03-03-2017 LETTING ITEM 028 INDEX OF SHEETS COVER SHEET HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS SUMMARY OF QUANTITIES 5 TRAFFIC SIGNAL PLAN MADISON STREET (FAP 67) (U.P.R.R. - N. 4TH ST.) TRAFFIC SIGNAL CABLE PLAN AND SCHEDULE OF QUANTITIES MADISON STREET (U.P.R.R. - N. 4TH ST.) TRAFFIC SIGNAL AND RAILROAD SEQUENCES OF OPERATION MADISON STREET (U.P.R.R. - N. 4TH ST.) TRAFFIC SIGNAL PLAN JEFFERSON STREET (FAP 67 ALT) (N. 2ND ST. - U.P.R.R.) 9 TRAFFIC SIGNAL CABLE PLAN AND SCHEDULE OF QUANTITIES JEFFERSON STREET (N. 2ND ST. - U.P.R.R.) 10 TRAFFIC SIGNAL AND RAILROAD SEQUENCES OF OPERATION JEFFERSON STREET (N. 2ND ST. - U.P.R.R.) CONDUIT INSTALLATION UNDER RAILROAD TRACKS DETAIL 11 JEFFERSON STREET (N. 2ND ST. - N. 4TH ST.) 12 TRAFFIC CONTROL AND PROTECTION DETAIL **FUNCTIONAL CLASSIFICATION URBAN PRINCIPAL ARTERIAL (MADISON STREET)** 2013 ADT = 13,300

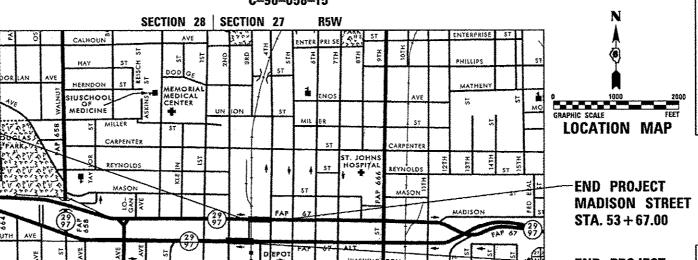
### STATE OF ILLINOIS

## DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

# **PROPOSED** HIGHWAY PLANS

SANGAMON COUNTY / CITY OF SPRINGFIELD C-96-058-15



FINAL

SECTION

MP 184.99

06 2015-5 HSRR

D-96-058-15

SANGAMON 12 1

CONTRACT NO. 72H81

MP 185.07

DOT#294303V DOT#294305J

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

SUBMITTED & December 20 1/16

LOCATION OF SECTION INDICATED THUS: - -

DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

**BEGIN PROJECT MADISON STREET** STA.49 + 38.00**BEGIN PROJECT JEFFERSON STREET** STA. 45 + 47.00

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

ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT

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

CONTRACT NO. 72H81

MADISON STREET JEFFERSON STREET

ARMORY -

CITY OF SPRINGFIELD

NET LENGTH 429.00 FT (0.081 MI) 503.00 FT (0.095 MI) 932.00 FT (0.176 MI)

303 E. WACKER DRIVE, SUITE 1400 CHICAGO, ILLINOIS 60601

429.00 FT (0.081 MI) 503.00 FT (0.095 MI) 932.00 FT (0.176 MI)

**GROSS LENGTH** 

062-055763

MATTHEW J. LETOURNEAU IL. REG. P.E. NO. 062-055763

F.A.P. ROUTE 67 (MADISON STREET) & F.A.P. ROUTE 67 ALT (JEFFERSON STREET) SECTION D6 2015-5 HSRR PROJECT HSR-0067(085) TRAFFIC SIGNAL AND RAILROAD INTERCONNECT MODIFICATIONS

END PROJECT JEFFERSON ST. STA.50 + 50.00

3rd P.M.

- DATE: 11/23/2016

EXPIRES: 11/30/2017

P.V. = NA S.U. = NA M.U. = NA

P.V. = NA S.U. = NA M.U. = NA

URBAN PRINCIPAL ARTERIAL (JEFFERSON STREET)

OR 811

2013 ADT = 13,400

 $\circ$ 

0

 $\bigcirc$ 

0

#### **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 MEDIA
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
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 FIFLD 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. ATRT
  - 3. CITY OF SPRINGFIELD, PUBLIC WORKS
  - 4. CITY WATER LIGHT AND POWER
- 5. COMCAST
- 6. SPRINGFIELD METRO SANITARY DISTRICT
- 7. SPRINT
- 8. LEVEL 3 COMMUNICATIONS 9. CENTURYLINK COMMUNICATIONS
- 10. WINDSTREAM
- 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)
- 3. STATE OF ILLINOIS
- 9, THE CONTRACTOR SHALL COORDINATE WITH THE UPRR SIGNAL DEPARTMENT FOR ITEMS REMOVED OR INSTALLED BY THE UPRR SIGNAL DEPARTMENT.
- 10. U.P.R.R. FLAGGERS SHALL BE PRESENT WHEN WORKING WITHIN THE U.P.P.R. RIGHT-OF-WAY. THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH THE U.P.P.R. TO ASSURE THAT FLAGGERS ARE PRESENT DURING CONSTRUCTION, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 11. FOR STABILIZATION, ALL TYPE 111 BARRICADES (WHERE NEEDED) SHALL REQUIRE A MINIMUM OF FOUR SAND RAGS 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
- 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.

DISTRICT SIX
EXAMINED October 3, 20 16
OPERATIONS ENGINEER
EXAMINED October 3 20 16
Kon auhambeau
PROJECT IMPLEMENTATION ENGINEER
EXAMINED October 12 2016
Cleff P. M/2
PROGRAM DEVELOPMENT ENGINEER

TO STA.

### COMMITMENTS

NONE.

November 23, 2016

DESIGNED - KMO REVISED USER NAME : kevin,oneill ORAWN KMO REVISED CHECKED - MUL REVISED PLOT SCALE = 40.9000 1/ in PLOT DATE : 11/22/2016 DATE 11/23/2016 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS

SHEET 1 OF 1 SHEETS STA.

SCALE: NONE

SECTION D6 2015-5 HSRR SANGAMON 12 2 CONTRACT NO. 72H81 ILLINOIS FED. AID PROJECT

				PPS # 6-	00284-0700
	SUMMARY OF QUANTIT	TIES		CONSTRUCT	ON TYPE CODE
			URBAN	SIGNALS MADISON ST.	SIGNALS JEFFERSON ST.
ITEM NO.	ITEM DESCRIPTION	UNIT	LATOT LY YTITMAUQ	100% HSR	100% HSR
			-	0021	0021
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	40	40	
25200100	SODDING	SQ YD	40	40	
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	405	50	355
44000100	PAVEMENT REMOVAL	SQ YD	4		4
44000600	SIDEWALK REMOVAL	SQ FT	405	50	355
44201737	CLASS D PATCHES. TYPE I. 8 INCH	SO YO	4		4
66900200	Non-special waste Disposal	CU YD	105	82.5	82.5
67100100	MOBILIZATION	LSUM		0.5	0, 5
66900450	SPECIAL WASTE PLANS AND REPORTS	L sum	1	0.5	0.5
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	LSUM	1	0. 5	0.5
66900530	SOIL DISPOSAL ANALYSIS	EACH	4	2	2
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	**************************************	0.5	0.5
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	0, 5	0.5
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	1	1
72000100	SIGN PANEL - TYPE 1	SQ FT	48	24	24
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	800	308	492
81028390	UNDERGROUND CONDUIT, PVC. 4" DIA.	FOOT	88	<del>.</del>	88

10/

\* DENOTES SPECIALTY ITEM

Ü		T		<del></del>
1		USER NAME * jemes.push	DESIGNED - KMO	REVISED -
į	$\Lambda = C \cap AA$		DRAWN - KMO	REVISED -
	AECUM	PLOT SCALE * 48.8000 '/ in.	CHECKED - MJL	REVISED -
1		PLOT DATE # 11/23/2016	DATE - 11/23/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

		SU	MMA	RY	OF QU	ANTITIES	
ALE: NONE	SHEET	1	0F	MARY OF QUANTITIES  OF 2 SHEETS STA. TO STA.			

				0284-0700
SUMMARY OF QUANTITIES			CONSTRUCTI	ON TYPE CODE
		NABAN	SIGNALS MADISON ST.	SIGNALS JEFFERSON ST
			100% HSR	100% HSR
ITEM DESCRIPTION	UNIT	QUANTITY		
			0021	0021
HANDHOLE	EACH	4	1	3
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	1	1
TRANSCEIVER	EACH	2	1	1
	The state of the s			
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	1165	511	654
DRILL EXISTING HANDHOLE	EACH	2	1	The state of the s
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	2	i	4
				A CONTRACTOR OF THE CONTRACTOR
RAILROAD. FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	2	1	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701, SPECIAL	LSUM	1	0.5	0.5
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	2	1	***************************************
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	2	1	***
REMOVE AND REINSTALL BRICK PAVER	SQ FT	135		135
RAILROAD PROTECTIVE LIABILITY INSURANCE	LSUM	***	0. 5	0.5
SPARE RAILROAD. FULL ACTUATED CONTROLLER, SPECIAL	EACH	2	1	1
	**************************************			
	***************************************			-
	HANDHOLE  MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION  TRANSCEIVER  ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C  DRILL EXISTING HANDHOLE  MODIFY EXISTING CONTROLLER FOUNDATION  RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)  TRAFFIC CONTROL AND PROTECTION, STANDARD 701701, SPECIAL  UNINTERRUPTABLE POWER SUPPLY, SPECIAL  REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET  REMOVE AND REINSTALL BRICK PAVER	ITEM DESCRIPTION  UNIT  HANDHOLE  EACH  MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION  EACH  TRANSCEIVER  ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C  FOOT  DRILL EXISTING HANDHOLE  EACH  MODIFY EXISTING CONTROLLER FOUNDATION  EACH  TRAFFIC CONTROL AND PROTECTION, STANDARD 701701, SPECIAL  UNINTERRUPTABLE POWER SUPPLY, SPECIAL  EACH  REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET  EACH  REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET  EACH  REMOVE AND REINSTALL BRICK PAVER  SO FT  RAILROAD PROTECTIVE LIABILITY INSURANCE  LSUM	ITEM DESCRIPTION  ITEM DESCRIPTION  ITEM DESCRIPTION  ITEM DESCRIPTION  INTO QUANTITY  AND	NOTAL   NADISON ST.   NADISO

17

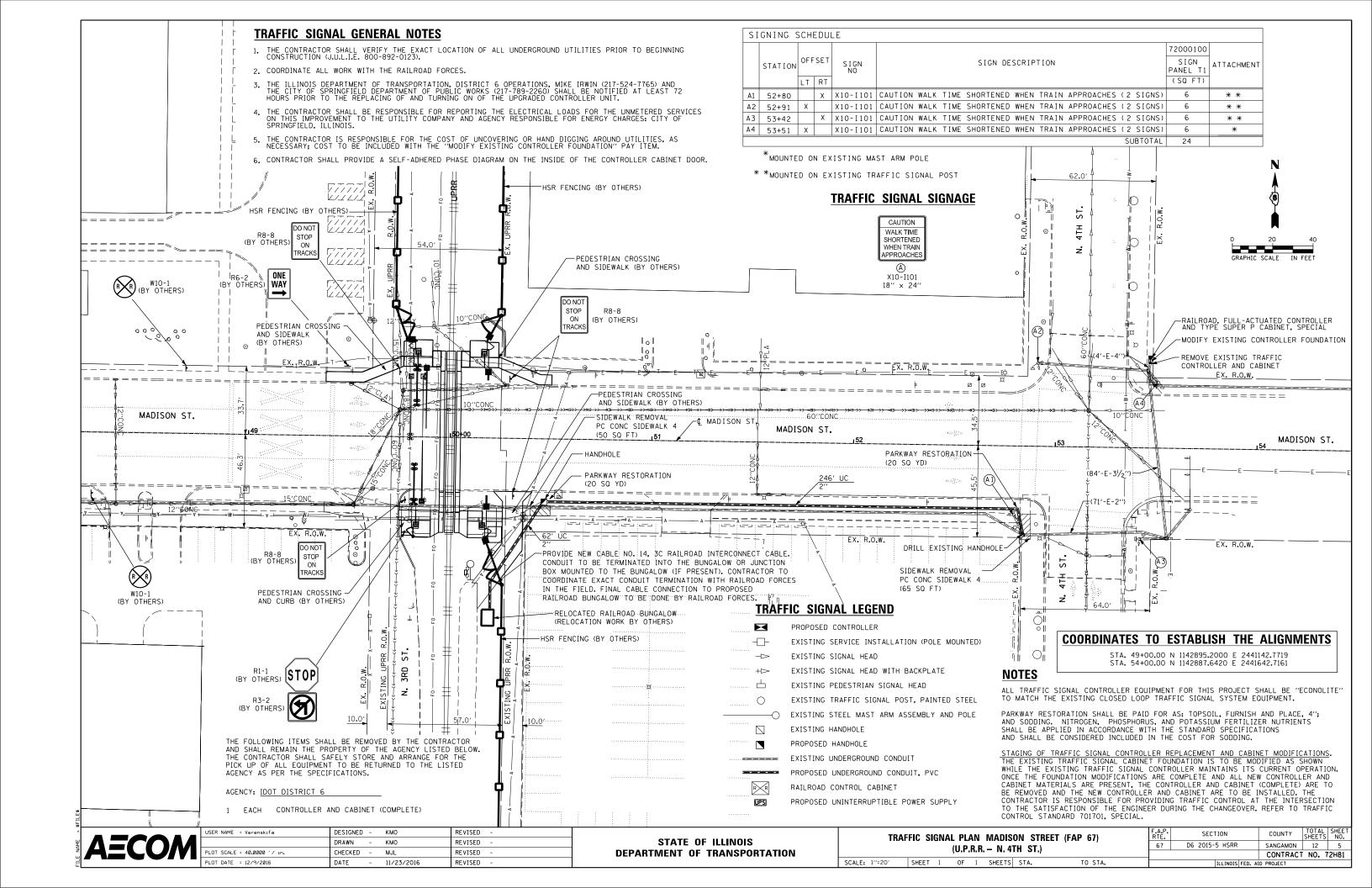
\* DENOTES SPECIALTY ITEM

	USER NAME = James.push	DESIGNED -	KMO	REVISED -
		DRAWN -	KMQ	REVISED -
ALLUM	PLOT SCALE = 48,8888 '/ In.	CHECKED -	MJL	REVISED -
<i></i>	PLOT DATE . 11/23/2816	DATE -	11/23/2016	REVISED -

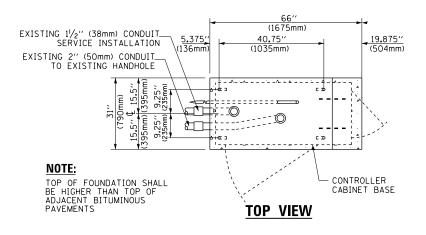
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

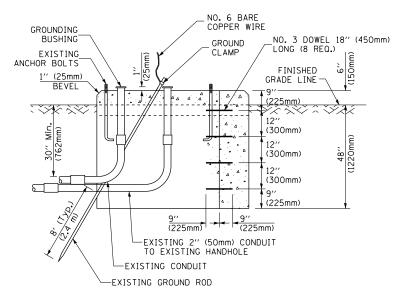
	F.A								F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
		SUMMARY OF QUANTITIES								67	D6 2015-5 HSRR	SANGAMON	12	4		
ļ												-		CONTRACT	NO.	72H81
ı	SCALE	NONE	SHEET	2	0F	2	SHEETS	STA.	TO	STA.	- 1		ILLINOIS FEO.	AID PROJECT		

PPS # 6-00284-0700





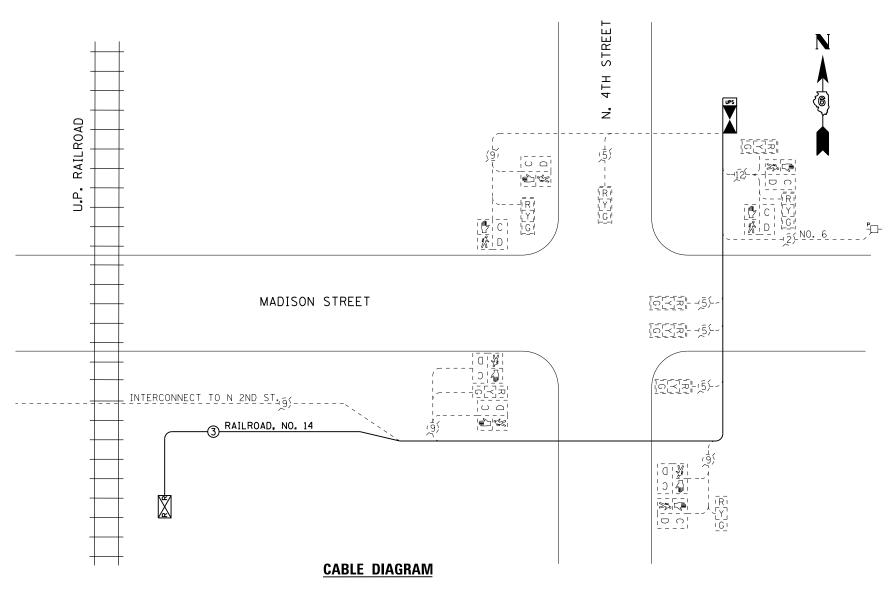




# MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION FOR GROUND MOUNTED TYPE SUPER P CONTROLLER CABINETS (MADISON ST.)

#### NOTES:

- 1. FURNISH AND INSTALL A 20 AMP, 1 POLE, 120VAC, 10,000 A/C AT 120VAC CIRCUIT BREAKER FOR DUPLEX RECEPTACLES, AND A U.L. LISTED GROUNDED THREE-WIRE, 120VAC, 20 AMP GROUND FAULT INTERRUPTER TYPE DUPLEX RECEPTACLE (NEMA 5-20R) ALL LOCATED IN THE CONTROLLER CABINET.
- 2. CONTROLLER SPECIFIED: FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE II, 8 PHASE, IN TYPE SUPER P CABINET.
- 3. THE TRAFFIC SIGNAL CONTROLLER SHALL HAVE REMOTE MONITORING CAPABILITES INCLUDING ALL NECESSARY PERIPHERAL HARDWARE SUCH AS INTERSECTION MONITOR, ETC. TO ALLOW FOR BOTH REMOTE ACCESS AND AUTOMATIC CONTROLLER REPORTING OF ALARMS. THE COST OF THE NECESSARY ADDITIONAL HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR "RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)."
- 4. CARE SHOULD BE TAKEN DURING MODIFICATION OF THE EXISTING FOUNDATION TO NOT DAMAGE THE EXISTING SERVICE CONDUIT AND SERVICE CABLE.
- 5. 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.



### **CABLE DIAGRAM LEGEND**

NOTE: ALL ITEMS ARE EXISTING TO REMAIN UNLESS OTHERWISE STATED.

- DENOTES NUMBER OF CONDUCTORS (EXISTING)
  ALL CABLE NO. 12 (UNLESS OTHERWISE NOTED)
- DENOTES NUMBER OF CONDUCTORS (PROPOSED)
  ALL CABLE NO. 14 EXCEPT AS INDICATED
- $\stackrel{\textbf{P}}{\Box}$  EXISTING SERVICE INSTALLATION, POLE MTD.
- PROPOSED CONTROLLER AND CABINET

  UPS PROPOSED UNINTERRUPTIBLE POWER SUPPLY
- SIGNAL SECTION, 12"
- WALK/DON'T WALK SECTION
- TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC

#### **SCHEDULE OF QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	308
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER	EACH	1
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	511
DRILL EXISTING HANDHOLE	EACH	1
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
SPARE RAILROAD, FULL ACTUATED CONTROLLER, SPECIAL	EACH	1



.	USER NAME = kevin.oneill	DESIGNED -	KMO	REVISED -
		DRAWN -	KMO	REVISED -
	PLOT SCALE = 40.0000 '/ in.	CHECKED -	MJL	REVISED -
'	PLOT DATE = 11/22/2016	DATE -	11/23/2016	REVISED -

TRAFFIC S	SIGNAL CABLE PLAN AND	SCHEDULE OF QUANTITIES	F. R	A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	MADISON STREET (U.P.F	R _ N ATH ST )		67	D6 2015-5 HSRR	SANGAMON	12	6
	INADIOUN OTHEET (O.I.)	– 14. 4111 01./				CONTRACT	NO. 7	'2H81
SCALE: NTS	SHEET 1 OF 1 SHEETS	STA. TO STA.			ILLINOIS FED. AI	D PROJECT		

## **SEQUENCE OF OPERATION**

MOVEMENT		MADISON	N. FOURTH + STREET	REET	-	MADISON	N. FOURTH STREET	TREET	
PHASE		,	2			2	1		F L
INTERVAL	1	2	3A	3B	4	5	6A	6B	A S H
CHANGE TO			4				2		
MADISON STREET E/B ALL SIGNALS	G	G	Y	R	R	R	R	R	R
NORTH FOURTH STREET N/B ALL SIGNALS	R	R	R	R	G	G	Y	R	R
PEDESTRIAN SIGNALS CROSSING N. FOURTH STREET ON BOTH SIDES OF MADISON STREET	Р	**FH	Н	Н	Н	Н	Н	Н	DARK
PEDESTRIAN SIGNALS CROSSING MADISON STREET ON BOTH SIDES OF NORTH FOURTH STREET	Н	Н	Н	Н	Р	**FH	Н	Н	R K

PHASE 2 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.
- P = ILLUMINATED PERSON = WALK
- FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK
- H = ILLUMINATED SOLID HAND = DON'T WALK

## RAILROAD PREEMPTION SEQUENCE OF OPERATION

				PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	4	4					
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	2	3	4	5	CLEAR TO NORMAL
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	2	3	4	5		SEQUENCE
MADISON STREET E/B ALL SIGNALS	G	R	R	G	Y	R	R	Δ
NORTH FOURTH STREET N/B ALL SIGNALS	R	Y	R	R	R	R	G	Δ
PEDESTRIAN SIGNALS CROSSING N. FOURTH STREET ON BOTH SIDES OF MADISON STREET	FH	Н	Н	Н	Н	Н	Н	Δ
PEDESTRIAN SIGNALS CROSSING MADISON STREET ON BOTH SIDES OF NORTH FOURTH STREET	Н	FH	Н	Н	Н	Н	Н	Δ

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK

△ = RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD INTERVAL 5 IS TERMINATED.

#### NOTES

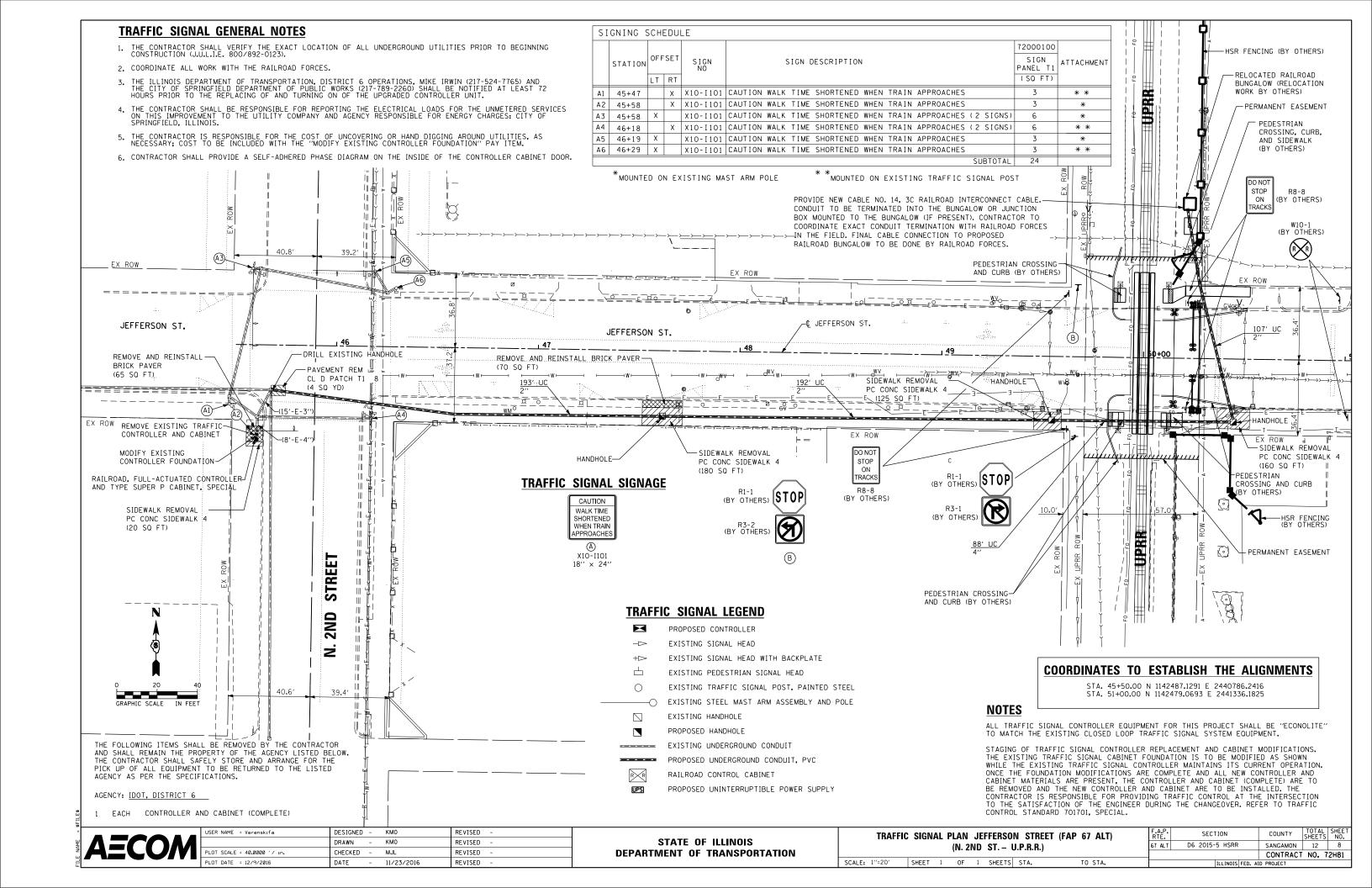
- 1. ONCE PREEMPTION HAS BEEN CALLED, THE TRACK CLEAR SIGNAL DISPLAY SHALL APPEAR IMMEDIATELY AFTER ALL NECESSARY VEHICULAR CLEARANCES HAVE BEEN PROVIDED.
- 2. RAILROAD PREEMPTION WILL TERMINATE ACTIVE PEDESTRIAN PHASES IMMEDIATELY. PEDESTRIAN CLEARANCES WILL BE ABBREVIATED.
- 3. THE RAILROAD PREEMPTION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

	US
AECOM	PL
	PI

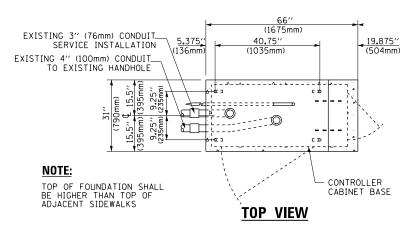
USER NAME = kevin.oneill	DESIGNED	-	KMO	REVISED -
	DRAWN	-	KM0	REVISED -
PLOT SCALE = 40.0000 '/ in.	CHECKED	-	MJL	REVISED -
PLOT DATE = 11/22/2016	DATE	-	11/23/2016	REVISED -

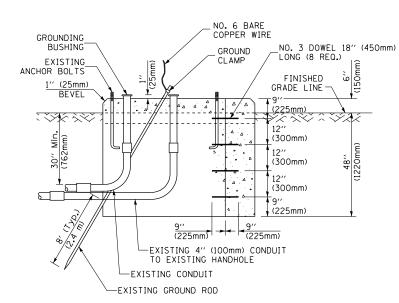
	TRAFFIC	SIGNAL	AND	R	AILR	OAD :	SEQUE	NCES OF	OPERATION	
		MADIS	ON	STR	EET	(U.P.F	R.R. –	N. 4TH S	Г.)	
SCALE:	NTS	SHEET	1	OF	1	SHEETS	STA.		TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	D6 2015-5 HSRR	SANGAMON	12	7
		CONTRACT	NO. 7	2H81
	ILLINOIS FED. A	ID PROJECT		





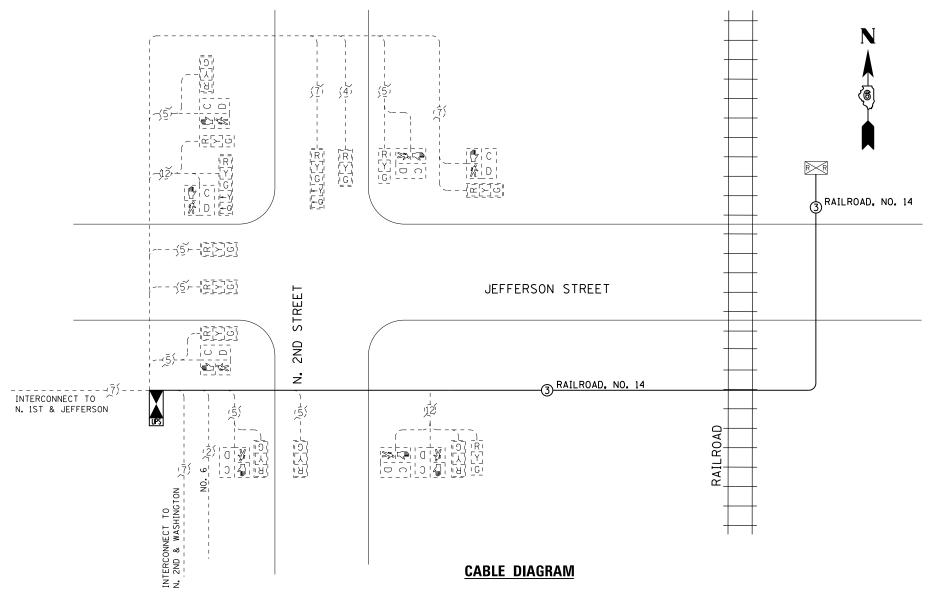




# MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION FOR GROUND MOUNTED TYPE SUPER P CONTROLLER CABINETS (JEFFERSON ST.)

#### NOTES:

- 1. FURNISH AND INSTALL A 20 AMP, 1 POLE, 120VAC, 10,000 A/C AT 120VAC CIRCUIT BREAKER FOR DUPLEX RECEPTACLES, AND A U.L. LISTED GROUNDED THREE-WIRE, 120VAC, 20 AMP GROUND FAULT INTERRUPTER TYPE DUPLEX RECEPTACLE (NEMA 5-20R) ALL LOCATED IN THE CONTROLLER CABINET.
- 2. CONTROLLER SPECIFIED: FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE II, 8 PHASE, IN TYPE SUPER P CABINET.
- 3. THE TRAFFIC SIGNAL CONTROLLER SHALL HAVE REMOTE MONITORING CAPABILITES INCLUDING ALL NECESSARY PERIPHERAL HARDWARE SUCH AS INTERSECTION MONITOR, ETC. TO ALLOW FOR BOTH REMOTE ACCESS AND AUTOMATIC CONTROLLER REPORTING OF ALARMS. THE COST OF THE NECESSARY ADDITIONAL HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR "RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)."
- 4. CARE SHOULD BE TAKEN DURING MODIFICATION OF THE EXISTING FOUNDATION TO NOT DAMAGE THE EXISTING SERVICE CONDUIT AND SERVICE CABLE.
- 5. 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.



#### CABLE DIAGRAM LEGEND

NOTE: ALL ITEMS ARE EXISTING TO REMAIN UNLESS OTHERWISE STATED.

- DENOTES NUMBER OF CONDUCTORS (EXISTING)
  ALL CABLE NO. 14 (UNLESS OTHERWISE NOTED)
- DENOTES NUMBER OF CONDUCTORS (PROPOSED)
  ALL CABLE NO. 14 EXCEPT AS INDICATED
- SERVICE INSTALLATION, POLE MTD.
- UPGRADED CONTROLLER AND CABINET
- UPS PROPOSED UNINTERRUPTIBLE POWER SUPPLY

EXISTING RAILROAD CONTROL CABINET

- EXISTING PHONE MODEM
- SIGNAL SECTION, 12"
- WALK/DON'T WALK SECTION

TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC

### **SCHEDULE OF QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	492
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	88
HANDHOLE	EACH	3
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER	EACH	1
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	654
DRILL EXISTING HANDHOLE	EACH	1
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
SPARE RAILROAD, FULL ACTUATED CONTROLLER, SPECIAL	EACH	1



	USER NAME = kevin.oneill	DESIGNED	-	KMO	REVISED -
		DRAWN	-	KMO	REVISED -
ı	PLOT SCALE = 40.0000 '/ in.	CHECKED	-	MJL	REVISED -
•	PLOT DATE = 11/22/2016	DATE	-	11/23/2016	REVISED -

TRAFFIC SIG	NAL CABLE PLAN AND	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
IFI	FFERSON STREET (N. 2N	67 ALT	D6 2015-5 HSRR	SANGAMON	12	9	
UL1	TILLIOUN CITIELT (N. 214			CONTRACT	NO. 7	2H81	
SCALE: NTS SH	HEET 1 OF 1 SHEETS	STA. TO STA.		ILLINOIS FED. AI	D PROJECT		

### **SEQUENCE OF OPERATION**

MOVE MENT	JEFFI	N. SECOND + STREET	STREET		JEFFERSON	N. SECOND STREET	STREET	JEFFER	N. SECOND STREET	STREET		
PHASE		6			4 + 7			4 + 8				F Ļ
INTERVAL	1	2	3A	3B	4	5	6	7	8	9A	9B	A S H
CHANGE TO				+ 7 <b>,</b> + 8	8	8	4 + 8			6		
JEFFERSON STREET W/E	G	G	Y	R	R	R	R	R	R	R	R	R
NORTH SECOND STREET N/E MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	G <sub>G</sub>	G <sub>G</sub>	G <sub>Y</sub>	G	G	Υ	R	R
NORTH SECOND STREET N/EFAR RIGHT AND NEAR RIGHT SIGNALS	R	R	R	R	G	G	G	G	G	Υ	R	R
NORTH SECOND STREET S/E	R	R	R	R	R	R	R	G	G	Υ	R	R
PEDESTRIAN SIGNALS CROSSING N. SECOND STREET ON BOTH SIDES OF JEFFERSON STREET	Р	**FH	Н	Н	Н	Н	Н	Н	Н	Н	Н	
PEDESTRIAN SIGNALS CROSSING JEFFERSON STREET ON WEST SIDE OF NORTH SECOND STREET	Н	Н	Н	Н	Н	Н	Н	Р	**FH	Н	Н	D A R K
PEDESTRIAN SIGNALS CROSSING JEFFERSON STREET ON EAST SIDE OF NORTH SECOND STREET	Н	Н	Н	Н	Р	**FH	Н	Р	**FH	Н	Н	,

# RAILROAD PREEMPTION SEQUENCE OF OPERATION

						PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	4 7								
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	2	3	4	5	CLEAR TO NORMAL
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	2	1E	2	3	4	5		SEQUENCE
JEFFERSON STREET W/E	G G	R	R	R	R	G	Y	R	R	Δ
NORTH SECOND STREET N/I MAST ARM AND FAR LEFT SIGNALS	R R	Y	R	Y	R	R	R	R	G	Δ
NORTH SECOND STREET N/F FAR RIGHT AND NEAR RIGHT SIGNALS	B R	Y	R	Y	R	R	R	R	G	Δ
NORTH SECOND STREET S/E	B R	R	R	Υ	R	R	R	R	G	Δ
PEDESTRIAN SIGNALS CROSSING N. SECOND STREET ON BOTH SIDES OF JEFFERSON STREET	FH	Н	н	Н	Н	Н	Н	Н	Н	Δ
PEDESTRIAN SIGNALS CROSSING JEFFERSON STREET ON WEST SIDE OF NORTH SECOND STREET	Н	Н	Н	FH	Н	Н	Н	Н	Н	Δ
PEDESTRIAN SIGNALS CROSSING JEFFERSON STREET ON EAST SIDE OF NORTH SECOND STREET	Н	FH	Н	FH	Н	Н	Н	Н	Н	Δ

PHASE 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.
- P = ILLUMINATED PERSON = WALK
- FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK
- H = ILLUMINATED SOLID HAND = DON'T WALK
- ← 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

☐ = RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD INTERVAL 5 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.

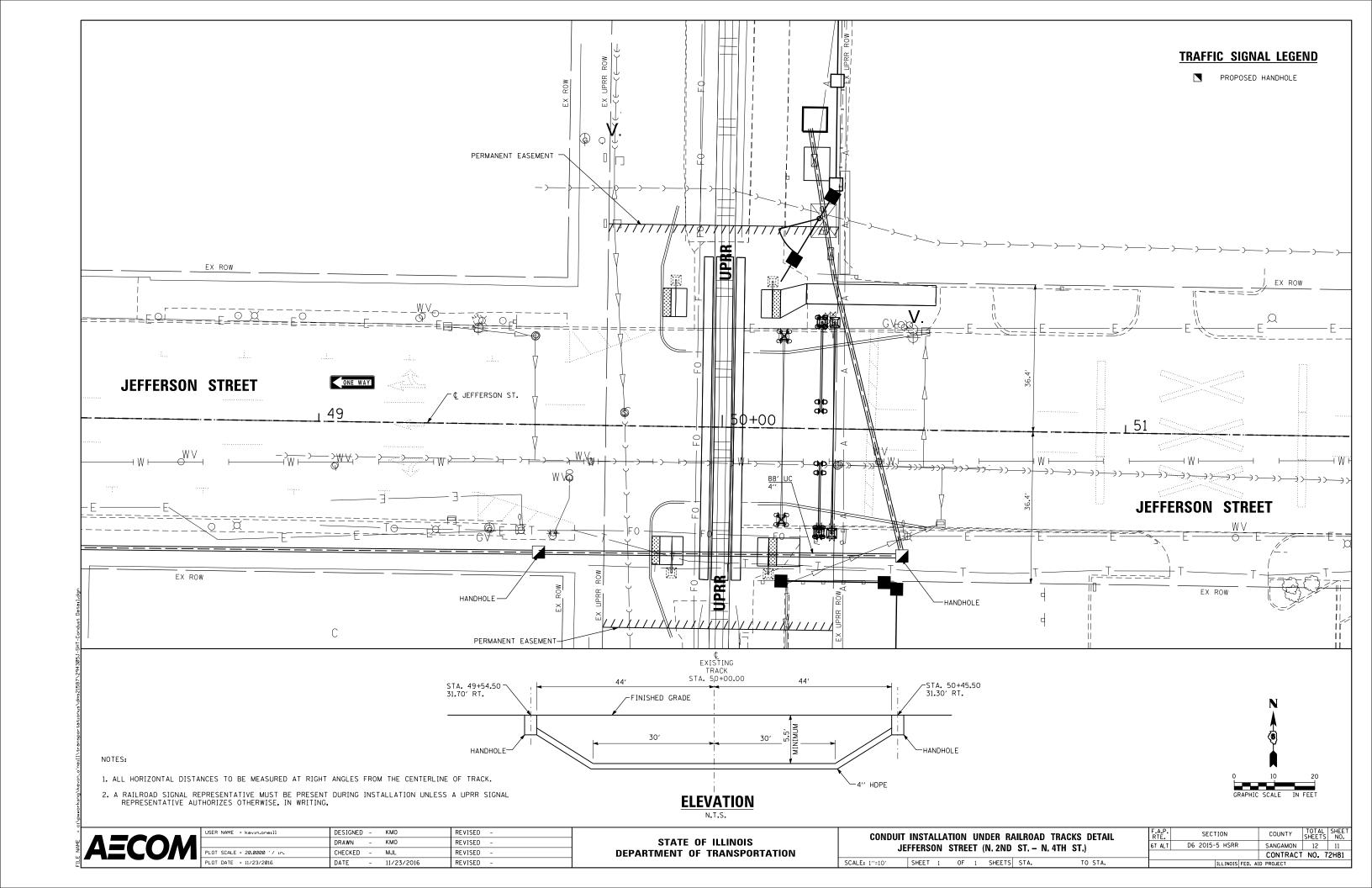
HOLD

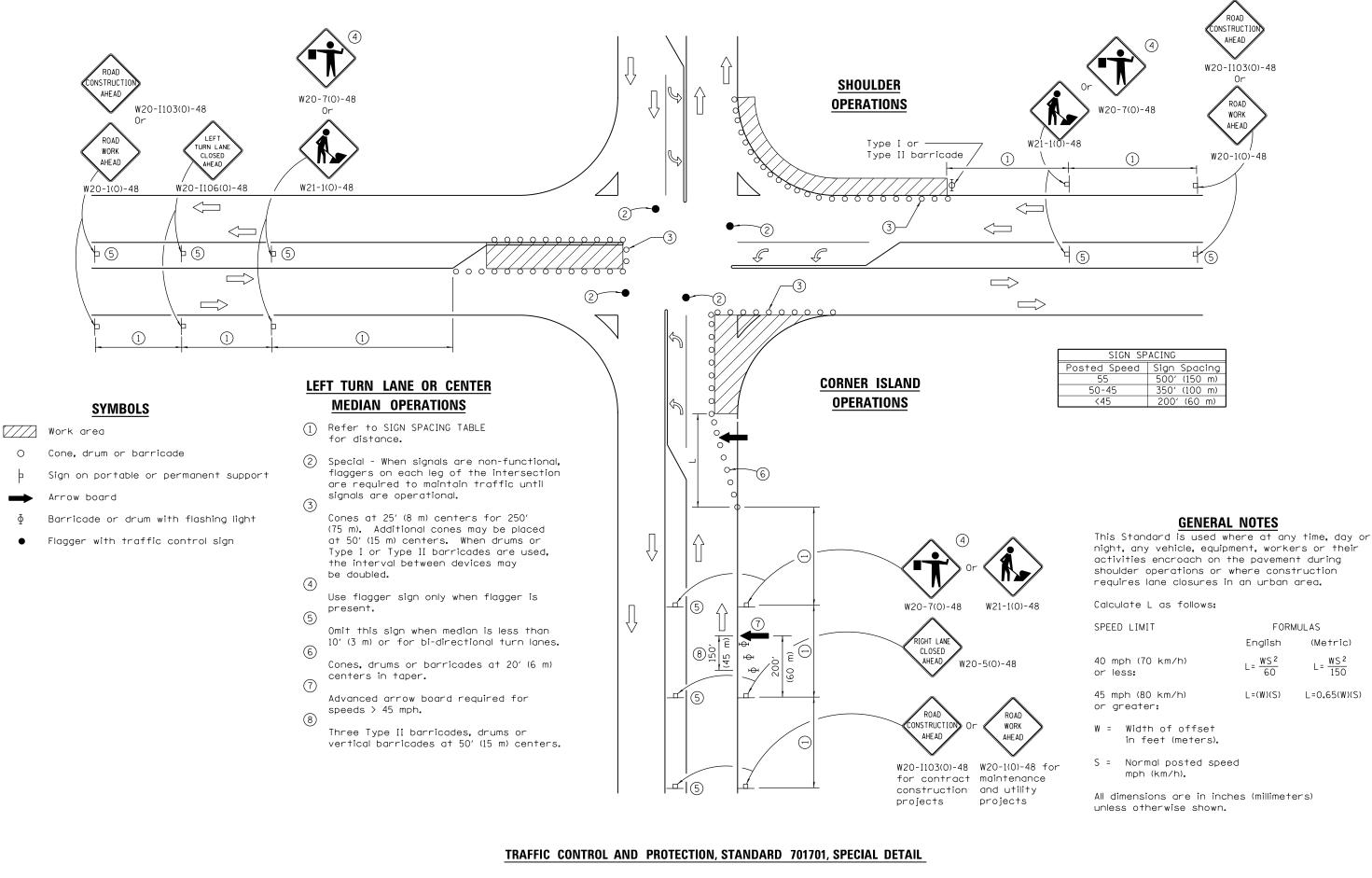
**AECOM** 

	USER NAME = kevin.oneill	DESIGNED	-	KMO	REVISED	-
		DRAWN	-	KMO	REVISED	=
	PLOT SCALE = 40.0000 '/ in.	CHECKED	-	MJL	REVISED	=
•	PLOT DATE = 11/22/2016	DATE	-	11/23/2016	REVISED	=

							SEQUENCE ND ST. –	S OF OPERATION U.P.R.R.)
SCALE:	NTS	SHEET	1	OF	1	SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
67 ALT	D6 2015-5 HSRR	SANGAMON	12 10			
		CONTRACT	NO. 7	2H81		
	THE TWO IS FED. AT	ID DDO IECT				





### USER NAME = kevin.oneill

	USEN NHME - Kevin.oneiii	DESIGNED	-	KMU	ME A 12ED	=
		DRAWN	-	KM0	REVISED	=
ı	PLOT SCALE = 100.0000 '/ in.	CHECKED	-	MJL	REVISED	=
•	PLOT DATE = 11/22/2016	DATE	-	11/23/2016	REVISED	=

							F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE1				
	TR	<b>VEEIC</b>	cr	MTRAI	ΛN	n p	BUL	FCTION	CTANDARD	701701 SPECIAL	67	D6 2015-5 HSRR	SANGAMON	12	12
	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701, SPECIAL								CONTRACT	NO. 7	72H81				
SC	ALE:	NTS		SHEET	1	OF	1	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		