

09-20-2024 LETTING ITEM 040

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	119-45/RS-6	CUMBERLAND	8	1
		ILLINOIS	CONTRACT NO. 74B52	

D-97-073-22

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT (2023) = 26,000
% TRUCKS = 60.7%

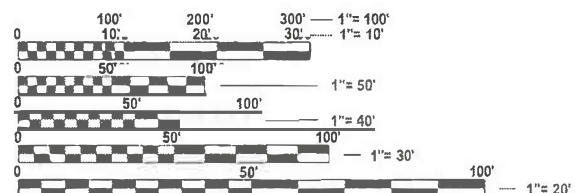
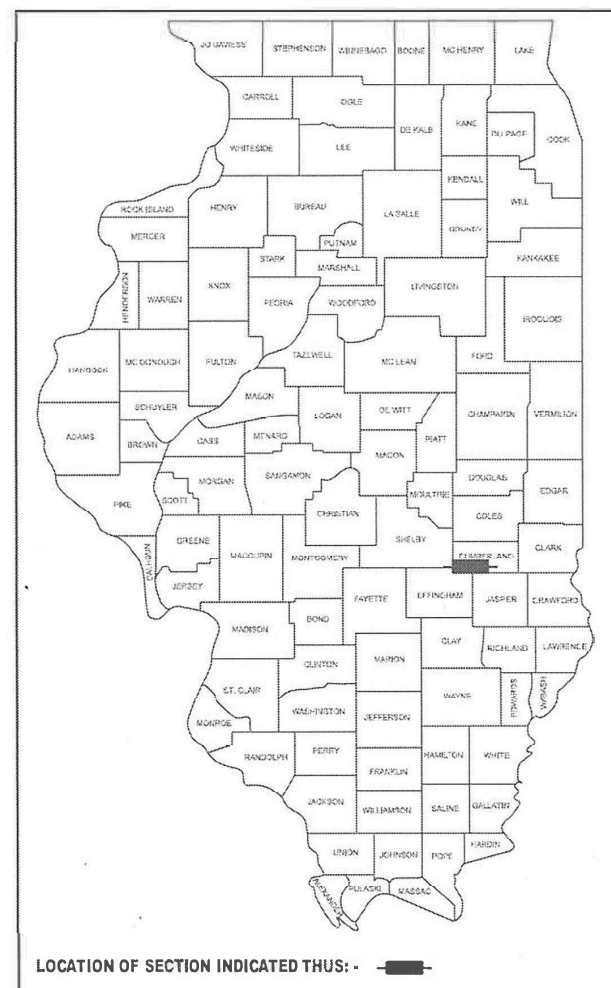
STATION EQUATION
STA. 2773+54.89 BK = STA. 10+00.05 AH

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAI ROUTE 70 (I 70)
SECTION (18-45)RS-6
PROJECT NHPP-1UW7(047)
SMART OVERLAY
CUMBERLAND COUNTY

C-97-123-22

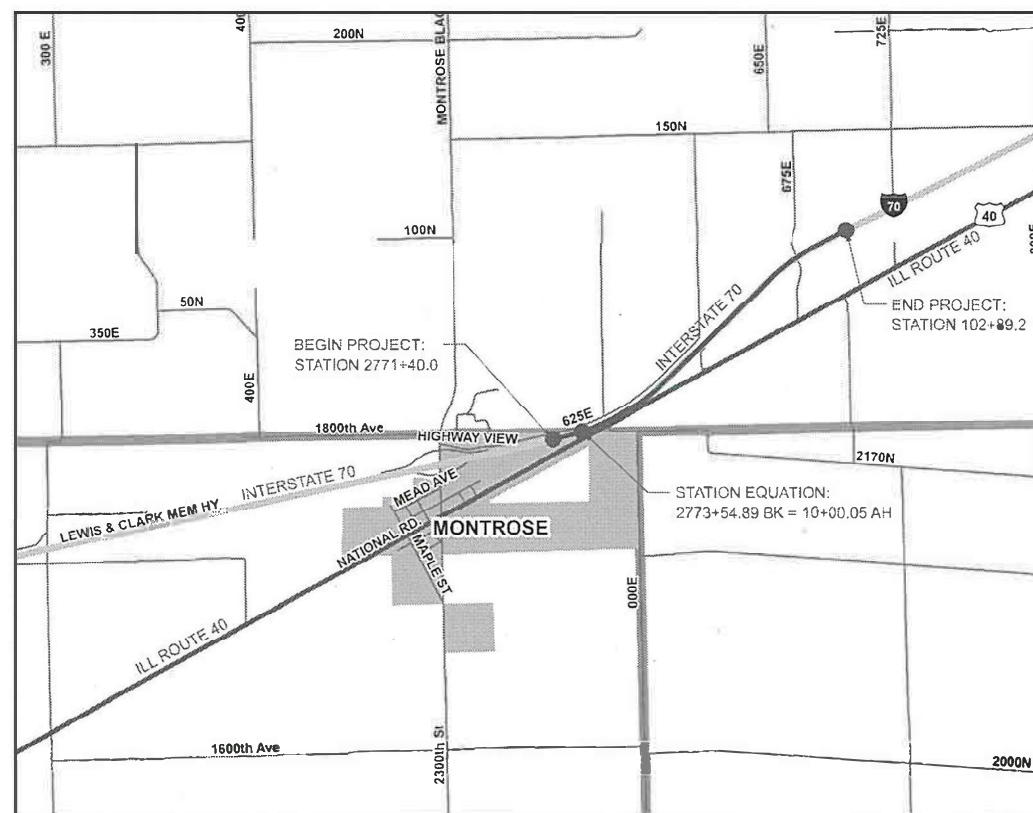


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: JACQUELYN SEALS
PROJECT MANAGER: LEAH HILLE

CONTRACT NO. 74B52



GROSS LENGTH = 9510 FT. = 1.8 MILE
NET LENGTH = 9510 FT. = 1.8 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED JUNE 12 2024
Jeffrey P. Myer
REGIONAL ENGINEER

August 16, 2024
Scott A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT

August 16, 2024
James J. [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 13

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OF THE STATE OF ILLINOIS

GENERAL NOTES

WHEN APPLYING SHORT TERM PAVEMENT MARKINGS, TEMPORARY TAPE SHALL BE USED ON THE SURFACE AND PAINT SHALL BE USED ON THE MILLED SURFACE.

A UNIFORMLY STRAIGHT SAW CUT SHALL BE MADE AT LOCATIONS WHERE PROPOSED NEW CONSTRUCTION WILL ABUT EXISTING HOT-MIX ASPHALT SURFACES. THE SAW CUT SHALL BE MADE THE SAME DEPTH AS THE HOT-MIX ASPHALT SURFACE REMOVAL. THIS WORK WILL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT ITEMS INVOLVED AND NO EXTRA COMPENSATION WILL BE ALLOWED.

INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	INDEX OF SHEETS, LIST OF STANDARDS, AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5	TYPICAL SECTIONS
6	SCHEDULE OF QUANTITIES
7-8	DISTRICT 7 DETAILS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 8:

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-10	PAVEMENT JOINTS
442201-03	CLASS A PATCHES
642001-03	SHOULDER RUMBLE STRIPS, 16 IN.
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701400-12	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-13	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS ≥ 45 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701901-09	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

APPLICATION RATES

THE FOLLOWING APPLICATION RATES WERE USED IN CALCULATING PLAN QUANTITIES AND HAVE BEEN INCLUDED FOR REFERENCE:

BITUMINOUS MATERIALS (TACK COAT)	0.05 LB/SQ FT (ON MILLED SURFACES)
AGGREGATE SURFACE COURSE AND SHOULDER	2.05 TON/CU YD
HMA SURFACE COURSE	112 LB/SY/IN
POLY SMA SURFACE COURSE	130 LB/SY/IN

MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

LOCATION(S)	MIXTURE USE(S)	PG	DESIGN AIR VOIDS	MIXTURE COMPOSITION	FRICTION AGGREGATE	MIXTURE WEIGHT	QUALITY MANAGEMENT PROGRAM	SUBLOT SIZE	MATERIAL TRANSFER DEVICE (REQUIRED?)
MAINLINE	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, IL-12.5, MIX "E", N80	SBS PG 76-22	4.0% @ N=80	IL - 12.5	MIXTURE E	N80	QCP	1000	YES
SHOULDERS	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	PG 64-22	4.0% @ N=90	IL - 9.5	MIXTURE C	N70	QC/QA	3000	N/A

REV - MS

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	CHECKED -	REVISED -
PLOT DATE = 6/7/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
& GENERAL NOTES

SCALE: NO SCALE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	(18-45)RS-6	CUMBERLAND	8	2
CONTRACT NO. 74B52				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES				CONSTR. CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FEDERAL 10% STATE
				ROADWAY 0005
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	19010	19010
40600370	LONGITUDINAL JOINT SEALANT	FOOT	9510	9510
40600990	TEMPORARY RAMP	SQ YD	63	63
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	TON	1900	1900
40605034	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80	TON	3300	3300
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	42250	42250
44200629	CLASS A PATCHES, TYPE I, 15 INCH	SQ YD	4	4
44200630	CLASS A PATCHES, TYPE II, 15 INCH	SQ YD	70	70
44200631	CLASS A PATCHES, TYPE III, 15 INCH	SQ YD	62	62
44200632	CLASS A PATCHES, TYPE IV, 15 INCH	SQ YD	42	42
44200633	CLASS A PATCHES, TYPE I, 17 INCH	SQ YD	6	6
44200637	CLASS A PATCHES, TYPE II, 17 INCH	SQ YD	96	96
44200641	CLASS A PATCHES, TYPE III, 17 INCH	SQ YD	85	85
44200643	CLASS A PATCHES, TYPE IV, 17 INCH	SQ YD	58	58

* SPECIALTY ITEMS

SUMMARY OF QUANTITIES				CONSTR. CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FEDERAL 10% STATE
				ROADWAY 0005
44213000	PATCHING REINFORCEMENT	SQ YD	423	423
44213200	SAW CUTS	FOOT	2180	2180
44213204	TIE BARS 3/4"	EACH	125	125
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	130	130
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	19010	19010
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3
67100100	MOBILIZATION	L SUM	1	1
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1	1
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	14	14
70300100	SHORT TERM PAVEMENT MARKING	FOOT	5150	5150
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1150	1150
70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	21390	21390

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	DRAWN - LMH	REVISED -			70	(18-45)RS-6	CUMBERLAND	8	3	
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PLOT DATE = 6/7/2024	DATE -	REVISED -			SCALE: NO SCALE	SHEET 1	OF 2	SHEETS	STA.	TO STA.

SUMMARY OF QUANTITIES				CONSTR. CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FEDERAL
				10% STATE ROADWAY
			0005	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	19010	19010
* 78004230	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 6"	FOOT	2380	2380
* 78011035	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	19010	19010
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	240	240
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	240	240
Z0034105	MATERIAL TRANSFER DEVICE	TON	3300	3300

SUMMARY OF QUANTITIES				CONSTR. CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	90% FEDERAL
				10% STATE ROADWAY
			0005	

* SPECIALTY ITEMS

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

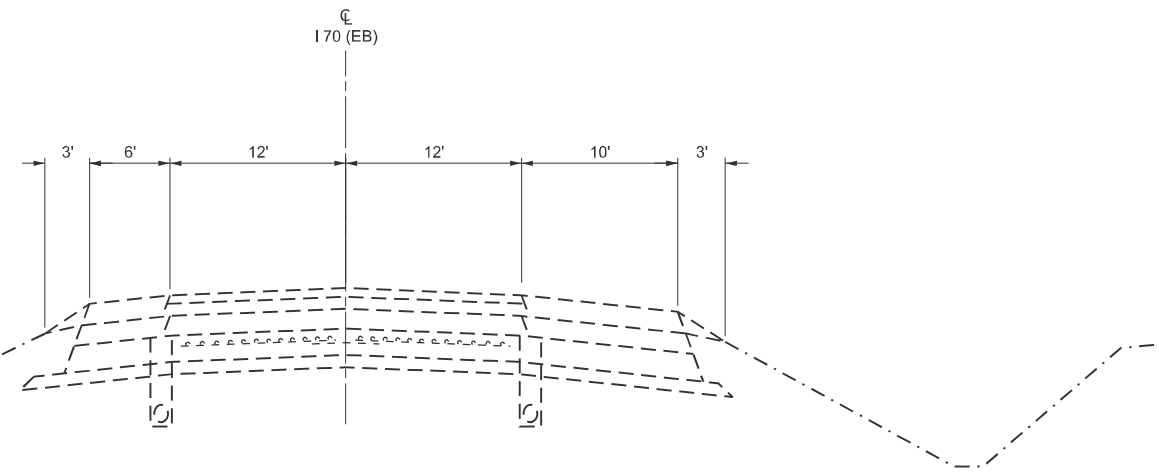
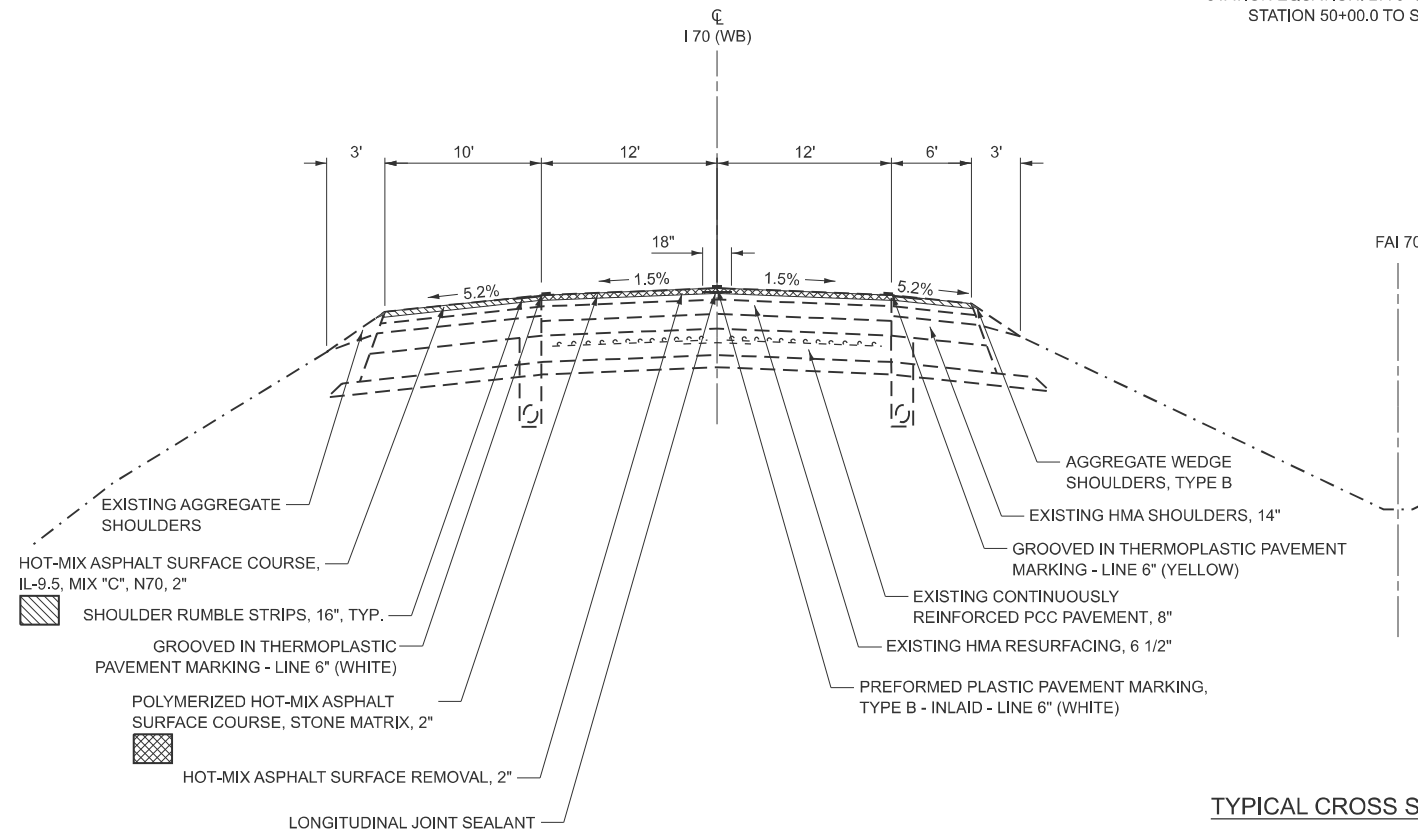
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SUMMARY OF
 QUANTITIES

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	(18-45)RS-6	CUMBERLAND	8	4
CONTRACT NO. 74B52				
ILLINOIS FED. AID PROJECT				

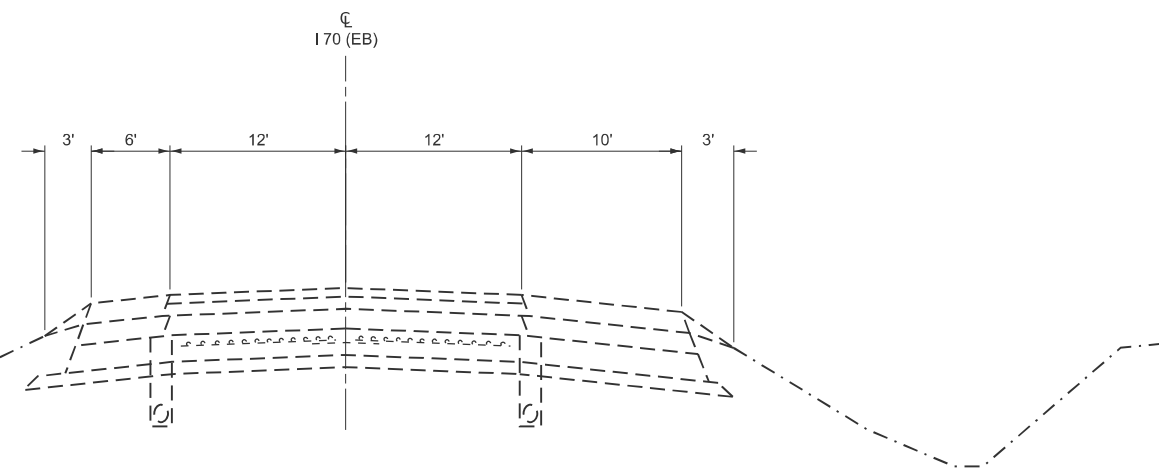
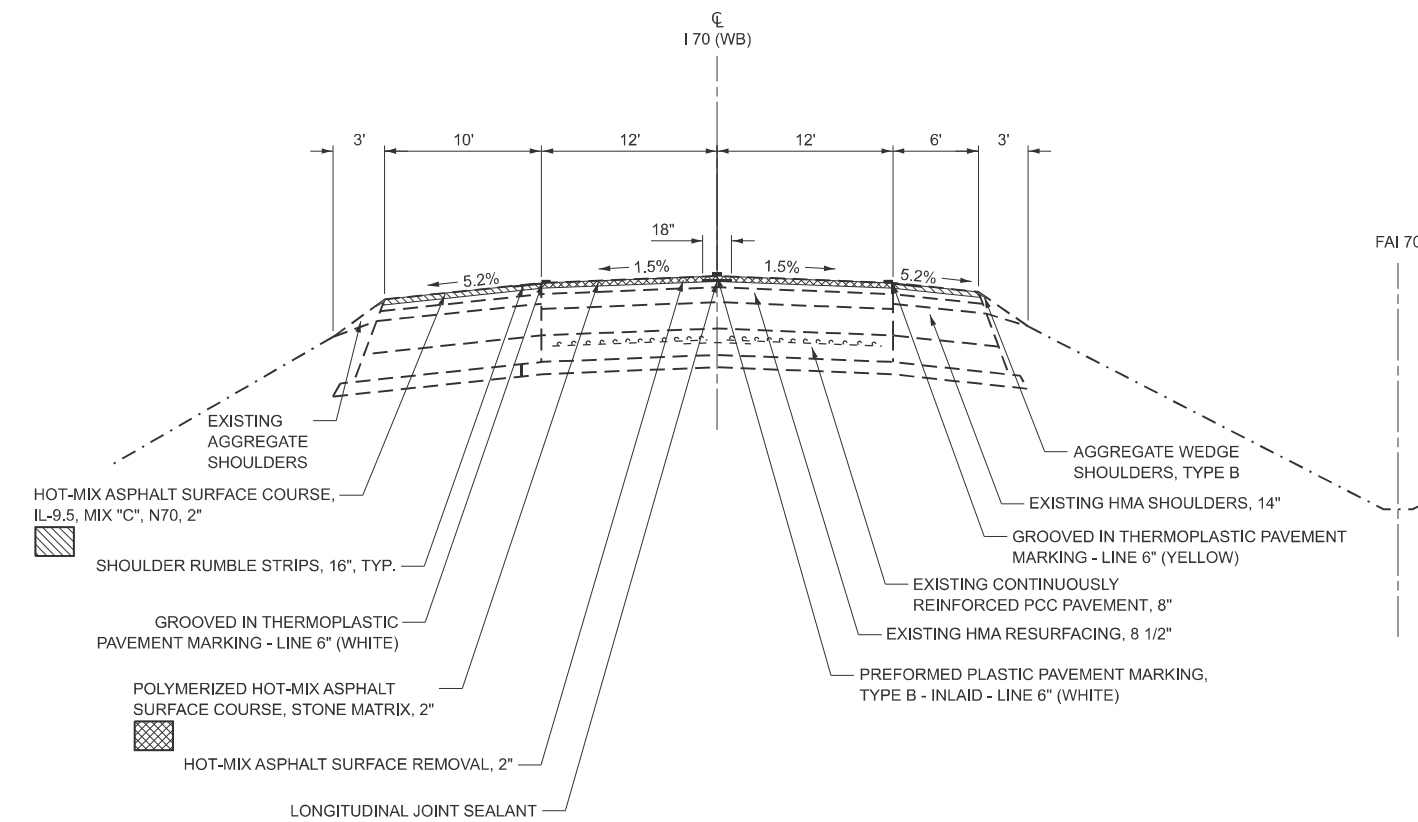
TYPICAL CROSS SECTIONS (I 70)

STATION 2771+40.0 TO STATION 2773+54.89
 STATION EQUATION: 2773+54.89 BK = 10+00.05 AH
 STATION 50+00.0 TO STATION 102+89.2



TYPICAL CROSS SECTIONS (I 70)

STATION 10+00.05 TO STATION 50+00.0



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PLOT DATE = 6/17/2024	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL
 CROSS SECTIONS

SCALE: NO SCALE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	(18-45)RS-6	CUMBERLAND	8	5
CONTRACT NO. 74B52				
ILLINOIS FED. AID PROJECT				

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PAVING SCHEDULE			40600290 BITUMINOUS MATERIALS (TACK COAT)	40600370 LONGITUDINAL JOINT SEALANT	40600990 TEMPORARY RAMP	40604052 HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	40605034 POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX	44000157 HOT-MIX ASPHALT SURFACE REMOVAL, 2"	48102100 AGGREGATE WEDGE SHOULDER, TYPE B	64200116 SHOULDER RUMBLE STRIPS, 16 INCH	78100100 RAISED REFLECTIVE PAVEMENT MARKER	78300200 RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	78300200 MATERIAL TRANSFER DEVICE
STATION TO STATION			POUND	FOOT	SQ YD	TON	TON	SQ YD	TON	FOOT	EACH	EACH	TON
2771+40.0	TO	2773+54.9	429.8	214.9	31.1	42.8	74.5	955.1	2.7	429.8	5.4	5.4	74.5
STATION EQUATION: 2773+54.89 BK = 10+00.05 AH													
10+00.1	TO	102+89.2	18578.2	9289.1	31.1	1819.6	3220.2	41285.1	117.5	18578.2	232.2	232.2	3220.2
OVERALL TOTALS:			19010	9510	63	1900	3300	42250	130	19010	240	240	3300

PAVEMENT MARKING SCHEDULE			LENGTH	70300100 SHORT TERM PAVEMENT MARKING	70300150 SHORT TERM PAVEMENT MARKING REMOVAL	70300241 TEMPORARY PAVEMENT MARKING - LINE 6" - PAINT	78000400 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)	78000400 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)	78004230 PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 6" (WHITE)	78011035 GROOVING FOR RECESSED PAVEMENT MARKING 7"
STATION TO STATION			FOOT	FOOT	SQ FT	FOOT	FOOT	FOOT	FOOT	FOOT
2771+40.0	TO	2773+54.9	214.9	116.0	25.8	483.5	214.9	214.9	53.7	429.8
STATION EQUATION: 2773+54.89 BK = 10+00.05 AH										
10+00.1	TO	102+89.2	9289.1	5016.1	1114.7	20900.5	9289.1	9289.1	2322.3	18578.2
OVERALL TOTALS:			5150	1150	21390	19010	2380	19010	19010	19010

PATCHING SCHEDULE			44200629 CLASS A PATCHES, TYPE I, 15 INCH	44200630 CLASS A PATCHES, TYPE II, 15 INCH	44200631 CLASS A PATCHES, TYPE III, 15 INCH	44200632 CLASS A PATCHES, TYPE IV, 15 INCH	44200633 CLASS A PATCHES, TYPE I, 17 INCH	44200637 CLASS A PATCHES, TYPE II, 17 INCH	44200641 CLASS A PATCHES, TYPE III, 17 INCH	44200643 CLASS A PATCHES, TYPE IV, 17 INCH	44213000 PATCHING REINFORCEMENT	44213200 SAW CUTS	44213204 TIE BARS 3/4"
LANE	TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 1	TYPE 2	TYPE 3	TYPE 4			SQ YD	FOOT	EACH
	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD			SQ YD	FOOT	EACH
WESTBOUND	4.0	70.0	62.0	42.0	6.0	96.0	85.0	58.0			423.0	2180.0	125.0
TOTAL:	4	70	62	42	6	96	85	58			423	2180	125

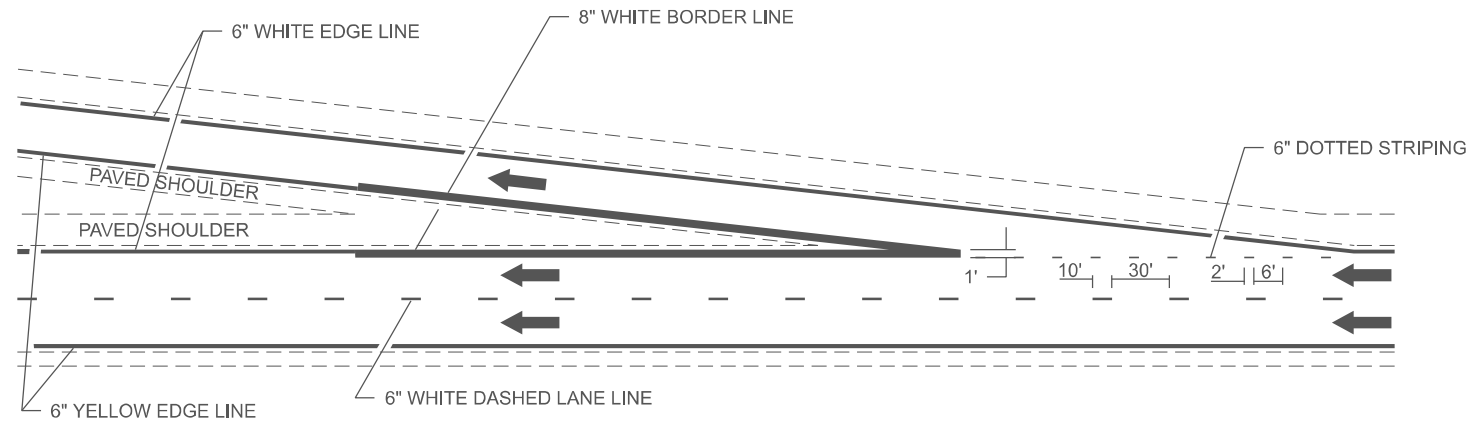
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

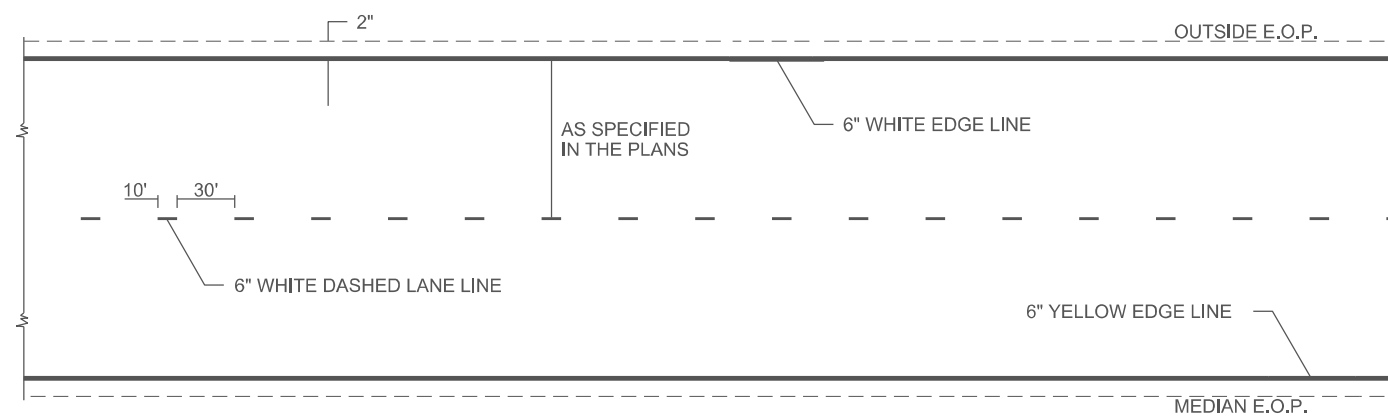
**SCHEDULE OF
 QUANTITIES**

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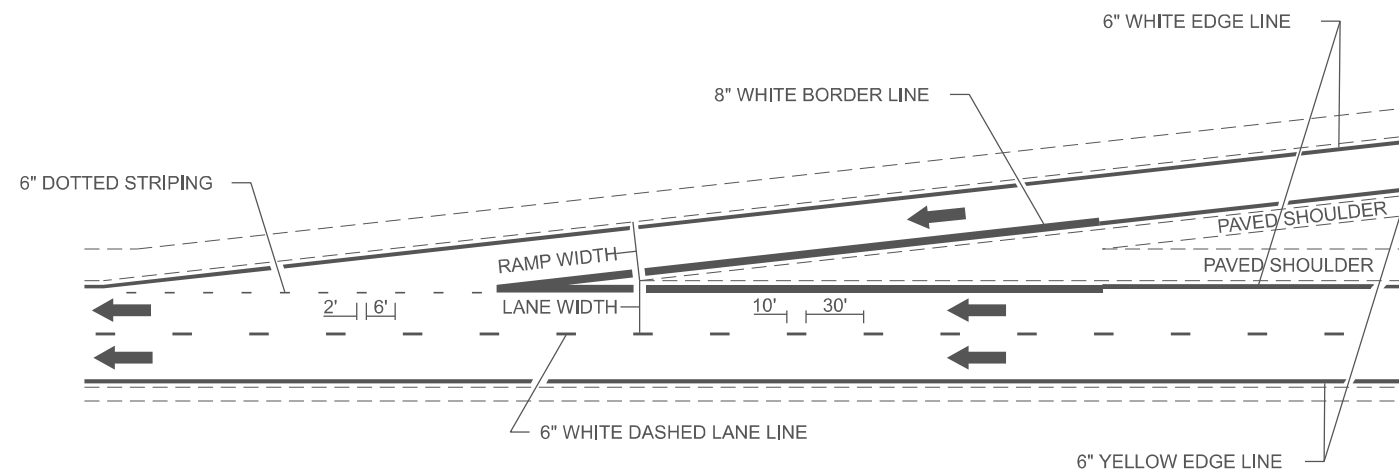
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70	(18-45)RS-6	CUMBERLAND	8	6
CONTRACT NO. 74B52				
ILLINOIS FED. AID PROJECT				



TYPICAL EXIT RAMP MARKING



TYPICAL CENTERLINE & EDGELINE MARKINGS



TYPICAL ENTRANCE RAMP MARKING

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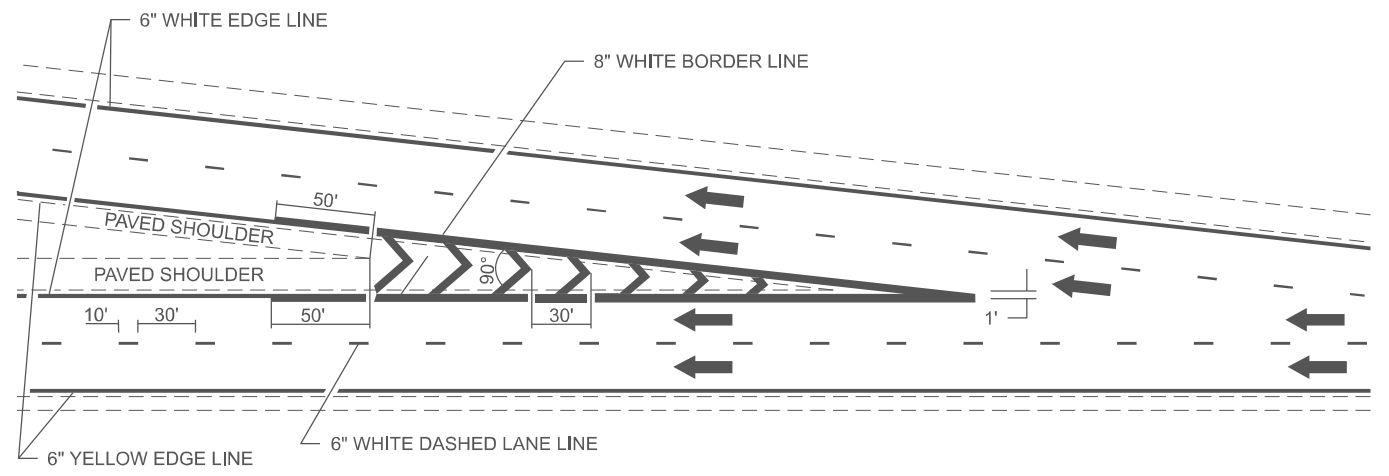
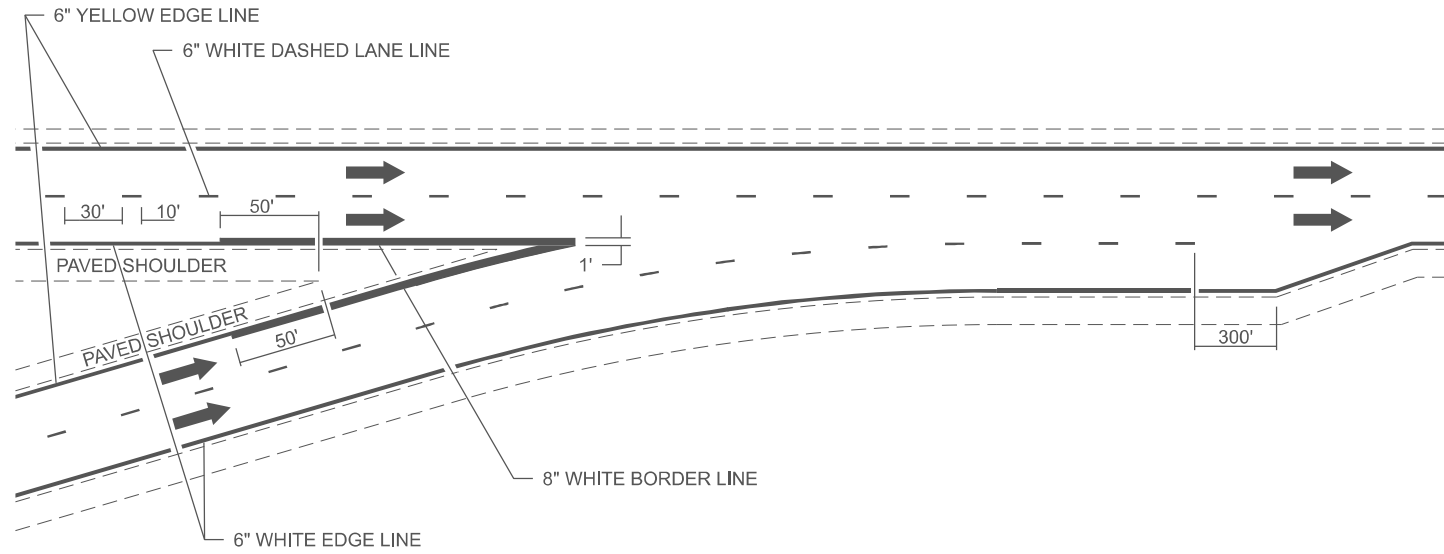
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

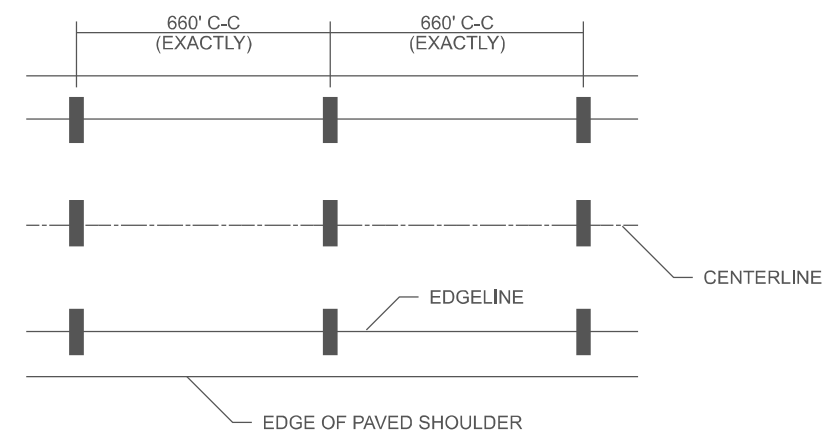
**TYPICAL APPLICATIONS OF FREEWAY/EXPRESSWAY
PAVEMENT MARKING**

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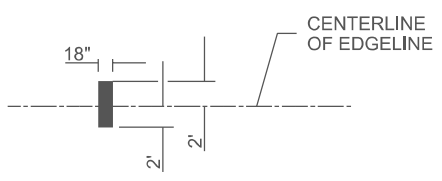
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70	(18-45)RS-6	CUMBERLAND	8	7
CONTRACT NO. 74B52				
ILLINOIS FED. AID PROJECT				



AERIAL SPEED CHECK ZONES



IT WILL BE NECESSARY TO HAVE A REPRESENTATIVE OF THE STATE POLICE PRESENT SO THAT THE ACCURACY OF MEASUREMENT CAN BE ATTESTED TO IN COURT.



NOT TO SCALE

DISTRICT 7 DETAIL NO. 78000002

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PLOT DATE = 6/25/2024	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL APPLICATION OF FREEWAY/EXPRESSWAY
PAVEMENT MARKING**

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

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	(18-45)RS-6	CUMBERLAND	8	8
CONTRACT NO. 74B52				
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