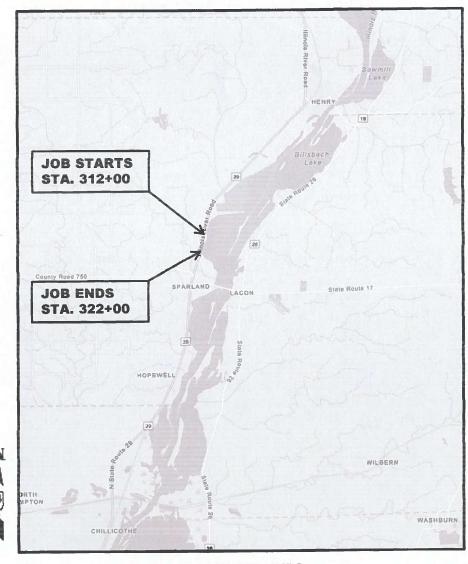
08-02-2024 LETTING ITEM 024

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

# PROPOSED HIGHWAY PLANS

FAP ROUTE 318 (IL 29)
SECTION 3RS-6
CONTRACT MAINTENANCE
MARSHALL COUNTY

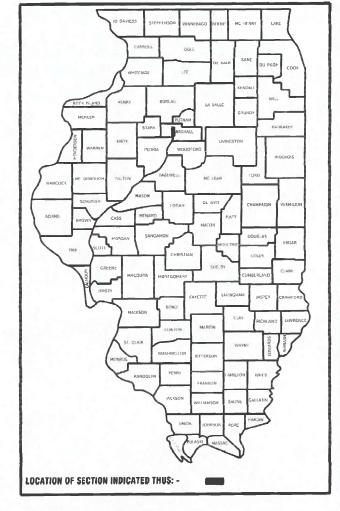
C-94-072-24



GROSS LENGTH = 0.20 MILE NET LENGTH = 0.20 MILE

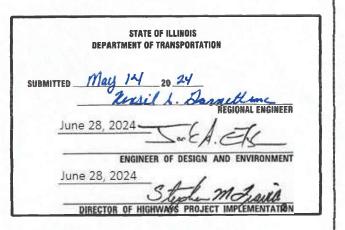
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# D-94-046-24



# PROJECT DESCRIPTION:

VARIABLE DEPTH MILLING AND RESURFACING



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

# INDEX OF SHEETS

1 COVER SHEET

0

0

0

0

- 2-3 GENERAL NOTES
- 4-5 SUMMARY OF QUANTITIES
- 6 TYPICAL SECTION
- 7 SCHEDULE OF QUANTITIES
- 8 TIES & BENCHMARKS
- 9 PROPOSED PLAN & PROFILE
  10 REMOVAL ITEMS AND PAVEMENT MARKING
- 11-15 D4 CADD STANDARDS

# HIGHWAY STANDARDS

701201-05

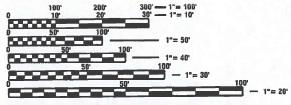
701301-04 701306-04

701311-03 701901-09

780001-05

AADT: 3100 (2022) SU: 140

MU: 300



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

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

PROJECT ENGINEER: BEN TELLEFSON (309) 671-3333 PROJECT MANAGER: ERIC PRICHARD (309) 671-3333

CATALOG NO. 036520-00D CONTRACT NO.68J22

## COMMITMENTS

Commitments are not to be altered without the written approval of all parties to which the commitment was made. NO COMMITMENTS HAVE BEEN MADE FOR THIS PROJECT.

#### **ENVIRONMENTAL REVIEWS**

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

The required environmental resource documentation shall include the following:

- \* BDE Form 2289 (Environmental Survey Request)
- \* BDE Form 2290 (Waste/Use Area Review)
- \* A location map showing the size limits and location of the use area
- Color photographs depicting the use area
- \* Borrow Area Entry Agreement form-D4 PI0101

Please note that a minimum of four weeks shall be allowed for the District to obtain the required environmental clearances and six weeks for the required borrow site environmental clearances.

## **BUTT JOINT CUTTING TIME RESTRICTION**

Butt joints shall not be milled more than three (3) days prior to placement of the HMA surface course.

#### PAVING SURFACE COURSE

Continuous paving operations on the main roadway shall be maintained at all times during the construction of the hot-mix asphalt surface. No interruptions for side roads, entrances, turn lanes, etc. will be allowed.

#### **PAVEMENT STATIONING NUMBERS & PLACEMENT**

The Contractor shall provide labor and materials required to imprint pavement station numbers in the finished surface of the pavement and/or overlay. The numbers shall be approximately 3/4 inch (20mm) wide, 5 inches (125 mm) high and 5/8 inch (15 mm) deep.

The pavement station numbers shall be installed as specified herein:

Interval - 200 feet (English stationing) or 100 meters (metric stationing)

Bottom of Numbers – 6 inches (150 mm ) from the inside edge of the pavement marking

#### Location:

- \* 2,3, & 5 Lane Pavements right edge of pavement in direction of increasing stations
- \* Multi-Lane Divided Roadways outside edge of pavement in both directions
- \* Ramps along baseline edge of pavement

Position - stations shall be placed so they can be read from the adjacent shoulder

Format – English (Metric) pavement stations shall use this format "XXX (XX + X00)" where X represents the pavement station

This work will not be paid for separately, but will be considered included in the cost of the associated pavement and/or overlay pay items.

USER NAME = mrich	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0000 / in	CHECKED	REVISED
PLOT DATE = 3/20/2023	DATE	REVISED

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	AND	PRO	JECT	SPEC	CIFIC	NOTES	
SHEET	1	OF	1				

# POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) RATES

Surface Type	Residual Rate
Milled (HMA or PCC)	0.08 lb /sq ft
Existing Pavement	0.04 lb /sq ft
Fog Coat (between lifts)	0.04 lb /sq ft

# HOT-MIX ASPHALT MIXTURE REQUIREMENTS

Mixture Use(s):	ALL LIFTS, SURFACE, BINDER & SHOULDER
AC/PC:	64–22
Design Air Voids:	4.0% N = 50
Mixture Composition:	IL 9.5
(Gradation Mixture):	1
Friction Aggregate:	MIX D
Mix Weights:	112 lb/syin
Quality Management:	QC/QA

Notes: Individual lift thickness of each mix type will be no less than 3 times nominal maximum aggregate size and no more than 6 times nominal aggregate size.

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					CONSTRUCTION CODE				
					MARSHALL COUNTY				
Г			$\mathbf{I}$		100% STATE				
	CODE	ITEM	UNIT	TOTAL	0005				
	NO.			QUANTITY	RURAL				
$\vdash$									
1	40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	6,049	6,049				
H									
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL – BUTT JOINT	SQ YD	84.4	84.4				
$\vdash$									
	40600990	TEMPORARY RAMP	SQ YD	88.8	88.8				
	40602978	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50	TON	337	337				
			1						
	40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	233.3	233.3				
-									
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	65.2	65.2				
F									
	48203100	HOT-MIX ASPHALT SHOULDERS	TON	190	190				
-									
	67100100	MOBILIZATION	L SUM	1	1				
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1				
I									
-									
	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1				
$\vdash$									
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	900	900				
			1						
$\perp$			-						
	70300150	SHORT-TERM PAVEMENT MARKING REMOVAL	SQ FT	300	300				
			1						
$\vdash$			1						
•	78001110	PAINT PAVEMENT MARKING – LINE 4"	FOOT	2250	2250				
$\vdash$			1						
:	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	13	13				
			1						
L				<u> </u>					
_ (	SPECIAL								

\* = SPECIALTY ITEM

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		ILLINOIS			

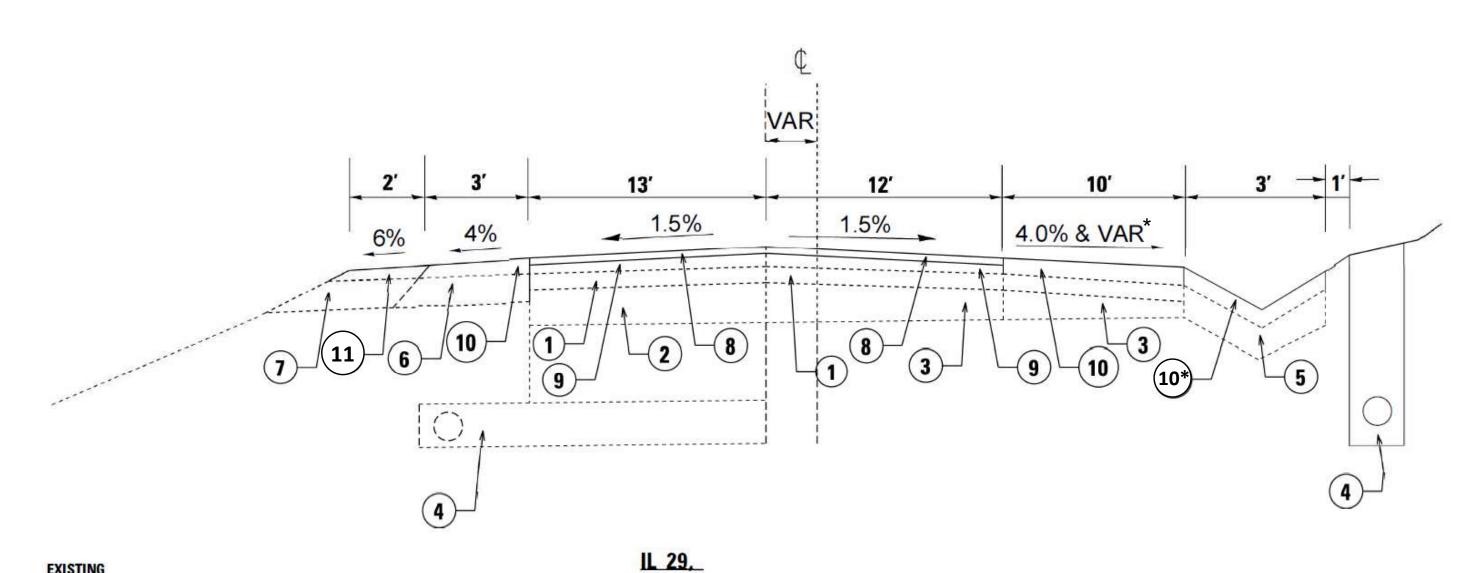
								CONSTRUC	CTION CODE		
						MARSHALL COUNTY					
CODE					TOTAL	100% STATE					
CODE NO.			ITEM	UNIT	TOTAL QUANTITY	0005					
NO.					QUANTITI	RURAL					
78300200	RAISED REFLECTIVE PAVI	EMENT MARKER REMOVAL		EACH	13	13					
X4401198	HOT-MIX ASPHALT SURF	ACE REMOVAL, VARIABLE DEPTH		SQ YD	4137.8	4137.8					
Z0013798	CONSTRUCTION LAYOUT	7		L SUM	1	1					
Z0034105	MATERIAL TRANSFER DE	EVICE		TON	233.3	233.3					
									-		
					1				<u> </u>		
					+						
					1				-		
					1						
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DEPARTMENT OF TRANSPORT	ATION

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SUMMARY OF QUANTITIES										31	
										RT	
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318	3RS-6		MARSHALL	15	5
RTE. II	L 29		CONTRACT	NO. 68	J22
		ILLINOIS			



STA. 312 + 00 TO 322 + 00

**EXISTING** 

Existing HMA Surface Course,
Existing HMA Base Course 9"
Existing PCC Pavement
Existing Pipe Underdrain
Existing Concrete Gutter
Existing HMA Shoulder
Existing AGG Shoulder

PROPOSED

PROPOSED HMA SURFACE COURSE MIX D, N50, 1 1/2"
PROPOSED HMA BINDER COURSE IL 9.5, N50 (VARIABLE DEPTH)
PROPOSED HMA SHOULDER (VARIABLE DEPTH)
PROPOSED AGG. SHOULDER, TYPE B

\* PROPOSED HMA SHOULDER SHALL MATCH INTO EXISTING GUTTER UNLESS THE SLOPE EXCEEDS 8%, PLACE HMA SHOULDER (VARIABLE DEPTH) ON THE EXISTING GUTTER TO MAINTAIN THE SLOPE OF THE PROPOSED SHOULDER AT 8% OR LESS

USER NAME = mrich	DESIGNED	REVISED					DTE	SECTION	COUNTY	TOTAL SHE	ΞŢ
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	RESURFACING TABLE														
							НМА	TEMP	НМА	POLY BIT	HMA BNDR CSE	HMA SURF CSE	НМА	AGG	MATERIAL
	10	CATION					SURF REM	RAMP	SURF REM	MAT'L	IL-9.5, N50	MIX "D" N50	SHLDRS	SHLDRS	TRANSFER
	LO	CATION		WIDTH	LENGTH	AREA	BUTT JT		VAR DEPTH	TACK COAT	(VAR DEPTH)	1-1/2"	(VAR DEPTH)	TYPE B	DEVICE
				FT	FT	SQ YD	SQ YD	SQ YD	SQ YD	POUND	TON	TON	TON	TON	TON
312+00	то	322+00	MAINLINE	25	1000	2777.8	55.6	88.8	2722.2	527	337	233.3	0	0	233.3
312+00	то	322+00	LT SHLDR	3	1000	333.3	6.6	0	326.7	3946	0	0	40	65.2	0
312+00	то	322+00	RT SHLDR	10	1000	1111.1	22.2	0	1088.9	1576	0	0	150	0	0
	TOTAL						84.4	88.8	4137.8	6049	337	233.3	190	65.2	233.3

S	HORT	TERM PAVE	MENT MARKIN	NG .
	LC	CATION		FOOT
312+00	TO	322+00	1000 FT	
RT & LT SH	HOULDI	ER DIAGON	ALS (WHITE)	80
SKIP	DASH (	CENTER (YE	ELLOW)	100
	180			
	SU	B TOTAL		900

SHORT TERM PAVEMENT MARKING REMOVAL							
	SQ FT						
312+00	TO	322+00	300				
	300						

PAINT PAVEMENT MARKING - LINE 4"					
	FOOT				
312+00	TO	322+00	1000 FT		
RT &	LT ED	GE LINES (V	VHITE)	2000	
SKIP	250				
	2250				

RAISED REFLECTIVE PAVEMENT MARKER							
	EACH						
317+50	TO	321+00	CENTER	13			
	Ν*	TOTAL		13			

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL							
	EACH						
317+50	TO	321+00	CENTER	13			
	13						

<b>TRAFFIC CONTROL &amp; PROTECTION STD 701201</b>					
LOCATION	L SUM				
JOBSITE	1				
TOTAL	1				

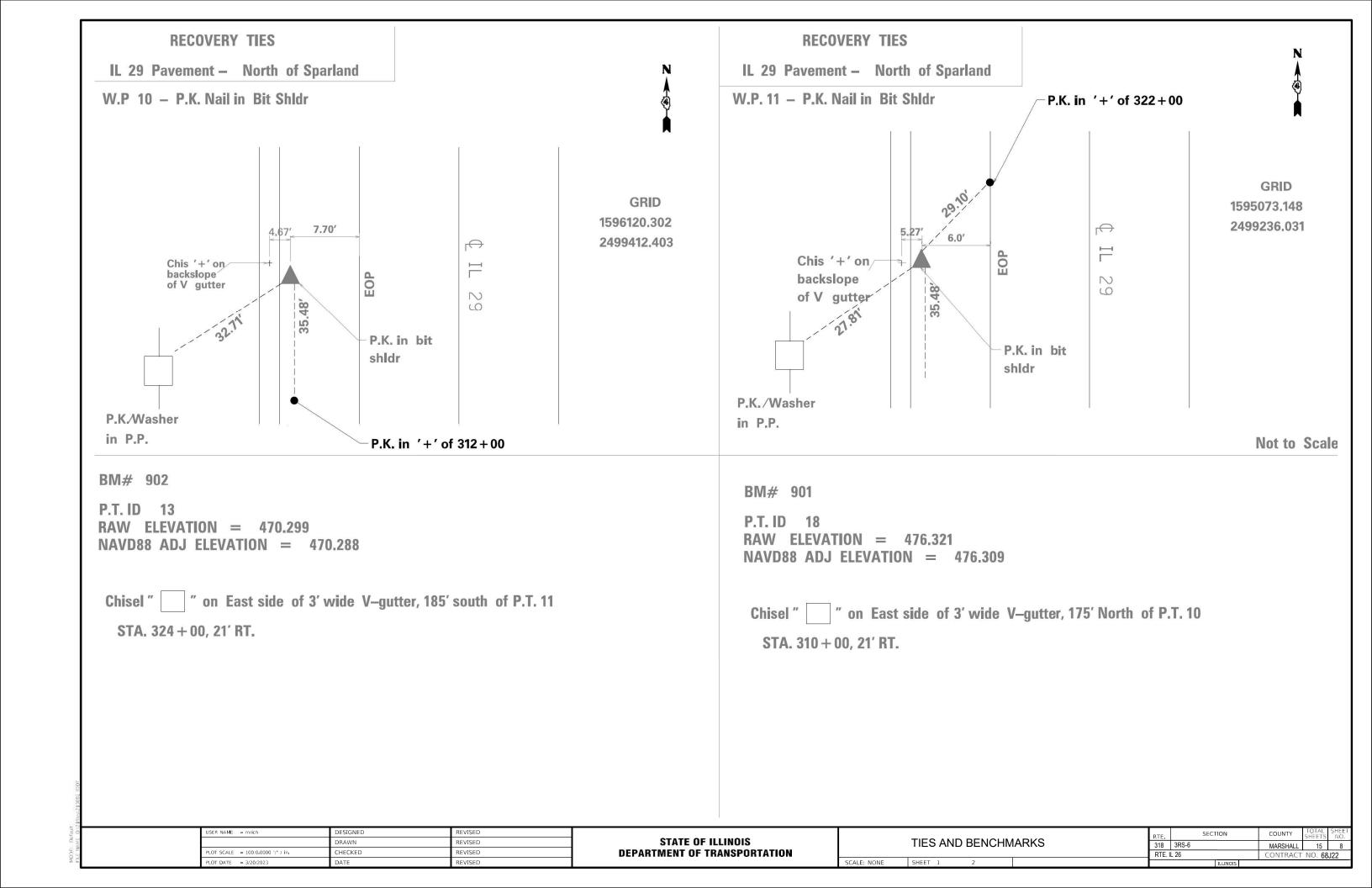
TRAFFIC CONTROL & PROTECTION STD 701306					
LOCATION	L SUM				
JOBSITE	1				
TOTAL	1				

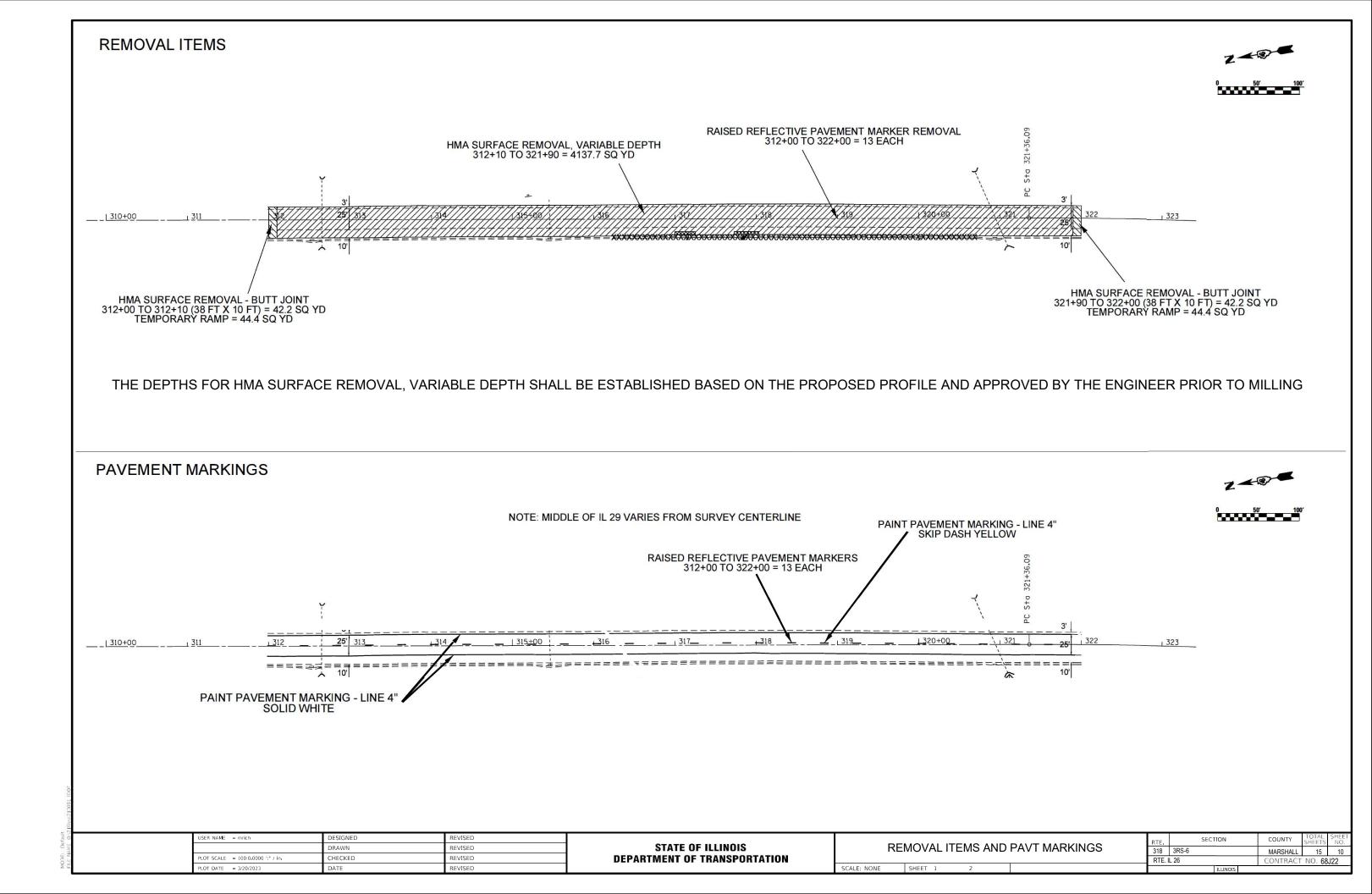
CONSTRUCTION LAYOU	T
LOCATION	L SUM
JOBSITE	1
TOTAL	1

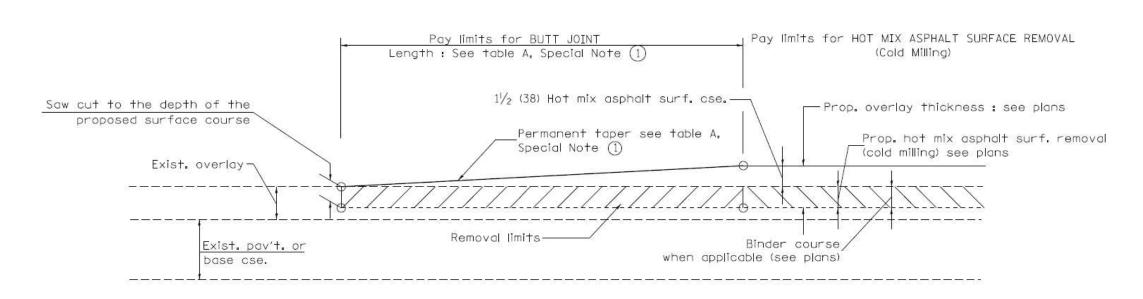
MOBILIZATION	
LOCATION	L SUM
JOBSITE	1
TOTAL	1

USER NAME = mrich	DESIGNED	REVISED	
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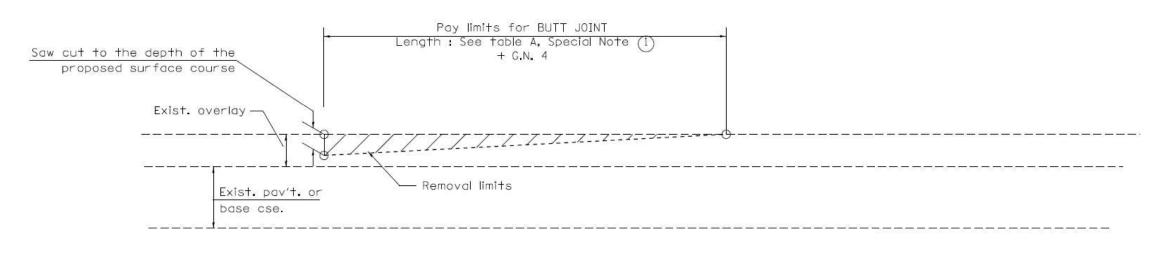
# CASE 1: WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

# TABLE A TAPER RATES

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
1)	BUTT JOINT TAPER RATE	1:480	1:240
2	TEMPORARY RAMP TAPER RATE	1:80	1:40

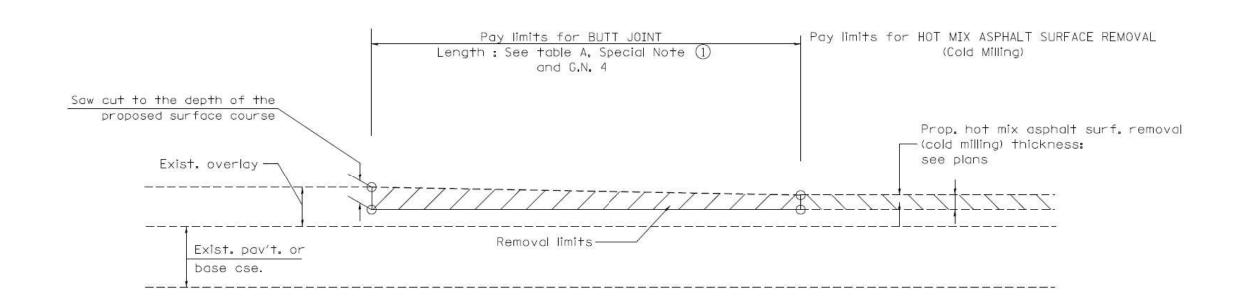
# GENERAL NOTES

- The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
- The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
- 3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
- 4. The length of butt joint is based on the taper rate times change in cold milling depth within the butt joint pay limits, unless otherwise indicated.
- 5. Temporary ramps are paid for separately and not included in the cost of the butt joints.

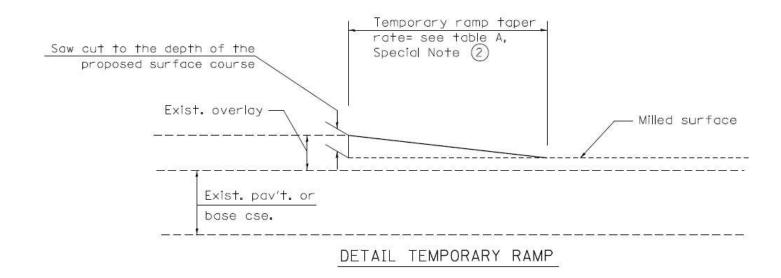


# CASE 2: NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

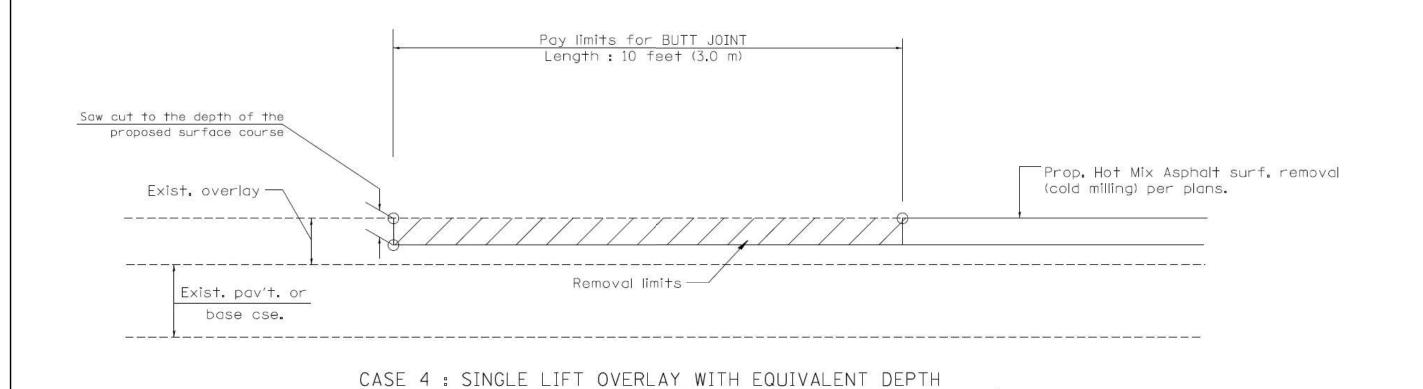
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0	04-01-97 CORRECTION TO DEPTH		J-A-	04-12-16	MINOR CORRECTIONS	R.D.	STATE OF ILLINOIS		BUTT JOINTS		318 3RS-6		MARSHALL	15	11
0	9-15-05 REVISED DESIGNER NO	TE	M.M.A.	02-14-17	ADDED NOTE 5	R.D.	DEPARTMENT OF TRANSPORTATION	6079		SHT. 1 OF 3			CONTRACT	T NO. 68	J22
10	0-16-06 REVISED TO 2007 SPI	c.	M.A.	07-16-19	Wording and Spelling corrections	R.D.		NOT TO SCALE		CADD STD. 406101-D4	FED. ROAD DIST	. NO. ILLINOIS FE			



# CASE 3: HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



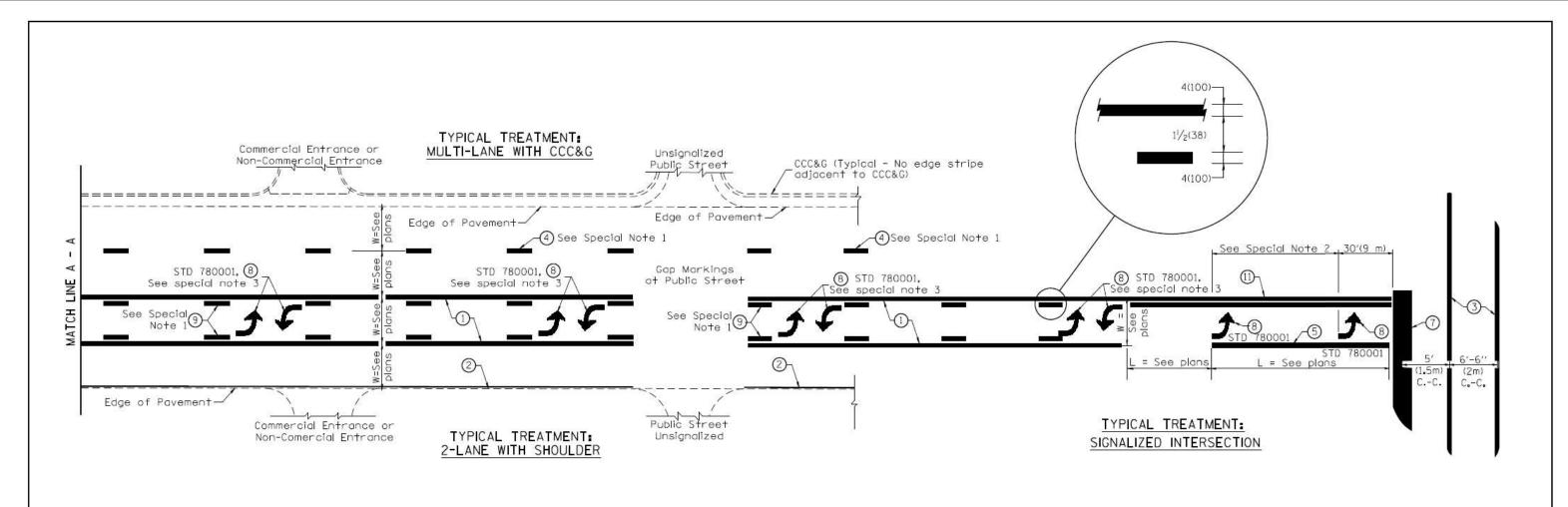
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	DEPARTMENT OF TRANSPORTATION	SHT. 2 OF	3 RTE. IL 29	CONTRACT NO. 68J22
3 8		NOT TO SCALE CADD STD. 406101-	D4 FED. ROAD DIST. NO. ILLINOIS FED. A	AID PROJECT



HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TIE-IN TO EXISTING BITUMINOUS TAPER

	20)	50 5	0.00	35 55	N .	<u> </u>				0.0000000000000000000000000000000000000	
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3		8 3	1 10		STATE OF ILLINOIS	BUTT JOINTS	318	3RS-6	MARSH	IALL 15	13
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# FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

# TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- 1) 4(100) Solid (Yellow)
- (2) 4(100) Solid (White)
- 3 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
  2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
- (4) 6(150) Skip-Dash (White)
- 10' 30' 10' (3.05m) (See Special Note 1)

(See Special Note 1)

- (5) 8(200) Solid (White)
- (6) 12(300) Diagonal (White) (Item (6) is shown on Std. 780001)
- 7 24(600) Stop Bar (White)
- (10m)
  - (See Std. 780001 and Special Notes 2 & 3)
- 9 4(100) Skip-Dash (Yellow)

(1) 4(100) Double Solid (Yellow)

Table A) 45° (10)

See Table A

) 12(300) Diagonal (Yellow) (See Table A)

#### 

11(280) C.-C.

## SPECIAL NOTES

- Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
- The following shall apply to arrows located in one-way left turn lanes:
  - A. A minimum of two (2) arrows is required.
  - B. The maximum spacing between arrows is 80' (24 m).
  - C. Arrows shall be evenly spaced if three (3) or more are required.
- The following shall apply to arrow pairs located in two-way left turn lanes:
  - A. A minimum of two (2) arrow pairs is required.
  - B. The maximum spacing between arrow pairs is 200' (61 m).
  - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
  - D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

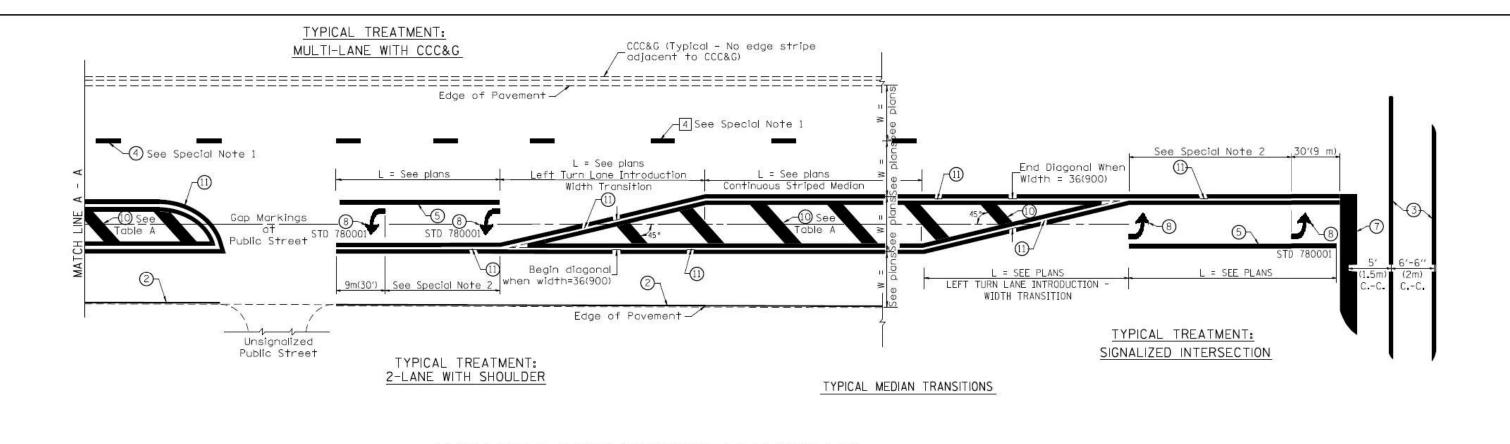
### GENERAL NOTES

- Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
- See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.
- 3. Refer to Article 780.13 for letter, number and symbol areas (sq. ft.)
- 4. Areas are grooved 1" beyond each edge for the following symbols:
  Through Arrow= 14.8 sq. ft.
  Large Left or Right Arrow= 21.9 sq. ft.
  2 Arrow Combination Left (or Right) and Through= 34.9 sq. ft.
  Wrong Way Arrow= 29.5 sq. ft.
  Railroad Crossing Symbol= 69.8 sq. ft.
  (For further information, refer to BDE Special Provision)

(For further information, refer to BDE Special Provision: Grooving for Recessed Pavement Markings)

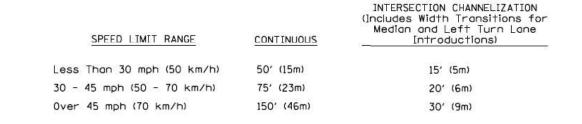
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

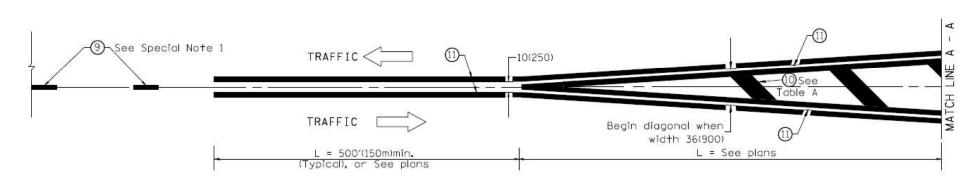
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FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

# TABLE A RECOMMENDED SPACING BETWEEN DIAGONAL LINES





MEDIAN INTRODUCTION - WIDTH TRANSITIONS

				uniess othe	rwise note	O.		
	OTATE OF MUNICIPAL			F.A. S	ECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	DEPARTMENT OF TRANSPORTATION	2024 SEC (3000 10 4 D 5 D 7 )	SHT. 2 OF 2	RTE. IL 29	0.000 (0.000 (#1.400 (0.000 (0	CONTRACT	F NO. 68.	J22
		NOT TO SCALE	CADD STD. 780001-D4	FED. ROAD DIST. NO.	ILLINOIS FED. AI	D PROJECT		
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