

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	1
		ILLINOIS	CONTRACT NO. 62W58	

D-91-124-24



FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

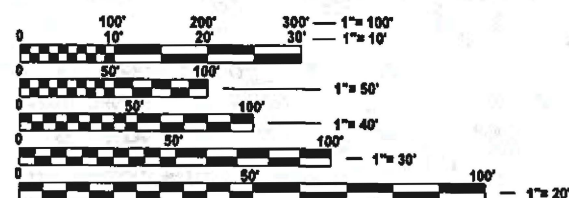


Jameel Ahmed 12/24/2024
IL. LICENSED PROFESSIONAL
LICENSE EXPIRES ON 11/30/2025
APPLIES TO THE FOLLOWING SHEETS:
1-9, 18-38

PREPARED BY:



245 W. ROOSEVELT ROAD, SUITE 87
WEST CHICAGO, ILLINOIS 60185
(630) 228-1231 (P)
PROJECT MANAGER:
JAMEEL AHMED, P.E.
www.quiggengineering.com



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.

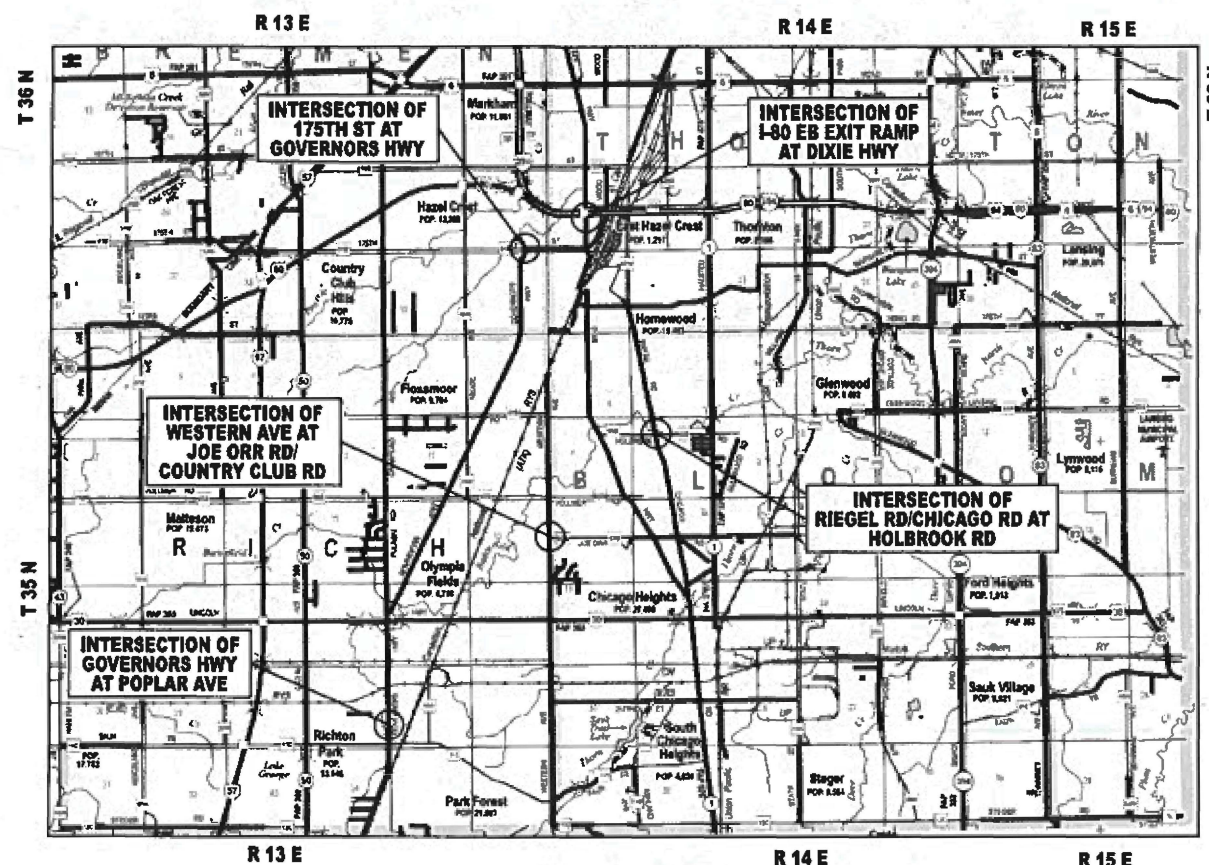
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: ANDREA VARGAS (847) 705-4419
PROJECT MANAGER: NICHOLAS BUTLER (847) 705-4420

CONTRACT NO. 62W58

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**PROPOSED
HIGHWAY PLANS**
VARIOUS LOCATIONS IN DISTRICT 1
SECTION 2023-942-N.TS
PROJECT HSIP - ZVSZ(220)
TROMBONE MAST ARM REPLACEMENT
COOK COUNTY
C-91-178-24

**LOCATION MAP**

GROSS LENGTH = N/A = N/A MILE
VARIOUS TOWNSHIP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED *April 25th 2025*
River
REGIONAL ENGINEER

June 27, 2025
See Ed
ENGINEER OF DESIGN AND ENVIRONMENT

June 27, 2025
Quigg
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

REV-SEP

MODEL: Unnamed Plan - GenNotes1 [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 21C-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\0162W58-Sht-General Notes.dgn

INDEX OF SHEETS

SHT NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES
3-9	SUMMARY OF QUANTITIES
10	DISTRICT 1 MAST ARM MOUNTED STREET NAME SIGNS (TS-02)
11-17	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05)

SHT NO.	TS NO.	DESCRIPTION
18-21	TS 45	DIXIE HWY AT I-80/294 OFF RAMP
22-25	TS 10860	GOVERNORS HWY AT 175TH ST
26-29	TS 5710	RIEGEL RD/CHICAGO RD AT HOLBROOK RD
30-33	TS 21795	WESTERN AVE AT JOE ORR RD/COUNTRY CLUB DR
34-37	TS 5195	GOVERNORS HWY AT POPLAR AVE

SHT NO.	DESCRIPTION
38	ADA RAMP DETAILS: GOVERNORS HWY AT POPLAR AVE
39	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
40	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
41	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
42	ARTERIAL ROAD INFORMATION SIGN (TC-22)

HIGHWAY STANDARDS

STD. NO.	TITLE
000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W UNDIVIDED
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
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
701901-10	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAIL
814001-03	HANDHOLES
814006-03	DOUBLE HANDHOLES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877002-04	STEEL MAST ARM ASSEMBLY AND POLE 56' THROUGH 75'
878001-11	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

TS. NO.	INTERSECTION NAME	MUNICIPALITY
45	I-80 EB RAMP AT DIXIE HWY	HAZEL CREST
10860	175TH ST AT GOVERNORS HWY	HAZEL CREST
5710	RIEGEL RD AT HOLBROOK RD	CHICAGO HEIGHTS
21795	WESTERN AVE AT JOE ORR RD/COUNTRY CLUB RD	OLYMPIA FIELDS
5195	GOVERNORS HWY AT POPLAR AVE	RIGHTON PARK

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 HOURS 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 ROW SHOWN IS APPROXIMATE AND MAY NEED TO BE VERIFIED IN THE FIELD. ANY ROW CONFLICTS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE 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 "J.U.L.I.E." 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 FACILITITES 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 PRIOR 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 IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH ARTICLES 252 AND 250 OF THE STANDARD SPECIFICATIONS, 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.
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM CLEARANCE OF 1.5' HORIZONTALLY AND 1' VERTICALLY FROM EXISTING NICOR UTILITIES.



QUIGG ENGINEERING INC

USER NAME = afarooql	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 4/2/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS,
& GENERAL NOTES

SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	2
		CONTRACT NO. 62W58		
		ILLINOIS FED. AID PROJECT		

MODEL: Unnamed Plan - SOQ-1 [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 21B-13.D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\162W58-Sht-SOQ.dgn

				CONSTRUCTION TYPE CODE									
				I-80/294 AT DIXIE HWY		175T ST AT GOVERNORS HWY		RIGEL RD AT HOLBROOK RD		WESTERNAVE AT JOE ORR/COUNTRY CLUB RD		GOVERNORS HWY AT POPLAR AVE	
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SAFETY		SAFETY		SAFETY		SAFETY		SAFETY	
				0021		0021		0021		0021		0021	
				URBAN		URBAN		URBAN		URBAN		URBAN	
25200110	SODDING, SALT TOLERANT	SQ YD	325									325	
28000510	INLET FILTERS	EACH	2									2	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	108									108	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	959.0									959.0	
42400800	DETECTABLE WARNINGS	SQ FT	55									55	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	45									45	
44000600	SIDEWALK REMOVAL	SQ FT	932									932	
60260100	INLETS TO BE ADJUSTED	EACH	1									1	
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	44.0									44.0	
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	240	48		48		48		48		48	
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	5	1		1		1		1		1	
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	0.2		0.2		0.2		0.2		0.2	
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	0.2		0.2		0.2		0.2		0.2	

* SPECIALTY ITEM

MODEL: Unnamed Plan - SQO-2 [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 215-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\162V58-Sht-SQO.dgn

				CONSTRUCTION TYPE CODE									
				I-80/294 AT DIXIE HWY		175T ST AT GOVERNORS HWY		RIGEL RD AT HOLBROOK RD		WESTERN AVE AT JOE ORR/COUNTRY CLUB RD		GOVERNORS HWY AT POPLAR AVE	
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SAFETY		SAFETY		SAFETY		SAFETY		SAFETY	
				0021		0021		0021		0021		0021	
				URBAN		URBAN		URBAN		URBAN		URBAN	
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	10	2		2		2		2		2	
67100100	MOBILIZATION	L SUM	1	0.2		0.2		0.2		0.2		0.2	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.2		0.2		0.2		0.2		0.2	
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.2		0.2		0.2		0.2		0.2	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.2		0.2		0.2		0.2		0.2	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.2		0.2		0.2		0.2		0.2	
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.2		0.2		0.2		0.2		0.2	
* 72000100	SIGN PANEL - TYPE 1	SQ FT	81.0	7.5		6.0		16.5		34.5		16.5	
* 72000200	SIGN PANEL - TYPE 2	SQ FT	91.5			21.0		37.5		22.5		10.5	
* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	25	25									
* 73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	2	2									
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	90									90	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	26	26									

* SPECIALTY ITEM

 QUIGG ENGINEERING INC	USER NAME = afarooql	DESIGNED - AAF	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES					F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - AAF	DRAWN - AAF	REVISED -							VAR	2023-942-N.TS	COOK	42	4
	PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -		SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.					CONTRACT NO. 62W58				
	PLOT DATE = 2/13/2025	DATE - 12/24/2024	REVISED -							ILLINOIS FED. AID PROJECT				

MODEL: Unnamed Plan - SOQ-3 [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 215-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\162\162V58-Sht-SOQ.dgn

				CONSTRUCTION TYPE CODE									
				I-80/294 AT DIXIE HWY		175T ST AT GOVERNORS HWY		RIGEL RD AT HOLBROOK RD		WESTERN AVE AT JOE ORR/COUNTRY CLUB RD		GOVERNORS HWY AT POPLAR AVE	
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SAFETY		SAFETY		SAFETY		SAFETY		SAFETY	
				0021		0021		0021		0021		0021	
				URBAN		URBAN		URBAN		URBAN		URBAN	
78006110	PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	44									44	
78006180	PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	9									9	
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	65	55								10	
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	926	128		295		212		76		215	
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	719	89		90		167		320		53	
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1,551	221		385		224		513		208	
81400100	HANDHOLE	EACH	3			1						2	
81400200	HEAVY-DUTY HANDHOLE	EACH	5					4		1			
81400300	DOUBLE HANDHOLE	EACH	1	1									
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	5	1		1		1		1		1	
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	4			1		1		1		1	
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	691									691	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3,091	105		877		288		668		1,153	

* SPECIALTY ITEM



QUIGG ENGINEERING INC

USER NAME = afarooqi	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 2/13/2025	DATE - 12/24/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
SCALE: NONE	SHEET 3	OF 7 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	5
		CONTRACT NO. 62W58		
		ILLINOIS	FED. AID PROJECT	

MODEL: Unnamed Plan - SQO-4 [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 215-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\162W58-Sht-SQO.dgn

				CONSTRUCTION TYPE CODE									
				I-80/294 AT DIXIE HWY		175T ST AT GOVERNORS HWY		RIGEL RD AT HOLBROOK RD		WESTERN AVE AT JOE ORR/COUNTRY CLUB RD		GOVERNORS HWY AT POPLAR AVE	
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SAFETY		SAFETY		SAFETY		SAFETY		SAFETY	
				0021		0021		0021		0021		0021	
				URBAN		URBAN		URBAN		URBAN		URBAN	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	13,590	1,612		2,591		1,295		5,945		2,147	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3,488			1,262		1,344		431		451	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	11,127	1,534		2,049		2,070		3,736		1,738	
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	456	150		87		74		71		74	
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	6,650	746		1,250		1,557		1,930		1,167	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	11	1		3		3		3		1	
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	2			1				1			
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	6	1				1		4			
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1	1									
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2					2					
87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1									1	
87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1					1					
87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	4			2				1		1	

* SPECIALTY ITEM

 QUIGG ENGINEERING INC	USER NAME = afarooqi	DESIGNED - AAF	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - AAF	DRAWN - AAF	REVISED -						VAR	2023-942-N.TS	COOK	42	6
	PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -		CONTRACT NO. 62W58								
	PLOT DATE = 2/13/2025	DATE - 12/24/2024	REVISED -		SCALE: NONE	SHEET 4	OF 7	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

MODEL: Unnamed Plan - SOQ-5 [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 215-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\162\162V58-Sht-SOQ.dgn

				CONSTRUCTION TYPE CODE									
				I-80/294 AT DIXIE HWY		175T ST AT GOVERNORS HWY		RIGEL RD AT HOLBROOK RD		WESTERNAVE AT JOE ORR/COUNTRY CLUB RD		GOVERNORS HWY AT POPLAR AVE	
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SAFETY		SAFETY		SAFETY		SAFETY		SAFETY	
				0021		0021		0021		0021		0021	
				URBAN		URBAN		URBAN		URBAN		URBAN	
87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	2	1								1	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	60.0	4.0		16.0		16.0		16.0		8.0	
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	114.5	27		10		13.5		64			
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	124	13		26		35		13		37	
87900100	DRILL EXISTING FOUNDATION	EACH	1									1	
87900200	DRILL EXISTING HANDHOLE	EACH	52			14		12		20		6	
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	28	6		5		4		7		6	
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	27	5		6		4		7		5	
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	10			4		4		1		1	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	9			3		4		1		1	
88055150	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4							4			
88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4							4			
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4									4	

* SPECIALTY ITEM



USER NAME = afarooqi	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 2/13/2025	DATE - 12/24/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	7
			CONTRACT NO. 62W58	
		ILLINOIS	FED. AID PROJECT	

MODEL: Unnamed Plan - SQ0-6 [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 21D-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15 - Trombone MA Replacement\CADD\CADD Sheets\1D162W58-Sht-SQ0.dgn

				CONSTRUCTION TYPE CODE									
				I-80/294 AT DIXIE HWY		175T ST AT GOVERNORS HWY		RIGEL RD AT HOLBROOK RD		WESTERNAVE AT JOE ORR/COUNTRY CLUB RD		GOVERNORS HWY AT POPLAR AVE	
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SAFETY		SAFETY		SAFETY		SAFETY		SAFETY	
				0021		0021		0021		0021		0021	
				URBAN		URBAN		URBAN		URBAN		URBAN	
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	41	6		8		8		12		7	
88500100	INDUCTIVE LOOP DETECTOR	EACH	39	6		8		8		10		7	
88600100	DETECTOR LOOP, TYPE I	FOOT	1,899	177		79		524		401		718	
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	10		1		3		2		2		2
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	8		1		3		2		2		
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	23,388	1,979		4,978		4,640		7,818		3,973	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	1		1		1		1		1	
89502378	REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	12	3				5		2		2	
89502380	REMOVE EXISTING HANDHOLE	EACH	4	2								2	
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	31	4		6		7		10		4	
X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	490	103		78		103		103		103	
Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1									1	
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	2,193		101		864		281		677		270

* SPECIALTY ITEM



QUIGG ENGINEERING INC

USER NAME = afarooqj	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 2/13/2025	DATE - 12/24/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
SCALE: NONE	SHEET 6	OF 7 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	8
		CONTRACT NO. 62W58		
		ILLINOIS FED. AID PROJECT		

MODEL: Unnamed Plan - SQ0-7 [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 21B 21B-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\162W58-Sht-SQ0.dgn

				CONSTRUCTION TYPE CODE									
				I-80/294 AT DIXIE HWY		175T ST AT GOVERNORS HWY		RIGEL RD AT HOLBROOK RD		WESTERN AVE AT JOE ORR/COUNTRY CLUB RD		GOVERNORS HWY AT POPLAR AVE	
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SAFETY		SAFETY		SAFETY		SAFETY		SAFETY	
				0021		0021		0021		0021		0021	
				URBAN		URBAN		URBAN		URBAN		URBAN	
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	3,175	596		435		873		707		564	
X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	5	1		1		1		1		1	
X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	3									3	
X2010516	SELECTIVE CLEARING	UNIT	0.75					0.75					
X2100002	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	3.00			1		1		1			
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	6	1.2		1.2		1.2		1.2		1.2	
X7200075	REMOVE AND REINSTALL SIGN PANEL	SQ FT	151.75	36.00		18.75		19.00		48.00		30.00	
X8620250	UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	2			1						1	
X8620310	REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	2					1		1			
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	3									3	
X8780012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12									12	
X8809005	LED SIGNAL FACE, LENS COVER	EACH	82	11		18		16		24		13	
X8870300	EMERGENCY VEHICLE PRIORITY SYSTEM	EACH	1								1		

* SPECIALTY ITEM



QUIGG ENGINEERING INC

USER NAME = afarooqi	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 2/13/2025	DATE - 12/24/2024	REVISED -

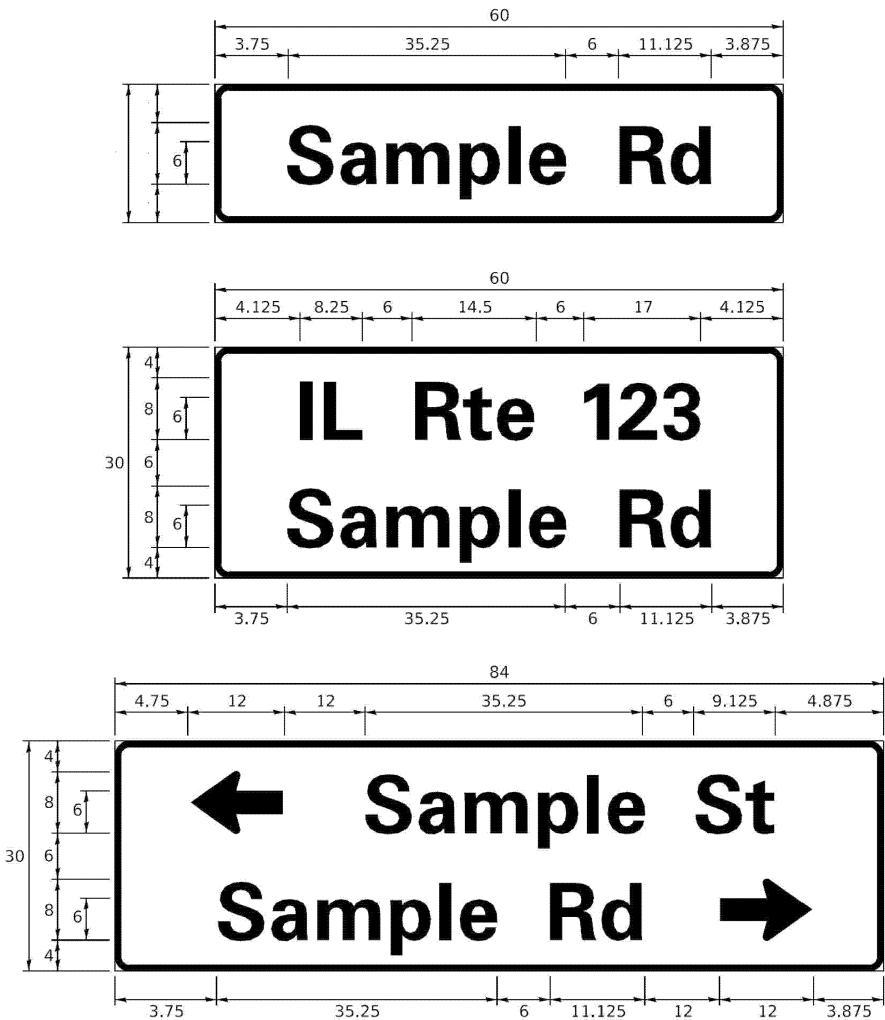
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE SHEET 7 OF 7 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	9
		CONTRACT NO. 62W58		
		ILLINOIS	FED. AID PROJECT	

SIGN PANEL – TYPE 1 OR TYPE 2



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

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	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

- 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.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS 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.
- 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'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" 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.
- 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.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

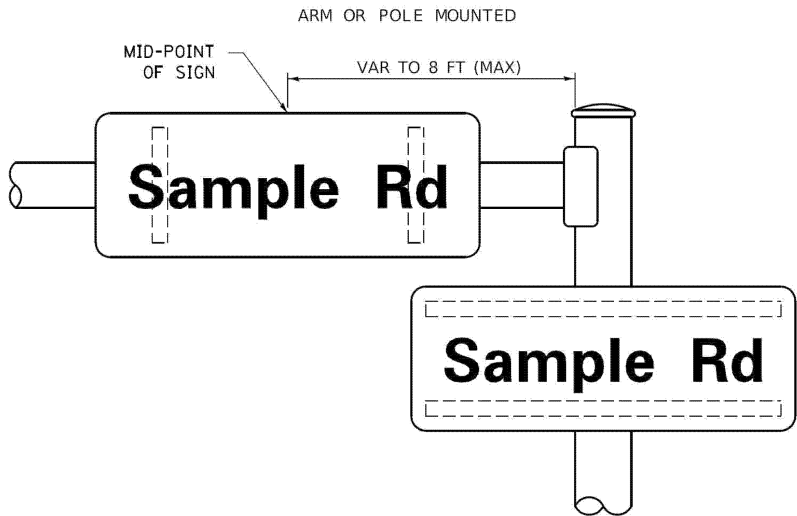
- J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA
- WESTERN REMAC, INC.
WOODRIDGE, IL

PARTS LISTING:

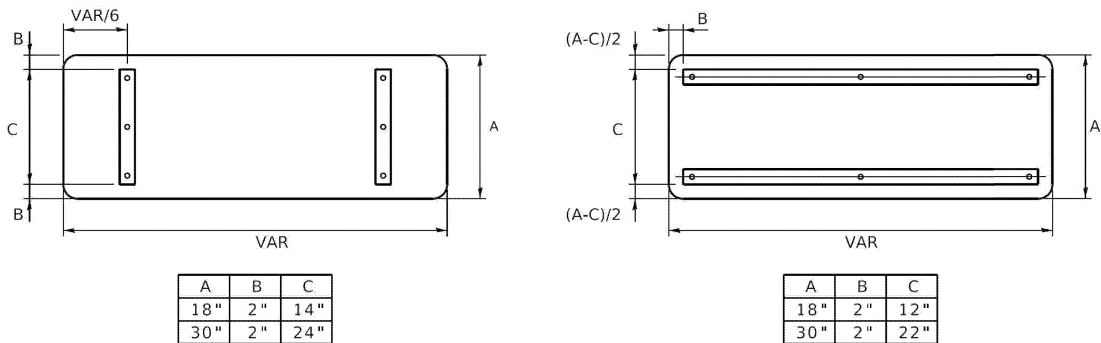
- SIGN CHANNEL
SIGN SCREWS
PART #HPN053 (MED. CHANNEL)
1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
PART #HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
- BRACKETS

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

MOUNTING LOCATION



SUPPORTING CHANNELS



STANDARD ALPHABETS SPACING CHART

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

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	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
H	0.880	4.482	0.880	H	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
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	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
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	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
l	0.720	1.120	0.720	l	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
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	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
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	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

MODEL: Detail1 [Sheet]
FILE NAME: S:\2024\24L001 - P1B 210-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\D162W58-Stt-Details.dgn

USER NAME = afarooqj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS

SCALE: 1"=10' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	10
TS-02		CONTRACT NO. 62W58		
		ILLINOIS	FED. AID PROJECT	

MODEL: Detail2 [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 210-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CAD\CADD Sheets\D162W58-Sht-Details.dgn

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM				ITEM				ITEM			
EXISTING				EXISTING				EXISTING			
PROPOSED				PROPOSED				PROPOSED			
CONTROLLER CABINET				HANDHOLE -SQUARE -ROUND				SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD			
COMMUNICATION CABINET				HEAVY DUTY HANDHOLE -SQUARE -ROUND				SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE			
MASTER CONTROLLER				DOUBLE HANDHOLE				PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS			
MASTER MASTER CONTROLLER				JUNCTION BOX				PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER			
UNINTERRUPTABLE POWER SUPPLY				RAILROAD CANTILEVER MAST ARM				ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"			
SERVICE INSTALLATION -(P) POLE MOUNTED				RAILROAD FLASHING SIGNAL				NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED			
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED				RAILROAD CROSSING GATE				GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)			
TELEPHONE CONNECTION				RAILROAD CROSSBUCK				ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C			
STEEL MAST ARM ASSEMBLY AND POLE				RAILROAD CONTROLLER CABINET				COAXIAL CABLE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				UNDERGROUND CONDUIT (UC), GALVANIZED STEEL				VENDOR CABLE			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED			
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY				SYSTEM ITEM				FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F			
WOOD POLE				INTERSECTION ITEM				GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE			
GUY WIRE				REMOVE ITEM							
SIGNAL HEAD				RELOCATE ITEM							
SIGNAL HEAD WITH BACKPLATE				ABANDON ITEM							
SIGNAL HEAD OPTICALLY PROGRAMMED				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED							
FLASHER INSTALLATION -(FS) SOLAR POWERED				MAST ARM POLE AND FOUNDATION TO BE REMOVED							
PEDESTRIAN SIGNAL HEAD				SIGNAL POST AND FOUNDATION TO BE REMOVED							
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON				DETECTOR LOOP, TYPE I							
RADAR DETECTION SENSOR				PREFORMED DETECTOR LOOP							
VIDEO DETECTION CAMERA				SAMPLING (SYSTEM) DETECTOR							
RADAR/VIDEO DETECTION ZONE				INTERSECTION AND SAMPLING (SYSTEM) DETECTOR							
PAN, TILT, ZOOM (PTZ) CAMERA				QUEUE AND SAMPLING (SYSTEM) DETECTOR							
EMERGENCY VEHICLE LIGHT DETECTOR				WIRELESS DETECTOR SENSOR							
CONFIMATION BEACON				WIRELESS ACCESS POINT							
WIRELESS INTERCONNECT											
WIRELESS INTERCONNECT RADIO REPEATER											

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	USER NAME = afarooqi		DESIGNED -	REVISED -
			DRAWN -	REVISED -
	PLOT SCALE = \$\$SCALE\$		CHECKED -	REVISED -
	PLOT DATE = 2/13/2025		DATE -	REVISED -
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		SCALE: 1"=10'	SHEET OF SHEETS	STA. TO STA.
		ILLINOIS		FED. AID PROJECT

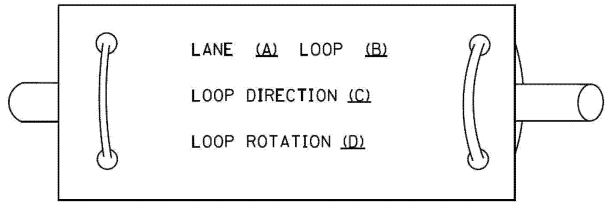
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	11
TS-05		CONTRACT NO. 62W58		

MODEL: Detail3 [Sheet]
FILE NAME: S:\2024\24L001 - PTB 210-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15 - Trombone MA Replacement\CADD\CADD Sheets\D162W58-Sht-Details.dgn

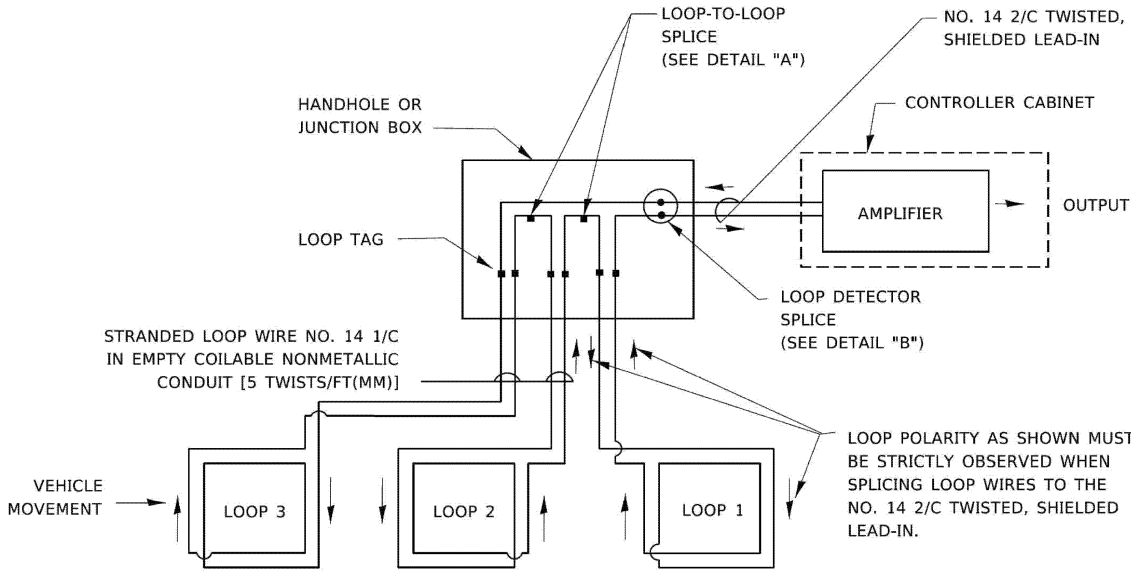
LOOP DETECTOR NOTES

- 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.
- 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.
- 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.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 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.
- 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.
- 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

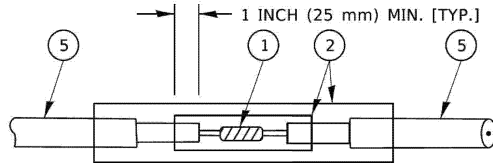


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

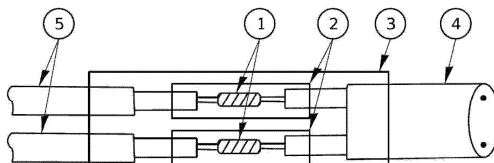


DETECTOR LOOP WIRING SCHEMATIC

- 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.

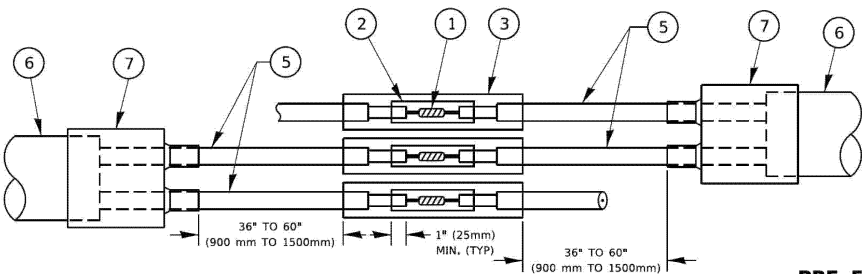


DETAIL "A"
LOOP-TO-LOOP SPLICE

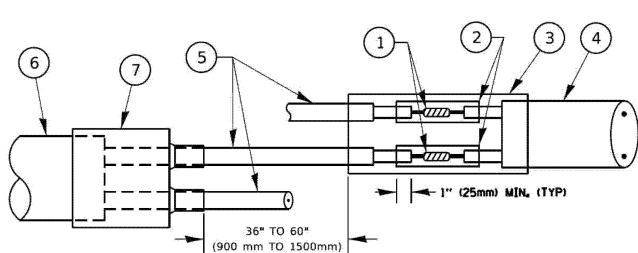


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PRE-FORMED LOOP

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 = afarooqi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$\$CALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

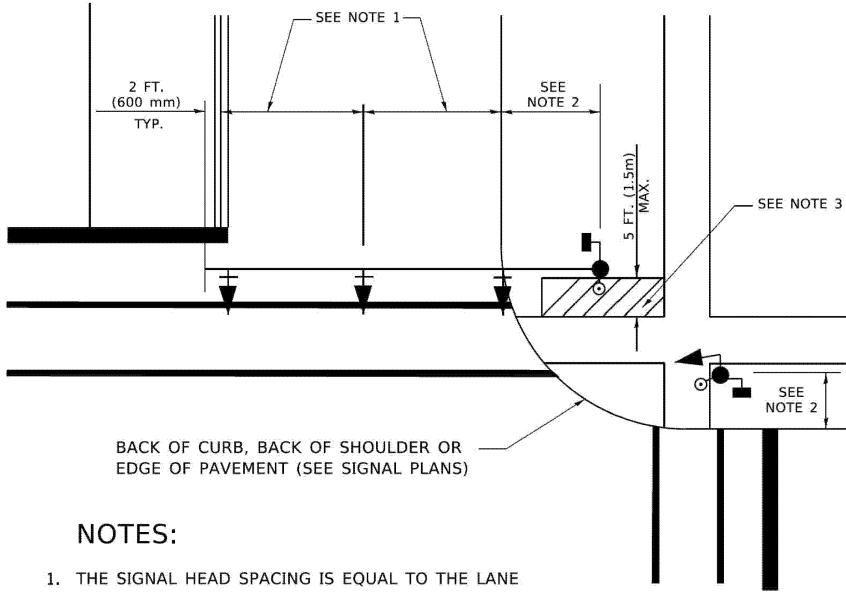
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	12
TS-05		CONTRACT NO. 62W58		
ILLINOIS		FED. AID PROJECT		

MODEL: Detail4 [Sheet]
FILE NAME: S:\2024\241001 - PTB 210-13.D1 - SRF - Various Phil Traffic Signal\WO 24-15 -Trombone MA Replacement\CADD\CADD Sheets\0162W58-Sht-Details.dgn

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.

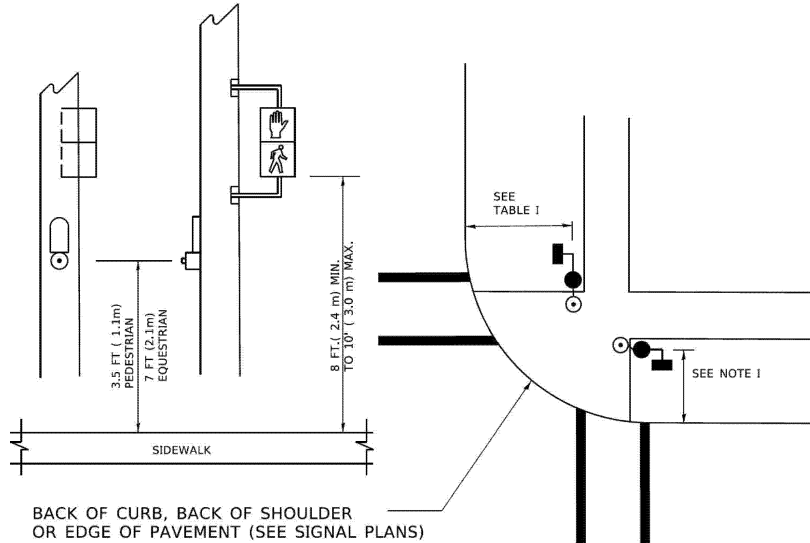


NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. 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

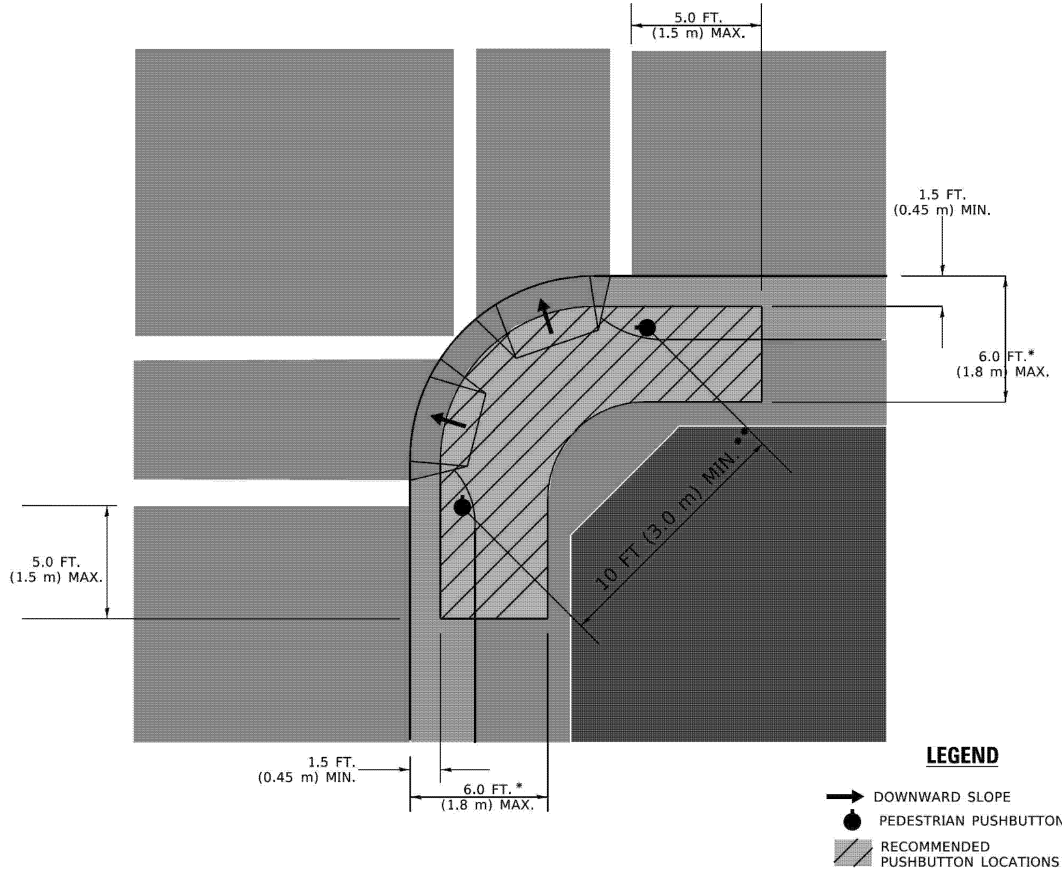
AND
PEDESTRIAN PUSH BUTTON POST



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 BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- RECOMMENDED PUSHBUTTON LOCATIONS

* 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:

1. 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.
2. 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.
5. 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

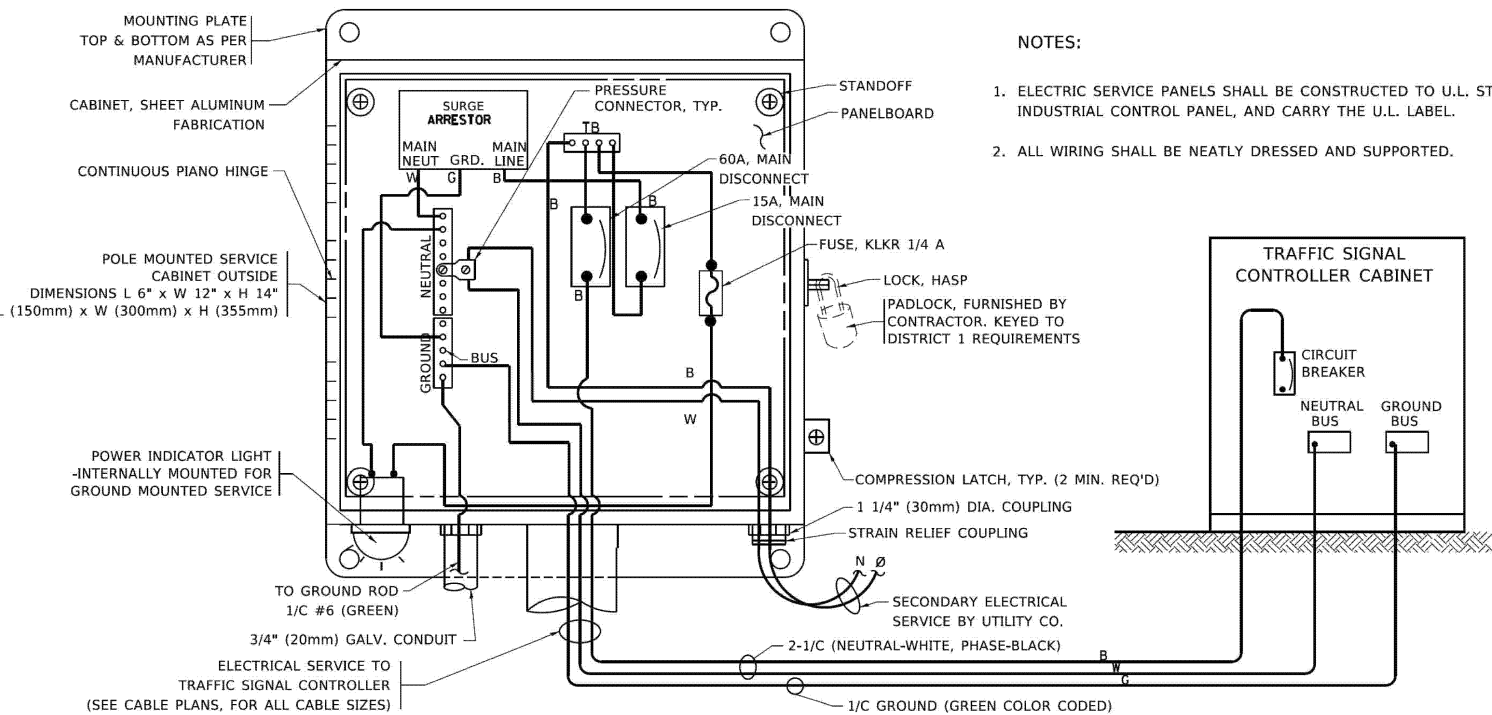
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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:

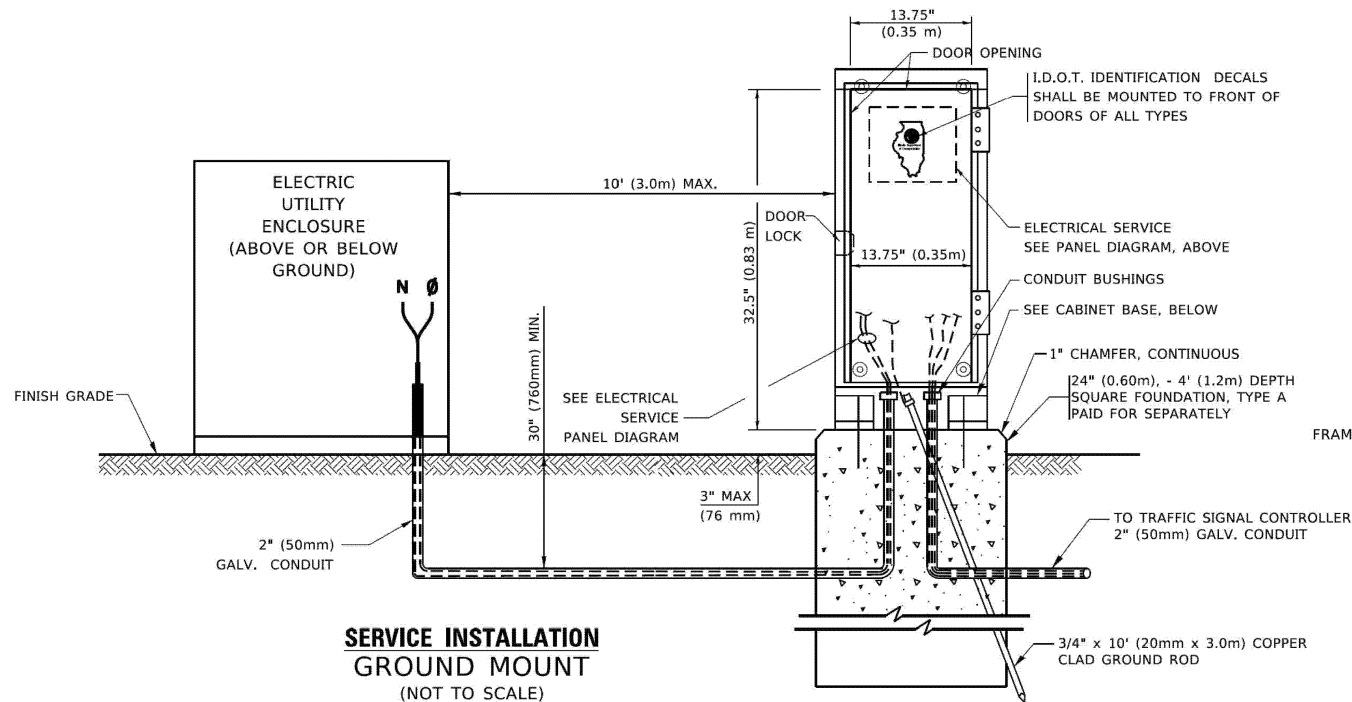
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM 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.

USER NAME = afarooqi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	DRAWN -	REVISED -			VAR	2023-942-N.TS	COOK	42	13	
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -			TS-05		CONTRACT NO. 62W58			
PLOT DATE = 2/13/2025	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

MODEL: Details (Sheet)
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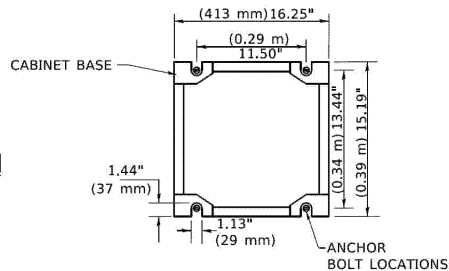


ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)



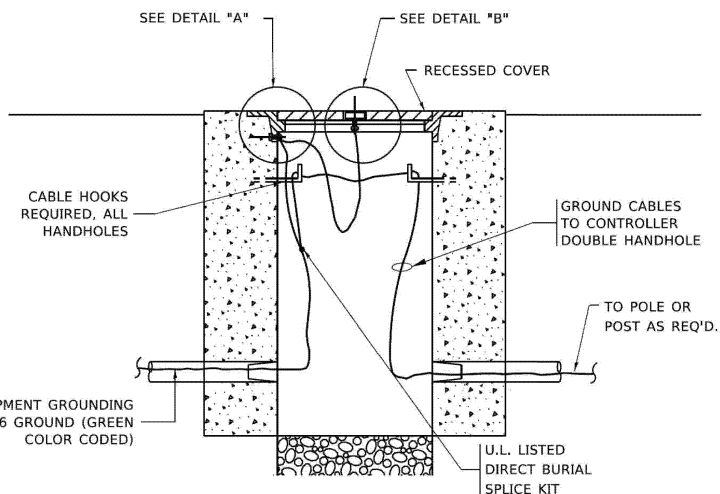
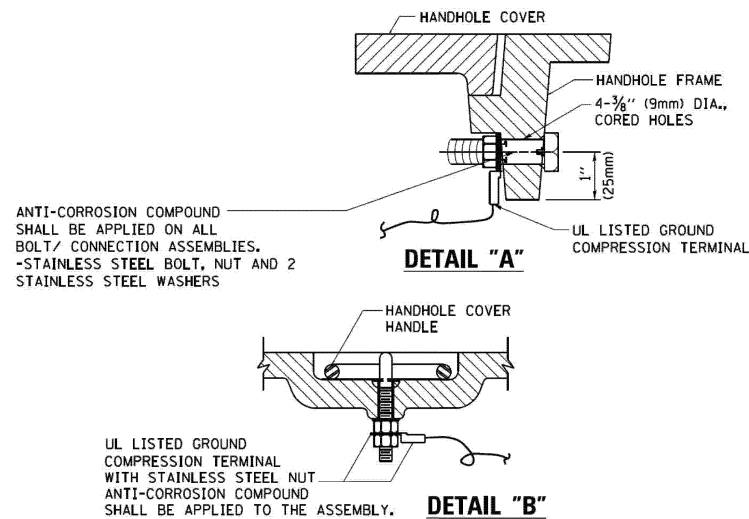
**SERVICE INSTALLATION
GROUND MOUNT**
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN
(NOT TO SCALE)

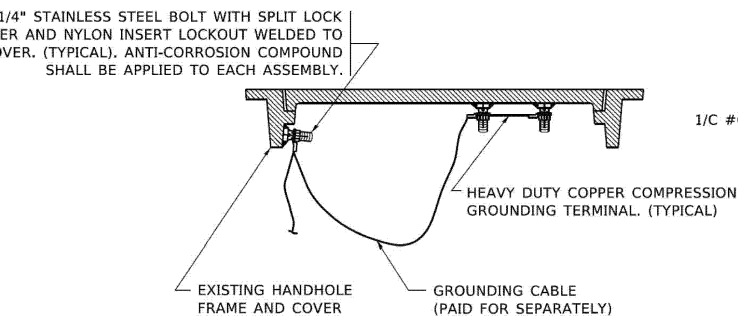


NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



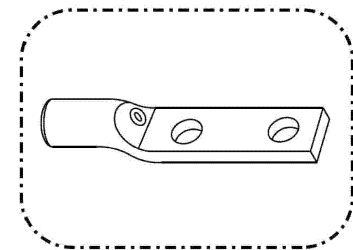
HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)



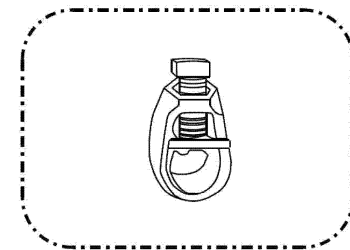
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)

NOTES:
GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD, ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



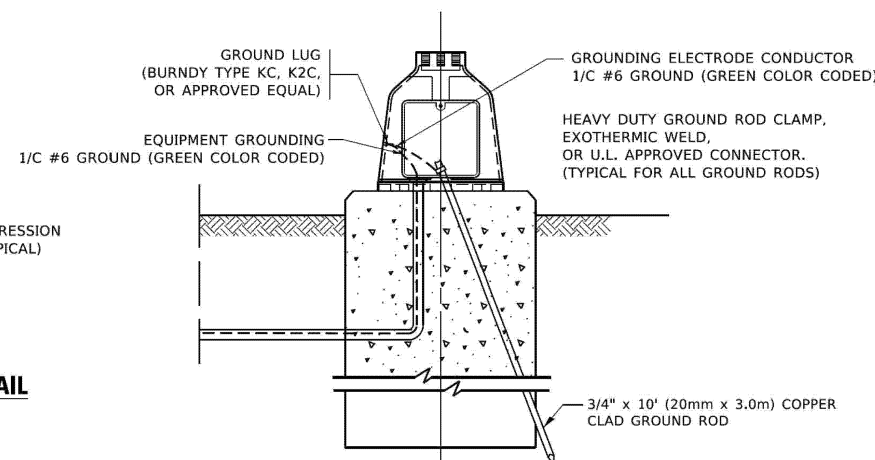
HEAVY-DUTY COMPRESSION TERMINAL
(BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP
(BURNDY TYPE GRC OR APPROVED EQUAL)

NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE /POST-GROUNDING DETAIL
(NOT TO SCALE)

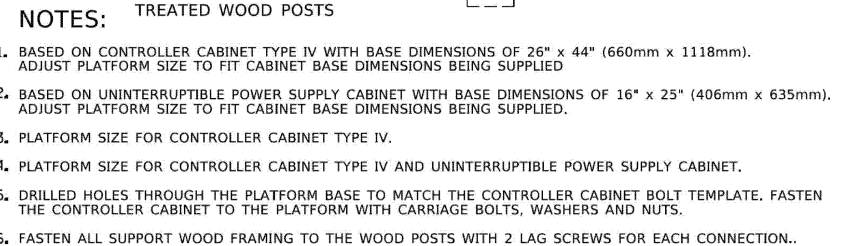
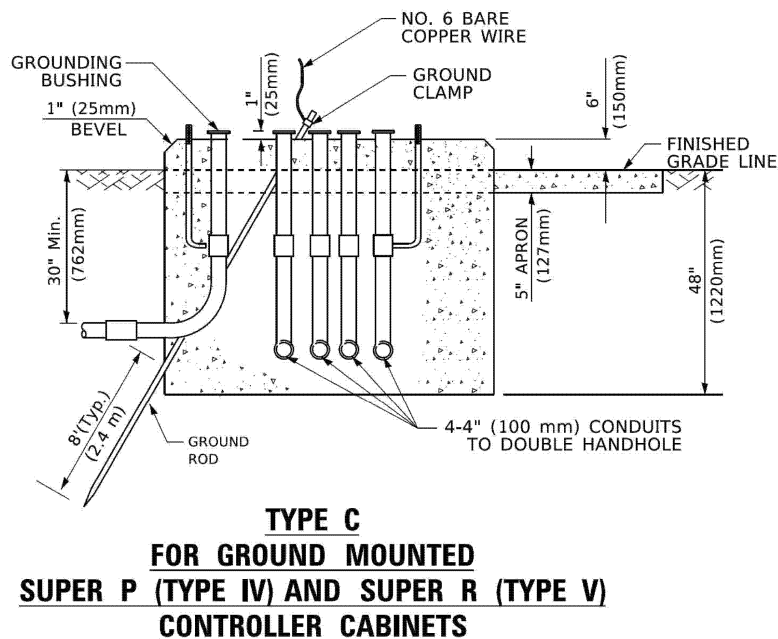
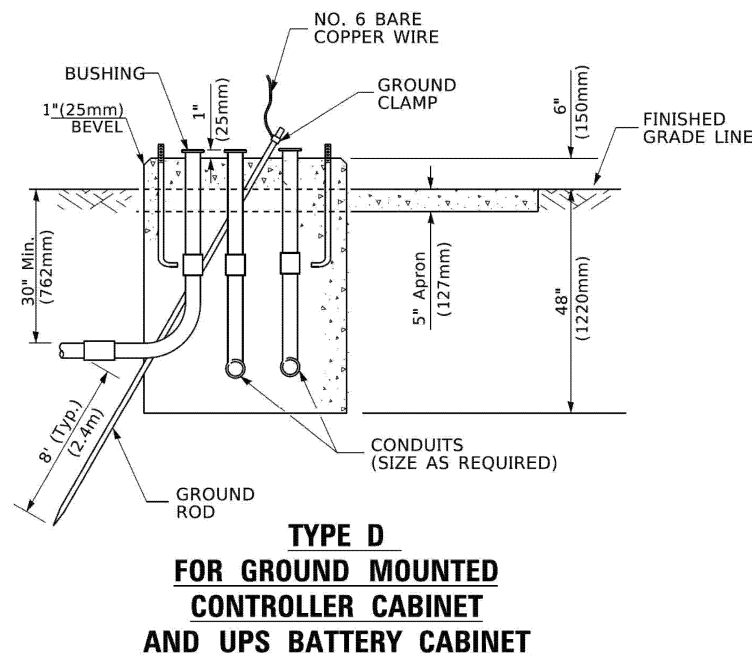
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	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: 1"=10' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	14
TS-05		CONTRACT NO. 62W58		
ILLINOIS		FED. AID PROJECT		



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

VERTICAL CABLE LENGTH	FEET	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

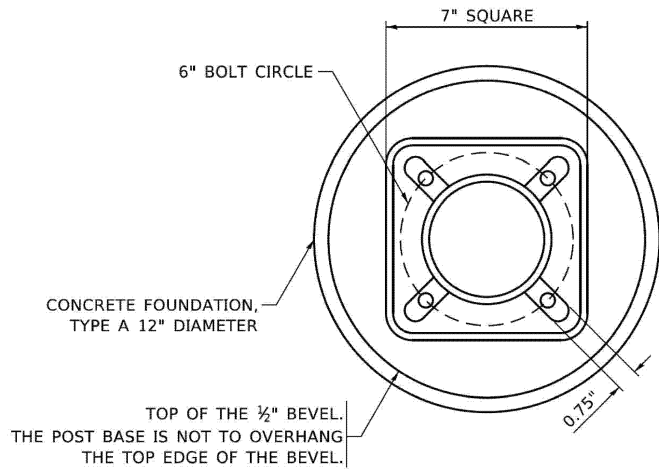
FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

Max 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 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	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)

1. These foundation depths are for sites which have cohesive soils (clays, silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Q_u) > 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 mast arm assemblies with dual arms refer to state standard 878001..

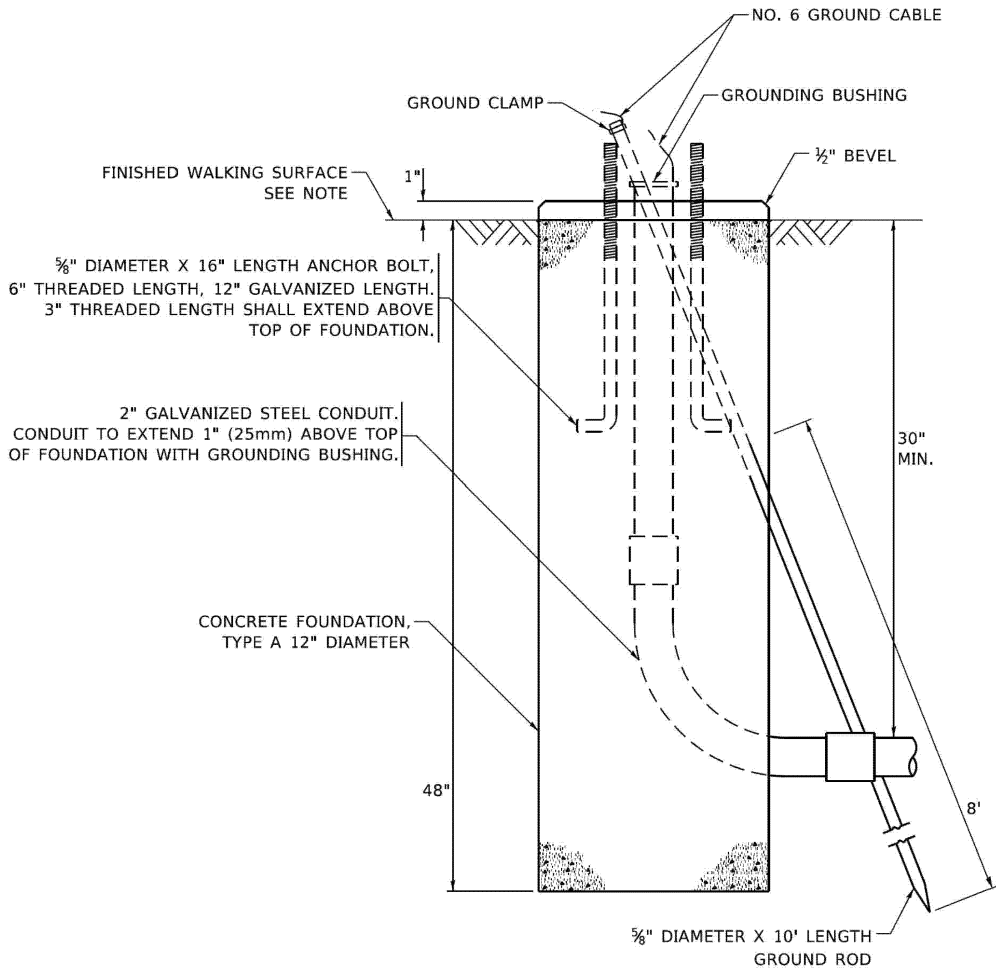
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	DRAWN -	REVISED -						VAR	2023-942-N.TS	COOK	42	15
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -		TS-05				CONTRACT NO. 62W58				
PLOT DATE = 2/13/2025	DATE -	REVISED -		SCALE: 1"=10'	SHEET	OF	SHEETS	STA.	TO STA.			
				ILLINOIS FED. AID PROJECT								

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N,TS	COOK	42	16
TS-05		CONTRACT NO. 62W58		
	ILLINOIS	FED. AID PROJECT		

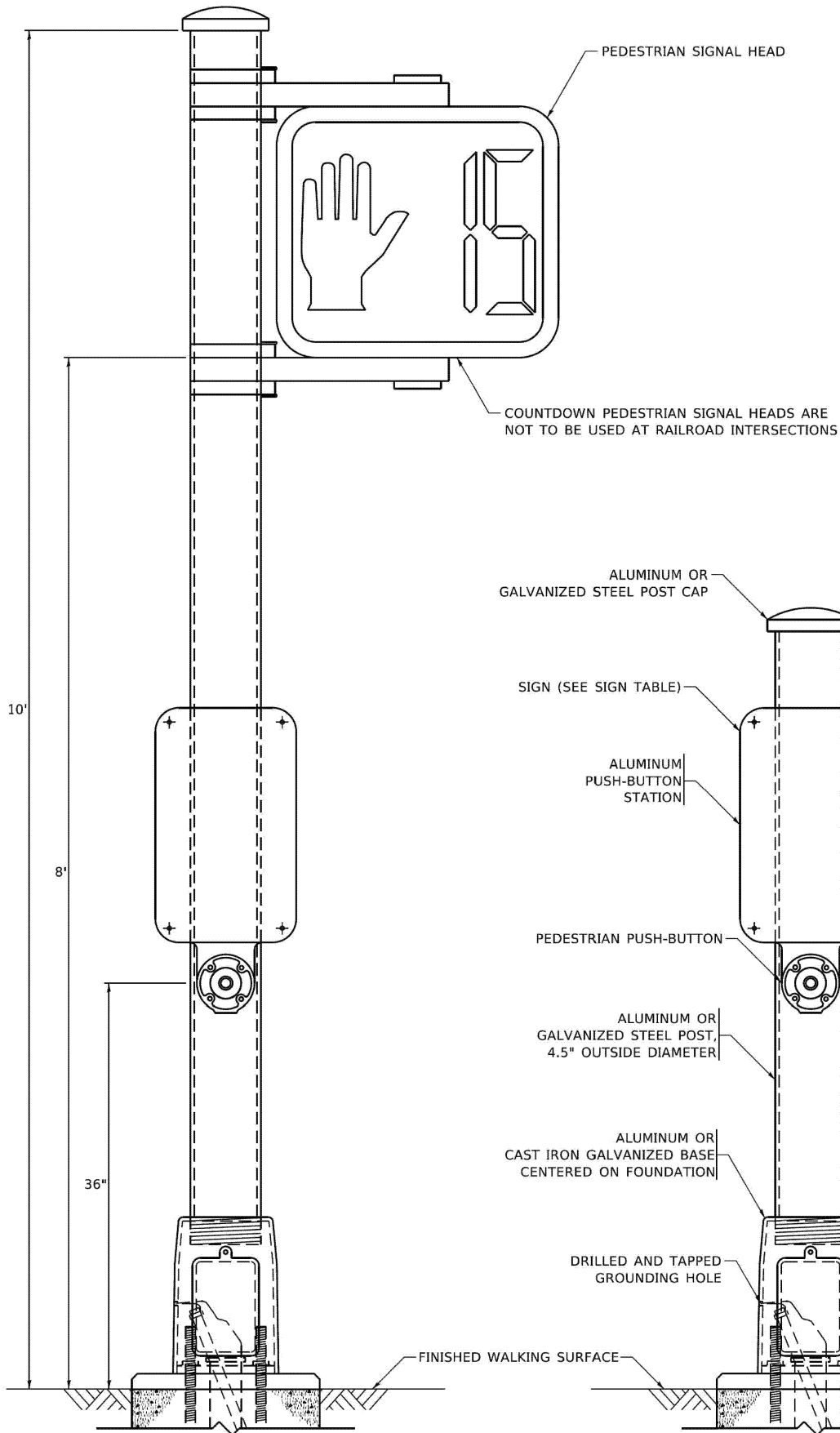


BOLT PATTERN

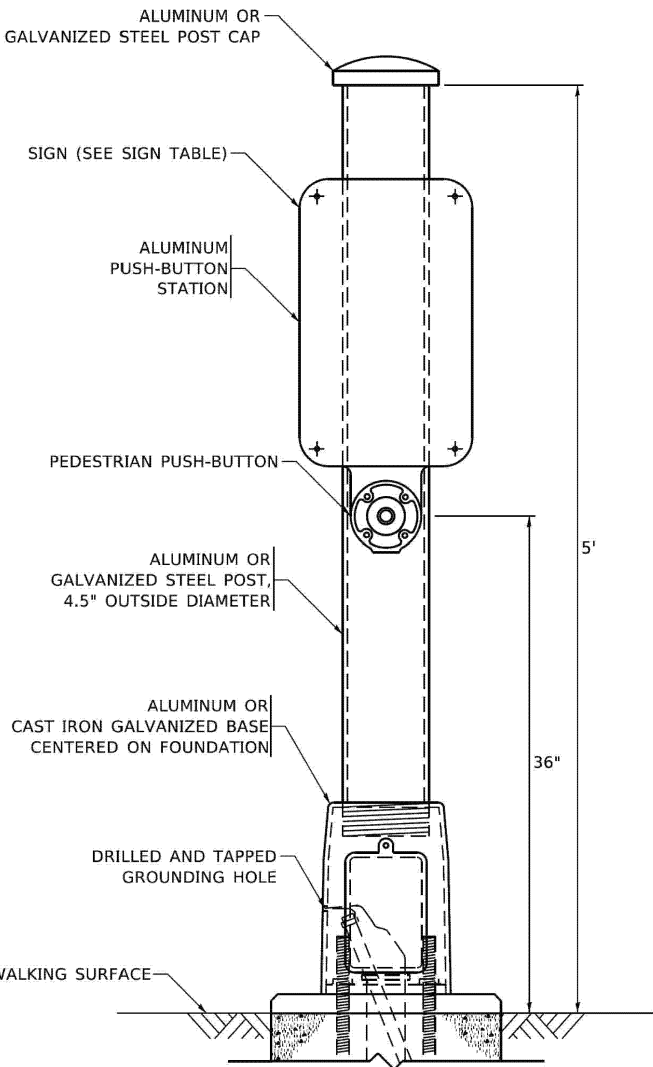
NOTE:
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



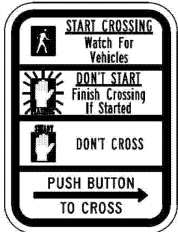
CONCRETE FOUNDATION,
TYPE A 12-INCH DIAMETER



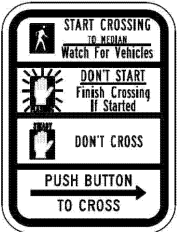
PEDESTRIAN SIGNAL POST, 10 FT.



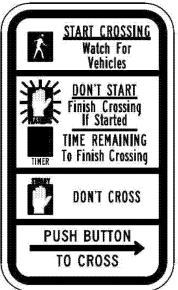
PEDESTRIAN SIGNAL POST, 5 FT.



R10-3b



R10-3d



R10-3e

SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 12"

NOTES:
1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

MODEL: Detail8 [Sheet]
FILE NAME: S:\2024\24001 - PTB 210-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15 - Trombone MA Replacement\CADD\CADD Sheets\D162W58-Sht-Details.dgn

USER NAME = afarooqi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

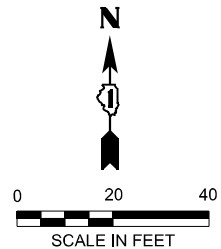
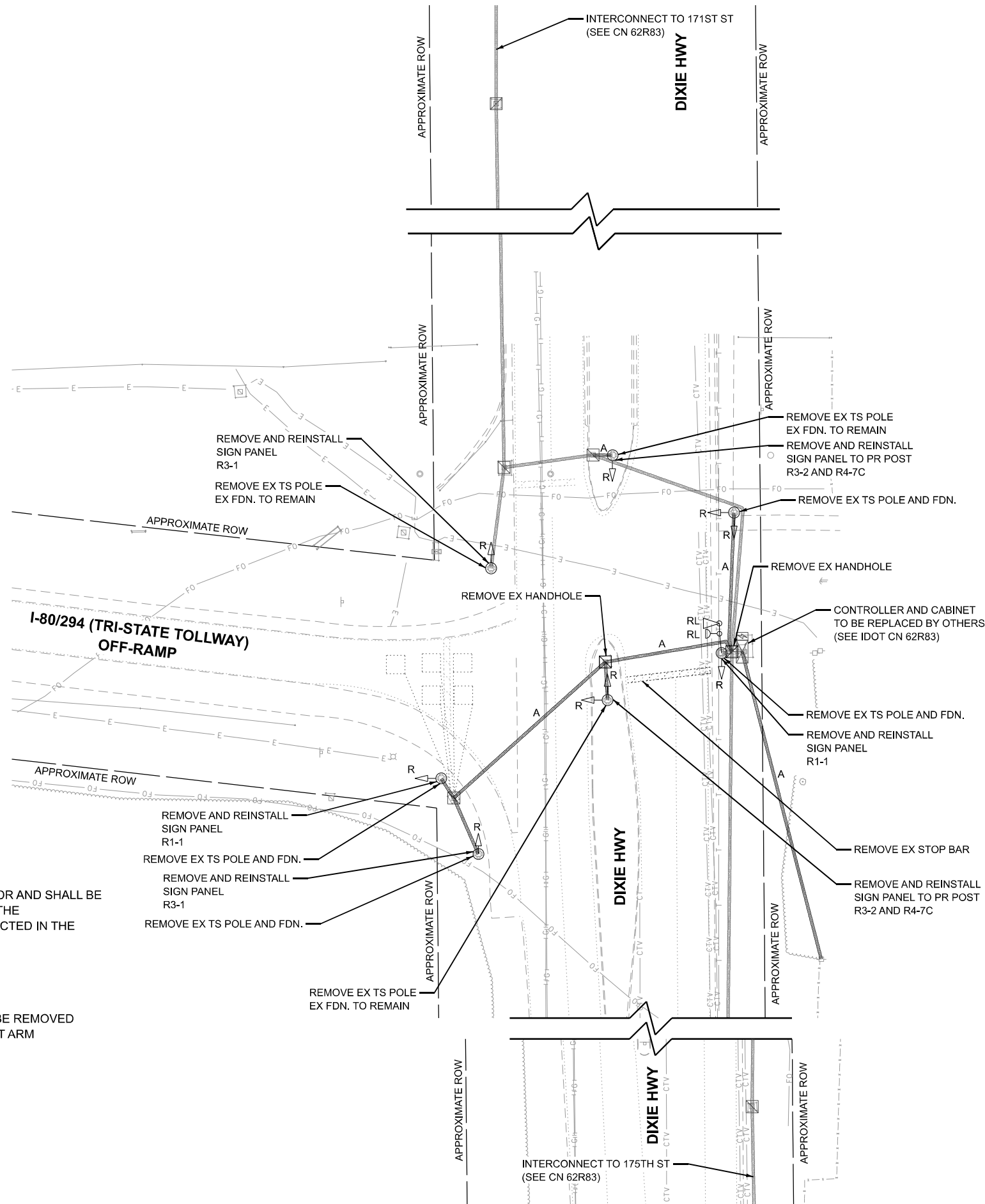
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: 1"=10' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N,TS	COOK	42	17
TS-05		CONTRACT NO. 62W58		
ILLINOIS		FED. AID PROJECT		

MODEL: Dixie Hwy I-80 - Dixie Hwy I-80
FILE NAME: S:\2024\24IL001 - PTB 210-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Tombone MA Replacement\CADD\CADD Sheets\D162W58-Sht-Removal-TS-Dixie-180.dgn



REMOVAL AND RELOCATION NOTES:

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

9	EACH	3-SECTION SIGNAL HEAD
7	EACH	TRAFFIC SIGNAL POST

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED MAST ARM ASSEMBLIES:

1	EACH	CONFIRMATION BEACON
1	EACH	LIGHT DETECTOR

NOTES:

- THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

TS 45



QUIGG ENGINEERING INC

USER NAME =	afarooqi	DESIGNED -	AAF	REVISED -	
		DRAWN -	AAF	REVISED -	
PLOT SCALE =	SSCALE\$	CHECKED -	JA	REVISED -	
PLOT DATE =	2/13/2025	DATE -	12/19/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN DIXIE HWY AT I-80/294 OFF RAMP

SCALE: 1"=20'

SHEET 1

OF 4

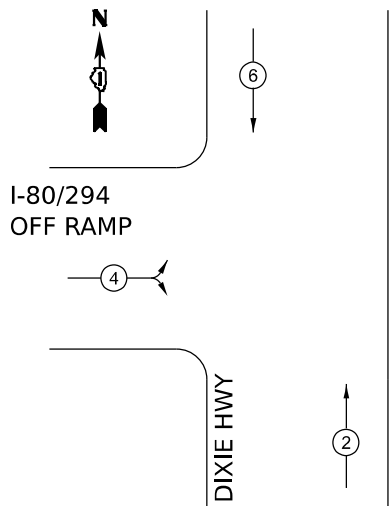
SHEETS

STA.

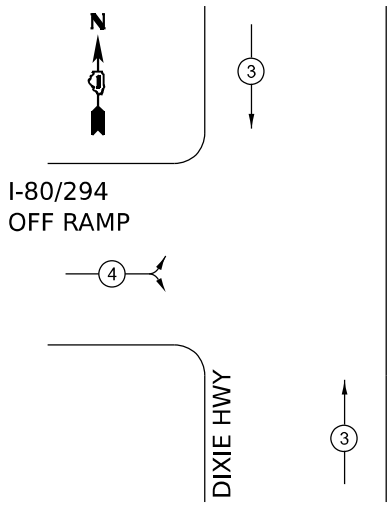
TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	18
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

EXISTING AND PROPOSED
CONTROLLER SEQUENCE



EXISTING AND PROPOSED
PREEMPTION SEQUENCE



LEGEND

- PROTECTED PHASE
- RIGHT TURN OVERLAP
- NUMBER REFERRING TO ASSOCIATED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE

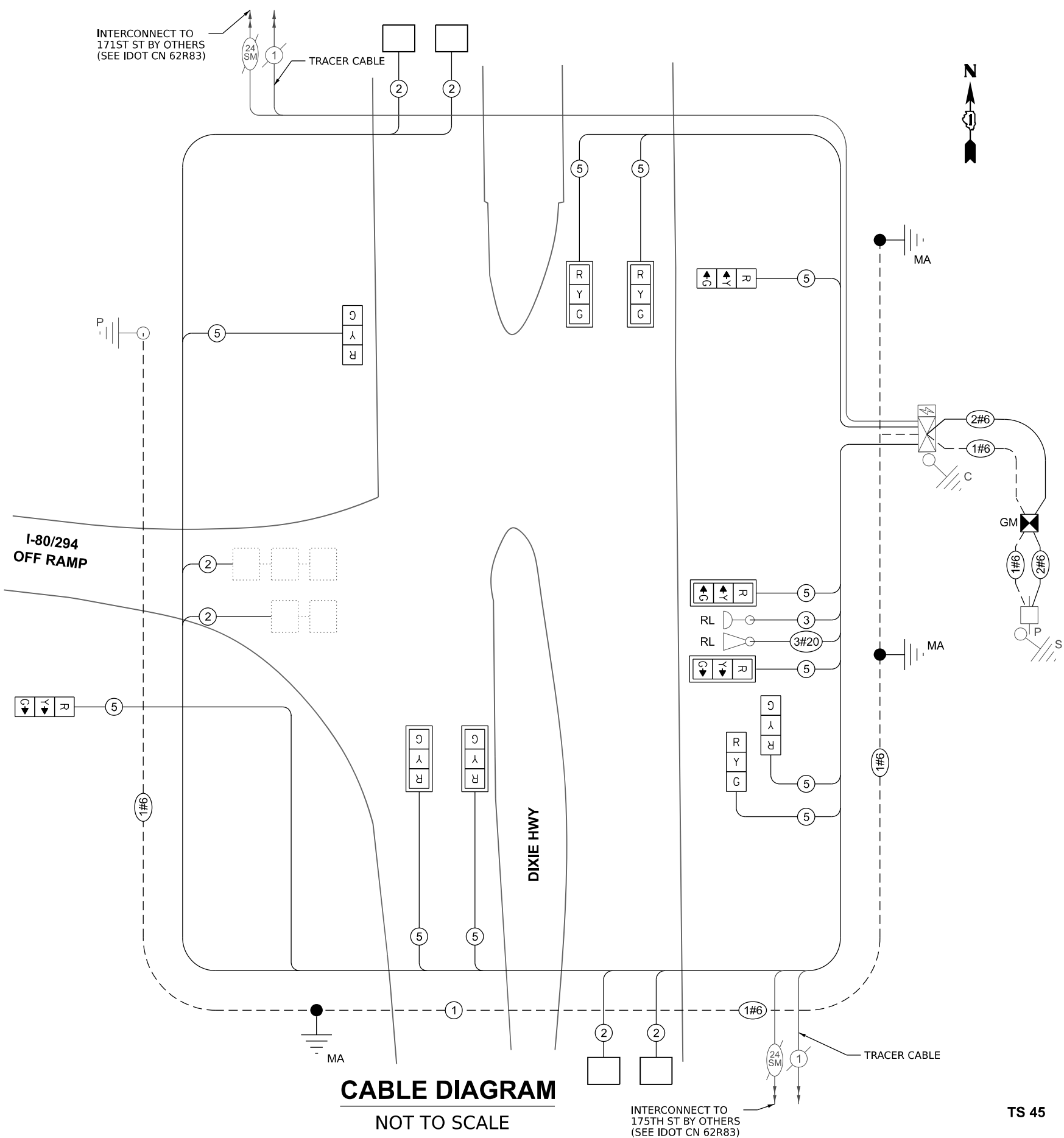
TRAFFIC SIGNAL ELECTRICAL
SERVICE REQUIREMENTS
DIXIE HWY AT I-80/294 OFF RAMP

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	1 OR 3-SECTION	11	11
	4-SECTION	-	14
	5-SECTION	-	13
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	-	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH	II OR III	-	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			296
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 WIRE SIZING			901

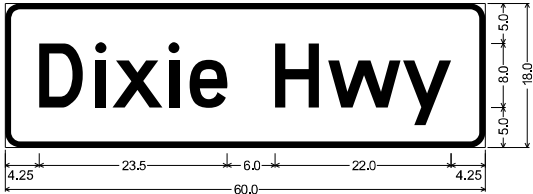
NOTES:

- ALL RED INDICATIONS SHALL HAVE LENS COVERS.

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER CT.
SCHAUMBURG, IL 60196
ENERGY SUPPLY:
CONTACT: DAVE SCHACT
PHONE: (630) 437-2129
COMPANY: COMED
ACCOUNT NUMBER: 61041-91955
METER NUMBER:



SIGN PANEL DETAILS



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

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE
DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

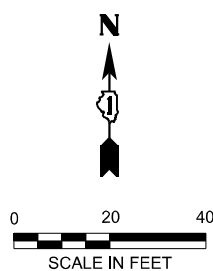
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	7.5
TELESCOPING STEEL SIGN SUPPORT	FOOT	25
BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	2
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	26
PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	55
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	128
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	89
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	221
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	105
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1612
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1534
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	150
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	746
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4.0
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	177
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1979
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	3
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
TEMPORARY INFORMATION SIGNING	SQ FT	103
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	101
ROD AND CLEAN EXISTING CONDUIT	FOOT	596
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
REMOVE AND REINSTALL SIGN PANEL	SQ FT	36
LED SIGNAL FACE, LENS COVER	EACH	11

* 100% COSTS TO THE VILLAGE OF HAZEL CREST

TS 45

MODEL: Dixie I80 Sched [Sheet]
FILE NAME: S:\2024\2414\001 - PTB 21D-13.D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\0162W58-Sht-CablePlan-Dixie-I80.dgn



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

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND RELOCATED TO THE PROPOSED MAST ARM ASSEMBLIES:

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.

MODEL: 175th Governors - 175th Governors_Main [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 210-13 DT - SRF - Various Phil Traffic Signal\WO 24-15 Trombone MA Replacement\CADD\CADD Sheets\162\W58-Shl-Removal-TS-Governors-175th.dgn



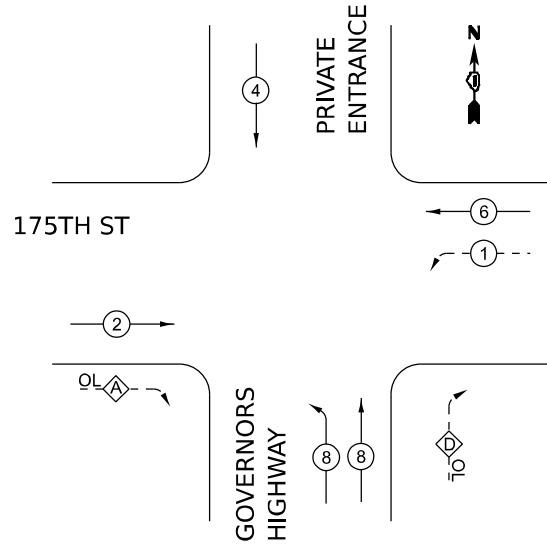
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=20'	SHEET 1	OF 4	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N,TS	COOK	42	22
		CONTRACT NO. 62W58		
ILLINOIS		FED. AID PROJECT		

MODEL: Cable Plan_175th Governors [Sheet]
FILE NAME: S:\2024\241001 - PTB 210-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15 - Trombone MA Replacement\CADD\CADD Sheets\175th-Governors-175th.dgn

EXISTING AND PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION			
OVERLAP LETTER		PERMISSIVE PHASE	PROTECTED PHASE
D	=	8	1
A	=	8	2

LEGEND

- PROTECTED PHASE
- RIGHT TURN OVERLAP
- (*) NUMBER REFERRING TO ASSOCIATED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE

NOTES:

- ALL RED INDICATIONS SHALL HAVE LENS COVERS.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

GOVERNORS HWY AT 175TH ST

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	1 OR 3-SECTION	11	121
	4-SECTION	-	14
	5-SECTION	7	13
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	-	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH	II OR III	-	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			387
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 WIRE SIZING			992

ENERGY COSTS TO: VILLAGE OF HAZEL CREST

3601 W. 183RD STREET
HAZEL CREST, IL 60429

ENERGY SUPPLY:

CONTACT: DAVE SCHACT

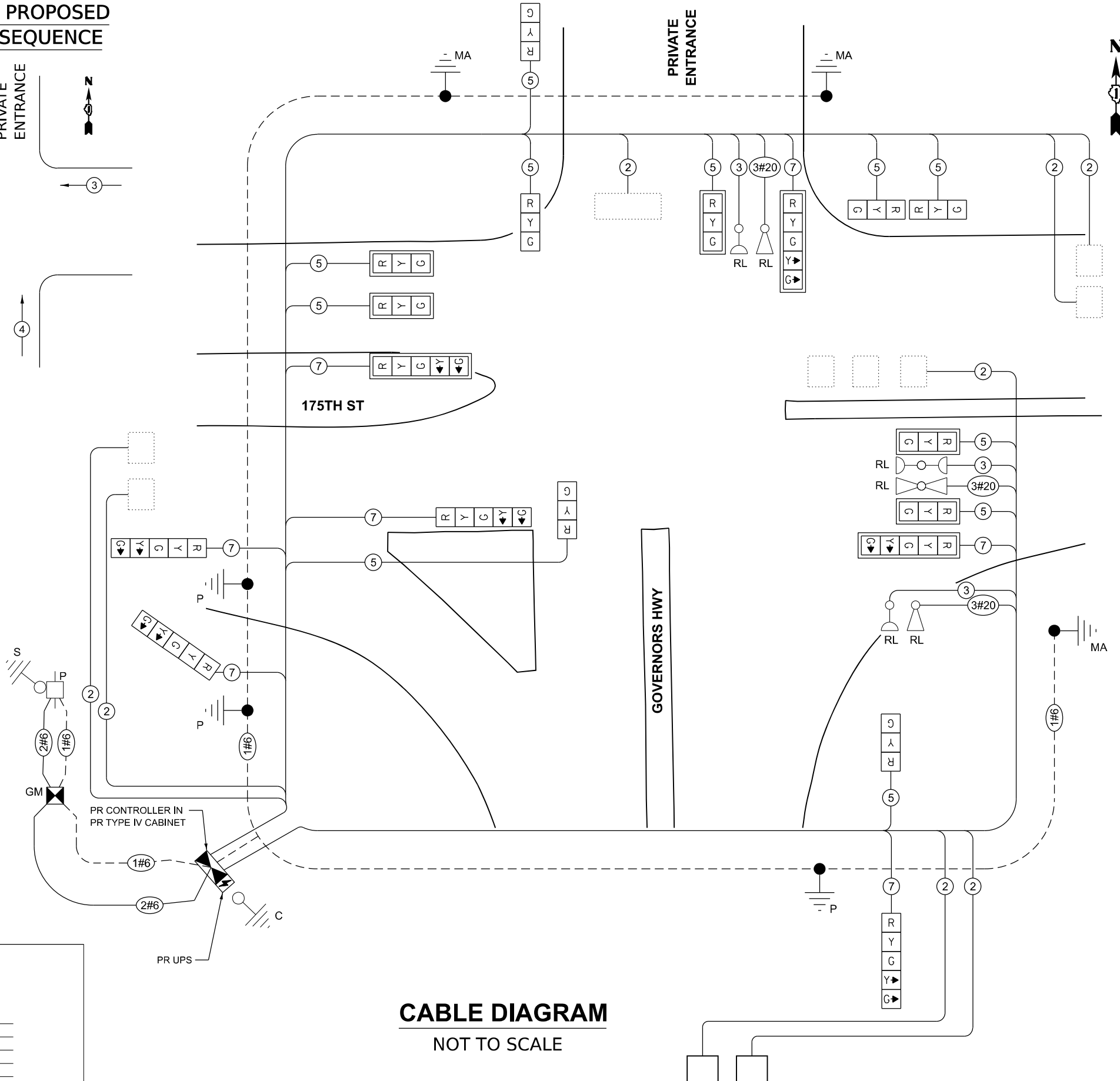
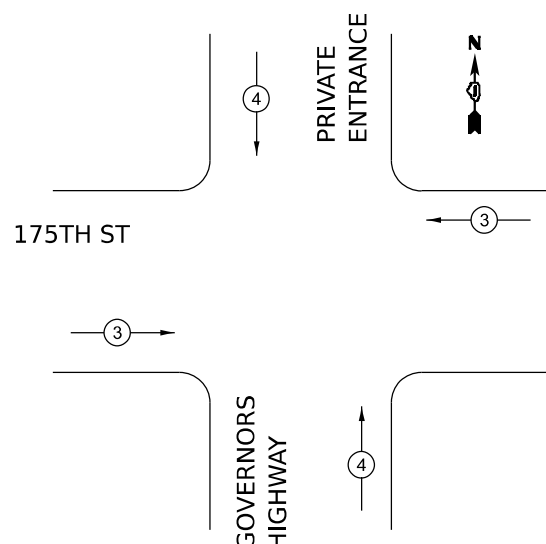
PHONE: (630) 437-2129

COMPANY: COMED

ACCOUNT NUMBER: 17630-82000

METER NUMBER:

EXISTING AND PROPOSED PREEMPTION SEQUENCE



CABLE DIAGRAM

NOT TO SCALE

TS 10860



QUIGG ENGINEERING INC

USER NAME	= afarooql
PLOT SCALE	= \$\$SCALE\$
PLOT DATE	= 2/13/2025

DESIGNED	-	AAF	REVISED	-
DRAWN	-	AAF	REVISED	-
CHECKED	-	JA	REVISED	-
DATE	-	12/19/2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE GOVERNORS HWY AT 175TH ST

SCALE: 1"=10'

SHEET 3

OF 4

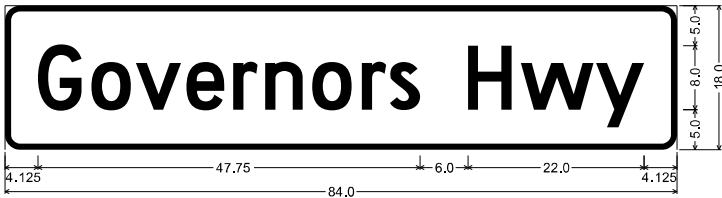
SHEETS

STA.

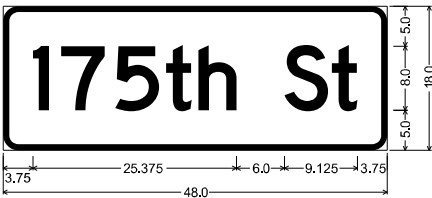
TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	24
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

SIGN PANEL DETAILS



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	10.5	2	ZZ	2



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

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE
DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

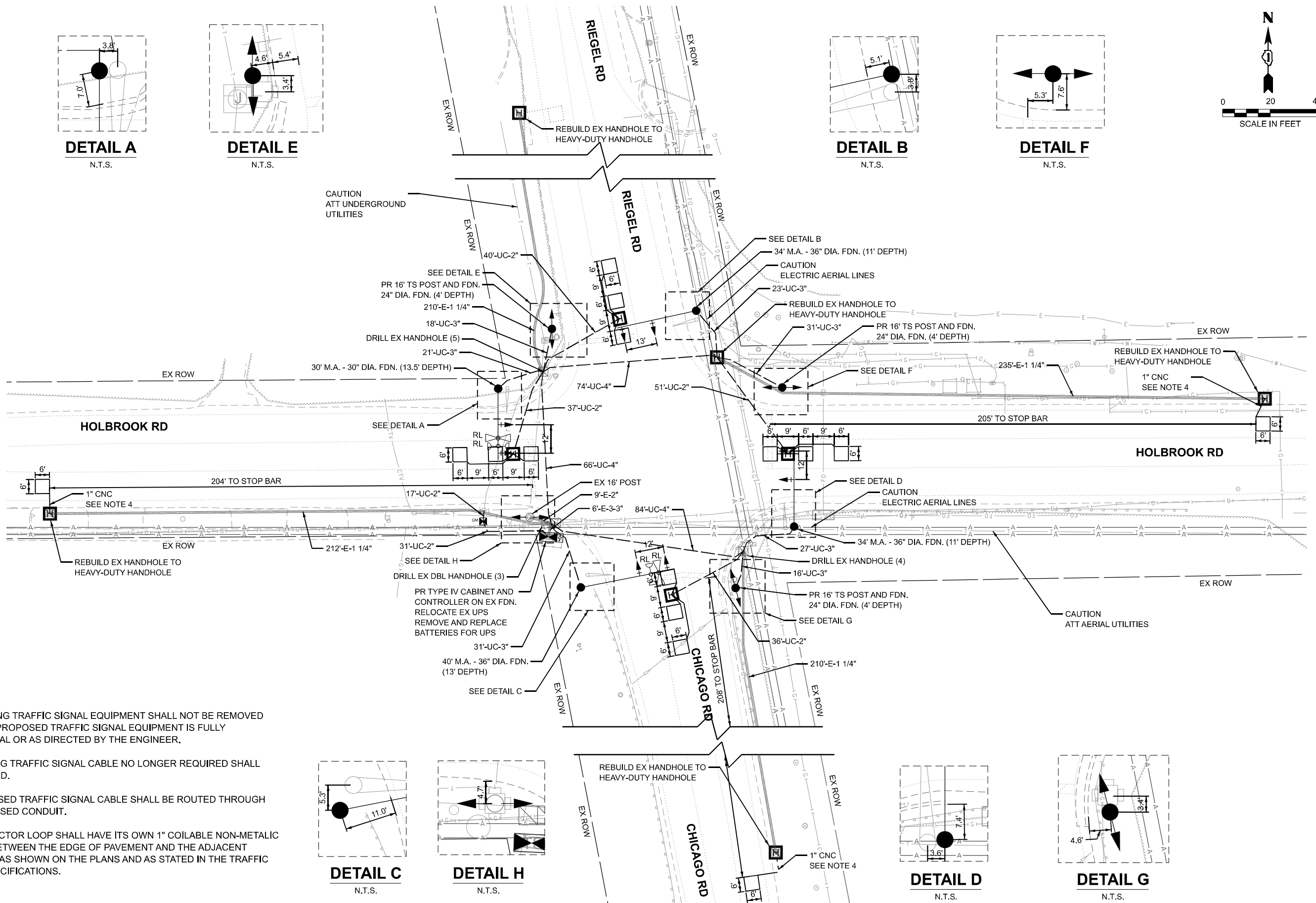
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	6
SIGN PANEL - TYPE 2	SQ FT	21
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	295
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	90
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	385
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	877
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2591
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1262
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	2049
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	87
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1250
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, 46 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	16.0
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26.0
DRILL EXISTING HANDHOLE	EACH	14
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	79
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	3
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4978
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
TEMPORARY INFORMATION SIGNING	SQ FT	78
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	864
ROD AND CLEAN EXISTING CONDUIT	FOOT	435
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	1
REMOVE AND REINSTALL SIGN PANEL	SQ FT	18.75
UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	18

* 100% COSTS TO THE VILLAGE OF HAZEL CREST

TS 10860

MODEL: 175th Governors Sched [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 21D-13.D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\162\162V58-Stk-CablePlan-Governors-175th.dgn



DETAIL A

N.T.S.

DETAIL E

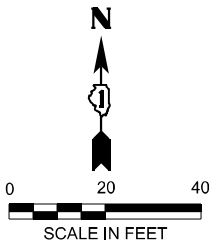
N.T.S.

DETAIL B

N.T.S.

DETAIL F

N.T.S.



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. ALL PROPOSED TRAFFIC SIGNAL CABLE SHALL BE ROUTED THROUGH THE PROPOSED CONDUIT.
4. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

DETAIL C

N.T.S.

DETAIL H

N.T.S.

DETAIL D

N.T.S.

DETAIL G

N.T.S.

MODEL: Riegel Holbrook - Riegel Holbrook - Main [Sheet]
FILE NAME: S:\2024\241001-1-PTB 210-13-D1 - SRP - Various Phil Traffic Signal\WO 24-15_Tombone MA Replacement\CADD\CADD Sheets\0162W58-Sht-P-TS-Riegel-Holbrook.dgn



QUIGG ENGINEERING INC

USER NAME = AAvilez	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 4/15/2025	DATE - 12/19/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
RIEGEL RD/CHICAGO RD AT HOLBROOK RD

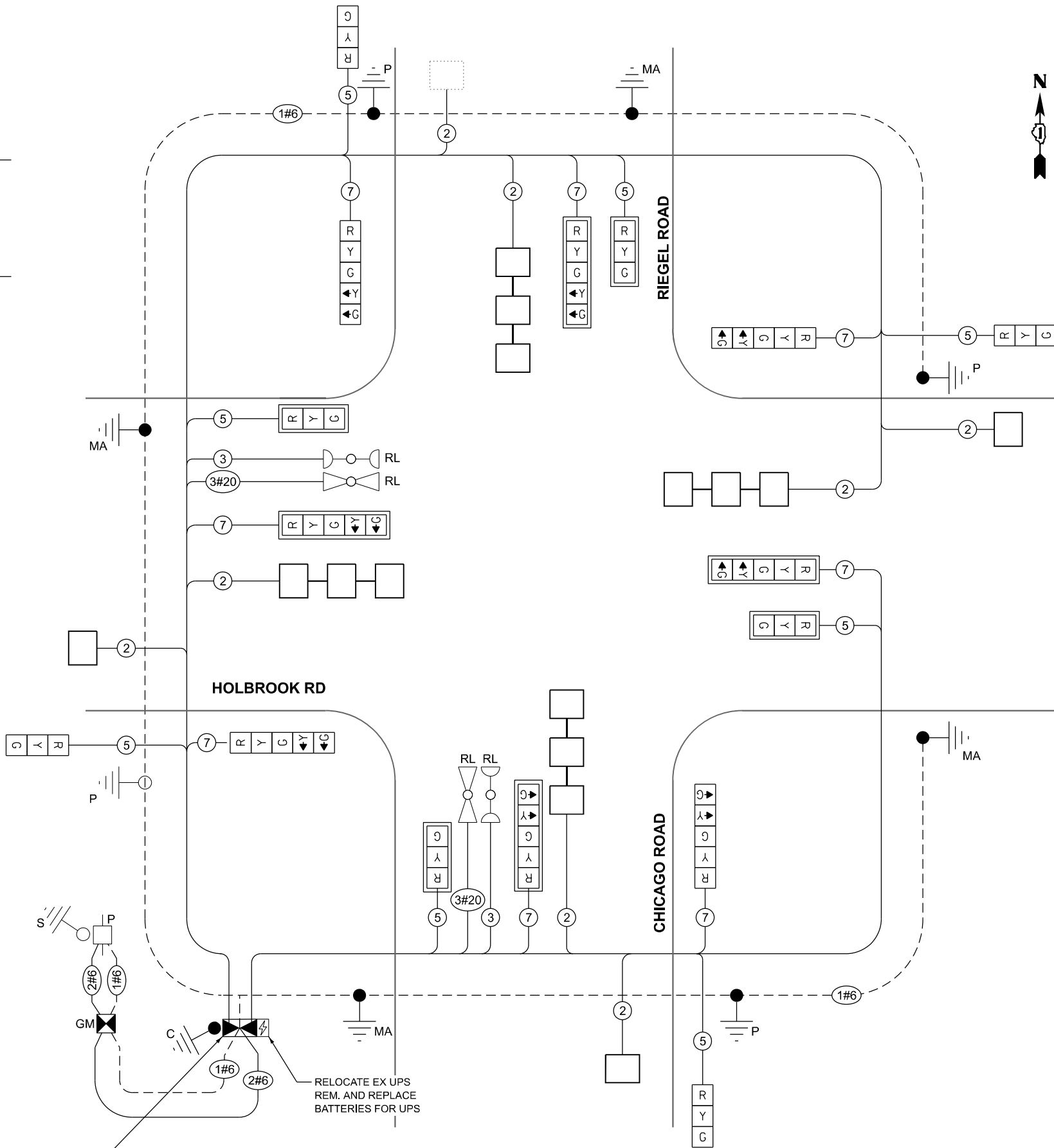
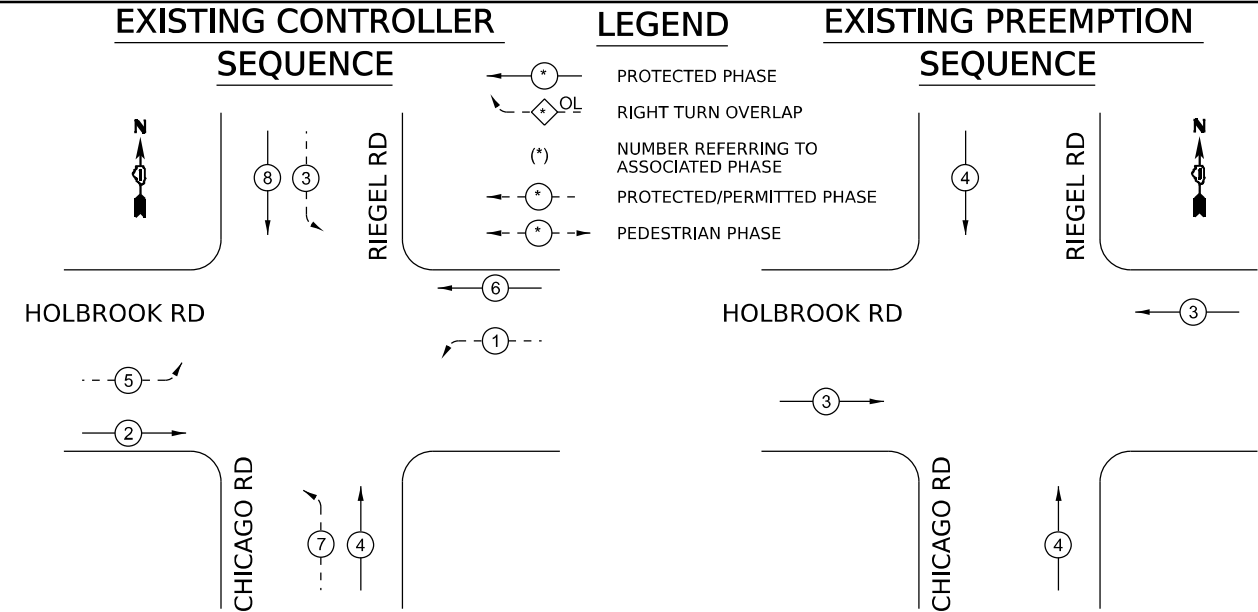
SCALE: 1"=20'

SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	27
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

TS 5710

MODEL: Riegel Holbrook Cable Plan (Sheet)
FILE NAME: S:\2024\241001 - PTB 21-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15 Trombone MA Replacement\CADD\CADD Sheets\D162W58-Srh-CablePlan-Riegel-Holbrook.dgn



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS				
RIEGEL RD AT HOLBROOK RD				
EQUIPMENT TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	1 OR 3-SECTION	8	11	88
	4-SECTION	-	14	-
	5-SECTION	8	13	-
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	2	20	40
	BLANK-OUT SIGN	-	25	-
NETWORK SWITCH	II OR III	-	35	-
CELLULAR MODEM		-	15	-
TOTAL UPS SIZING				303
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 WIRE SIZING				908

NOTES:
1. ALL RED INDICATIONS SHALL HAVE LENS COVERS.

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER CT.
SCHAUMBURG, IL 60196
ENERGY SUPPLY:
CONTACT: DAVE SCHACT
PHONE: (630) 437-2129
COMPANY: COMED
ACCOUNT NUMBER: 26584-88536
METER NUMBER:



USER NAME	= afarooql
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 2/13/2025

DESIGNED	-	AAF	REVISED	-
DRAWN	-	AAF	REVISED	-
CHECKED	-	JA	REVISED	-
DATE	-	12/19/2024	REVISED	-

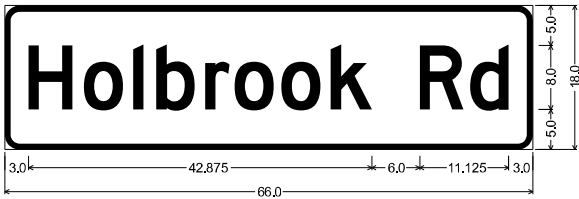
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE				
RIEGEL RD/CHICAGO RD AT HOLBROOK RD				
SCALE: 1"=10'	SHEET 3	OF 4	SHEETS	STA. TO STA.

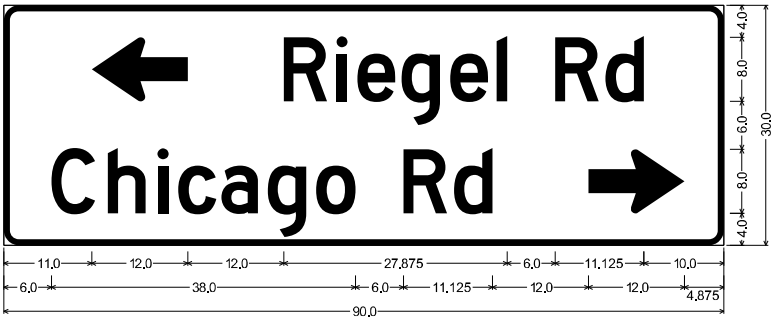
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	28
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

TS 5710

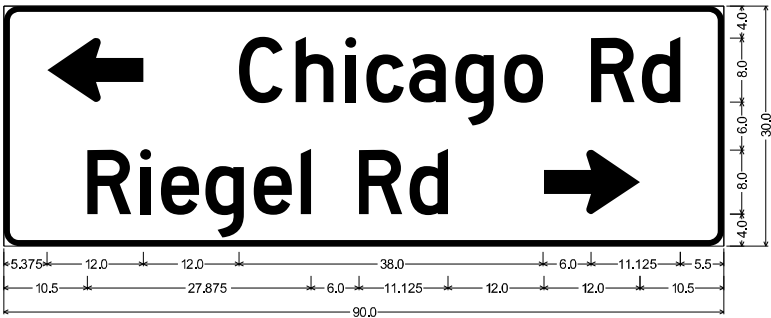
SIGN PANEL DETAILS



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	8.25	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	18.75	2	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	18.75	2	ZZ	1

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE
DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

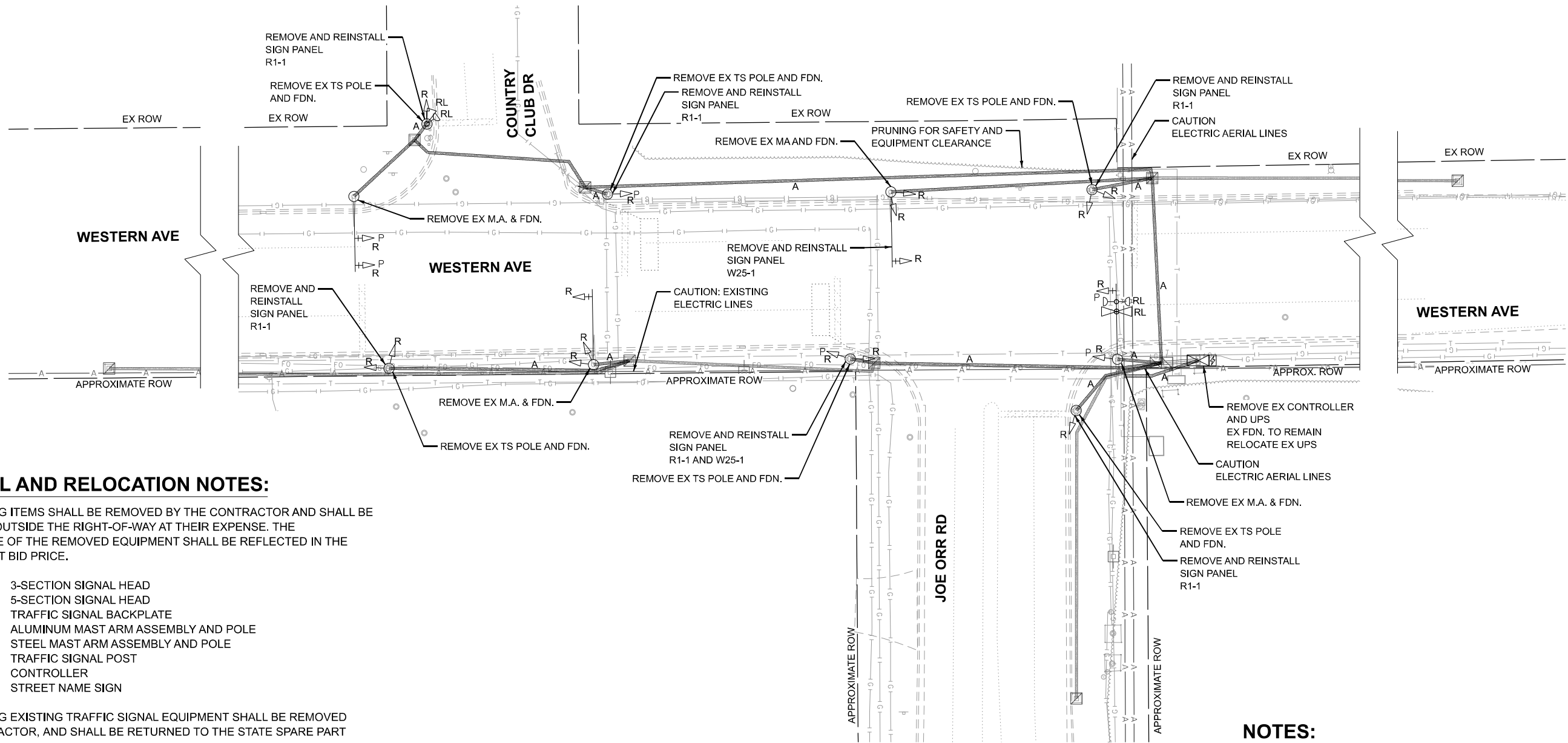
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	16.5
SIGN PANEL - TYPE 2	SQ FT	37.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	212
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	167
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	224
HEAVY-DUTY HANDHOLE	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	288
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1295
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1344
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	2070
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	74
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1557
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16.0
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	13.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	35.0
DRILL EXISTING HANDHOLE	EACH	12
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
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
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	524
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4640
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
TEMPORARY INFORMATION SIGNING	SQ FT	103
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	281
ROD AND CLEAN EXISTING CONDUIT	FOOT	873
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
SELECTIVE CLEARING	UNIT	0.75
PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	1
REMOVE AND REINSTALL SIGN PANEL	SQ FT	19
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	16

* 100% COSTS TO THE VILLAGE OF CHICAGO HEIGHTS

TS 5710

MODEL: Riegel Holbrook Sched [Sheet]
FILE NAME: S:\2024\24L\001 - PTB 213-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\0162\058-Site-CablePlan-Riegel-Holbrook.dgn



REMOVAL AND RELOCATION NOTES:

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

- 11 EACH 3-SECTION SIGNAL HEAD
- 2 EACH 5-SECTION SIGNAL HEAD
- 5 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 6 EACH TRAFFIC SIGNAL POST
- 1 EACH CONTROLLER
- 4 EACH STREET NAME SIGN

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND SHALL BE RETURNED TO THE STATE SPARE PART DEPARTMENT:

- 6 EACH 3-SECTION OPTICALLY PROGRAMMED SIGNAL HEAD

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND RELOCATED TO THE PROPOSED MAST ARM ASSEMBLIES:

- 2 EACH CONFIRMATION BEACON
- 2 EACH LIGHT DETECTOR

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. EXISTING UPS TO BE RELOCATED TO PR CONTROLLER AND CABINET.

TS 21795

MODEL: Western Joe Orr TS Pr_1 [Sheet]
FILE NAME: S:\2024\2411\01 - PTB 21795-8-Sht-Removal-TS-Western-Joe Orr.dgn



QUIGG ENGINEERING INC

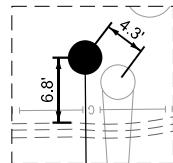
USER NAME = AFarooqj	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 4/24/2025	DATE - 12/19/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

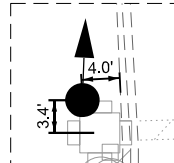
REMOVAL PLAN
WESTERN AVE AT JOE ORR RD/COUNTRY CLUB DR

SCALE: 1"=20' SHEET 1 OF 4 SHEETS STA. TO STA.

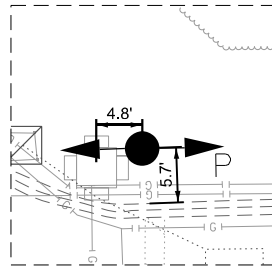
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	30
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				



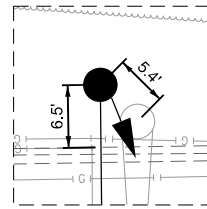
DETAIL E
N.T.S.



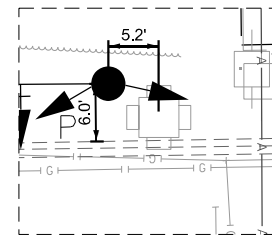
DETAIL I
N.T.S.



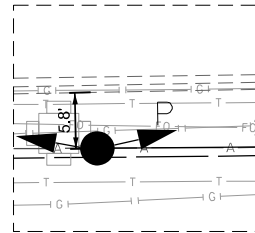
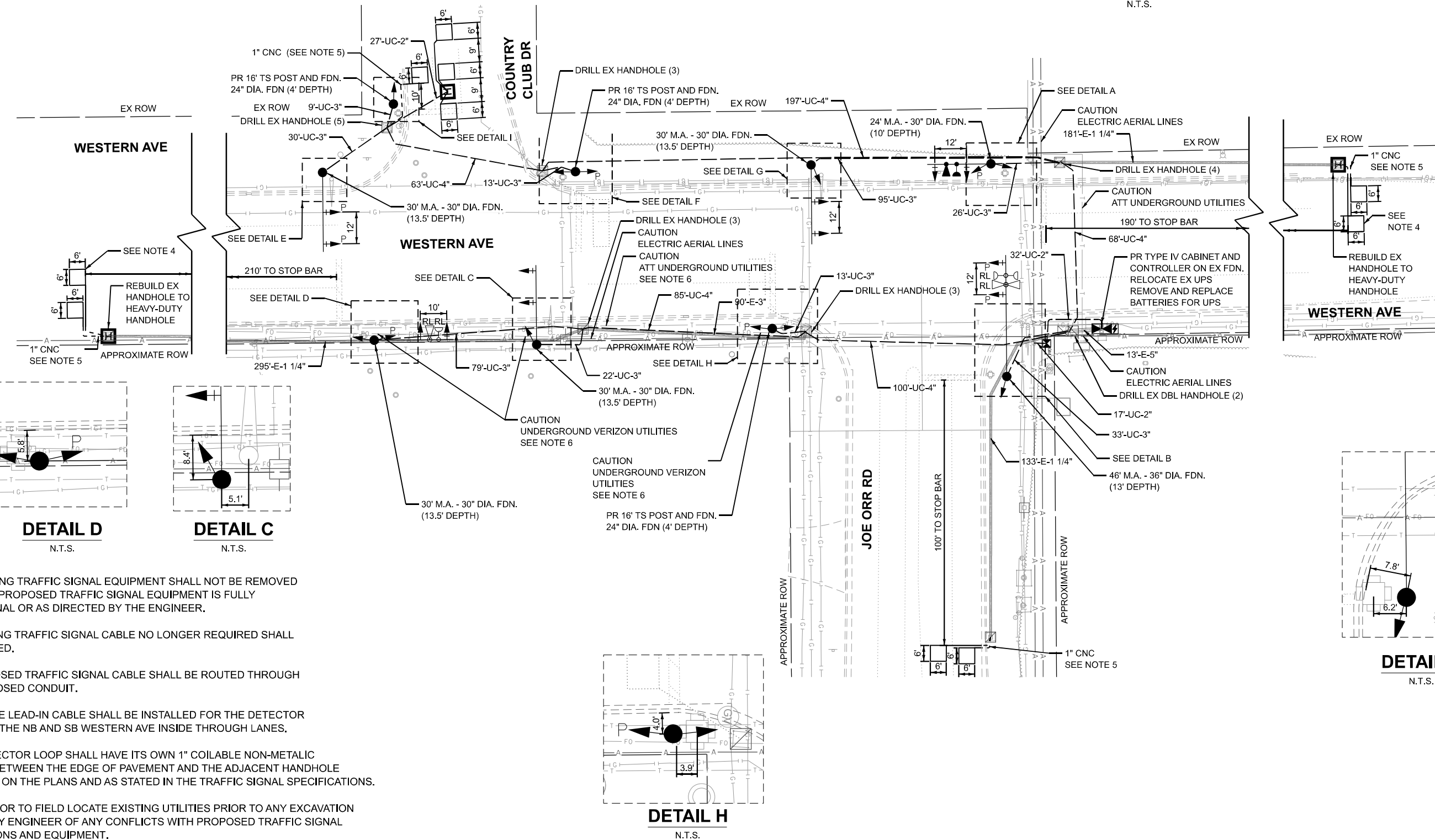
DETAIL F
N.T.S.



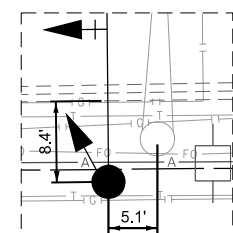
DETAIL G
N.T.S.



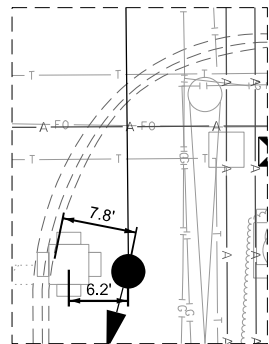
DETAIL A
N.T.S.



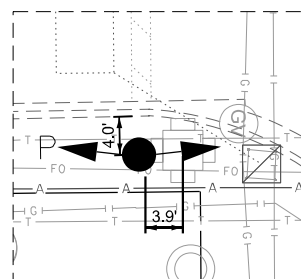
DETAIL D
N.T.S.



DETAIL C
N.T.S.



DETAIL B
N.T.S.



DETAIL H
N.T.S.

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. ALL PROPOSED TRAFFIC SIGNAL CABLE SHALL BE ROUTED THROUGH THE PROPOSED CONDUIT.
4. A SEPARATE LEAD-IN CABLE SHALL BE INSTALLED FOR THE DETECTOR LOOPS ON THE NB AND SB WESTERN AVE INSIDE THROUGH LANES.
5. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
6. CONTRACTOR TO FIELD LOCATE EXISTING UTILITIES PRIOR TO ANY EXCAVATION AND NOTIFY ENGINEER OF ANY CONFLICTS WITH PROPOSED TRAFFIC SIGNAL FOUNDATIONS AND EQUIPMENT.



QUIGG ENGINEERING INC

USER NAME	= AFarooqi
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 4/24/2025

DESIGNED	- AAF
DRAWN	- AAF
CHECKED	- JA
DATE	- 12/19/2024

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
WESTERN AVE AT JOE ORR RD/COUNTRY CLUB DR

SCALE: 1"=20'

SHEET 2

OF 4

SHEETS

STA.

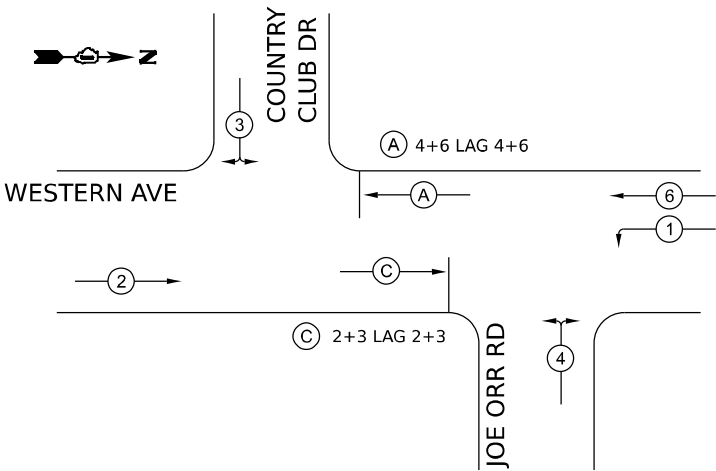
TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	31
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

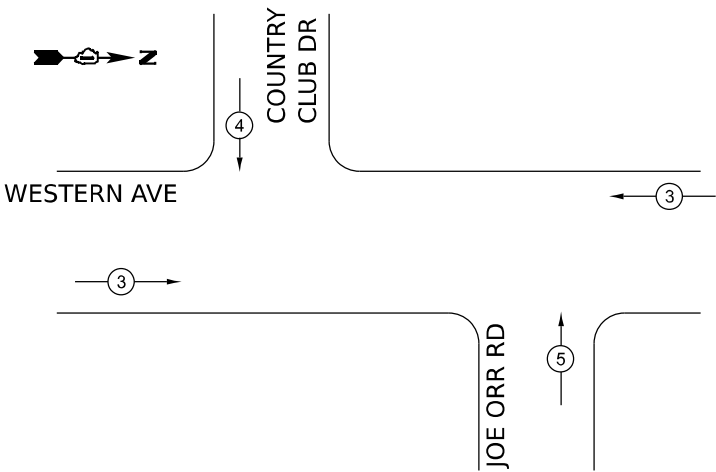
TS 21795

MODEL: Western Joe Orr Cable (Sheet)
FILE NAME: S:\2024\24IL001 - PTB 211-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15 Trombone MA Replacement\CADD\CADD Sheets\D162V58-Srk-CablePlan-Western-Joe Orr.dgn

EXISTING AND PROPOSED
CONTROLLER SEQUENCE

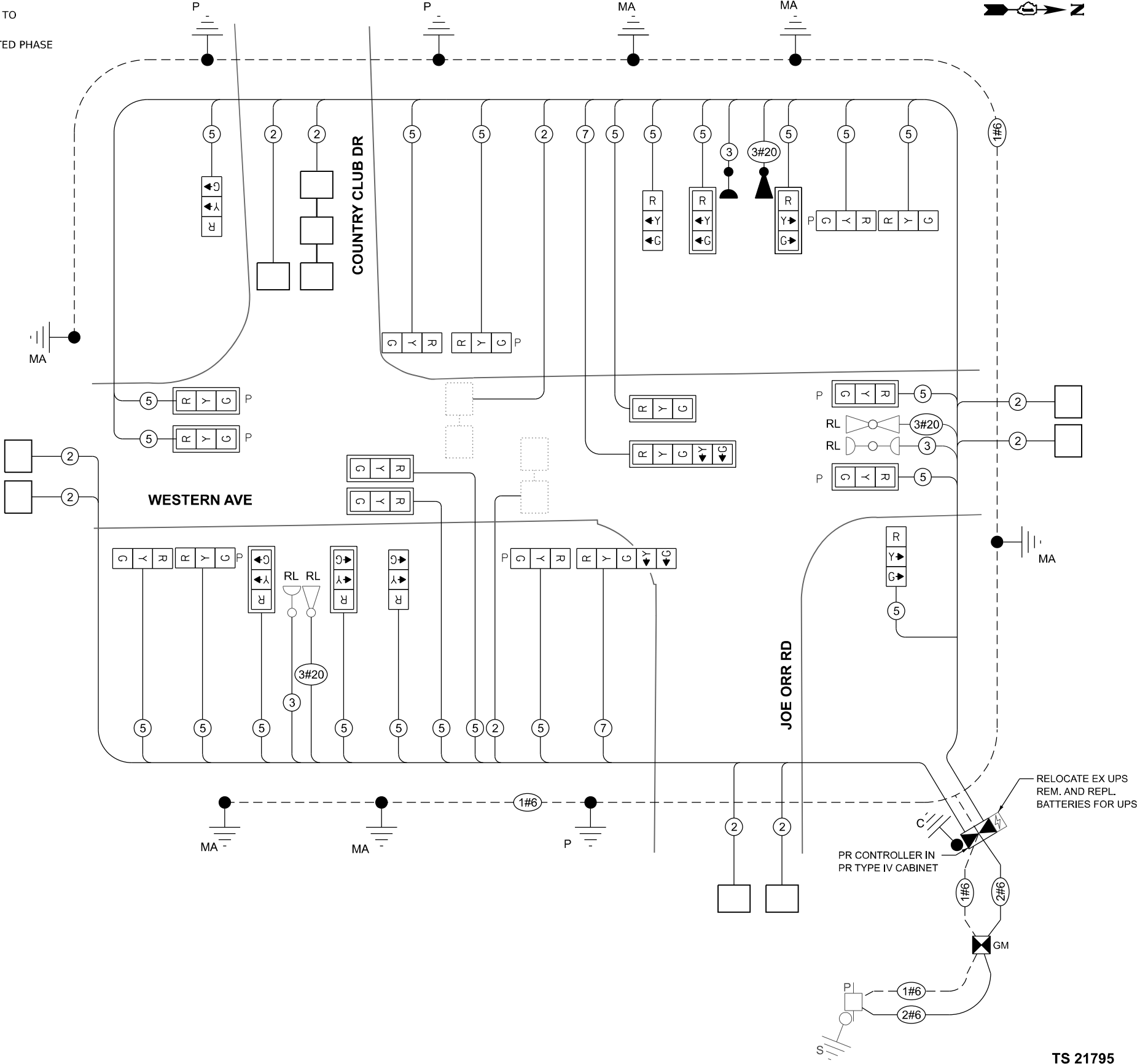


EXISTING AND PROPOSED
PREEMPTION SEQUENCE



LEGEND

- PROTECTED PHASE
- RIGHT TURN OVERLAP
- NUMBER REFERRING TO ASSOCIATED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE



TRAFFIC SIGNAL ELECTRICAL
SERVICE REQUIREMENTS
WESTERN AVE AT JOE ORR RD/COUNTRY CLUB DR

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	1 OR 3-SECTION	14	11
	4-SECTION	-	14
	5-SECTION	2	13
PROGRAMMABLE	3-SECTION	8	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	-	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH	II OR III	-	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			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 WIRE SIZING			1136

NOTES:

- ALL RED INDICATIONS SHALL HAVE LENS COVERS.

ENERGY COSTS TO:
VILLAGE OF OLYMPIA FIELDS

20040 GOVERNORS HIGHWAY
OLYMPIA FIELDS, IL 60461

ENERGY SUPPLY:

CONTACT: DAVE SCHACT

PHONE: (630) 437-2129

COMPANY: COMED

ACCOUNT NUMBER: 55649-78477

METER NUMBER:



QUIGG ENGINEERING INC

USER NAME =	afarooqi
PLOT SCALE =	SSCALE\$
PLOT DATE =	2/13/2025

DESIGNED -	AAF
DRAWN -	AAF
CHECKED -	JA
DATE -	12/19/2024

REVISED -	
REVISED -	
REVISED -	
REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE
WESTERN AVE AT JOE ORR RD/COUNTRY CLUB DR

SCALE: 1"=10'

SHEET 3

OF 4

SHEETS

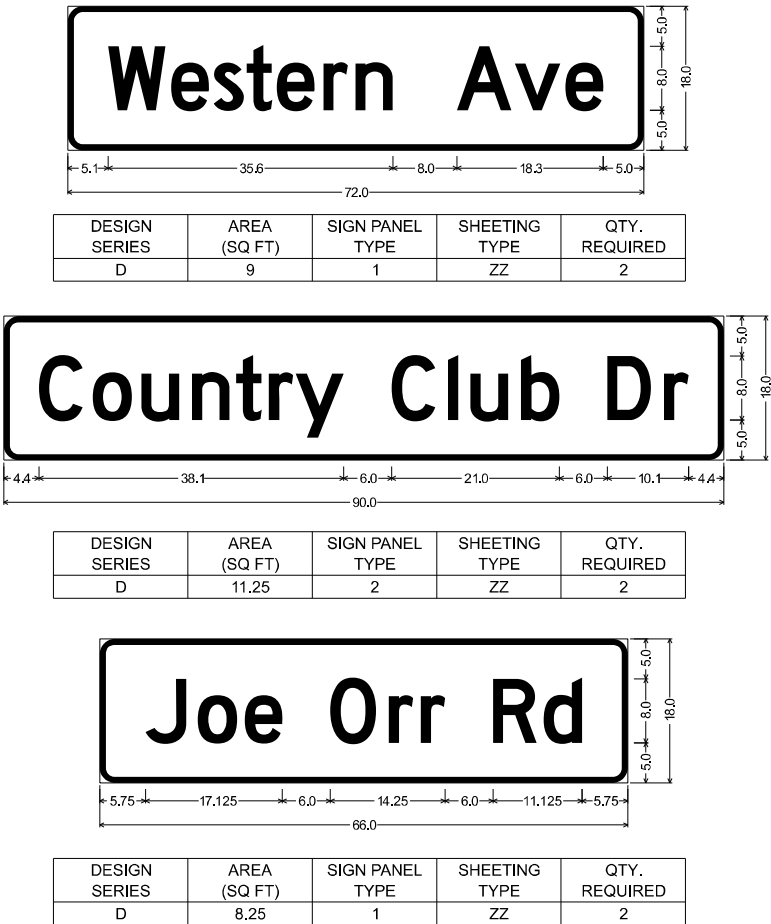
STA.

TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	32
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

TS 21795

SIGN PANEL DETAILS



ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE
DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

SCHEDULE OF QUANTITIES

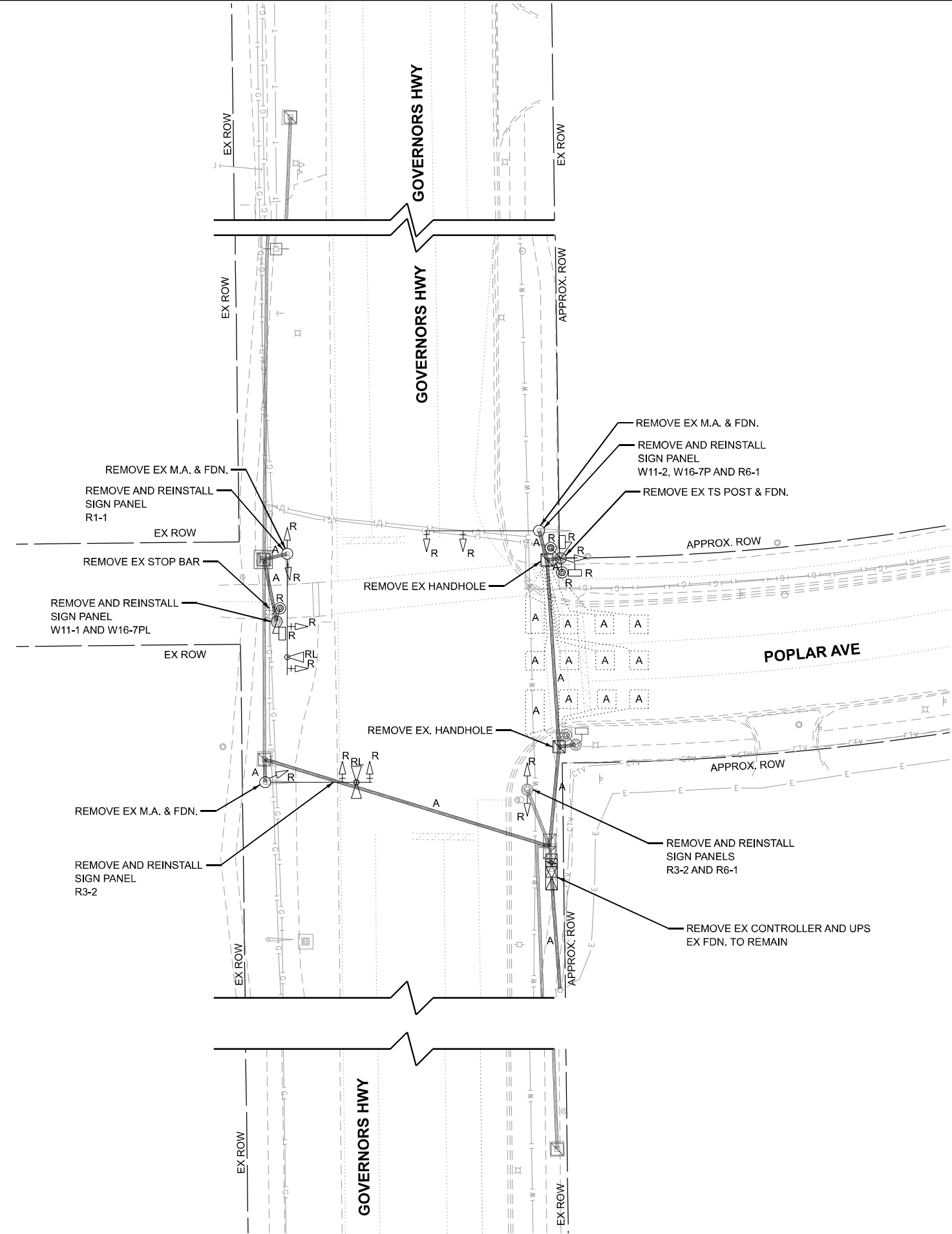
PAY ITEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	34.5
SIGN PANEL - TYPE 2	SQ FT	22.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	76
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	320
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	513
HEAVY-DUTY HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	668
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5945
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	431
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	3736
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	71
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1930
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, 30 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16.0
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	64.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13.0
DRILL EXISTING HANDHOLE	EACH	20
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
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
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	401
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7818
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	10
TEMPORARY INFORMATION SIGNING	SQ FT	103
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	677
ROD AND CLEAN EXISTING CONDUIT	FOOT	707
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	1
REMOVE AND REINSTALL SIGN PANEL	SQ FT	48
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	24
* EMERGENCY VEHICLE PRIORITY SYSTEM	EACH	1

* 100% COSTS TO THE VILLAGE OF OLYMPIA FIELDS

TS 21795

MODEL: Western Joe Orr Sched [Sheet]
FILE NAME: S:\2024\24IL001 - PTB 217-13.D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\0162W58-Sht-CablePlan-Western-Joe Orr.dgn

MODEL: Governors Poplar - Governors Poplar
FILE NAME: S:\2024\241001 - PTB 210-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\D162W58-Sht-Removal-TS-Governors-Poplar.dgn



REMOVAL AND RELOCATION NOTES:

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

- 11 EACH SIGNAL HEAD, 3-SECTION SIGNAL HEAD
- 3 EACH PEDESTRIAN PUSH-BUTTON
- 3 EACH PEDESTRIAN SIGNAL HEAD
- 6 EACH TRAFFIC SIGNAL BACKPLATE
- 3 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 1 EACH CONTROLLER
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY
- 1 EACH TRAFFIC SIGNAL POST
- 2 EACH STREET NAME SIGN

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND RELOCATED TO THE PROPOSED MAST ARM ASSEMBLIES:

- 2 EACH LIGHT DETECTOR

NOTES:

- THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

TS 5195



QUIGG ENGINEERING INC

USER NAME = afarooqi	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 2/13/2025	DATE - 12/19/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

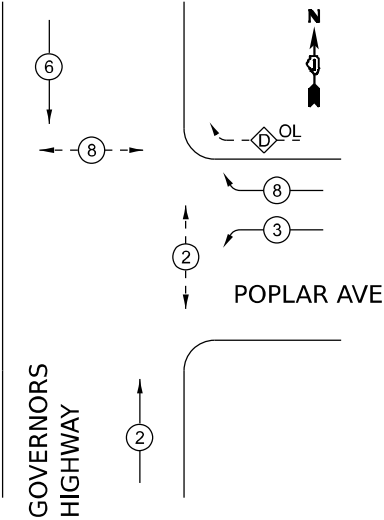
REMOVAL PLAN
GOVERNORS HWY AT POPLAR AVE

SCALE: 1"=20' SHEET 1 OF 4 SHEETS STA. TO STA.

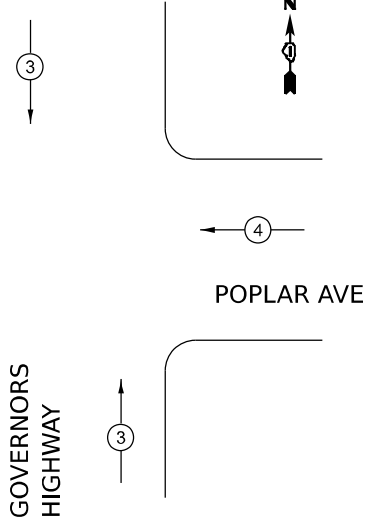
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	34
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

MODEL: Cable Plan, Governors Poplar - Cable Plan, Governors Poplar (Sheet)
FILE NAME: S:\2024\241001 - PTB 21-1-13 D1 - SRP - Various PHL Traffic Signal\WO 24-15 - Trombone MA Replacement\CADD\CADD Sheets\162V58-Sht-CablePlan-Governors-Poplar.dgn

EXISTING AND PROPOSED
CONTROLLER SEQUENCE



EXISTING AND PROPOSED
PREEMPTION SEQUENCE



LEGEND

- PROTECTED PHASE
- RIGHT TURN OVERLAP
- NUMBER REFERRING TO ASSOCIATED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE

TRAFFIC SIGNAL ELECTRICAL
SERVICE REQUIREMENTS
GOVERNORS HWY AT POPLAR AVE

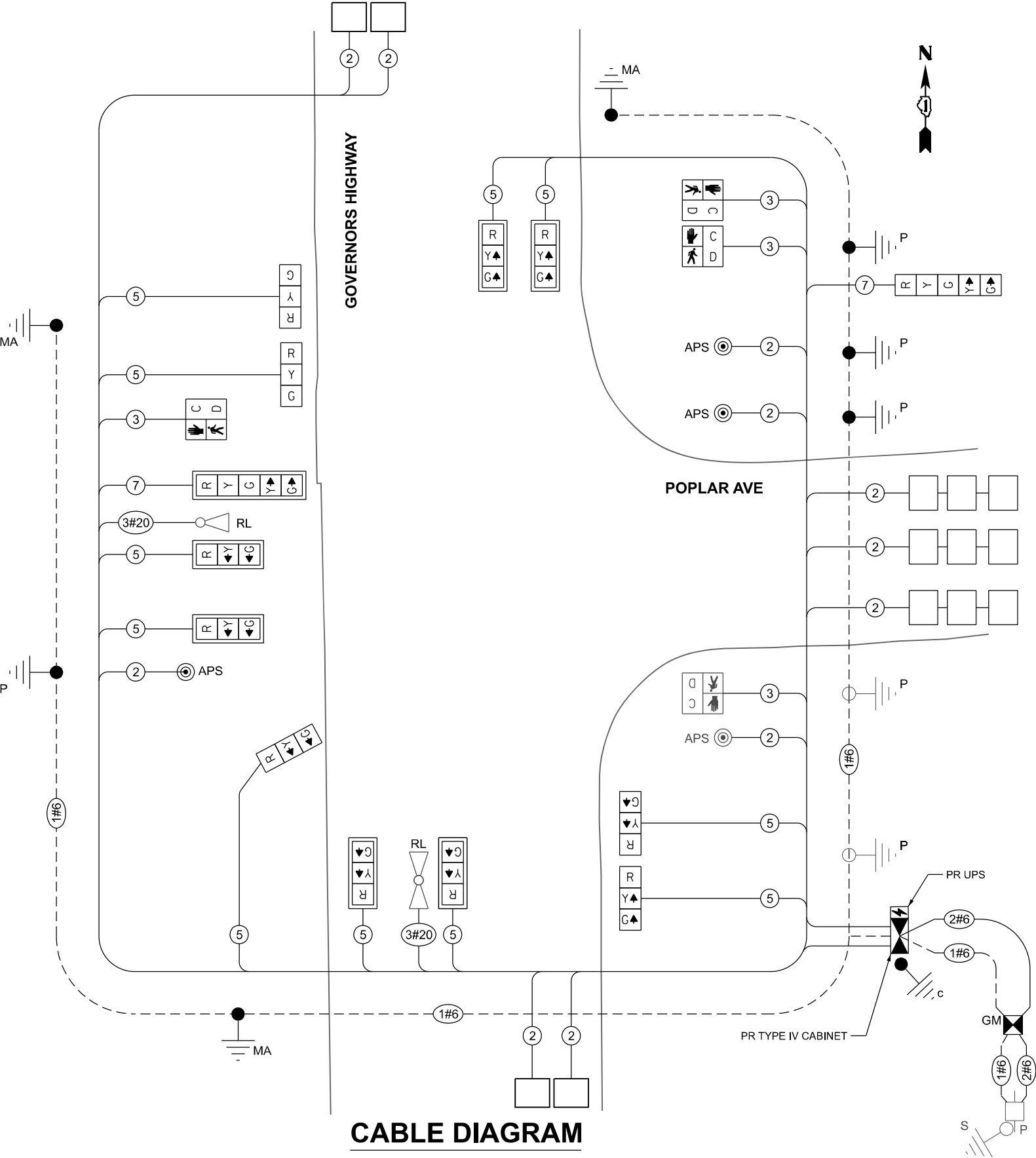
EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	1 OR 3-SECTION	11	121
	4-SECTION	-	14
	5-SECTION	2	13
PROGRAMMABLE	3-SECTION	-	22
	4-SECTION	-	32
	5-SECTION	-	28
PEDESTRIAN SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION	RADAR OR VIDEO	1	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH	II OR III	-	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			402
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 WIRE SIZING			1007

NOTES:

1. ALL RED INDICATIONS SHALL HAVE LENS COVERS.

ENERGY COSTS TO:
VILLAGE OF RICHTON PARK
4455 SAUK TRAIL
RICHTON PARK, IL 60471
ENERGY SUPPLY:
CONTACT: DAVE SCHACT
PHONE: (630) 437-2129
COMPANY: COMED
ACCOUNT NUMBER: 62017-98500
METER NUMBER:

CABLE DIAGRAM
NOT TO SCALE



TS 5195



QUIGG ENGINEERING INC

USER NAME = afarooqi
PLOT SCALE = \$SCALE\$
PLOT DATE = 2/13/2025

DESIGNED - AAF
DRAWN - AAF
CHECKED - JA
DATE - 12/19/2024

REVISED -
REVISED -
REVISED -
REVISED -

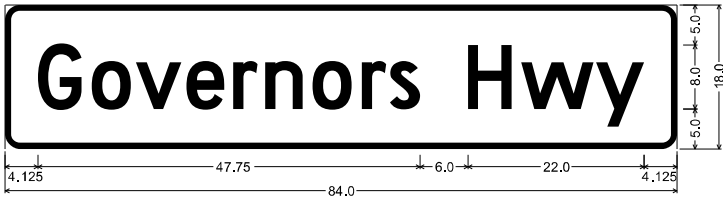
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE
GOVERNORS HWY AT POPLAR AVE

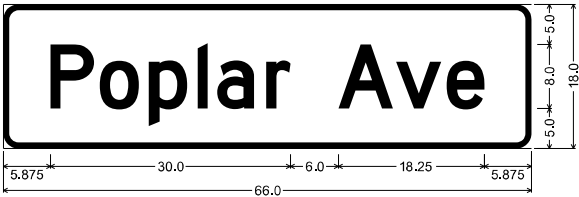
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SHEET 3 OF 4 SHEETS
STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	36
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

SIGN PANEL DETAILS



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	10.5	2	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	8.25	1	ZZ	2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE
DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	16.5
SIGN PANEL - TYPE 2	SQ FT	10.5
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	90
PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	44
PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	9
PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	10
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	215
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	53
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	208
HANDHOLE	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	691
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1153
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2147
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	451
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	1738
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	74
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1167
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	8.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	37
DRILL EXISTING FOUNDATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	6
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
DETECTOR LOOP, TYPE I	FOOT	718
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3973
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	2
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
TEMPORARY INFORMATION SIGNING	SQ FT	103
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	270
ROD AND CLEAN EXISTING CONDUIT	FOOT	564
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	3
REMOVE AND REINSTALL SIGN PANEL	SQ FT	30
UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	3
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12
LED SIGNAL FACE, LENS COVER	EACH	13

* 100% COSTS TO THE VILLAGE OF RICHTON PARK

TS 5195

MODEL: Schedule, Governors Poplar - Schedule, Governors Poplar (Sheet)
FILE NAME: S:\2024\2414\001 - PTB 21D-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\0162W58-Sht-CablePlan-Governors-Poplar.dgn



USER NAME = afarooql	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 2/13/2025	DATE - 12/19/2024	REVISED -

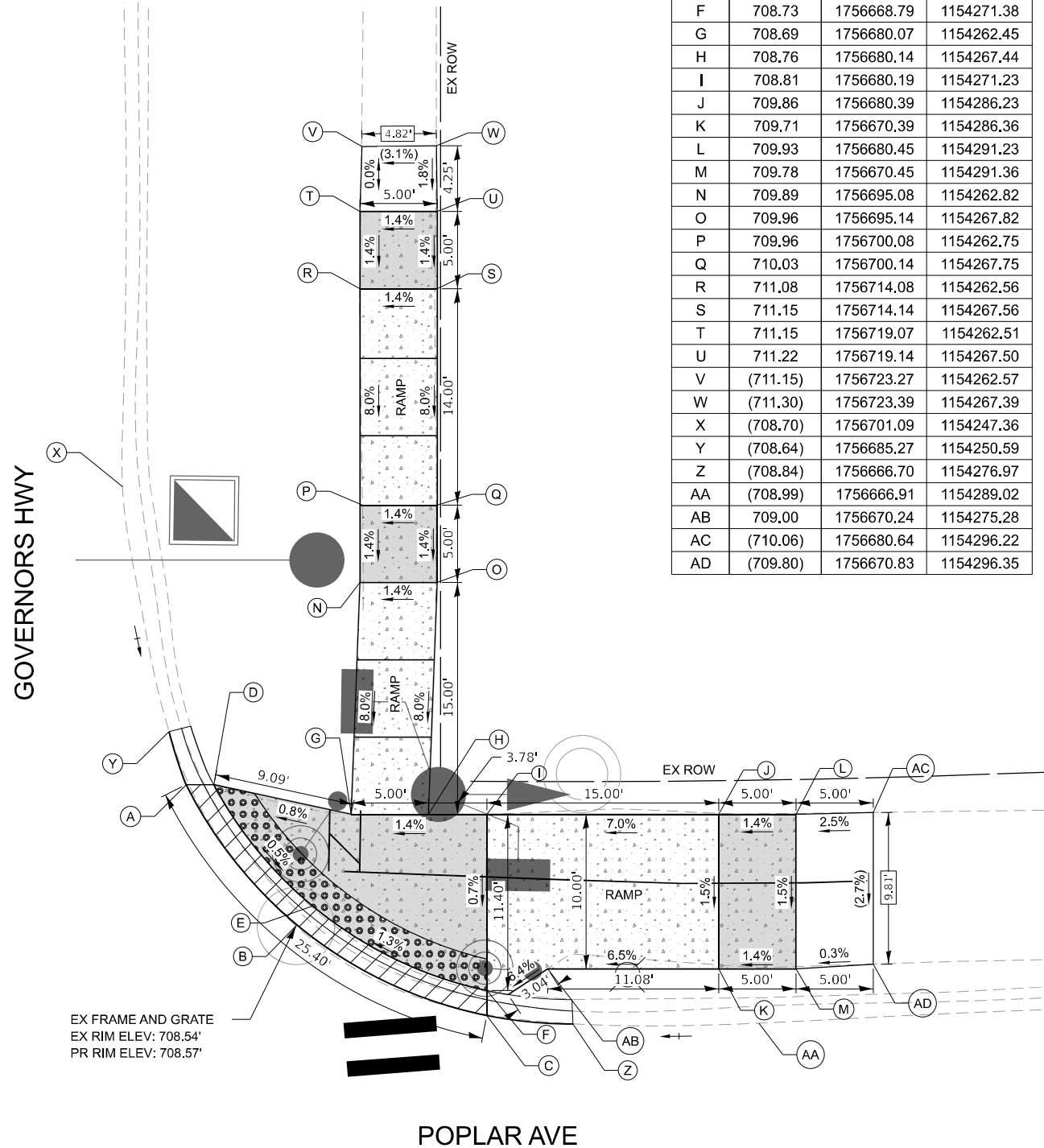
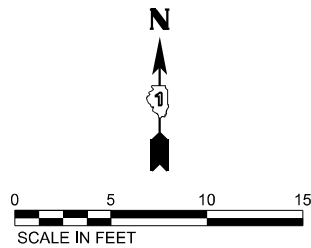
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES AND DETAILS
GOVERNORS HWY AT POPLAR AVE

SCALE: 1"=10' SHEET 4 OF 4 SHEETS STA. TO STA.

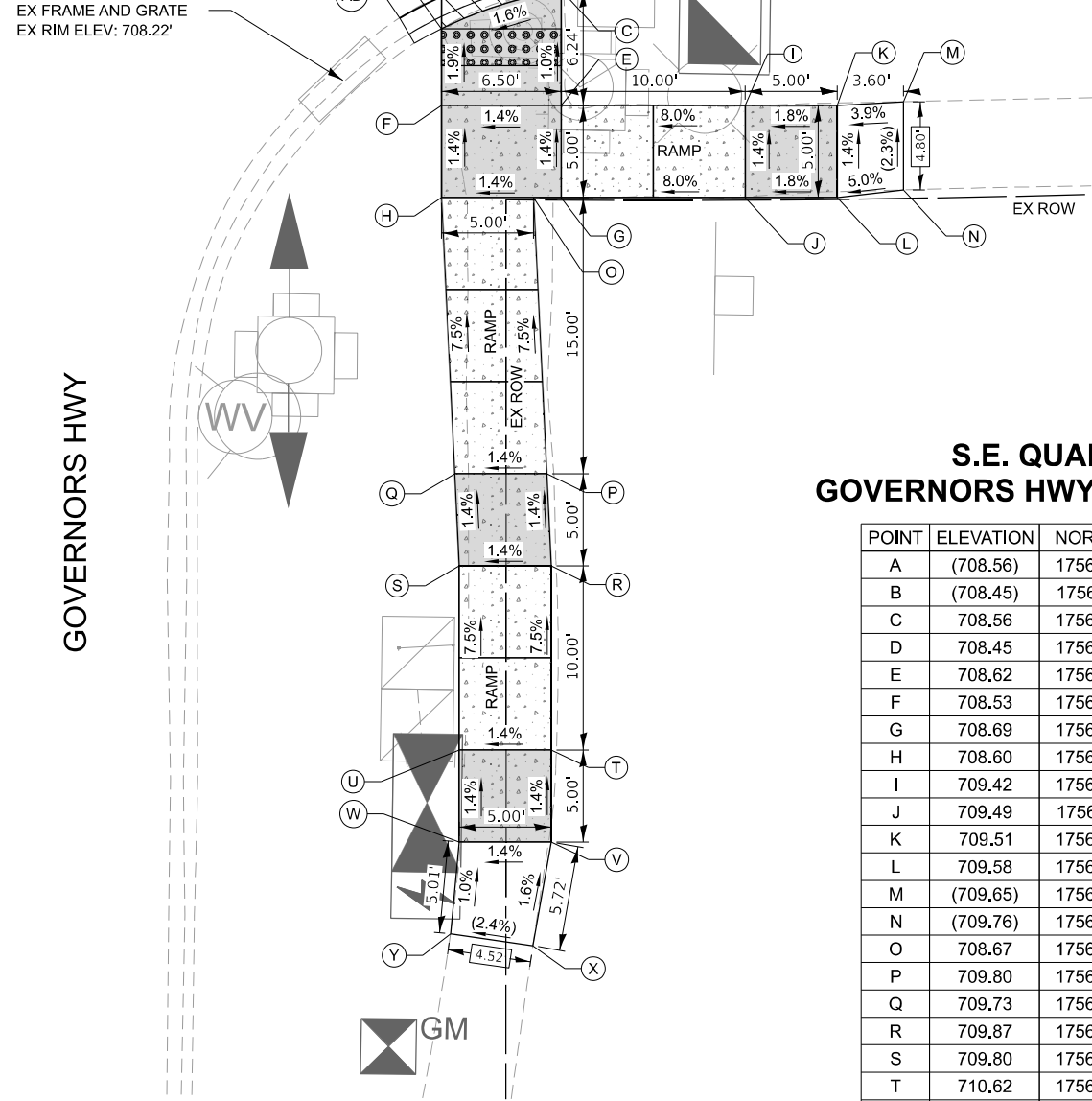
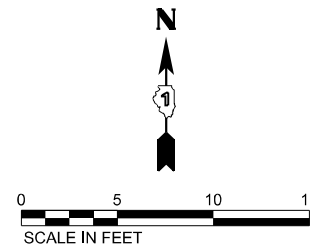
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	37
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

MODEL: Poplar St ADA [Sheet]
FILE NAME: S:\2024\241101 - SRF - Various Phil Traffic Signal\WO 24-15 - Trombone MA Replacement\CADD\CADD Sheets\0162W58-Sht-ADA Plans.dgn



N.E. QUADRANT
GOVERNORS HWY & POPLAR AVE

POINT	ELEVATION	NORTHING	EASTING
A	(708.62)	1756681.85	1154251.75
B	708.57	1756672.80	1154258.97
C	(708.73)	1756667.17	1154271.40
D	708.62	1756681.87	1154253.53
E	708.57	1756674.11	1154260.03
F	708.73	1756668.79	1154271.38
G	708.69	1756680.07	1154262.45
H	708.76	1756680.14	1154267.44
I	708.81	1756680.19	1154271.23
J	709.86	1756680.39	1154286.23
K	709.71	1756670.39	1154286.36
L	709.93	1756680.45	1154291.23
M	709.78	1756670.45	1154291.36
N	709.89	1756695.08	1154262.82
O	709.96	1756695.14	1154267.82
P	709.96	1756700.08	1154262.75
Q	710.03	1756700.14	1154267.75
R	711.08	1756714.08	1154262.56
S	711.15	1756714.14	1154267.56
T	711.15	1756719.07	1154262.51
U	711.22	1756719.14	1154267.50
V	(711.15)	1756723.27	1154262.57
W	(711.30)	1756723.39	1154267.39
X	(708.70)	1756701.09	1154247.36
Y	(708.64)	1756685.27	1154250.59
Z	(708.84)	1756666.70	1154276.97
AA	(708.99)	1756666.91	1154289.02
AB	709.00	1756670.24	1154275.28
AC	(710.06)	1756680.64	1154296.22
AD	(709.80)	1756670.83	1154296.35



S.E. QUADRANT
GOVERNORS HWY & POPLAR AVE

POINT	ELEVATION	NORTHING	EASTING
A	(708.56)	1756629.32	1154271.90
B	(708.45)	1756627.31	1154265.43
C	708.56	1756627.72	1154271.92
D	708.45	1756625.56	1154265.45
E	708.62	1756621.47	1154272.00
F	708.53	1756621.39	1154265.51
G	708.69	1756616.47	1154272.07
H	708.60	1756616.39	1154265.57
I	709.42	1756621.60	1154282.00
J	709.49	1756616.61	1154282.07
K	709.51	1756621.67	1154287.00
L	709.58	1756616.67	1154287.07
M	(709.65)	1756621.92	1154290.60
N	(709.76)	1756617.12	1154290.66
O	708.67	1756616.45	1154270.57
P	709.80	1756601.46	1154271.48
Q	709.73	1756601.40	1154266.48
R	709.87	1756596.47	1154271.79
S	709.80	1756596.40	1154266.79
T	710.62	1756586.47	1154271.92
U	710.55	1756586.40	1154266.92
V	710.69	1756581.47	1154271.99
W	710.62	1756581.40	1154266.99
X	(710.78)	1756575.82	1154271.06
Y	(710.67)	1756576.41	1154266.59
Z	(708.79)	1756629.88	1154285.72
AA	(708.57)	1756629.48	1154273.43
AB	(708.40)	1756626.10	1154263.17

LEGEND

	PROPOSED SIDEWALK		LANDING		SIDEWALK TRANSITION PANEL		DETECTABLE WARNINGS		DEPRESSED CURB & GUTTER		EXISTING LENGTH		EXISTING ELEVATION/SLOPE
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USER NAME = afarooqi	DESIGNED - MW	REVISED -
DRAWN - MW	REVISOR -	
PLOT SCALE = \$SCALE\$	CHECKED - AAF	REVISED -
PLOT DATE = 2/13/2025	DATE - 07/24/2024	REVISED -

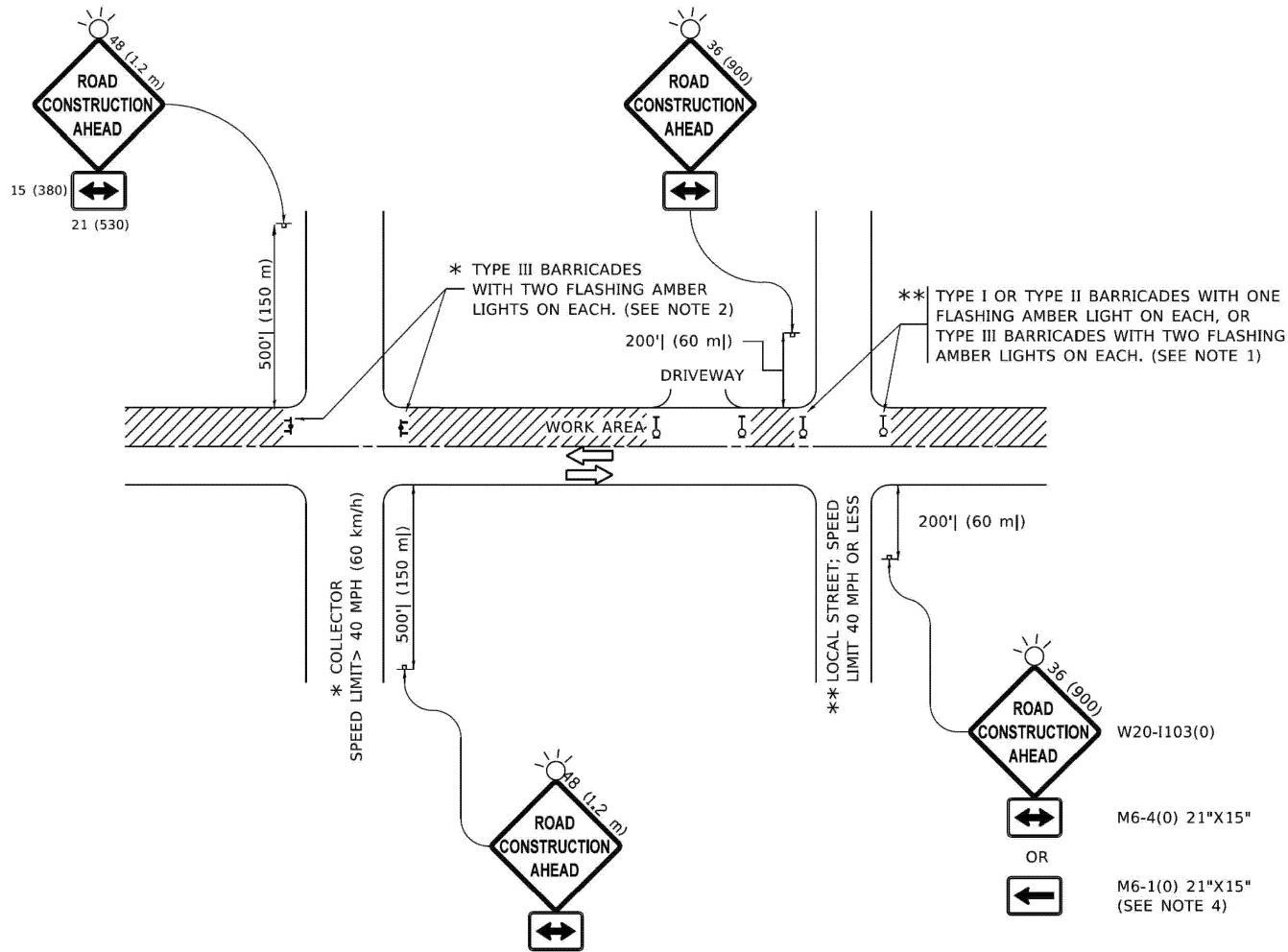
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ADA RAMP DETAILS
GOVERNORS HWY AT POPLAR AVE

SCALE: 1"=5'	SHEET 1 OF 1 SHEETS	STA. N/A	TO STA. N/A
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	38
CONTRACT NO. 62W58				
ILLINOIS FED. AID PROJECT				

MODEL: Detail9 (Sheet)
FILE NAME: S:\2024\24IL001 - PTB 210-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CAADD\CAADD Sheets\D162W58-Sht-Details.dgn



NOTES:

- 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:
 - 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.
 - 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.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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 BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- 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.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 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.

USER NAME = afarooqj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$\$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

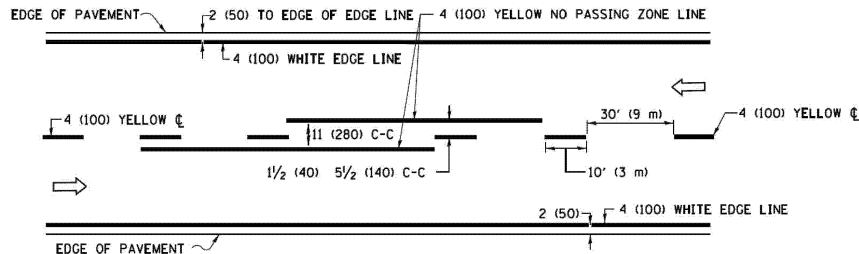
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

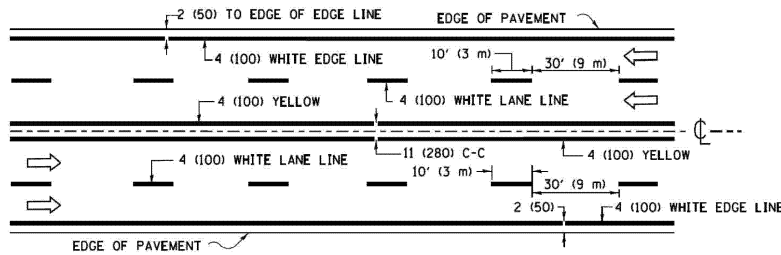
SCALE: 1"=10' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N,TS	COOK	42	39
TC-10		CONTRACT NO. 62W58		
ILLINOIS		FED. AID PROJECT		

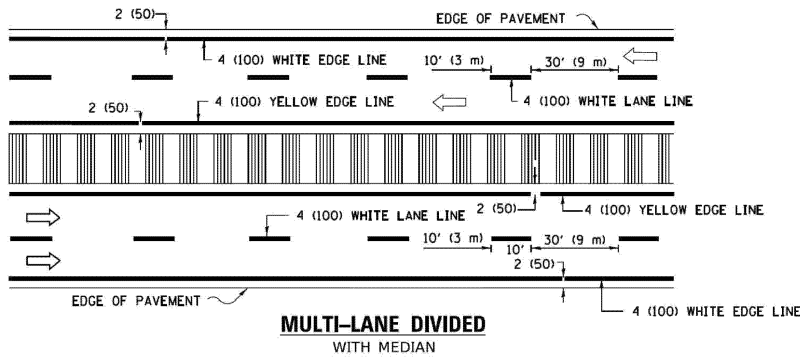
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FILE NAME: S:\2024\241001 - PTB 210-13 D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\D162W58-Sht-Details.dgn



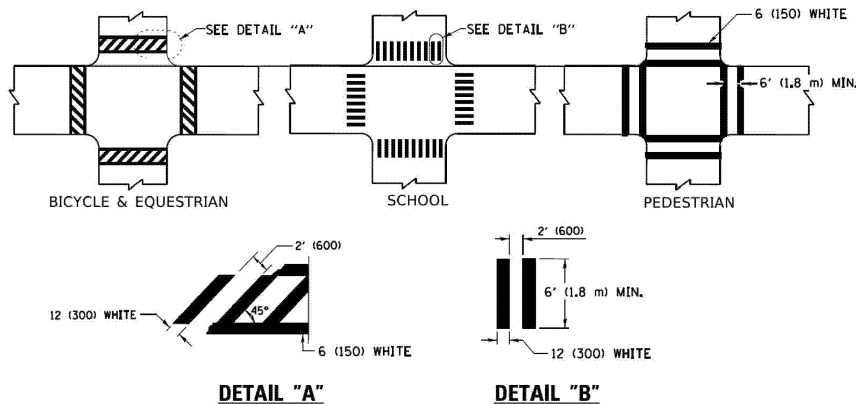
2-LANE ROADWAY



MULTI-LANE UNDIVIDED

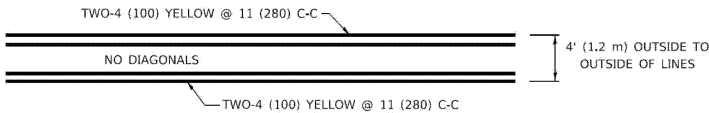


TYPICAL LANE AND EDGE LINE MARKING

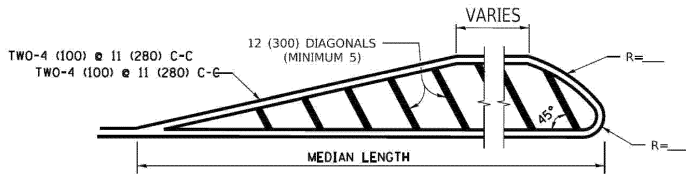


TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



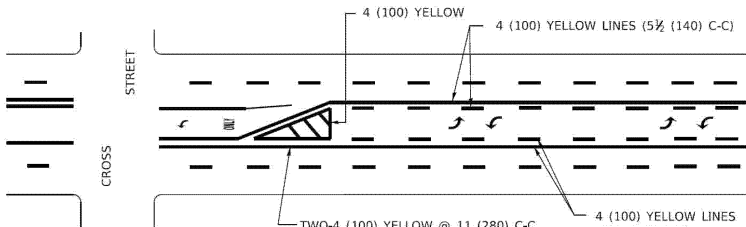
4' (1.2 m) WIDE MEDIANS ONLY



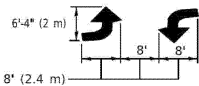
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

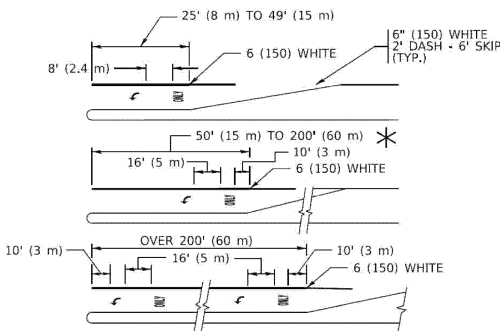


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

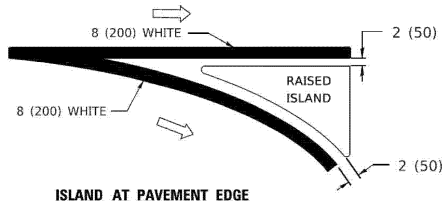
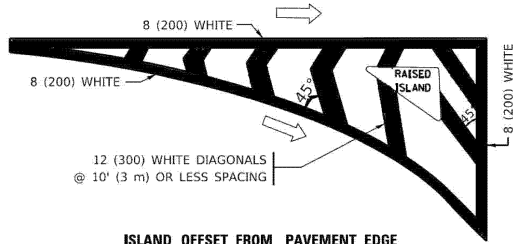


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

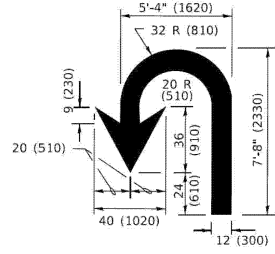
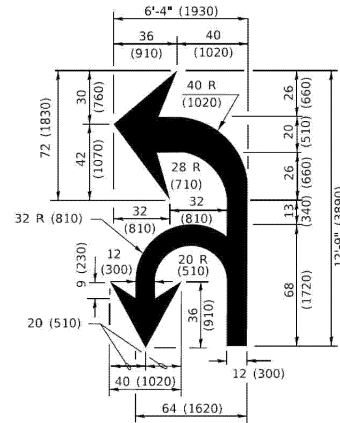
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING



LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGTUDINAL BARS (SCHOOL)	2 @ 6 (150) 2 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

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DRAWN -	REVISED -	
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N.TS	COOK	42	40
TC-13		CONTRACT NO. 62W58		
ILLINOIS		FED. AID PROJECT		

TURN BAY ENTRANCE AT START
OF LANE CLOSURE TAPER

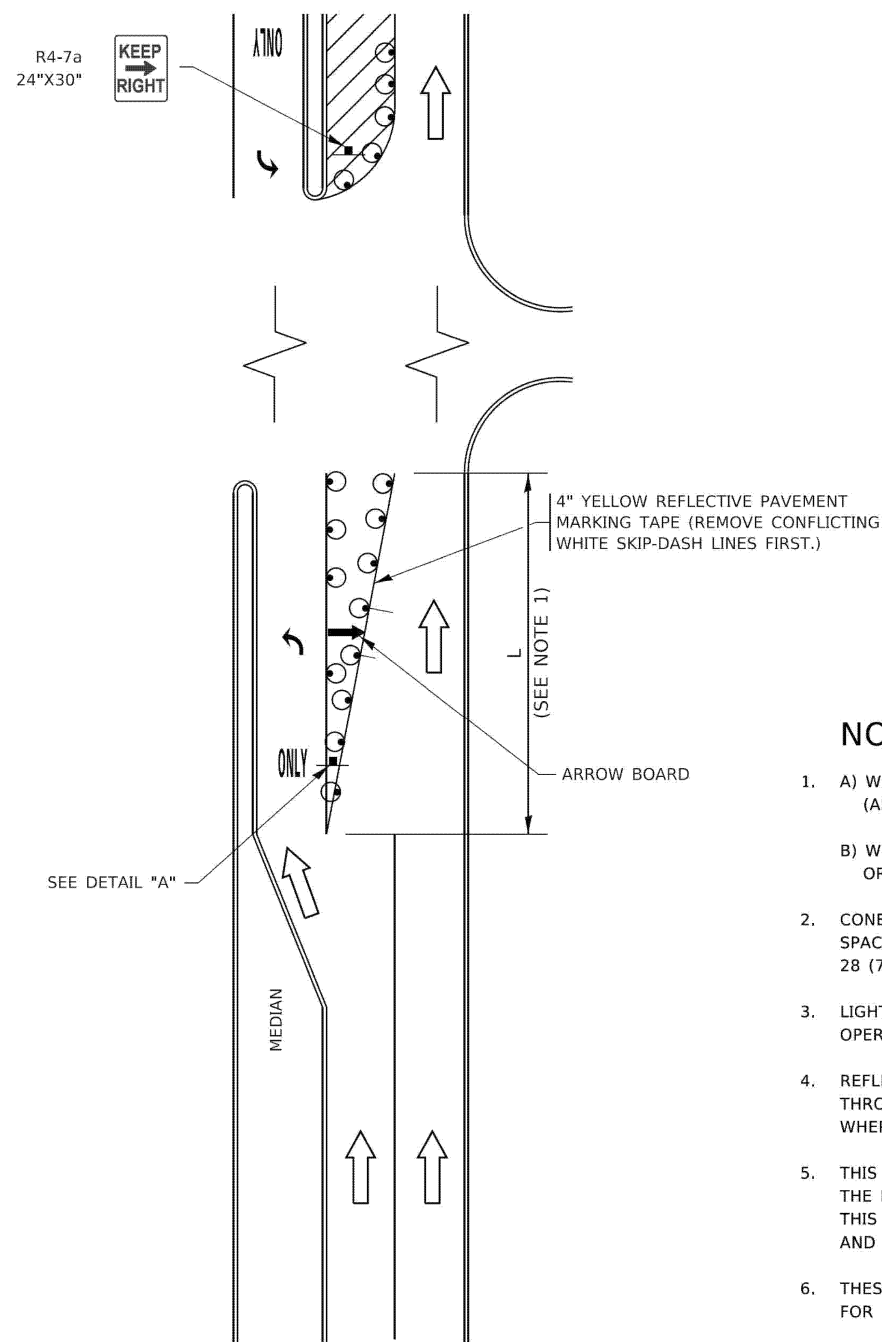
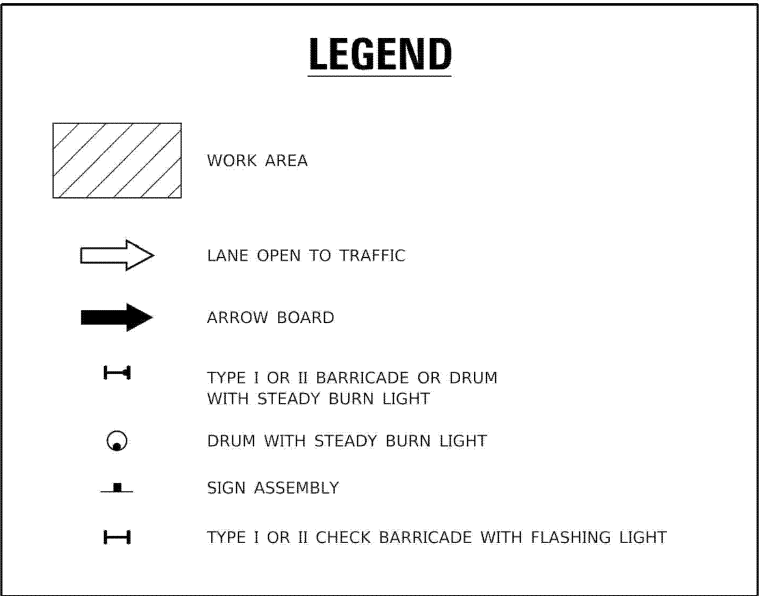


FIGURE 1

LEGEND



NOTES:

- A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
B) WHEN "L" IS $>$ THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
- THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PRE REQUIREMENTS.
- TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE
WITHIN A LANE CLOSURE

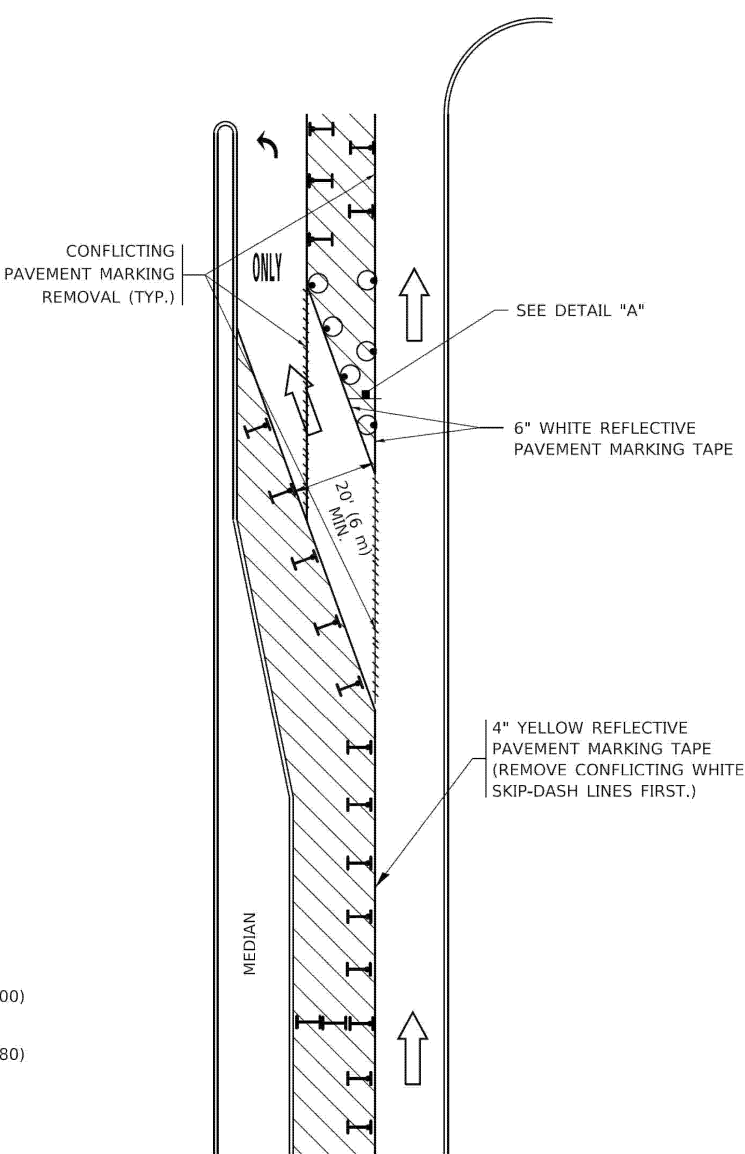
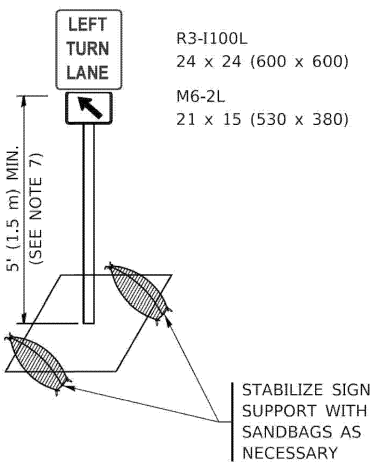


FIGURE 2



DETAIL A

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

MODEL: Details-12 (Sheet)
FILE NAME: S:\2024\24L001 - SRF - Various Phil Traffic Signal\WO 24-15 - Trombone MA Replacement\CADD\CADD Sheets\D162W58-Sht-Details.dgn

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PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

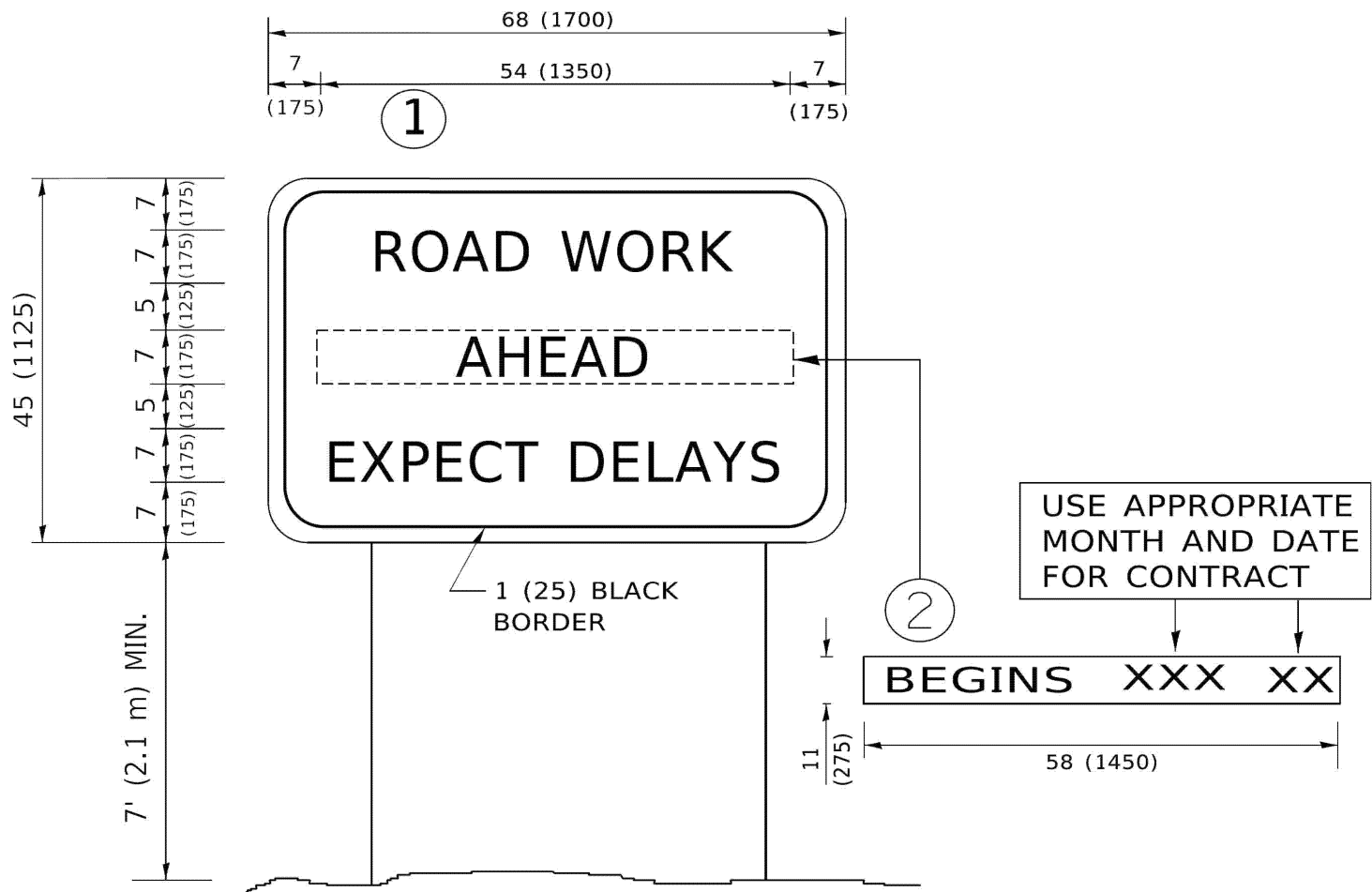
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N,TS	COOK	42	41
TC-14		CONTRACT NO. 62W58		
ILLINOIS		FED. AID PROJECT		

MODEL: Detail10 (Sheet)
FILE NAME: S:\2024\24IL001 - PTB 210-13.D1 - SRF - Various Phil Traffic Signal\WO 24-15_Trombone MA Replacement\CADD\CADD Sheets\D162W58-Sht-Details.dgn



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 SIGN①WITH INSTALLED PANEL②ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL②SOON 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.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

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		DRAWN	-	REVISED	-
PLOT SCALE	= \$\$SCALE\$	CHECKED	-	REVISED	-
PLOT DATE	= 2/13/2025	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD
INFORMATION SIGN

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-942-N,TS	COOK	42	42
TC-22		CONTRACT NO. 62W58		
ILLINOIS		FED. AID PROJECT		