

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
104	2025-2039-RS,SW	LAKE	57	1

* 57 + 5 = 62 TOTAL SHEETS

D-91-028-26

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED IN THE
VILLAGES OF FOX LAKE, LAKE VILLA
& UNINCORPORATED INGLESIDE

TRAFFIC DATA:
ADT = 10,400 - 15,400 (2023)

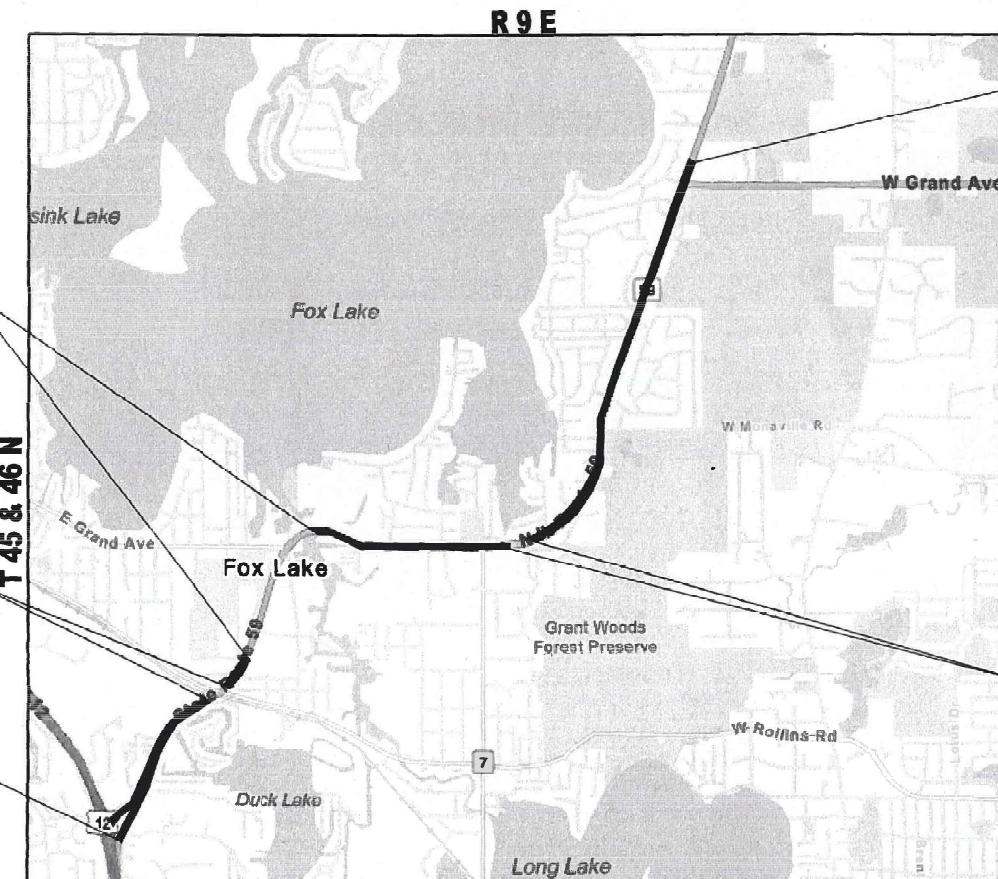
POSTED SPEED LIMIT = 40 & 45 MPH

DESIGN DESIGNATION = OTHER PRINCIPAL ARTERIAL

PROPOSED HIGHWAY PLANS

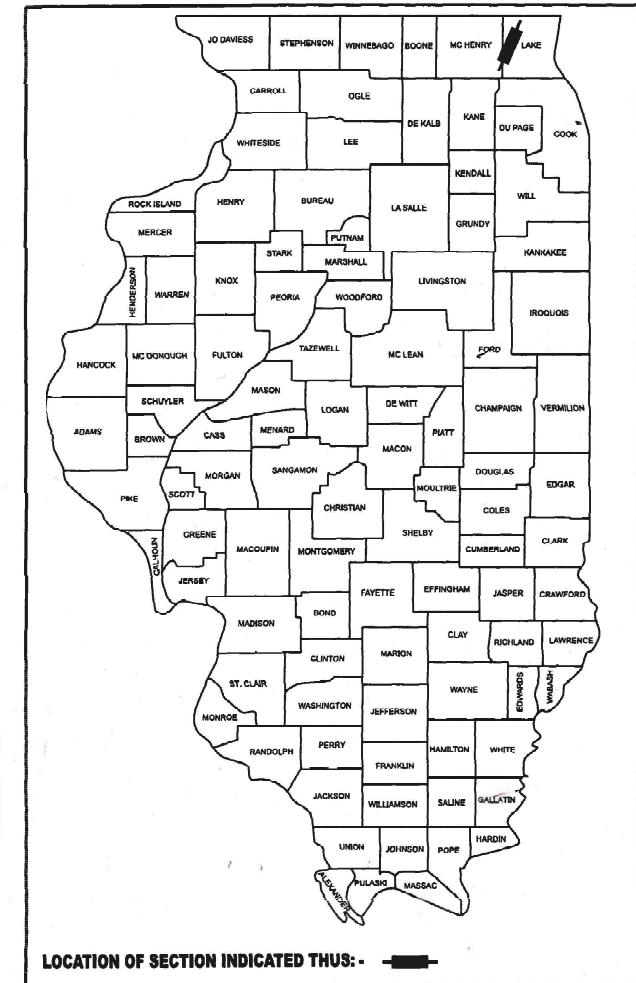
FAP ROUTE 104: IL-59
NORTH OF IL-132 (GRAND AVE) TO US-12
SECTION: 2025-2039-RS,SW
PROJECT: NHPP-9NAV(974)
STANDARD OVERLAY, ADA IMPROVEMENTS &
TRAFFIC SIGNAL MODERNIZATION

C-91-034-26



GRANT & LAKE VILLA TOWNSHIP

GROSS LENGTH = 22,242 FEET = 4.21 MILES
OMMISION LENGTH = 4,123 FEET = 0.78 MILES
NET LENGTH = 18,119 FEET = 3.43 MILES



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED	Dec 4th 2025
	Jose Rivas IR
	REGIONAL ENGINEER
	January 23 2026
	ED ETS
	ENGINEER OF DESIGN AND ENVIRONMENT
	January 23 2026
	January 23 2026
	5
	DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PROJECT ENGINEER: DANIEL WILGREEN, P.E. (847)-705-4240
PROJECT MANAGER: J. ALAIN MIDY, P.E. (847)-221-3056

CONTRACT NO. 80B75

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

REV-SEP

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3-6	SUMMARY OF QUANTITIES
7-9	TYPICAL SECTIONS
10	HMA TAPER AT EDGE OF PCC PAVEMENT DETAIL
11-19	ROADWAY PLANS
20-21	DETECTOR LOOP REPLACEMENT PLANS
22-30	TRAFFIC SIGNAL PLANS
31	ADA RAMP DESIGNS
32	FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)
33	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
34	CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
35	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
35A-D	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL (BM-21)
36	ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)
37	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
38	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
39	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
40	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)
41	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)
42	ARTERIAL ROAD INFORMATION SIGN (TC-22)
43	DRIVEWAY ENTRANCE SIGNING (TC-26)
44-50	STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05)
51	DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING (TS-07)
52-57	ADA RAMP PD STANDARDS

STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-09	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
424001-12	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424011-05	DEPRESSED CORNER FOR SIDEWALKS
424021-07	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
442101-09	CLASS B PATCHES
442201-04	CLASS C AND D PATCHES
482011-03	HMA SHLD. STRIPS / SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
606001-09	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANIS
630001-13	STEEL PLATE BEAM GUARDRAIL
701006-05	OFF ROAD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM EDGE OF PAVEMENT
701011-04	OFF ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W. SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
701336-07	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES FOR SPEEDS > 45 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-11	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

GENERAL NOTES

- ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- ALL MILLED SURFACES SHALL BE A UNIFORM CROSS SLOPE PER LANE AND FREE OF RIDGES BETWEEN PASSES, ANY DEVIATIONS SHALL BE CORRECTED AT NO COST TO THE DEPARTMENT.
- LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (OR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS)), WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIAN IN THE FIELD, UNLESS OTHERWISE SHOWN.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 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.
- PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- 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.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 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.
- 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.
- THE RESIDENT ENGINEER SHALL CONTACT BRANDY KENNEDY AREA TRAFFIC FIELD TECHNICIAN, AT BRANDY.KENNEDY@ILLINOIS.GOV, A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 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.
- ALL PAVEMENT MARKINGS ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING DETAIL TC-13.
- 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.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO THE DISTRICT STANDARDS AS NOTED IN THE DETAIL.
- ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED ACCORDING TO IDOT D1 RRPM DETAIL TC-11.
- CONTRACTOR MUST NOT ENCROACH, PERFORM ANY CONSTRUCTION ACTIVITIES, OR PARK ANY CONSTRUCTION EQUIPMENT OR VEHICLES IN THE AREA WITHIN 30' FROM THE CENTERLINE OF THE NEAREST TRACK.
- THE CONTRACTOR SHALL CONTACT THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4171 AT LEAST 1 WEEK IN ADVANCE OF BEGINNING FORESTRY WORK, WEED SPRAYING AND SEEDING.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITES COMPANIES AND THE VILLAGES OF FOX LAKE, LAKE VILLA & UNINCORPORATED INGLESIDE.
- TEMPORARY PAVEMENT MARKINGS OR SHORT TERM PAVEMENT MARKINGS ON INTERMEDIATE SURFACES SHALL NOT BE REMOVED, UNLESS DIRECTED BY THE ENGINEER.
- LOCATIONS OF FORESTRY ITEMS ON ROADWAY PLANS ARE WITHIN A 10' DISTANCE.
- GUARDRAIL LOCATIONS: 31+50, 35+90, 39+00 BOTH SIDES, 52+30, 132+00, 133+00 BOTH SIDES, 50+00 TO 52+00

SUMMARY OF QUANTITIES							TYPE CODE					
							IL-59 LAKE	IL-59 LAKE	IL-59 LAKE	IL-59 LAKE		
							ROADWAY	ROADWAY	TRAFFIC SIGNALS	EVP		
							80% FED 20% STATE	100% STATE	80% FED 20% STATE	100% LAKE VILLA FPD		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005	0021	0021					
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	85.3	85.3								
20200100	EARTH EXCAVATION	CU YD	21	21								
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	160	160								
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	0.3	0.3								
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	0.3	0.3								
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	0.3	0.3								
25200110	SODDING, SALT TOLERANT	SQ YD	160	160								
25200200	SUPPLEMENTAL WATERING	UNIT	0.3	0.3								
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	23	23								
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	23	23								
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	62094	62094								
40600370	LONGITUDINAL JOINT SEALANT	FOOT	41734	41734								
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	138	138								
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	800	800								
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	52	52								
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	3863	3863								
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	5	5								
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	7728	7728								
42001300	PROTECTIVE COAT	SQ YD	350	350								
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1071	1071								
42400800	DETECTABLE WARNINGS	SQ FT	54	54								

* = SPECIALTY ITEM

SUMMARY OF QUANTITIES							TYPE CODE					
							IL-59 LAKE	IL-59 LAKE	IL-59 LAKE	IL-59 LAKE		
							ROADWAY	ROADWAY	TRAFFIC SIGNALS	EVP		
							80% FED 20% STATE	100% STATE	80% FED 20% STATE	100% LAKE VILLA FPD		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005	0021	0021					
44000153	HOT-MIX ASPHALT SURFACE REMOVAL, 1"	SQ YD	1957	1957								
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	87074	87074								
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	45	45								
44000300	CURB REMOVAL	FOOT	90	90								
44000600	SIDEWALK REMOVAL	SQ FT	1071	1071								
44003100	MEDIAN REMOVAL	SQ FT	400	400								
44200970	CLASS B PATCHES, TYPE II, 10 INCH	SQ YD	24	24								
44201299	DOWEL BARS 1 1/2"	EACH	60	60								
44201777	CLASS D PATCHES, TYPE II, 11 INCH	SQ YD	250	250								
44201781	CLASS D PATCHES, TYPE III, 11 INCH	SQ YD	250	250								
44201783	CLASS D PATCHES, TYPE IV, 11 INCH	SQ YD	300	300								
44201875	CLASS D PATCHES, TYPE II, 19 INCH	SQ YD	1000	1000								
44201879	CLASS D PATCHES, TYPE III, 19 INCH	SQ YD	900	900								
44201881	CLASS D PATCHES, TYPE IV, 19 INCH	SQ YD	950	950								
44213200	SAW CUTS	FOOT	144	144								
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	426	426								
60250200	CATCH BASINS TO BE ADJUSTED	EACH	5	5								
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1								
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	5	5								
60404950	FRAMES AND GRATES, TYPE 24	EACH	5	5								
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	15	15								
60920012	PIPE CULVERTS TO BE CLEANED 12"	FOOT	500	500								
60920018	PIPE CULVERTS TO BE CLEANED 18"	FOOT	500	500								
* 63300575	REMOVE AND REERECT RAIL ELEMENT OF EXISTING GUARDRAIL	FOOT	155	155								

* = SPECIALTY ITEM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL-59 FROM N OF IL-132 (GRAND AVE) TO US-12

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	2025-2039-RS, SW	LAKE	57	3
				CONTRACT NO. 80B75

SUMMARY OF QUANTITIES							TYPE CODE						
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	IL-59 LAKE	IL-59 LAKE	IL-59 LAKE	IL-59 LAKE	TRAFFIC SIGNALS	EVP	80% FED 20% STATE	100% STATE	80% FED 20% STATE	100% LAKE VILLA FPD
				ROADWAY	ROADWAY	TRAFFIC SIGNALS	EVP						
				80% FED 20% STATE	100% STATE	80% FED 20% STATE	100% LAKE VILLA FPD						
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1471			1471							
87501200	TRAFFIC SIGNAL POST, 16 FT.	EACH	4			4							
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1			1							
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1			1							
87700408	STEEL MAST ARM ASSEMBLY AND POLE, 64 FT.	EACH	1			1							
87700260	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1			1							
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16			16							
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27			27							
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13			13							
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21			21							
87900200	DRILL EXISTING HANDHOLE	EACH	19			19							
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6			6							
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8			8							
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2			2							
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2			2							
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8			8							
88600100	DETECTOR LOOP, TYPE I	FOOT	2471			2471							
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2			2							
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6061			6061							
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	108			108							
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2			2							
89502376	REBUILD EXISTING HANDHOLE	EACH	3			3							

* = SPECIALTY ITEM

MODEL: FINAL SOQ-3 [Sheet] FILE NAME: cbw worldwidehamwmid154870D102826-sh1-SQ1.dwg

SUMMARY OF QUANTITIES							TYPE CODE						
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	IL-59 LAKE	IL-59 LAKE	IL-59 LAKE	IL-59 LAKE	TRAFFIC SIGNALS	EVP	80% FED 20% STATE	100% STATE	80% FED 20% STATE	100% LAKE VILLA FPD
				ROADWAY	ROADWAY	TRAFFIC SIGNALS	EVP						
				80% FED 20% STATE	100% STATE	80% FED 20% STATE	100% LAKE VILLA FPD						
89502380	REMOVE EXISTING HANDHOLE	EACH	7										
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	5										
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1										
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1										
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	325										
X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	183										
X1400368	RELOCATE EXISTING PTZ CAMERA	EACH	1										
X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	2										
X2010100	TREE LIMB REMOVAL (4 TO 10 INCHES DIAMETER)	EACH	5										
X2010106	TREE REMOVAL (UNDER 6 UNITS DIAMETER)	UNIT	14.4										
X2010200	TREE LIMB REMOVAL (OVER 10 INCHES DIAMETER)	EACH	1										
X2010516	SELECTIVE CLEARING	UNIT	3.95										
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	217										
X2100002	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	21.04										
X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	1005										
X4400501	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT LESS THAN OR EQUAL TO 10 FEET	FOOT	216										
X4400503	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT GREATER THAN 10 FEET	FOOT	777										
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	73										
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	375										
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	15										
X6700407	ENGINEER'S FIELD OFFICE, TYPEA (D1)	CAL MO	12										
X7010808	TRAFFIC CONTROL AND PROTECTION, STANDARD TC8	EACH	2										
X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	105										
X8140215	HEAVY-DUTY HANDHOLE TO BE ADJUSTED	EACH	3										

* = SPECIALTY ITEM

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES IL-59 FROM N OF IL-132 (GRAND AVE) TO US-12	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN -	REVISED -	104			2025-2039-RS,SW	LAKE	57	5	
CHECKED -	REVISED -							CONTRACT NO. 80B75	

PLOT DATE = 12/4/2025	DATE -	REVISED -	SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT
-----------------------	--------	-----------	---	---------------------------

REV-SEP

SUMMARY OF QUANTITIES				TYPE CODE					
				IL-59 LAKE	IL-59 LAKE	IL-59 LAKE	IL-59 LAKE		
				ROADWAY	ROADWAY	TRAFFIC SIGNALS	EVP		
				80% FED 20% STATE	100% STATE	80% FED 20% STATE	100% LAKE VILLA FPD		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005	0021	0021		
*	X8760200 ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4			4			
*	X8780012 CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8			8			
*	X8809005 LED SIGNAL FACE, LENS COVER	EACH	16			16			
*	X8891009 VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2			2			
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	25		25				
*	Z0033044 RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1			1			
Ø	Z0076600 TRAINEES	HOUR	500	500					
Ø	Z0076604 TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500					
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	400	400					
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	8	8					
63200310	GUARDRAIL REMOVAL	FOOT	400	400					
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	8					
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	20	20					

* = SPECIALTY ITEM

SUMMARY OF QUANTITIES						TYPE CODE					
						IL-59 LAKE	IL-59 LAKE	IL-59 LAKE	IL-59 LAKE		
						ROADWAY	ROADWAY	TRAFFIC SIGNALS	EVP		
						80% FED 20% STATE	100% STATE	80% FED 20% STATE	100% LAKE VILLA FPD		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005	0021	0021				
*	X8760200 ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4			4					
*	X8780012 CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8			8					
*	X8809005 LED SIGNAL FACE, LENS COVER	EACH	16			16					
*	X8891009 VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2			2					
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	25		25						
*	Z0033044 RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1			1					
Ø	Z0076600 TRAINEES	HOUR	500	500							
Ø	Z0076604 TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500							
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	400	400							
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	8	8							
63200310	GUARDRAIL REMOVAL	FOOT	400	400							
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	8							
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	20	20							

Ø 0042 * = SPECIALTY ITEM

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
DRAWN -	REVISED -		
CHECKED -	REVISED -		
PLOT DATE = 12/4/2025	DATE -	REVISED -	

SUMMARY OF QUANTITIES
IL-59 FROM N OF IL-132 (GRAND AVE) TO US-12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	2025-2039-RS,SW	LAKE	57	6
CONTRACT NO. 80B75				
SCALE:	SHEET 4 OF 4 SHEETS STA.	TO STA.		

ILLINOIS FED. AID PROJECT

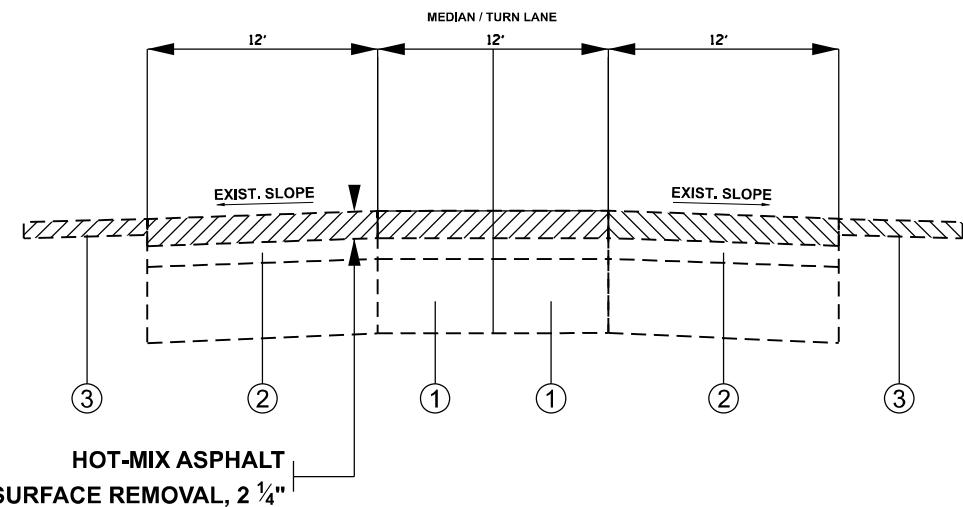
HMA LEGEND (EXISTING)

- ① PORTLAND CEMENT CONCRETE PAVEMENT $\pm 8"$
- ② HOT MIX ASPHALT PAVEMENT $\pm 13"$
- ③ EXISTING AGGREGATE WEDGE SHOULDER $\pm 3'$
- ④ EXISTING CURB AND GUTTER

HMA LEGEND (PROPOSED)

- ④ HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 $\frac{1}{2}"$
- ⑤ POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, $\frac{3}{4}"$
- ⑥ COMBINATION CURB & GUTTER (REMOVAL & REPLACEMENT DETERMINED BY RE)
- ⑦ GRADING AND SHAPING SHOULders
- ⑧ AGGREGATE WEDGE SHOULDER, TYPE B

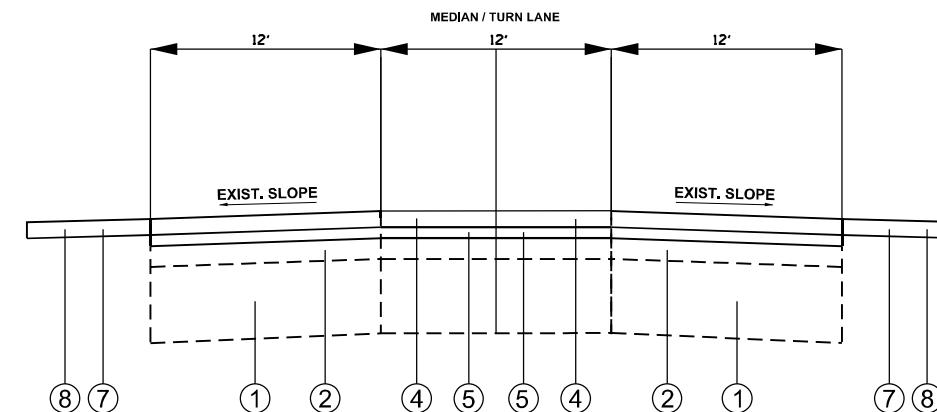
IL-59



EXISTING TYPICAL SECTION

STATION:
20+32 TO 21+35
24+15 TO 45+35
89+30 TO 100+22
134+79 TO 227+65

IL-59



PROPOSED TYPICAL SECTION

STATION:
20+32 TO 21+35
24+15 TO 45+35
89+30 TO 100+22
134+79 TO 227+65

LOCATION	HOT-MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
	MIXTURE TYPE	AIR VOIDS @ Ndesign	
PAVEMENT RESURFACING			
IL-59	HMA SURFACE COURSE, IL-9.5, MIX "D", N70, 1 $\frac{1}{2}"$	4.0% @ 70 GYR	QCP
IL-59	POLYMERIZED HMA BINDER COURSE, IL-4.75, N50, $\frac{3}{4}"$	3.5% @ 50 GYR	QCP
PATCHING			
IL-59	CLASS D PATCHES (HMA BINDER IL-19.0 MM: 19" & 11")	4.0% @ 70 GYR	QC/QA
PCC OVERLAY			
IL-59	HMA SURFACE COURSE, IL-9.5, MIX "D", N70, 1 $\frac{1}{2}"$	4.0% @ 70 GYR	QCP
IL-59	POLYMERIZED HMA BINDER COURSE, IL-4.75, N50, 1"	3.5% @ 50 GYR	QCP
COMMERCIAL DRIVEWAYS			
IL-59	HMA SURFACE, MIX "D", IL-9.5, N50: 2"	4.0% @ 50 GYR	QC/QA
IL-59	HMA ASPHALT BASE COURSE, 8" (HMA BINDER - IL - 19.0)	4.0% @ 50 GYR	QC/QA
RESIDENTIAL DRIVEWAYS			
IL-59	HMA SURFACE, MIX "D", IL-9.5, N50: 2"	4.0% @ 50 GYR	QC/QA
IL-59	HMA ASPHALT BASE COURSE, 6" (HMA BINDER - IL - 19.0)	4.0% @ 50 GYR	QC/QA
QMP DESIGNATIONS: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)			

NOTES:

1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE COURSE MIXTURES IS 112 LBS/SQYD/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.
3. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED ON THE POLYMERIZED HMA BC IL-4.75 N50
4. THE CONTRACTOR SHALL MILL THEN PATCH.

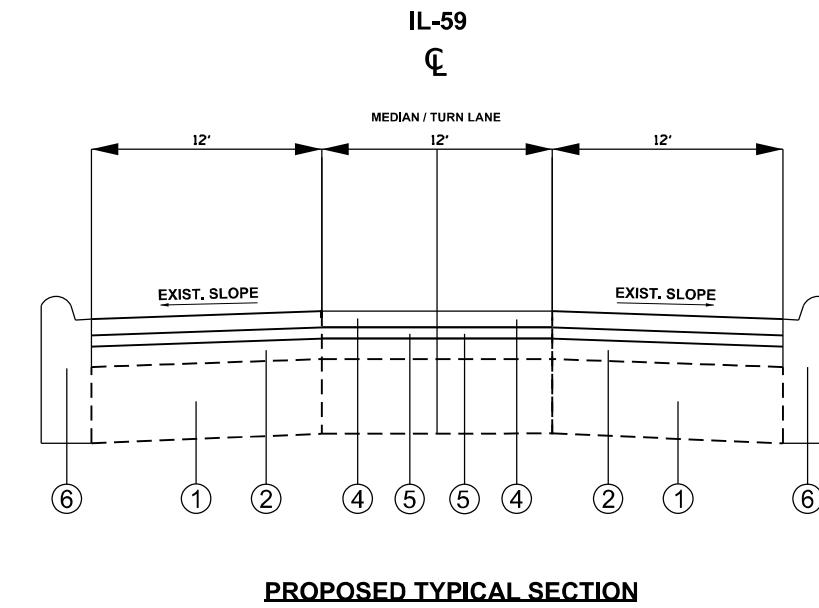
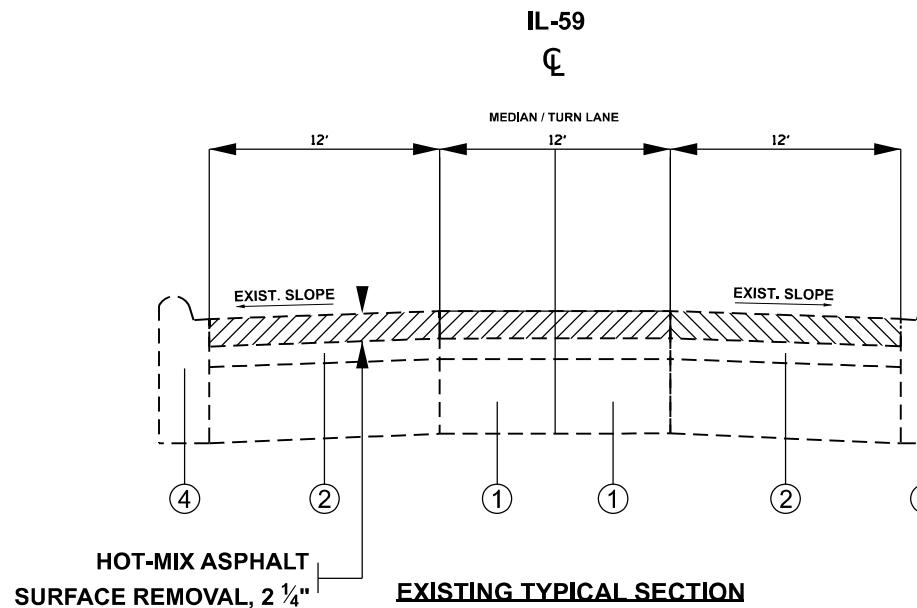
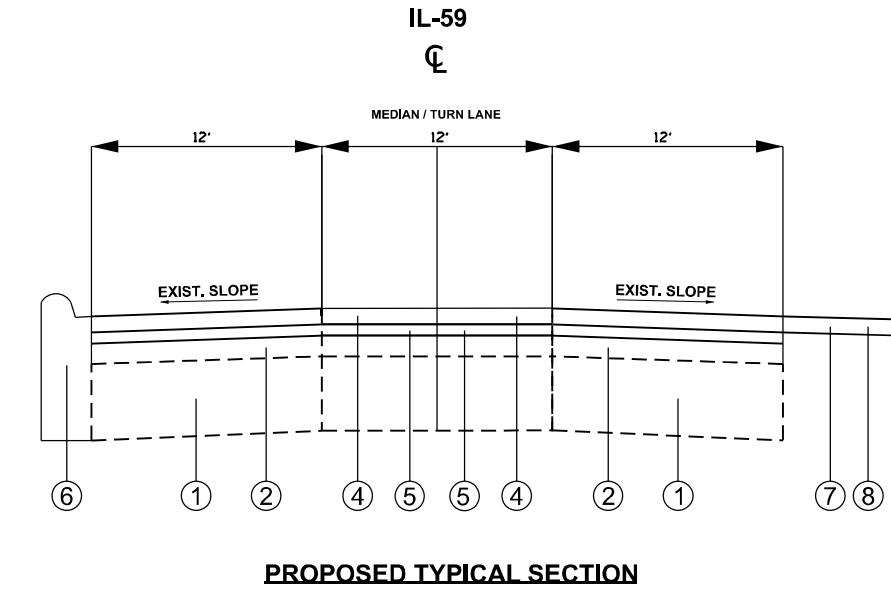
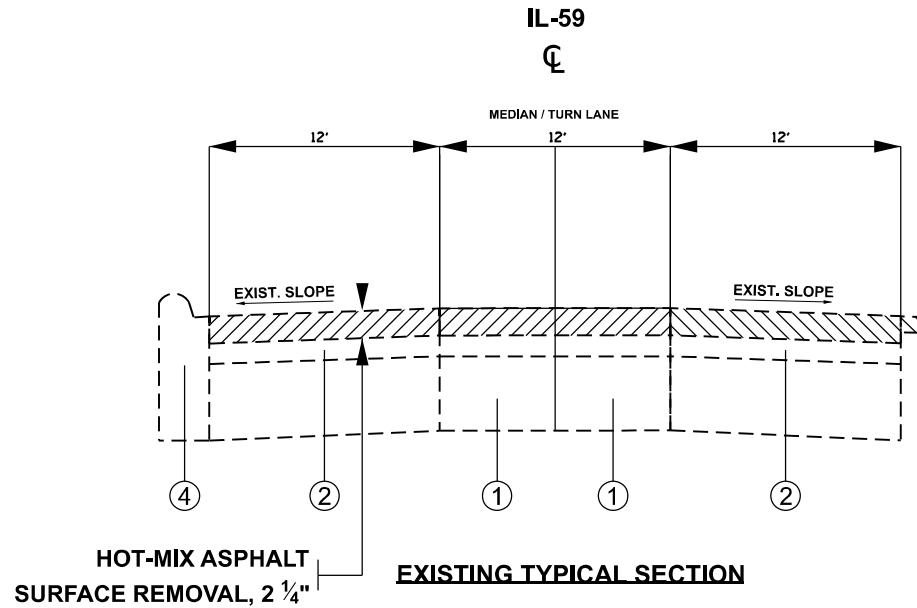
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTION			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -		104	2025-2039-RS,SW		LAKE	57	7		
	CHECKED -	REVISED -									CONTRACT NO. 80B75
	PLOT DATE = 12/4/2025	DATE -		SCALE:	1	OF 4	LEAVES	STA.	TO STA.	ILLINOIS	FED. AID PROJECT

HMA LEGEND (EXISTING)

- ① PORTLAND CEMENT CONCRETE PAVEMENT $\pm 8"$
- ② HOT MIX ASPHALT PAVEMENT $\pm 13"$
- ③ EXISTING AGGREGATE WEDGE SHOULDER $\pm 3'$
- ④ EXISTING CURB AND GUTTER

HMA LEGEND (PROPOSED)

- ④ HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 $\frac{1}{2}"$
- ⑤ POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, $\frac{3}{4}"$
- ⑥ COMBINATION CURB & GUTTER (REMOVAL & REPLACEMENT DETERMINED BY RE)
- ⑦ GRADING AND SHAPING SHOULders
- ⑧ AGGREGATE WEDGE SHOULDER, TYPE B

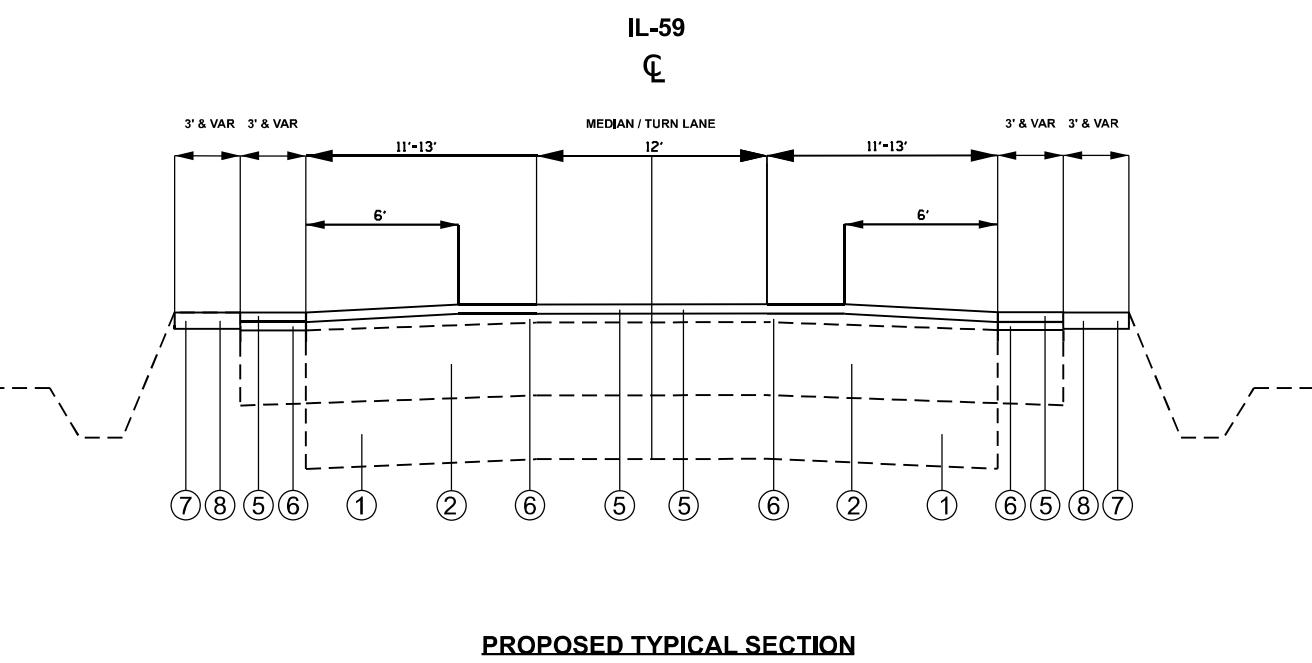
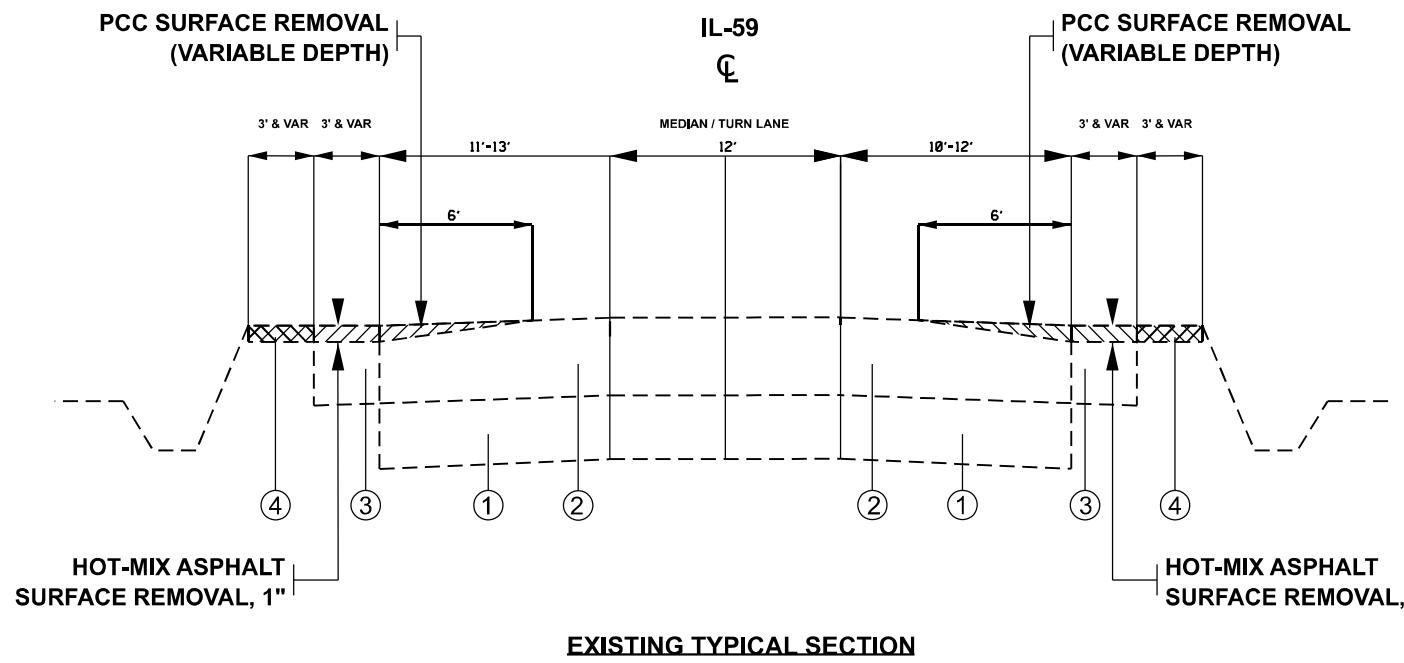


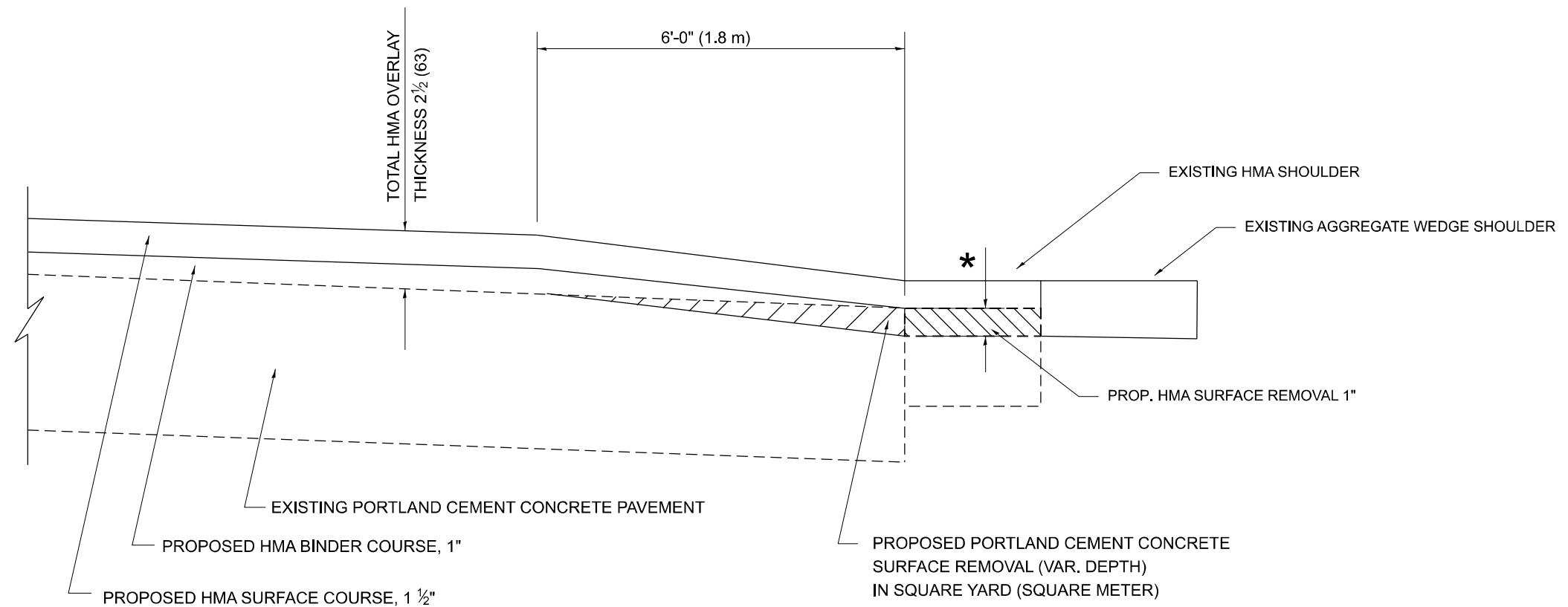
PCC LEGEND (EXISTING)

- ① SUB-BASE GRANULAR MATERIAL, TYPE B, $\pm 7"$
- ② PCC PAVEMENT $\pm 11"$
- ③ HMA SHOULDERS $\pm 9"$
- ④ AGGREGATE WEDGE SHOULDER

PCC LEGEND (PROPOSED)

- ⑤ HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, $1\frac{1}{2}"$
- ⑥ POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 1"
- ⑦ GRADING AND SHAPING SHOULDERS
- ⑧ AGGREGATE WEDGE SHOULDER, TYPE B

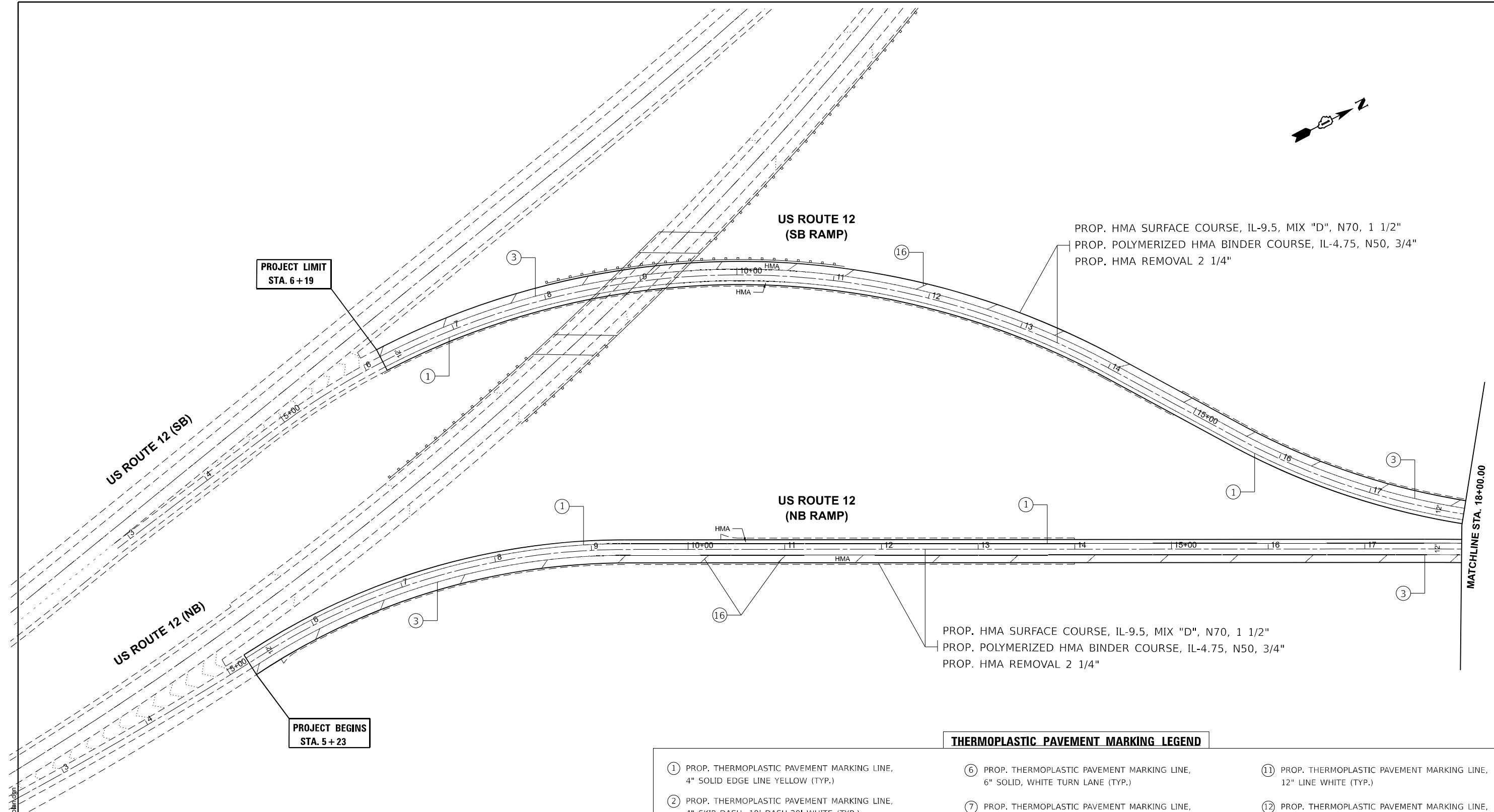




HMA TAPER AT EDGE OF PCC PAVEMENT

HMA SURFACE COURSE	HMA BINDER COURSE		
MIX	THICKNESS	THICKNESS	* MILLING AT HMA SHOULDER
D	1 1/2 (38)	1 (25)	1" (25)

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



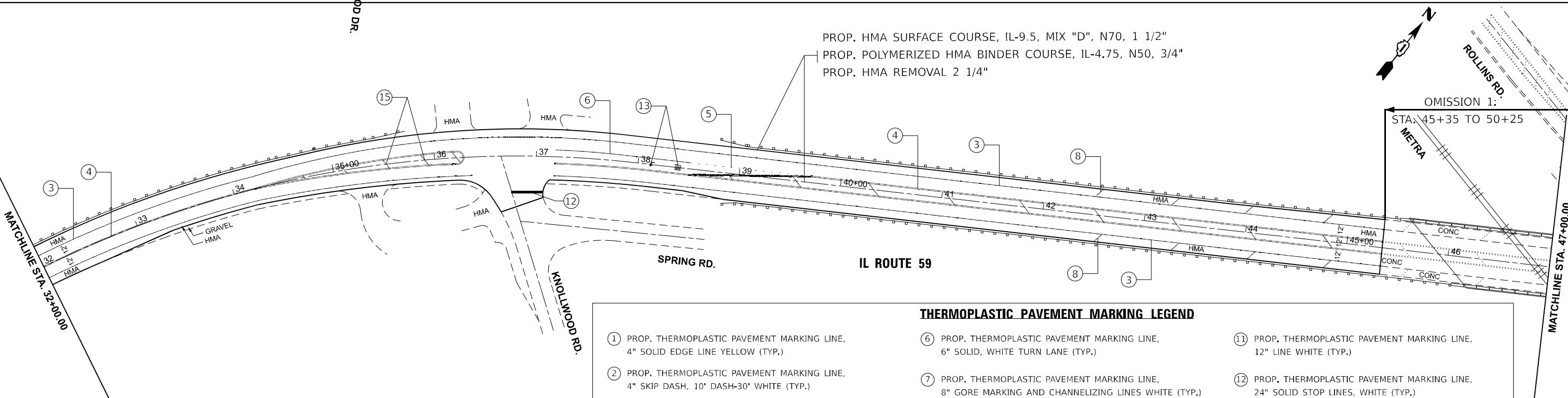
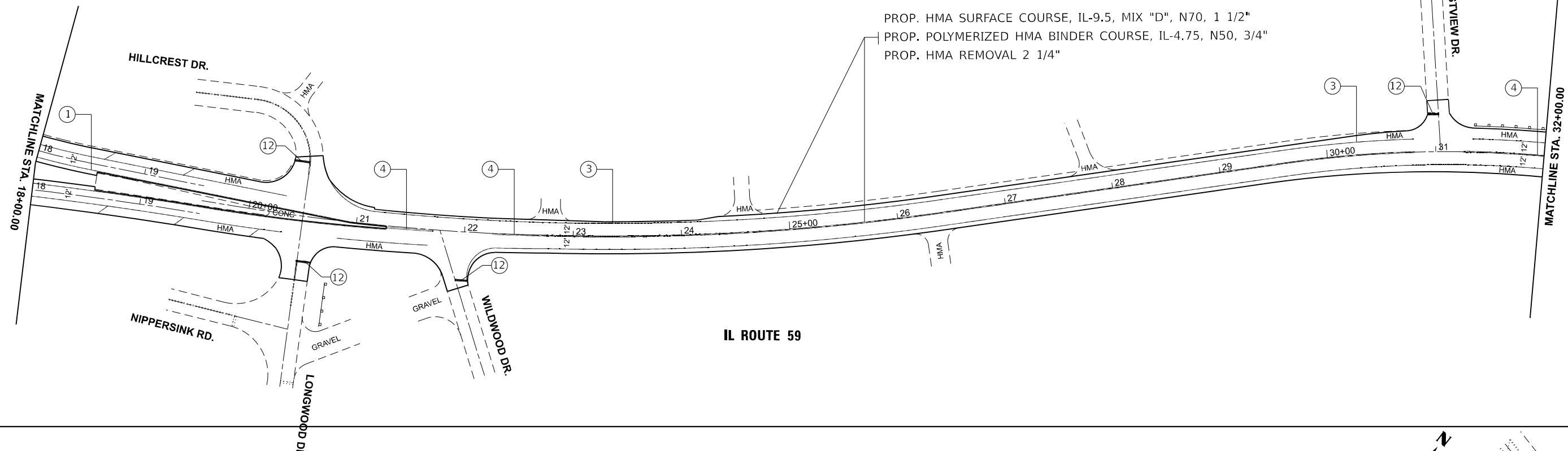
THERMOPLASTIC PAVEMENT MARKING LEGEND

① PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE YELLOW (TYP.)	⑥ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SOLID, WHITE TURN LANE (TYP.)	⑪ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" LINE WHITE (TYP.)
② PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH, 10' DASH-30' WHITE (TYP.)	⑦ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 8" GORE MARKING AND CHANNELIZING LINES WHITE (TYP.)	⑫ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 24" SOLID STOP LINES, WHITE (TYP.)
③ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE WHITE (TYP.)	⑧ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 10' OR LESS LINE WHITE (TYP.)	⑬ PROP. THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS WHITE (TYP.)
④ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" DOUBLE SOLID YELLOW LINE, 2 @ 11" C-C (TYP.)	⑨ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 150' C-C (MINIMUM 5) YELLOW (TYP.)	⑭ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH LINE YELLOW (TYP.)
⑤ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SKIP DASH, WHITE TURN LANE @ 6' SKIP & 2' DASH (TYP.)	⑩ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 150' C-C (MINIMUM 5) WHITE (TYP.)	⑮ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 75' C-C LINE YELLOW (TYP.)
		⑯ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 75' C-C (MINIMUM 5) WHITE (TYP.)

NOTE: STATION DIFFERS FROM NB AND SB LANES

MODEL: US12NBRamp_E - Rdwy Plan 1 [Sheet]

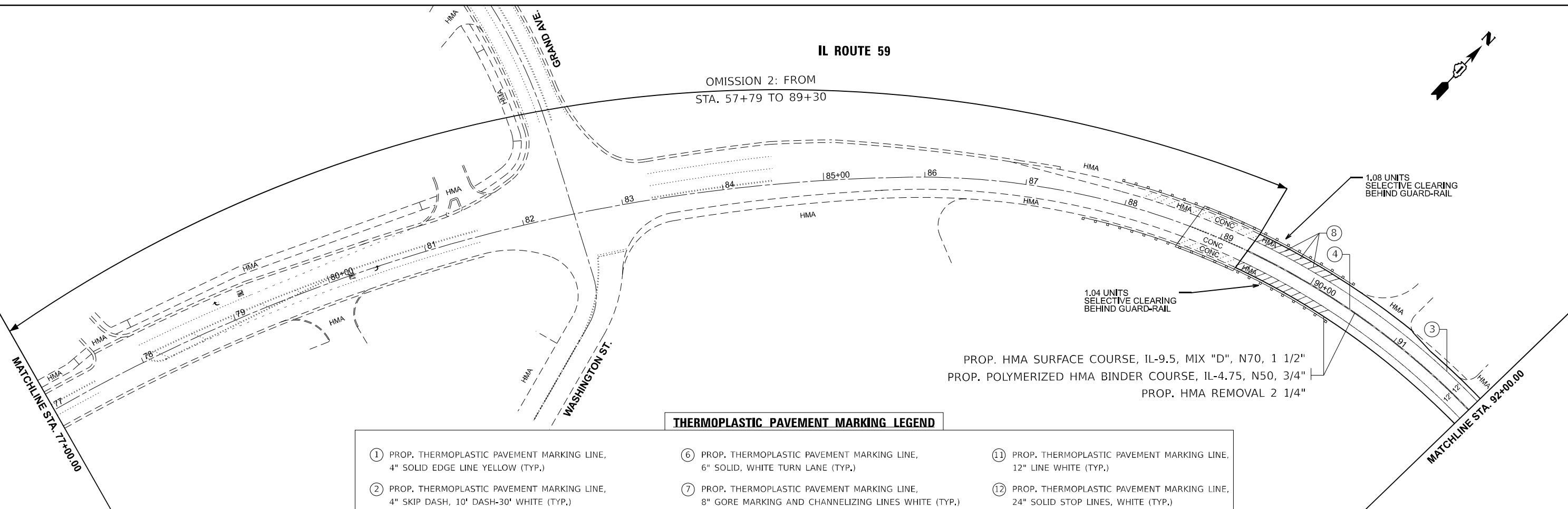
	USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	MH	1/16/2026	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN IL-59 FROM N OF IL-132 (GRAND AVE) TO US-12					F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SEE NO.
	DRAWN -		REVISED -				104	2025-2039-RS,SW			LAKE	69	11			
	CHECKED -		REVISED -									CONTRACT NO. 80B75				
	PLOT DATE = 1/16/2026	DATE -	REVISED -				SCALE: 1"=50'	SHEET	1	OF	9	Sheets	STA. 3+00.00	TO STA.	18+00.00	
													ILLINOIS	FED. AID PROJECT		



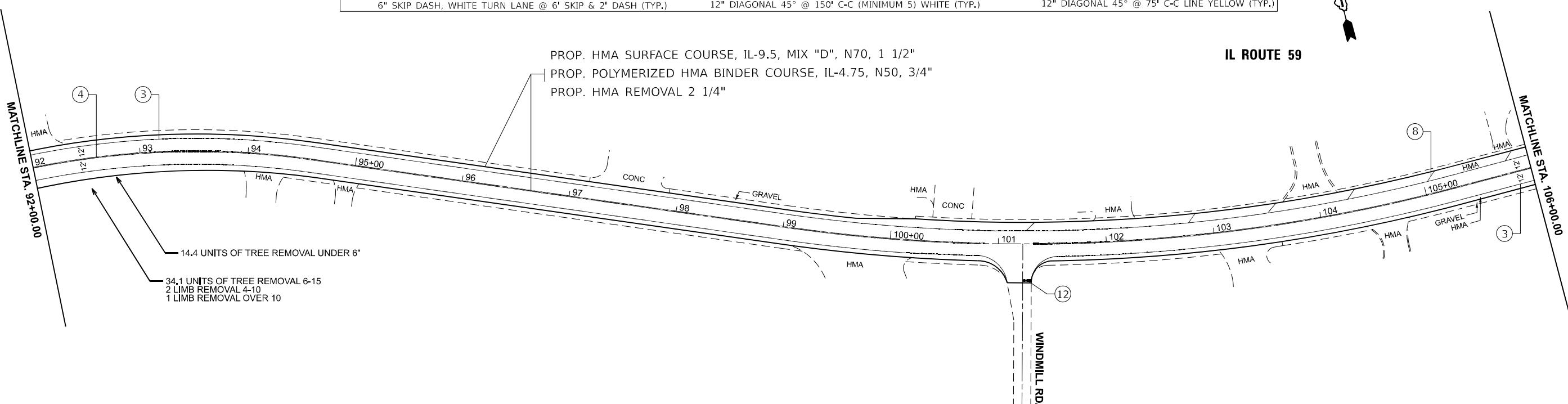
THERMOPLASTIC PAVEMENT MARKING LEGEND	
①	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE YELLOW (TYP.)
②	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH, 10' DASH-30' WHITE (TYP.)
③	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE WHITE (TYP.)
④	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 4" DOUBLE SOLID YELLOW LINE, 2 @ 11" C-C (TYP.)
⑤	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 6" SKIP DASH, WHITE TURN LANE @ 6' SKIP & 2' DASH (TYP.)
⑥	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 6" SOLID, WHITE TURN LANE (TYP.)
⑦	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 8" GORE MARKING AND CHANNELIZING LINES WHITE (TYP.)
⑧	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 10' OR LESS LINE WHITE (TYP.)
⑨	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 150' C-C (MINIMUM 5) YELLOW (TYP.)
⑩	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 150' C-C (MINIMUM 5) WHITE (TYP.)
⑪	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 12" LINE WHITE (TYP.)
⑫	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 24" SOLID STOP LINES, WHITE (TYP.)
⑬	PROPS: THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS WHITE (TYP.)
⑭	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH LINE YELLOW (TYP.)
⑮	PROPS: THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 75' C-C LINE YELLOW (TYP.)

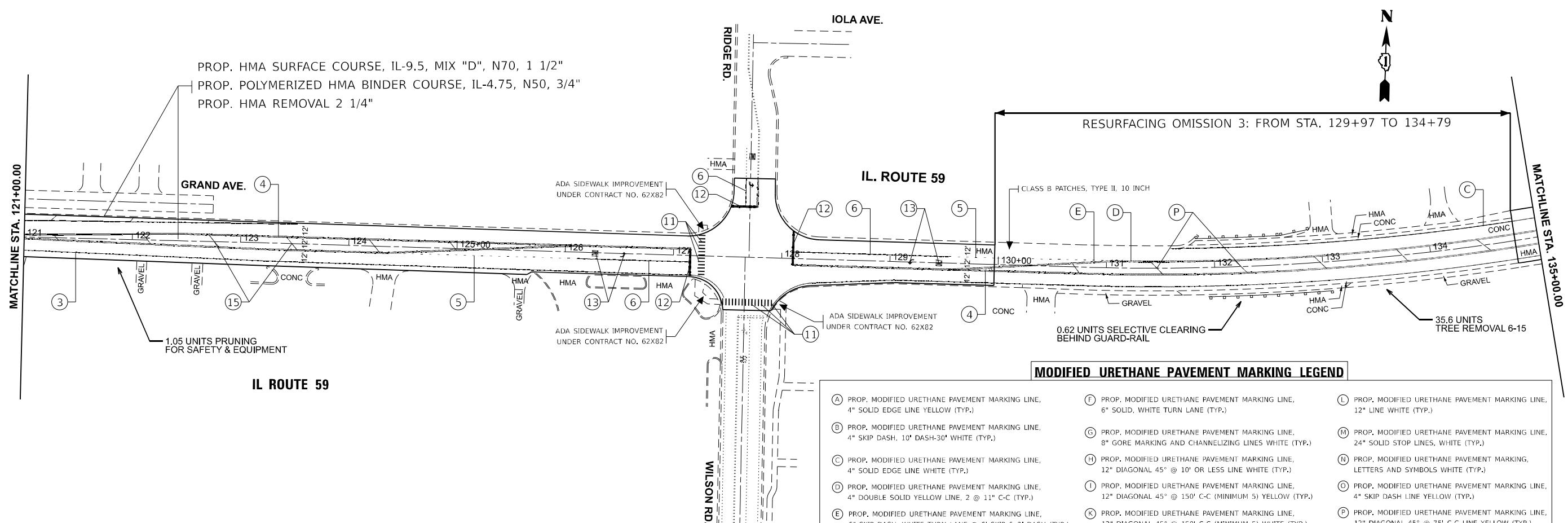
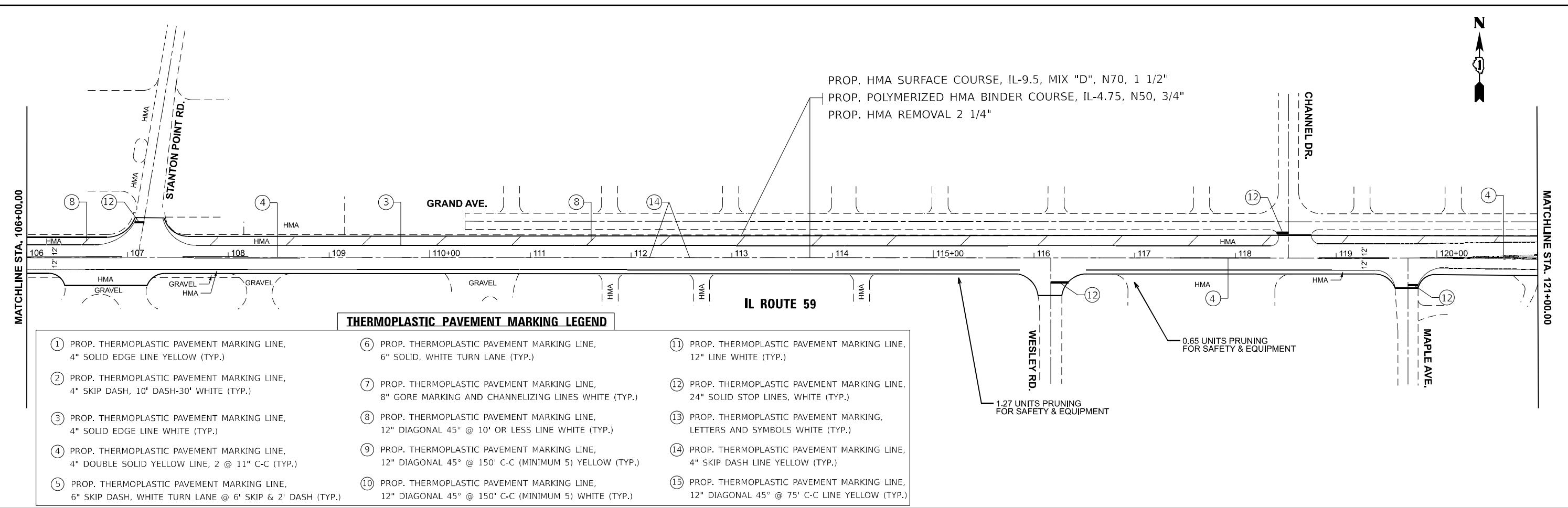
IL ROUTE 59

OMISSION 2: FROM
STA. 57+79 TO 89+30



IL ROUTE 59





MODEL: IL59_E - Plan 7 [Sheet]
FILE NAME: C:\pw\work\widoto\hamwim\d1154870\d102826-sh\plan.dgn

	USER NAME = mohammad.hamwi	DESIGNED -	REVISED - MH
		DRAWN -	REVISED -
		CHECKED -	REVISED -
	PLATE DATE - 14/6/2020	DATE -	REVISED -

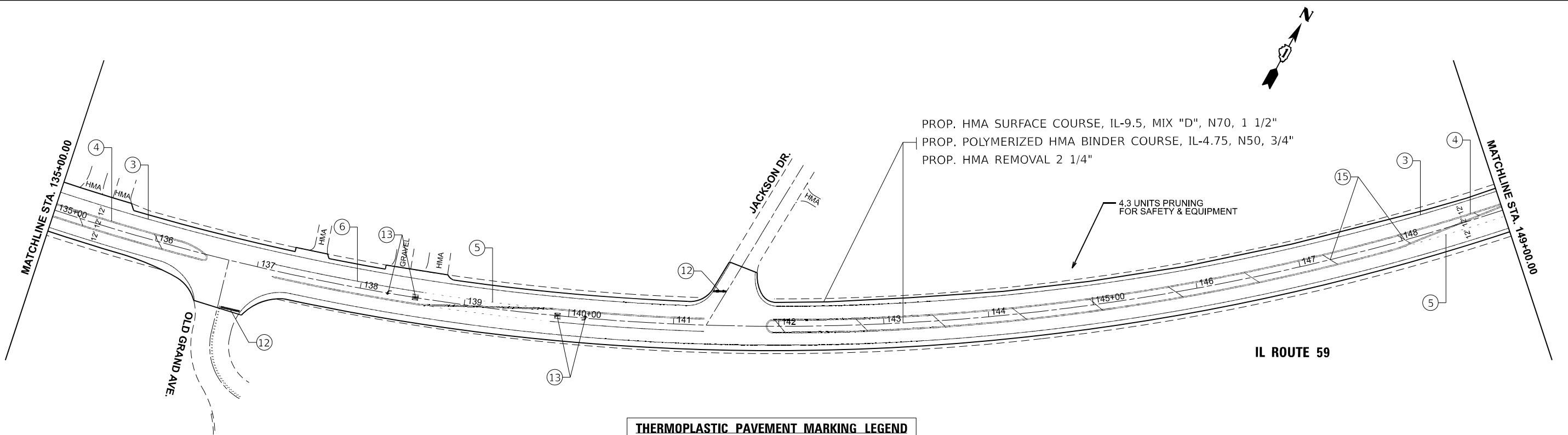
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN

IL-59 FROM N OF IL-132 (GRAND AVE) TO US-12

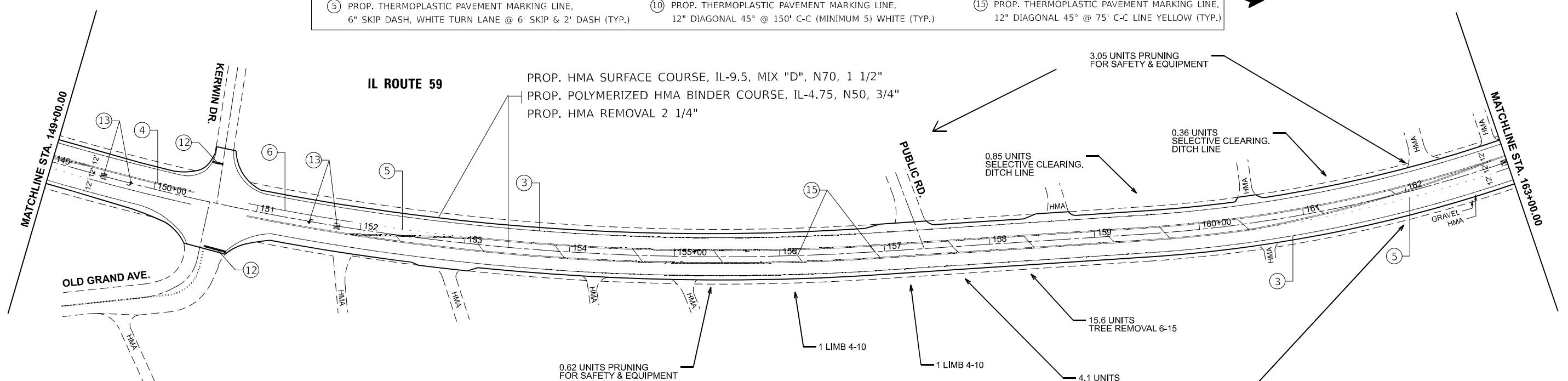
SCALE: 1"=50' SHEET 5 OF 9 SHEETS STA 106+00.00 TO STA 135+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
104	2025-2039-RS,SW	LAKE	69	15
				CONTRACT NO. 80B75



THERMOPLASTIC PAVEMENT MARKING LEGEND

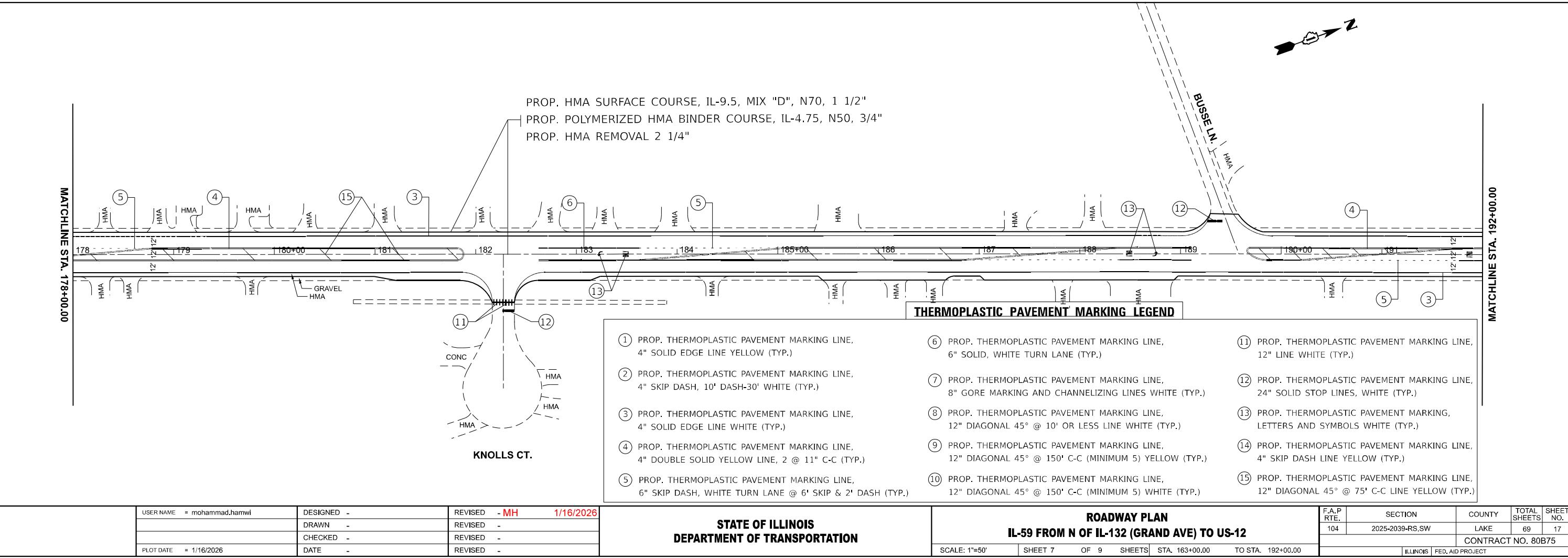
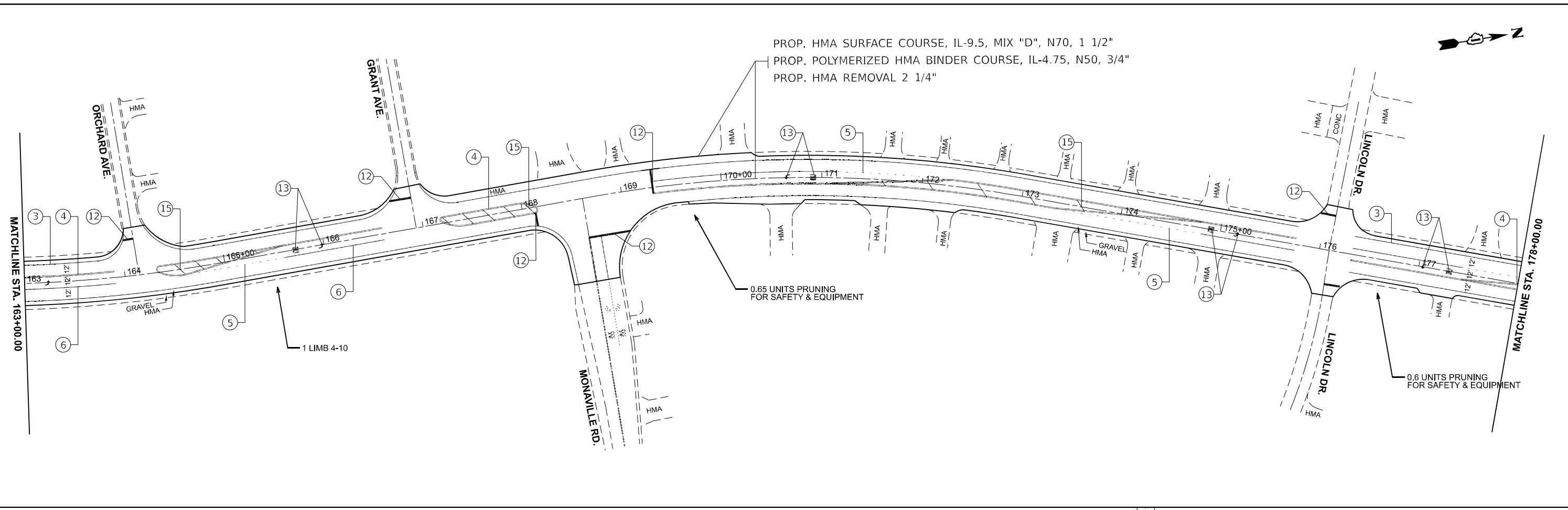
① PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE YELLOW (TYP.)	⑥ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SOLID, WHITE TURN LANE (TYP.)	⑪ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" LINE WHITE (TYP.)
② PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH, 10' DASH-30' WHITE (TYP.)	⑦ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 8" GORE MARKING AND CHANNELIZING LINES WHITE (TYP.)	⑫ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 24" SOLID STOP LINES, WHITE (TYP.)
③ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE WHITE (TYP.)	⑧ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 10' OR LESS LINE WHITE (TYP.)	⑬ PROP. THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS WHITE (TYP.)
④ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" DOUBLE SOLID YELLOW LINE, 2 @ 11" C-C (TYP.)	⑨ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 150' C-C (MINIMUM 5) YELLOW (TYP.)	⑭ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH LINE YELLOW (TYP.)
⑤ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SKIP DASH, WHITE TURN LANE @ 6' SKIP & 2' DASH (TYP.)	⑩ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 150' C-C (MINIMUM 5) WHITE (TYP.)	⑮ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 75' C-C LINE YELLOW (TYP.)

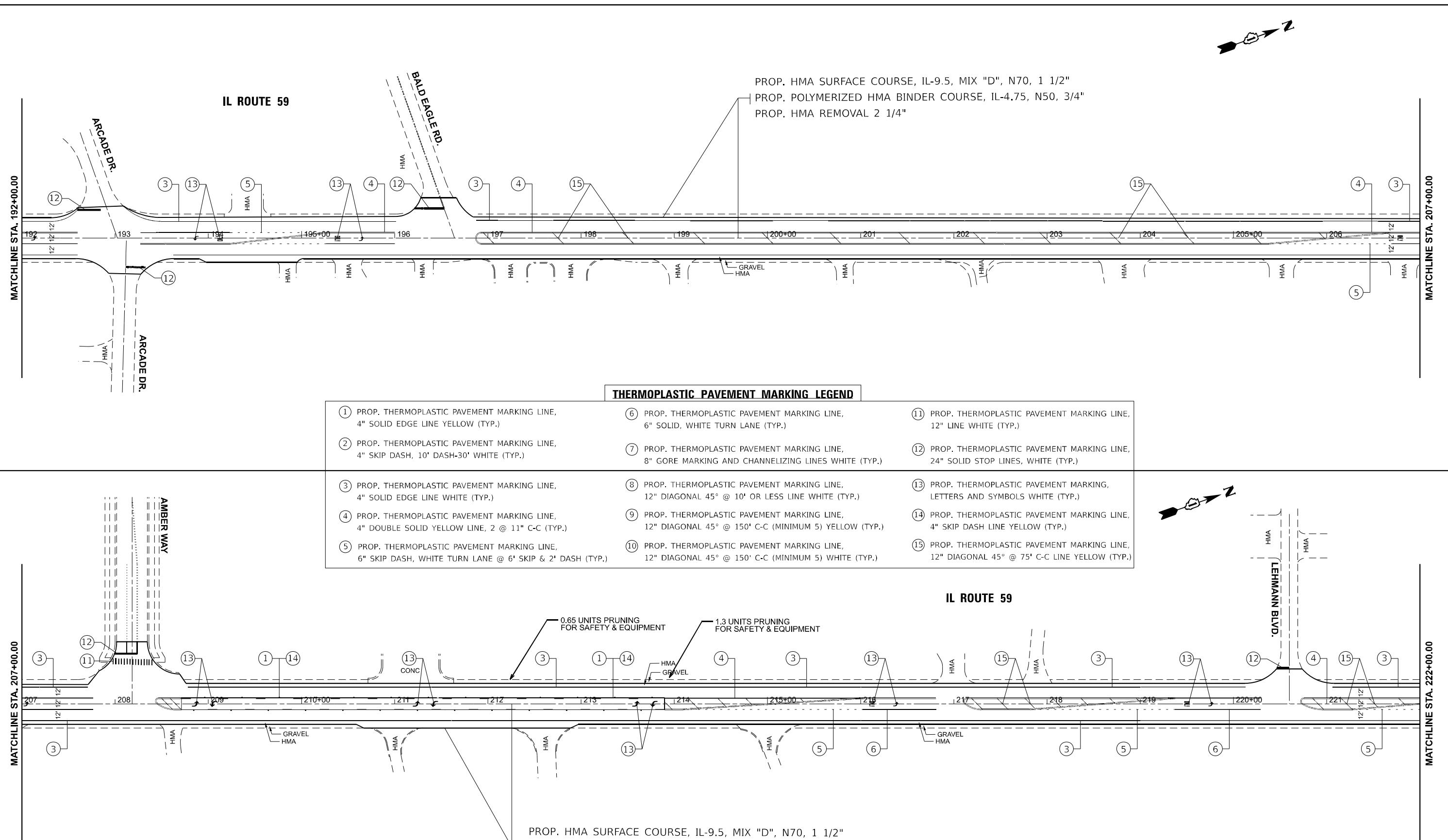


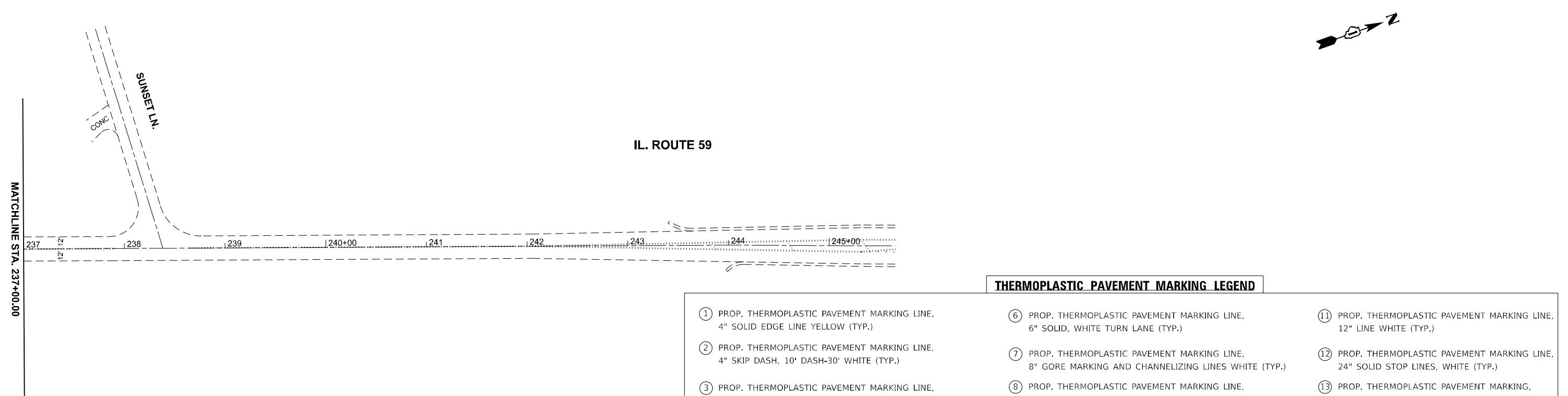
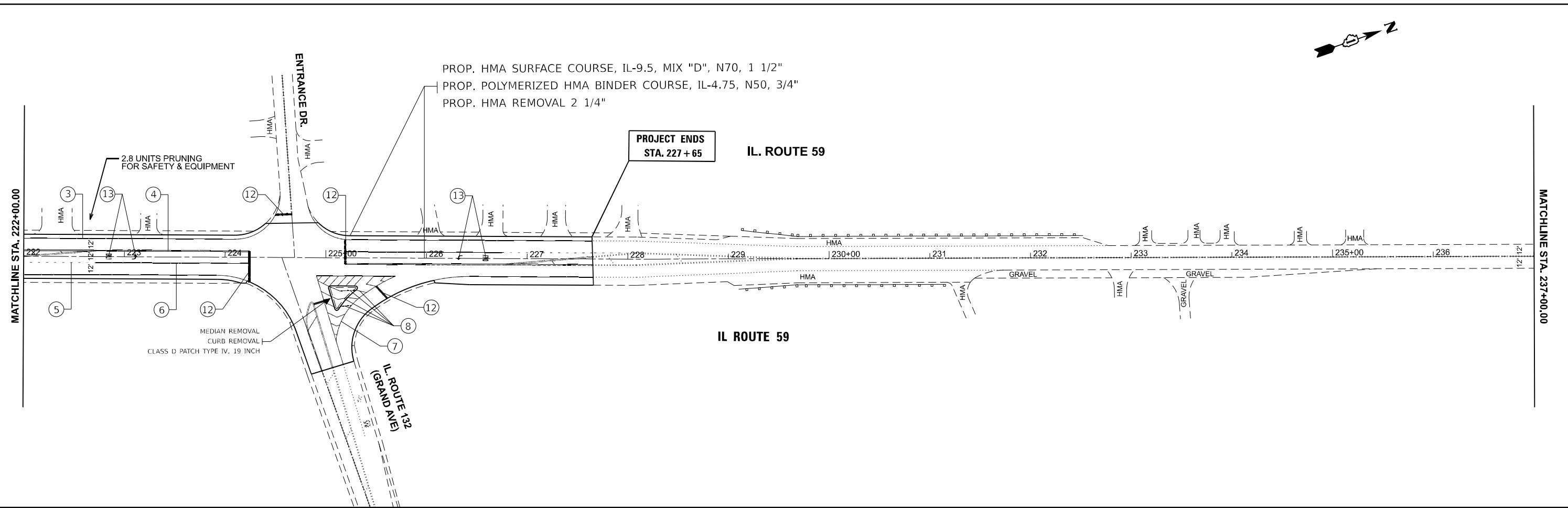
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	MH	1/16/2020
	DRAWN -	REVISED -		
	CHECKED -	REVISED -		
PLAT. DATE = 1/16/2020	DATE	REVISED		

ROADWAY PLAN

USER NAME = mohammad.hamwi	DESIGNED -	REVISED - MH 1/16/2026	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN IL-59 FROM N OF IL-132 (GRAND AVE) TO US-12	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
	DRAWN -	REVISED -			104	2025-2039-RS,SW	LAKE	69	16
	CHECKED -	REVISED -							CONTRACT NO. 80B75
PLOT DATE: 1/16/2026	DATE: 1/16/2026	REVISED -			ZONE 5-11, 50	SHFTS 0	25 0	SHFTS 0	STA 105+00.00 TO STA 105+00.00







THERMOPLASTIC PAVEMENT MARKING LEGEND

① PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE YELLOW (TYP.)	⑥ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SOLID, WHITE TURN LANE (TYP.)	⑪ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" LINE WHITE (TYP.)
② PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH, 10' DASH-30' WHITE (TYP.)	⑦ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 8" GORE MARKING AND CHANNELIZING LINES WHITE (TYP.)	⑫ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 24" SOLID STOP LINES, WHITE (TYP.)
③ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE WHITE (TYP.)	⑧ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 10' OR LESS LINE WHITE (TYP.)	⑬ PROP. THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS WHITE (TYP.)
④ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" DOUBLE SOLID YELLOW LINE, 2 @ 11" C-C (TYP.)	⑨ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 150' C-C (MINIMUM 5) YELLOW (TYP.)	⑭ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH LINE YELLOW (TYP.)
⑤ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SKIP DASH, WHITE TURN LANE @ 6' SKIP & 2' DASH (TYP.)	⑩ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 150' C-C (MINIMUM 5) WHITE (TYP.)	⑮ PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 75' C-C LINE YELLOW (TYP.)

[LE NAME: C:\pw\work\pwidol\hamwi\l\154870\102826-shl-plan.dgn

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	MH	1/
	DRAWN -	REVISED -		
	CHECKED -	REVISED -		
PLOT DATE = 1/16/2026	DATE -	REVISED -		

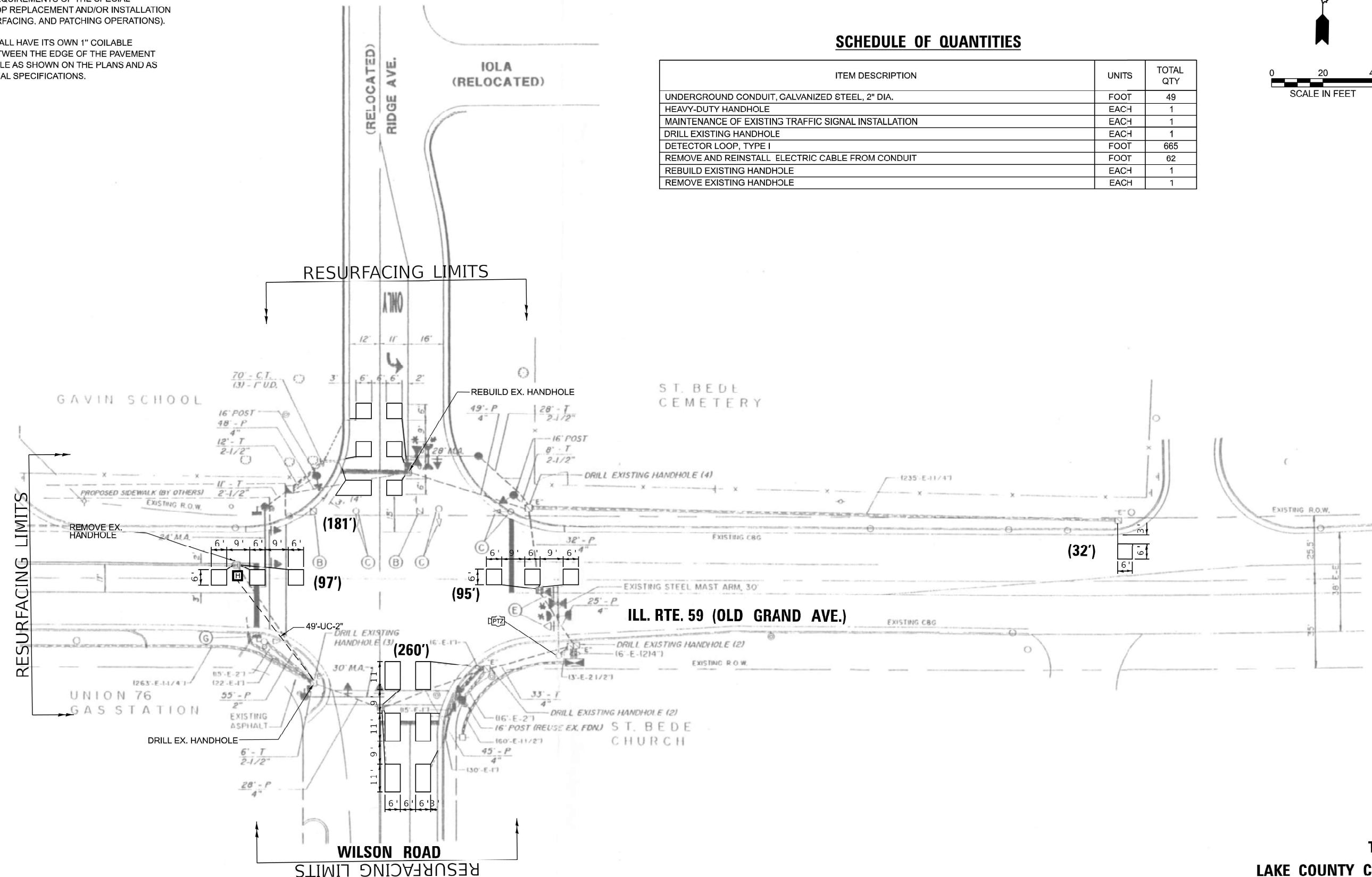
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN

ROADWAY PLAN IL-59 FROM N OF IL-132 (GRAND AVE) TO US-12						F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
						104	2025-2039-RS,SW	LAKE	69	19
						CONTRACT NO. 80B75				

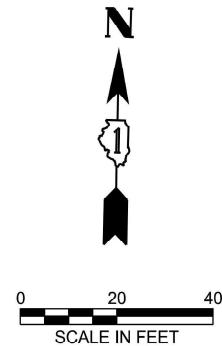
NOTES:

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS, DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, AND PATCHING OPERATIONS).
2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF THE PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.



SCHEDULE OF QUANTITIES

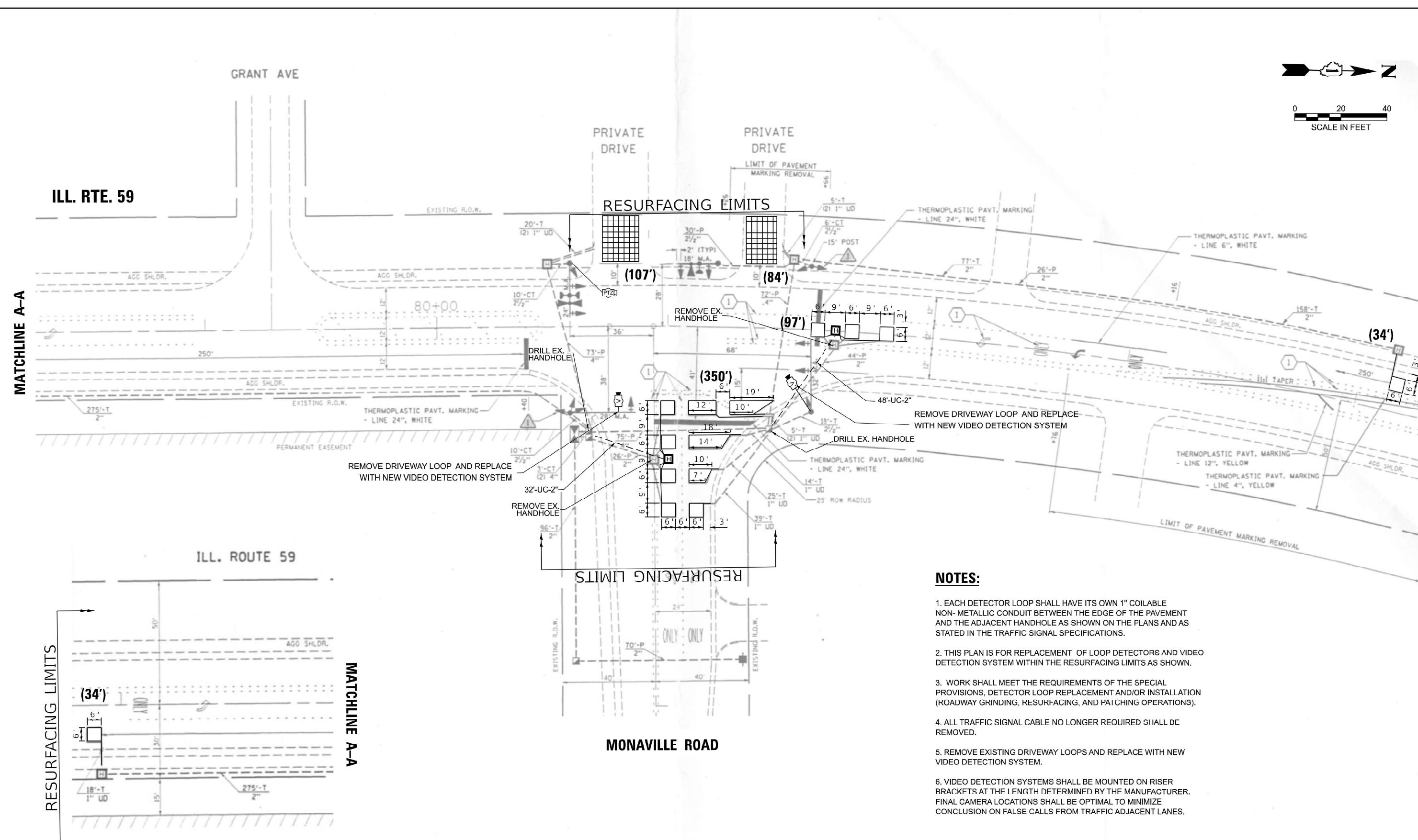
ITEM DESCRIPTION	UNITS	TOTAL QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	49
HEAVY-DUTY HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
DETECTOR LOOP, TYPE I	FOOT	665
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	62
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1



TS 11940

LAKE COUNTY CENTRACS

USER NAME = mohammad.hamwi	DESIGNED -	REVISED - MH 1/10/2026	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN -	REVISED -			IL ROUTE 59 AT RIDGE ROAD / WILSON ROAD	104	2025-2039-RS,SW	LAKE	57	20
CHECKED -	REVISED -								CONTRACT NO. 80B75
PLOT DATE = 1/10/2026	DATE -	REVISED -		SCALE: SHEET 1 OF 69 SHEETS STA. TO STA.					ILLINOIS FED. AID PROJECT

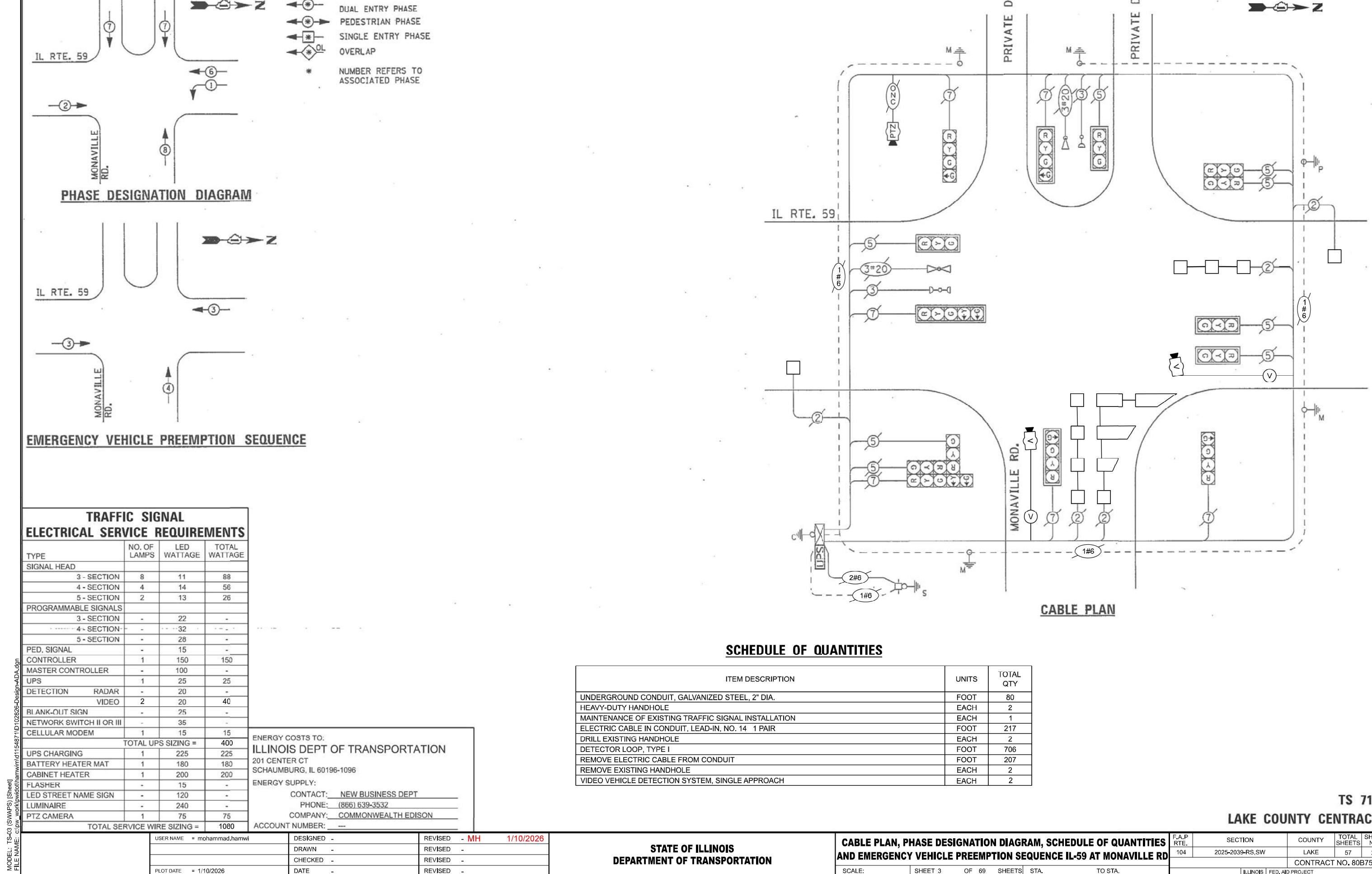


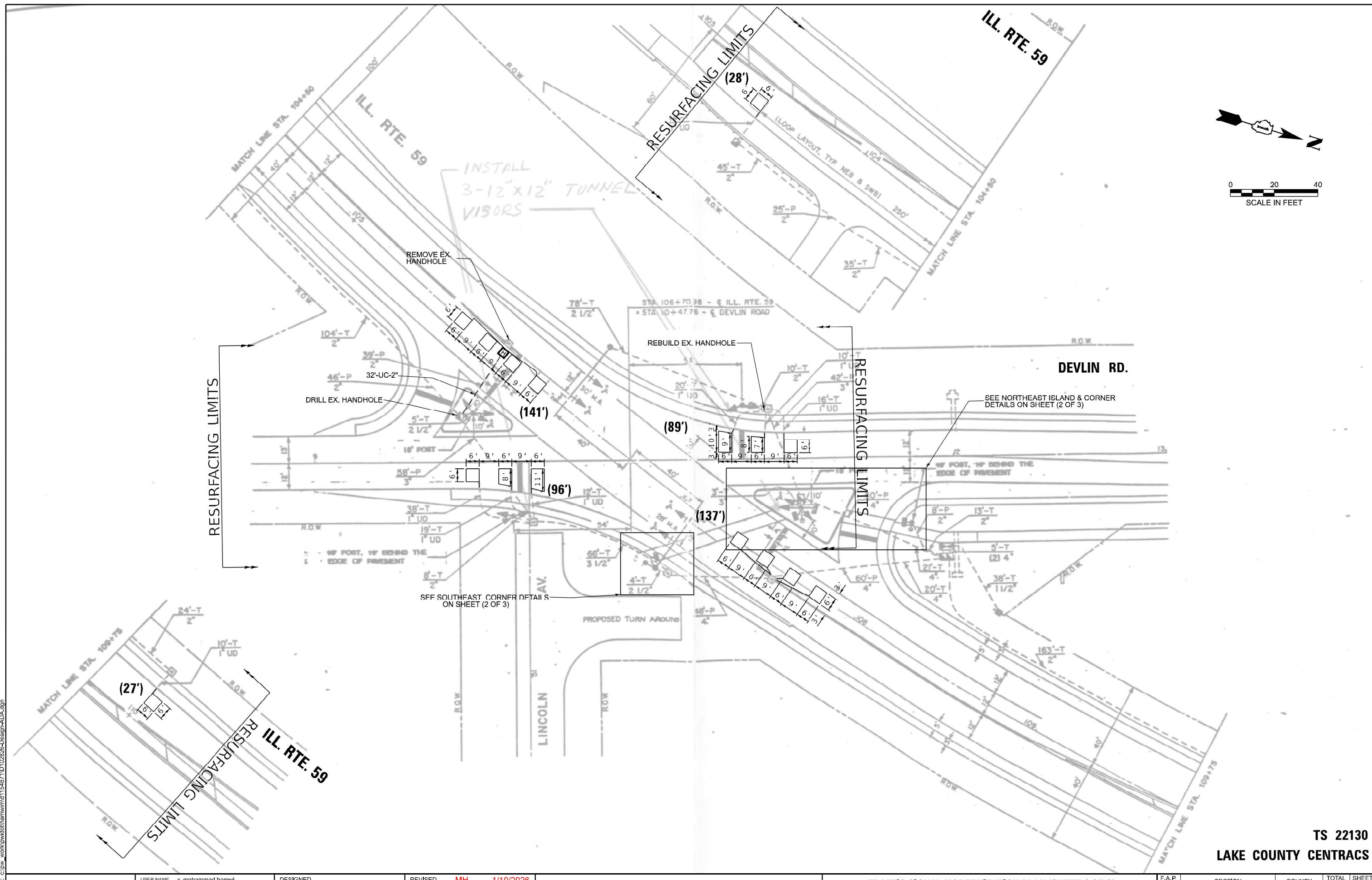
MODEL: TS-02 (SWAPS) [Sheet]

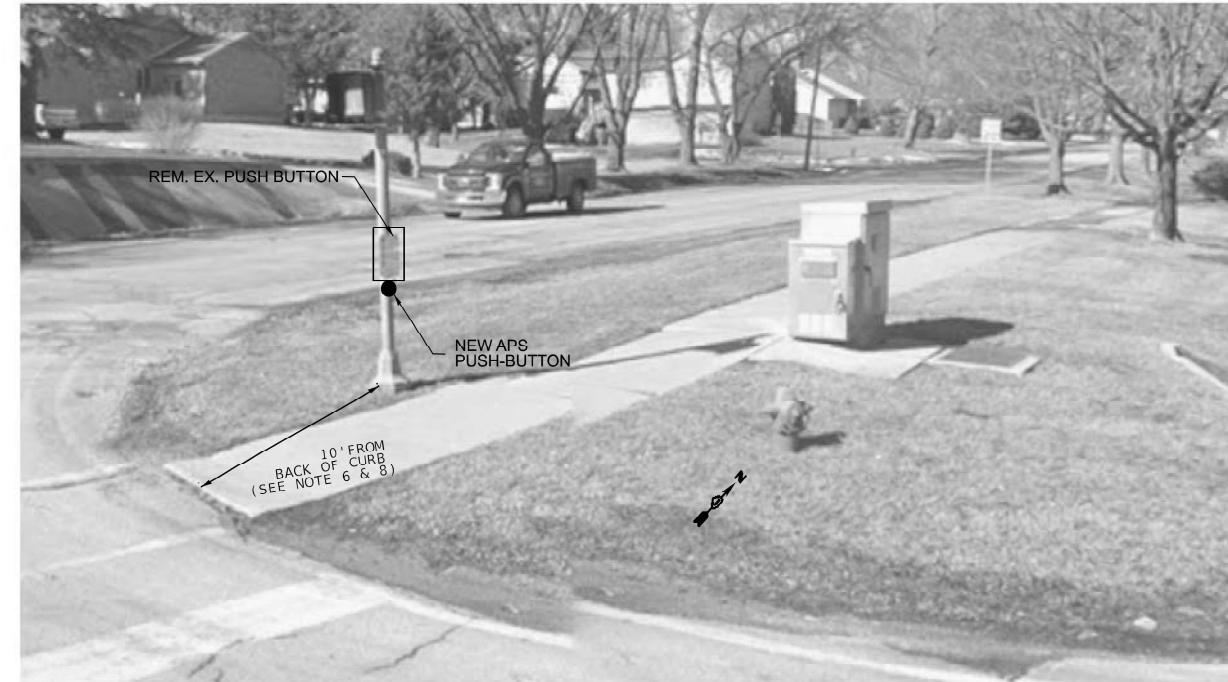
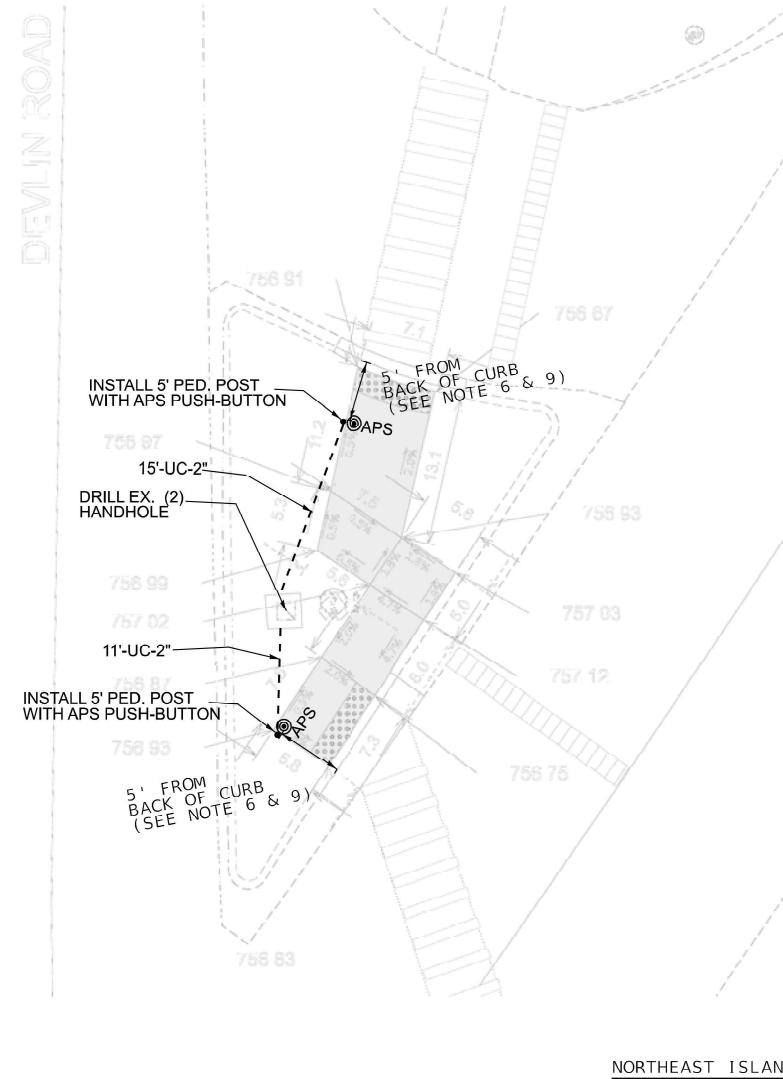
TS 717

Lake County Centracs

FILE NAME: clip	USER NAME = mohammad.hamwi	DESIGNED -	REVISED - MH 1/10/2026	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN IL ROUTE 59 AT MONAVILLE ROAD				F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						104	2025-2039-RS,SW	LAKE	57	21
		CHECKED -	REVISED -										CONTRACT NO. 80B75
	PLOT DATE = 1/10/2026	DATE -	REVISED -		SCALE:	SHEET 2	OF 69	SHEETS	STA.	TO STA.			ILLINOIS FED. AID PROJECT







NORTHEAST CORNER



SOUTHEAST CORNER

TS 22130

LAKE COUNTY CENTRACS

USER NAME = mohammad.hamwi	DESIGNED -	REVISED - MH 1/10/2026
DRAWN -	REVISED -	
CHECKED -	REVISED -	
PLOT DATE = 1/10/2026	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 3)
IL ROUTE 59 AT DEVLIN ROAD

SCALE: SHEET 7 OF 69 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
104	2025-2039-RS,SW	LAKE	57	24

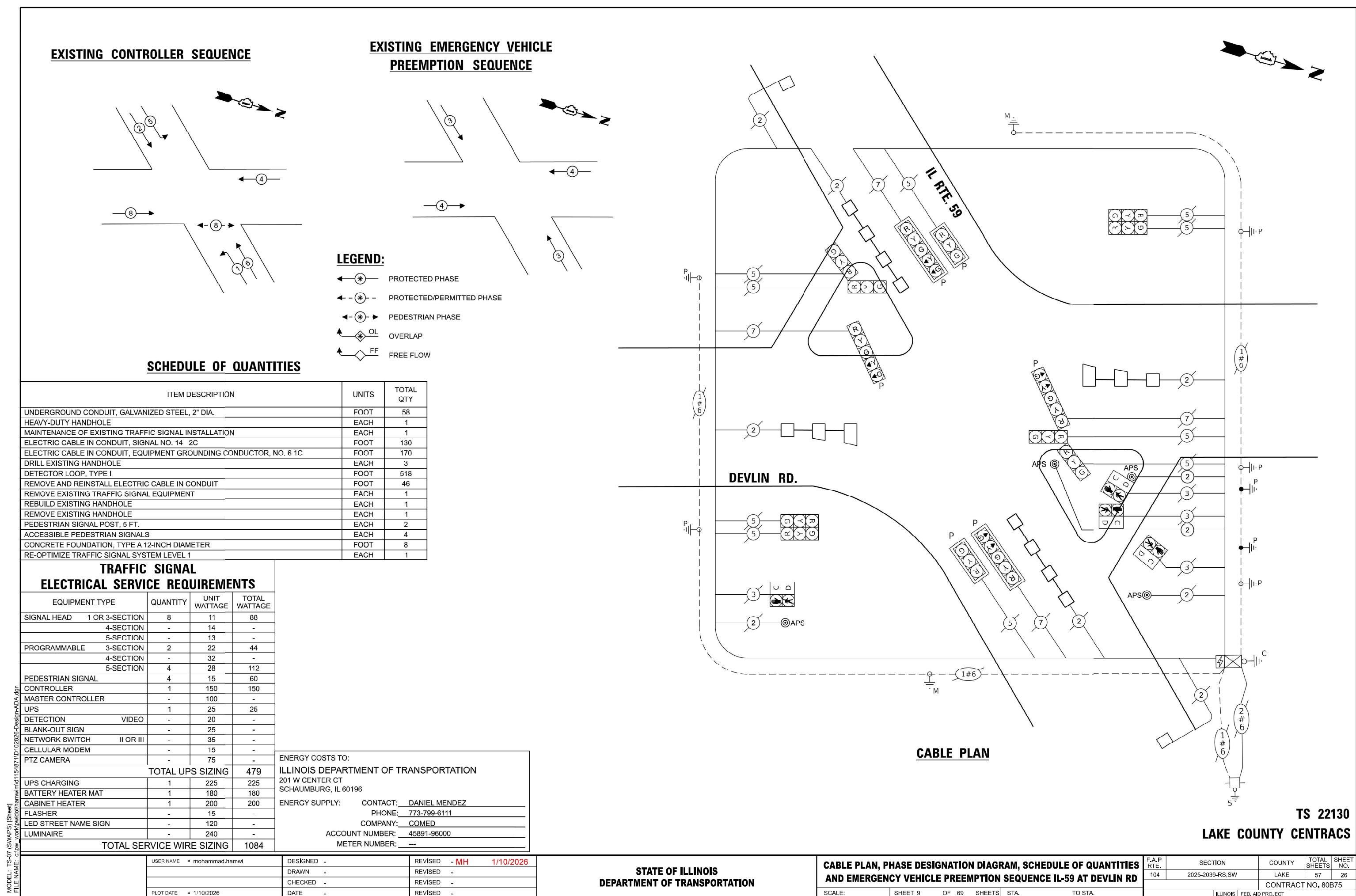
CONTRACT NO. 80B75

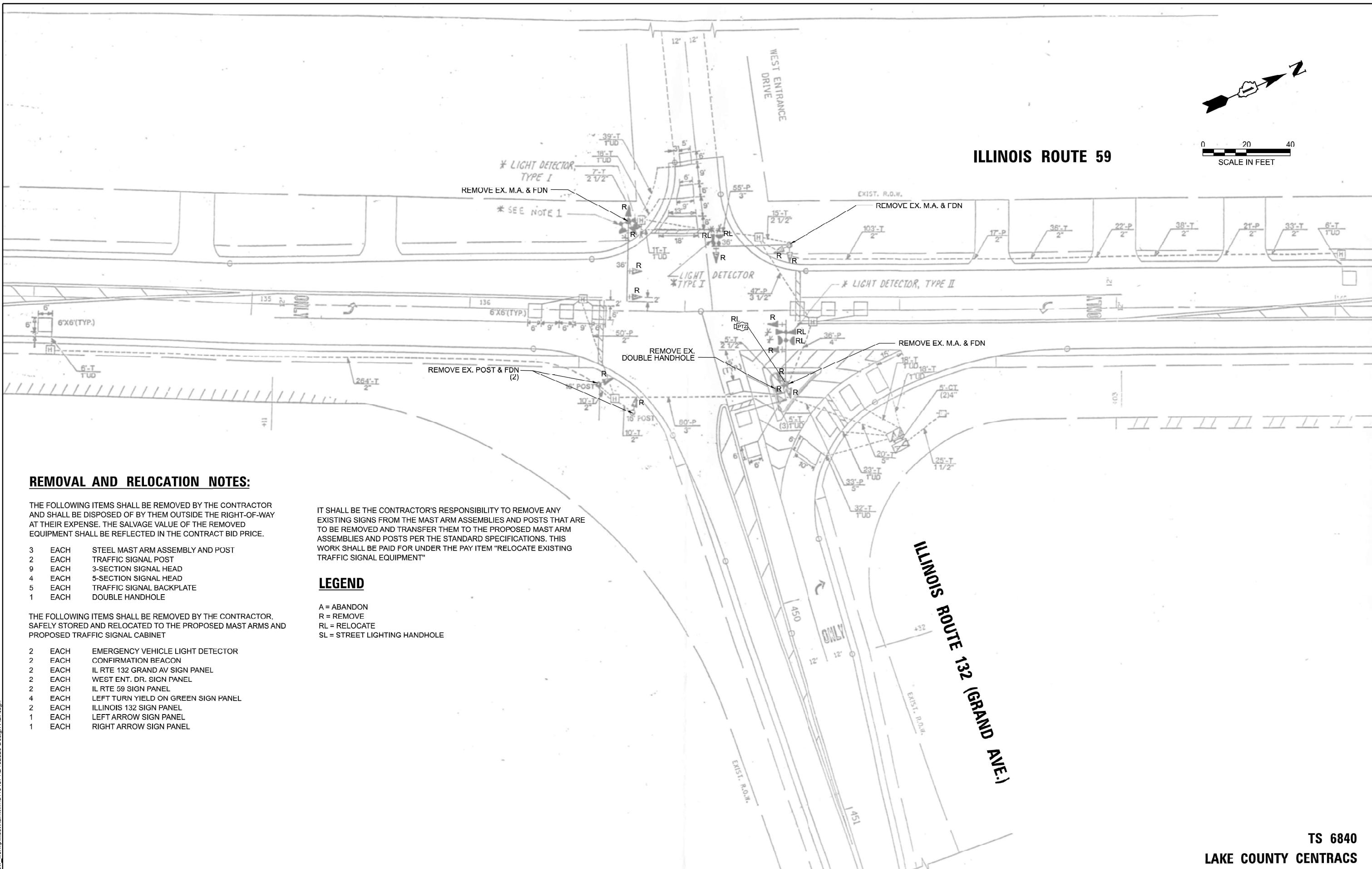
ILLINOIS FED. AID PROJECT

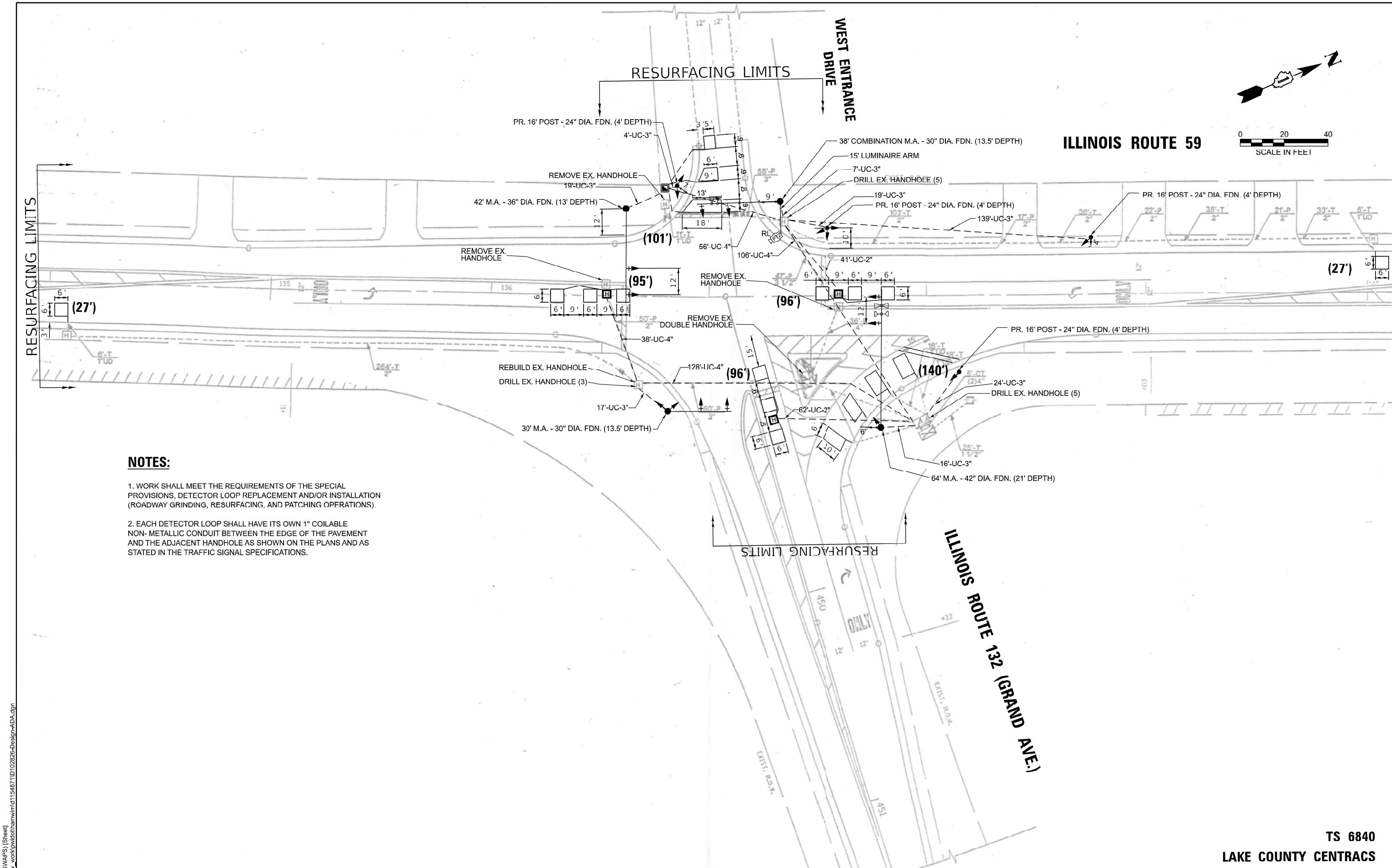
NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
2. CONTRACTOR SHALL CONFIRM THE FINAL LOCATION OF THE PEDESTRIAN EQUIPMENT BEFORE INSTALLATION WITH THE TRAFFIC SIGNAL ENGINEER.
3. APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALK.
4. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS, DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING, AND PATCHING OPERATIONS).
5. ALL PUSH BUTTONS SHALL BE APS
6. NO PROPOSED PEDESTRIAN POST SHALL EXCEED 10 FT FROM BACK OF CURB
7. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED
8. THERE SHALL BE A MINIMUM OF 4' SIDEWALK CLEARANCE NEXT TO TRAFFIC SIGNAL FOUNDATIONS TO BE ADA COMPLIANT

USER NAME = mohammad.hamwi	DESIGNED -	REVISED - MH 1/10/2026	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 3 OF 3) IL ROUTE 59 AT DEVLIN ROAD				F.A.P RTE. 104	SECTION 2025-2039-RS,SW	COUNTY LAKE	TOTAL SHEETS 57	SHEET NO. 25
	DRAWN -	REVISED -										
	CHECKED -	REVISED -										
PLOT DATE = 1/10/2026	DATE -	REVISED -		SCALE:	SHEET 8	OF 69	SHEETS	STA.	TO STA.			ILLINOIS FED. AID PROJECT





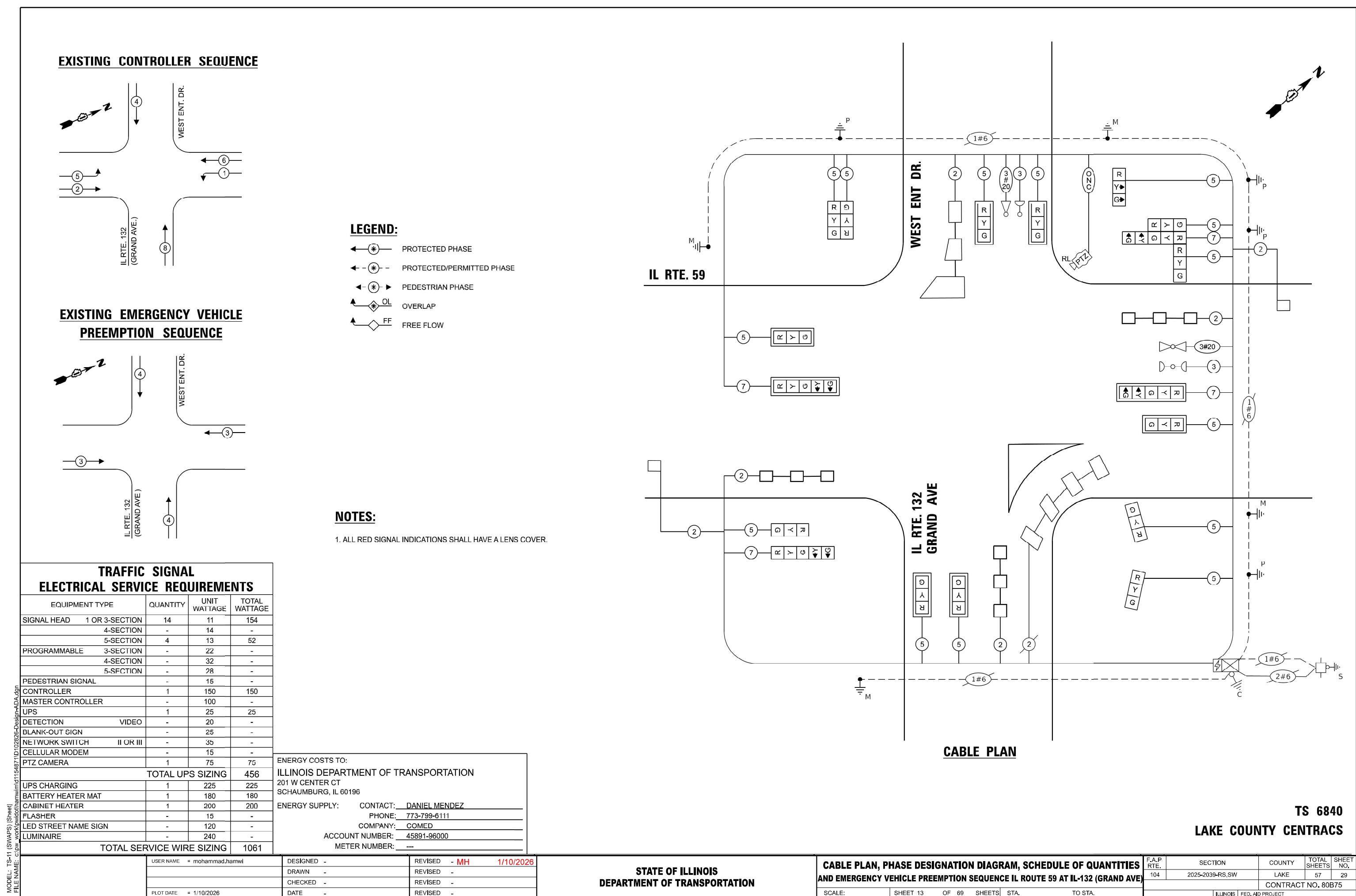




TS 6840

LAKE COUNTY CENTRACS

USER NAME = mohammad.hamwi	DESIGNED -	REVISED - MH 1/10/2026	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 2) IL ROUTE 59 AT IL-132 (GRAND AVE)				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN -	REVISED -	104		2025-2039-RS,SW	LAKE	57	28A					
CHECKED -	REVISED -										CONTRACT NO. 80B75	
PLOT DATE = 1/10/2026	DATE -	REVISED -		SCALE:	SHEET 12 OF 69 SHEETS STA.	TO STA.			ILLINOIS	FED. AID PROJECT		

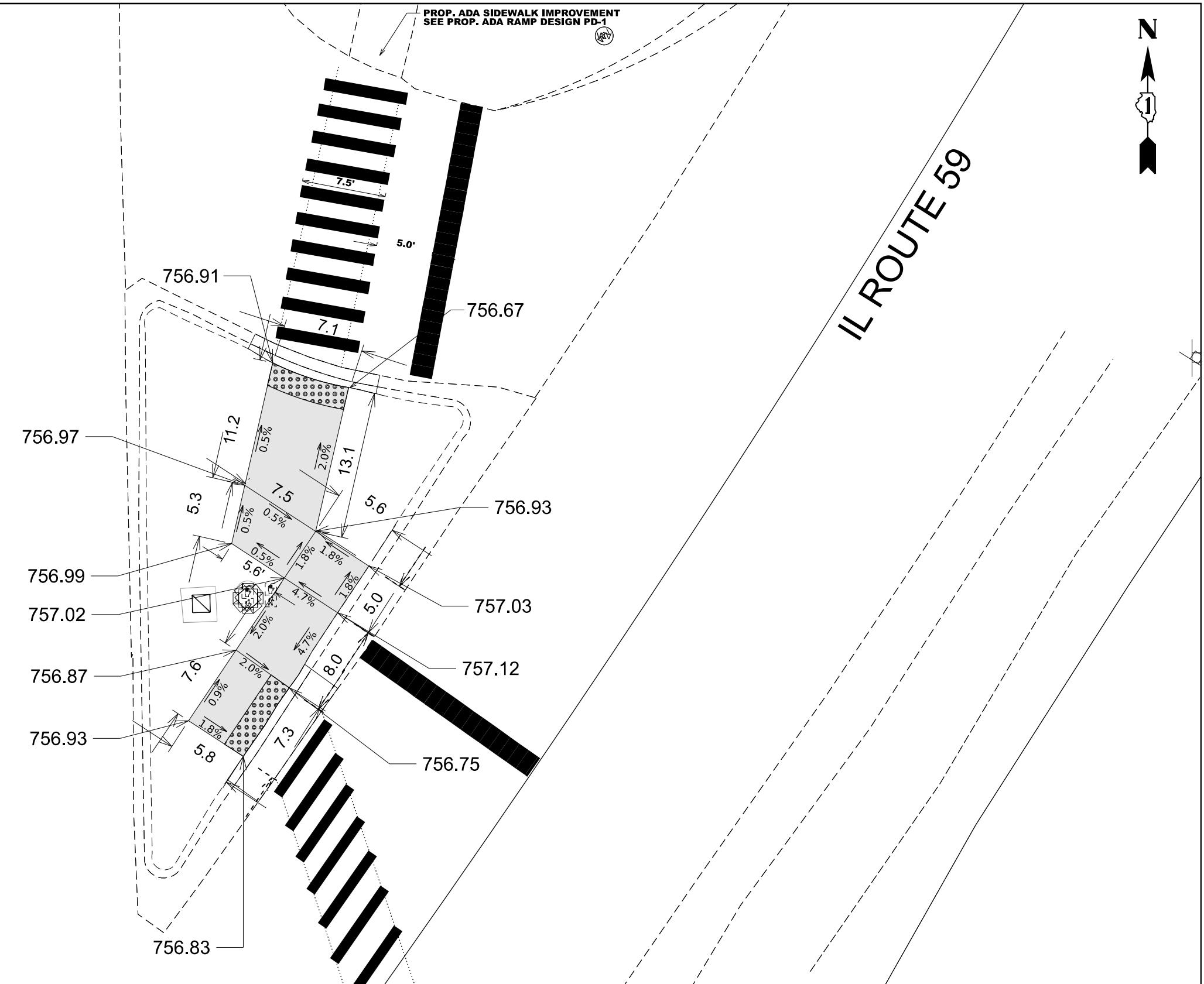


SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	103
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	245
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	328
HANDHOLE	EACH	1
HEAVY DUTY HANDHOLE	EACH	3
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	319
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,618
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	770
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	FOOT	1461
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1301
TRAFFIC SIGNAL POST, 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 64 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
DRILL EXISTING HANDHOLE	EACH	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
DETECTOR LOOP, TYPE I	FOOT	582
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	5,854
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING HANDHOLE	EACH	3
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	325
OUTDOOR RATED NETWORK CABLE	FOOT	183
RELOCATE EXISTING PTZ CAMERA	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	18
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

USER NAME	DESIGNED	REVISED	MH	1/10/2026	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES			F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						REVISED	1	2					
	DRAWN					REVISED	-						
	CHECKED					REVISED	-						
PLOT DATE	= 1/10/2026	DATE	-	REVISED		SCALE:	SHEET 14	OF 69	SHEETS	STA.	TO STA.	CONTRACT NO.	80B75
												ILLINOIS	FED. AID PROJECT

DEVLIN ROAD



DESIGNER NOTES

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.

BENCHMARK: "X" IN W. BOLT OF F.H IN N. CORNER OF INTERSECTION OF IL-59 & DEVLIN RD EL. 757.14

LEGEND

- XX.XX¹ EXISTING LENGTH
- PROPOSED SIDE CURB
- () EXISTING ELEVATION/SLOPE

PROPOSED SIDEWALK

DETECTABLE WARNINGS

SIDEWALK REMOVAL
REPLACE W/TOPSOIL & SOD

CONSTRUCTION NOTES

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK.
- 2) MATCH EXISTING SIDEWALK WIDTH.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

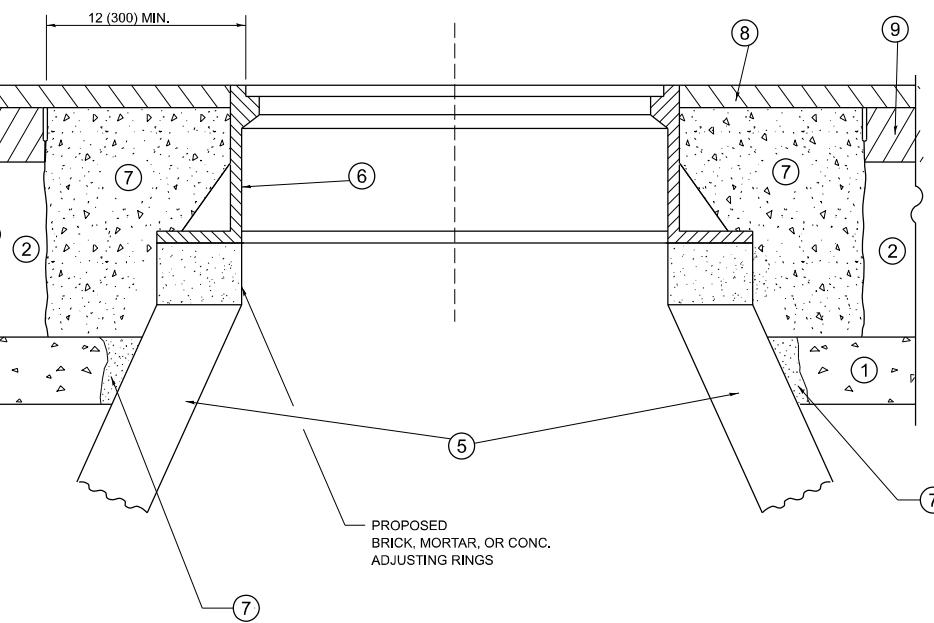
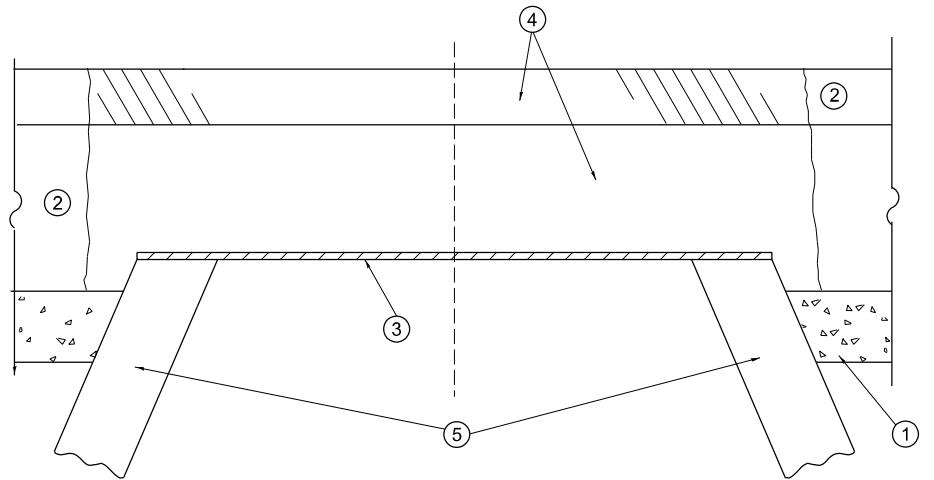
CURB RAMP IMPROVEMENT
NORTHEAST ISLAND OF IL ROUTE 59 AND DEVLIN ROAD

SCALE: SHEET A001 OF 1 SHEETS STA. 0+00.00 TO STA. 0+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
104	2025-2039-RS,SW	LAKE	57	31
				CONTRACT NO. 80B75

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
DRAWN -	REVISED -	
CHECKED -	REVISED -	
PLOT DATE = 12/4/2025	DATE -	REVISED -

N
1



DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

NOTES

- 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 IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.
- CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
- THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

STAGE 2 (AFTER PAVEMENT MILLING)

- REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-2* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

① SUB-BASE GRANULAR MATERIAL	⑥ FRAME AND LID (SEE NOTES)
② EXISTING PAVEMENT	⑦ CLASS PP-2* CONCRETE
③ 36 (900) DIAMETER METAL PLATE	⑧ PROPOSED HMA SURFACE COURSE
④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX	⑨ PROPOSED HMA BINDER COURSE
⑤ EXISTING STRUCTURE	

LOCATION OF STRUCTURES

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT

- REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."
- THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
- NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
- WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

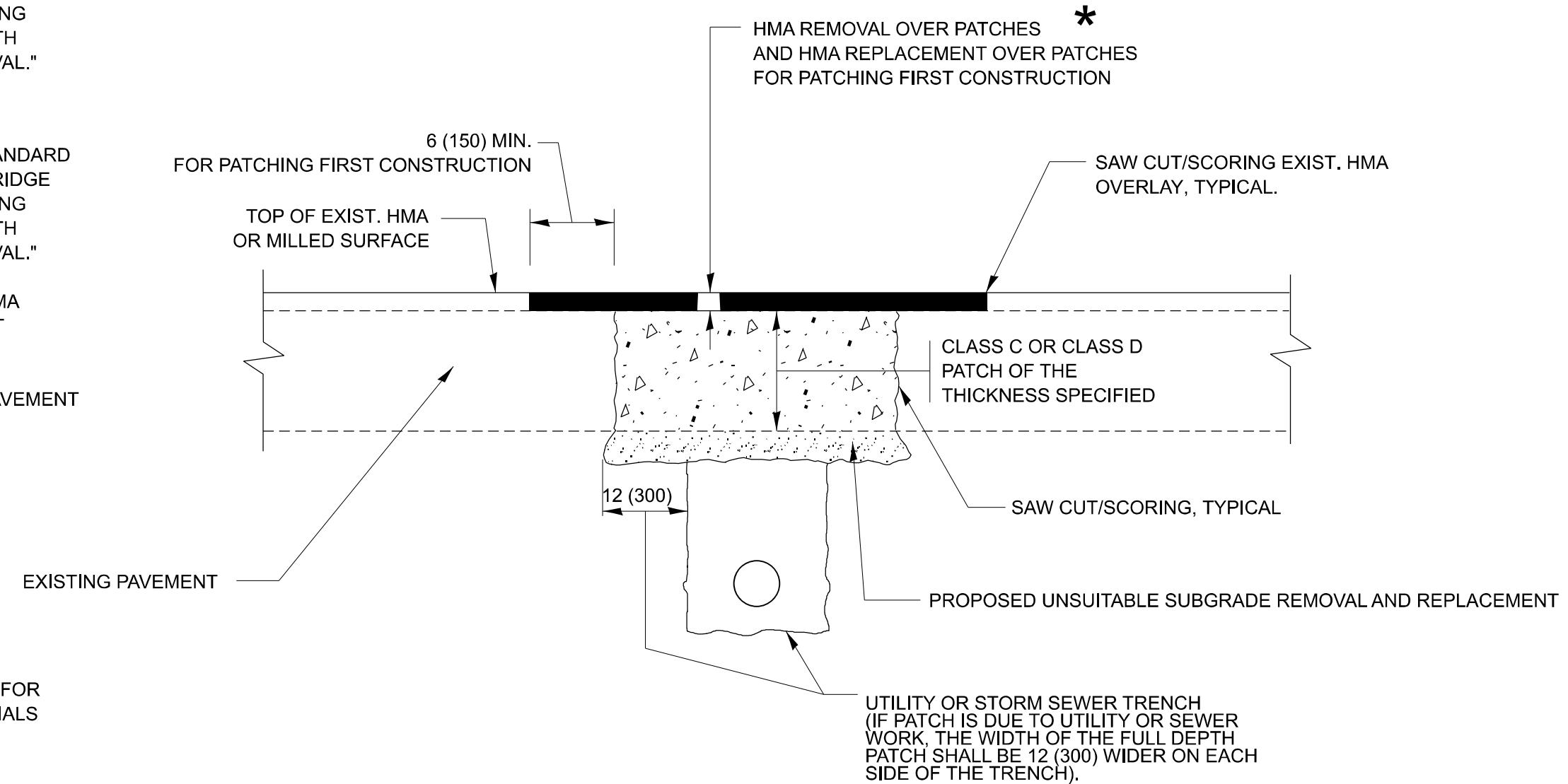
USER NAME	DESIGNED	R. SHAH	REVISED	R. BORO 03-09-11	STATE OF ILLINOIS	DETAILS FOR	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT DATE	12/4/2025	DATE	10-25-94	REVISED	K. SMITH 09-15-23	DETAILS FOR	104	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
						FRAMES AND LIDS ADJUSTMENT WITH MILLING	BD600-03 (BD-08)	2025-2039-RS,SW	LAKE	57	32	
						SCALE: NONE	1	OF 1	LEAVES	TO STA.	ILLINOIS	FED. AID PROJECT

METHOD OF MEASUREMENT

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

BASIS OF PAYMENT

1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
2. SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.



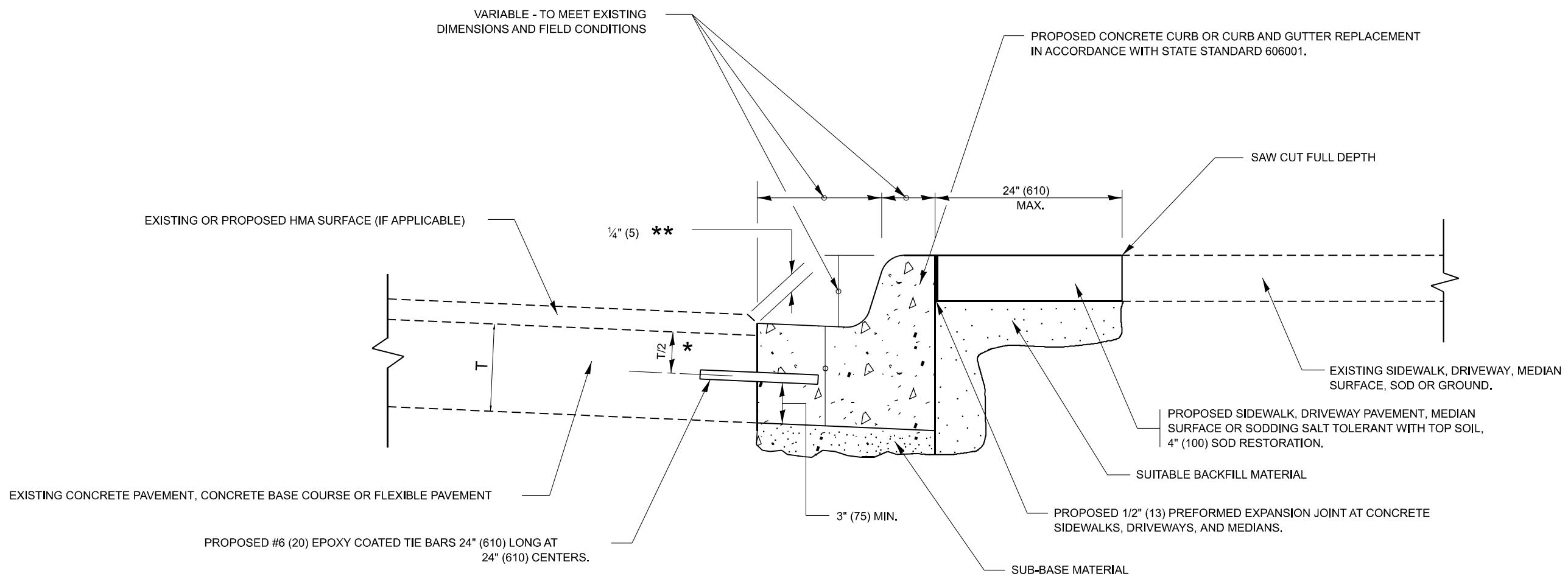
SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 $\frac{1}{2}$ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN



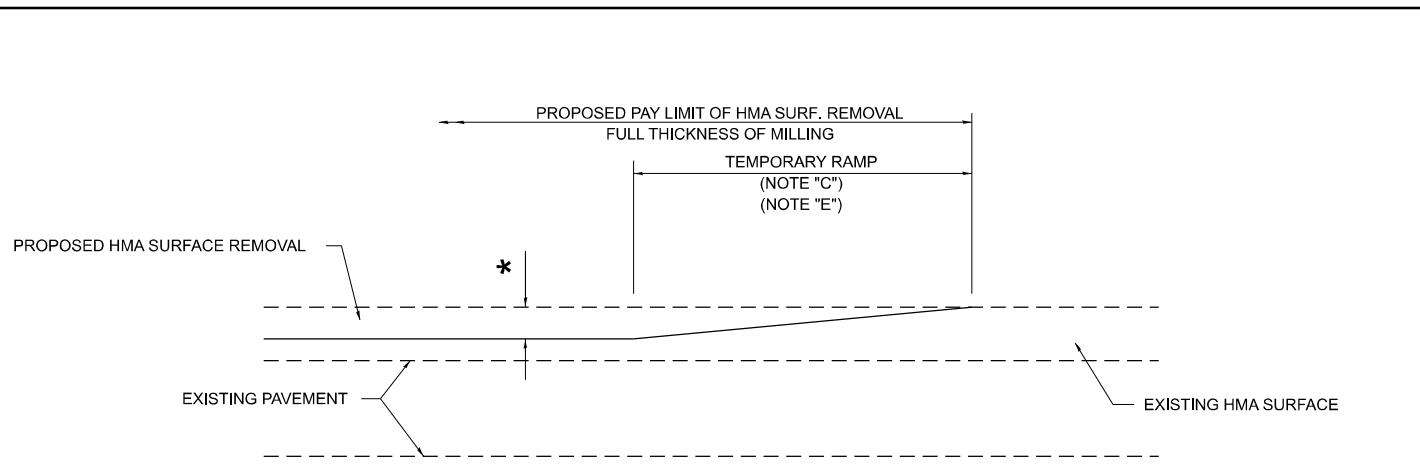
* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

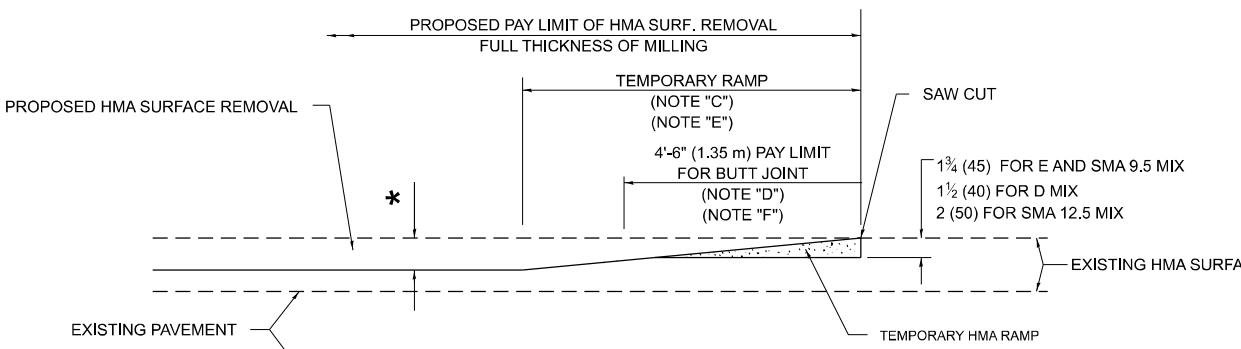
USER NAME = mohammad.hamwi	DESIGNED - A. HOUSEH	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT				F.A.P RTE. 104	SECTION 2025-2039-RS,SW	COUNTY LAKE	TOTAL SHEETS 57	SHEET NO. 34
	DRAWN -	REVISED - M. GOMEZ 01-22-01										
	CHECKED -	REVISED - R. BORO 12-15-09										
PLOT DATE = 12/4/2025	DATE - 03-11-94	REVISED - K. SMITH 07-11-19		SCALE: NONE	1	OF 1	Sheets	STA.	TO STA.	BD600-06 (BD-24)	CONTRACT NO. 80B75	ILLINOIS FED. AID PROJECT



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

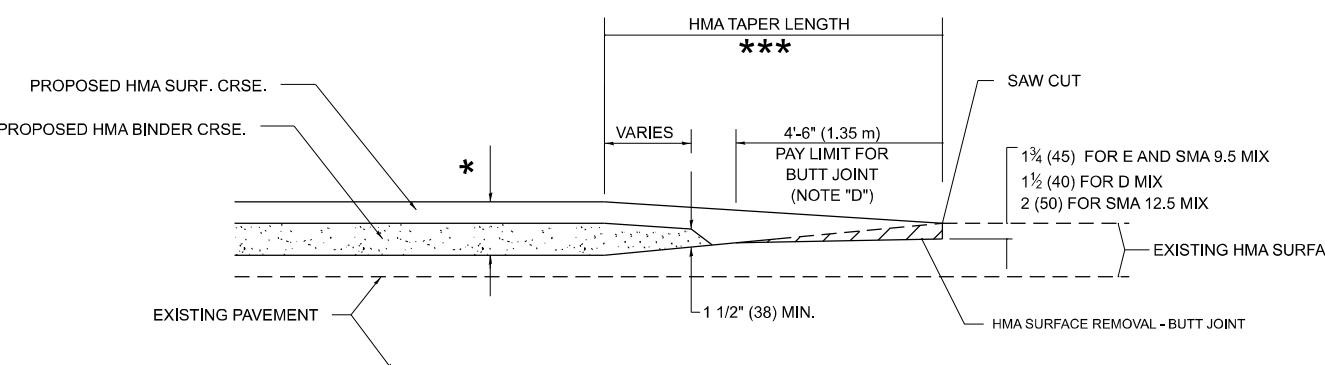


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

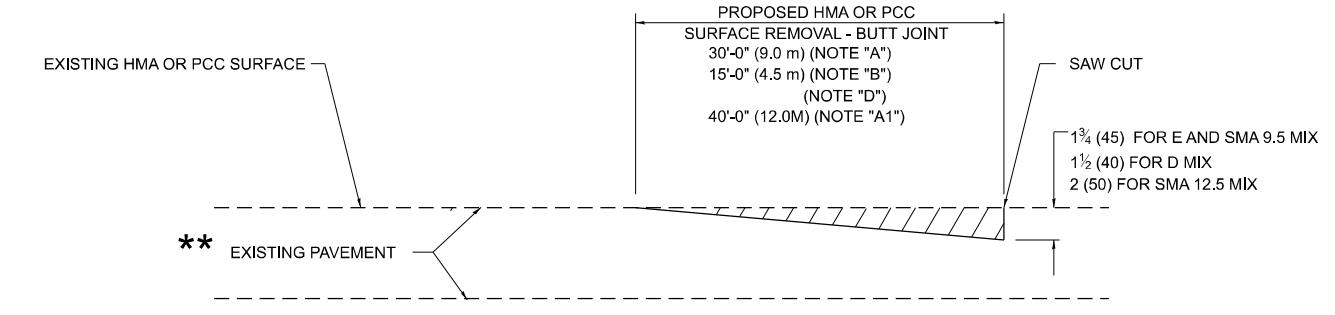
OPTION 2

TYPICAL TEMPORARY RAMP

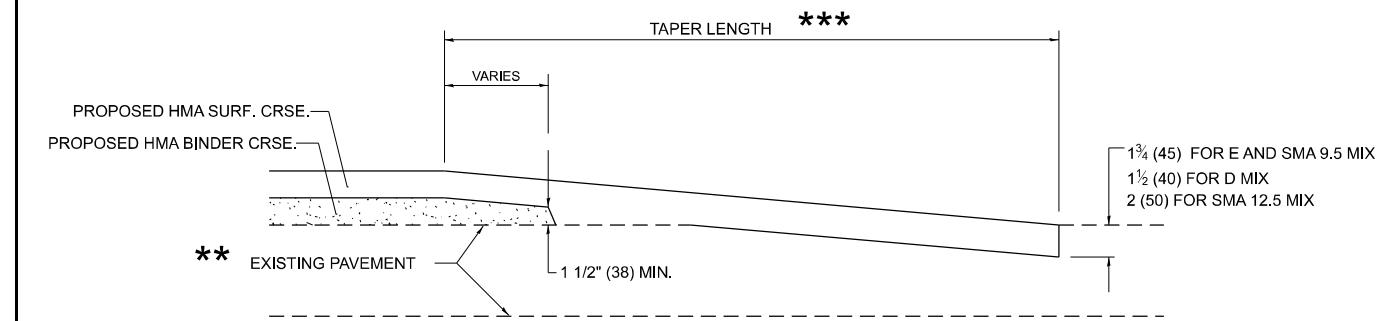


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

GENERAL NOTES

- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E. TAPER THE TEMP. RAMP AT A RATE OF 3' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.
* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

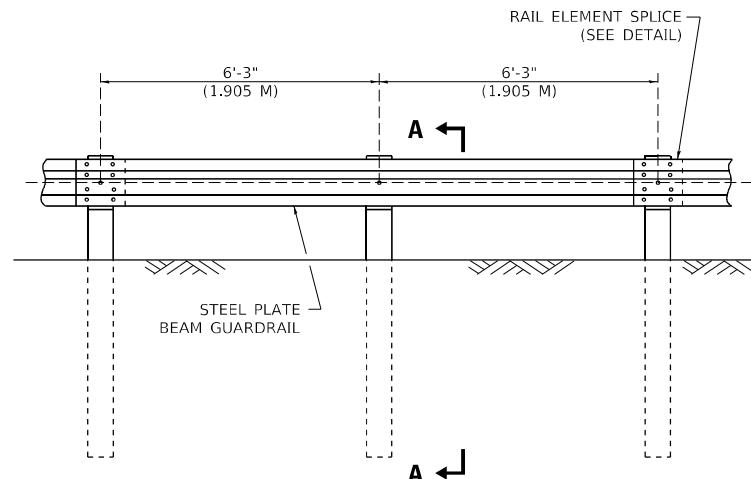
20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT

1. THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".
2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

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

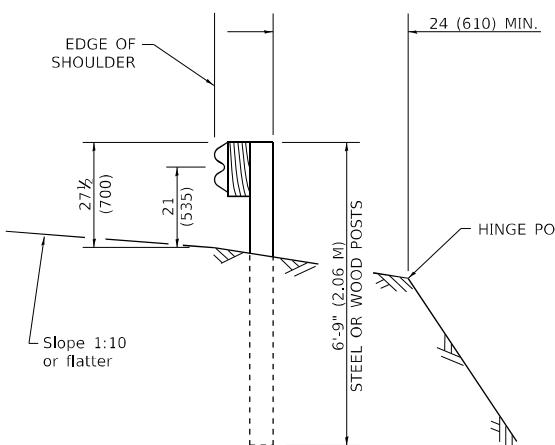
USER NAME = mohammad.hamwi	DESIGNED - M. DE YONG	REVISED - A. ABBAS 03-21-97
DRAWN -		REVISED - M. GOMEZ 04-06-01
CHECKED -		REVISED - R. BORO 01-01-07
PLOT DATE = 12/4/2025	DATE - 06-13-90	REVISED - K. SMITH 11-18-22



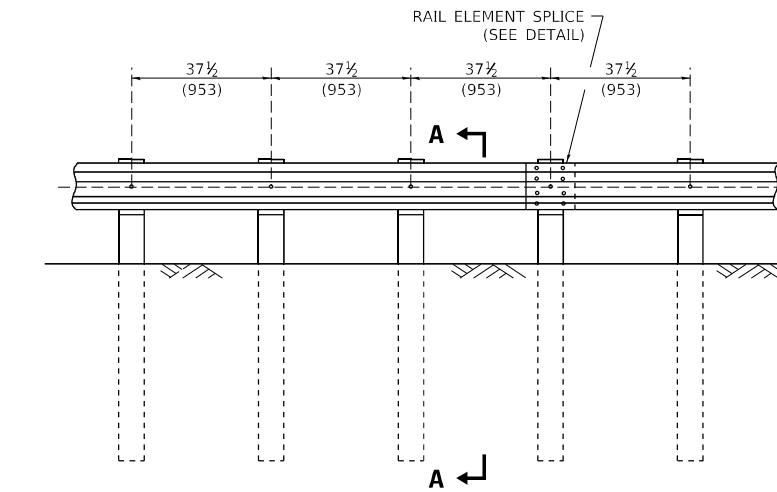
ELEVATION

TYPE A

6'-3" (1.905 M) TYPICAL POST SPACING



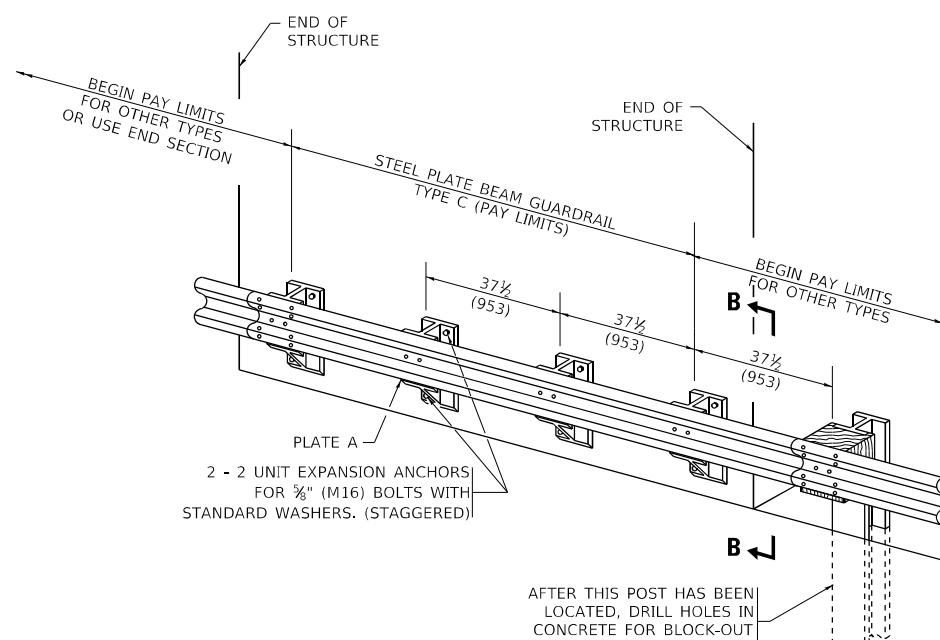
SECTION A-A



ELEVATION

TYPE A

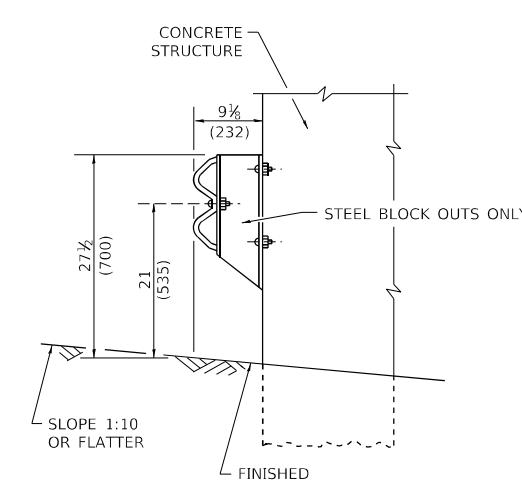
37½ (953) CLOSED POST SPACING



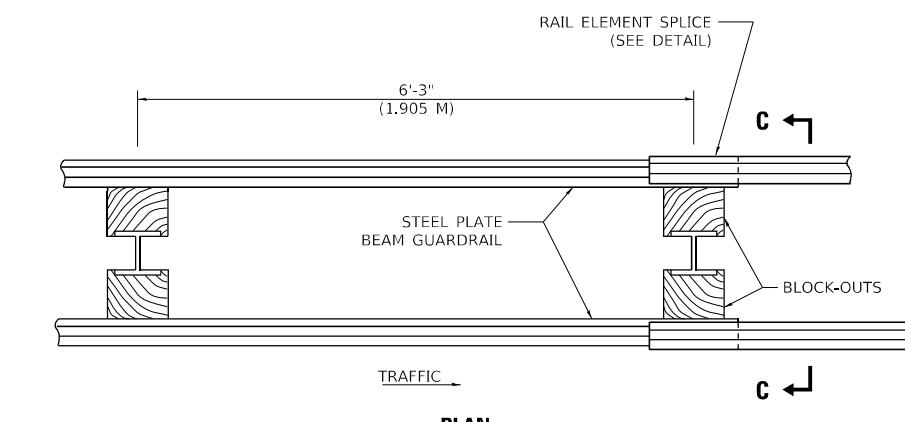
TYPE C

FIG. 3

37 $\frac{1}{2}$ (953) BLOCK-OUT SPACING



SECTION B-B



TYPE D

DOUBLE STEEL PLATE BEAM GUARDRAIL 6' 3" (1.905 M) TYPICAL POST SPACING

GENERAL NOTES

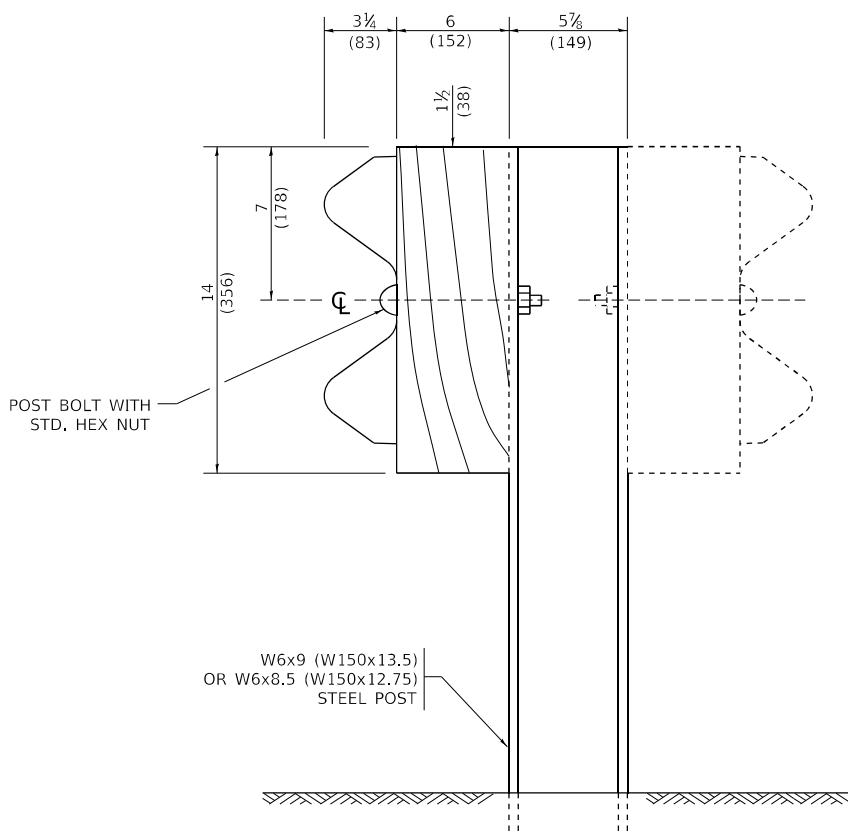
ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V/H).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN

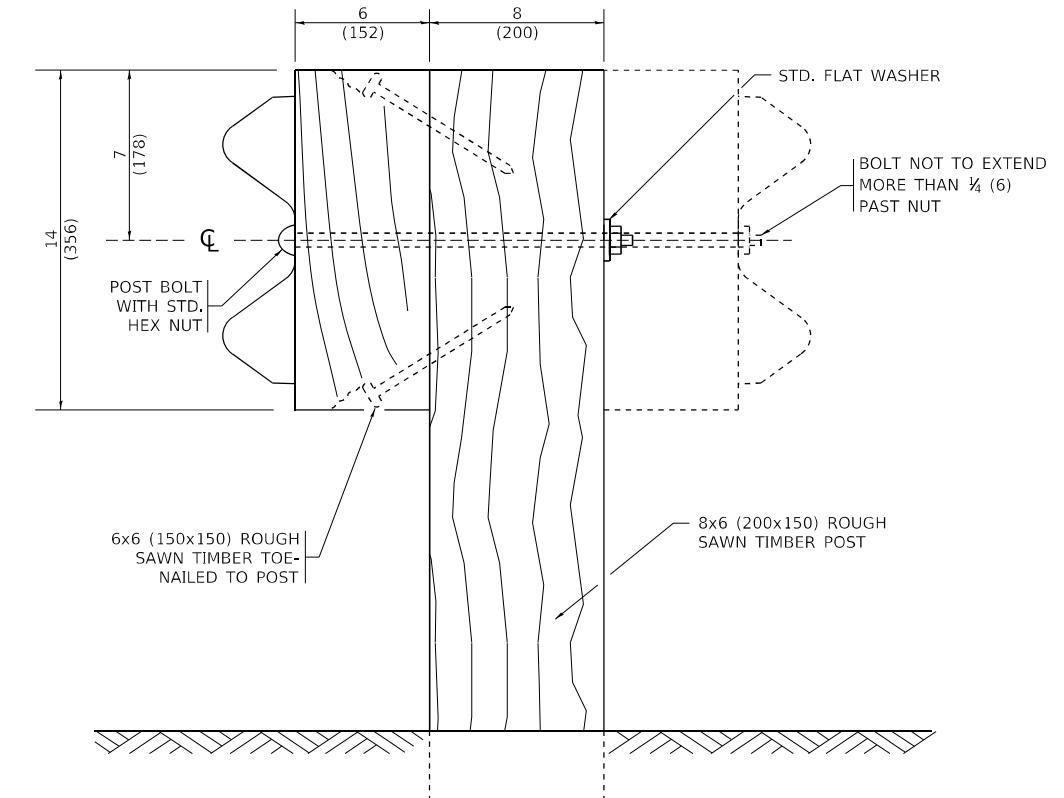
THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD F30001.

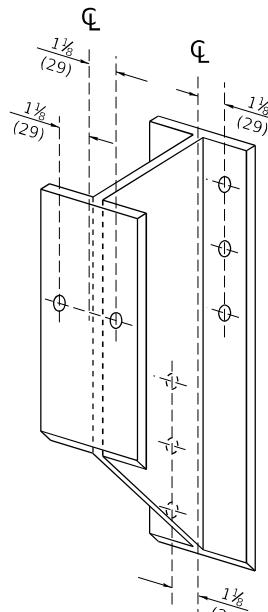
USER NAME = footemj	DESIGNED -	REVISED - MH 12/19/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
	DRAWN -	REVISED -			104	2025-2039-RS,SW	LAKE	57	35A
	PLOT SCALE = 50.0000' / in.	CHECKED -			BM-21		CONTRACT NO. 80B75		
	PLOT DATE = 2/1/2026	DATE			SCALE: NONE	SHEET 1 OF 4 SHEETS STA TO STA			



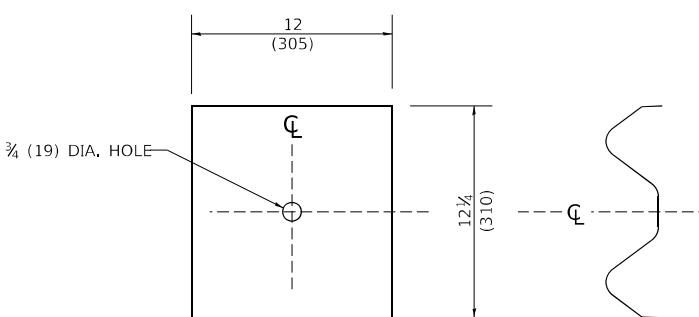
STEEL POST CONSTRUCTION



WOOD POST CONSTRUCTION



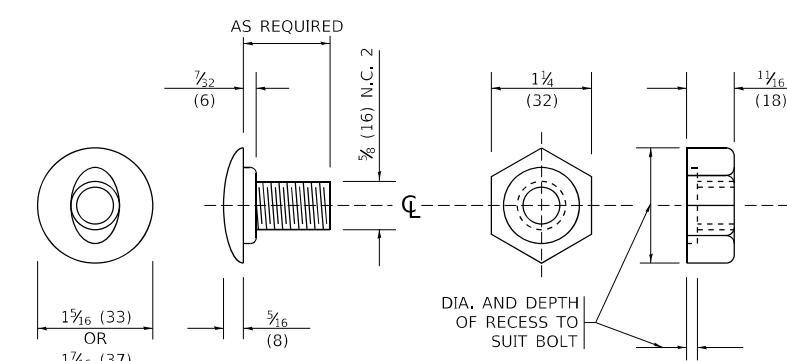
STEEL BLOCK-OUT DETAIL



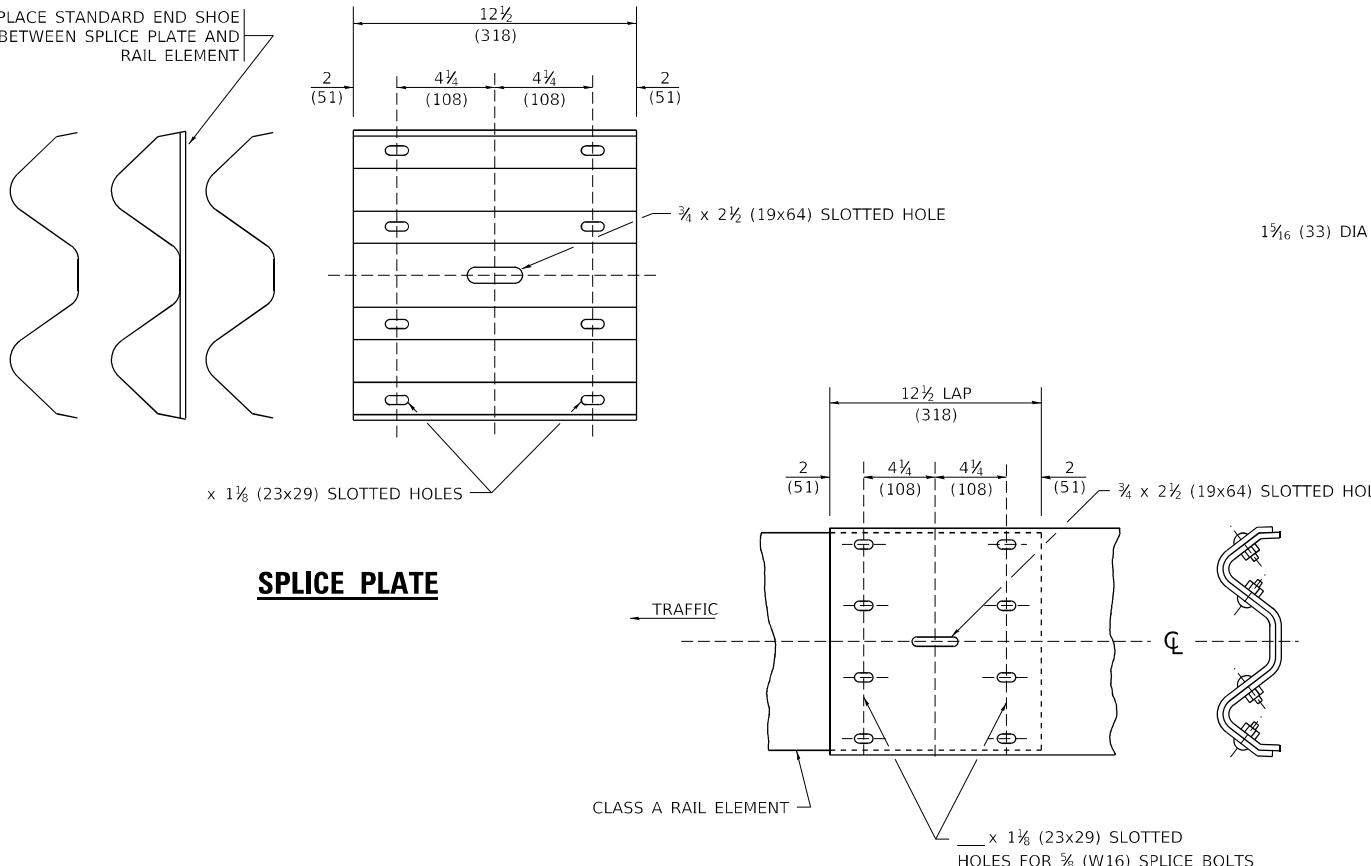
NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICING MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

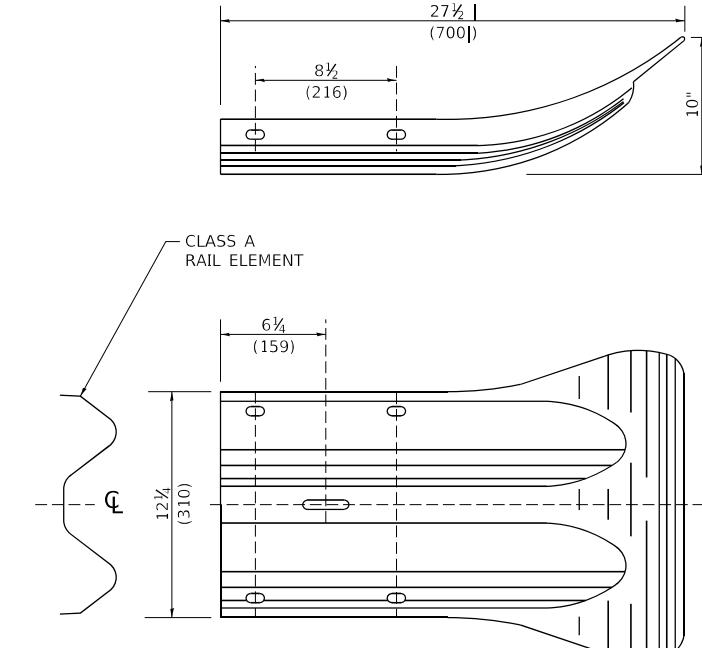
PLATE A



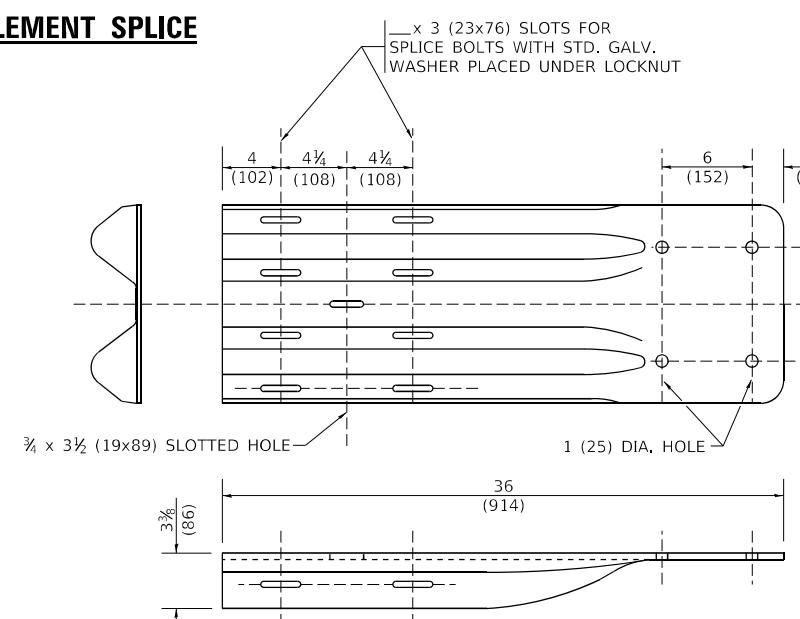
POST OR SPLICE BOLT & NUT



SPICE PLATE



END SECTION

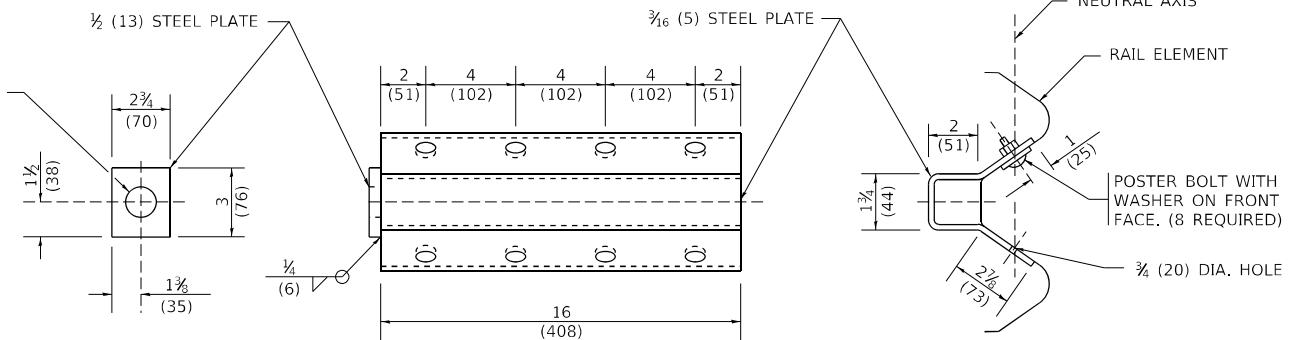


END SHOW

NOTE:
WHEN END SHOE IS ATTACHED TO A BRIDGE PARAPET WHICH HAS AN EXPANSION JOINT, THE BOLTS SHALL BE PROVIDED WITH A LOCKNUT OR DOUBLE NUT AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW SHALLOW MOVEMENT.

THE STANDARD END SHOE SHALL BE ATTACHED TO THE CONCRETE WITH PRE-DRILLED OR SELF-DRILLING ANCHOR BOLTS. THE ANCHOR CONE SHALL BE SET FLUSH WITH THE SURFACE OF THE CONCRETE.

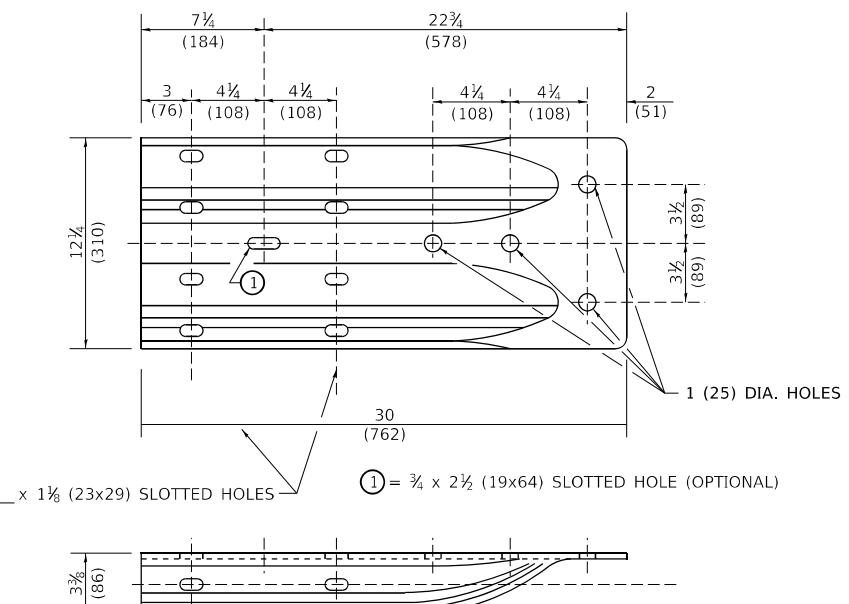
EXTERNALLY THREADED STUDS PROTRUDING FROM THE SURFACE OF THE CONCRETE
WILL NOT BE PERMITTED.



NOTE

ANCHOR PLATE T SHALL BE USED TO ATTACH CABLE ASSEMBLY TO GUARDRAIL WHEN REQUIRED ON TRAFFIC BARRIER TERMINALS.

ANCHORE PLATE T DETAILS



ALTERNATE END SHOE

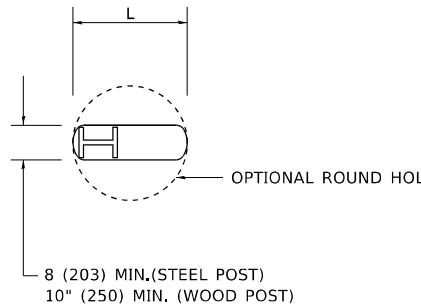
OPDEI: Default
FILE NAME: pw:\\enron\\dot.illinois.gov\\PWID\\Office\\District 1\\Projects\\DistStd2\\2x34\\CADData\\CADsheets\\bm21.dgn

FILE NAME: DWG1	USER NAME = footemj	DESIGNED -	REVISED - M
		DRAWN -	REVISED -
	PLOT SCALE = 50,000' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/11/2010	DATE	REVISED

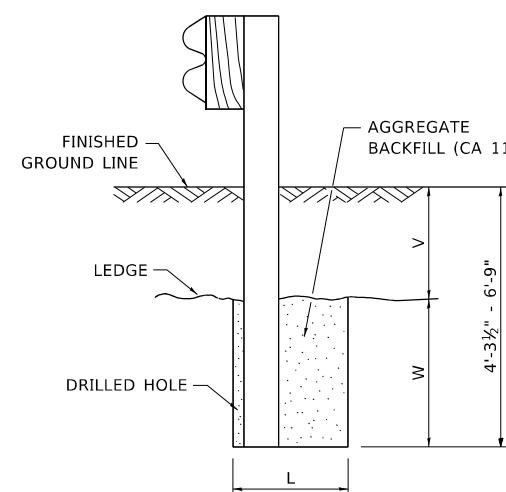
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL**

MH	12/19/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	2025-2039-RS.SW			LAKE	57	35C		
BM-21				CONTRACT NO.80B75				
SCALE: 1/4 INCH = 10 FEET	1			2	3	4	5	6



PLAN

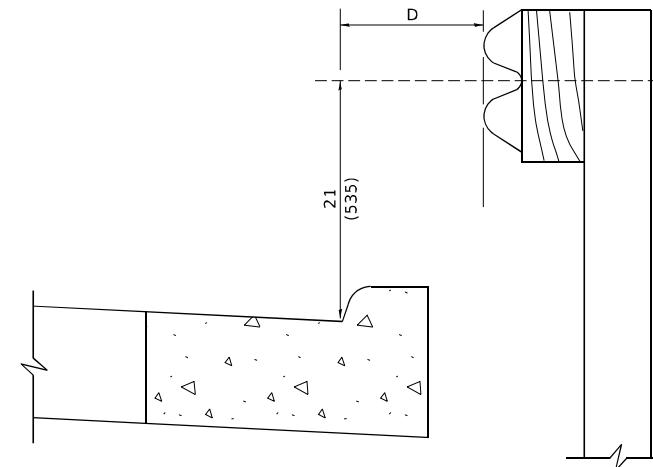


NOTE

LEDGE LINE IS TOP OF ROCK
LEDGE OR HARD SLAG FILL

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED



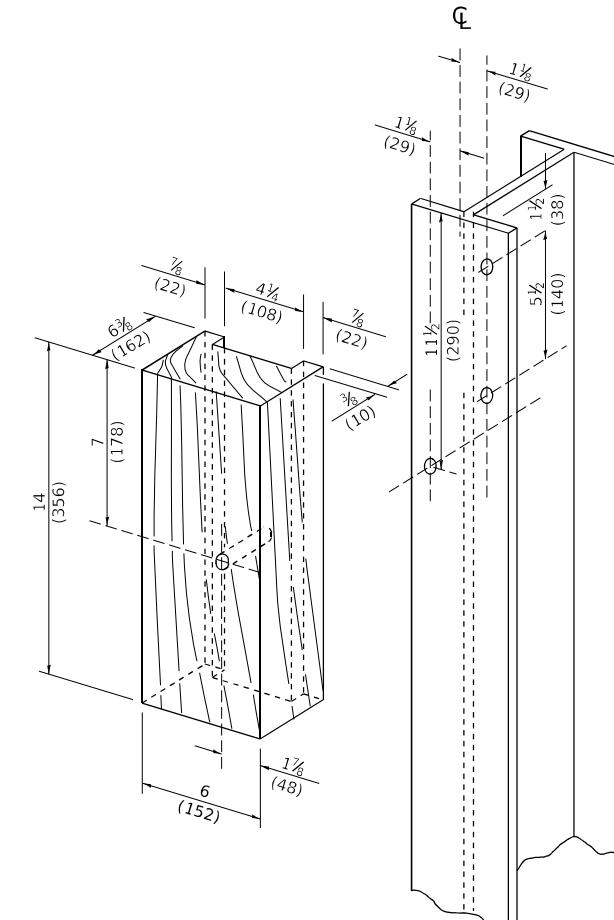
NOTE:

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

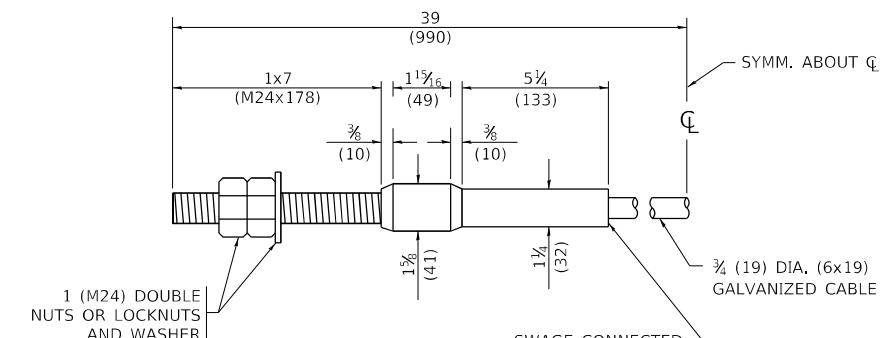
GUARDRAIL PLACED BEHIND CURB

(D = 0 DESIRABLE TO 12 (300) MAXIMUM)

V	W	L	
		STEEL POST	WOOD POST
0 - 18 (0 - 460)	24 (610)	21 (530)	23 (580)
>18 - 41.5 (> 460 - 825)	12 (305)	8 (203)	10 (250)
>41.5 - 53.5 (> 825 - 1.13 M)	12 - 0 (350 - 0)	8 (203)	10 (250)



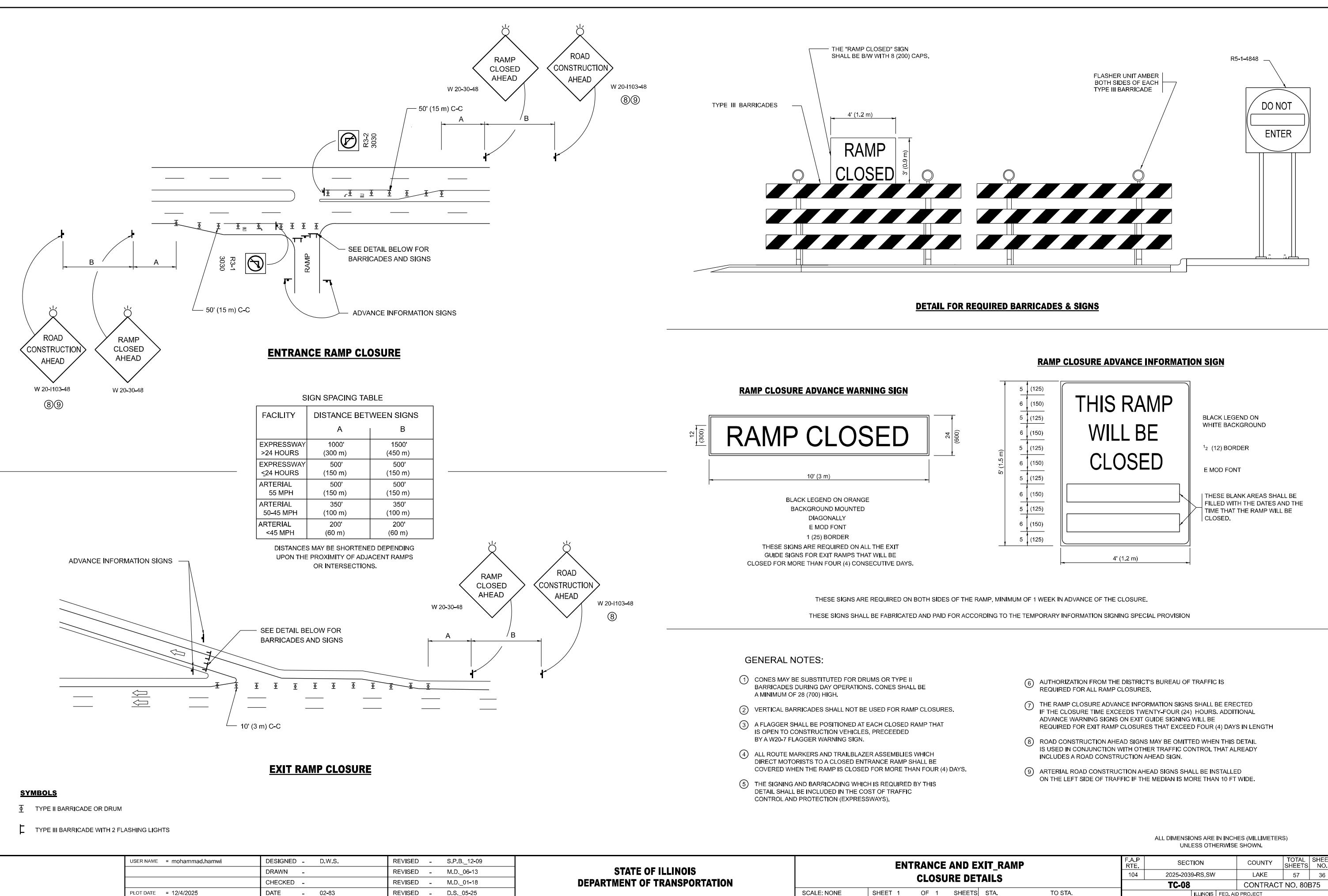
WOOD BLOCK - OUT AND STEEL POST DETAILS

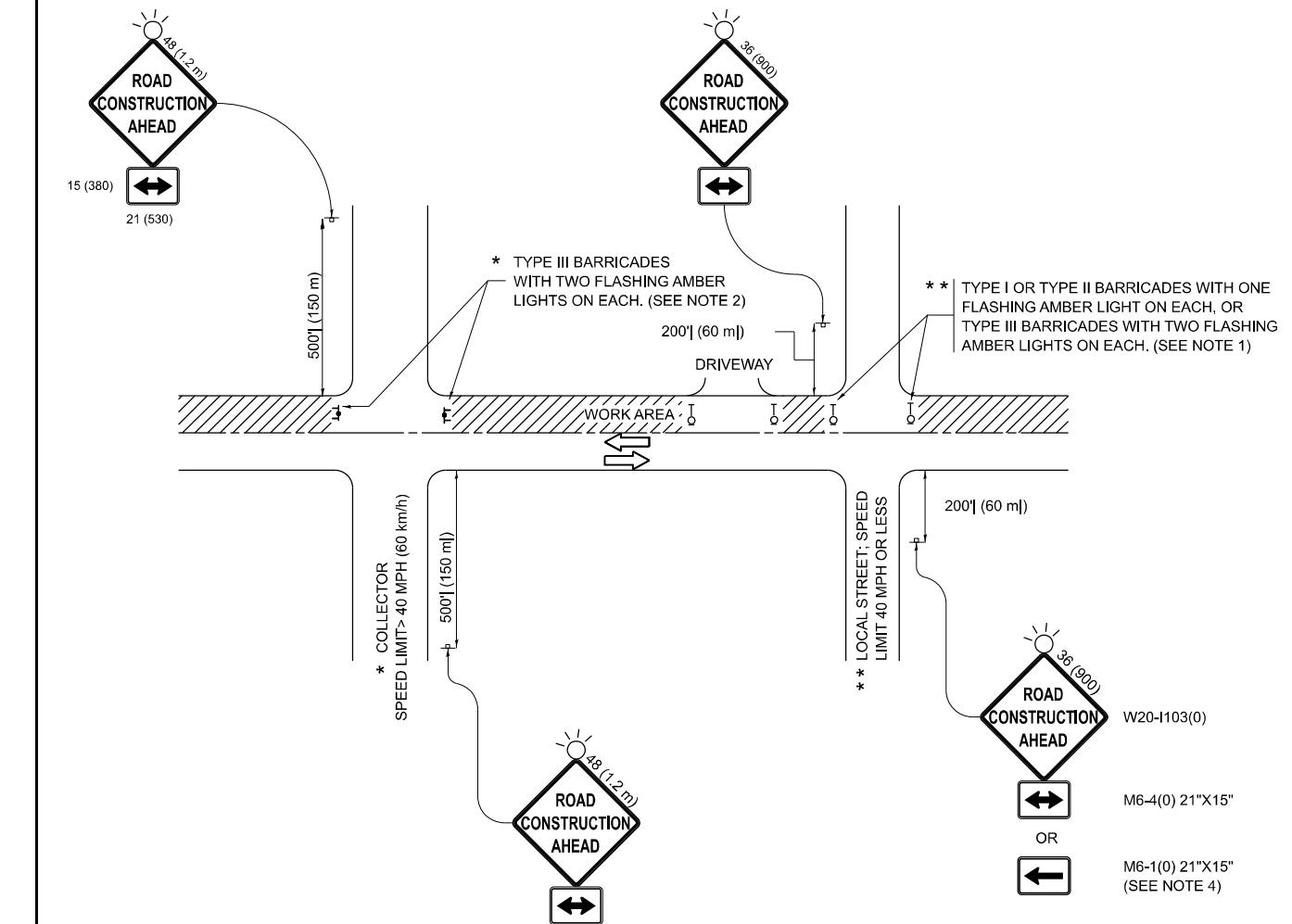


CABLE ASSEMBLY

(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)
TIGHTEN TO TAUT TENSION

1	USER NAME	footemj	DESIGNED	-	REVISED	-	MH	12/19/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHE ET NO
			DRAWN	-	REVISED	-								104	2025-2039-RS,SW	LAKE	57	35D
	PLOT SCALE	= 50,000' 1 / in.	CHECKED	-	REVISED	-								BM-21		CONTRACT NO. 80B75		
	PLOT DATE	2025-01-01	DATE		REVISED					SCALE: NONE	1	OF 1	SHEETS	STA	TO STA			



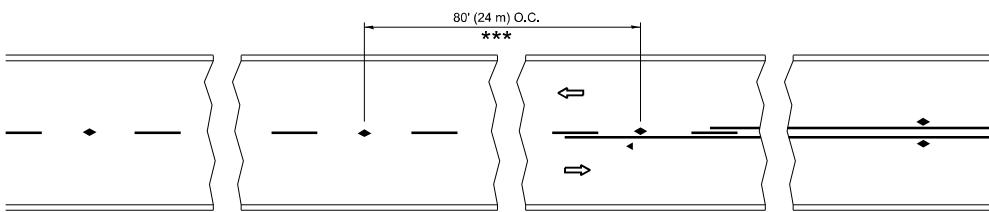


NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

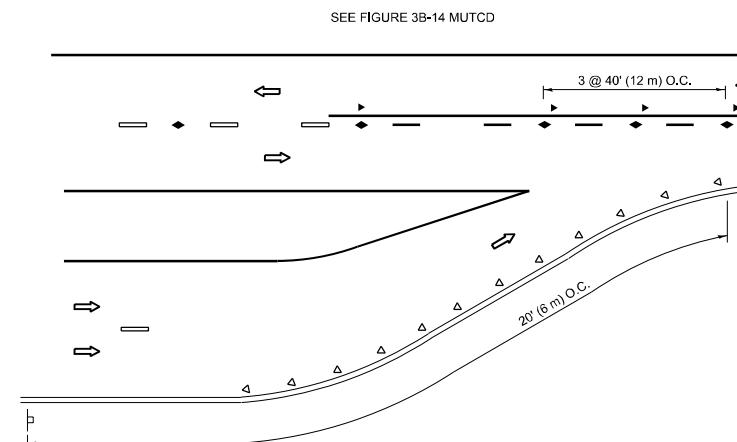
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME	DESIGNED	L.H.A.	REVISED	T. RAMMACHER 01-06-00	STATE OF ILLINOIS	TRAFFIC CONTROL AND PROTECTION FOR	F.A.P.	SECTION	COUNTY	TOTAL	SHEET
							RTE.	2025-2039-RS,SW	LAKE	57	37
	DRAWN	-	REVISED	A. SCHUETZE 07-01-13			TC-10	CONTRACT NO. 80B75			
	CHECKED	-	REVISED	A. SCHUETZE 09-15-06							
PLOT DATE	= 12/4/2025	DATE	-	06-89	DEPARTMENT OF TRANSPORTATION	SCALE:	OF	Sheets	STA.	TO STA.	ILLINOIS FED. AID PROJECT

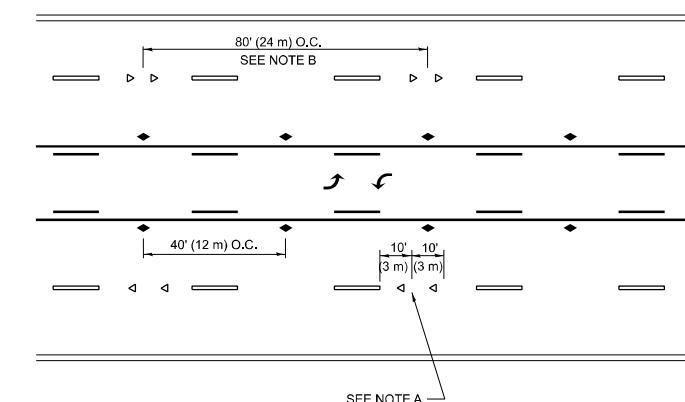


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

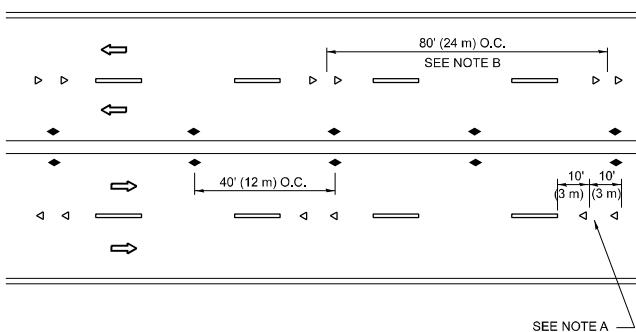
TWO-LANE/TWO-WAY



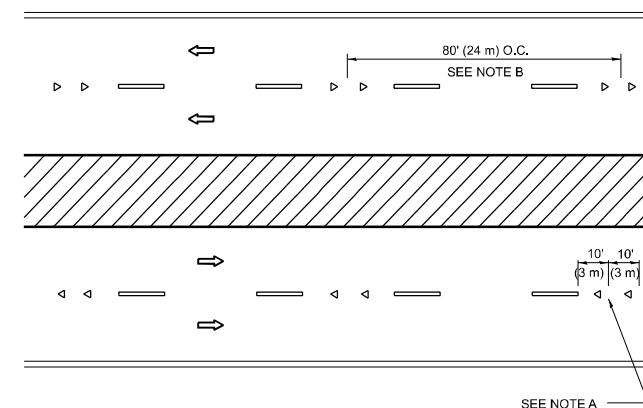
LANE REDUCTION TRANSITION



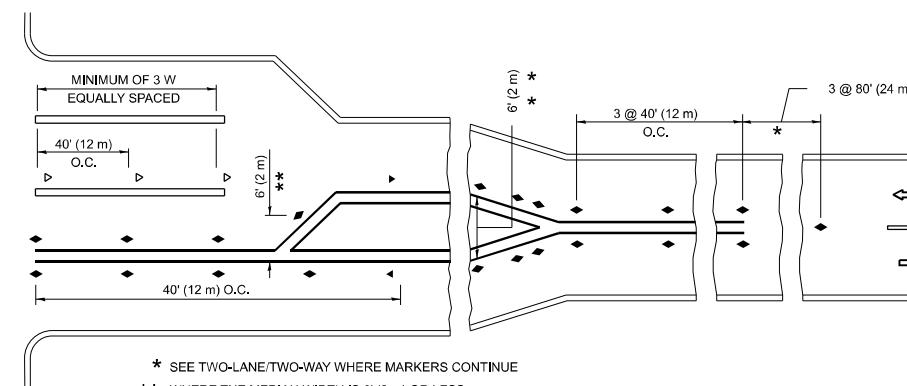
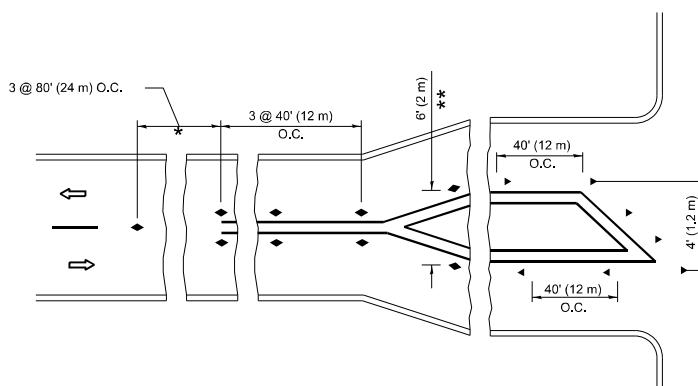
TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED



TURN LANES

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.
4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

SYMBOLS

- YELLO STRIPE
- WHITE STRIPE
- ▲ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

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

USER NAME	DESIGNED	REVISED	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
= mohammad.hamwi	-	REVISED - T. RAMMACHER 03-12-99				
	DRAWN	REVISED - T. RAMMACHER 01-06-00				
	CHECKED	REVISED - C. JUCIUS 09-09-09				
PLOT DATE	= 12/4/2025	REVISED - C. JUCIUS 07-01-13				
	DATE					

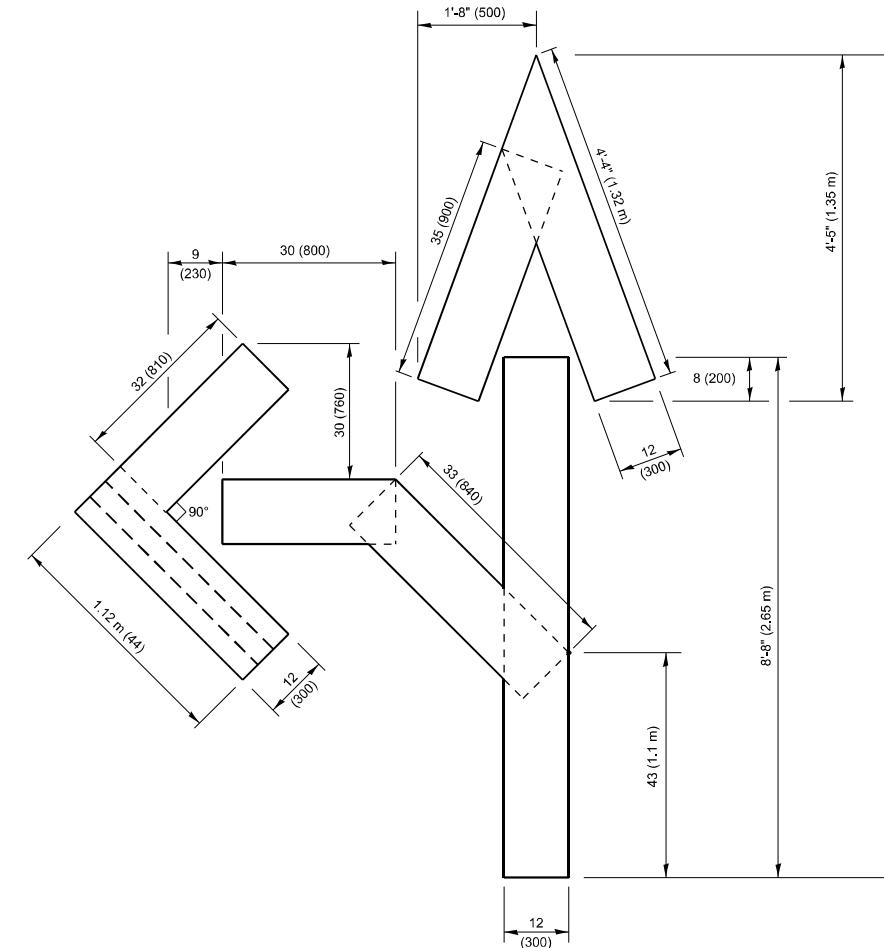
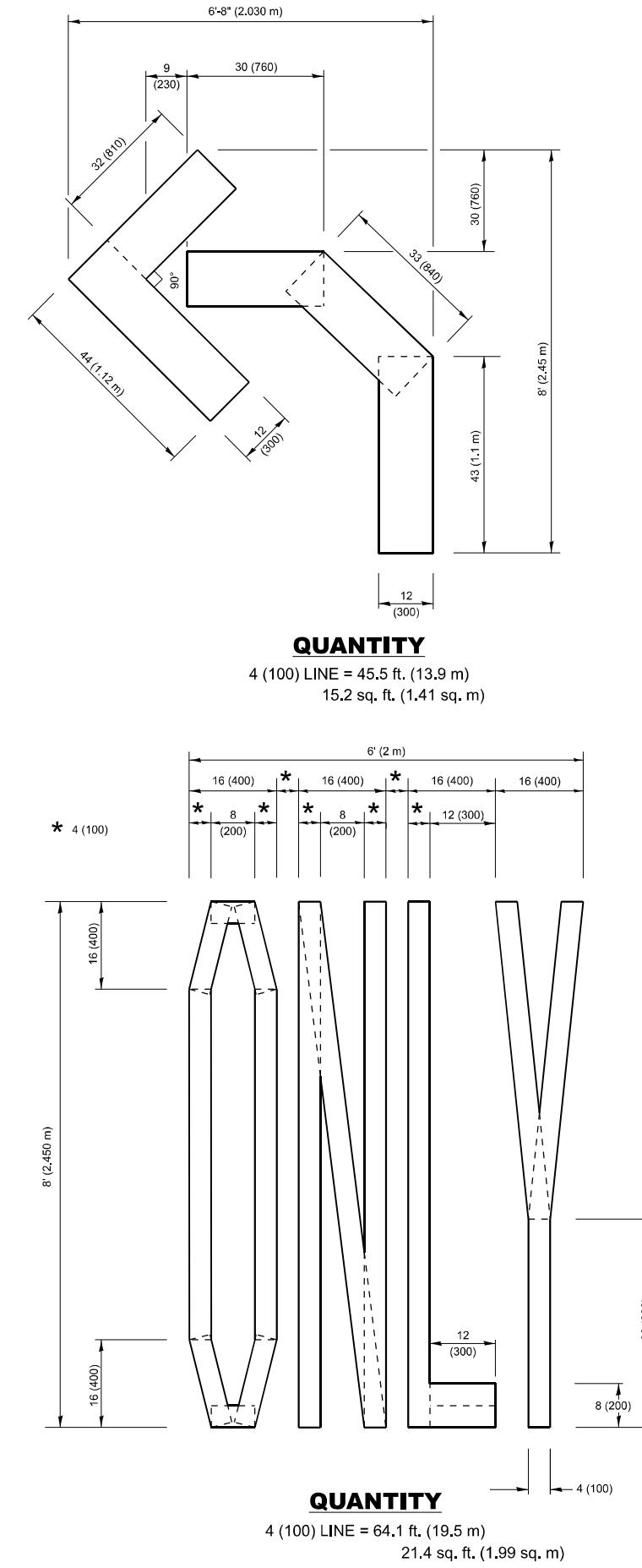
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

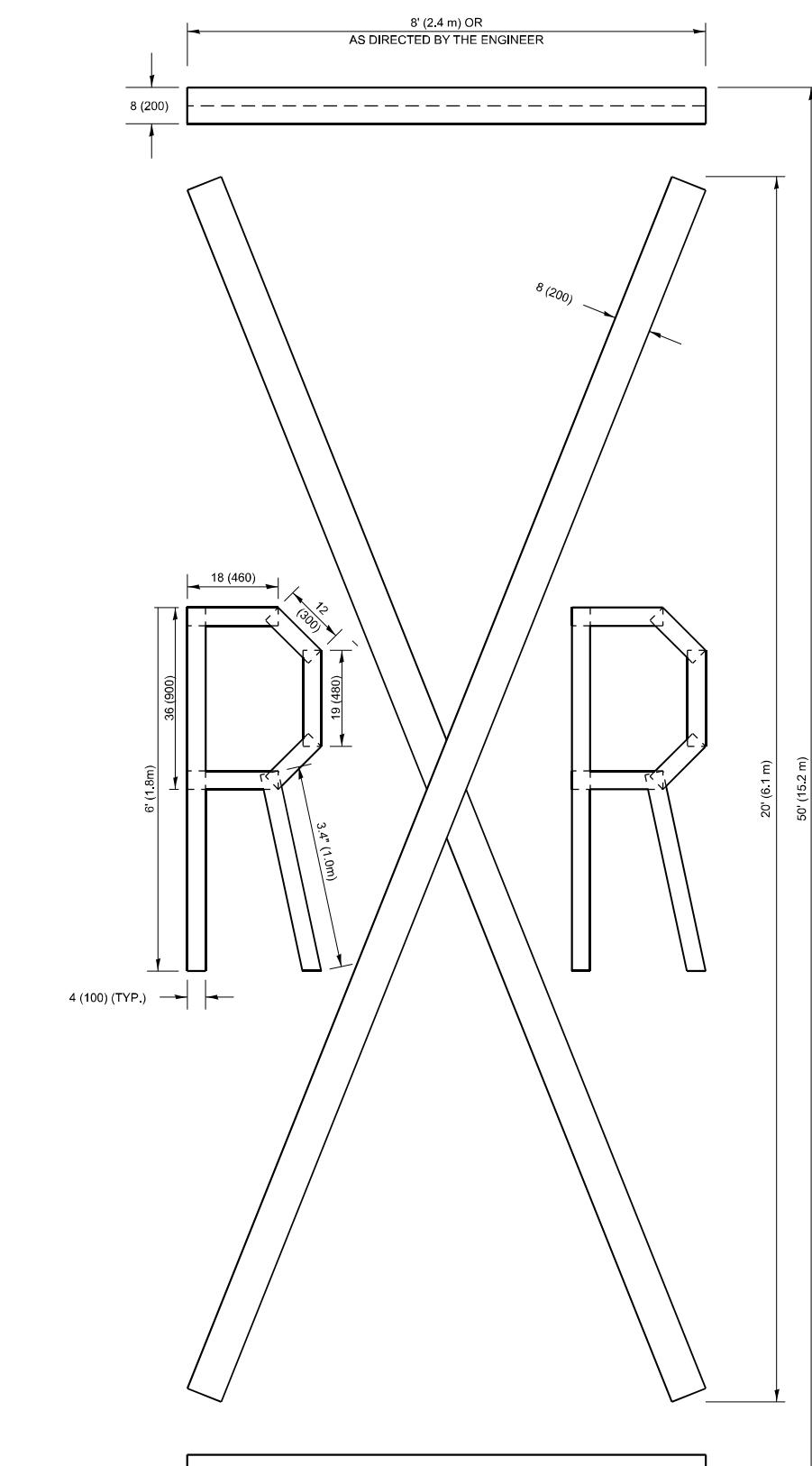
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	2025-2039-RS,SW	LAKE	57	38
TC-11	CONTRACT NO. 80B75			

ILLINOIS FED. AID PROJECT



NOTE:
ALL QUANTITIES OF PLACEMENT ARE REPRESENTED
IN LINEAR FEET OF 4" LINES TO MATCH THE
4" TEMPORARY TAPE PAY ITEM AND REPRESENTS
THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



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

USER NAME = mohammad.hamwi	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
DRAWN -		REVISED - E. GOMEZ 08-28-00
CHECKED -		REVISED - E. GOMEZ 08-28-00
PLOT DATE = 12/4/2025	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

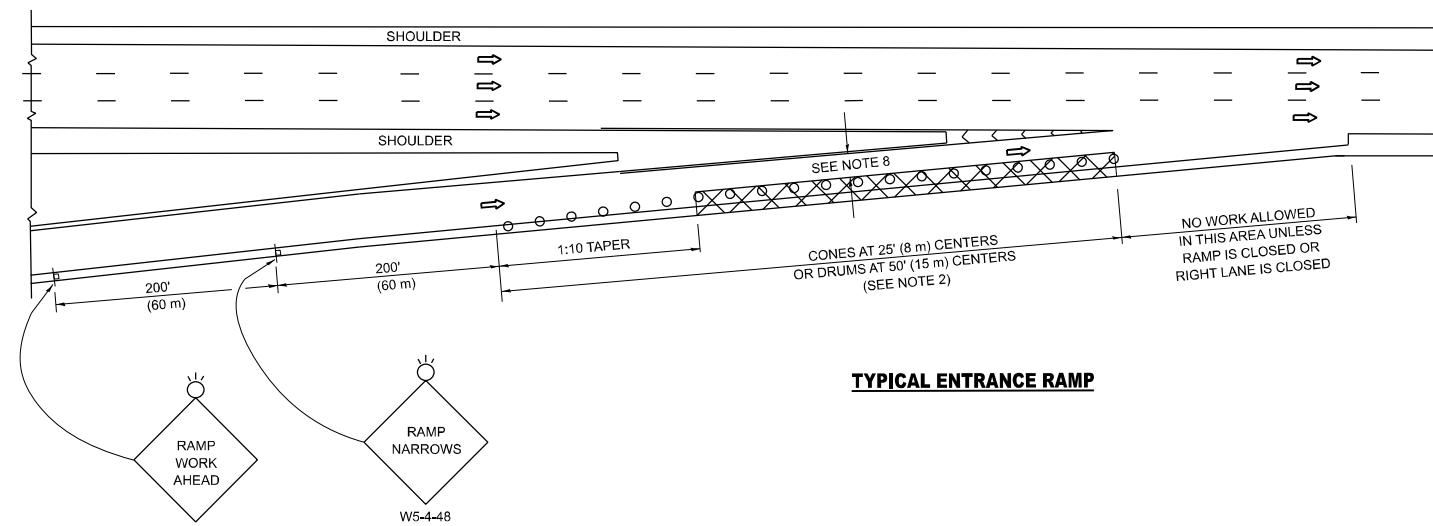
SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

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

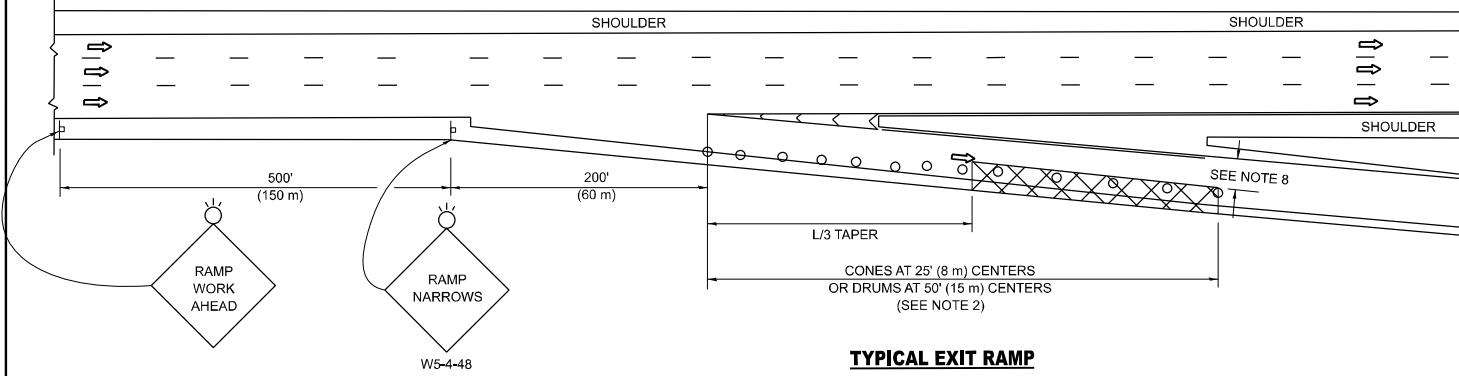
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	2025-2039-RS,SW	LAKE	57	40
TC-16		CONTRACT NO. 80B75		

ILLINOIS FED. AID PROJECT

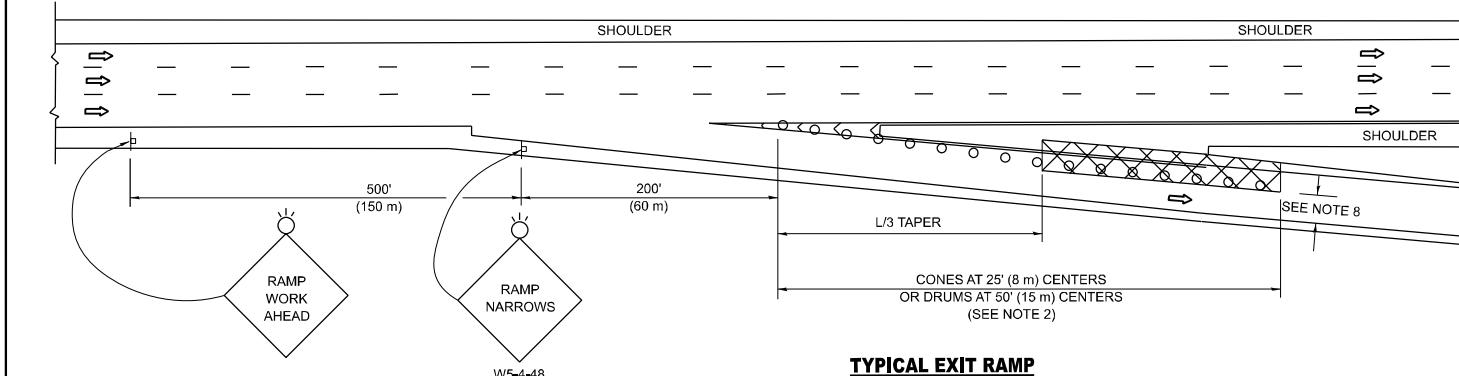
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

-
- ACTIVE WORK AREA
-
- SIGN ON PORTABLE OR PERMANENT SUPPORT
-
- FLAGGER WITH CONTROL SIGN
-
- TYPE II BARRICADE OR DRUM
-
- CONE, DRUM OR BARRICADE
-
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES:

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h)	METRIC ENGLISH
OR GREATER:	$L=0.65(W)(S)$ $L=(W)(S)$
W = WIDTH OF OFFSET IN FEET (METERS)	
S = NORMAL POSTED SPEED MPH (KM/H)	
2. TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTACLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.

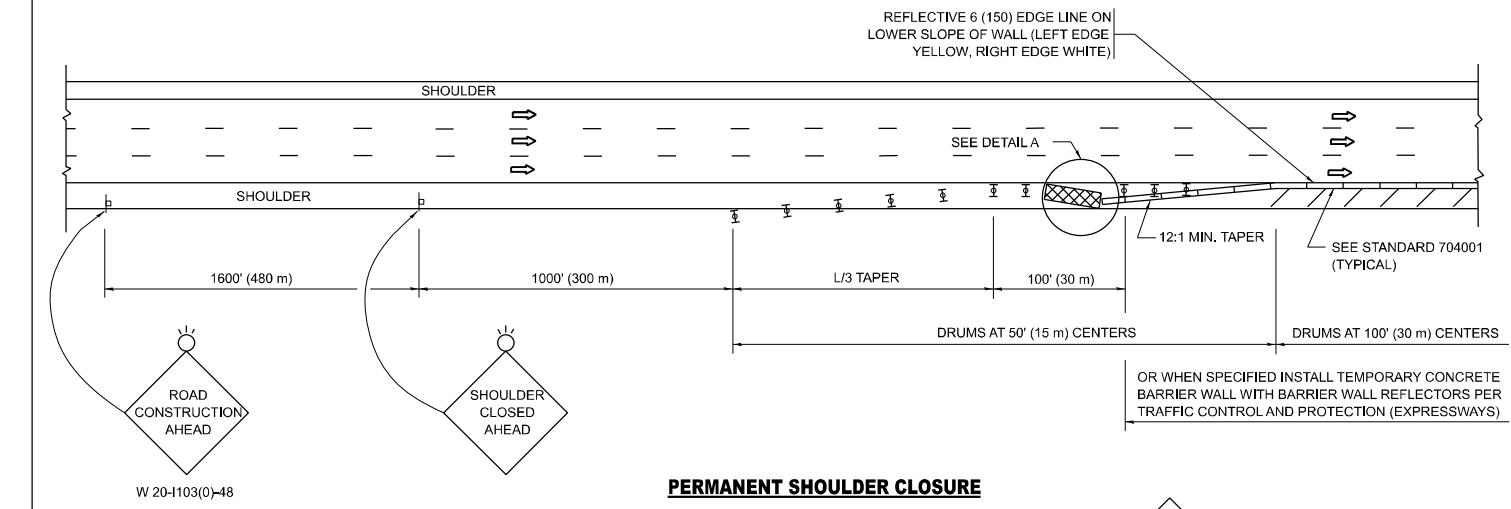
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.

7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:

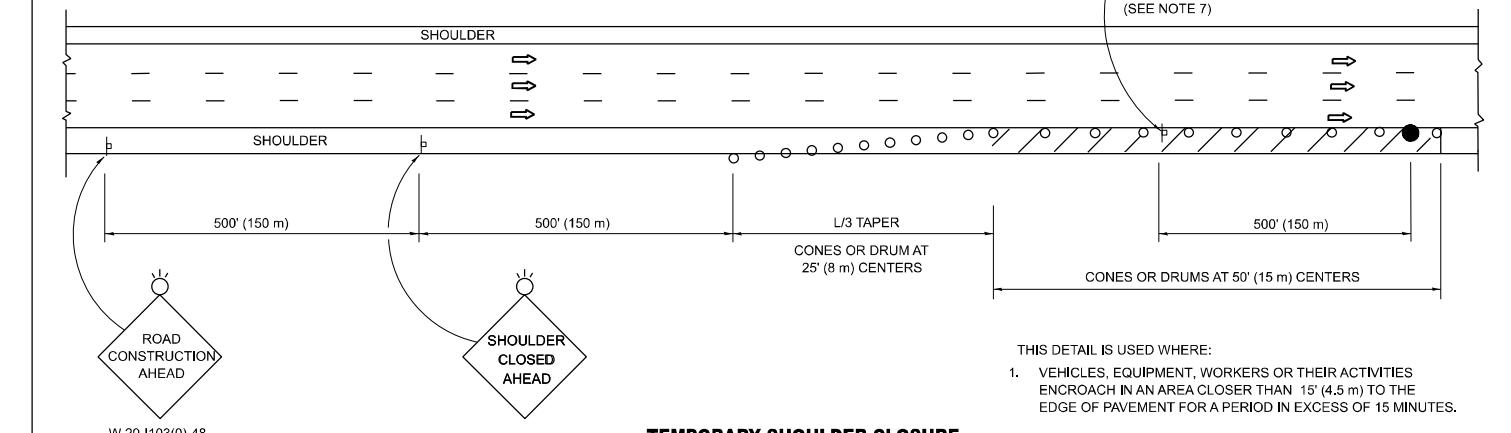
- a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
- b. THE WORK ACTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.

THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



TEMPORARY SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:

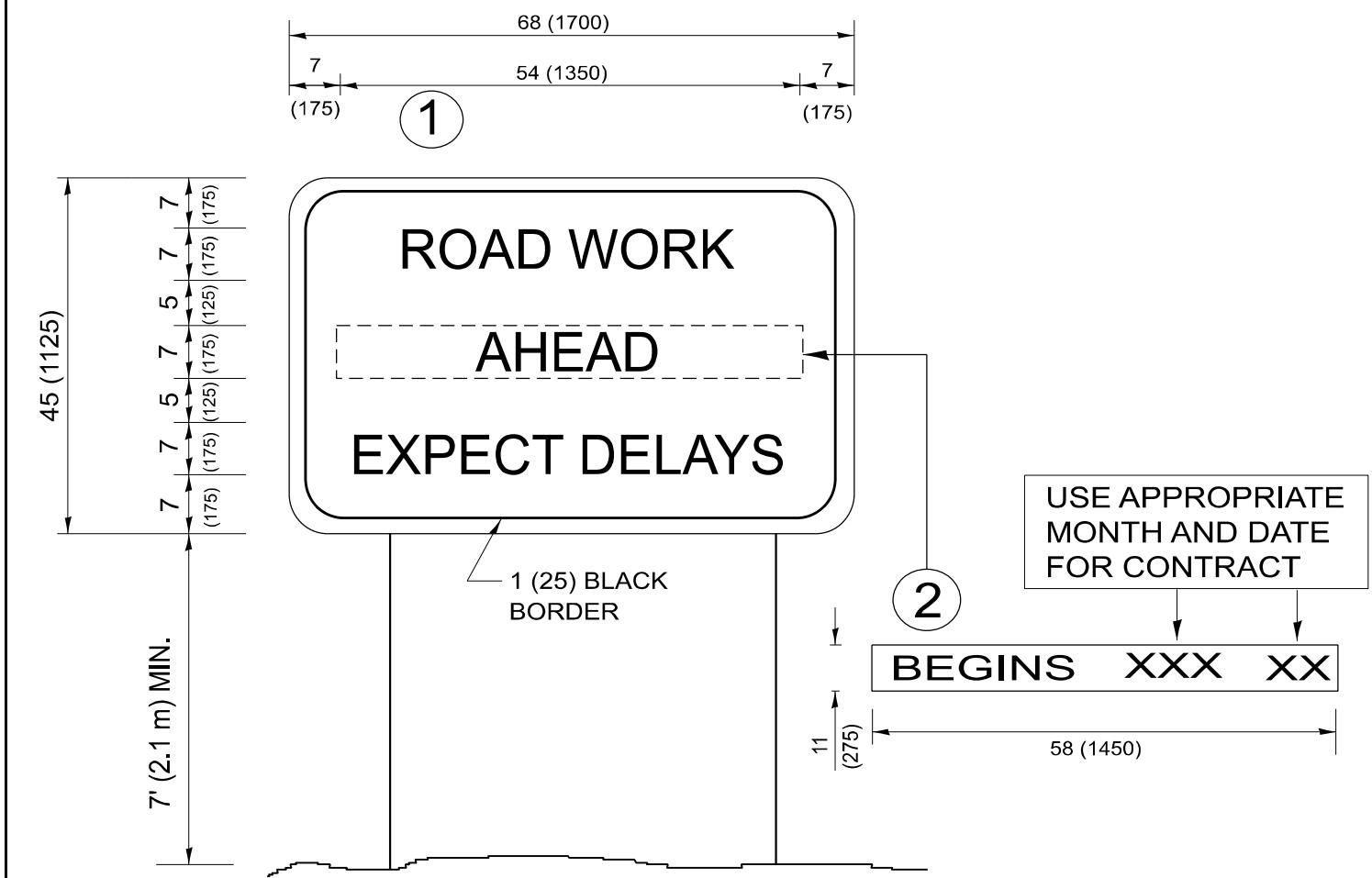
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

USER NAME = mohammad.hamwi	DESIGNED -	REVISED - M.D. 06-13
	DRAWN - D.W.S.	REVISED - M.D. 01-18
	CHECKED -	REVISED - M.D. 10-20
PLOT DATE = 12/4/2025	DATE - 11-96	REVISED - D.S. 05-25

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	2025-2039-RS,SW	LAKE	57	41
TC-17			CONTRACT NO. 80B75	

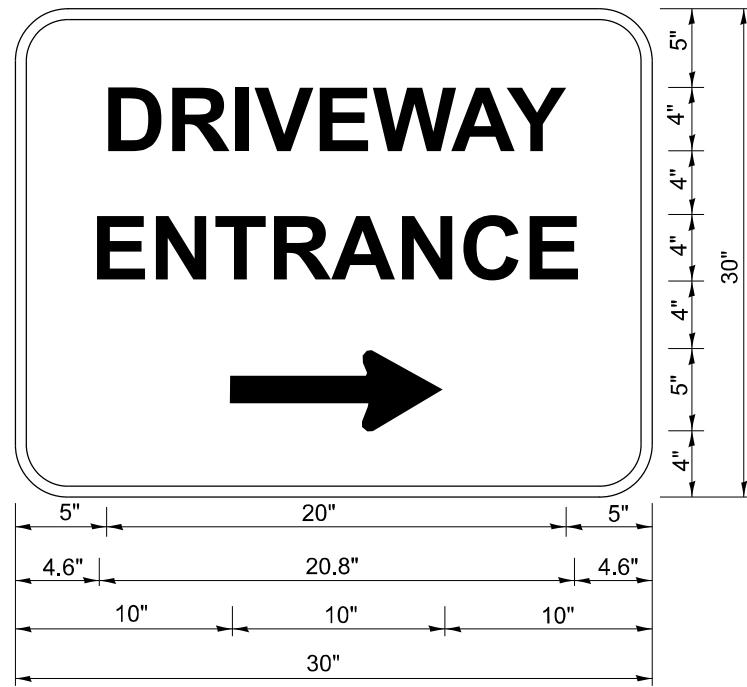


NOTES:

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

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

USER NAME = mohammad.hamwi	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN -		REVISED - R. MIRS 12-11-97			104	2025-2039-RS,SW	LAKE	57	42
CHECKED -		REVISED - T. RAMMACHER 02-02-99			TC-22		CONTRACT NO. 80B75		
PLOT DATE = 12/4/2025	DATE -	REVISED - C. JUCIUS 01-31-07			SCALE: NONE	SHEET 1 OF 1 SHEETS STA.	TO STA.	ILLINOIS	FED. AID PROJECT



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
"DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

	USER NAME = mohammad.hamwi	DESIGNED -	REVISED -	C. JUCIUS 02-15-07
	DRAWN -		REVISED -	
	CHECKED -		REVISED -	
	PLOT DATE = 12/4/2025	DATE -	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

DRIVEWAY ENTRANCE SIGNING					F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
					104	2025-2039-RS,SW	LAKE	57	43
					TC-26		CONTRACT NO. 80B75		
SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.			ILLINOIS	FED. AID PROJECT	

TRAFFIC SIGNAL LEGEND

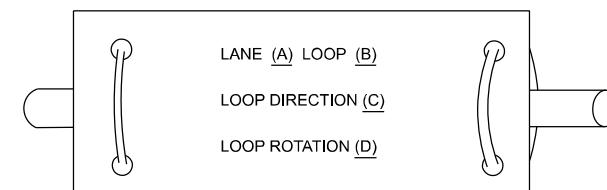
(NOT TO SCALE)

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 CONTROLLER CABINET			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			SYSTEM ITEM	S	SP	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			INTERSECTION ITEM	I	IP	FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			REMOVE ITEM		R	24F		
GUY WIRE			RELOCATE ITEM		RL	36F		
SIGNAL HEAD			ABANDON ITEM		A	C		
SIGNAL HEAD WITH BACKPLATE			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF	V		
SIGNAL HEAD OPTICALLY PROGRAMMED			MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	12F		
FLASHER INSTALLATION -(FS) SOLAR POWERED			SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	24F		
PEDESTRIAN SIGNAL HEAD			DETECTOR LOOP, TYPE I			36F		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			PREFORMED DETECTOR LOOP			C		
RADAR DETECTION SENSOR			SAMPLING (SYSTEM) DETECTOR			M		
VIDEO DETECTION CAMERA			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			P		
RADAR/VIDEO DETECTION ZONE			QUEUE AND SAMPLING (SYSTEM) DETECTOR			S		
PAN, TILT, ZOOM (PTZ) CAMERA			WIRELESS DETECTOR SENSOR			C		
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS ACCESS POINT			M		
CONFIRMATION BEACON						P		
WIRELESS INTERCONNECT						S		
WIRELESS INTERCONNECT RADIO REPEATER								

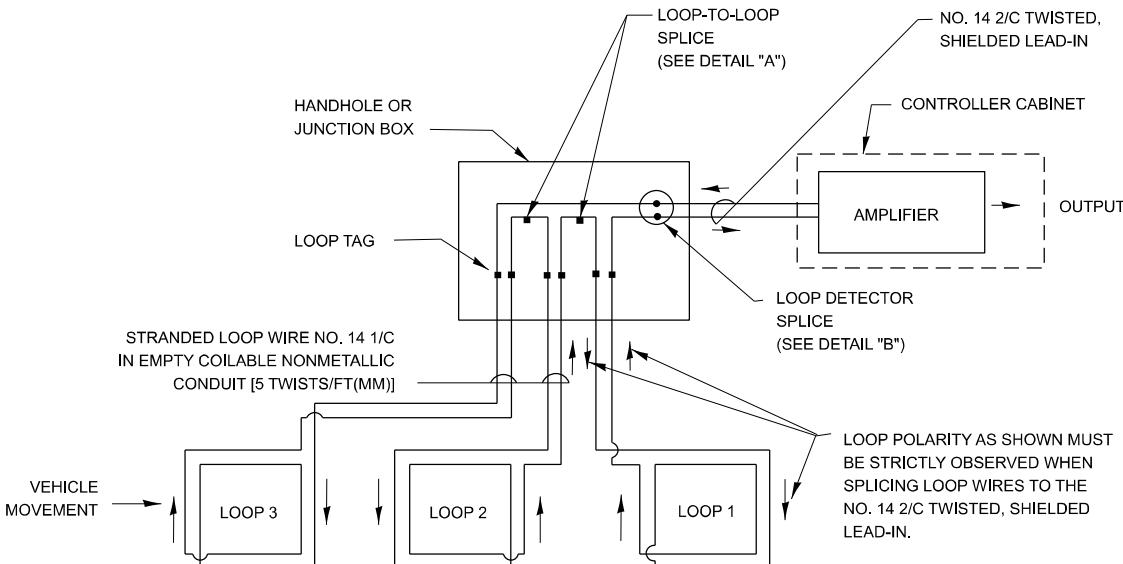
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

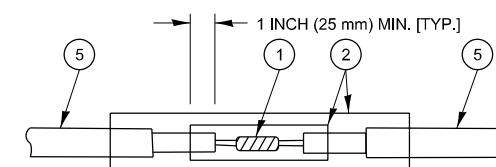


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

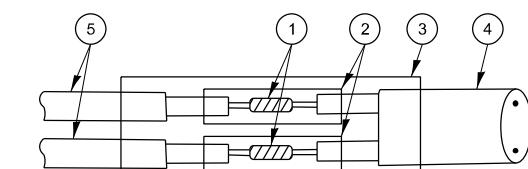


DETECTOR LOOP WIRING SCHEMATIC

- 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.

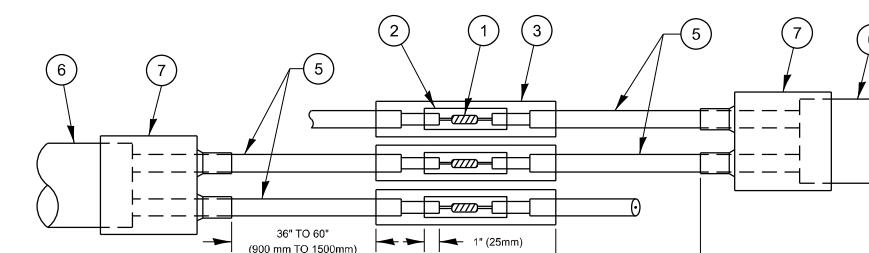


DETAIL "A"
LOOP-TO-LOOP SPLICE

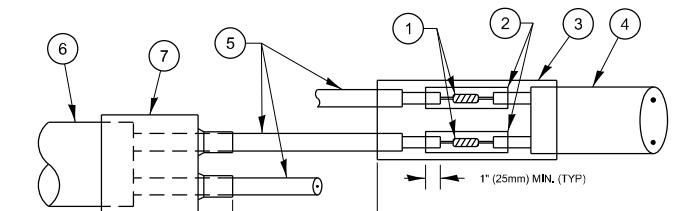


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



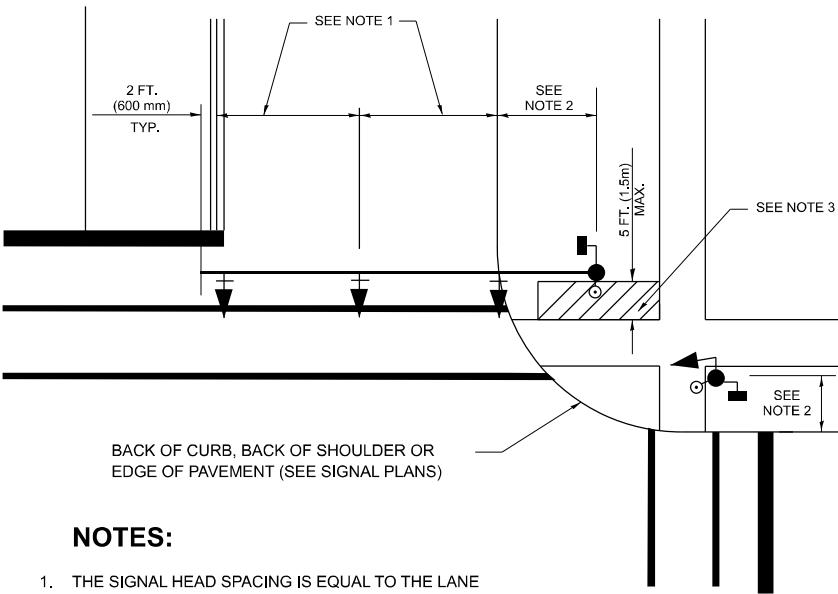
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

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. PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR
- BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

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

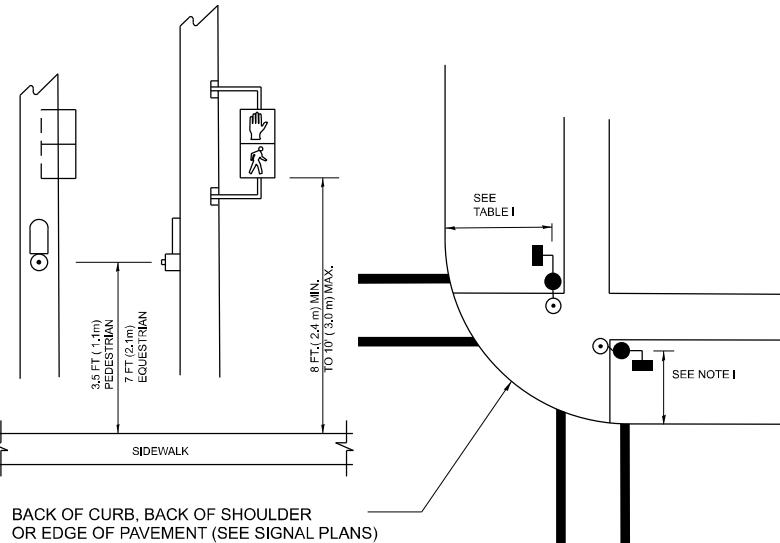


NOTES:

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

PEDESTRIAN SIGNAL POST

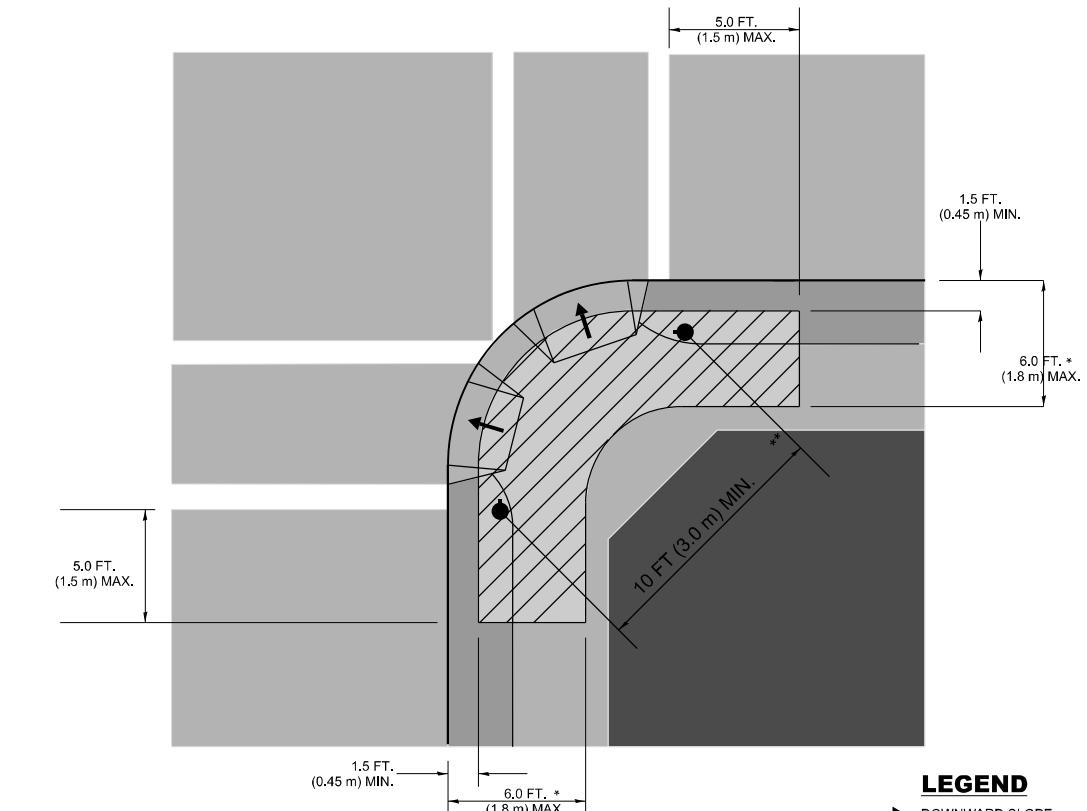
AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- / RECOMMENDED PUSHBUTTON LOCATIONS

NOTES:

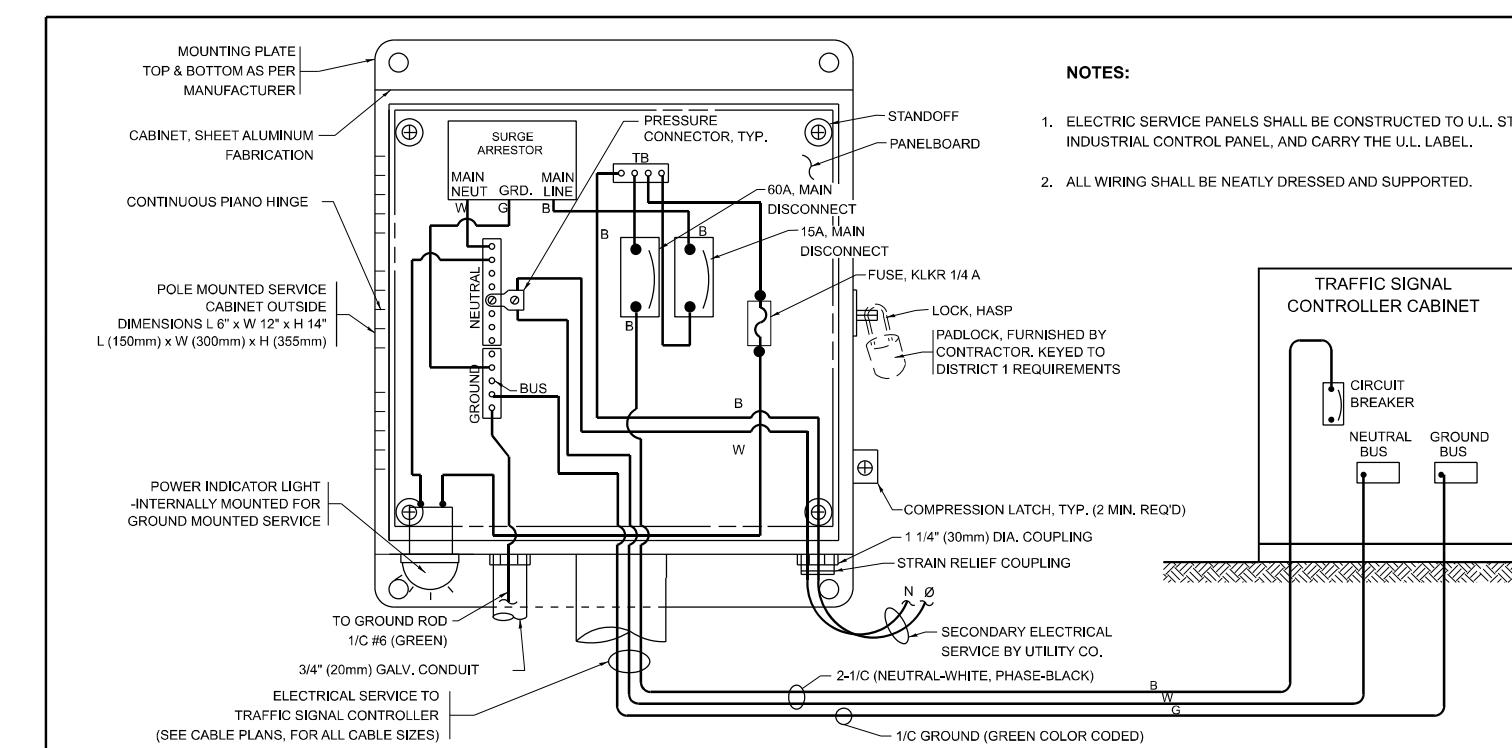
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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.

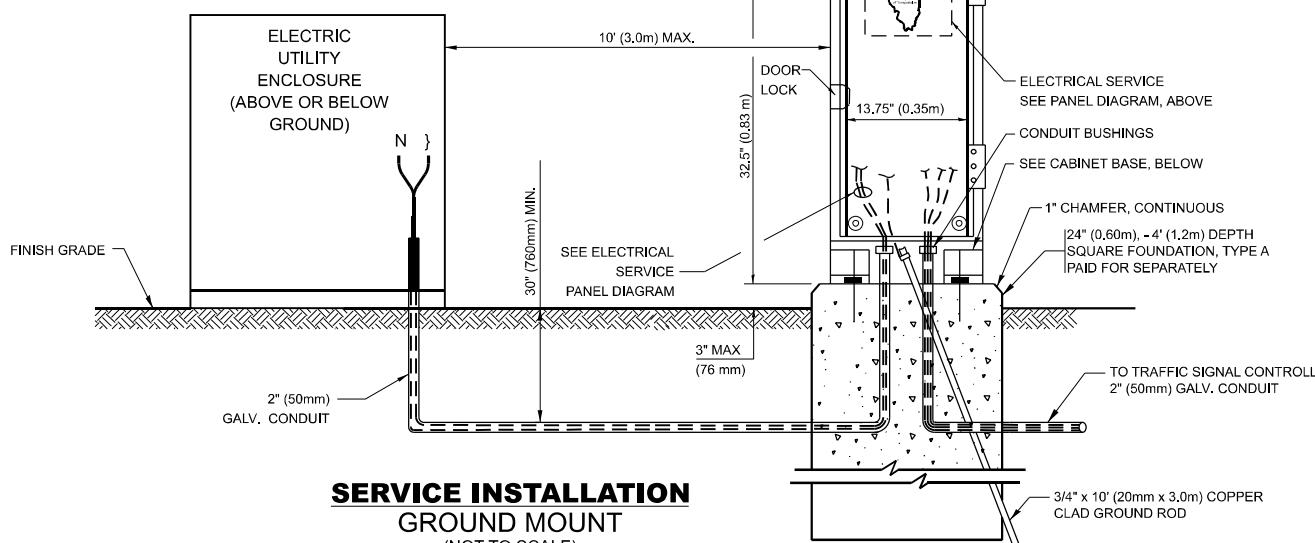
NOTES:

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.



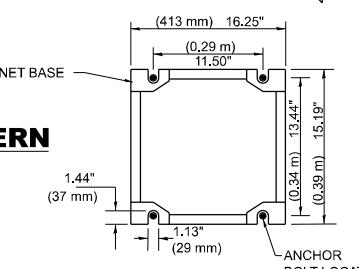
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)



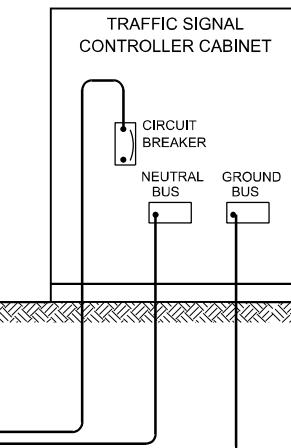
CABINET - BASE BOLT PATTERN

(NOT TO SCALE)

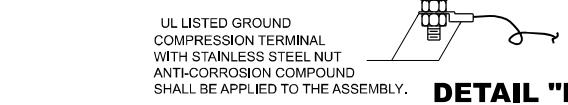
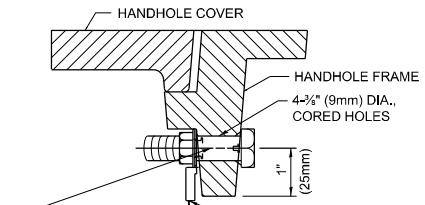


NOTES:

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

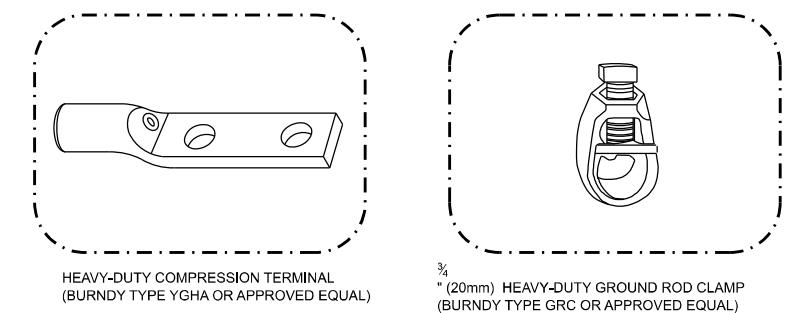
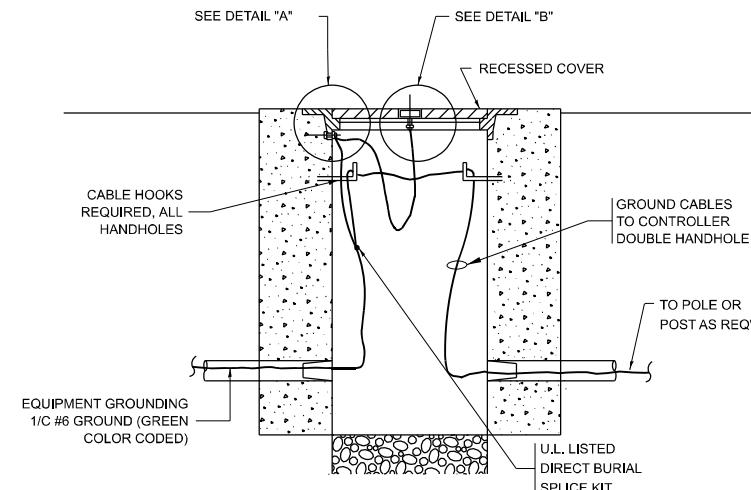


ANTI-CORROSION COMPOUND
SHALL BE APPLIED ON ALL
BOLT/ CONNECTION ASSEMBLIES.
-STAINLESS STEEL BOLT, NUT AND 2
STAINLESS STEEL WASHERS



NOTES: GROUNDING SYSTEM

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



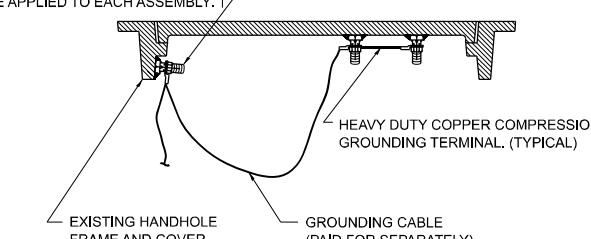
NOTES:

- 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.

HANDHOLE COVER & FRAME - GROUNDING DETAIL

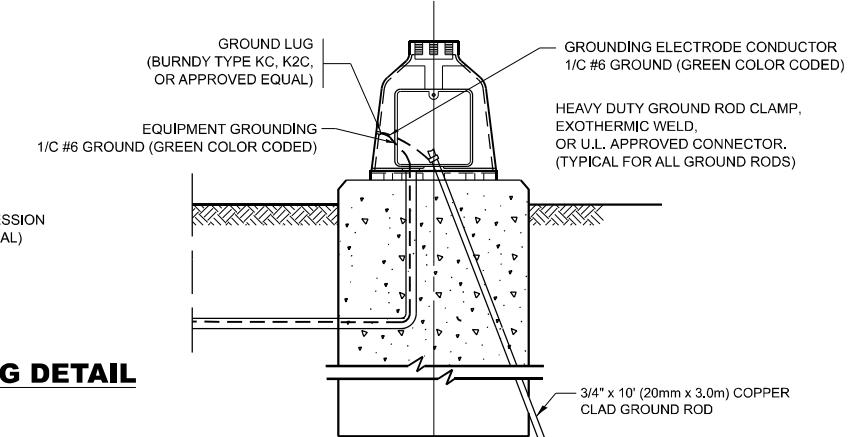
(NOT TO SCALE)

(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK
WASHER AND NYLON INSERT LOCKOUT WELDED TO
FRAME AND TO COVER. (TYPICAL). ANTI-CORROSION COMPOUND
SHALL BE APPLIED TO EACH ASSEMBLY.



EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

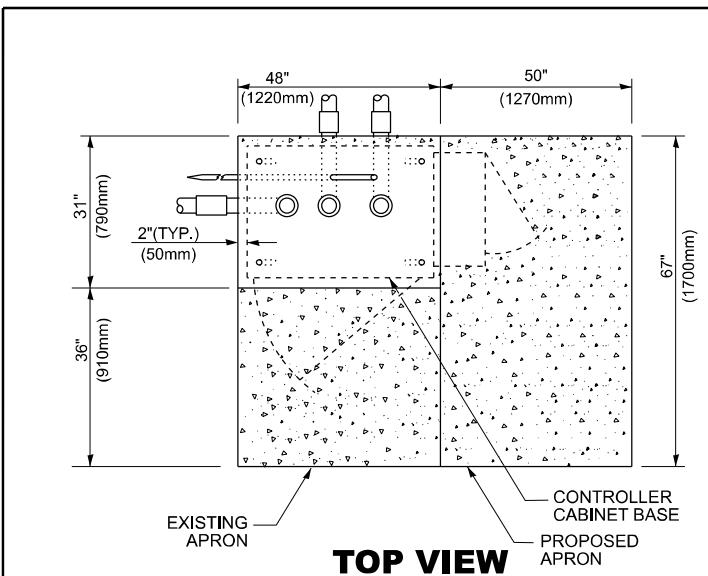
(NOT TO SCALE)



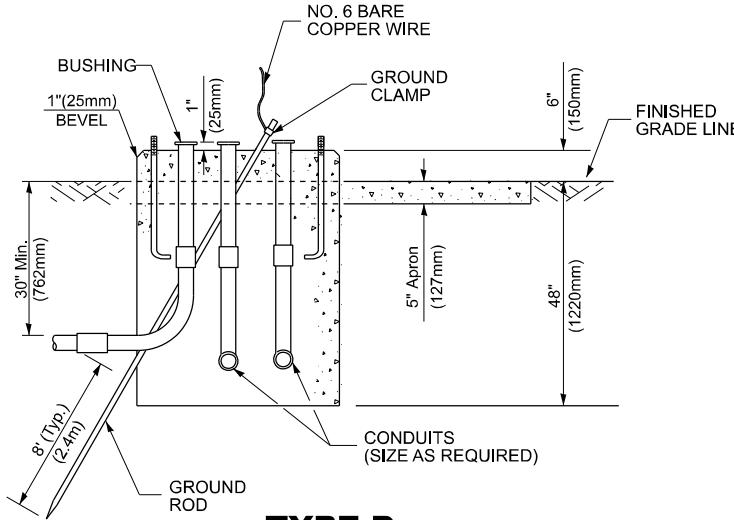
MAST ARM POLE / POST-GROUNDING DETAIL

(NOT TO SCALE)

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
DRAWN -	REVISED -	
CHECKED -	REVISED -	
PLOT DATE = 12/4/2025	DATE -	REVISED -

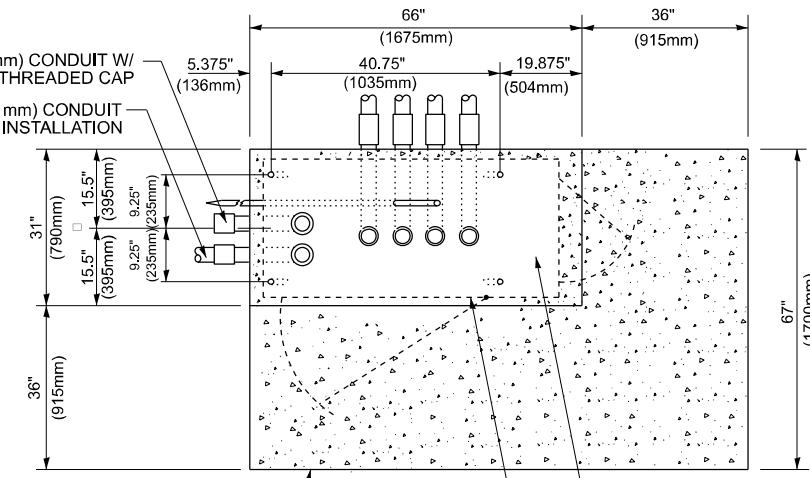


TOP VIEW

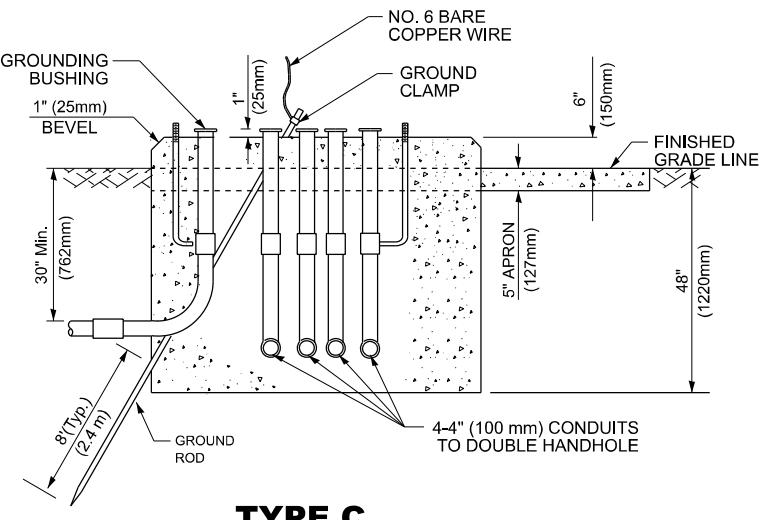


TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET

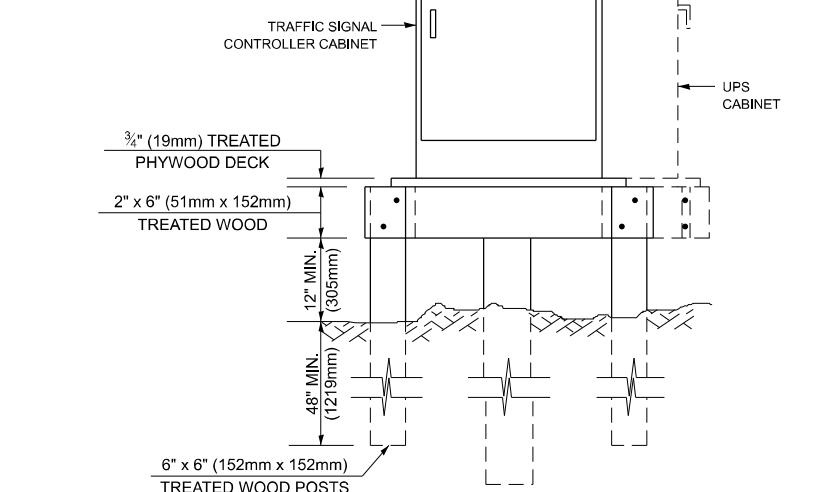
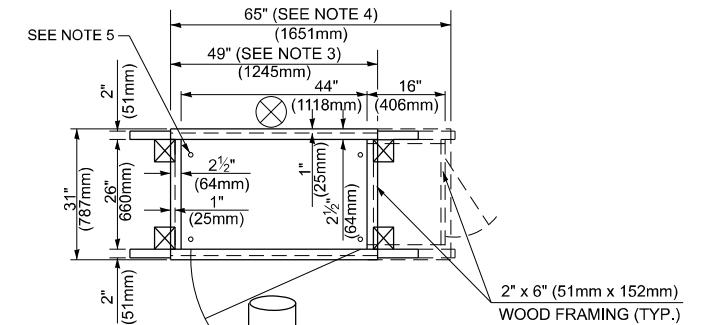
NOTE:
TOP OF FOUNDATION SHALL
BE HIGHER THAN TOP OF
DOUBLE HANDHOLE



TOP VIEW



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

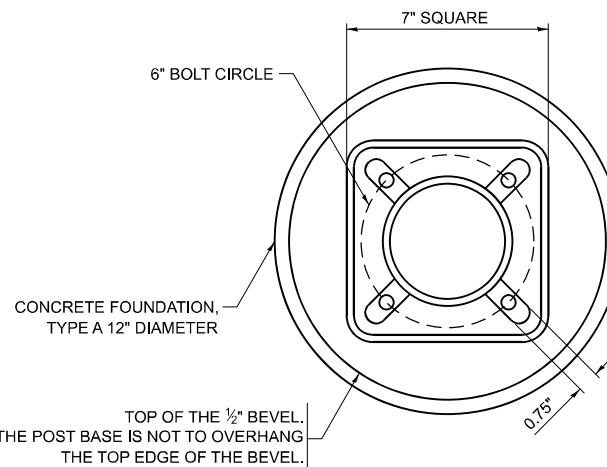
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or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

NOTES:

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

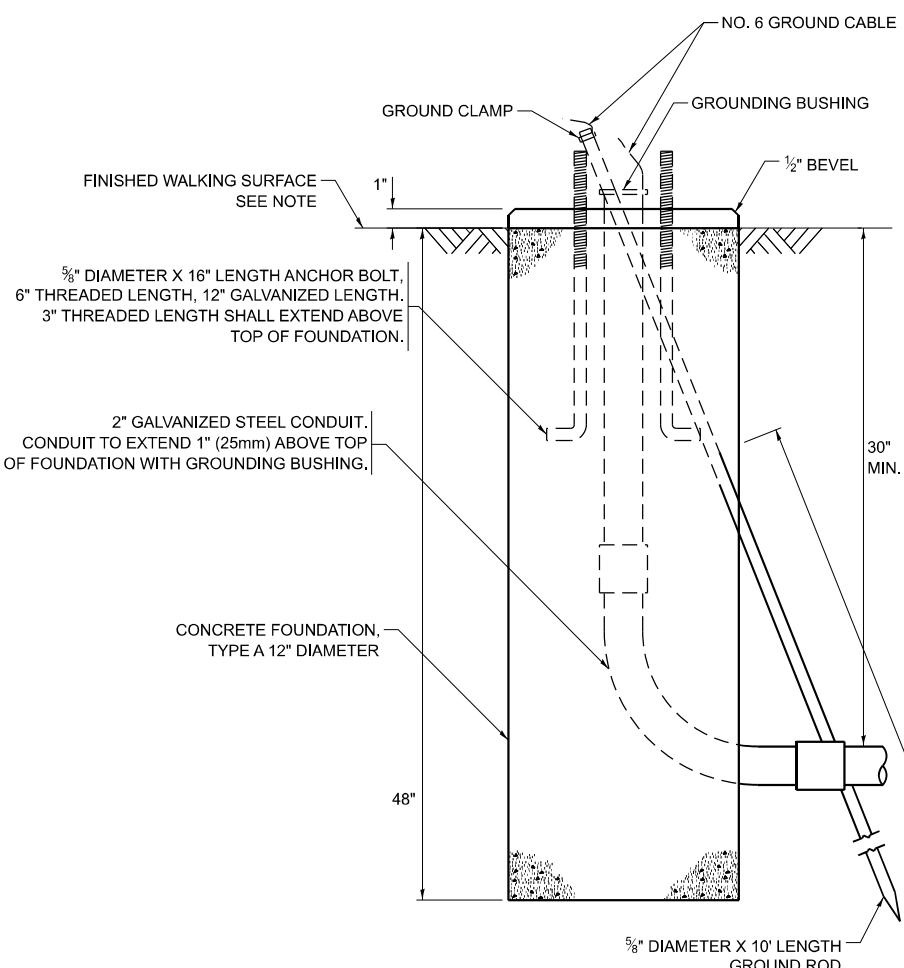
USER NAME	DESIGNED	REVISED	DRAWN	CHECKED	DATE	REVISED	STATE OF ILLINOIS			DISTRICT ONE			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
							DEPARTMENT OF TRANSPORTATION			STANDARD TRAFFIC SIGNAL DESIGN DETAILS							
FILE NAME: TS-05E [Sheet]	USER NAME: mohammad.hamwi	DESIGNED	REVISED	DRAWN	CHECKED	DATE	REVISED	SCALE: NONE	104	2025-2039-RS,SW	TRAFFIC SIGNAL CONTROLLER	TS-05	CONTRACT NO. 80B75	ILLINOIS	FED. AID PROJECT		
MODE: TS-05E [Sheet]	FILE NAME: c:\pw\work\pwboltham\wmid1154870D102826-sh1-dictstds.dgn							1 OF 7 SHEETS STA.	104	2025-2039-RS,SW	TRAFFIC SIGNAL CONTROLLER	TS-05	CONTRACT NO. 80B75	ILLINOIS	FED. AID PROJECT		



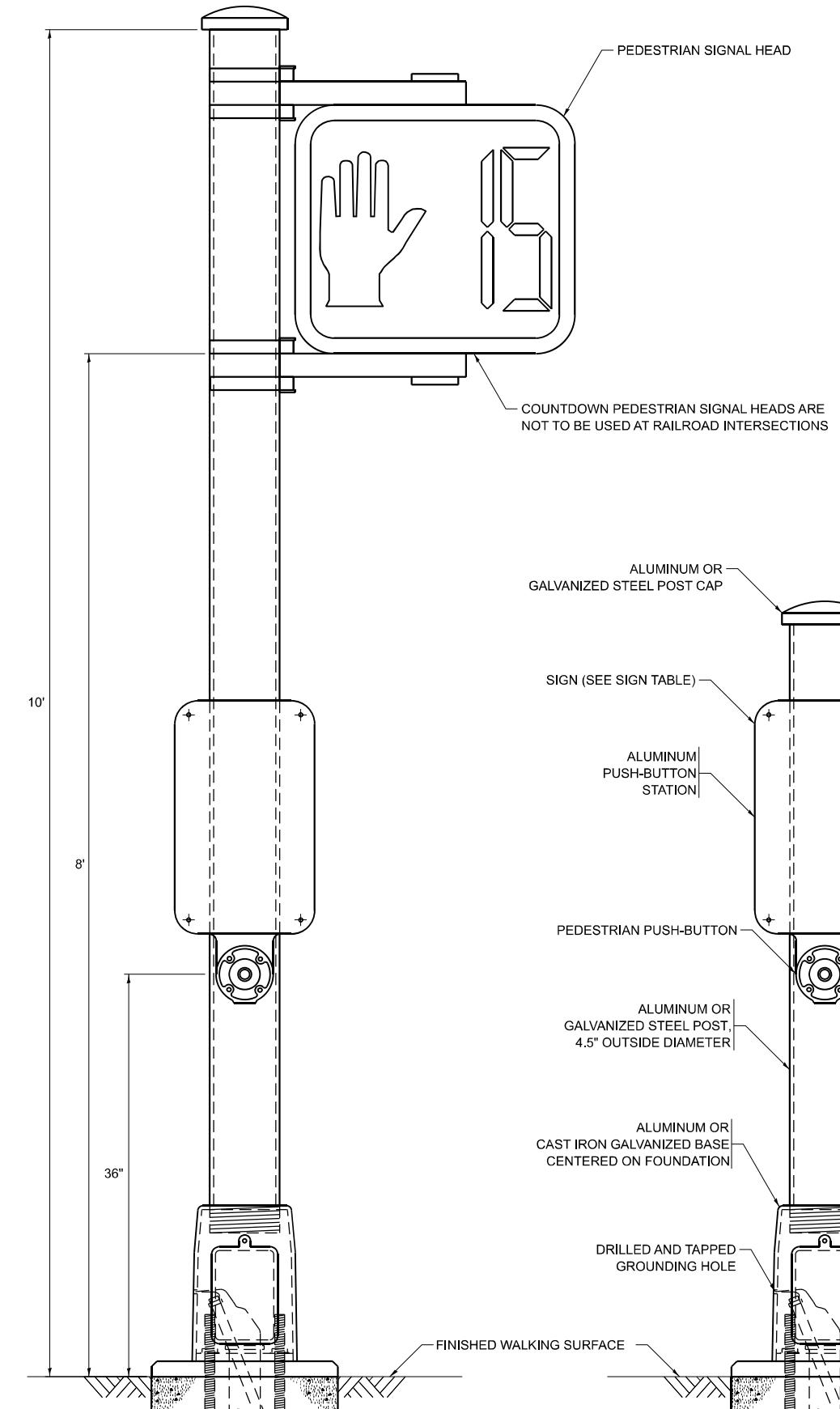
BOLT PATTERN

NOTE:

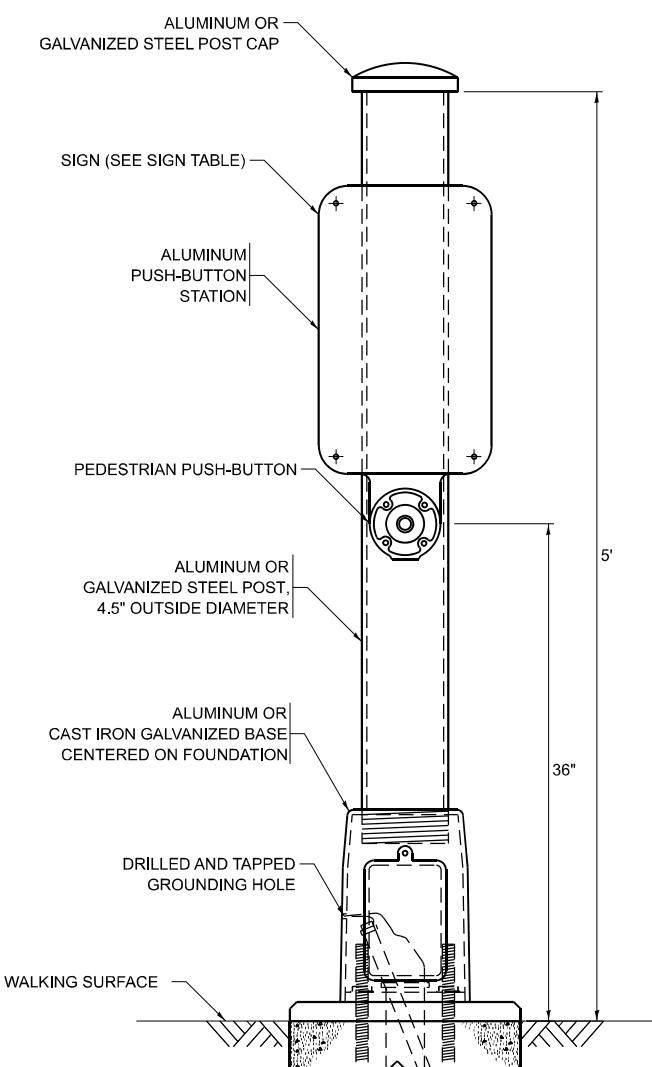
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



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



PEDESTRIAN SIGNAL POST, 10 FT.



PEDESTRIAN SIGNAL POST, 5 FT.



R10-3b

R10-3d

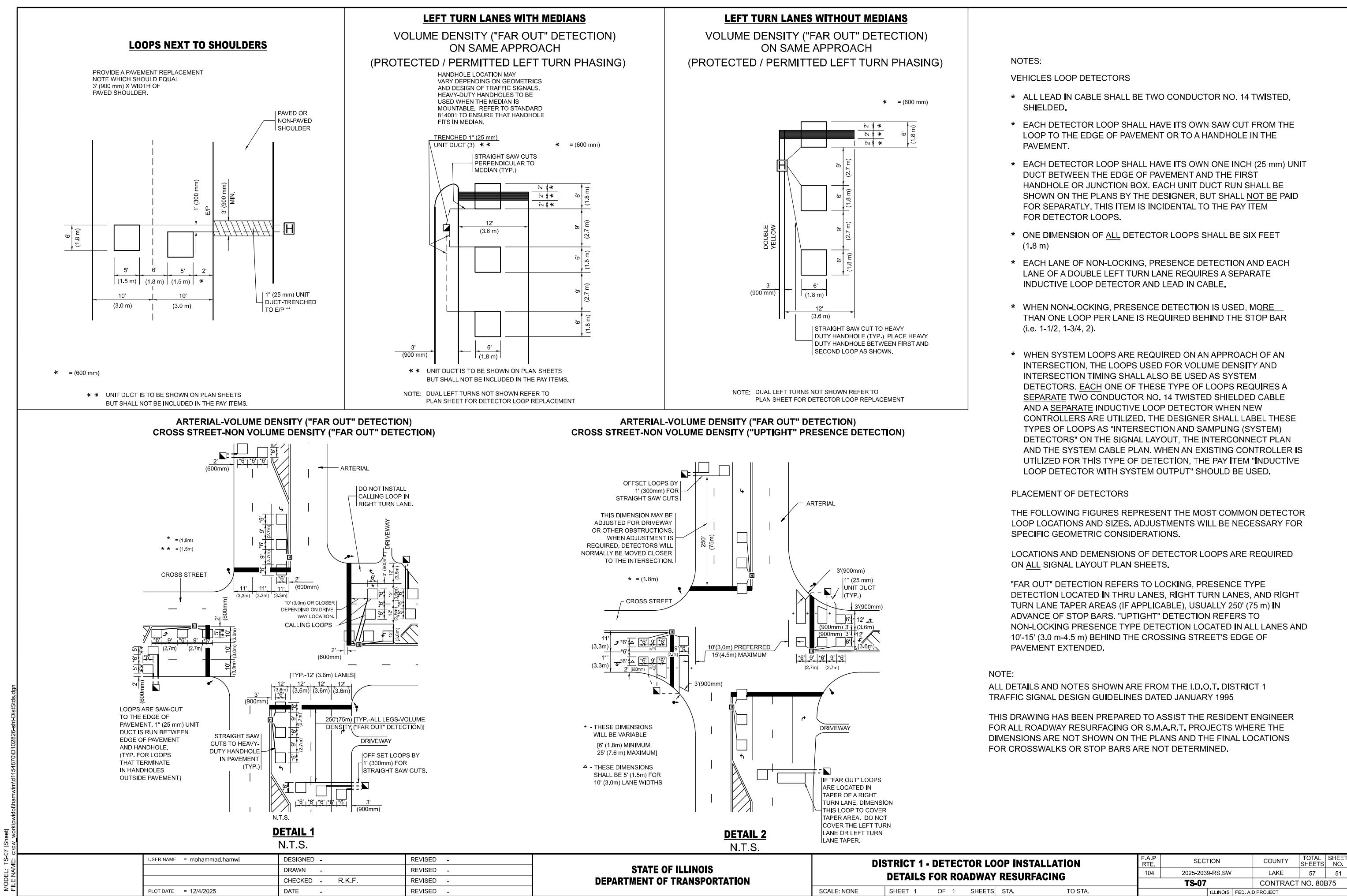
R10-3e

SIGN TABLE

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

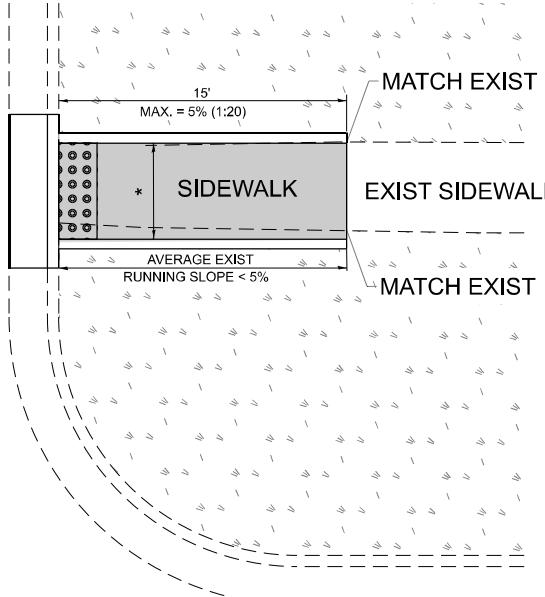
NOTES:

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.

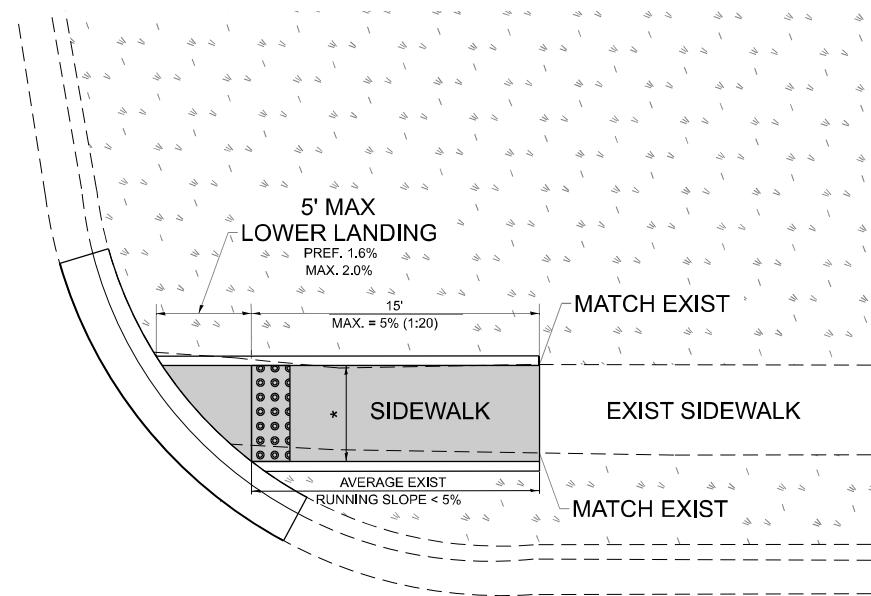


ADA DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS W/ EXIST. 5% OR LESS RUN. SLOPE

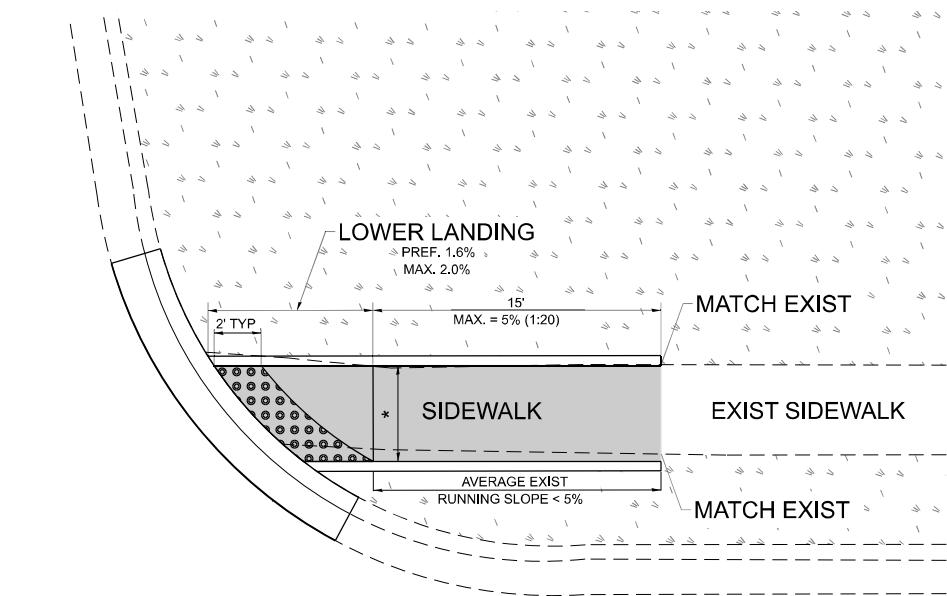
PD-01A



PD-01B



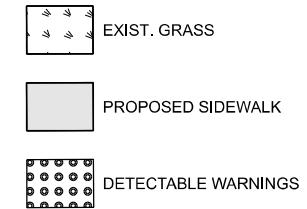
PD-01C



DESIGNER NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

LEGEND



CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS
(PD-01)

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

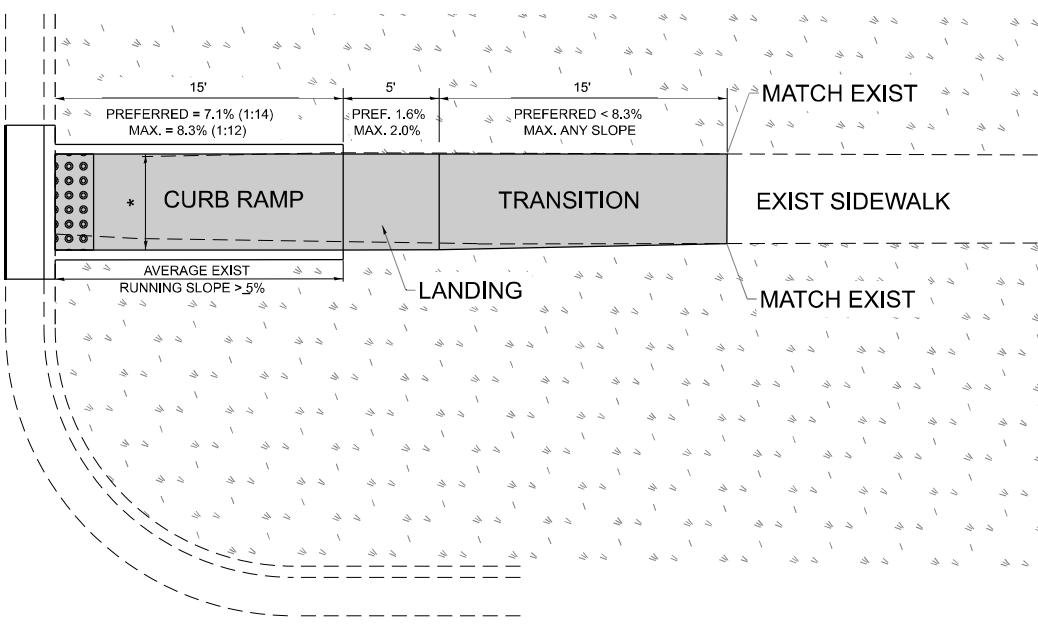
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
104	2025-2039-RS,SW	LAKE	57	52
PD-01	CONTRACT NO. 80B75			

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
DRAWN - R. LEDEZMA	REVISED -	
CHECKED -	REVISED -	
PLOT DATE = 12/4/2025	DATE - 10/02/2019	REVISED -

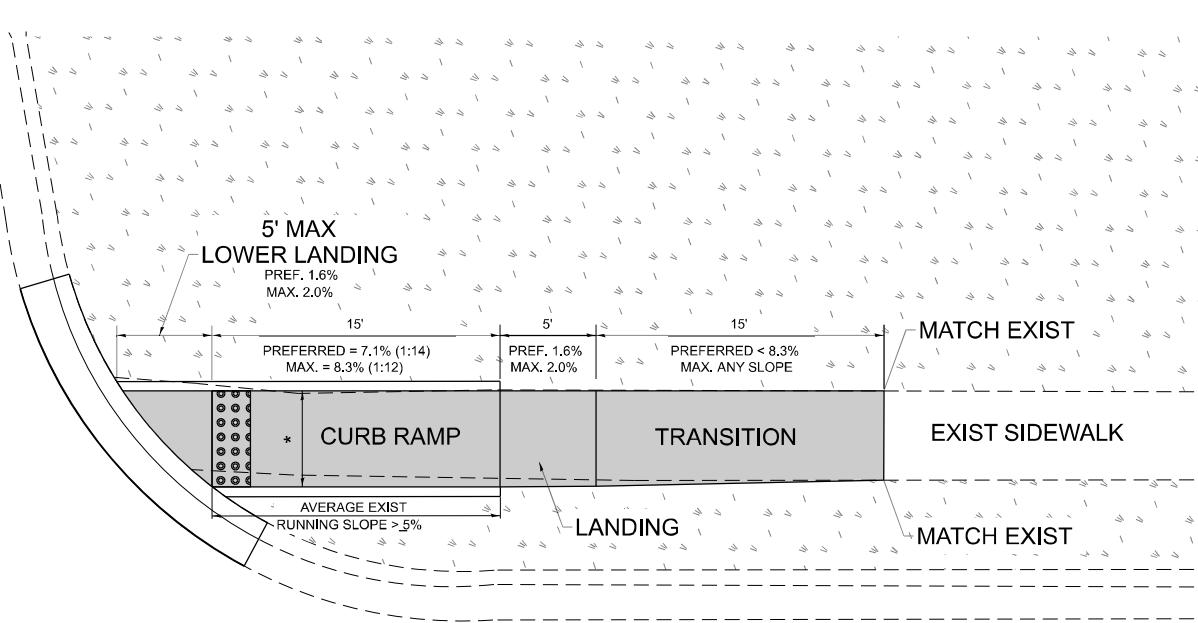
ILLINOIS FED. AID PROJECT

ADA DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS W/ EXIST. 5% OR GREATER RUN. SLOPE

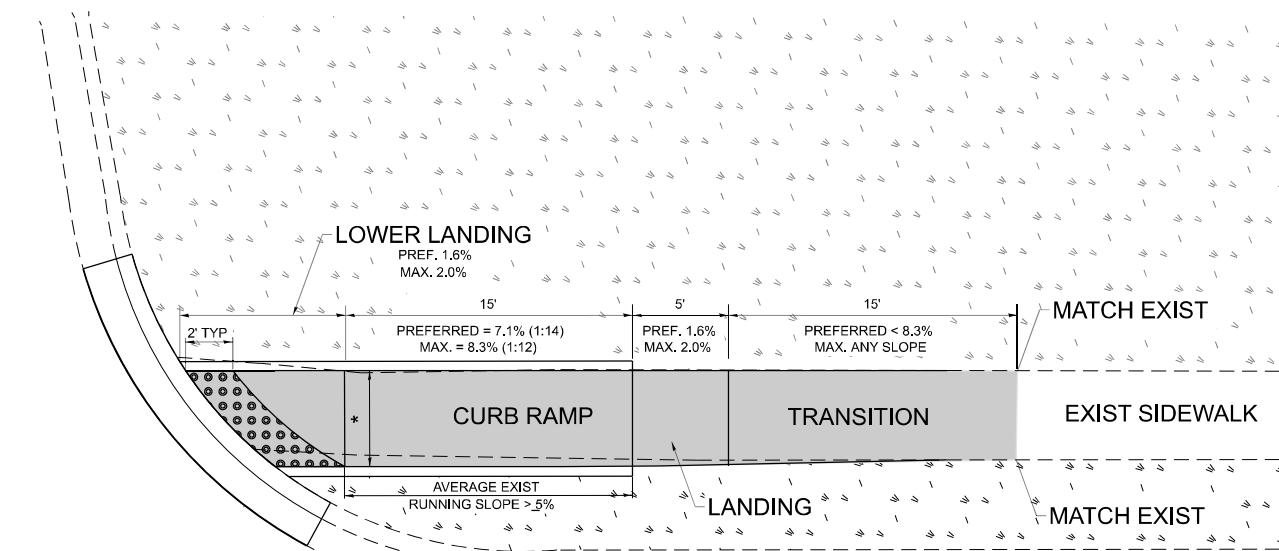
PD-02A



PD-02B



PD-02C

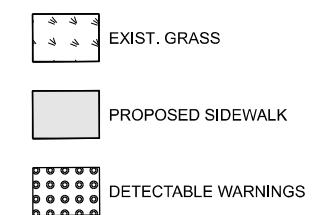


MODEL: PD-02 [Sheet]
FILE NAME: ctsw_worlwideothamwmid1154870D102826-sh-DetaIsd.s.dgn

DESIGNER NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

LEGEND



CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS (PD-02)

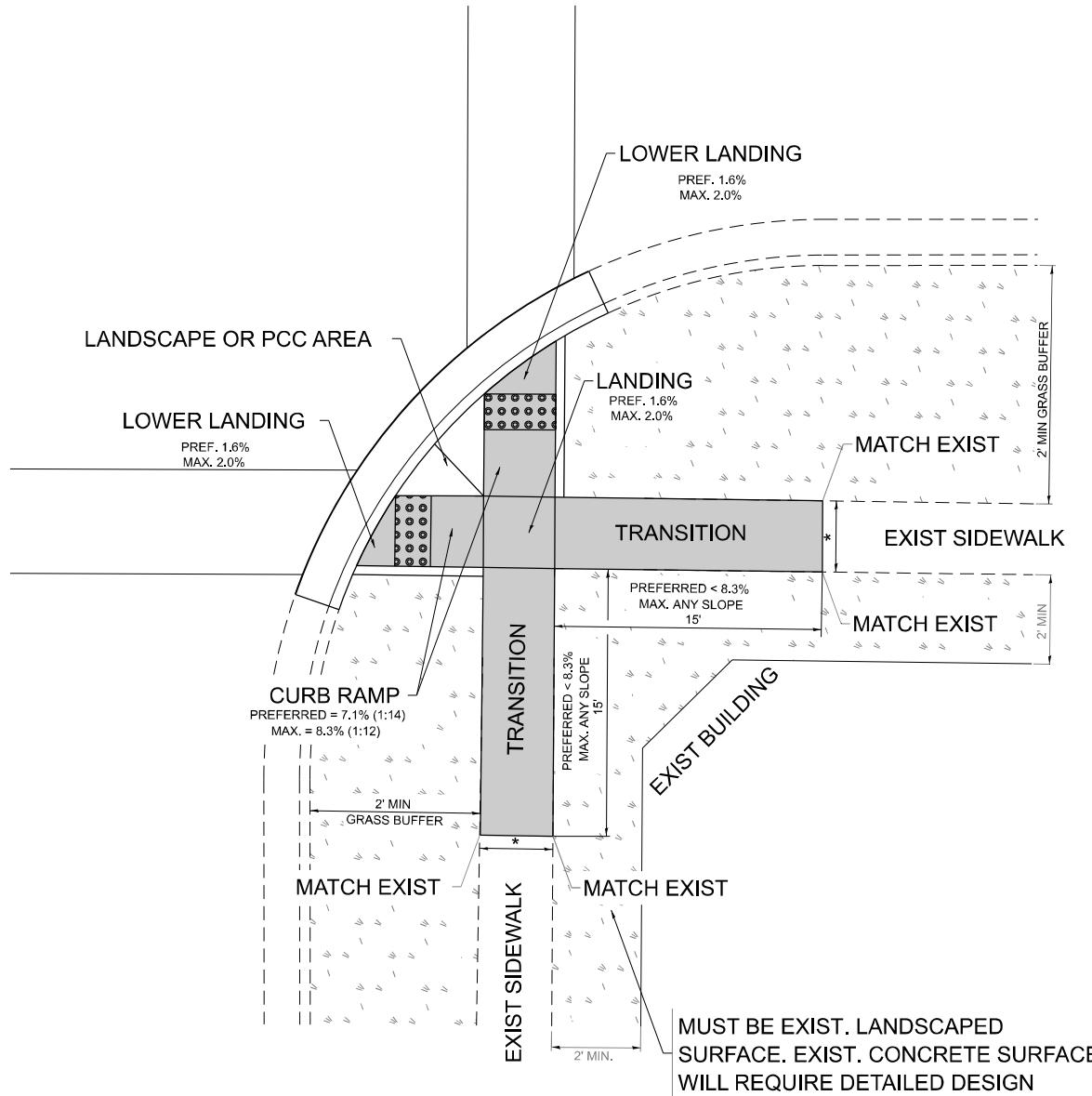
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	2025-2039-RS,SW	LAKE	57	53
PD-02	CONTRACT NO. 80B75	ILLINOIS	FED. AID PROJECT	

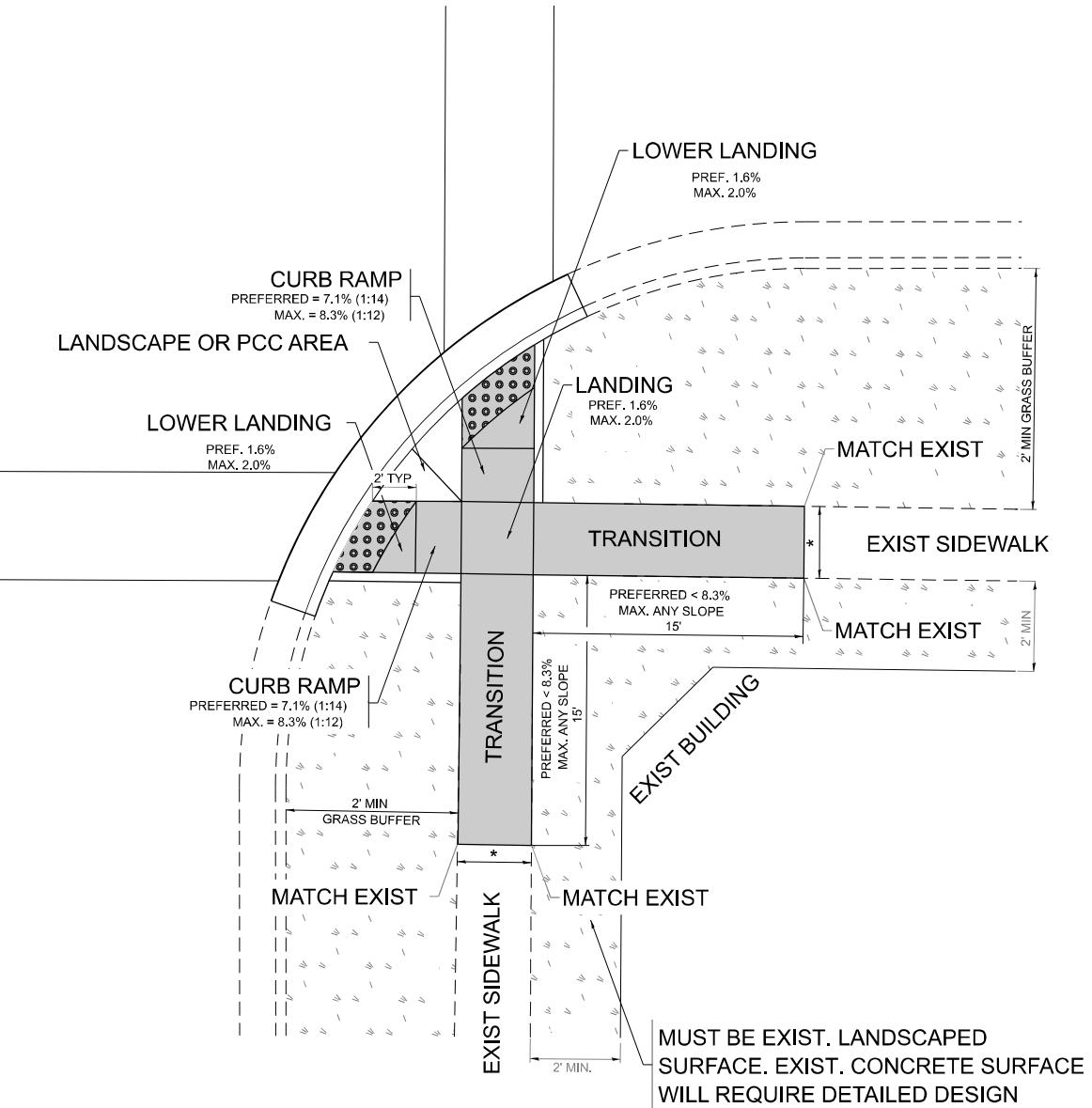
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
DRAWN - R. LEDEZMA	REVISED -	
CHECKED -	REVISED -	
PLOT DATE = 12/4/2025	DATE - 10/02/2019	REVISED -

ADA DETAIL FOR DOUBLE PERPENDICULAR CURB RAMPS

PD-03A



PD-03B

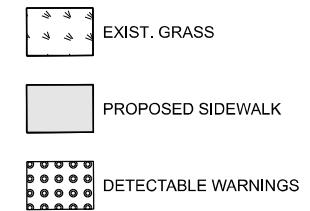


DESIGNER NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

LEGEND

PROPOSED SIDE CURB



CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK

* MATCH EXISTING SIDEWALK WIDTH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

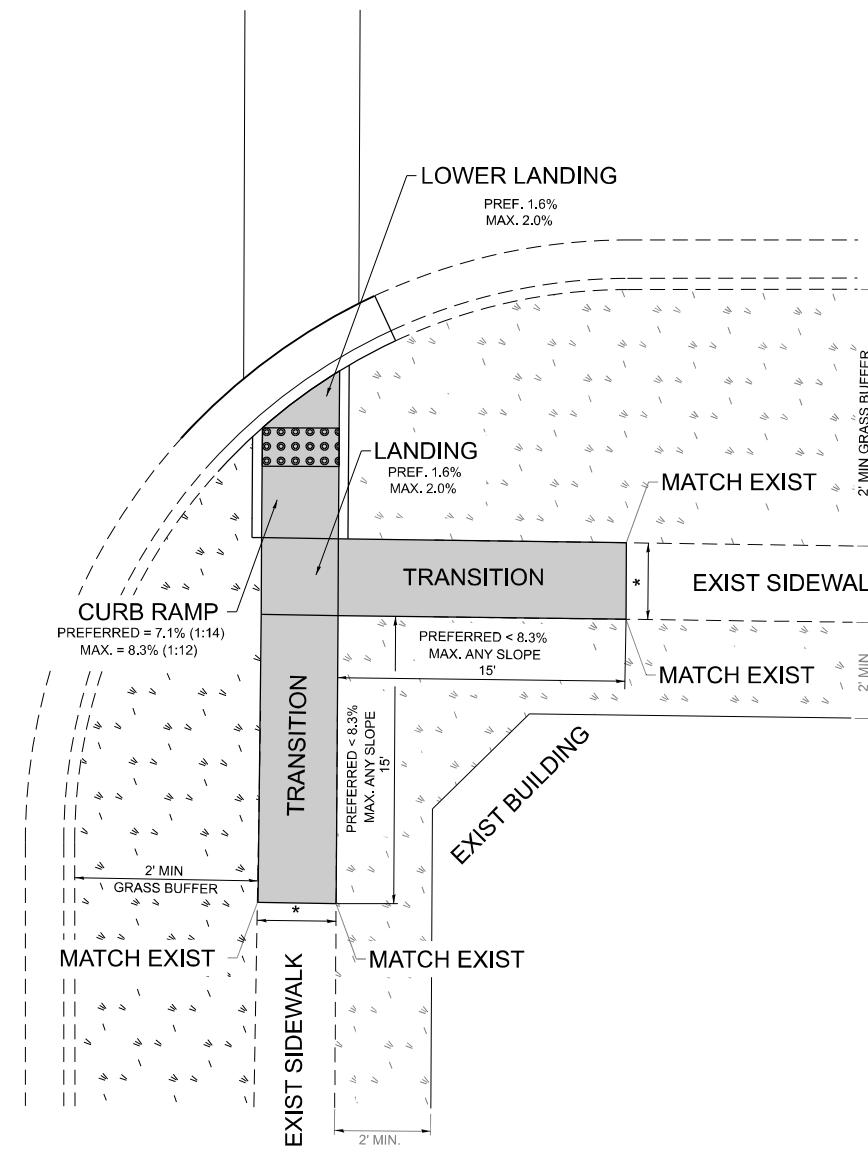
PROJECT DETAIL FOR DOUBLE PERPENDICULAR CURB RAMPS
(PD-03)

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

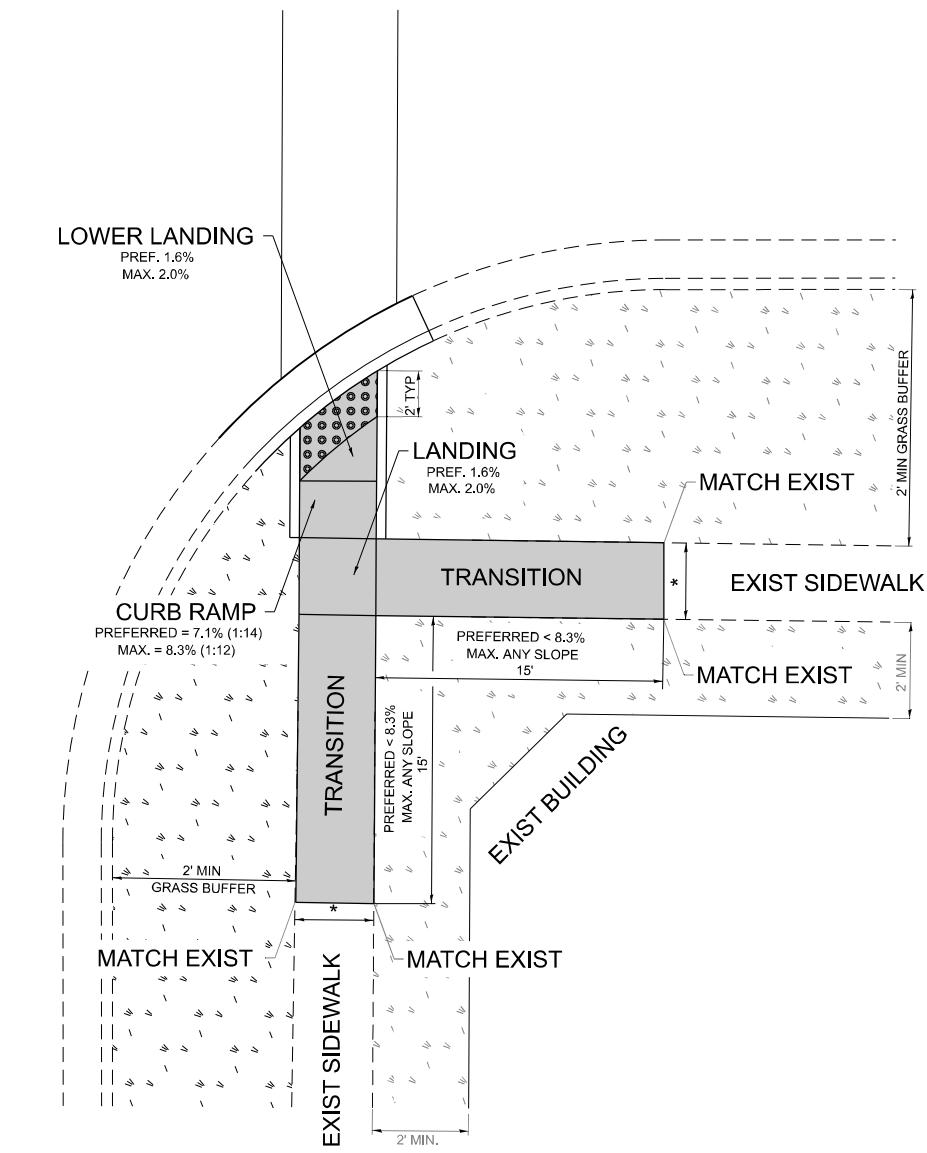
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	2025-2039-RS,SW	LAKE	57	54
PD-03	CONTRACT NO. 80B75	ILLINOIS	FED. AID PROJECT	

ADA DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS W/ TURNING SPACE

PD-04A



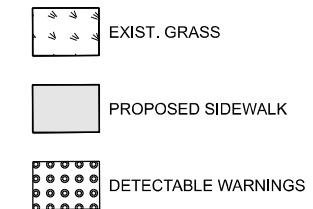
PD-04B



DESIGNER NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

LEGEND



CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT DETAIL FOR SINGLE PERPENDICULAR CURB RAMPS WITH
TURNING SPACE (PD-04)

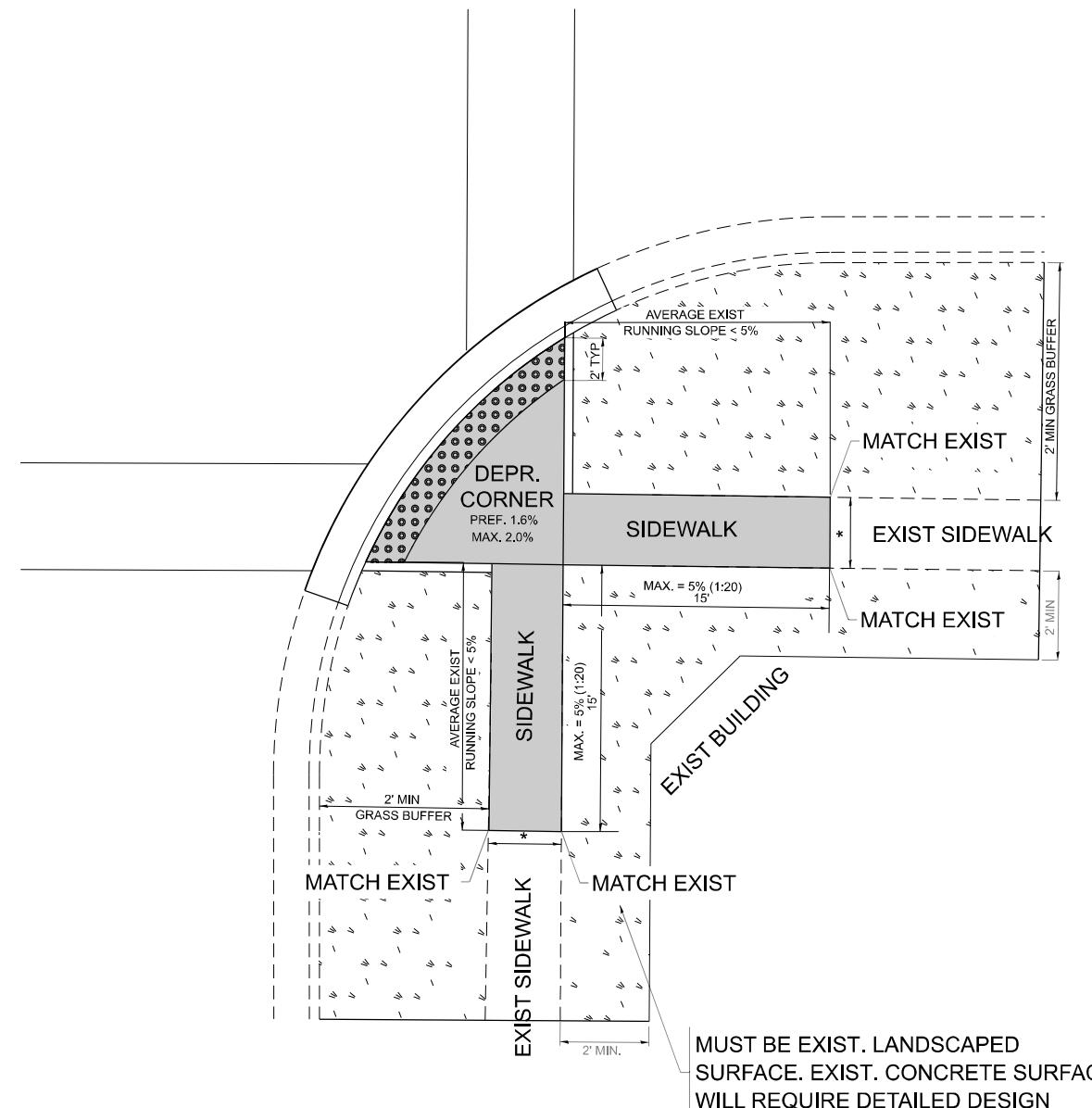
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
104	2025-2039-RS,SW	LAKE	57	55
PD-04	CONTRACT NO. 80B75	ILLINOIS	FED. AID PROJECT	

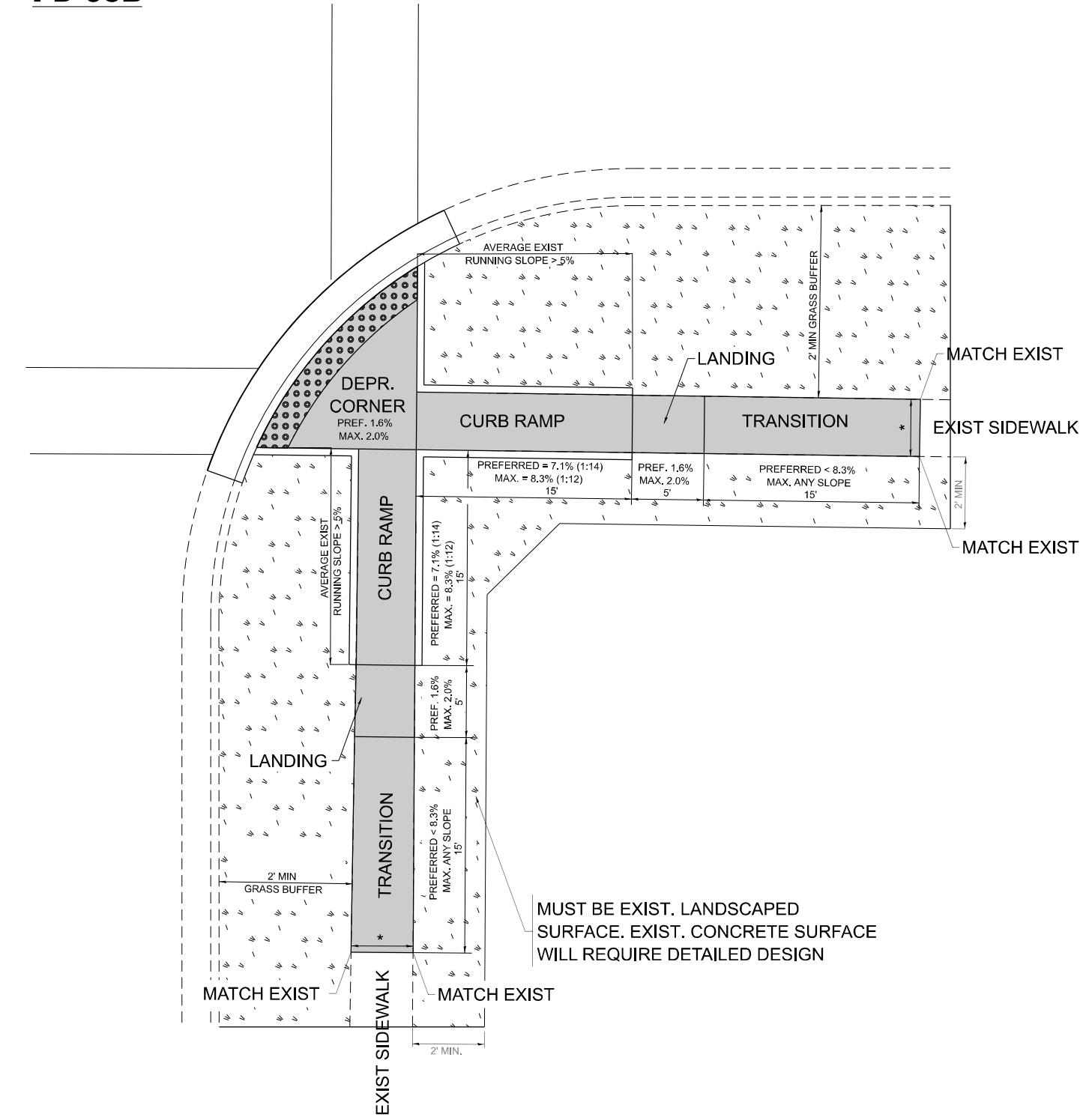
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
DRAWN - R. LEDEZMA	REVISED -	
CHECKED -	REVISED -	
PLOT DATE = 12/4/2025	DATE - 10/02/2019	REVISED -

ADA DETAIL FOR DEPRESSED CORNER CURB RAMPS

PD-05A



PD-05B

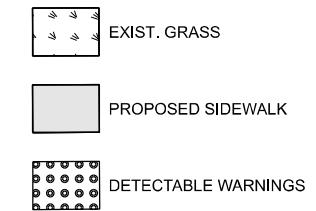


MODEL: PD-05 [Sheet]
FILE NAME: c:\tew\work\pwindol\hamwim\1154870\102826-sh-DetaiLs.dgn

DESIGNER NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

LEGEND



CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT DETAIL FOR DEPRESSED CORNER CURB RAMPS
(PD-05)

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

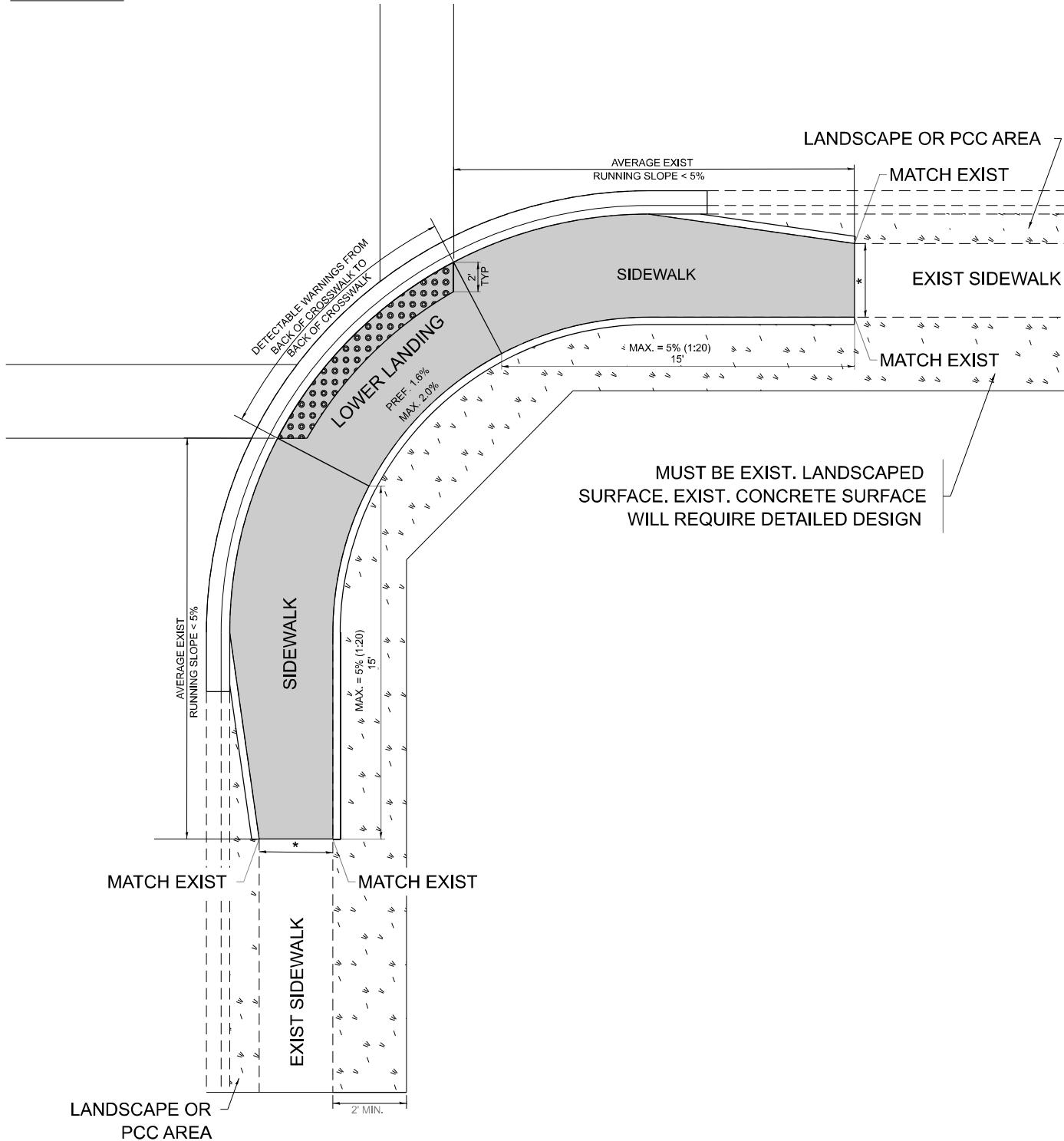
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104	2025-2039-RS,SW	LAKE	57	56
PD-05		CONTRACT NO. 80B75		

ILLINOIS FED. AID PROJECT

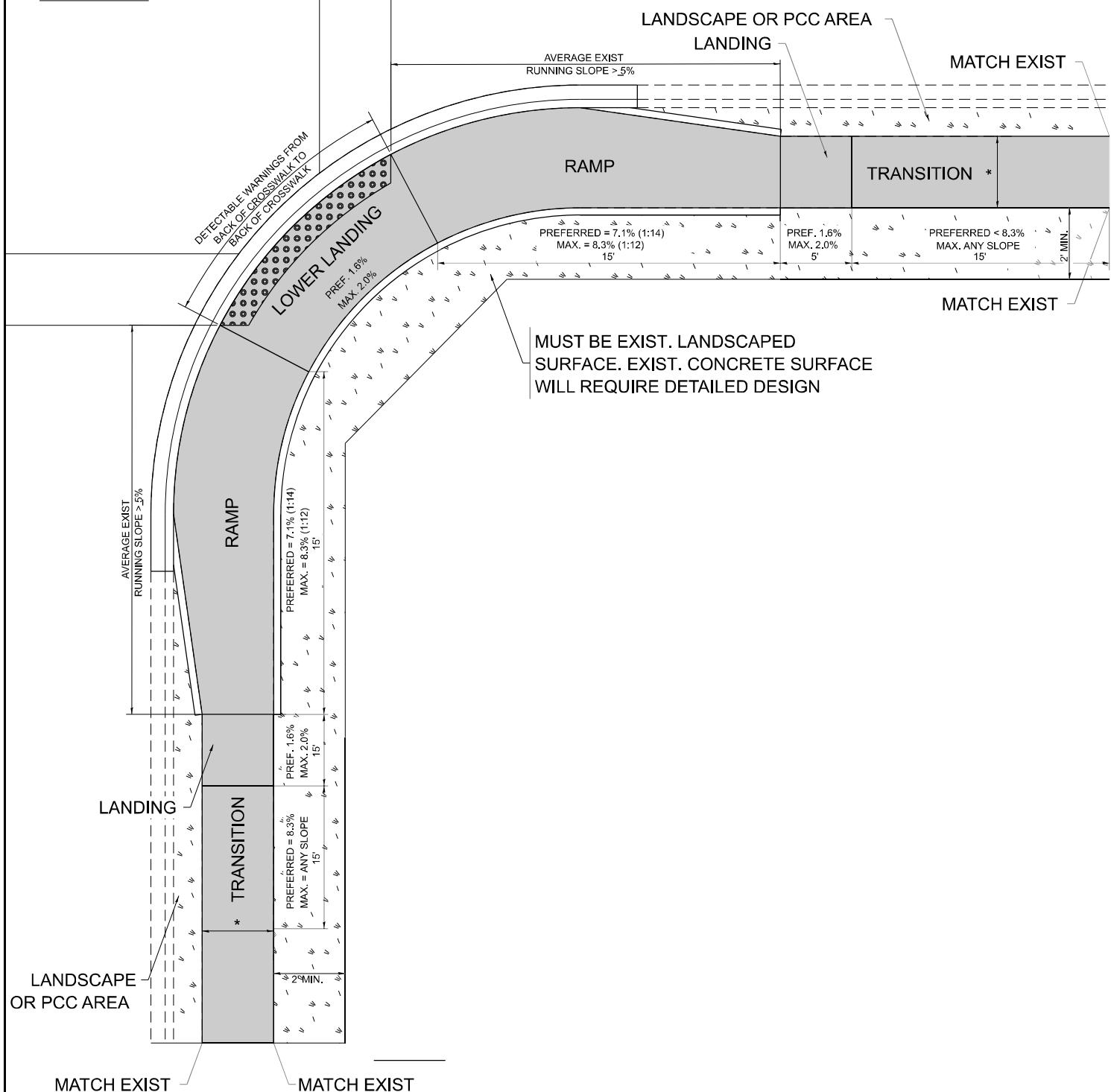
USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
DRAWN - R. LEDEZMA	REVISED -	
CHECKED -	REVISED -	
PLOT DATE = 12/4/2025	DATE -	REVISED -

ADA DETAIL FOR PARALLEL CURB RAMPS ADJACENT TO LANDSCAPING

PD-06A



PD-06B



DESIGNER NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50).
- 2) SIDEWALK REALIGNMENT WILL REQUIRE DETAILED DESIGN.
- 3) AREAS SURROUNDED BY PCC/ASPHALT, BUILDINGS, OR ARE NEAR TO DRIVEWAYS, REALIGNED SIDEWALK, UTILITY AND SIGNAL POLES, OR WHEN PRIVATE SIDEWALK TIES IN, WILL REQUIRE DETAILED SURVEY AND DESIGN.
- 4) ALL BRICK CORNERS WILL REQUIRE SUPERVISOR APPROVAL BEFORE USING PROJECT DETAILS

LEGEND

PROPOSED SIDE CURB



CONSTRUCTION NOTES:

- 1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISTING SIDEWALK
- * MATCH EXISTING SIDEWALK WIDTH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT DETAIL FOR PARALLEL CURB RAMPS
(PD-06)

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
104	2025-2039-RS,SW	LAKE	57	57
PD-06		CONTRACT NO. 80B75		

USER NAME = mohammad.hamwi	DESIGNED -	REVISED -
DRAWN - R. LEDEZMA	REVISED -	
CHECKED -	REVISED -	
PLOT DATE = 12/4/2025	DATE - 10/02/2019	REVISED -