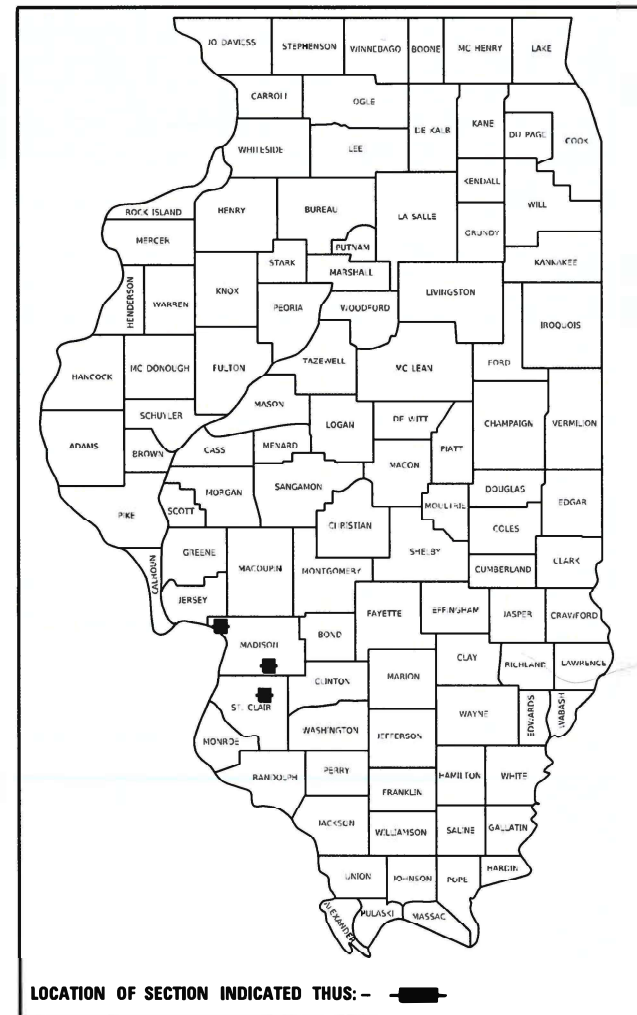


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	ILLINOIS	19	1
CONTRACT NO. 76P47				

D-98-052-21



# PROPOSED HIGHWAY PLANS

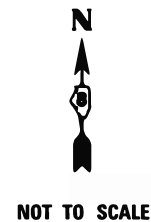
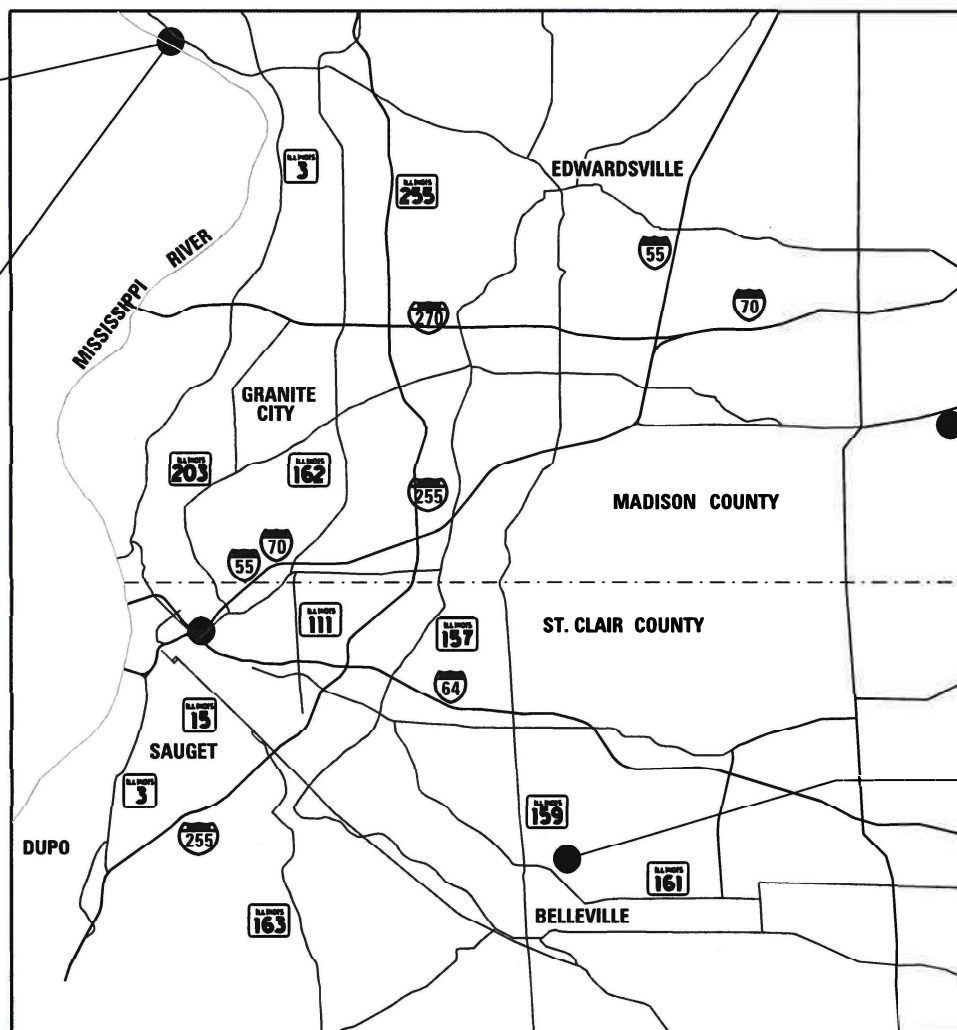
VARIOUS ROUTES  
SECTION : RR INTERCONNECT 2021  
PROJECT : NHPP-STP-8KDX(507)  
TRAFFIC SIGNAL UPGRADE  
MADISON / ST. CLAIR COUNTY

FOR INDEX OF SHEETS, SEE SHEET NO. 2

C-98-083-21

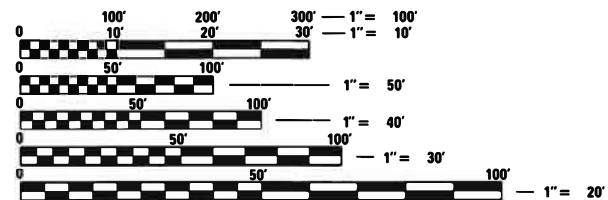
**LOCATION 1**  
UNION PACIFIC  
FRA CROSSING #294504L  
NORFOLK SOUTHERN  
FRA CROSSING #327937M  
US ROUTE 67 & RIDGE ST  
ALTON, IL

**LOCATION 2**  
UNION PACIFIC  
FRA CROSSING #294503E  
NORFOLK SOUTHERN  
FRA CROSSING #327936F  
US ROUTE 67 & HENRY ST  
ALTON, IL



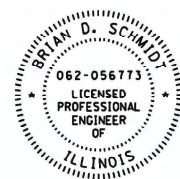
**LOCATION #4**  
CSX  
FRA CROSSING #546538E  
US ROUTE 40 & DOUGLAS ST  
ST JACOB, IL

**LOCATION 3**  
NORFOLK SOUTHERN  
FRA CROSSING #724595J  
LEBANON AVE & WEST BLVD  
BELLEVILLE, IL



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 EXCAVATORS  
1-800-892-0123  
OR 811



*Brian D. Schmidt*

3/16/2021  
Date

License Expires 11/30/2021  
MY SEAL APPLIES TO SHEETS: 1-15

PLANS PREPARED BY



1022 Eastport Plaza Drive  
Collinsville, Illinois 62234  
Phone: (618) 855-8000  
Illinois Professional Design Firm  
No. 184-003252  
License Expires 4/30/2021



License Expires 11/30/2021  
MY SEAL APPLIES TO SHEETS: 16-19

PROJECT ENGINEER : GELIN, HERVE  
SQUAD LEADER : PRESTON, MICHAEL

CONTRACT NO. 76P47

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED *March 18, 2021*

*Kath Kolata*  
REGIONAL ENGINEER

May 7, 2021

*Scott A. Etk*  
ENGINEER OF DESIGN AND ENVIRONMENT

May 7, 2021

*James J. Gu*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

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**GENERAL NOTES**

- 1 NO WORK SHALL COMMENCE UNTIL THE PROPOSED TRAFFIC CONTROL IS IN PLACE AND HAS BEEN APPROVED BY THE ENGINEER.
- 2 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- 3 ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY. ACCORDING TO THE ARTICLE 202.30 OF THE STANDARD SPECIFICATION AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPERATELY, BUT SHALL BE INCLUDED IN THE COSTS OF THE UNDERGROUND CONDUIT.
- 4 THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO FULL SIZE PLANS AND NOT TO THE REDUCED SIZE PLANS. REDUCED SIZE PLANS CAN BE PRINTED TO SCALE FOR USE IN THE FIELD.
- 5 NS RAILROAD AND UP RAILROAD FLAGGERS SHALL BE PRESENT WHEN WORKING WITHIN 25' OF THE RAILROAD TRACKS. THE CONTRACTOR SHALL COORDINATE WITH NS OR THE UP RAILROAD TO ASSURE FLAGGERS ARE PRESENT DURING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 6 EXISTING UTILITIES ARE SHOWN ON THE PLANS ACCORDING TO INFORMATION OBTAINED FROM THE LOCAL AGENCIES, OWNERS, AND FIELD SURVEYS. THE ACCURACY AND COMPLETENESS OF SAID INFORMATION IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTENCE, NATURE AND EXACT LOCATIONS OF ALL UTILITY LINES AND APPURTENANCES WITH THE LIMITS OF IMPROVEMENTS.
- 7 THE CONTRACTOR SHALL COORDINATE WITH NS FOR RIGHT OF ENTRY PERTAINING TO WORK WITHIN RAILROAD R.O.W.
- 8 THE RESIDENT ENGINEER SHALL VERIFY THE EXISTENCE OF HIGHWAY LIGHTING AND/OR INTELLIGENT TRANSPORTATION SYSTEMS (I.T.S.) UTILITIES WITHIN THE PROJECT LIMITS. IF HIGHWAY LIGHTING AND OR I.T.S. EXISTS WITHIN THE PROJECT LIMITS, AND IF THESE ITEMS REQUIRE LOCATING, THE CONTRACTOR SHALL BE DIRECTED TO DO SO ACCORDING TO SECTION 803 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
- 9 THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUBCONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION-RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSE WORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE, ETC.) AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL-TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 618-346-3360 AND/OR THE HCCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.
- 10 MEMBERS OF J.U.L.I.E CALL TOLL FREE (800) 892-1023 OR 811. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.
- 11 ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY.  
 THE FOLLOWING UTILITIES ARE KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA AS FOLLOWS:

**LOCATION 1**

US ROUTE 67 & RIDGE STREET

AMEREN ILLINOIS  
 CITY OF ALTON  
 ATT  
 CHARTER COMMUNICATIONS  
 IL AMERICAN WATER - ALTON SANITARY  
 IL AMERICAN WATER - ALTON WATER  
 WANRACK LLC  
 WOOD RIVER DRAINAGE & LEVEE DISTRICT

GAS & ELECTRIC  
 LIGHTING & SEWER  
 PHONE  
 CABLE TV  
 SEWER  
 WATER  
 PHONE  
 SEWER

**LOCATION 3**

LEBANON AVENUE & WEST BOULEVARD

ADB COMPANIES  
 AMEREN ILLINOIS  
 ATT  
 CITY OF BELLEVILLE  
 CHARTER COMMUNICATIONS  
 CLEARWAVE COMMUNICATIONS  
 FIDELITY COMMUNICATION SERVICES III  
 IL AMERICAN WATER - EAST ST LOUIS  
 WINDSTREAM KDL / MCLEOD USA  
 MCI / VERIZON  
 TOWNSHIP OF ST CLAIR

PHONE  
 GAS & ELECTRIC  
 PHONE  
 SEWER  
 CABLE TV  
 PHONE  
 PHONE  
 WATER  
 PHONE  
 PHONE  
 SEWER

**LOCATION 2**

US 67 & HENRY STREET

AMEREN ILLINOIS  
 CITY OF ALTON  
 ATT  
 CHARTER COMMUNICATIONS  
 IL AMERICAN WATER - ALTON SANITARY  
 IL AMERICAN WATER - ALTON WATER  
 WANRACK LLC  
 WOOD RIVER DRAINAGE & LEVEE DISTRICT

GAS & ELECTRIC  
 LIGHTING & SEWER  
 PHONE  
 CABLE TV  
 SEWER  
 WATER  
 PHONE  
 SEWER

**LOCATION 4**

US 40 & N DOUGLAS STREET

AMEREN ILLINOIS  
 ATT  
 CHARTER COMMUNICATIONS  
 CLEARWAVE COMMUNICATIONS  
 STATE OF ILLINOIS  
 CITY OF HIGHLAND  
 HOME TELEPHONE CO  
 VILLAGE OF ST JACOB

GAS & ELECTRIC  
 PHONE  
 CABLE TV  
 PHONE  
 PHONE & FIBER  
 ELECTRIC, SEWER, WATER, & FIBER  
 PHONE  
 SEWER & WATER

**HIGHWAY STANDARDS**

- 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' (4.5 M) AWAY
- 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
- 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
- 701201-05 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 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
- 701901-08 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720006-04 SIGN PANEL ERECTION DETAILS
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>INDEX OF SHEETS GENERAL NOTES HIGHWAY STANDARDS</b>	
SCALE: NTS	SHEET 1 OF 1 SHEETS
STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	2
CONTRACT NO. 76P47				
ILLINOIS FED. AID PROJECT NHPP-8KDX(507)				

\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

SUMMARY OF QUANTITIES				CONSTRUCTION CODE	
				80% FED 20% STATE	80% FED 20% STATE
CODE NO	ITEM	UNIT	TOTAL	TRAFFIC SIGNALS	TRAFFIC SIGNALS
				0021	0021
				URBAN	URBAN
				MADISON COUNTY	ST CLAIR COUNTY
67100100	MOBILIZATION	L SUM	1.00	0.75	0.25
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1.00	1.00	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1.00		1.00
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.00	0.75	0.25
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1.00	1.00	
* 72000100	SIGN PANEL - TYPE 1	SQ FT	21.50	21.50	
* 72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	0.75	0.75	
* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	32.00	32.00	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4.00	3.00	1.00
87301750	ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	645.00	607.00	38.00
89100400	ILLUMINATED SIGN, LED	EACH	14.00	12.00	2.00
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	645.00	607.00	38.00
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	18.00	15.00	3.00
X1400214	SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	4.00	3.00	1.00

SUMMARY OF QUANTITIES				CONSTRUCTION CODE	
				80% FED 20% STATE	80% FED 20% STATE
CODE NO	ITEM	UNIT	TOTAL	TRAFFIC SIGNALS	TRAFFIC SIGNALS
				0021	0021
				URBAN	URBAN
				MADISON COUNTY	ST CLAIR COUNTY
X8571215	RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	4.00	3.00	1.00
X8620250	UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL	EACH	4.00	3.00	1.00
Ø Z0076600	TRAINEES	HOUR	500	500	
Ø Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500	

\* SPECIALTY ITEM  
Ø 0042

\* SPECIALTY ITEM

REV. - MS

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A. * RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	3
CONTRACT NO. 76P47				
ILLINOIS   FED. AID PROJECT   NHP-8KDX(507)				

\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

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 SPECIAL PROVISION.

AGENCY: ILLINOIS DEPARTMENT OF TRANSPORTATION - DISTRICT 8  
1 EACH CONTROLLER AND CABINET (COMPLETE)

NOTE: ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

**RESTORATION OF WORK AREA:**

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS AND NO EXTRA COMPENSTAION SHALL BE ALLOWED. ANY DAMAGE TO TURF AREAS SHALL BE SEEDED IN ACCORDANCE WITH SECTION 252 OF THE STANDARD SPECIFICATIONS.

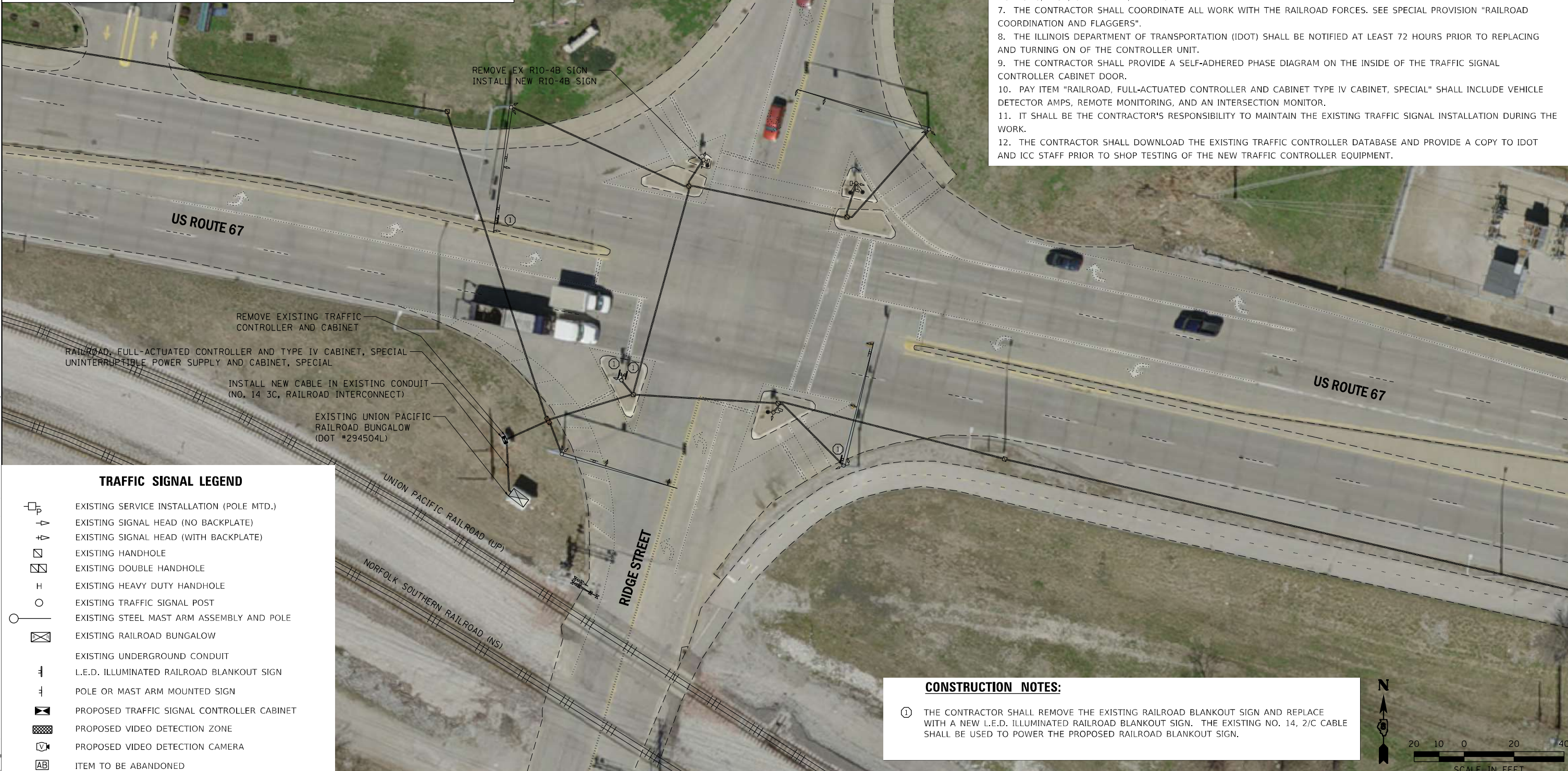
**STAGING OF THE RAILROAD INTERCONNECT WORK:**

THE EXISTING RAILROAD INTERCONNECT WILL BE MAINTAINED THROUGHOUT THE WORK UNTIL A NEW RAILROAD INTERCONNECT CABLE IS INSTALLED FROM THE NEW CONTROLLER TO THE RAILROAD BUNGALOW AS SHOWN.

ANY DAMAGE DONE TO THE EXISTING SIGNAL ITEMS OR APURTENANCES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, PER PER SECTION 895.02 OF THE STANDARD SPECIFICATIONS.

**TRAFFIC SIGNAL GENERAL NOTES**

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123.
3. THE CONTRACTOR SHALL CONTACT THE UNION PACIFIC (UP) RAILROAD COMPANY AT (800) 848-8715.
4. THE CONTRACTOR SHALL CONTACT THE NORFOLK SOUTHERN (NS) RAILROAD COMPANY AT (478) 832-0958 (JOEL VAN AKKEREN, C&S SUPERVISOR). JOELVANAKKEREN@NSCORP.COM
5. THE CONTRACTOR SHALL COORDINATE WITH UNION PACIFIC (UP) RAILROAD AND NORFOLK SOUTHERN (NS) BEFORE STARTING ANY WORK ON EITHER RAILROAD PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND FOLLOWING CURRENT SPECIFICATIONS FOR PIPELINE OCCUPANCY OF UNION PACIFIC (UP) RAILROAD COMPANY PROPERTY (UP DOT #294504L) AND NORFOLK SOUTHERN (NS) RAILROAD COMPANY PROPERTY (NS DOT #327937M)
6. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES, IDOT, UP RAILWAY, AND NS RAILWAY.
7. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE RAILROAD FORCES. SEE SPECIAL PROVISION "RAILROAD COORDINATION AND FLAGGERS".
8. THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO REPLACING AND TURNING ON OF THE CONTROLLER UNIT.
9. THE CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE TRAFFIC SIGNAL CONTROLLER CABINET DOOR.
10. PAY ITEM "RAILROAD, FULL-ACTUATED CONTROLLER AND CABINET TYPE IV CABINET, SPECIAL" SHALL INCLUDE VEHICLE DETECTOR AMPS, REMOTE MONITORING, AND AN INTERSECTION MONITOR.
11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE EXISTING TRAFFIC SIGNAL INSTALLATION DURING THE WORK.
12. THE CONTRACTOR SHALL DOWNLOAD THE EXISTING TRAFFIC CONTROLLER DATABASE AND PROVIDE A COPY TO IDOT AND ICC STAFF PRIOR TO SHOP TESTING OF THE NEW TRAFFIC CONTROLLER EQUIPMENT.

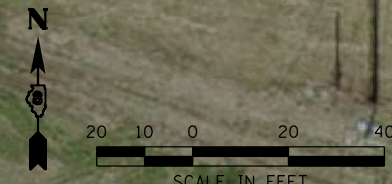


**TRAFFIC SIGNAL LEGEND**

- EXISTING SERVICE INSTALLATION (POLE MTD.)
- EXISTING SIGNAL HEAD (NO BACKPLATE)
- EXISTING SIGNAL HEAD (WITH BACKPLATE)
- EXISTING HANDHOLE
- EXISTING DOUBLE HANDHOLE
- EXISTING HEAVY DUTY HANDHOLE
- EXISTING TRAFFIC SIGNAL POST
- EXISTING STEEL MAST ARM ASSEMBLY AND POLE
- EXISTING RAILROAD BUNGALOW
- EXISTING UNDERGROUND CONDUIT
- L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN
- POLE OR MAST ARM MOUNTED SIGN
- PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET
- PROPOSED VIDEO DETECTION ZONE
- PROPOSED VIDEO DETECTION CAMERA
- ITEM TO BE ABANDONED

**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL REMOVE THE EXISTING RAILROAD BLANKOUT SIGN AND REPLACE WITH A NEW L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN. THE EXISTING NO. 14, 2/C CABLE SHALL BE USED TO POWER THE PROPOSED RAILROAD BLANKOUT SIGN.



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN  
FRA CROSSING #294504L & #327937M  
US ROUTE 67 & RIDGE STREET (ALTON, IL)**

SCALE: 1"=20' SHEET 1 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	4
CONTRACT NO. 76P47				
ILLINOIS FED. AID PROJECT NHFP-8KDX(507)				

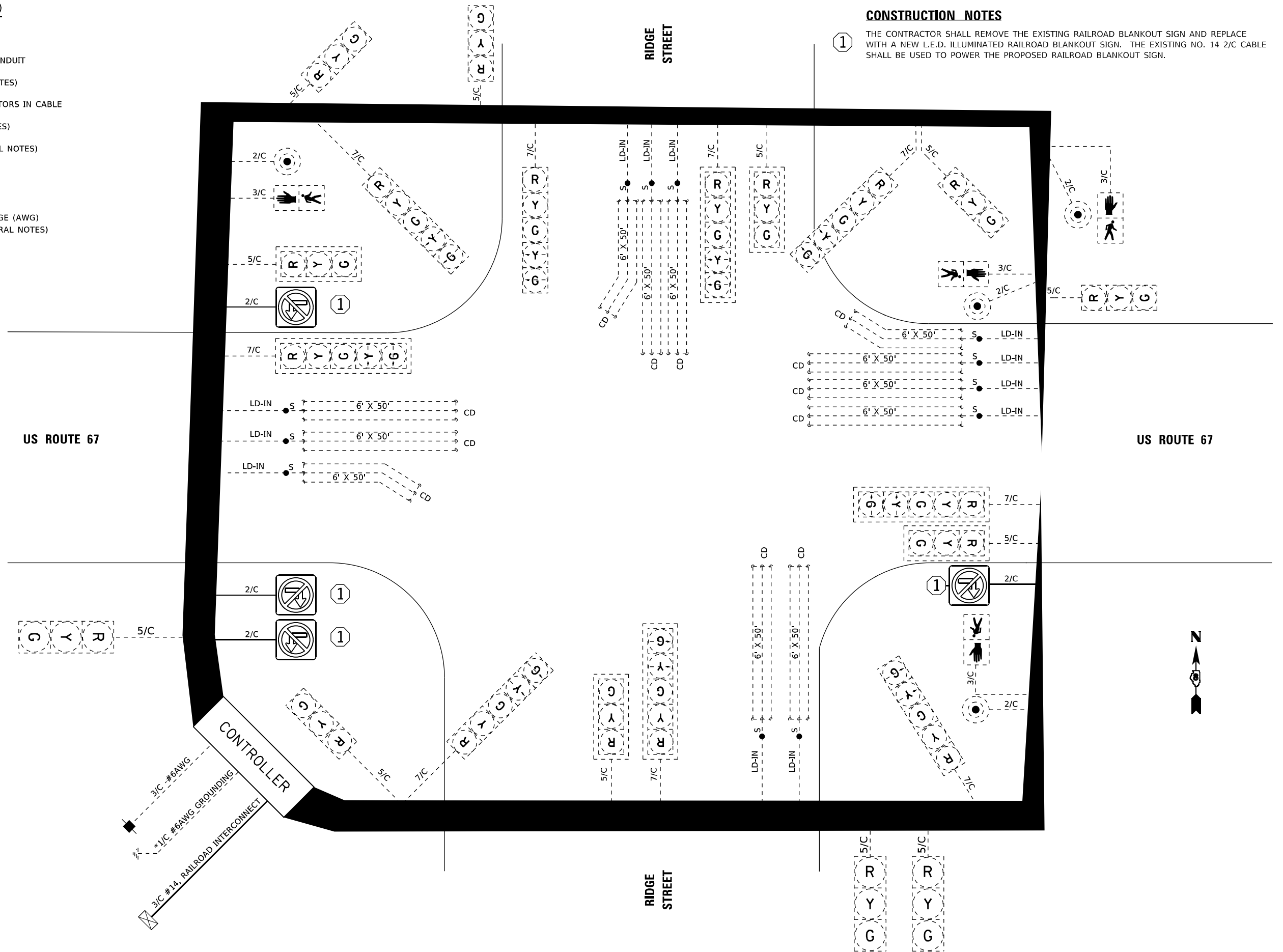
\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

**CABLE DIAGRAM LEGEND**

- ELECTRIC CABLE IN CONDUIT
- EXISTING ELECTRIC CABLE IN CONDUIT
- S CABLE SPLICE (SEE GENERAL NOTES)
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- CD CALL DELAY (SEE GENERAL NOTES)
- CCO CALL CARRY OVER (SEE GENERAL NOTES)
- EXISTING SERVICE INSTALLATION
- EXISTING ILLUMINATED SIGN
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)

**CONSTRUCTION NOTES**

- ① THE CONTRACTOR SHALL REMOVE THE EXISTING RAILROAD BLANKOUT SIGN AND REPLACE WITH A NEW L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN. THE EXISTING NO. 14 2/C CABLE SHALL BE USED TO POWER THE PROPOSED RAILROAD BLANKOUT SIGN.



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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CABLE DIAGRAM**  
**FRA CROSSINGS #294504L & #327937M**  
**US ROUTE 67 & RIDGE STREET (ALTON, IL)**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	5
CONTRACT NO. 76P47				
ILLINOIS FED. AID PROJECT NHFP-8KDX(507)				

SCALE: N.T.S. SHEET 2 OF 4 SHEETS STA. TO STA.

\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

# TRAFFIC SIGNAL SEQUENCE OF OPERATION

MOVEMENT																									FLASH																																											
PHASE	1 + 5				2 + 5				1 + 6				2 + 6				3 + 7				3 + 8					4 + 7				4 + 8																																						
INTERVAL	1	2A	2B	3A	3B	4A	4B	5	6	7A	7B	8	9A	9B	10	11	12A	12B	13	14A	14B	15A	15B	16A		16B	17	18	19A	19B	20A	20B	21	22A	22B	23A	23B	23	24	25A	25B																											
CHANGE TO	/				2 + 5				1 + 6				2 + 6				2 + 6				3 + 7					3 + 8				4 + 7				1 + 5				2 + 5				4 + 8				1 + 6				2 + 6				1 + 5				2 + 5				1 + 6				2 + 6		
US ROUTE 67 FAR LEFT AND LEFT MAST ARM SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R												
US ROUTE 67 NEAR RIGHTS AND RIGHT MAST ARM SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R												
US ROUTE 67 FAR LEFT AND LEFT MAST ARM SIGNALS	W/B	R	R	R	R	R	R	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R												
US ROUTE 67 NEAR RIGHTS AND RIGHT MAST ARM SIGNALS	W/B	R	R	R	R	R	R	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R												
RIDGE STREET FAR LEFT AND LEFT MAST ARM SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R												
RIDGE STREET NEAR RIGHTS AND RIGHT MAST ARM SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R												
RIDGE STREET FAR LEFT AND LEFT MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R												
RIDGE STREET NEAR RIGHTS AND RIGHT MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R												
PEDESTRIAN SIGNALS CROSSING US 67 ON EAST LEG		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H												
PEDESTRIAN SIGNALS CROSSING RIDGE STREET ON NORTH LEG		H	H	H	H	H	H	*P	**FH	H	H	H	H	H	H	*P	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H											

P = ILLUMINATED PERSON = WALK  
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK  
 H = ILLUMINATED SOLID HAND = DON'T WALK

\* TO APPEAR ONLY UPON PUSHBUTTON ACTUATION  
 \*\* "FH" TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE

PHASES 2 AND 6 SHALL BE PLACED ON RECALL

MODEL: D:\p4\h... FILE NAME: C:\E:\051\_2018\18-1386\_PTB\_189236\_VARIOUS\_P4\_IL\_TRAFFIC DESIGN.DS - FEI\_PRIME\W02\GACADD\CADD\_Sheets\05189236\_P4\_IL.dwg

	USER NAME = bschm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL SEQUENCE OF OPERATION FRA CROSSING #294504L &amp; #327937M US ROUTE 67 &amp; RIDGE STREET (ALTON, IL)</b>	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 2,0000' / in.	CHECKED -	REVISED -			** RR INTERCONNECT 2021	***	19	6
WWW.FUHRMANN-ENG.COM	PLOT DATE = 3/17/2021	DATE -	REVISED -	SCALE: SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 76P47			
						ILLINOIS FED. AID PROJECT NHPP-8KDX(507)			

\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

# RAILROAD PREEMPTION SEQUENCE OF OPERATION

PREEMPTOR  
NUMBER 2

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	5	8	10	13	17	21	23													
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1L	1M	1N	1P	1R	1S	1T	1U	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION NUMBER	1B	2	1D	2	1F	2	1H	2	1M	2	1P	2	1S	2	1U	2	3	4	5	<input type="checkbox"/>	
US ROUTE 67 FAR LEFT AND LEFT MAST ARM SIGNALS	E/B R Y ←	R	R	R	Y Y ←	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	G G ←	△
US ROUTE 67 NEAR RIGHTS AND RIGHT MAST ARM SIGNALS	E/B	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	G	△	
US ROUTE 67 FAR LEFT AND LEFT MAST ARM SIGNALS	W/B R Y ←	R	Y Y ←	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	△	
US ROUTE 67 NEAR RIGHTS AND RIGHT MAST ARM SIGNALS	W/B	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	△		
RIDGE STREET FAR LEFT AND LEFT MAST ARM SIGNALS	N/B	R	R	R	R	R	R	R	R G ←	R G ←	G G ←	R	R	G	G	G G ←	Y Y ←	R	R	△	
RIDGE STREET NEAR RIGHTS AND RIGHT MAST ARM SIGNALS	N/B	R	R	R	R	R	R	R	R	G	G	R	R	G	G	G	Y	R	R	△	
RIDGE STREET FAR LEFT AND LEFT MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	R Y ←	R	R	R	Y Y ←	R	Y	R	R	R	R	R	△
RIDGE STREET NEAR RIGHTS AND RIGHT MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	Y	R	Y	R	R	R	R	R	△	
INTERNALLY ILLUMINATED NO LEFT TURN SIGNS	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	△	
INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	△	
PEDESTRIAN SIGNALS CROSSING US 67 ON EAST LEG	H	H	H	H	H	H	H	H	H	FH	H	H	H	FH	H	H	H	H	H	△	
PEDESTRIAN SIGNALS CROSSING RIDGE STREET ON NORTH LEG	H	H	FH	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	△	

HOLD

- THE RAILROAD PREEMPTION SEQUENCE SHALL BE CAPABLE OF CYCLING BETWEEN PHASES 1+6, 2+6, AND 7 UNTIL PREEMPTION IS TERMINATED
- △ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD INTERVAL 5 IS TERMINATED

P = ILLUMINATED PERSON = WALK  
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK  
 H = ILLUMINATED SOLID HAND = DON'T WALK

- NOTES:
1. ONCE PREEMPTION HAS BEEN CALLED, THE TRACK CLEAR SIGNAL DISPLAY SHALL APPEAR IMMEDIATELY AFTER ALL NECESSARY VEHICULAR CLEARANCES HAVE BEEN PROVIDED.
  2. THE RAILROAD PREEMPTION SEQUENCE OF OPERATION SHALL HAVE PRIORITY OVER ALL OTHER SEQUENCES OF OPERATION.

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USER NAME = bschm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 2,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/17/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**RAILROAD PREEMPTION SEQUENCE OF OPERATION  
FRA CROSSING #294504L & #327937M  
US ROUTE 67 & RIDGE STREET (ALTON, IL)**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	7
CONTRACT NO. 76P47			ILLINOIS FED. AID PROJECT NHPP-8KDX(507)	

SCALE: SHEET OF SHEETS STA. TO STA.

\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

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 SPECIAL PROVISION.

AGENCY: ILLINOIS DEPARTMENT OF TRANSPORTATION - DISTRICT 8  
1 EACH CONTROLLER AND CABINET (COMPLETE)

NOTE: ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

**RESTORATION OF WORK AREA:**

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS AND NO EXTRA COMPENSTAIION SHALL BE ALLOWED. ANY DAMAGE TO TURF AREAS SHALL BE SEEDED IN ACCORDANCE WITH SECTION 252 OF THE STANDARD SPECIFICATIONS.

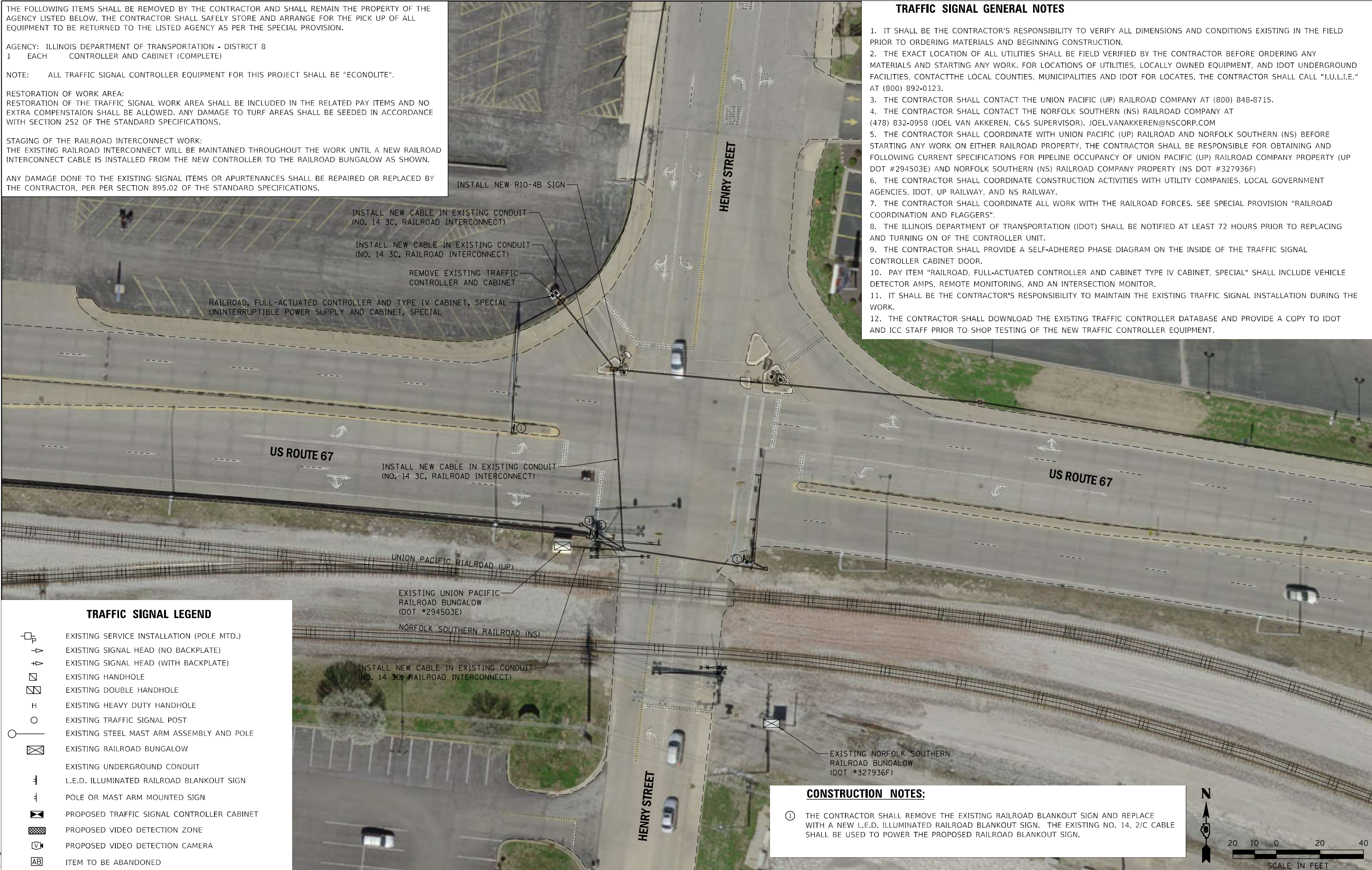
**STAGING OF THE RAILROAD INTERCONNECT WORK:**

THE EXISTING RAILROAD INTERCONNECT WILL BE MAINTAINED THROUGHOUT THE WORK UNTIL A NEW RAILROAD INTERCONNECT CABLE IS INSTALLED FROM THE NEW CONTROLLER TO THE RAILROAD BUNGALOW AS SHOWN.

ANY DAMAGE DONE TO THE EXISTING SIGNAL ITEMS OR APURTENANCES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, PER PER SECTION 895.02 OF THE STANDARD SPECIFICATIONS.

**TRAFFIC SIGNAL GENERAL NOTES**

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123.
3. THE CONTRACTOR SHALL CONTACT THE UNION PACIFIC (UP) RAILROAD COMPANY AT (800) 848-8715.
4. THE CONTRACTOR SHALL CONTACT THE NORFOLK SOUTHERN (NS) RAILROAD COMPANY AT (478) 832-0958 (JOEL VAN AKKEREN, C&S SUPERVISOR). JOEL.VANAKKEREN@NSCORP.COM
5. THE CONTRACTOR SHALL COORDINATE WITH UNION PACIFIC (UP) RAILROAD AND NORFOLK SOUTHERN (NS) BEFORE STARTING ANY WORK ON EITHER RAILROAD PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND FOLLOWING CURRENT SPECIFICATIONS FOR PIPELINE OCCUPANCY OF UNION PACIFIC (UP) RAILROAD COMPANY PROPERTY (UP DOT #294503E) AND NORFOLK SOUTHERN (NS) RAILROAD COMPANY PROPERTY (NS DOT #327936F)
6. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES, IDOT, UP RAILWAY, AND NS RAILWAY.
7. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE RAILROAD FORCES. SEE SPECIAL PROVISION "RAILROAD COORDINATION AND FLAGGERS".
8. THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO REPLACING AND TURNING ON OF THE CONTROLLER UNIT.
9. THE CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE TRAFFIC SIGNAL CONTROLLER CABINET DOOR.
10. PAY ITEM "RAILROAD, FULL-ACTUATED CONTROLLER AND CABINET TYPE IV CABINET, SPECIAL" SHALL INCLUDE VEHICLE DETECTOR AMPS, REMOTE MONITORING, AND AN INTERSECTION MONITOR.
11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE EXISTING TRAFFIC SIGNAL INSTALLATION DURING THE WORK.
12. THE CONTRACTOR SHALL DOWNLOAD THE EXISTING TRAFFIC CONTROLLER DATABASE AND PROVIDE A COPY TO IDOT AND ICC STAFF PRIOR TO SHOP TESTING OF THE NEW TRAFFIC CONTROLLER EQUIPMENT.

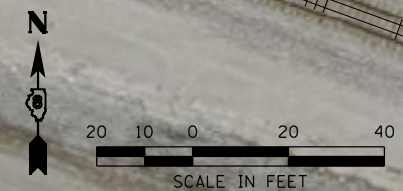


**TRAFFIC SIGNAL LEGEND**

- EXISTING SERVICE INSTALLATION (POLE MTD.)
- EXISTING SIGNAL HEAD (NO BACKPLATE)
- EXISTING SIGNAL HEAD (WITH BACKPLATE)
- EXISTING HANDHOLE
- EXISTING DOUBLE HANDHOLE
- EXISTING HEAVY DUTY HANDHOLE
- EXISTING TRAFFIC SIGNAL POST
- EXISTING STEEL MAST ARM ASSEMBLY AND POLE
- EXISTING RAILROAD BUNGALOW
- EXISTING UNDERGROUND CONDUIT
- L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN
- POLE OR MAST ARM MOUNTED SIGN
- PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET
- PROPOSED VIDEO DETECTION ZONE
- PROPOSED VIDEO DETECTION CAMERA
- ITEM TO BE ABANDONED

**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL REMOVE THE EXISTING RAILROAD BLANKOUT SIGN AND REPLACE WITH A NEW L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN. THE EXISTING NO. 14, 2/C CABLE SHALL BE USED TO POWER THE PROPOSED RAILROAD BLANKOUT SIGN.



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<p><b>FUHRMANN ENGINEERING</b> WWW.FUHRMANN-ENG.COM</p>	USER NAME = bschm PLOT SCALE = 40,0000 */ in. PLOT DATE = 3/17/2021	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODIFICATION PLAN FRA CROSSING #294503E &amp; #327936F US ROUTE 67 &amp; HENRY STREET (ALTON, IL)</b>	F.A. ~ RTE.	SECTION RR INTERCONNECT 2021	COUNTY ***	TOTAL SHEETS 19	SHEET NO. 8
	SCALE: 1"=20'    SHEET 1 OF 4 SHEETS    STA.    TO STA.						ILLINOIS FED. AID PROJECT NHPF-8KDX(507) CONTRACT NO. 76P47 ** VARIOUS    ** VARIOUS    *** MADISON / ST. CLAIR			

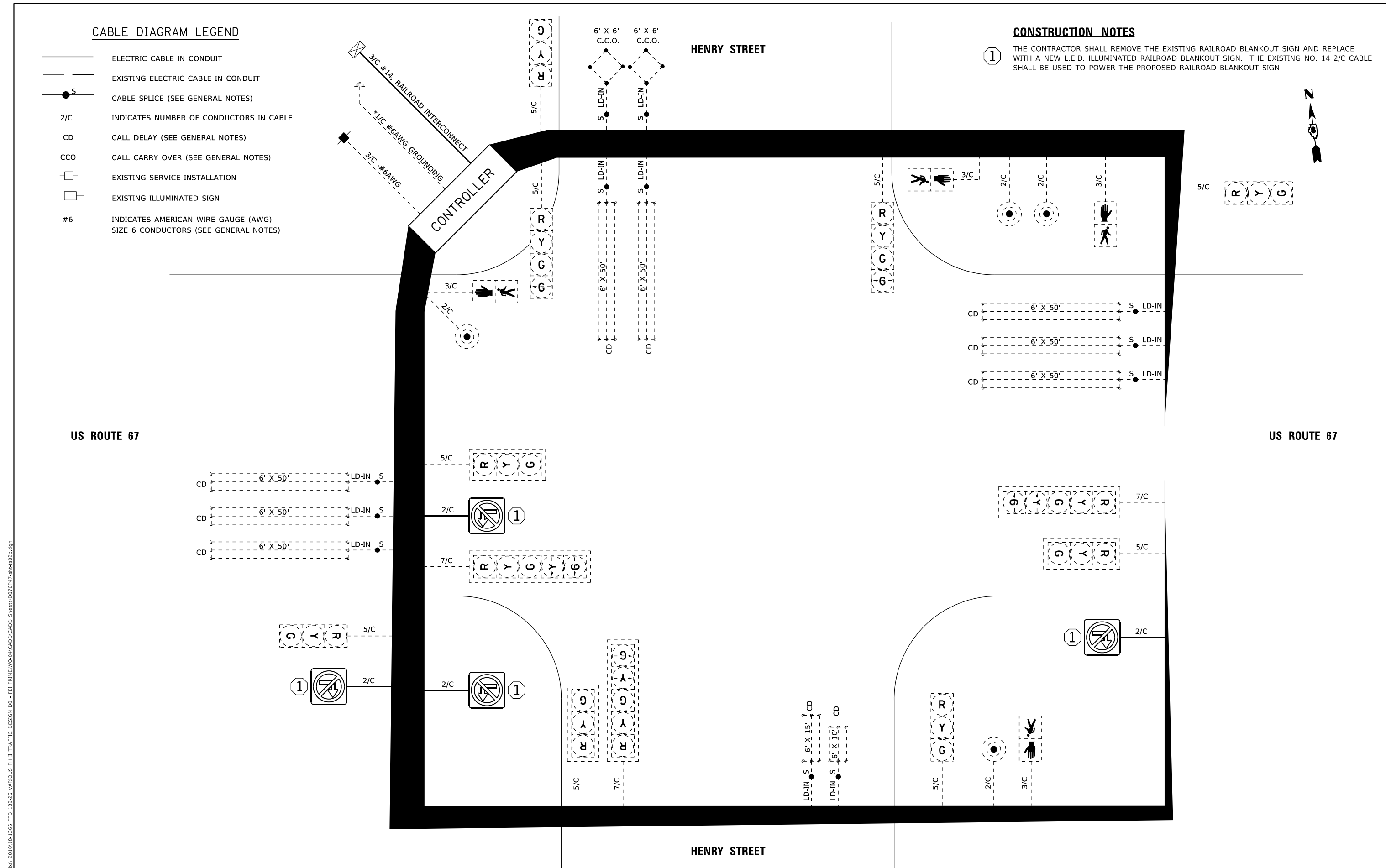


**CABLE DIAGRAM LEGEND**

- ELECTRIC CABLE IN CONDUIT
- EXISTING ELECTRIC CABLE IN CONDUIT
- S CABLE SPLICE (SEE GENERAL NOTES)
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- CD CALL DELAY (SEE GENERAL NOTES)
- CCO CALL CARRY OVER (SEE GENERAL NOTES)
- EXISTING SERVICE INSTALLATION
- EXISTING ILLUMINATED SIGN
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)

**CONSTRUCTION NOTES**

- 1 THE CONTRACTOR SHALL REMOVE THE EXISTING RAILROAD BLANKOUT SIGN AND REPLACE WITH A NEW L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN, THE EXISTING NO. 14 2/C CABLE SHALL BE USED TO POWER THE PROPOSED RAILROAD BLANKOUT SIGN.



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	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CABLE DIAGRAM**  
**FRA CROSSING #294503E & #327936F**  
**US ROUTE 67 & HENRY STREET (ALTON, IL)**

SCALE: N.T.S. SHEET 2 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	9
			CONTRACT NO. 76P47	
ILLINOIS FED. AID PROJECT NHPP-8KDX(507)				

\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

# TRAFFIC SIGNAL SEQUENCE OF OPERATION

MOVEMENT																																					FLASH
PHASE	1 + 5								2 + 5				1 + 6				2 + 6				3				4 + 8												
INTERVAL	1	2A	2B	3A	3B	4A	4B	5	6	7A	7B	8	9A	9B	10	11	12A	12B	13	14	14A	14B	15	16A	16B												
CHANGE TO	/								/				/				/				/				/												
US ROUTE 67 LEFT MAST ARM SIGNAL	E/B	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R								
US ROUTE 67 NEAR RIGHT AND RIGHT MAST ARM SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R								
US ROUTE 67 LEFT MAST ARM SIGNAL	W/B	R	R	R	R	R	R	G	G	G	G	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R								
US ROUTE 67 NEAR RIGHT AND RIGHT MAST ARM SIGNALS	W/B	R	R	R	R	R	R	G	G	G	G	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R								
HENRY STREET FAR LEFT AND FAR RIGHT SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R								
HENRY STREET NEAR RIGHT SIGNAL	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R								
HENRY STREET LEFT MAST ARM SIGNAL	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R									
HENRY STREET NEAR RIGHT AND RIGHT MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R									
PEDESTRIAN SIGNALS CROSSING US 67 ON EAST LEG		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	*P	**FH	H	H	H	H	H	H	H	H	H								
PEDESTRIAN SIGNALS CROSSING HENRY STREET ON NORTH LEG		H	H	H	H	H	H	*P	**FH	H	H	H	H	H	*P	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H								

P = ILLUMINATED PERSON = WALK  
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK  
 H = ILLUMINATED SOLID HAND = DON'T WALK

\* TO APPEAR ONLY UPON PUSHBUTTON ACTUATION  
 \*\* "FH" TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE

PHASES 2 AND 6 SHALL BE PLACED ON RECALL

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	DRAWN -	REVISED -
PLOT SCALE = 2,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/17/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL SEQUENCE OF OPERATION  
FRA CROSSING #294503E & #327936F  
US ROUTE 67 & HENRY STREET (ALTON, IL)**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	10
CONTRACT NO. 76P47			ILLINOIS FED. AID PROJECT NHPP-8KDX(507)	

\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

# RAILROAD PREEMPTION SEQUENCE OF OPERATION

PREEMPTOR  
NUMBER 2

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		5		8		10		13		15							CLEAR TO NORMAL SEQUENCE
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1L	1M	1N	1P	2	3	4	5		
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION NUMBER	1B	2	1D	2	1F	2	1H	2	1M	2	1P	2	3	4	5	<input type="checkbox"/>		
US ROUTE 67 LEFT MAST ARM SIGNAL	E/B R Y ←	R	R	R	R	Y Y ←	R	Y	R	R	R	R	R	R	R	R	G G ←	△
US ROUTE 67 NEAR RIGHT AND RIGHT MAST ARM SIGNALS	E/B	R	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	G	△
US ROUTE 67 LEFT MAST ARM SIGNAL	W/B R Y ←	R	R	Y Y ←	R	R	R	Y	R	R	R	R	R	R	R	R		△
US ROUTE 67 NEAR RIGHT AND RIGHT MAST ARM SIGNALS	W/B	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R		△
HENRY STREET FAR LEFT AND FAR RIGHT SIGNALS	N/B	R	R	R	R	R	R	R	R	G G ←	G G ←	R	R	G G ←	Y	R	R	△
HENRY STREET NEAR RIGHT	N/B	R	R	R	R	R	R	R	R	G	G	R	R	G	Y	R	R	△
HENRY STREET LEFT MAST ARM SIGNAL	S/B	R	R	R	R	R	R	R	R	R	Y Y ←	R	R	R	R	R		△
HENRY STREET NEAR RIGHT AND RIGHT MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R		△
INTERNALLY ILLUMINATED NO LEFT TURN SIGNS	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT		△
INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT		△
PEDESTRIAN SIGNALS CROSSING US 67 ON EAST LEG	H	H	H	H	H	H	H	H	FH	H	H	H	H	H	H	H		△
PEDESTRIAN SIGNALS CROSSING HENRY STREET NORTH LEG	H	H	FH	H	H	H	FH	H	H	H	H	H	H	H	H	H		△

HOLD

- THE RAILROAD PREEMPTION SEQUENCE SHALL BE CAPABLE OF CYCLING BETWEEN PHASES 1+6, 2+6, AND 8 UNTIL PREEMPTION IS TERMINATED
- △ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD INTERVAL 5 IS TERMINATED

P = ILLUMINATED PERSON = WALK  
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK  
 H = ILLUMINATED SOLID HAND = DON'T WALK

- NOTES:
1. ONCE PREEMPTION HAS BEEN CALLED, THE TRACK CLEAR SIGNAL DISPLAY SHALL APPEAR IMMEDIATELY AFTER ALL NECESSARY VEHICULAR CLEARANCES HAVE BEEN PROVIDED.
  2. THE RAILROAD PREEMPTION SEQUENCE OF OPERATION SHALL HAVE PRIORITY OVER ALL OTHER SEQUENCES OF OPERATION.

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\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

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 SPECIAL PROVISION.

AGENCY: ILLINOIS DEPARTMENT OF TRANSPORTATION - DISTRICT 8  
1 EACH CONTROLLER AND CABINET (COMPLETE)

NOTE: ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

**RESTORATION OF WORK AREA:**

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS AND NO EXTRA COMPENSTION SHALL BE ALLOWED. ANY DAMAGE TO TURF AREAS SHALL BE SEEDED IN ACCORDANCE WITH SECTION 252 OF THE STANDARD SPECIFICATIONS.

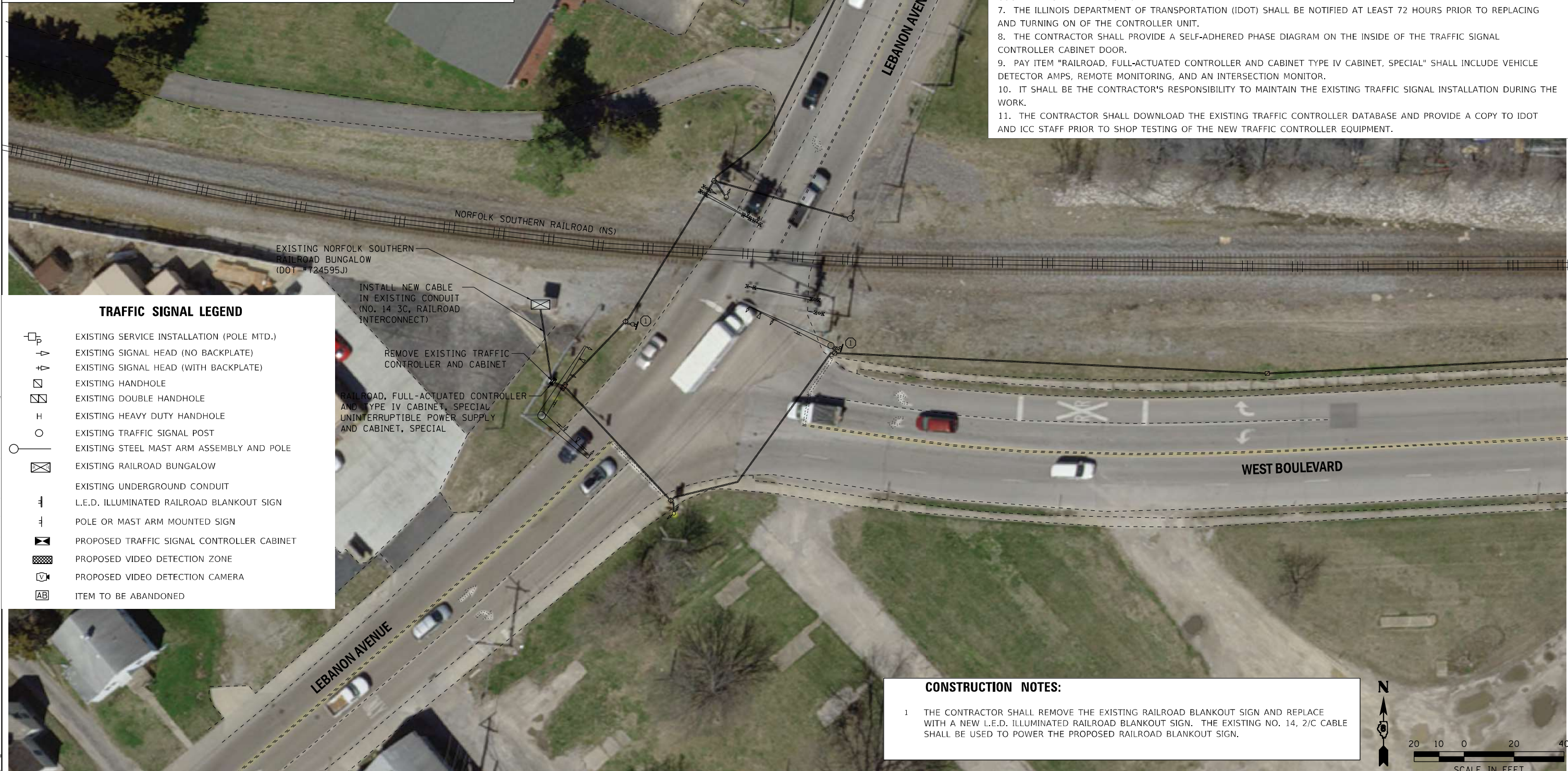
**STAGING OF THE RAILROAD INTERCONNECT WORK:**

THE EXISTING RAILROAD INTERCONNECT WILL BE MAINTAINED THROUGHOUT THE WORK UNTIL A NEW RAILROAD INTERCONNECT CABLE IS INSTALLED FROM THE NEW CONTROLLER TO THE RAILROAD BUNGALOW AS SHOWN.

ANY DAMAGE DONE TO THE EXISTING SIGNAL ITEMS OR APURTENANCES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, PER PER SECTION 895.02 OF THE STANDARD SPECIFICATIONS.

**TRAFFIC SIGNAL GENERAL NOTES**

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123.
3. THE CONTRACTOR SHALL CONTACT THE NORFOLK SOUTHERN (NS) RAILROAD COMPANY AT (478) 832-0958 (JOEL VAN AKKEREN, C&S SUPERVISOR). JOEL.VANAKKEREN@NSCORP.COM
4. THE CONTRACTOR SHALL COORDINATE WITH NORFOLK SOUTHERN (NS) RAILROAD BEFORE STARTING ANY WORK ON UP PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND FOLLOWING CURRENT SPECIFICATIONS FOR PIPELINE OCCUPANCY OF NORFOLK SOUTHERN (NS) RAILROAD COMPANY PROPERTY. (NS DOT #724595J)
5. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES, IDOT, AND NS RAILWAY.
6. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE RAILROAD FORCES. SEE SPECIAL PROVISION "RAILROAD COORDINATION AND FLAGGERS".
7. THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO REPLACING AND TURNING ON OF THE CONTROLLER UNIT.
8. THE CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE TRAFFIC SIGNAL CONTROLLER CABINET DOOR.
9. PAY ITEM "RAILROAD, FULL-ACTUATED CONTROLLER AND CABINET TYPE IV CABINET, SPECIAL" SHALL INCLUDE VEHICLE DETECTOR AMPS, REMOTE MONITORING, AND AN INTERSECTION MONITOR.
10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE EXISTING TRAFFIC SIGNAL INSTALLATION DURING THE WORK.
11. THE CONTRACTOR SHALL DOWNLOAD THE EXISTING TRAFFIC CONTROLLER DATABASE AND PROVIDE A COPY TO IDOT AND ICC STAFF PRIOR TO SHOP TESTING OF THE NEW TRAFFIC CONTROLLER EQUIPMENT.



**TRAFFIC SIGNAL LEGEND**

- P EXISTING SERVICE INSTALLATION (POLE MTD.)
- ▽ EXISTING SIGNAL HEAD (NO BACKPLATE)
- ▽ EXISTING SIGNAL HEAD (WITH BACKPLATE)
- EXISTING HANDHOLE
- EXISTING DOUBLE HANDHOLE
- H EXISTING HEAVY DUTY HANDHOLE
- EXISTING TRAFFIC SIGNAL POST
- EXISTING STEEL MAST ARM ASSEMBLY AND POLE
- EXISTING RAILROAD BUNGALOW
- EXISTING UNDERGROUND CONDUIT
- ⚡ L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN
- ⚡ POLE OR MAST ARM MOUNTED SIGN
- PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET
- ▨ PROPOSED VIDEO DETECTION ZONE
- ◻ PROPOSED VIDEO DETECTION CAMERA
- AB ITEM TO BE ABANDONED

**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL REMOVE THE EXISTING RAILROAD BLANKOUT SIGN AND REPLACE WITH A NEW L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN. THE EXISTING NO. 14, 2/C CABLE SHALL BE USED TO POWER THE PROPOSED RAILROAD BLANKOUT SIGN.



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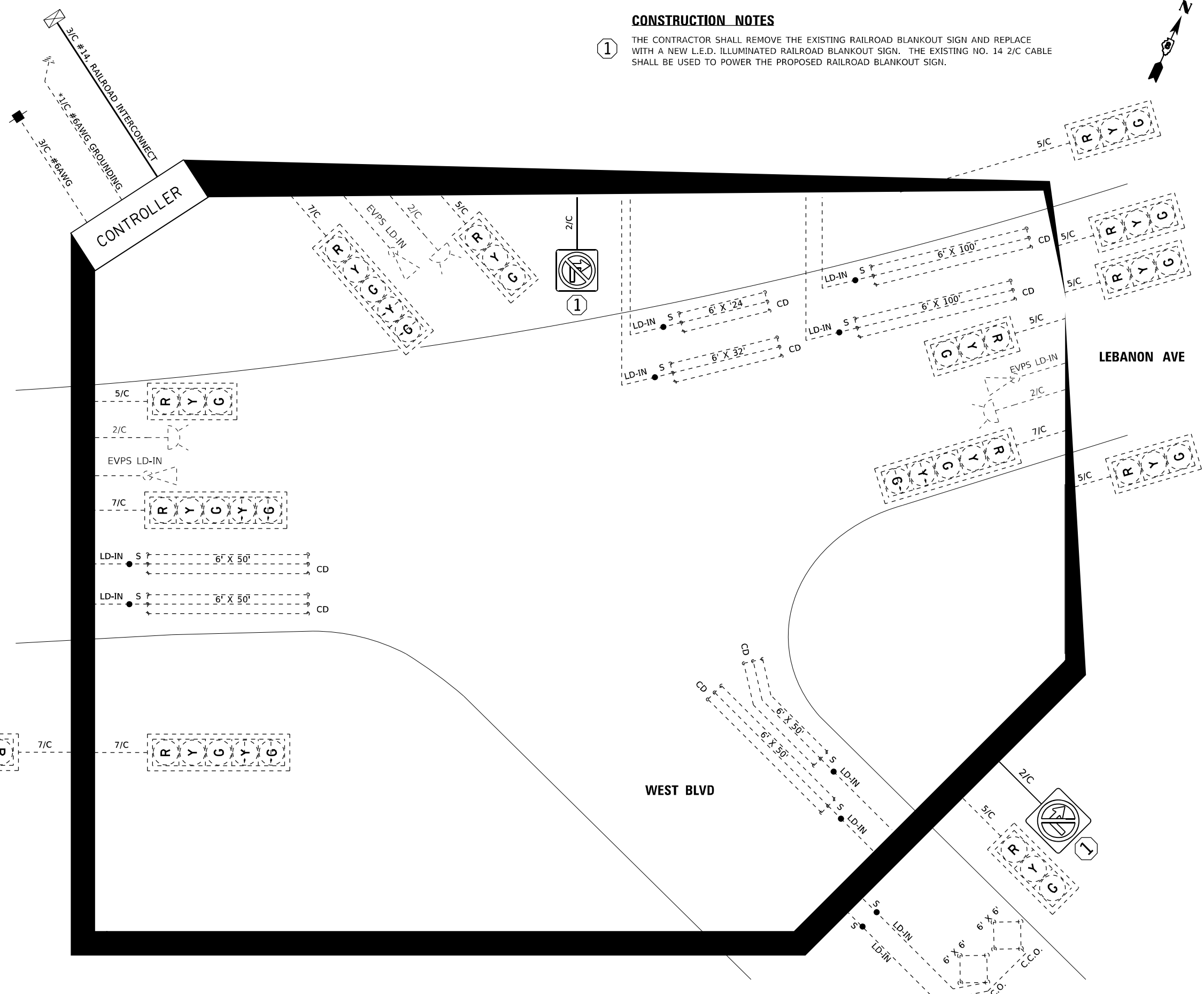
<p><b>FUHRMANN ENGINEERING</b> WWW.FUHRMANN-ENG.COM</p>	USER NAME = bschm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODIFICATION PLAN FRA CROSSING #724595J LEBANON AVE &amp; WEST BLVD (BELLEVILLE, IL)</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000 * / in.	DRAWN -	REVISED -		** RR INTERCONNECT 2021	***	19	12				
PLOT DATE = 3/17/2021	CHECKED -	REVISED -	CONTRACT NO. 76P47									
	DATE -	REVISED -	ILLINOIS FED. AID PROJECT NHPP-8KDX(507)									
					SCALE: 1"=20'	SHEET 1 OF 4 SHEETS	STA. TO STA.	* VARIOUS ** VARIOUS *** MADISON / ST. CLAIR				

**CABLE DIAGRAM LEGEND**

- ELECTRIC CABLE IN CONDUIT
- - - EXISTING ELECTRIC CABLE IN CONDUIT
- S CABLE SPLICE (SEE GENERAL NOTES)
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- CD CALL DELAY (SEE GENERAL NOTES)
- CCO CALL CARRY OVER (SEE GENERAL NOTES)
- EXISTING SERVICE INSTALLATION
- EXISTING ILLUMINATED SIGN
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)

**CONSTRUCTION NOTES**

① THE CONTRACTOR SHALL REMOVE THE EXISTING RAILROAD BLANKOUT SIGN AND REPLACE WITH A NEW L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN. THE EXISTING NO. 14 2/C CABLE SHALL BE USED TO POWER THE PROPOSED RAILROAD BLANKOUT SIGN.



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USER NAME = bschm	DESIGNED -	REVISED -
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PLOT DATE = 3/17/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CABLE DIAGRAM**  
**FRA CROSSING #724595J**  
**LEBANON AVE & WEST BLVD (BELLEVILLE, IL)**

SCALE: NTS    SHEET 2 OF 4 SHEETS    STA.    TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	13
CONTRACT NO. 76P47				
ILLINOIS FED. AID PROJECT NHPP-8KDX(507)				

\* VARIOUS    \*\* VARIOUS    \*\*\* MADISON / ST. CLAIR

# TRAFFIC SIGNAL SEQUENCE OF OPERATION

MOVEMENT					
PHASE		1 + 6	2 + 6	4 + 8	FLASH
INTERVAL		1 2A 2B 3A 3B 3C 3D	4 5A 5B 5C 5D	6 7A 7B 7C 7D	
CHANGE TO		2 + 6	4 + 8*	4 + 8	
LEBANON AVENUE LEFT MAST ARM SIGNAL	N/B	R R R R R R R	G G G Y R	R R R R R	R
LEBANON AVENUE NEAR RIGHT AND RIGHT MAST ARM SIGNAL	N/B	R R R R R R R	$\overrightarrow{G}$ $\overrightarrow{G}$ $\overrightarrow{G}$ $\overrightarrow{Y}$ $\overrightarrow{R}$	$\overrightarrow{R}$ $\overrightarrow{R}$ $\overrightarrow{Y}$ $\overrightarrow{R}$ $\overrightarrow{R}$ $\overrightarrow{G}$ $\overrightarrow{G}$	R
LEBANON AVENUE FAR RIGHT, NEAR RIGHT AND MAST ARM SIGNALS (PRE-SIGNAL)	S/B	G G G Y R R R	G Y R R R	R R R R R	R
LEBANON AVENUE FAR LEFT AND LEFT MAST ARM SIGNALS	S/B	$\overleftarrow{G}$ $\overleftarrow{Y}$ $\overleftarrow{G}$ $\overleftarrow{G}$ $\overleftarrow{Y}$ $\overleftarrow{Y}$ R	G G G Y R	R R R R R	R
LEBANON AVENUE RIGHT MAST ARM SIGNAL	S/B	G G G G G Y R	G G G Y R	R R R R R	R
WEST BOULEVARD LEFT MAST ARM SIGNAL	W/B	R R R R R R R	R R R R R	$\overleftarrow{G}$ $\overleftarrow{Y}$ $\overleftarrow{R}$ $\overleftarrow{Y}$ $\overleftarrow{R}$	R
WEST BOULEVARD NEAR RIGHT AND RIGHT MAST ARM SIGNAL	W/B	R R R R R R R	R R R R R	G Y R Y R	R

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

- PREEMPTOR 3 = PHASES 1 AND 6
- PREEMPTOR 4 = PHASE 2
- PREEMPTOR 5 = PHASES 4 AND 8

\* DURING NORMAL OPERATION, 1+6 WILL NOT CHANGE TO 4+8 WHEN PHASES 2 AND 6 ARE ON RECALL, BUT THESE INTERVALS ARE SHOWN FOR THE PURPOSE OF TRANSITIONING TO AN EMERGENCY VEHICLE PREEMPTION CALL

PHASES 2 AND 6 SHALL BE PLACED ON RECALL

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	DRAWN -	REVISED -	
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PLOT DATE = 3/17/2021	DATE -	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL SEQUENCE OF OPERATION			
FRA CROSSING #724595J			
LEBANON AVENUE & WEST BOULEVARD (BELLEVILLE, IL)			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

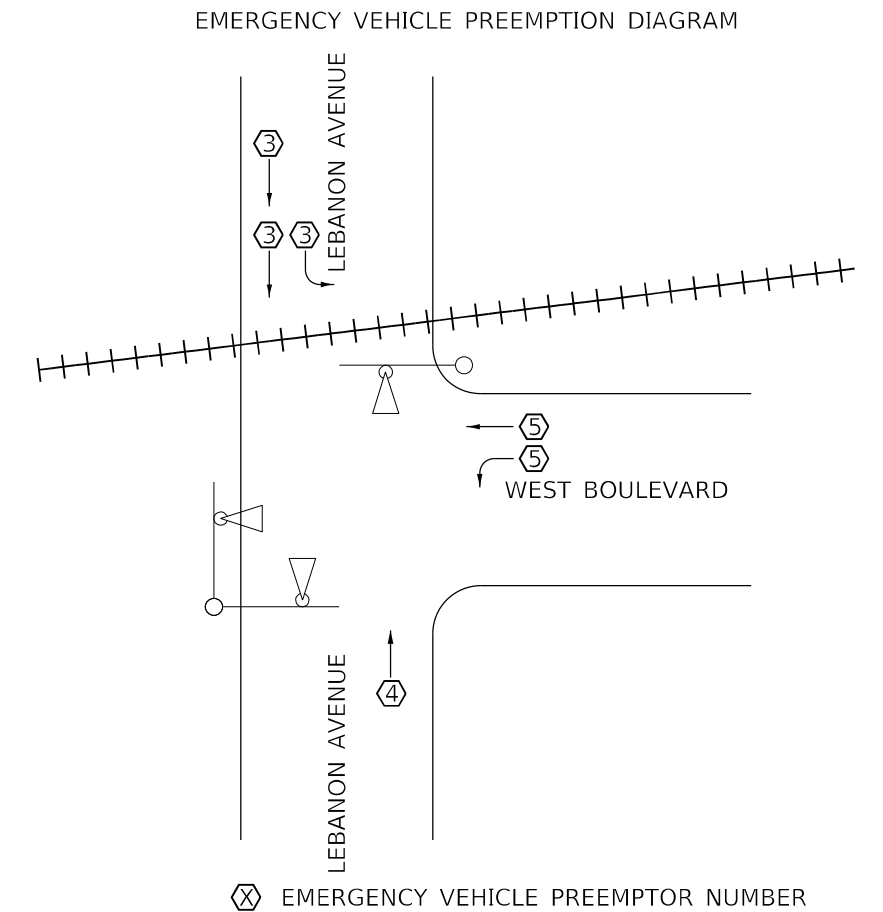
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**	RR INTERCONNECT 2021	***	19	14
				CONTRACT NO. 76P47
ILLINOIS FED. AID PROJECT NHPP-8KDX(507)				

\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

# RAILROAD PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		4		6		PREEMPTOR NUMBER 2					CLEAR TO NORMAL SEQUENCE
	1A	1B	1C	1D	1E	1F	2	3	4	5		
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	2	3	4	5		
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION NUMBER	1B	2	1D	2	1F	2	3	4	5		<input type="checkbox"/>	
LEBANON AVENUE LEFT MAST ARM SIGNAL	N/B	R	R	Y	R	R	R	R	R	R	R	△
LEBANON AVENUE NEAR RIGHT AND RIGHT MAST ARM SIGNAL	N/B	R	R	Y ↓	R	R ↓	R	R	R	R	R ↓	△
LEBANON AVENUE FAR RIGHT, NEAR RIGHT AND MAST ARM SIGNALS (PRE-SIGNAL)	S/B	Y	R	Y	R	R	R	R	R	R	R	△
LEBANON AVENUE FAR LEFT AND LEFT MAST ARM SIGNALS	S/B	G ↓	G ↓	G	G	R	R	G ↓	Y ↓	R	R	△
LEBANON AVENUE RIGHT MAST ARM SIGNAL	S/B	G	G	G	G	R	R	G	Y	R	R	△
WEST BOULEVARD LEFT MAST ARM SIGNAL	W/B	R	R	R	R	Y ↓	R	R	R	R	R ↓	△
WEST BOULEVARD NEAR RIGHT AND RIGHT MAST ARM SIGNAL	W/B	R	R	R	R	Y	R	R	R	R	R	△
INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	△

HOLD



THE RAILROAD PREEMPTION SEQUENCE SHALL HOLD IN PHASES 4 AND OL A UNTIL PREEMPTION IS TERMINATED

△ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD INTERVAL 5 IS TERMINATED

P = ILLUMINATED PERSON = WALK  
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK  
 H = ILLUMINATED SOLID HAND = DON'T WALK

**NOTES:**

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

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\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

**TRAFFIC SIGNAL GENERAL NOTES**

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "J.U.L.I.E.," AT (800) 892-0123.
- THE CONTRACTOR SHALL CONTACT CSX TRANSPORTATION (CSX) AT (800) 232-0144.
- THE CONTRACTOR SHALL COORDINATE WITH CSX TRANSPORTATION (CSX) BEFORE STARTING ANY WORK ON UP PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND FOLLOWING CURRENT SPECIFICATIONS FOR PIPELINE OCCUPANCY OF CSX TRANSPORTATION (CSX) PROPERTY, (CSX DOT #546538E).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANES, LOCAL GOVERNMENT AGENCIES, IDOT, AND CSX RAILWAY.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE RAILROAD FORCES. SEE SPECIAL PROVISION "RAILROAD COORDINATION AND FLAGGERS".
- THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO REPLACING AND TURNING ON OF THE CONTROLLER UNIT.
- THE CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE TRAFFIC SIGNAL CONTROLLER CABINET DOOR.
- PAY ITEM "RAILROAD, FULL-ACTUATE CONTROLLER AND CABINET TYPE IV CABINET, SPECIAL" SHALL INCLUDE VEHICLE DETECTOR AMPS, REMOTE MONITORING, AND AN INTERSECTION MONITOR.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE EXISTING TRAFFIC SIGNAL INSTALLATION DURING THE WORK.
- THE CONTRACTOR SHALL DOWNLOAD THE EXISTING TRAFFIC CONTROLLER DATABASE AND PROVIDE A COPY TO IDOT AND ICC STAFF PRIOR TO SHOP TESTING OF THE NEW TRAFFIC CONTROLLER EQUIPMENT.

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 SPECIAL PROVISION.

AGENCY: ILLINOIS DEPARTMENT OF TRANSPORTATION - DISTRICT 8  
1 EACH CONTROLLER AND CABINET (COMPLETE)

NOTE: ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE 'ECONOLITE'.

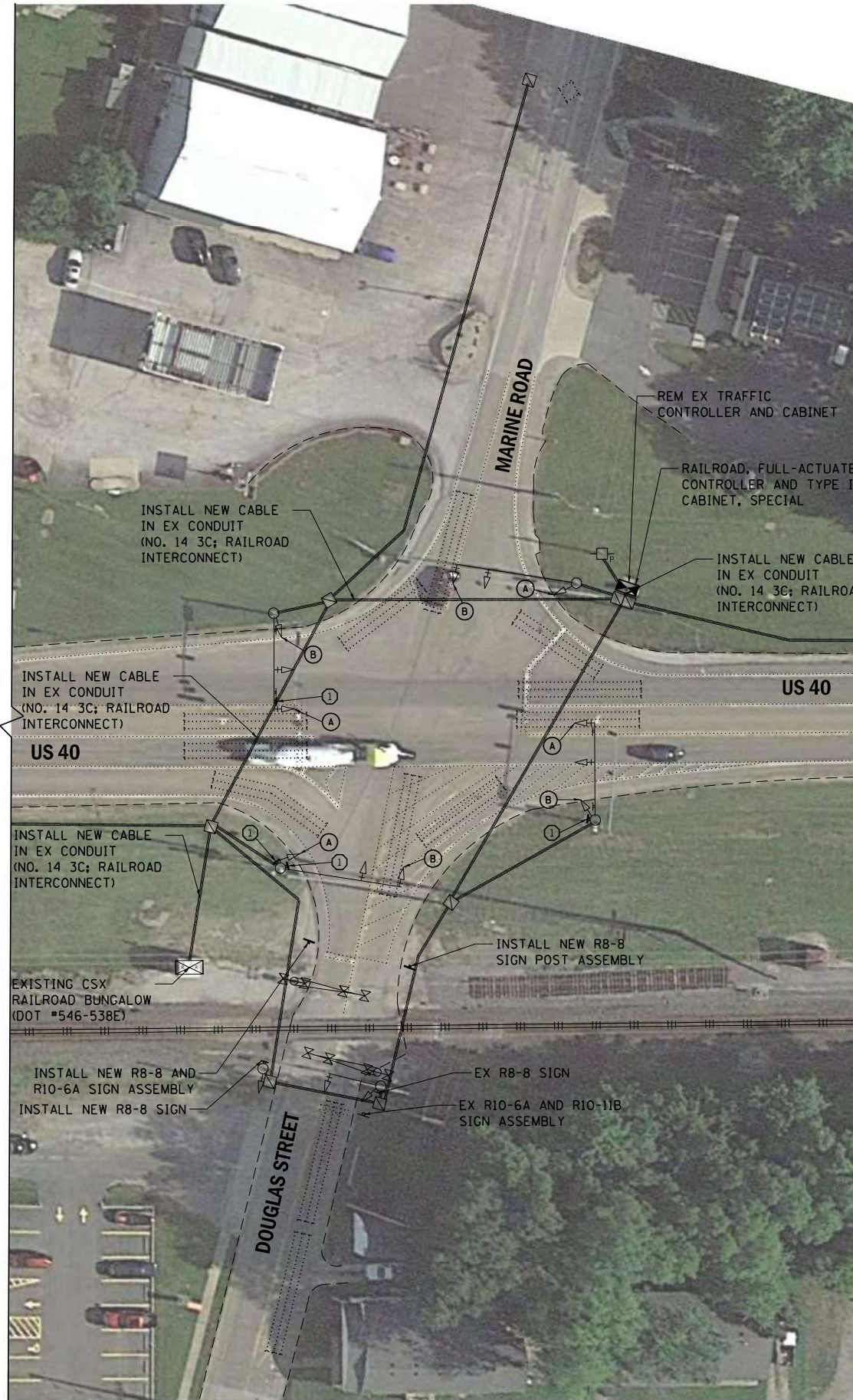
RESTORATION OF WORK AREA:  
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS AND NO EXTRA COMPENSTAIN SHALL BE ALLOWED. ANY DAMAGE TO TURF AREAS SHALL BE SEEDED IN ACCORDANCE WITH SECTION 252 OF THE STANDARD SPECIFICATIONS.

STAGING OF THE RAILROAD INTERCONNECT WORK:  
THE EXISTING RAILROAD INTERCONNECT WILL BE MAINTAINED THROUGHOUT THE WORK UNTIL A NEW RAILROAD INTERCONNECT CABLE IS INSTALLED FROM THE NEW CONTROLLER TO THE RAILROAD BUNGALOW AS SHOWN.

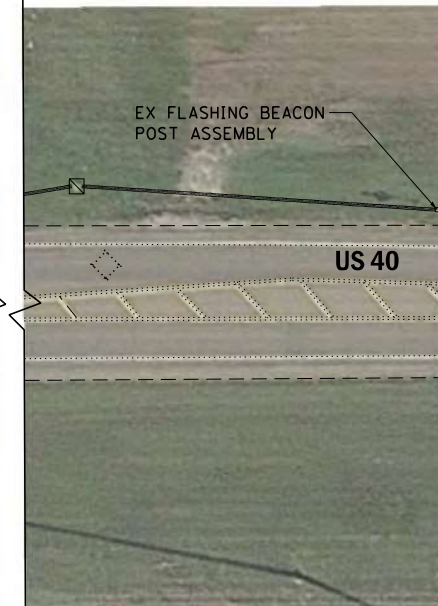
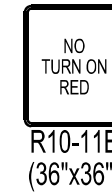
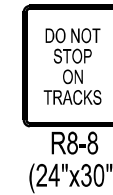
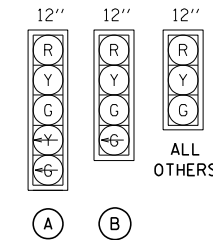
ANY DAMAGE DONE TO THE EXISTING SIGNAL ITEMS OR APURTENANCES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, PER PER SECTION 895.02 OF THE STANDARD SPECIFICATIONS.

**CONSTRUCTION NOTES:**

- THE CONTRACTOR SHALL REMOVE THE EXISTING RAILROAD BLANKOUT SIGN AND REPLACE WITH A NEW L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN. THE EXISTING NO. 14, 2/C CABLE SHALL BE USED TO POWER THE PROPOSED RAILROAD BLANKOUT SIGN.



**TRAFFIC SIGNAL FACES**



**TRAFFIC SIGNAL LEGEND**

	EXISTING SERVICE INSTALLATION (POLE MTD.)
	EXISTING SIGNAL HEAD (NO BACKPLATE)
	EXISTING SIGNAL HEAD (WITH BACKPLATE)
	EXISTING HANDHOLE
	EXISTING DOUBLE HANDHOLE
	EXISTING HEAVY DUTY HANDHOLE
	EXISTING TRAFFIC SIGNAL POST
	EXISTING STEEL MAST ARM ASSEMBLY AND POLE
	EXISTING RAILROAD BUNGALOW
	EXISTING UNDERGROUND CONDUIT
	L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN
	POLE OR MAST ARM MOUNTED SIGN
	PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET
	EXISTING LOOP DETECTION ZONE

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PLOT SCALE = 40.0000 1/ in.	DRAWN -	REVISED -
PLOT DATE = 3/16/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC SIGNAL MODIFICATION PLAN**  
**CSX CROSSING #546538E**  
**US 40 & DOUGLAS ST./MARINE RD. (ST. JACOB,IL)**

SCALE: 1"= 20' SHEET 1 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	16
CONTRACT NO. 76P47				
ILLINOIS FED. AID PROJECT NHPP-8KDX(507)				

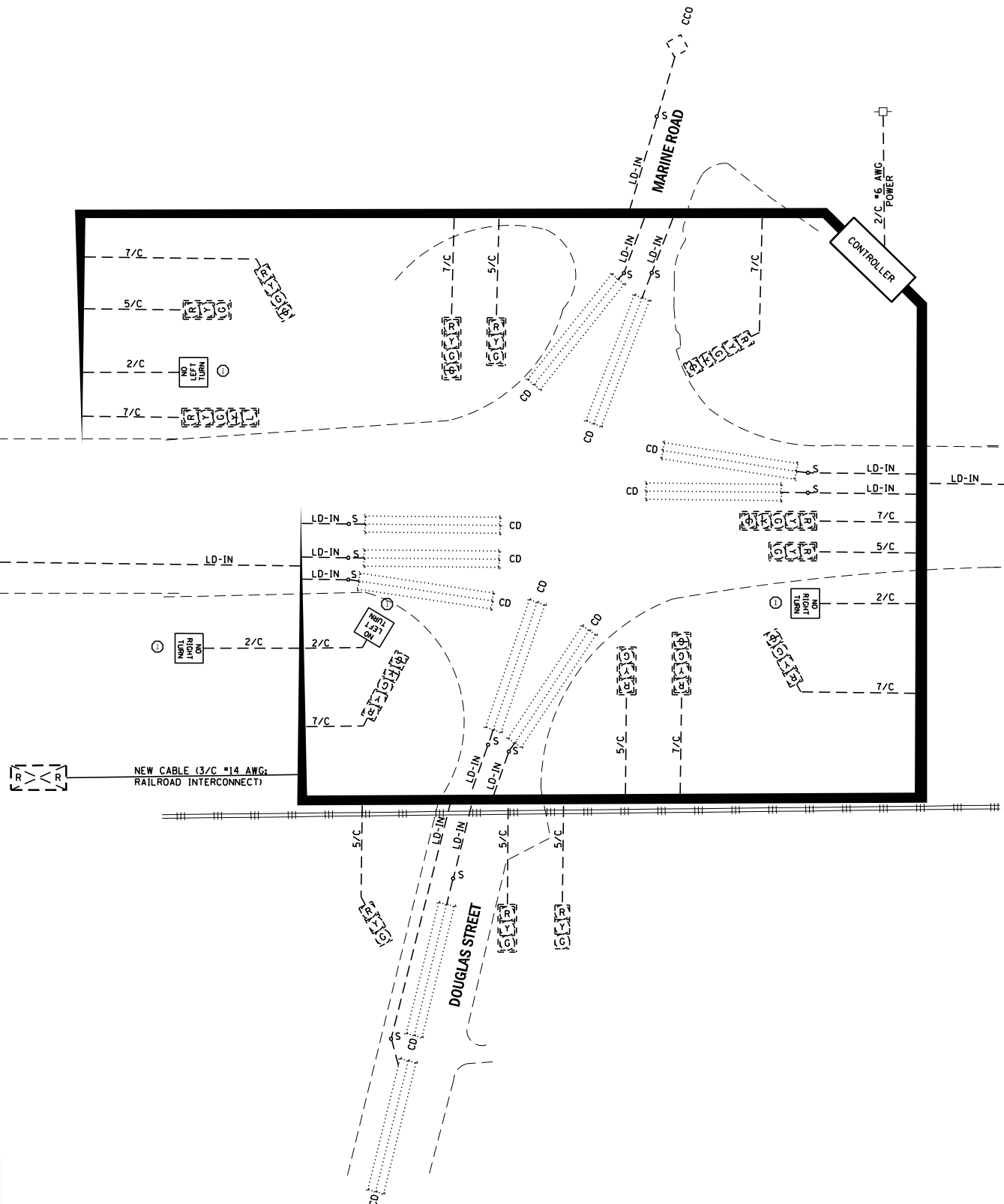
\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR



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US 40

CCO



US 40

CCO

**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL REMOVE THE EXISTING RAILROAD BLANKOUT SIGN AND REPLACE WITH A NEW L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN. THE EXISTING NO. 14, 2/C CABLE SHALL BE USED TO POWER THE PROPOSED RAILROAD BLANKOUT SIGN.

**TRAFFIC SIGNAL LEGEND**

- EXISTING SERVICE INSTALLATION (POLE MTD.)
- 2/C** INDICATES NUMBER OF CONDUCTORS IN CABLE
- CD** CALL DELAY (SEE GENERAL NOTES)
- LD-IN** ELECTRIC CABLE LEAD-IN 1 PAIR
- \*6** INDICATES AMERICAN WIRE GAUGE (AWG) SIZE, 6 CONDUCTORS
- PROPOSED SIGNAL CABLE
- EXISTING SIGNAL CABLE
- EXISTING LOOP DETECTION ZONE
- PROPOSED L.E.D. ILLUMINATED RAILROAD BLANKOUT SIGN



USER NAME = SAZebari	DESIGNED -	REVISED -
PLOT SCALE = 40.0000 1/ in.	DRAWN -	REVISED -
PLOT DATE = 3/16/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION


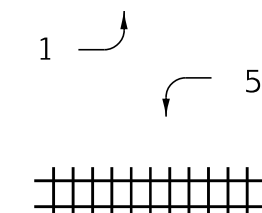
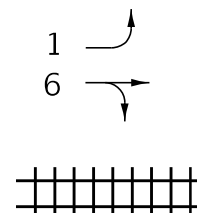
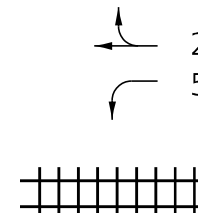
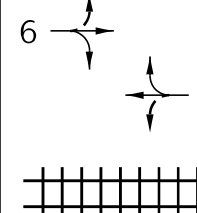
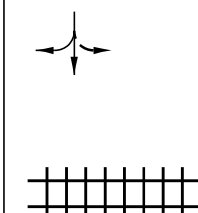
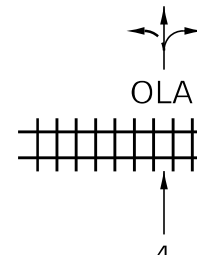
**CABLE DIAGRAM**  
**CSX CROSSING #546538E**  
**US 40 & DOUGLAS ST./MARINE RD. (ST. JACOB, IL)**

SCALE: 1" = 20' SHEET 2 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	17
			CONTRACT NO. 76P47	
			ILLINOIS FED. AID PROJECT NHPP-8KDX(507)	

\* VARIOUS \*\* VARIOUS \*\*\* MADISON / ST. CLAIR

# TRAFFIC SIGNAL SEQUENCE OF OPERATION

 MOVEMENT							F L A S H																		
PHASE	1 + 5							1 + 6			2 + 5			2 + 6			3			4 + OLA					
INTERVAL	1	2A	2B	3A	3B	4A	4B	5	6A	6B	7	8A	8B	9	10A	10B	11	12A	12B	13	14A	14B	14C	14D	
CHANGE TO	/	1 + 6			2 + 5		2 + 6		/	2 + 6		/	2 + 6		/	3 4		/	1 + 5 1 + 6 2 + 5 2 + 6 4		/	1 + 5 1 + 6 2 + 5 2 + 6			
US 40 LEFT MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	R	R	G	G	G	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	
US 40 RIGHT MAST ARM	E/B	R	R	R	R	R	R	G	G	G	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	
US 40 LEFT MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	
US 40 RIGHT MAST ARM	W/B	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	
MARINE ROAD MAST ARM SIGNAL (4-SEC HEAD)	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R		
MARINE ROAD MAST ARM SIGNAL (3-SEC HEAD)	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R		
DOUGLAS STREET MAST ARM SIGNALS SOUTH OF RR TRACKS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	
DOUGLAS STREET MAST ARM SIGNALS NORTH OF RR TRACKS (4-SEC HEAD)	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	
DOUGLAS STREET MAST ARM SIGNALS NORTH OF RR TRACKS (3-SEC HEAD)	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	

NOTES:

- PHASES 2 AND 6 SHALL BE PLACED ON RECALL
- OVERLAP A INCLUDES PHASES 4 (NB) AND 9 (NB, ONLY USED IN PREEMPTION AS TRACK CLEARANCE PHASE)

MODEL Sheet 3  
FILE NAME: S:\projects\2019\_P\03\ctv\018\_Use\_41B\_Folcwr\_Version\_0n\_X.dwg  
19-00321E - IDOT DB SignalITS On-calling #415rev05.dgn



USER NAME = SAJzebari	DESIGNED -	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/16/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL SEQUENCE OF OPERATION  
CSX CROSSING #546538E  
US 40 & DOUGLAS ST./MARINE RD. (ST. JACOB, IL)**

SCALE: 1" = 20'    SHEET 3 OF 4 SHEETS    STA.    TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	18
CONTRACT NO. 76P47			ILLINOIS   FED. AID PROJECT   NHPP-8KDX(507)	

\* VARIOUS    \*\* VARIOUS    \*\*\* MADISON / ST. CLAIR

# RAILROAD PREEMPTION SEQUENCE OF OPERATION

PREEMPTOR  
NUMBER 2

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		5		7		9		11		13							CLEAR TO NORMAL SEQUENCE
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1I	1J	1K	1L	2	3	4	5		
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION NUMBER	1B	2	1D	2	1F	2	1H	2	1J	2	1L	2	3	4	5	<input type="checkbox"/>		
US 40 LEFT MAST ARM AND FAR LEFT SIGNALS E/B	R Y ←	R	Y Y ←	R	R	R	Y	R	R	R	R	R	R	R	R	G	△	
US 40 RIGHT MAST ARM SIGNALS E/B	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	G	△
US 40 LEFT MAST ARM AND FAR LEFT SIGNALS W/B	R Y ←	R	R	R	Y Y ←	R	Y	R	R	R	R	R	R	R	R	R	G	△
US 40 RIGHT MAST ARM SIGNALS W/B	R	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R	G	△
MARINE ROAD MAST ARM SIGNAL (4-SEC HEAD) S/B	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	△
MARINE ROAD MAST ARM SIGNAL (3-SEC HEAD) S/B	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	△
DOUGLAS STREET MAST ARM SIGNAL SOUTH OF RR TRACKS (PRE-SIGNALS) N/B	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	△
DOUGLAS STREET MAST ARM SIGNAL NORTH OF RR TRACKS (4-SEC HEAD) N/B	R	R	R	R	R	R	R	R	R	R	G ←	G ←	G ←	Y	R	R	△	
DOUGLAS STREET MAST ARM SIGNAL NORTH OF RR TRACKS (3-SEC HEAD) N/B	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	R	△	
INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	△
INTERNALLY ILLUMINATED NO LEFT TURN SIGNS	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	△

HOLD

- THE RAILROAD PREEMPTION SEQUENCE SHALL BE CAPABLE OF CYCLING BETWEEN PHASES 1, 2, AND 6 UNTIL PREEMPTION IS TERMINATED
- △ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION 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. THE RAILROAD PREEMPTION SEQUENCE OF OPERATION SHALL HAVE PRIORITY OVER ALL OTHER SEQUENCES OF OPERATION.

MODEL Sheet 4  
FILE NAME: S:\projects\2019 Projects\018 Use 418 Folder Version on X drive - 418-003721E - IDOT DB Signal\15 On-civil\NO #418\seqs.dgn



USER NAME = SAJzebari	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/16/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**RAILROAD PREEMPTION SEQUENCE OF OPERATION  
CSX CROSSING #546538E  
US 40 & DOUGLAS ST./MARINE RD. (ST. JACOB, IL)**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	RR INTERCONNECT 2021	***	19	19
			CONTRACT NO. 76P47	
			ILLINOIS FED. AID PROJECT NHPP-8KDX(507)	

SCALE: 1" = 20'    SHEET 4 OF 4 SHEETS    STA.    TO STA.

\* VARIOUS    \*\* VARIOUS    \*\*\* MADISON / ST. CLAIR