

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	1
		ILLINOIS	CONTRACT NO. 62W13	

D-91-084-24

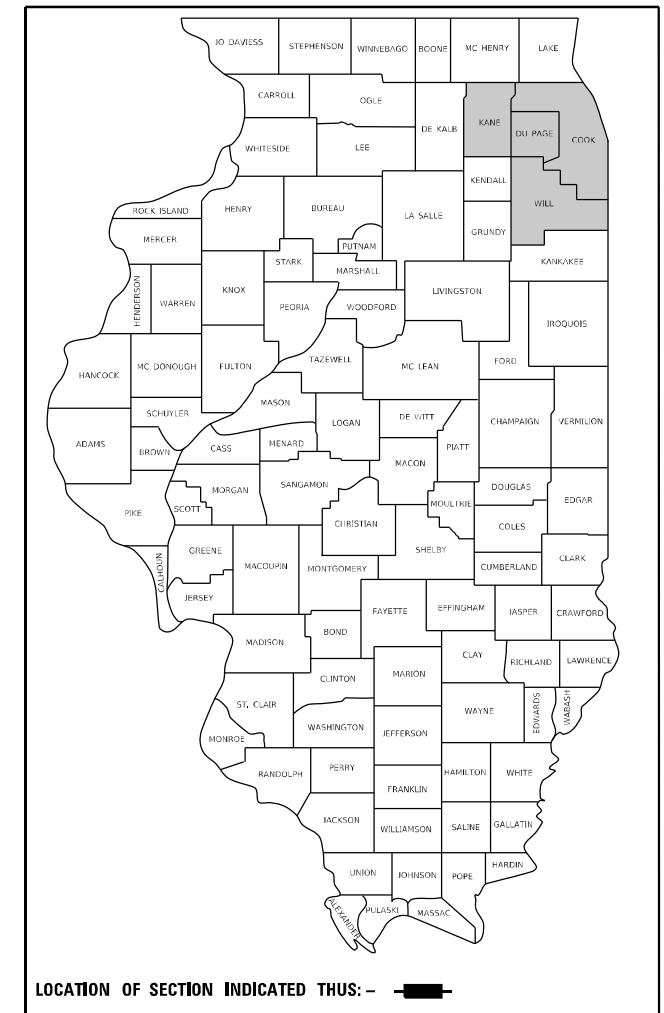
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

**PROPOSED
HIGHWAY PLANS**

**VARIOUS LOCATIONS IN DISTRICT 1
SECTION: 2023 VAR APS PUSH BUTTON
PROJECT: HSIP – FXJ2(754)
APS PUSH BUTTON INSTALLATION
VARIOUS COUNTIES**

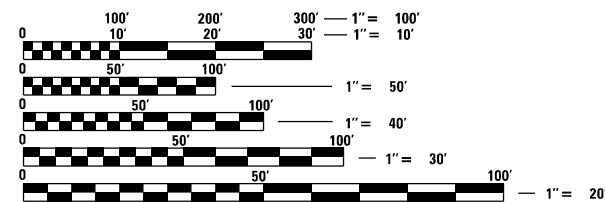
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FOR INDEX OF SHEETS, SEE SHEET NO. 2



FOR LOCATION MAPS
SEE SHEETS NO. 3-7

VARIOUS TOWNSHIPS



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

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

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

CONTRACT NO. 62W13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 22, 2023
Jose Rios
REGIONAL ENGINEER

October 13, 2023
San E. A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT

October 13, 2023
Stephen M. Smith
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS**

INDEX OF SHEETS

SHT NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES
3-7	LOCATION MAPS
8	SUMMARY OF QUANTITIES
9-15	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05)
16	SCHEDULE OF QUANTITIES

HIGHWAY STANDARDS

STD. NO.	TITLE
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
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
701701-10	URBAN LANE CLOSURE MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS

GENERAL NOTES

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

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

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

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

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

THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR UNDERGROUND AND OVERHEAD UTILITY CONFLICTS, THE CONTRACTOR SHALL NOTIFY THE AREA ENGINEER, THE RESIDENT ENGINEER AND ANY IMPACTED UTILITY COMPANY OF THE CONFLICT, AND SHALL COORDINATE AND RESOLVE THE ISSUE 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 STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

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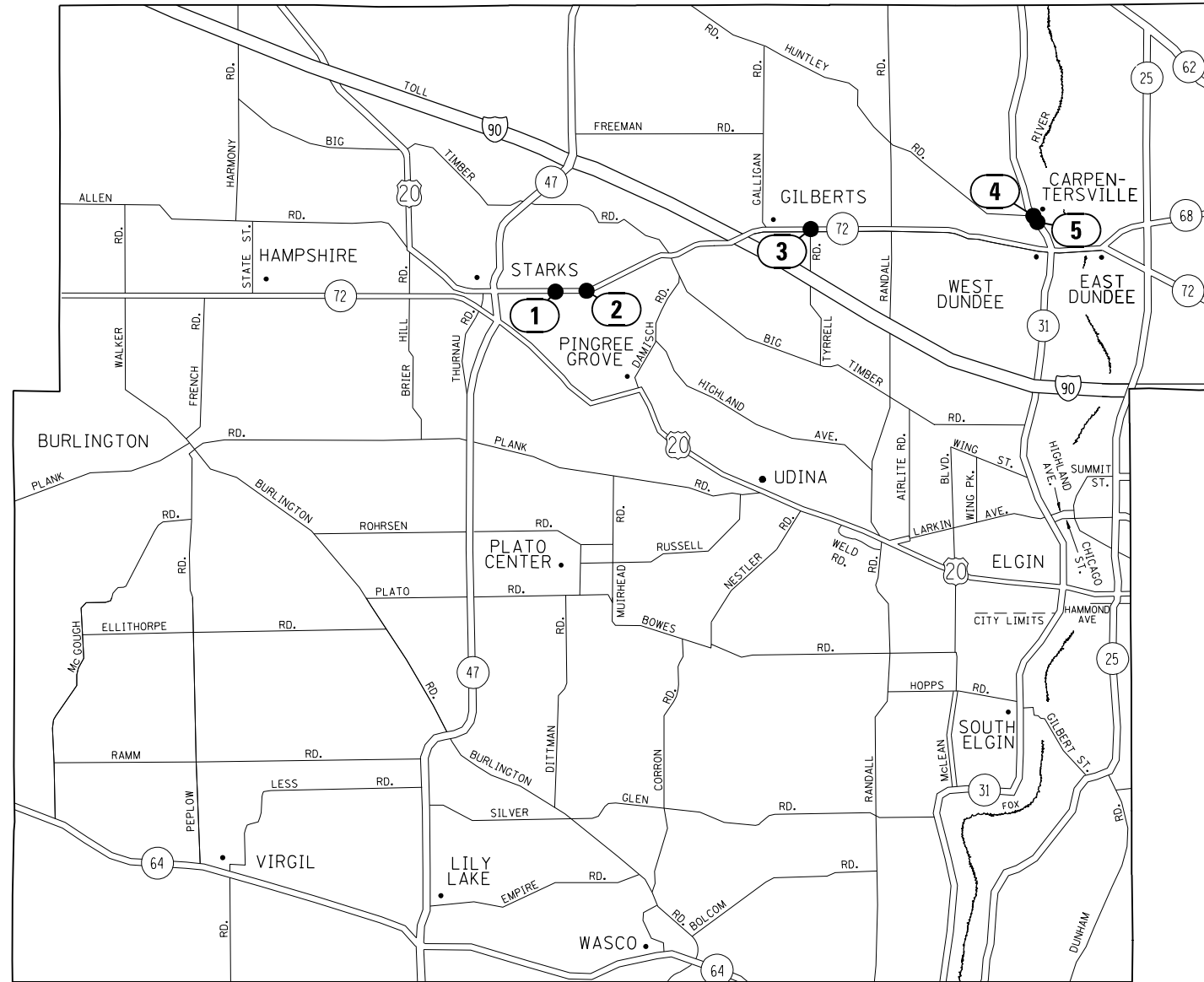
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	2
			CONTRACT NO. 62W13	
ILLINOIS FED. AID PROJECT				



LOCATION NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY
1	904	IL RTE 72 (HIGGINS RD) AT RICHARD J BROWN BLVD	PINGREE GROVE
2	902	IL RTE 72 (HIGGINS RD) AT REINKING RD	PINGREE GROVE
3	13404	IL RTE 72 (HIGGINS RD) AT TYRRELL RD	GILBERTS
4	14890	IL RTE 31 (WESTERN AVE) AT HUNTLEY RD / MAIN ST	CARPENTERSVILLE
5	14885	IL RTE 31 (WESTERN AVE) AT SPRUCE DR	CARPENTERSVILLE

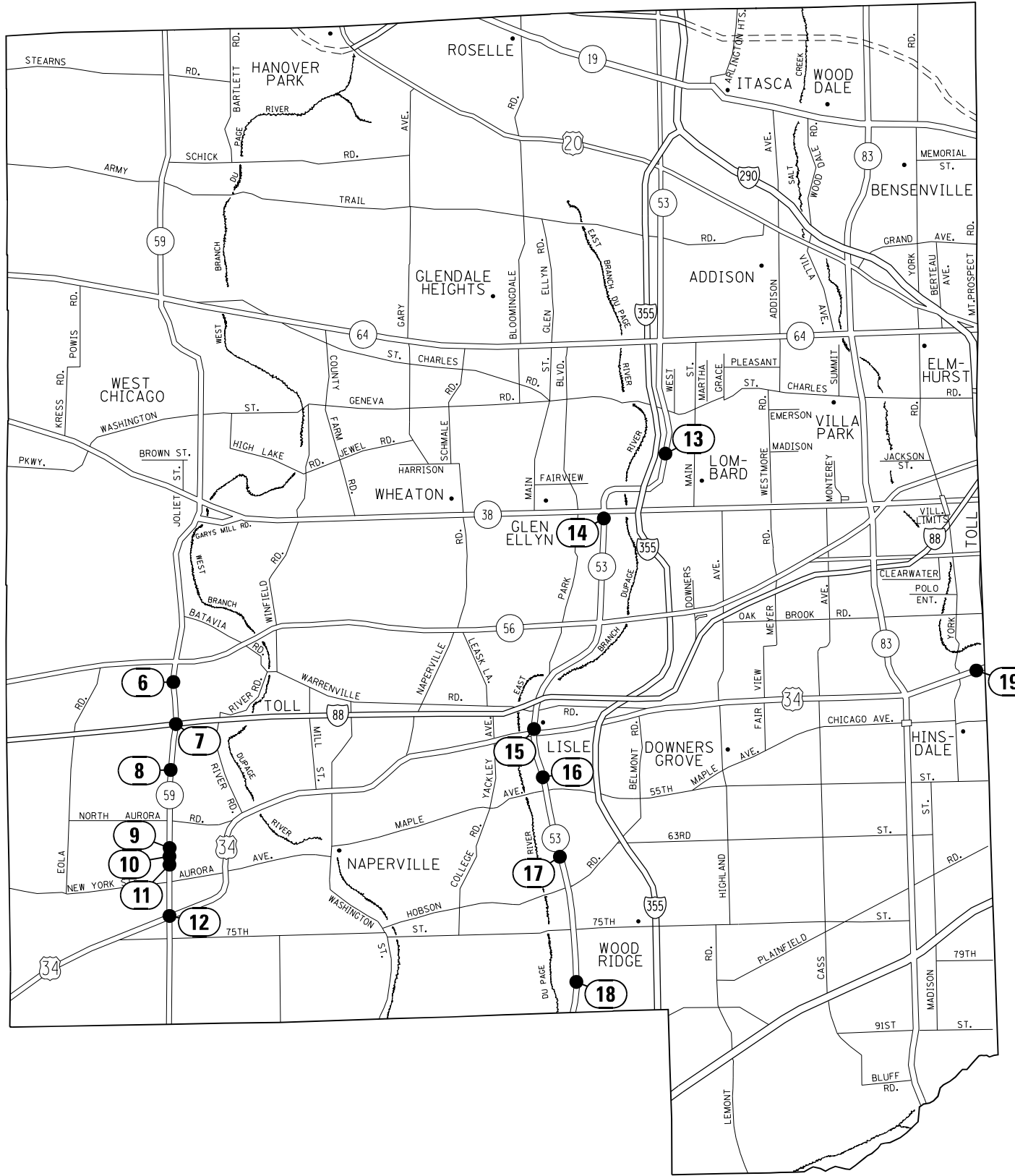
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP (SHEET 1 OF 5) NORTH KANE COUNTY			
SCALE:	SHEET	OF	SHEETS
	STA.		TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	3
			CONTRACT NO. 62W13	
		ILLINOIS	FED. AID PROJECT	



LOCATION NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY
6	11083	IL RTE 59 AT DUKE PKWY / EVERTON DR	AURORA
7	9472	IL RTE 59 AT I-88 DDI	NAPERVILLE
8	9455	IL RTE 59 AT BRUCE LN / BROOKDALE RD	NAPERVILLE
9	20360	IL RTE 59 AT MERIDIAN PKWY / GLACIER PARK AVE	NAPERVILLE
10	12140	IL RTE 59 AT LIBERTY ST / JEFFERSON AVE	NAPERVILLE
11	21139	IL RTE 59 AT MEIJER ENTRANCE	NAPERVILLE
12	6090	IL RTE 59 AT US RTE 34 (OGDEN AVE)	NAPERVILLE
13	6237	IL RTE 53 AT MADISON ST	LOMBARD
14	20335	IL RTE 53 AT PERSHING AVE	GLEN ELLYN
15	11680	IL RTE 53 AT US RTE 34 WB RAMP / SOUTHPORT AVE	LISLE
16	11655	IL RTE 53 AT MAIN ST - LISLE	LISLE
17	6255	IL RTE 53 AT WOODRIDGE DR	WOODRIDGE
18	6245	IL RTE 53 AT 83RD ST	WOODRIDGE
19	6116	US RTE 34 (OGDEN AVE) AT OAK ST / SALT CREEK LN	HINSDALE

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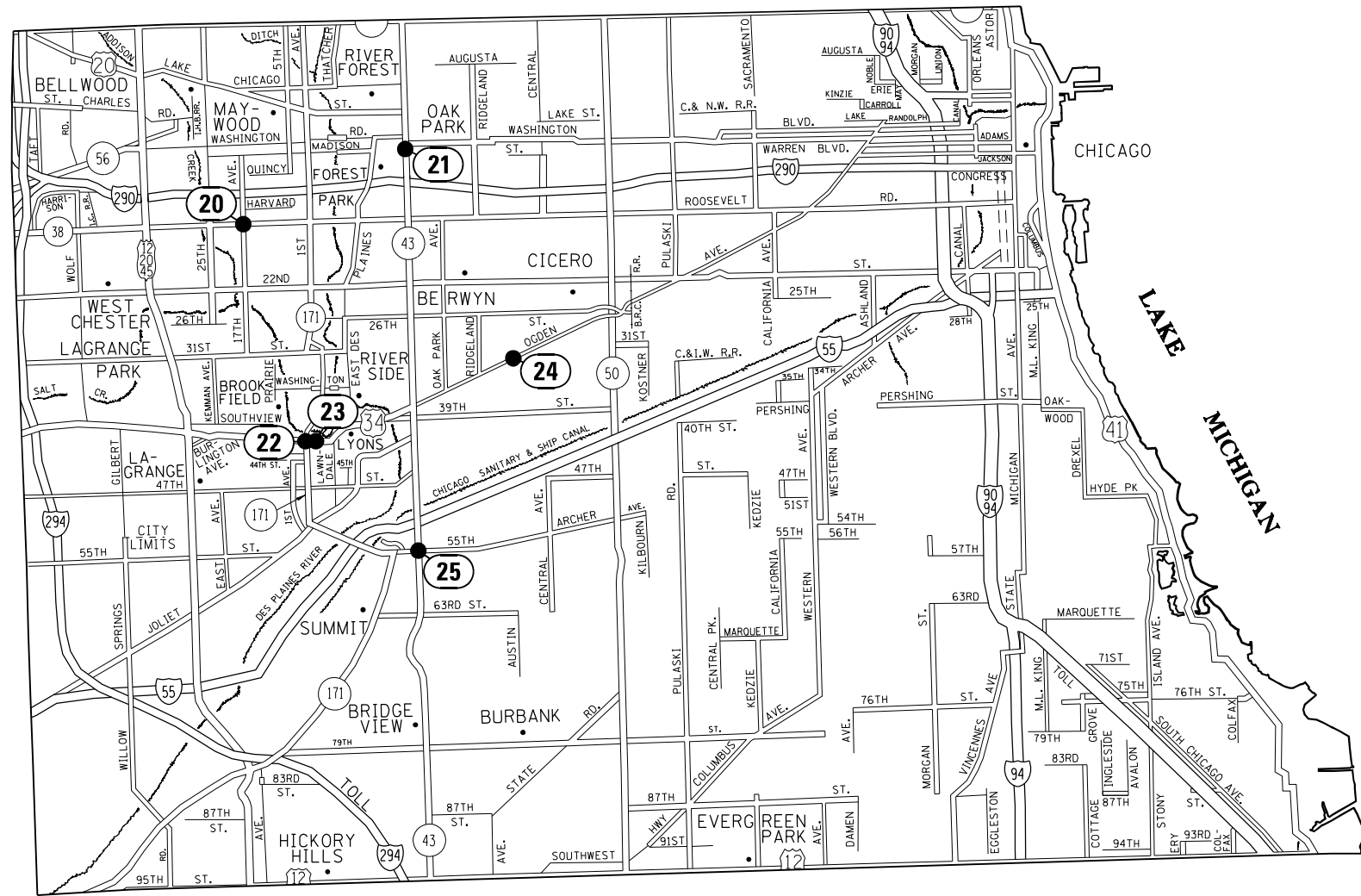
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP (SHEET 2 OF 5)
DUPAGE COUNTY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	4
			CONTRACT NO. 62W13	
		ILLINOIS	FED. AID PROJECT	



LOCATION NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY
20	3705	ROOSEVELT RD AT 17TH AVE	BROADVIEW
21	2370	IL RTE 43 (HARLEM AVE) AT MADISON ST	OAK PARK
22	14155	US RTE 34 (OGDEN AVE) AT IL RTE 171 (1ST AVE)	LYONS
23	14170	US RTE 34 (OGDEN AVE) AT PLAINFIELD RD	LYONS
24	5565	OGDEN AVE AT AUSTIN BLVD	CICERO
25	2260	IL RTE 43 (HARLEM AVE) AT 55TH ST (ARCHER AVE)	SUMMIT

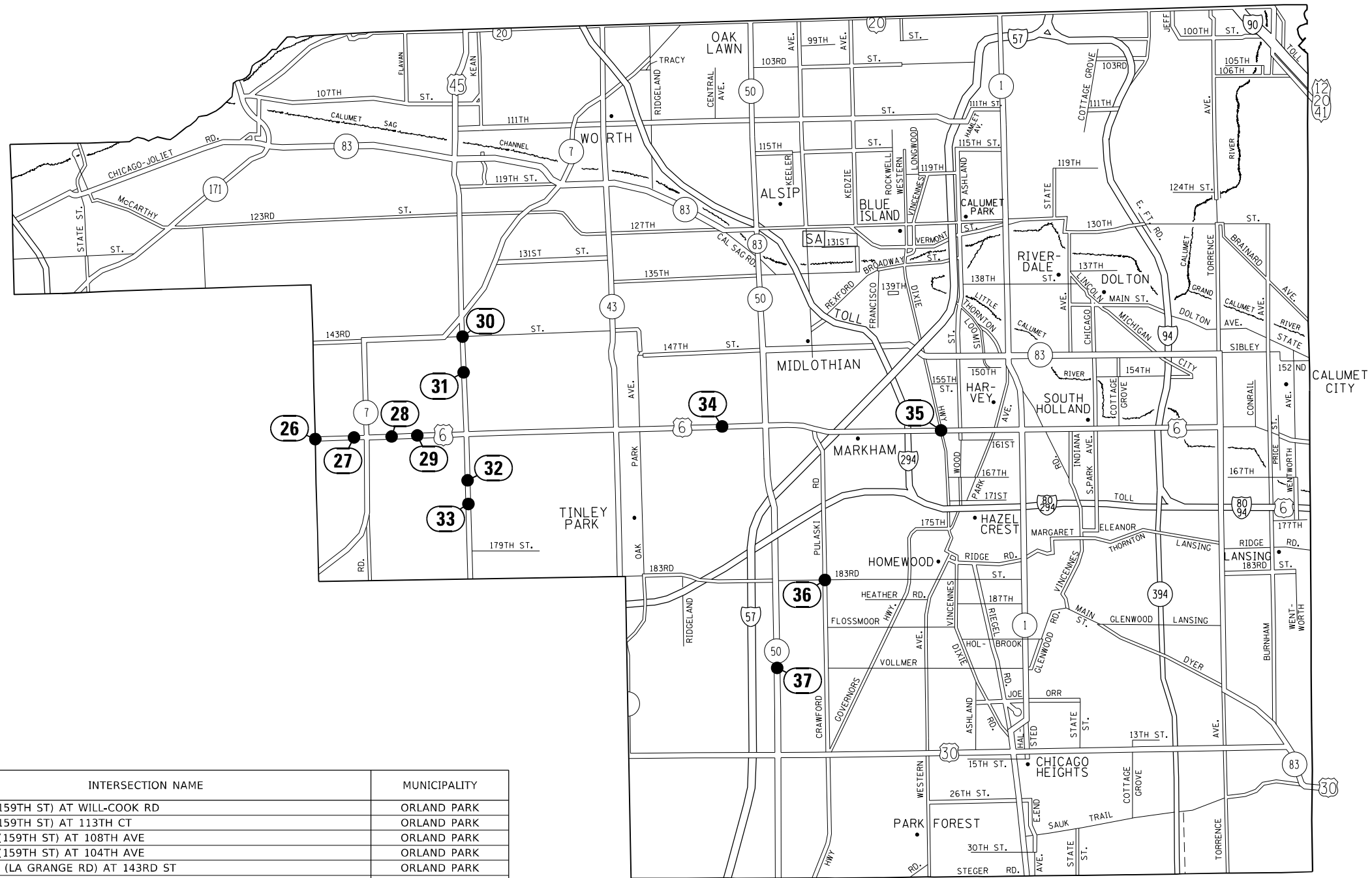
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP (SHEET 3 OF 5)			
CENTRAL COOK COUNTY			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	5
			CONTRACT NO. 62W13	
ILLINOIS FED. AID PROJECT				



LOCATION NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY
26	163	IL RTE 7 (159TH ST) AT WILL-COOK RD	ORLAND PARK
27	164	IL RTE 7 (159TH ST) AT 113TH CT	ORLAND PARK
28	20490	US RTE 6 (159TH ST) AT 108TH AVE	ORLAND PARK
29	20492	US RTE 6 (159TH ST) AT 104TH AVE	ORLAND PARK
30	1650	US RTE 45 (LA GRANGE RD) AT 143RD ST	ORLAND PARK
31	1660	US RTE 45 (LA GRANGE RD) AT 149TH ST	ORLAND PARK
32	1700	US RTE 45 (LA GRANGE RD) AT 167TH ST	ORLAND HILLS
33	22060	US RTE 45 (LA GRANGE RD) AT 171ST ST	ORLAND HILLS
34	205	US RTE 6 (159TH ST) AT CENTRAL AVE	OAK FOREST
35	220	US RTE 6 (159TH ST) AT DIXIE HWY	MARKHAM
36	4095	PULASKI RD AT 183RD ST	COUNTRY CLUB HILLS
37	2635	IL RTE 50 (CICERO AVE) AT VOLLMER RD	MATTESON

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP (SHEET 4 OF 5)
SOUTH COOK COUNTY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	6
			CONTRACT NO. 62W13	
		ILLINOIS FED. AID PROJECT		

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE					
				90% FED 10% STATE KANE COUNTY	90% FED 10% STATE DUPAGE COUNTY	90% FED 10% STATE COOK COUNTY	90% FED 10% STATE WILL COUNTY		
				TRAFFIC SIGNALS					
				0021 URBAN					
67100100	MOBILIZATION	L SUM	1	0.1	0.3	0.4	0.2		
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.1	0.3	0.4	0.2		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	44	5	14	18	7		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	44	5	14	18	7		
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	6	1	2	2	1		
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	294	26	94	122	52		

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	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					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

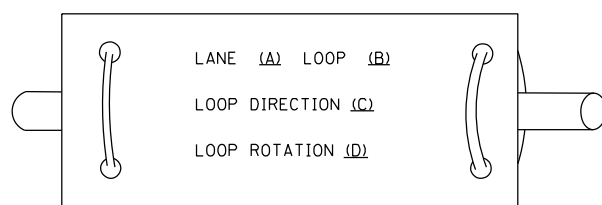
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TS-05		CONTRACT NO. 62W13		
ILLINOIS FED. AID PROJECT				

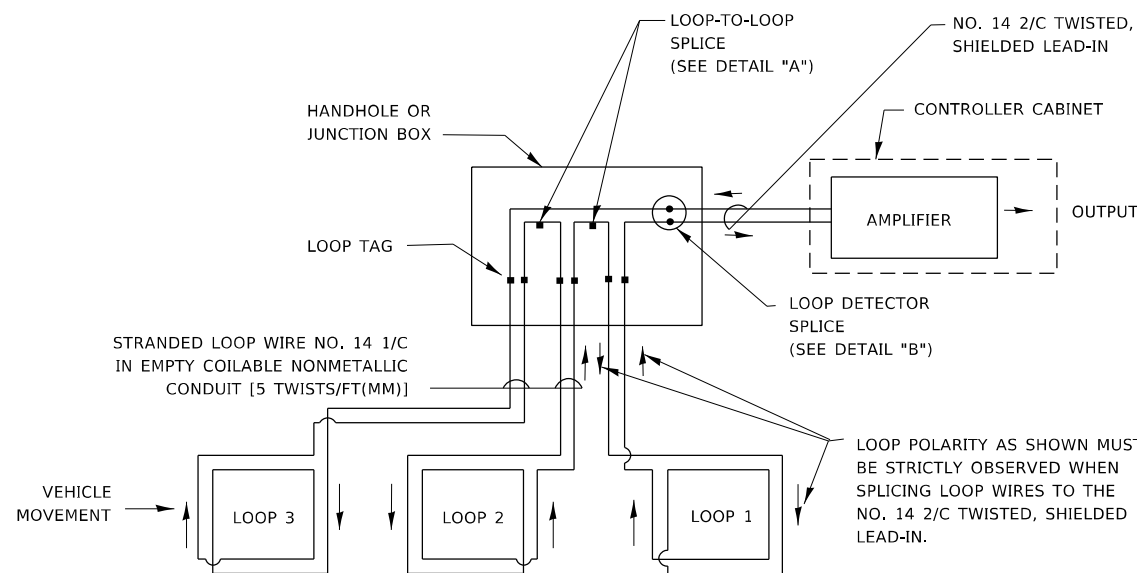
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

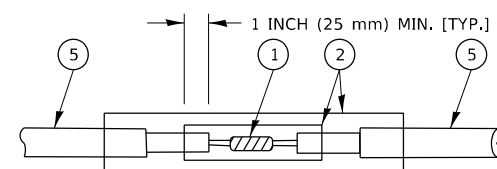


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

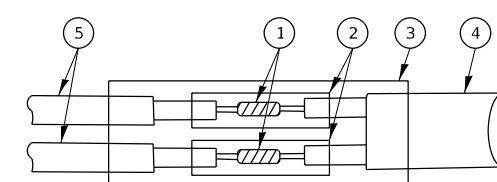


DETECTOR LOOP WIRING SCHEMATIC

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

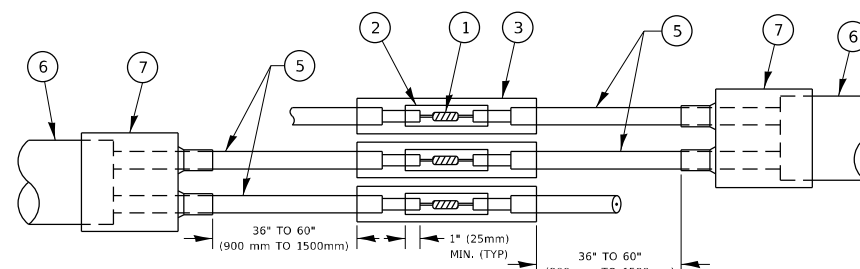


DETAIL "A"
LOOP-TO-LOOP SPLICE

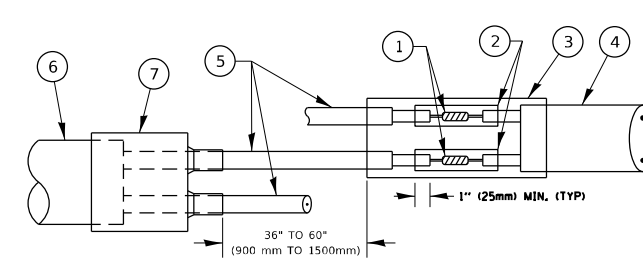


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED 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 LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PREFORMED LOOP
- 6 XL POLYOLEFIN 2 CONDUCTOR
- 7 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

MODEL Path: \\S:\Projects\Design\Ivan03_1\House_Traffic\et1_Phase2\ET106_APS\62106-aps-dt-general.dgn
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USER NAME = Iovan,Plascencia	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/24/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

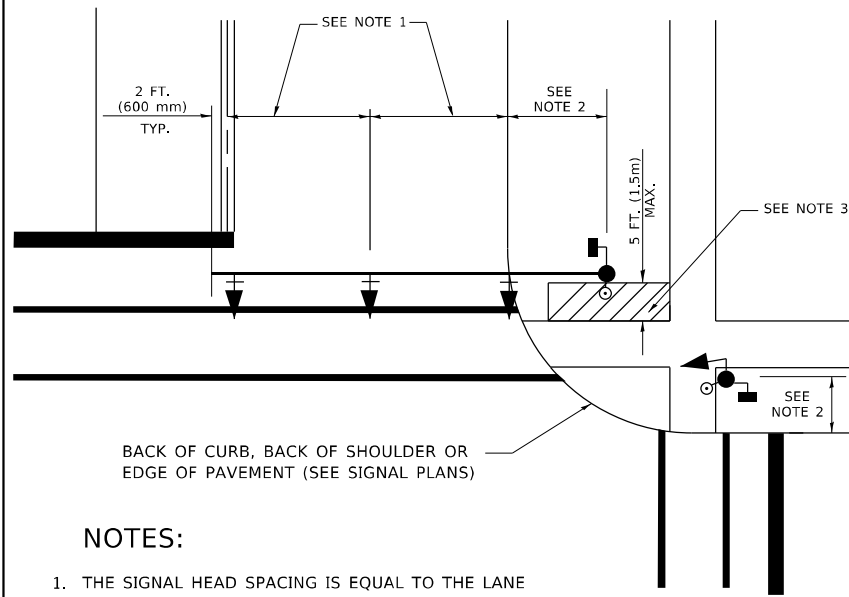
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	10
TS-05			CONTRACT NO. 62W13	
ILLINOIS		FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

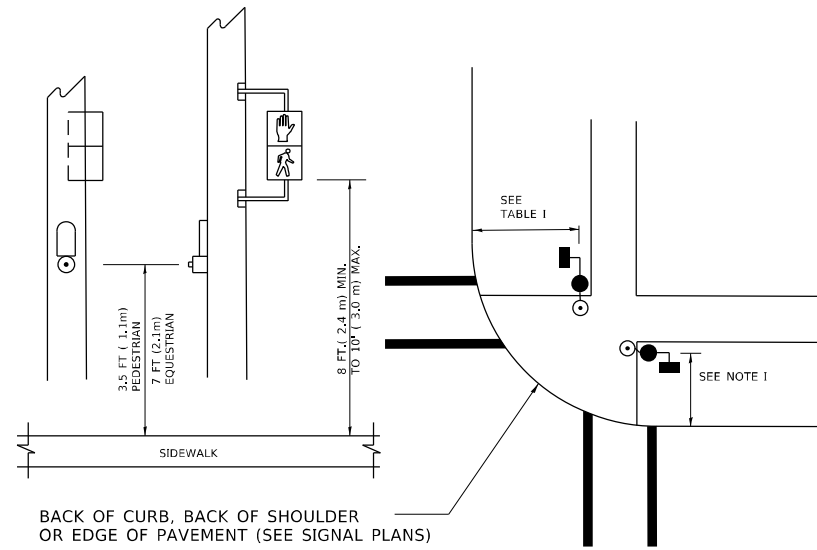
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

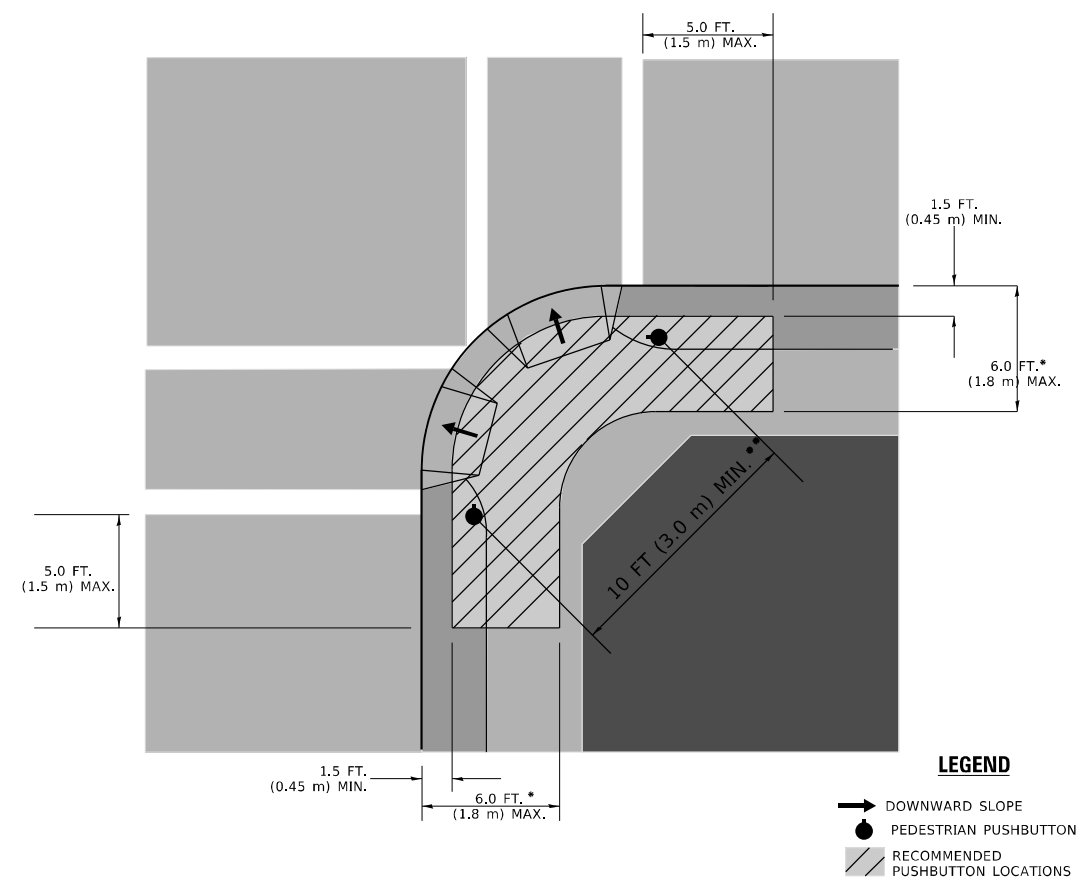
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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



- * 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.

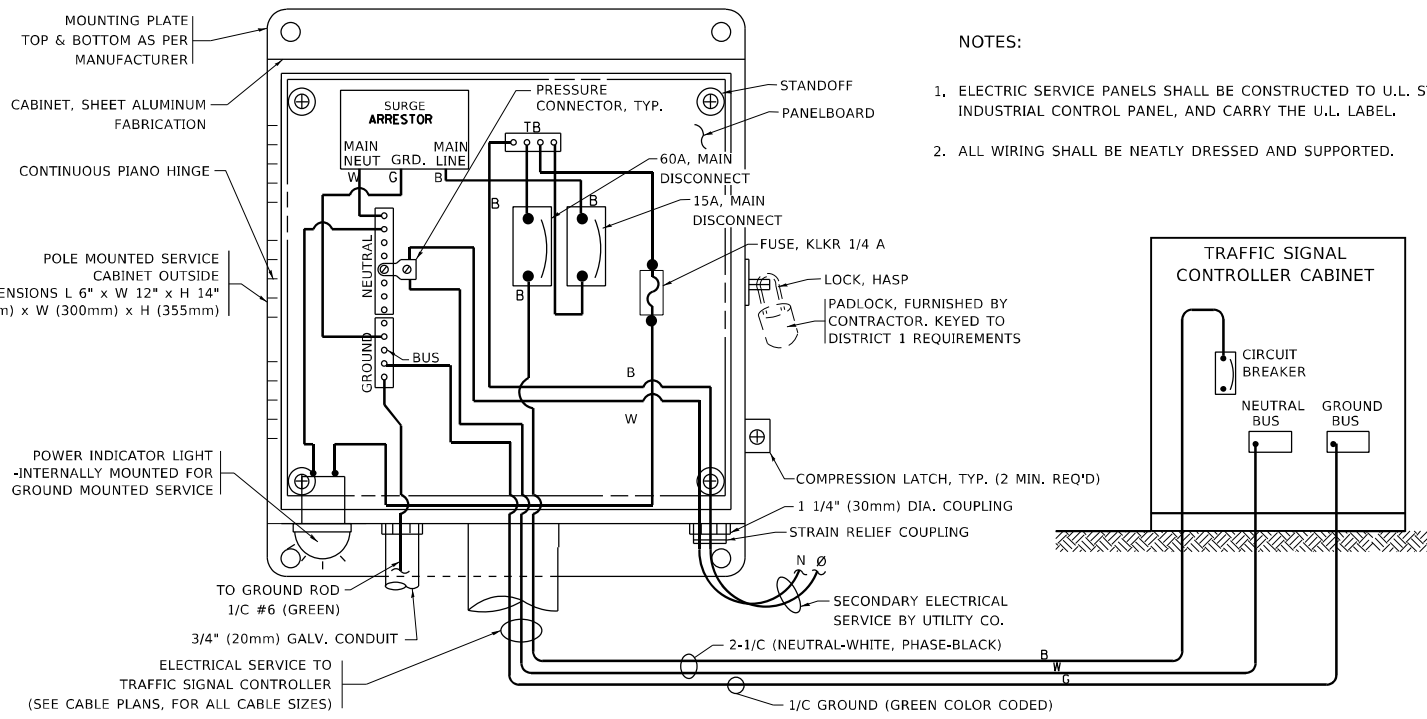
TRAFFIC SIGNAL EQUIPMENT OFFSET

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.

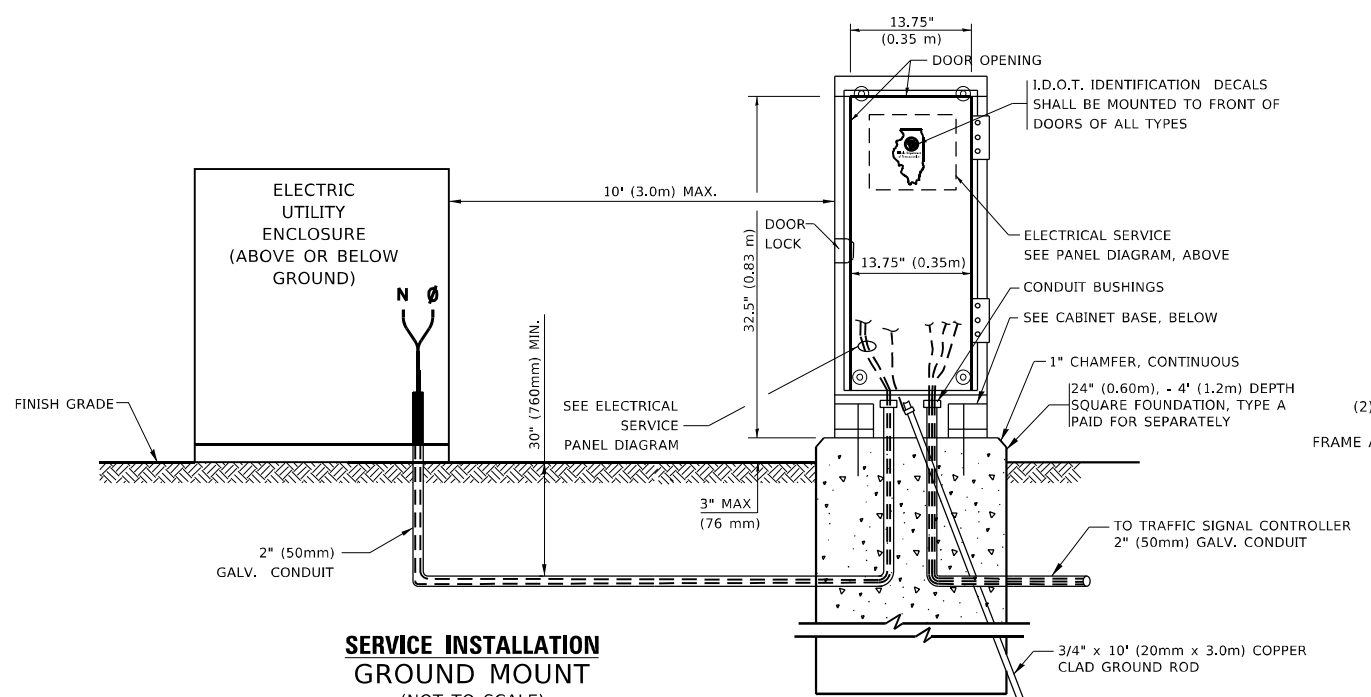
NOTES:

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 TO THE 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.

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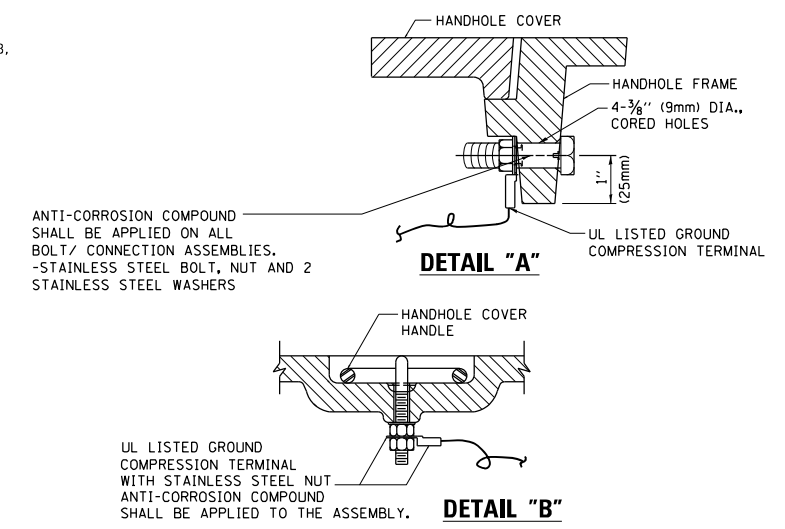
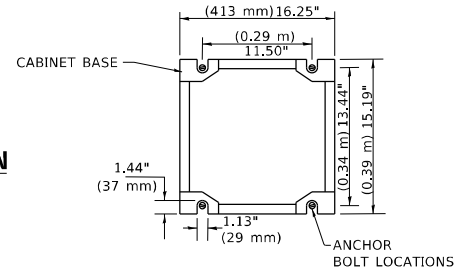


ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



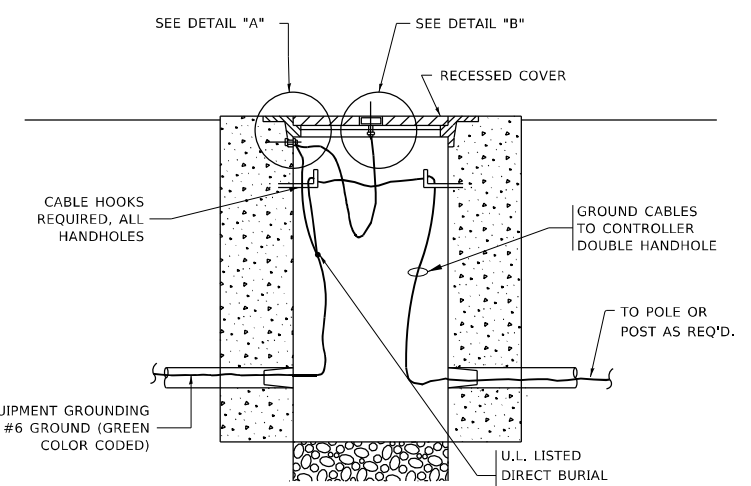
SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)

CABINET – BASE BOLT PATTERN
 (NOT TO SCALE)

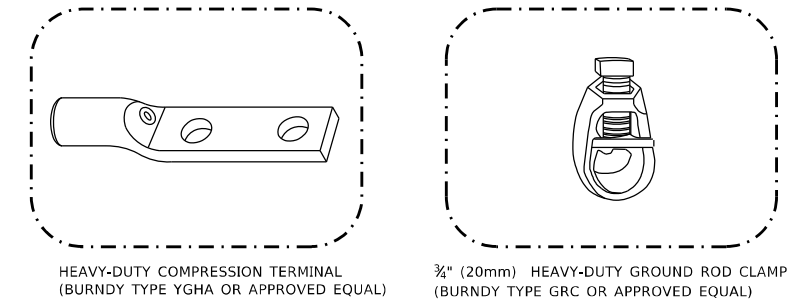


NOTES:
GROUNDING SYSTEM

- 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

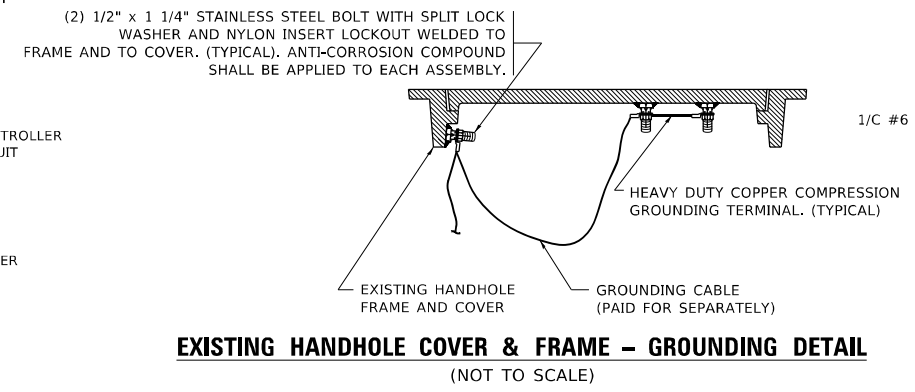


HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)

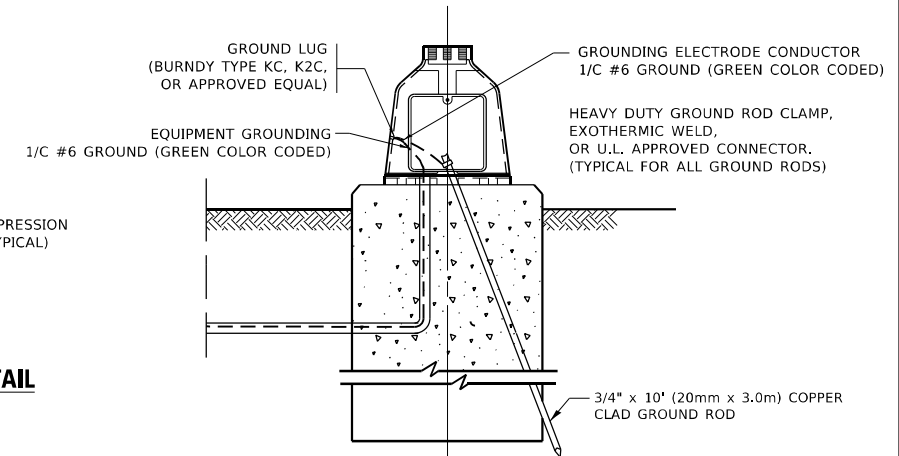


NOTES:

- 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.



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



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

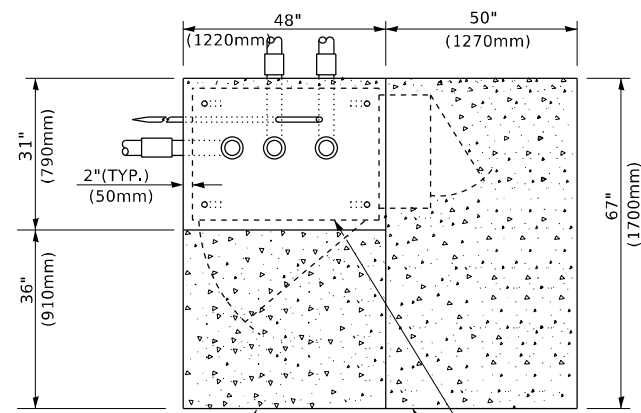
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DRAWN -	REVISED -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/24/2023	DATE -	REVISED -

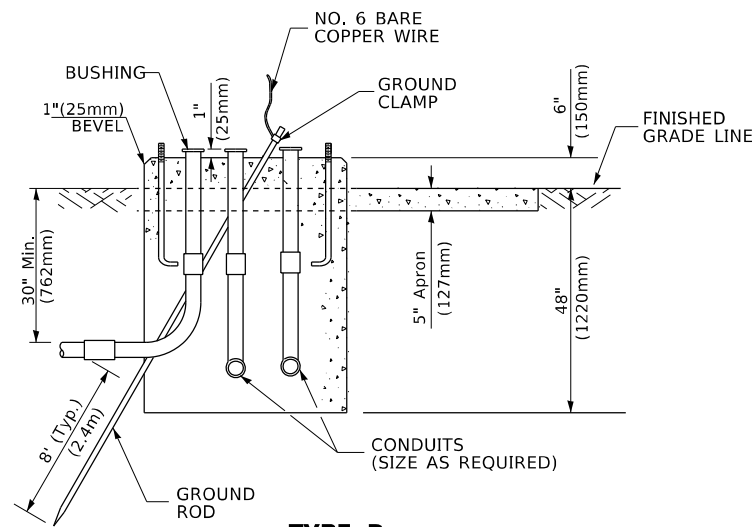
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET 4	OF 7 SHEETS	STA. TO STA.

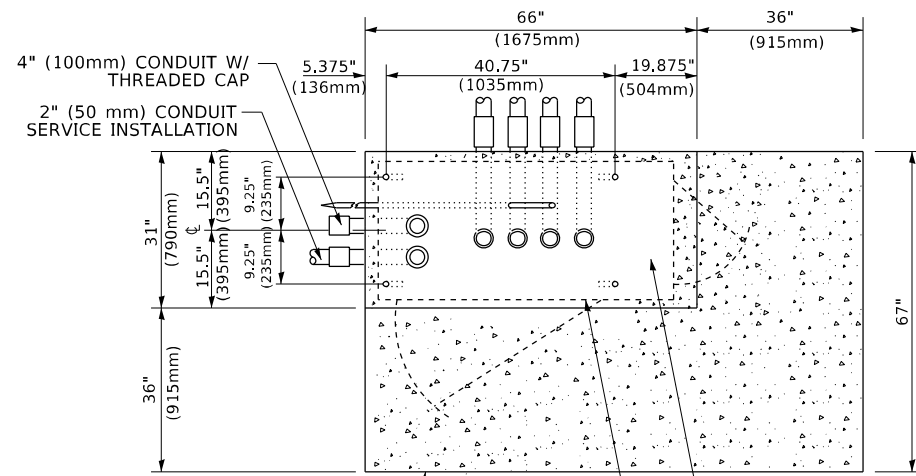
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	12
TS-05		CONTRACT NO. 62W13		
ILLINOIS FED. AID PROJECT				



TOP VIEW



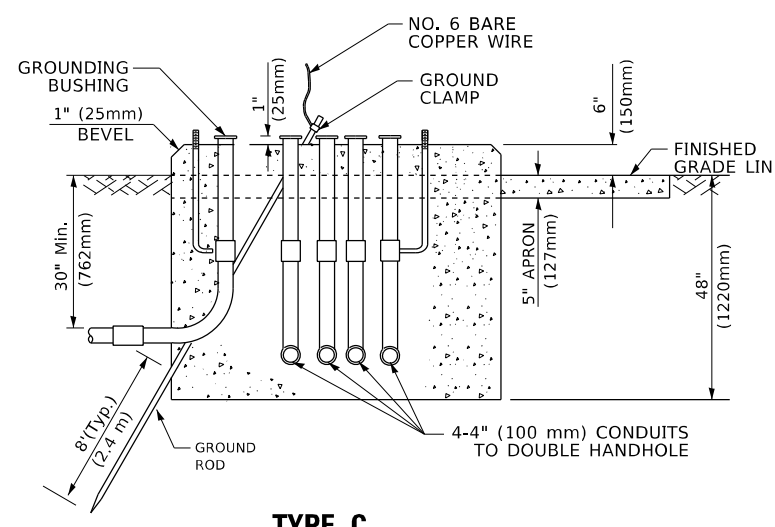
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



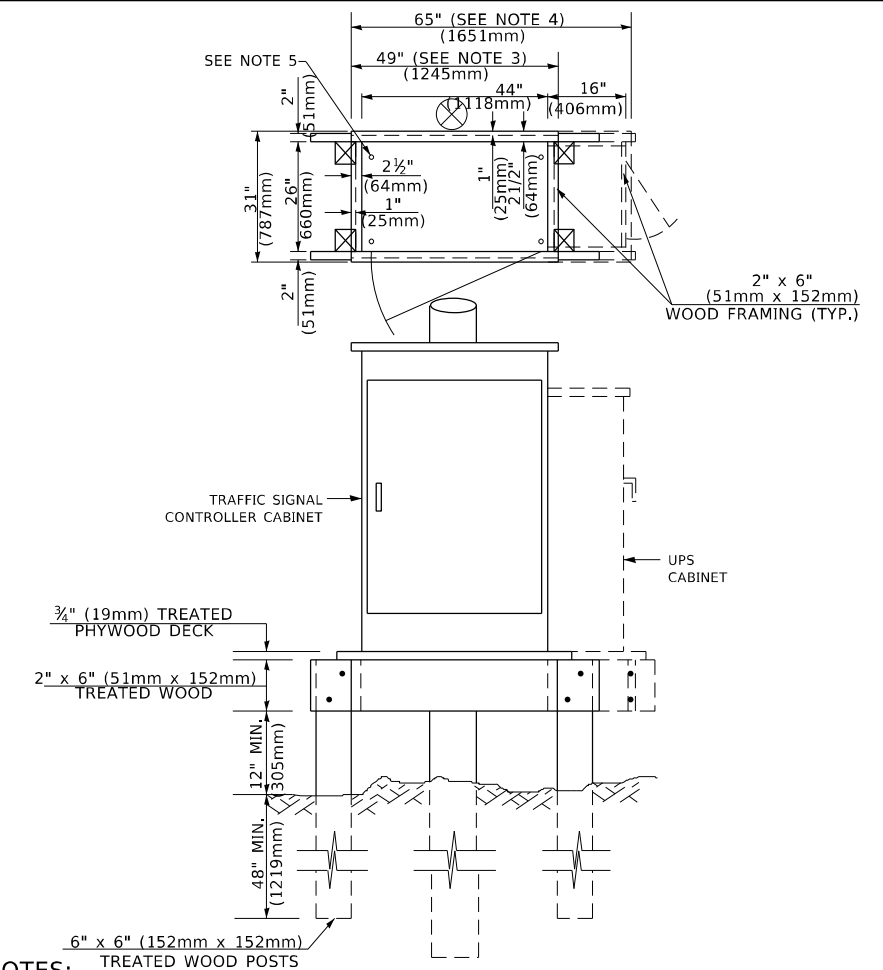
TOP VIEW

NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	24" (600mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average unconfined compressive strength (qu) > 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..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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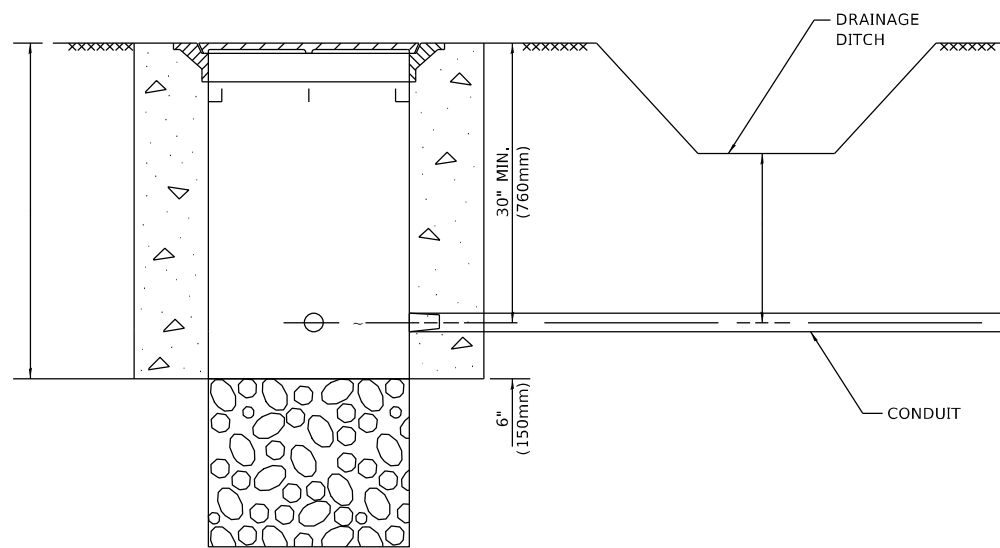
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	DRAWN -	REVISED -
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PLOT DATE = 8/24/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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

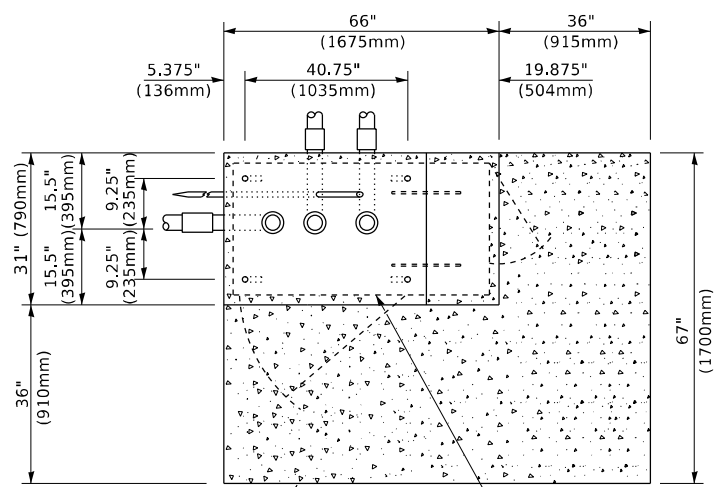
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	13
TS-05			CONTRACT NO. 62W13	
ILLINOIS		FED. AID PROJECT		



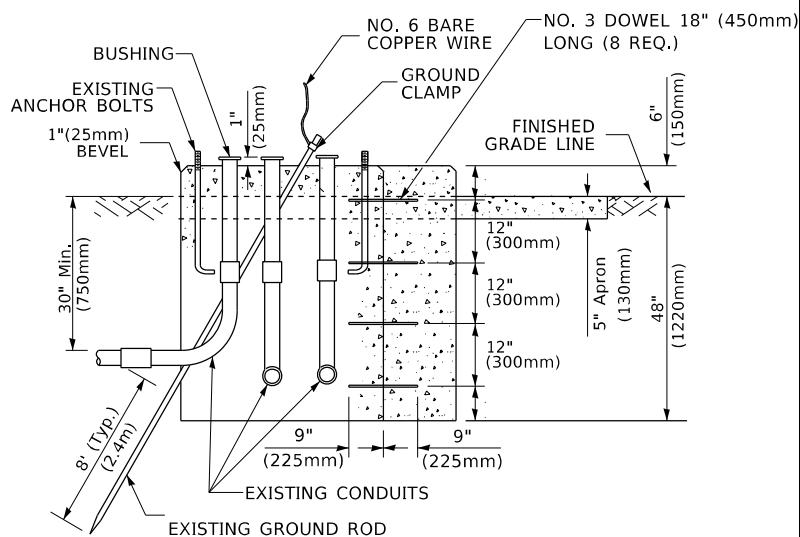
NOTES:

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

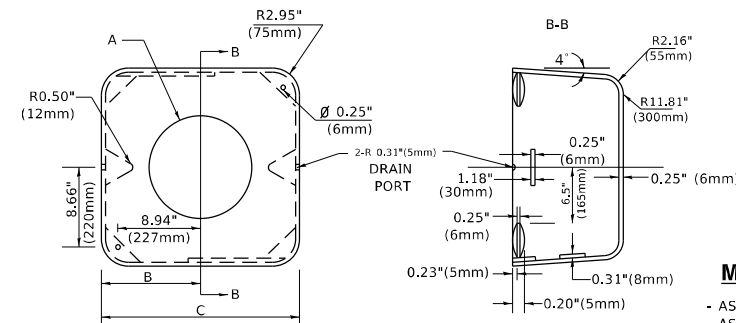
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



TOP VIEW
(NOT TO SCALE)



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)



MATERIAL
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

	A	B	C	HEIGHT	WEIGHT
	VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
	VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
	VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
	VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

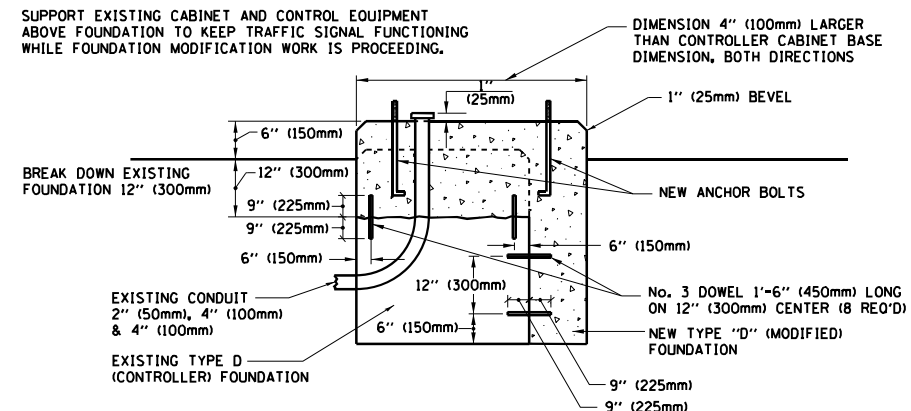
SHROUD

NOTES:

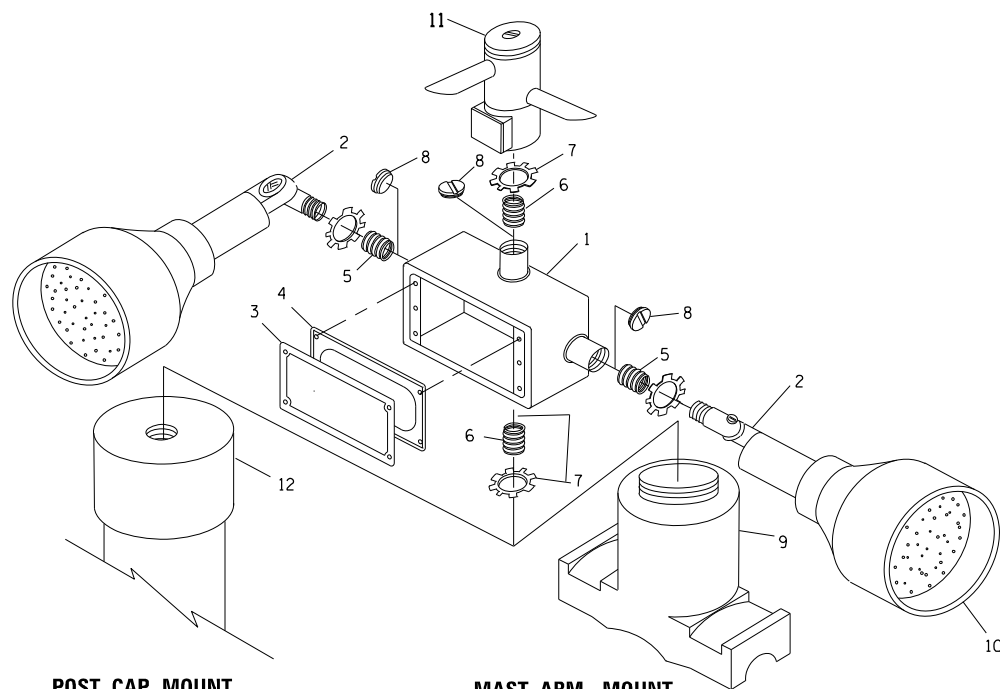
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION

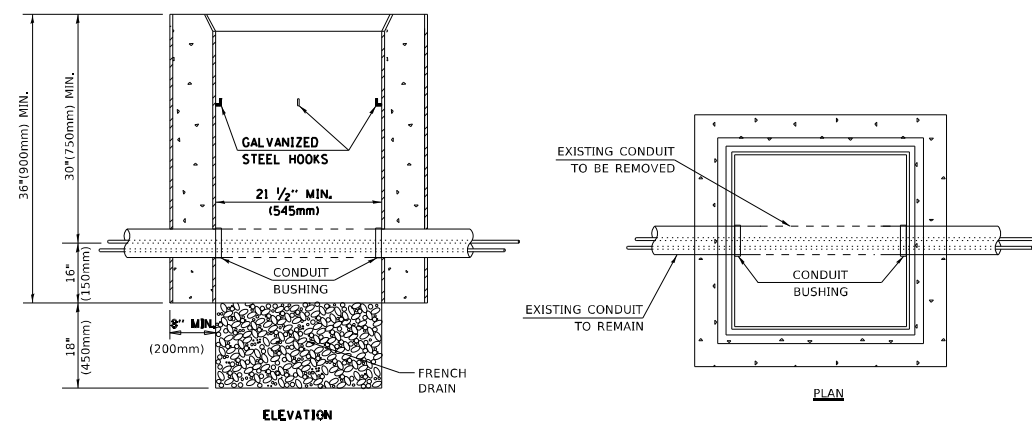


POST CAP MOUNT **MAST ARM MOUNT**
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	3/4"(19 mm) LOCKNUT
8	3/4"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



NOTES:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

MODEL: Default
FILE NAME: S:\WP\Design\Ivan03_1\House_Traffic\et1_Phase2_E2UB6_APS\62UB6-ct-general.dgn

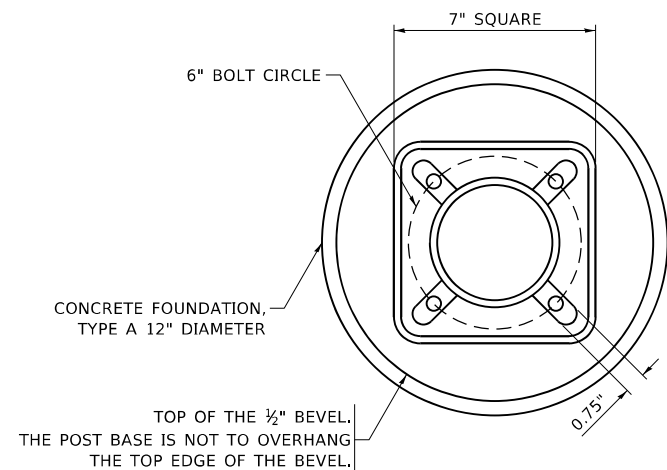
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	DRAWN -	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/24/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

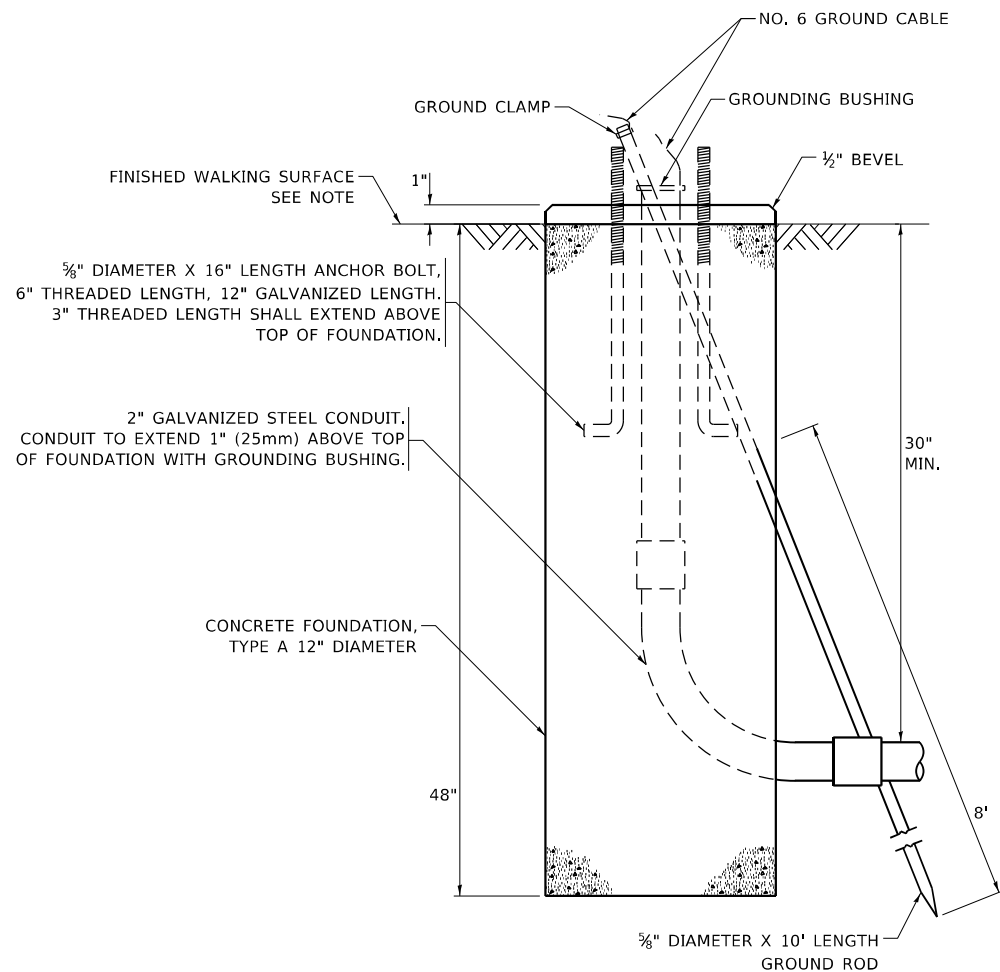
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	14
TS-05		CONTRACT NO. 62W13		
ILLINOIS / FED. AID PROJECT				



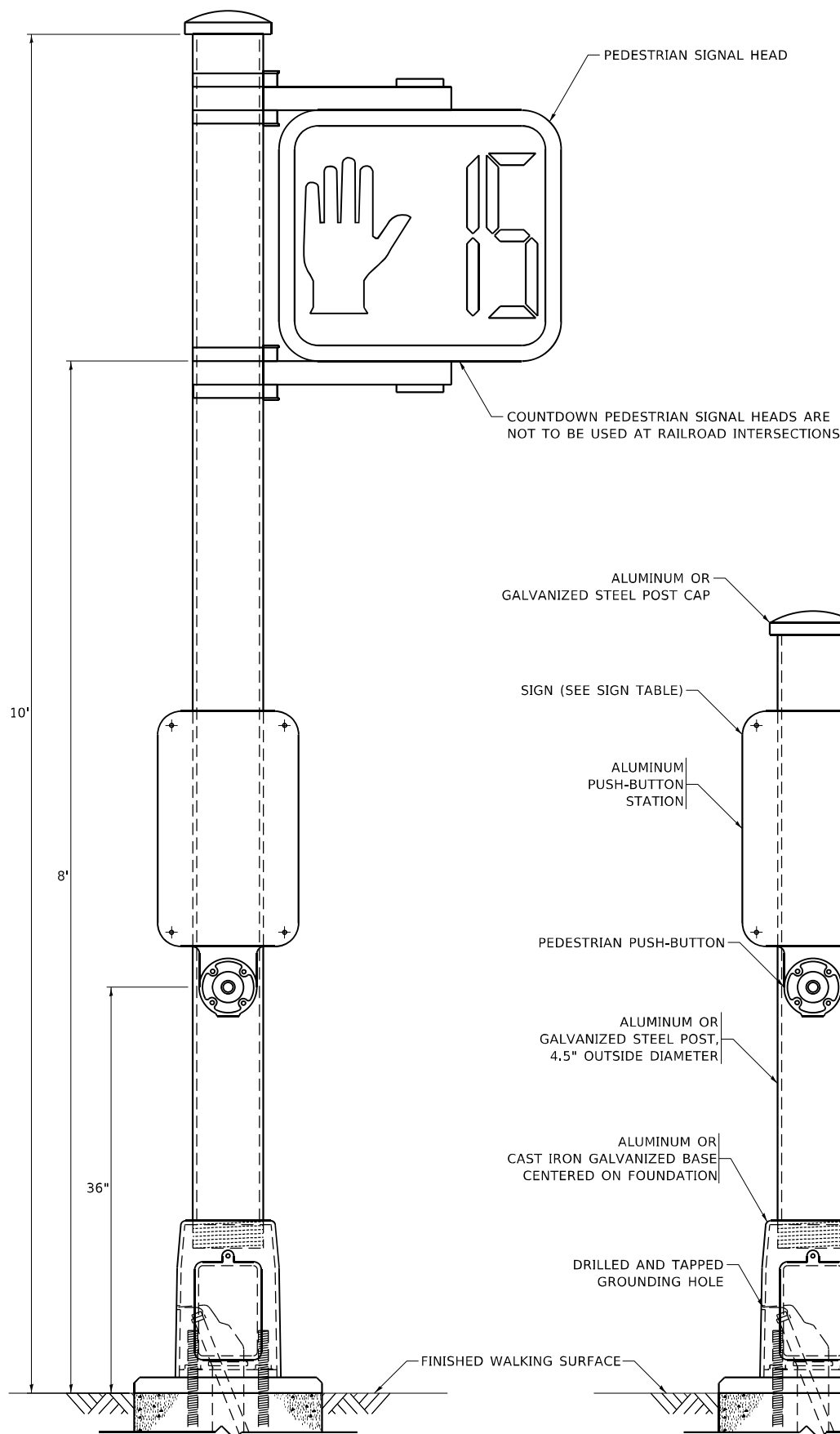
BOLT PATTERN

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.

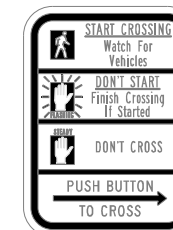


**CONCRETE FOUNDATION,
TYPE A 12-INCH DIAMETER**

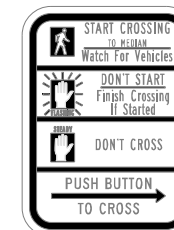


PEDESTRIAN SIGNAL POST, 10 FT.

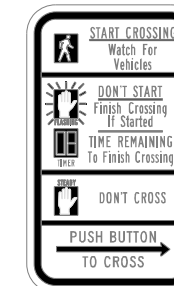
PEDESTRIAN SIGNAL POST, 5 FT.



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: Default
FILE NAME: S:\V\Design\Ivanov\03_InHouse_Traffic\et1_Phase2\2DU06_APS\62106-aps-std-general.dgn

USER NAME = Ivan.Plascencia	DESIGNED - IP	REVISED - 10-15-2020
PLOT SCALE = 100,0000' / in.	DRAWN - IP	REVISED -
PLOT DATE = 8/24/2023	CHECKED - LP	REVISED -
	DATE - 10-15-2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	15
TS-05			CONTRACT NO. 62W13	
ILLINOIS FED. AID PROJECT				

MODEL Path: J:\Projects\Design\Ivan03_InHouse_Traffic\et1_Phase2_ETU06_A0562106s-dt-general.dgn
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LOCATION NO.	TS NO.	INTERSECTION NAME	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT ACCESSIBLE PEDESTRIAN SIGNALS		
			85000200	89502375	X8760200
1	904	IL RTE 72 (HIGGINS RD) AT RICHARD J BROWN BLVD	1	1	2
2	902	IL RTE 72 (HIGGINS RD) AT REINKING RD	1	1	4
3	13404	IL RTE 72 (HIGGINS RD) AT TYRRELL RD	1	1	2
4	14890	IL RTE 31 (WESTERN AVE) AT HUNTLEY RD / MAIN ST	1	1	10
5	14885	IL RTE 31 (WESTERN AVE) AT SPRUCE DR	1	1	8
6	11083	IL RTE 59 AT DUKE PKWY / EVERTON DR	1	1	8
7	9472	IL RTE 59 AT I-88 DDI	1	1	16
8	9455	IL RTE 59 AT BRUCE LN / BROOKDALE RD	1	1	8
9	20360	IL RTE 59 AT MERIDIAN PKWY / GLACIER PARK AVE	1	1	8
10	12140	IL RTE 59 AT LIBERTY ST / JEFFERSON AVE	1	1	8
11	21139	IL RTE 59 AT MEIJER ENTRANCE	1	1	8
12	6090	IL RTE 59 AT US RTE 34 (OGDEN AVE)	1	1	6
13	6237	IL RTE 53 AT MADISON ST	1	1	2
14	20335	IL RTE 53 AT PERSHING AVE	1	1	8
15	11680	IL RTE 53 AT US RTE 34 WB RAMP / SOUTHPORT AVE	1	1	2
16	11655	IL RTE 53 AT MAIN ST - LISLE	1	1	2
17	6255	IL RTE 53 AT WOODRIDGE DR	1	1	4
18	6245	IL RTE 53 AT 83RD ST	1	1	2
19	6116	US RTE 34 (OGDEN AVE) AT OAK ST / SALT CREEK LN	1	1	12
20	3705	ROOSEVELT RD AT 17TH AVE	1	1	8
21	2370	IL RTE 43 (HARLEM AVE) AT MADISON ST	1	1	8
22	14155	US RTE 34 (OGDEN AVE) AT IL RTE 171 (1ST AVE)	1	1	8
23	14170	US RTE 34 (OGDEN AVE) AT PLAINFIELD RD	1	1	2
24	5565	OGDEN AVE AT AUSTIN BLVD	1	1	8
25	2260	IL RTE 43 (HARLEM AVE) AT 55TH ST (ARCHER AVE)	1	1	8
26	163	IL RTE 7 (159TH ST) AT WILL-COOK RD	1	1	8
27	164	IL RTE 7 (159TH ST) AT 113TH CT	1	1	6
28	20490	US RTE 6 (159TH ST) AT 108TH AVE	1	1	8
29	20492	US RTE 6 (159TH ST) AT 104TH AVE	1	1	4
30	1650	US RTE 45 (LA GRANGE RD) AT 143RD ST	1	1	8
31	1660	US RTE 45 (LA GRANGE RD) AT 149TH ST	1	1	8
32	1700	US RTE 45 (LA GRANGE RD) AT 167TH ST	1	1	8
33	22060	US RTE 45 (LA GRANGE RD) AT 171ST ST	1	1	4
34	205	US RTE 6 (159TH ST) AT CENTRAL AVE	1	1	8
35	220	US RTE 6 (159TH ST) AT DIXIE HWY	1	1	8
36	4095	PULASKI RD AT 183RD ST	1	1	8
37	2635	IL RTE 50 (CICERO AVE) AT VOLLMER RD	1	1	2
38	7543	IL RTE 7 AT THORNTON ST	1	1	8
39	7526	IL RTE 7 (159TH ST) AT FARRELL RD	1	1	8
40	7529	IL RTE 7 (159TH ST) AT ADELMANN RD	1	1	4
41	22528	US RTE 30 (JEFFERSON ST) AT JOLIET ST	1	1	8
42	22530	US RTE 30 (JEFFERSON ST) AT CHICAGO ST	1	1	8
43	22531	US RTE 30 (JEFFERSON ST) AT IL RTE 53 (SCOTT ST)	1	1	8
44	12261	US RTE 6 (EAMES ST) AT I-55 W FRONTAGE RD	1	1	8

USER NAME = Iovan,Plascencia	DESIGNED - IP	REVISED -
	DRAWN - IP	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - NB	REVISED -
PLOT DATE = 8/24/2023	DATE - 8/15/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 VAR APS PUSH BUTTON	VARIOUS	16	16
		62W13		
		ILLINOIS		FED. AID PROJECT