01-21-2022 LETTING ITEM 052

FOR INDEX OF SHEETS, SEE SHEET NO. 2

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STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

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

LOCATION #2

LOCATION #1

LOCATION #3

IL ROUTE 161 AT MAIN STREET

IL ROUTE 161 AT JOSEPHINE DRIVE-

IL ROUTE 161 AT B STREET

LOCATION #4 IL ROUTE 161 AT CARLYLE AVENUE

> LOCATION #5 IL ROUTE 161 AT WEST BOULEVARD

> > LOCATION #6 IL ROUTE 161 AT GREEN MOUNT ROAD-

. 062-05677

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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



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

FOLLOWING SHEETS IN THESE PLANS WHICH

License Expires 11/30/2021 THE SEAL SHOWN ABOVE IS VALID FOR THE

WERE PREPARED UNDER MY DIRECT SUPERVISION: SHEETS 1-16

SECTION

(123-1,2,3) SFY-1

ST CLAIR 28 1 CONTRACT NO. 76P34

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

LOCATION OF SECTION INDICATED THUS: - -

LOCATION #8

LOCATION #7

IL ROUTE 161 AT

GREEN MOUNT CROSSING

IL ROUTE 161 AT YMCA DRIVE

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

- 1 COVER SHEET
- 2 GENERAL NOTES, INDEX OF SHEETS, AND HIGHWAY STANDARDS
- 3-4 SUMMARY OF QUANTITIES
- 5 TRAFFIC SIGNAL DETAILS
- 6-7 TRAFFIC SIGNAL MODIFICATION PLANS IL 161 & JOSEPHINE
- 8-10 TRAFFIC SIGNAL MODIFICATION PLANS IL 161 & B STREET
- 11-13 TRAFFIC SIGNAL MODIFICATION PLANS IL 161 & MAIN STREET
- 14-16 TRAFFIC SIGNAL MODIFICATION PLANS IL 161 & CARLYLE AVENUE
 17-19 TRAFFIC SIGNAL MODIFICATION PLANS IL 161 & WEST BOULEVARD
- 20-22 TRAFFIC SIGNAL MODIFICATION PLANS IL 161 & GREEN MOUNT ROAD
- 23-25 TRAFFIC SIGNAL MODIFICATION PLANS IL 161 & GREEN MOUNT CROSSING
- 26-28 TRAFFIC SIGNAL MODIFICATION PLANS IL 161 & YMCA DRIVE

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 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.
- 8. ANY COMPONANT 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 PVCC	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT POLYVINYL CHLORIDE CONDUIT
GSC	GALVANIZED STEEL CONDUIT
<u>↓</u> ↓	EXISTING TRAFFIC SIGNAL MAST ARM
	EXISTING HANDHOLE
	EXISTING DOUBLE HANDHOLE
	EXISTING DETECTOR LOOP
\bowtie	EXISTING CONTROLLER
TT.	EXISTING STREET NAME SIGN/TRAFFIC SIGN
	EXISTING SERVICE INSTALLATION
	EXISTING CONDUIT
	PROPOSED TRAFFIC SIGNAL MAST ARM
	PROPOSED HANDHOLE
	PROPOSED DOUBLE HANDHOLE
\square	PROPOSED DETECTOR LOOP
	PROPOSED CONDUIT: "T" TRENCH, "P" PUSH, SIZE SPECIFIED

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	SUMMARY OF QUANTIT	TES		CONSTRUCTION C
CODE	О	UNIT	TOTAL	FAP 805 IL ROUTE 161 URBAN TRAFFIC SIGNAL
* 6690020	NON-SPECIAL WASTE DISPOSAL	CU YD	28	28
671001	0 MOBILIZATION	L SUM	1	1
k 6690053	SOIL DISPOSAL ANALYSIS	EACH	2	2
701026	0 TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1
* 6690100	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1
701026	2 TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1
k 6690100	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1
701026	2 TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	LSUM	1	1
* 6690100	REGULATED SUBSTANCESS MONITORING	CAL DA	4	4
701026	5 TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
720001	0 SIGN PANEL - TYPE 1	SQFT	113	113
724003	0 REMOVE SIGN PANEL - TYPE 1	SQFT	95	95
* 724007	0 RELOCATE SIGN PANEL - TYPE 1	SQFT	38	38
* 724007:	0 RELOCATE SIGN PANEL - TYPE 2	SQ FT	40	40
805001	0 SERVICE INSTALLATION, TYPE A	EACH	1	1
8102820	0 UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	60	60
810282	0 UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	5	5
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				20/001/112
	SUMMARY OF QUANTITIES	<u> </u>		CONSTRUCTION CODE 0021
CODE NO		UNIT	TOTAL	FAP 805 IL ROUTE 161 URBAN
7		1		TRAFFIC SIGNALS
0.4.000.00.00		5007		
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
03000200	INAINTENANCE OF EXISTING THAT THE SIGNAL INSTALLATION	LACIT		0
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
0,001200			010	0.0
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, GALVA N IZ ED STEE L 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

TO STA.

*SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

CONSTRUCTION CODE

	SUMMARY OF QUANTITIE	S		0021
CODE NO		UNIT	TOTAL	FAP 805 IL ROUTE 161 URBAN TRAFFIC SIGNALS
0.7700000	OTTEL MACT ADM ACCEMBLY AND DOLE TO ET			•
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

	0021			
CODE NO	ITEM	UNIT	TOTAL	FAP 805 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 PEDESTRIANNSIGNALS	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
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* SPECIALTY ITEM

* SPECIALTY ITEM

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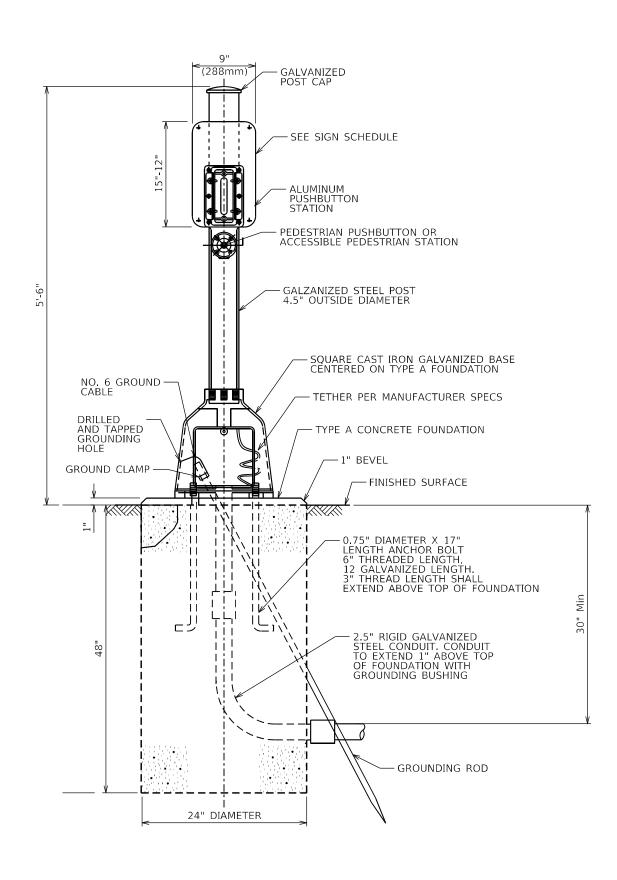
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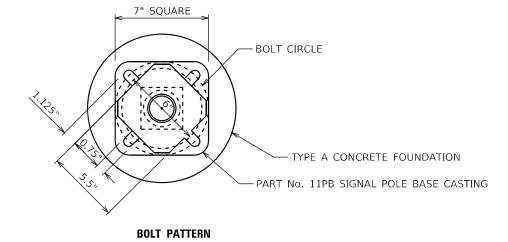
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DEPARTMENT OF TRANSPORTATION

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		CONTR	ACT	NO. 70	õРЗ	
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PEDESTRIAN PUSH-BUTTON POST

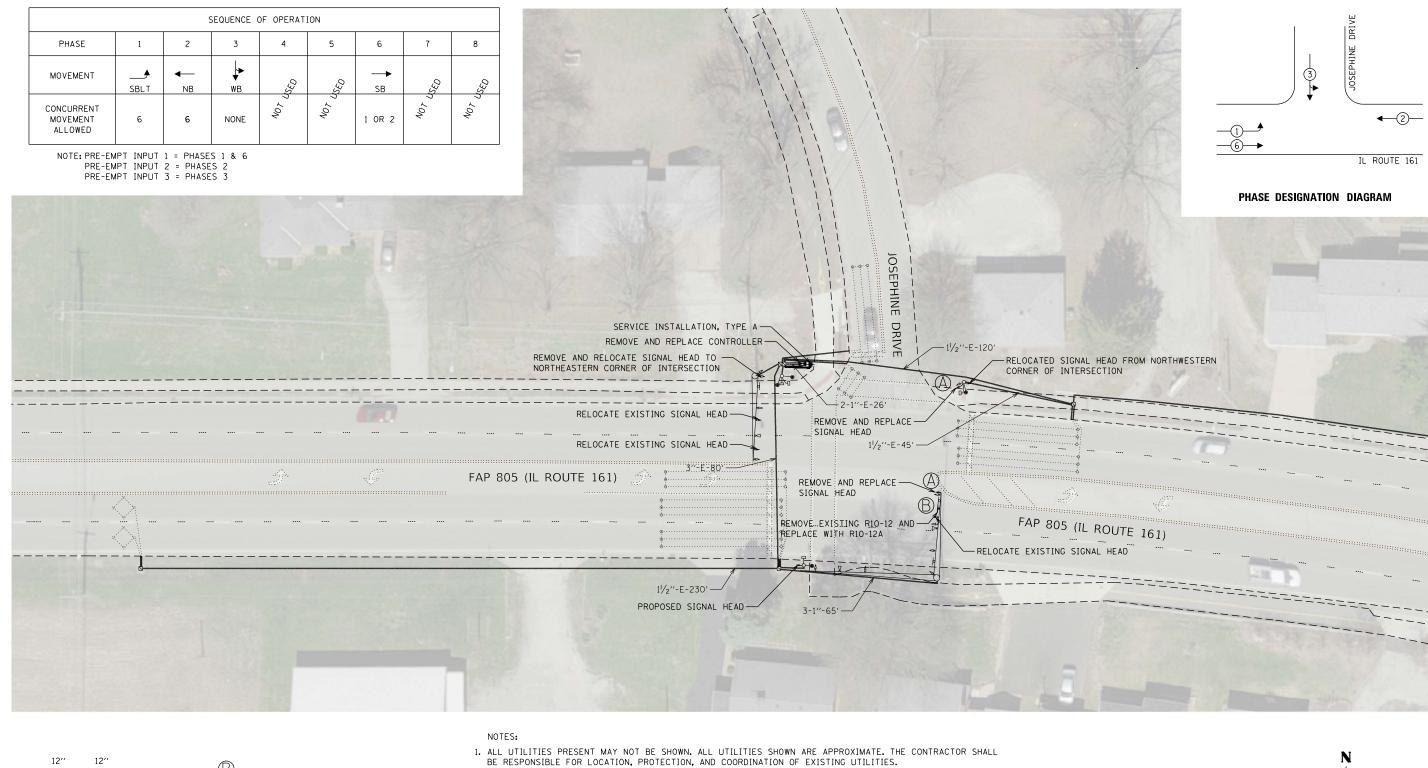


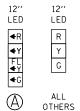
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.
805	(123-1, 2, 3) SF	Y-1	ST CLAIR	28	5
			CONTRACT	NO. 76	5P34
	ILLINOI	FED. A	ID PROJECT HS	IP-7B48	(242)



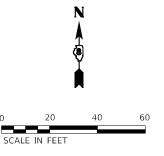


TRAFFIC SIGNAL FACES

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

1 REQUIRED

- 2. 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 ARANDONED.
- 3. 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.
- 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 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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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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FAP				161) &			DRIVE	80	05	(123-1, 2,	3) SFY-	-1
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PROPOSED ELECTRIC CABLE IN CONDUIT

2/C INDICATES NUMBER OF CONDUCTORS IN CABLE

EXISTING SERVICE INSTALLATION

PROPOSED BATTERY BACKUP

EXISTING VIDEO DETECTION ZONE

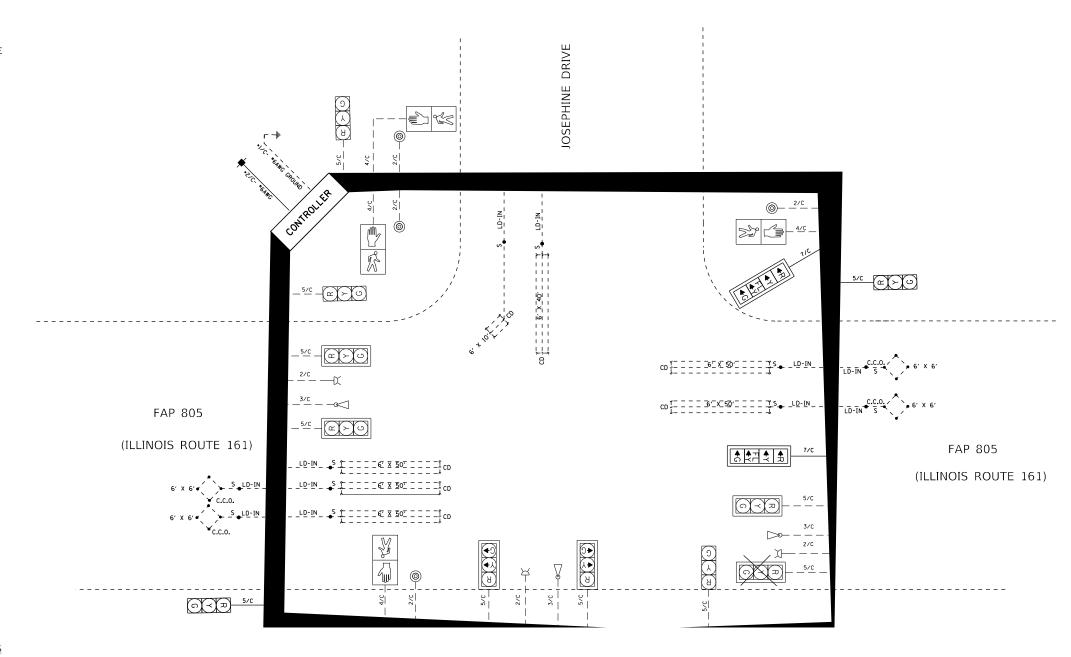
EXISTING VIDEO CAMERA

#6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE
6 CONDUCTORS (SEE GENERAL NOTES)

6, x e. CCO

CALL CARRY OVER LOOP (SIZE AS SHOWN)

CALL DELAY 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

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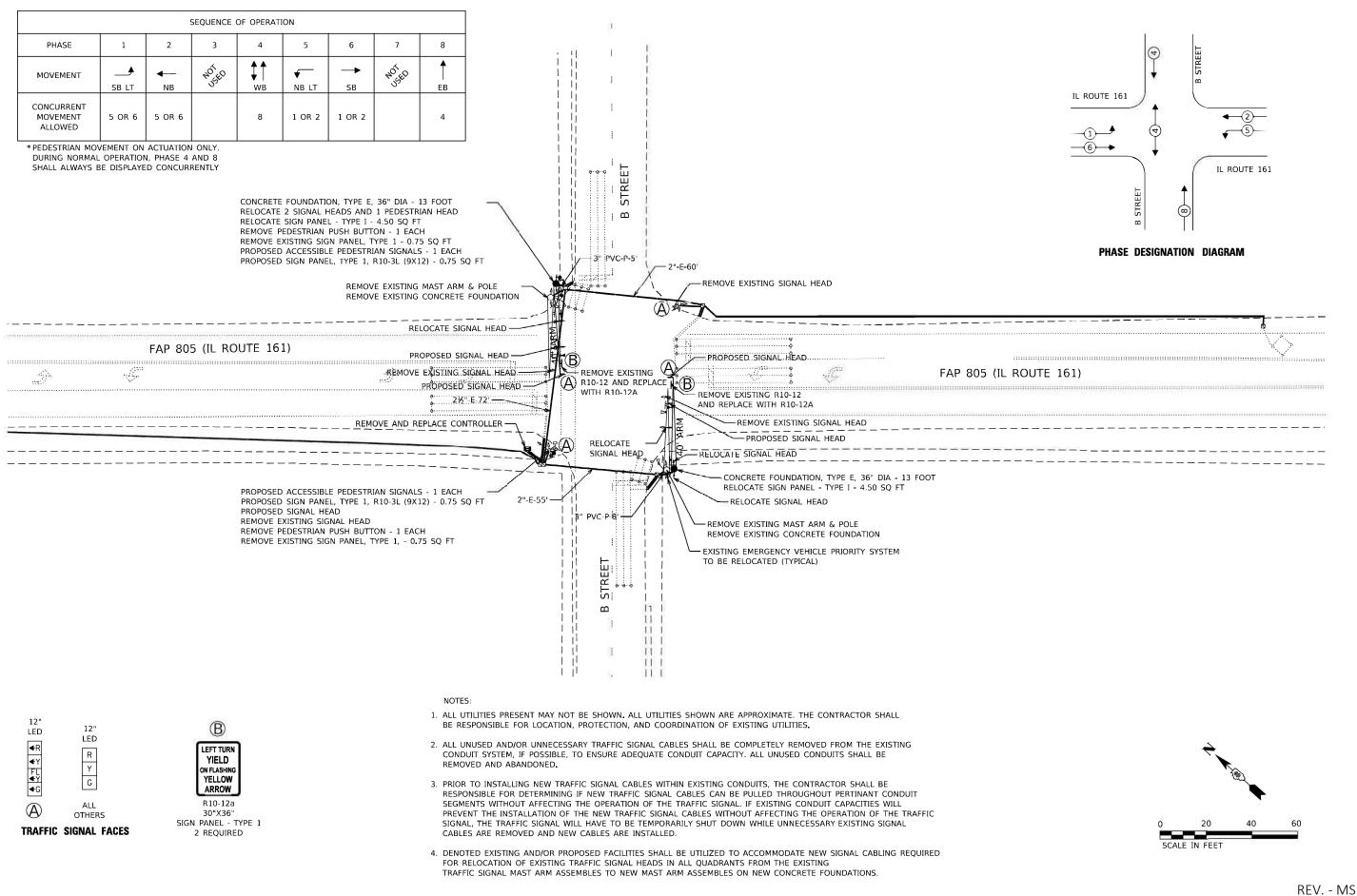
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NTS

	TE	F.A.P. RTE	SECT	ION		COUNTY					
TRAFFIC SIGNAL DETAILS FAP 805 (IL ROUTE 161) AND JOSEPHINE DRIVE							(123-1, 2,	3) SFY-	1	ST CLAI	R
.,,,,			101, 7111	, 000L.						CONTRA	₹CT
TS	SHEET 2	OF	2 SHEETS	STA.	TO STA.			THINOIS	FED A	ID PROJECT	HSI

NO. 76P34



FUHRMANN ENGINEERING WWW. FUHRMANN-ENG .COM PLOT DATE = 12/1/2021

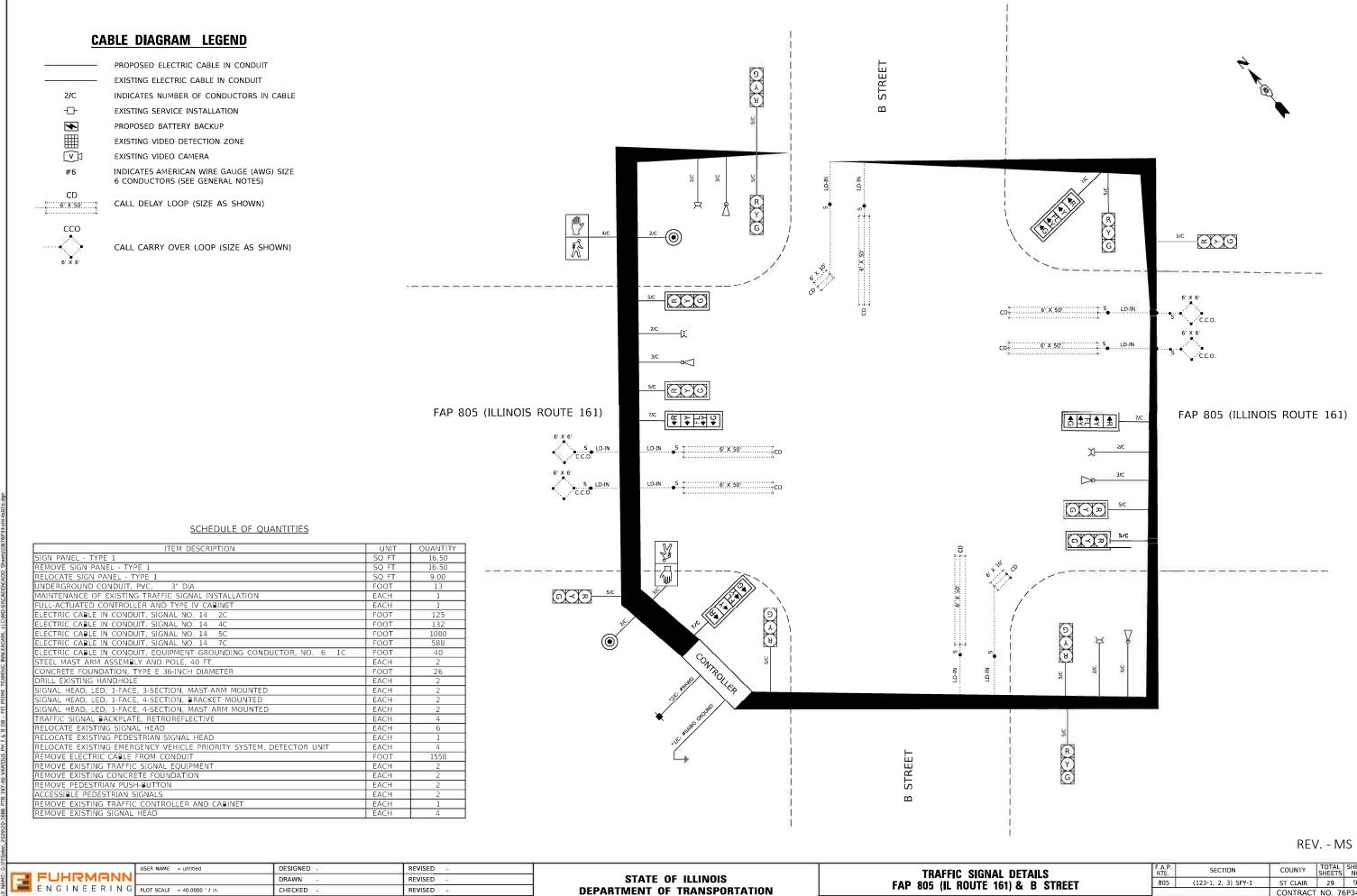
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL PLANS FAP 805 (IL ROUTE 161) & B STREET SHEET 1 OF 2 SHEETS STA.

SCALE: 1"=20"

SECTION COUNTY ST CLAIR 29 8 CONTRACT NO. 76P34 ILLINOIS FED. AID PROJECT HSIP-7B48(242)



WWW. FUHRMANN-ENG .COM | PLOT DATE = 12/1/2021

DRAWN REVISED CHECKED REVISED DATE REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP 805 (IL ROUTE 161) & B STREET SHEET 2 OF 2 SHEETS STA.

SCALE: NTS

ST CLAIR 29 9 CONTRACT NO. 76P34 ILLINOIS FED. AID PROJECT HSIP-7B48(242)



Page <u>1</u> of <u>1</u>

Date 3/28/86

Illinois Department of Transpo	ortation								Dute	- 0,2	0,00
ROUTE FAP 805 DESCR	RIPTION	۱	Traffi	c Signa	als at I	L 161 and B Street in Belle	ville LOGGI	ED B	Y	J. Kin	g
SECTION 123-3R	LO	CATI	ON _	NW 1/	4, SE	C. 23, TWP. 1N, RNG. 8W, 3	3 PM				
COUNTY St. Clair DR	RILLING	ME	THOD			Hand Auger H	AMMER TYPE				
STRUCT. NO. Station		D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev. Groundwater Elev.: First Encounter		D E P T H	B L O W S	U C % Qu	M O I S T
Offset 42.00ft L Ground Surface Elev. 529.2		(ft)	(/6'')	(tsf)	(%)	Upon Completion After Hrs.		(ft)	(/6")	(tsf)	(%)
Brown and Gray SILT	- 69			1000 1001	50000000	are recorded from pocket pentrometer readings.		-		20 0000	1997 1-1-30
	528.2					pentiometer readings.		_			
Brown and Gray Silty CLAY								_			
		_		0.75	07						
	525.7	-		0.75	27	_					
Brown and Gray SILT	504.0										
	524.2	-5	r:					25			
Brown and Gray Silty CLAY				0.5	30	_					
		_						-			
		-						-			
		_		0.75	30			_			
								_			
		-10						-30			
		_		1.0	30	-		_			
		1						6-3			
		-						_			
				1.0	28			_			
								_			
		_ -15						-35			
	513.2	_		1.5	28	-		-			
END OF BORING	J.U.Z	-									
AT DESIGNACE SHIPM OF THE STATE		_						_			
NOTE:											
Due to utilities and general congestion in the area, these borings were drilled using hand		_						_			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page <u>1</u> of <u>1</u>

ROUTEFAP 805 DESCR	RIPTION _	Traffic	Signa	als at I	L 161 and B Street in Bel	leville L	.OGGE	D B	·	J. Kin	g
SECTION 123-3R	LOCAT	ION	NW 1/	4. SEC	2. 23. TWP. 1N. RNG. 8W	/. 3 PM					
COUNTY St. Clair DF					Hand Auger						
STRUCT. NOStation	— E	0	U C S	M O I	Surface Water Elev Stream Bed Elev		ft ft	D E P	B L O	U C S	M 0 1
BORING NO. 1 Station 287+69 Offset 41.00ft R	T H	W S	Qu	S T	Groundwater Elev.: First Encounter Upon Completion	521.5	ft ₹	H	W S	Qu	S
Ground Surface Elev. 528.5	ft (ft)	(/6")	(tsf)	(%)	After Hrs		ft	(ft)	(/6")	(tsf)	(%)
Brown and Gray Silty CLAY	_				were available and all G are recorded from pock pentrometer readings.			_			
	_										
	-		0.75	25							
								_			
	5	5						-25			
	_		0.5	22							
	y _							-			
	-							_			
	_		0.75	30							
	-10							-30			
		_	1.0	28							
			1.0	20				_			
	<u>-</u>							_			
	-		1.5	27							
	_							_			
	16	5						-35			
	512.5		1.5	28							
END OF BORING	-							_			
NOTE:	_							_			
Due to utilities and general	_	-									
congestion in the area, these borings were drilled using hand augers. Therefore, no "N" values											
augers. Therefore, no in values	-20							-40			

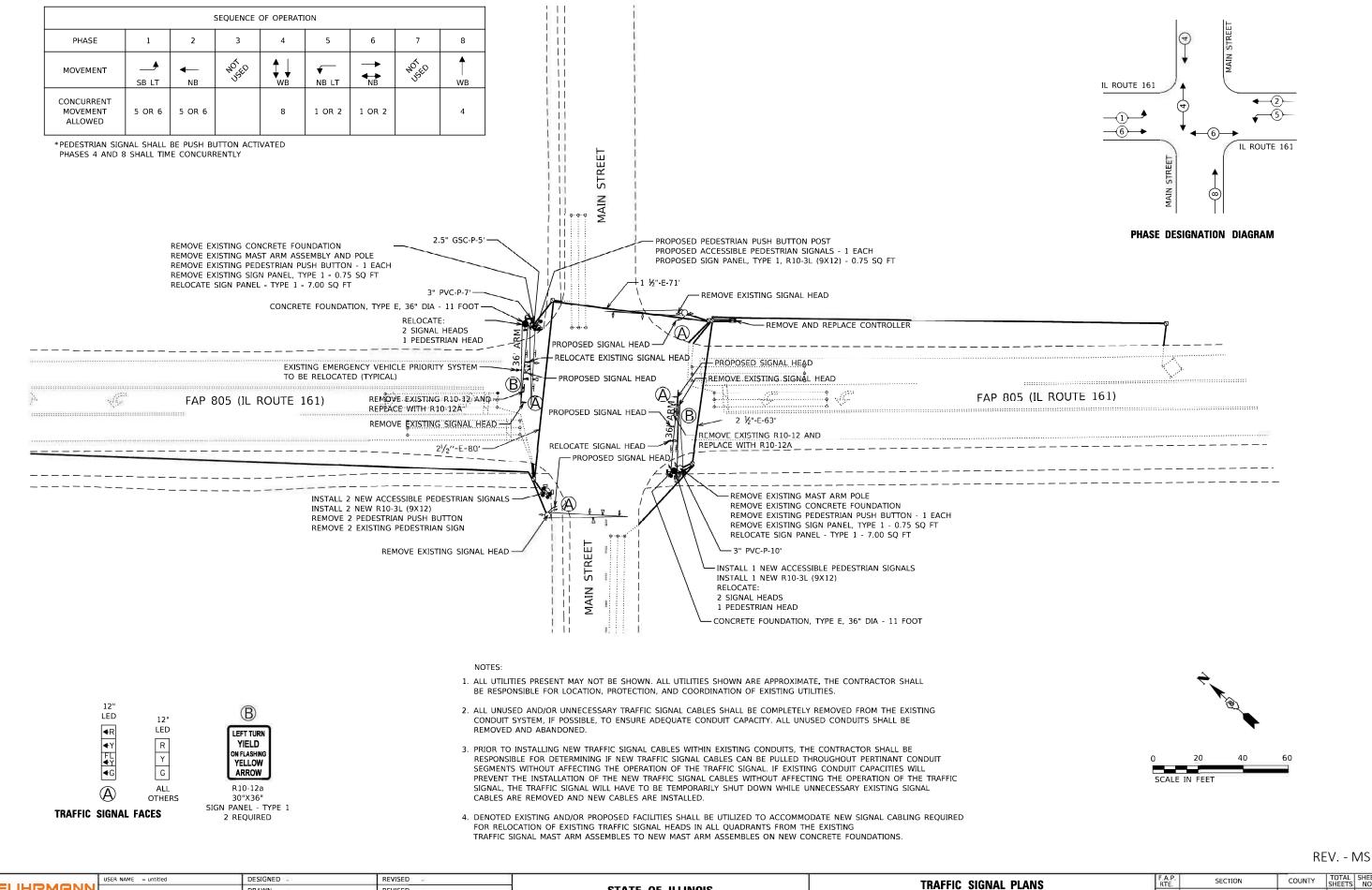
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

		US				
E	FUHRMANN					
	ENGINEERING	PLO				
WWW. FUHRMANN-ENG.COM						

	USER NAME = untitled	DESIGNED -	REVISED -
ı		DRAWN -	REVISED -
6	PLOT SCALE = 2.0000 / in	CHECKED -	REVISED -
	PLOT DATE = 10/4/2021	DATE -	REVISED -

	TRAFFIC SIGNAL DETAILS	F.A.P. RTE	SECTION	COUNTY	TOTAL	SHEE NO.
	FAP 805 (IL ROUTE 161) & B STREET	805	(123-1, 2, 3) SFY-1	ST CLAIF	28	10
	TAI 000 (IL HOUTE 101) & D OTHEET			CONTRA	CT NO. 7	6P34
SCALE: NTS	SHEET 3 OF 3 SHEETS STA. TO STA.		ILLINOIS FE	ED. AID PROJECT	HSIP-7B48	3(242



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

FUHRMANN ENGINEERING

WWW. FUHRMANN-ENG .COM PLOT DATE = 12/1/2021

PLOT SCALE = 40.0000 ' / in.

DRAWN

DATE

CHECKED

REVISED

REVISED

REVISED

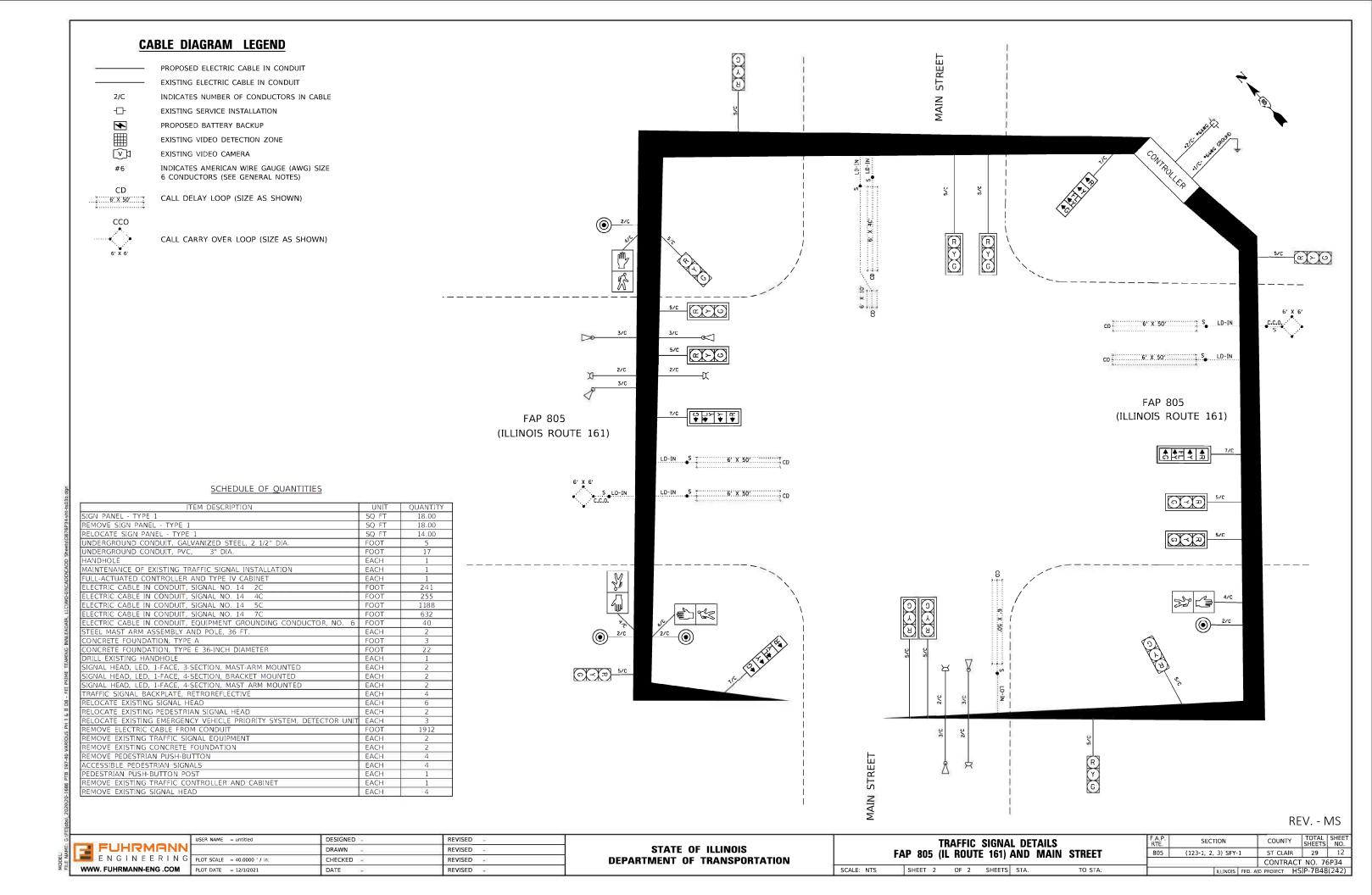
COUNTY ST CLAIR 29 11 CONTRACT NO. 76P34

ILLINOIS FED. AID PROJECT HSIP-7B48(242)

(123-1, 2, 3) SFY-1

FAP 805 (IL ROUTE 161) AND MAIN STREET

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





Page 1 of 1

Date 10/17/95

BOUTE FAR OOF PEOOR		-	··· 0:	r	LILAGO LE LM. OL LA LOCATE DY	
ROUTEFAP 805 DESCRI	PHON .	Ira	ffic Sig	nais a	t IL 161 and East Main Street LOGGED BY Larry Ford	1
SECTION 123-3TS	LOCA	ATION _	SE 1/4	4, NW	1/4, SEC. 23, TWP. 1N, RNG. 8W, 3 PM	
COUNTY St. Clair DRI	LLING N	METHOD			Hand Auger HAMMER TYPE DCP	
STRUCT. NO. N/A Station N/A	_	D B L P O T W	U C S	M O I S	Surface Water Elev ft Stream Bed Elev ft	
BORING NO. 1 SW Quad Station 300+35 Offset 32.00ft Right		H S	Qu	T	Groundwater Elev.: First Encounter ft Upon Completion 499.8 ft ✓	
Ground Surface Elev. 509.3	ft(ft) (/6")	(tsf)	(%)	After Hrs. ft	
Limestone GRAVEL	508.3	-	NC			
Brown and Gray Silty Clay LOAM		8	2.4	23		
	506.3	-	1.7	23		
Gray Silty LOAM	505.3	7	1.0	27		
Gray and Brown Silty CLAY	000.0	-5	1.5	25		
50		7	1.5	26		
	100	_	1.6	25		
	-		1.3	25		
	_		1.4	24		
	$\bar{\mathbb{Z}}$	7	1.3	26		
	499.3	-10 8				
End of Hand Auger	<u></u>					
Pocket Penetrometer used for Qu	<i>p</i>					
Due to inaccessability or buried utilities, Hand Augers were used. "N" values shown are calibrated from a curve converting	-					
Dynamic Cone N to SPT "N". Reference ASTM STP 399	_	-15				
	_					
	_					
	2					
	_					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 8/24/2021

PTB 197-040 WO-3 IL 161 Mast Arm LOGGED BY ____JB Replacements

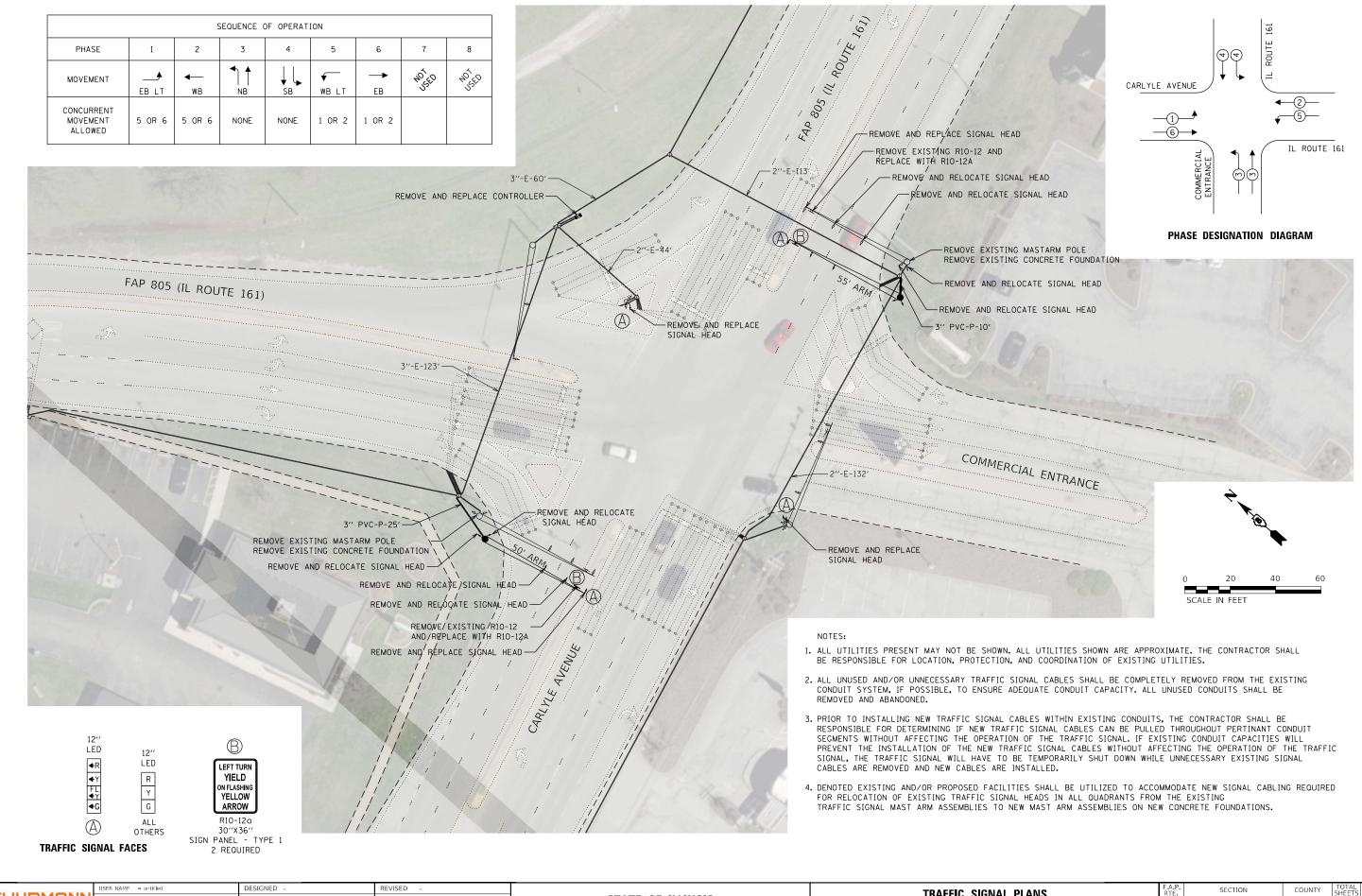
ROUTE IL-161 DESCRIPTION LOCATION Beleville, Illinois SECTION DRILLING METHOD Vertek S4 CPT Direct Sampler HAMMER TYPE N/A COUNTY STRUCT. NO. Surface Water Elev. L 0 C Stream Bed ⊟ev. S W S BORING NO. Groundwater Elev.: s Qu Station First Encounter Offset **Upon Completion** ft (ft) (/6") (tsf) (%) Ground Surface Elev. 510 +/-After 2" TOPSOIL 21 CLAY LOAM: Brown (A-6) 2.6 27 S/20 1.7 S/20 30 30 4.1 26 S/20 2.3 23 B/20 23 2.1 25 S/20 2.1 27 S/20 2.7 24 B/20 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)

SCALE: NTS

USER NAME = untitled	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 2.0000 / in	CHECKED -	REVISED -
PLOT DATE = 10/4/2021	DATE -	REVISED -

						F.A.P. RTE	SECT	LION		COUNTY		TOTAL SHEETS		
FΔP	AP 805 (IL ROUTE 161) AND MAIN STRE		STREET	805	(123-1, 2,	(123-1, 2, 3) SFY-1		ST CLAI	IR	28	13			
174	000	/	HOULE	1017 7	NO MAN	OTHEET					CONTRA	ACT I	NO. 76	P34
	SHEET	3	OF 3	SHEETS	STA.	TO STA.			ILLINOIS	FED. Al	D PROJECT	HSIP	7R48	(242)

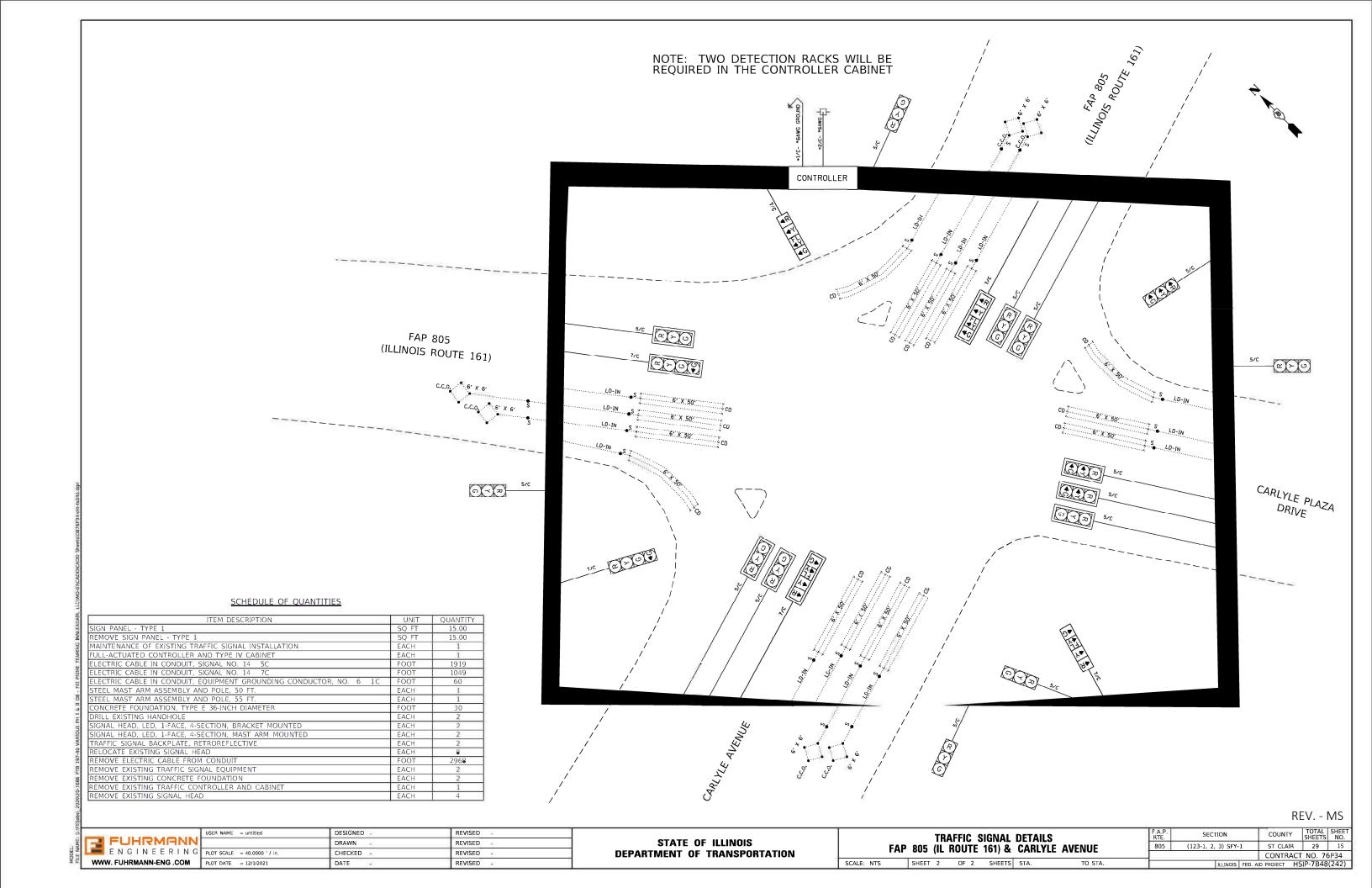


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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLANS
FAP 805 (IL ROUTE 161) AND CARLYLE AVENUE

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





Page 1 of 1

Division of Highways
Illinois Department of Transportation Date ___11/7/89 Traffic Signals at IL 161 and Carlyle Avenue in FAP 805 DESCRIPTION LOGGED BY L. Ford Belleville LOCATION NW 1/4, SE 1/4, SEC. 23, TWP. 1N, RNG. 8W, 3 PM DRILLING METHOD Hollow Stem Augers HAMMER TYPE 140# Automatic STRUCT. NO. Surface Water Elev. E P C S E L P O 0 L 0 C Stream Bed Elev. Station 0 S W W S BORING NO. 2 NW Quad Groundwater Elev.: Qu S Qu S First Encounter Station 42+30 Offset **Upon Completion** (ft) (/6") ft (ft) (/6") (tsf) (%) (tsf) (%) Ground Surface Elev. 515.2 After Hrs. Brown and Gray Very Silty CLAY 1.2 26 (continued) Brown Sandy Silty CLAY S/10 1.8 25 3 1.0 20 3 Brown and Gray Gravelly Sandy Silty CLAY 4 S/5 4 S/10 Brown and Gray Very Silty CLAY 3 1.2 29 2 1.8 18 3 S/5 5 S/10 END OF BORING 4 0.2 39 3 S/5 Gray Clayey SILT 4 2.2 25 5 S/10 3 1.5 25 4 S/10 2 1.7 26 4 S 498.7 Brown and Gray Very Silty CLAY 3 1.2 25 5 S/10

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99) Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Division of Highways Illinois Department of Tran	PIPTION	J	Traff	fic Sigi	nals at	IL 161 and Carlyle Avenue in	LOGGE	ים ח:	,	I For	d
SECTION 123RS-2	LO	CAT	ION _	NW 1/	4, SE	1/4, SEC. 23, TWP. 1N, RNG. 8W, 3	3 PM				
COUNTYSt. ClairI	ORILLING	ME	THOD		Hol	ow Stem Augers HAMMER	TYPE	1	40# A	utoma	tic
STRUCT. NO.		D	В	U	M	Surface Water Elev.	ft	D	В	U	M
STRUCT. NO		E	L	C S	0	Stream Bed Elev.		E	L	C S	0
BORING NO. 1 SE Quad		T	W		S	Groundwater Elev.:		Т	W	0	S
Station 44+13 Offset 50.00ft R		Н	S	Qu	T	First Encounter 502.4 Upon Completion	– ft ¥	П	S	Qu	Т
Ground Surface Elev. 514.9) ft	(ft)	(/6'')	(tsf)	(%)	After Hrs	ft	(ft)	(/6")	(tsf)	(%
		_				Brown and Gray Silty CLAY (continued)			3	1.2	27
Brown Silty Clay with Some Rock	((conunueu)			4	S/5	
								_			
			2	0.7	24			-	1	1.6	26
		-	4	S/5	24			_	5	S/5	20
	<u>510.9</u>					 	490.9				
Brown and Gray Clayey SILT		-5	1			Brown and Gray Gravelly Sandy		-25	1		
Brown and Gray Grayer Gray		5	1	0.7	29	Silty CLAY		-25	3	1.2	2
		_	3	S			188.9		4	S/5	
		-				END OF BORING		47-			
		_	1								
		_	2	1.2 S/15	29						
		-		0,10							
		_	4					_			
		-10	2	1.1	27			-30			
			4	S/10							
		-						-			
		T	1								
		_	2 2	0.8 S/10	29						
	500.9	-	2	5/10				-			
	000.0	_									
Brown and Gray Silty CLAY		-15	3	0.8	26			-35			
			5	S/10				_			
		_						_			
			1								
		-	3	1.5	24	1					
		_	2	S/10							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

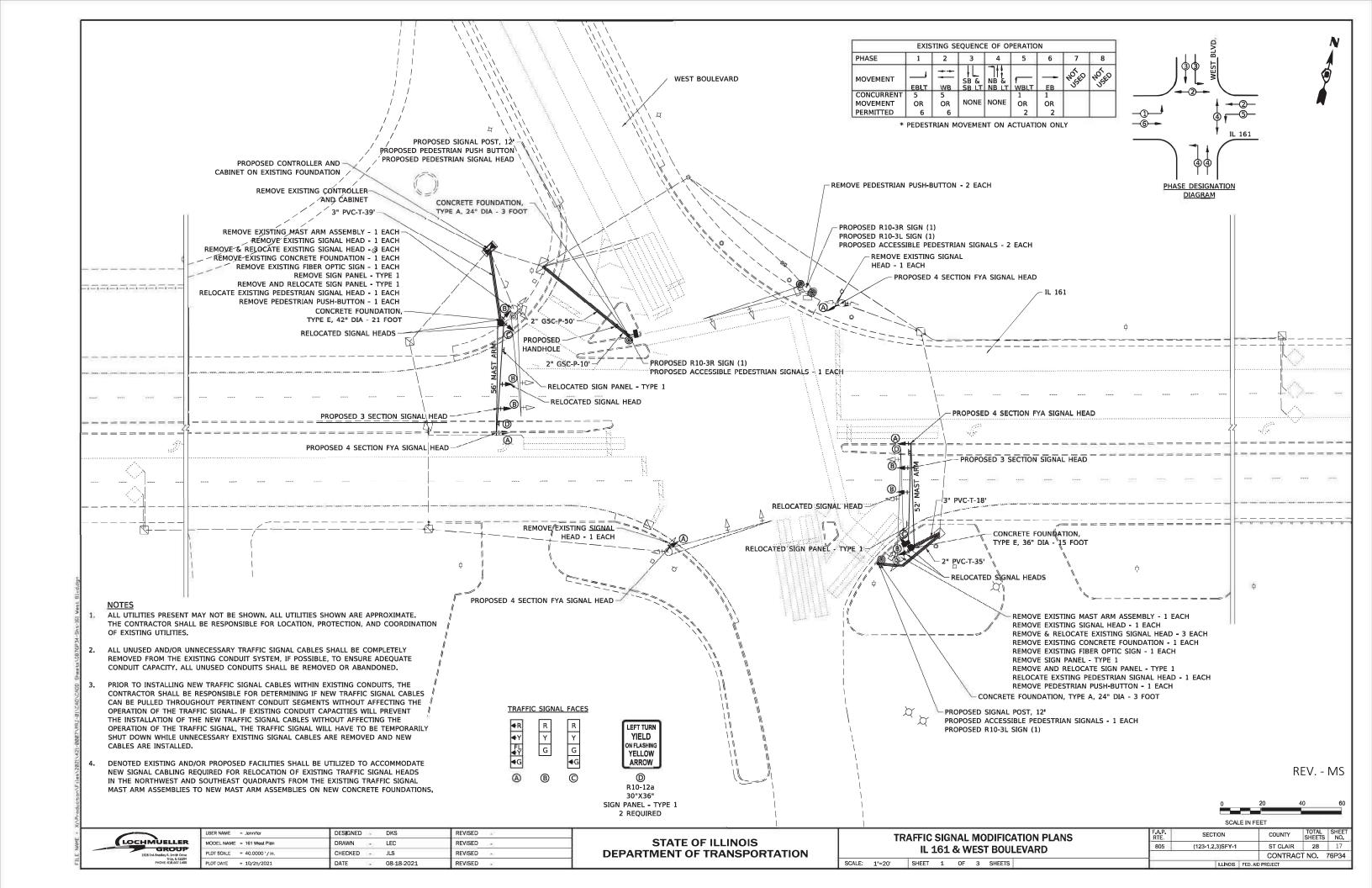
BBS, from 137 (Rev. 8-99)

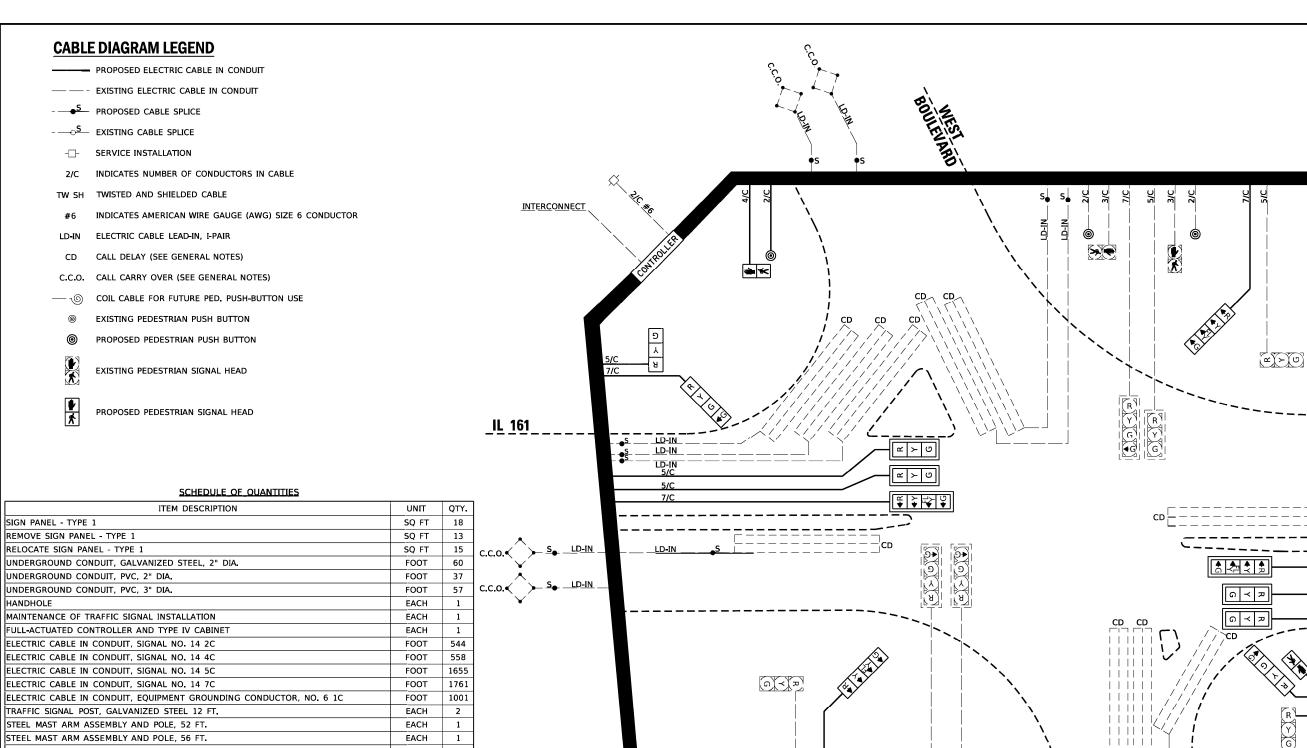
FUHRMANN ENGINEERING WWW. FUHRMANN-ENG .COM

DESIGNED REVISED DRAWN REVISED HECKED REVISED PLOT DATE = 10/4/2021 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION TRAFFIC SIGNAL DETAILS (123-1, 2, 3) SFY-1 ST CLAIR 28 16 FAP 805 (IL 161) AND CARLYLE DRIVE CONTRACT NO. 76P34 SHEET 3 OF 3 SHEETS STA.





ı	REMOVE SIGN PANEL - TYPE I	SQ FI	13
ı	RELOCATE SIGN PANEL - TYPE 1	SQ FT	15
I	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	60
I	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	37
ı	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	57
ı	HANDHOLE	EACH	1
ı	MAINTENANCE OF TRAFFIC SIGNAL INSTALLATION	EACH	1
ı	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ı	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	544
I	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 4C	FOOT	558
ı	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1655
I	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1761
I	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1001
١	TRAFFIC SIGNAL POST, GALVANIZED STEEL 12 FT.	EACH	2
۱	STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
١	STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	1
١	CONCRETE FOUNDATION, TYPE A	FOOT	6
۱	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
۱	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
١	DRILL EXISTING HANDHOLE	EACH	3
۱	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
ı	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
۱	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
۱	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	4
١	RELOCATE EXISTING SIGNAL HEAD	EACH	6
	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	2
۱	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3903
1	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	4
۱	REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
۱	REMOVE PEDESTRIAN PUSH-BUTTON	EACH	4
	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
	REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
1	DEMOVE EVICTING CIGNAL HEAD	EACH	4

- 1	FULL-ACTUATED CONTROLLER A	ND TYPE IV CABINET		EACH	1							
- 1	ELECTRIC CABLE IN CONDUIT, S	·										
- 1	ELECTRIC CABLE IN CONDUIT, S	IGNAL NO. 14 4C		FOOT	558							
- 1	ELECTRIC CABLE IN CONDUIT, S	IGNAL NO. 14 5C		FOOT	1655							
- 1	ELECTRIC CABLE IN CONDUIT, S	IGNAL NO. 14 7C		FOOT	1761							
- 1	ELECTRIC CABLE IN CONDUIT, E	ECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C										
ę	TRAFFIC SIGNAL POST, GALVANI	IZED STEEL 12 FT.		EACH	2							
West	STEEL MAST ARM ASSEMBLY AN	ID POLE, 52 FT.		EACH	1							
-sht-ts-West.dg	STEEL MAST ARM ASSEMBLY AN	ID POLE, 56 FT.		EACH	1							
-sht	CONCRETE FOUNDATION, TYPE	A		FOOT	6							
SP34	CONCRETE FOUNDATION, TYPE	E 36-INCH DIAMETER		FOOT	15							
,D87	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER DRILL EXISTING HANDHOLE SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED											
ets												
ADD	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED											
ADV	SIGNAL HEAD, LED, 1-FACE, 4-S	ECTION, MAST ARM MOUNTED		EACH	2							
01VC	TRAFFIC SIGNAL BACKPLATE, RE	TROREFLECTIVE		EACH	4							
P.P.	RELOCATE EXISTING SIGNAL HE	AD		EACH	6							
7	RELOCATE EXISTING PEDESTRIA	N SIGNAL HEAD		EACH	2							
1-06	REMOVE ELECTRIC CABLE FROM	CONDUIT		FOOT	3903							
1/42	REMOVE EXISTING TRAFFIC SIGI	NAL EQUIPMENT		EACH	4							
\202	REMOVE EXISTING CONCRETE F	OUNDATION		EACH	2							
ıles	REMOVE PEDESTRIAN PUSH-BUT	TON		EACH	4							
ACCESSIBLE PEDESTRIAN SIGNALS EAG												
ucti	REMOVE EXISTING TRAFFIC CON	ITROLLER AND CABINET		EACH	1							
X:\Production\Files\2021\421-0007\PRJ-01\CAD\CADD	REMOVE EXISTING SIGNAL HEAD)		EACH	4							
		T										
- 0		USER NAME = DStrothmann	DESIGNED - DKS		REVISE							

R NAME = DStrothmann	DESIGNED -	DKS	REVISED -	
DEL NAME = 161 West Cable Dia	DRAWN -	LEC	REVISED -	STATE OF ILLINOIS
T SCALE = 40.0000 ' / in.	CHECKED -	JLS	REVISED -	DEPARTMENT OF TRANSPORTATION
T DATE = 11/24/2021	DATE -	08-18-2021	REVISED -	

TR						ATION PLANS EVARD
	SHEET	2	OF	3	SHFFTS	

SCALE: N/A

ID-IN

	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Ī	805	(123-1,2,3)SFY-1	ST CLAIR	29	18
_			CONTRAC	ΓNO.	76P34
		ILLINOIS	PROJECT		

REV. - MS

5 LD-IN

S LD-IN

>c.c.o.

> c.c.o.

>c.c.o.

LOCHMUELLER MODEL PLOT SO



Page 1 of 1

Date ___11/8/89 Traffic Signals at IL 161 and West Boulevard in FAP 805 DESCRIPTION Belleville LOGGED BY ____ L. Ford 123RS-2 LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 1N, RNG. 8W, 3 PM

COUNTY St. Clair D	RILLING	ME	THOD		Но	llow Stem Auger	HAMMER TYPE	<u> </u>	140# A	utoma	tic
STRUCT. NO. Station		D E P T H (ft)	B L O W S	U C S Qu (tsf)	M O I S T	Surface Water Elev. Stream Bed Elev. Groundwater Elev.: First Encounter Upon Completion After Hrs.	ft ft ft	D E P T H	L O W S	U C S Qu (tsf)	N C I S T
Brown SILT (with Some Rock)						Brown and Gray Sandy Very Silty CLAY (contin	Gravelly nued)	-	4 7	2.6 S/10	2
		<u> </u>								0,10	
		-	1					<u> </u>	4		
	1	_	2	1.5 S/5	18			-	8	2.8 S/5	2
		<u></u>		0/3				_	- 11	0/3	
	495.6	_	1					-2	5 3		
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	493.0	-5	3	0.7	30			15	6	5.2	1
Brown Very Silty CLAY	9		4	S/10			474	.6	17	S/5	
	1		2			END OF BORING		<u> </u>			
		-	2	0.8	28			10_	^?		
		_	5	S/15				=	= 15		
								-			
		-10	1	0.9	28			3	0		
	400.4		4	S/10				-			
	489.1	8 8						2 <u>-</u>			
Brown Clayey SILT		\$	1 2	1.1	24			72 <u>-</u>	_8		
			4	S/10	1000000			_	= 10 = 10		
	486.6							8	= 5		
Brown and Gray Sandy Gravelly /ery Silty CLAY	9	-15	1	1.5	24			3	5		
ony only obtain		_	4	S/10	24			-			
								8=	-		
	i i	19_	1	0.0	6.1						
	1		3 6	2.2 S/10	24				-		
	,	-						_			
			1000						-8		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



ROUTE FAP 805 DESCRIPTION

SOIL BORING LOG

Belleville

Page <u>1</u> of <u>1</u>

Date ___11/8/89 Traffic Signals at IL 161 and West Boulevard in LOGGED BY ____ L. Ford

COUNTY St. Clair DI	RILLING	ME	THOD		Hol	llow Stem Auger HAMMER	TYPE	1	40# A	utoma	tic
STRUCT. NO. Station		DEPTH (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T	Surface Water Elev. Stream Bed Elev. Groundwater Elev.: First Encounter Upon Completion After Hrs.	ft ft ft	DEPTH (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T
Brown Silt with ROCK	54	5.				Brown and Gray Clayey SILT with Some Rock (continued)	ž		2 4 7	1.8 S/10	27
	493.9	-	2 3	0.6 S/10	15				2 5 6	2.2 S/10	21
Brown Very Silty CLAY			WR 2 2	0.4 S/10	31		471.7	_	5 6 8	3.7 S/10	17
			1 2 3	0.7 S/10	29	END OF BORING					
		-10		1.0 S/15	27						
Brown Clayey SILT	486.4		1 2								
	483.9	2	4	1.5 S/10	26						
Brown and Gray Gravelly Silty CLAY		15	3 5	2.2 S/10	23			35			
			3 5 6	2.2 S/10	23			_			
Brown and Gray Clayey SILT with	478.9	54-		0,10				_			

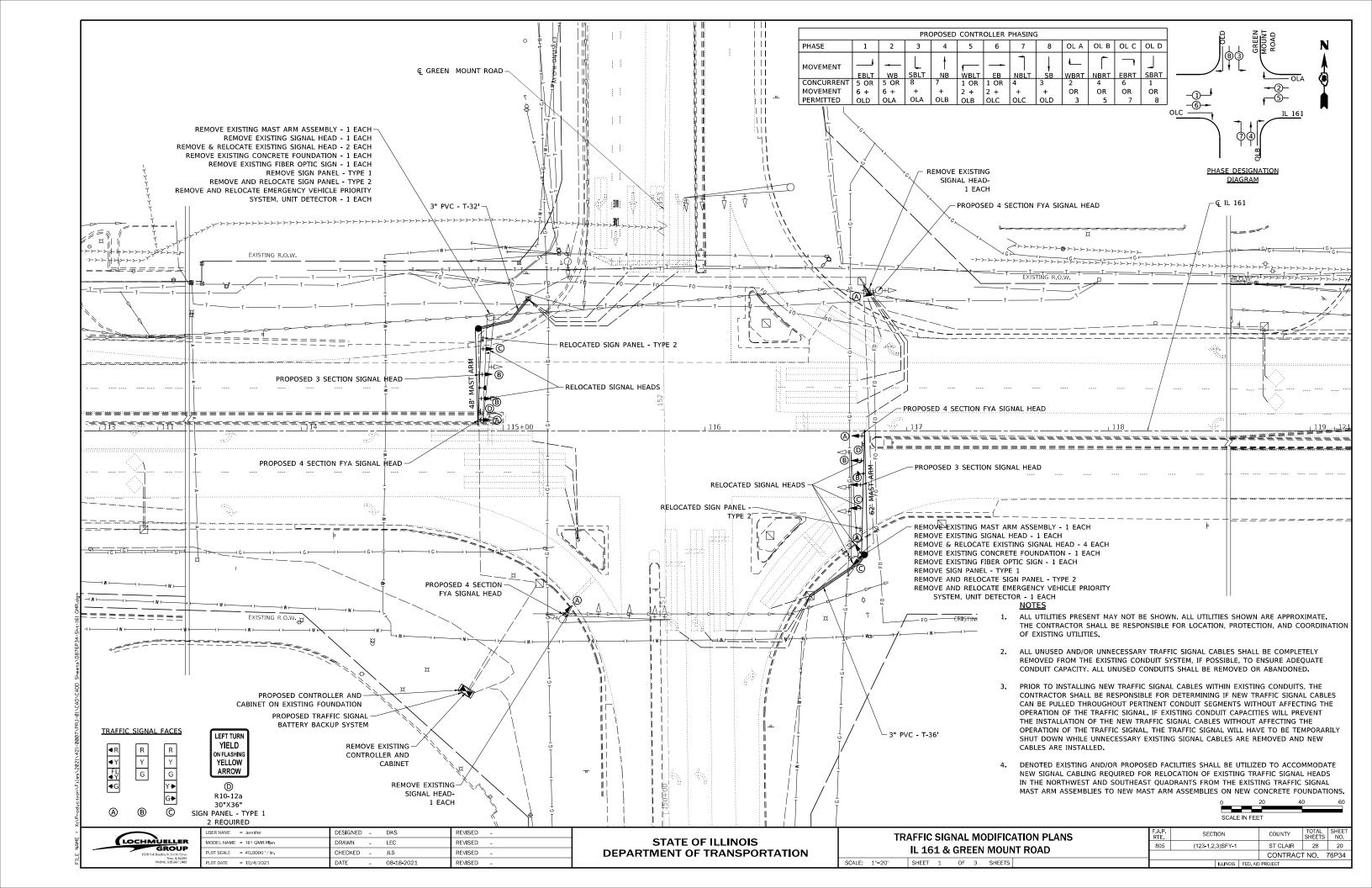
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

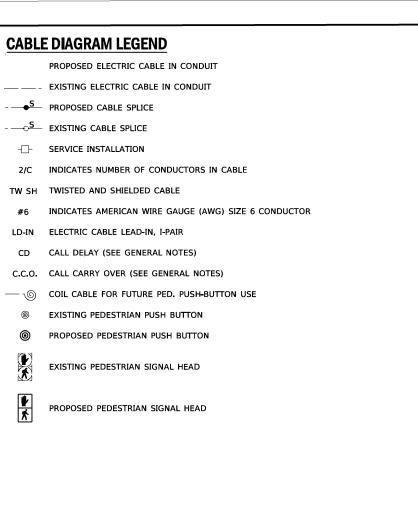
BBS, from 137 (Rev. 8-99)



USER NAME = Jennifer	DESIGNED -	DKS	REVISED -
MODEL NAME = 161 West Borings	DRAWN -	LEC	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	JLS	REVISED -
PLOT DATE = 10/4/2021	DATE -	08-18-2021	REVISED -

TRAFFIC SIGNAL MODIFICATION PLANS	F.A.P. RTE.	
IL 161 & WEST BOULEVARD	805	
IL 101 & WEST BOOLEVARD		





SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNIT	QTY.
	SIGN PANEL - TYPE 1	SQ FT	15
	REMOVE SIGN PANEL - TYPE 1	SQ FT	10
	RELOCATE SIGN PANEL - TYPE 2	SQ FT	40
	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	68
	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	1328
r.	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1904
1R.do	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	554
19-S1	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
sht-1	STEEL MAST ARM ASSEMBLY AND POLE, 62 FT.	EACH	1
34-5	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
876P	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
Sheets\D876P34_sht-ts-GMR.dgn	DRILL EXISTING HANDHOLE	EACH	2
hee	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
)\CA	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
NCAL	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	4
J-01	RELOCATE EXISTING SIGNAL HEAD	EACH	6
7\PF	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
-000	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3273
.421	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	4
2021	REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
les\.	REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
	REMOVE EXISTING SIGNAL HEAD	EACH	4
uction\Files\2021\421-0007\PRJ-01\CAD\CADD	TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	1
÷Ι			

[a] > [a]CD IL 161 LD-IN CD CD CD NOTE: TWO DETECTION RACKS WILL BE REQUIRED IN THE CONTROLLER CABINET

SCALE: N/A

LOCHMUELLER	
 GROUP	
1928 SrA Bradley R. Smith Drive	
Troy, IL 62294	
PHONE: 618.657.1400	

Į	USER NAME = DStrothmann	DESIGNED	-	DKS	REVISED	-
Ì	MODEL NAME = 161 GMR Cable Dia	DRAWN	-	LEC	REVISED	-
Ì	PLOT SCALE = 40.0000 ' / in.	CHECKED	-	JLS	REVISED	-
Ì	PLOT DATE = 11/24/2021	DATE	-	08-18-2021	REVISED	-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

R						TION PLANS T ROAD
	SHEET	2	OF	3	SHEETS	

	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Ī	805	(123-1,2,3)SFY-1	ST CLAIR	29	. 21
_	!		CONTRAC	T NO.	76P34
		LILLINGIE L EED AIE	DDOILOL		

REV. - MS



Page 1 of 1

Division of Highways SCI Engineering Date 8/24/2021 PTB 197-040 WO-3 IL 161 Mast Arm ROUTE DESCRIPTION Replacements LOGGED BY JB SECTION LOCATION Beleville, Illinois DRILLING METHOD Vertek S4 CPT Direct Sampler HAMMER TYPE COUNTY St. Clair STRUCT. NO. Surface Water Elev. c E Stream Bed Elev. 0 W BORING NO. Groundwater Elev.: Qu S First Encounter Station Offset **Upon Completion** Ground Surface Elev. 494 +/- ft (ft) (/6") (tsf) (%) After FILL: CLAY LOAM: Brown (A-6) 0.7 23 S/10 2.3 19 SANDY LOAM: Brown, fine grained P CLAY LOAM: Brown (A-6) 0.3 26 B/20 0.5 26 B/20 0.3 25 B/20 26 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)



SOIL BORING LOG

Page 1 of 1

Illinois Department of Transpo	ortation						Date
ROUTE FAP 805 DESCR (123-2,3)RS-1,	RIPTION	1	Traff	ic Sign	als at	IL 161 and Greenmour	t Road LOGGED BY J. King
SECTION (123BR, VBR)-1	_ LO	CATI	ON _	NE 1/4	, SE	1/4, SEC. 24, TWP. 1N	RNG. 8W, 3 PM
COUNTY St. Clair DR	RILLING	ME	THOD			Hand Auger	HAMMER TYPE
STRUCT. NO. Station Station Station Station 116+77 Offset 60.00ft Rt. Station Station Control Control	unt	DEPTH	B L O W S	U C S Qu (tsf)	M O I S T (%)	Upon Completion	ft ft ft
Ground Surface Elev. 492.4	n	(11)	(10)		(70)	After Hrs.	п
Brown & Gray SILT		=		0.5	21	•	
	490.4	8-		7.TH.O. (\$1.00-10)	Victor		
Brown & Gray Silty CLAY		_		1.5			
				1.5	27		
		_		1.5			
		5		1.75	28		
				2.0			
		-		1.75	27		
		_		1.75			
	483.4	-					
Red Brown Silty CLAY		-10		1.5	25		
				1.75			
				2.0	30		
		-		2.0	2		
			ž.	2.0	30		
	478.4	0-					
End of Hand Auger							
Pocket Penetrometer used for Qu		_					
		=					
		-					
		_	-				
		-	-				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

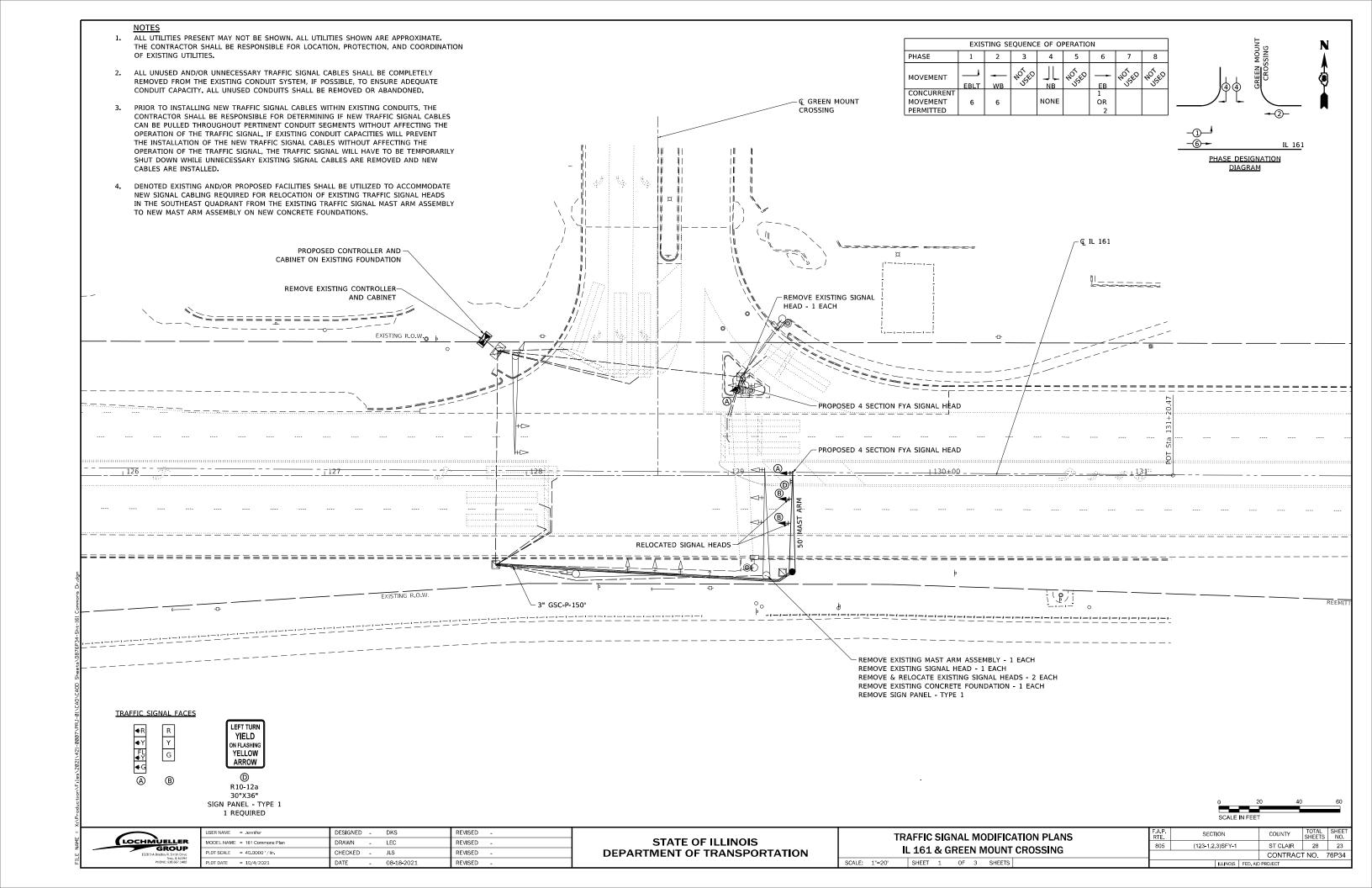


USER NAME = Jennifer	DESIGNED - DKS	REVISED -
MODEL NAME = 161 GMR Borings	DRAWN - LEC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JLS	REVISED -
PLOT DATE = 10/4/2021	DATE - 08-18-2021	REVISED -

TR						ATION PLANS NT ROAD
	CHEET	2	ΩE	2	енсете	

SCALE: N/A

F.A.P. RTE	SECT	ION	COUNTY	TOTAL SHEETS	SHEE NO.
805	(123-1,2	,3)SFY-1	ST CLAIR	28	22
			CONTRAC	ΓNO.	76P34





PROPOSED ELECTRIC CABLE IN CONDUIT

- S PROPOSED CABLE SPLICE

 \longrightarrow 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)

— ⑤ COIL CABLE FOR FUTURE PED. PUSH-BUTTON USE

EXISTING PEDESTRIAN PUSH BUTTON

PROPOSED PEDESTRIAN PUSH BUTTON

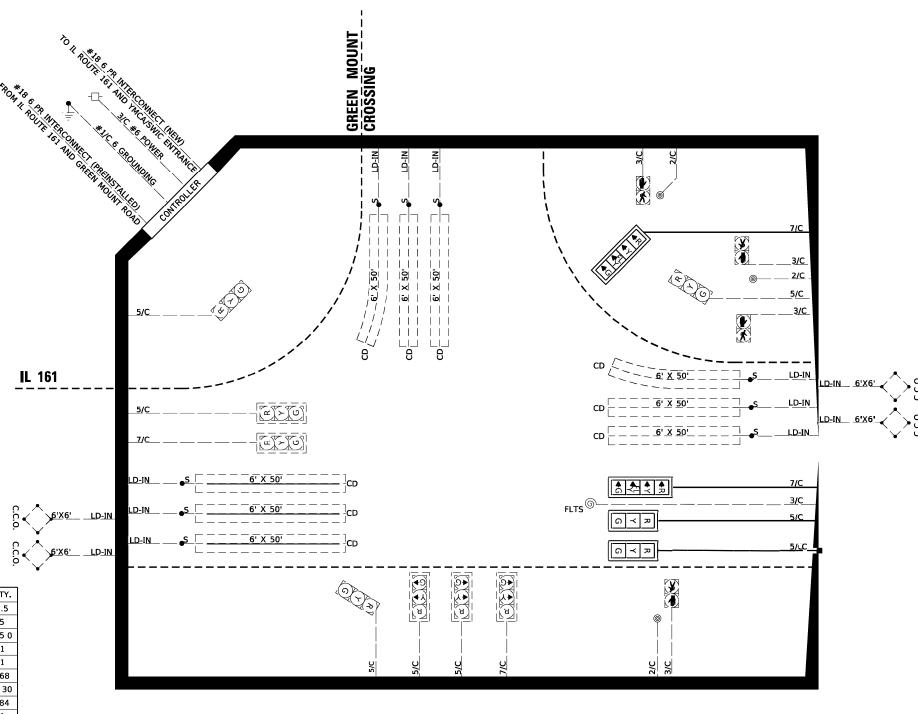
EXISTING PEDESTRIAN SIGNAL HEAD

<u>₩</u>

PROPOSED PEDESTRIAN SIGNAL HEAD

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	7.5
REMOVE SIGN PANEL - TYPE 1	SQ FT	5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	15 0
MAINTENANCE OF TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5 C	FOOT	668
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	5 30
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	284
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
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, FORMED PLASTIC	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	14 04
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
REMOVE EXISTING SIGNAL HEAD	EACH	2



SCALE: N/A

REV. - MS



ISER NAME = DStrothmann	DESIGNED	-	DKS	REVISED	-
MODEL NAME = 161 Commons Cable Dia	DRAWN	-	LEC	REVISED	-
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	JLS	REVISED	-
LOT DATE = 11/24/2021	DATE	-	08-18-2021	REVISED	-

TR/	TRAFFIC SIGNAL MODIFICATION PLANS										
IL	IL 161 & GREEN MOUNT CROSSING										
(SHEET	2	OF	3	SHEETS						



Page <u>1</u> of <u>1</u>

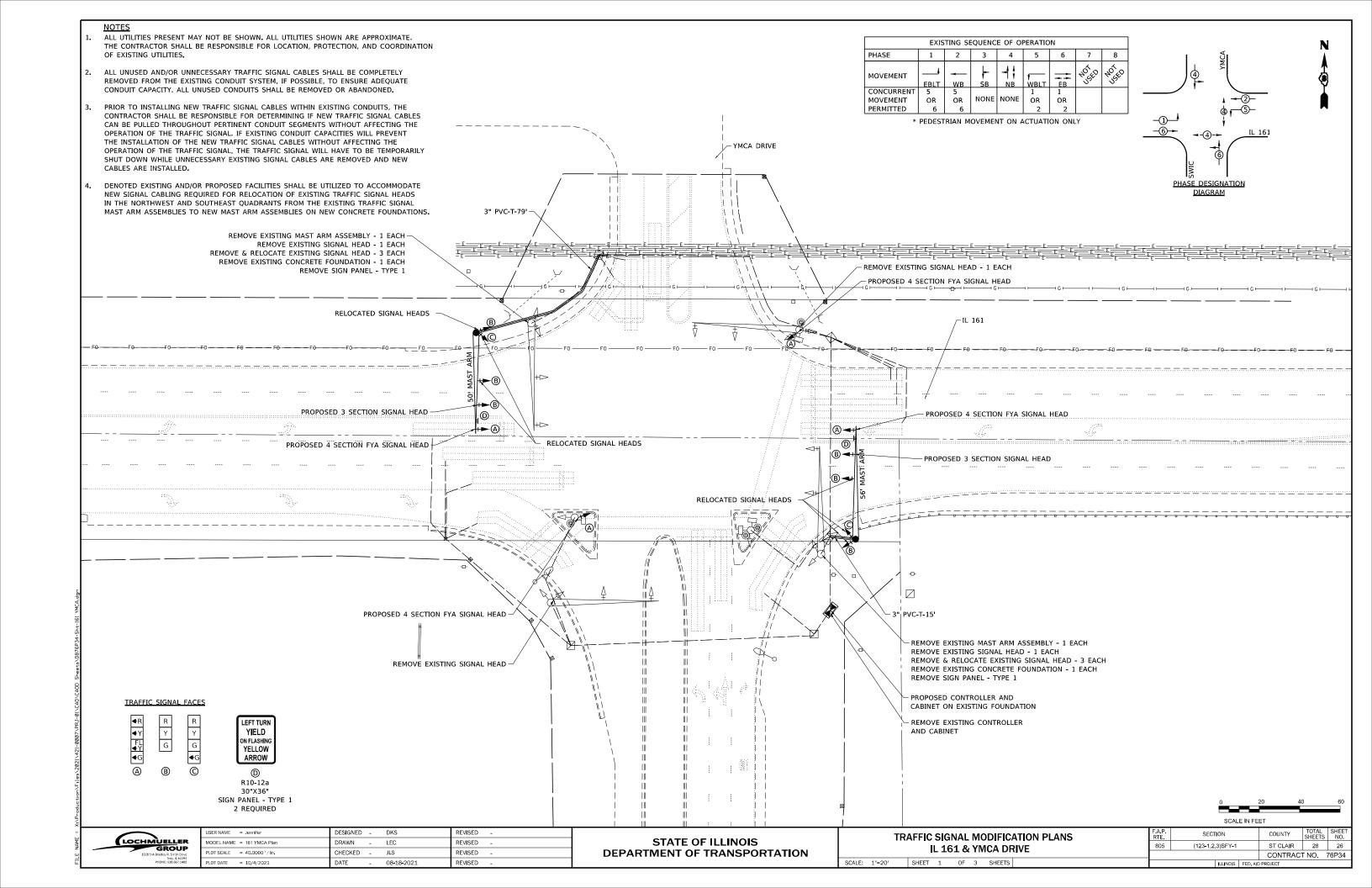
Date 8/24/2021 PTB 197-040 WO-3 IL 161 Mast Arm ROUTE IL-161 DESCRIPTION Replacements LOGGED BY JB LOCATION Beleville, Illinois SECTION COUNTY St. Clair DRILLING METHOD Vertek S4 CPT Direct Sampler HAMMER TYPE STRUCT. NO. Surface Water Elev. E c L Stream Bed Elev. 0 W BORING NO. Groundwater Elev.: Qu Station S First Encounter Offset **Upon Completion** (ft) (/6") (tsf) (%) Ground Surface Elev. 481 +/- ft After 3" TOPSOIL FILL: Brown, clay loam (A-6) 0.4 24 CLAY LOAM: Gray (A-4) S/15 0.5 21 S/5 SILTY CLAY LOAM: Gray (A-4) 0.2 28 B/20 0.9 24 B/20 <0.25 30 P 0.5 25 Ρ Boring terminated at 12 ft.

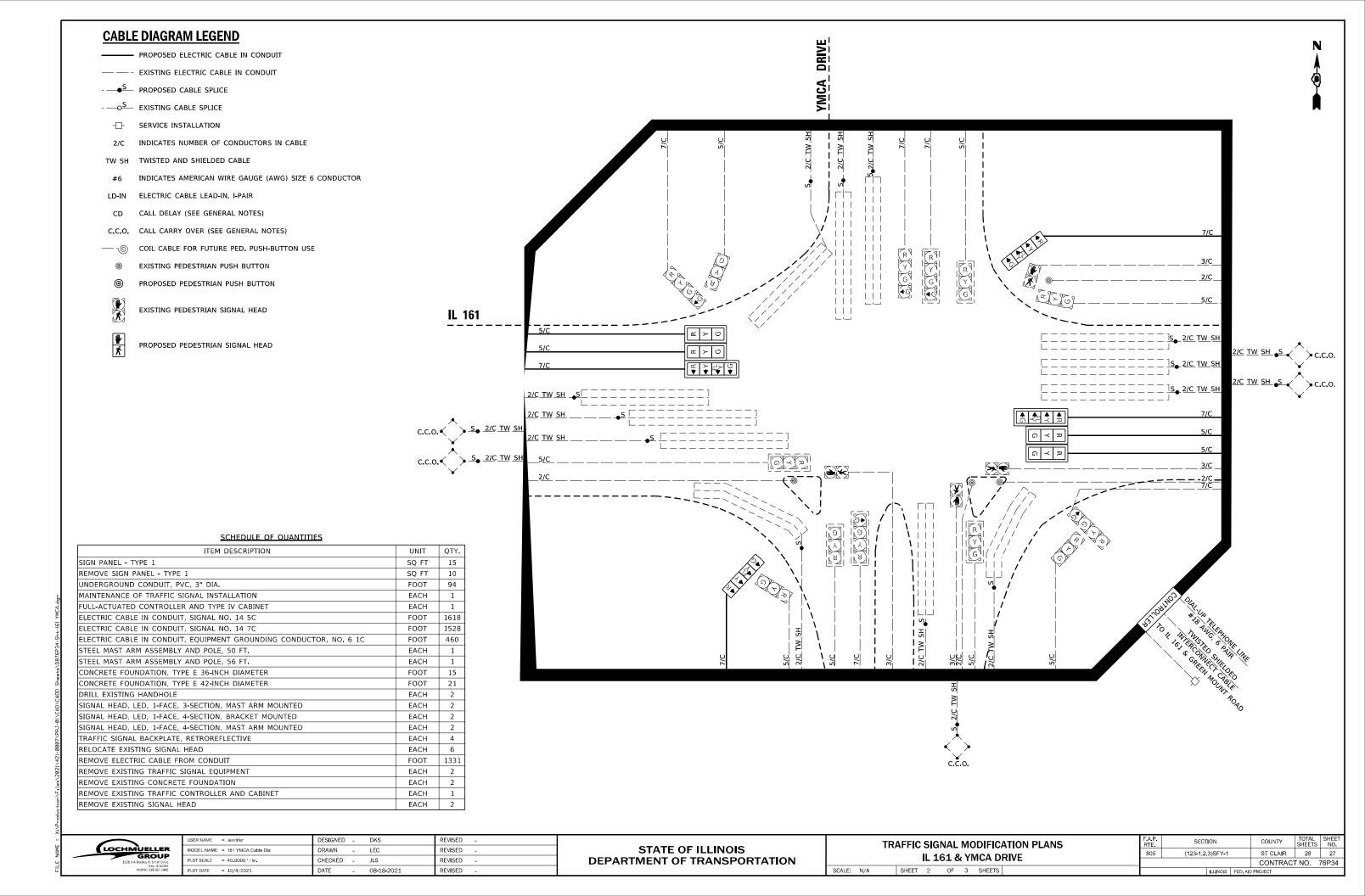
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)



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 -

	TRAFFIC SIGNAL MODIFICATION PLANS													
		Į.	_ 161	&	GREE	N	MOUNT	CROSSING						
SCALE:	N/A		SHEET	3	OF	3	SHEETS							







SOIL POPING LOG

Page <u>1</u> of <u>1</u>

	Division of High SCI Engineering	ways I			20	JIL BUKIN	G LUG		
ROUTE L-161	D	ESCR	IPTIO	N	PTB	8 197-040 WO-3 IL 161 i Replacements	Mast Arm		8/24/2021 JB
SECTION		ι	_OCAT	ION _	Belevill	le, Illinois			
COUNTYSt. Clair	DRILLING	G MET	THOD	<u>Ve</u>	rtek S	4 CPT Direct Sampler	HAMMER TYPE	N	I/A
STRUCT. NO		D E P	B L O	U C S	М О І	Surface Water Elev Stream Bed Elev			
Station NW QUAD at IL 161 a		Н	S	Qu	S T	Groundwater Elev.: First Encounter	ft		
Offset YMCA Entrance Ground Surface Elev. 484	+/- ft	(ft)	(/6")	(tsf)	(%)	Upon Completion Hrs	π ft		
5" TOPSOIL SILTY CLAY LOAM: Gray (A-4)				1.7 S/10	23				
				0.8 S/10	27				
		-5		<0.25 P	35				
Brown				0.3 P	27				
Gray		-10		<0.25 P	30				
		_		0.5 P	26				
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)



SOIL BORING LOG

Page <u>1</u> of <u>1</u>

Date 8/24/2021

					Date <u>8/2</u>	
ROUTE IL-161 [DESCR	RIPTION	V	PTE	B 197-040 WO-3 IL 161 Mast Arm Replacements LOGGED BY	JB
SECTION		_OCAT	ION _	Belevil	lle, Illinois	
COUNTY St. Clair DRILLIN	IG ME	THOD	_ <u>V</u> e	ertek S	A CPT Direct Sampler HAMMER TYPE N/A	
STRUCT. NOStation	D E P	B L O	U C S	M 0 -	Surface Water Elev ft Stream Bed Elev ft	
BORING NO. B-5 Station SE QUAD at IL 161 at Offset YMCA Entrance Ground Surface Elev. 484 +/- ft	H (ft)	W S (/6")	Qu (tsf)	S T (%)	Groundwater Elev.: First Encounter ft Upon Completion ft After Hrs ft	
3" TOPSOIL FILL: Brown, silty clay (A-4) SILTY CLAY: Brown and gray (A-6)			0.3	22		
SILT: Brown (A-4)	_		S	27		
	-5		0.1 B	29		
			0.3 B	28		
	-10			31		
	-			25		
Boring terminated at 12 ft.	-					
	15					

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)

SCALE: N/A

LOCHMUELLER GROUP

		100
USER NAME = DStrothmann	DESIGNED DKS	REVISED -
MODEL NAME = 161 YMCA Borings	DRAWN - LEC	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED JLS	REVISED
PLOT DATE = 11/24/2021	DATE 08-18-2021	REVISED

STATE OF ILLINOIS

TRAFFIC SIGNAL MODIFICATION PLANS									
IL 161 & YMCA DRIVE									
IL 161 & TWICA DRIVE									
	SHEET	3	OF	3	SHFFTS			_	

SECTION

(123-1,2,3)SFY-1

DEPARTMENT OF TRANSPORTATION