# STATE OF ILLINOIS

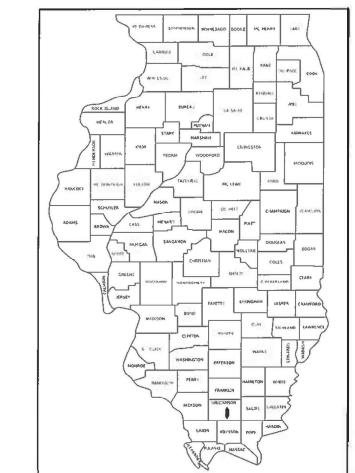
# DEPARTMENT OF TRANSPORTATION

2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39 1

ILLINOIS CONTRACT NO. 78916

SECTION

#### D-99-009-22



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

LOCATION OF SECTION INDICATED THUS: -

REGION FIVE ENGINEER

May 9

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

## TRAFFIC DATA

IL 37 NORTH OF MAIN STREET: 11,000

FOR INDEX OF SHEETS, SEE SHEET NO. 3

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-8

IL 37 SOUTH OF MAIN STREET: 9,000

# **TOWNSHIP**

0

0

0

0

**WEST MARION PRECINCT** 

# POSTED SPEED

35 MPH, 25 MPH

# **PROPOSED** HIGHWAY PLANS

**FAS ROUTE 2887 (IL 37) SECTION D9 TRAFFIC SIGNAL 2021-3** TRAFFIC SIGNAL IMPROVEMENT WILLIAMSON COUNTY

C-99-018-22



P. BRIEN FUNK II EXPIRES: 11-30-2025

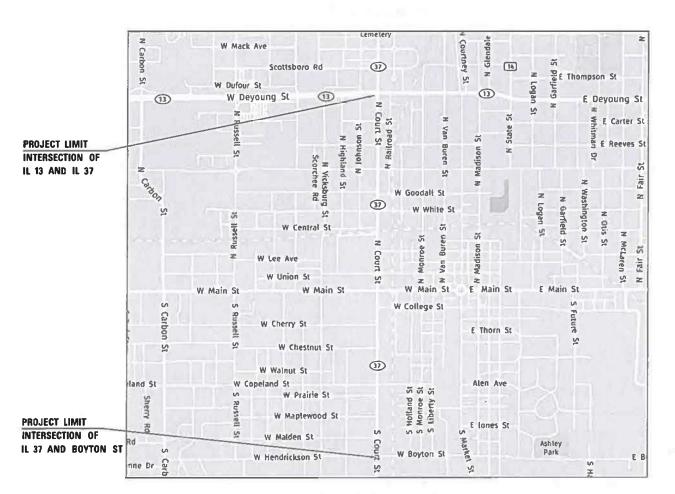
3-26-2025 DATE

319 W STATE STREET, SUITE 200 GENEVA, IL 60134

IL DESIGN FIRM NO: 184007145-0002

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT ENGINEER SUSAN POE PROJECT DESIGNER SUSAN POE



GROSS LENGTH = 1.3 MILES NET LENGTH = 1.3 MILES

CONTRACT NO. 78916

Prepared By:

Examined By:

Examined By: Came Melsoner &P

DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: DISTRICT OPERATIONS ENGINEER

**Examined By:** 

DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: Buswith

DISTRICT CONSTRUCTION ENGINEER

Examined By: A and Day DISTRICT MATERIALS ENGINEER

iteris

USER NAME b'unk	DESIGNED -	REVISED -
	DRAWN .	REVISED -
PLOT SCALE = 100.0000 * / Ms.	CHECKED -	REVISED .
PLOT DATE = 12:15/2023	DATE - 1/5/22	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SIGNATURE SHEET OF SHEETS STA. 
 F.A.S. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS NO.

 2887
 D9 TRAFFIC SIGNAL 2021-3
 WILLIAMSON
 39
 2

#### **INDEX OF SHEETS**

COVER SHEET SIGNATURE SHEET

GENERAL NOTES, INDEX OF SHEETS, HIGHWAY STANDARDS, LOCATION MAP

4-8 SUMMARY OF QUANTITIES

9-12 PAVEMENT MARKINGS AND SIGNING PLANS

13-24 TRAFFIC SIGNAL MODIFICATION PLANS

GROUND MOUNT SERVICE DETAIL 25

26-28 FIBER OPTIC INSTALLATION PLANS

FIBER OPTIC COMMUNICATIONS SYSTEM TOPOLOGY

FIBER OPTIC COMMUNICATIONS SYSTEM SCHEMATIC 30

FIBER OPTIC CABLE TYPICAL DETAIL

32-33 TYPICAL BACKBONE FIBER TO LATERAL FIBER SPLICING DETAIL

PROPOSED MAINLINE FIBER SPLICING DETAIL

IL 37 TRAFFIC SIGNAL CABINET LAYOUT 35

FIBER OPTIC MARKER, SPLICE, GROUNDING DETAIL

37-39 SOIL BORING LOGS

#### **IDOT HIGHWAY STANDARDS**

000001-08 STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS 701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY

701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE

OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE 701101-05

701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, SPEEDS 2 45 MPH TO 55 MPH 701421-08

701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

701602-10 URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION

SIDEWALK, CORNER OR CROSSWALK CLOSURE 701801-06

TRAFFIC CONTROL DEVICES 701901-10

878001-11 CONCRETE FOUNDATION DETAILS

#### **LOCATION MAP**



#### **SUMMARY OF LOCATIONS**

NO.	SHEET	INTERSECTION/INTERCONNECT
1	13	IL ROUTE 37 AND IL ROUTE 13
2	15	IL ROUTE 37 AND BOULEVARD STREET
3	18	IL ROUTE 37 AND MAIN STREET
4	22	IL ROUTE 37 AND BOYTON STREET / HENDRICKSON STREET
7	26	INTERCONNECT: IL ROUTE 37 FROM IL ROUTE 13 TO BOYTON STREE

#### **GENERAL NOTES**

- 1. THE LOCATIONS FOR COMMUNICATION VAULTS ARE PROVIDED FOR REFERENCE ONLY. THE ENGINEER OF TRAFFIC SHALL BE NOTIFIED FOR LOCATION VERIFICATION BEFORE INSTALLATION.
- 2. THE EXISTING TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED CONDUIT AND FIBER OPTIC CABLE.
- 3. THE CONTRACTOR SHALL PROVIDE 100 FT. OF SLACK FIBER OPTIC CABLE INSIDE EACH PROPOSED COMMUNICATIONS VAULT OR AS SHOWN IN THE SPEC BOOK.
- THERE SHALL BE NO ADDITIONAL SPLICES IN THE FIBER OPTIC CABLE EXCEPT WHERE NOTED IN THE PLANS, OR UPON APPROVAL OF THE ENGINEER.
- NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN THE REQUIRED MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES. LOCATIONS OF ANTICIPATED GREATER THAN MINIMUM DEPTH CONDUIT ARE NOTED IN THE PLANS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES OF THE CONDUIT.
- 7. THE LOCATION OF THE PROPOSED CONDUIT AS SHOWN IN THE PLAN SHEETS IS APPROXIMATE. THE CONDUIT SHALL BE INSTALLED AT A 36" MINIMUM DEPTH INCLUDING CROSSING DRAINAGE FLOW LINES, EXCEPT AS NOTED IN THE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING FIELD TILES, UNDERDRAINS, AND DRAINAGE STRUCTURE LOCATIONS. THE CONTRACTOR SHALL MAKE AN EFFORT TO MINIMIZE DAMAGE TO THESE FACILITIES DURING INSTALLATION OF CONDUIT AND COMMUNICATIONS VAULTS. IN THE EVENT ANY OF THESE FACILITIES ARE DAMAGED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING REPAIRS AND RESTORE FUNCTIONALITY TO THE SATISFACTION OF THE FNGINFFR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MOWING, BRUSH AND SHRUB REMOVAL, AND SMALL TREE (10" DIAMETER OR LESS) REMOVAL REQUIRED TO INSTALL THE PROPOSED CONDUIT AND COMMUNICATIONS VAULTS. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED ITEMS OFF THE JOB SITE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE CONDUIT PAY ITEM.

iteris

USER NAME = bfunk	DESIGNED BF	REVISED =
	DRAWN BF	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED ASG	REVISED -
PLOT DATE = 12/15/2023	DATE 12/15/23	REVISED +

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCALE:

GENERAL NOTES, INDEX OF SHEETS,									
HIGHWAY	/ CTAN	IDARDS, L	OCATIO	N MAD	2887				
IIIGIIVVA	JIAI	IDANDS, L	UUAIIU	IN INIAI					
CUEET	OE	сисстс	CTA	TO STA					

.S. E.	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.
37	D9 TRAFFIC SIGNAL 20	21-3	WILLIAMSON	39	3
			CONTRACT	NO. 78	3916
	LI LINOIS I	EED AT	D PROJECT		

REV - MS

					CONSTRUCTION CODE							
					0021	0.0	21	00	21	002	2 1	0021
	CODE	I.T.C.M.		TOTAL	IL ROUTE 1			MAIN		ВОҮТО		INTERCONNECT
	NO.	ITEM	UNIT	QUANTITY	STATE 100%	GCPF/STATE 95% / 5%	STATE 100%	GCPF/STATE 95% / 5%	STATE 100%	GCPF / STATE 95% / 5%	STATE 100%	GCPF/STATE 95% / 5%
					10070	3370 7 370	10070	3370 7 370	10070	3370 7 370	10070	3370 7 370
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6								6
	67100100	MOBILIZATION	L SUM	1								1
	70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1								1
	70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1								1
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1								1
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1								1
*	72000100	SIGN PANEL - TYPE 1	SQ FT	221	10	20	60	51	60	20		
*	78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	473	237	59		59		118		
	7000200	TOETORIEAT AVENIENT MANNING THE ETPELTENG AND OTHIBOEC	0011	410	201	33		33		110		
*	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	102				102				
ماد	70000220	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	383		77		131		175		
*	78008230	POLTUREA PAVEMENT MARRING TIPE I - LINE 0	1001	303		11		131		175		
*	78008240	POLYUREA PAVEMENT MARKING TYPE I - LINE 8"	FOOT	50		14		18		18		
*	78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	310	132	44		54		80		
of a second	78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	276	276							
	80300100	LOCATING UNDERGROUND CABLE	FOOT	35		15		15		5		
*	SPECIAL	TY ITEM	1	1	1	•	1					
ـــــا	J UI/ \L	—										

iteris

USER NAME = bfunk	DESIGNED	-	BF	REVISED	-
	DRAWN	-	BF	REVISED	-
PLOT SCALE = 100.0000 / in.	CHECKED	-	ASG	REVISED	-
PLOT DATE = 11/21/2023	DATE	-	11/21/23	REVISED	-

STATE 0	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

						F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANTITIES					2887	D9 TRAFFIC SIGNAL 2021-3	WILLIAMSON	39	4	
								CONTRACT	NO. 78	3916
	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

			Ģ.		w		CONSTRU	CTION CODE	~		
			58	0021	00	21	0.0	021	00	21	0021
CODE			TOTAL	IL ROUTE 13			1 I AM		BOYTO		INTERCONNECT
NO.	ITEM	UNIT	QUANTITY	STATE	GCPF/STATE		GCPF/STATE	STATE	GCPF/STATE	STATE	GCPF/STATE
			*	100%	95% / 5%	100%	95% / 5%	100%	95% / 5%	100%	95% / 5%
80500010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1			1					
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1259	369	172	73	297		348		
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	235			187		38	10		
81028740	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA.	FOOT	7220								7220
			_	_		7					
81400100	HANDHOLE	EACH	5	2	1		1		1		
81400200	HEAVY-DUTY HANDHOLE	EACH	2				1		1		
							Ì				
85700310	RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	2		1		1				
:						*	110				1 1
86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	3		1	<u>-</u>	1		1		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	269			<del>-</del>		269			
						<u> </u>					
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1905	1905							
3											
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2257			1274	u.s	807	176		-
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2965		400	826		1445	294		
87301750	ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	1107		189		528		390		
07004005	ELECTRIC CARLE IN CONDUIT SERVICE NO. 2. 2.2	FOOT	70			70					
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	78			78					
				ļ	Į.						

• 4	•
ite	ric

	USER NAME = bfunk	DESIGNED	BF	REVISED =
ij		DRAWN -	BF	REVISED -
	PLOT SCALE = 100.0000 / in.	CHECKED -	ASG	REVISED =
- 2	PLOT DATE = 12/8/2023	DATE	12/8/23	REVISED -

STATE	: OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

					F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANTITIES						2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39			5
							CONTRACT	NO. 78	3916
SHEET OF SHEETS STA. TO STA.					ILLINOIS FED. AID PROJECT				

			CONSTRUCTION CODE								
				0021 0021			00	21	0021		0021
CODE			TOTAL	IL ROUTE 13			MAIN		BOYTO		INTERCONNECT
NO.	ITEM	UNIT	QUANTITY	STATE	GCPF/STATE	STATE	GCPF/STATE	STATE	GCPF/STATE	STATE	GCPF/STATE
				100%	95% / 5%	100%	95% / 5%	100%	95% / 5%	100%	95% / 5%
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1814			454		728		632	
87501000	TRAFFIC SIGNAL POST, 14 FT.	EACH	2	2							
87702830	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 20 FT.	EACH	1						1		
87702860	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1			1					
87702880	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	3			3					
							118		1	9	
1-											
							177		0 1		- V 4
z -											
87702920	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1					1			
87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1					1			
×											
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8	8							
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	74			50.5		13.5	10		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	· · · · · · · · · · · · · · · · · · ·						1 2				
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	19					19			D:
87900100	DRILL EXISTING FOUNDATION	EACH	6		1	2					3
87900200	DRILL EXISTING HANDHOLE	EACH	13	3		5	1	2	2		
88030012	SIGNAL HEAD, LED, 1-FACE, 1-SECTION, BRACKET MOUNTED	EACH	2	2							
		*	,	100			- de				REV - MS

REV - MS

•	) d =	•	- 6
	ite	rı	C
			3

	USER NAME = bfunk	DESIGNED		BF	REVISED =
ij		DRAWN	+	BF	REVISED -
	PLOT SCALE = 100.0000 / in.	CHECKED	(6)	ASG	REVISED =
	PLOT DATE = 11/21/2023	DATE		11/21/23	REVISED +

STATE (	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

					147					
	SUMMARY OF QUANTITIES						F.A.S. RTE. SECTION		TOTAL SHEETS	SHEET NO.
							D9 TRAFFIC SIGNAL 2021-3	WILLIAMSON	39	6
								CONTRACT	NO. 78	3916
	SHEET OF SHEETS STA. TO STA.						ILLINOIS FED. AID PROJECT			

				CONSTRUCTION CODE								
					0021	0.0	21	0.0	021	002	21	0021
1	CODE				IL ROUTE 13 BOULEVARD ST		'ARD ST	1 I AM	N ST	ВОҮТО	N ST	INTERCONNECT
	CODE	ITEM	UNIT	TOTAL	CTATE	GCPF/STATE		GCPF/STATE	STATE	GCPF/STATE	STATE	GCPF/STATE
	NO.			QUANTITY	100%	95% / 5%	100%	95% / 5%	100%	95% / 5%	100%	95% / 5%
1	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1					1			
5												
	88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	5			2		2	1		
	8											76
8	88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	5			2		2	1		
34	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		1	1					± 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2		1	1					
	88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	21			8		4		9	
	89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2		1		1				3 1
3	00001200		2.0.1									
	89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1								1
	3		1					10				
1	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4175		186	1779		1947	263		
Š	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	4	1	1		1		1		
	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	8			5		2	1		-
3	X0326944	ATMS INTEGRATION	L SUM	1								1
												).
	X1400214	SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	3		1		1		1		
	V4700000	POTHOLING	EACH	40								40
	X1700066	POTHOLING	EACH	10								10
*	X7240505	RELOCATE SIGN PANEL AND POST	EACH	1	1							
	SPECIALT	TV ITENA										RFV - M

\* SPECIALTY ITEM

REV - MS

• 4	•
ite	ric

ı	USER NAME = bfunk	DESIGNED :	*	BF	REVISED	=
Q		DRAWN	÷.	BF	REVISED	5
ı	PLOT SCALE = 100.0000 / in.	CHECKED	•	ASG	REVISED	8
100	PLOT DATE = 3/26/2025	DATE		3/26/25	REVISED	¥5

STATE 0	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

					F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANTITIES					2887	D9 TRAFFIC SIGNAL 2021-3	WILLIAMSON	39	7
							CONTRACT	NO. 78	3916
SHEET OF SHEETS STA. TO STA.					ILLINOIS FED. AID PROJECT				

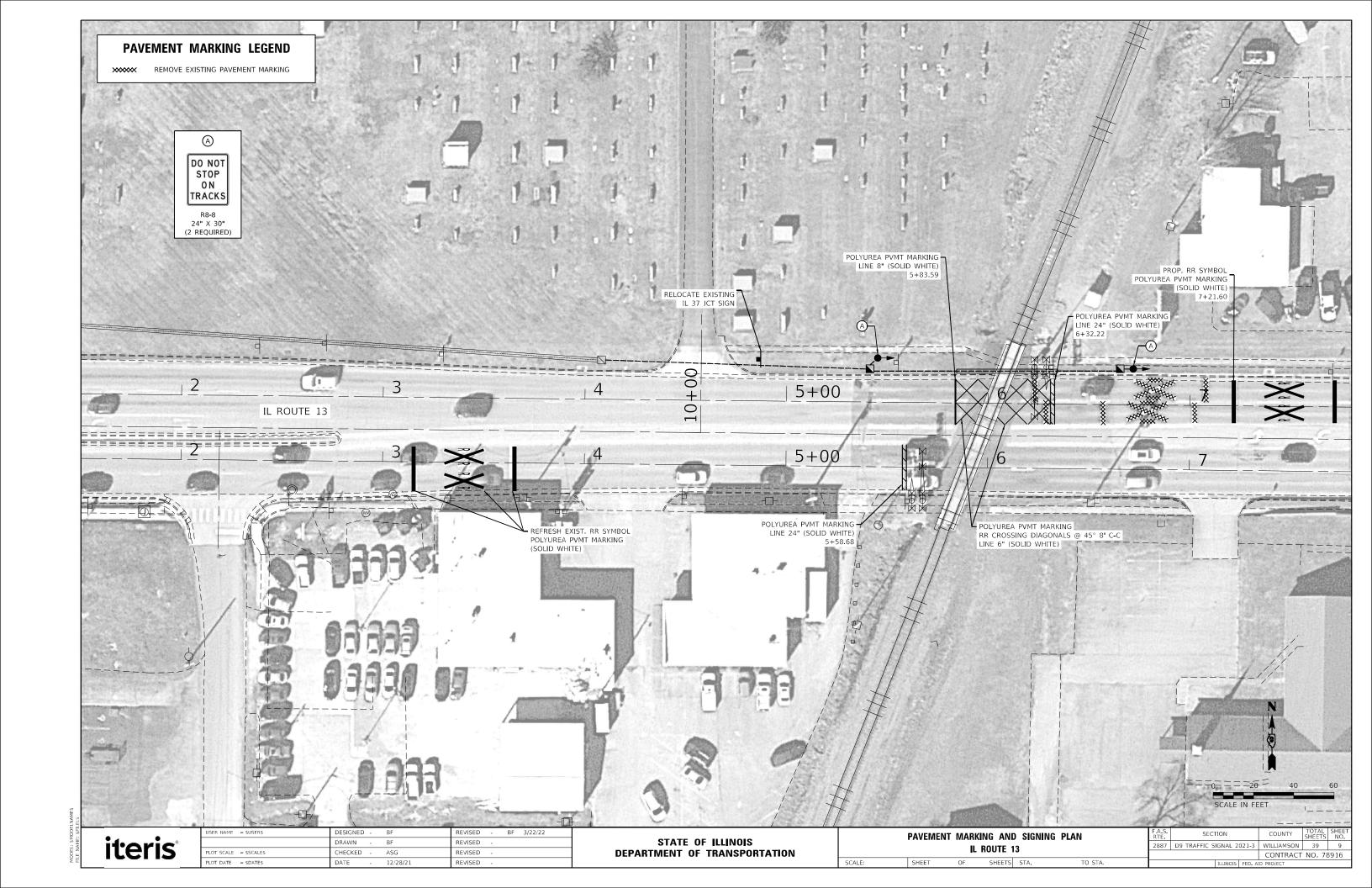
							CONSTRUC	TION CODE			
				0021	0.0	21	002	2 1	002	2 1	0021
CODE	LTEM		TOTAL	IL ROUTE 13			MAIN		ВОУТО		INTERCONNEC
NO.	ITEM	UNIT	QUANTITY	STATE 100%	GCPF/STATE 95% / 5%	STATE 100%	GCPF/STATE 95% / 5%	STATE 100%	GCPF / STATE 95% / 5%	STATE 100%	GCPF/STATE 95% / 5%
				10070	3370 7 370	10070	3370 7 370	10070	3370 7 370	10070	3370 7 370
X7340100	CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5			0.5					
X8108242	UNDERGROUND CONDUIT, HDPE, 4" DIA.	FOOT	50								50
X8571214	RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE III CABINET (SPECIAL)	EACH	1						1		
X8710010	FIBER LAYOUT	L SUM	1								1
X8710030	FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	7780								7780
X8710036	FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	565								565
V0740400	ETUEDUET QUITOU	54011									
X8710103	ETHERNET SWITCH	EACH	3		1		1		1		
X8710304	FIBER OPTIC CABLE SPLICE - LATERAL	EACH	3								3
X8710306	FIBER OPTIC CABLE SPLICE - MAINLINE	EACH	1								1
X8710318	FIBER OPTIC UTILITY MARKER	EACH	66								66
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4	4							
X8891001	VIDEO VEHICLE DETECTION SYSTEM	EACH	3			1		1		1	
Z0033052	COMMUNICATIONS VAULT	EACH	8								8
		2, 3011									
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1								1
Z0066900	STEEL CASINGS 4"	FOOT	150	50			50		50		

ite	ris
ILC	113

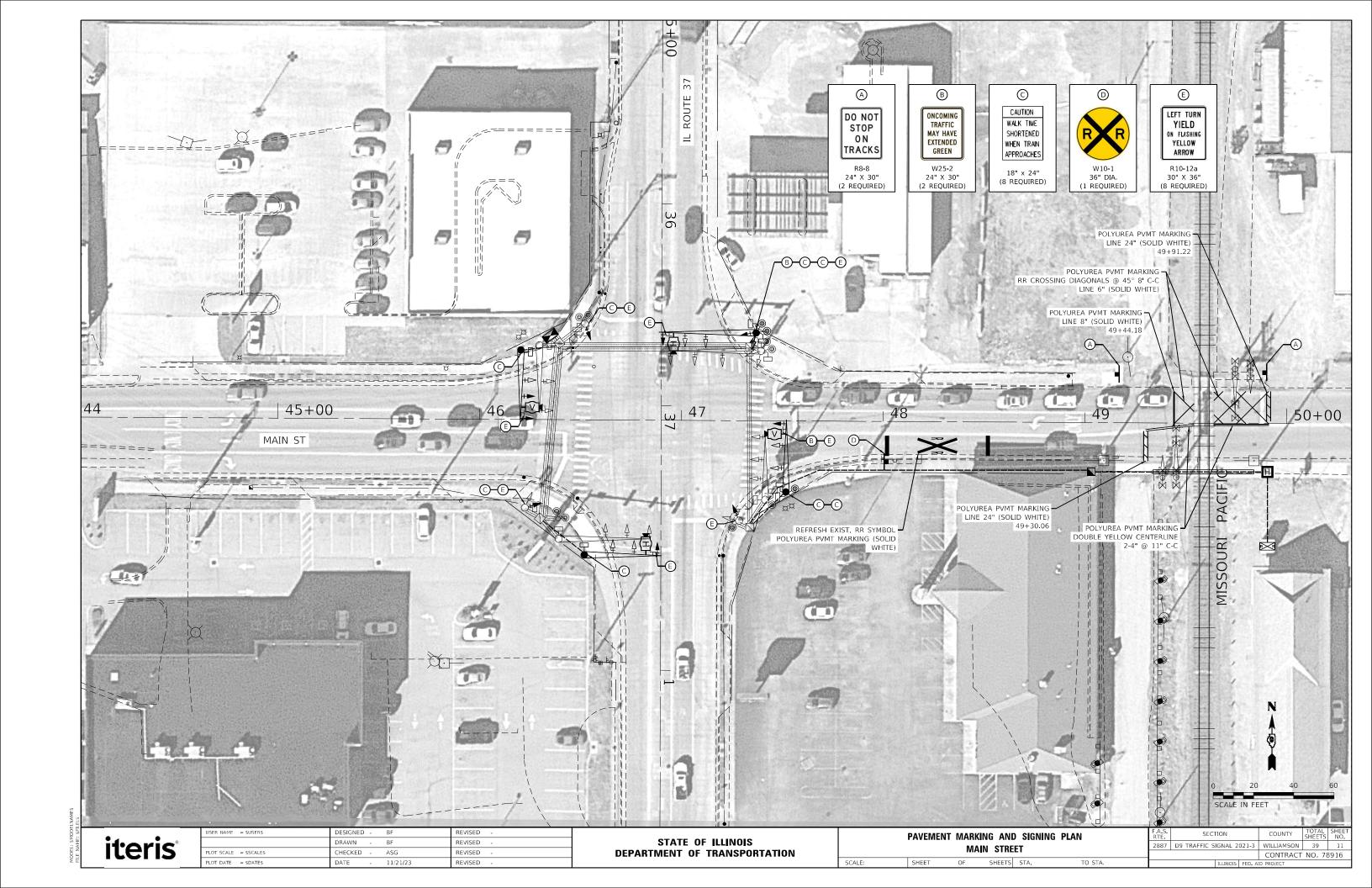
USER NAME = bfunk	DESIGNED	-	BF	REVISED	-
	DRAWN	-	BF	REVISED	-
PLOT SCALE = 100.0000 / in.	CHECKED	-	ASG	REVISED	-
PLOT DATE = 3/26/2025	DATE	-	3/26/25	REVISED	-

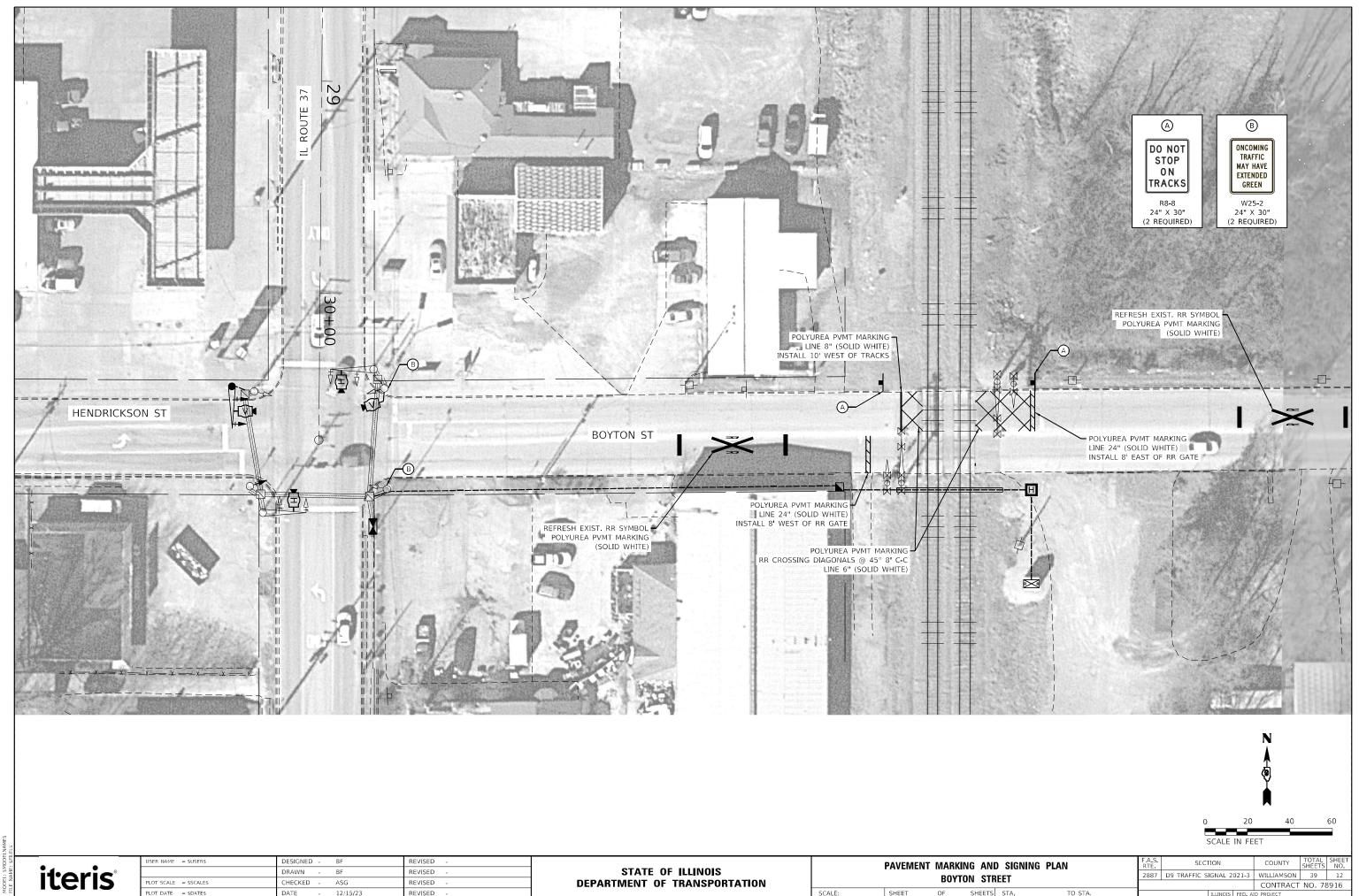
STATI	E OI	F ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

	SUMMARY OF QUANTITIES  F.A. RTE 200									COUNTY	TOTAL SHEETS	SHEET NO.
		SUMMARY	2	2887	D9 TRAFFIC SIGNAL 2	021-3	WILLIAMSON	39	8			
						CONTRACT	NO. 78	8916				
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		





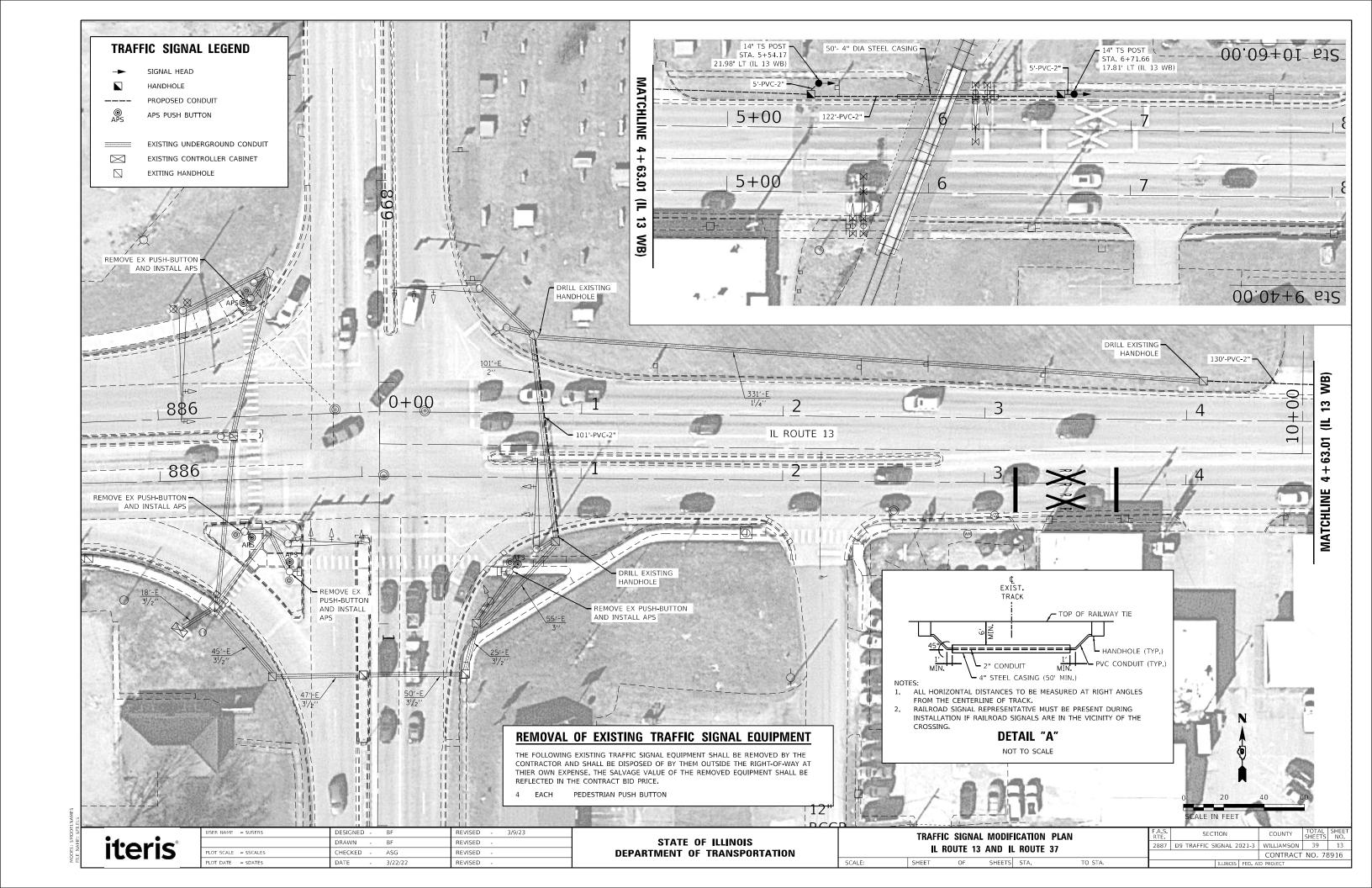


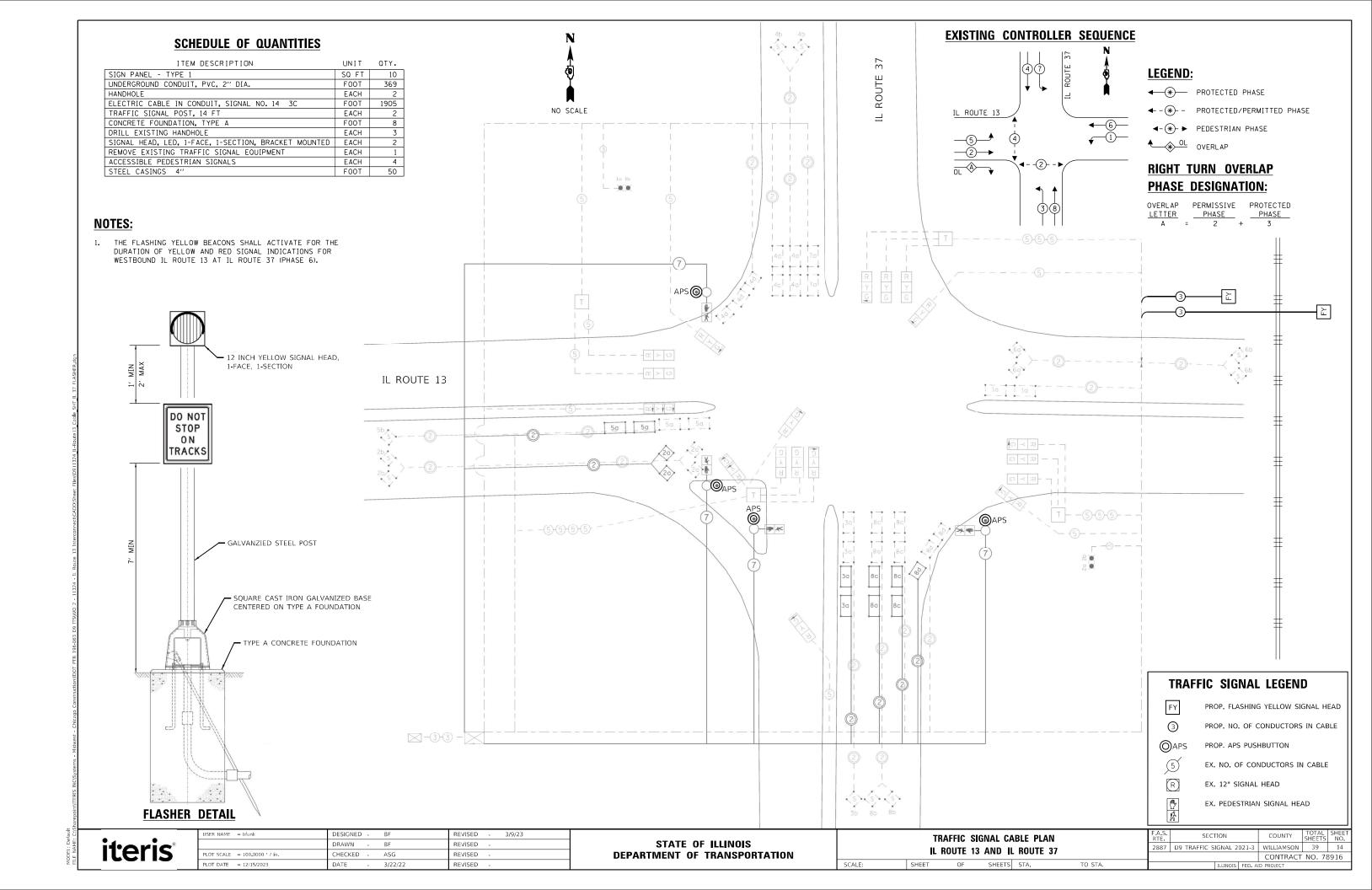


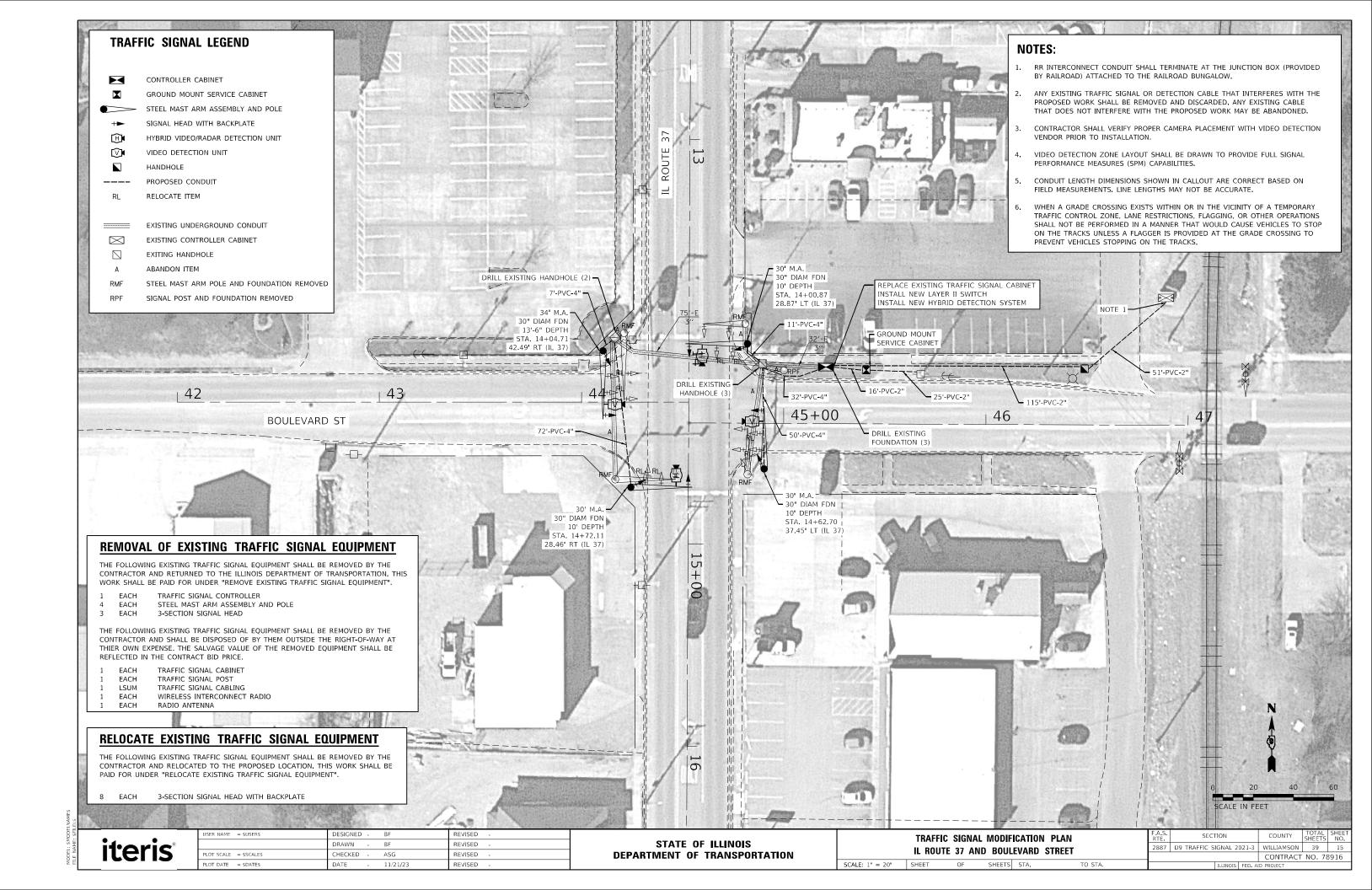
PLOT DATE = \$DATE\$

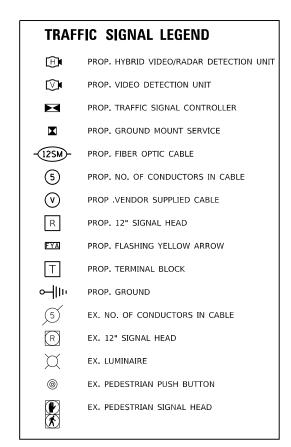
REVISED DATE 12/15/23

SHEET SHEETS STA. TO STA.



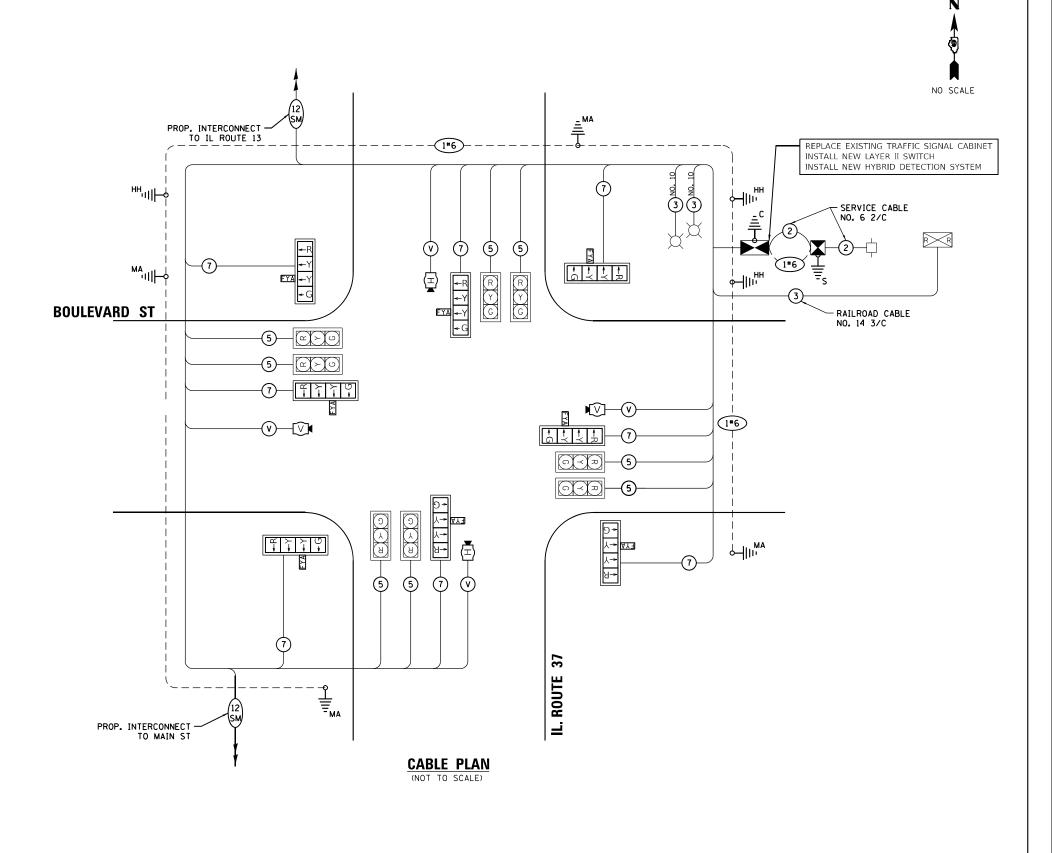






#### **SCHEDULE OF QUANTITIES**

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
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	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 1 C	FOOT	454
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	3
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	43.5
DRILL EXISTING FOUNDATION	EACH	3
DRILL EXISTING HANDHOLE	EACH	5
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	16
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





USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED - ASG	REVISED -
PLOT DATE = 12/8/2023	DATE - 12/8/23	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

TRAFFIC SIGNAL CABLE PLAN													
IL ROUTE 37 AND BOULEVARD STREET													
IL 11001	L 3/ A	ID DOOL	LVAIID	OTHEET.									
SHEET	OF	SHEETS	STA.	TO STA.									

F.A.S. RTE. SECTION COUNTY TOTAL SHEETS NO. 2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39 16

CONTRACT NO. 78916

MODEL: Default

#### PROPOSED SEQUENCE OF OPERATION

MOVEMENT				1 5					6 1			<b>↑</b> ↑ 5 2			6 ↓ ↑				7 —	<b>*</b> *	<del>,     </del> 3	,			4	<b>←</b> 8	3							4 —		— 8	F
PHASE				1 + 5	5				1 + 6			2 + 5	i	i	2 + 6	5				3 + 7	7				;	3 + 8	;				4 + 7				4 + 8	ş	A
INTERVAL	1	2A	2B	3A	3B	44	4B	5	64	6B	7	88	8B	9	10A	10B	11	12A	12B	13A	13B	14A	14B	15	16A	16B	17A	17B	18	19A	19B	20A	20B	21	22A	22B	H 5
CHANGE TO		1 +	- 6	2 -	+ 5	2 -	+ 6	/	2 -	+ 6	/	2 -	+ 6	/	3 - 3 - 4 - 4 -	+ 8 + 7		3 -	+ 8	4 -	+ 7	4 + 1 + 1 + 2 + 2 +	- 5 - 6 + 5		4+	+8	1 - 2 -	+ 5 + 6 + 5 + 6		4-	+8			//	1 +	+ 5 + 6 + 5 + 6	
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	G	¥	R	G	G	¥_	R	FYA	FYA	FYA	G	<b>Y</b>	R	FΥA	<u>~</u>	₽	R	R	R	R	R	R	R	R	R	R	R	R	R	R	₽	R	₽	₽	₽	R	₽
IL 37 MIDDLE AND RIGHT MAST ARM SIGNALS NB	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Υ	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	G	G	G	<del>Y</del>	R	<del>Y</del>	R	G	<del>Y</del>	R	FYA	FYA	FYA	FYA	<u>}</u>	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	₽.	R	R	R	R	R	R
IL 37 MIDDLE AND RIGHT MAST ARM SIGNALS SB	R	R	R	R	R	R	R	G	G	G	R	R	R	G	Υ	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	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Ç	<u>د</u>	G	<u>\</u>	R	¥_	R	Ç	<u>\</u>	R	Υ	R	R	R	R	R	R	G	Y	R	R
BOULEVARD ST MIDDLE AND RIGHT MAST ARM SIGNALS WE	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	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	R	C	<u>~</u>	R	G G	G	<del>Y</del>	R	R	R	R	R	R	G.	<b>→</b>	R	Υ	R	G	Y	R	R
IROUI EVARD ST	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	Υ	R	G	Y	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	í	5		7	Ć	9	1	1	15	1	8	2	?1					
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1 A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	10	2	3	4	5	CLEAR TO
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	1K	2	2	1N	2	10	2	3	4	5		NORMAL SEQUENCE
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	<u> </u>	R	<u> </u>	₽Į	<b>&gt;</b> .	R	<b>&gt;</b> .	₽	₽↓	R	₽	₽Į	₽Į	₽Į	R	₽	₽	₽Į	FYA	Δ
IL 37 MIDDLE AND RIGHT MAST ARM SIGNALS	R	R	R	R	Υ	R	Υ	R	R	R	R	R	R	R	R	R	R	R	G	Δ
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	¥ —	R	<u> </u>	R	<u>*</u>	₽	¥ —	R	R	R	₽	R	R	R	R	R	R	R	R	Δ
IL 37 MIDDLE AND RIGHT MAST ARM SIGNALS	1	R	Υ	R	R	R	Υ	R	R	R	R	R	R	R	R	R	R	R	G	Δ
BOULEVARD ST FAR LEFT AND LEFT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	<del>ا</del>	<u>C</u>	<u>C</u>	R	R	G	G	<u>C</u>	Υ	R	R	
BOULEVARD ST MIDDLE AND RIGHT MAST ARM SIGNALS	1	R	R	R	R	R	R	R	R	R	G	R	R	G	G	G	Υ	R	R	Δ
BOULEVARD ST FAR LEFT AND LEFT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	¥	R	R	Y	R	Υ	R	R	R	R	R	Δ
BOULEVARD ST MIDDLE AND RIGHT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	Υ	R	Υ	R	R	R	R	R	Δ
A RAILROAD PREEMPTION SEQUENCE SHALL	PROV	IDE P	ROPE	₹															HOLD	

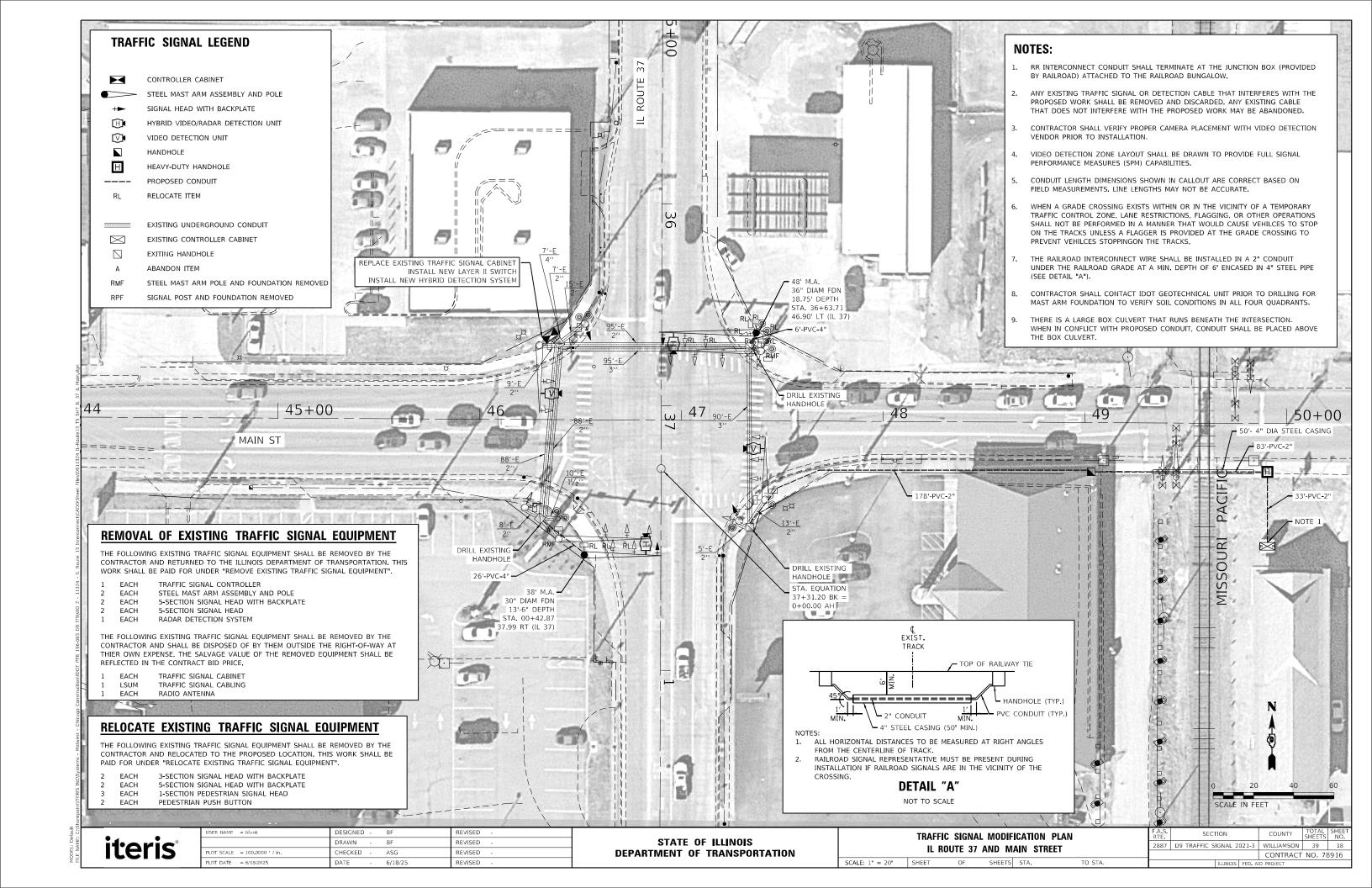
A RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

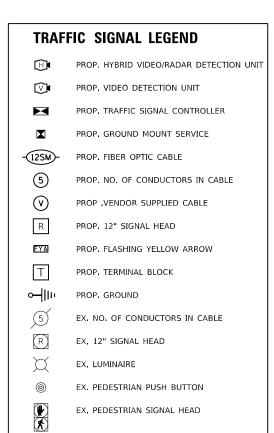
USER NAME = bfunk	DESIGNED	-	BF	REVISED -
	DRAWN	-	BF	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED	-	ASG	REVISED -
PLOT DATE = 6/18/2025	DATE	-	6/18/25	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

RAILROAD PREEMPTION SEQUENCE OF OPERATIONS											
IL ROUTE 37 AND BOULEVARD STREET											
	IL HOUT	L J/ AI	ID DOOL	LVAIID 3	IIILLI						
	SHEET	OF	SHEETS	STA	TO STA.		_				

F.A.S. SECTION COUNTY TOTAL SHEETS NO. 2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39 17 CONTRACT NO. 78916





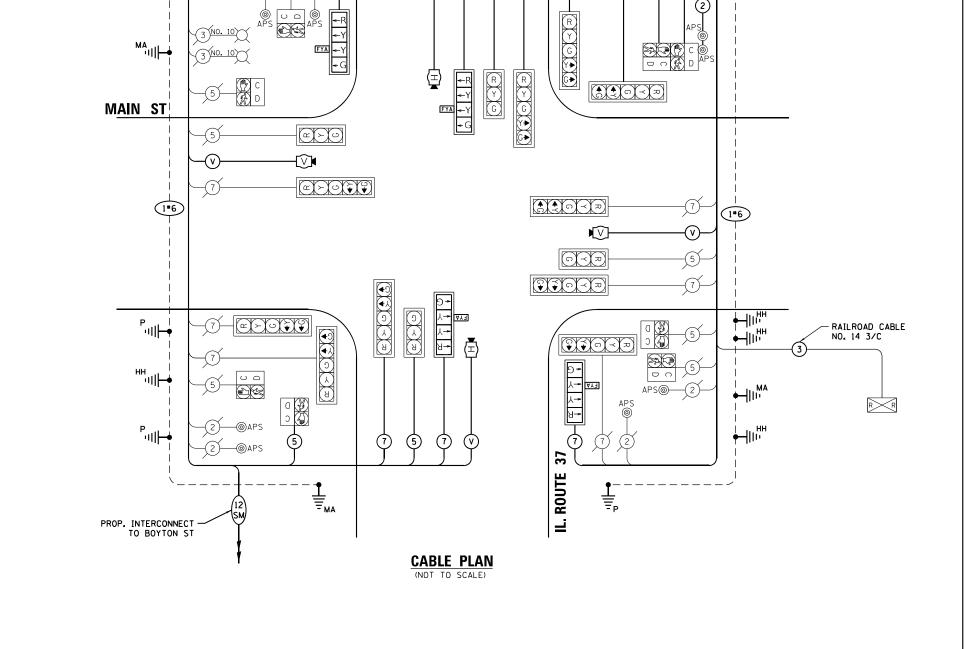
REPLACE EXISTING TRAFFIC SIGNAL CABINET

INSTALL NEW HYBRID DETECTION SYSTEM

INSTALL NEW LAYER II SWITCH

# 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



(1\*6)

<u>≞</u>™^

- PROP. INTERCONNECT TO BOULEVARD ST

iteris<sup>®</sup>

USER NAME = bfunk	DESIGNED -	BF	REVISED -
	DRAWN -	BF	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	ASG	REVISED -
PLOT DATE = 6/18/2025	DATE -	6/18/25	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

-	TRAFFIC SI	GNAL CA	BLE PL	AN	F.A.S. RTE	SECTION	V		COUNTY	TOTAL SHEETS	SHEET NO.
ш	ROUTE 37	AND M	TP MIA	REET	2887	D9 TRAFFIC SIGN	AL 20	021-3	WILLIAMSON	39	19
ir.	HOUTE 37	AIND IVI	AJIN JI	ILL I					CONTRACT	NO. 78	3916
IEET	OF	SHEETS	STA.	TO STA.		ILLI	INOIS	FED. AI	O PROJECT		

NO SCALE

#### PROPOSED SEQUENCE OF OPERATION

MOVEMENT (I)			-		1					1	6 1		_	<b>*</b> 5	2 2F		66	6	2 2F	, l		7	, ₫	<b>,</b> •	_ 3				< <	1 - → 8	BP					7 4 4	•		l	· •	<b>4-→</b>		F
PHASE				1	+ 5					1	+ 6			2	? + 5			2	2 + 6	,			3	3 + 7						3 +	8					4 + 7	,				4 + 8		L A
INTERVAL		1 2	A 2	2B	ЗА	3B	4A	4B	5	6	7A	7B	8	9	10A	10B	11	12	13A	13B	14	15A	15B	16A	16B	17A 1	7B	18 1	20	)A 20	B 21A	21B	22	23	24A	24B	25A	25B	26	27	28A	28B	Н
CHANGE TO			1 + (	6	2 +	5	2 +	6	Ø/	<i>p</i>	2 +	- 13	$\emptyset$	Ø/	2 +	- 6	//	/	3 + 3 + 4 + 4 +	+ 8 + 7		3 +	- 8	4 +	7	4 + 8 1 + 5 1 + 6 2 + 5 2 + 6	5	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1	4+8	1 2	+ 5 + 6 + 5 + 6	Ø	Ø/	4-	+8	1 + 1 + 2 + 2 +	+ 5		/	1 + 1 + 2 + 2 +	- 6 - 5	
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS NE	В	G +	<u>′</u>	R_	€ G	<u>C</u>	<b>Y</b>	R	FYA	FΥA	FYA F	ΥA	Ç	G	¥	₽	FΥA	FYA	¥	₽	₽	R	R	R	₽	₽ .	R	<u>R</u>	- ‡	<u> </u>	- R	R	₽	R	₽	R	₽	R	R	₽	₽	₽	R
IL 37 MIDDLE MAST ARM SIGNALS	В	R F	₹	R	R	R	R	R	R	R	R	R	G	G	G	G	G	G	Υ	R	R	R	R	R	R	R	R	R F	: F	R R	R	R	R	R	R	R	R	R	R	R	R	R	R
IL 37 FAR RIGHT AND RIGHT MAST ARM SIGNALS NE	В	R F	₹	R	R	R	R	R	R	R	R	R	G	G	G	G	G	G	Υ	R	R G	R G	R G	R Y	R	R Y	R	R F		<u> </u>	R <u>Y</u>	R	R	R	R	R	R	R	R	R	R	R	R
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS SE	в	<u>G</u> _C	-	G	<del>Y</del>	R	¥_	R	G	G	¥_	R	FΥA	FΥΑ	FΥA	FYA	FYA	FΥA	¥_	R	R	R	R	R	R	R -	R	R F	<u> </u>	R ₽	R	R	R	R	R	R	R	R	R	R	<u>R</u>	R	R
IL 37 MIDDLE MAST ARM SIGNALS	В	R F	?	R	R	R	R	R	G	G	G	G	R	R	R	R	G	G	Υ	R	R	R	R	R	R	R	R	R F	: F	R R	R	R	R	R	R	R	R	R	R	R	R	R	R
IL 37 FAR RIGHT AND RIGHT MAST ARM SIGNALS	В	R F	₹	R	R	R	R	R	G	G	G	G	R	R	R	R	G	G	Υ	R	R G	R Y	R	R G	R G	R Y	R	R F	: F	R R	R	R	R G	R G	R Y,	R	R Y,	R	R	R	R	R	R
MAIN ST FAR LEFT AND LEFT MAST ARM SIGNALS	В	R F	₹	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	В	Y	R	<u>G</u> <u>C</u>	-   -	<u>′</u> R	Y	R		R	R	R	R	R	G	G	Υ	R	R
MAIN ST	В	R F	₹	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 C	; (	G G	Y	R	R	R	R	R	R	R	G	G	Y	R	R
MAIN ST	3	R F	₹	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	Y	R	R F	: F	R R	R	R	G	G	¥.	R	Y	R	G	G	Υ	R	R
MAIN ST FE	3	R F	₹	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	R	R F	: F	R R	R	R	G	G	G	G	Υ	R	G	G	Υ	R	R
MIDDLE MAST ARM SIGNALS  MAIN ST  FAR RIGHT AND RIGHT MAST ARM SIGNALS EE	3	R F	?	R	R G	R G	R	R	R	R	R	R	R G	R G	R Y	R	R	R	R	R	R	R	R	R	R	R	R	R F	:   F	R R	R	R	G	G	G	G	Y	R	G	G	Y	R	R
FAR RIGHT AND RIGHT MAST ARM SIGNALS	$\neg$	<u>⊶      </u> н      ⊦	+	н	Н	н	<del></del>	Н	Н	Н	-+	_		• • F H	т 🕂	Н		**FH	Н	Н	Н	Н	н	н	Н		Н	н н	+	1 н	+-	+	н	н	Н	Н	Н	н	Н	Н	Н	н	 )ARK
EAST APPROACH (PH 2 PED) PEDESTRIAN SIGNALS CROSSING	+	н	+	+	н	Н	Н	Н	*P *	•*FH	Н	н	Н	Н	Н	Н		**FH	Н	Н	Н	Н	Н	Н	Н	_	н	н	+	+	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	н	
WEST APPROACH (PH 6 PED) PEDESTRIAN SIGNALS CROSSING	+	н н	+	Н	Н	н	Н	Н	Н	н		н	Н	н	н	н	Н	н	Н	н	н	н	н	н	-		н	н н	-	н н	+	+	+	**FH	-	н	н	н		**FH	н	Н	
SOUTH APPROACH (PH 4 PED) PEDESTRIAN SIGNALS CROSSING NORTH APPROACH (PH 8 PED)	+	н н	+	Н	н	н	Н	Н	Н	н	+	Н	н	Н	н	Н	н	н	н	Н	Н	н	Н	Н	н	-	Н	*P **	+	+	+	Н.	Н	Н	Н	н	Н	н		**FH	н	Н	

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

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

USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED - ASG	REVISED -
PLOT DATE = 6/18/2025	DATE - 6/18/25	REVISED -

PROPO	SED SEQU	JENCE O	F OPERA	TIONS	F
II R	<b>OUTE 37</b>	AND M	AIN STR	FFT	
15 11	OUIL 37	AIND IN	Alla Sili	<b>LL!</b>	
SHEET	OF	SHEETS	STA.	TO STA.	_

F.A.S. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
2887	D9 TRAFFIC SIGNAL	2021-3	WILLIAMSON	39	20
			CONTRACT	NO. 78	3916
	ILLINO	S FED. A	ID PROJECT		

#### PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION

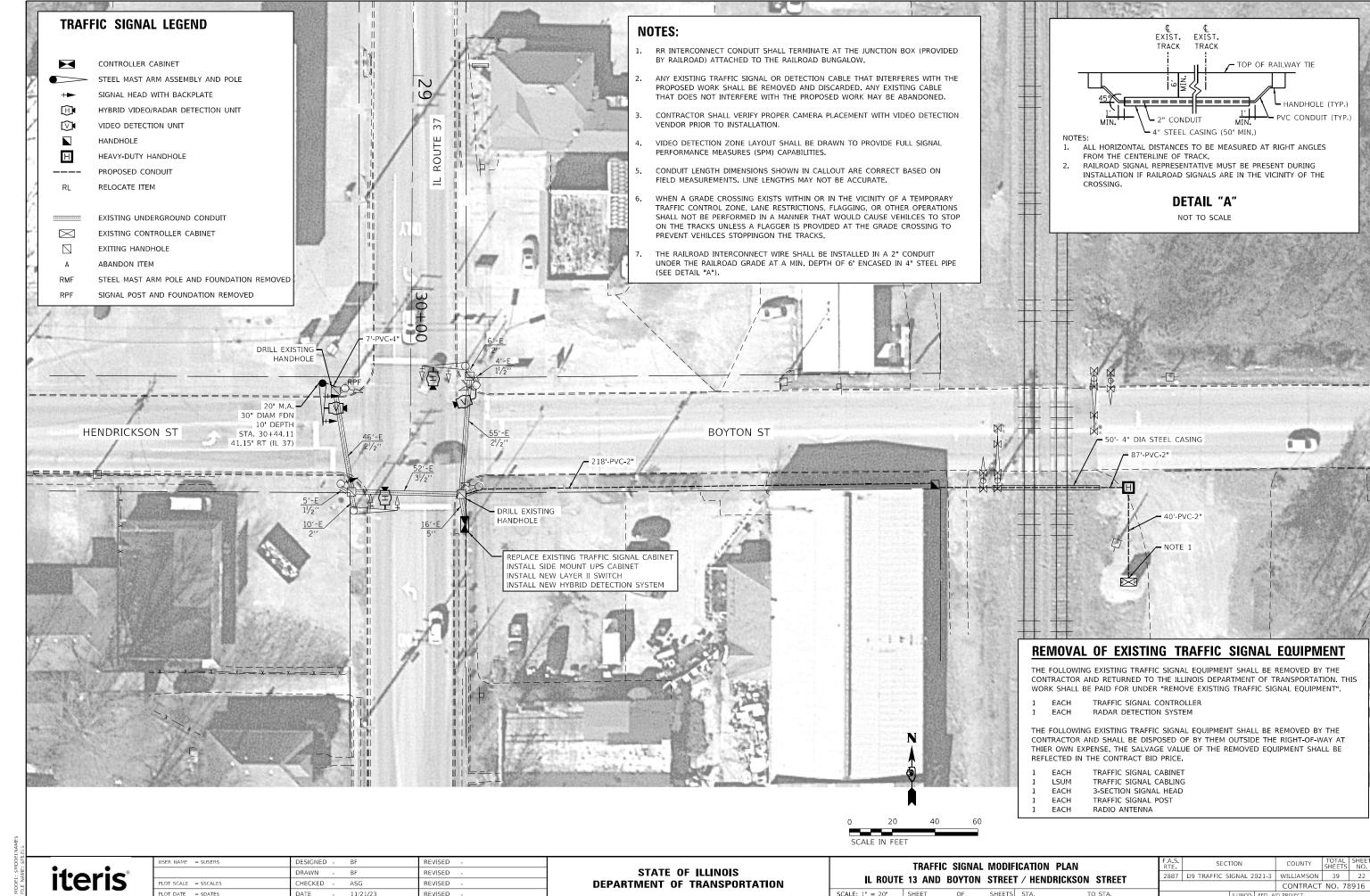
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		:	l	į	5	8	3	1	1	1	4	1	8	2	2	2	:6	]				
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	10	1R	2	3	4	5	CLEAR TO
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBE	R	1B	2	1D	2	1F	2	1H	2	1K	2	1M	2	1P	2	1R	2	3	4	5		NORMAL SEQUENCE
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	ΝB	≻ļ	R.	₽	₽Į	¥	R	¥	₽	R	R	₽	R	R	R	₽	₽	₽	₽	₽	FYA	Δ
IL 37 MIDDLE MAST ARM SIGNALS	ΝB	R	R	R	R	Υ	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	Δ
IL 37 FAR RIGHT AND RIGHT MAST ARM SIGNALS	ΝB	R	R	R	R	Y	R	Y	R	R Y→	R	R Y→	R	R	R	R	R	R	R	R	G	Δ
IL 37 FAR LEFT AND LEFT MAST ARM SIGNALS	SB	≻	rļ	¥	R.	R	R	¥	R.	R	R	R	R.	R	R	R	₽	₽	₽	R.	R.	Δ
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	Δ
IL 37 FAR RIGHT AND RIGHT MAST ARM SIGNALS	SB	R	R	Y	R	R	R	Y	R	<b>L</b> ≺3	R	R	R	<b> </b> ≺⊅	R	R	R	R	R	R	G	Δ
MAIN ST FAR LEFT AND LEFT MAST ARM SIGNALS	wв	R	R	R	R	R	R	R	R	o	G	o <del> </del>	o	R	R	G	G	Ç G	Y	R	R	Δ
MAIN ST MIDDLE AND RIGHT MAST ARM SIGNALS	wв	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	G	Y	R	R	Δ
MAIN ST FAR LEFT AND LEFT MAST ARM SIGNALS	EВ	R	R	R	R	R	R	R	R	<u>†</u>	R	R	R	Υ	R	Y	R	R	R	R	R	Δ
MAIN ST MIDDLE MAST ARM SIGNALS	EВ	R	R	R	R	R	R	R	R	R	R	R	R	Υ	R	Y	R	R	R	R	R	Δ
MAIN ST FAR RIGHT AND RIGHT MAST ARM SIGNALS	EВ	R Y	R	R	R	R Y	R	R	R	R	R	R	R	Υ	R	Y	R	R	R	R	R	Δ
PEDESTRIAN SIGNALS CROSSING EAST APPROACH (PH 2 PED)		Н	Н	Н	Н	FH	Н	FH	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Δ
PEDESTRIAN SIGNALS CROSSING WEST APPROACH (PH 6 PED)		Н	Н	FH	Н	Н	Н	FH	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Δ
PEDESTRIAN SIGNALS CROSSING SOUTH APPROACH (PH 4 PED)		Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	FH	Н	FH	Н	Н	Н	Н	Н	Δ
PEDESTRIAN SIGNALS CROSSING NORTH APPROACH (PH 8 PED)		Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	FH	Н	Н	Н	FH	Н	Н	Н	Н	Н	Δ
A RAILROAD PREEMPTION SEQUENCE SHALL CLEARANCE INTERVAL TO RESUME THE					)F																HOLD	

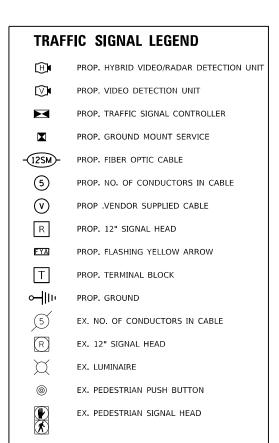
A RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED - ASG	REVISED -
PLOT DATE = 6/18/2025	DATE - 11/15/21	REVISED -

STATE OF	ILLINOIS
DEPARTMENT OF	TRANSPORTATION

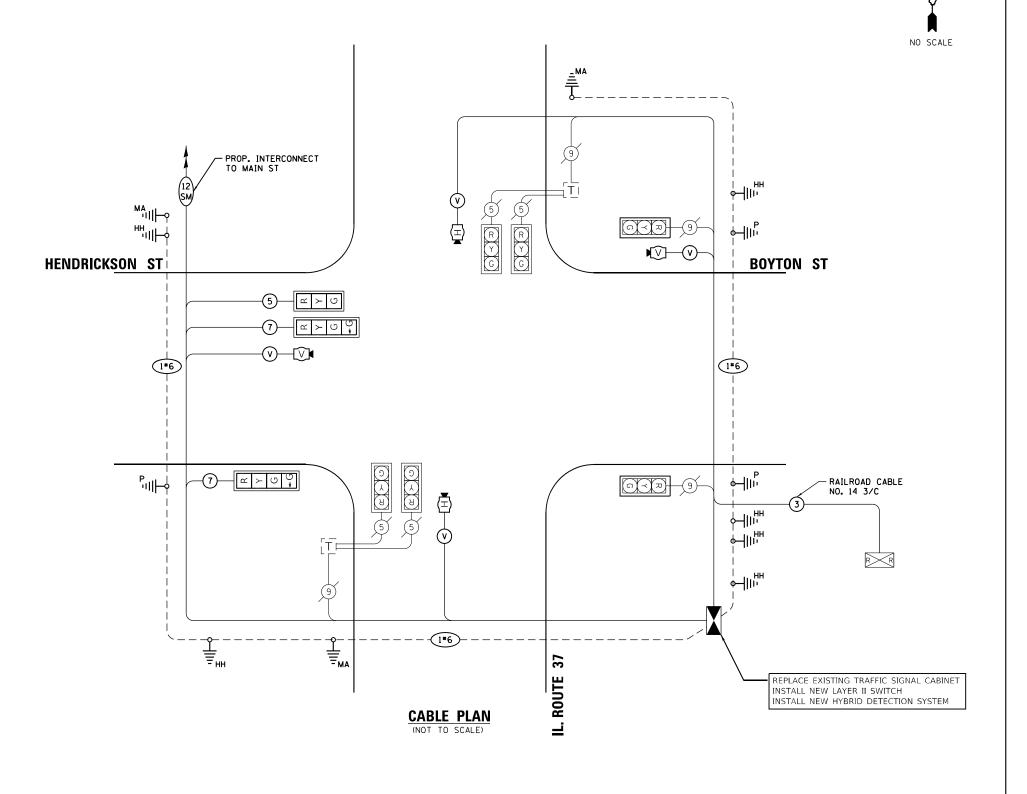
RAILI	ROAD PR	EEMPTIO	N SEQUE	ENCE C	F OPERATIONS	F.A.S. RTE	SECTION		COUNTY	TOTAL SHEETS	
	II R	<b>OUTE</b> 13	AND MA	7 MIN	DEET	2887	D9 TRAFFIC SIGNAL 20	21-3	WILLIAMSON	39	21
	15 11	OOIL 13	AIND IN	AJIN J	IILLI				CONTRACT	NO. 78	3916
	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS	FED. AI	D PROJECT		





#### **SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNIT	QTY.
SIGN PANEL - TYPE 1	SQ FT	20
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	348
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	10
HANDHOLE	EACH	1
HEAVY-DUTY HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	176
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	294
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	390
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	632
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 20 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	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	9
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	263
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	1
ETHERNET SWITCH	EACH	1
VIDEO VEHICLE DETECTION SYSTEM	EACH	1
STEEL CASINGS 4"	FOOT	50
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE III CABINET, SPECIAL	EACH	1



ΙL

SCALE:



USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED - ASG	REVISED -
PLOT DATE = 12/8/2023	DATE - 12/8/23	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	TR/	AFFIC SIG	NAL CA	BLE PLAN		F.A.S. RTE	SECTION			TOTAL SHEETS	SHEET NO.
BUILLE	37 AND	BUATUM	CTRFFI	/ HENDRICKSON	CTREET	2887	D9 TRAFFIC SIGNAL 202	21-3 W	WILLIAMSON	39	23
- NOUTL	37 AND	DOTTON	JIIILL	/ IILINDIIIOKSON	JIIILLI				CONTRACT	NO. 78	3916
	CHEET	OF	CHEETC	CTA -	O CTA		n i miore   E		DDOJECT		

#### PROPOSED SEQUENCE OF OPERATION

MOVEMENT	N A ®		6 ↓ ↑ 2		4 —	<b>+</b>	— 8	F.
PHASE		:	2 + 6	, ,		4 + 8	3	L A S
INTERVAL		1	2A	2B	3	4A	4B	Н
CHANGE TO			4 -	+ 8		2 -	+ 6	
IL 37 MAST ARM SIGNALS	NB	G	Y	R	R	R	R	R
IL 37 MAST ARM SIGNALS	SB	G	Y	R	R	R	R	R
BOYTON ST/HENDRICKSON ST FAR LEFT AND LEFT MAST ARM SIGNALS	wB	R	R	R	G	Y	R	R
BOYTON ST/HENDRICKSON ST RIGHT MAST ARM SIGNALS	WB	R	R	R	G	Y	R	R
BOYTON ST/HENDRICKSON ST FAR LEFT AND FAR RIGHT SIGNALS	ЕВ	R	R	R	G	Y	R	R

PHASE 2 + 6 SHALL BE PLACED ON RECALL

### PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION

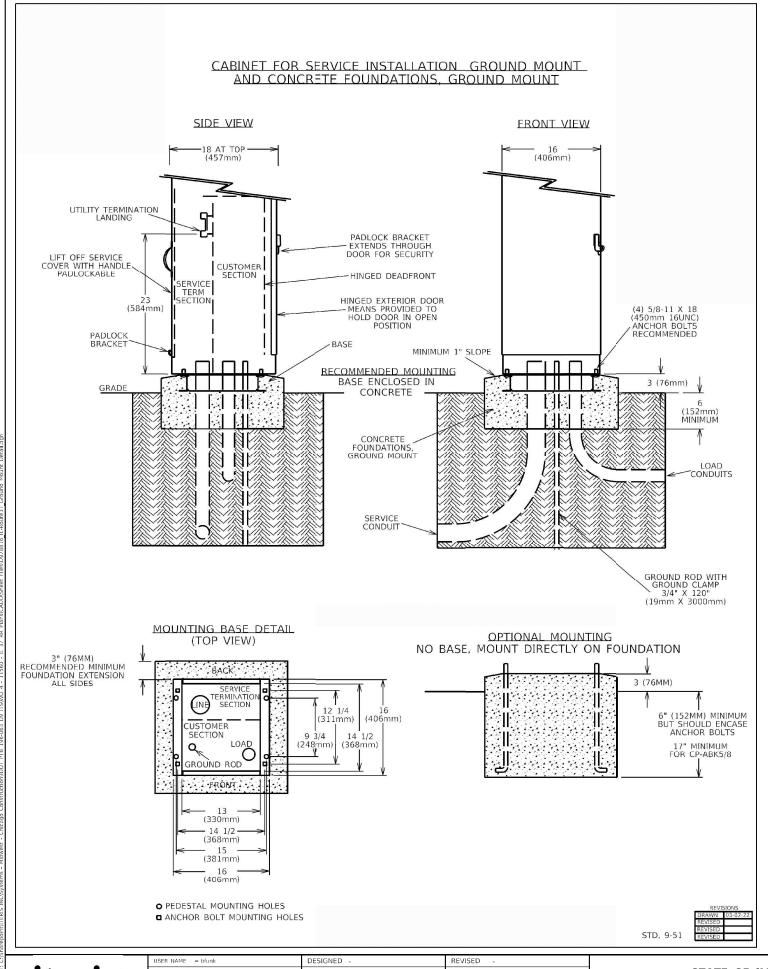
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		:	1		3					
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	1B	1C	1D	2	3	4	5	CLEAR TO
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1B	2	1D	2	3	4	5		NORMAL SEQUENCE
IL 37 MAST ARM SIGNALS	NB	Y	R	R	R	R	R	R	G	Δ
IL 37 MAST ARM SIGNALS	SB	Y	R	R	R	R	R	R	G	Δ
BOYTON ST/HENDRICKSON ST FAR LEFT AND LEFT MAST ARM SIGNALS	wB	R	R	G	G	ပပ	Y	R	R	Δ
BOYTON ST/HENDRICKSON ST RIGHT MAST ARM SIGNALS	wB	R	R	G	G	G	Y	R	R	Δ
BOYTON ST/HENDRICKSON ST FAR LEFT AND FAR RIGHT SIGNALS	ЕВ	R	R	Y	R	R	R	R	R	Δ
RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE PROPER						HOLD				

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

•
ris
- 1

USER NAME = bfunk	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED - ASG	REVISED -
PLOT DATE = 12/15/2023	DATE - 12/28/21	REVISED -

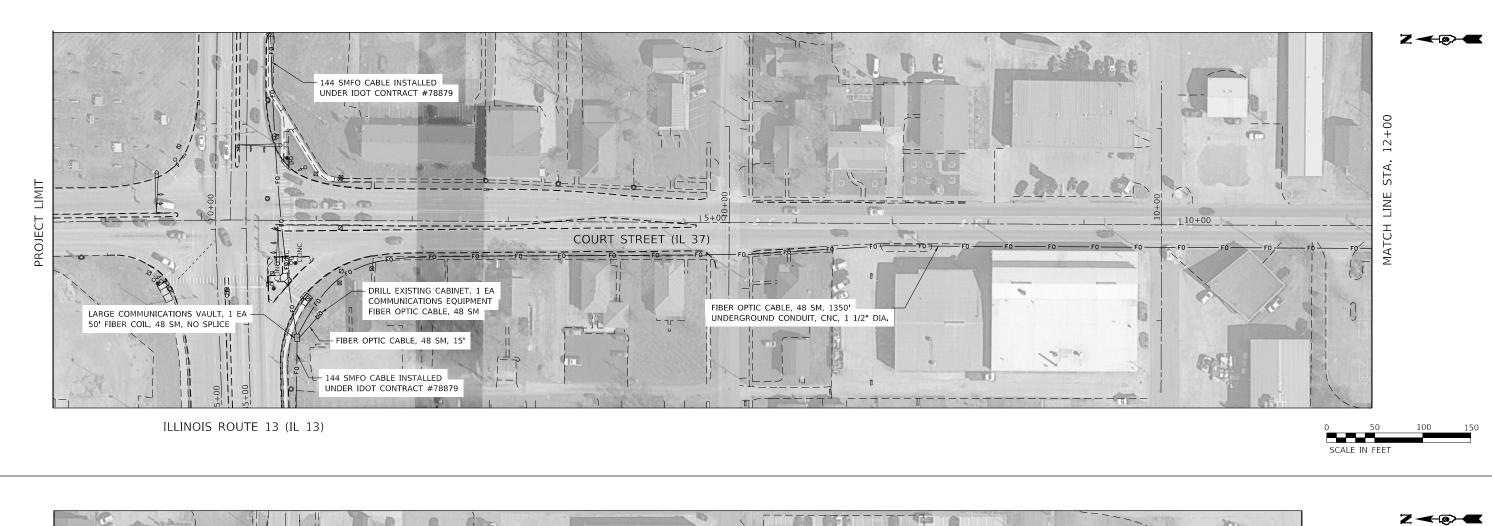
RAILI	ROAD PRI	EEMPTION	SEQUI	ENCE OF	OPERATIONS
ROUTE	37 AND	BOYTON	STREET	「∕ HEND	RICKSON STREET
	SHEET	OF	SHEETS	STA	TO STA

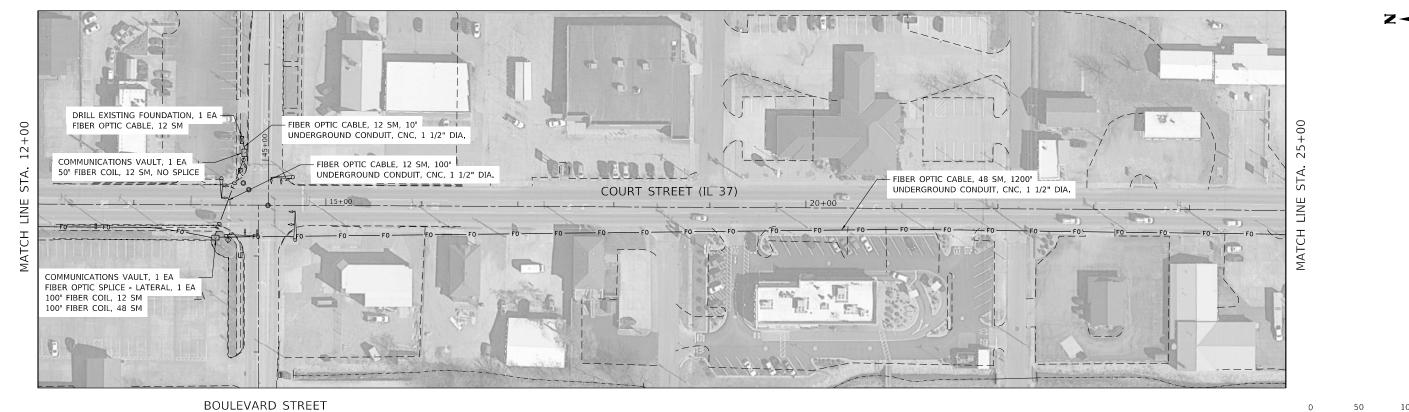


| F.A.S. | SECTION | COUNTY | SHEETS | STATE |

iteris<sup>®</sup>

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION







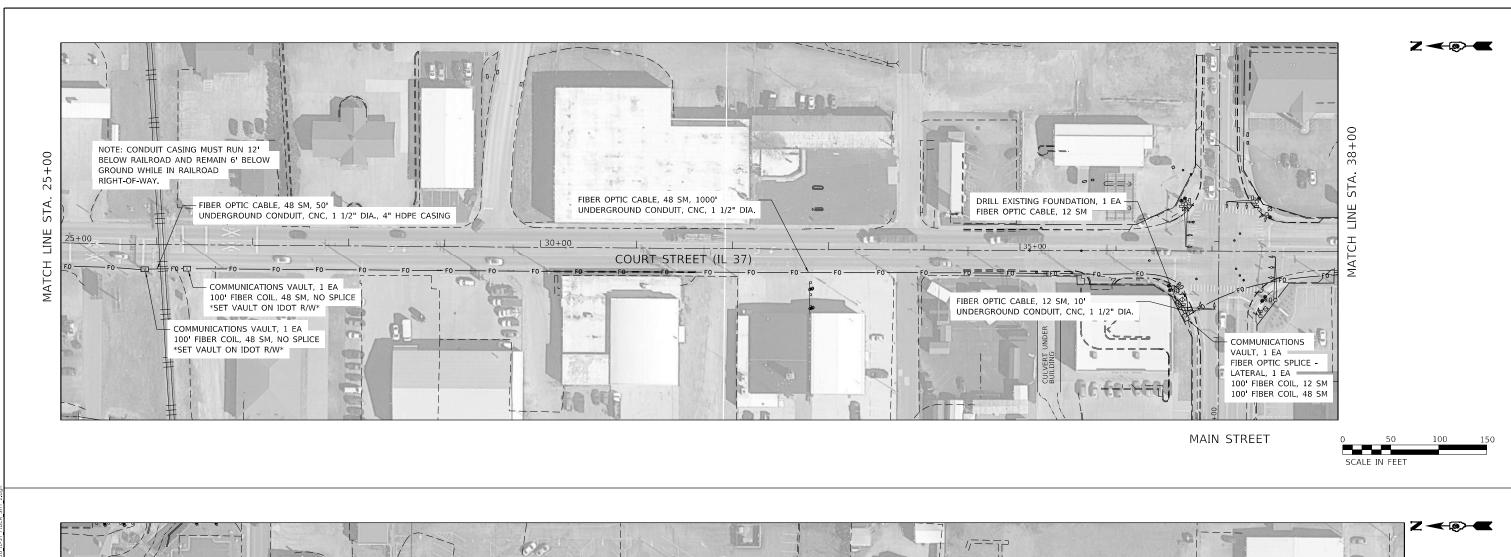
iteris

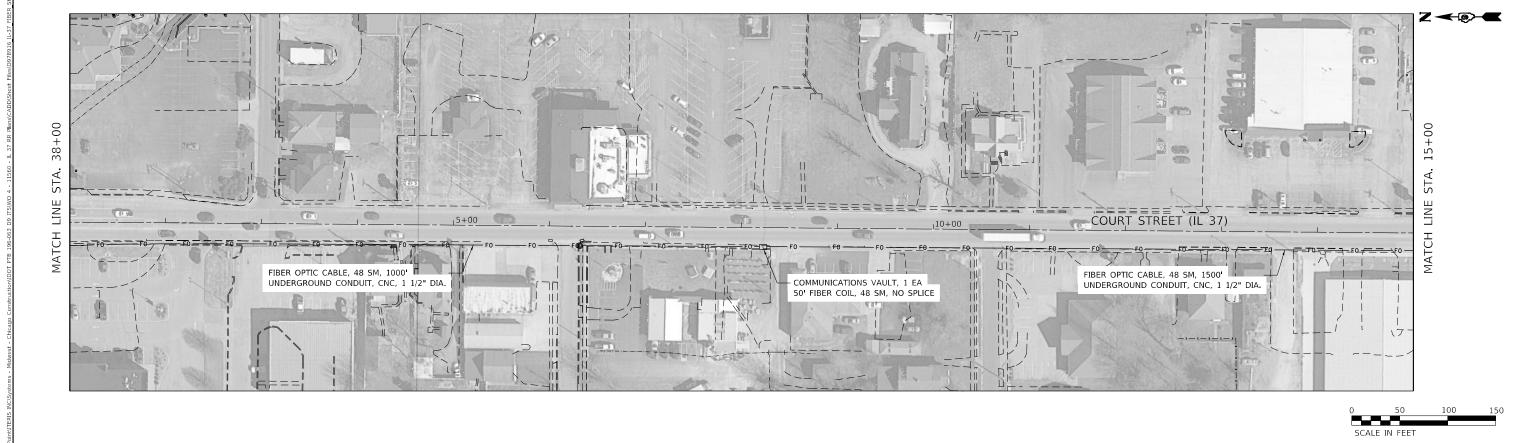
USER NAME = caskar	DESIGNED - CA	REVISED -
	DRAWN - CA	REVISED -
PLOT SCALE = 50.0000 / in.	CHECKED - BF	REVISED -
PLOT DATE = 3/22/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	F	IBER OPT	TC INSTA Route 3		N
SCALE: 1" = 50'	SHEET	OF	SHEETS	STA.	TO STA.

	F.A.S. SECTION			COUNTY	TOTAL SHEETS	SHI N
	2887	D9 TRAFFIC SIGNAL 20	21-3	WILLIAMSON	39	2
				CONTRACT	NO. 78	391
ı		ILLINOIS	FED. Al	ID PROJECT		





iteris

 USER NAME
 caskar
 DESIGNED
 CA
 REVISED

 PLOT SCALE
 = 50,0000 / in.
 CHECKED
 BF
 REVISED

 PLOT DATE
 = 3/22/2022
 DATE
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

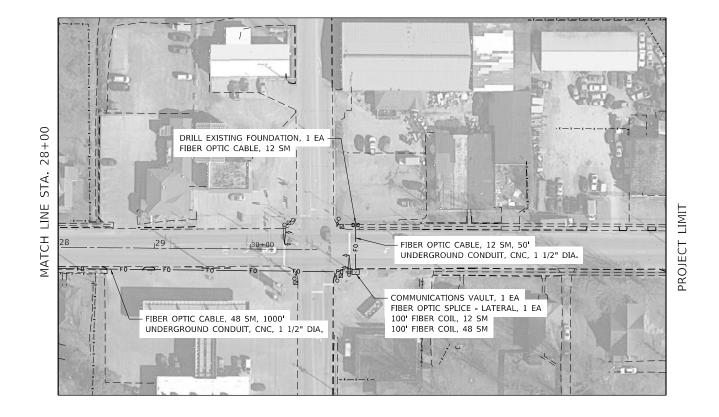
FIBER OPTIC INSTALLATION
IL ROUTE 37

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

RTE. SECTION COUNTY TOTAL SHEETS NO. 2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39 27

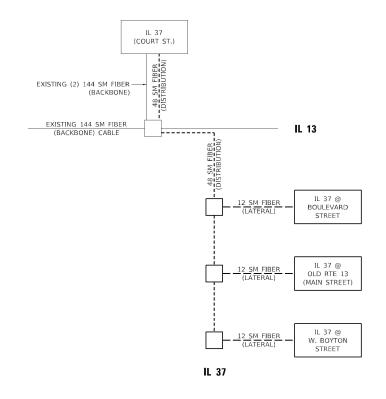
CONTRACT NO. 78916





DESIGNED - CA REVISED SECTION FIBER OPTIC INSTALLATION STATE OF ILLINOIS DRAWN - CA REVISED 2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39 28 IL ROUTE 37 CHECKED -REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 78916 SCALE: 1" = 50' SHEET SHEETS STA. TO STA. REVISED





#### NOTES:

1. SEE CONTRACT NO. 78879 FOR EXISTING CONDUIT AND CABLE DETAILS

LEGEND

EXISTING	PROPOSED	
INTERSECTION NAME	INTERSECTION NAME	INTERSECTION STREET NAME
		COMMUNICATIONS VAULT
		12 SINGLE MODE FIBER (LATERAL) CABLE
		48 SINGLE MODE FIBER (SMF) DISTRIBUTION
		144 SINGLE MODE FIBER (BACKBONE) CABLE

TranSm	ort"
100 S. Wacker Drive Chicago, Illinois 6060	

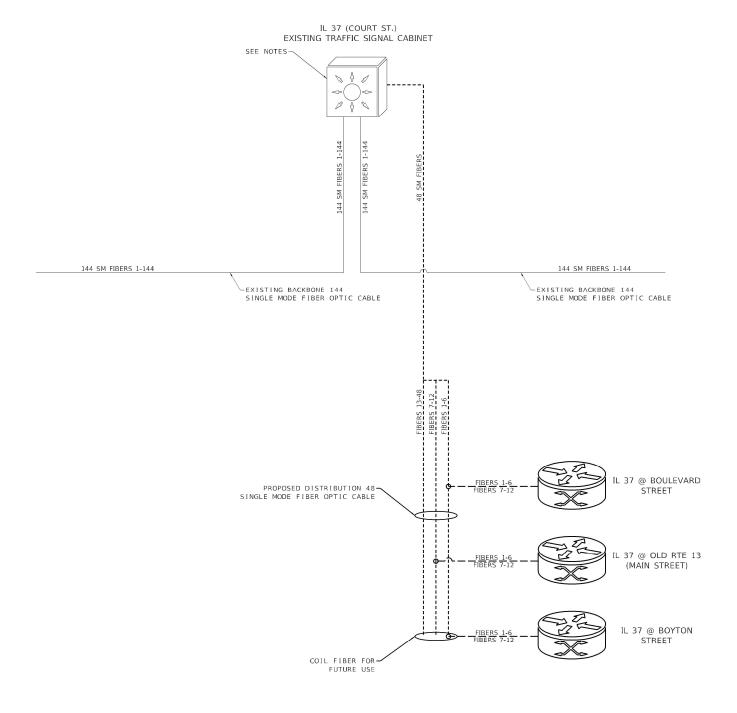
<b>■</b> >>>	USER NAME = jmalcolm	DESIGNED	-	JM	REVISED	-	
		DRAWN	-	DLB	REVISED	-	
10	PLOT SCALE = 0.1200 ' / in.	CHECKED	-	JM	REVISED	-	
	PLOT DATE = 12/29/2021	DATE	-	12/29/2021	REVISED	-	

STATE OF ILLINOIS					
DEPARTMENT	OF	TRANSPORTATION			

SCALE: N.T.S.

					F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
FIBI	FIBER COMMUNICATIONS SYSTEM TOPOLOGY					2887	D9 TRAFFIC SIGNAL 2021-3	WILLIAMSON	39	29
						CONTRACT	NO. 78	3916		
c	SHEET	OF	SHEETS	STA NA	TO STA N.A.		ILLINOIS EED	AID PROJECT		





1. SEE CONTRACT NO. 78879 FOR EXISTING DETAILS AT THE IL 13 AND IL 37 CABINET

LEGEND:



LAYER 2 NETWORK SWITCH



LAYER 3 NETWORK SWITCH

0 SPLICE LOCATION

12 SINGLE MODE FIBER (SMF) LATERAL 48 SINGLE MODE FIBER (SMF) BACKBONE

144 SINGLE MODE FIBER (SMF) BACKBONE

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606

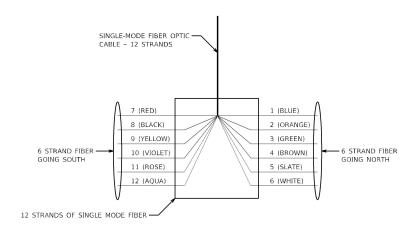
JSER NAME = jmalcolm DESIGNED - JM REVISED -DRAWN - DLB REVISED -CHECKED -REVISED PLOT DATE = 12/29/2021 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  FIBER COMMUNICATIONS SYSTEM SCHEMATIC

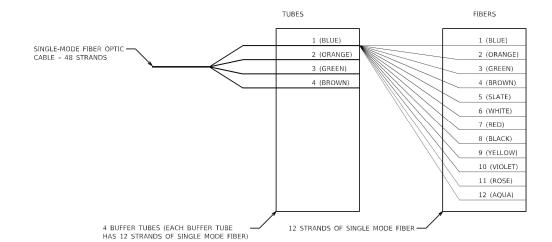
SECTION COUNTY

2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39 30 CONTRACT NO. 78916 SCALE: N.T.S. SHEETS STA. N.A. TO STA. N.A.

144 SINGLE MODE FIBER CABLE COLOR CODE



LATERAL 12 SINGLE MODE FIBER CABLE COLOR CODE



48 SINGLE MODE FIBER CABLE COLOR CODE

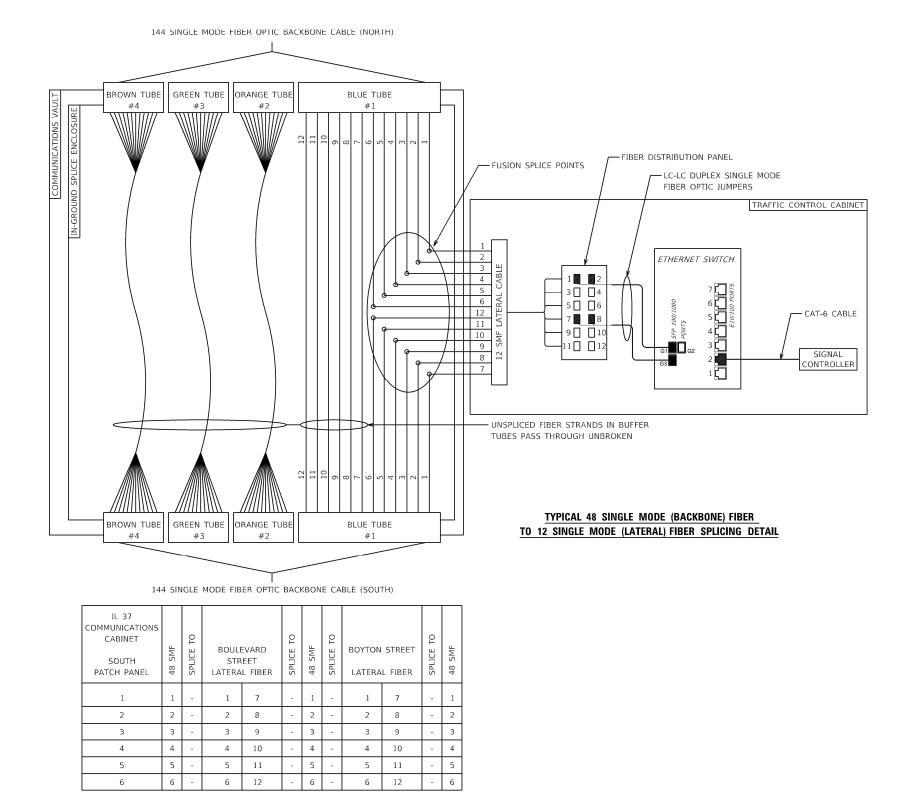
TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606

JSER NAME = jmalcolm DESIGNED - JM REVISED DRAWN - DLB REVISED CHECKED -REVISED DATE PLOT DATE = 12/29/2021 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

FIBER OPTIC CABLE TYPICAL DETAIL SCALE: N.T.S. SHEET SHEETS STA. N.A. TO STA. N.A.

SECTION COUNTY 2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39 31 CONTRACT NO. 78916

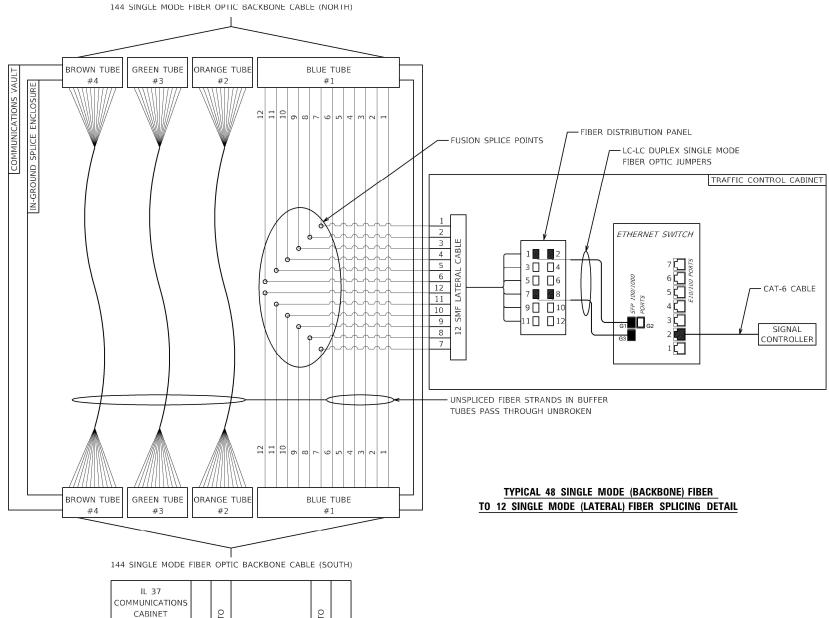


TranSmart"
100 S. Wacker Drive Suite 400
Chicago Illinois 60606

USER NAME = jmalcolm	DESIGNED - JM	REVISED
	DRAWN - DLB	REVISED
PLOT SCALE = 0.1200 ' / in.	CHECKED - JM	REVISED
PLOT DATE = 12/29/2021	DATE - 12/29/2021	REVISED

SCALE: N.T.S.

TYPICAL 48 SINGLE MODE (BACKBONE) FIBER						F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	
TO 12	SIGNIAL M	NDE /I/	ATERAL) F	BER SPLICING	DETAIL	2887	D9 TRAFFIC SIGNAL 2021	I-3 WILLIAMSON	39	32
10 12	SIGNAL IVI	ODL (LA	TILIME, I	IDEN 31 LICING	DLIAIL			CONTRACT	NO. 78	3916
I.T.S.	SHEET	OF	SHEETS	STA. N.A.	TO STA. N.A.		ILLINOIS FE	ED. AID PROJECT		



IL 37 COMMUNICATIONS CABINET SOUTH PATCH PANEL	48 SMF	SPLICE TO	(MAIN S	OLD RTE 13 MAIN STREET) ATERAL FIBER		48 SMF
7	7	-	1	7	-	7
8	8	-	2	8	-	8
9	9	1	3	9	-	9
10	10	-	4	10		10
11	11	-	5	11	1	11
12	12	-	6	12	-	12

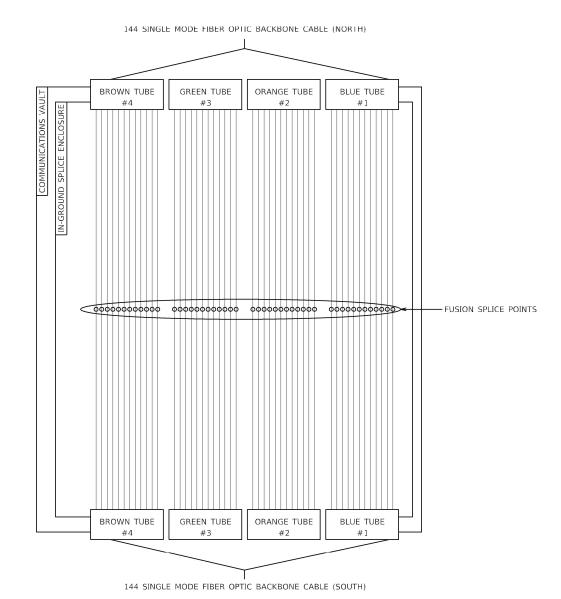
TranSmart\*\*
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = jmalcolm	DESIGNED - JM	REVISED
	DRAWN - DLB	REVISED
PLOT SCALE = 0.1200 ' / in.	CHECKED - JM	REVISED
PLOT DATE = 12/29/2021	DATE - 12/29/2021	REVISED

STATE OF ILLINOIS					
DEPARTMENT	OF	TRANSPORTATION			

TYPICAL 48 SINGLE MODE (BACKBONE) FIBER						
TO 12	SIGNAL	MODE (L	ATERAL) I	FIBER SPLIC	ING DETAIL	
SCALE: N.T.S.	SHEET	OF	SHEETS	STA. N.A.	TO STA. N.A.	

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.	
2887	D9 TRAFFIC SIGNAL 2	WILLIAMSON	39	33	
			CONTRACT	NO. 78	3916
	ILLINOIS	FED. A	ID PROJECT		



TYPICAL 48 SINGLE MODE (BACKBONE) FIBER TO 48 SINGLE MODE (BACKBONE) FIBER SPLICING DETAIL

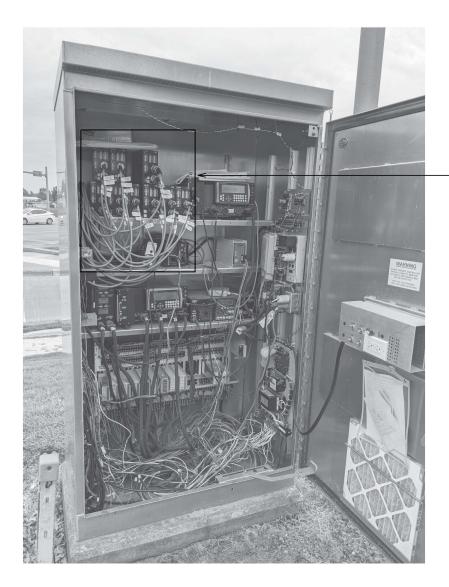
TranSmart\*\*
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = jmalcolm	DESIGNED - JM	REVISED
	DRAWN - DLB	REVISED
PLOT SCALE = 0.1200 ' / in.	CHECKED - JM	REVISED
PLOT DATE = 12/29/2021	DATE - 12/29/2021	REVISED -

STATE	0F	ILLINOIS
DEPARTMENT C	)F T	<b>TRANSPORTATION</b>

SCALE: N.T.S.

		F.A.S. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
PROPOSED MAINLINE	SPLICE DETAIL	2887	D9 TRAFFIC SIGNAL 2	2021-3	WILLIAMSON	39	34
					CONTRACT	NO. 78	3916
SHEET OF SHEETS	STA. N.A. TO ST	TA. N.A.	ILLINOIS	FED. Al	ID PROJECT		



#### **EXISTING IL 37 TRAFFIC SIGNAL CABINET LAYOUT**

#### **LEGEND**

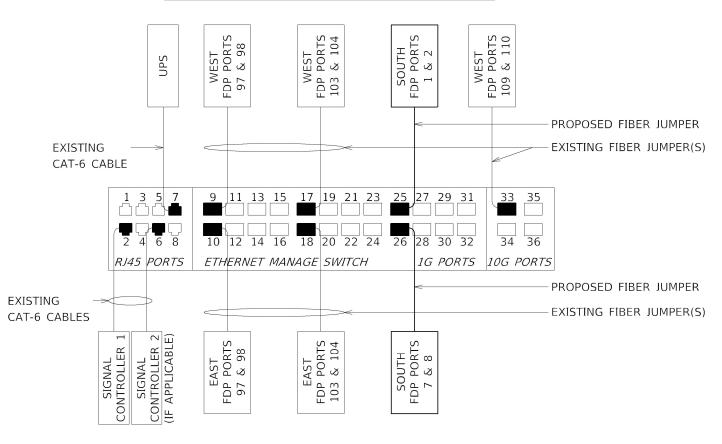
- (A) INSTALL ONE (1) FIBER OPTIC PATCH PANEL, 48 PORT
- (B) EXISTING ETHERNET MANAGE SWITCH

#### **NOTES**

A B

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CABINET LAYOUT.
- 2. THE CONTRACTOR SHALL MOUNT THE FIBER PATCH PANEL SECURELY ON THE SHELF AND LABEL IT TO SHOW GOING SOUTH.
- 3. THE CONTRACTOR SHALL INSTALL THE PROPOSED 1GB SFP TRANSCEIVER(S) IN THE SWITCH PER THE SCHEDULE IN THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
- 4. ALL FIBER OPTIC JUMPERS SHALL BE LC-LC DUPLEX SINGLE MODE FIBER OPTIC CABLE AS DETAILED IN THE SPECIAL PROVISIONS.
- 5. ALL FIBER OPTIC CABLE SLACK SHALL BE INSTALLED INSIDE THE FIBER OPTIC HANDHOLE. NO SLACK SHALL BE PERMITTED INSIDE THE TRAFFIC SIGNAL CABINET.

#### **ETHERNET MANAGE SWITCH PORT ASSIGNMENTS**



TranSmart

100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

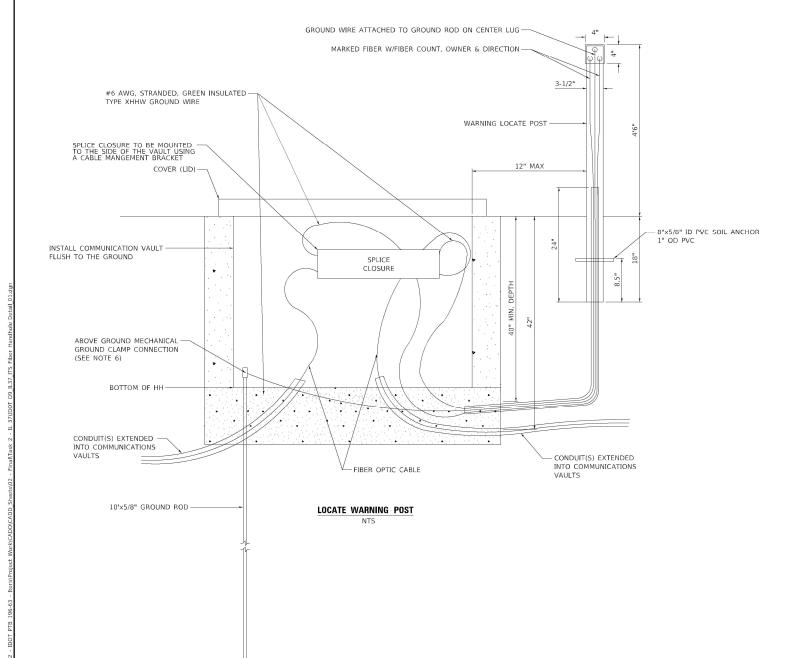
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING IL 37 TRAFFIC SIGNAL CABINET LAYOUT

SCALE: N.T.S. | SHEET | OF SHEETS | STA. N.A. TO STA. N.A.



NOTE:
DAMAGE TO SOIL ANCHORS NOT
INSTALLED WITH ARRPOVED DRIVER
WILL BE THE RESPONSIBILITY OF
THE CONTRACTOR FOR REPLACEMENT





### COVER DETAIL

#### NOTES

- FOR ALL SPLICE AND COMMUNICATION VAULTS NUMER DECALS
  WILL BE APPLIED AFTER INSTALLATION IS COMPLETED AND AT THE
  DIRECTION OF THE ENGINEER.
- COIL FIBER OPTIC CABLE SLACK IN COMMUNICATIONS VAULTS ENSURING THAT THE BEN RADIUS DOES NOT EXCEED THE MINIMUM BEND RADIUS OF THE FIBER.
- 1-1/2" CONDUIT AND #6 AWG GROUND WIRE AND ASSOCIATED WORK ARE INCLUDED AS PART OF THE FIBER OPTIC UTILITY MARKER AND WILL NOT BE PAID FOR SEPARATELY.
- 4. GROUND WIRE SHALL BE BONDED TO THE ARMOR OF THE ARMORED FIBER OPTIC CABLE(S) IN THE SPLICE ENCLOSURE USING THE #6 AWG GROUND WIRE, AND EACH GROUND SHALL BE ISOLATED. WITHIN THE ENCLOSURE.
- 5. A WATERPROOF SIMPLEX FIBER OPTIC INNERDUCT SPLIT PLUG WITH BUSHING ASSEMBLY OF APPROPRIATE SIZE OR APPROVED EQUIVALENT SHALL BE INSTALLED AROUND THE FIBER OPTIC CABLE TO SEAL AROUND THE DUCT FOR THE CONDUIT(S) ENTERING ALL COMMUNICATION VAULTS, AND IS INCLUDED AS PART OF THE FIBER OPTIC CABLE(S) PAY ITEM AND WILL NOT BE PAID SEPARATELY.
- 6. ALL MATERIALS FOR MECHANICAL CONNECTION SHALL BE UL LISTED AND INSTALLED PER NEC ARTICLE 250. CADWELD UNDER PEA GRAVEL CONNECTIONS MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.

Tr	anSm	art
	S. Wacker Drive 1go, Illinois 606	

USER NAME = jmalcolm	DESIGNED - JM	REVISED
	DRAWN - DLB	REVISED
PLOT SCALE = 0.1200 ' / in.	CHECKED - JM	REVISED
PLOT DATE = 3/17/2022	DATE - 01/28/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC MARKER, SPLICE, AND GROUNDING DETAIL

SCALE: N.T.S. SHEET OF SHEETS STA. N.A. TO STA. N.A. | ILLI



# **SOIL BORING LOG**

Page  $\underline{1}$  of  $\underline{1}$ 

Date 10/22/21

	RIPTION	ı	Mas	t Arm F	ounda	tion Investigation - Marion, IL L	OGGED B	Y	L. Est	el
SECTION D9 Traffic Signal 2021-1	LO	CATI	ON _	IL 37/E	<u>Boulev</u>	ard St (SW Quad.), SEC. 13, TWP. 9	S, <b>RNG</b> . 2E	, PM		
COUNTY Williamson DI	RILLING	ME	THOD	H <u>ollow</u>	Stem	Auger (8" O.D., 3.25" I.D.) <b>HAMMER 1</b>	Γ <b>ΥΡΕ</b> ω <u>to SF</u>	PT 140	lb (HE	E: 86.5%
STRUCT. NO.           Station         1-MA           BORING NO.         14+75           Offset         35.0ft Rt           Ground Surface Elev.         437.5	<u> </u>	D E P T H	B L O W S	U C S Qu (tsf)		Surface Water Elev. Stream Bed Elev.  Groundwater Elev.:  First Encounter  Upon Completion  After Hrs.	ft EPT	B L O W S	U C S Qu (tsf)	M O I S T
Cored Sidewalk, 6 in. CONCRETE Stiff Grey, Moist CLAY	437.00		1 2 2 2 2 4	1.4 B	25	Bottom of hole @ 16 ft  No free water encountered			(8)	(70)
Stiff Brownish Grey, Moist SILTY CLAY  Stiff Brown and mottled Grey, Moist CLAY	430.50		1 3 3 1 3 3	1.0 B	20	To convert "N" values to "N60", multiplly by 1.44; Hammer efficiency = 86.5%  Ground surface elevation referenced to FM012; Rod in canister at SW corner of IL 37 and Goodall St; EL. 437.51				
Stiff Brown, mottled Grey and Black, Moist CLAY	425.50		2 3 4 1 3 3	1.0 B	23					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating 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>

Date 10/25/21

ROUTEIL 37 DESC D9 Traffic Signal	RIPTION	۱	Mas	t Arm I	=ounda	ation Investigation - Marion, IL LOG	GED BY		L. Est	el
SECTION 2021-1	LO	CATI	ON _	IL 37/E	3oulev	ard St (NE Quad.), SEC. 13, TWP. 9S, R	NG. 2E,	PM		
COUNTY Williamson D	RILLING	ME	THOD	H <u>ollow</u>	Stem	Auger (8" O.D., 3.25" I.D.) <b>HAMMER TYPI</b>	<b>≛</b> u <u>to SP</u>	T 140	lb (HE	: 86.5°
STRUCT. NOStation		D E P	B L O	U C S	M 0 1	Surface Water Elev ft Stream Bed Elev ft	D E P	В L О	<b>%</b> О С	M O I
BORING NO.         2-MA           Station         13+87           Offset         13.0ft Lt		H	W S	Qu	S T	Groundwater Elev.:  □ First Encounter ft	H	W S	Qu	S T
Ground Surface Elev. 437.2	ft	(ft)		(tsf)	(%)	▼Upon Completion ft ▼After Hrs. ft	(ft)		(tsf)	(%)
Cored Pavement, 2.5 in. of HMA over 8.5 in. of CONCRETE Stiff Tannish Brown, Moist CLAY	436.28									
			1 2	1.6	21					
	<u>432.70</u>	_	3	В						
V. Stiff Tannish Brown, Moist CLAY			2 2 3	2.2 B	21	Bottom of hole @ 16 ft	25 			
Stiff Brown with specks of Black, Moist CLAY	430.20		2	1.6	26	No free water encountered  To convert "N" values to "N60", multiplly by 1.44; Hammer efficiency = 86.5%				
		_	5	В		Ground surface elevation referenced to FM012; Rod in canister at SW corner of IL 37 and	_			
		10	3 4	1.3 S	24	Goodall St; EL. 437.51	30			
		_	2	4.0	40		_			
		_	3	1.6 B	19					
V. Stiff Brown with specks of Black, Moist CLAY	<u>422.70</u>	- <u>-15</u>	3 5 7	2.0	16					
		_								
		-20	-				-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating 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)

#### FOR INFORMATION ONLY



File Name S:MATERIALS GEOTECHNICAL UNIT/GINTPROJECTS/PROJECTS FILE/WILLIAMSON/POINT Lattude 37 44 12.98 Longitude -88 55 57.75 Datum NAD83 Job Number D-99-039-22

USER NAME = \$USERS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES	CHECKED -	REVISED -
PLOT DATE = \$DATES	DATE - 1/5/22	REVISED -

**DEPARTMENT OF TRANSPORTATION** 

SOIL BORING LOG IL ROUTE 37 AND BOULEVARD STREET SHEETS STA.

2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39 37 CONTRACT NO. 78916

STATE OF ILLINOIS



# **SOIL BORING LOG**

Page  $\underline{1}$  of  $\underline{1}$ 

Date 10/23/21

	RIPTION	۱	Mas	t Arm F	Founda	ation Investigation - Marion, IL	LOGGE	D BY	·	L. Este	el
SECTION D9 Traffic Signal 2021-1	LO	CATI	ON _	IL 37/N	Main S	t (SW Quad.), <b>SEC.</b> 13, <b>TWP.</b> 9S, <b>I</b>	RNG. 2E	, PM			
COUNTY Williamson D	RILLING	ME.	THOD	H <u>ollow</u>	Stem	Auger (8" O.D., 3.25" I.D.) <b>HAMMER</b>	R TYPEu	to SP	T 140	lb (HE	E: 86.5%
STRUCT. NO.           Station           BORING NO.         3-MA           Station         00+42           Offset         24.0ft Rt		DEPTH	B L O W S	U C S Qu		Surface Water Elev. Stream Bed Elev.  Groundwater Elev.:  ☐ First Encounter ☐ Upon Completion	ft 5 ft ft	D E P T H	B L O W S	U C S Qu	M O I S T
Ground Surface Elev. 425.3	ft	(ft)		(tsf)	(%)	▼After Hrs.	ft	(ft)		(tsf)	(%)
Cored Sidewalk, 6 in. CONCRETE M. Dense Brown, Moist m. SAND	424.80	- - - -	2 4 8		4				3 4	1.8 S	18
			3		4	Bottom of hole @ 21 ft					
Stiff Grey, Moist SILTY CLAY	418.30		8			To convert "N" values to "N60", multiply by 1.44; Hammer efficiency = 86.5%					
			3 3	1.1 B	22	Ground surface elevation referenced to BM 1337; Cut Square on South Side of Signal Arm Foundation on the NE corne of IL 37 and Main St; EL. 424.88	r				
	413.30	_	2 3	1.1 B	17						
M. Stiff Grey, Moist SILTY CLAY LOAM		_	2 3	0.8 B	19			_			
M. Stiff Grey with mottled Brown and Tan, Moist SILTY CLAY	410.80		1 2 3	0.8 B	24						
M. Stiff Dark Greyish Brown, Mois CLAY	<u>408.30</u> t		2 3 4	0.9 B	22						
Stiff Brownish Grey, Moist CLAY	<u>405.80</u>	-20	2					-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating 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>

Date 10/25/21

		۱	Mas	t Arm F	=ounda	ation Investigation - Marion, IL	LOGGE	D BY		L. Este	el
SECTION D9 Traffic Signal 2021-1	LO	CATI	ON _	IL 37/ľ	Main S	it (NE Quad.), <b>SEC.</b> 13, <b>TWP.</b> 9S, <b>R</b>	NG. 2E,	PM			
COUNTY Williamson	DRILLING	ME	THOD	H <u>ollow</u>	Stem	Auger (8" O.D., 3.25" I.D.) <b>HAMMEF</b>	R TYPEu	to SP	T 140	lb (HE	: 86.5%
STRUCT. NOStation		D E P T	B L O W	U C S	M O I S	Surface Water Elev. Stream Bed Elev.	ft ft	D E P T	B L O W	U C S	M O I S
BORING NO.         4-MA           Station         26+65           Offset         44.0ft Lt		н	S	Qu	Т	Groundwater Elev.:	ft	н	s	Qu	Т
Ground Surface Elev. 425.	7 ft	(ft)		(tsf)	(%)	▼After Hrs	ft	(ft)		(tsf)	(%)
Cored Sidewalk, 6.5 in. CONCRETE	425.16	_				SILTY CLAY LOAM		_	3 5	0.5 B	
Concrete obstruction at 2.5 ft, augered through to next sample depth.		_									
dopun.		_									
		_						_			
Soft dark Grey, Moist CLAY	421.20	- 5									
Note: soil had a strong odor		_	1 2	0.3 B	26	Bottom of hole @ 21 ft  To convert "N" values to "N60",		_			
		_	1			multiply by 1.44; Hammer efficiency = 86.5%		25			
			1 3	0.5 B	27	Ground surface elevation referenced to BM 1337; Cut		_			
	416.20					Square on South Side of Signal Arm Foundation on the NE cornel of IL 37 and Main St; EL. 424.88	r	$\exists$			
M. Stiff dark Grey, Moist CLAY Note: soil had a strong odor		-10	2	0.6	28			-30			
			3	В				_			
M. Stiff Grey, Moist SILTY CLAY	413.70		1 2	0.7	27			_			
			3	0.7 B	21			_			
Stiff Brown and Grey, Moist SILT	<u>411.20</u> Y	 15	2					-35			
CLAY			2 3	1.2 B	25			$\equiv$			
	<u>408.70</u>	_									
M. Stiff Brown and Grey, Moist SILTY CLAY			2 3	0.8 B	24						
	400.00	_	, J								
M. Stiff Brown and Grey, V. Mois	406.20 st	- <u></u>	2					-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating 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)

### FOR INFORMATION ONLY



File Name S:MATERIALS GEOTECHNICAL UNIT/GINT/PROJECTS/PROJECTS FILEV Latitude 37 43 50.26 Longitude -88 55 57.84 Datum NAD83 Job Number D-99-039-22

USER NAME = \$USERS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES	CHECKED -	REVISED -
PLOT DATE = \$DATES	DATE - 1/5/22	REVISED -

STATE OF ILLINOIS

SOIL BORING LOG							
IL	ROUTE 37	AND M	AIN	STREET			
SHEET	OF	SHEETS	SΤΔ		TO STA		

A.S. RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHE	
2887	D9 TRAFFIC S	IGNAL 2	021-3	WILLIAMSON	39	38	
			CONTRACT NO. 78916				
		0.101010		D DDG IECT			

**DEPARTMENT OF TRANSPORTATION** 



# **SOIL BORING LOG**

Page  $\underline{1}$  of  $\underline{1}$ 

Date 10/23/21

D9 Traffic Signal						ation Investigation - Marion, IL				el
SECTION 2021-1	LO	CATI	ON _	IL 37/H	<u> lendri</u>	ckson St (SW Quad.), <b>SEC.</b> 24, <b>TW</b> F	. 9S, <b>RNG</b>	. 2E, <b>P</b>	M	
COUNTY Williamson DI	RILLING	ME	THOD	H <u>ollow</u>	Stem	Auger (8" O.D., 3.25" I.D.) <b>HAMMER</b>	TYPEuto S	PT 140	O Ib (HE	€: 86.5
STRUCT. NOStation		D E P	B L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.	_ft   E   P	L O	U C S	M O I
BORING NO.         5-MA           Station         31+00           Offset         27.0ft Rt		H	W S	Qu	S T	Groundwater Elev.: ☑ First Encounter ☑ Upon Completion	_ft H -ft		Qu	S T
Ground Surface Elev. 426.42	ft	(ft)		(tsf)	(%)	▼After Hrs.	ft (ft	)	(tsf)	(%)
Cored Driveway, 6 in. CONCRETE Concrete obstruction at 2.5 ft, augered through to next sample depth	425.92						- - - -			
V. Stiff dark Grey, Moist CLAY	421.92		3 4 5	2.9 B	20	Bottom of hole @ 16 ft	- - -2	5		
V. Stiff dark Grey and Brown, Moist CLAY	<u>419.42</u>		3 5 5	3.1 B	21	No free water encountered  To convert "N" values to "N60", multiply by 1.44; Hammer efficiency = 86.5%				
Stiff Grey and Brown, Moist CLAY	416.92		3 3 5	1.9 S	24	Ground surface elevation referenced to BM 600; Cut Square on SE corner of Traffic Signal Foundation on the NW corner of IL 37 and Hendrickson St; EL. 426.08	 3	0		
V. Stiff Grey and Brown, Moist CLAY	<u>414.42</u>		3 4 6	2.3 S	22		- - -			
M. Stiff Grey, V. Moist CLAY LOAM	411.92		1 2 3	0.6 B	24			5		
							- - -			
		_					_			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating 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>

Date 10/25/21

D9 Traffic Signal 2021-1	LO	CATI	ON _	IL 37/\	N Boy	ton St (NE Quad.), SEC. 24, TWP. 9S, RN  Auger (8" O.D., 3.25" I.D.)HAMMER TYPE	IG. 2E, PM		
STRUCT. NO.   Station   BORING NO.   6-MA   Station   30+35   Offset   27.0ft Lt   Ground Surface Elev.   425.29		D E P T H	B L O W S	U C S Qu (tsf)	M O I S T	Surface Water Elev. ft Stream Bed Elev. ft  Groundwater Elev.:  First Encounter ft  Upon Completion ft  After Hrs. ft	D B E L P O T W H S	U C S	M O I S T
Cored Sidewalk, 4 in. CONCRETE M. Stiff Brown, V. Moist CLAY			3 3 3	0.7 B	26				
V. Stiff Brown, Moist CLAY		_	3 4 5	3.1 B	22	Bottom of hole @ 16 feet  No free water observed			
V. Stiff Brown and Grey, Moist CLAY	<u>418.29</u>		3	2.1 S	25	To convert "N" values to "N60", multiply by 1.44; Hammer efficiency = 86.5%  Ground surface elevation referenced to BM 600; Cut Square on SE corner of Traffic Signal Foundation on the NW corner of IL 37 and Hendrickson St; EL. 426.08			
Stiff Brown and Grey, Moist CLAY			1 3 4	1.6 B	28	420.00			
V. Stiff Brown and Grey with specks of Black, Moist CLAY	<u>410.79</u>		1 3 4	2.2 B	22				
							10		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating 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)



File Name S:MATERIALS GEOTECHNICAL UNIT/GINT/PROJECTS/PROJECTS FILEV Latitude 37 43 19:93 Longitude -88 55 57.80 Datum NAD83 Job Number D-99-039-22

USER NAME = \$USERS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES	CHECKED -	REVISED -
PLOT DATE = \$DATES	DATE - 1/5/22	REVISED -

FOR INFORMATION ONLY

SOIL BORING LOG 2887 D9 TRAFFIC SIGNAL 2021-3 WILLIAMSON 39 39 IL ROUTE 37 AND BOYTON STREET / HENDRICKSON STREET CONTRACT NO. 78916 SHEETS STA.