

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**PROPOSED
HIGHWAY PLANS**

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|----------|--------------------|-----------|
| 318 | 3RS-6 | MARSHALL | 15 | 1 |
| RTE. IL 29 | | ILLINOIS | CONTRACT NO. 68J22 | |

D-94-046-24



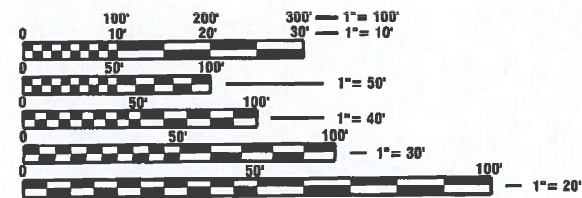
INDEX OF SHEETS

- 1 COVER SHEET
- 2-3 GENERAL NOTES
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- 7 SCHEDULE OF QUANTITIES
- 8 TIES & BENCHMARKS
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- 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

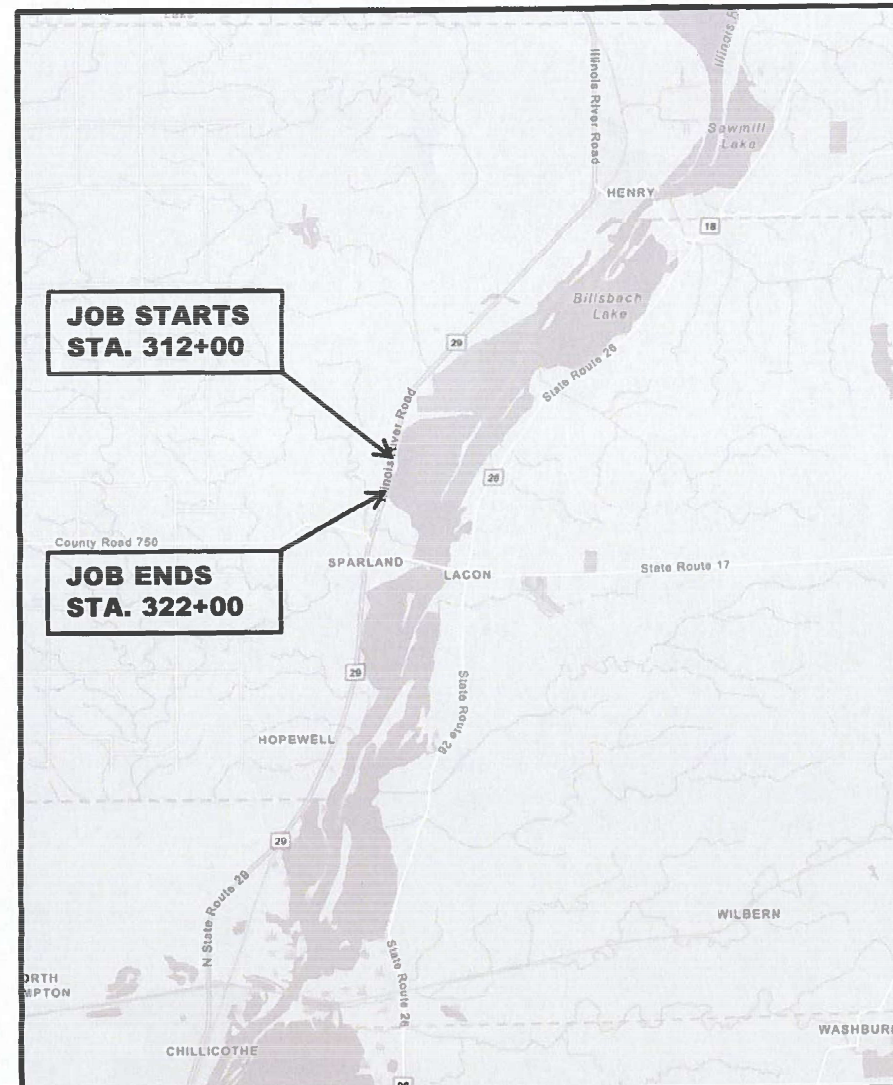


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

C-94-072-24



GROSS LENGTH = 0.20 MILE
NET LENGTH = 0.20 MILE

PROJECT DESCRIPTION:
VARIABLE DEPTH MILLING AND RESURFACING

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED May 14 2024
Russell L. Barnette
REGIONAL ENGINEER

June 28, 2024 [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

June 28, 2024 [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

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): | |
| Friction Aggregate: | MIX D |
| Mix Weights: | 112 lb/sy/in |
| 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.

MOE: D:\mich...
 FILE NAME: O:\318\318\318\DOT...
 PLOT DATE: 3/20/2023

| | | |
|-------------------------------|----------|---------|
| USER NAME = mich | DESIGNED | REVISED |
| PLOT SCALE = 100,0000 ' / in. | DRAWN | REVISED |
| PLOT DATE = 3/20/2023 | CHECKED | REVISED |
| | DATE | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**COMMITMENTS, GENERAL NOTES,
AND PROJECT SPECIFIC NOTES**

SCALE: NONE SHEET 1 OF 1

| | | | | |
|------------|---------|----------|--------------------|-----------|
| RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 318 | 3RS-6 | MARSHALL | 15 | 3 |
| RTE. IL 29 | | | CONTRACT NO. 68J22 | |
| ILLINOIS | | | | |

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | | | | |
|------------|--|-------|----------------|-------------------|--|--|--|--|--|
| | | | | MARSHALL COUNTY | | | | | |
| | | | | 100% STATE | | | | | |
| | | | | 0005 | | | | | |
| RURAL | | | | | | | | | |
| 40600295 | POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) | POUND | 6,049 | 6,049 | | | | | |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL – BUTT JOINT | SQ YD | 84.4 | 84.4 | | | | | |
| 40600990 | TEMPORARY RAMP | SQ YD | 88.8 | 88.8 | | | | | |
| 40602978 | HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50 | TON | 337 | 337 | | | | | |
| 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 | | | | | |
| 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 | | | | | |
| 70100460 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701306 | L SUM | 1 | 1 | | | | | |
| 70300100 | SHORT-TERM PAVEMENT MARKING | FOOT | 900 | 900 | | | | | |
| 70300150 | SHORT-TERM PAVEMENT MARKING REMOVAL | SQ FT | 300 | 300 | | | | | |
| * 78001110 | PAINT PAVEMENT MARKING – LINE 4" | FOOT | 2250 | 2250 | | | | | |
| * 78100100 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 13 | 13 | | | | | |

* = SPECIALTY ITEM

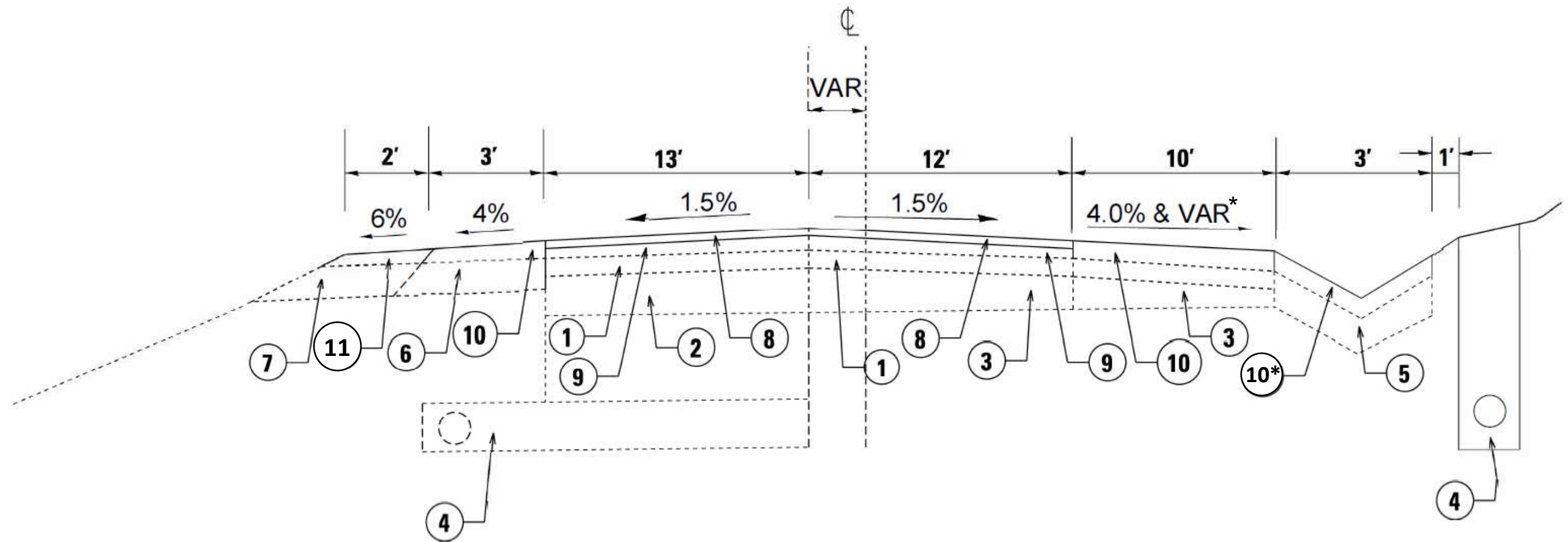
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 SCALE: NONE
 STA: N/A TO STA: N/A
 COUNTY: MARSHALL
 SECTION: 3RS-6
 F.A.P. RTE: 318
 CONTRACT NO: 68J22
 TOTAL SHEETS: 15
 SHEET NO.: 4

| | | |
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| PLOT SCALE = 100.0000' / in. | DRAWN - | REVISOR - |
| PLOT DATE = 3/20/2023 | CHECKED - | REVISIONS - |
| | DATE - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|-----------------------|---------------------|----------|-------------|
| SUMMARY OF QUANTITIES | | | |
| SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. N/A | TO STA. N/A |

| | | | | |
|-------------|---------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 318 | 3RS-6 | MARSHALL | 15 | 4 |
| RTE. IL 29 | | CONTRACT NO. 68J22 | | |
| ILLINOIS | | | | |



IL 29
STA. 312+00 TO 322+00

EXISTING

- 1. Existing HMA Surface Course,
- 2. Existing HMA Base Course 9"
- 3. Existing PCC Pavement
- 4. Existing Pipe Underdrain
- 5. Existing Concrete Gutter
- 6. Existing HMA Shoulder
- 7. Existing AGG Shoulder

PROPOSED

- 8. PROPOSED HMA SURFACE COURSE MIX D, N50, 1 1/2"
- 9. PROPOSED HMA BINDER COURSE IL 9.5, N50 (VARIABLE DEPTH)
- 10. PROPOSED HMA SHOULDER (VARIABLE DEPTH)
- 11. 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

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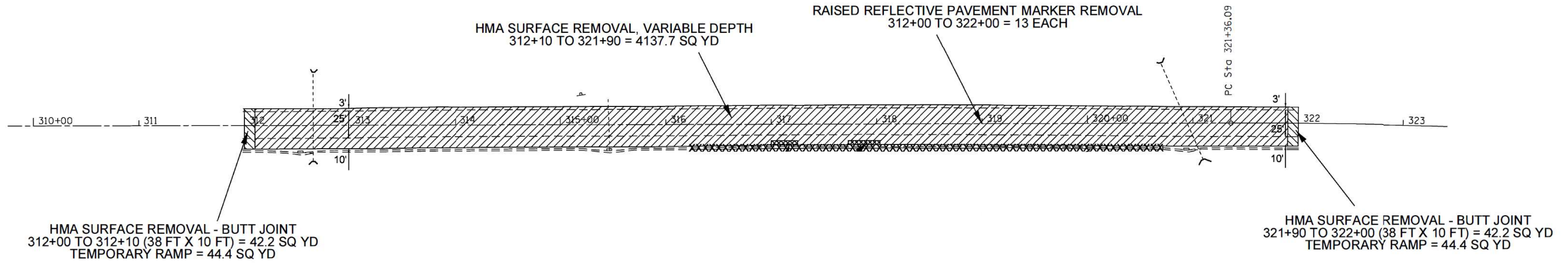
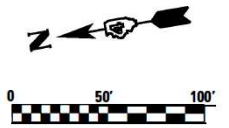
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION

SCALE: NONE SHEET 2 2

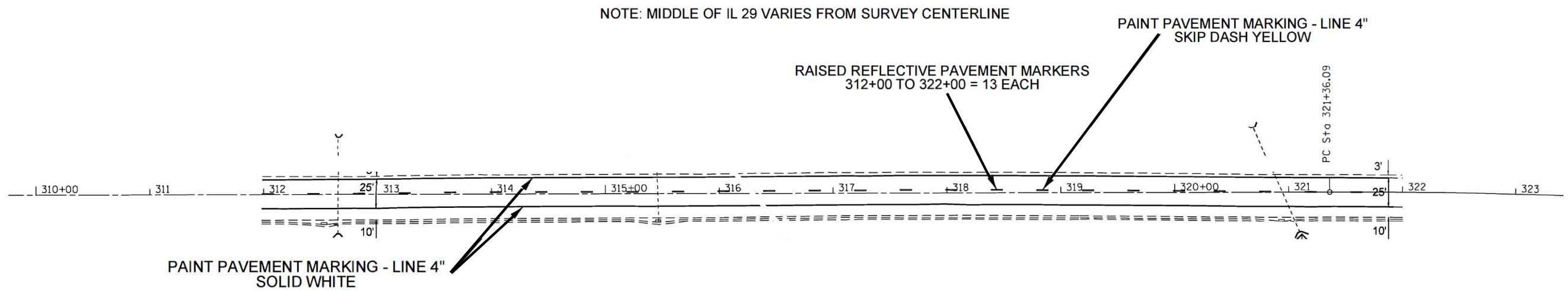
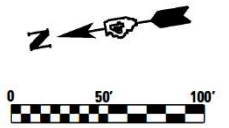
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| 318 | 3RS-6 | MARSHALL | 15 | 6 |
| RTE. IL 29 | | CONTRACT NO. 68J22 | | |
| ILLINOIS | | | | |

REMOVAL ITEMS



THE DEPTHS FOR HMA SURFACE REMOVAL, VARIABLE DEPTH SHALL BE ESTABLISHED BASED ON THE PROPOSED PROFILE AND APPROVED BY THE ENGINEER PRIOR TO MILLING

PAVEMENT MARKINGS



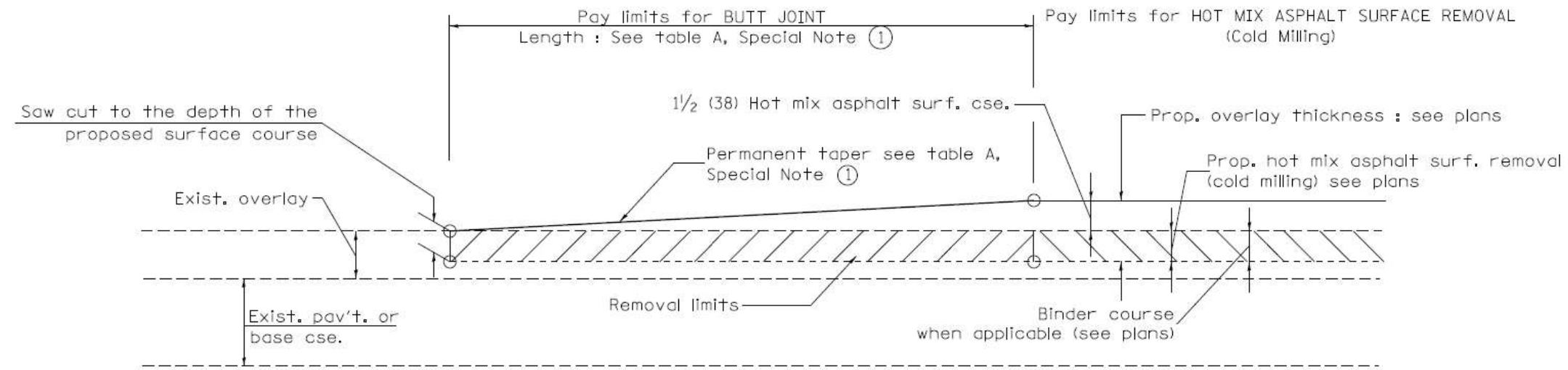
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|-----------------------------|----------|---------|
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| PLOT DATE = 3/20/2023 | DATE | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL ITEMS AND PAVT MARKINGS
 SCALE: NONE SHEET 1 2

| RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|------------|---------|--------------------|--------------|-----------|
| 318 | 3RS-6 | MARSHALL | 15 | 10 |
| RTE. IL 26 | | CONTRACT NO. 68J22 | | |



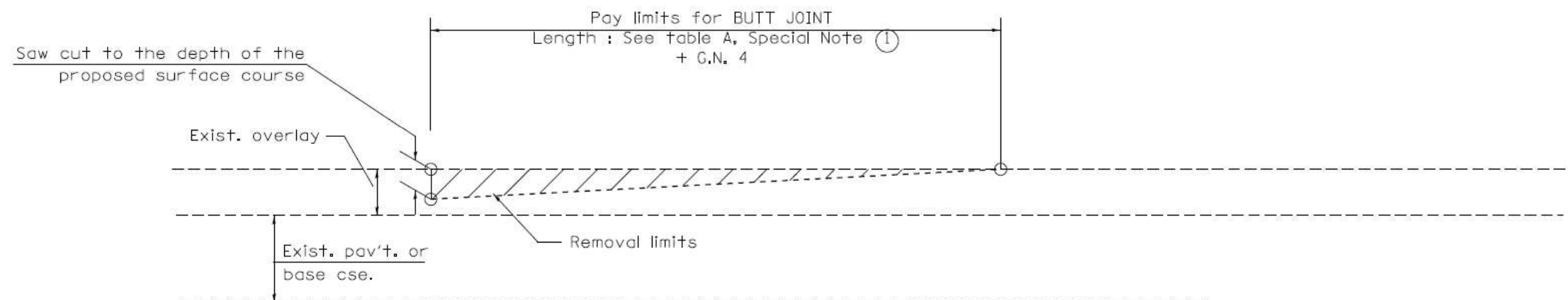
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

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 |

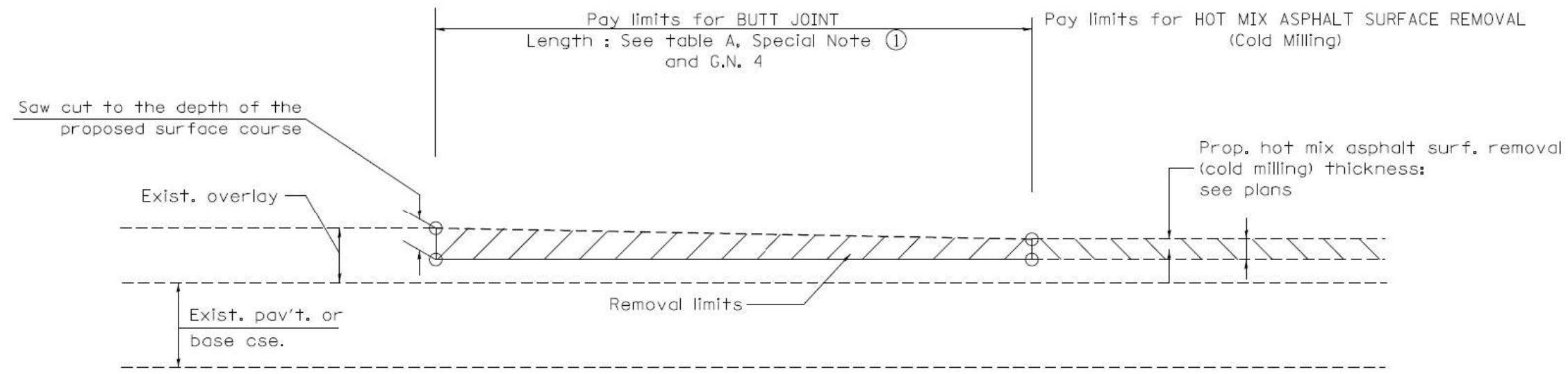
GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. 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.

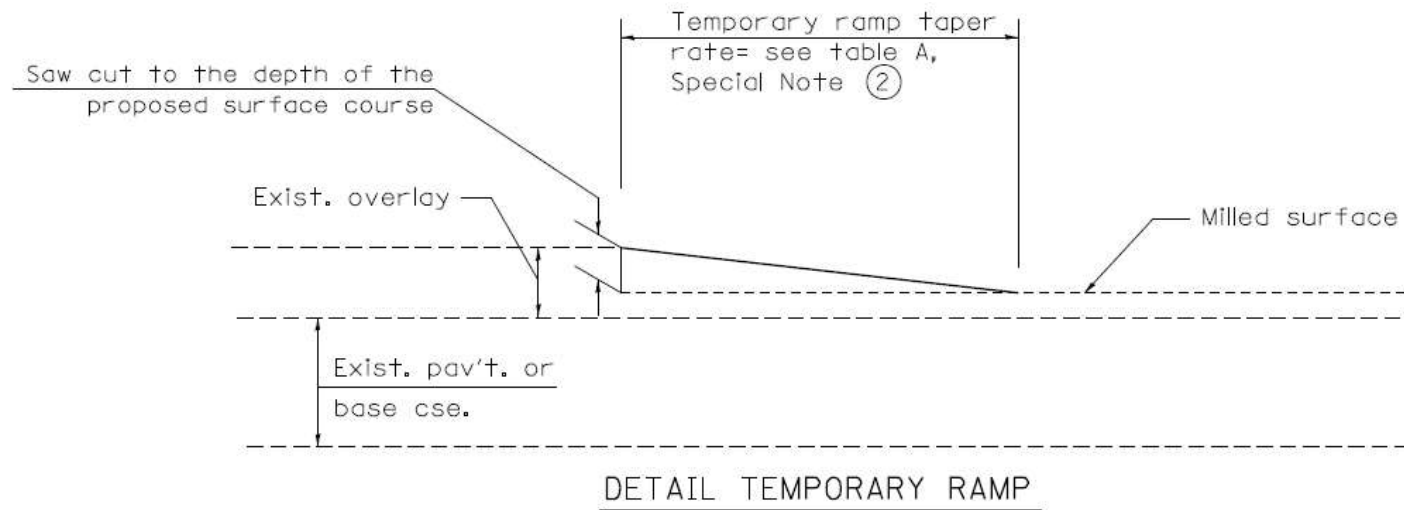


CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

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



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



DETAIL TEMPORARY RAMP

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

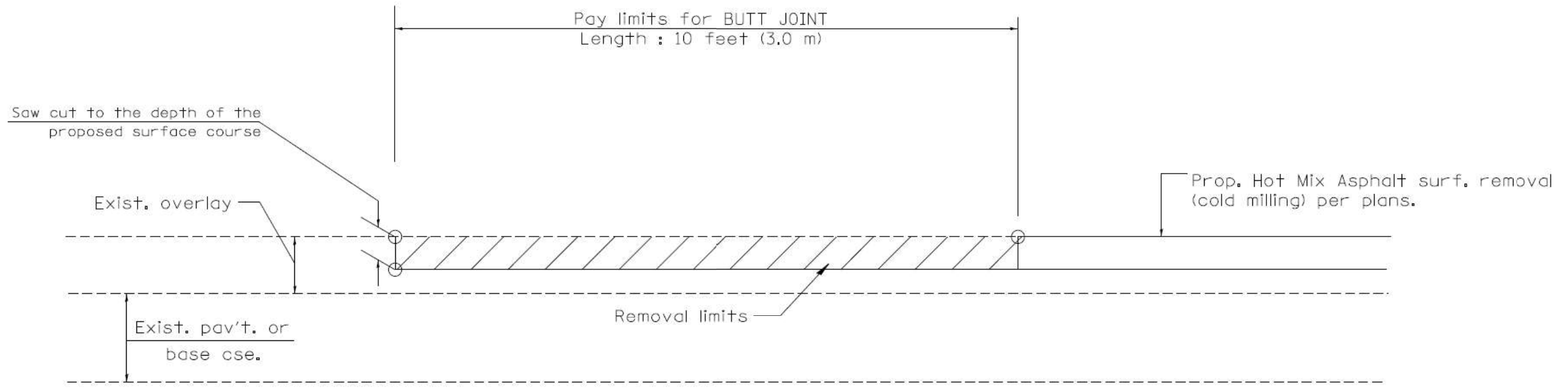
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHT. 2 OF 3
 CADD STD. 406101-D4

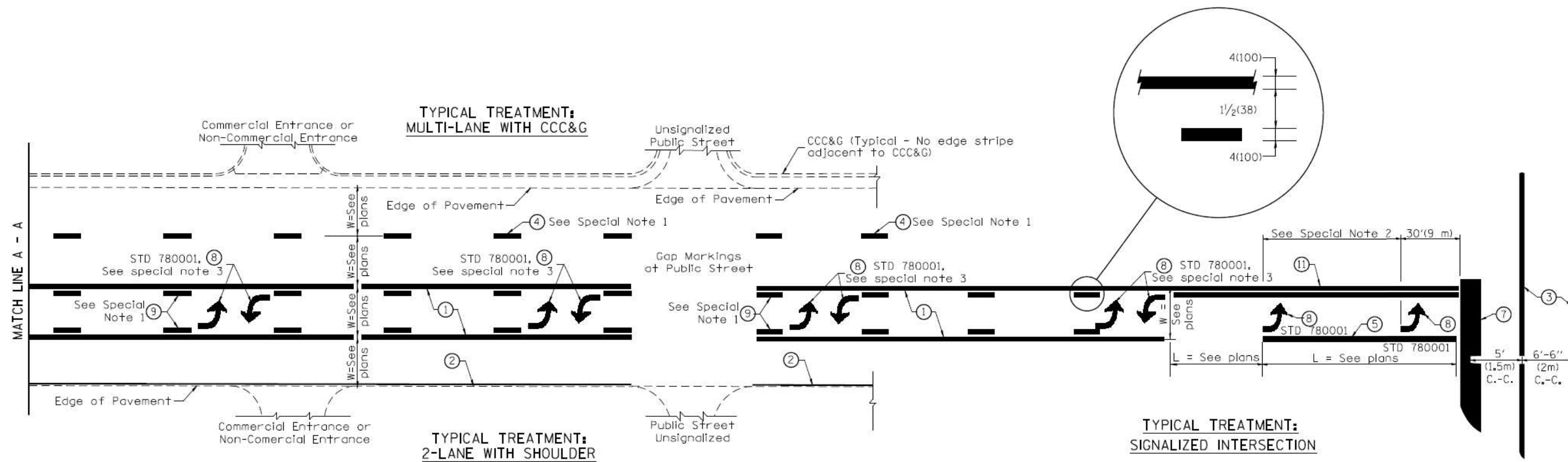
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------|---------|---------------------------|--------------------|-----------|
| 318 | 3RS-6 | MARSHALL | 15 | 12 |
| RTE. IL 29 | | | CONTRACT NO. 68J22 | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |



CASE 4 : SINGLE LIFT OVERLAY WITH EQUIVALENT DEPTH
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

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

| | | | | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | | BUTT JOINTS | | SHT. 3 OF 3 CADD STD. 406101-04 | | <table border="1"> <tr> <th>F.A. RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td>318</td> <td>3RS-6</td> <td>MARSHALL</td> <td>15</td> <td>13</td> </tr> <tr> <td colspan="2">RTE. IL 29</td> <td colspan="3">CONTRACT NO. 68J22</td> </tr> <tr> <td colspan="2">FED. ROAD DIST. NO.</td> <td colspan="3">ILLINOIS FED. AID PROJECT</td> </tr> </table> | | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | 318 | 3RS-6 | MARSHALL | 15 | 13 | RTE. IL 29 | | CONTRACT NO. 68J22 | | | FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |
|---------------------|---------|---------------------------|--------------|---|--|--------------------|--|------------------------------------|--|--|--|-----------|---------|--------|--------------|-----------|-----|-------|----------|----|----|------------|--|--------------------|--|--|---------------------|--|---------------------------|--|--|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 318 | 3RS-6 | MARSHALL | 15 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RTE. IL 29 | | CONTRACT NO. 68J22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | NOT TO SCALE | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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) (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)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 4(100) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 12(300) Diagonal (Yellow) (See Table A)
- ⑪ 4(100) Double Solid (Yellow) (See Table A)

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
2. 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.
3. 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

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. 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: Grooving for Recessed Pavement Markings)

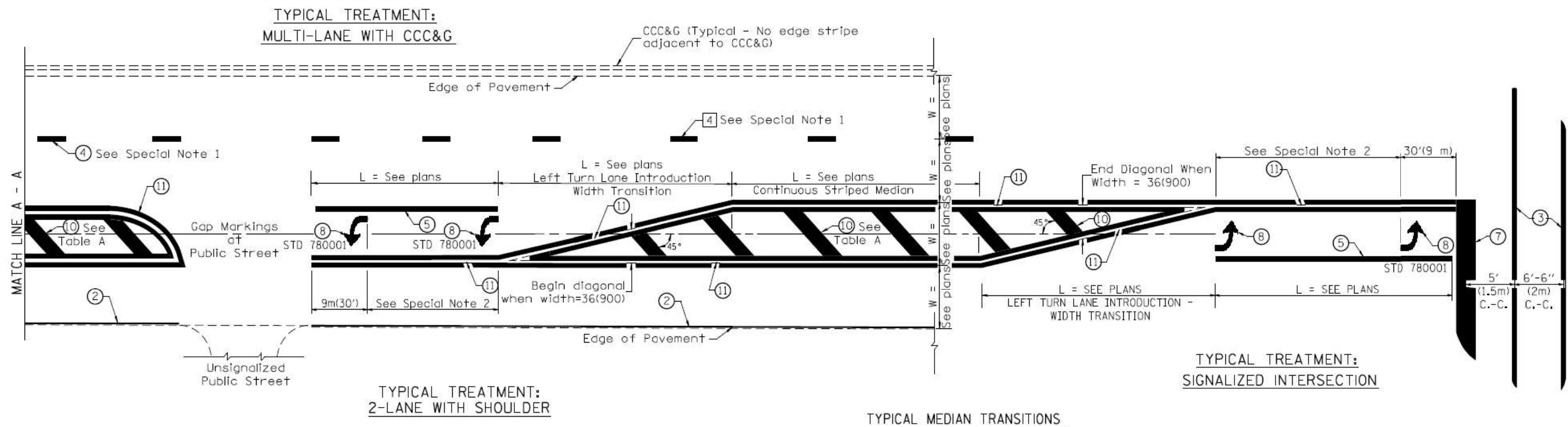
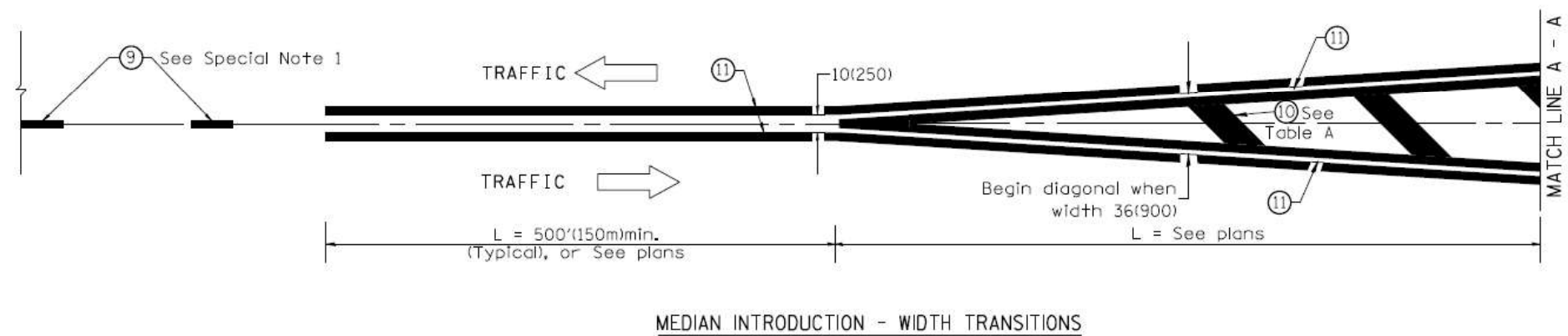


TABLE A
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

| SPEED LIMIT RANGE | INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions) | |
|----------------------------|---|----------|
| | CONTINUOUS | |
| Less Than 30 mph (50 km/h) | 50' (15m) | 15' (5m) |
| 30 - 45 mph (50 - 70 km/h) | 75' (23m) | 20' (6m) |
| Over 45 mph (70 km/h) | 150' (46m) | 30' (9m) |



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKINGS

NOT TO SCALE

SHT. 2 OF 2
CADD STD. 780001-D4

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------|---------|---------------------------|--------------|-----------|
| 318 | 3RS-6 | MARSHALL | 15 | 15 |
| RTE. IL 29 | | CONTRACT NO. 68J22 | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |