

TRAFFIC SIGNAL LEGEND

- CONTROLLER CABINET
- GROUND MOUNT SERVICE CABINET
- STEEL MAST ARM ASSEMBLY AND POLE
- SIGNAL HEAD WITH BACKPLATE
- HYBRID VIDEO/RADAR DETECTION UNIT
- VIDEO DETECTION UNIT
- HANDHOLE
- PROPOSED CONDUIT
- RL RELOCATE ITEM
- EXISTING UNDERGROUND CONDUIT
- EXISTING CONTROLLER CABINET
- EXITING HANDHOLE
- A ABANDON ITEM
- RMF STEEL MAST ARM POLE AND FOUNDATION REMOVED
- RPF SIGNAL POST AND FOUNDATION REMOVED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RETURNED TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION. THIS WORK SHALL BE PAID FOR UNDER "REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- | | | |
|---|------|----------------------------------|
| 1 | EACH | TRAFFIC SIGNAL CONTROLLER |
| 4 | EACH | STEEL MAST ARM ASSEMBLY AND POLE |
| 5 | EACH | 3-SECTION SIGNAL HEAD |

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- | | | |
|---|------|-----------------------------|
| 1 | EACH | TRAFFIC SIGNAL CABINET |
| 1 | EACH | TRAFFIC SIGNAL POST |
| 1 | LSUM | TRAFFIC SIGNAL CABLING |
| 1 | EACH | WIRELESS INTERCONNECT RADIO |
| 1 | EACH | RADIO ANTENNA |

RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED LOCATION. THIS WORK SHALL BE PAID FOR UNDER "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- | | | |
|---|------|--------------------------------------|
| 6 | EACH | 3-SECTION SIGNAL HEAD WITH BACKPLATE |
|---|------|--------------------------------------|

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USER NAME	= bfunk
PLOT SCALE	= 100,0000 ' / in.
PLOT DATE	= 6/9/2025

DESIGNED	- BF
DRAWN	- BF
CHECKED	- ASG
DATE	- 6/9/25

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

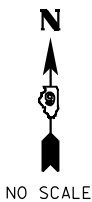
TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 37 AND BOULEVARD STREET

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2887	D9 TRAFFIC SIGNAL 2021-3	WILLIAMSON	39	15
CONTRACT NO. 78916				

ILLINOIS FED. AID PROJECT

REVISED SHEET 7-11-2025

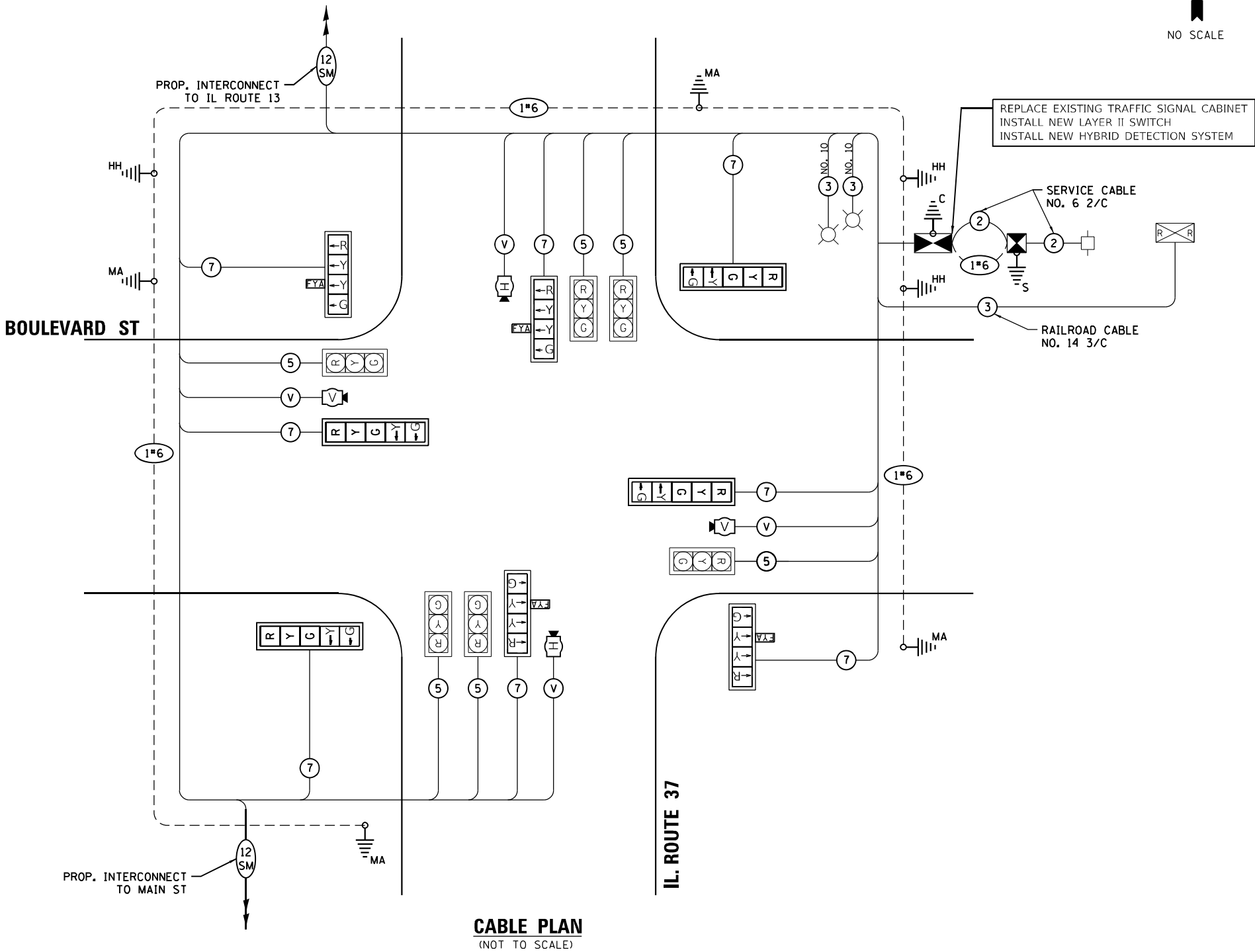


TRAFFIC SIGNAL LEGEND

- PROP. HYBRID VIDEO/RADAR DETECTION UNIT
- PROP. VIDEO DETECTION UNIT
- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. GROUND MOUNT SERVICE
- PROP. FIBER OPTIC CABLE
- PROP. NO. OF CONDUCTORS IN CABLE
- PROP. VENDOR SUPPLIED CABLE
- PROP. 12" SIGNAL HEAD
- PROP. FLASHING YELLOW ARROW
- PROP. TERMINAL BLOCK
- PROP. GROUND
- EX. NO. OF CONDUCTORS IN CABLE
- EX. 12" SIGNAL HEAD
- EX. LUMINAIRE
- EX. PEDESTRIAN PUSH BUTTON
- EX. PEDESTRIAN SIGNAL HEAD

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	80
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	245
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	187
HANDHOLE	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1274
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1226
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	189
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	78
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	454
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	3
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	50.5
DRILL EXISTING FOUNDATION	EACH	3
DRILL EXISTING HANDHOLE	EACH	5
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	8
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1965
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	1
CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5
ETHERNET SWITCH	EACH	1
VIDEO VEHICLE DETECTION SYSTEM	EACH	1



REVISD SHEET 7-11-2025



USER NAME = bfunck	DESIGNED - BF	REVISED -
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PLOT DATE = 6/9/2025	CHECKED - ASG	REVISED -
	DATE - 6/9/25	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 37 AND BOULEVARD STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2887	D9 TRAFFIC SIGNAL 2021-3	WILLIAMSON	39	16
CONTRACT NO. 78916				
ILLINOIS FED. AID PROJECT				

PROPOSED SEQUENCE OF OPERATION

MOVEMENT																																																																									FLASH
PHASE	1 + 5								1 + 6								2 + 5								2 + 6								3 + 7								3 + 8								4 + 7								4 + 8																
INTERVAL	1	2A	2B	3A	3B	4A	4B	5	6A	6B	7	8A	8B	9	10A	10B	11	12A	12B	13A	13B	14A	14B	15	16A	16B	17A	17B	18	19A	19B	20A	20B	21	22A	22B																																					
CHANGE TO		1 + 6		2 + 5		2 + 6			2 + 6		2 + 6			3 + 7 3 + 8 4 + 7 4 + 8			3 + 8		4 + 7		4 + 8 1 + 5 1 + 6 2 + 5 2 + 6			4+8		1 + 5 1 + 6 2 + 5 2 + 6			4+8		1 + 5 1 + 6 2 + 5 2 + 6			1 + 5 1 + 6 2 + 5 2 + 6																																							
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	NB	<u>G</u>	<u>Y</u>	<u>R</u>	<u>G</u>	<u>G</u>	<u>Y</u>	<u>R</u>	<u>FYA</u>	<u>FYA</u>	<u>FYA</u>	<u>G</u>	<u>Y</u>	<u>R</u>	<u>FYA</u>	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>																																				
IL 37 MIDDLE AND RIGHT MAST ARM SIGNALS	NB	R	R	R	R	R	R	R	R	R	R	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																																			
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	SB	<u>G</u>	<u>G</u>	<u>G</u>	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>G</u>	<u>Y</u>	<u>R</u>	<u>FYA</u>	<u>FYA</u>	<u>FYA</u>	<u>FYA</u>	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>																																				
IL 37 MIDDLE AND RIGHT MAST ARM SIGNALS	SB	R	R	R	R	R	R	R	G	G	G	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R																																			
BOULEVARD ST FAR LEFT AND LEFT MAST ARM SIGNALS	WB	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	<u>G</u>	<u>G</u>	<u>G</u>	<u>Y</u>	R	<u>Y</u>	R	<u>G</u>	<u>Y</u>	R	Y	R	R	R	R	R	R	R	G	Y	R	R																																			
BOULEVARD ST MIDDLE AND RIGHT MAST ARM SIGNALS	WB	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	G	Y	R	R																																			
BOULEVARD ST FAR LEFT AND LEFT MAST ARM SIGNALS	EB	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	<u>G</u>	<u>Y</u>	R	<u>G</u>	<u>G</u>	<u>Y</u>	R	R	R	R	R	<u>G</u>	<u>Y</u>	R	Y	R	G	Y	R	R	R																																				
BOULEVARD ST MIDDLE AND RIGHT MAST ARM SIGNALS	EB	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	G	G	G	Y	R	G	Y	R	R	R																																				

PHASE 2 + 6 SHALL BE PLACED ON RECALL

PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1		5		7		9		11		15	18		21						
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1B	2	1D	2	1F	2	1H	2	1K	2	2	1N	2	1Q	2	3	4	5		
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	NB	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	FYA	△
IL 37 MIDDLE AND RIGHT MAST ARM SIGNALS	NB	R	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	G	△
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	SB	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	△
IL 37 MIDDLE AND RIGHT MAST ARM SIGNALS	SB	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	G	△
BOULEVARD ST FAR LEFT AND LEFT MAST ARM SIGNALS	WB	R	R	R	R	R	R	R	R	<u>G</u>	<u>G</u>	<u>G</u>	R	R	G	G	<u>G</u>	Y	R	R	△
BOULEVARD ST MIDDLE AND RIGHT MAST ARM SIGNALS	WB	R	R	R	R	R	R	R	R	R	R	G	R	R	G	G	G	Y	R	R	△
BOULEVARD ST FAR LEFT AND LEFT MAST ARM SIGNALS	EB	R	R	R	R	R	R	R	R	<u>Y</u>	R	R	Y	R	Y	R	R	R	R	R	△
BOULEVARD ST MIDDLE AND RIGHT MAST ARM SIGNALS	EB	R	R	R	R	R	R	R	R	R	R	R	Y	R	Y	R	R	R	R	R	△
△ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE PROPER																				HOLD	

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

1 REVISED SHEET 7-11-2025



USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100,000 ' / in.	CHECKED - ASG	REVISED -
PLOT DATE = 6/18/2025	DATE - 6/18/25	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAILROAD PREEMPTION SEQUENCE OF OPERATIONS IL ROUTE 37 AND BOULEVARD STREET			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2887	D9 TRAFFIC SIGNAL 2021-3	WILLIAMSON	39	17
CONTRACT NO. 78916				
ILLINOIS FED. AID PROJECT				

MODEL Default
FILE NAME C:\Sharepoint\ITERIS INC\Systems - Midwest - Chicago Construction\DOT_PTB_196-063_D9 ITS\WG 2 - 11324 - IL Route 13 Interconnect\CADD\Sheet Files\0911324_ILRoute13_Seq_SHT_IL 37 & Boulevard.dgn

TRAFFIC SIGNAL LEGEND

	CONTROLLER CABINET
	STEEL MAST ARM ASSEMBLY AND POLE
	SIGNAL HEAD WITH BACKPLATE
	HYBRID VIDEO/RADAR DETECTION UNIT
	VIDEO DETECTION UNIT
	HANDHOLE
	HEAVY-DUTY HANDHOLE
	PROPOSED CONDUIT
	RELOCATE ITEM
	EXISTING UNDERGROUND CONDUIT
	EXISTING CONTROLLER CABINET
	EXISTING HANDHOLE
	ABANDON ITEM
	STEEL MAST ARM POLE AND FOUNDATION REMOVED
	SIGNAL POST AND FOUNDATION REMOVED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RETURNED TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION, THIS WORK SHALL BE PAID FOR UNDER "REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT".

1	EACH	TRAFFIC SIGNAL CONTROLLER
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE
2	EACH	5-SECTION SIGNAL HEAD WITH BACKPLATE
2	EACH	5-SECTION SIGNAL HEAD
1	EACH	RADAR DETECTION SYSTEM

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THIER OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	TRAFFIC SIGNAL CABINET
1	LSUM	TRAFFIC SIGNAL CABLING
1	EACH	RADIO ANTENNA

RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT

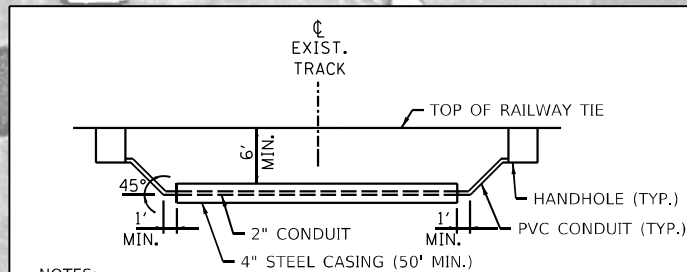
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED LOCATION, THIS WORK SHALL BE PAID FOR UNDER "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".

2	EACH	3-SECTION SIGNAL HEAD WITH BACKPLATE
2	EACH	5-SECTION SIGNAL HEAD WITH BACKPLATE
3	EACH	1-SECTION PEDESTRIAN SIGNAL HEAD
2	EACH	PEDESTRIAN PUSH BUTTON

REPLACE EXISTING TRAFFIC SIGNAL CABINET
INSTALL NEW LAYER II SWITCH
INSTALL NEW HYBRID DETECTION SYSTEM

NOTES:

- RR INTERCONNECT CONDUIT SHALL TERMINATE AT THE JUNCTION BOX (PROVIDED BY RAILROAD) ATTACHED TO THE RAILROAD BUNGALOW.
- ANY EXISTING TRAFFIC SIGNAL OR DETECTION CABLE THAT INTERFERES WITH THE PROPOSED WORK SHALL BE REMOVED AND DISCARDED. ANY EXISTING CABLE THAT DOES NOT INTERFERE WITH THE PROPOSED WORK MAY BE ABANDONED.
- CONTRACTOR SHALL VERIFY PROPER CAMERA PLACEMENT WITH VIDEO DETECTION VENDOR PRIOR TO INSTALLATION.
- VIDEO DETECTION ZONE LAYOUT SHALL BE DRAWN TO PROVIDE FULL SIGNAL PERFORMANCE MEASURES (SPM) CAPABILITIES.
- CONDUIT LENGTH DIMENSIONS SHOWN IN CALLOUT ARE CORRECT BASED ON FIELD MEASUREMENTS. LINE LENGTHS MAY NOT BE ACCURATE.
- WHEN A GRADE CROSSING EXISTS WITHIN OR IN THE VICINITY OF A TEMPORARY TRAFFIC CONTROL ZONE, LANE RESTRICTIONS, FLAGGING, OR OTHER OPERATIONS SHALL NOT BE PERFORMED IN A MANNER THAT WOULD CAUSE VEHICLES TO STOP ON THE TRACKS UNLESS A FLAGGER IS PROVIDED AT THE GRADE CROSSING TO PREVENT VEHICLES STOPPING ON THE TRACKS.
- THE RAILROAD INTERCONNECT WIRE SHALL BE INSTALLED IN A 2" CONDUIT UNDER THE RAILROAD GRADE AT A MIN. DEPTH OF 6' ENCASED IN 4" STEEL PIPE (SEE DETAIL "A").
- CONTRACTOR SHALL CONTACT IDOT GEOTECHNICAL UNIT PRIOR TO DRILLING FOR MAST ARM FOUNDATION TO VERIFY SOIL CONDITIONS IN ALL FOUR QUADRANTS.
- THERE IS A LARGE BOX CULVERT THAT RUNS BENEATH THE INTERSECTION. WHEN IN CONFLICT WITH PROPOSED CONDUIT, CONDUIT SHALL BE PLACED ABOVE THE BOX CULVERT.



- NOTES:
- ALL HORIZONTAL DISTANCES TO BE MEASURED AT RIGHT ANGLES FROM THE CENTERLINE OF TRACK.
 - RAILROAD SIGNAL REPRESENTATIVE MUST BE PRESENT DURING INSTALLATION IF RAILROAD SIGNALS ARE IN THE VICINITY OF THE CROSSING.

DETAIL "A"

NOT TO SCALE

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USER NAME	= bfunck
DESIGNED	- BF
DRAWN	- BF
CHECKED	- ASG
DATE	- 6/18/25

REVISED	-
REVISED	-
REVISED	-
REVISED	-

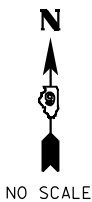
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN IL ROUTE 37 AND MAIN STREET

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2887	D9 TRAFFIC SIGNAL 2021-3	WILLIAMSON	39	18
CONTRACT NO. 78916				

ILLINOIS FED. AID PROJECT
REVISED SHEET 7-11-2025



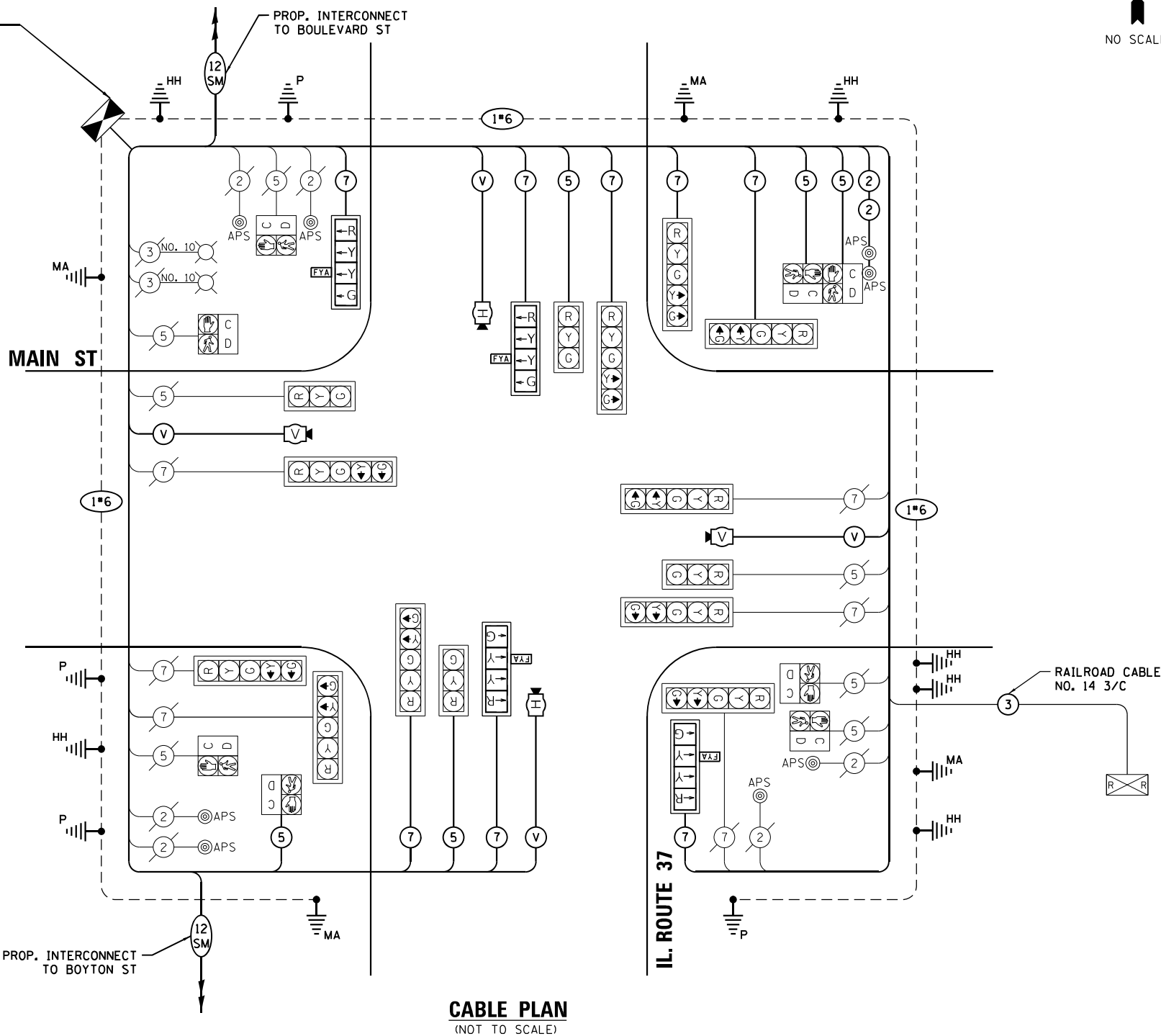
TRAFFIC SIGNAL LEGEND

	PROP. HYBRID VIDEO/RADAR DETECTION UNIT
	PROP. VIDEO DETECTION UNIT
	PROP. TRAFFIC SIGNAL CONTROLLER
	PROP. GROUND MOUNT SERVICE
	PROP. FIBER OPTIC CABLE
	PROP. NO. OF CONDUCTORS IN CABLE
	PROP. VENDOR SUPPLIED CABLE
	PROP. 12" SIGNAL HEAD
	PROP. FLASHING YELLOW ARROW
	PROP. TERMINAL BLOCK
	PROP. GROUND
	EX. NO. OF CONDUCTORS IN CABLE
	EX. 12" SIGNAL HEAD
	EX. LUMINAIRE
	EX. PEDESTRIAN PUSH BUTTON
	EX. PEDESTRIAN SIGNAL HEAD

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	111
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	297
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	38
HANDHOLE	EACH	1
HEAVY-DUTY HANDHOLE	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	269
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	807
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1445
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	528
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	728
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	13.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	19
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	4
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1947
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	1
ETHERNET SWITCH	EACH	1
VIDEO VEHICLE DETECTION SYSTEM	EACH	1
STEEL CASINGS 4"	FOOT	50

REPLACE EXISTING TRAFFIC SIGNAL CABINET
INSTALL NEW LAYER II SWITCH
INSTALL NEW HYBRID DETECTION SYSTEM



CABLE PLAN
(NOT TO SCALE)

1 REVISED SHEET 7-11-2025

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DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 37 AND MAIN STREET

SCALE: SHEET OF SHEETS STA. TO STA.

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2887	D9 TRAFFIC SIGNAL 2021-3	WILLIAMSON	39	19
CONTRACT NO. 78916				
ILLINOIS FED. AID PROJECT				

PROPOSED SEQUENCE OF OPERATION

MOVEMENT																																												F L A S H						
PHASE		1 + 5								1 + 6				2 + 5				2 + 6				3 + 7							3 + 8							4 + 7				4 + 8										
INTERVAL		1	2A	2B	3A	3B	4A	4B	5	6	7A	7B	8	9	10A	10B	11	12	13A	13B	14	15A	15B	16A	16B	17A	17B	18	19	20A	20B	21A	21B	22	23	24A	24B	25A	25B	26	27	28A	28B							
CHANGE TO			1 + 6			2 + 5		2 + 6		Ø	Ø	2 + 6		Ø	Ø	2 + 6		Ø	Ø	3 + 7 3 + 8 4 + 7 4 + 8		3 + 8			4 + 7		4 + 8 4 + 8 1 + 5 1 + 6 2 + 5 2 + 6		Ø	Ø	4+8		1 + 5 1 + 6 2 + 5 2 + 6		Ø	Ø	4+8		1 + 5 1 + 6 2 + 5 2 + 6		Ø	Ø	1 + 5 1 + 6 2 + 5 2 + 6							
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS		NB	<u>G</u>	<u>Y</u>	<u>R</u>	<u>G</u>	<u>G</u>	<u>Y</u>	<u>R</u>	<u>FYA</u>	<u>FYA</u>	<u>FYA</u>	<u>FYA</u>	<u>G</u>	<u>G</u>	<u>Y</u>	<u>R</u>	<u>FYA</u>	<u>FYA</u>	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>			
IL 37 MIDDLE MAST ARM SIGNALS		NB	R	R	R	R	R	R	R	R	R	R	R	G	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	
IL 37 FAR RIGHT AND RIGHT MAST ARM SIGNALS		NB	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	G	Y	R	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS		SB	<u>G</u>	<u>G</u>	<u>G</u>	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>G</u>	<u>G</u>	<u>Y</u>	<u>R</u>	<u>FYA</u>	<u>FYA</u>	<u>FYA</u>	<u>FYA</u>	<u>FYA</u>	<u>FYA</u>	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	
IL 37 MIDDLE MAST ARM SIGNALS		SB	R	R	R	R	R	R	R	G	G	G	G	R	R	R	R	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	
IL 37 FAR RIGHT AND RIGHT MAST ARM SIGNALS		SB	R	R	R	R	R	R	R	G	G	G	G	R	R	R	R	G	G	Y	R	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>
MAIN ST FAR LEFT AND LEFT MAST ARM SIGNALS		WB	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	<u>G</u>	<u>G</u>	<u>G</u>	<u>Y</u>	R	<u>Y</u>	R	<u>G</u>	<u>G</u>	<u>Y</u>	R	Y	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R		
MAIN ST MIDDLE AND RIGHT MAST ARM SIGNALS		WB	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	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R		
MAIN ST FAR LEFT AND LEFT MAST ARM SIGNALS		EB	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	<u>G</u>	<u>Y</u>	R	<u>G</u>	<u>G</u>	<u>Y</u>	R	R	R	R	R	R	R	<u>G</u>	<u>G</u>	<u>Y</u>	R	Y	R	G	G	Y	R	R	R	R				
MAIN ST MIDDLE MAST ARM SIGNALS		EB	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	G	G	G	G	Y	R	G	G	Y	R	R	R	R				
MAIN ST FAR RIGHT AND RIGHT MAST ARM SIGNALS		EB	<u>R</u>	<u>G</u>	<u>Y</u>	<u>R</u>	<u>G</u>	<u>G</u>	<u>Y</u>	R	R	R	R	<u>R</u>	<u>G</u>	<u>G</u>	<u>Y</u>	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	G	G	Y	R	R	R	R				
PEDESTRIAN SIGNALS CROSSING EAST APPROACH (PH 2 PED)			H	H	H	H	H	H	H	H	H	H	•P	••FH	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	DARK			
PEDESTRIAN SIGNALS CROSSING WEST APPROACH (PH 6 PED)			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	DARK		
PEDESTRIAN SIGNALS CROSSING SOUTH APPROACH (PH 4 PED)			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	••FH	H	H	H	H	H	•P	••FH	H	H	H	H	DARK			
PEDESTRIAN SIGNALS CROSSING NORTH APPROACH (PH 8 PED)			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	••FH	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 PUSH BUTTON ACTUATION
- FLASHING "HAND" IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN CLEARANCE INTERVAL

Ø THE "WALK" OR FLASHING "DON'T WALK" INTERVAL MAY FINISH TIMING IN THE BI-DIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "WALK" OR FLASHING "DON'T WALK" INTERVALS. "WALK" AND FLASHING "DON'T WALK" TIMINGS TO BE SET ONLY ON THE PHASES WHERE "WALK" AND FLASHING "DON'T WALK" ARE INDICATED IN THE SEQUENCE OF OPERATION.

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

⚠️REVISED SHEET 7-11-2025

PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1		5		8		11		14		18		22		26						
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1B	2	1D	2	1F	2	1H	2	1K	2	1M	2	1P	2	1R	2	3	4	5		
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	NB	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	FYA	△
IL 37 MIDDLE MAST ARM SIGNALS	NB	R	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	△
IL 37 FAR RIGHT AND RIGHT MAST ARM SIGNALS	NB	R	R	R	R	Y	R	Y	R	<u>R</u> <u>Y</u>	R	<u>R</u> <u>Y</u>	R	R	R	R	R	R	R	R	G	△
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	SB	<u>Y</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>Y</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	△
IL 37 MIDDLE MAST ARM SIGNALS	SB	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	△
IL 37 FAR RIGHT AND RIGHT MAST ARM SIGNALS	SB	R	R	Y	R	R	R	Y	R	<u>R</u> <u>Y</u>	R	R	R	<u>R</u> <u>Y</u>	R	R	R	R	R	R	G	△
MAIN ST FAR LEFT AND LEFT MAST ARM SIGNALS	WB	R	R	R	R	R	R	R	R	<u>G</u>	<u>G</u>	<u>G</u>	<u>G</u>	R	R	G	G	<u>G</u>	Y	R	R	△
MAIN ST MIDDLE AND RIGHT MAST ARM SIGNALS	WB	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	G	Y	R	R	△
MAIN ST FAR LEFT AND LEFT MAST ARM SIGNALS	EB	R	R	R	R	R	R	R	R	<u>Y</u>	R	<u>R</u>	<u>R</u>	Y	R	Y	R	R	R	R	R	△
MAIN ST MIDDLE MAST ARM SIGNALS	EB	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	Y	R	R	R	R	R	△
MAIN ST FAR RIGHT AND RIGHT MAST ARM SIGNALS	EB	<u>R</u> <u>Y</u>	R	R	R	<u>R</u> <u>Y</u>	R	R	R	R	R	R	R	Y	R	Y	R	R	R	R	R	△
PEDESTRIAN SIGNALS CROSSING EAST APPROACH (PH 2 PED)		H	H	H	H	FH	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	△
PEDESTRIAN SIGNALS CROSSING WEST APPROACH (PH 6 PED)		H	H	FH	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	△
PEDESTRIAN SIGNALS CROSSING SOUTH APPROACH (PH 4 PED)		H	H	H	H	H	H	H	H	H	H	H	H	FH	H	FH	H	H	H	H	H	△
PEDESTRIAN SIGNALS CROSSING NORTH APPROACH (PH 8 PED)		H	H	H	H	H	H	H	H	H	H	FH	H	H	H	FH	H	H	H	H	H	△

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

HOLD

1 REVISED SHEET 7-11-2025