08-04-2023 LETTING ITEM 023

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

VARIOUS LOCATIONS IN DISTRICT 1
CONTRACT NO. 7
SECTION: 2022 VAR TSM
PROJECT: HSIP - OSBQ(185)
TROMBONE MAST ARM REPLACEMENT
COOK AND KANE COUNTIES

C-91-063-23

0 100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100'
1" = 50'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 30'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: IOVAN PLASCENCIA (847) 705–4504 PROJECT MANAGER: NICHOLAS BUTLER (847) 705–4420

CONTRACT NO. 62U47

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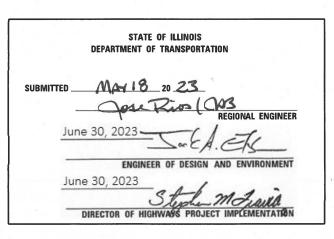
FOR LOCATION MAPS SEE SHEETS NO. 3-4

VARIOUS TOWNSHIPS



D-91-046-23





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHT NO.	DESCRIPTION
1 2 3-4 5-10 11-17	COVER SHEET INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES LOCATION MAPS SUMMARY OF QUANTITIES DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05) DISTRICT 1 MAST ARM MOUNTED STREET NAME SIGNS (TS-02)
SHT NO. TS NO.	INTERSECTION NAME
19-22 775 23-26 4310 27-32 3120 33-38 1150 39-43 3170 44-48 3125	IL RTE 25 (DUNDEE AVE) AT BRANDT DR IL RTE 25 (KENNEDY DR) AT KINGS RD IL RTE 68 (DUNDEE RD) AT HICKS RD US RTE 12 (RAND RD) AT HICKS RD IL RTE 68 (DUNDEE RD) AT SANDERS RD IL RTE 68 (DUNDEE RD) AT HUEHL RD
SHT NO.	DESCRIPTION
49	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
50	ARTERIAL ROAD INFORMATION SIGN (TC-22)

HIGHWAY STANDARDS

886001-01

STD. NO.	TITLE
000001-08	STANDARD SYMBOLS, ABREVIATIONS 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' AWAY
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701101-05	OFF-ROAD OPERATIONS MULITLANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAIL
814001-03	HANDHOLES
814006-03	DOUBLE HANDHOLES
862001-01	UNINTERRUPTABLE POWER SUPPLY
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877006-06	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS
878001-11	CONCRETE FOUNDATION DETAILS
990006-01	TRAFFIC SIGNAL MOUNTING DETAILS

DETECTOR LOOP INSTALLATIONS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT KALPANA, KANNAN-HOSADURGA@ILLINOIS, GOV, 72 HOURS IN ADVANCE OF BEGINNING WORK.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.

ALL EXISTING R.O.W. SHOWN IS APPROXIMATE AND MAY NEED TO BE VERIFIED IN THE FIELD. ANY R.O.W. CONFLICTS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER.

THE EXACT LOCATION OF ALL UTILITES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR, THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.

THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR UNDERGROUND AND OVERHEAD UTILITY CONFLICTS, THE CONTRACTOR SHALL NOTIFY THE AREA ENGINEER, THE RESIDENT ENGINEER AND ANY IMPACTED UTILITY COMPANY OF THE CONFLICT, AND SHALL COORDINATE AND RESOLVE THE ISSUE PRIOIR TO ORDERING MATERIALS, AND PRIOR TO POURING FOUNDATIONS.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT,

LOCATIONS WITH PEDESTRIAN EQUIPMENT HAVE BEEN DESIGNED TO BE ADA COMPLIANT. ANY DEVIATION FROM THE PLANS FOR TRAFFIC SIGNAL MAST ARM/POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO INSURE ADA COMPLIANCE.

DIMENSIONED OFFSETS FOR THE TRAFFIC SIGNAL MAST ARMS AND POSTS ARE MEASURED FROM THE BACK OF CURB TO THE CENTER OF THE FOUNDATION WHERE CURB IS PRESENT, IF NO CURB IS PRESENT, OFFSETS ARE MEASURED FROM THE EDGE OF PAVEMENT TO THE CENTER OF THE FOUNDATION

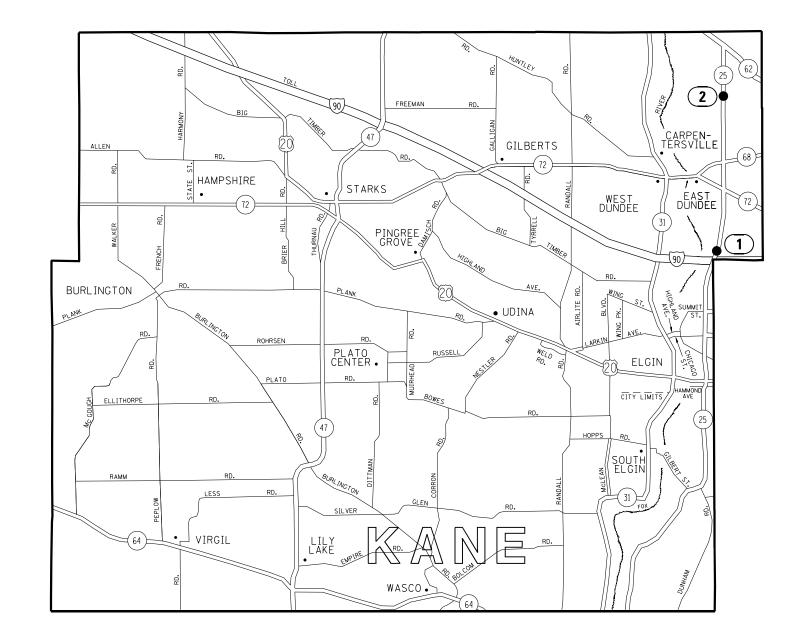
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY EXISTING SIGNS FROM THE MAST ARM ASSEMBLIES AND POSTS THAT ARE TO BE REMOVED AND TRANSFER THEM TO THE PROPOSED MAST ARM ASSEMBLIES AND POSTS PER THE STANDARD SPECIFICATIONS.

USER NAME = Iovan.Plascencia	DESIGNED	-	IP	REVISED -	
	DRAWN	-	IP	REVISED -	
PLOT SCALE = 100.0000 / in.	CHECKED	-	NB	REVISED -	
PLOT DATE = 5/17/2023	DATE	-	5/12/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

				05115041 110550	F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
INDEX OF SHEET	S, HIGHWAY	STANL	DARDS &	GENERAL NOTES	VAR	2022 VAR TSM	VARIOUS	50	2
							CONTRACT	F NO. 62	2U47
: SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		



LOCATION NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY	COUNTY
1	775	IL RTE 25 (DUNDEE AVE) AT BRANDT DR	ELGIN	KANE
2	4310	IL RTE 25 (KENNEDY DR) AT KINGS RD	CARPENTERSVILLE	KANE

USER NAME = Iovan.Plascencia	DESIGNED - IP	REVISED -			100	ATION N	MAP (SH	HEET 1 OF 2	1	F.A. BTF	SECTION	COUNTY	TOTAL	SHEET NO.
	DRAWN - IP	REVISED -	STATE OF ILLINOIS				•		,	VAR	2022 VAR TSM	VARIOUS	50	3
PLOT SCALE = 100.0000 / in.	CHECKED - NB	REVISED -	DEPARTMENT OF TRANSPORTATION			NUKIH	KANE (COUNTY				+	T NO. 62	2U47
PLOT DATE = 5/17/2023	DATE - 5/12/2023	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

4

COLFAX

BROCKWAY-

ALDRIDGE

EMERSON

PALATINE :

3

HILLSIDE

PALATINE

TOLL

HOFFMAN ESTATES SCHAUMBURG

SCHAUMBURG '

ELGIN O'HARE

STREAMWOOD

USER NAME = Iovan Plascencia	DESIGNED - IP	REVISED -			100	ATION N	MAP (SHI	FFT 2 OF 2)		F.A. RTF	SECTION	COUNTY	TOTAL SHEET
USER NAME = Iovan,Plascencia	DESIGNED - IP DRAWN - IP	REVISED - REVISED -	STATE OF ILLINOIS					EET 2 OF 2)		F.A. RTE. VAR	SECTION 2022 VAR TSM		TOTAL SHEET NO.
USER NAME = Iovan Plascencia PLOT SCALE = 100.0000 / in.			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				MAP (SHI COOK C			F.A. RTE. VAR		VARIOUS	50 4
	DRAWN - IP	REVISED -		SCALE:				OUNTY	TO STA.	F.A. RTE. VAR	2022 VAR TSM	VARIOUS	

WHEEL

5 6

W. LAKE

FOSTER AVE.

NORRIDGE

GLENVIEW 1

TOWER

WINNETKA

DEMPSTER

SKOKIE

FOSTER AVE

WELLINGTON KIMBALL

DIVERSEY

KENILWORTH

WILMETTE

BERWYN

AVE.

83 MCHENRY

PALATINE

KENSINGTON

(83)

MOUNT PROSPECT

ARLINGTON HEIGHTS

SA

• ELK GROVE • VILLAGE MANCHESTER DR.

MARQUARDT DR.

FOUNDRY

PLAINES

SA

					CONSTRUCTION CODE						
					90% FED 10% STATE KANE COUNTY	90% FED 10% STATE COOK COUNTY	25,731,1021,10				
	CODE		11817 =	TOTAL		1	TRAFFIC S				
	NO.	ITEM	UNIT	QUANTITY			0021 URBAN				
-							URBAI	N .			
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	60	20	40					
				_		_					
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	2	1	1					
*	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	0.33	0.67					
}											
*	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	0.33	0.67					
ļ											
}	66001655	DESCRIPTION CONTRACTOR AND CONTRACTO		10		10			+		
*	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	18	6	12					
	67100100	MOBILIZATION	L SUM	1	0.33	0.67					
-											
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.33	0.67					
}	70102625	TRAFFIC CONTROL AND PROTECTION CTANDARD 701000	I CIM	1	0.22	0.67					
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.33	0.67					
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.33	0.67					
+											
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.33	0.67					
*	72000100	SIGN PANEL - TYPE 1	SQ FT	72	19.5	52.5					
"	,2000100	SIGN FAMILE - TITL I	30 F1	/ 2	19.5	32.3					
*	72000200	SIGN PANEL - TYPE 2	SQ FT	122.5	27.5	95					
}											
}											
	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	524	311	213					
Ì	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	601	103	498					
}		The same state of the same state, as said	1.001	551		.50					
*	SPECIALT	Y ITEM									
		USER NAME = Iovan, Plascencia DESIGNED - IP REV	ISED -		OE ILLINOIS		SUMMARY OF QUAI	NTITIES	F.A. RTE	SECTION	COUNTY TOT

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES
(SHEET 1 OF 6)

SHEET OF SHEETS STA. TO STA.

RTE. SECTION COUNTY SHEETS NO.

VAR 2022 VAR TSM VARIOUS 50 5

CONTRACT NO. 62U47

ILLINOIS FED. AID PROJECT

			CONSTRUCTION CODE							
			90% FED 10% STATE KANE COUNTY	90% FED 10% STATE COOK COUNTY						
CODE	LINIT	TOTAL				SIGNALS				
NO.	UNIT	QUANTITY	0021 URBAN							
81028240 UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1,349	422	927						
81400100 HANDHOLE	EACH	2	2							
81400200 HEAVY-DUTY HANDHOLE	EACH	1	1							
81400300 DOUBLE HANDHOLE	EACH	1	1							
85000200 MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	6	2	4						
86400100 TRANSCEIVER - FIBER OPTIC	EACH	1	1							
87301215 ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2,385	200	2,185						
87301225 ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	4,230	315	3,915						
87301245 ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	11,675	2,675	9,000						
87301255 ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	5,980	675	5,305						
87301305 ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4,400	2,120	2,280						
87301805 ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	70	70							
97201000 ELECTRIC CARLE IN CONDUIT FOURMENT CROUNDING COMPUSTOR NO. C. 10	F00T	2.620	700	1.020						
87301900 ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2,620	700	1,920						
87502440 TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1		1						
	2,1011	-		-						
USER NAME = Iovan.Plascencia DESIGNED - IP REVISED -	T			<u> </u>	OURARA BY OF O		F.A. SECT	TON COUNTY		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES
(SHEET 2 OF 6)

SHEET OF SHEETS STA. TO STA.

F.A. SECTION COUNTY TOTAL SHEETS NO.

VAR 2022 VAR TSM VARIOUS 50 6

CONTRACT NO. 62U47

			CONSTRUCTION CODE					
			90% FED 10% STATE KANE COUNTY	90% FED 10% STATE COOK COUNTY				
CODE		TOTAL				SIGNALS		
NO. I TEM	UNIT	QUANTITY)21 BAN		
					UN	DAN		
87502500 TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	9	4	5				
OZEGORNO TRAFFIC CICNAL POCT. CALVANIZED CTEFL 10 FT	FACIL	2	1	1				
87502520 TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	2	1	1				
87700160 STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	2	1	1				
87700210 STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	4	2	2				
87700220 STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	4		4				
67/00220 STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	4		4				
87700230 STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	4		4				
87700250 STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1		1				
87700270 STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1		1				
67700270 STEEL MAST ARM ASSEMBLT AND POLE, 40 FT.	EACH	1		1				
87702488 STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 32 FT. AND 36 FT.	EACH	1	1					
87800100 CONCRETE FOUNDATION, TYPE A	FOOT	28	16	12				
87800150 CONCRETE FOUNDATION, TYPE C	FOOT	4	4					
	1001	,	•					
87800400 CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	182	37	145				
				<u> </u>				1
	_							
87800415 CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	38	12	26				
87900200 DRILL EXISTING HANDHOLE	EACH	58	12	46				
	1							

 USER NAME
 = Iovan, Plascencia
 DESIGNED
 IP
 REVISED

 DRAWN
 IP
 REVISED

 PLOT SCALE
 = 100,0000 ° / in.
 CHECKED
 NB
 REVISED

 PLOT DATE
 = 5/17/2023
 DATE
 5/12/2023
 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES
(SHEET 3 OF 6)

SHEET OF SHEETS STA. TO STA.

SCALE:

				CONSTRUCTION CODE				
				90% FED 10% STATE KANE COUNTY	90% FED 10% STATE COOK COUNTY			
CODE	ITEM	UNIT	TOTAL			TRAFFIC SIGNALS		
NO.	1	ONTI	QUANTITY			0021 URBAN		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	40	12	28			
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	30	11	19			
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	15	2	13			
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	15	2	13			
30030110	SIGNAL HEAD, LED, TIMEL, S SECTION, PARSTANCE PRODUCES	E/(CIT	13		15			
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	32	4	28			
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	55	14	41			
88500100	INDUCTIVE LOOP DETECTOR	EACH	16	12	4			
00000100	DETECTOR LOOP, TYPE I	FOOT	171	171				
88600100	DETECTOR LOOP, TYPE I	1001	1/1	1/1				
89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	1	4			
89502200	MODIFY EXISTING CONTROLLER	EACH	1		1			
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	15,505	1,315	14,190			
0050555								
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	6	2	4			
89502376	REBUILD EXISTING HANDHOLE	EACH	3	1	2			
89502380	REMOVE EXISTING HANDHOLE	EACH	12	5	7			
						I s a		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES (SHEET 4 OF 6)

SHEET OF SHEETS STA.

TO STA.

SCALE:

F.A. SECTION COUNTY TOTAL SHEETS NO.

VAR 2022 VAR TSM VARIOUS 50 8

CONTRACT NO. 62U47

				CONSTRUCTION CODE							
				90% FED 90% FED 10% STATE 10% STATE KANE COUNTY COOK COUNTY TRAFFIC SIGNALS							
CODE	LTEM	LINIT	TOTAL					•			
NO.	ITEM	UNIT	QUANTITY)21 BAN				
						<u> </u>					
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	28	10	18						
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1,460	105	1,355						
V1.400107	FULL ACTUATED CONTROLLED AND TYPE CURED B CARDINET	54611									
X1400107	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET	EACH	1	1							
X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1	1							
X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	13	1	12						
X1400388	VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	5	1	4						
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	6	2	4						
V0570045	SULL ACTUATED CONTROLLED IN EVICTING CARNIET	54611			_						
X85/0215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1		1						
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	1							
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1	1							
X8620250	UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL	EACH	1	1							
X8620310	REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	4		4						
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	32	4	28						
V0700010	CONCRETE FOUNDATION, TYPE A 12 INCH DIAMETER	5007	F2		40						
X8/80012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	52	4	48						
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	462.6	102.8	359.8						
			132.0								
					<u> </u>	<u> </u>					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 5 OF 6)

SHEET OF SHEETS STA. TO STA.

SCALE:

							CONSTRUCTION CODE		
					90% FED 10% STATE	90% FED 10% STATE			
Г	T				KANE COUNTY	COOK COUNTY	TRAFFIC SIGNALS		
	CODE NO.	ITEM	UNIT	TOTAL QUANT I TY			0021		
				,			URBAN		
-									
	Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	5	1	4			
Ø	Z00 766 00	TRAINEES	HOURS	500	500				
Ø	Z00 766 04	TRAINEES -TRAINING PROGRAM GRADUATE	HOURS	500	500				
F									
-									
-									
F									
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-									
-									
L									d -
		USER NAME = Iovan Plascencia DESIGNED - IP REVISED -					SUMMARY OF QUANTITIES	F.A. SECT	Ø 0042 ION COUNTY TOTAL SHEETS NO. R TSM VARIOUS 50 10
		DRAWN - IP	D	STATE EPARTMENT (OF ILLINOIS OF TRANSPORTATION		(SHEET 6 OF 6)	VAR 2022 VA	CONTRACT NO. 62U47
		PLOT DATE = 5/17/2023 DATE - 5/12/2023 REVISED -				SCALE:	SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT REV-SE

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

<u>ITEM</u>	<u>EXISTING</u>	PROPOSED	ITEM	<u>existing</u>	PROPOSED	ITEM	<u>EXISTING</u>	PROPOSED
CONTROLLER CABINET	\boxtimes		HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R P	RRYY
COMMUNICATION CABINET	ECC	CC	-ROUND HEAVY DUTY HANDHOLE					Y
MASTER CONTROLLER	EMC	MC	-SQUARE -ROUND	H (B)	⊞ ⊕			4G 4G P
MASTER MASTER CONTROLLER	ЕММС	ммд	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE		R R R
UNINTERRUPTABLE POWER SUPPLY	4	9	JUNCTION BOX		•	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
SERVICE INSTALLATION -(P) POLE MOUNTED	- <u></u> -P	- ■ - P	RAILROAD CANTILEVER MAST ARM	X OX X X	I eI I			G G G AY G G G G G G G G G G G G G G G G
SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	∑⊙ ∑	X•X		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^G\boxtimes^{GM}$	\blacksquare \square \square \square \square	RAILROAD CROSSING GATE	₹0 ₹>	X•X-	PEDESTRIAN SIGNAL HEAD	(•
TELEPHONE CONNECTION	ET	Т	RAILROAD CROSSBUCK	苍	*	AT RAILROAD INTERSECTIONS	Ø	<u>**</u>
STEEL MAST ARM ASSEMBLY AND POLE	0	•	RAILROAD CONTROLLER CABINET		≯ -₹	PEDESTRIAN SIGNAL HEAD	© C	♥ C ★ D
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			WITH COUNTDOWN TIMER		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	o-¤—	•*	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	 ● BM 	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
WOOD POLE	\otimes	•	INTERSECTION ITEM	I	IP _	GROUND CABLE IN CONDUIT,		
GUY WIRE	>	>	REMOVE ITEM		R	NO. 6 SOLID COPPER (GREEN)	1#6	
SIGNAL HEAD	>	-	RELOCATE ITEM ABANDON ITEM		RL A	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
SIGNAL HEAD WITH BACKPLATE	+->	+-	CONTROLLER CABINET AND			COAXIAL CABLE		<u> </u>
SIGNAL HEAD OPTICALLY PROGRAMMED	-⊳ ^P +⊳ ^P	- ▶ P + ▶ P	FOUNDATION TO BE REMOVED		RCF	COMUNE CASE	- /	_
FLASHER INSTALLATION	o⇔ ^F o⇔ ^{FS}	•► FS	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	VENDOR CABLE		
-(FS) SOLAR POWERED	or o	F FS FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	(6#18)	(6#18)
PEDESTRIAN SIGNAL HEAD	-0	-1	DETECTOR LOOP, TYPE I	ПО	ПО	FIBER OPTIC CABLE -NO. 62.5/125, MM12F		— <u>(12F)</u> —
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON		⊚	PREFORMED DETECTOR LOOP	P P	P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		—
RADAR DETECTION SENSOR	R	R	SAMPLING (SYSTEM) DETECTOR	s s	s s		— <u>36F</u>	—(36F)—
VIDEO DETECTION CAMERA	₩ I	V	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS (IS)	IS (IS)			
RADAR/VIDEO DETECTION ZONE			QUEUE AND SAMPLING	QS QS	QS QS	GROUND ROD -(C) CONTROLLER	<u> </u>	± ^C ± ^M ± ^P ± ^S
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ]	PTZ	(SYSTEM) DETECTOR			-(M) MAST ARM -(P) POST		
EMERGENCY VEHICLE LIGHT DETECTOR	₩	←	WIRELESS DETECTOR SENSOR	®	®	-(S) SERVICE		
CONFIMATION BEACON	o-()	-	WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT	0−1 0+1 -	•-+						
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR						
USER NAME = Iovan.Plascen		IP REVISED - IP REVISED -	STA	ATE OF ILLINOIS		DISTRICT ONE INDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A. SECTIC TVAR 2022 VAR	SIILLI

- 9/29/2016

DATE

PLOT DATE = 5/17/2023

REVISED

CONTRACT NO. 62U47

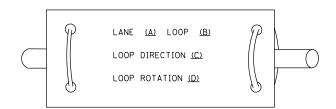
TS-05

SHEET 1 OF 7 SHEETS STA.

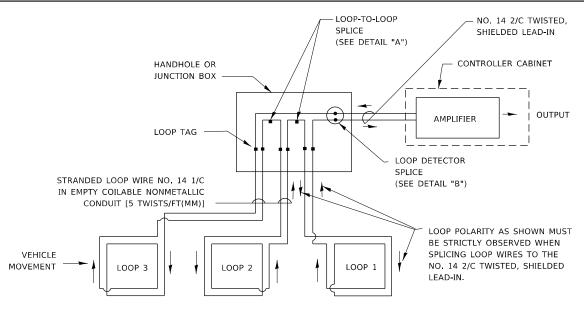
LOOP DETECTOR NOTES

- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

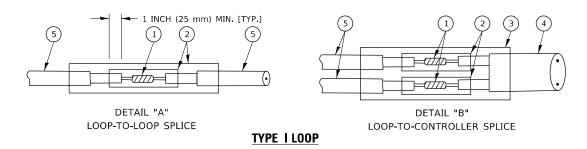


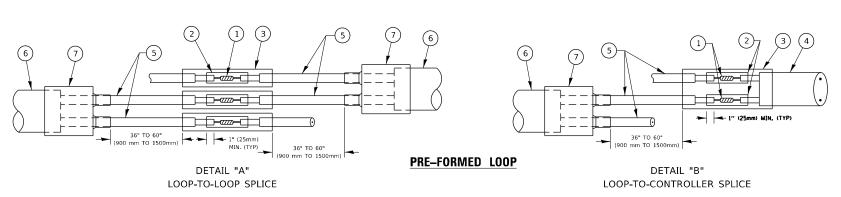
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES,
 SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
- THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.





LOOP DETECTOR SPLICE

- 1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.

- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PRE-FORMED LOOP
- (6) XL POLYOLEFIN 2 CONDUCTOR
- (7) BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

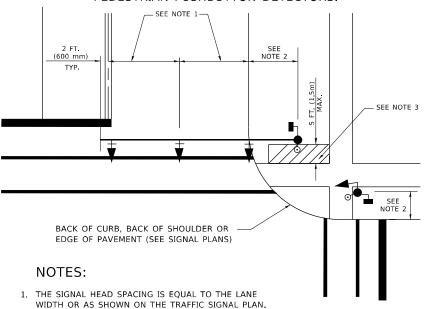
USER NAME = Iovan, Plascencia	DESIGNED -	REVISED -
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PLOT DATE = 5/17/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

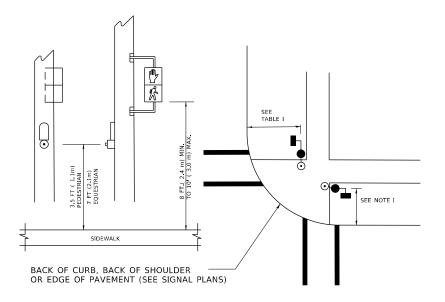
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND

PEDESTRIAN PUSHBUTTON DETECTORS.



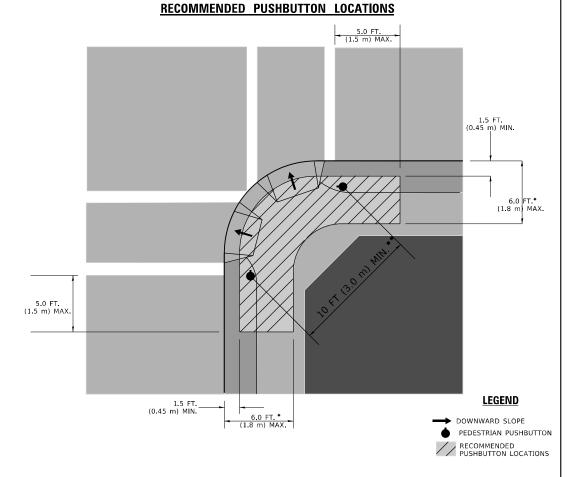
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR



- * WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- ** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK,
- THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT,
- THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2, MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

SCALE: NONE

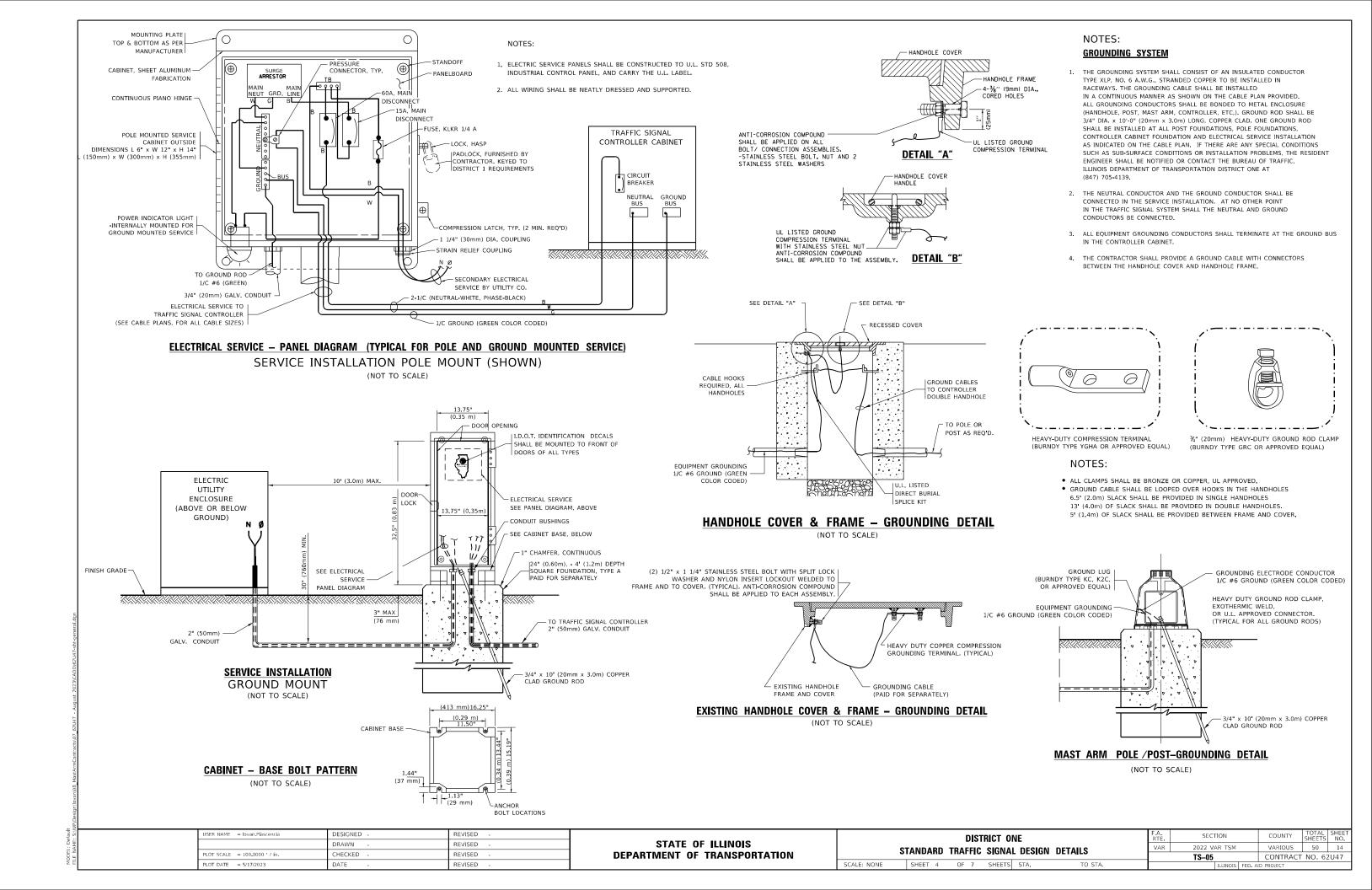
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PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 5/17/2023	DATE -	REVISED -

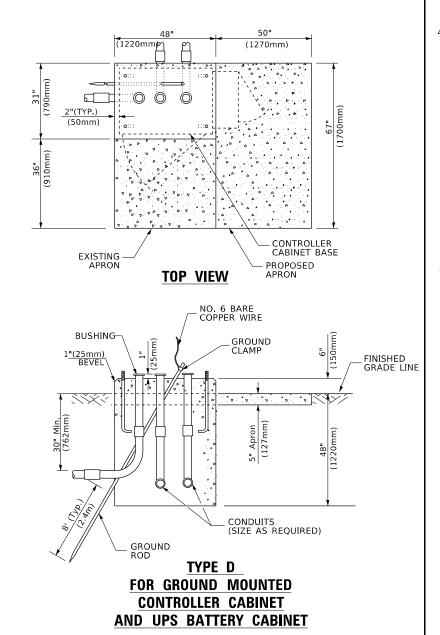
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

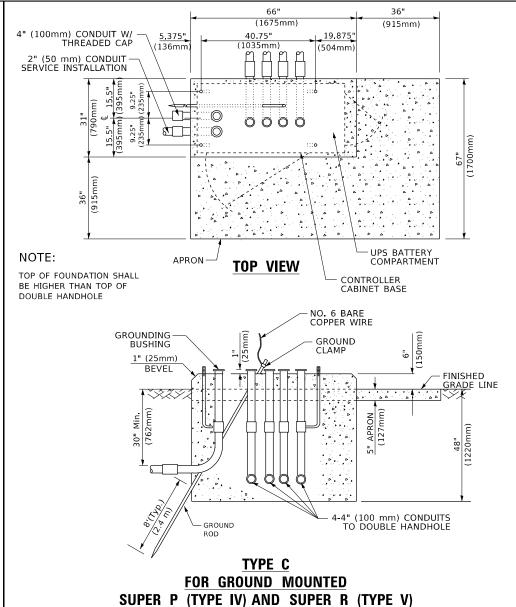
DISTRICT ONE	F.A. RTE	SECTION	COUNTY TOTAL SHEET SHEETS NO.		
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	VAR	2022 VAR TSM	VARIOUS	50	13
STANDARD HIATTO SIGNAL DESIGN DETAILS	TS-05 CONTRACT NO. 62U4				
SHEET 3 OF 7 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				

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CONTROLLER CABINETS

[E] (1245mm) 44" 16"
7 (44" 16" (406mm) (406mm)
21/2" (64mm) (27/2" (1/2) (1/2
[(64mm) 1 1 1 1 1 1 1 1 1
2" x 6"
2" x 6" (51mm x 152mm) WOOD FRAMING (TYP.)
is Aming (11.)
===
TRAFFIC SIGNAL
CONTROLLER CABINET
ups □
CABINET
¾" (19mm) TREATED PHYWOOD DECK
PHYWOOD DECK
2" x 6" (51mm x 152mm) TREATED WOOD
TREATED WOOD
Ξ ΄ ξ
12. MIN 305 mm)
No.
1219mm) MMIN(MIN)
4 1 1 1 1
CII v. CII (152 v. 152)
NOTES: TREATED WOOD POSTS
 BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
 BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.

49" (SEE NOTE 3) (1245mm)

SEE NOTE 5

- 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

		METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD)		
(L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

CABLE SLACK

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

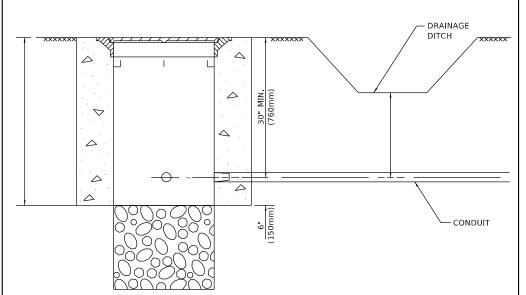
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42'' (1060mm)	36'' (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0'' (7.6 m)	42'' (1060mm)	36'' (900mm)	16	8(25)

NOTES:

- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along
 the length of the shaft, with an average Unconfined Compressive Strength (Ou) > 1.0 tsf (100 kpa).
 This strength shall be verified by boring data prior to construction or with testing by the Engineer
 during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised
 design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For most arm assemblies with dual arms refer to state standard 878001.

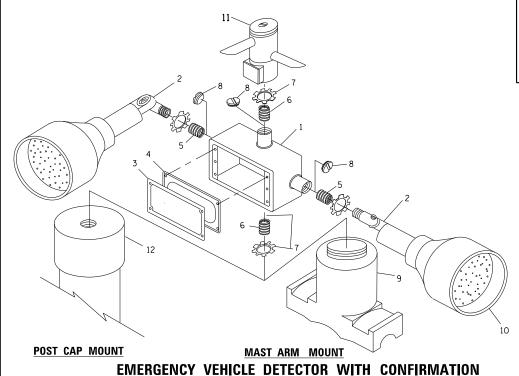
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

USER NAME = Iovan.Plascencia	DESIGNED -	REVISED -	·	DISTRICT ONE			SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS				2022 VAR TSM	VARIOUS	50 15
PLOT SCALE = 100,0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	3	TANDARD TRAFFIC SIGNAL DESIGN DETAILS		TS-05	CONTRACT N	NO. 62U47
PLOT DATE = 5/17/2023	DATE -	REVISED -		SCALE: NONE	SHEET 5 OF 7 SHEETS STA. TO STA.		ILLINOIS FED. AI	D PROJECT	



- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- 2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

HANDHOLE WITH MINIMUM CONDUIT DEPTH



BEACON MOUNTING DETAIL

DRAWN

HECKED

REVISED

REVISED

REVISED

ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT 3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE SCREWS SHALL BE REQUIRED ON EACH CAP.

(1675mm) (915mm) 19.875" (1035mm) (504mm) <u>___</u> 0 CONTROLLER CABINET BASE PROPOSED-**TOP VIEW** APRON -NO. 3 DOWEL 18" (450mm NO. 6 BARE COPPER WIRE LONG (8 REQ.) BUSHING-_GROUND CLAMP EXISTING-ANCHOR BOLTS FINISHED GRADE LINE 1"(25mm) BEVEL (300 mm)(300 mm)12" (300mm) (225mm) -EXISTING CONDUITS EXISTING GROUND ROD MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION (NOT TO SCALE)

0.25" MATERIAL - ASTM A36 STEEL - ASTM A-123 HOT DIPPED GALVANIZED WEIGHT 7" (178m 19"(483mm) 53 lbs (24kg) VARIES 9.5"(241mm VARIES 10.75"(273m 21.5"(546r 178mm) - 12" (300r 68 lbs (31 kg) VARIES 126 lbs (57 kg) 7" (178mm) - 12" (300m 18.5"(470m **SHROUD** 1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. BE TIGHT TO THE MAST ARM POLE. ER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS. . THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE. SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING. DIMENSION 4" (100mm) LARGER THAN CONTROLLER CABINET BASE DIMENSION, BOTH DIRECTIONS (25mm) 1" (25mm) BEVEL BREAK DOWN EXISTING FOUNDATION 12" (300mm -12" (300m NEW ANCHOR BOLTS 9" (225mm) 9" (225mm) No. 3 DOWEL 1'-6" (450mm) LONG ON 12" (300mm) CENTER (8 REO'D) EXISTING CONDUIT —— 2" (50mm), 4" (100mm) & 4" (100mm) NEW TYPE "D" (MODIFIED) FOUNDATION EXISTING TYPE D (CONTROLLER) FOUNDATION

PORT

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR

IDENTIFICATION

1 OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2 LAMP HOLDER AND COVER
3 OUTLET BOX COVER

4 RUBBER COVER GASKET 5 REDUCING BUSHING 6 ¾"(19 mm) CLOSE NIPPLE

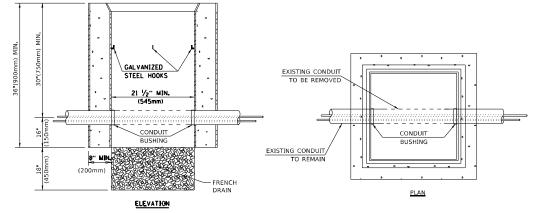
7 ¾"(19 mm) LOCKNUT

11 DETECTOR UNIT

8 ¾"(19 mm) HOLE PLUG
9 SADDLE BRACKET - GALV.
10 6 WATT PAR 38 LED FLOOD LAMP

12 POST CAP [18 FT. (5.4 m) POST MIN.]

- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
- DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING



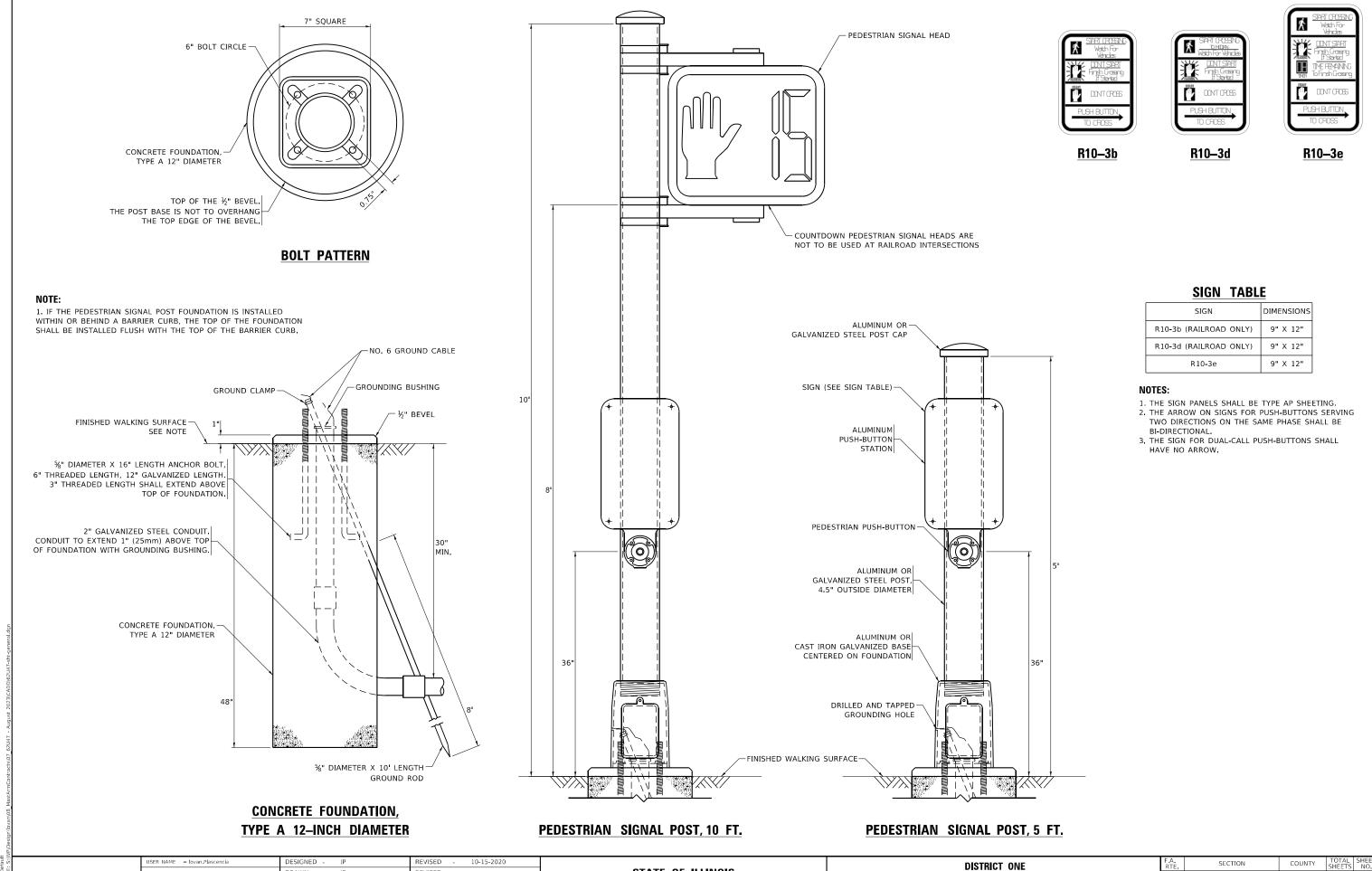
MODIFY EXISTING TYPE "D" FOUNDATION

- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

		DIST	RICT O	NE		F.A. RTE	SECT	LION		COUNTY	TOTAL SHEETS	SHEET NO.
ΛТ2	NDARD	TRAFFIC	SIGNA	DESIGN	DETAILS	VAR	2022 V	AR TSM		VARIOUS	50	16
317	INDAND	IIIAIIJO	SIGNA	L DESIGN	DLIAILS		TS-05			CONTRACT	NO. 62	2U47
S	HEET 6	OF 7	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

2022 VAR TSM

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SHEET 7 OF 7 SHEETS STA.

VARIOUS

50 17

CONTRACT NO. 62U47

MODEL: Default

DRAWN

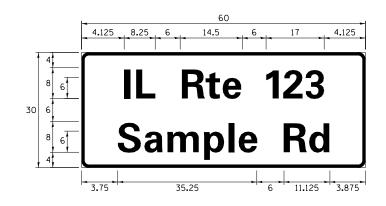
PLOT DATE = 5/17/2023

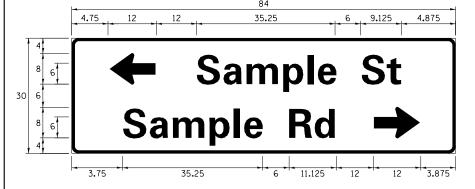
REVISED

REVISED

SIGN PANEL - TYPE 1 OR TYPE 2

3.75 11.125 3.875 Sample Rd





DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D OR C	-	1 OR 2	ZZ	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH	(INCH)
NAME	ADDREVATION	SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	C†	8. 250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	ΙL	7.000	8. 250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	PI	7. 125	7. 750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	S†	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7. 750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- 2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-O". ALL BORDERS SHALL BE 34" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-O" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-O" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-O" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- 5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT, GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND

LOCAL SUPPLIERS: PARTS LISTING:

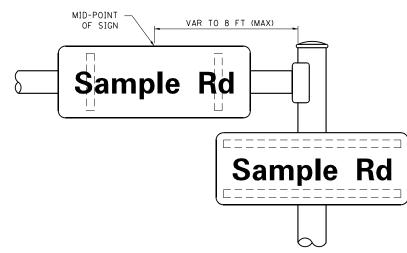
- J.O. HERBERT COMPANY, INC SIGN CHANNEL PART #HPN053 (MED. CHANNEL) MIDLOTHIAN, VA SIGN SCREWS $1/4" \times 14 \times 1"$ H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER

PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING - WESTERN REMAC, INC. BRACKETS WOODRIDGE, IL

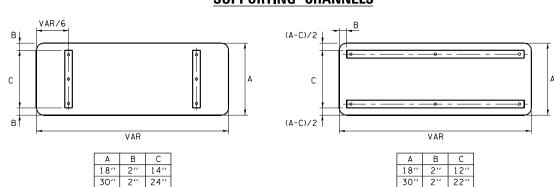
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

ARM OR POLE MOUNTED



SUPPORTING CHANNELS



SCALE: NTS

STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

	FHWA SEF	RIES "C"			FHWA SEF	RIES "D"	
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
Α	0.240	5.122	0.240	Α	0.240	6.804	0.240
В	0.880	4.482	0.480	В	0.960	5.446	0.400
С	0.720	4.482	0.720	С	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
Ε	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
Н	0.880	4.482	0.880	Н	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6. 244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
0 P	0.720	4.722	0.720	0 P	0.800	5.684	0.800
0	0.880 0.720	4.482 4.722	0.720 0.720	Q Q	0.960 0.800	5. 446 5. 684	0.240
R	0.720	4.722	0. 720	R	0.800	5. 446	0.800
S	0.880	4.482	0.480	S	0.400	5.446	0.400
T	0.480	4. 482	0.460	T	0.400	4.962	0.400
Ü	0.880	4.482	0.880	Ü	0.960	5.446	0.960
٧	0.240	4.962	0.240	v	0. 240	6.084	0.240
w	0.240	6.084	0.240	w	0.240	7.124	0.240
X	0.240	4. 722	0.240	X	0.400	5.446	0.400
Y	0.240	5. 122	0.240	Y	0. 240	6.884	0.240
Z	0.480	4. 482	0.480	Z	0.400	5.446	0.400
	0.320	3. 842	0.640	a	0.400	4.562	0.720
Ь	0.720	4.082	0.480	Ь	0.800	4. 802	0.480
С	0.480	4.002	0.240	С	0.480	4. 722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
е	0.480	4.082	0.320	е	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
1	0.720	1.120	0.720	I	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7. 926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
0	0.480	4.082	0.480	0	0.480	4.882	0.480
Р	0.720	4.082	0.480	Р	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
S +	0.320	3. 362	0.240	S	0.320	3. 762	0.240
+	0.080	2.882	0.080	+	0.080	3. 202	0.080
u	0.640 0.160	4. 082 4. 722	0.720 0.160	U	0.720 0.160	4. 722 5. 684	0.800
V	0.160	7.524	0.160	V	0.160	9.046	0.160
w	0.000	5. 202	0.000	W	0.000	6. 244	0.000
×	0.160	4. 962	0.160	×	0.160	6.004	0.160
y z	0.180	3. 362	0. 240	y z	0. 240	4.002	0. 240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0. 480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4. 962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

USER NAME = Iovan.Plascencia	DESIGNED	-	IP	REVISED	-
	DRAWN	-	IP	REVISED	-
PLOT SCALE = 100.0000 / in.	CHECKED	-	LP	REVISED	-
PLOT DATE = 5/17/2023	DATE	-	10/15/2018	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE	F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
MAST ARM MOUNTED STREET NAME SIGNS	VAR	2022 VAR TSM	VARIOUS	50	18
MAST ANN MOONTED STILLT NAME STONE		TS-02	CONTRACT	NO. 62	2U47
CHEET NO 7 OF 7 CHEETE CTA TO CTA					

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED SERVICE CABINET:

SERVICE METER

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

CONTROLLER (ASC/2S-1000) AND CABINET (TYPE 3) (COMPLETE) ALUMINUM MAST ARM ASSEMBLY AND POLE

EACH

TRAFFIC SIGNAL POST

SIGNAL HEAD, 1 FACE, 3 SECTION SIGNAL HEAD, 1 FACE, 5 SECTION TRAFFIC SIGNAL BACKPLATE

EACH EACH

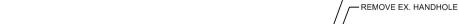
UNINTERRUPTIBLE POWER SUPPLY AND CABINET (COMPLETE) EACH

SERVICE INSTALLATION POLE MOUNTED

STREET NAME SIGN PANEL



REMOVE EX. HANDHOLE



REMOVE EX. FDN. -

REMOVE EX. M.A. & FDN. —

IL RTE 25 (DUNDEE AVE)

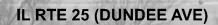
REMOVE EX. POST -EX. FDN. TO REMAIN

NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.

2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

3. THE EXISTING SERVICE METER SHALL BE RELOCATED TO THE IN THE PAY ITEM SERVICE INSTALLATION, GROUND MOUNTED,



REMOVE EX. HANDHOLE

REMOVE EX. M.A. & FDN. REMOVE EX. HANDHOLE

REMOVE EX. POST & FDN.

- REMOVE EX. UPS AND FDN.

- REMOVE EX. POST & FDN.

- REMOVE EX. CONTROLLER CABINET AND FDN.

RELOCATE EX. SERVICE METER TO PR. SERVICE CABINET

PROPOSED SERVICE CABINET. THIS WORK SHALL BE INCLUDED

DESIGNED -REVISED DRAWN -RG REVISED . CHECKED -REVISED

STATE OF ILLINOIS

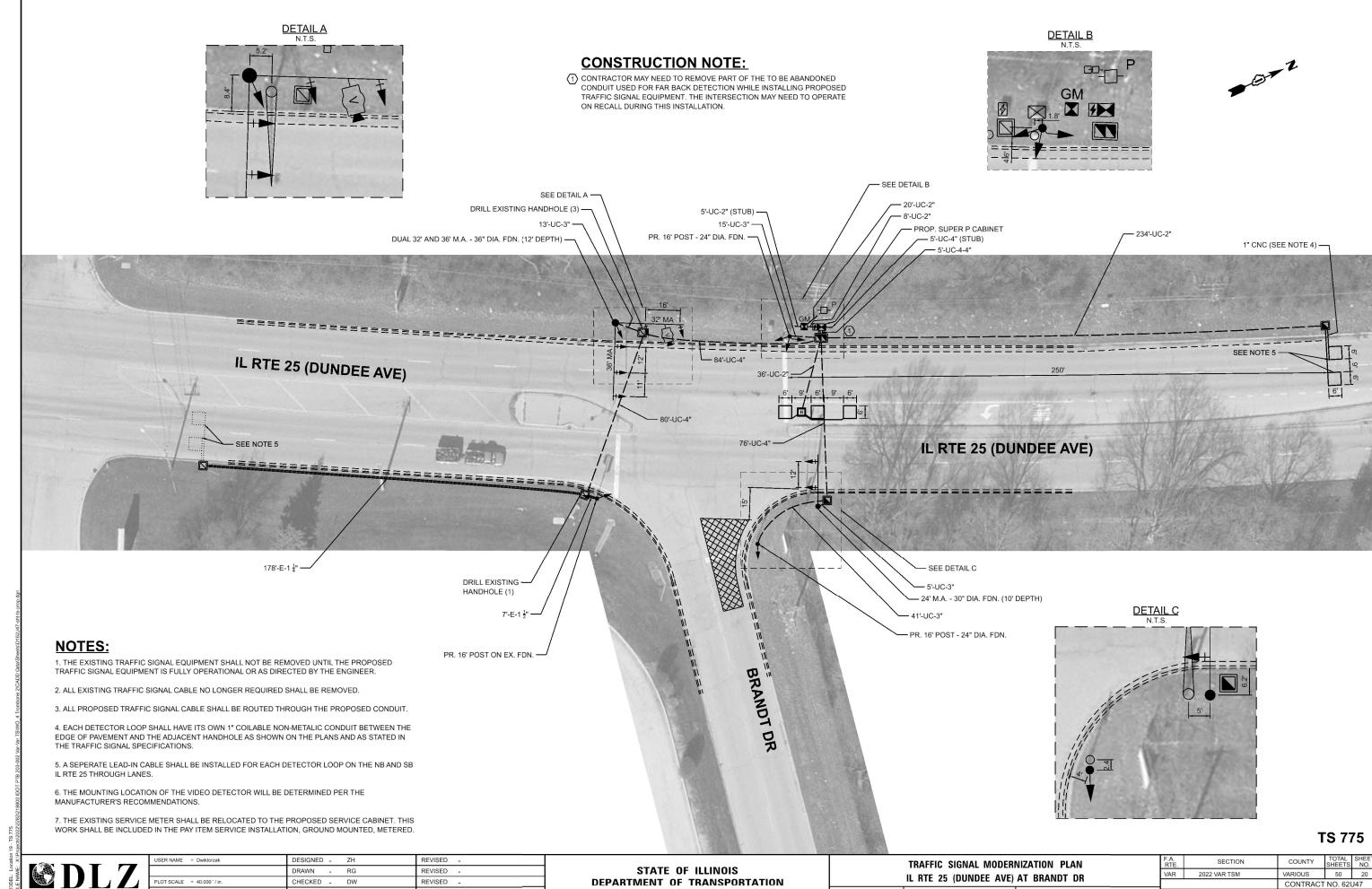
BRANDT DR

REMOVAL PLAN IL RTE 25 (DUNDEE AVE) AT BRANDT DR SHEET 1 OF 30 SHEETS STA.

SECTION COUNTY VAR 2022 VAR TSM VARIOUS 50 19 CONTRACT NO. 62U47

TS 775

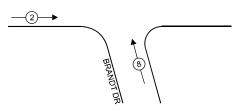
DEPARTMENT OF TRANSPORTATION



EXISTING AND PROPOSED CONTROLLER SEQUENCE







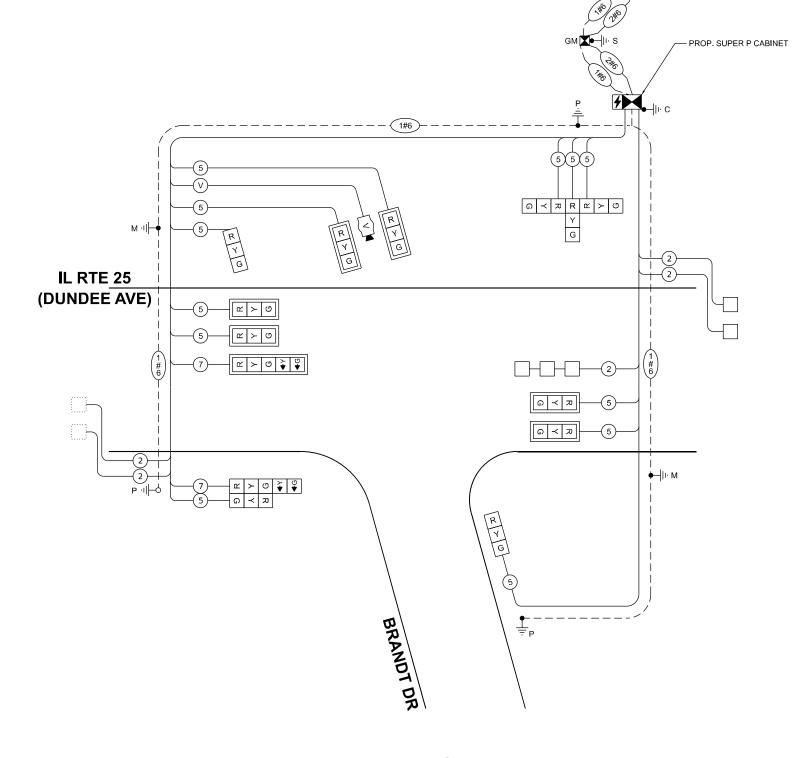
LEGEND

◆ PROTECTED PHASE

← - * - PROTECTED/PERMITTED PHASE

◆- *- PEDESTRIAN PHASE

*OL OVERLAP



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	OLIANTITY	UNIT	TOTAL
EQUIPMENT TYPE	QUANTITY	WATTAGE	WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	12	11	132
4-SECTION	-	14	-
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
	TOTAL UF	S SIZING	353
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIDE		240	

TOTAL SERVICE WIRE SIZING

ENERGY COSTS TO:
CITY OF ELGIN

150 DEXTER COURT
ELGIN, IL 60120

ENERGY SUPPLY:

CONTACT: JOE STACHO

PHONE: (630)-424-5704

COMPANY: COMED

ACCOUNT NUMBER: 12591-16009

CABLE PLAN
(NOT TO SCALE)

TS 775

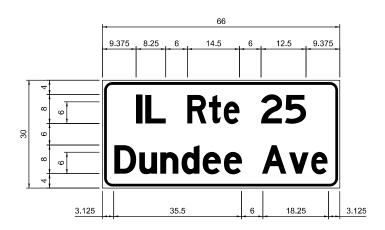


USER NAME = Dwiktorzak	DESIGNED	-	ZH	REVISED -
	DRAWN	-	RG	REVISED -
PLOT SCALE = 40.000 '/in.	CHECKED	-	DW	REVISED -
PLOT DATE = 5/17/2023	DATE	-	5/12/2023	REVISED -

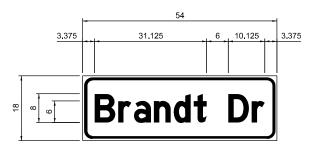
A. SECTION		COUNTY	TOTAL SHEETS	SHE		
٩R	IR 2022 VAR TSM		VARIOUS	50	2	
			CONTRACT	NO. 62	J47	
		ILLINOIS	FED. AII	PROJECT		

SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	13.75	2	ZZ	1



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	6.75	1	ZZ	2

NOTE:

FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

SCHEDULE OF QUANTITIES

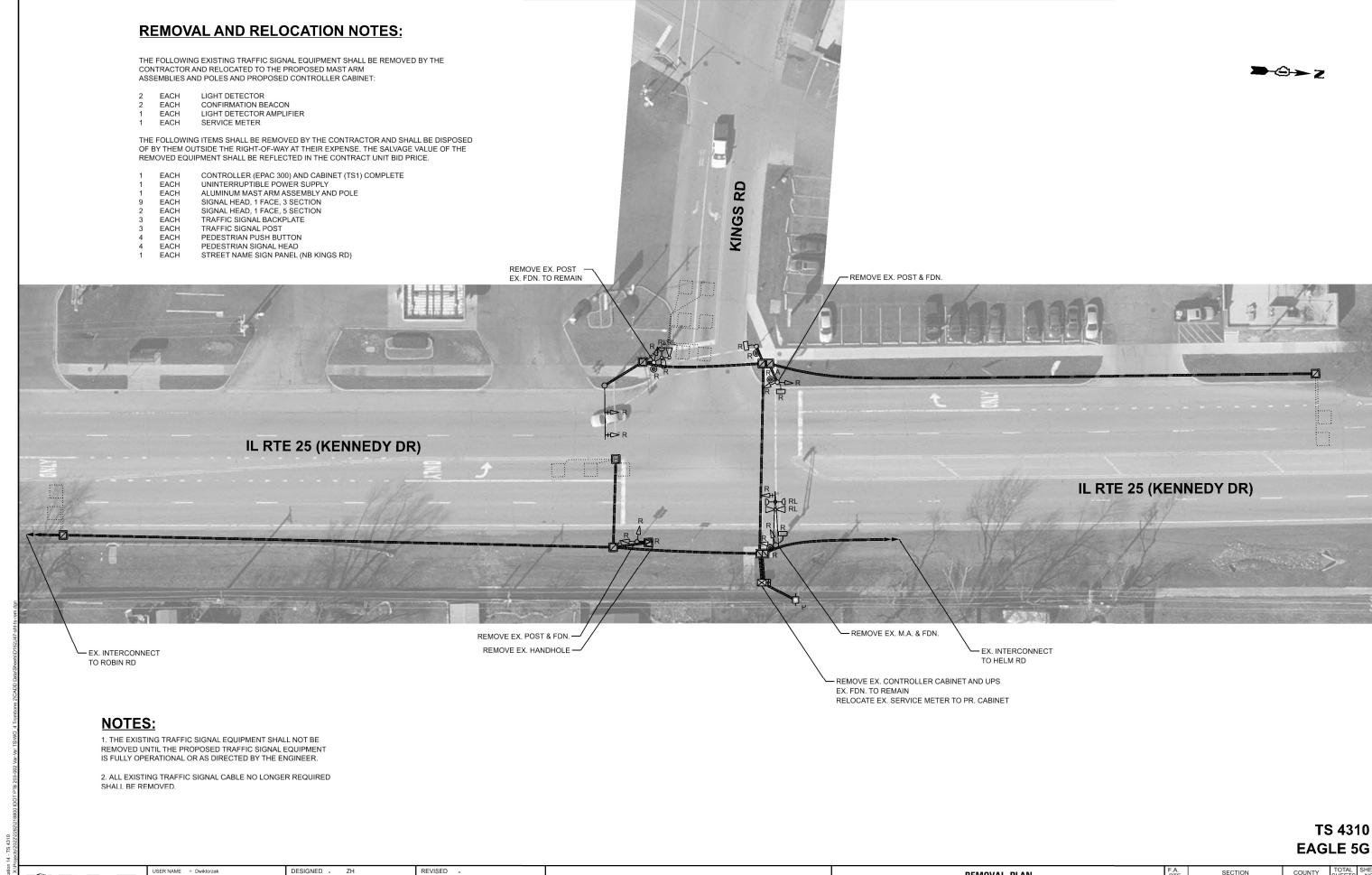
ITEM DESCRIPTION		TOTAL
TIEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQFT	13.5
SIGN PANEL - TYPE 2	SQFT	13.75
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	303
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	74
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	265
HANDHOLE	EACH	2
HEAVY-DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1685
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	410
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1360
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	70
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	450
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 32 FT. AND 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	12
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	7
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	171
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	220
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY INFORMATION SIGNING	SQFT	51.4

DIT

USER NAME = Dwiktorzak	DESIGNED	-	ZH	REVISED -
	DRAWN	-	RG	REVISED -
PLOT SCALE = 40,000'/in.	CHECKED	-	DW	REVISED -
PLOT DATE = 5/17/2023	DATE	-	5/12/2023	REVISED -

IAST ARM	MOUNTED	STREET NAM	IF SIGNS
		OF QUANTITI	
		AVE) AT BRAN	
	•		
I SHEET 4	OF 30 SH	IEETSI STA.	TO STA.

TS 775

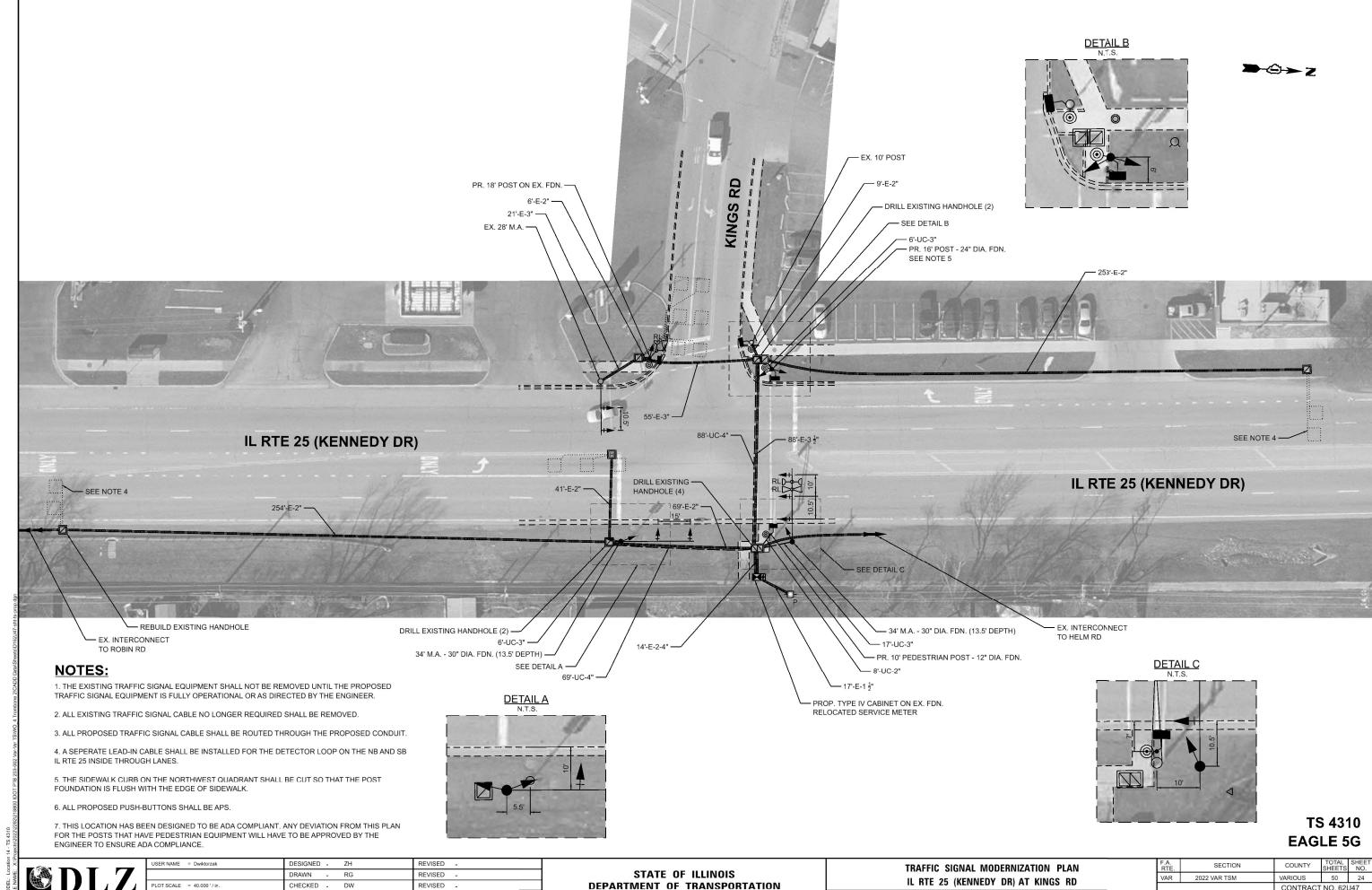


@DL7

USER NAME = Dwiktorzak	DESIGNED -	ZH	REVISED -
	DRAWN -	RG	REVISED -
PLOT SCALE = 40.000 ' / in.	CHECKED -	DW	REVISED -
PLOT DATE = 5/17/2023	DATE -	5/12/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

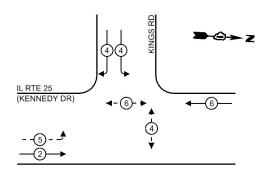
REMOVAL PLAN	F.A. RTE.	S
L RTE 25 (KENNEDY DR) AT KINGS RD	VAR	2022 VA
L HIL 23 (KLINILDI DI) AI KINGS ID		



CONTRACT NO. 62U47

SHEET 6 OF 30 SHEETS STA.

EXISTING AND PROPOSED CONTROLLER SEQUENCE

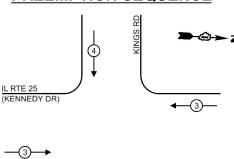


LEGEND

◆ PROTECTED PHASE ← - (*)- - PROTECTED/PERMITTED PHASE **◄- *** PEDESTRIAN PHASE

OL OVERLAP

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



	4	KINGS RE	> -⊕-> z
IL RTE 25 (KENNEDY DR)	'		← 3—

TRAFFIC SIGNAL ELECTRICAL **SERVICE REQUIREMENTS**

Data/Sheets/D162U47-sht-ts-cable	EQUIPMENT TYPE	QUANTITY	UNIT	TOTAL
ht-ts-	EQUIPMENT TYPE	QUANTITY	WATTAGE	WATTAGE
8-74I	SIGNAL HEAD 1 OR 3-SECTION	11	11	121
162L	4-SECTION	-	14	-
ets/D	5-SECTION	2	13	26
Shee	PROGRAMMABLE 3-SECTION	-	22	-
Data)	4-SECTION	-	32	
ZICADD	5-SECTION	-	28	-
	PEDESTRIAN SIGNAL	4	15	60
Trombone	CONTROLLER	1	150	150
Lion	MASTER CONTROLLER	-	100	-
4	UPS	1	25	25
Var-Var TS/WO	DETECTION RADAR OR VIDEO	-	20	-
Aar T	BLANK-OUT SIGN	-	25	-
	NETWORK SWITCH II OR III	-	35	-
203-002	CELLULAR MODEM		15	-
PTB 203		TOTAL UF	S SIZING	382
	UPS CHARGING	1	225	225
OID	BATTERY HEATER MAT	1	180	180
IS 4310 s\2022\2282\218800 IDOT	CABINET HEATER	1	200	200
82/21	FLASHER	-	15	-
2/22	LED STREET NAME SIGN	-	120	-
US 4310 s\2022\2	LUMINAIRE	-	240	-

TOTAL SERVICE WIRE SIZING

VILLAGE OF CARPENTERSVILLE 1200 L.W. BESINGER DR CARPENTERSVILLE, IL 60110 ENERGY SUPPLY: CONTACT: JOE STACHO PHONE: (630)-424-5704
COMPANY: COMED ACCOUNT NUMBER: 08090-69056 METER NUMBER:

KINGS RD **>>. ₹** IL RTE 25 (KENNEDY DR) EX. TRACER CABLE -EX. TRACER G ≺ Z Z ≻ U CABLE EX. INTERCONNECT -TO ROBIN RD EX. INTERCONNECT TO HELM RD 1#6 PR. TYPE IV CABINET WITH RELOCATED SERVICE METER

CABLE PLAN (NOT TO SCALE)

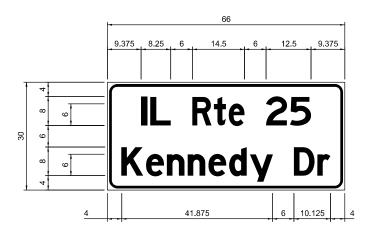
> TS 4310 **EAGLE 5G**

DESIGNED - ZH REVISED -DRAWN - RG REVISED -CHECKED -REVISED - 5/12/2023 REVISED

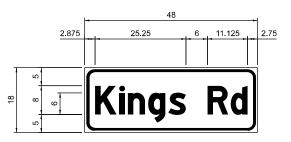
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SECTION EMERGENCY VEHICLE PREEMPTION SEQUENCE VAR 2022 VAR TSM VARIOUS 50 25 IL RTE 25 (KENNEDY DR) AT KINGS RD
SHEET 7 OF 30 SHEETS STA. CONTRACT NO. 62U47

SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	13.75	2	ZZ	1



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	6	1	ZZ	1

NOTE:

FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

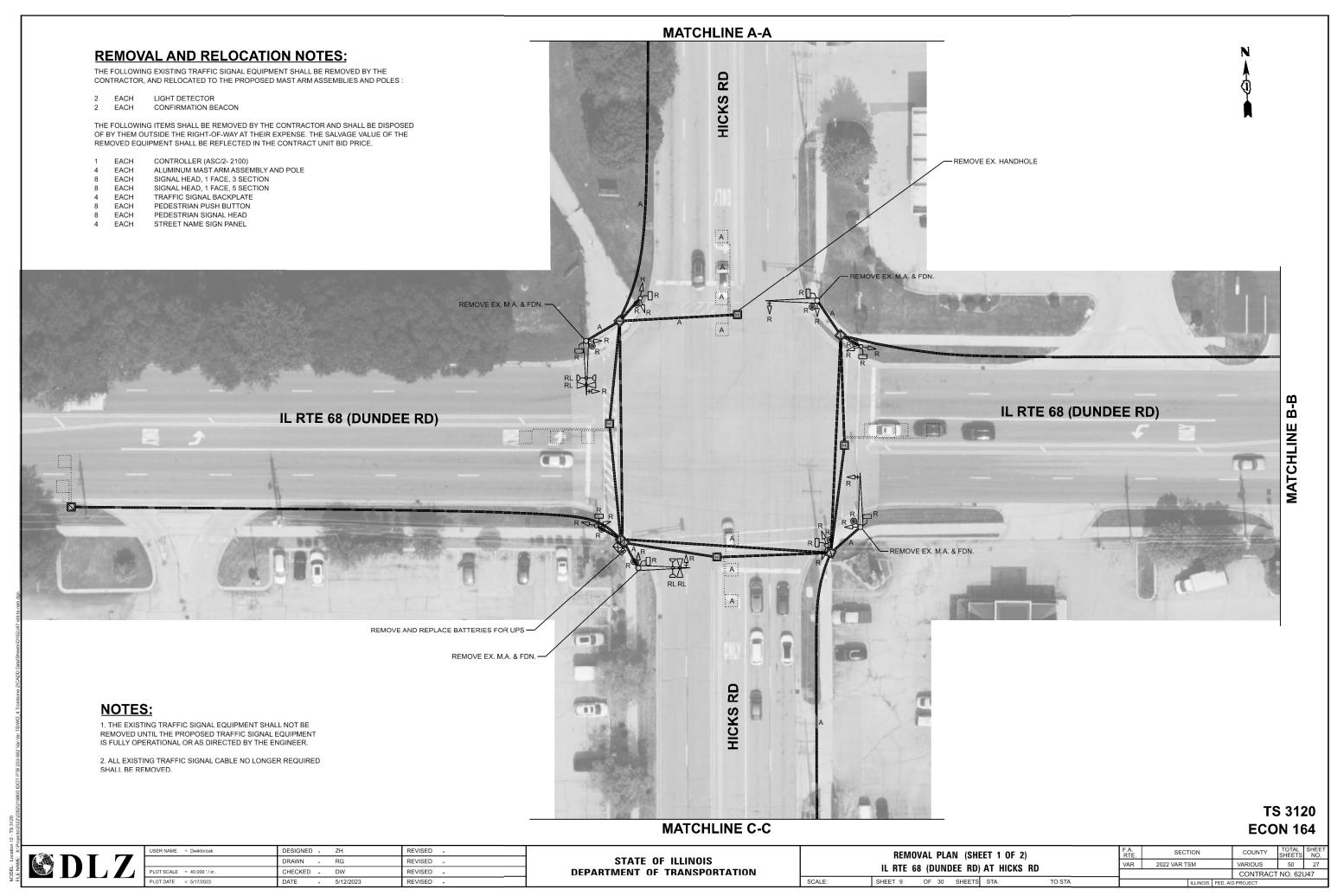
SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTA QUANT
SIGN PANEL - TYPE 1	SQFT	6
SIGN PANEL - TYPE 2	SQFT	13.75
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	8
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	29
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	157
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	200
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	315
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	990
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	265
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	760
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	250
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	7
INDUCTIVE LOOP DETECTOR	EACH	7
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1095
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	105
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	4
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

TS 4310 EAGLE 5G

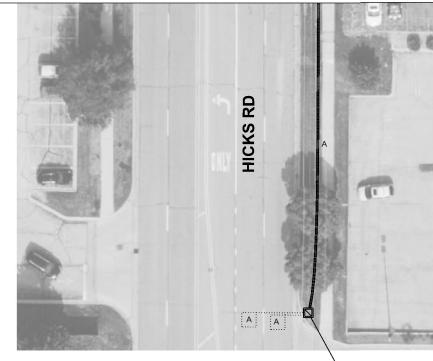


USER NAME = zhoerbert	DESIGNED	-	ZH	REVISED -
	DRAWN	-	RG	REVISED -
PLOT SCALE = 40.000 ' / in.	CHECKED	-	DW	REVISED -
PLOT DATE = 5/26/2023	DATE	-	5/12/2023	REVISED -





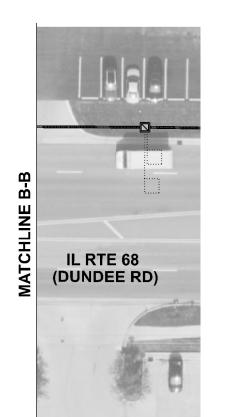












REMOVE EX. HANDHOLE -



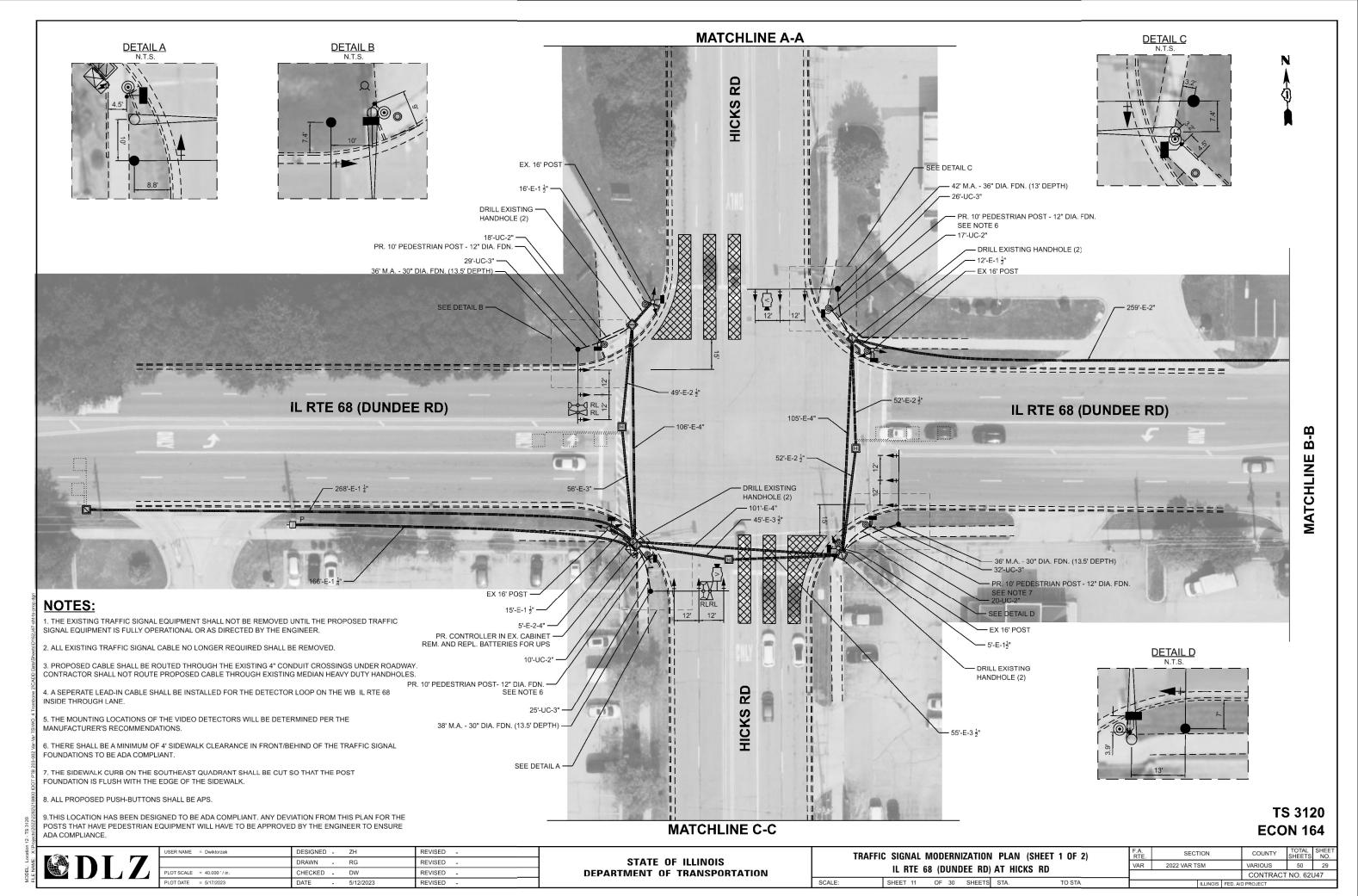
USER
PLOT
PLOT

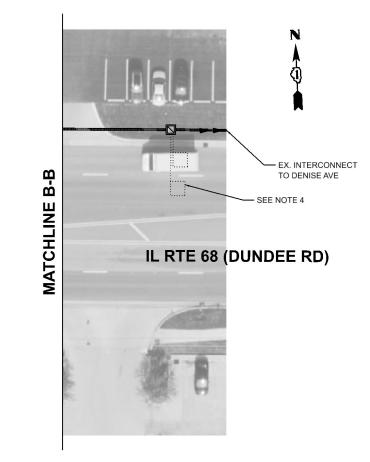
SER NAME = Dwiktorzak	DESIGNED	-	ZH	REVISED	-
	DRAWN	-	RG	REVISED	-
LOT SCALE = 40.000 ' / in.	CHECKED	-	DW	REVISED	-
LOT DATE = 5/17/2023	DATE	-	5/12/2023	REVISED	-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

							ECO	N 16	64
	REMOVAL PLAN (SHEET 2 OF 2)								
			VAR	2022 VAR TS	SM	VARIOUS	50	28	
	IL HIL OO (DOMDEE ND) AT HICKS				_		CONTRACT	NO. 621	J47
ALE: SHEET 10 OF 30 SHEETS STA. TO STA					ILLINOIS FEE	D. AID PROJECT			

TS 3120





TS 3120 ECON 164



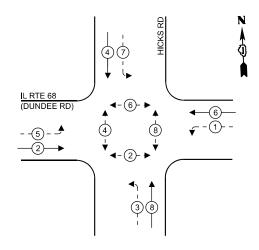
USER NAME = Dwiktorzak	DESIGNED .	-	ZH	REVISED -
	DRAWN	-	RG	REVISED -
PLOT SCALE = 40.000 ' / in.	CHECKED .	-	DW	REVISED -
PLOT DATE = 5/17/2023	DATE	-	5/12/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

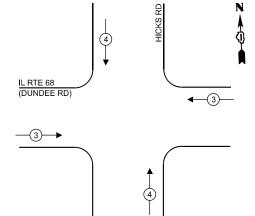
TRAFFIC	SIGNAL	MODERN	IZATION I	PLAN (SHEET	2 OF 2)	F
	IL RTE	68 (DUNE	DEE RD) A	T HICKS RD		_
	SHEET 12	OF 30	SHEETS S	STA.	TO STA	-

SECTION





EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL **SERVICE REQUIREMENTS**

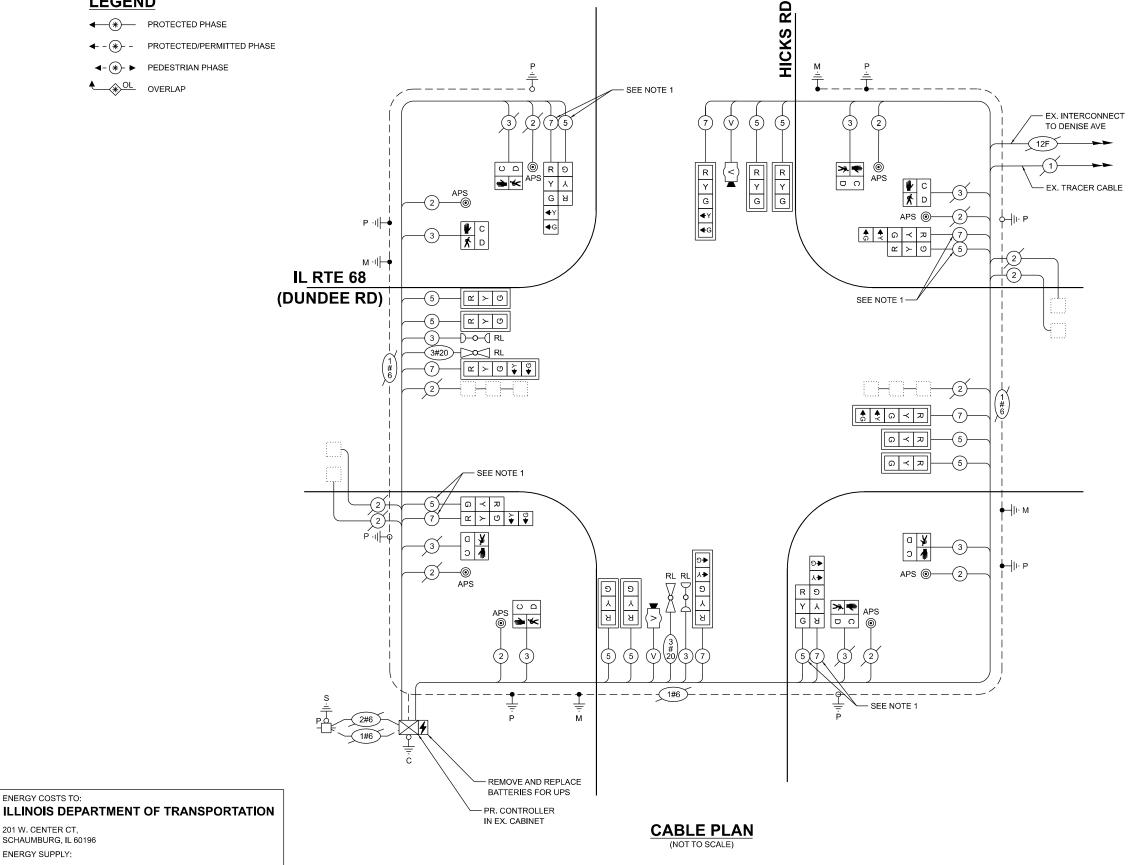
Ę	EQUIPMENT TYPE	QUANTITY	UNII	IOIAL
윺	EQUIPMENT TYPE	QUANTITY	WATTAGE	WATTAG
2\CADD Data\Sheets\D162U47-sht+s-ca	SIGNAL HEAD 1 OR 3-SECTION	12	11	132
162L	4-SECTION	-	14	-
d)ste	5-SECTION	8	13	104
She	PROGRAMMABLE 3-SECTION	-	22	-
Data	4-SECTION	-	32	-
9	5-SECTION	-	28	-
200	PEDESTRIAN SIGNAL	8	15	120
pone	CONTROLLER	1	150	150
4 Trombone	MASTER CONTROLLER	-	100	-
. 4	UPS	1	25	25
Var-Var TS/WO	DETECTION RADAR OR VIDEO	1	20	20
/ar T	BLANK-OUT SIGN	-	25	-
Var	NETWORK SWITCH II OR III	-	35	-
-005	CELLULAR MODEM	-	15	-
B 203		TOTAL UPS SIZING		551
I	UPS CHARGING	1	225	225
ĕ	BATTERY HEATER MAT	1	180	180
8800	CABINET HEATER	1	200	200
82121	FLASHER	-	15	-
2/22	LED STREET NAME SIGN	-	120	-
S 2028	LUMINAIRE	-	240	-
on 12 - 15 3120 NProjects/2022/2282/218800 IDOT PTB 203-002	TOTALS	SERVICE WIF	RE SIZING	1,156

LEGEND

◆ PROTECTED PHASE PROTECTED/PERMITTED PHASE

PEDESTRIAN PHASE

♦ OL OVERLAP



1. REMOVE EXISTING SHARED MULTI-CONDUCTOR CABLE AND REPLACE WITH SEPERATE 5C AND 7C CABLE AS SHOWN.

TS 3120 ECON 164



DESIGNED - ZH REVISED -DRAWN - RG REVISED -CHECKED - DW REVISED -DATE REVISED -- 5/12/2023

CONTACT: DAVE SCHACHT PHONE: (630)-437-2129

COMPANY: COMED

ACCOUNT NUMBER: 16880-73011

201 W. CENTER CT,

SCHAUMBURG, IL 60196 ENERGY SUPPLY:

> STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

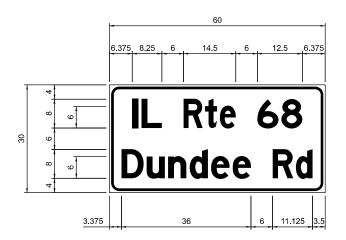
NOTES:

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 68 (DUNDEE RD) AT HICKS RD

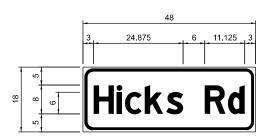
SECTION COUNTY 2022 VAR TSM VAR VARIOUS 50 31 CONTRACT NO. 62U47

SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	12.5	2	ZZ	



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	6	1	ZZ	2

NOTE:

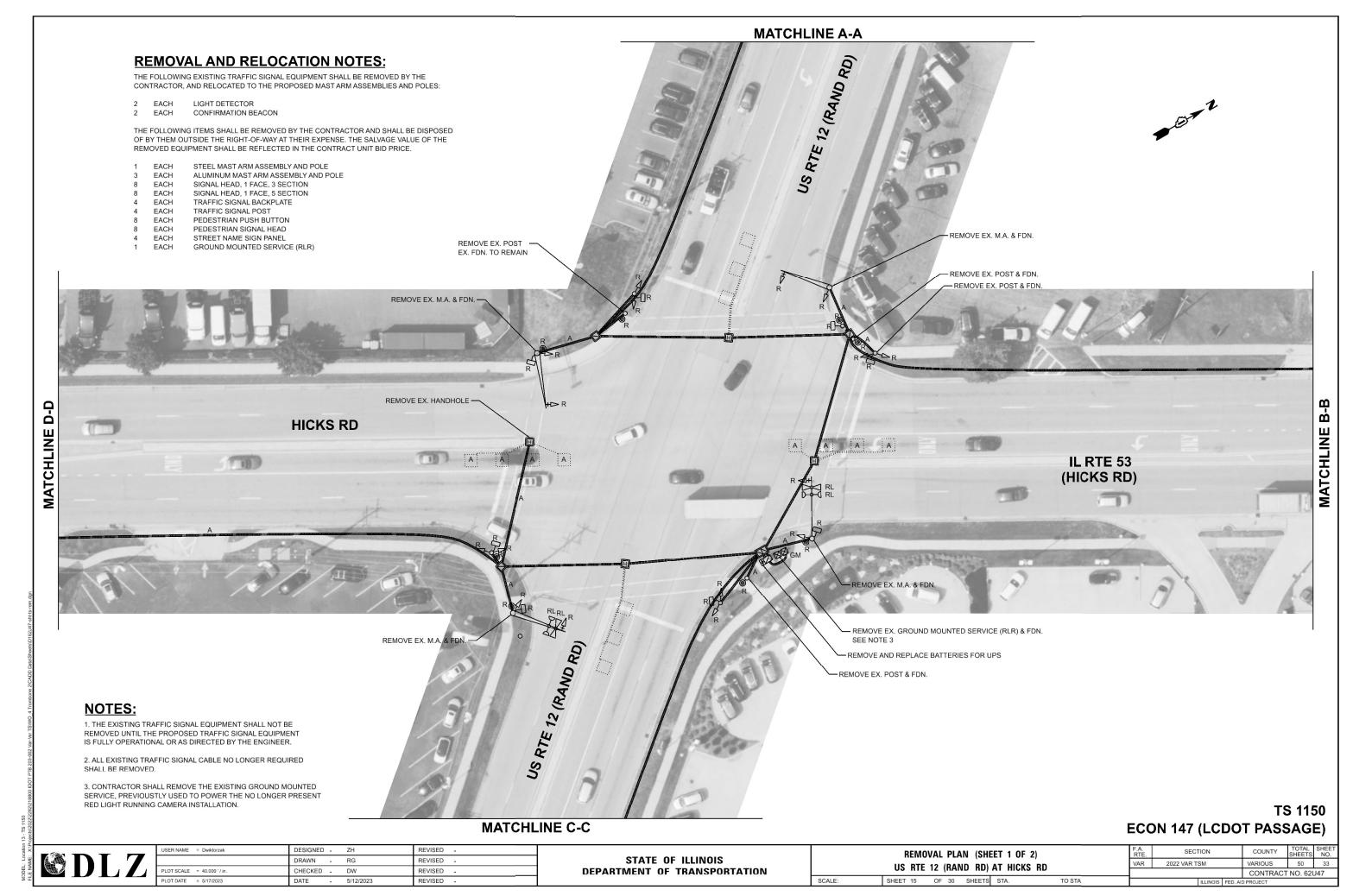
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

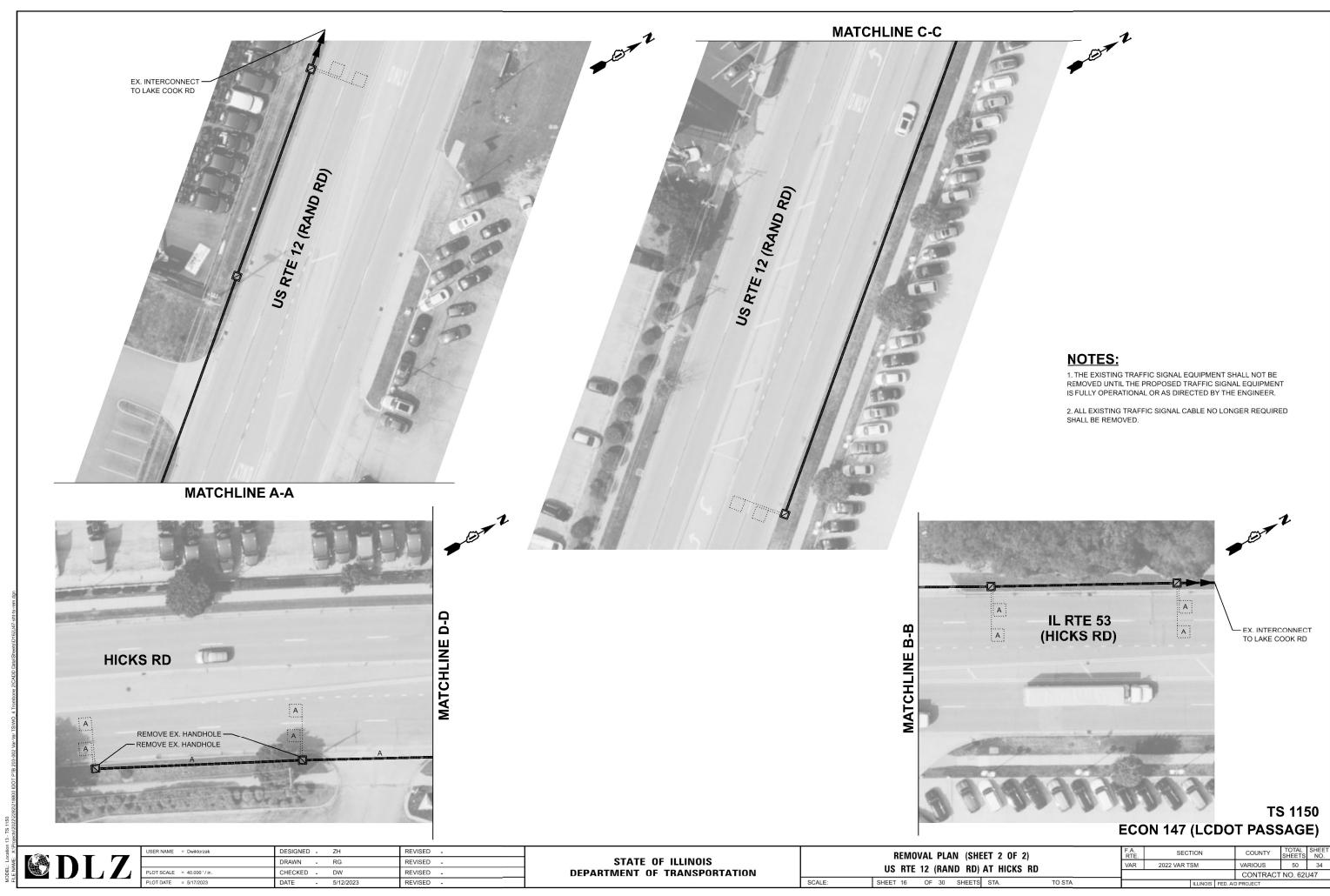
SCHEDULE OF QUANTITIES

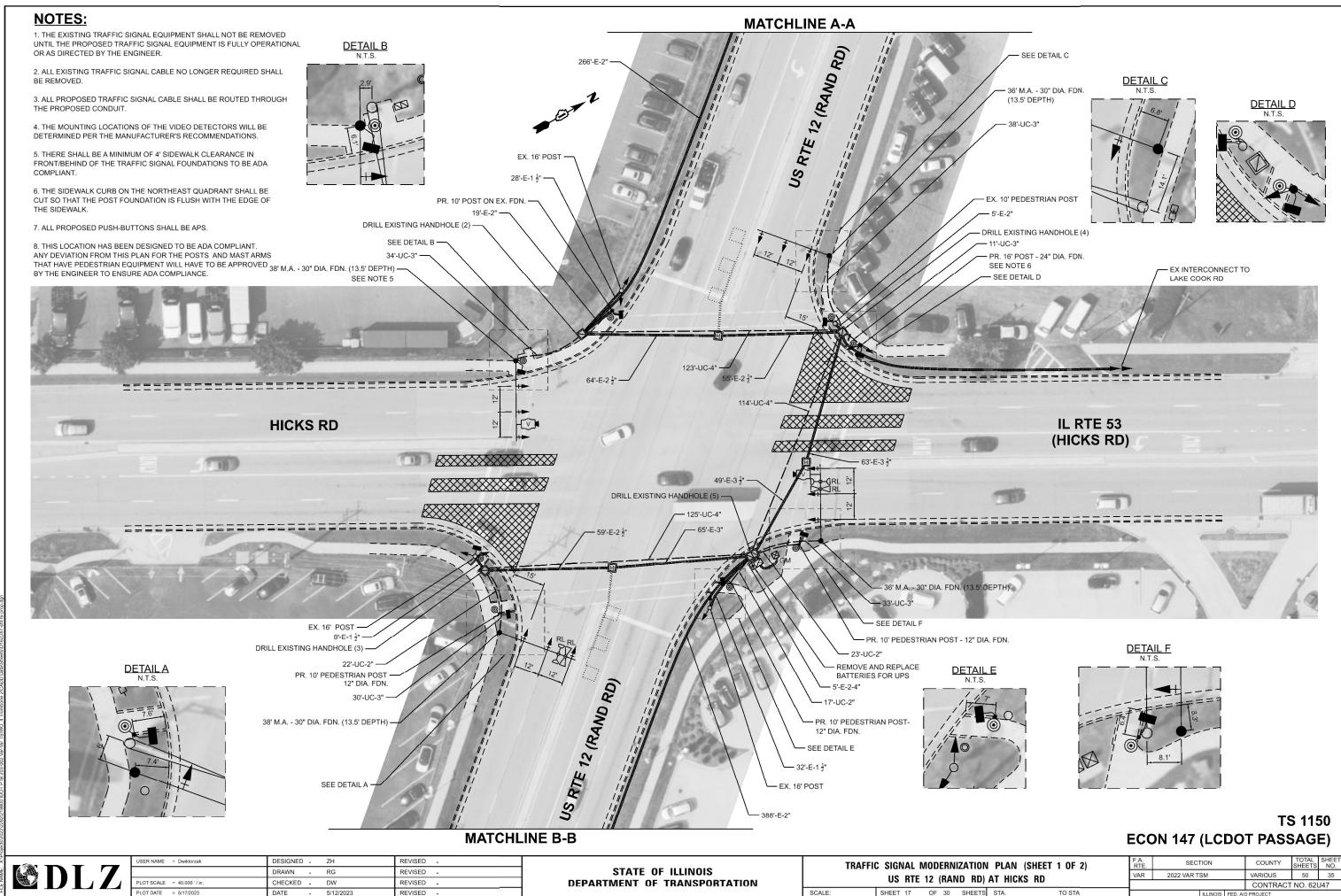
ITEM DESCRIPTION	UNIT	QUANTI
SIGN PANEL - TYPE 1	SQFT	12
SIGN PANEL - TYPE 2	SQ FT	25
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	65
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	112
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	640
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	995
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2275
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1535
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	510
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	250
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	40.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3620
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	3
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	340
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	4
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	16
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

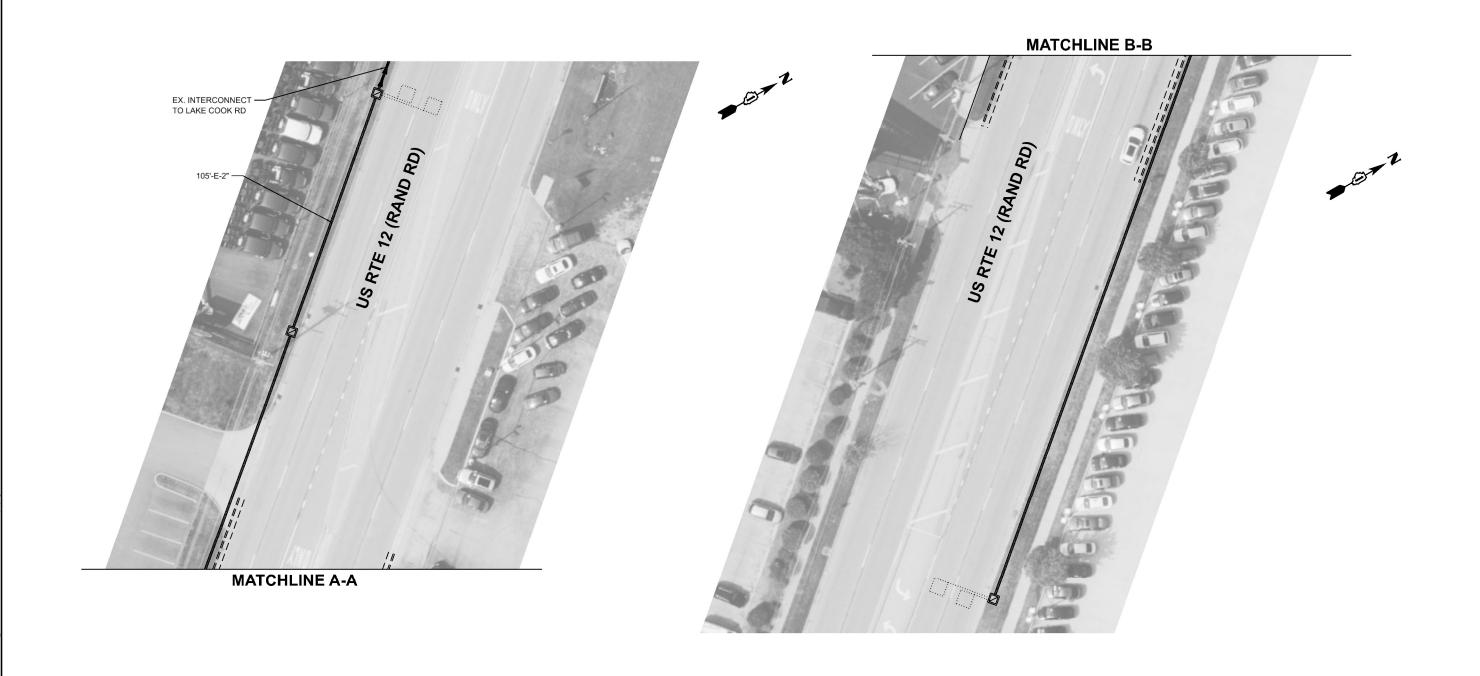
TS 3120 ECON 164

USER NAME = Dwiktorzak	DESIGNED - ZH	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40.000 '/ in.	CHECKED - DW	REVISED -
PLOT DATE = 5/17/2023	DATE - 5/12/2023	REVISED -









TS 1150 ECON 147 (LCDOT PASSAGE)

©DLZ

 USER NAME
 = Dwiktorzak
 DESIGNED
 ZH
 REVISED

 DRAWN
 RG
 REVISED

 PLOT SCALE
 = 40.000 °/ in.
 CHECKED
 DW
 REVISED

 PLOT DATE
 = 5/17/2023
 DATE
 5/12/2023
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 2)

US RTE 12 (RAND RD) AT HICKS RD

| SHEET 18 OF 30 SHEETS | STA. TO STA

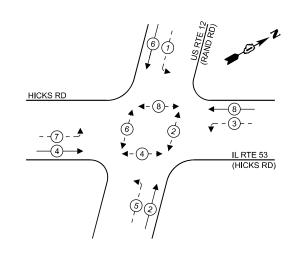
 F.A. RTE.
 SECTION
 COUNTY SHEETS
 SHEETS NO.

 VAR
 2022 VAR TSM
 VARIOUS
 50
 36

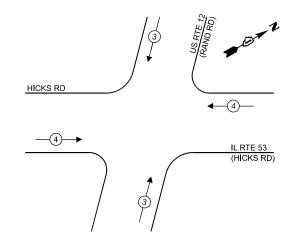
 CONTRACT NO. 62U47

 ILLINOIS FED. AID PROJECT

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

, i	<u> </u>	. –		*
4 Trombone 2/CADD Data/Sheets/D162U47-sht-ts-cable.c	EQUIPMENT TYPE	QUANTITY	UNIT	TOTAL
윺	EQOII MENT TITE	QUANTITI	WATTAGE	WATTAGE
147 -s	SIGNAL HEAD 1 OR 3-SECTION	12	11	132
162L	4-SECTION	-	14	-
d)ste	5-SECTION	8	13	104
Shee	PROGRAMMABLE 3-SECTION	-	22	-
Data)	4-SECTION	-	32	-
QQ	5-SECTION	-	28	-
2/C/	PEDESTRIAN SIGNAL	8	15	120
pooe	CONTROLLER	1	150	150
Trom	MASTER CONTROLLER	-	100	-
	UPS	1	25	25
SIW	DETECTION RADAR OR VIDEO	1	20	20
/ar T	BLANK-OUT SIGN	-	25	-
Var−	NETWORK SWITCH II OR III	-	35	-
-002	CELLULAR MODEM	-	15	-
TB 203		TOTAL UF	PS SIZING	551
T P	UPS CHARGING	1	225	225
O DO	BATTERY HEATER MAT	1	180	180
1880	CABINET HEATER	1	200	200
8212	FLASHER	-	15	-
150	LED STREET NAME SIGN	-	120	-
rS 11 s\202	LUMINAIRE	-	240	-
on 13 - TS 1150 Projects/2022/2282/218800 DOT PTB 203-002 Var-Var TS\WO	TOTALS	SERVICE WIF	RE SIZING	1,156

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER CT.
SCHAUMBURG, IL 60196

ENERGY SUPPLY:

CONTACT: DAVE SCHACHT
PHONE: (630)-437-2129
COMPANY: COMED

ACCOUNT NUMBER: 16880-73011
METER NUMBER:

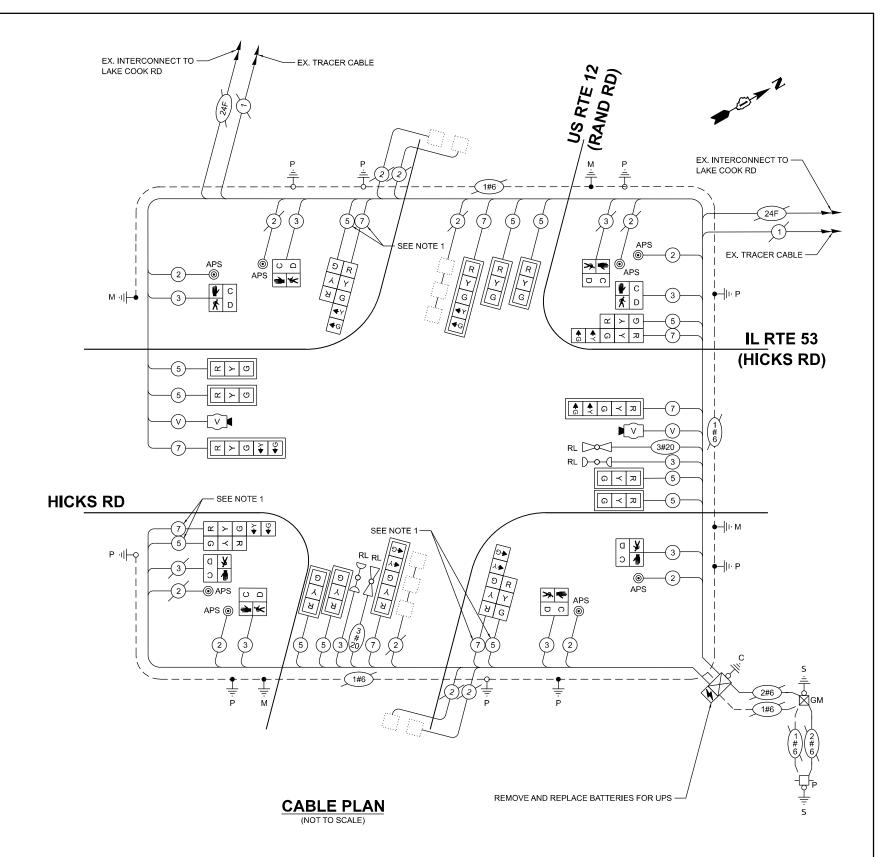
LEGEND

PROTECTED PHASE

 PROTECTED/PERMITTED PHASE

 PEDESTRIAN PHASE

OL OVERLAP



NOTES:

1. REMOVE EXISTING SHARED MULTI-CONDUCTOR CABLE AND REPLACE WITH SEPERATE 5C AND 7C CABLE AS SHOWN.

TS 1150 ECON 147 (LCDOT PASSAGE)

DLZ

 USER NAME
 = Dwiktorzak
 DESIGNED
 ZH
 REVISED

 DRAWIN
 RG
 REVISED

 PLOT SCALE
 = 40,000 */ in
 CHECKED
 DW
 REVISED

 PLOT DATE
 = 5/17/2023
 DATE
 5/12/2023
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

US RTE 12 (RAND RD) AT HICKS RD

| SHEET 19 OF 30 SHEETS STA. TO STA.

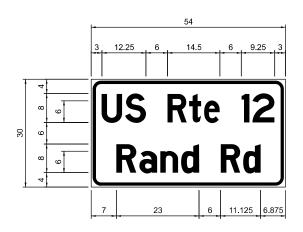
 F.A. RTE.
 SECTION
 COUNTY SHEETS NO.
 SHEETS NO.

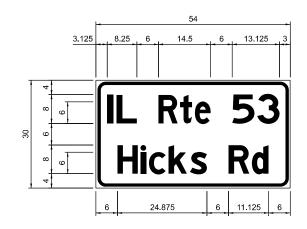
 VAR
 2022 VAR TSM
 VARIOUS
 50
 37

 CONTRACT NO. 62U47

SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



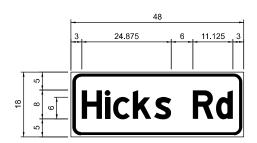


DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	11.25	2	ZZ	2

DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	11.25	2	ZZ	2

NOTE:

INSTALL THIS SIGN BACK TO BACK ON THE THE NORTHBOUND MAST ARM.



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	6	1	ZZ	2

NOTE:

INSTALL THIS SIGN BACK TO BACK ON THE THE SOUTHBOUND MAST ARM.

NOTE:

FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

SCHEDULE OF QUANTITIES

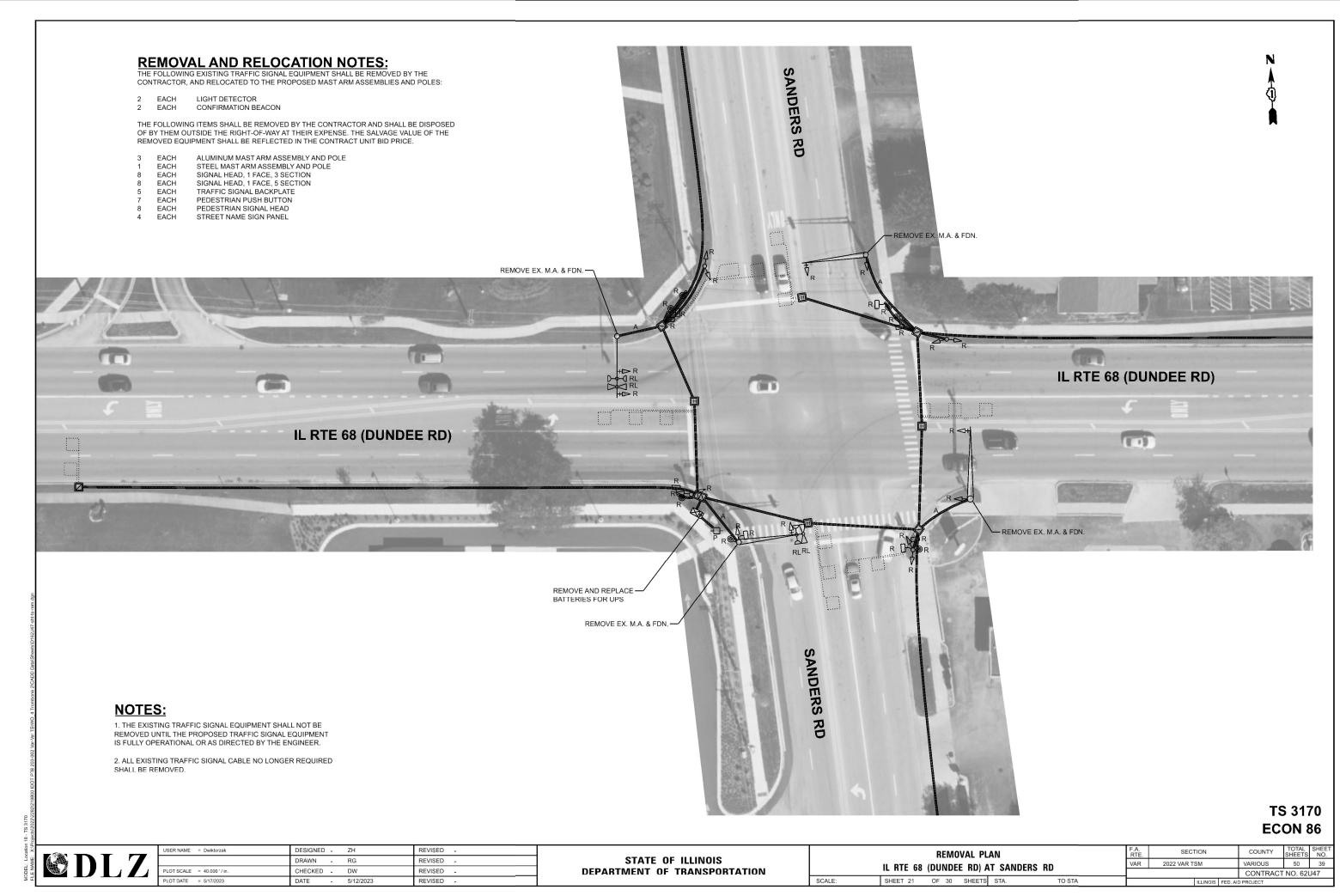
ITEM DESCRIPTION	UNIT	TOTAL QUANTIT
SIGN PANEL - TYPE 1	SQFT	12
SIGN PANEL - TYPE 2	SQFT	45
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	62
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	146
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	362
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	775
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1460
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2530
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1710
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	650
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	54
DRILL EXISTING HANDHOLE	EACH	14
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6000
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	3
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	355
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	3
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12
TEMPORARY INFORMATION SIGNING	SQFT	102.8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

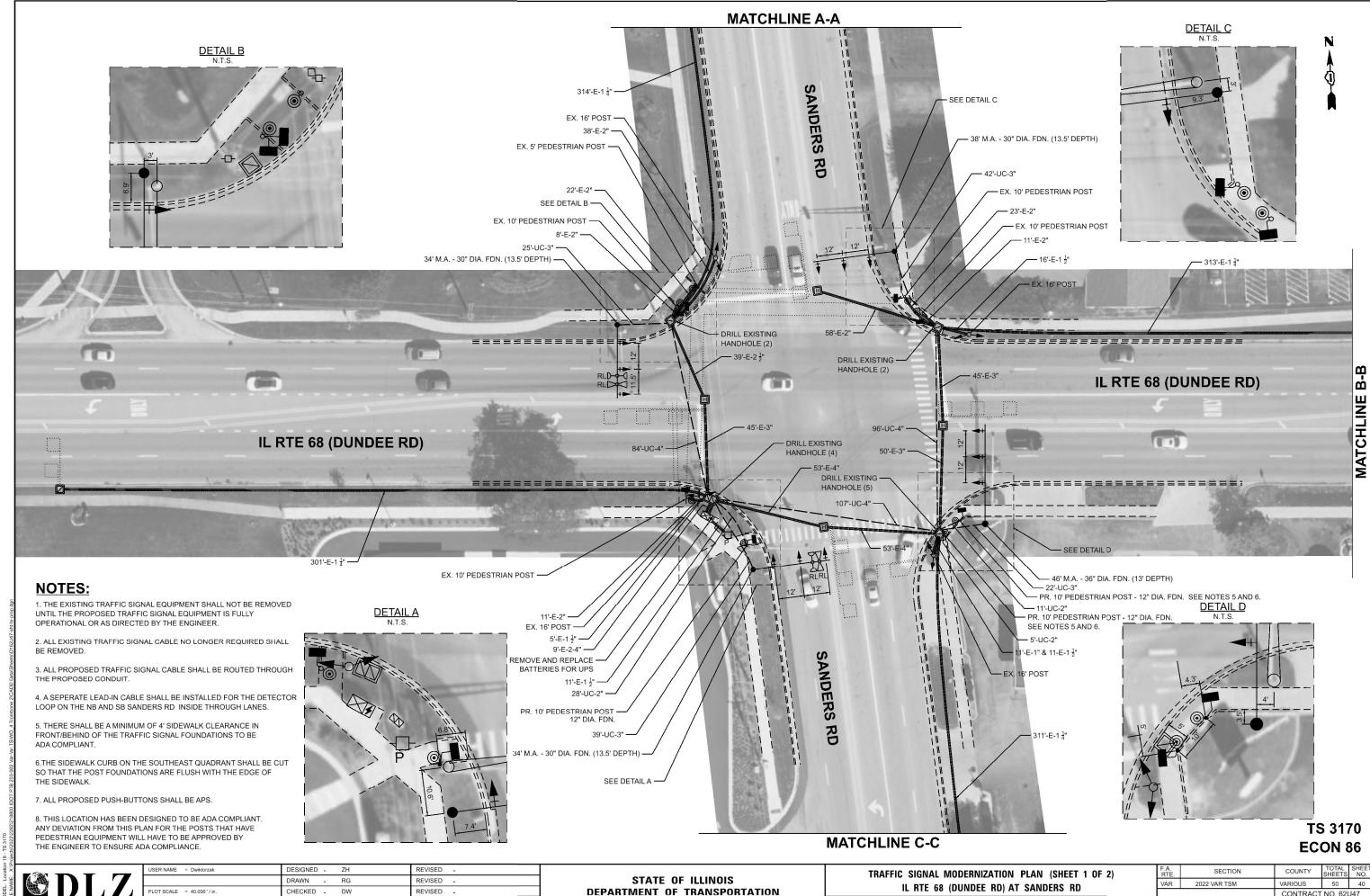
TS 1150 ECON 147 (LCDOT PASSAGE)



USER NAME = Dwiktorzak	DESIGNED	-	ZH	REVISED -
	DRAWN	-	RG	REVISED -
PLOT SCALE = 40.000 '/in.	CHECKED	-	DW	REVISED -
PLOT DATE = 5/17/2023	DATE	-	5/12/2023	REVISED -

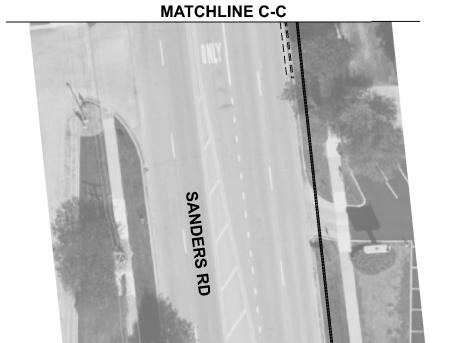
MASI ANM MOUNTED STREET MAME SIGNS		F.A. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.							
AND SCHEDULE OF QUANTITIES US RTE 12 (RAND RD) AT HICKS RD					VAR	2022 VAR TSM		VARIOUS	50	38				
_	US	KIE	12	(KAI	ID KD)	AI HIC	KS KD					CONTRACT	NO, 621	J47
	SHEET	20	OF	30	SHEETS	STA.	TO STA.			ILLINOIS	FED. All	D PROJECT		





SHEET 22 OF 30 SHEETS STA.

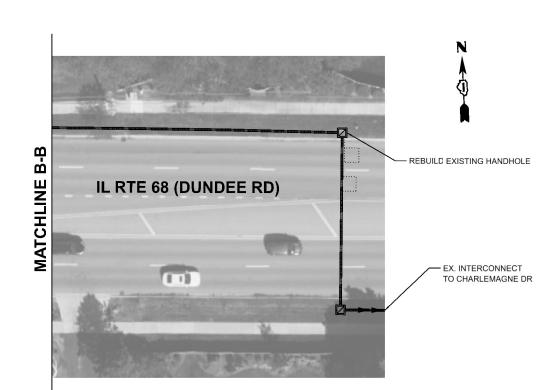
CONTRACT NO. 62U47



MATCHLINE A-A

SEE NOTE 4

SANDERS RD







DRAWN - RG REVISED -REVISED -CHECKED - DW

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 2) IL RTE 68 (DUNDEE RD) AT SANDERS RD SHEET 23 OF 30 SHEETS STA.

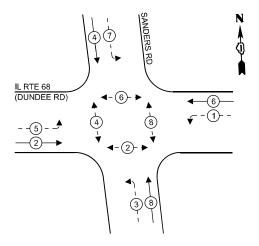
SEE NOTE 4

COUNTY TOTAL SHEET NO.

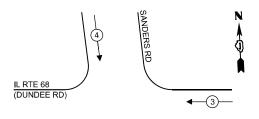
VARIOUS 50 41 CONTRACT NO. 62U47

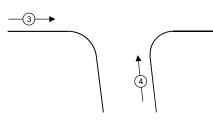
VAR 2022 VAR TSM

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

FOURDMENT TYPE	OLIANITITY	UNIT	TOTAL
EQUIPMENT TYPE	QUANTITY	WATTAGE	WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	12	11	132
4-SECTION	-	14	-
5-SECTION	8	13	104
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
	TOTAL UF	531	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL	SERVICE WIF	RE SIZING	1,136

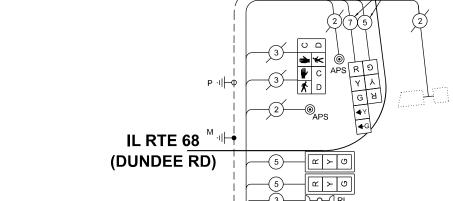
LEGEND

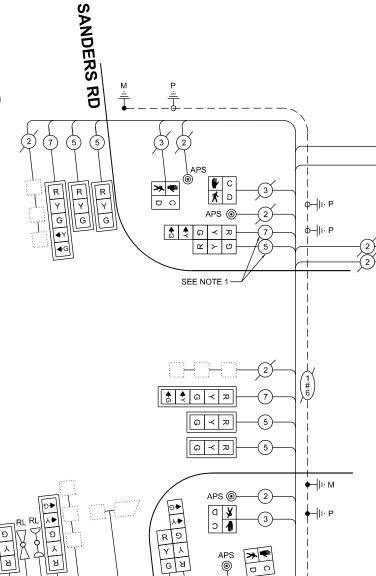
PROTECTED PHASE

 PROTECTED/PERMITTED PHASE

 PEDESTRIAN PHASE

OVERLAP OVERLAP





CABLE PLAN (NOT TO SCALE)

PGV COSTS TO:

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION

REMOVE AND REPLACE BATTERIES FOR UPS

201 W. CENTER CT. SCHAUMBURG, IL 60196 ENERGY SUPPLY:

CONTACT: TERRI BLECK
PHONE: (847)-816-5239
COMPANY: COMED

ACCOUNT NUMBER: 44430-67074
METER NUMBER:

NOTES:

1. REMOVE EXISTING SHARED MULTI-CONDUCTOR CABLE AND REPLACE WITH SEPERATE 5C AND 7C CABLE AS SHOWN.

SEE NOTE 1

TS 3170 ECON 86

- EX. TRACER CABLE

EX. INTERCONNECT TO CHARLEMAGNE DR



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APS 🍥 主 🕊

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

IL RTE 68 (DUNDEE RD) AT SANDERS RD

SHEET 24 OF 30 SHEETS STA. TO STA.

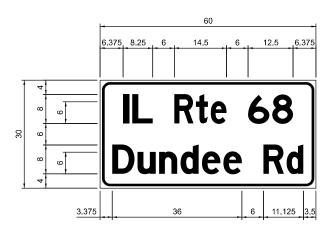
 F.A. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS NO.
 SHEETS NO.

 VAR
 2022 VAR TSM
 VARIOUS
 50
 42

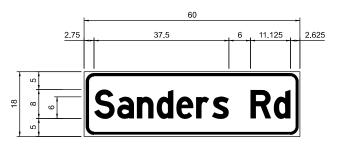
 CONTRACT NO. 62U47

SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL	SHEETING	QTY. REQUIRED
D	12.5	2	ZZ	2



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	7.5	1	ZZ	

NOTE:

FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

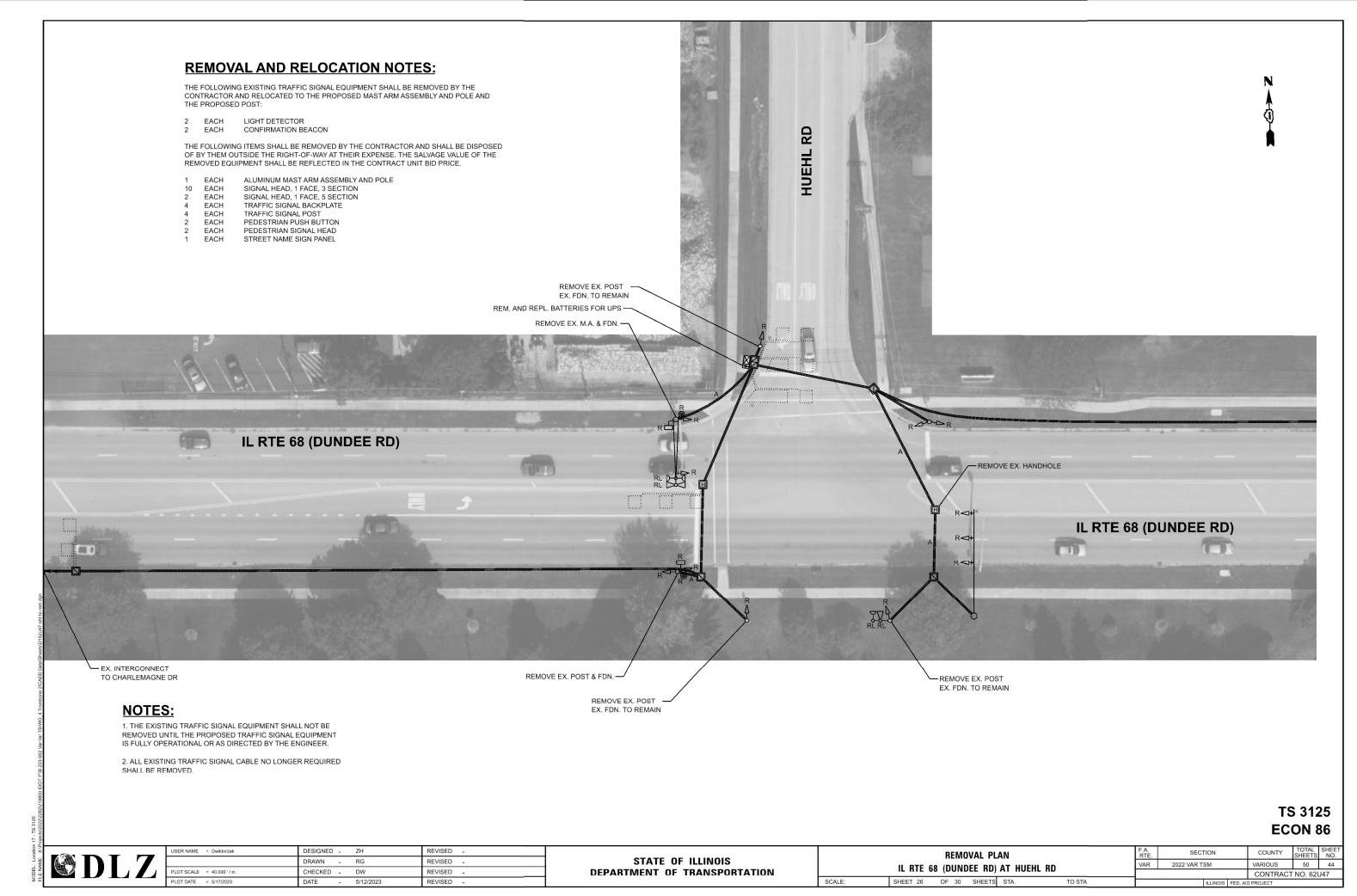
SCHEDULE OF QUANTITIES

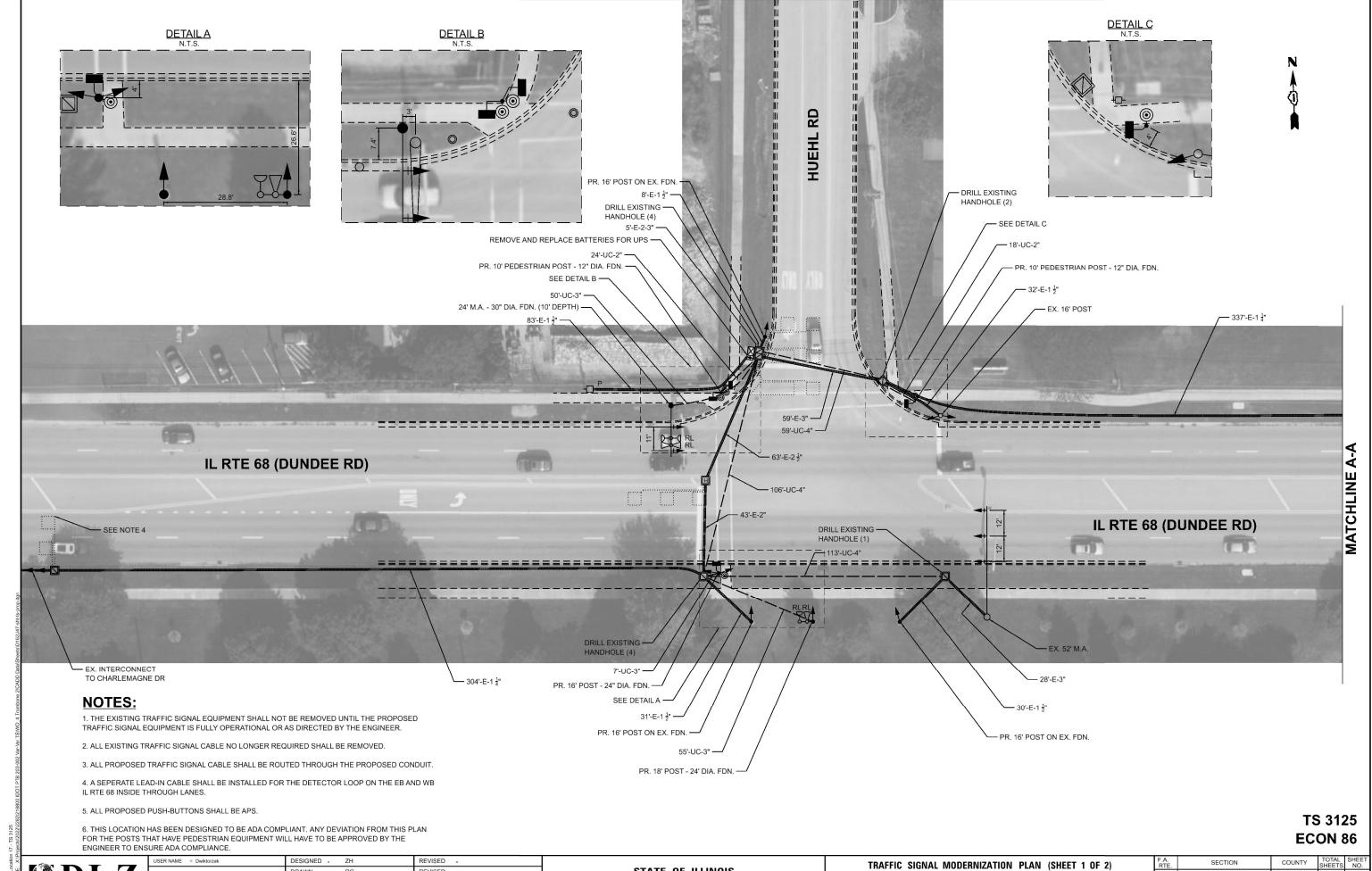
ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	25
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	44
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	128
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	287
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	385
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	725
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2320
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1565
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	895
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	530
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	40.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
DRILL EXISTING HANDHOLE	EACH	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2155
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	325
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	3
REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

TS 3170 ECON 86



USER NAME = Dwiktorzak	DESIGNED	-	ZH	REVISED -
	DRAWN	-	RG	REVISED -
PLOT SCALE = 40,000'/in.	CHECKED	-	DW	REVISED -
PLOT DATE = 5/17/2023	DATE	-	5/12/2023	REVISED -





STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DRAWN

CHECKED -

RG

5/12/2023

REVISED

REVISED

VAR

IL RTE 68 (DUNDEE RD) AT HUEHL RD

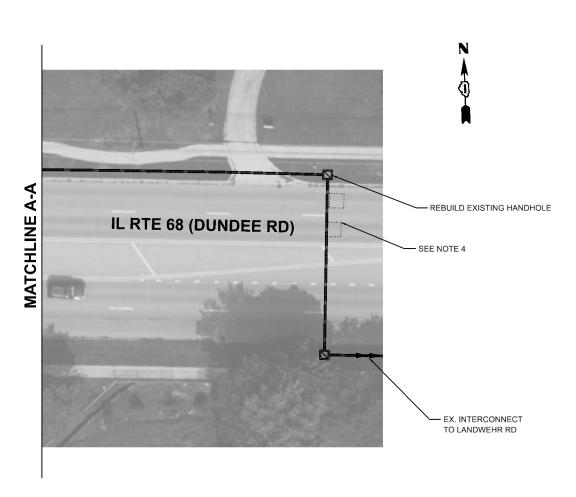
SHEET 27 OF 30 SHEETS STA.

2022 VAR TSM

VARIOUS

50

CONTRACT NO. 62U47



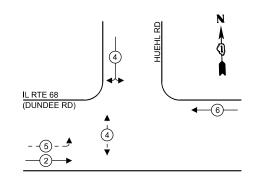
TS 3125 ECON 86

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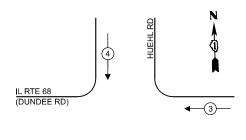
| DESIGNED - ZH | REVISED - | DRAWN - RG | REVISED - | DRAWN - RG | REVISED - | DRAWN - DRAWN - DW | REVISED - | DW | DATE - 5/12/2023 | REVISED - | DW | REVISED | DATE |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONTROLLER SEQUENCE PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



--(5) - A (4) V

←(*)— PROTECTED PHASE

← -*****)- - PROTECTED/PERMITTED PHASE

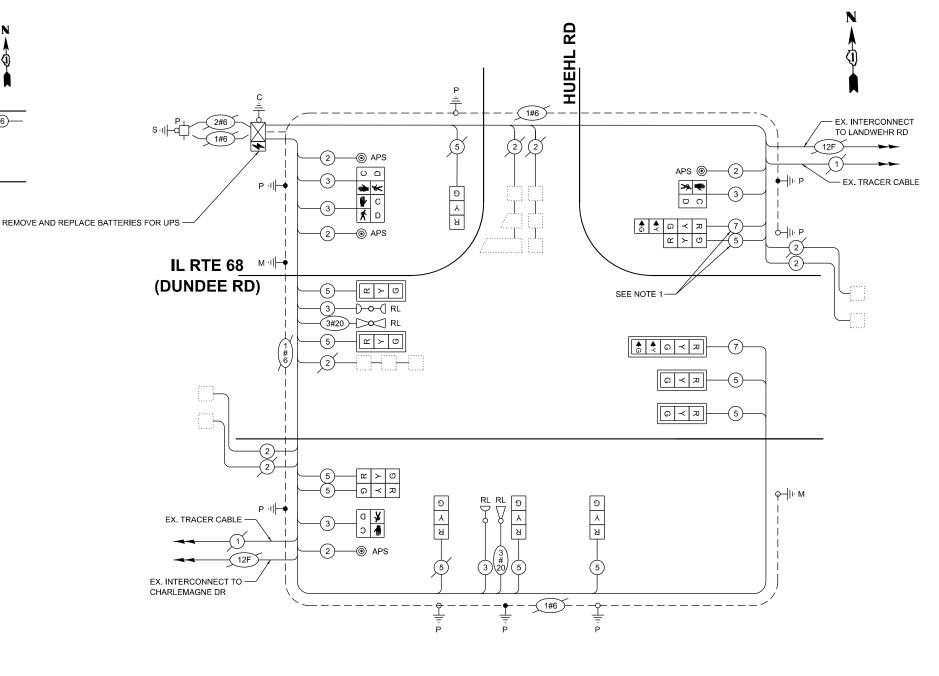
∢-6)- **▶**

←6

◆- *- PEDESTRIAN PHASE

OVERLAP OVERLAP

(DUNDEE RD)



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

─3**─**►

OFIVE IVE	COUZEN		,		
EQUIPMENT TYPE	QUANTITY	UNIT	TOTAL		
			WATTAGE		
	11		121		
4-SECTION	-	14	-		
5-SECTION	2	13	26		
PROGRAMMABLE 3-SECTION	-	22	-		
4-SECTION	-	32	-		
5-SECTION	-	28	-		
PEDESTRIAN SIGNAL	4	15	60		
CONTROLLER	1	150	150		
MASTER CONTROLLER	-	100	-		
UPS	1	25	25		
DETECTION RADAR OR VIDEO	-	20	-		
BLANK-OUT SIGN	-	25	-		
NETWORK SWITCH II OR III	-	35	-		
CELLULAR MODEM	-	15	-		
	TOTAL UF	S SIZING	382		
UPS CHARGING	1	225	225		
BATTERY HEATER MAT	1	180	180		
CABINET HEATER	1	200	200		
FLASHER	-	15	-		
LED STREET NAME SIGN	-	120	-		
LUMINAIRE	-	240	-		
DETECTION RADAR OR VIDEO - 20					
	EQUIPMENT TYPE SIGNAL HEAD 1 OR 3-SECTION 4-SECTION 5-SECTION PROGRAMMABLE 3-SECTION 4-SECTION 5-SECTION PEDESTRIAN SIGNAL CONTROLLER MASTER CONTROLLER IPS	EQUIPMENT TYPE	EQUIPMENT TYPE		

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER CT,
SCHAUMBURG, IL 60196

ENERGY SUPPLY:

CONTACT: TERRI BLECK
PHONE: (847)-816-5239
COMPANY: COMED

ACCOUNT NUMBER: 44430-67074
METER NUMBER:

CABLE PLAN
(NOT TO SCALE)

NOTES:

1. REMOVE EXISTING SHARED MULTI-CONDUCTOR CABLE AND REPLACE WITH SEPERATE 5C AND 7C CABLE AS SHOWN.

TS 3125 ECON 86



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

IL RTE 68 (DUNDEE RD) AT HUEHL RD

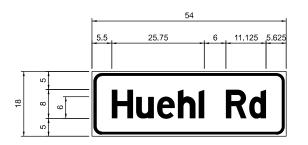
 F.A. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS NO.
 SHEETS NO.

 VAR
 2022 VAR TSM
 VARIOUS
 50
 47

 CONTRACT NO. 62U47

SIGN PANEL - TYPE 1

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL	SHEETING	QTY. REQUIRED
D	6.75	1	ZZ	2

NOTES:

1. FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

2. CONTRACTOR SHALL MOUNT THE TWO MAST ARM MOUNTED STREET NAME SIGNS BACK TO BACK ON THE WB MAST ARM.

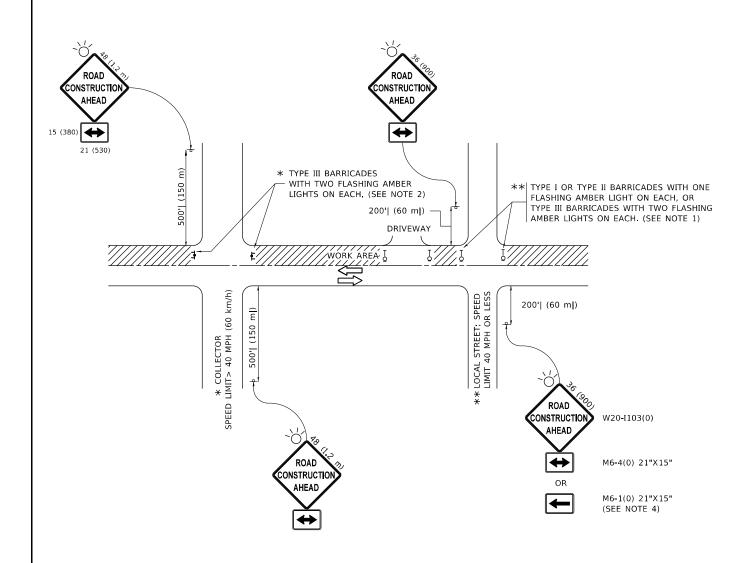
SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QUANTIT
SIGN PANEL - TYPE 1	SQ FT	13.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	42
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	112
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	278
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	385
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	735
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1875
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	495
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	875
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	490
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
STEEL MAST ARMASSEMBLY AND POLE, 24 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
DRILL EXISTING HANDHOLE	EACH	11
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	5
INDUCTIVE LOOP DETECTOR	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2415
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	335
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

TS 3125 **ECON 86**



USER NAME = Dwiktorzak	DESIGNED	-	ZH	REVISED -
	DRAWN	-	RG	REVISED -
PLOT SCALE = 40,000'/in.	CHECKED	-	DW	REVISED -
PLOT DATE = 5/17/2023	DATE	-	5/12/2023	REVISED -



NOTES:

- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE,
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE 4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE
- 7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

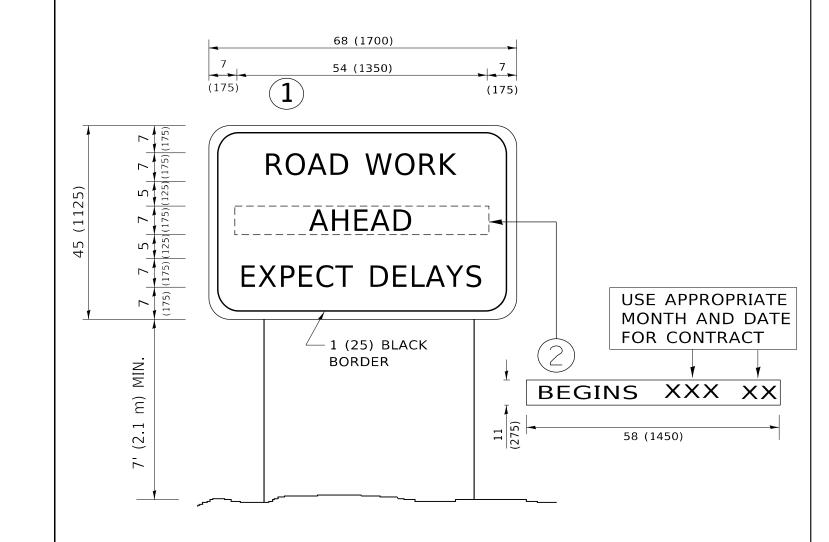
All dimensions are in inches (millimeters) unless otherwise shown.

REVISED - A. HOUSEH 10-15-96 DESIGNED -L.H.A. DRAWN REVISED - T. RAMMACHER 01-06-00 HECKED REVISED _ A. SCHUETZE 09-15-16 PLOT DATE = 5/17/2023 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHEET 1 OF 1 SHEETS STA.

SECTION 2022 VAR TSM VARIOUS 50 49 CONTRACT NO. 62U47



NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN 1 WITH INSTALLED PANEL 2 ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL(2)SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)

SCALE: NONE

7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = Iovan,Plascencia	DESIGNED -	REVISED	- R. MIRS 09-15-97
	DRAWN -	REVISED	- R. MIRS 12-11-97
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED	-T. RAMMACHER 02-02-99
PLOT DATE = 5/17/2023	DATE -	REVISED	- C. JUCIUS 01-31-07

ARTERIAL ROAD			F.A. RTE	SECTION					
INFORMATION SIGN				VAR	2022 VAR TSM				
INI OUNIALION SIGN						TC-22			
	SHEET	1	OF	1	SHEETS	STA.	TO STA.		ILLINOIS FED. AII