

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	28	1
ILLINOIS			CONTRACT NO. 62W69	

\* 26 + 19 = 45 TOTAL SHEETS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED  
IN THE CITY OF AURORA

TRAFFIC DATA

2023 ADT = 18900  
POSTED SPEED = 25 MPH - 45 MPH

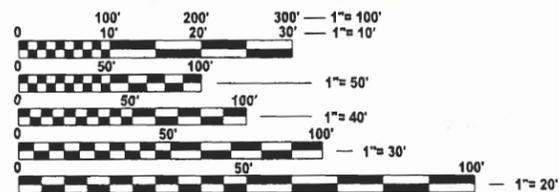
PROPOSED  
HIGHWAY PLANS

FAU ROUTE 2503: IL-25 (AURORA AVENUE)  
NORTH OF CLEAR WATER DRIVE TO HAZEL AVENUE  
SECTION: 2024-950-RS  
PROJECT: NHPP-STP-KUYP(061)  
STANDARD OVERLAY  
KANE COUNTY  
C-91-203-24

PROJECT ENDS  
STA. 195+68

OMISSION  
STA. 70+38 TO STA. 85+00  
STA. 117+57 TO STA. 118+02

PROJECT BEGINS  
STA. 17+50

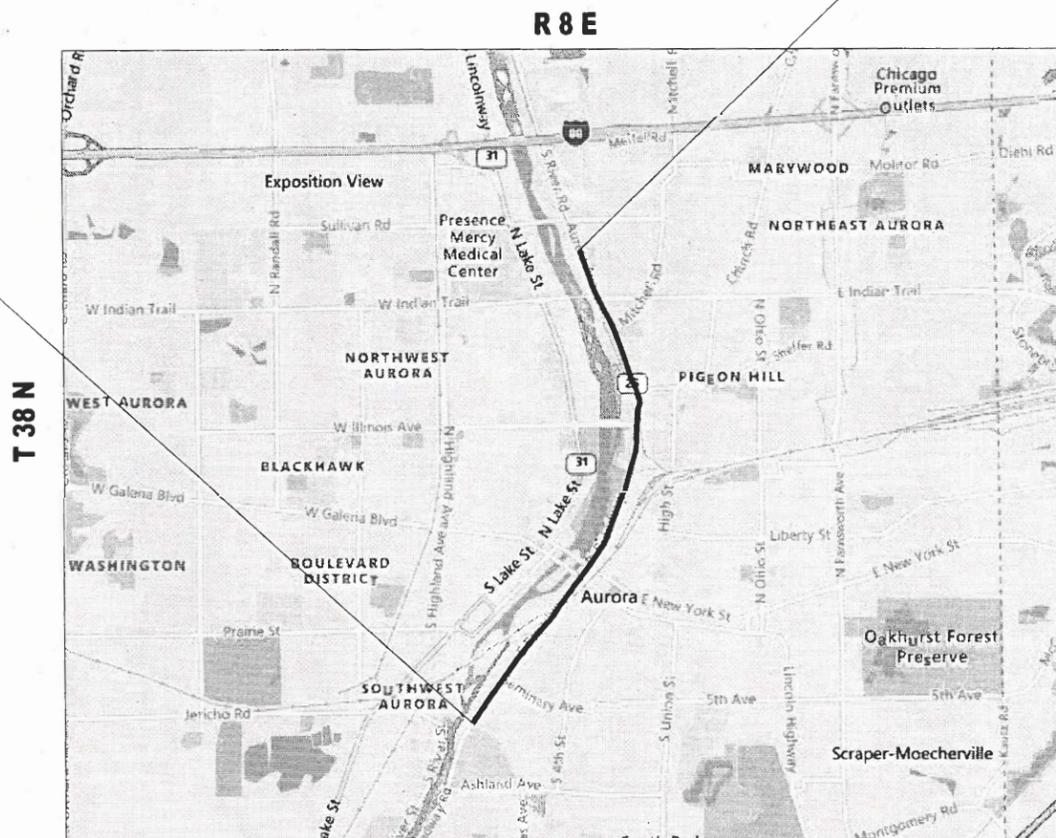


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD  
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT  
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS  
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: RODRIGO LEDEZMA (847) 705-4580  
PROJECT MANAGER: J. ALAIN MIDY (847) 221-3056

CONTRACT NO. 62W69



AURORA TOWNSHIP

GROSS LENGTH = 17,818 FT. = 3.37 MILE  
NET LENGTH = 16,311 FT. = 3.09 MILE



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 6 20 24

*[Signature]* REGIONAL ENGINEER

January 31 20 25

*[Signature]* ENGINEER OF DESIGN AND ENVIRONMENT

January 31 20 25

*[Signature]* DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

## INDEX OF SHEETS

## STATE STANDARDS

### SHEET NO.

### DESCRIPTION

### STANDARD NO.

### DESCRIPTION

1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-6	EXISTING AND PROPOSED TYPICAL SECTIONS
7-13	ROADWAY PLAN AND PROFILE
13A-13F	CURB RAMP PLANS
13G-13L	APS SIGNAL PLANS
14	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)
15	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
16	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
17	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
18	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYSS (TC-10)
19	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
20	DISTRICT ONE TYPICAL PAVEMENT MARKING (TC-13)
21	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
22	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)
23	ARTERIAL ROAD INFORMATION SIGN (TC-22)
23A-23G	TRAFFIC SIGNAL DETAILS
24	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)
25	PROJECT DETAIL FOR DOUBLE PERPENDICULAR RAMPS (PD-03)
26	PROJECT DETAIL FOR SINGLE PERPENDICULAR RAMPS WITH TURNING SPACE (PD-04)

000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
442201-03	CLASS C AND D PATCHES
604001-05	FRAMES AND LIDS, TYPE 1
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' TO 2' FROM PAVEMENT EDGE
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 2' FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS ≤ 40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON-TRAVERSABLE MEDIAN
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD 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
886001-01	DETECTOR LOOP INSTALLATIONS

11. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
12. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FILED BY THE ENGINEER.
13. ALL MILLED SURFACES SHALL BE A UNIFORM CROSS SLOPE PER LANE AND FREE OF RIDGES BETWEEN PASSES. ANY DEVIATION SHALL BE CORECTED AT NO COST TO THE DEPARTMENT.
14. LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
15. THE CONTRACTOR SHALL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF PLATED STRUCTURES BY STATION AND OFFSET LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT.
16. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION.
17. PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR SHORT TERM PAVEMENT MARKING ON FINAL SURFACES.
18. THE (ROAD CONSTRUCTION AHEAD) SIGNS SHALL REMAIN INSTALLED UNTIL THE COMPLETION OF THE PROJECT OR WHEN NO ROADWAY HAZARD REMAIN WITHIN THE WORKZONE.
19. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD UNLESS OTHERWISE SHOWN.
20. DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
21. WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2" INCHES WHERE THE SPEED LIMIT IS 40 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH. WITH WRITTEN APPROVAL OF THE ENGINEER A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPE A MINIMUM 1:3 (V:H) OR A NOTCHED LONGITUDINAL WEDGE IS USED.
22. OVERNIGHT LANE CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS.
23. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 108.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPERATE PAY ITEM HAS BEEN PROVIDED.

## GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES, (48 HOURS NOTIFICATION IS REQUIRED).
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF AURORA.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
4. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
5. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
6. THE RESIDENT ENGINEER SHALL CONTACT EMAD ALHUSSEINI AREA TRAFFIC FIELD TECHNICIAN, AT EMAD.ALHUSSEINI@ILLINOIS.GOV, A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
7. ANY DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
8. FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE PROJECT LIMITS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
9. THE CONTRACTOR SHALL CONTACT THE DISTRICT TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
10. 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 AND FOUNDATIONS AND VERIFYING THE MAST ARM LENGHTS.

GENERAL NOTES CONTINUE ON NEXT SHEET

MODEL: GenNotesSH01 [Sheet]  
FILE NAME: c:\pwwork\work\117024-shh-egennotes.dgn

USER NAME = Fritz, Guillaume	DESIGNED -	REVISED - 4/11/2025
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/12/2024	DATE -	REVISED -

### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

### INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES IL-25 (AURORA AVENUE) N. OF CLEAR WATER DR TO HAZEL AVENUE

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	2
CONTRACT NO. 62W69				
		ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES				TYPE CODE						
				URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	
				ROADWAY	ROADWAY	DRAINAGE				
				80% FED 20% STATE (NHPP)	80% FED 20% STATE (STP)	100% STATE				
Code No.	Item	Unit	Total Quantity	0005	0005	0044				
20200100	EARTH EXCAVATION	CU YD	107	53.5	53.5					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	509	254.5	254.5					
25200110	SODDING, SALT TOLERANT	SQ YD	585	292.5	292.5					
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	52496	26248	26248					
40600370	LONGITUDINAL JOINT SEALANT	FOOT	20800	10400	10400					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	120	60	60					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	680	340	340					
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	3210	1605	1605					
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	6536	3268	3268					
42001300	PROTECTIVE COAT	SQ YD	1285	642.5	642.5					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	8257	4128.5	4128.5					
42400800	DETECTABLE WARNINGS	SQ FT	675	337.5	337.5					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	77766	38883	38883					
44000600	SIDEWALK REMOVAL	SQ FT	8296	4148	4148					
44201798	CLASS D PATCHES, TYPE I, 13 INCH	SQ YD	170	85	85					
44201803	CLASS D PATCHES, TYPE II, 13 INCH	SQ YD	1560	780	780					
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SQ YD	950	475	475					
44201809	CLASS D PATCHES, TYPE IV, 13 INCH	SQ YD	1352	676	676					
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	166	83	83					
56109210	WATER VALVES TO BE ADJUSTED	EACH	50	25	25					
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	160	80	80					

SUMMARY OF QUANTITIES				TYPE CODE						
				URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	
				ROADWAY	ROADWAY	DRAINAGE				
				80% FED 20% STATE (NHPP)	80% FED 20% STATE (STP)	100% STATE				
Code No.	Item	Unit	Total Quantity	0005	0005	0044				
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	35	17.5	17.5					
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	4	2	2					
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	0.5	0.5					
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	0.5	0.5					
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	12	6	6					
67100100	MOBILIZATION	L SUM	1	0.5	0.5					
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.5	0.5					
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.5	0.5					
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.5	0.5					
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	0.5	0.5					
70102634	TRAFFIC CONTROL AND PROTECTION, STANDARD 701611	L SUM	1	0.5	0.5					
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.5	0.5					
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.5	0.5					
70300100	SHORT TERM PAVEMENT MARKING	FOOT	110880	55440	55440					
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	46200	23100	23100					
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	4380	2190	2190					
70300221	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT	FOOT	132000	66000	66000					
70300241	TEMPORARY PAVEMENT MARKING - LINE 6" - PAINT	FOOT	22200	11100	11100					
70300251	TEMPORARY PAVEMENT MARKING - LINE 8" - PAINT	FOOT	1500	750	750					
70300261	TEMPORARY PAVEMENT MARKING - LINE 12" - PAINT	FOOT	9000	4500	4500					
70300281	TEMPORARY PAVEMENT MARKING - LINE 24" - PAINT	FOOT	3900	1950	1950					

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REVISED SHEET 4/14/2025

\* = SPECIALTY ITEM    Δ = NON-PARTICIPATING ITEM

USER NAME = Fritz, Guillaume	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/13/2024	DATE -	REVISED -

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

**SUMMARY OF QUANTITIES**  
**IL-25 (AURORA AVENUE) N. OF CLEAR WATER DR TO HAZEL AVENUE**  
 SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	3
CONTRACT NO. 62W69				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES				TYPE CODE					
				URBAN	URBAN	URBAN	URBAN	URBAN	URBAN
				ROADWAY	ROADWAY	DRAINAGE			
				80% FED 20% STATE (NHPP)	80% FED 20% STATE (STP)	100% STATE			
Code No.	Item	Unit	Total Quantity	0005	0005	0044			
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	27720	13860	13860				
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1460	730	730				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	44000	22000	22000				
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	7400	3700	3700				
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	500	250	250				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	3000	1500	1500				
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	1300	650	650				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	1250	625	625				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	1220	610	610				
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	25760	12880	12880				
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	0.5	0.5				
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	40	20	20				
X4400223	CURB REMOVAL AND REPLACEMENT GREATER THAN 10 FEET	FOOT	3360	1680	1680				
X4400501	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT LESS THAN OR EQUAL TO 10 FEET	FOOT	2088	1044	1044				
X4400503	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT GREATER THAN 10 FEET	FOOT	5548	2774	2774				
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	3000		3000				
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	126	63	63				
X6700407	ENGINEER'S FIELD OFFICE, TYPEA (D1)	CAL MO	12	6	6				
* X8860105	DETECTOR LOOP REPLACEMENT	FOOT	100	50	50				
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	160		160				
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	25.7	25.7				

SUMMARY OF QUANTITIES				TYPE CODE					
				URBAN	URBAN	URBAN	URBAN	URBAN	URBAN
				ROADWAY	ROADWAY	DRAINAGE			
				80% FED 20% STATE (NHPP)	80% FED 20% STATE (STP)	100% STATE	80% FED 20% STATE (NHPP)		
Code No.	Item	Unit	Total Quantity	0005	0005	0044	0021		
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	0.5	0.5				
Ø Z0076600	TRAINEES	HOUR	500	500					
Ø Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500					
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	1	0.5	0.5				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	1	0.5	0.5				
25200200	SUPPLEMENTAL WATERING	UNIT	4	2	2				
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	4	2	2				
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	4	2	2				
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-95, MIX "D", N50	TON	1	0.5	0.5				
44000300	CURB REMOVAL	FOOT	38	19	19				
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	497	248.5	248.5				
60600605	CONCRETE CURB, TYPE B	FOOT	180	80	80				
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	305	152.5	152.5				
Z0076604	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	192	96	96				
81028200	UNDERGROUND, GALVANIZED STEEL, 2" DIA.	FOOT	204					204	
81028240	UNDERGROUND, GALVANIZED STEEL, 4" DIA.	FOOT	247					247	
81400200	HEAVY-DUTY HANDHOLE	EACH	4					4	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2					2	
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	633					633	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	199					199	
87301305	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 1 PAIR	FOOT	1050					1050	
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	90					90	
87900200	DRILL EXISTING HANDHOLE	EACH	13					13	
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8					8	
88500100	INDUCTIVE LOOP DETECTOR	EACH	5					5	
88600100	DETECTOR LOOP, TYPE 1	FOOT	1143					1143	
89502200	MODIFY EXISTING CONTROLLER	EACH	1					1	
89502300	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	536					536	
89502375	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	EACH	2					2	
89502376	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	EACH	4					4	
X1400367	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	EACH	2					2	
X1400378	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	EACH	2					2	
X8760200	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	EACH	12					12	
X8780012	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	16					16	
Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	2					2	

MODEL: LE NAME: c1

REVISÉD SHEET 4/14/2025

\* = SPECIALTY ITEM Δ = NON-PARTICIPATING ITEM

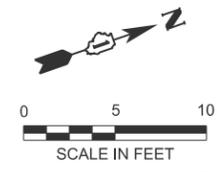
USER NAME = Fritz.Guillaume	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/13/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

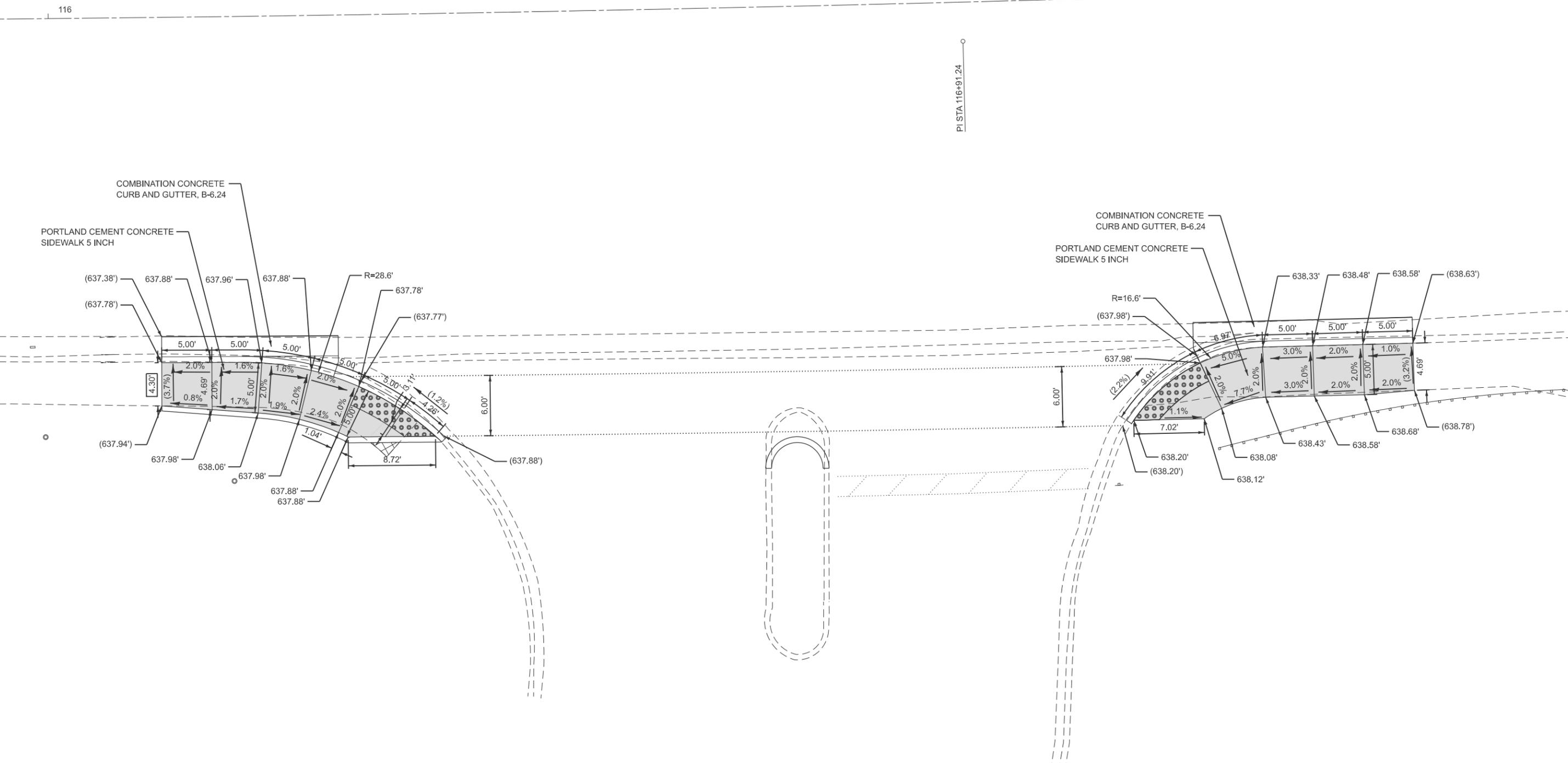
**SUMMARY OF QUANTITIES  
IL-25 (AURORA AVENUE) N. OF CLEAR WATER DR TO HAZEL AVENUE**

F A U RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2503	2024-950-RS	KANE	26	4
CONTRACT NO. 62W69				
ILLINOIS   FED. AID PROJECT				

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.



# IL ROUTE 25



LEGEND			
<span style="border: 1px solid black; padding: 2px;">xx.xx'</span>	EXISTING LENGTH		DETECTABLE WARNINGS
<span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span>	PROPOSED SIDE CURB		SIDEWALK REMOVAL
( )	EXISTING ELEVATION/SLOPE		



MODEL: Default  
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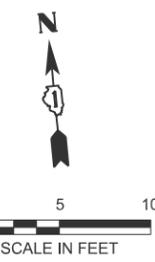
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	DRAWN - AT	REVISED -
	CHECKED - KE	REVISED -
PLOT DATE = 2/14/2025	DATE - 3/12/2025	REVISED -

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

**IL ROUTE 25 (BROADWAY STREET)**  
**AT POST OFFICE ENTRANCE CURB RAMP DETAILS**

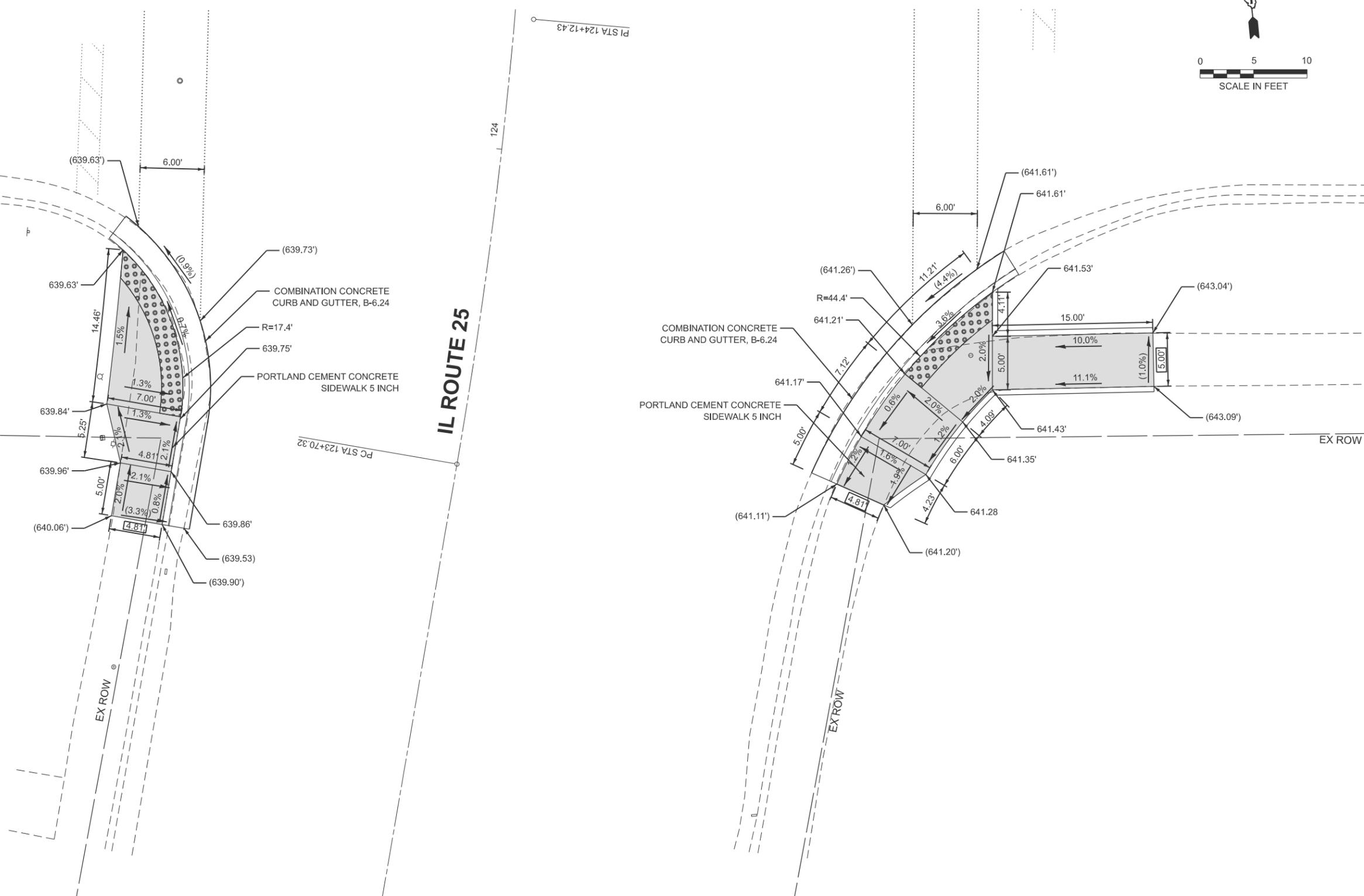
SCALE: 1"=5'      SHEET 5 OF 10 SHEETS      STA.      TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	13A
CONTRACT NO. 62W69				
ILLINOIS FED. AID PROJECT				



PIERCE STREET

IL ROUTE 25



**LEGEND**

<span style="border: 1px solid black; padding: 2px;">xx.xx'</span>	EXISTING LENGTH		DETECTABLE WARNINGS
<span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span>	PROPOSED SIDE CURB		SIDEWALK REMOVAL
( )	EXISTING ELEVATION/SLOPE		



MODEL: Default  
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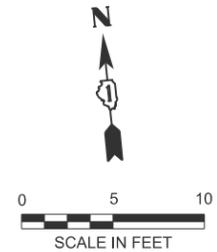
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PLOT DATE = 2/14/2025	DATE - 3/12/2025	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

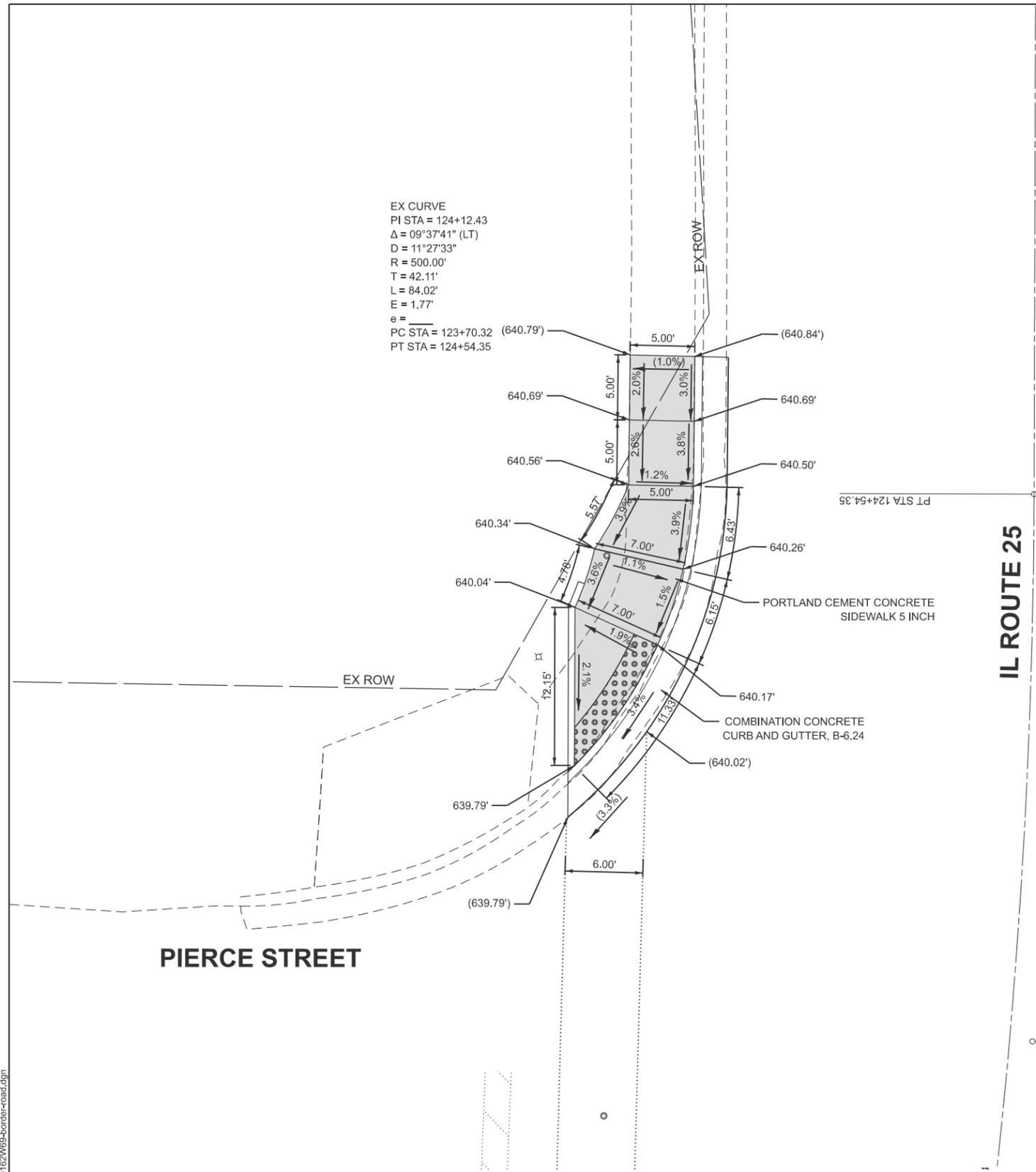
**IL ROUTE 25 (BROADWAY STREET)  
AT PIERCE STREET CURB RAMP DETAILS**

SCALE: 1"=5'      SHEET 6 OF 10 SHEETS      STA.      TO STA.

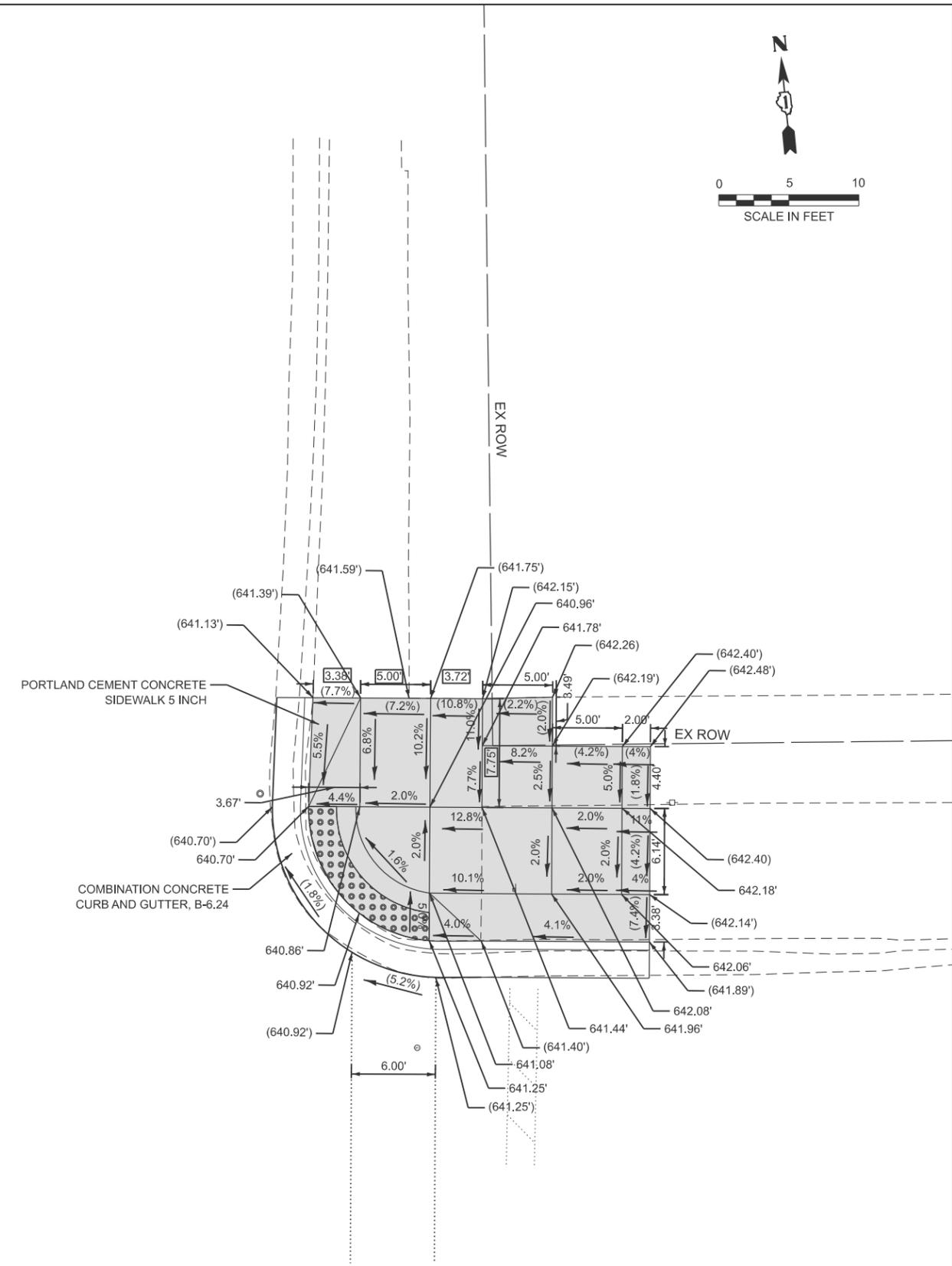
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	13B
CONTRACT NO. 62W69				
ILLINOIS FED. AID PROJECT				



EX CURVE  
 PI STA = 124+12.43  
 $\Delta = 09^{\circ}37'41''$  (LT)  
 $D = 11^{\circ}27'33''$   
 $R = 500.00'$   
 $T = 42.11'$   
 $L = 84.02'$   
 $E = 1.77'$   
 $e =$   
 PC STA = 123+70.32  
 PT STA = 124+54.35



IL ROUTE 25

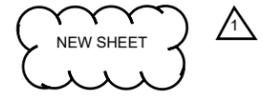


LEGEND

- xx.xx' EXISTING LENGTH
- PROPOSED SIDE CURB
- EXISTING ELEVATION/SLOPE
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL

NOTES:

1. SIDEWALK IS DESIGNED TO THE MAXIMUM EXTENT FEASIBLE (MEF).



MODEL: Default  
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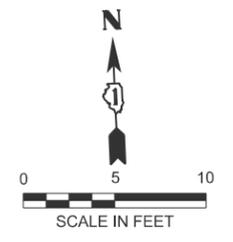
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	DRAWN - AT	REVISED -
	CHECKED - KE	REVISED -
PLOT DATE = 2/14/2025	DATE - 3/12/2025	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

IL ROUTE 25 (BROADWAY STREET)  
 AT PIERCE STREET CURB RAMP DETAILS

SCALE: 1"=5' SHEET 7 OF 10 SHEETS STA. TO STA.

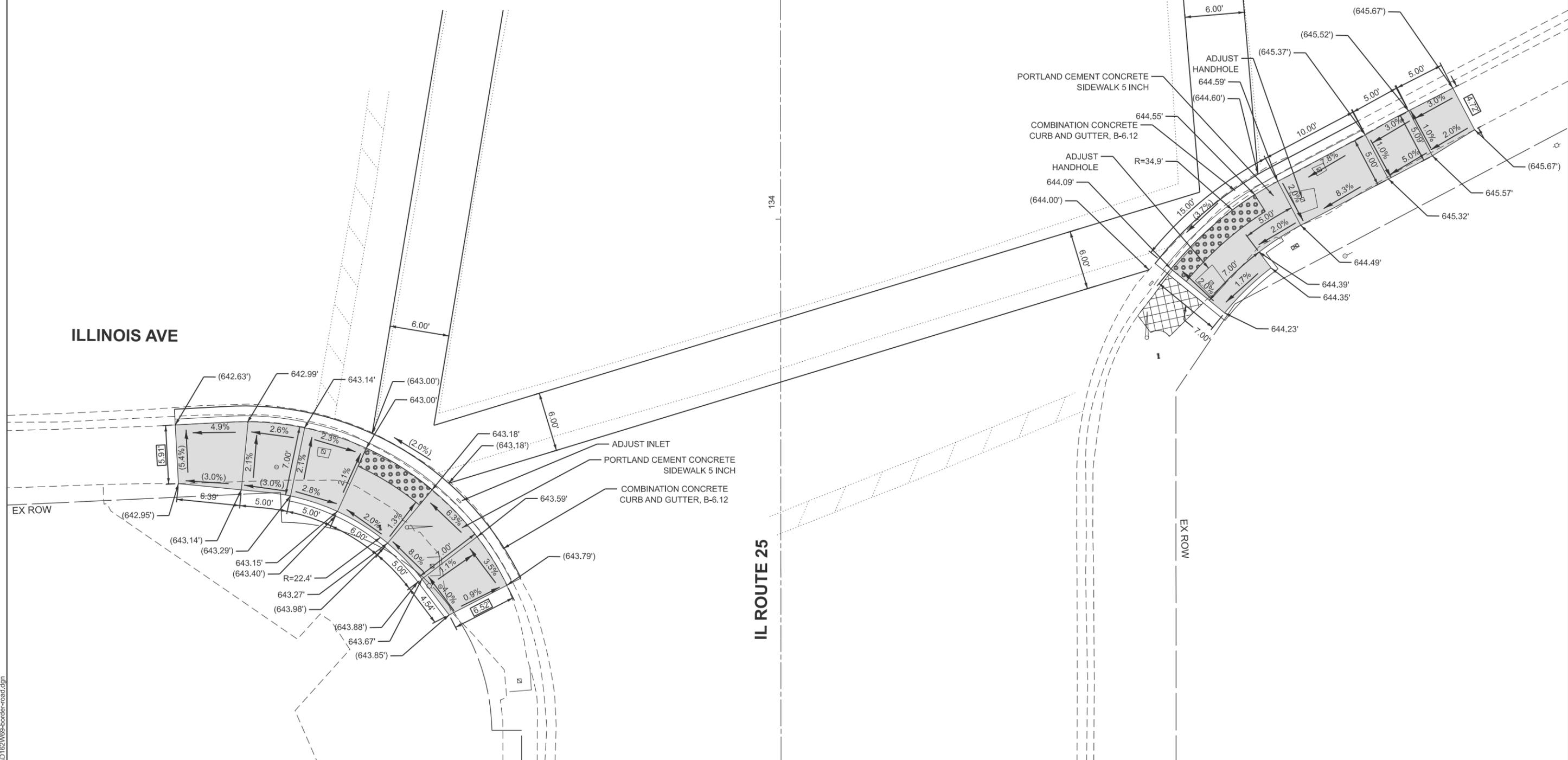
F.A.U. RTE. 2503	SECTION 2024-950-RS	COUNTY KANE	TOTAL SHEETS 26	SHEET NO. 13C
CONTRACT NO. 62W69				
ILLINOIS FED. AID PROJECT				



PI STA 134+27.04

IL ROUTE 25

ILLINOIS AVE



LEGEND

- xx.xx' EXISTING LENGTH
- PROPOSED SIDE CURB
- EXISTING ELEVATION/SLOPE
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL

NOTES:

1. PEDESTRIAN PUSH BUTTON LOCATION PROVIDED ON TRAFFIC SIGNAL PLANS



MODEL: Default  
FILE NAME: c:\bms\wsp-us-pw\illinois\062010162169-border-road.dgn



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PLOT DATE = 2/14/2025	DATE - 3/12/2025	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

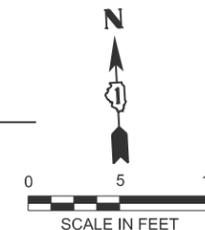
IL ROUTE 25 (BROADWAY STREET)  
AT ILLINOIS AVENUE CURB RAMP DETAILS

SCALE: 1"=5'

SHEET 8 OF 10 SHEETS STA. TO STA.

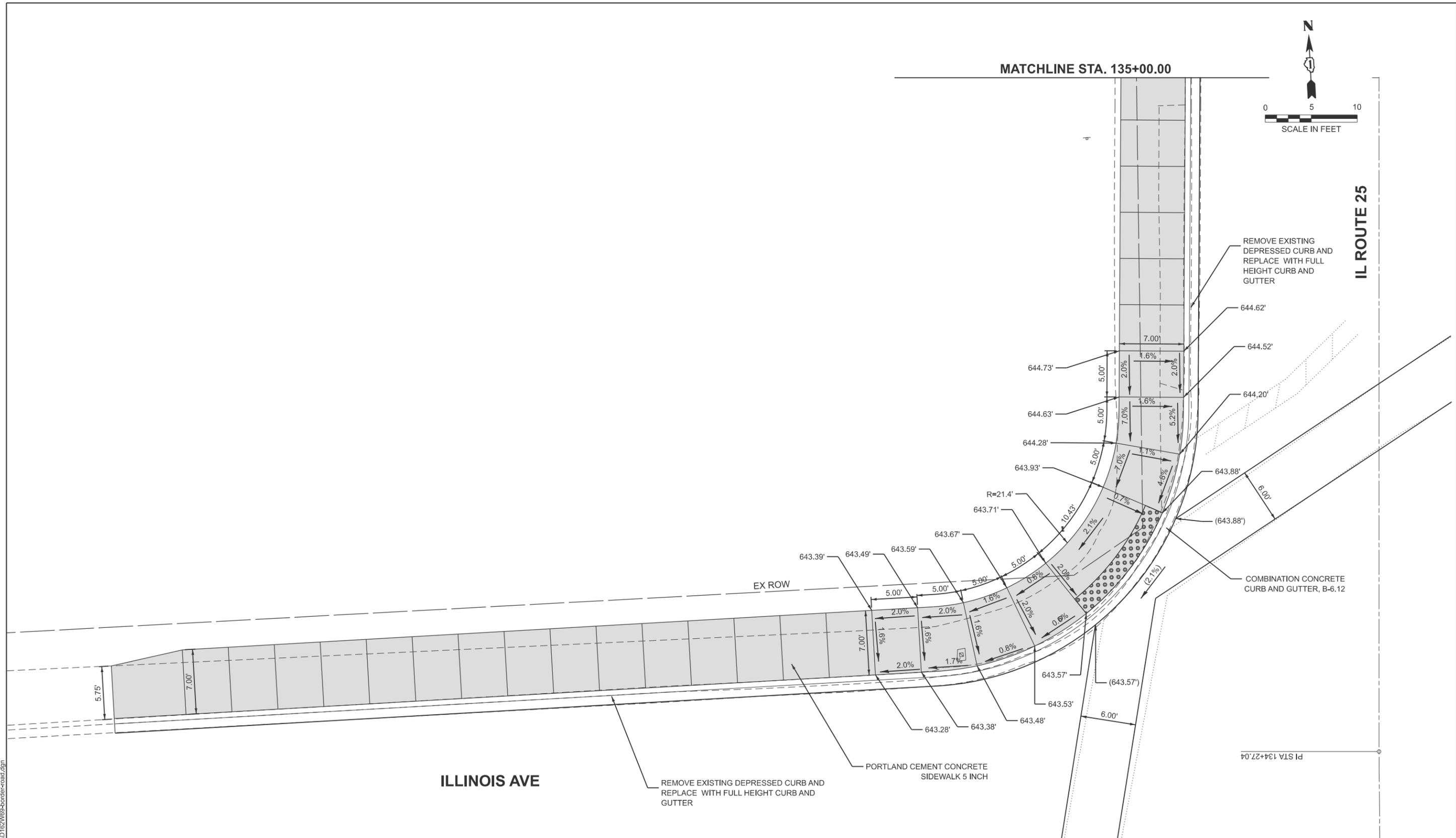
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	13D
CONTRACT NO. 62W69				

ILLINOIS FED. AID PROJECT



MATCHLINE STA. 135+00.00

IL ROUTE 25



ILLINOIS AVE

REMOVE EXISTING DEPRESSED CURB AND REPLACE WITH FULL HEIGHT CURB AND GUTTER

PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

COMBINATION CONCRETE CURB AND GUTTER, B-6.12

LEGEND

- xx.xx' EXISTING LENGTH
- PROPOSED SIDE CURB
- EXISTING ELEVATION/SLOPE
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL

NOTES:

1. PEDESTRIAN PUSH BUTTON LOCATION PROVIDED ON TRAFFIC SIGNAL PLANS



MODEL: Default  
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USER NAME = USAT719599	DESIGNED - AT	REVISED - 4/10/2025
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL ROUTE 25 (BROADWAY STREET)  
AT ILLINOIS AVENUE CURB RAMP DETAILS

SCALE: 1"=5'

SHEET 9 OF 10 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	13E
CONTRACT NO. 62W69				
ILLINOIS FED. AID PROJECT				



**REMOVE AND RELOCATION NOTES:**

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

- 4 EACH PEDESTRIAN PUSH-BUTTONS
- 6 EACH PEDESTRIAN SIGNAL HEADS

**NOTES:**

1. THE CONTRACTOR SHALL PERFORM WORK IN SUCH A WAY AS TO MINIMIZE THE TIME THE PEDESTRIAN EQUIPMENT IS NOT OPERATIONAL.
2. THE CONTRACTOR SHALL CONFIRM THE FINAL LOCATION OF THE APS EQUIPMENT WITH THE TRAFFIC SIGNAL AREA ENGINEER BEFORE INSTALLATION.
3. APS BUTTONS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALK.
4. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
5. ALL PUSH-BUTTONS SHALL BE APS.
6. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
7. THERE SHALL BE A MINIMUM OF 4' SIDEWALK CLEARANCE NEXT TO TRAFFIC SIGNAL FOUNDATIONS TO BE ADA COMPLIANT.
8. THIS LOCATION HAS BEEN DESIGNED TO BE ADA COMPLIANT. ANY DEVIATION FROM THIS PLAN FOR THE POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO ENSURE ADA COMPLIANCE.

INSTALL PEDESTRIAN SIGNAL POST, 5 FT  
INSTALL APS PUSH-BUTTON  
REBUILD EXISTING HANDHOLE

REMOVE EXISTING PEDESTRIAN SIGNAL HEAD (2)  
INSTALL PEDESTRIAN SIGNAL HEADS LED, 1-FACE,  
BRACKET MOUNTED WITH COUNTDOWN TIMER (2)

REMOVE EXISTING PUSH-BUTTON  
INSTALL APS PUSH-BUTTON

INSTALL PEDESTRIAN SIGNAL POST, 10 FT  
INSTALL PEDESTRIAN SIGNAL HEAD, LED, 1-FACE,  
BRACKET MOUNTED WITH COUNTDOWN TIMER (FACING WEST)  
INSTALL APS PUSH-BUTTON

REMOVE EXISTING PEDESTRIAN SIGNAL HEAD (FACING WEST)  
INSTALL PEDESTRIAN SIGNAL HEAD, LED, 1-FACE,  
BRACKET MOUNTED WITH COUNTDOWN TIMER (FACING SOUTH)

REMOVE EXISTING PUSH-BUTTON  
INSTALL APS PUSH-BUTTON

REBUILD EXISTING HANDHOLE

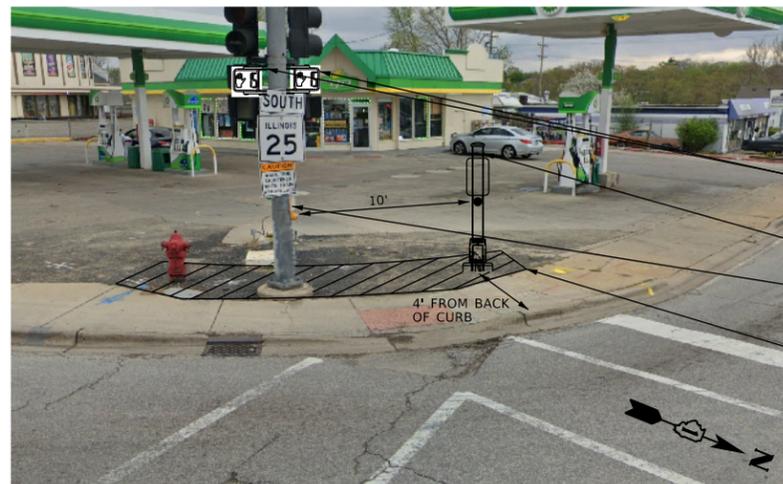
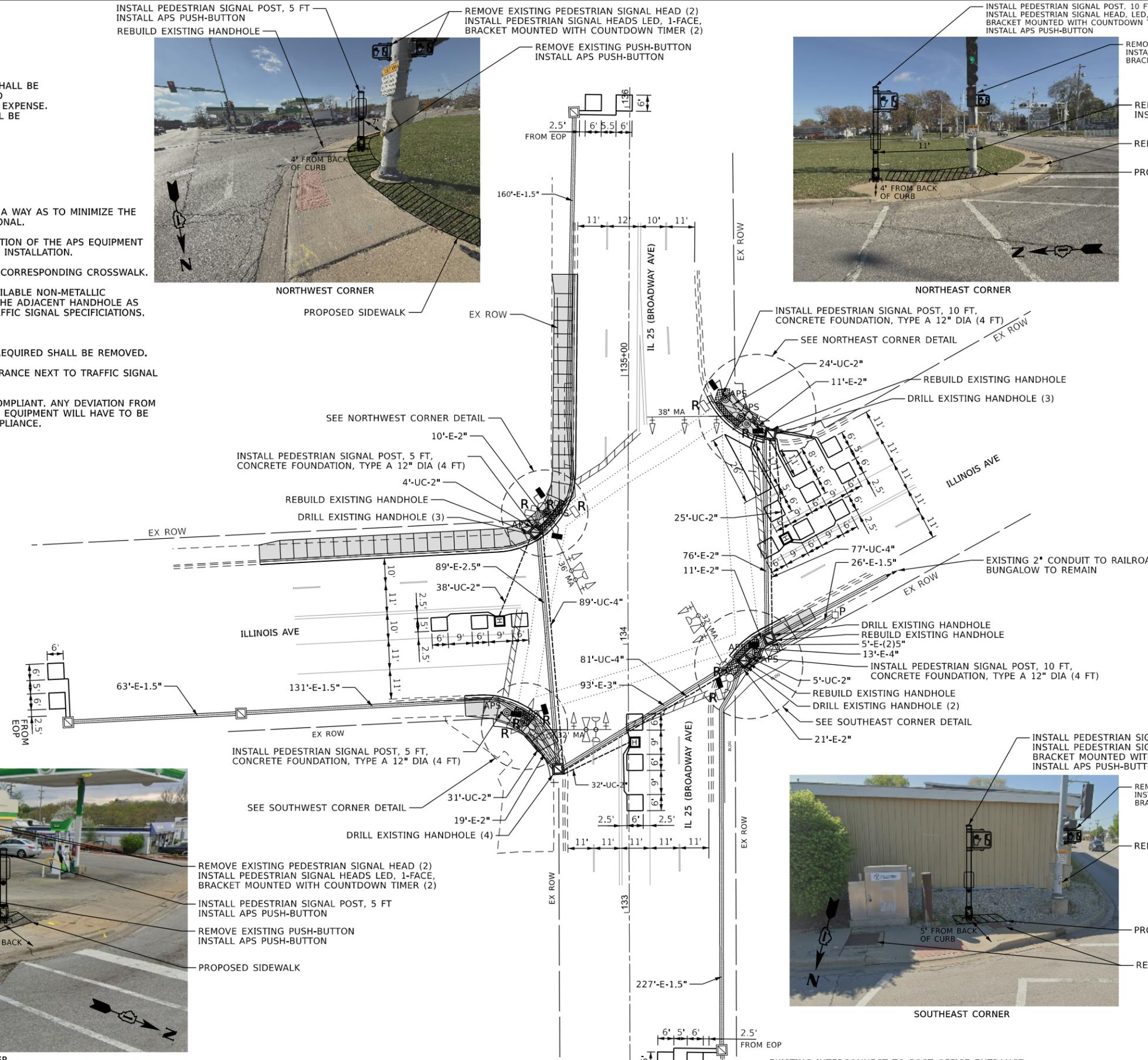
PROPOSED SIDEWALK



NORTHWEST CORNER



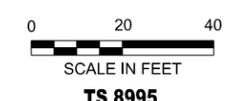
NORTHEAST CORNER



SOUTHWEST CORNER



SOUTHEAST CORNER



MODEL: Default  
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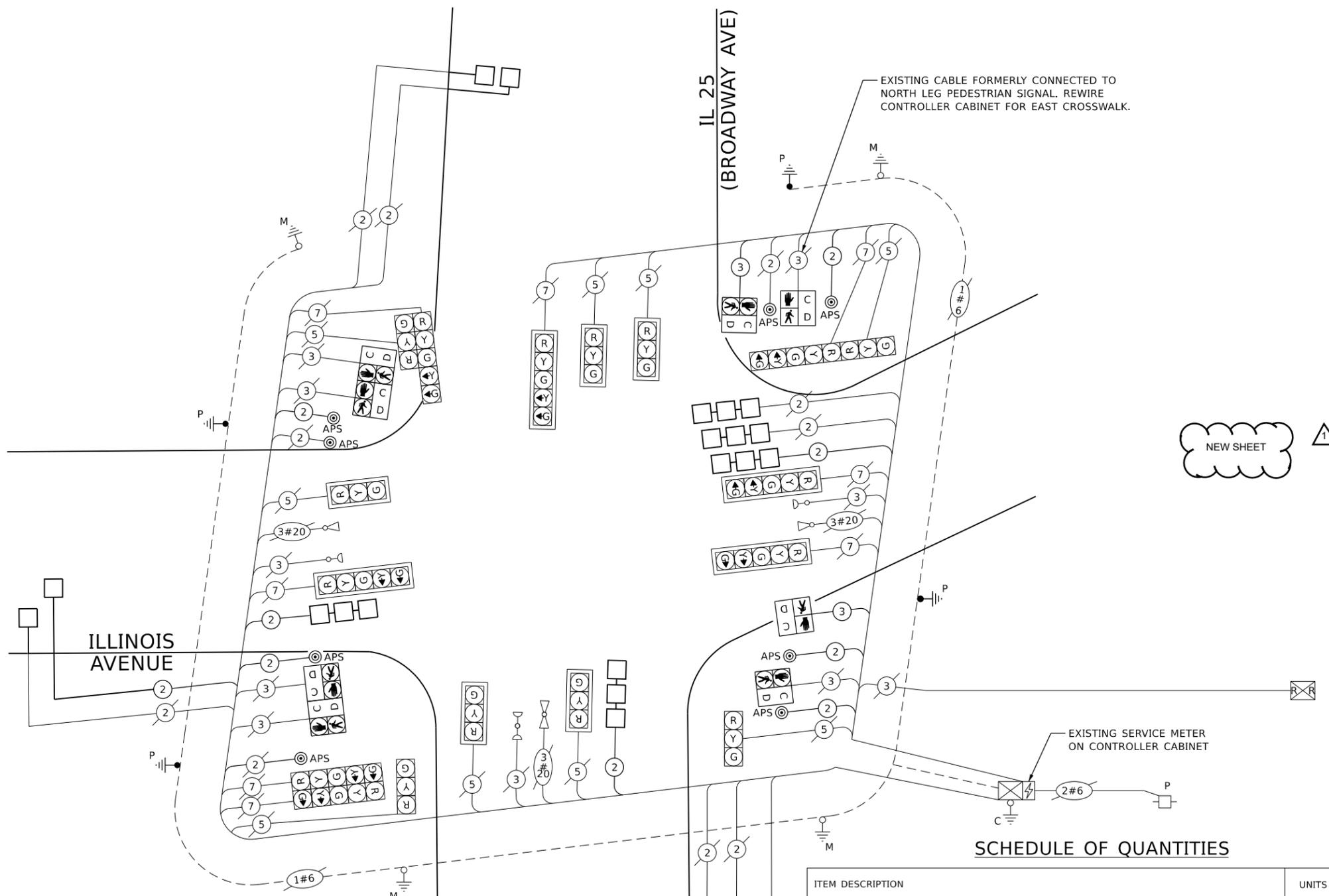


USER NAME = USPS706128	DESIGNED - STSG	REVISED - 4/10/2025
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	CHECKED - MJM	REVISED -
PLOT DATE = 3/11/2025	DATE - 3/12/2025	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL MODERNIZATION PLAN</b>	
<b>IL ROUTE 25 (BROADWAY AVE) AND ILLINOIS AVE</b>	
SCALE: 1"=20'	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	13G
CONTRACT NO. 62W69				
ILLINOIS FED. AID PROJECT				



**NOTE:**  
 THE CONTRACTOR SHALL REPROGRAM THE CONTROLLER CABINET TO ELIMINATE THE EXISTING DUAL CALL PUSH-BUTTONS. THIS WORK WILL BE PAID FOR UNDER THE MODIFY EXISTING CONTROLLER ITEM.

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3-SECTION	9	11	99
4-SECTION	-	14	-
5-SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PED. SIGNAL CONTROLLER	8	15	120
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION			
RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
PTZ CAMERA	-	75	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
<b>TOTAL UPS SIZING =</b>			<b>498</b>
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	-
<b>TOTAL SERVICE WIRE SIZING =</b>			<b>1103</b>

ENERGY COSTS TO:  
**CITY OF AURORA**  
 44 E DOWNERS PLACE  
 AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY: CONTACT: CASSIE EVANS  
 PHONE: (773) 241-0741  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: ---

**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	170
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	247
HEAVY-DUTY HANDHOLE	EACH	3
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	633
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	199
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	899
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	90
DRILL EXISTING HANDHOLE	EACH	12
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	729
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	426
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	4
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	2
ACCESSIBLE PEDESTRIAN SIGNAL	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	16
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

**CABLE PLAN**  
(NOT TO SCALE)

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

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES AND EMERGENCY VEHICLE PREEMPTION SYSTEM IL ROUTE 25 (BROADWAY AVE) AND ILLINOIS AVE**

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	13H
CONTRACT NO. 62W69				

MODEL: Default; FILE NAME: c:\bms\usps-us-pvw\illinois\0920\0117024-broadway-TS.dgn



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	DRAWN - STSG	REVISED -
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PLOT DATE = 3/11/2025	DATE - 3/12/2025	REVISED -

NOT TO SCALE SHEET 1 OF 1 SHEETS STA. TO STA.

**TS 8995**

ILLINOIS FED. AID PROJECT

PROPOSED SEQUENCE OF OPERATION

MOVEMENT		2+5				2+6				3+7				3+8				4+7				4+8				F L A S H				
PHASE		1	2	3	4A	4B	5	6	7A	7B	8	9	10	11	12	13	14A	14B	15	16	17	18A	18B	19	20		21	22A	22B	
CHANGE TO				2+6	3+7 3+8 4+7 4+8				3+7 3+8 4+7 4+8			2+5 2+6 4+8	3+8	4+7				2+5 2+6		4+8			2+5 2+6		4+8				2+5 2+6	
IL ROUTE 25 (BROADWAY STREET) END MAST ARM AND FAR LEFT SIGNALS (5-SECTION)	N/B	G ←G	G ←G	G ←Y	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
IL ROUTE 25 (BROADWAY STREET) CENTER AND RIGHT MAST ARM AND NEAR RIGHT SIGNALS (3-SECTION)	N/B	G	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
IL ROUTE 25 (BROADWAY STREET) ALL SIGNALS (3-SECTION)	S/B	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
ILLINOIS AVENUE END MAST ARM AND FAR LEFT SIGNALS (5-SECTION)	E/B	R	R	R	R	R	R	R	R	R	←G	←Y	←Y	←G	R	R	R	R	R	R	←G	←G	Y	R	←Y	G	G	Y	R	
ILLINOIS AVENUE RIGHT MAST ARM AND NEAR RIGHT SIGNALS (5-SECTION)	E/B	R G	R G	R Y	R Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	G	G	Y	R	
ILLINOIS AVENUE END MAST ARM AND FAR LEFT SIGNALS (5-SECTION)	W/B	R	R	R	R	R	R	R	R	R	←G	←Y	←G	←Y	←G	←G	Y	R	←Y	R	R	R	R	R	R	R	G	G	Y	R
ILLINOIS AVENUE RIGHT MAST ARM AND NEAR RIGHT SIGNALS (3-SECTION)	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	R	R	R	R	R	R	R	G	G	Y	R
PEDESTRIAN SIGNALS CROSSING IL ROUTE 25 ON NORTH SIDE OF ILLINOIS AVENUE		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING IL ROUTE 25 ON SOUTH SIDE OF ILLINOIS AVENUE		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
		*P	**FH	H	H	H	*P	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	

PHASES 2 AND 6 SHALL BE PLACED ON RECALL.

\* TO APPEAR ONLY UPON PUSH-BUTTON ACTIVATION

\*\* FLASHING "↓" IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN CLEARANCE INTERVAL

∅ THE "↑" OR FLASHING "↓" INTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "↑" OR FLASHING "↓" INTERVALS. "↑" AND FLASHING "↓" TIMINGS TO BE SET ONLY ON PHASES WHERE "↑" AND FLASHING "↓" ARE INDICATED IN THE SEQUENCE OF OPERATION.

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

PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION

	1	5	8	12	16	20	PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 2										
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER																			
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE INTERVAL NUMBER							2	3											
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1I	1K	1L	1M	1N	1P	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	2	2	1H	2	1K	2	1M	2	1P	2	3	4	5		
IL ROUTE 25 (BROADWAY STREET) END MAST ARM AND FAR LEFT SIGNALS (5-SECTION)	N/B	Y	R	Y	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	Δ
IL ROUTE 25 (BROADWAY STREET) CENTER AND RIGHT MAST ARM AND NEAR RIGHT SIGNALS (3-SECTION)	N/B	Y	R	Y	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	Δ
IL ROUTE 25 (BROADWAY STREET) ALL SIGNALS (3-SECTION)	S/B	R	R	Y	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
ILLINOIS AVENUE END MAST ARM AND FAR LEFT SIGNALS (5-SECTION)	E/B	R	R	R	R	←Y	R	Y	R	Y	R	R	Y	R	R	R	R	R	Δ
ILLINOIS AVENUE RIGHT MAST ARM AND NEAR RIGHT SIGNALS (5-SECTION)	E/B	R Y	R	R	R	R	Y	R	Y	R	R	R	Y	R	R	R	R	R	Δ
ILLINOIS AVENUE END MAST ARM AND FAR LEFT SIGNALS (5-SECTION)	W/B	R	R	R	R	←G	←G	R	R	G	G	R	R	G	G	←G	Y	R	Δ
ILLINOIS AVENUE RIGHT MAST ARM AND NEAR RIGHT SIGNALS (3-SECTION)	W/B	R	R	R	R	R	G	R	R	G	G	R	R	G	G	G	Y	R	Δ
PEDESTRIAN SIGNALS CROSSING IL ROUTE 25 ON NORTH SIDE OF ILLINOIS AVENUE		H	H	H	H	H	FH	H	H	FH	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING IL ROUTE 25 ON SOUTH SIDE OF ILLINOIS AVENUE		H	H	H	H	H	FH	H	FH	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING ILLINOIS AVENUE ON WEST SIDE OF IL ROUTE 25		H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING ILLINOIS AVENUE ON EAST SIDE OF IL ROUTE 25		FH	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	Δ



Δ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

MODEL: Default  
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USER NAME = USPS706128	DESIGNED - STSG	REVISED - 4/10/2025
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SEQUENCE OF OPERATION, RAILROAD PREEMPTION SEQUENCE OF OPERATION,  
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION  
 IL ROUTE 25 (BROADWAY AVE) AND ILLINOIS AVE

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	131
CONTRACT NO. 62W69				
ILLINOIS FED.AID PROJECT				

TS 8995

HOLD

NOT TO SCALE SHEET 1 OF 2 SHEETS STA. TO STA.

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

	1	1		5	5			8	12			12		16			16		20			20	PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	CLEAR TO NORMAL SEQUENCE	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	2	3	Δ	
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	3	2	1F	1G	3	<sup>2</sup> OR <sub>3</sub>	1K	1L	2	1N	3	1Q	1R	2	1T	3	1V	1W	2	3			Δ	
IL ROUTE 25 (BROADWAY STREET) END MAST ARM AND FAR LEFT SIGNALS (5-SECTION)	N/B	<sup>G</sup> ←Y	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Δ
IL ROUTE 25 (BROADWAY STREET) CENTER AND RIGHT MAST ARM AND NEAR RIGHT SIGNALS (3-SECTION)	N/B	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Δ
IL ROUTE 25 (BROADWAY STREET) ALL SIGNALS (3-SECTION)	S/B	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Δ
ILLINOIS AVENUE END MAST ARM AND FAR LEFT SIGNALS (5-SECTION)	E/B	R	R	R	R	R	R	R	<sup>R</sup> ←Y	R	R	R	R	R	<sup>G</sup> ←G	Y	R	<sup>G</sup> ←G	<sup>G</sup> ←Y	G	Y	R	G	R	G	Δ
ILLINOIS AVENUE RIGHT MAST ARM AND NEAR RIGHT SIGNALS (5-SECTION)	E/B	<sup>R</sup> Y→	<sup>R</sup> Y→	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	G	Y	R	G	R	G	Δ
ILLINOIS AVENUE END MAST ARM AND FAR LEFT SIGNALS (5-SECTION)	W/B	R	R	R	R	R	R	R	<sup>R</sup> ←Y	<sup>G</sup> ←G	Y	R	<sup>G</sup> ←G	<sup>G</sup> ←Y	R	R	R	R	R	G	Y	R	G	R	G	Δ
ILLINOIS AVENUE RIGHT MAST ARM AND NEAR RIGHT SIGNALS (3-SECTION)	W/B	R	R	R	R	R	R	R	R	G	Y	R	G	G	R	R	R	R	R	G	Y	R	G	R	G	Δ
PEDESTRIAN SIGNALS CROSSING IL ROUTE 25 ON NORTH SIDE OF ILLINOIS AVENUE	H	H	H	H	H	H	H	H	H	FH	H	H	FH	H	H	H	H	H	H	FH	H	H	FH	H	H	Δ
PEDESTRIAN SIGNALS CROSSING IL ROUTE 25 ON SOUTH SIDE OF ILLINOIS AVENUE	H	H	H	H	H	H	H	H	H	H	H	H	H	H	FH	H	H	FH	H	FH	H	H	FH	H	H	Δ
PEDESTRIAN SIGNALS CROSSING ILLINOIS AVENUE ON WEST SIDE OF IL ROUTE 25	H	H	H	FH	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING ILLINOIS AVENUE ON EAST SIDE OF IL ROUTE 25	FH	FH	H	FH	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	Δ

Δ EMERGENCY VEHICLE PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE PREEMPTION INTERVAL 2 OR 3 IS TERMINATED.

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	CHECKED - MJM	REVISED -
PLOT DATE = 3/11/2025	DATE - 3/12/2025	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SEQUENCE OF OPERATION, RAILROAD PREEMPTION SEQUENCE OF OPERATION,  
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION  
IL ROUTE 25 (BROADWAY AVE) AND ILLINOIS AVE

NOT TO SCALE SHEET 2 OF 2 SHEETS STA. TO STA.



TS 8995

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	13J
CONTRACT NO. 62W69				
ILLINOIS FED. AID PROJECT				

**REMOVE AND RELOCATION NOTES:**

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

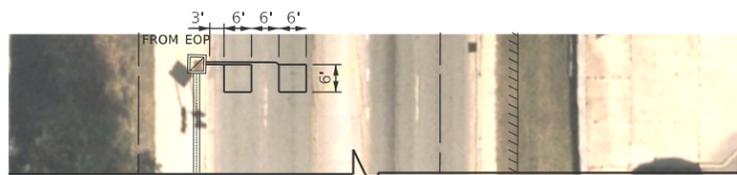
- 4 EACH PEDESTRIAN PUSH-BUTTONS

**NOTES:**

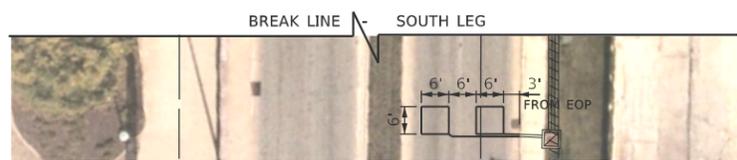
1. THE CONTRACTOR SHALL PERFORM WORK IN SUCH A WAY AS TO MINIMIZE THE TIME THE PEDESTRIAN EQUIPMENT IS NOT OPERATIONAL.
2. THE CONTRACTOR SHALL CONFIRM THE FINAL LOCATION OF THE APS EQUIPMENT WITH THE TRAFFIC SIGNAL AREA ENGINEER BEFORE INSTALLATION.
3. APS BUTTONS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALK.
4. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
5. ALL PUSH-BUTTONS SHALL BE APS.
6. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
7. THERE SHALL BE A MINIMUM OF 4' SIDEWALK CLEARANCE NEXT TO TRAFFIC SIGNAL FOUNDATIONS TO BE ADA COMPLIANT.
8. THIS LOCATION HAS BEEN DESIGNED TO BE ADA COMPLIANT. ANY DEVIATION FROM THIS PLAN FOR THE POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO ENSURE ADA COMPLIANCE.



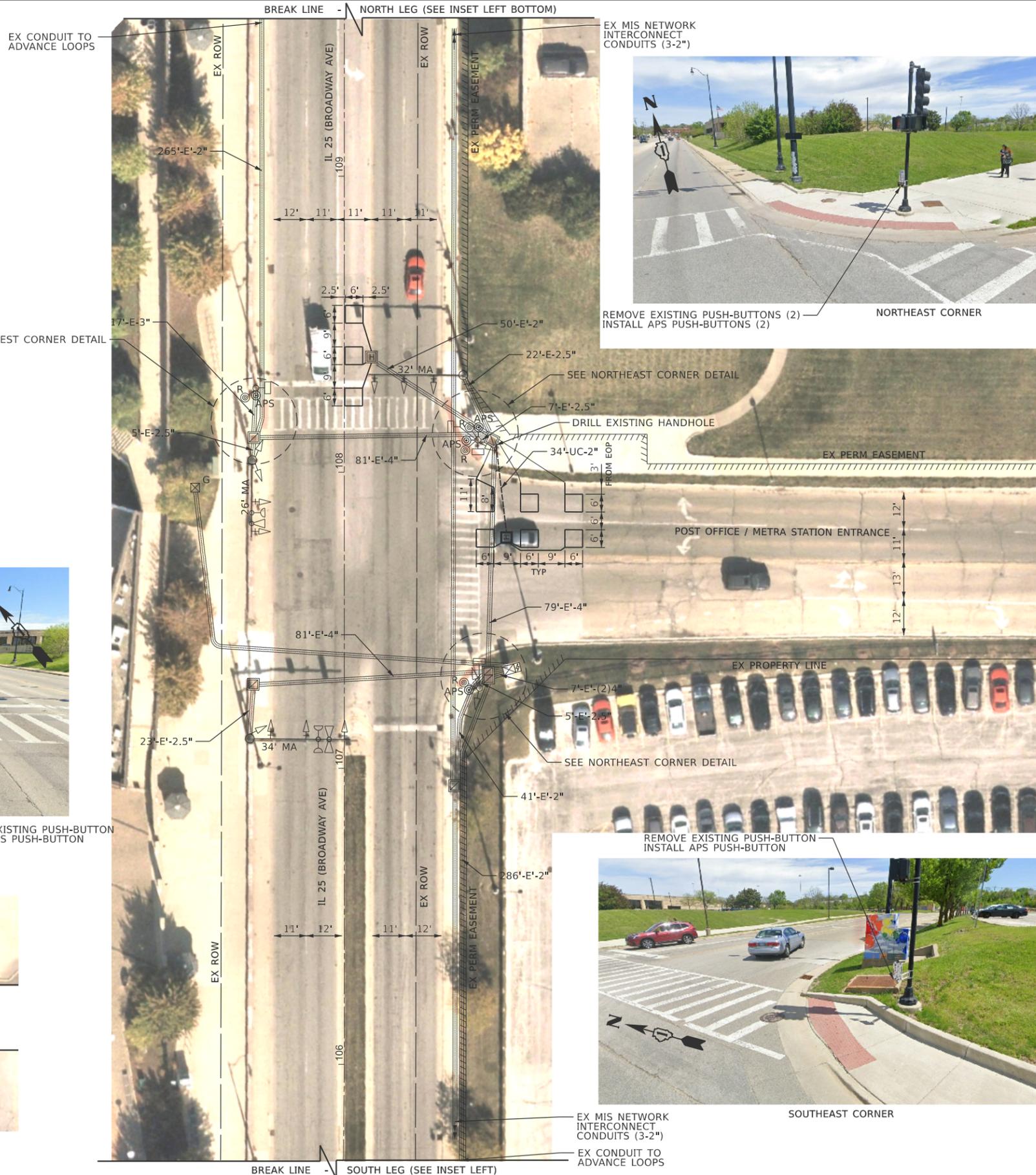
NORTHWEST CORNER - REMOVE EXISTING PUSH-BUTTON  
INSTALL APS PUSH-BUTTON



BREAK LINE - NORTH LEG



BREAK LINE - SOUTH LEG



NORTHEAST CORNER  
REMOVE EXISTING PUSH-BUTTONS (2)  
INSTALL APS PUSH-BUTTONS (2)



SOUTHEAST CORNER  
REMOVE EXISTING PUSH-BUTTON  
INSTALL APS PUSH-BUTTON



TS 790

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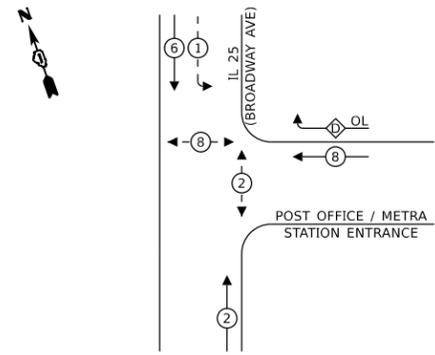
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN  
IL ROUTE 25 (BROADWAY AVE) AND POST OFFICE ENTRANCE

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

F.A.U. RTE. 2503	SECTION 2024-950-RS	COUNTY KANE	TOTAL SHEETS 26	SHEET NO. 13K
CONTRACT NO. 62W69				
ILLINOIS FED. AID PROJECT				

**EXISTING CONTROLLER SEQUENCE**



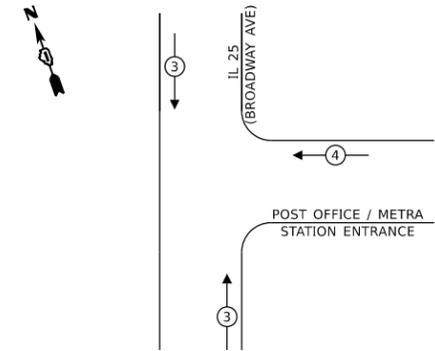
**RIGHT TURN OVERLAP PHASE DESIGNATION:**

$$\text{OVERLAP LETTER } D = \frac{\text{PERMISSIVE PHASE}}{8} + \frac{\text{PROTECTED PHASE}}{1}$$

**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



AS REQUIRED BY THE CITY OF AURORA, EMERGENCY VEHICLE PREEMPTION EQUIPMENT IS \*OPTICOM\*.

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

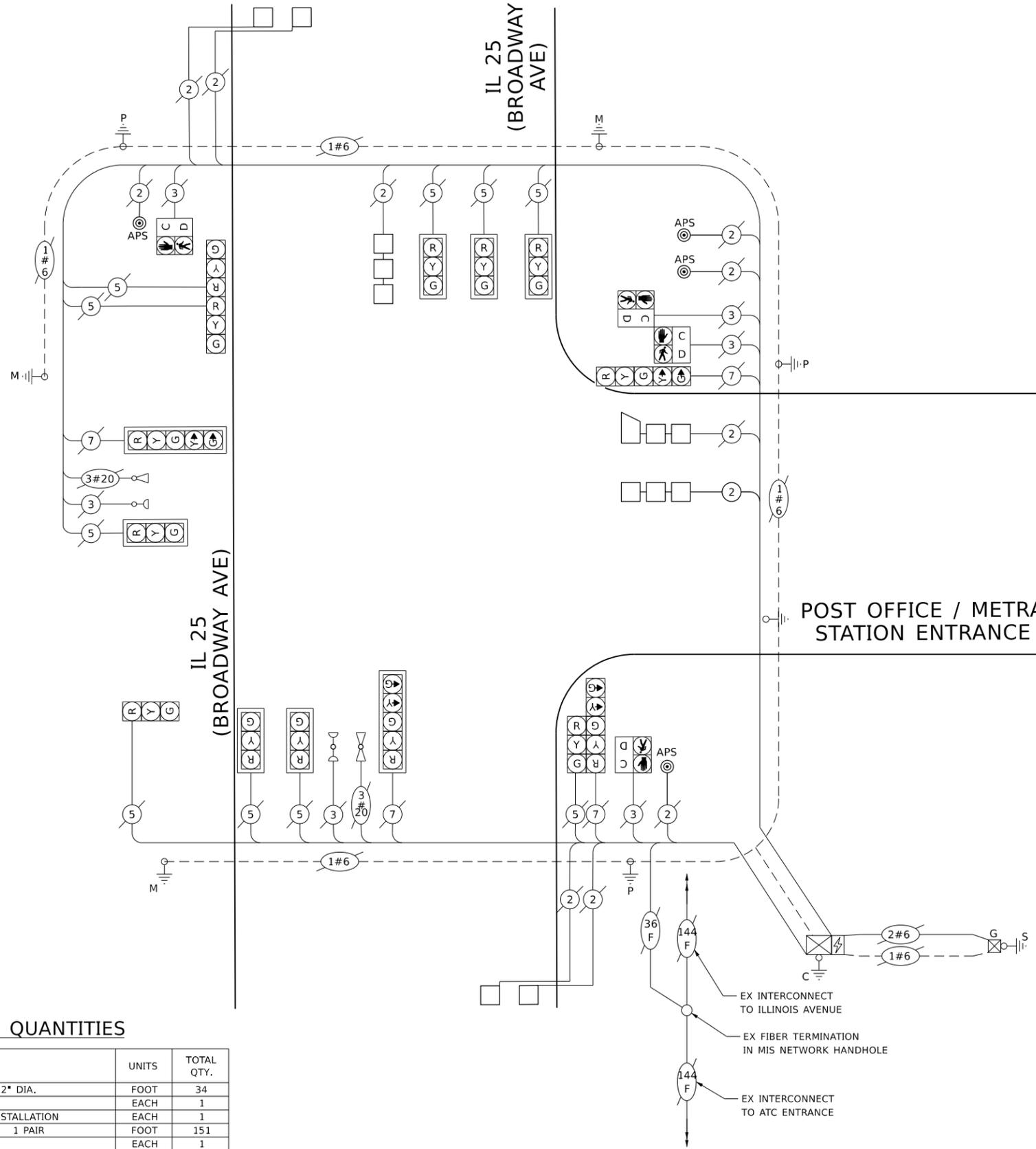
TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3-SECTION	10	11	110
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION			
RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
PTZ CAMERA	-	75	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
<b>TOTAL UPS SIZING =</b>			<b>397</b>
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	-
<b>TOTAL SERVICE WIRE SIZING =</b>			<b>1002</b>

ENERGY COSTS TO:  
**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 201 WEST CENTER COURT  
 SCHAMBURG, ILLINOIS 60196

ENERGY SUPPLY: CONTACT: CASSIE EVANS  
 PHONE: (773) 241-0741  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: ---

**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	34
HEAVY-DUTY HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	151
DRILL EXISTING HANDHOLE	EACH	1
DETECTOR LOOP, TYPE I	FOOT	414
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	110
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ACCESSIBLE PEDESTRIAN SIGNAL	EACH	4
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1



**CABLE PLAN**

(NOT TO SCALE)

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES  
 AND EMERGENCY VEHICLE PREEMPTION SYSTEM  
 IL ROUTE 25 (BROADWAY AVE) AND POST OFFICE ENTRANCE**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-RS	KANE	26	13L
CONTRACT NO. 62W69				
ILLINOIS FED. AID PROJECT				

NOT TO SCALE SHEET 1 OF 1 SHEETS STA. TO STA.

**TS 790**

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 PLOT DATE = 3/11/2025

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 DRAWN - STSG  
 CHECKED - MJM  
 DATE - 3/12/2025

REVISED - 4/10/2025  
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# 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								

NEW SHEET 1

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

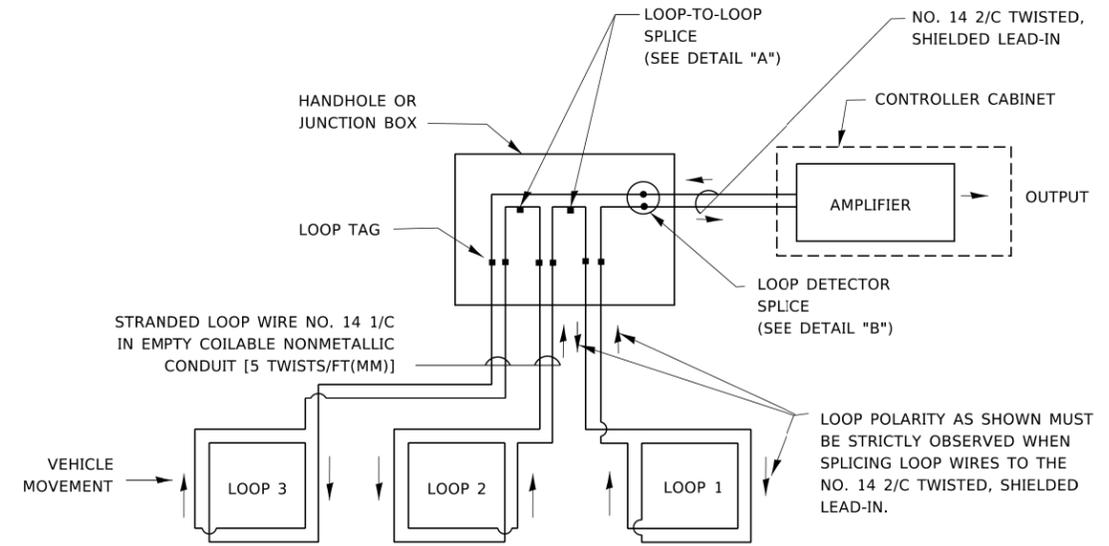
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 1 OF 7 SHEETS STA. TO STA.

F.A.U. RTE. 2503	SECTION 2024-950-RS	COUNTY KANE	TOTAL SHEETS 26	SHEET NO. 23A
<b>TS-05</b>		CONTRACT NO. 62W69		
ILLINOIS FED. AID PROJECT				

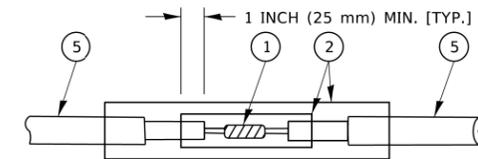
**LOOP DETECTOR NOTES**

- 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 DIVESHOLES 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.

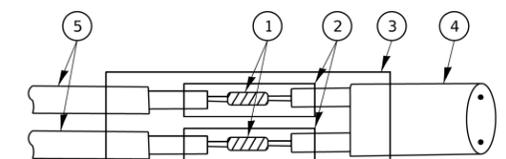


**DETECTOR LOOP WIRING SCHEMATIC**

- 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.



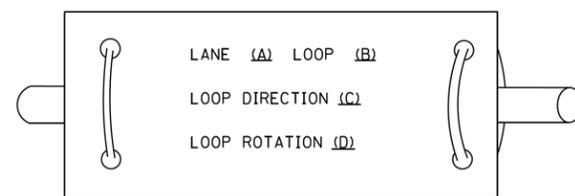
DETAIL "A"  
LOOP-TO-LOOP SPLICE



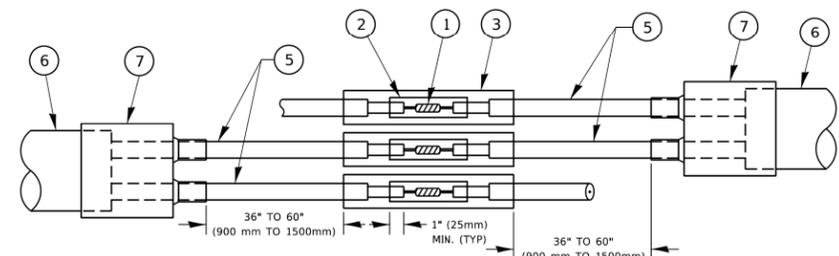
DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**

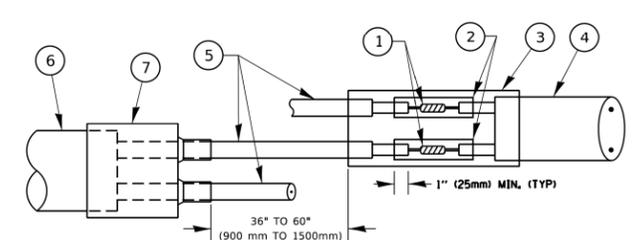
**LOOP LEAD-IN CABLE TAG**



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



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PREFORMED LOOP**

**LOOP DETECTOR SPLICE**

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PREFORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR
- BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

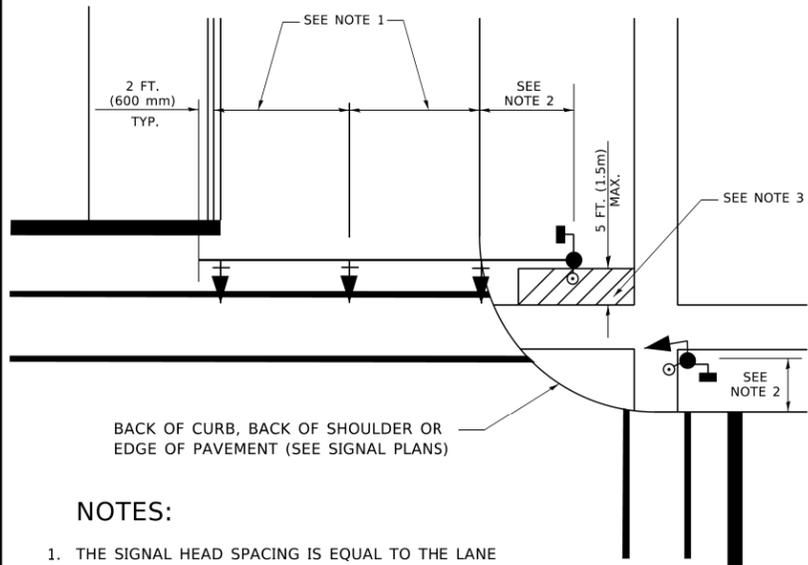
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-R5	KANE	26	23B
TS-05			CONTRACT NO. 62W69	
ILLINOIS FED. AID PROJECT				

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

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**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

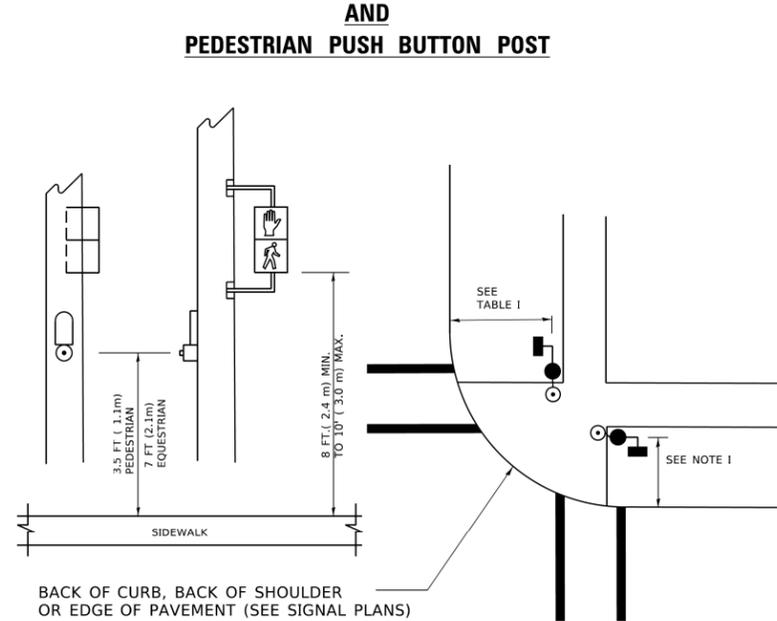
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**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."

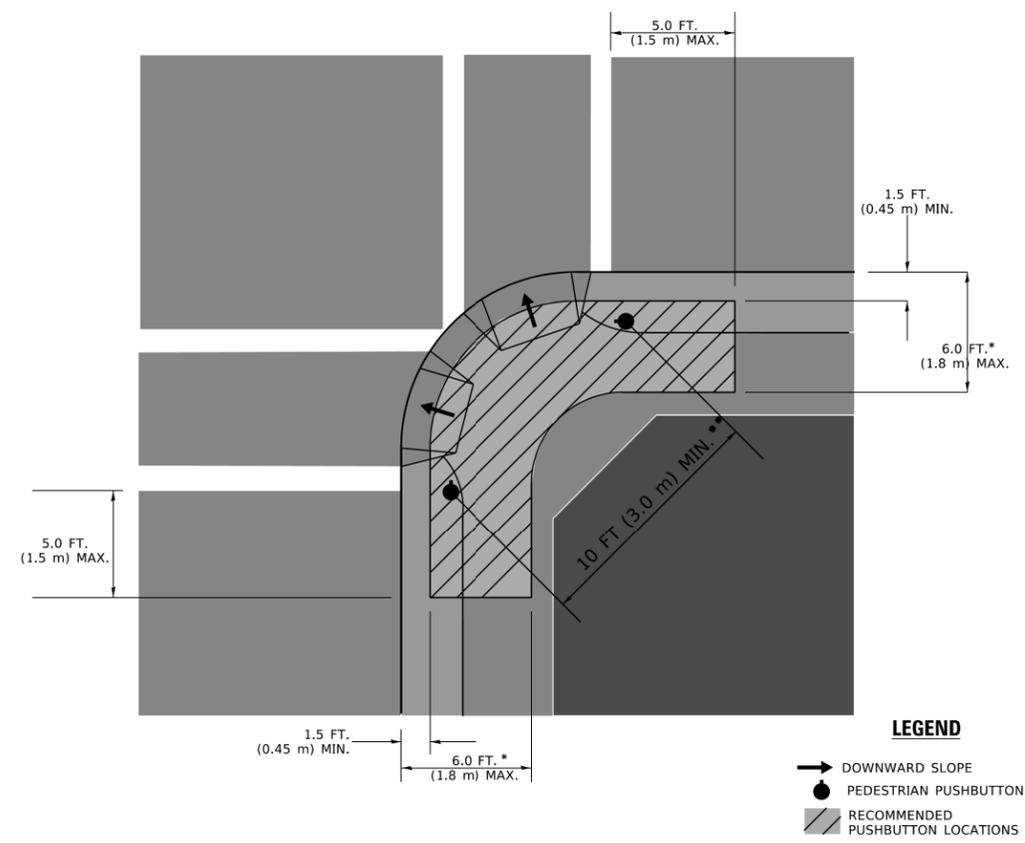
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



**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.

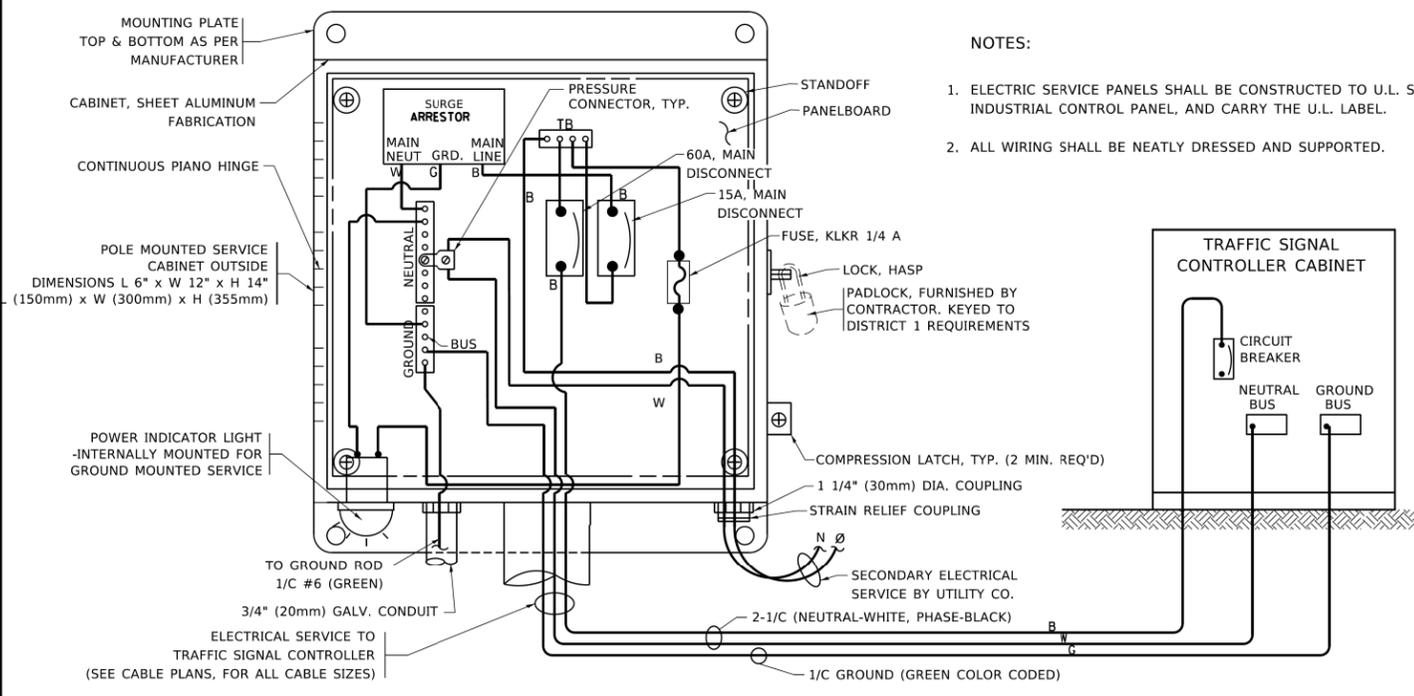
**NOTES:**

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 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.

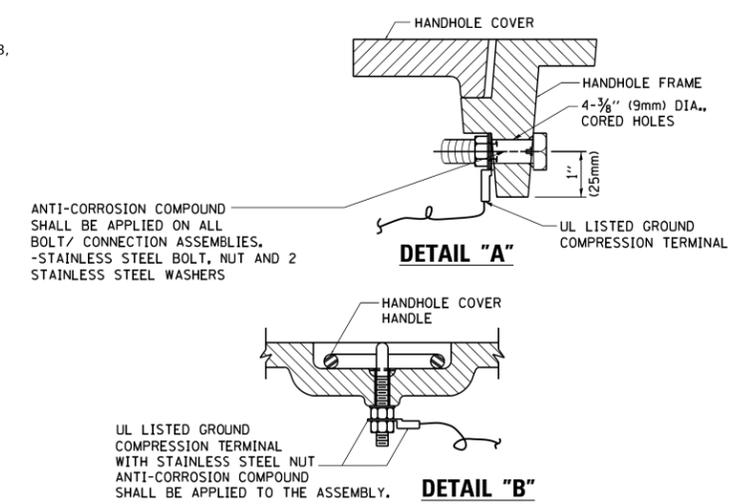


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PLOT SCALE = 50.0000" / in.	DRAWN -	REVISED -			SCALE: NONE	SHEET 3 OF 7 SHEETS	TS-05	CONTRACT NO. 62W69	ILLINOIS	FED. AID PROJECT
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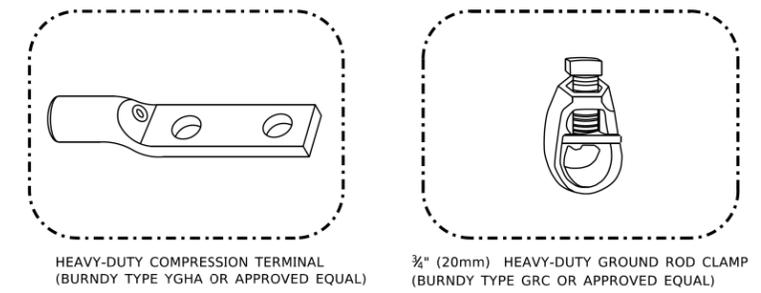
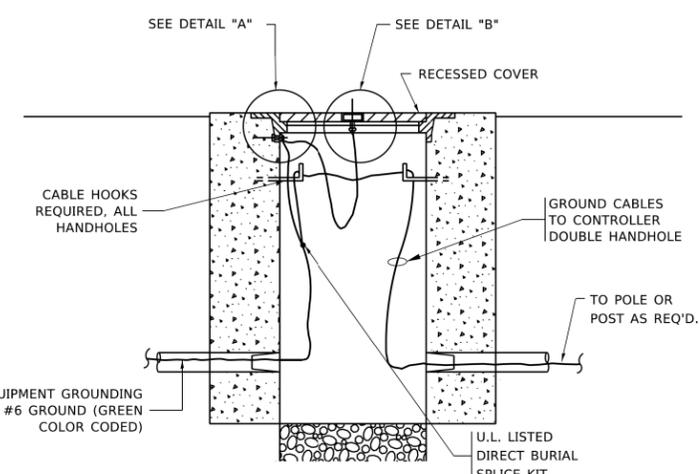


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



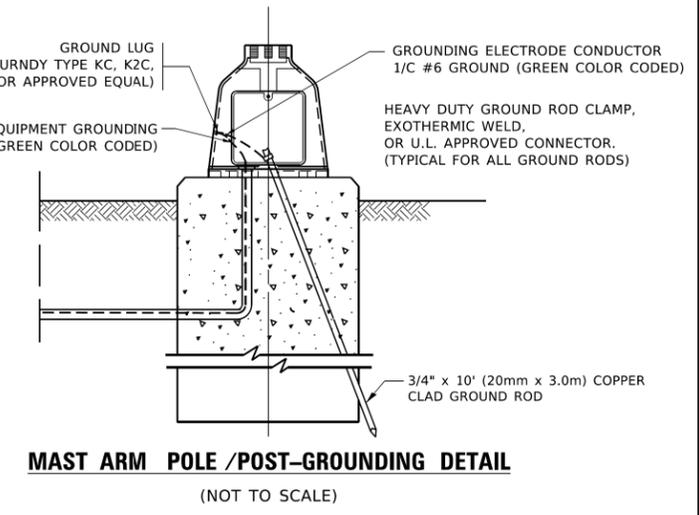
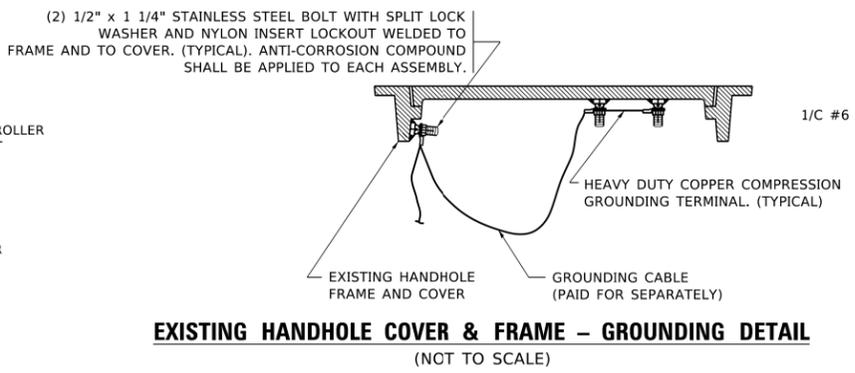
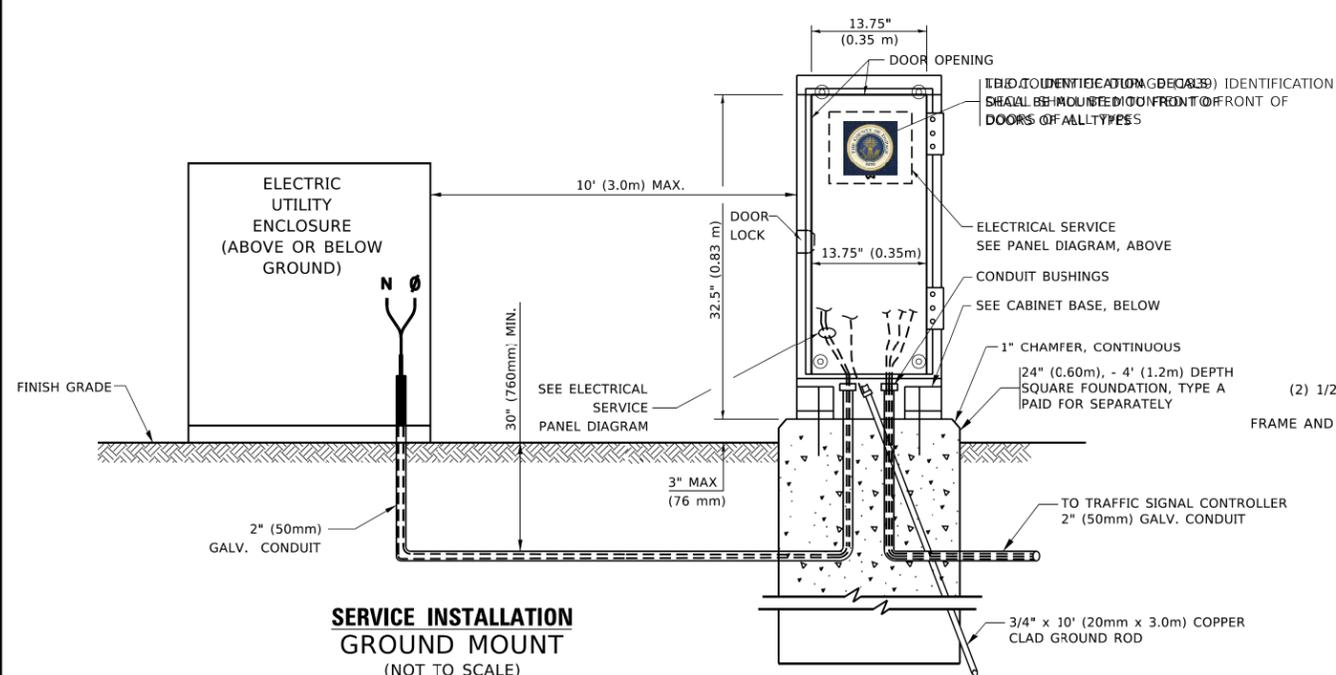
**NOTES:**  
**GROUNDING SYSTEM**

- 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.



**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.



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

**CABINET - BASE BOLT PATTERN**  
 (NOT TO SCALE)



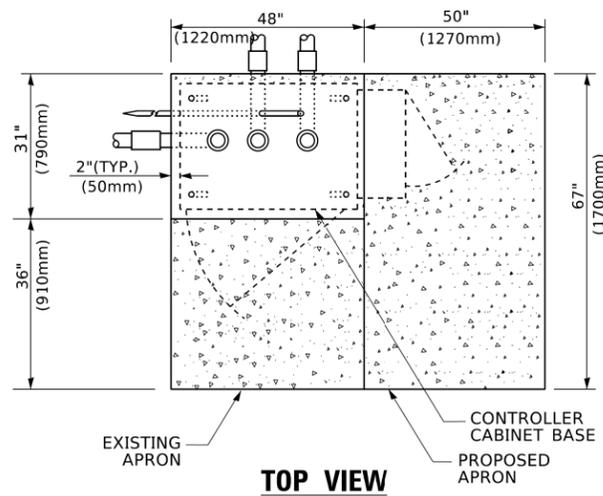
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

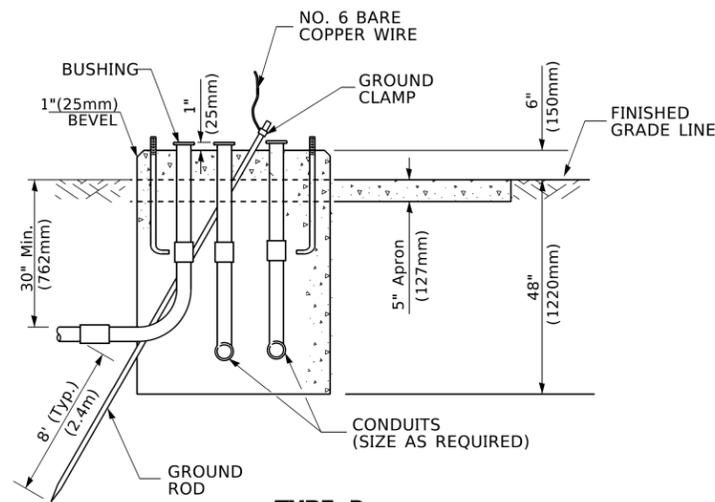
**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

F.A.U. RTE. 2503	SECTION 2024-950-R5	COUNTY KANE	TOTAL SHEETS 26	SHEET NO. 23D
TS-05		CONTRACT NO. 62W69		
ILLINOIS FED. AID PROJECT				

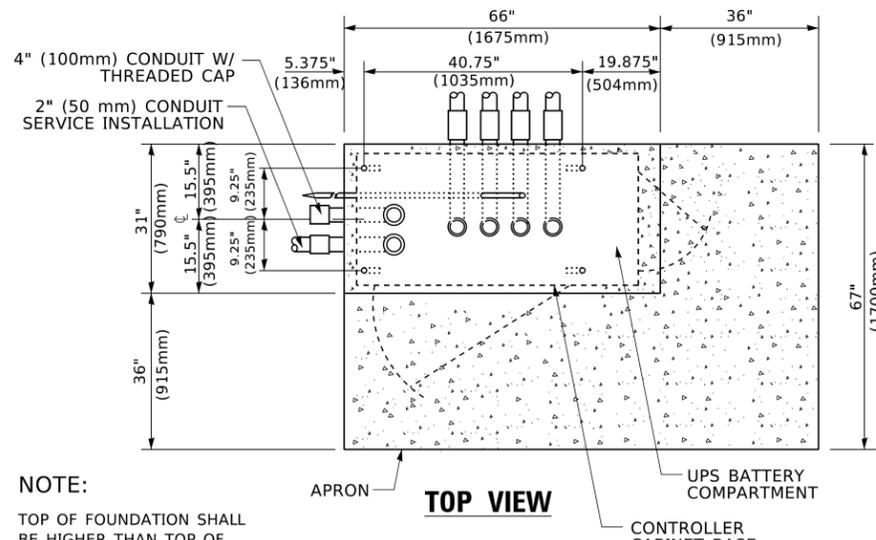
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**TOP VIEW**

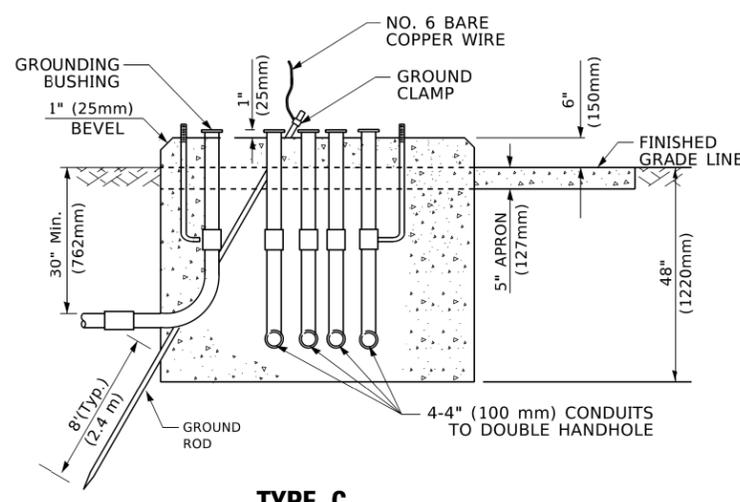


**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**

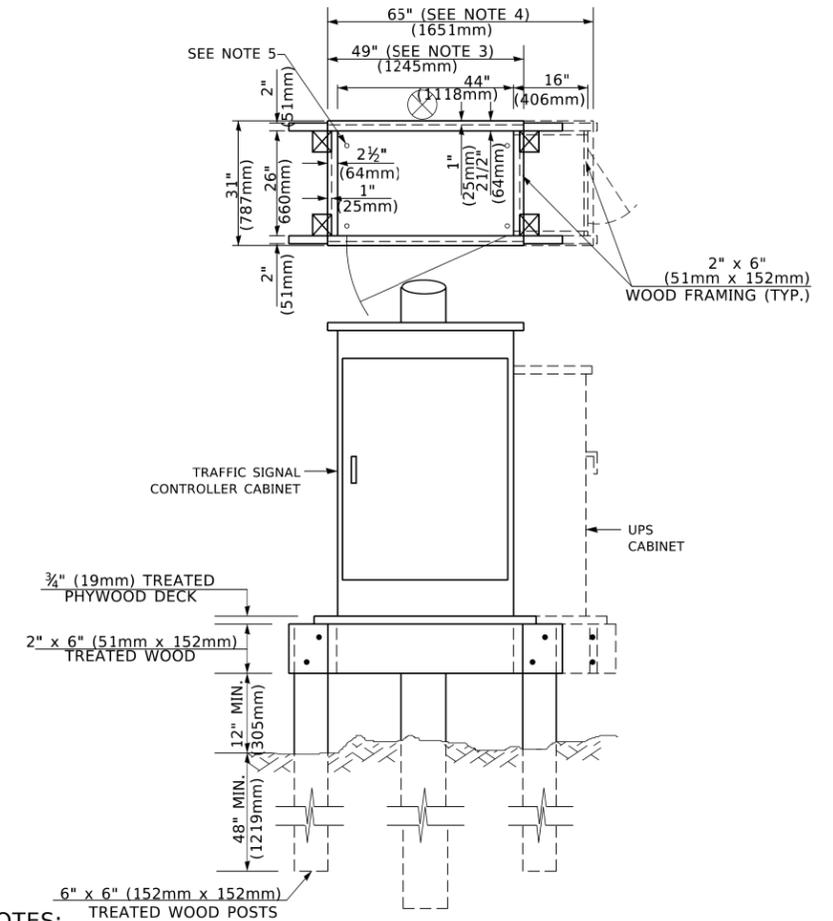


**TOP VIEW**

**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)	30" (750mm)	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 up to 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 less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	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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PLOT DATE = 3/4/2019	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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2024-950-R5	KANE	26	23E

**TS-05** CONTRACT NO. 62W69  
ILLINOIS FED. AID PROJECT



