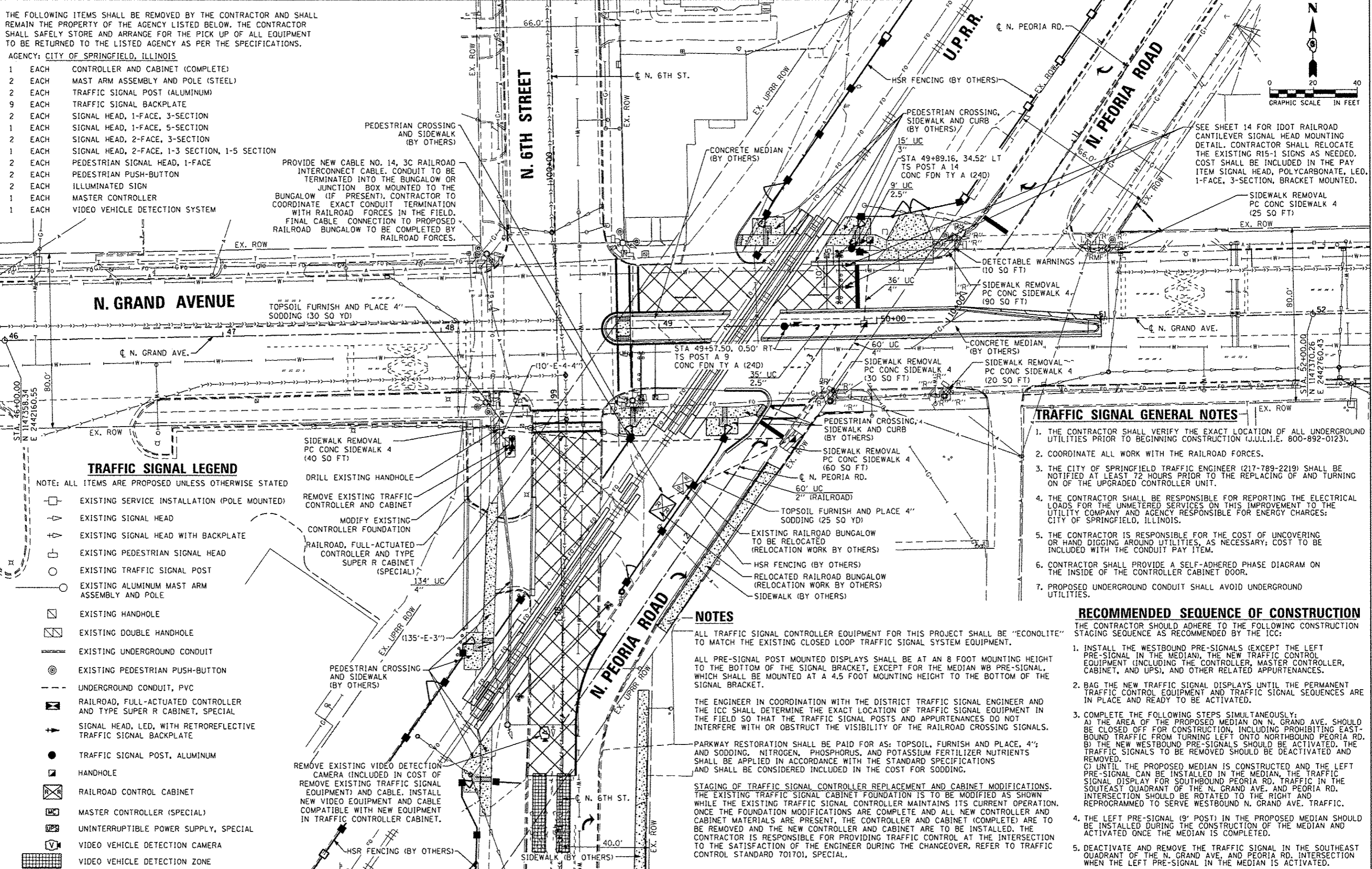
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	4
CONTRACT NO. 93639			ILLINOIS FED. AID PROJECT	

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE SPECIFICATIONS.

AGENCY: CITY OF SPRINGFIELD, ILLINOIS

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 2 EACH MAST ARM ASSEMBLY AND POLE (STEEL)
- 2 EACH TRAFFIC SIGNAL POST (ALUMINUM)
- 9 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 2 EACH ILLUMINATED SIGN
- 1 EACH MASTER CONTROLLER
- 1 EACH VIDEO VEHICLE DETECTION SYSTEM

PROVIDE NEW CABLE NO. 14, 3C RAILROAD INTERCONNECT CABLE. CONDUIT TO BE TERMINATED INTO THE BUNGALOW OR JUNCTION BOX MOUNTED TO THE BUNGALOW (IF PRESENT). CONTRACTOR TO COORDINATE EXACT CONDUIT TERMINATION WITH RAILROAD FORCES IN THE FIELD. FINAL CABLE CONNECTION TO PROPOSED RAILROAD BUNGALOW TO BE COMPLETED BY RAILROAD FORCES.



SEE SHEET 14 FOR IDOT RAILROAD CANTILEVER SIGNAL HEAD MOUNTING DETAIL. CONTRACTOR SHALL RELOCATE THE EXISTING R15-1 SIGNS AS NEEDED. COST SHALL BE INCLUDED IN THE PAY ITEM SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED.

N. GRAND AVENUE

N. 6TH STREET

U.P.R.R.

N. PEORIA ROAD

TRAFFIC SIGNAL LEGEND

NOTE: ALL ITEMS ARE PROPOSED UNLESS OTHERWISE STATED

- EXISTING SERVICE INSTALLATION (POLE MOUNTED)
- EXISTING SIGNAL HEAD
- EXISTING SIGNAL HEAD WITH BACKPLATE
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING TRAFFIC SIGNAL POST
- EXISTING ALUMINUM MAST ARM ASSEMBLY AND POLE
- EXISTING HANDHOLE
- EXISTING DOUBLE HANDHOLE
- EXISTING UNDERGROUND CONDUIT
- EXISTING PEDESTRIAN PUSH-BUTTON
- UNDERGROUND CONDUIT, PVC
- RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET, SPECIAL
- SIGNAL HEAD, LED, WITH RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE
- TRAFFIC SIGNAL POST, ALUMINUM
- HANDHOLE
- RAILROAD CONTROL CABINET
- MASTER CONTROLLER (SPECIAL)
- UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
- VIDEO VEHICLE DETECTION CAMERA
- VIDEO VEHICLE DETECTION ZONE

- DRILL EXISTING HANDHOLE
- REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET
- MODIFY EXISTING CONTROLLER FOUNDATION
- RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL)

REMOVE EXISTING VIDEO DETECTION CAMERA (INCLUDED IN COST OF REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT) AND CABLE. INSTALL NEW VIDEO EQUIPMENT AND CABLE COMPATIBLE WITH NEW EQUIPMENT IN TRAFFIC CONTROLLER CABINET.

TRAFFIC SIGNAL GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION (J.U.I.L.E. 800-892-0123).
2. COORDINATE ALL WORK WITH THE RAILROAD FORCES.
3. THE CITY OF SPRINGFIELD TRAFFIC ENGINEER (217-789-2219) SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO THE REPLACING OF AND TURNING ON OF THE UPGRADED CONTROLLER UNIT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING THE ELECTRICAL LOADS FOR THE UNMETERED SERVICES ON THIS IMPROVEMENT TO THE UTILITY COMPANY AND AGENCY RESPONSIBLE FOR ENERGY CHARGES: CITY OF SPRINGFIELD, ILLINOIS.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES, AS NECESSARY; COST TO BE INCLUDED WITH THE CONDUIT PAY ITEM.
6. CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE CONTROLLER CABINET DOOR.
7. PROPOSED UNDERGROUND CONDUIT SHALL AVOID UNDERGROUND UTILITIES.

RECOMMENDED SEQUENCE OF CONSTRUCTION

- THE CONTRACTOR SHOULD ADHERE TO THE FOLLOWING CONSTRUCTION STAGING SEQUENCE AS RECOMMENDED BY THE ICC:
1. INSTALL THE WESTBOUND PRE-SIGNALS (EXCEPT THE LEFT PRE-SIGNAL IN THE MEDIAN), THE NEW TRAFFIC CONTROL EQUIPMENT (INCLUDING THE CONTROLLER, MASTER CONTROLLER, CABINET, AND UPS), AND OTHER RELATED APPURTENANCES.
 2. BAG THE NEW TRAFFIC SIGNAL DISPLAYS UNTIL THE PERMANENT TRAFFIC CONTROL EQUIPMENT AND TRAFFIC SIGNAL SEQUENCES ARE IN PLACE AND READY TO BE ACTIVATED.
 3. COMPLETE THE FOLLOWING STEPS SIMULTANEOUSLY:
 - A) THE AREA OF THE PROPOSED MEDIAN ON N. GRAND AVE. SHOULD BE CLOSED OFF FOR CONSTRUCTION, INCLUDING PROHIBITING EASTBOUND TRAFFIC FROM TURNING LEFT ONTO NORTHBOUND PEORIA RD.
 - B) THE NEW WESTBOUND PRE-SIGNALS SHOULD BE ACTIVATED, THE TRAFFIC SIGNALS TO BE REMOVED SHOULD BE DEACTIVATED AND REMOVED.
 - C) UNTIL THE PROPOSED MEDIAN IS CONSTRUCTED AND THE LEFT PRE-SIGNAL CAN BE INSTALLED IN THE MEDIAN, THE TRAFFIC SIGNAL DISPLAY FOR SOUTHBOUND PEORIA RD. TRAFFIC IN THE SOUTHEAST QUADRANT OF THE N. GRAND AVE. AND PEORIA RD. INTERSECTION SHOULD BE ROTATED TO THE RIGHT AND REPROGRAMMED TO SERVE WESTBOUND N. GRAND AVE. TRAFFIC.
 4. THE LEFT PRE-SIGNAL (9' POST) IN THE PROPOSED MEDIAN SHOULD BE INSTALLED DURING THE CONSTRUCTION OF THE MEDIAN AND ACTIVATED ONCE THE MEDIAN IS COMPLETED.
 5. DEACTIVATE AND REMOVE THE TRAFFIC SIGNAL IN THE SOUTHEAST QUADRANT OF THE N. GRAND AVE. AND PEORIA RD. INTERSECTION WHEN THE LEFT PRE-SIGNAL IN THE MEDIAN IS ACTIVATED.

NOTES

- ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM EQUIPMENT.
- ALL PRE-SIGNAL POST MOUNTED DISPLAYS SHALL BE AT AN 8 FOOT MOUNTING HEIGHT TO THE BOTTOM OF THE SIGNAL BRACKET, EXCEPT FOR THE MEDIAN WB PRE-SIGNAL, WHICH SHALL BE MOUNTED AT A 4.5 FOOT MOUNTING HEIGHT TO THE BOTTOM OF THE SIGNAL BRACKET.
- THE ENGINEER IN COORDINATION WITH THE DISTRICT TRAFFIC SIGNAL ENGINEER AND THE ICC SHALL DETERMINE THE EXACT LOCATION OF TRAFFIC SIGNAL EQUIPMENT IN THE FIELD SO THAT THE TRAFFIC SIGNAL POSTS AND APPURTENANCES DO NOT INTERFERE WITH OR OBSTRUCT THE VISIBILITY OF THE RAILROAD CROSSING SIGNALS.
- PARKWAY RESTORATION SHALL BE PAID FOR AS: TOPSOIL, FURNISH AND PLACE, 4"; AND SODDING, NITROGEN, PHOSPHORUS, AND POTASSIUM FERTILIZER NUTRIENTS SHALL BE APPLIED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SHALL BE CONSIDERED INCLUDED IN THE COST FOR SODDING.
- STAGING OF TRAFFIC SIGNAL CONTROLLER REPLACEMENT AND CABINET MODIFICATIONS. THE EXISTING TRAFFIC SIGNAL CABINET FOUNDATION IS TO BE MODIFIED AS SHOWN WHILE THE EXISTING TRAFFIC SIGNAL CONTROLLER MAINTAINS ITS CURRENT OPERATION. ONCE THE FOUNDATION MODIFICATIONS ARE COMPLETE AND ALL NEW CONTROLLER AND CABINET MATERIALS ARE PRESENT, THE CONTROLLER AND CABINET (COMPLETE) ARE TO BE REMOVED AND THE NEW CONTROLLER AND CABINET ARE TO BE INSTALLED. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL AT THE INTERSECTION TO THE SATISFACTION OF THE ENGINEER DURING THE CHANGEOVER, REFER TO TRAFFIC CONTROL STANDARD 701701, SPECIAL.



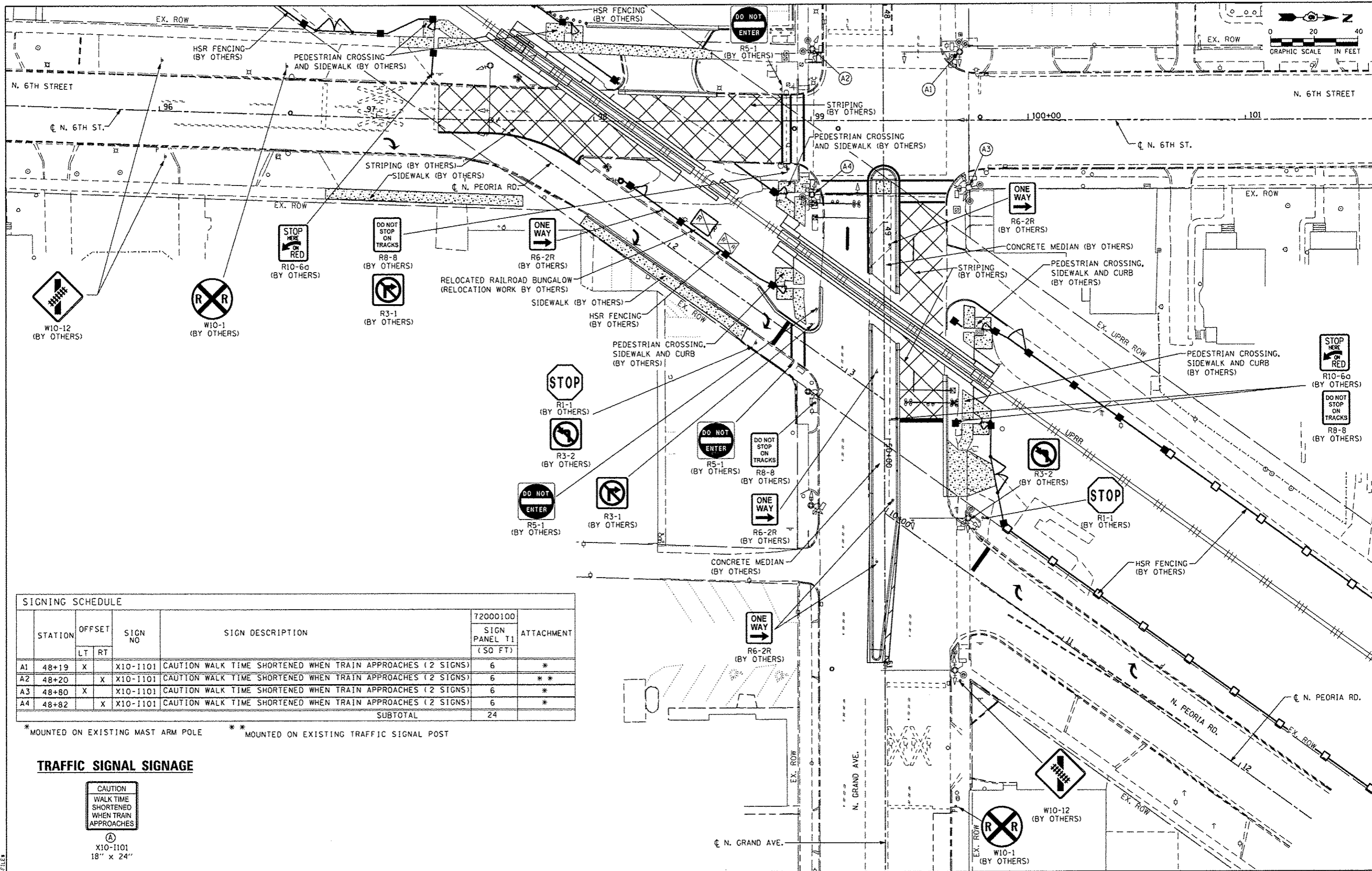
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PLOT SCALE : *SCALE*	DRAWN - KMD	REVISED -
PLOT DATE : *DATE*	CHECKED - MJL	REVISED -
	DATE - 12/22/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
NORTH GRAND AVENUE AND SIXTH STREET

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	6
				CONTRACT NO. 93639
ILLINOIS FED. AID PROJECT				



SIGNING SCHEDULE						
STATION	OFFSET	SIGN NO		SIGN DESCRIPTION	72000100 SIGN PANEL T1 (SQ FT)	ATTACHMENT
		LT	RT			
A1	48+19	X		X10-1101 CAUTION WALK TIME SHORTENED WHEN TRAIN APPROACHES (2 SIGNS)	6	*
A2	48+20		X	X10-1101 CAUTION WALK TIME SHORTENED WHEN TRAIN APPROACHES (2 SIGNS)	6	**
A3	48+80	X		X10-1101 CAUTION WALK TIME SHORTENED WHEN TRAIN APPROACHES (2 SIGNS)	6	*
A4	48+82		X	X10-1101 CAUTION WALK TIME SHORTENED WHEN TRAIN APPROACHES (2 SIGNS)	6	*
SUBTOTAL					24	

* MOUNTED ON EXISTING MAST ARM POLE ** MOUNTED ON EXISTING TRAFFIC SIGNAL POST

TRAFFIC SIGNAL SIGNAGE



X10-1101
18" x 24"



USER NAME : #USER#	DESIGNED - KMO	REVISED -
PLOT SCALE = #SCALE#	DRAWN - KMO	REVISED -
PLOT DATE = #DATE#	CHECKED - MJL	REVISED -
	DATE - 12/22/2016	REVISED -

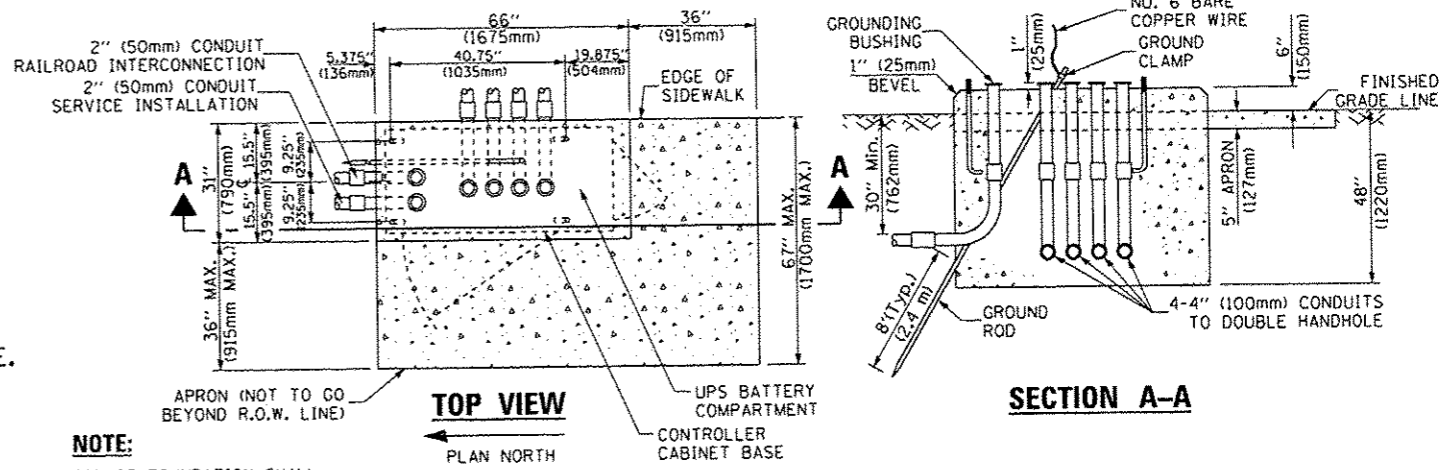
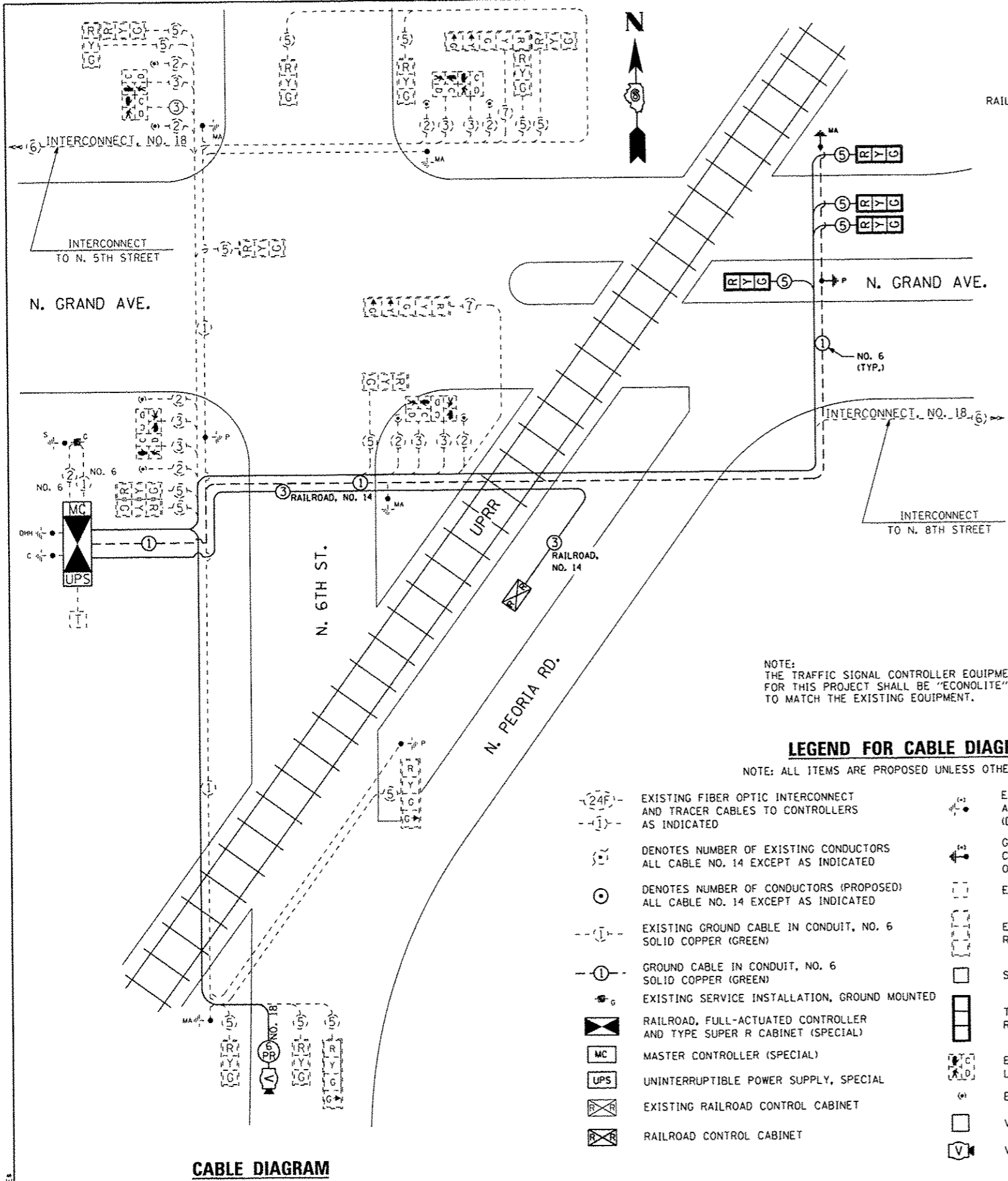
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SIGNING AND PAVEMENT MARKING PLAN
NORTH GRAND AVENUE AND SIXTH STREET**

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE. 7972	SECTION 15-HSRT3-02-RR	COUNTY SANGAMON	TOTAL SHEETS 14	SHEET NO. 7
CONTRACT NO. 93639			[ILLINOIS] FED. AID PROJECT	

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TYPE C FOR GROUND MOUNTED TYPE SUPER P AND TYPE SUPER R CONTROLLER CABINETS

NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING EQUIPMENT.

LEGEND FOR CABLE DIAGRAM

NOTE: ALL ITEMS ARE PROPOSED UNLESS OTHERWISE STATED.

- (24F)- EXISTING FIBER OPTIC INTERCONNECT AND TRACER CABLES TO CONTROLLERS AS INDICATED
- (5) DENOTES NUMBER OF EXISTING CONDUCTORS ALL CABLE NO. 14 EXCEPT AS INDICATED
- (5) DENOTES NUMBER OF CONDUCTORS (PROPOSED) ALL CABLE NO. 14 EXCEPT AS INDICATED
- (1) EXISTING GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)
- (1) GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)
- (S) EXISTING SERVICE INSTALLATION, GROUND MOUNTED
- MC MASTER CONTROLLER (SPECIAL)
- UPS UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
- EXISTING RAILROAD CONTROL CABINET
- RAILROAD CONTROL CABINET
- (P) EXISTING GROUND ROD AT POST (P), MAST ARM (MA), CONTROLLER (C), DOUBLE HANDHOLE (DHH), OR SERVICE INSTALLATION (S)
- (P) GROUND ROD AT POST (P), MAST ARM (MA), CONTROLLER (C), DOUBLE HANDHOLE (DHH), OR SERVICE INSTALLATION (S)
- (12) EXISTING SIGNAL SECTION, LED, 12"
- (12) EXISTING TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE
- (12) SIGNAL SECTION, LED, 12"
- (12) TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE
- (A) EXISTING PEDESTRIAN SIGNAL HEAD, LED, WITH COUNTDOWN TIMER
- (P) EXISTING PEDESTRIAN PUSH-BUTTON
- (V) VEHICLE DETECTOR, INDUCTION LOOP
- (V) VIDEO VEHICLE DETECTION SYSTEM CAMERA

SCHEDULE OF QUANTITIES

PAY ITEM	UNITS	QTY.
UNDERGROUND CONDUIT, PVC, 2 IN. DIA.	FOOT	60
UNDERGROUND CONDUIT, PVC, 2 1/2 IN. DIA.	FOOT	44
UNDERGROUND CONDUIT, PVC, 3 IN. DIA.	FOOT	15
UNDERGROUND CONDUIT, PVC, 4 IN. DIA.	FOOT	230
HANDHOLE	EACH	3
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	1,248
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18 6 PAIR	FOOT	206
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	242
TRAFFIC SIGNAL POST, ALUMINUM 9 FT.	EACH	1
TRAFFIC SIGNAL POST, ALUMINUM 14 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	17
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	206
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL)	EACH	1
MASTER CONTROLLER (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
VIDEO VEHICLE DETECTION SYSTEM	EACH	1
SPARE RAILROAD, FULL-ACTUATED CONTROLLER, SPECIAL	EACH	1



USER NAME : #USER#	DESIGNED - KMO	REVISED -
PLLOT SCALE : #SCALE#	DRAWN - KMO	REVISED -
PLLOT DATE : #DATE#	CHECKED - M.J.L.	REVISED -
	DATE - 12/22/2016	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE DIAGRAM AND SCHEDULE OF QUANTITIES
 NORTH GRAND AVENUE AND SIXTH STREET

F.A.U. RTE. 7972	SECTION 15-HSRT3-02-RR	COUNTY SANGAMON	TOTAL SHEETS 14	SHEET NO. 8
SCALE: NTS				SHEET 1 OF 1 SHEETS STA. TO STA.
CONTRACT NO. 93639				

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SEQUENCE OF OPERATION

MOVEMENT	N																		
PHASE		1 + 6		2 + 6				4	FLASH										
INTERVAL		1	2	3A	3B	4	5	6A		6B	6C	6D	7	8	9A	9B	9C	9D	
CHANGE TO		∅	∅	2 + 6		∅	∅	4				∅	∅	1 + 6 2 + 6					
N. GRAND AVENUE FAR LEFT AND LEFT MAST ARM SIGNALS	E/B					G	G	G	G	Y	R	R	R	R	R	R	R	R	
N. GRAND AVENUE FAR RIGHT AND NEAR RIGHT SIGNALS	E/B	G	G	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	
N. GRAND AVENUE (PRESIGNAL EAST OF TRACKS) ALL SIGNALS	W/B	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	
N. GRAND AVENUE (WEST OF TRACKS) ALL SIGNALS	W/B	R	R	R	R	G	G	G	G	Y	R	R	R	R	R	R	R	R	
SIXTH STREET (PRESIGNAL SOUTH OF TRACKS) NEAR LEFT AND LEFT MAST ARM SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	
SIXTH STREET (PRESIGNAL SOUTH OF TRACKS) RIGHT MAST ARM AND FAR RIGHT SIGNALS	N/B																	R	
SIXTH STREET (NORTH OF TRACKS) ALL SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	R	
PEDESTRIAN SIGNALS CROSSING SIXTH STREET NORTH SIDE OF N. GRAND AVENUE		H	H	H	H	•P	••FH	H	H	H	H	H	H	H	H	H	H	DARK	
PEDESTRIAN SIGNALS CROSSING SIXTH STREET SOUTH SIDE OF N. GRAND AVENUE		•P	••FH	H	H	•P	••FH	H	H	H	H	H	H	H	H	H	H	DARK	
PEDESTRIAN SIGNALS CROSSING W. GRAND AVENUE BOTH SIDES OF SIXTH STREET		H	H	H	H	H	H	H	H	H	H	•P	••FH	H	H	H	H	DARK	

PHASE 2 + 6 SHALL BE PLACED ON RECALL

- = TO APPEAR ONLY UPON PUSHBUTTON ACTUATION
- = FLASHING "DON'T WALK" IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.
- = THIS "WALK" OR FLASHING "DON'T WALK" INTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "WALK" OR FLASHING "DON'T WALK" INTERVALS.

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK

FILE NAME = #FILES



USER NAME = #USER#	DESIGNED - KMG	REVISED -
	DRAWN - KMG	REVISED -
PLOT SCALE = #SCALE#	CHECKED - MJL	REVISED -
PLOT DATE = #DATE#	DATE - 12/22/2016	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL SEQUENCE OF OPERATION
NORTH GRAND AVENUE AND SIXTH STREET**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	9
CONTRACT NO. 93639				
ILLINOIS FED. AID PROJECT				

RAILROAD PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	PREEMPTOR NUMBER 2																
	1		4						7								
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER																	
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	2	3	4	5	6	7	8	CLEAR TO NORMAL SEQUENCE	
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	1E	1F	2	1H	2	3	4	5	6	7	8			
N. GRAND AVENUE FAR LEFT AND LEFT MAST ARM SIGNALS E/B	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R ← G	Δ
N. GRAND AVENUE RIGHT MAST ARM AND NEAR RIGHT SIGNALS E/B	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	R		Δ
N. GRAND AVENUE (PRESIGNAL EAST OF TRACKS) ALL SIGNALS W/B	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R		Δ
N. GRAND AVENUE (WEST OF TRACKS) ALL SIGNALS W/B	R	R	G	G	Y	R	R	R	R	R	R	G	Y	R	R		Δ
SIXTH STREET (PRESIGNAL SOUTH OF TRACKS) NEAR LEFT AND LEFT MAST ARM SIGNALS N/B	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R		Δ
SIXTH STREET (PRESIGNAL SOUTH OF TRACKS) RIGHT MAST ARM AND FAR RIGHT SIGNALS N/B	G → R	G → R	G → R	G → R	G → R	G → R	G → Y	G → R	G → R	G → R	G → R	G → R	G → R	G → R	G → R		Δ
SIXTH STREET (NORTH OF TRACKS) ALL SIGNALS N/B	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R		Δ
PEDESTRIAN SIGNALS CROSSING SIXTH STREET NORTH SIDE OF N. GRAND AVENUE	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H		Δ
PEDESTRIAN SIGNALS CROSSING SIXTH STREET SOUTH SIDE OF N. GRAND AVENUE	FH	H	FH	H	H	H	H	H	H	H	H	H	H	H	H		Δ
PEDESTRIAN SIGNALS CROSSING W. GRAND AVENUE BOTH SIDES OF SIXTH STREET	H	H	H	H	H	H	FH	H	H	H	H	H	H	H	H		Δ

HOLD

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK
 H = ILLUMINATED SOLID HAND = DON'T WALK
 Δ = RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD INTERVAL 8 IS TERMINATED.

NOTES:

1. ONCE PREEMPTION HAS BEEN CALLED, THE TRACK CLEAR SIGNAL DISPLAY SHALL APPEAR IMMEDIATELY AFTER ALL NECESSARY VEHICULAR CLEARANCES HAVE BEEN PROVIDED.
2. RAILROAD PREEMPTION WILL TERMINATE ACTIVE PEDESTRIAN PHASES IMMEDIATELY. PEDESTRIAN CLEARANCES WILL BE ABBREVIATED.
3. THE RAILROAD PREEMPTION SEQUENCE OF OPERATION SHALL HAVE PRIORITY OVER ALL OTHER SEQUENCES OF OPERATION.

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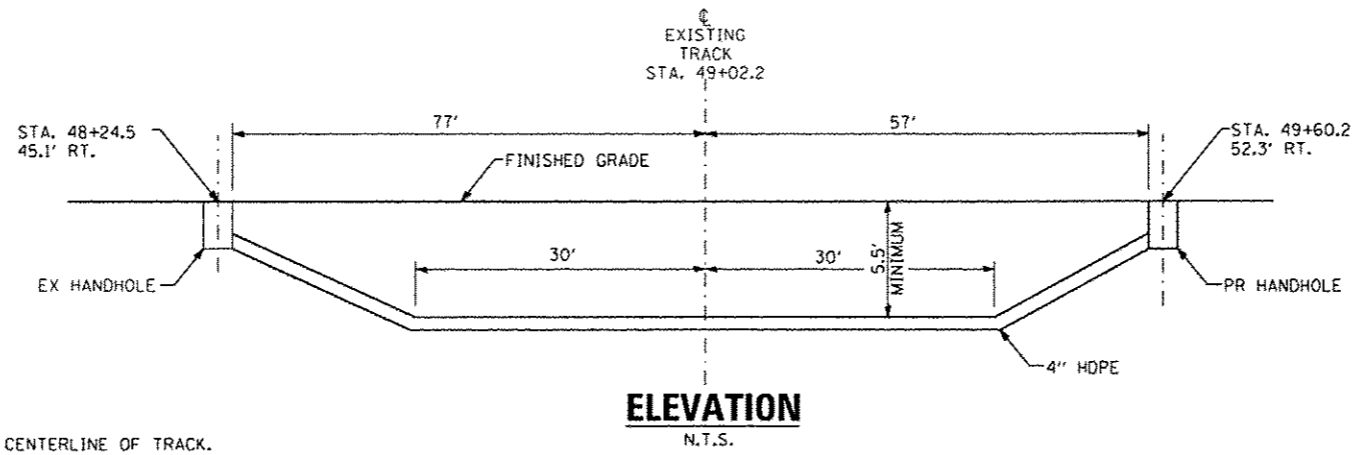
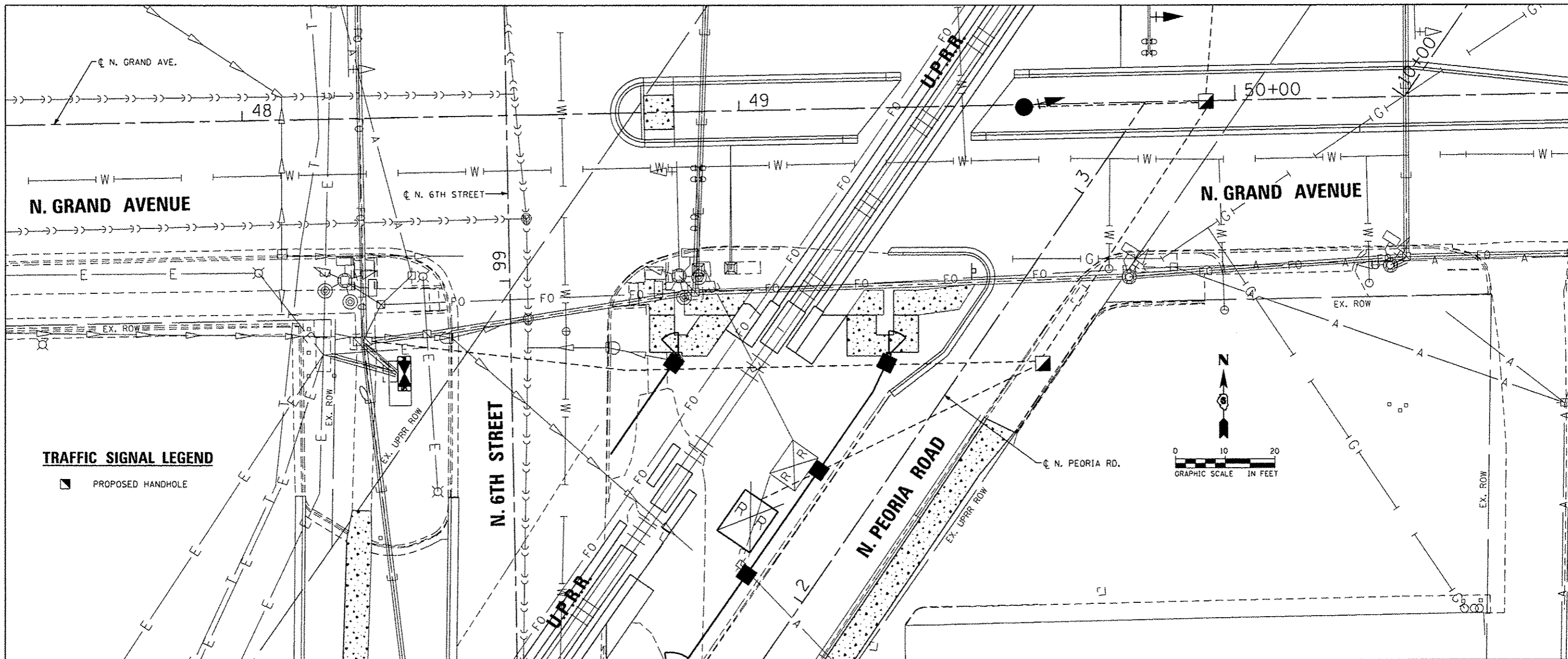


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PLOT DATE : #DATE#	DATE - 12/22/2016	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

RAILROAD PREEMPTION SEQUENCE OF OPERATION NORTH GRAND AVENUE AND SIXTH STREET		
SCALE: NTS	SHEET 1 OF 1 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	10
CONTRACT NO. 93639				
ILLINOIS FED. AID PROJECT				



- NOTES:
1. ALL HORIZONTAL DISTANCES TO BE MEASURED AT RIGHT ANGLES FROM THE CENTERLINE OF TRACK.
 2. A RAILROAD SIGNAL REPRESENTATIVE MUST BE PRESENT DURING INSTALLATION IF RAILROAD SIGNALS ARE IN THE VICINITY OF THE CROSSING UNLESS A UPRR SIGNAL REPRESENTATIVE AUTHORIZES OTHERWISE, IN WRITING.



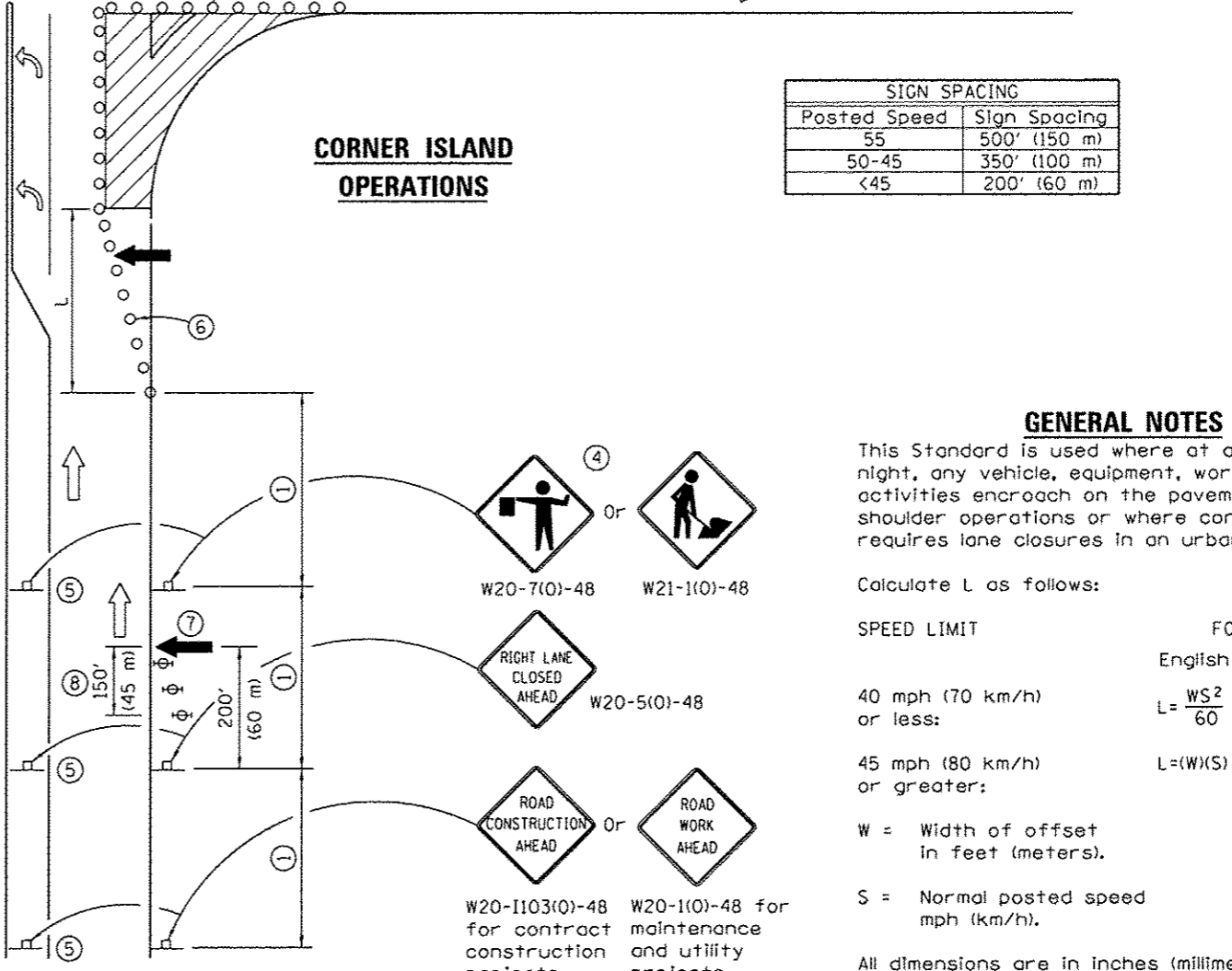
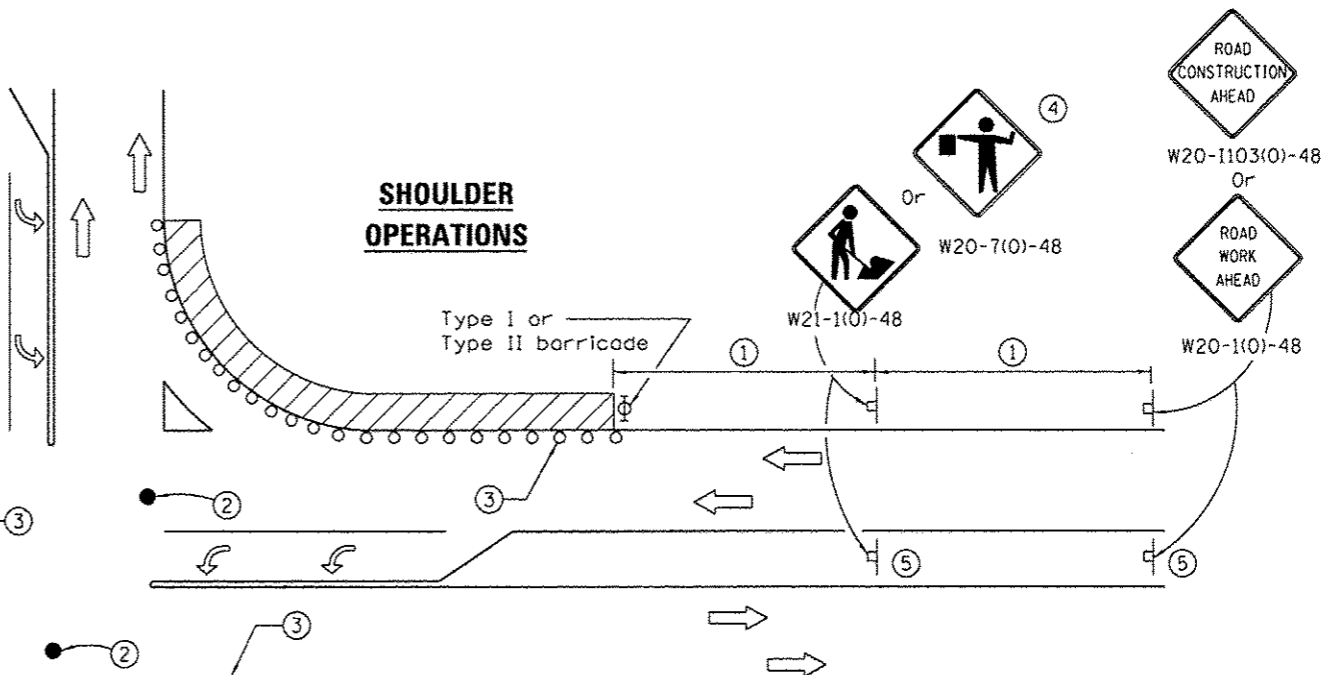
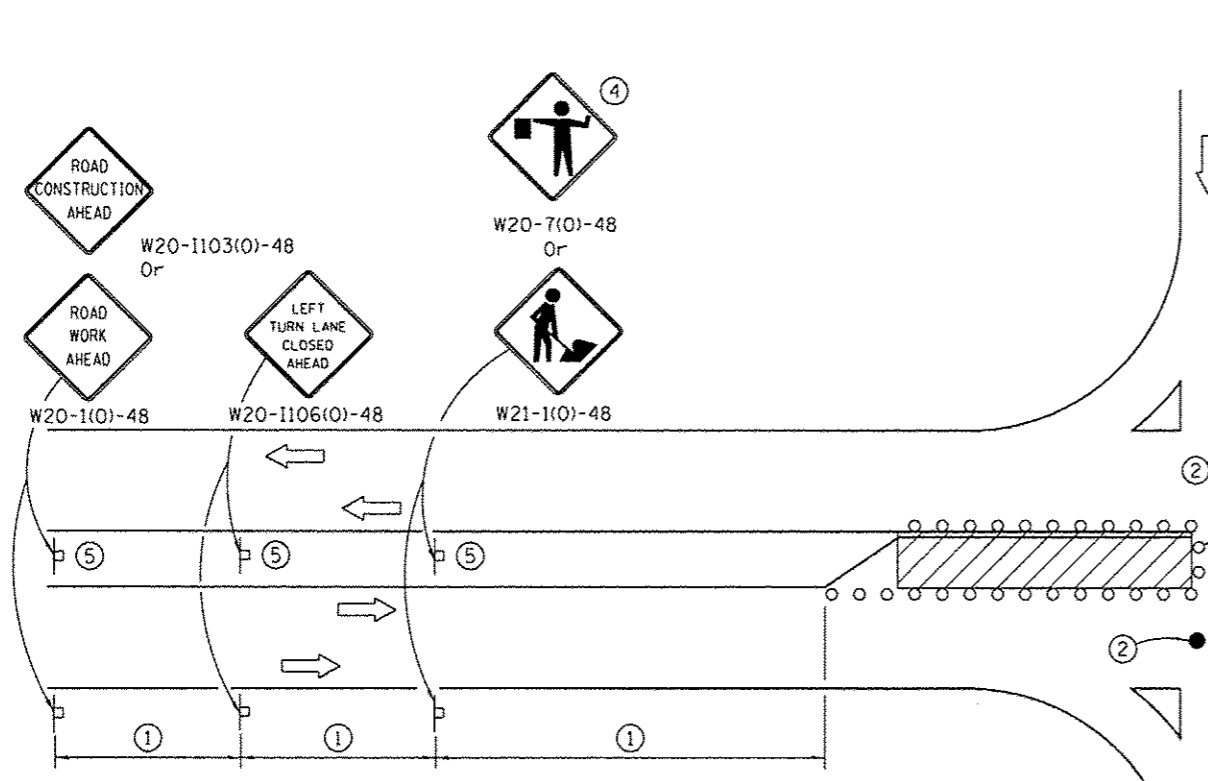
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	DATE - 12/22/2016	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONDUIT INSTALLATION UNDER RAILROAD TRACKS DETAIL
NORTH GRAND AVENUE AND SIXTH STREET**

SCALE: 1"=10' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	11
CONTRACT NO. 93639				
ILLINOIS FED. AID PROJECT				



SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

SYMBOLS

- Work area
- Cone, drum or barricade
- Sign on portable or permanent support
- Arrow board
- Barricade or drum with flashing light
- Flagger with traffic control sign

LEFT TURN LANE OR CENTER MEDIAN OPERATIONS

- ① Refer to SIGN SPACING TABLE for distance.
- ② Special - When signals are non-functional, flaggers on each leg of the intersection are required to maintain traffic until signals are operational.
- ③ Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
- ④ Use flagger sign only when flagger is present.
- ⑤ Omit this sign when median is less than 10' (3 m) or for bi-directional turn lanes.
- ⑥ Cones, drums or barricades at 20' (6 m) centers in taper.
- ⑦ Advanced arrow board required for speeds > 45 mph.
- ⑧ Three Type II barricades, drums or vertical barricades at 50' (15 m) centers.

CORNER ISLAND OPERATIONS

- ④ Or W20-7(0)-48 W21-1(0)-48
- W20-5(0)-48
- Or W20-1103(0)-48 W20-1(0)-48 for contract construction projects W20-1(0)-48 for maintenance and utility projects

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement during shoulder operations or where construction requires lane closures in an urban area.

Calculate L as follows:

SPEED LIMIT	FORMULAS	
	English	(Metric)
40 mph (70 km/h) or less:	$L = \frac{WS^2}{60}$	$L = \frac{WS^2}{150}$
45 mph (80 km/h) or greater:	$L = (W)(S)$	$L = 0.65(W)(S)$

W = Width of offset in feet (meters).
S = Normal posted speed mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701701, SPECIAL DETAIL

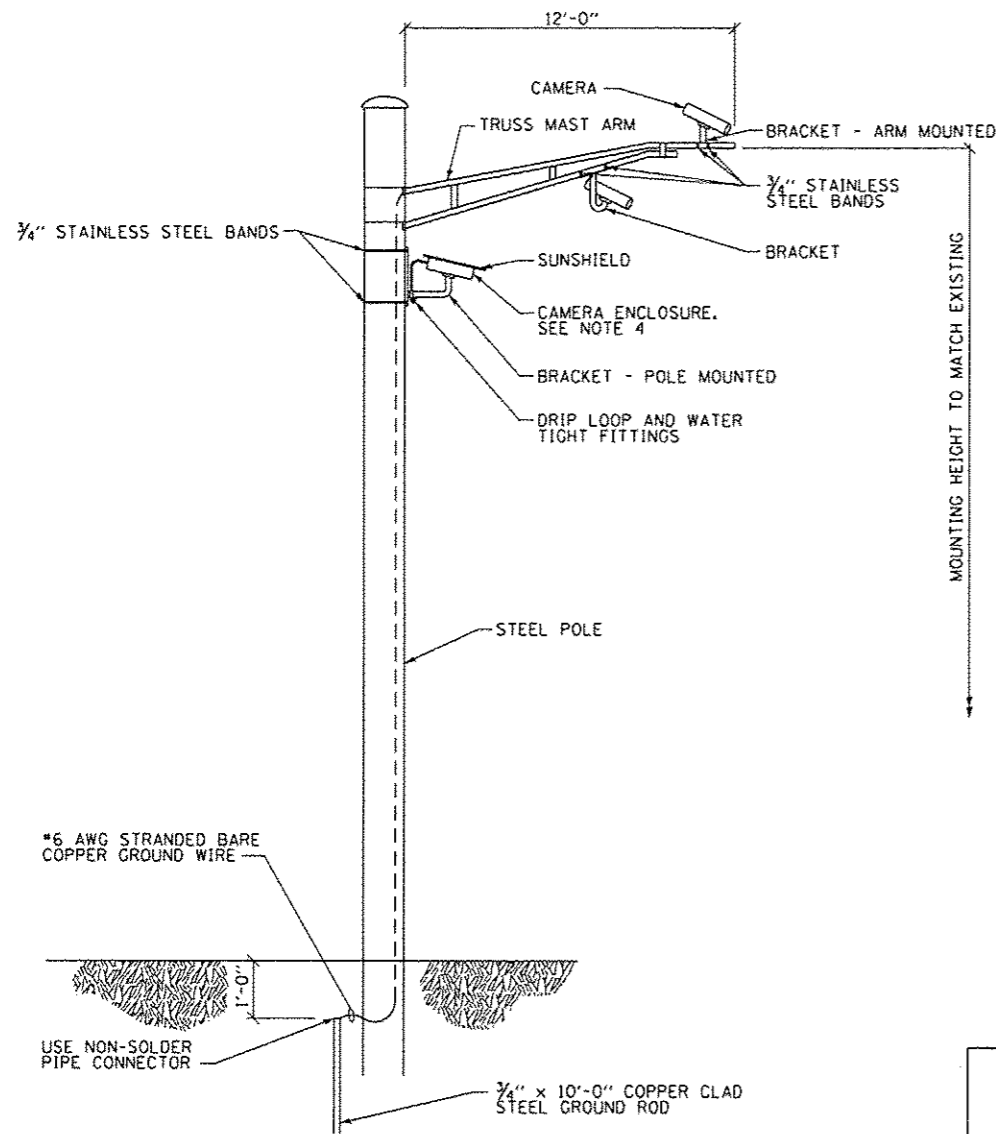


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PLOT DATE = *DATE*	CHECKED - MJL	REVISED -
	DATE - 12/22/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION, STANDARD 701701, SPECIAL DETAIL		
SCALE: NTS	SHEET 1 OF 1 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	12
CONTRACT NO. 93639				
ILLINOIS FED. AID PROJECT				



ARM MOUNTED OR POLE MOUNTED CAMERA

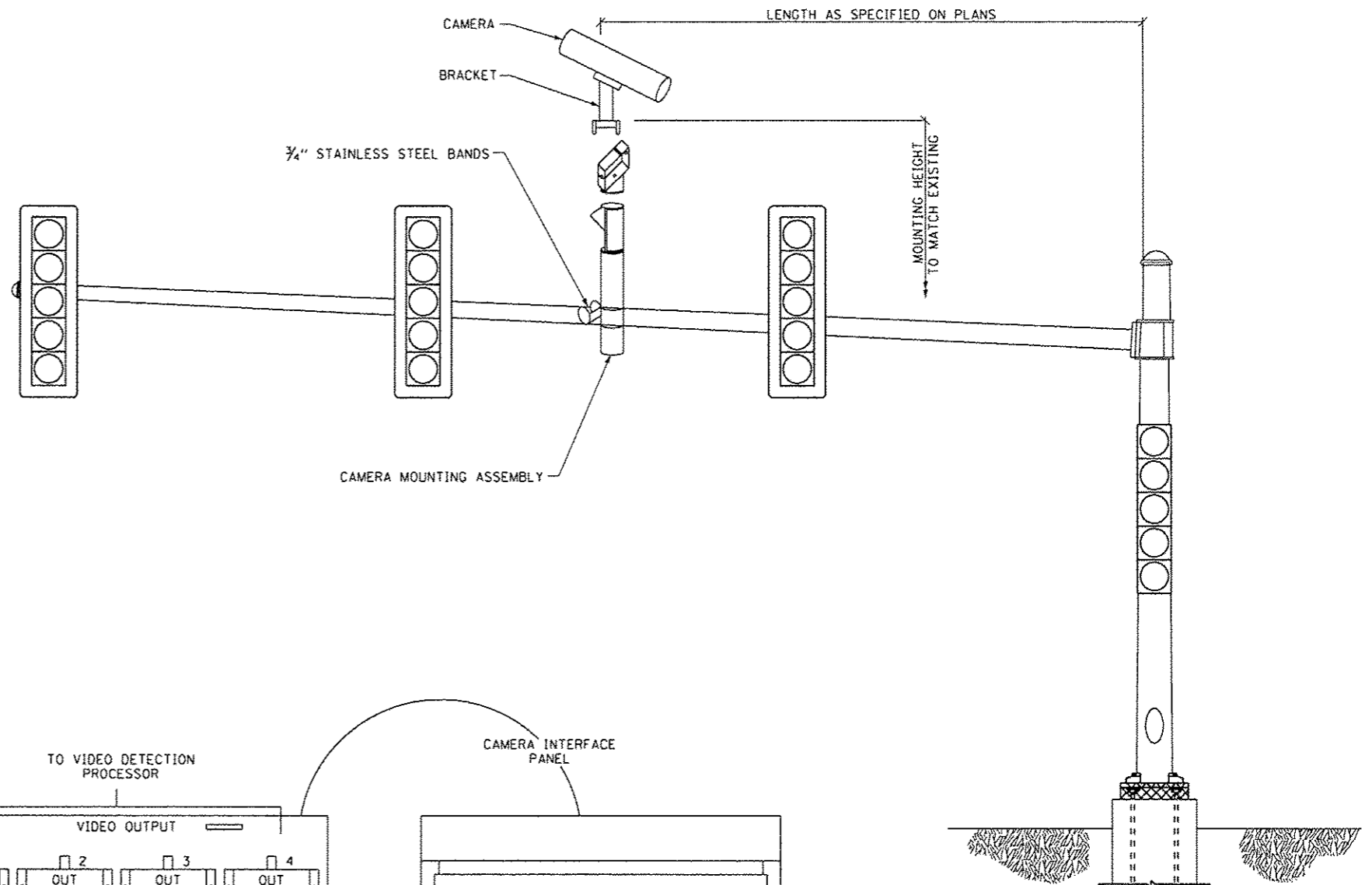
SCALE: NONE

NOTES:

1. MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
2. AIM BRACKET TOWARD DIRECTION OF TRAFFIC TO BE DETECTED.
3. MOUNT VIDEO VEHICLE DETECTOR AIMING DOWN AT 15 DEGREE ANGLE.
4. CAMERA CAN BE ROTATED INSIDE THE ENCLOSURE AFTER INSTALLATION, TO ALIGN HORIZON AT HORIZONTAL PLANE.

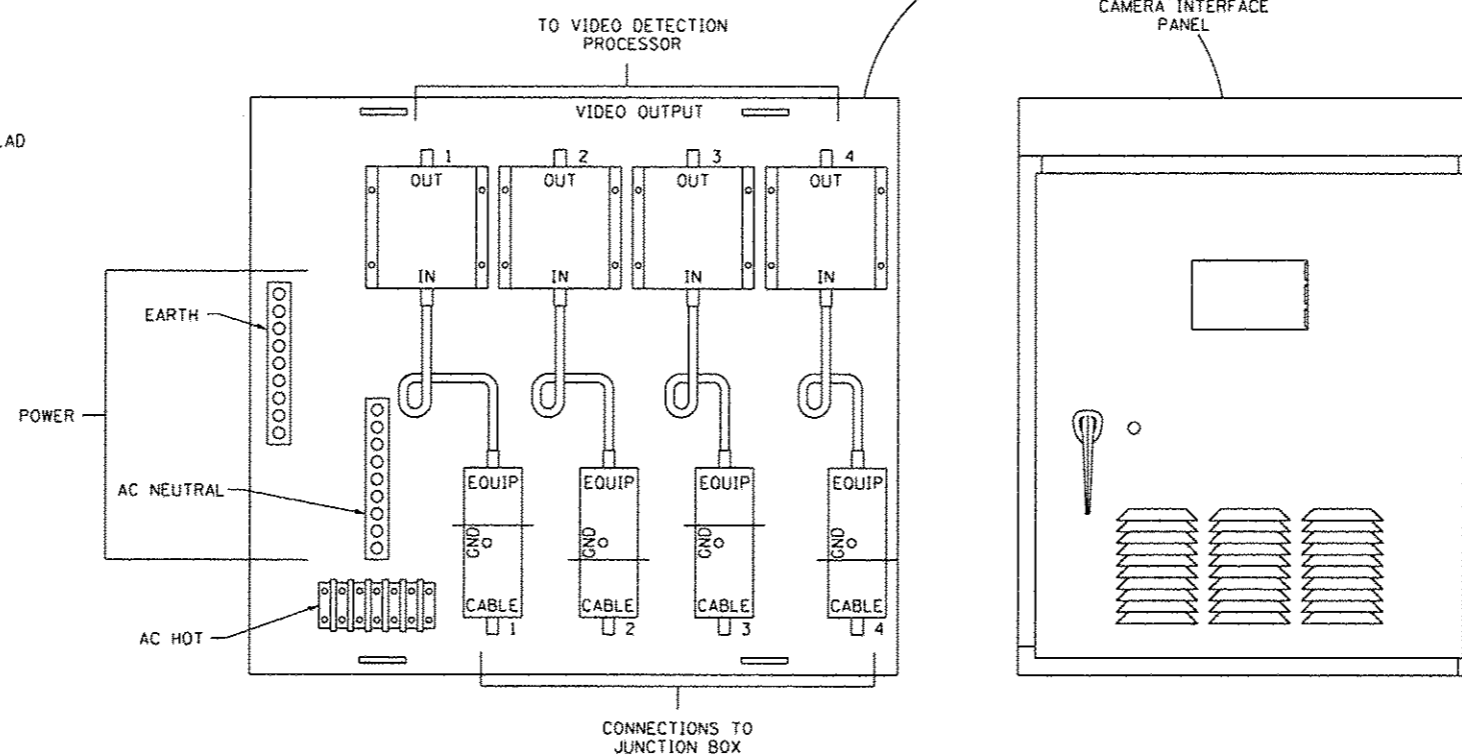
WARNING:

1. AIMING THE VIDEO VEHICLE DETECTOR AT DIRECT SUNLIGHT WILL CAUSE PERMANENT DAMAGE TO THE VIDEO VEHICLE DETECTOR.



MAST ARM MOUNTED CAMERA

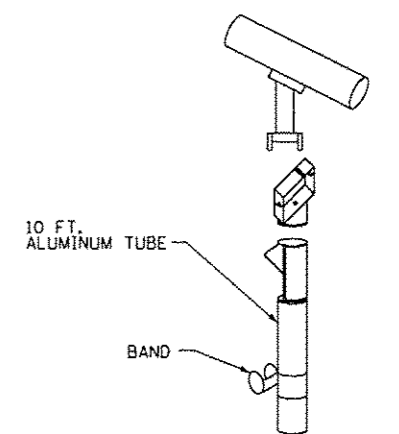
SCALE: NONE



CONNECTIONS TO JUNCTION BOX
 POWER CABLE TO EACH IMAGE SENSOR (24 VAC)
 6 PAIR CABLE FROM IMAGE SENSOR TO CABINET
 SIGNAL AND POWER CABLE TERMINATIONS
 (MANUFACTURER'S REPRESENTATIVE TO ASSIST)

VIDEO VEHICLE DETECTION SYSTEM INSTALLATION DETAIL

SCALE: NONE



CAMERA MOUNTING ASSEMBLY

FILE NAME = #FILES#



USER NAME = #USER#	DESIGNED - KMD	REVISED -
PLOT SCALE = #SCALE#	DRAWN - KMD	REVISED -
PLOT DATE = #DATE#	CHECKED - MJL	REVISED -
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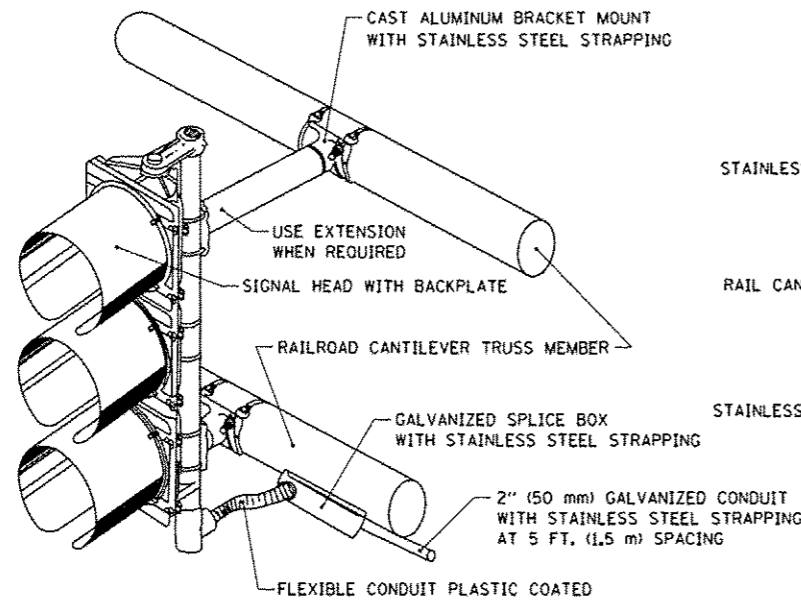
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DATE - 12/22/2016	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

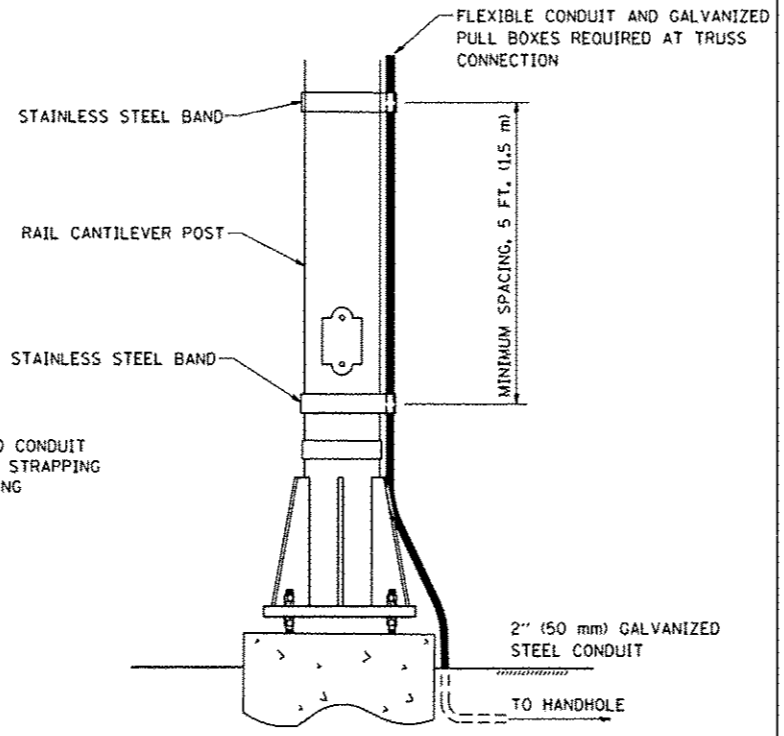
VIDEO VEHICLE DETECTION SYSTEM INSTALLATION DETAILS
 NORTH GRAND AVENUE AND SIXTH STREET

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

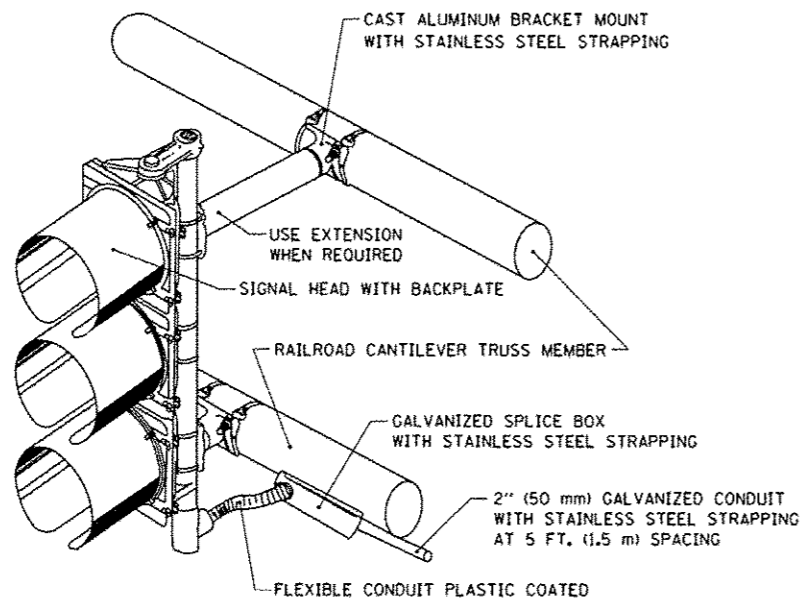
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	13
CONTRACT NO. 93639				
ILLINOIS FED. AID PROJECT				



RAILROAD CANTILEVER SIGNAL HEAD MOUNTING

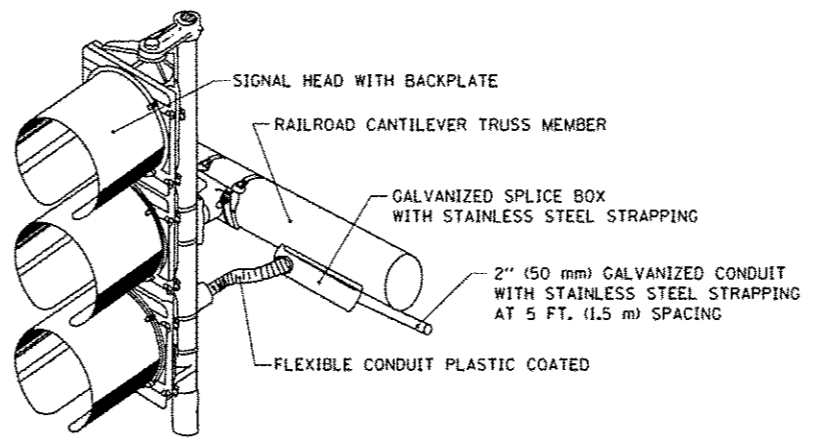


SIGNAL CONDUIT CONNECTION TO RAIL CANTILEVER DETAIL



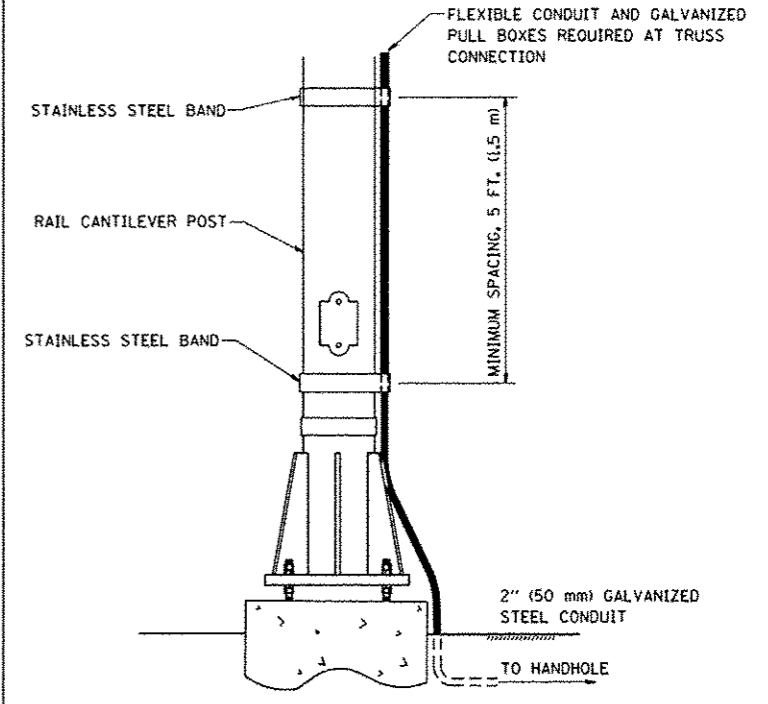
NOTE: USE NONCONDUCTIVE SPACERS BETWEEN THE TRAFFIC SIGNAL EQUIPMENT AND THE RAILROAD CANTILEVER TO PREVENT DISSIMILAR METAL CORROSION.

RAILROAD CANTILEVER SIGNAL HEAD MOUNTING



NOTE: USE NONCONDUCTIVE SPACERS BETWEEN THE TRAFFIC SIGNAL EQUIPMENT AND THE RAILROAD CANTILEVER TO PREVENT DISSIMILAR METAL CORROSION.

RAILROAD CANTILEVER SIGNAL HEAD MOUNTING



NOTE: USE NONCONDUCTIVE SPACERS BETWEEN THE TRAFFIC SIGNAL EQUIPMENT AND THE RAILROAD CANTILEVER TO PREVENT DISSIMILAR METAL CORROSION.

SIGNAL CONDUIT CONNECTION TO RAIL CANTILEVER DETAIL

FILE NAME: *.BFILES



USER NAME: *USER*	DESIGNED: -	REVISED: -
PLOT SCALE: *SCALE*	DRAWN: -	REVISED: -
PLOT DATE: *DATE*	CHECKED: -	REVISED: -
	DATE: -	REVISED: -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

RAILROAD CANTILEVER SIGNAL HEAD MOUNTING DETAIL	
SCALE: NONE	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7972	15-HSRT3-02-RR	SANGAMON	14	14
TS-06			CONTRACT NO. 93639	
ILLINOIS FED. AID PROJECT				