

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

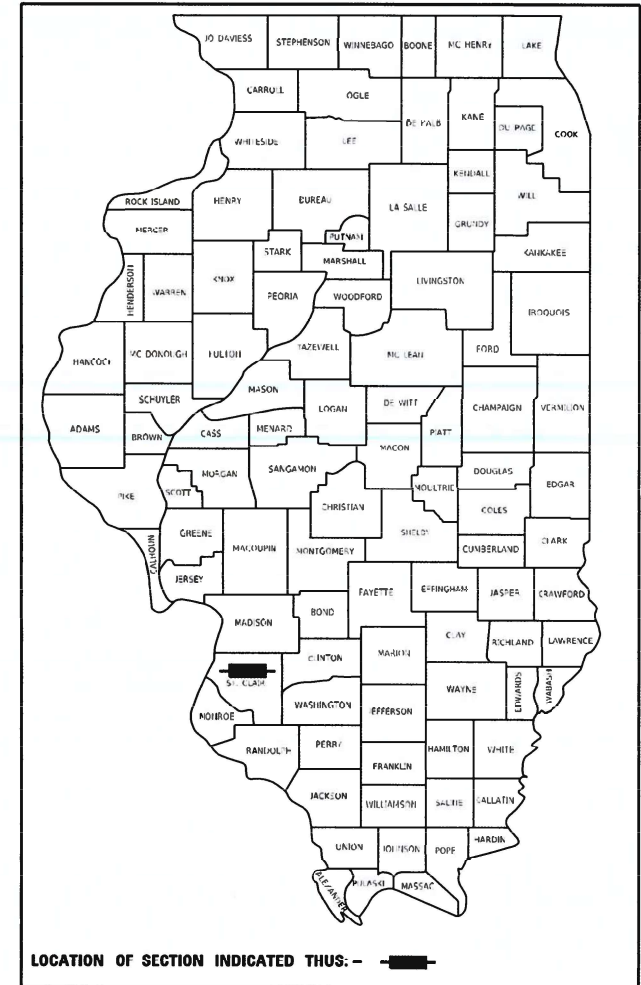
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	(123-1,2,3) SFY-1	ST CLAIR	28	1
		ILLINOIS	CONTRACT NO. 76P34	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

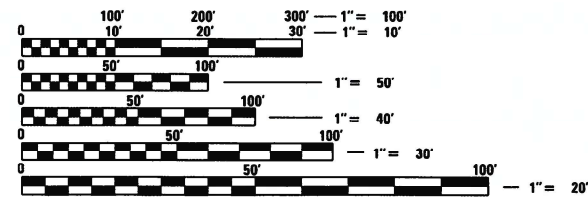
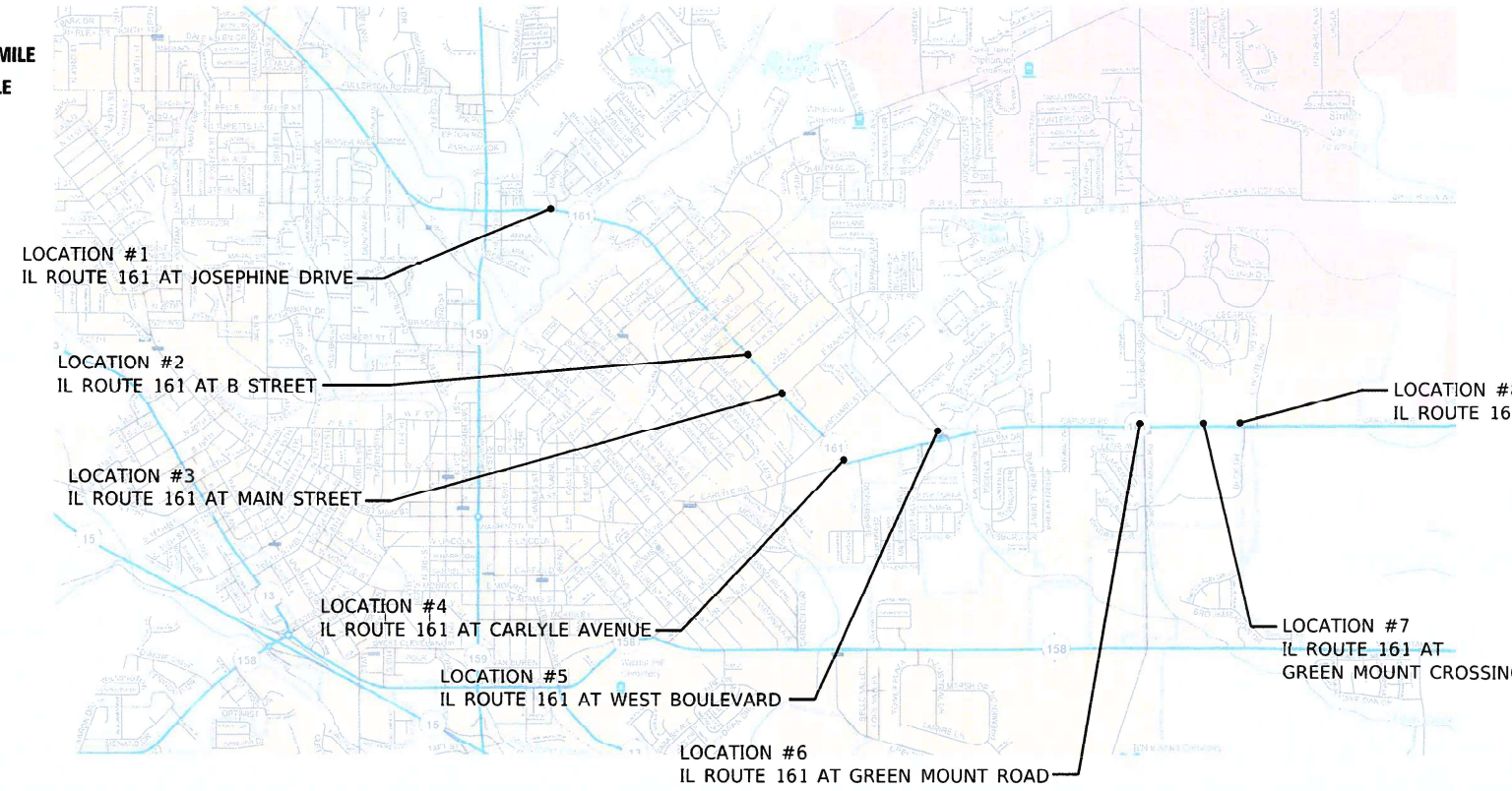
# PROPOSED HIGHWAY PLANS

FAP 805 (IL ROUTE 161)  
SECTION (123-1,2,3) SFY-1  
PROJECT HSIP-7B48(242)  
TRAFFIC SIGNAL IMPROVEMENTS  
ST CLAIR COUNTY

C-98-073-21



GROSS LENGTH = 20592 FT. = 3.9 MILE  
NET LENGTH = 20592 FT. = 3.9 MILE



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

PROJECT ENGINEER CHERYL KEPLAR  
PROJECT MANAGER MICHAEL PRESTON

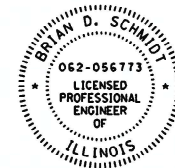
CONTRACT NO. 76P34

PLANS PREPARED BY



WWW.FUHRMANN-ENG.COM

1022 Eastport Plaza Drive Collingsville, Illinois 62234  
Phone: (618) 855-8000  
Illinois Professional Design Firm No. 184-003252  
License Expires 4/30/2023



Date

License Expires 11/30/2021  
THE SEAL SHOWN ABOVE IS VALID FOR THE FOLLOWING SHEETS IN THESE PLANS WHICH WERE PREPARED UNDER MY DIRECT SUPERVISION:  
SHEETS 1-16

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED Oct. 21, 2021  
*Keith Roberts*  
REGIONAL ENGINEER

December 10, 2021  
*[Signature]*  
ENGINEER OF DESIGN AND ENVIRONMENT

December 10, 2021  
*Stephen M. Smith*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

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










**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
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701502-09 URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
- 701602-10 URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
- 701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901-08 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720016-04 MAST ARM MOUNTED STREET NAME SIGNS
- 805001-01 ELECTRICAL SERVICE INSTALLATION DETAILS
- 814001-03 HANDHOLES
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 873001-02 TRAFFIC SIGNAL GROUNDING & BONDING
- 877001-08 STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
- 878001-11 CONCRETE FOUNDATION DETAILS
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS
- 876001-04 PEDESTRIAN PUSH BUTTON POST
- 877002-04 STEEL MAST ARM ASSEMBLY AND POLE 56' THROUGH 75'

**ELECTRICAL GENERAL NOTES**

1. ALL VEHICLES AND PEDESTRIANS SIGNAL HEADS SHALL HAVE 12" L.E.D. SECTIONS. ALL MOUNTING HARDWARE, SIGNAL POSTS, AND BASES SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI-FREEZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
2. BACKPLATES SHALL BE PLASTIC.
3. THE LOCATION OF MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF THE SHOULDER, WHICH EVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE FACE OF CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE. ALL OF THE MAST ARMS SHALL BE GALVANIZED.
4. ALL TRAFFIC CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED.
5. CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
6. ALL HANDHOLES SHALL BE CAST-IN-PLACE PORTLAND CEMENT CONCRETE (PER ARTICLE 873.03(B)). THE CAST IN PLACE LEGEND IN THE COVER SHALL BE "TRAFFIC LEGENDS".
7. SLOPE HANDHOLE COVERS TO MATCH PROPOSED GRADE ELEVATIONS. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT
8. ANY COMPONENT OF THE VARIOUS TRAFFIC SIGNAL INSTALLATION. THE DEPARTMENT IS NOT A MEMBER OF JULIE AND DOES NOT LOCATE ITS OWN FACILITIES (SUCH AS UNDERGROUND CONDUIT AND/OR CABLE FOR TRAFFIC SIGNALS OR HIGHWAY LIGHTING). THE APPLICANT, AT HIS/HER OWN EXPENSE, MUST OBTAIN THE SERVICES OF A QUALIFIED ELECTRICAL CONTRACTOR TO LOCATE SUCH STATE-OWNED FACILITIES.
9. THE KNOWN UTILITIES IN THE AREA ARE:
  - ADB COMPANIES
  - AMEREN ILLINOIS
  - CHARTER COMMUNICATIONS
  - CITY OF BELLEVILLE
  - CLEARVIEW COMMUNICATIONS
  - FIDELITY COMMUNICATION SERVICES
  - ILLINOIS AMERICAN WATER
  - MCI / VERIZON
10. CABLE MARKING TAPE SHALL BE INCLUDED WITH THE PAY ITEM "TRENCH AND BACKFILL FOR ELECTRICAL WORK" AND INSTALLED PER ARTICLE 815.03(D) OF THE STANDARD SPECIFICATION FOR THE ROAD AND BRIDGE CONSTRUCTION.
11. 1 1/4" NYLON PULL ROPE SHALL BE FURNISHED AND INSTALLED IN ALL SIGNAL CONDUITS, THIS WORK SHALL BE INCLUDED WITH THE CONDUIT PAY ITEM.

**TRAFFIC SIGNAL LEGEND**

- RREC REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT
- PVCC POLYVINYL CHLORIDE CONDUIT
- GSC GALVANIZED STEEL CONDUIT
-  EXISTING TRAFFIC SIGNAL MAST ARM
-  EXISTING HANDHOLE
-  EXISTING DOUBLE HANDHOLE
-  EXISTING DETECTOR LOOP
-  EXISTING CONTROLLER
-  EXISTING STREET NAME SIGN/TRAFFIC SIGN
-  EXISTING SERVICE INSTALLATION
-  EXISTING CONDUIT
-  PROPOSED TRAFFIC SIGNAL MAST ARM
-  PROPOSED HANDHOLE
-  PROPOSED DOUBLE HANDHOLE
-  PROPOSED DETECTOR LOOP
-  PROPOSED CONDUIT: "T" TRENCH, "P" PUSH, SIZE SPECIFIED

MODEL: FILE NAME: C:\Users\jgibbs\OneDrive\Documents\202020-686 PTB 197-40 VARIOUS PH 1 & 2 DB - EET PRIME TEAMING INNI EADAIR, LLC\WORK\310\310\310\CADD\CADD Sheets\0876P34-shr-GeneralNotes.dgn

REV. - MS

 <p><b>FUHRMANN ENGINEERING</b> WWW.FUHRMANN-ENG.COM</p>	USER NAME = untitled	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES, INDEX OF SHEETS, AND HIGHWAY STANDARDS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 2.0000' / in.	DRAWN -	REVISED -			805	(123-1, 2, 3) SFY-1	ST CLAIR	28	2
P LOTDATE = 10/4/2021	CHECKED -	REVISED -	DATE -	SCALE: NTS	SHEET 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS   FED. AID P. 0102   HSIP-7B48(242)		



90% FED  
10% STATE

SUMMARY OF QUANTITIES				CONSTRUCTION CODE	
CODE NO	ITEM	UNIT	TOTAL	0021	
				FAP 805	
				IL ROUTE 161	
				URBAN	
				TRAFFIC SIGNALS	
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	28	28	
67100100	MOBILIZATION	L SUM	1	1	
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1	
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1	
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1	
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1	
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1	
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	4	4	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
* 72000100	SIGN PANEL - TYPE 1	SQ FT	113	113	
72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	95	95	
* 72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	38	38	
* 72400720	RELOCATE SIGN PANEL - TYPE 2	SQ FT	40	40	
80500100	SERVICE INSTALLATION, TYPE A	EACH	1	1	
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	60	60	
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	5	5	
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	150	150	

\*SPECIALTY ITEM

90% FED  
10% STATE

SUMMARY OF QUANTITIES				CONSTRUCTION CODE	
CODE NO	ITEM	UNIT	TOTAL	0021	
				FAP 805	
				IL ROUTE 161	
				URBAN	
				TRAFFIC SIGNALS	
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	52	52	
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	284	284	
81400100	HANDHOLE	EACH	2	2	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	8	8	
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	8	8	
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	910	910	
87301235	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 4C	FOOT	945	945	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	9822	9822	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	8457	8457	
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2439	2439	
87502460	TRAFFIC SIGNAL POST, GALVANIZED STEEL 12 FT.	EACH	2	2	
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2	2	
87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	2	2	
87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1	1	

\*SPECIALTY ITEM

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90% FED  
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SUMMARY OF QUANTITIES				CONSTRUCTION CODE
				0021
CODE NO	ITEM	UNIT	TOTAL	FAP 805
				IL ROUTE 161 URBAN TRAFFIC SIGNALS
87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	3	3
87700300	STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1	1
87700320	STEEL MAST ARM ASSEMBLY AND POLE, 55 FT.	EACH	1	1
87700330	STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	2	2
87700404	STEEL MAST ARM ASSEMBLY AND POLE, 62 FT.	EACH	1	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	9	9
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	136	136
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	63	63
87900200	DRILL EXISTING HANDHOLE	EACH	14	14
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10	10
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	14	14
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	14	14
88200400	TRAFFIC SIGNAL BACKPLATE, FORMED PLASTIC	EACH	1	1
88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	23	23

\* SPECIALTY ITEM

90% FED  
10% STATE

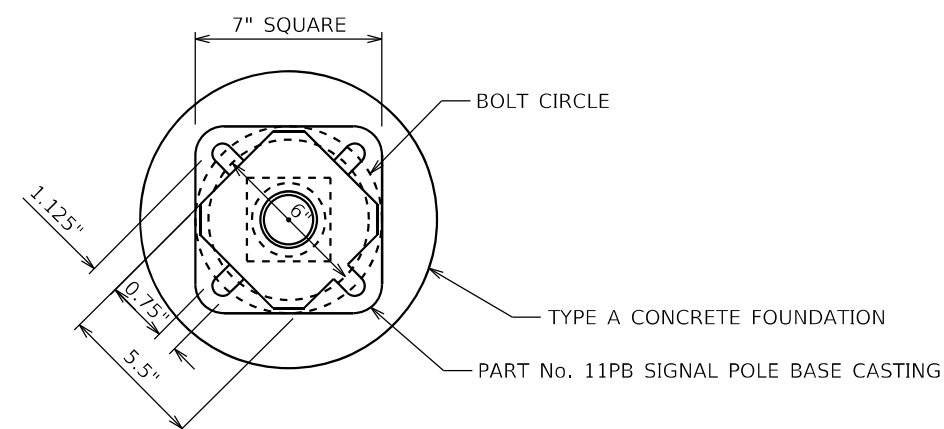
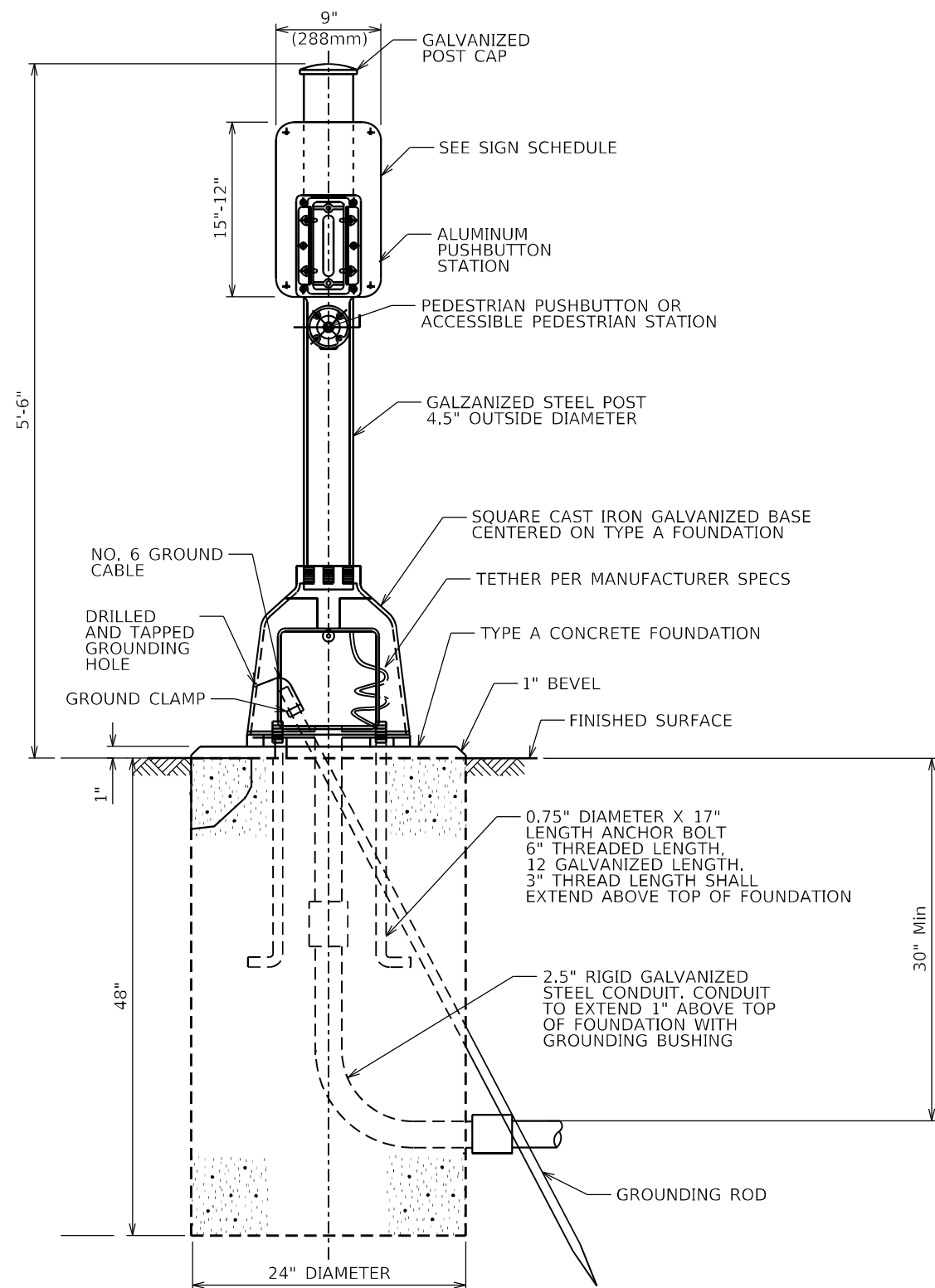
SUMMARY OF QUANTITIES				CONSTRUCTION CODE
				0021
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				IL ROUTE 161 URBAN TRAFFIC SIGNALS
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	44	44
89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	5	5
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	9	9
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	17237	17237
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	17	17
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	13	13
X1400031	REMOVE PEDESTRIAN PUSH-BUTTON	EACH	10	10
X8760201	PEDESTRIAN PUSH-BUTTON POST	EACH	1	1
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	10	10
X8950105	REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	8	8
X8950305	REMOVE EXISTING SIGNAL HEAD	EACH	28	28
Z0033068	TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	1	1

\* SPECIALTY ITEM

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**BOLT PATTERN**  
**PEDESTRIAN PUSH-BUTTON POST**

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 <b>FUHRMANN</b> ENGINEERING WWW.FUHRMANN-ENG.COM	USER NAME = untitled	DESIGNED -	REVISED -
	PLOT SCALE = 2,000' / in.	DRAWN -	REVISED -
	PLOT DATE = 10/4/2021	CHECKED -	REVISED -
		DATE -	REVISED -

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

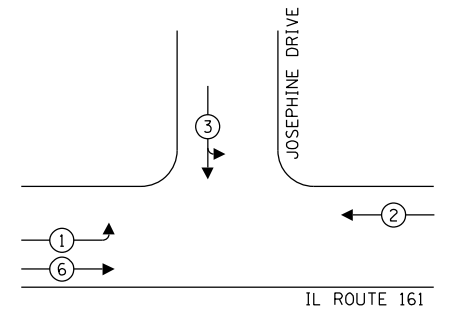
**TRAFFIC SIGNAL DETAILS**  
**CONCRETE FOUNDTION, TYPE A**  
**PEDESTRIAN PUSH-BUTTON POST**

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

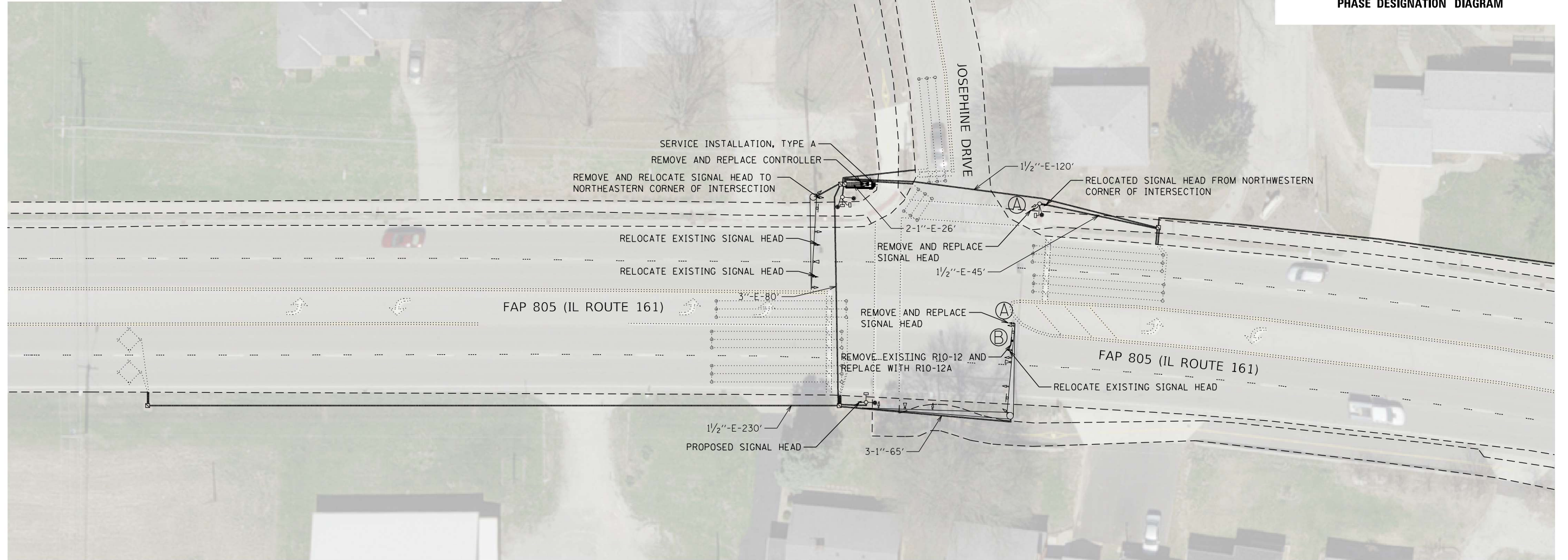
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	(123-1, 2, 3) SFY-1	ST CLAIR	28	5
CONTRACT NO. 76P34			ILLINOIS FED. AID PROJECT HSIP-7B48(242)	

SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	SBLT	NB	WB	NOT USED	NOT USED	SB	NOT USED	NOT USED
CONCURRENT MOVEMENT ALLOWED	6	6	NONE	NOT USED	NOT USED	1 OR 2	NOT USED	NOT USED

NOTE: PRE-EMPT INPUT 1 = PHASES 1 & 6  
 PRE-EMPT INPUT 2 = PHASES 2  
 PRE-EMPT INPUT 3 = PHASES 3

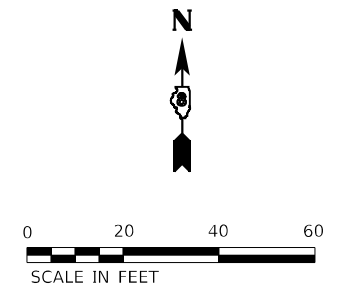
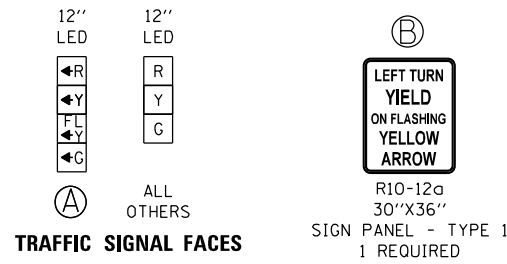


PHASE DESIGNATION DIAGRAM



NOTES:

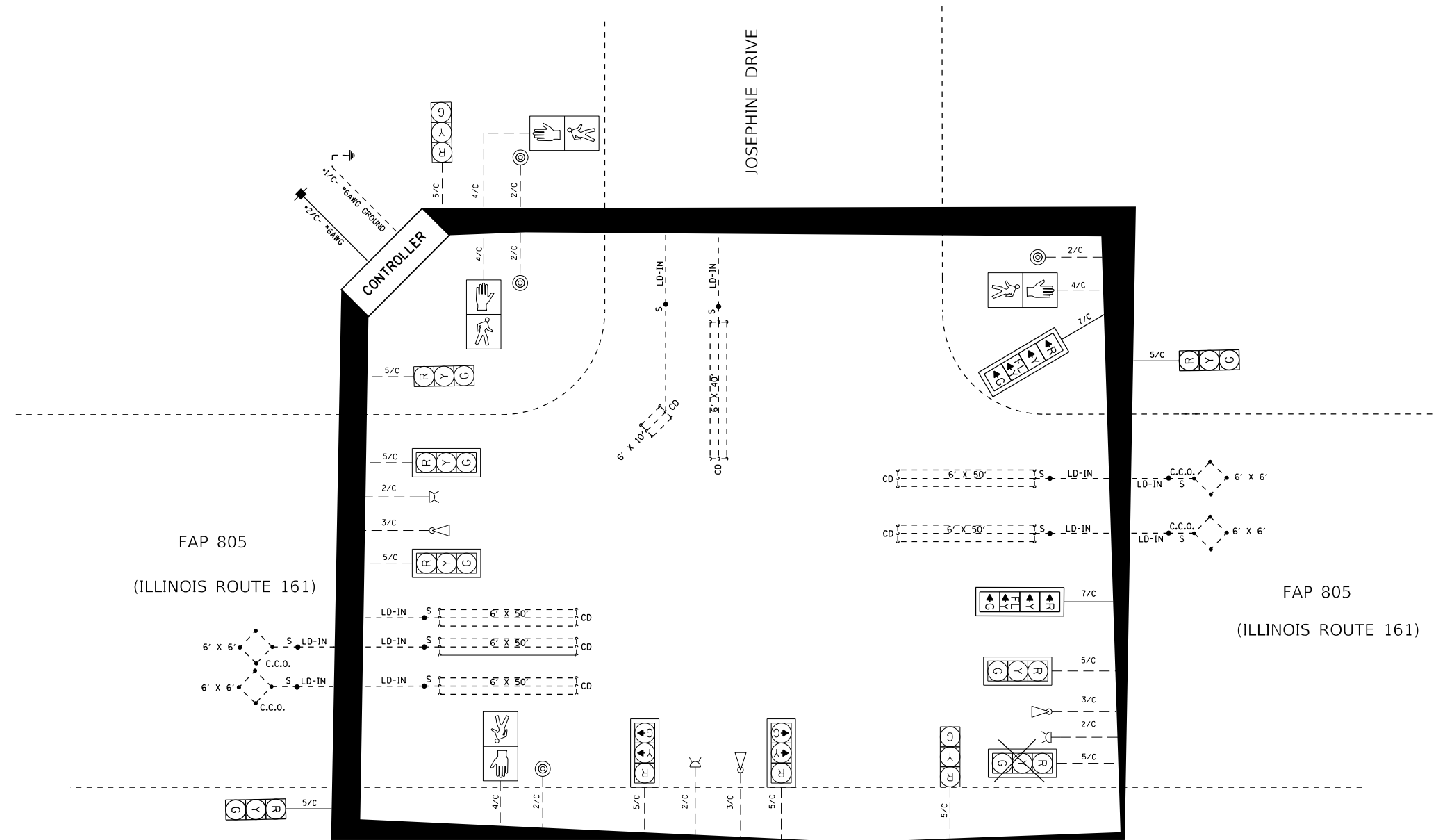
- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED AND ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINENT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED FACILITIES SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS IN THE NORTHEAST AND SOUTHWEST QUADRANTS FROM THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLES TO NEW MAST ARM ASSEMBLES ON NEW CONCRETE FOUNDATIONS.



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**CABLE DIAGRAM LEGEND**

- PROPOSED ELECTRIC CABLE IN CONDUIT
- - - EXISTING ELECTRIC CABLE IN CONDUIT
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- EXISTING SERVICE INSTALLATION
- ▣ PROPOSED BATTERY BACKUP
- ▤ EXISTING VIDEO DETECTION ZONE
- Ⓜ EXISTING VIDEO CAMERA
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE  
6 CONDUCTORS (SEE GENERAL NOTES)
- CD CALL DELAY LOOP (SIZE AS SHOWN)
- CCO CALL CARRY OVER LOOP (SIZE AS SHOWN)



**SCHEDULE OF QUANTITIES**

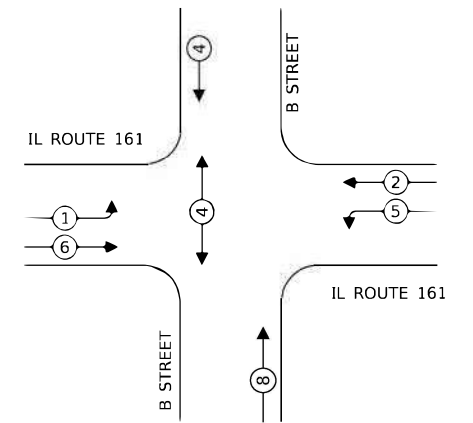
ITEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	7.50
REMOVE SIGN PANEL - TYPE 1	SQ FT	7.50
SERVICE INSTALLATION, TYPE A	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	15
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	366
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	465
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	3
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	888
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
REMOVE EXISTING SIGNAL HEAD	EACH	2

MODEL: FILE NAME: C:\EIT\051\_2020\20-1686\_PTB\_19740\_VARIOUS\_P1 I & II.DWG - EET PRIME TEAMING INKLEADAR, LLC\UW03ICADD\CADD\_Sheets\0876P34.dwg:5015.dwg

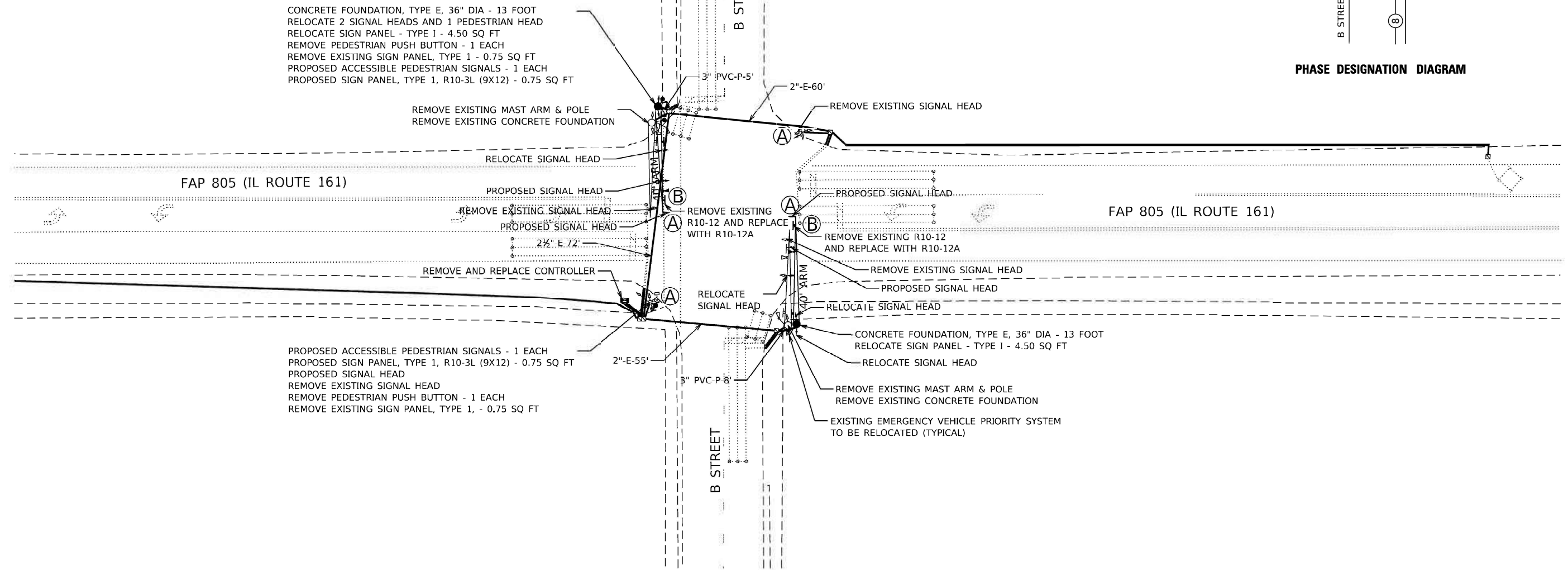


SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	SB LT	NB	NOT USED	WB	NB LT	SB	NOT USED	EB
CONCURRENT MOVEMENT ALLOWED	5 OR 6	5 OR 6		8	1 OR 2	1 OR 2		4

\* PEDESTRIAN MOVEMENT ON ACTUATION ONLY. DURING NORMAL OPERATION, PHASE 4 AND 8 SHALL ALWAYS BE DISPLAYED CONCURRENTLY



PHASE DESIGNATION DIAGRAM



CONCRETE FOUNDATION, TYPE E, 36" DIA - 13 FOOT  
 RELOCATE 2 SIGNAL HEADS AND 1 PEDESTRIAN HEAD  
 RELOCATE SIGN PANEL - TYPE 1 - 4.50 SQ FT  
 REMOVE PEDESTRIAN PUSH BUTTON - 1 EACH  
 REMOVE EXISTING SIGN PANEL, TYPE 1 - 0.75 SQ FT  
 PROPOSED ACCESSIBLE PEDESTRIAN SIGNALS - 1 EACH  
 PROPOSED SIGN PANEL, TYPE 1, R10-3L (9X12) - 0.75 SQ FT

REMOVE EXISTING MAST ARM & POLE  
 REMOVE EXISTING CONCRETE FOUNDATION

RELOCATE SIGNAL HEAD

FAP 805 (IL ROUTE 161)

PROPOSED SIGNAL HEAD

REMOVE EXISTING SIGNAL HEAD

PROPOSED SIGNAL HEAD

2 1/2" E-72

REMOVE AND REPLACE CONTROLLER

RELOCATE SIGNAL HEAD

2" E-55'

PROPOSED ACCESSIBLE PEDESTRIAN SIGNALS - 1 EACH  
 PROPOSED SIGN PANEL, TYPE 1, R10-3L (9X12) - 0.75 SQ FT  
 PROPOSED SIGNAL HEAD  
 REMOVE EXISTING SIGNAL HEAD  
 REMOVE PEDESTRIAN PUSH BUTTON - 1 EACH  
 REMOVE EXISTING SIGN PANEL, TYPE 1, - 0.75 SQ FT

B STREET

CONCRETE FOUNDATION, TYPE E, 36" DIA - 13 FOOT  
 RELOCATE SIGN PANEL - TYPE 1 - 4.50 SQ FT  
 RELOCATE SIGNAL HEAD

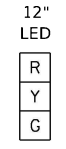
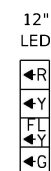
REMOVE EXISTING MAST ARM & POLE  
 REMOVE EXISTING CONCRETE FOUNDATION

EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM  
 TO BE RELOCATED (TYPICAL)

FAP 805 (IL ROUTE 161)

NOTES:

- ALL UTILITIES PRESENT MAY NOT BE SHOWN. ALL UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, PROTECTION, AND COORDINATION OF EXISTING UTILITIES.
- ALL UNUSED AND/OR UNNECESSARY TRAFFIC SIGNAL CABLES SHALL BE COMPLETELY REMOVED FROM THE EXISTING CONDUIT SYSTEM, IF POSSIBLE, TO ENSURE ADEQUATE CONDUIT CAPACITY. ALL UNUSED CONDUITS SHALL BE REMOVED AND ABANDONED.
- PRIOR TO INSTALLING NEW TRAFFIC SIGNAL CABLES WITHIN EXISTING CONDUITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF NEW TRAFFIC SIGNAL CABLES CAN BE PULLED THROUGHOUT PERTINANT CONDUIT SEGMENTS WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL. IF EXISTING CONDUIT CAPACITIES WILL PREVENT THE INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLES WITHOUT AFFECTING THE OPERATION OF THE TRAFFIC SIGNAL, THE TRAFFIC SIGNAL WILL HAVE TO BE TEMPORARILY SHUT DOWN WHILE UNNECESSARY EXISTING SIGNAL CABLES ARE REMOVED AND NEW CABLES ARE INSTALLED.
- DENOTED EXISTING AND/OR PROPOSED FACILITIES SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS IN ALL QUADRANTS FROM THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLES TO NEW MAST ARM ASSEMBLES ON NEW CONCRETE FOUNDATIONS.

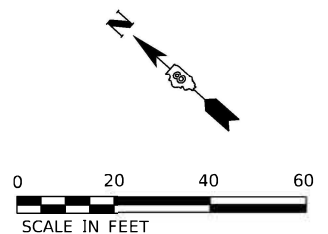


ALL OTHERS

TRAFFIC SIGNAL FACES



R10-12a  
 30"X36"  
 SIGN PANEL - TYPE 1  
 2 REQUIRED


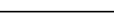




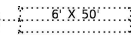
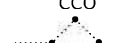


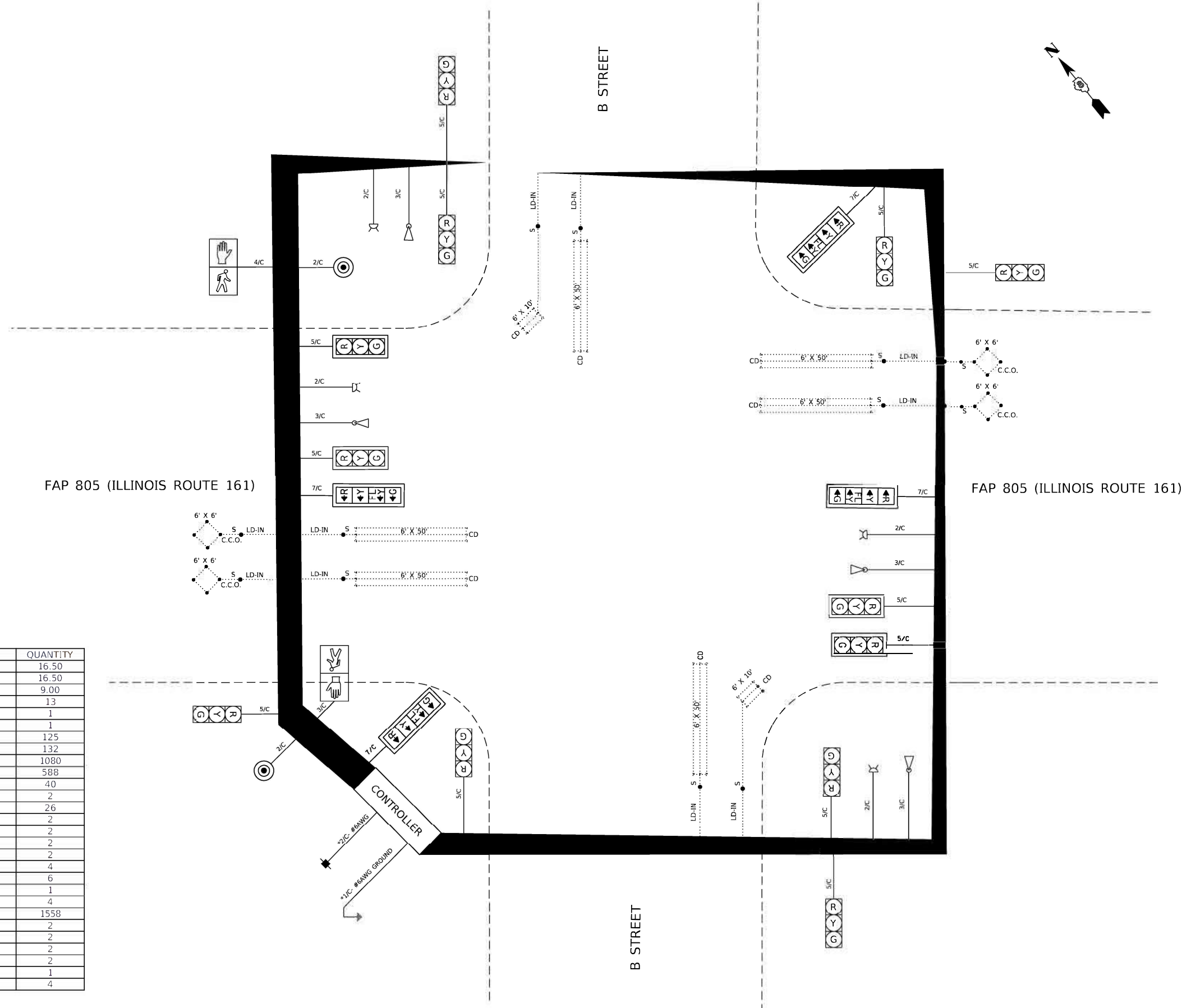
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USER NAME = untitled	DESIGNED -	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2021	CHECKED -	REVISED -
	DATE -	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	(123-1, 2, 3) SFY-1	ST CLAIR	29	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 76P34 HSIP-7B48(242)	

**CABLE DIAGRAM LEGEND**

-  PROPOSED ELECTRIC CABLE IN CONDUIT
-  EXISTING ELECTRIC CABLE IN CONDUIT
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
-  EXISTING SERVICE INSTALLATION
-  PROPOSED BATTERY BACKUP
-  EXISTING VIDEO DETECTION ZONE
-  EXISTING VIDEO CAMERA
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)
- CD  CALL DELAY LOOP (SIZE AS SHOWN)
- CCO  CALL CARRY OVER LOOP (SIZE AS SHOWN)



**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	16.50
REMOVE SIGN PANEL - TYPE 1	SQ FT	16.50
RELOCATE SIGN PANEL - TYPE 1	SQ FT	9.00
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	13
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	125
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 4C	FOOT	132
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1080
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	588
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	40
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
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 SIGNAL HEAD	EACH	6
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1558
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
REMOVE PEDESTRIAN PUSH-BUTTON	EACH	2
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	2
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
REMOVE EXISTING SIGNAL HEAD	EACH	4

MODEL: C:\E\0851\_2020\20-1686\_PTB 197-AD VARIOUS PH 1 & II DB - F&E PRIME TEAMING INNI EAGAR, LLC\WG-01\CADD\CADD Sheets\0851\0851-01\0851.dgn  
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REV. - MS

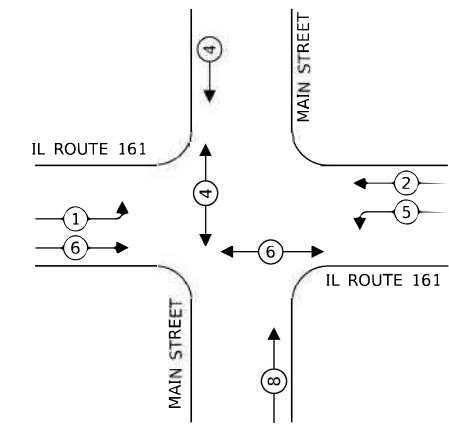
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	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 76P34	ILLINOIS FED. AID PROJECT HSIP-7B48(242)			
WWW.FUHRMANN-ENG.COM	PLOT DATE = 12/1/2021	DATE -	REVISED -	SCALE: NTS	SHEET 2 OF 2 SHEETS	STA. TO STA.				



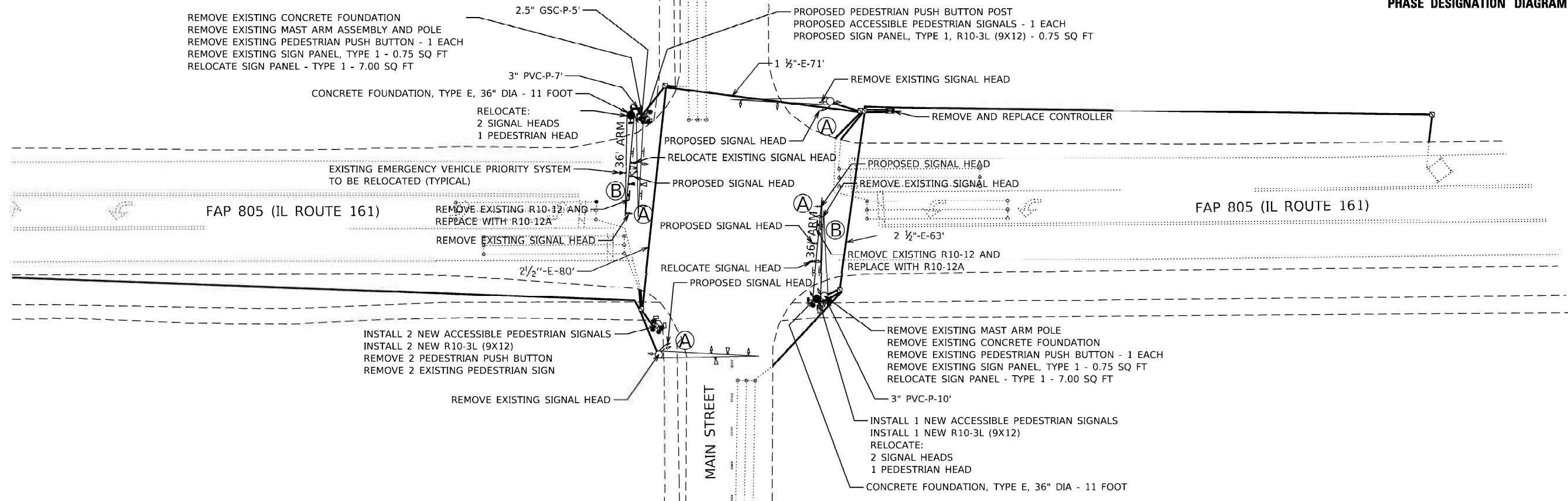


SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	SB LT	NB	NOT USED	WB	NB LT	NB	NOT USED	WB
CONCURRENT MOVEMENT ALLOWED	5 OR 6	5 OR 6		8	1 OR 2	1 OR 2		4

\*PEDESTRIAN SIGNAL SHALL BE PUSH BUTTON ACTIVATED  
PHASES 4 AND 8 SHALL TIME CONCURRENTLY

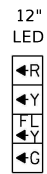


PHASE DESIGNATION DIAGRAM

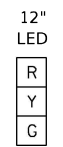


NOTES:

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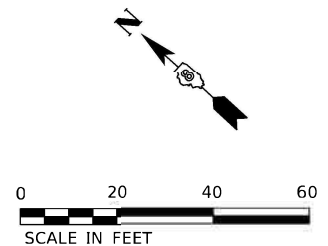
TRAFFIC SIGNAL FACES



ALL OTHERS



R10-12a  
30"X36"  
SIGN PANEL - TYPE 1  
2 REQUIRED



MODEL: FILE NAME: C:\E\0851\_2020\20-1686\_PTB 197-AD VARIOUS PH 1 & 2 DB - F&E PRIME TEAMING INNI EAGAR, LLC\WG-01\CAD\CADD Sheets\0851\0851.dwg

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PLOT DATE = 12/1/2021	CHECKED -	REVISED -
	DATE -	REVISED -

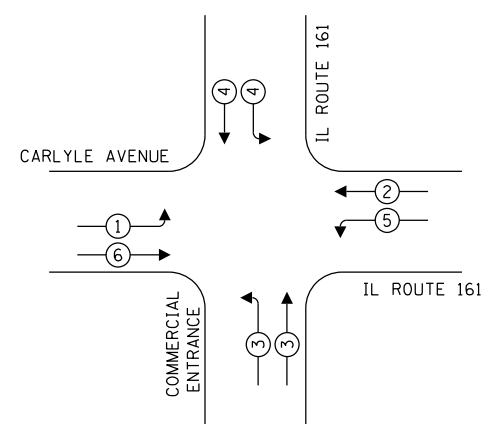
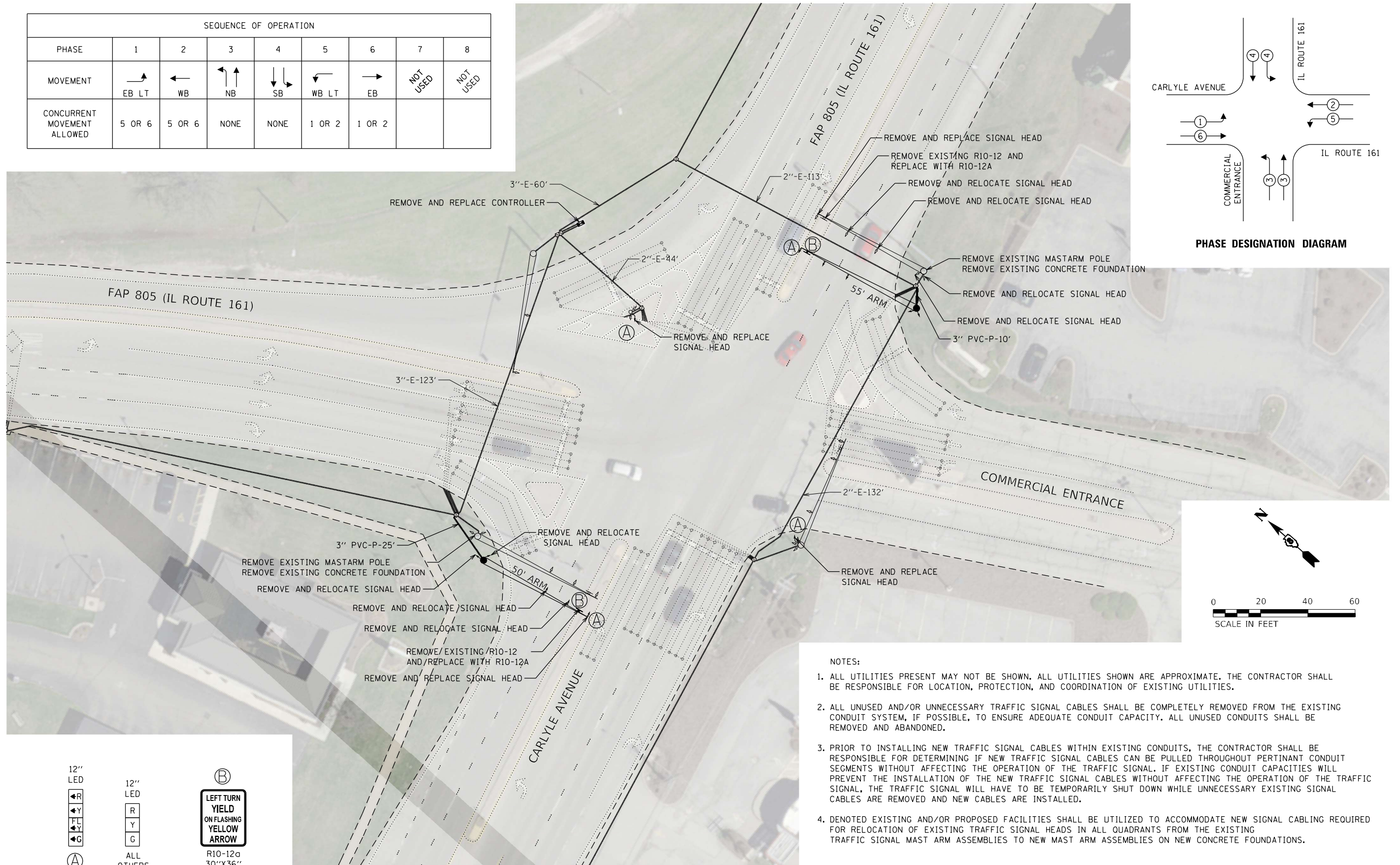
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	(123-1, 2, 3) SFY-1	ST CLAIR	29	11
			CONTRACT NO. 76P34	
ILLINOIS FED. AID PROJECT HSIP-7B48(242)				



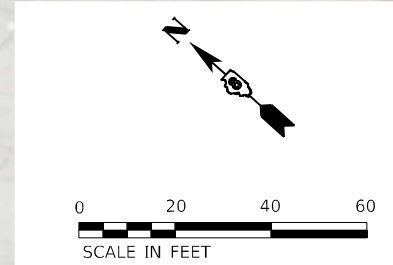




SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	EB LT	WB	NB	SB	WB LT	EB	NOT USED	NOT USED
CONCURRENT MOVEMENT ALLOWED	5 OR 6	5 OR 6	NONE	NONE	1 OR 2	1 OR 2		



PHASE DESIGNATION DIAGRAM



- NOTES:
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**TRAFFIC SIGNAL FACES**

12" LED  
  
 ALL OTHERS

12" LED  
  
 ALL OTHERS

**TRAFFIC SIGNAL PANELS**

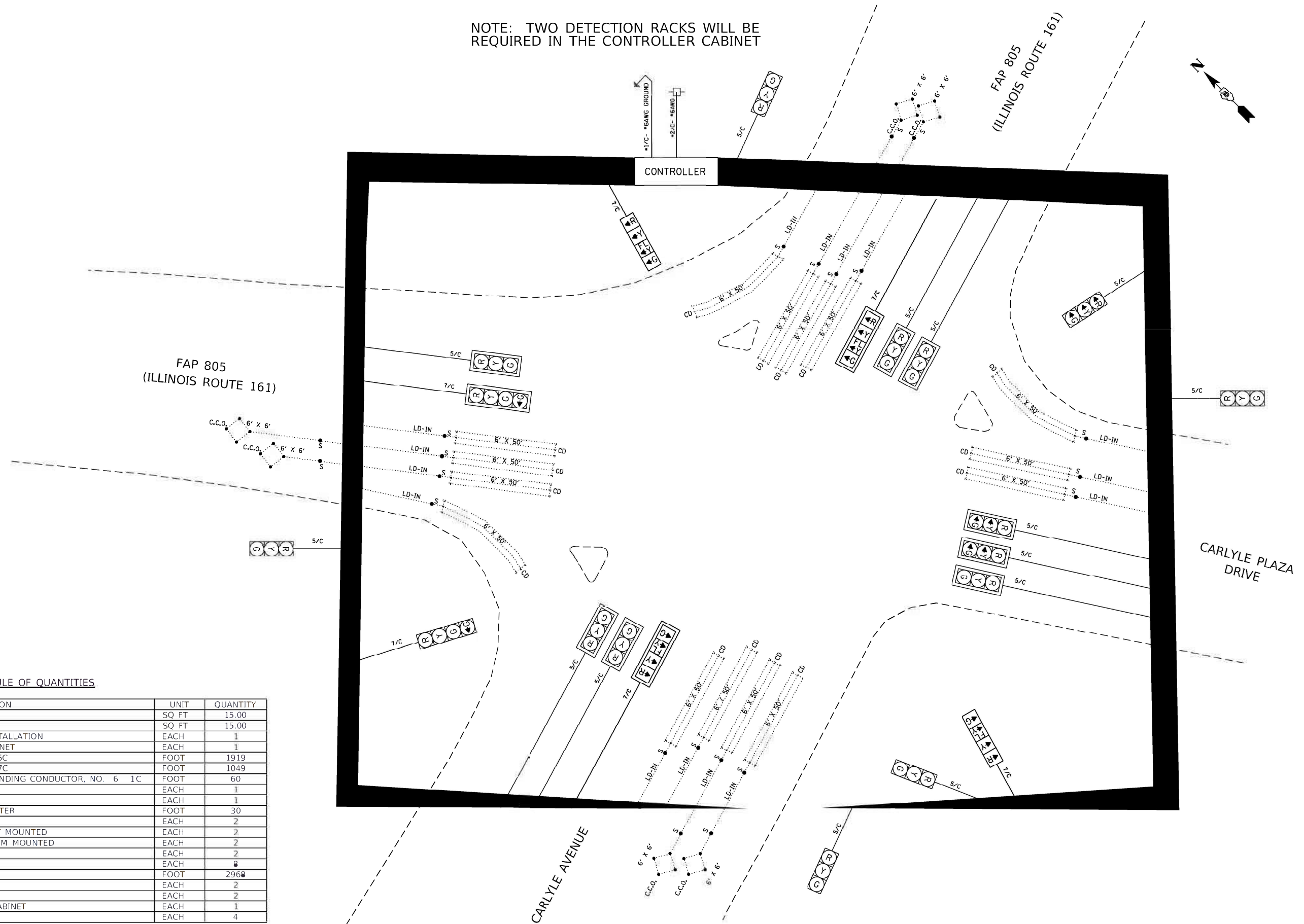
**LEFT TURN YIELD ON FLASHING YELLOW ARROW**  
 R10-12a  
 30"X36"  
 SIGN PANEL - TYPE 1  
 2 REQUIRED

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USER NAME = untitled	DESIGNED -	REVISED -
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PLOT DATE = 10/4/2021	CHECKED -	REVISED -
	DATE -	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	(123-1, 2, 3) SFY-1	ST CLAIR	28	14
CONTRACT NO. 76P34			ILLINOIS FED. AID PROJECT HSIP-7B48(242)	

NOTE: TWO DETECTION RACKS WILL BE REQUIRED IN THE CONTROLLER CABINET



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	15.00
REMOVE SIGN PANEL - TYPE 1	SQ FT	15.00
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1919
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1049
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	60
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 55 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	2
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	2
RELOCATE EXISTING SIGNAL HEAD	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2968
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
REMOVE EXISTING SIGNAL HEAD	EACH	4

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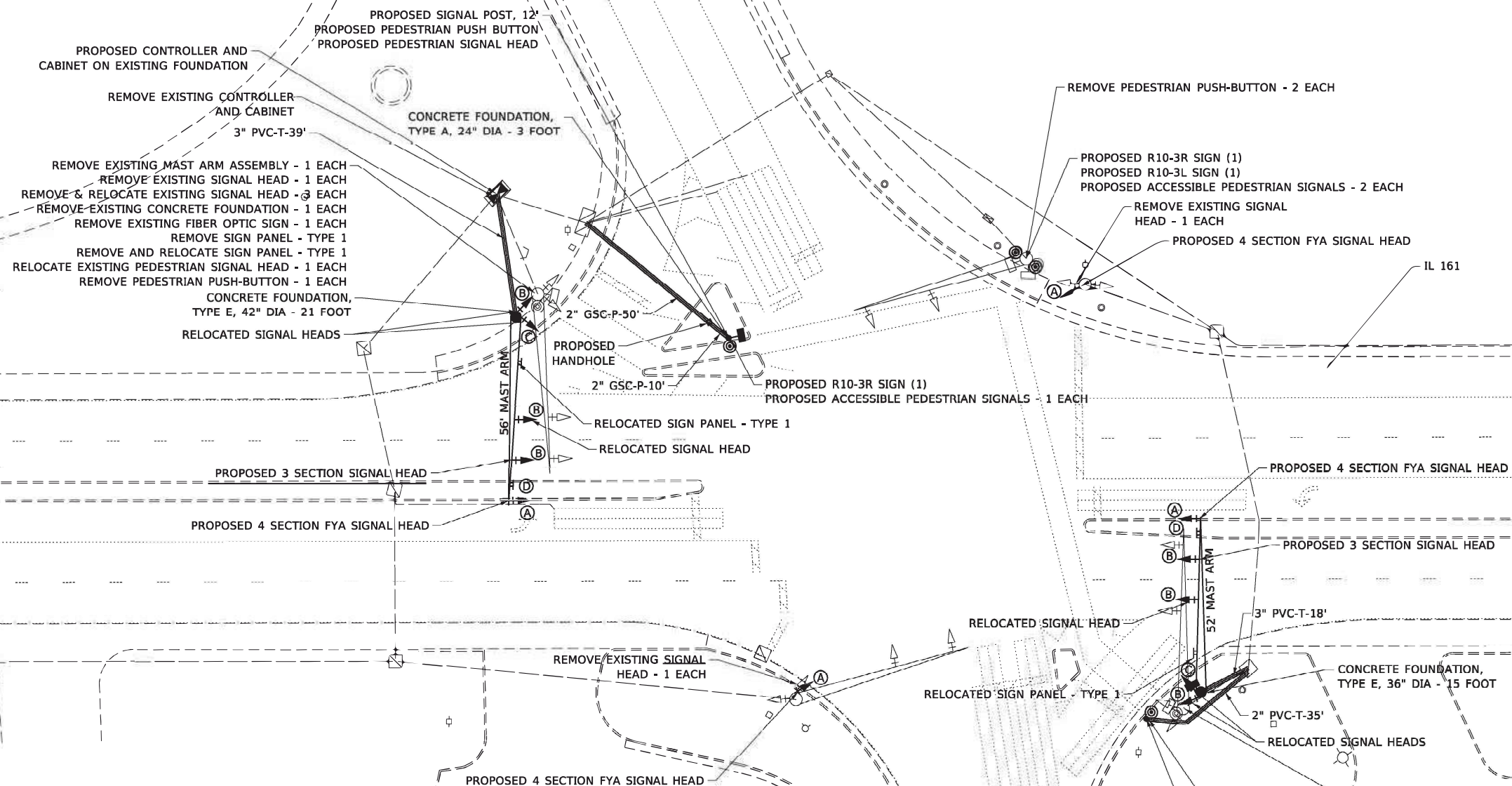
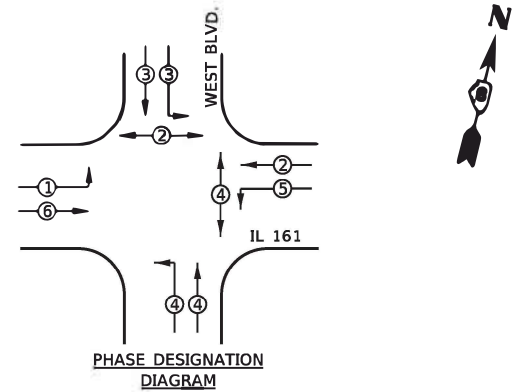






EXISTING SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	←	→	SB & NB LT	NB & SB LT	←	→	NOT USED	NOT USED
CONCURRENT MOVEMENT PERMITTED	5 OR 6	5 OR 6	NONE	NONE	1 OR 2	1 OR 2		

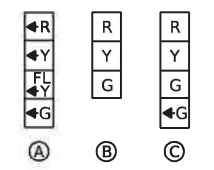
\* PEDESTRIAN MOVEMENT ON ACTUATION ONLY



**NOTES**

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4. DENOTED EXISTING AND/OR PROPOSED FACILITIES SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS IN THE NORTHWEST AND SOUTHEAST QUADRANTS FROM THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLIES TO NEW MAST ARM ASSEMBLIES ON NEW CONCRETE FOUNDATIONS.

**TRAFFIC SIGNAL FACES**



④  
R10-12a  
30"X36"  
SIGN PANEL - TYPE 1  
2 REQUIRED

REV. - MS



USER NAME = Jennifer	DESIGNED = DKS	REVISED =
MODEL NAME = 161 West Plan	DRAWN = LEC	REVISED =
PLOT SCALE = 40.0000' / in.	CHECKED = JLS	REVISED =
PLOT DATE = 10/25/2021	DATE = 08-18-2021	REVISED =

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLANS  
IL 161 & WEST BOULEVARD**

SCALE: 1"=20' SHEET 1 OF 3 SHEETS

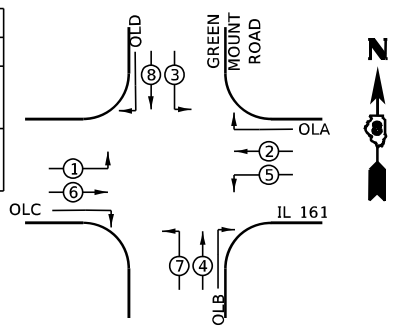
F.A.P. RTE. = 805	SECTION = (123-1,2,3)SFY-1	COUNTY = ST CLAIR	TOTAL SHEETS = 28	SHEET NO. = 17
CONTRACT NO. = 76P34			ILLINOIS FED. AID PROJECT	







PROPOSED CONTROLLER PHASING												
PHASE	1	2	3	4	5	6	7	8	OL A	OL B	OL C	OL D
MOVEMENT	EBLT	WB	SBLT	NB	WBLT	EB	NBLT	SB	WBRT	NBRT	EBRT	SBRT
CONCURRENT MOVEMENT PERMITTED	5 OR 6 + OLD	8 OR 6 + OLA	8 + OLA	7 + OLB	1 OR 2 + OLB	1 OR 2 + OLC	4 + OLC	3 + OLD	2 OR 3	4 OR 5	6 OR 7	1 OR 8



REMOVE EXISTING MAST ARM ASSEMBLY - 1 EACH  
 REMOVE EXISTING SIGNAL HEAD - 1 EACH  
 REMOVE & RELOCATE EXISTING SIGNAL HEAD - 2 EACH  
 REMOVE EXISTING CONCRETE FOUNDATION - 1 EACH  
 REMOVE EXISTING FIBER OPTIC SIGN - 1 EACH  
 REMOVE SIGN PANEL - TYPE 1  
 REMOVE AND RELOCATE SIGN PANEL - TYPE 2  
 REMOVE AND RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, UNIT DETECTOR - 1 EACH

REMOVE EXISTING SIGNAL HEAD - 1 EACH

PROPOSED 4 SECTION FYA SIGNAL HEAD

PROPOSED 4 SECTION FYA SIGNAL HEAD

PROPOSED 3 SECTION SIGNAL HEAD

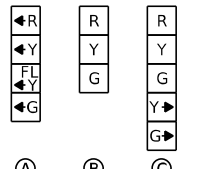
REMOVE EXISTING MAST ARM ASSEMBLY - 1 EACH  
 REMOVE EXISTING SIGNAL HEAD - 1 EACH  
 REMOVE & RELOCATE EXISTING SIGNAL HEAD - 4 EACH  
 REMOVE EXISTING CONCRETE FOUNDATION - 1 EACH  
 REMOVE EXISTING FIBER OPTIC SIGN - 1 EACH  
 REMOVE SIGN PANEL - TYPE 1  
 REMOVE AND RELOCATE SIGN PANEL - TYPE 2  
 REMOVE AND RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, UNIT DETECTOR - 1 EACH

**NOTES**

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**TRAFFIC SIGNAL FACES**



LEFT TURN YIELD ON FLASHING YELLOW ARROW

Ⓞ R10-12a 30"X36" SIGN PANEL - TYPE 1 2 REQUIRED

REMOVE EXISTING CONTROLLER AND CABINET  
 REMOVE EXISTING SIGNAL HEAD - 1 EACH

FILE NAME: X:\Production\Files\2021\421\_0800\PRJ\01\ACAD\CAD\CADD\_Sheets\0876P34-Sht-1.dwg



USER NAME = Jennifer  
 MODEL NAME = 161 GMR Plan  
 PLOT SCALE = 40,0000' / in.  
 PLOT DATE = 10/4/2021

DESIGNED - DKS  
 DRAWN - LEC  
 CHECKED - JLS  
 DATE - 08-18-2021

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLANS IL 161 & GREEN MOUNT ROAD**

SCALE: 1"=20' SHEET 1 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	(123-1,2,3)SFY-1	ST CLAIR	28	20
CONTRACT NO. 76P34				

ILLINOIS FED. AID PROJECT



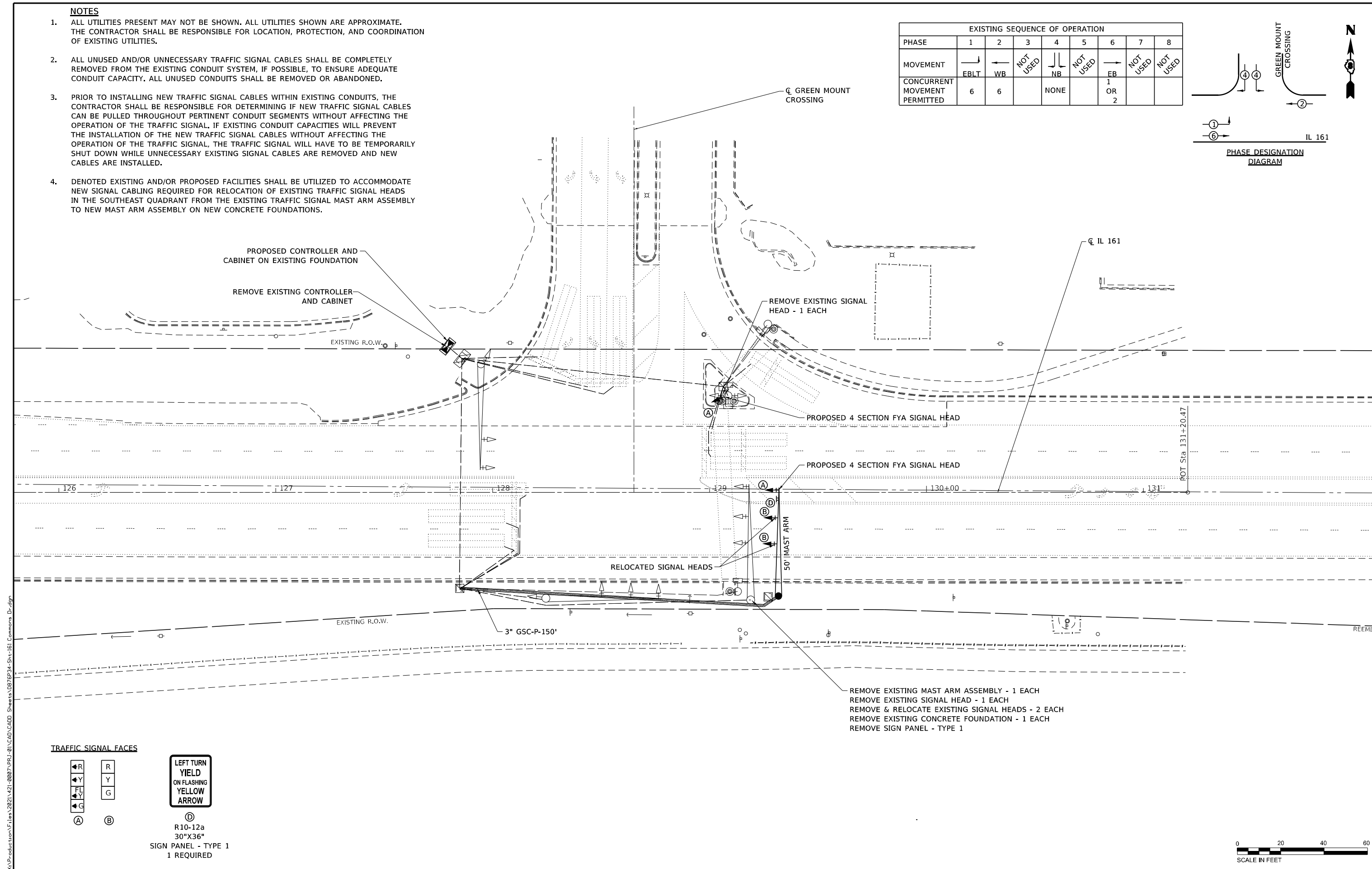
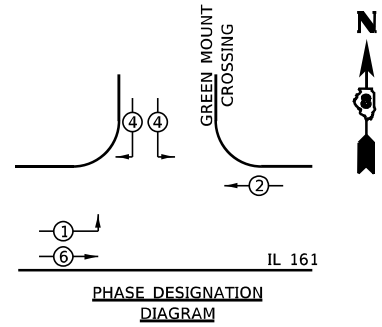




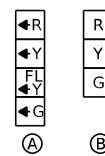
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4. DENOTED EXISTING AND/OR PROPOSED FACILITIES SHALL BE UTILIZED TO ACCOMMODATE NEW SIGNAL CABLING REQUIRED FOR RELOCATION OF EXISTING TRAFFIC SIGNAL HEADS IN THE SOUTHEAST QUADRANT FROM THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLY TO NEW MAST ARM ASSEMBLY ON NEW CONCRETE FOUNDATIONS.

EXISTING SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	→	←	NOT USED	↓	NOT USED	→	NOT USED	NOT USED
CONCURRENT MOVEMENT PERMITTED	EBLT	WB		NB		EB 1 OR 2		



**TRAFFIC SIGNAL FACES**



Ⓓ  
R10-12a  
30"X36"  
SIGN PANEL - TYPE 1  
1 REQUIRED

- REMOVE EXISTING MAST ARM ASSEMBLY - 1 EACH
- REMOVE EXISTING SIGNAL HEAD - 1 EACH
- REMOVE & RELOCATE EXISTING SIGNAL HEADS - 2 EACH
- REMOVE EXISTING CONCRETE FOUNDATION - 1 EACH
- REMOVE SIGN PANEL - TYPE 1



FILE NAME = X:\Production\Files\2021\421-0807A\PRJ-01\ACAD\CADD\_Sheets\0876P34-Sht-161-Commons Dr.dgn

<p>1028 S/A Bradley R. Smith Drive Troy, IL 61864 PHONE: 618.667.1400</p>	USER NAME = Jennifer	DESIGNED - DKS	REVISED -
	MODEL NAME = 161 Commons Plan	DRAWN - LEC	REVISED -
	PLOT SCALE = 40,0000' / in.	CHECKED - JLS	REVISED -
	PLOT DATE = 10/4/2021	DATE - 08-18-2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLANS  
IL 161 & GREEN MOUNT CROSSING**

SCALE: 1"=20'    SHEET 1 OF 3 SHEETS

F.A.P. RTE. 805	SECTION (123-1,2,3)SFY-1	COUNTY ST CLAIR	TOTAL SHEETS 28	SHEET NO. 23
CONTRACT NO. 76P34			ILLINOIS FED. AID PROJECT	





# SOIL BORING LOG

Date 8/24/2021

ROUTE IL-161 DESCRIPTION PTB 197-040 WO-3 IL 161 Mast Arm Replacements LOGGED BY JB

SECTION LOCATION Beleville, Illinois

COUNTY St. Clair DRILLING METHOD Vertek S4 CPT Direct Sampler HAMMER TYPE N/A

STRUCT. NO. Station	D E P T H	B L O W S	U C S Qu	M O I S T T	Surface Water Elev. _____ ft Stream Bed Elev. _____ ft
BORING NO. Station Offset Ground Surface Elev. _____ ft	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft
3" TOPSOIL					
FILL: Brown, clay loam (A-6)			0.4 S/15	24	
CLAY LOAM: Gray (A-4)			0.5 S/5	21	
SILTY CLAY LOAM: Gray (A-4)			0.2 B/20	28	
			0.9 B/20	24	
			<0.25 P	30	
			0.5 P	25	
Boring terminated at 12 ft.					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

FILE NAME: X:\Production\Files\2021\21-0807\PRJ-01\ACAD\CADD\_Sheets\0876P34-Sht-161-Commons\_Dr.dgn



USER NAME = Jennifer	DESIGNED - DKS	REVISED -
MODEL NAME = 161 Commons Borings	DRAWN - LEC	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED - JLS	REVISED -
PLOT DATE = 10/4/2021	DATE - 08-18-2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLANS  
IL 161 & GREEN MOUNT CROSSING  
SCALE: N/A SHEET 3 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	(123-1,2,3)SFY-1	ST CLAIR	28	25
CONTRACT NO. 76P34			ILLINOIS FED. AID PROJECT	

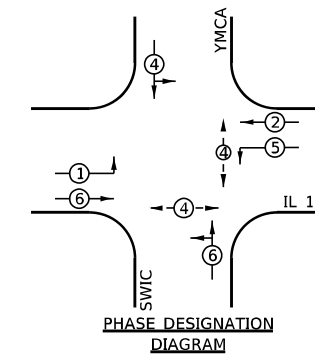


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EXISTING SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	EBLT	WB	SB	NB	WBLT	EB	NOT USED	NOT USED
CONCURRENT MOVEMENT PERMITTED	5 OR 6	5 OR 6	NONE	NONE	1 OR 2	1 OR 2		

\* PEDESTRIAN MOVEMENT ON ACTUATION ONLY



REMOVE EXISTING MAST ARM ASSEMBLY - 1 EACH  
 REMOVE EXISTING SIGNAL HEAD - 1 EACH  
 REMOVE & RELOCATE EXISTING SIGNAL HEAD - 3 EACH  
 REMOVE EXISTING CONCRETE FOUNDATION - 1 EACH  
 REMOVE SIGN PANEL - TYPE 1

REMOVE EXISTING SIGNAL HEAD - 1 EACH

PROPOSED 4 SECTION FYA SIGNAL HEAD

RELOCATED SIGNAL HEADS

3" PVC-T-79'

YMCA DRIVE

IL 161

PROPOSED 3 SECTION SIGNAL HEAD

50' MAST ARM

PROPOSED 4 SECTION FYA SIGNAL HEAD

PROPOSED 4 SECTION FYA SIGNAL HEAD

RELOCATED SIGNAL HEADS

PROPOSED 3 SECTION SIGNAL HEAD

RELOCATED SIGNAL HEADS

56' MAST ARM

PROPOSED 4 SECTION FYA SIGNAL HEAD

3" PVC-T-15'

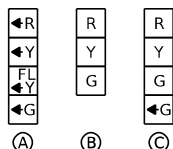
REMOVE EXISTING SIGNAL HEAD

REMOVE EXISTING MAST ARM ASSEMBLY - 1 EACH  
 REMOVE EXISTING SIGNAL HEAD - 1 EACH  
 REMOVE & RELOCATE EXISTING SIGNAL HEAD - 3 EACH  
 REMOVE EXISTING CONCRETE FOUNDATION - 1 EACH  
 REMOVE SIGN PANEL - TYPE 1

PROPOSED CONTROLLER AND CABINET ON EXISTING FOUNDATION

REMOVE EXISTING CONTROLLER AND CABINET

**TRAFFIC SIGNAL FACES**



R10-12a  
 30"X36"  
 SIGN PANEL - TYPE 1  
 2 REQUIRED



SCALE IN FEET

FILE NAME = X:\Production\Files\2021\421\_0807A\PRJ\01\ACAD\CADD\_Sheets\0876P34-Sht-161\_YMCA.dgn



USER NAME = Jennifer  
 MODEL NAME = 161 YMCA Plan  
 PLOT SCALE = 40,0000' / in.  
 PLOT DATE = 10/4/2021

DESIGNED - DKS  
 DRAWN - LEC  
 CHECKED - JLS  
 DATE - 08-18-2021

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLANS  
 IL 161 & YMCA DRIVE

SCALE: 1"=20' SHEET 1 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	(123-1,2,3)SFY-1	ST CLAIR	28	26
			CONTRACT NO. 76P34	

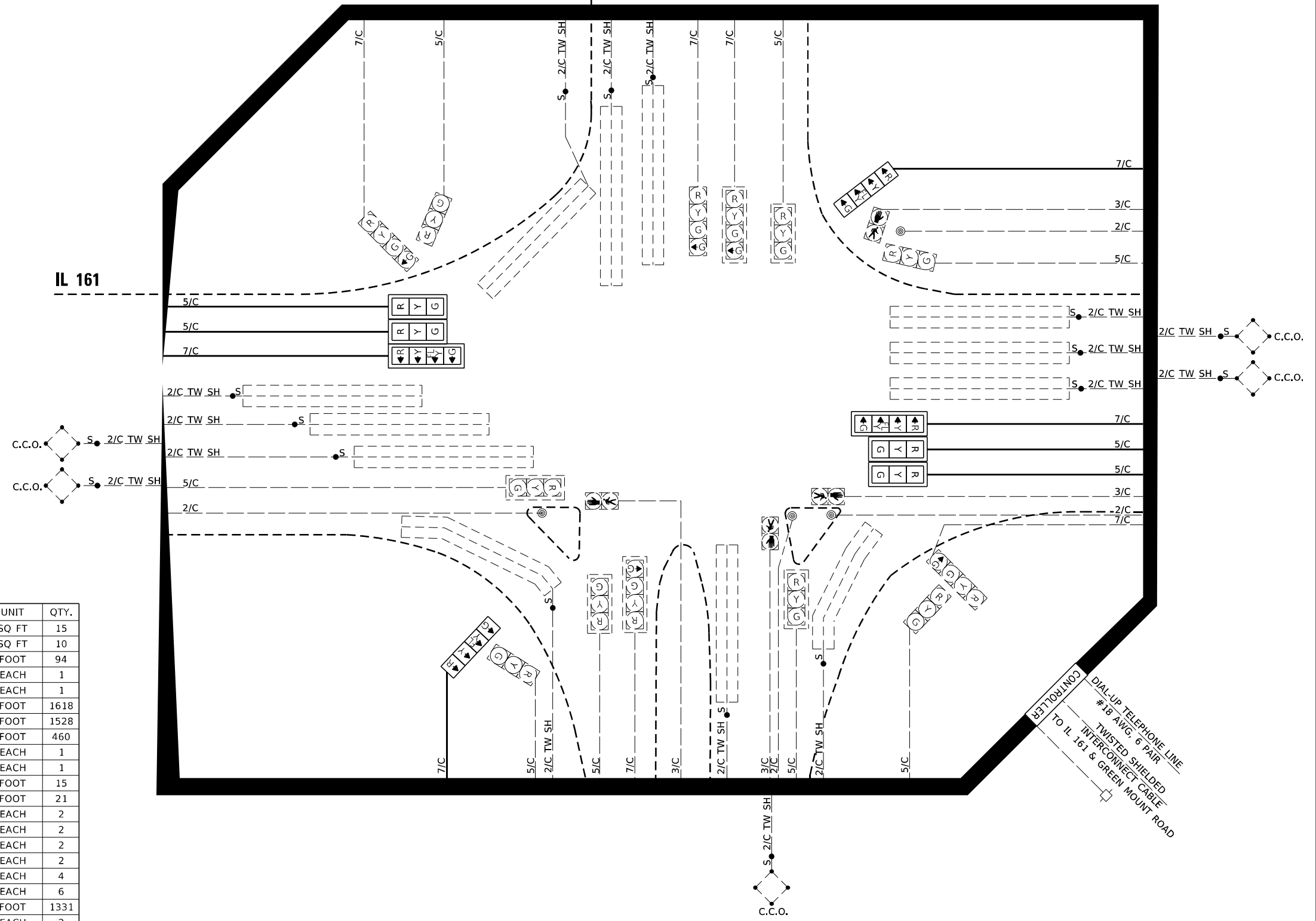
ILLINOIS FED. AID PROJECT

# CABLE DIAGRAM LEGEND

- PROPOSED ELECTRIC CABLE IN CONDUIT
- - - EXISTING ELECTRIC CABLE IN CONDUIT
- PROPOSED CABLE SPLICE
- EXISTING CABLE SPLICE
- SERVICE INSTALLATION
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- TW SH TWISTED AND SHIELDED CABLE
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE 6 CONDUCTOR
- LD-IN ELECTRIC CABLE LEAD-IN, I-PAIR
- CD CALL DELAY (SEE GENERAL NOTES)
- C.C.O. CALL CARRY OVER (SEE GENERAL NOTES)
- ⊙ COIL CABLE FOR FUTURE PED. PUSH-BUTTON USE
- ⊙ EXISTING PEDESTRIAN PUSH BUTTON
- ⊙ PROPOSED PEDESTRIAN PUSH BUTTON
- ⊙ EXISTING PEDESTRIAN SIGNAL HEAD
- ⊙ PROPOSED PEDESTRIAN SIGNAL HEAD

IL 161

YMCA DRIVE



## SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	15
REMOVE SIGN PANEL - TYPE 1	SQ FT	10
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	94
MAINTENANCE OF TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1618
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1528
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	460
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
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 SIGNAL HEAD	EACH	6
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1331
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
REMOVE EXISTING SIGNAL HEAD	EACH	2

FILE NAME = X:\Production\Files\2021\421-0807A\PRJ-01\CAD\CADD\_Sheets\0876P34-Sht-161\_YMCA.dgn



USER NAME = Jennifer	DESIGNED - DKS	REVISED -
MODEL NAME = 161 YMCA Cable Dia	DRAWN - LEC	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED - JLS	REVISED -
PLOT DATE = 10/4/2021	DATE - 08-18-2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLANS  
IL 161 & YMCA DRIVE

SCALE: N/A SHEET 2 OF 3 SHEETS

F.A.P. RTE. 805	SECTION (123-1,2,3)SFY-1	COUNTY ST CLAIR	TOTAL SHEETS 28	SHEET NO. 27
CONTRACT NO. 76P34			ILLINOIS FED. AID PROJECT	

