06-13-2025 LETTING ITEM 201

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

FAP 0335 23 SMART2 MCHENRY ILLINOIS CONTRACT NO. 62V57

D-91-035-24

PROPOSED HIGHWAY PLANS

LOCATED IN THE CITY OF CRYSTAL LAKE

POSTED SPEED LIMIT = 45 - 55 MPH

2023 AADT = 10,200 - 13,200

DESIGN CLASSIFICATION = OTHER PRINCIPAL ARTERIAL

IL 176

FOR INDEX OF SHEETS, SEE SHEET NO. 2

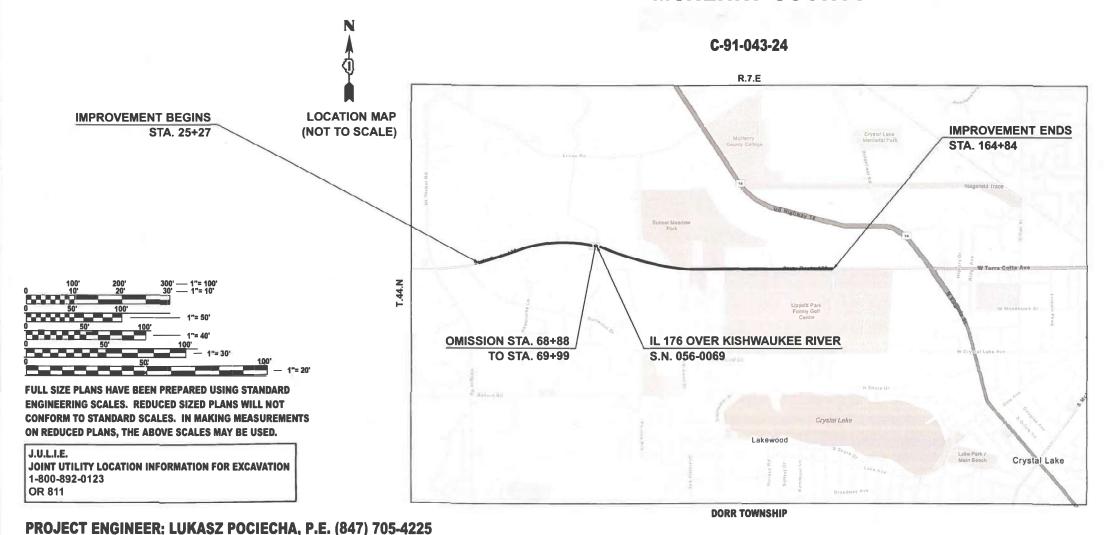
FAP ROUTE 335: (IL 176)
EAST OF HALIGUS ROAD TO WEST OF US 14 (VIRGINIA STREET)
SECTION: FAP 0335 23 SMART2

GROSS LENGTH = 13,957 FT = 2.64 MILES

NET LENGTH = 13.846 FT = 2.62 MILES

DESIGNED OVERLAY AND HMA SHOULDERS

MCHENRY COUNTY



STATE OF ILLINOIS

LOCATION OF SECTION INDICATED THUS: -

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 62V57

PROJECT MANAGER: VESELIN VELICHKOV, P.E.

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REV-SEP

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- SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)
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- DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

HIGHWAY STANDARDS

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

442201-03 CLASS C AND D PATCHES

482001-02 HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT

HMA SHLD. STRIPS / SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS

630001-13 STEEL PLATE BEAM GUARDRAIL SHOULDER RUMBLE STRIPS 8 IN 642006-01

OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE 701006-05

OFF-RD MOVING OPERATIONS 2L, 2W, DAY ONLY

LANE CLOSURE, 2L 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH 701201-05 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH 701306-04

LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY 701311-03

LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS ≥ 45 MPH

701336-07 LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES FOR SPEEDS ≥ 45 MPH

701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE 701502-09

TRAFFIC CONTROL DEVICES 701901-10

TYPICAL PAVEMENT MARKINGS

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS 781001-04

DETECTOR LOOP INSTALLATIONS

TYPICAL LAYOUTS FOR DETECTION LOOPS 886006-01

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES (48 HOURS NOTIFICATION IS REQUIRED)
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT
- 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
- ALL PAVEMENT PATCHING LOCATIONS SHALL BE DETERMINED BY THE FNGINFFR AT
- PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING
- PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR SHORT TERM PAVEMENT
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIEVALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF
- BUTT JOINTS SHALL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS"
- THE CONTRACTOR SHALL 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 SHALL DELIVER THE RECORD TO THE ENGINEER
- THE RESIDENT ENGINEER SHALL CONTACT BRANDY KENNEDY, AREA TRAFFIC FIELD ENGINEER AT BRANDY.KENNEDY@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 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 BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- 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
- 14. THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- ALL GUARDRAIL REMOVAL AND REPLACEMENT LOCATIONS SHALL BE DETERMINED BY
- THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR 1
- DROP-OFFS ADJACENT TO THE TRAVELLANE SHALL BE KEPT TO A MINIMUM PROTECTION OF THE DROP-OFFS SHALL BE ACCORDING TO THE IDOT BUREAU OF SAFETY PROGRAMS AND ENGINEERING, SAFETY ENGINEERING POLICY MEMORANDUM 4-21, DROP-OFFS GREATER THAN OR EQUAL TO 12" WILL NOT BE ALLOWED AT LOCATIONS WHERE THE DROP-OFFS IF LOCATED WITHIN 8 FT OF THE EDGE OF THE TRAVEL LANE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DROP-OFF AREAS MEET THE OFFSET, HEIGHT, AND DURATION REQUIREMENTS TO USE BARRICADES AT THE END OF EACH WORKDAY. THIS MAY REQUIRE THE CONTRACTOR TO REPLACE OR PLACE SUFFICIENT MATERIAL IN THE EXCAVATION TO REDUCE THE DROP-OFF TO BE COMPLIANT WITH THE REQUIREMENTS FOR USE OF BARRICADES, NO ADDITIONAL COMPENSATION SHALL BE ALLOWED TO COMPLY WITH THIS REQUIREMENT.
- GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301,04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COST COMPENSATION WILL BE DUE TO THE CONTRACTOR.
- ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR EXPENSE.

USER NAME = jammal.alramahi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/20/2025	DATE -	REVISED -

OF 1 SHEETS STA.

SCALE:

				100% STATE	100% STATE
				ROADWAY	ROADWAY
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005
NO.			QUANTITY	URBAN	URBAN
20200100	EARTH EXCAVATION	CU YD	5,792	5,792	
		i			
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	580	580	
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	632	632	
30300112	AGGREGATE SUBGRADE IMPROVEMENT, 12"	SQ YD	9,477	9,477	
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	21,324	21,324	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	28,526	28,526	
40600370	LONGITUDINAL JOINT SEALANT	FOOT	13,668	13,668	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	127	127	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	133	133	
40602985	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	TON	4,734	4,734	
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	4,143	4,143	
44000164	HOT-MIX ASPHALT SURFACE REMOVAL, 3 3/4"	SQ YD	42,260	42,260	
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	317	317	
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	20	20	

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* SPECIALTY ITEM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. ROUTE 335 (IL 176)
SUMMARY OF QUANTITIES

SHEET 1 OF 5 SHEETS STA. TO STA.

SCALE:

CONSTRUCTION CODE

				100% STATE	100% STATE
				ROADWAY	ROADWAY
CODE	ITEM	UNIT	TOTAL	0005	0005
NO.			QUANTITY	URBAN	URBAN
44201796	CLASS D PATHCES, TYPE IV, 12 INCH	SQ YD	223	223	
44213200	SAW CUTS	FOOT	23,856	23,856	
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	9,477	9,477	
60920024	PIPE CULVERTS TO BE CLEANED 24"	FOOT	300	300	
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	125	125	
63200310	GUARDRAIL REMOVAL	FOOT	125	125	
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	24,793	24,793	
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	5,792	5,792	
66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2	
66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1	
66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1	
66901006	REGULATED SUBSTANCES MONITORING	CAL DA	4	4	
67100100	MOBILIZATION	L SUM	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	

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* SPECIALTY ITEM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

F.A.P. ROUTE 335 (IL 176)
SUMMARY OF QUANTITIES

SHEET 2 OF 5 SHEETS STA. TO STA.

CONSTRUCTION CODE

REV-SEP

				100% STATE	100% STATE
				ROADWAY	ROADWAY
CODE	ITEM	UNIT	TOTAL	0005	0005
NO.			QUANTITY	URBAN	URBAN
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1	1	
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	976,020	976,020	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	78,295	78,295	
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	624	624	
70300221	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT	FOOT	221,655	221,655	
70300241	TEMPORARY PAVEMENT MARKING - LINE 6" - PAINT	FOOT	2,841	2,841	
70300251	TEMPORARY PAVEMENT MARKING - LINE 8" - PAINT	FOOT	993	993	
70300261	TEMPORARY PAVEMENT MARKING - LINE 12" - PAINT	FOOT	739	739	
70300281	TEMPORARY PAVEMENT MARKING - LINE 24" - PAINT	FOOT	690	690	

* SPECIALTY ITEM

USER NAME = jammal.alramahi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/20/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. ROUTE 335 (IL 176)
SUMMARY OF QUANTITIES

SHEET 3 OF 5 SHEETS STA. TO STA.

SCALE:

CONSTRUCTION CODE

					100% STATE	100% STATE	
					ROADWAY	ROADWAY	
	CODE	ITEM	UNIT	TOTAL	0005	0005	
	NO.	·· - ··		QUANTITY	URBAN	URBAN	
						OT (2)	
	70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	7,286	7,286		
	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	FOOT	208	208		
	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	73,885	73,885		
_							
·	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	947	947		
\vdash							
'	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	331	331		
	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	739	739		
\vdash							
,	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	230	230		
,	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	395	395		
_							
*	78200010	BARRIER WALL REFLECTORS, TYPE B	EACH	6	6		
-							
-	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	395	395		
-	78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	26,730	26,730		
	X2020110	GRADING AND SHAPING SHOULDERS	UNIT	249	249		
	X4060995	TEMPORARY RAMP (SPECIAL)	SQ YD	59	59		
	X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	75	1	75	

* SPECIALTY ITEM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

	F.A.P. ROUTE 335 (IL 176) SUMMARY OF QUANTITIES						SECTI
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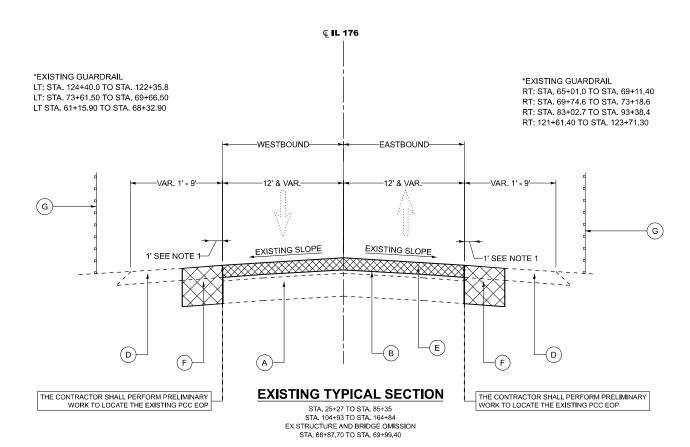
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				100% STATE	100% STATE
				ROADWAY	ROADWAY
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0005
				URBAN	URBAN
X6420114	CENTER LINE - RUMBLE STRIP - 16"	FOOT	13,845	13,845	
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	6	6	
X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4	
		·			
X7800815	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 4 INCH	FOOT	13,556	13,556	
X8860105	DETECTOR LOOP REPLACEMENT	FOOT	1,279	1,279	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5		5

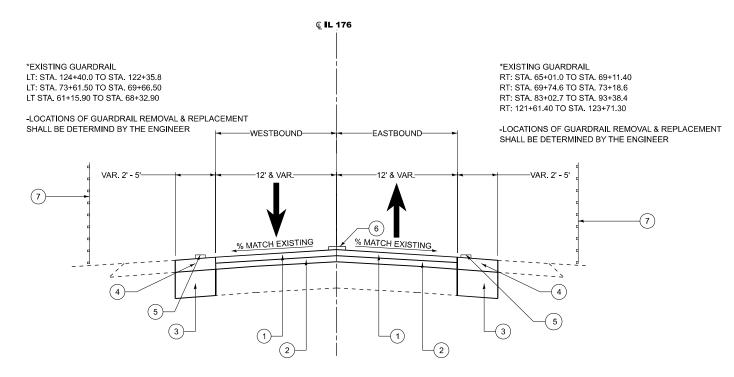
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* SPECIALTY ITEM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:





PROPOSED TYPICAL SECTION

STA. 25+27 TO STA. 85+35 STA. 104+93 TO STA. 164+84 EX STRUCTURE AND BRIDGE OMISSION STA. 68+87.70 TO STA. 69+99.40

EXISTING LEGEND

A PCC PAVEMENT, 9"

B HMA SURFACE COURSE, ± 5 1/4"

C - PCC BASE COURSE WIDENING, ± 9"

(D)— AGGREGATE SHOULDER

E HMA SURFACE REMOVAL, 3 3/4"

(F)— EARTH EXCAVATION, 24" (AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER)

G — EXISTING GUARDRAIL / GUARDRAIL REMOVAL

PROPOSED LEGEND

1)— HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 3/4"

(2)— HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, 2"

(3)— AGGREGATE SUBGRADE IMPROVEMENT, 12"

4 — HOT-MIX ASPHALT SHOULDERS, 10"

(5)— SHOULDER RUMBLE STRIPS, 8 INCH (SHALL BE PLACED ALONG NEW SHOULDER CONSTRUCTION)

6 — CENTER LINE - RUMBLE STRIPS - 16" (SHALL BE PLACED ALONG NEW SHOULDER CONSTRUCTION)

(7)— STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FT POSTS

NOTES

1. SAWOUT THE EXISTING HMA SHOULDER 1' FROM THE OUTSIDE EDGE FOR A CLEAN LINE FOR THE HMA SHOULDER WIDENING. WHERE THE EXISTING HMA SHOULDER IS 1' OR LESS, SAWOUT ON THE 12' LANE.

AIR VOIDS QUALITY MANAGEMI									
	MIX DESIGN	@ NDES	PROGRAM (QMP)						
OT-MIX ASPHALT SHOULDERS,	10"	-							
	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 3/4"	4% @ 70 GYR.	QC/QA						
	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 8 1/4"	4% @ 70 GYR.	QC/QA						
DESIGNED OVERLAY									
	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 3/4"	4% @ 70 GYR.	QCP						
	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, 2"	4% @ 70 GYR.	QCP						
EMPORARY RAMP (SPECIAL)									
	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	4% @ 70 GYR.	QC/QA						
PATCHING									
	CLASS D PATCH (HMA BINDER IL-19.0)	4% @ 70 GYR.	QC/QA						

MIXTURE REQUIREMENTS NOTES:

NOTE 1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

NOTE 2. THE CONTRACTOR SHALL MILL FIRST THEN PATCH.

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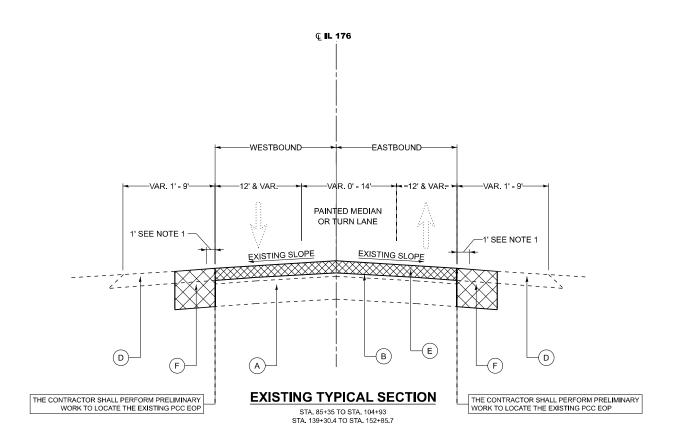
NOTE 3. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON POLYMERIZED HMA THE THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

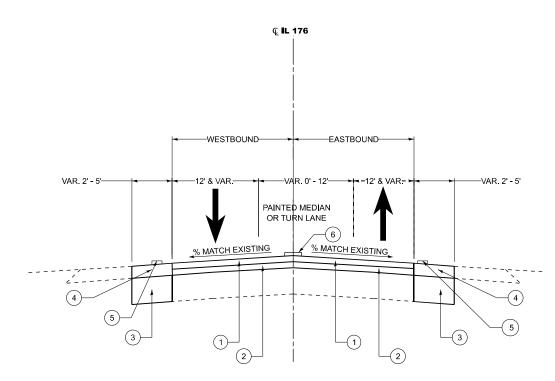
NOTE 4. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE HMA BINDER COURSE, IL-9.5 N70.

SHEET 1

USER NAME = jammal.alramahi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/20/2025	DATE -	REVISED -

F.A.P. ROUTE 335 (IL 176)				F.A.P RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.		
TYPICAL SECTIONS			335	FAP 0335 23 SMAF	RT2	MCHENRY	25	8			
I I FIGAL SECTIONS							CONTRACT	NO. 62	√57		
OF	2	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		





PROPOSED TYPICAL SECTION

STA. 139+30.4 TO STA. 152+85.7

EXISTING LEGEND

A PCC PAVEMENT, 9"

B HMA SURFACE COURSE, ± 5 1/4"

C PCC BASE COURSE WIDENING, ± 9"

(D)— AGGREGATE SHOULDER

E HMA SURFACE REMOVAL, 3 3/4"

F EARTH EXCAVATION, 24" (AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER)

G EXISTING GUARDRAIL / GUARDRAIL REMOVAL

PROPOSED LEGEND

(1)— HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 3/4"

2 HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, 2"

(3)— AGGREGATE SUBGRADE IMPROVEMENT, 12"

4 HOT-MIX ASPHALT SHOULDERS, 10"

(5)— SHOULDER RUMBLE STRIPS, 8 INCH (SHALL BE PLACED ALONG NEW SHOULDER CONSTRUCTION)

6 — CENTER LINE - RUMBLE STRIPS - 16" (SHALL BE PLACED ALONG NEW SHOULDER CONSTRUCTION)

NOTES:

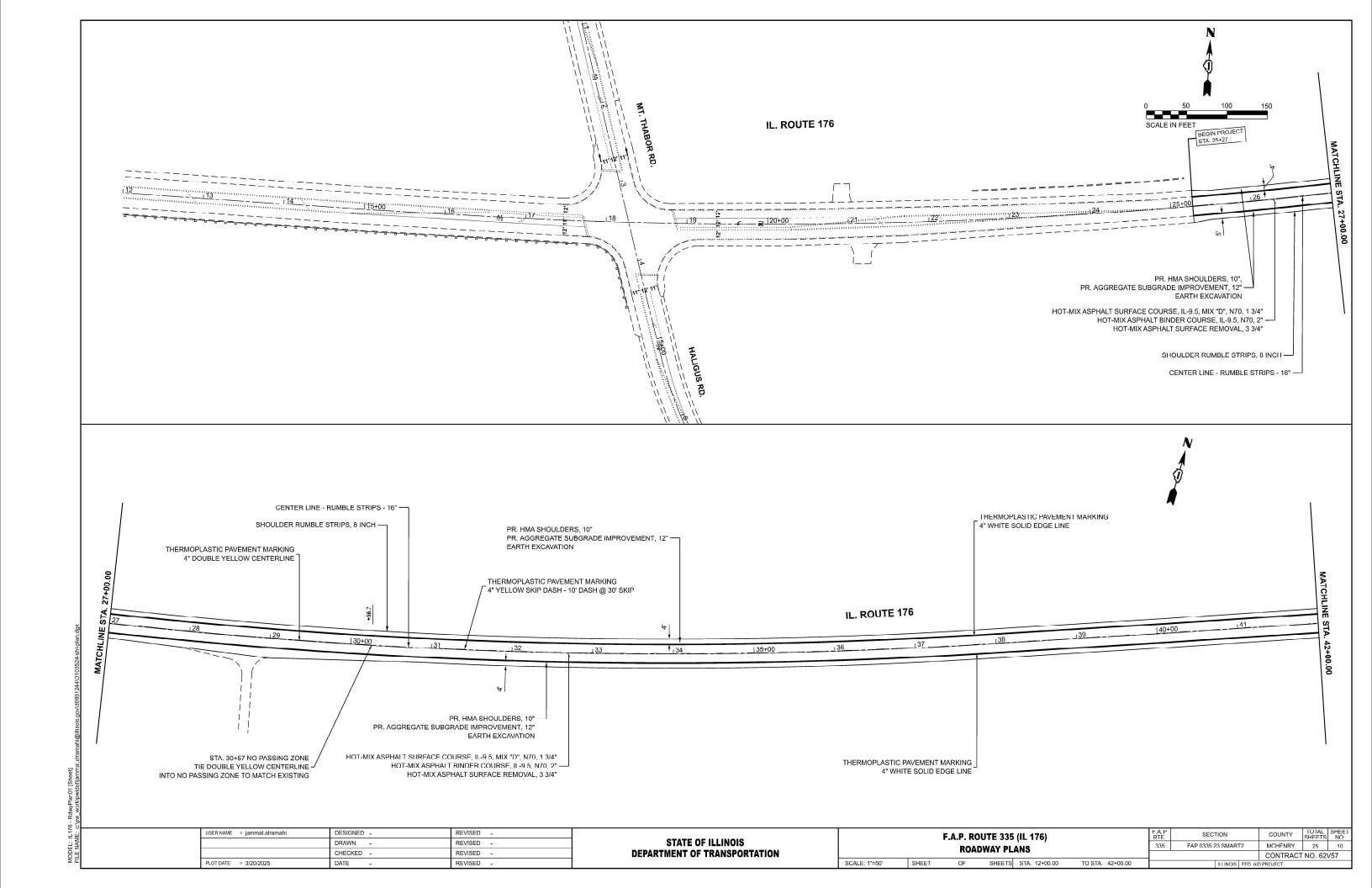
1. SAWCUT THE EXISTING HMA SHOULDER 1' FROM THE OUTSIDE EDGE FOR A CLEAN LINE FOR THE HMA SHOULDER WIDENING. WHERE THE EXISTING HMA SHOULDER IS 1' OR LESS, SAWCUT ON THE 12' LANE.

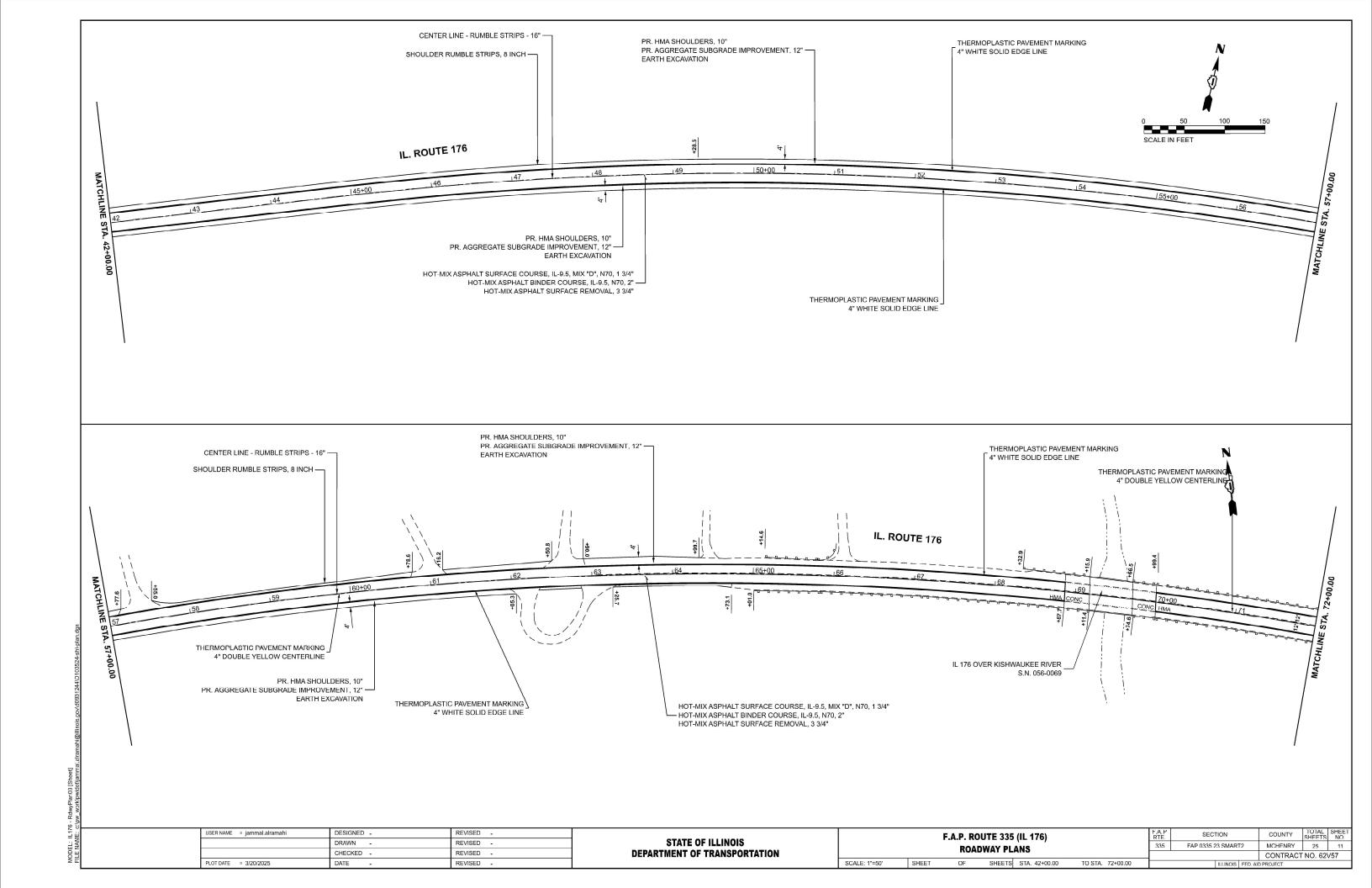
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	STA. 85+35 T	O STA. 104+93	

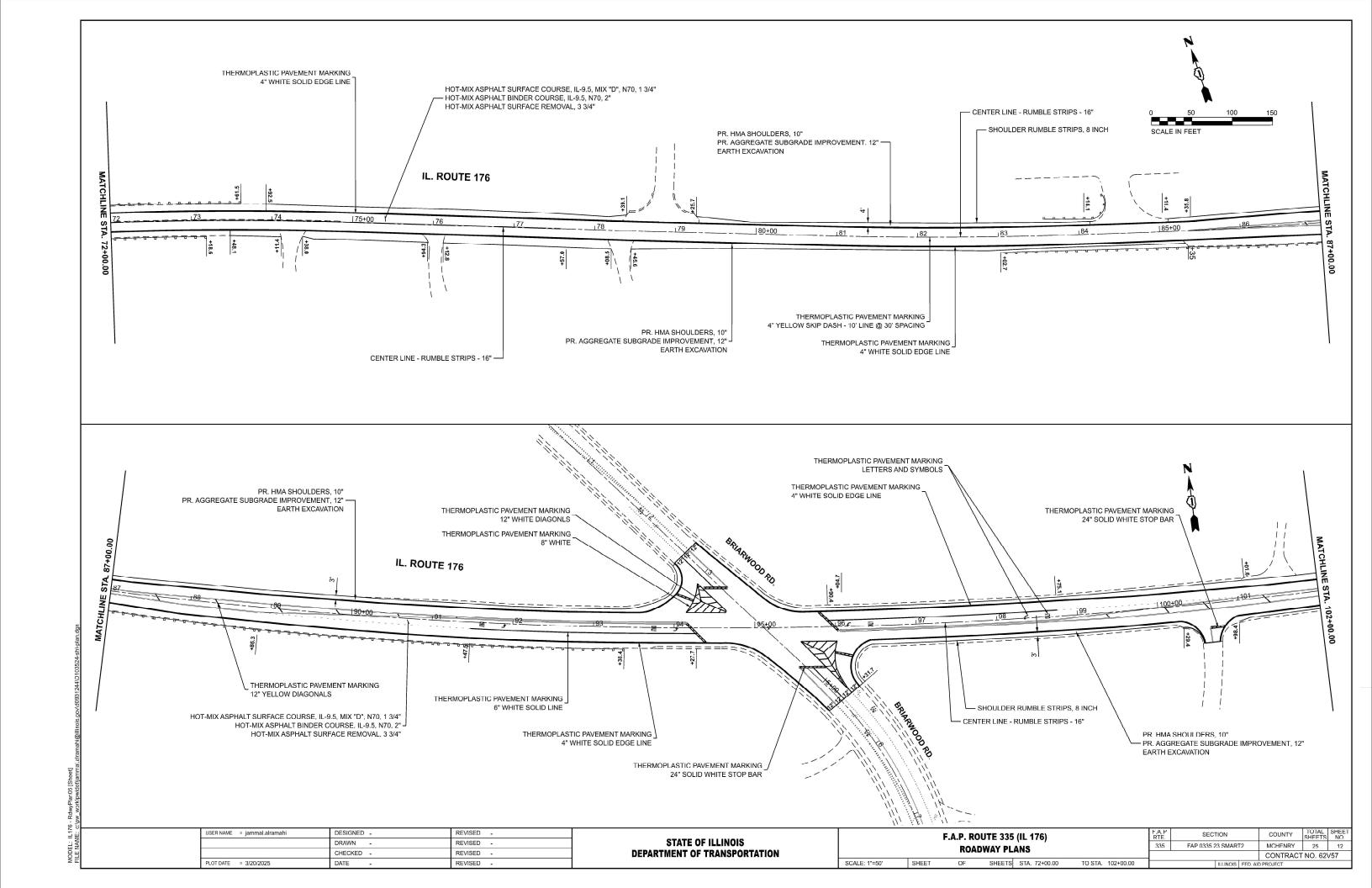
USER NAME = jammal.alramahi	DESIGNED -	REVISED -
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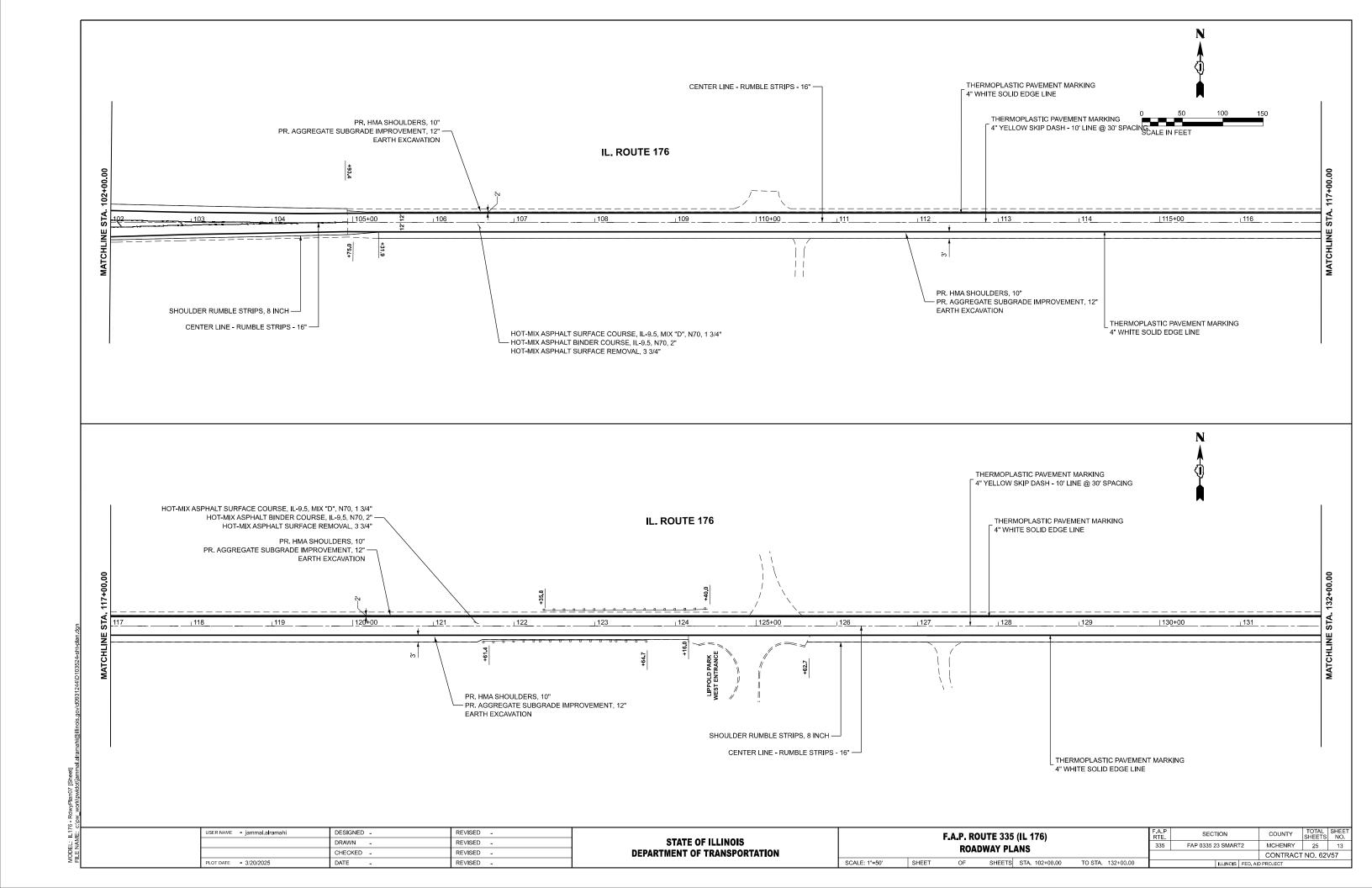
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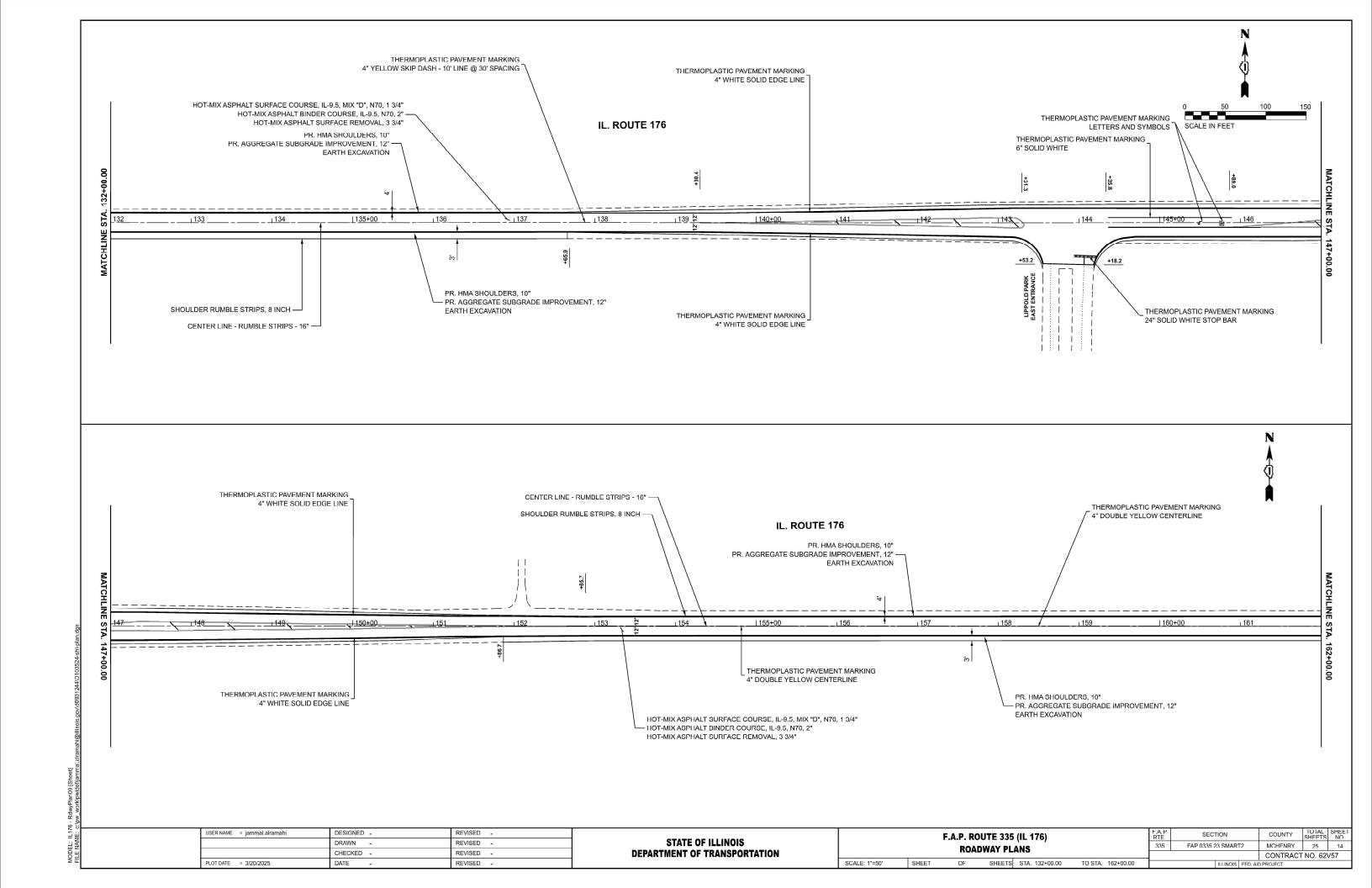
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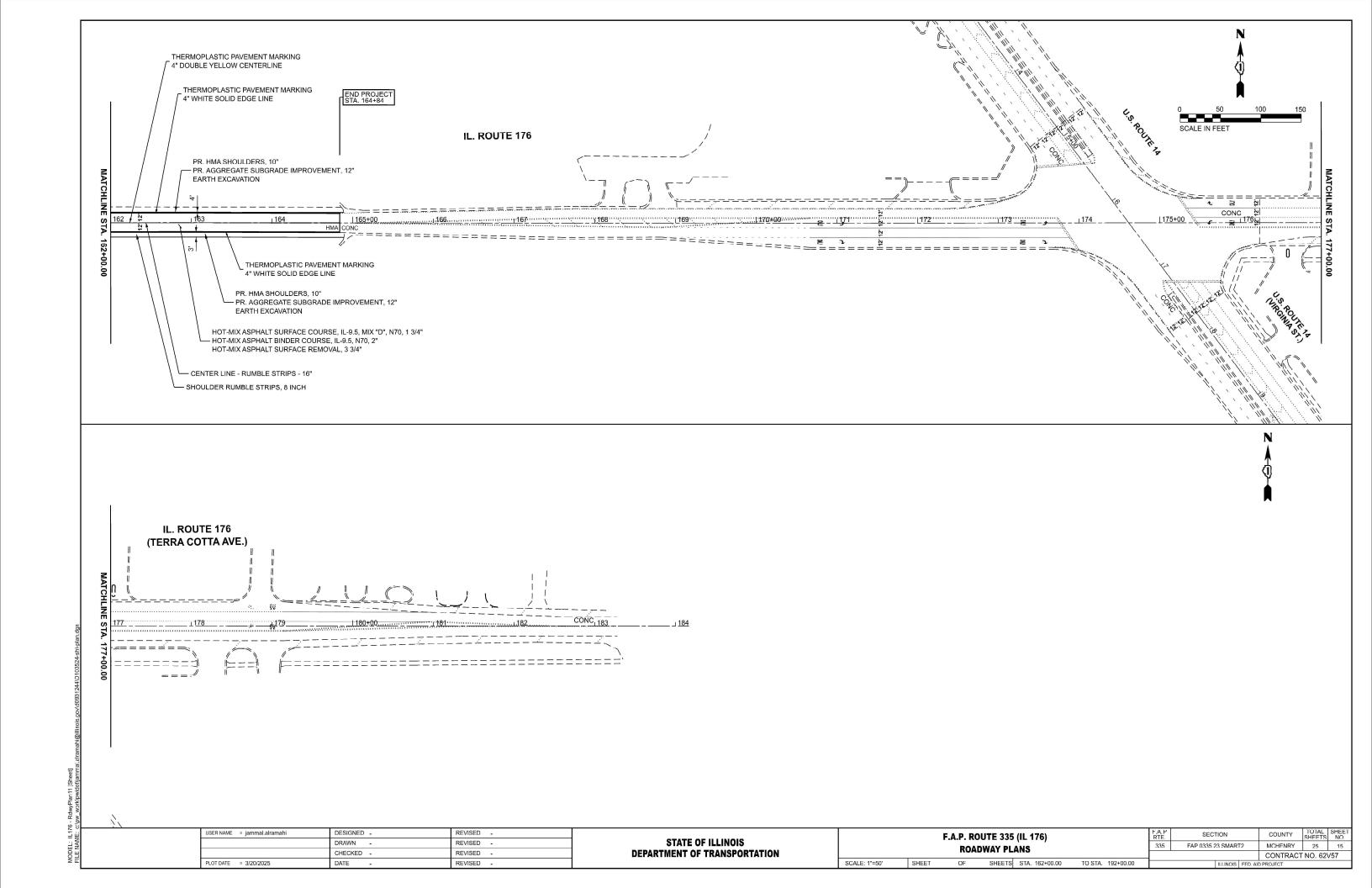


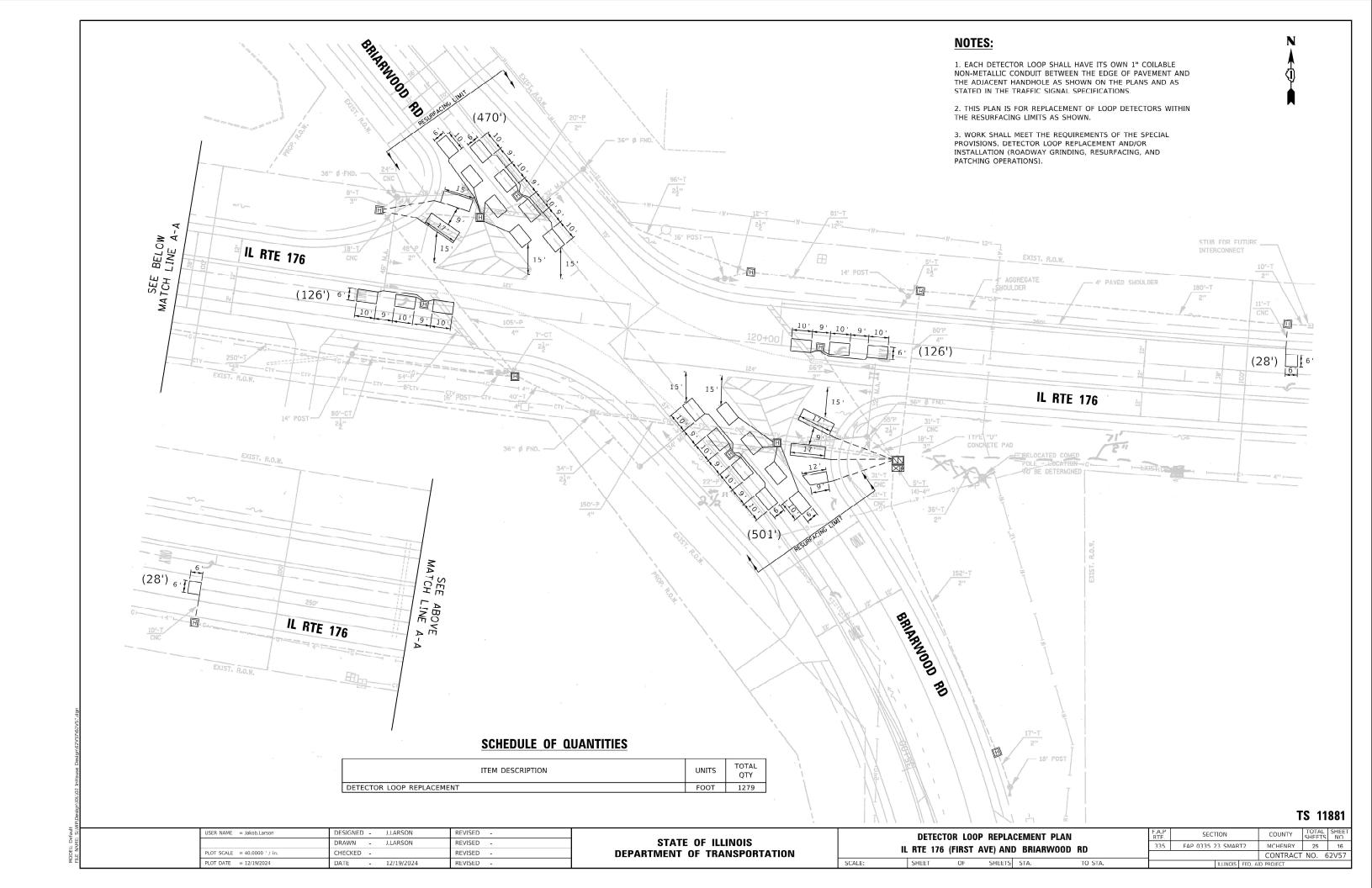










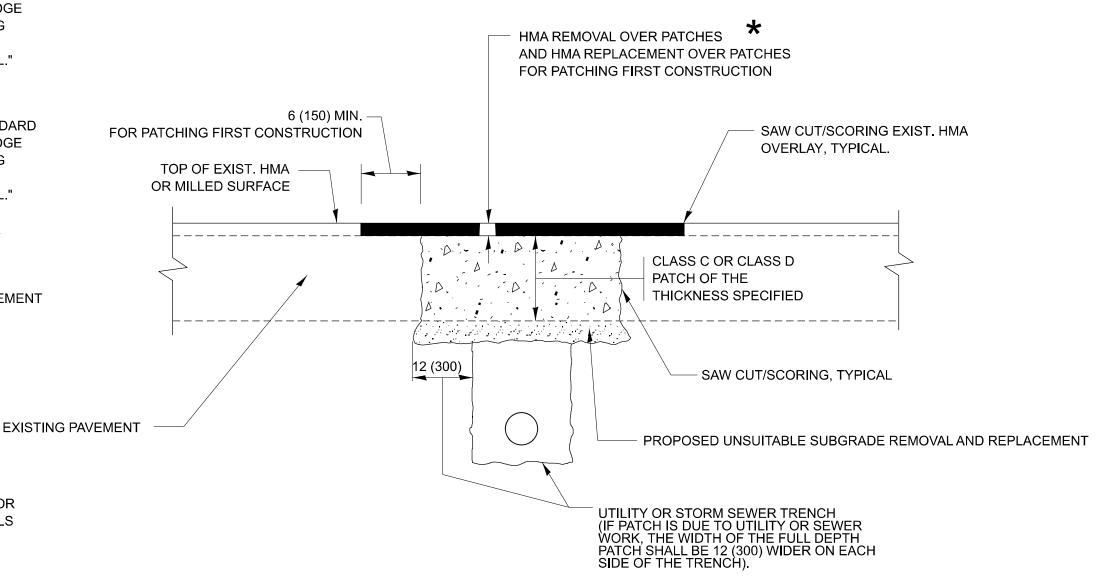


METHOD OF MEASUREMENT

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."
- 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.

SEE TYPICAL SECTIONS FOR

THICKNESS AND MATERIALS

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

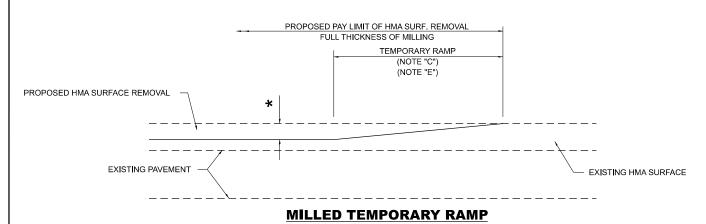
SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 4 ½ 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.

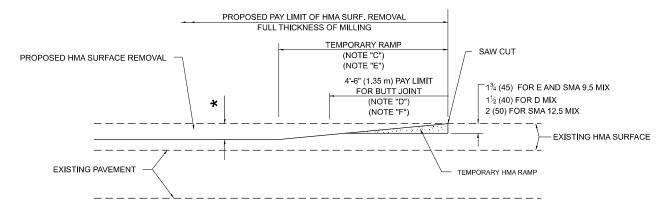
USER NAME	USER NAME = jammal.alramahi	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07			PAVEMENT PATCHING FOR	F.A.P RTF	SECTION	COUNTY	TOTAL	SHEET NO.
		DRAWN -	REVISED - R. BORO 09-04-07	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT			FAP 0335 23 SMART2	MCHENRY	25	17
		CHECKED -	REVISED - K. ENG 10-27-08					BD400-04 (BD-22)	CONTRACT NO. 62V57		/57
	PLOT DATE = 3/20/2025	DATE - 10-25-94	REVISED - K. SMITH 11-18-22		SCALE: NONE	SHEET A001 OF 9 SHEETS STA. TO STA.		ILLINOIS FED. AIL	O PROJECT		

MODEL: BD-22



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

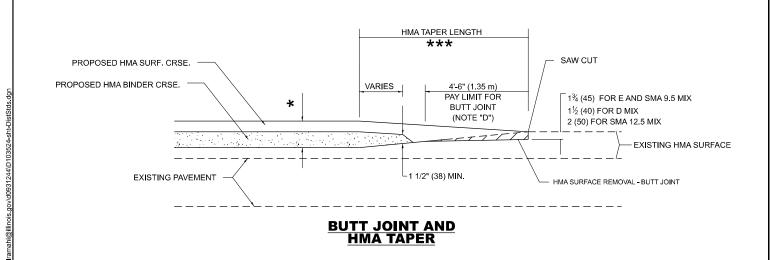
OPTION 1



HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2 TYPICAL TEMPORARY RAMP

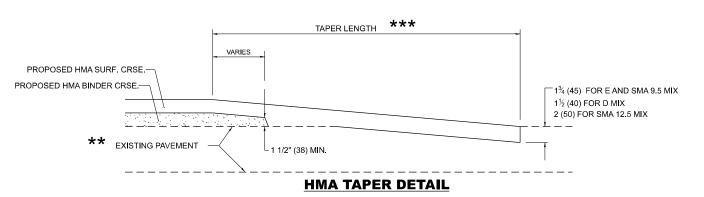


TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

PROPOSED HMA OR PCC
SURFACE REMOVAL - BUTT JOINT
30'-0" (9.0 m) (NOTE "A")
15'-0" (4.5 m) (NOTE "B")
(NOTE "D")
40'-0" (12.0M) (NOTE "A1")

** EXISTING PAVEMENT

BUTT JOINT 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".

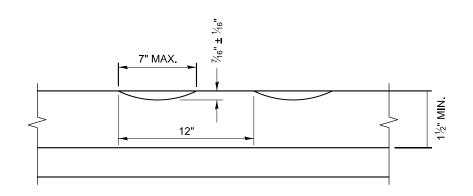
20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT

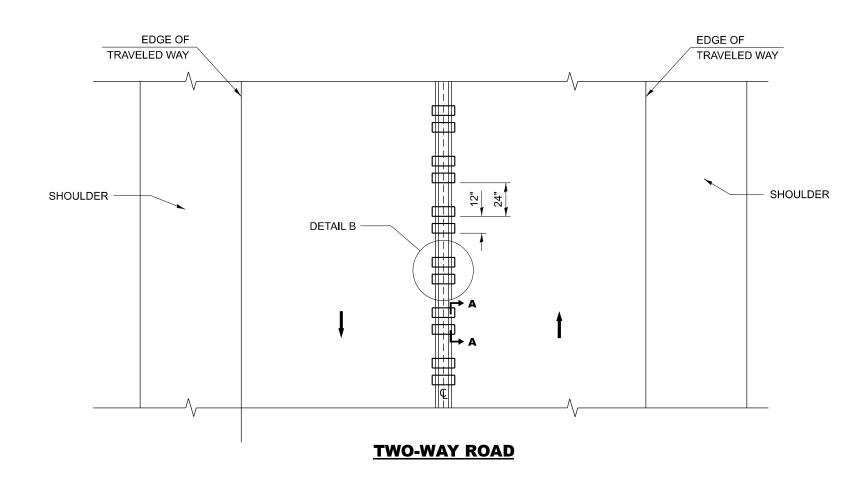
- THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE
 PER SQUARE YARD (SQUARE METER)
 FOR "HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT" OR
 FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL BUTT JOINT"
- 2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT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

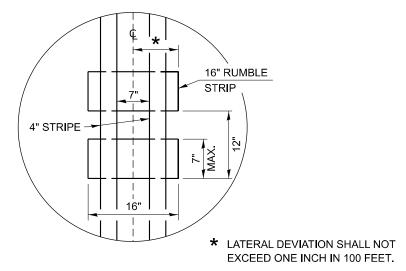
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = jammal.alramahi DESIGNED - M. DE YONG **BUTT JOINT AND** STATE OF ILLINOIS REVISED -DRAWN M. GOMEZ 04-06-01 FAP 0335 23 SMART2 MCHENRY 25 **HMA TAPER DETAILS** CHECKED -**DEPARTMENT OF TRANSPORTATION** BD400-05 BD-32 CONTRACT NO. 62V57 SHEET A002 OF 9 SHEETS STA. TO STA. PLOT DATE = 3/20/2025 DATE REVISED - K. SMITH 11-18-22



SECTION A-A





DETAIL B

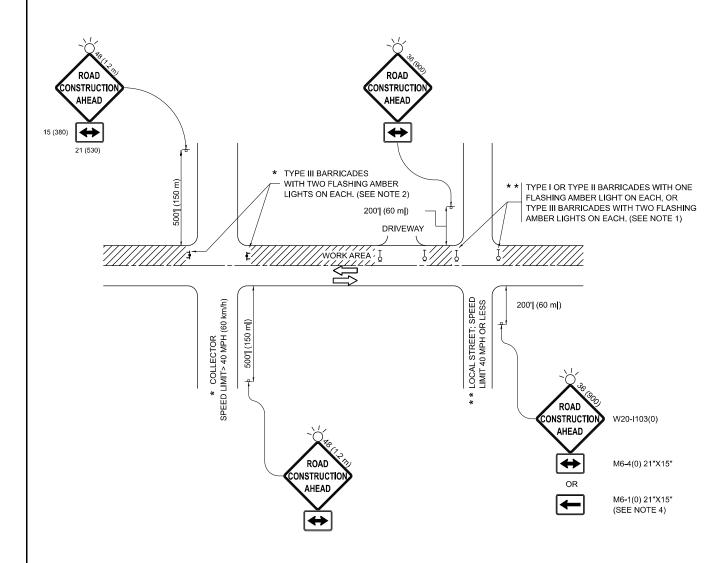
GENERAL NOTES

- 1. CENTERLINE RUMBLE STRIPS SHALL BE CONSTRUCTED ACCORDING TO SECTION 642 ALONG THE CENTERLINE OF PAVEMENT.
- 2. SEE STANDARD 780001 FOR OTHER STRIPING LAYOUTS.
- 3. RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.
- 4. ALL RUMBLE STRIPS SHALL BE MILLED.
- 5. CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.
- 6. DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES, INCLUDING ANY LANE TAPER SECTIONS.
- 7. AFTER RUMBLE STRIPS ARE INSTALLED, THE PAVEMENT SURFACE SHALL BE SWEPT CLEAN PRIOR TO THE PLACEMENT OF THE NEW PAVEMENT MARKINGS.
- 8. WHERE USED, ADJUST SPACING OF RAISED REFLECTIVE PAVEMENT MARKERS TO FALL IN WIDER GAP BETWEEN RUMBLE STRIPS.

BASIS OF PAYMENT

- 1. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR CENTERLINE-RUMBLE STRIP OF THE WIDTH SPECIFIED.
- 2. HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING WILL BE USED OVER THE RUMBLE STRIPS, AND WILL BE PAID FOR SEPARATELY.

USER NAME = jammal.alramahi	DESIGNED	-	R. BORO	REVISED	-	K. SMITH 11-18-22
	DRAWN	-		REVISED	-	
	CHECKED	-		REVISED	-	
PLOT DATE = 3/20/2025	DATE	-	08-06-2012	REVISED	-	



NOTES:

- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- 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)
- 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).

SCALE:

- 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.

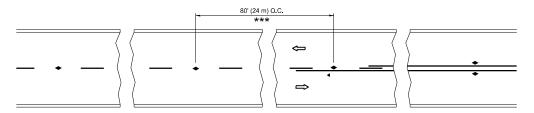
All dimensions are in inches (millimeters) unless otherwise shown.

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHEET A004 OF 9 SHEETS STA.

SECTION COUNTY 335 FAP 0335 23 SMART2 MCHENRY 25 20 TC-10 CONTRACT NO. 62V57

USER NAME = jammal.alramahi	DESIGNED - L.H.A.	REVISED - T. RAMMACHER 01-06-00
	DRAWN -	REVISED - A. SCHUETZE 07-01-13
	CHECKED -	REVISED - A. SCHUETZE 09-15-06
PLOT DATE = 3/20/2025	DATE 06-89	DEVISED D. SENDERAK 05-03-24

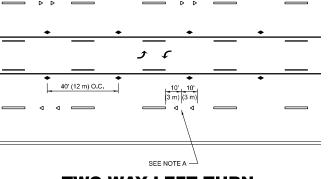


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

3 @ 40' (12 m) O.C. \Rightarrow

LANE REDUCTION TRANSITION

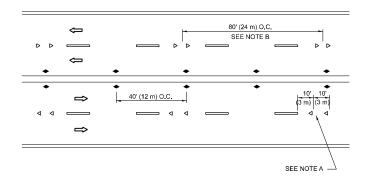
SEE FIGURE 3B-14 MUTCD

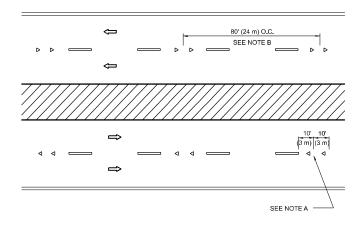


SEE NOTE B

TWO-WAY LEFT TURN

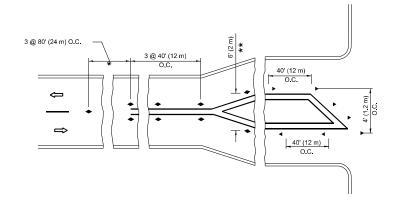
TWO-LANE/TWO-WAY

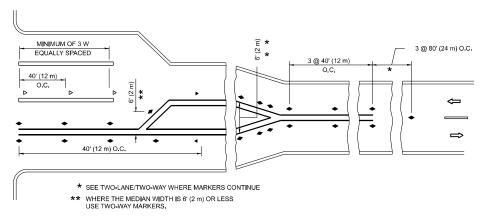




MULTI-LANE/UNDIVIDED

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

YELLOW 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
- 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.

DRAWN REVISED - T. RAMMACHER 01-06-00 CHECKED . PLOT DATE = 3/20/2025 REVISED - C. JUCIUS 07-01-13 DATE

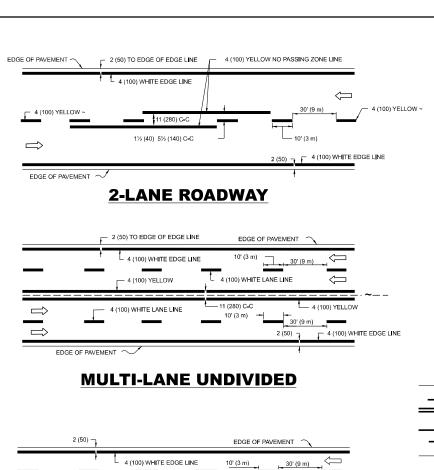
STATE OF ILLINOIS

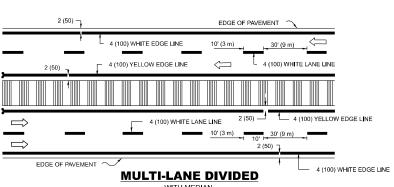
TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHEET A1005 OF 9 SHEETS STA.

SECTION COUNTY FAP 0335 23 SMART2 MCHENRY 25 21 TC-11 CONTRACT NO. 62V57

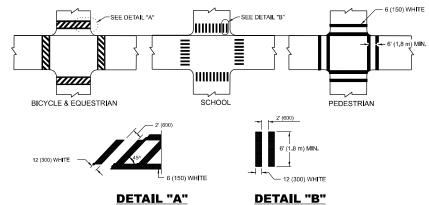
JSER NAME = jammal.alramahi DESIGNED -REVISED - T. RAMMACHER 03-12-99

DEPARTMENT OF TRANSPORTATION





TYPICAL LANE AND EDGE LINE MARKING

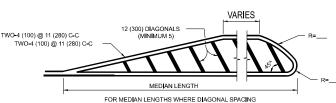


TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

TWO-4 (100) YELLOW @ 11 (280) C-C 4' (1.2 m) OUTSIDE TO NO DIAGONALS TWO-4 (100) YELLOW @ 11 (280) C-C

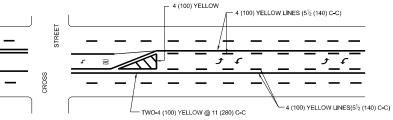
4' (1.2 m) WIDE MEDIANS ONLY



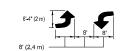
CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

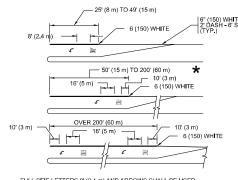
MEDIANS OVER 4' (1.2 m) WIDE



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



MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING



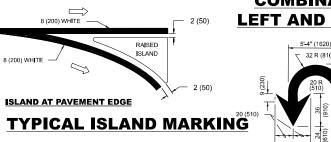
 $\begin{tabular}{ll} FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \\ & AREA = 15.6 SQ. FT. (1.5 m ^2) \\ \hline \end{tabular} AREA = 20.8 SQ. FT. (1.9 m ^2) \\ \end{tabular}$

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

@ 10' (3 m) OR LESS SPACING ISLAND OFFSET FROM PAVEMENT EDGE



COMBINATION **LEFT AND U-TURN** 32 R (810)

> LANE REDUCTION **TRANSITION**

U-TURN

 \bigstar LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR

SPEED LIMIT

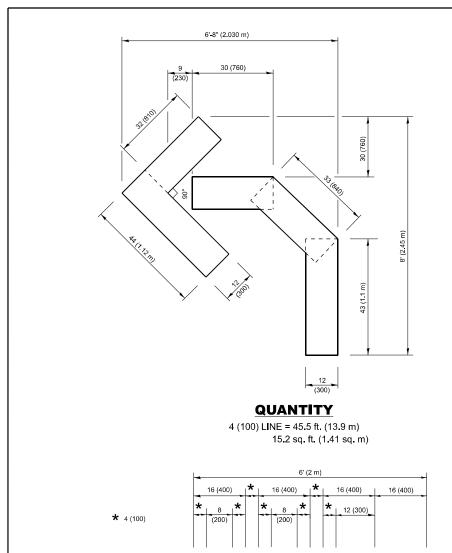
	GREATER OR WHEN SPECIFIED IN PLANS.									
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS						
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE						
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C						
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) G-C OMIT SKIP-DASH CENTERLINE BETWEEN						
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE						
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE						
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW						
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL						
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL						
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.						
STOP LINES	24 (600)	SOLID	WHITE	PILACE 4" (1.2 m) N ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE						
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.						
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))						
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: **R*=3.6 SQ, FT. (0.33 m ²) EACH **E\$4.0 SQ, FT. (6.0 m ²)						
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS \geq 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))						
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF						
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF						

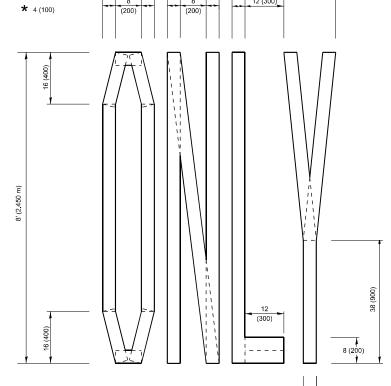
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

JSER NAME = jammal.alramahi DESIGNED - EVERS REVISED - C. JUCIUS 09-09-09 REVISED -DRAWN C. JUCIUS 07-01-13 CHECKED -PLOT DATE = 3/20/2025 DATE

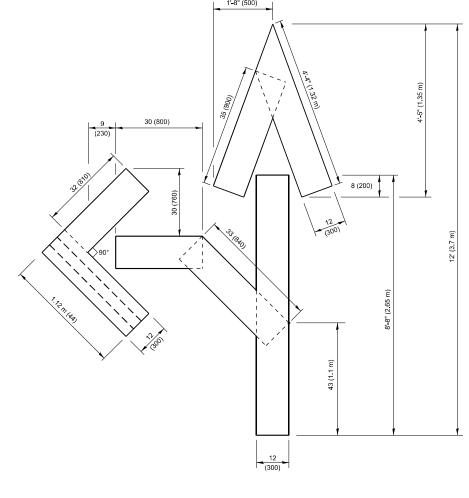
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SECTION DISTRICT ONE FAP 0335 23 SMART2 MCHENRY 25 22 TYPICAL PAVEMENT MARKINGS CONTRACT NO. 62V57 SHEET A006 OF 9 SHEETS STA.





QUANTITY4 (100) LINE = 64.1 ft. (19.5 m)

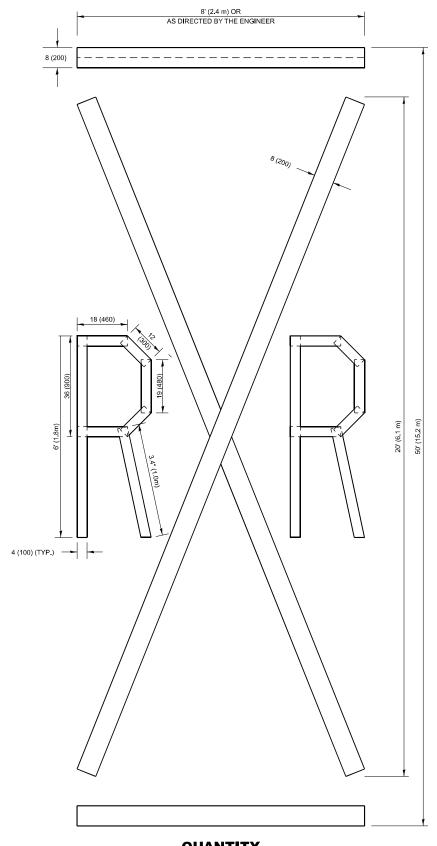


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m) 27.5 sq. ft. (2.53 sq. m)

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.



QUANTITY

4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

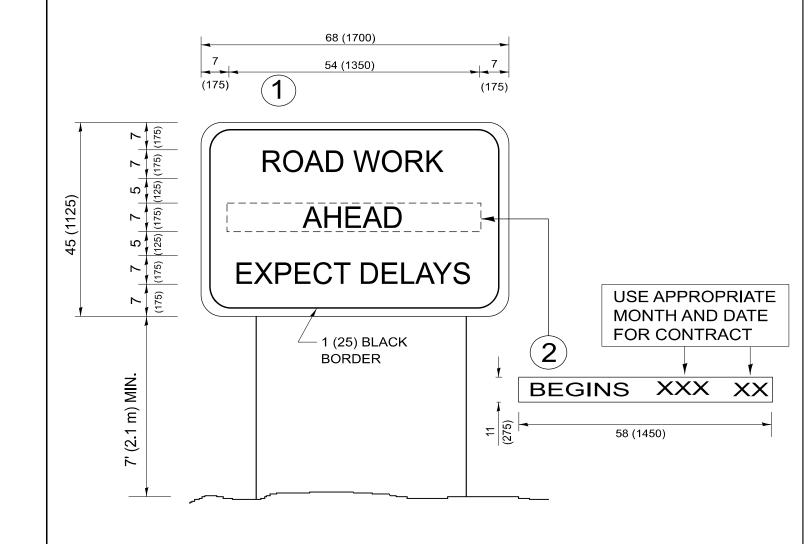
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = jammal.alramahi	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
	DRAWN -	REVISED - E. GOMEZ 08-28-00
	CHECKED -	REVISED - E. GOMEZ 08-28-00
PLOT DATE = 3/20/2025	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

21.4 sq. ft. (1.99 sq. m)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	SHORT TE	RM PAVEN	IEN'	T MA	RKING	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
ı									FAP 0335 23 SMART2	MCHENRY	25	23
I							TC-16	CONTRACT	NO. 62\	/57		
I	SCALE: NONE	SHEET A007	OF	9	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		



NOTES:

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

SCALE: NONE

7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

USER NAME = jammal.alramahi	DESIGNED -	REVISED	-	R. MIRS 09-15-97
	DRAWN -	REVISED	-	R. MIRS 12-11-97
	CHECKED -	REVISED	- T. F	RAMMACHER 02-02-9
PLOT DATE = 3/20/2025	DATE -	REVISED	-	C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	ART	ERIAL RO	DAD		F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	INFO	RMATION	SIGN		335	FAP 0335 23 SMART2	MCHENRY	25	24
	1141 01	MAIION	JIOI		TC-22 CONTRACT NO. 62				/57
SHEET A008	OF 9	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER (1.5 m) (1.8 m) (1.5 m) I 1" (25 mm) UNIT

DUCT-TRENCHED TO E/P **

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)

CROSS STREET-NON VOLUME DENSITY ("FAR OUT" DETECTION)

10' (3.0m) OR CLOSER

DEPENDING ON DRIVE-WAY LOCATION.

CALLING LOOPS

DETAIL 1

[TYP.-12' (3.6m) LANES]

ARTERIAL

DO NOT INSTALL

CALLING LOOP IN

RIGHT TURN LANE

* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

* = (1.8m)

CROSS STREET

PAVEMENT. 1" (25 mm) UNIT

JSER NAME = jammal.alramahi

PLOT DATE = 3/20/2025

STRAIGHT SAW

CUTS TO HEAVY-

DUTY HANDHOLE

IN PAVEMENT

(TYP.)

DUCT IS RUN BETWEEN

LOOPS ARE SAW-CUT

EDGE OF PAVEMENT

TO THE EDGE OF

AND HANDHOLE.

(TYP FOR LOOPS

THAT TERMINATE

IN HANDHOLES

* * = (1.5m)

(3.0 m)

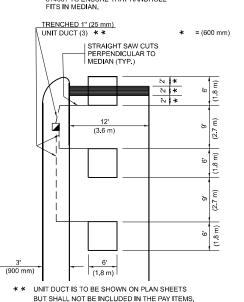
* = (600 mm)

LEFT TURN LANES WITH MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE



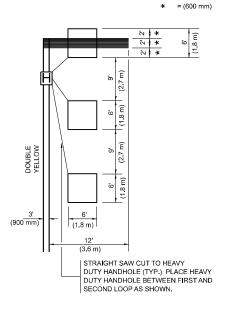
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



3'(900mm)

|1" (25 mm

(TYP.)

12' **★**

DRIVEWAY

IF "FAR OUT" LOOPS

LANE OR LEFT TURN LANE TAPER.

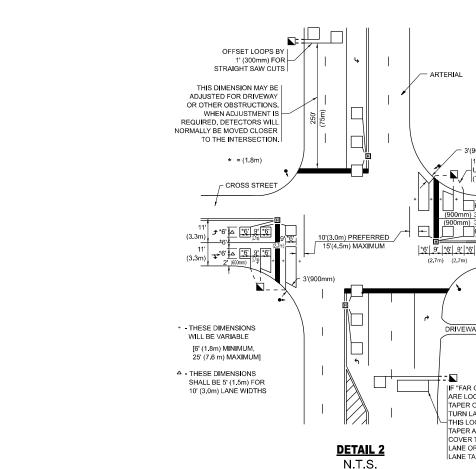
SCALE: NONE

ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER TAPER AREA. DO NOT COVER THE LEFT TURN

UNIT DUC

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED,
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY, THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

TO STA.

FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER

N.T.S. DESIGNED -REVISED DRAWN REVISED

TYP.-ALL LEGS-VOLUME FAR OUT" DETECTION)

OFF SET LOOPS BY

STRAIGHT SAW CUTS.

1' (300mm) FOR

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

		ILLINOIS	O PROJECT				
	TS-07		CONTRACT NO. 62V57				
335	FAP 0335 2	23 SMAR	MCHENRY	25			
RTE.	SEC ⁻	TION		COUNTY	SHEETS	NO.	

HECKED -R.K.F REVISED REVISED DATE