

**INTERNATIONAL DRIVE REHABILITATION  
JACKSON-MEDGAR WILEY EVERS INTERNATIONAL AIRPORT  
CITY OF JACKSON  
RANKIN COUNTY, MS.**

80

STA. 13+50  
BEGIN MILLING & OVERLAY

**JACKSON-MEDGAR WILEY EVERS  
INTERNATIONAL AIRPORT**

EOP STA. 99+60.870  
END MILLING & OVERLAY

JACKSON CORPORATION BOUNDARY

OLD BRANDON RD.

BOP STA. 13+50

PROJECT SITE

PP-1, PP-2, PP-3, PP-4, PP-5, PP-6, PP-7

0 500 1000

## SHEET 1



| DESCRIPTION OF SHEET                                                    | WKG.<br>NO. | SH.<br>NO. |
|-------------------------------------------------------------------------|-------------|------------|
| TITLE SHEET ( 1 )                                                       | T-1         | 1          |
| DETAILED INDEX - ROADWAY                                                | DI-1        | 2          |
| GENERAL NOTES                                                           | GN-1        | 3          |
| GENERAL NOTES                                                           | GN-2        | 4          |
| <b><u>TYPICAL SECTION SHEETS ( 2 )</u></b>                              |             |            |
| TYPICAL SECTION - INTERNATIONAL DRIVE                                   | TS-1        | 5          |
| TYPICAL SECTION - INTERNATIONAL DRIVE                                   | TS-2        | 6          |
| <b><u>SUMMARY OF QUANTITY SHEETS ( 2 )</u></b>                          |             |            |
| SUMMARY OF QUANTITIES                                                   | SQ-1        | 7          |
| SUMMARY OF QUANTITIES                                                   | SQ-2        | 8          |
| <b><u>ESTIMATED QUANTITY SHEETS ( 3 )</u></b>                           |             |            |
| ESTIMATED QUANTITY - EARTHWORK AND EROSION CONTROL                      | EQ-1        | 9          |
| ESTIMATED QUANTITY - PAVEMENT MARKING                                   | EQ-2        | 10         |
| ESTIMATED QUANTITY - CONSTRUCTION SIGNING                               | EQ-3        | 11         |
| <b><u>PLAN &amp; PROFILE SHEETS ( 9 )</u></b>                           |             |            |
| INTERNATIONAL DRIVE - STA. 5+00 TO STA. 20+00                           | PP-1        | 12         |
| INTERNATIONAL DRIVE - STA. 20+00 TO STA. 35+00                          | PP-2        | 13         |
| INTERNATIONAL DRIVE - STA. 35+00 TO STA. 50+00                          | PP-3        | 14         |
| INTERNATIONAL DRIVE - STA. 50+00 TO STA. 65+00                          | PP-4        | 15         |
| INTERNATIONAL DRIVE - STA. 65+00 TO STA. 78+00                          | PP-5        | 16         |
| INTERNATIONAL DRIVE - STA. 10+00 TO STA. 15+38.913                      | PP-5A       | 17         |
| INTERNATIONAL DRIVE - STA. 78+00 TO STA. 85+00                          | PP-6        | 18         |
| INTERNATIONAL DRIVE - STA. 10+00 TO STA. 15+20.378                      | PP-6A       | 19         |
| INTERNATIONAL DRIVE - STA. 85+00 TO STA. 99+60.870                      | PP-7        | 20         |
| <b><u>PAVEMENT MARKING SHEETS ( 9 )</u></b>                             |             |            |
| PAVEMENT MARKING DETAILS - INTERNATIONAL DRIVE STA. 13+50 TO STA. 21+00 | PMD-1       | 21         |
| PAVEMENT MARKING DETAILS - INTERNATIONAL DRIVE STA. 21+00 TO STA. 30+00 | PMD-2       | 22         |
| PAVEMENT MARKING DETAILS - INTERNATIONAL DRIVE STA. 30+00 TO STA. 39+00 | PMD-3       | 23         |
| PAVEMENT MARKING DETAILS - INTERNATIONAL DRIVE STA. 39+00 TO STA. 48+00 | PMD-4       | 24         |
| PAVEMENT MARKING DETAILS - INTERNATIONAL DRIVE STA. 48+00 TO STA. 57+00 | PMD-5       | 25         |
| PAVEMENT MARKING DETAILS - INTERNATIONAL DRIVE STA. 57+00 TO STA. 66+00 | PMD-6       | 26         |
| PAVEMENT MARKING DETAILS - INTERNATIONAL DRIVE STA. 66+00 TO STA. 75+00 | PMD-7       | 27         |
| PAVEMENT MARKING DETAILS - INTERNATIONAL DRIVE STA. 75+00 TO STA. 85+00 | PMD-8       | 28         |
| PAVEMENT MARKING DETAILS - INTERNATIONAL DRIVE STA. 85+00 TO STA. 94+00 | PMD-9       | 29         |
| <b><u>CONSTRUCTION SIGNING SHEETS ( 1 )</u></b>                         |             |            |
| CONSTRUCTION SIGNING - INTERNATIONAL DRIVE                              | CS-1        | 30         |

| DESCRIPTION OF SHEET                                                      | WKG.<br>NO. | SH.<br>NO. |
|---------------------------------------------------------------------------|-------------|------------|
| <b><u>MISCELLANEOUS - SPECIAL DESIGN SHEETS ( 2 )</u></b>                 |             |            |
| SURVEY CONTROL DATA SHEET                                                 | SC-1        | 31         |
| DISSIPATOR DETAILS                                                        | DD-1        | 32         |
| <b><u>STANDARD DRAWINGS ( 33 )</u></b>                                    |             |            |
| PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED ROADWAYS           | PM-1        | 33         |
| PAVEMENT MARKING LEGEND DETAILS                                           | PM-5        | 34         |
| PAVEMENT MARKING LEGEND DETAILS                                           | PM-6        | 35         |
| 4-LANE TO 2-LANE TRANSITION AT INTERCHANGE                                | PM-8        | 36         |
| TYPICAL TEMPORARY EROSION/ SEDIMENT CONTROL APPLICATIONS                  | ECD-1       | 37         |
| DETAILS OF SEDIMENT BARRIER APPLICATIONS                                  | ECD-2       | 38         |
| DETAILS OF SILT FENNCE INSTALLATION                                       | ECD-3       | 39         |
| DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS                  | ECD-4       | 40         |
| STABILIZED CONSTRUCTION ENTRANCE                                          | ECD-16      | 41         |
| DETAILS OF TYPICAL DITCH TREATMENT                                        | DT-1        | 42         |
| SUPERELEVATION TRANSITION ROTATION ABOUT CENTERLINE                       | SE-2E       | 43         |
| TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)   | TCP-1       | 44         |
| DIVIDED HIGHWAYS) (MEDIAN LANE OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD) |             |            |
| TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT LESS THAN 65 MPH              | TCP-2       | 45         |
| (4-LANE: MEDIAN LANE OR OUTSIDE LANE CLOSURE) (WORK DAY ONLY)             |             |            |
| TRAFFIC CONTROL PLANS UNEVEN PAVEMENT DETAILS                             | TCP-12      | 46         |
| TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS | TCP-13      | 47         |
| TRAFFIC CONTROL DETAILS - DRUM PLACEMENT AND SHOULDER CLOSURE             | TCP-16      | 48         |
| DRIVEWAYS, INTEGRAL CURB & SIDEWALK                                       | SD-2        | 49         |
| CURB RAMPS RAMP DESIGN ELEMENTS                                           | CR-1        | 50         |
| CURB RAMPS PLACEMENT DETAILS                                              | CR-2        | 51         |
| CURB RAMPS DETETABLE WARNING DETAILS                                      | CR-4        | 52         |
| TOTAL SHEETS =                                                            |             | 52         |

| REVISIONS |                   |     |
|-----------|-------------------|-----|
| DATE      | SHEET NO.         | BY  |
| 5/6/19    | 9 & 32            | RJS |
| 5/23/19   | 6, 7, 16, 18 & 28 | RJS |
|           |                   |     |
|           |                   |     |

|          |    |                   |      |
|----------|----|-------------------|------|
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
| REVISION | BY | DESCRIPTION       | DATE |
|          |    | DRAWING REVISIONS |      |

| DESIGN TEAM    |             |               |
|----------------|-------------|---------------|
| DESIGNED _____ | DRAWN _____ | CHECKED _____ |
| SCALE: 1"=100' |             | DATE: _____   |



- (1) THE LOCATION AND SPACING OF SIGNS, SHOWN ON THE TRAFFIC CONTROL PLANS, ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.

(2) ALL TRAFFIC CONTROL DEVICES ON THIS PROJECT SHALL COMPLY WITH PART VI OF THE **MUTCD** (LATEST EDITION).

(3) ALL PLASTIC DRUMS SHALL HAVE A BALLASTING COLLAR MADE FROM RECYCLED TRUCK TIRES OR OTHER SUITABLE MATERIAL.

(4) A GEOTECHNICAL REPORT HAS BEEN PREPAIRED FOR THIS PROJECT USING SAMPLES TAKEN FROM HOLES AT THE LOCATIONS INDICATED IN THE TESTS REPORTS. J.M.A.A. DOES NOT GUARANTEE THAT THE MATERIALS AS SHOWN IN THE REPORTS ARE NECESSARILY TO BE FOUND OUTSIDE THE TEST HOLES.

(5) 25% SHRINKAGE FACTOR USED IN THE EARTHWORK CALCULATIONS IS FOR DESIGN ESTIMATING PURPOSES ONLY.

(6) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING STRUCTURES SUCH AS, BUT NOT LIMITED TO, PIPES, INLETS, APRONS, AND BRIDGES FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTR- UCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.

(7) UTILITIES ON THE DRAWINGS ARE SHOWN IN THEIR ORIGINAL LOCATION BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. UTILITIES THAT WERE FOUND TO BE IN CONFLICT WITH CONSTRUCTION HAVE BEEN RELOCATED. PERMITS ARE ON FILE WITH THE DEPARTMENT SHOWING THE APPROXIMATE LOCATION OF UTILITIES RELOCATED WITHIN THE RIGHT-OF-WAY. THE ENGINEER CAN NOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION.

(8) WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES. THEREFORE, THE RISK OF A FAILURE OCCURRING DURING EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING WHAT BRACING, SHORING, OR GROUND SUPPORT SYSTEM THAT IS DEEMED NECESSARY TO PREVENT A FAILURE AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION, THE PUBLIC THAT MAY BE ABOVE THE EXCAVATION, OR ANY STRUCTURES ADJACENT TO THE EXCAVATION. ALL COSTS FOR DESIGNING, DRAWING, AND CONSTRUCTING THE FACILITY SHALL BE INCLUDED IN THE PRICE BID FOR CONTRACT ITEMS.

(9) SOME WORK IS REQUIRED OUTSIDE THE PROJECT LIMITS. NO ADDITIONAL COMPENSATION WILL BE MADE FOR SUCH WORK EXCEPT AS PROVIDED BY SPECIFIC PAY ITEMS INCLUDED IN THE PLANS.

(10) WIRE FENCE BACKING WILL BE REQUIRED FOR ALL SILT FENCE. (SEE WK. NO. ECD-3)

(11) FOR LIST OF PUBLIC UTILITIES, SEE WORKING NO. GN-2.
- (12) FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED ON THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.

(13) SMALL AMOUNTS OF EXCAVATION MAY BE NECESSARY AT SOME OF THE SITES. THIS MATERIAL MAY BE USED AS E.S.F.E. MATERIAL AND WILL BE PAID FOR BORROW. NO E.S.F.E. MATERIAL SHALL BE REMOVED FROM THE PROJECT WITHOUT THE APPROVAL OF THE ENGINEER.

(14) VEGETATIVE MATERIAL WILL BE REMOVED PRIOR TO PLACEMENT OF GRANULAR MATERIAL. THE COST OF WHICH SHALL BE ABSORBED IN OTHER ITEMS BID.

(15) THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE SURFACE TREATED SHOULDER THAT MIGHT OCCUR DURING CONSTRUCTION. ANY REPAIR TO SHOULDER WILL BE IN ACCORDANCE WITH SECTION 410 OF **THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION**. NO PAYMENT WILL BE MADE FOR REPAIR OF DAMAGED SHOULDER.

(16) THE CONTRACTOR SHALL COVER ANY TEMPORARY TRAFFIC CONTROL SIGNS SHOWN IN THE TRAFFIC CONTROL PLAN THAT DO NOT APPLY TO THE CURRENT PHASE.

(17) REMOVAL OF RAISED PAVEMENT MARKERS THAT ARE IN CONFLICT WITH REQUIRED CONSTRUCTION IS NOT CONSIDERED A SEPARATE PAY ITEM. COST TO BE ABSORBED IN OTHER ITEMS BID.

(18) REMOVAL OF OBJECT MARKERS IS NOT CONSIDERED A SEPARATE PAY ITEM, AND SHALL BE ABSORBED IN OTHER ITEMS BID.

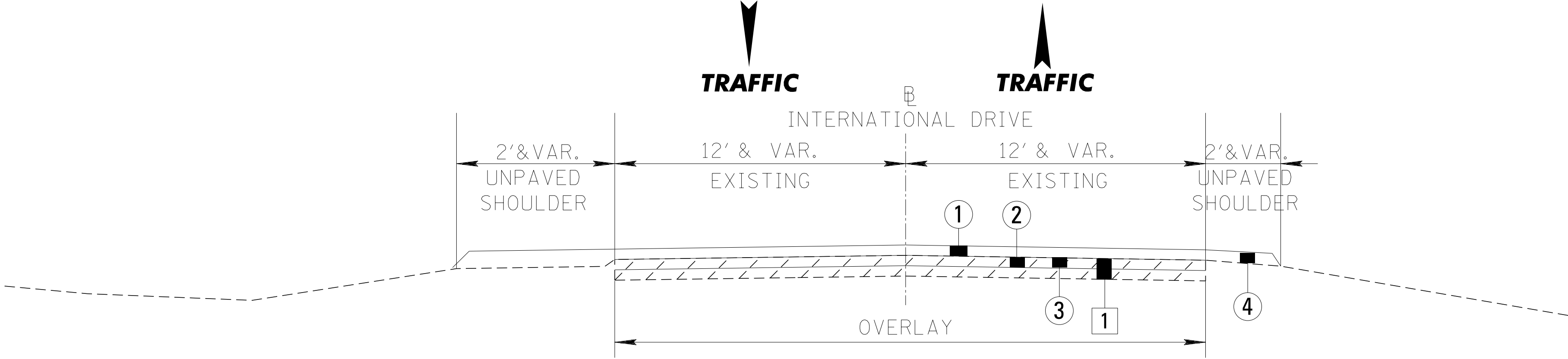


- (19) WHERE MILLING IS REQUIRED, THE CONTRACTOR SHALL PROVIDE OUTLETS IN THE EXISTING SHOULDERS AT SUFFICIENT INTERVALS TO PREVENT POOLING OR STANDING WATER ON THE MILLED SURFACE, THE COST OF WHICH SHALL BE ABSORBED IN OTHER ITEMS BID.
- (20) THE EROSION CONTROL DEVICES REFERENCED IN THESE PLANS ARE A MINIMUM REQUIREMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SILT DOES NOT LEAVE THE RIGHT OF WAY OR CONTAMINATE WATERS OF THE U. S. DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF WORK AND MAINTAIN THE PLAN DURING CONSTRUCTION.
- (21) THE CONTRACTOR IS RESPONSIBLE FOR FIELD-VERIFICATION OF EXISTING GRADES AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.
- (22) TEMPORARY STRIPING SHALL CONFORM TO FINISHED STRIPE SPECIFICATIONS FOR ALIGNMENT, NEATNESS, AND STRAIGHTNESS.
- (23) IF COLORS ARE USED ON PLAN/PROFILE SHEETS, THEY ARE INTENDED TO VISUALLY EASE THE LOCATION OF ELEMENTS FOR USERS OF THESE DRAWINGS. ALTHOUGH THE INTENT IS TO CATEGORIZE EVERYTHING AS EITHER EXISTING OR PROPOSED, IT IS THE END USER’S RESPONSIBILITY TO ENSURE ALL ELEMENTS ARE INTERPRETED CORRECTLY, REGARDLESS OF COLOR.
- (24) ALL ITEMS OF WORK ASSOCIATED WITH THE INSTALLATION OF A CONSTRUCTION ENTRANCE SHALL BE ABSORBED IN OTHER ITEMS OF WORK.

(25) LIST OF PUBLIC UTILITIES:

|                                                                    |                                                                      |
|--------------------------------------------------------------------|----------------------------------------------------------------------|
| <u>ELECTRIC SERVICE</u><br>ENTERGY<br>JACKSON, MS.<br>601-351-4367 | <u>TELEPHONE SERVICE</u><br>A T & T<br>601-859-3307                  |
| <u>GAS SERVICE</u><br>ATMOS ENERGY<br>601-592-5312                 | <u>MISS ONE CALL SYSTEM</u><br>"CALL BEFORE YOU DIG"<br>800-227-6477 |
| <u>CABLE SERVICE</u><br>COMCAST<br>601-862-4834                    | <u>FIBER OPTIC SERVICES</u><br>CSPIRE<br>601-487-5333                |
| <u>SEWER SERVICE</u><br>J.M.A.A.<br>601-939-5631                   |                                                                      |
| <u>WATER SERVICE</u><br>J.M.A.A.<br>601-939-5631                   |                                                                      |





TYPICAL SECTION

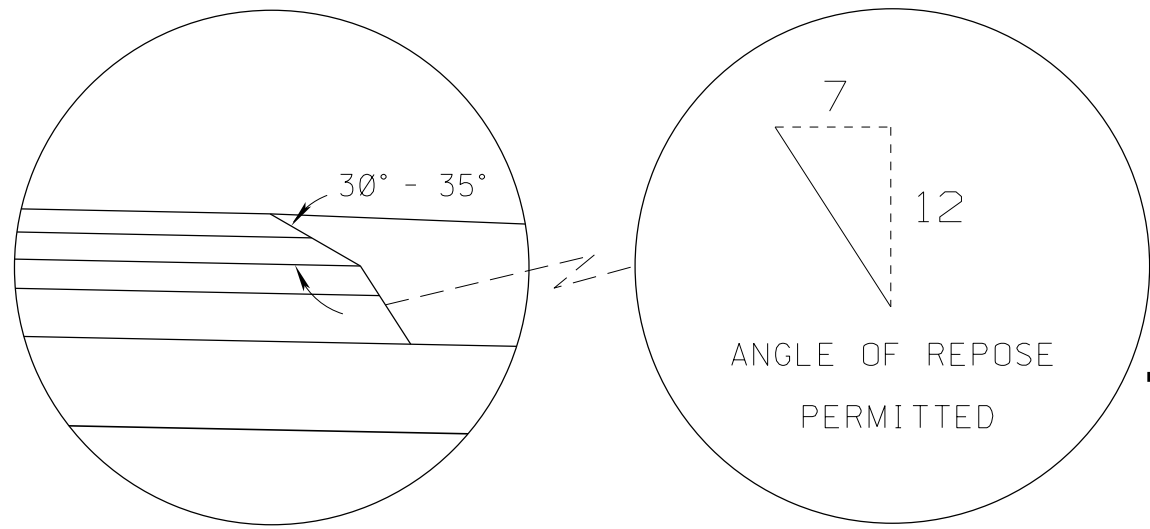
INTERNATIONAL DRIVE  
OVERLAY  
STA. 13+50 TO STA. 61+48

INTERNATIONAL DRIVE PROPOSED PAVEMENT STRUCTURE

- ① 2.0" 9.5mm, ST ASPHALT PAVEMENT, (1 @ 2.0"), REQ'D
- ② 2.0" 12.5mm, ST ASPHALT PAVEMENT, LEVELING (LOCATION SHOWN IN PLANS)
- ③ 2.0" COLD MILLING REQUIRED (LOCATION SHOWN IN PLANS)
- ④ 2.0" & VAR. GRANULAR MAT'L (CLASS 5 GROUP E)

INTERNATIONAL DRIVE EXISTING PAVEMENT STRUCTURE

- ① 4.5" & VARIES ASPHALT PAVEMENT



SAFETY EDGE REQ'D  
TOP 2 LIFTS ONLY  
(NOT A PAY ITEM)

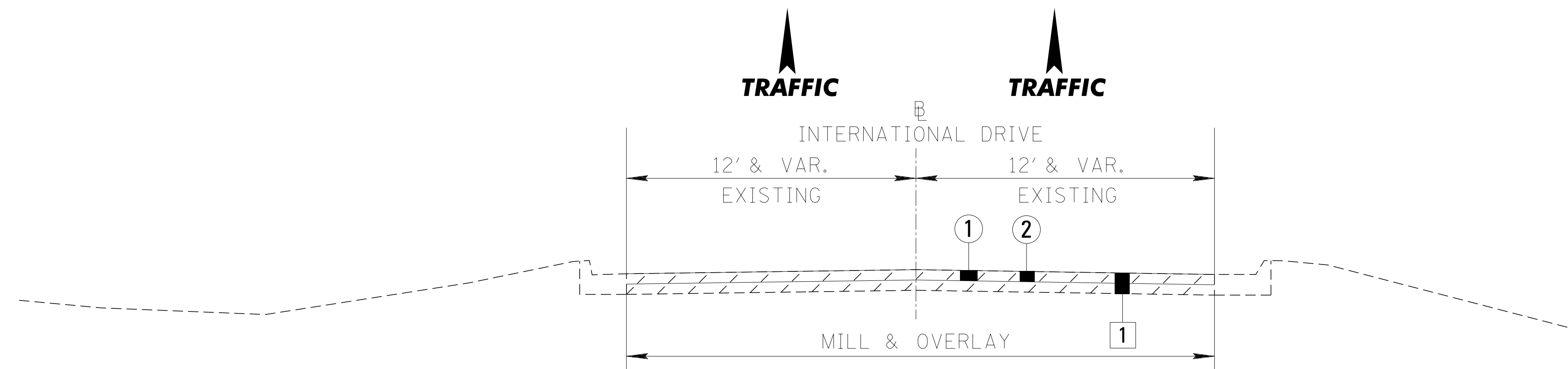
TYPICAL SECTIONS

INTERNATIONAL DRIVE  
MILLING AND OVERLAY

|          |    |                   |      |
|----------|----|-------------------|------|
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
| REVISION | BY | DESCRIPTION       | DATE |
|          |    | DRAWING REVISIONS |      |

|                |             |               |
|----------------|-------------|---------------|
| DESIGN TEAM    |             |               |
| DESIGNED _____ | DRAWN _____ | CHECKED _____ |
| SCALE: 1"=4'   |             | DATE: _____   |





TYPICAL SECTION  
INTERNATIONAL DRIVE

1 STA. 61+48.51 TO STA. 76+50  
STA. 82+60 TO STA. 99+60.87  
ONE WAY - CURB AND GUTTER

EXIT TO DEPARTURE AREA

STA. 13+17.78 TO STA. 15+38.91

ENTRANCE FROM DEPARTURE AREA

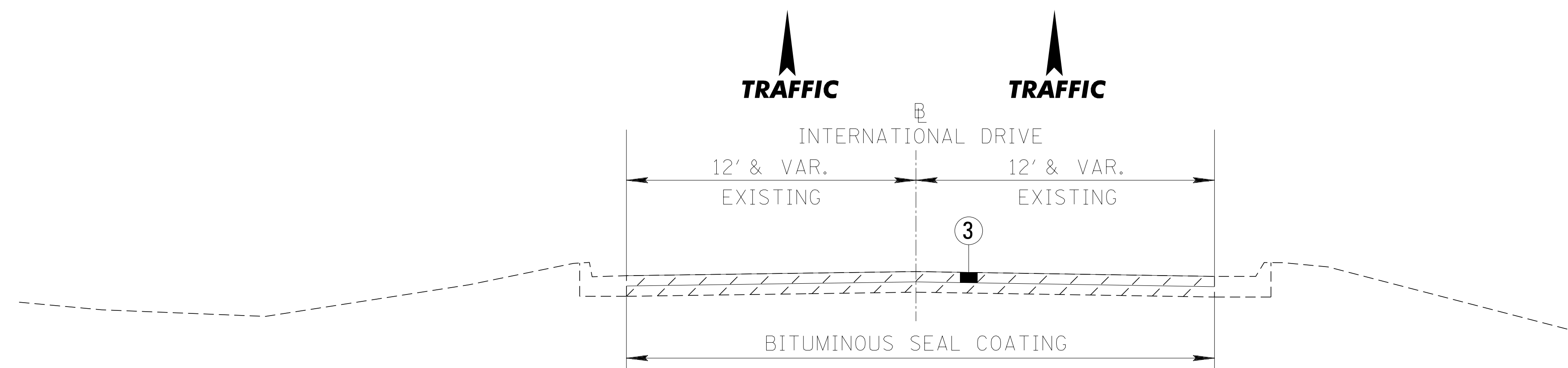
STA. 10+00 TO STA. 14+47.03

### INTERNATIONAL DRIVE PROPOSED PAVEMENT STRUCTURE

- ① 2.0" 9.5mm, ST ASPHALT PAVEMENT, (1 @ 2.0"), REQ'D  
 ② 2.0" COLD MILLING REQUIRED  
 ③ SLURRY SEAL (TYPE 1) 

## INTERNATIONAL DRIVE EXISTING PAVEMENT STRUCTURE

- 1** 4.5" & VARIES ASPHALT PAVEMENT



TYPICAL SECTION  
INTERNATIONAL DRIVE 

STA. 76+50 TO STA. 82+60

|                   |     |                                   |         |
|-------------------|-----|-----------------------------------|---------|
|                   |     |                                   |         |
|                   |     |                                   |         |
|                   |     |                                   |         |
|                   |     |                                   |         |
|                   |     |                                   |         |
|                   |     |                                   |         |
|                   | RJS | ADDED TYPICAL SHOWING SLURRY SEAL | 5/23/19 |
| REVISION          | BY  | DESCRIPTION                       | DATE    |
| DRAWING REVISIONS |     |                                   |         |

|                |             |               |
|----------------|-------------|---------------|
| DESIGN TEAM    |             |               |
| DESIGNED _____ | DRAWN _____ | CHECKED _____ |
| SCALE: 1" = 4' |             | DATE: _____   |



SUMMARY OF QUANTITIES

| PAY ITEM NO.  | NAICS CODE | PAY ITEM                                                       | UNIT | ALT. A | FINAL | ALT. B | FINAL |
|---------------|------------|----------------------------------------------------------------|------|--------|-------|--------|-------|
| 202-B080      | 238910     | REMOVAL OF CONCRETE SIDEWALK                                   | SY   | 125    |       | 125    |       |
| 202--B092     | 238910     | REMOVAL OF CURB, ALL TYPES                                     | LF   | 75     |       | 75     |       |
| 202-B208      | 238910     | REMOVAL OF RIP RAP                                             | SY   | 500    |       | 500    |       |
| 203-EX021     | 238910     | BORROW EXCAVATION, AH, FME, CLASS B9-6                         | CY   | 354    |       | 354    |       |
| 206-B001      | 238910     | SELECT MATERIAL FOR UNDERCUTS, CONTRACTOR FURNISHED            | CY   | 95     |       | 95     |       |
| 216-A001      | 237310     | SOLID SODDING                                                  | SY   | 100    |       | 100    |       |
| 219-A001      | 237310     | WATERING                                                       | KGAL | 2      |       | 2      |       |
| 234-A001      | 238110     | TEMPORARY SILT FENCE                                           | LF   | 200    |       | 200    |       |
| 237-A002      | 238110     | WATTLES, 20"                                                   | LF   | 150    |       | 150    |       |
| 249-A001      | 238910     | RIPRAP FOR EROSION CONTROL                                     | TON  | 50     |       | 50     |       |
| 304-B005      | 238910     | GRANULAR MATERIAL, CLASS 5, GROUP E                            | TON  | 395    |       | 395    |       |
| 403-A015      | 237310     | 9.5-MM, ST, ASPHALT PAVEMENT                                   | TON  | 3,401  |       | 3,401  |       |
| 403-B013      | 237310     | 12.5-MM, ST, ASPHALT PAVEMENT , LEVELING                       | TON  | 499    |       | 499    |       |
| 406-A002      | 237310     | COLD MILLING OF BITUMINOUS PAVEMENT, ALL DEPTHS                | SY   | 18,942 |       | 18,942 |       |
| 407-A001      | 237310     | ASPHALT FOR TACK COAT                                          | GAL  | 2,505  |       | 2,505  |       |
| S-411-A       | 237310     | SLURRY SEAL (TYPE 1)                                           | SY   | 3,169  |       | 4,812  |       |
| 503-C010      | 238910     | SAW CUT, FULL DEPTH                                            | LF   | 225    |       | 225    |       |
| 601-B001      | 238120     | CLASS "B" STRUCTURAL CONCRETE, MINOR STRUCTURES                | CY   | 108    |       | 108    |       |
| 602-A001      | 238120     | REINFORCING STEEL                                              | LB   | 1,000  |       | 1,000  |       |
| 608-B001      | 237310     | CONCRETE SIDEWALK, WITH REINFORCEMENT                          | SY   | 125    |       | 125    |       |
| 609-B002      | 237310     | CONCRETE CURB, HEADER                                          | LF   | 50     |       | 50     |       |
| 618-A001      | 561990     | MAINTENANCE OF TRAFFIC                                         | LS   | 1      |       | 1      |       |
| 619-A1002     | 237310     | TEMPORARY TRAFFIC STRIPE, CONTINUOUS WHITE                     | LF   | 31,414 |       | 31,692 |       |
| 619-A2002     | 237310     | TEMPORARY TRAFFIC STRIPE, CONTINUOUS YELLOW                    | LF   | 1,397  |       | 1,397  |       |
| 619-A3002     | 237310     | TEMPORARY TRAFFIC STRIPE, SKIP WHITE                           | LF   | 8,224  |       | 8,724  |       |
| 619-A4001     | 237310     | TEMPORARY TRAFFIC STRIPE, SKIP YELLOW                          | LF   | 6,299  |       | 6,299  |       |
| 907-619-A5001 | 237310     | TEMPORARY TRAFFIC STRIPE, DETAIL BLUE ADA                      | LF   | 380    |       | 380    |       |
| 619-A5002     | 237310     | TEMPORARY TRAFFIC STRIPE, DETAIL                               | LF   | 32,381 |       | 32,432 |       |
| 907-619-A6001 | 237310     | TEMPORARY TRAFFIC STRIPE, LEGEND BLUE ADA                      | SF   | 32     |       | 32     |       |
| 619-A6001     | 237310     | TEMPORARY TRAFFIC STRIPE, LEGEND                               | LF   | 1,784  |       | 1,944  |       |
| 619-A6002     | 237310     | TEMPORARY TRAFFIC STRIPE, LEGEND                               | SF   | 2,679  |       | 2,679  |       |
| 619-C6001     | 237310     | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKER            | EA   | 577    |       | 590    |       |
| 619-C7001     | 237310     | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKER       | EA   | 239    |       | 239    |       |
| 619-D1001     | 237310     | STANDARD ROADSIDE CONSTRUCTION SIGNS, LESS THAN 10 SQUARE FEET | SF   | 8      |       | 8      |       |
| 619-D2001     | 237310     | STANDARD ROADSIDE CONSTRUCTION SIGNS, 10 SQUARE FEET OR MORE   | SF   | 50     |       | 50     |       |
| 619-F1001     | 237310     | CONCRETE MEDIAN BARRIER, PRECAST                               | LF   | 100    |       | 100    |       |
| 619-G4001     | 237310     | BARRICADES, TYPE III, DOUBLE FACED                             | LF   | 12     |       | 12     |       |
| 619-G5001     | 237310     | FREE STANDING PLASTIC DRUMS                                    | EA   | 100    |       | 100    |       |
| 620-A001      | 237310     | MOBILIZATION                                                   | LS   | 1      |       | 1      |       |

- ① INCLUDES A 25% INCREASE FROM CALCULATED QUANTITY.
- ② QUANTITY ESTIMATED, ACTUAL QUANTITY AND PLACEMENT TO BE USED AS DIRECTED BY THE ENGINEER.
- ③ INCLUDES 13 C.Y. FOR CONCRETE DISSIPATORS 95 CY FOR PAVED DITCH
- ④ STATE AID PAY ITEM - REFER TO 2004 STATE AID STANDARD SPECIFICATIONS
- ⑤ TEMPORARY STRIPE QUANTITY INCLUDES ONE APPLICATION ON MILLED SURFACE

NOTE:  
ALTERNATE "A" IS ALL PUBLIC AREAS SHOWN.  
  
ALTERNATE "B" INCLUDES ALL PUBLIC AREAS AND GATED PARKING ON PICKUP LEVEL SHOWN ON PP-6.



## SUMMARY OF QUANTITIES

[illegible]



| ESTIMATED EARTHWORK QUANTITIES |          |          |               |                         |                   |          |                           |
|--------------------------------|----------|----------|---------------|-------------------------|-------------------|----------|---------------------------|
| WK SHEET NO.                   | CUT      | FILL     | BORROW (B9-6) | UNCLASSIFIED EXCAVATION | EXCESS EXCAVATION |          | REMARKS                   |
|                                |          |          |               |                         | EXCESS            | CHANNEL  |                           |
| 1                              | PP-3     | 0        | 144           |                         |                   |          | STILLING BASIN INTL. DR.  |
| 1                              | PP-3     | 0        | 139           |                         |                   |          | STILLING BASIN HANGER DR. |
|                                |          |          |               |                         |                   |          |                           |
|                                |          |          |               |                         |                   |          |                           |
|                                |          |          |               |                         |                   |          |                           |
| UNITS                          | CU. YDS. | CU. YDS. | CU. YDS.      | CU. YDS.                | CU. YDS.          | CU. YDS. |                           |
| TOTALS                         | 0        | 283      | 0             | 0                       | 0                 | 0        |                           |
| SHRINKAGE FACTOR (SF) = 25%    |          |          |               |                         |                   |          |                           |
| BORROW = FILL x (1+SF)         |          |          | 354           |                         |                   |          |                           |
|                                |          |          |               |                         |                   |          |                           |
|                                |          |          |               |                         |                   |          |                           |
| UNITS                          |          |          | CU. YDS.      | CU. YDS.                | CU. YDS.          | CU. YDS. |                           |
| TOTALS                         |          |          | 354           | 0                       | 0                 | 0        |                           |

RJS

## EARTHWORK QUANTITIES

[illegible]

|                |             |               |
|----------------|-------------|---------------|
| DESIGN TEAM    |             |               |
| DESIGNED _____ | DRAWN _____ | CHECKED _____ |
| SCALE: 1" = 1' |             | DATE: 2019    |





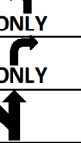
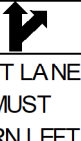
| PERMANENT PAVEMENT MARKING DETAILS |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
|------------------------------------|---------------|--------|------------|--------|--------|----------|-------|--------|----------|--------|-------|--------|--------------|----------|----------|---------|
| SHEET NO.                          | THERMOPLASTIC |        |            |        |        |          |       |        |          |        |       |        | MARKERS      |          |          | REMARKS |
|                                    | EDGE          |        | CONTINUOUS |        | LEGEND |          |       | DETAIL |          |        | SKIP  |        | RED<br>CLEAR | YELLOW   |          |         |
|                                    | WHITE         | YELLOW | WHITE      | YELLOW | WHITE  | ADA BLUE | WHITE | WHITE  | ADA BLUE | YELLOW | WHITE | YELLOW |              | 1<br>WAY | 2<br>WAY |         |
| PMD-1                              | 2,381         | 0      | 0          | 149    | 0      | 0        | 0     | 74     | 0        | 5,664  | 0     | 196    | 0            | 0        | 81       |         |
| PMD-2                              | 1,800         | 0      | 0          | 575    | 0      | 0        | 0     | 0      | 0        | 0      | 0     | 1,200  | 0            | 0        | 30       |         |
| PMD-3                              | 1,800         | 0      | 0          | 0      | 0      | 0        | 0     | 0      | 0        | 0      | 0     | 1,200  | 0            | 0        | 30       |         |
| PMD-4                              | 1,801         | 0      | 0          | 0      | 0      | 0        | 0     | 81     | 0        | 0      | 0     | 1,199  | 4            | 0        | 30       |         |
| PMD-5                              | 1,677         | 0      | 0          | 73     | 110    | 0        | 0     | 408    | 0        | 0      | 0     | 1,200  | 21           | 0        | 30       |         |
| PMD-6                              | 2,776         | 0      | 0          | 181    | 218    | 0        | 265   | 813    | 0        | 1,124  | 800   | 383    | 50           | 0        | 36       |         |
| PMD-7                              | 2,210         | 0      | 0          | 0      | 0      | 0        | 349   | 696    | 0        | 0      | 1,560 | 0      | 86           | 0        | 0        |         |
| PMD-8                              | 3,109         | 0      | 0          | 0      | 537    | 16       | 629   | 6,503  | 190      | 0      | 864   | 0      | 312          | 0        | 0        |         |
| PMD-9                              | 1,606         | 0      | 0          | 44     | 82     | 0        | 39    | 2,354  | 0        | 0      | 888   | 0      | 104          | 0        | 2        |         |
|                                    |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
| UNITS                              | FEET          | FEET   | FEET       | FEET   | FEET   | SQ FT    | SQ FT | FEET   | FEET     | FEET   | FEET  | FEET   | EACH         | EACH     | EACH     |         |
| TOTAL                              | 19,160        | 0      | 0          | 1,022  | 947    | 16       | 1,282 | 10,929 | 190      | 6,788  | 4,112 | 5,378  | 577          | 0        | 239      |         |
|                                    |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
|                                    |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
|                                    |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |

| PERMANENT PAVEMENT MARKING DETAILS (GATED AREA) |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
|-------------------------------------------------|---------------|--------|------------|--------|--------|----------|-------|--------|----------|--------|-------|--------|--------------|----------|----------|---------|
| SHEET NO.                                       | THERMOPLASTIC |        |            |        |        |          |       |        |          |        |       |        | MARKERS      |          |          | REMARKS |
|                                                 | EDGE          |        | CONTINUOUS |        | LEGEND |          |       | DETAIL |          |        | SKIP  |        | RED<br>CLEAR | YELLOW   |          |         |
|                                                 | WHITE         | YELLOW | WHITE      | YELLOW | WHITE  | ADA BLUE | WHITE | WHITE  | ADA BLUE | YELLOW | WHITE | YELLOW |              | 1<br>WAY | 2<br>WAY |         |
|                                                 |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
| PMD-8                                           | 278           | 0      | 320        | 0      | 160    | 0        | 0     | 51     | 0        | 0      | 560   | 0      | 13           | 0        | 0        |         |
|                                                 |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
|                                                 |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
|                                                 |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
|                                                 |               |        |            |        |        |          |       |        |          |        |       |        |              |          |          |         |
| UNITS                                           | FEET          | FEET   | FEET       | FEET   | FEET   | SQ FT    | SQ FT | FEET   | FEET     | FEET   | FEET  | FEET   | EACH         | EACH     | EACH     |         |
| TOTAL                                           | 278           | 0      | 320        | 0      | 160    | 0        | 0     | 51     | 0        | 0      | 560   | 0      | 13           | 0        | 0        |         |

PAVEMENT MARKING QUANTITIES



| SIGNS REQ'D. |           |                      |                 |                      |                                     |
|--------------|-----------|----------------------|-----------------|----------------------|-------------------------------------|
| SIGN NO.     | SIZE      | UNIT AREA<br>SQ. FT. | QUAN.<br>REQ'D. | SIGN AREA<br>SQ. FT. | REMARKS                             |
| G20 - 1      | 60" X 24" | 10.00                | 1               | 10                   |                                     |
| G20 - 2      | 48" X 24" | 8.00                 | 1               | 8                    |                                     |
| G20 - 4      | 36" X 18" | 4.50                 |                 |                      |                                     |
|              |           |                      |                 |                      |                                     |
| 1            | M1 - 1    | 24" X 24"            | 4.00            |                      | 1 of 2 DIGIT                        |
| 1            | M1 - 1    | 30" X 24"            | 5.00            |                      | 3 DIGIT                             |
| 2            | M1 - 4    | 24" X 24"            | 4.00            |                      | 1 of 2 DIGIT                        |
| 2            | M1 - 5    | 30" X 24"            | 5.00            |                      | 3 DIGIT                             |
|              |           |                      |                 |                      |                                     |
| 3            | M1 - 6    | 24" X 24"            | 4.00            |                      | 1 of 2 DIGIT                        |
| 3            | M1 - 6    | 30" X 24"            | 5.00            |                      | 3 DIGIT                             |
|              |           |                      |                 |                      |                                     |
| 4            | M3 - 1    | 24" X 12"            | 2.00            |                      | NORTH- 1 OR 2<br>DIGIT RTE. MARKER  |
| 4            | M3 - 1    | 30" X 15"            | 3.13            |                      | NORTH- 3<br>DIGIT RTE. MARKER       |
| 4            | M3 - 2    | 24" X 12"            | 2.00            |                      | EAST- 1 OR 2<br>DIGIT RTE. MARKER   |
| 4            | M3 - 2    | 30" X 15"            | 3.13            |                      | EAST- 3<br>DIGIT RTE. MARKER        |
| 4            | M3 - 3    | 24" X 12"            | 2.00            |                      | SOUTH- 1 OR 2<br>DIGIT RTE. MARKER  |
| 4            | M3 - 3    | 30" X 15"            | 3.13            |                      | SOUTH- 3<br>DIGIT RTE. MARKER       |
| 4            | M3 - 4    | 24" X 12"            | 2.00            |                      | WEST- 1 OR 2<br>DIGIT RTE. MARKER   |
| 4            | M3 - 4    | 30" X 15"            | 3.13            |                      | WEST- 3<br>DIGIT RTE. MARKER        |
|              |           |                      |                 |                      |                                     |
|              | M4 - 8    | 24" X 12"            | 2.00            |                      | DETOUR- 1 OR 2<br>DIGIT RTE. MARKER |
|              | M4 - 8a   | 24" X 18"            | 3.00            |                      | END DETOUR                          |
|              | M4 - 9    | 48" X 36"            | 12.00           | ◆                    | DETOUR<br>↑                         |
|              | M4 - 9L   | 48" X 36"            | 12.00           | ◆                    | DETOUR<br>↑                         |
|              | M4 - 9BL  | 48" X 36"            | 12.00           | ◆                    | DETOUR<br>↘                         |
|              | M4 - 9SL  | 30" X 24"            | 5.00            |                      | DETOUR<br>↘                         |
|              | M4 - 9BSL | 30" X 24"            | 5.00            |                      | DETOUR<br>↘                         |
|              | M4 - 9R   | 30" X 24"            | 5.00            |                      | DETOUR<br>↓                         |
|              | M4 - 9BR  | 30" X 24"            | 5.00            |                      | DETOUR<br>↘                         |
|              | M4 - 9SR  | 30" X 24"            | 5.00            |                      | DETOUR<br>↘                         |
|              | M4 - 9BSR | 30" X 24"            | 5.00            |                      | DETOUR<br>↘                         |
|              | M4 - 10L  | M4 - 10L             | 6.00            |                      | DETOUR<br>←                         |
|              | M4 - 10R  | M4 - 10R             | 6.00            |                      | DETOUR<br>→                         |
|              | SPECIAL   | 30" X 12"            | 2.50            |                      |                                     |
|              | SPECIAL   | 30" X 12"            | 2.50            |                      |                                     |
| 4            | M4 - 5    | 24" X 12"            | 2.00            |                      | TO                                  |
| 4            | M5 - 1L   | 21" X 15"            | 2.19            |                      | ↑                                   |
| 4            | M5 - 1R   | 21" X 15"            | 2.19            |                      | ↑                                   |
| 4            | M5 - 2L   | 21" X 15"            | 2.19            |                      | ↑                                   |
| 4            | M5 - 2R   | 21" X 15"            | 2.19            |                      | ↑                                   |
| 4            | M6 - 1L   | 21" X 15"            | 2.19            |                      | ↑                                   |
| 4            | M6 - 1R   | 21" X 15"            | 2.19            |                      | ↑                                   |
| 4            | M6 - 2L   | 21" X 15"            | 2.19            |                      | ↑                                   |
| 4            | M6 - 2R   | 21" X 15"            | 2.19            |                      | ↑                                   |
| 4            | M6 - 3    | 21" X 15"            | 2.19            |                      | ↑                                   |
|              |           |                      |                 |                      |                                     |
|              | R1 - 1    | 36" X 36"            | 9.00            |                      | STOP ①                              |
|              | R1 - 1    | 48" X 48"            | 16.00           | ◆                    | STOP ②                              |
|              | R1 - 2    | 48" X 48" X 48"      | 6.93            |                      | YEILD ①                             |
|              | R1 - 2    | 60" X 60" X 60"      | 10.83           | ◆                    | YEILD ②                             |

| SIGNS REQ'D. (CONT.) |           |                      |                 |                      |                                                                                          |
|----------------------|-----------|----------------------|-----------------|----------------------|------------------------------------------------------------------------------------------|
| SIGN NO.             | SIZE      | UNIT AREA<br>SQ. FT. | QUAN.<br>REQ'D. | SIGN AREA<br>SQ. FT. | REMARKS                                                                                  |
| R1 - 3               | 12" X 6"  | 0.50                 |                 |                      | 3-WAY, 4-WAY ETC.                                                                        |
| R2 - 1               | 36" X 48" | 12.00                | 1               | 12                   | SPEED LIMIT                                                                              |
|                      | 24" X 36" | 6.00                 |                 |                      |                                                                                          |
| R2 - 5A              | 48" X 60" | 20.00                |                 |                      | REDUCED SPEED AHEAD                                                                      |
|                      |           |                      |                 |                      |                                                                                          |
| R3 - 1               | 36" X 36" | 9.00                 |                 |                      |  ①    |
|                      | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| R3 - 2               | 36" X 36" | 9.00                 |                 |                      |  ①    |
|                      | 48" X 48" | 16.00                |                 |                      |                                                                                          |
|                      |           |                      |                 |                      |                                                                                          |
| R3 - 4               | 36" X 36" | 9.00                 |                 |                      |  ①    |
| R3 - 4               | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| R3 - 5L              | 30" X 36" | 7.50                 |                 |                      |  ONLY |
| R3 - 5R              | 30" X 36" | 7.50                 |                 |                      |                                                                                          |
| R3 - 6L              | 30" X 36" | 7.50                 |                 |                      |       |
| R3 - 6R              | 30" X 36" | 7.50                 |                 |                      |                                                                                          |
| R3 - 7L              | 30" X 30" | 6.25                 |                 |                      | LEFT LANE<br>MUST<br>TURN LEFT                                                           |
| R3 - 7R              | 30" X 30" | 6.25                 |                 |                      | RIGHT LANE<br>MUST<br>TURN RIGHT                                                         |
| R4 - 1               | 24" X 30" | 5.00                 |                 |                      | DO NOT PASS ①                                                                            |
|                      | 48" X 60" | 20.00                |                 |                      |                                                                                          |
| R4 - 2               | 24" X 30" | 5.00                 |                 |                      | PASS WITH CARE ①                                                                         |
|                      | 48" X 60" | 20.00                |                 |                      |                                                                                          |
| R4 - 7               | 48" X 60" | 20.00                |                 |                      |                                                                                          |
| R4 - 8               | 48" X 60" | 20.00                |                 |                      |                                                                                          |
| R5 - 1               | 48" X 48" | 16.00                |                 |                      | DO NOT ENTER                                                                             |
| R5 - 1a              | 42" X 30" | 8.75                 |                 |                      | WRONG WAY                                                                                |
| R6 - 1L              | 36" X 12" | 3.00                 |                 |                      |       |
| R6 - 1R              | 36" X 12" | 3.00                 |                 |                      |       |
| R6 - 2L              | 18" X 24" | 3.00                 |                 |                      |  ①   |
|                      | 24" X 30" | 5.00                 |                 |                      |                                                                                          |
| R6 - 2R              | 18" X 24" | 3.00                 |                 |                      |  ①  |
|                      | 24" X 30" | 5.00                 |                 |                      |                                                                                          |
|                      |           |                      |                 |                      |                                                                                          |
| R11 - 2              | 48" X 30" | 10.00                |                 |                      | ROAD CLOSED                                                                              |
| R11 - 3a             | 60" X 30" | 12.50                |                 |                      | ROAD CLOSED<br>XX MILES AHEAD                                                            |
| R11 - 4              | 60" X 30" | 12.50                |                 |                      | ROAD CLOSED TO THRU TRAFFIC                                                              |
| R11(SPECIAL)         | 60" X 30" | 12.50                |                 |                      | LANE CLOSED                                                                              |
| R12 - 1              | 36" X 48" | 12.00                |                 |                      | WEIGHT<br>LIMIT<br>XX TONS                                                               |
|                      |           |                      |                 |                      |                                                                                          |
| R16- 3               | 36" X 48" | 12.00                | 1               | 12                   | WHEN WORKERS<br>ARE PRESENT<br>SPEEDING FINES DOUBLED                                    |
|                      | 48" X 60" | 20.00                |                 |                      |                                                                                          |
|                      |           |                      |                 |                      |                                                                                          |
| W1 - 1L              | 48" X 48" | 16.00                |                 |                      |     |
| W1 - 1R              | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| W1 - 2L              | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| W1 - 2R              | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| W1 - 3L              | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| W1 - 3R              | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| W1 - 4aL             | 36"X 36"  | 9.00                 |                 |                      |     |
|                      | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| W1 - 4aR             | 36"X 36"  | 9.00                 |                 |                      |     |
|                      | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| W1 - 4cR             | 36"X 36"  | 9.00                 |                 |                      |     |
|                      | 48" X 48" | 16.00                |                 |                      |                                                                                          |
| W1 - 5R              | 48" X 48" | 16.00                |                 |                      |     |
| W1 - 6L              | 48" X 24" | 8.00                 |                 |                      |  ①  |
|                      | 60" X 30" | 12.50                |                 |                      |                                                                                          |

| SIGNS REQ'D. (CONT.) |             |                      |                 |                      |                                                                                       |                                                                                       |
|----------------------|-------------|----------------------|-----------------|----------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SIGN NO.             | SIZE        | UNIT AREA<br>SQ. FT. | QUAN.<br>REQ'D. | SIGN AREA<br>SQ. FT. | REMARKS                                                                               |                                                                                       |
| W1 - 6R              | 48" X 24"   | 8.00                 |                 |                      |  ① |                                                                                       |
|                      | 60" X 30"   | 12.50                | ◆               |                      |                                                                                       | ②                                                                                     |
| W1 - 7               | 48" X 24"   | 8.00                 |                 |                      |  ① |                                                                                       |
|                      | 60" X 30"   | 12.50                | ◆               |                      |                                                                                       | ②                                                                                     |
|                      |             |                      |                 |                      |                                                                                       |                                                                                       |
| W1 - 8L              | 18" X 24"   | 3.00                 |                 |                      |  ① |                                                                                       |
|                      | 36" X 48"   | 12.00                | ◆               |                      |                                                                                       | ②                                                                                     |
| W1 - 8R              | 18" X 24"   | 3.00                 |                 |                      |  ① |                                                                                       |
|                      | 36" X 48"   | 12.00                | ◆               |                      |                                                                                       | ②                                                                                     |
| W1 - 9L              | 48" X 48"   | 16.00                | ◆               |                      |    |                                                                                       |
| W1 - 9R              | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       |                                                                                       |
| W3 - 1a              | 48" X 48"   | 16.00                | ◆               |                      |    |                                                                                       |
| W3 - 2a              | 48" X 48"   | 16.00                | ◆               |                      |    |                                                                                       |
| W3 - 3               | 48" X 48"   | 16.00                | ◆               |                      |    |                                                                                       |
| W3 - 5               | 48" X 48"   | 16.00                | ◆               |                      |    |                                                                                       |
|                      | 36" X 36"   | 9.00                 |                 |                      |                                                                                       |                                                                                       |
| W4 - 1L              | 48" X 48"   | 16.00                | ◆               |                      |    |                                                                                       |
| W4 - 1R              | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       |                                                                                       |
| W4 - 2L              | 48" X 48"   | 16.00                | ◆               |                      |    |                                                                                       |
| W4 - 2R              | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       |                                                                                       |
| W5 - 1a              | 48" X 48"   | 16.00                | ◆               |                      | PAVEMENT<br>NARROWS                                                                   |                                                                                       |
| W6 - 1               | 48" X 48"   | 16.00                | ◆               |                      |    |                                                                                       |
| W6 - 2               | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       |                                                                                       |
| W6 - 3               | 48" X 48"   | 16.00                | ◆               |                      |    |                                                                                       |
| W8 - 1               | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       |                                                                                       |
| W8 - 4               | 48" X 48"   | 16.00                | ◆               |                      | BUMP                                                                                  |                                                                                       |
| W8 - 9               | 48" X 48"   | 16.00                | ◆               |                      | SOFT<br>SHOULDER                                                                      |                                                                                       |
| W9 - 1R              | 48" X 48"   | 16.00                | ◆               |                      | LOW<br>SHOULDER                                                                       |                                                                                       |
| W10 - 1              | 36" DIA.    | 9.00                 |                 |                      |  ① |                                                                                       |
|                      | 48" DIA.    | 16.00                | ◆               |                      |                                                                                       | ②                                                                                     |
| W13 - 1              | 24" X 24"   | 4.00                 |                 |                      | XX MPH                                                                                |                                                                                       |
| W13 - 5              | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       |                                                                                       |
| W14 - 3              | 36"X48"X48" | 5.56                 |                 |                      | NO<br>PASSING<br>ZONE ①                                                               |                                                                                       |
|                      | 48"X64"X64" | 9.89                 |                 |                      |                                                                                       | ②                                                                                     |
| W19 - 2              | 48" X 48"   | 16.00                | ◆               |                      | BRIDGE MAY ICE IN COLD WEATHER                                                        |                                                                                       |
| W20 - 1              | 48" X 48"   | 16.00                | ◆               | 1                    | 16                                                                                    | ADVANCE ROAD WORK ①                                                                   |
|                      | 36" X 36"   | 9.00                 |                 |                      |                                                                                       |                                                                                       |
| W20 - 2              | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       | ADVANCE DETOUR                                                                        |
| W20 - 3              | 36" X 36"   | 9.00                 |                 |                      |                                                                                       | ADVANCE ROAD CLOSED                                                                   |
| W20 - 4              | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       | ADVANCE ONE-LN. RD.                                                                   |
| W20 - 4B             | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       | ADVANCE ONE-LN. BE.                                                                   |
| W20 - 5L             | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       | ADVANCE LT. LN. CLOSED                                                                |
| W20 - 5R             | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       | ADVANCE RT. LN. CLOSED                                                                |
| W20 - 7              | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       | ADVANCE FLAGGER                                                                       |
| W20 - 7a             | 48" X 48"   | 16.00                | ◆               |                      |                                                                                       |    |
| W21 - 1              | 36" X 36"   | 9.00                 |                 |                      |                                                                                       | WORKERS                                                                               |
| W21 - 1a             | 36" X 36"   | 9.00                 |                 |                      |                                                                                       |  |

| SIGNS REQ'D. (CONT.)            |           |                         |                 |                      |                           |
|---------------------------------|-----------|-------------------------|-----------------|----------------------|---------------------------|
| SIGN NO.                        | SIZE      | UNIT AREA<br>SQ. FT.    | QUAN.<br>REQ'D. | SIGN AREA<br>SQ. FT. | REMARKS                   |
| W4 - 3R                         | 36" X 36" | 9.00                    |                 |                      |                           |
| W21 - 3                         | 48" X 48" | 16.00                   | ◆               |                      | ADVANCE ROAD<br>MACHINERY |
|                                 | 48" X 48" | 16.00                   | ◆               |                      | LANES SHIFT AHEAD         |
|                                 | 48" X 48" | 16.00                   | ◆               |                      |                           |
| W21 - 5                         | 48" X 48" | 16.00                   | ◆               |                      | SHOULDER<br>WORK          |
| W21 - 6                         | 36" X 36" | 9.00                    |                 |                      | SURVERY CREW              |
| PANEL                           | 36"X12"   | 3.00                    |                 |                      | SPECIAL                   |
| SPECIAL                         | 48"X24"   | 8.00                    |                 |                      | WOODROW WILSON            |
|                                 |           |                         |                 |                      |                           |
| VP - IL                         | 12" X 36" | 3.00                    |                 |                      |                           |
| VP - IR                         | 12" X 36" | 3.00                    |                 |                      |                           |
|                                 |           |                         |                 |                      |                           |
| OM - 3L                         | 12" X 36" | 3.00                    |                 |                      |                           |
| OM - 3R                         | 12" X 36" | 3.00                    |                 |                      |                           |
|                                 |           |                         |                 |                      |                           |
| TOTAL SIGN AREA                 |           | LESS THAN<br>10 SQ. FT. |                 | 8.00                 |                           |
|                                 |           |                         |                 |                      |                           |
| TOTAL SIGN AREA                 |           | 10 SQ. FT.<br>OR MORE   |                 | 50.00                |                           |
|                                 |           |                         |                 |                      |                           |
| ① STANDARD                      |           |                         |                 |                      |                           |
| ② SPECIAL (USE WHERE WARRANTED) |           |                         |                 |                      |                           |

NOTES

- ① INTERSTATE ROUTE MARKER
- ② UNITED STATES ROUTE MARKER
- ③ STATE ROUTE MARKER
- ④ COLORS OF CARDINAL DIRECTION MARKERS AND DIRECTIONAL ARROWS SHALL BE APPROPRIATE TO MATCH ACCOMPANYING ROUTE MARKERS.
- ⑤ BLACK STRIPES ON YELLOW BACKGROUND
- ⑥ INTERSTATE USE ONLY
- ⑦ TOP OF SIGN - BLACK LETTERING ON ORANGE BACKGROUND, BOTTOM OF SIGN - BLACK LETTERING ON WHITE BACKGROUND

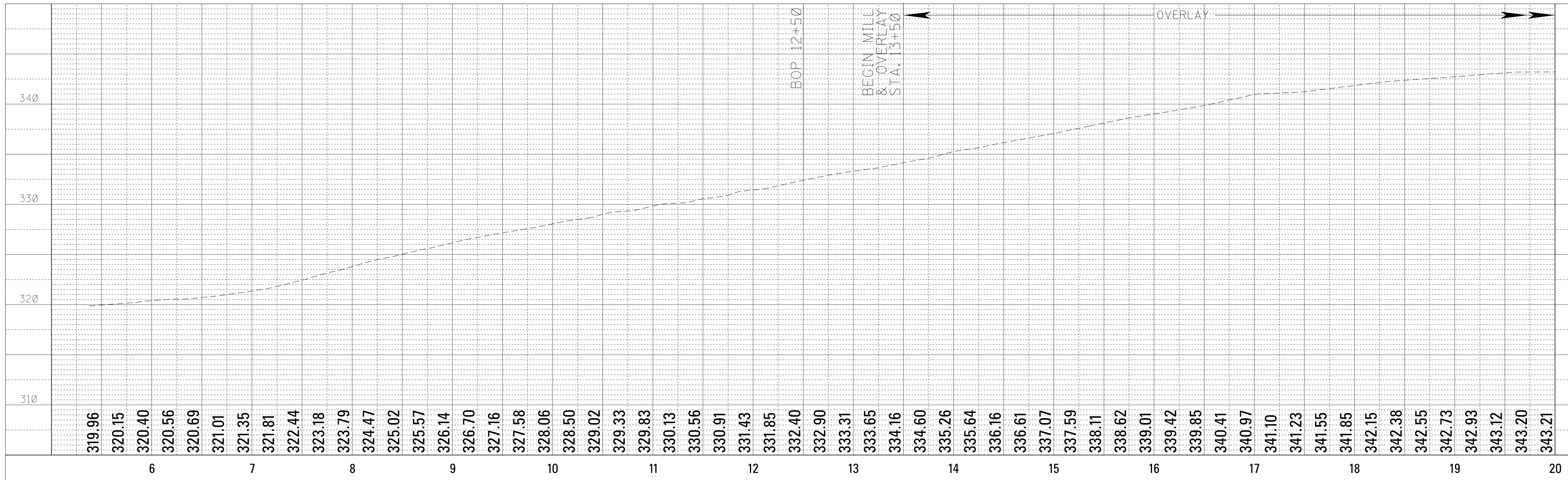
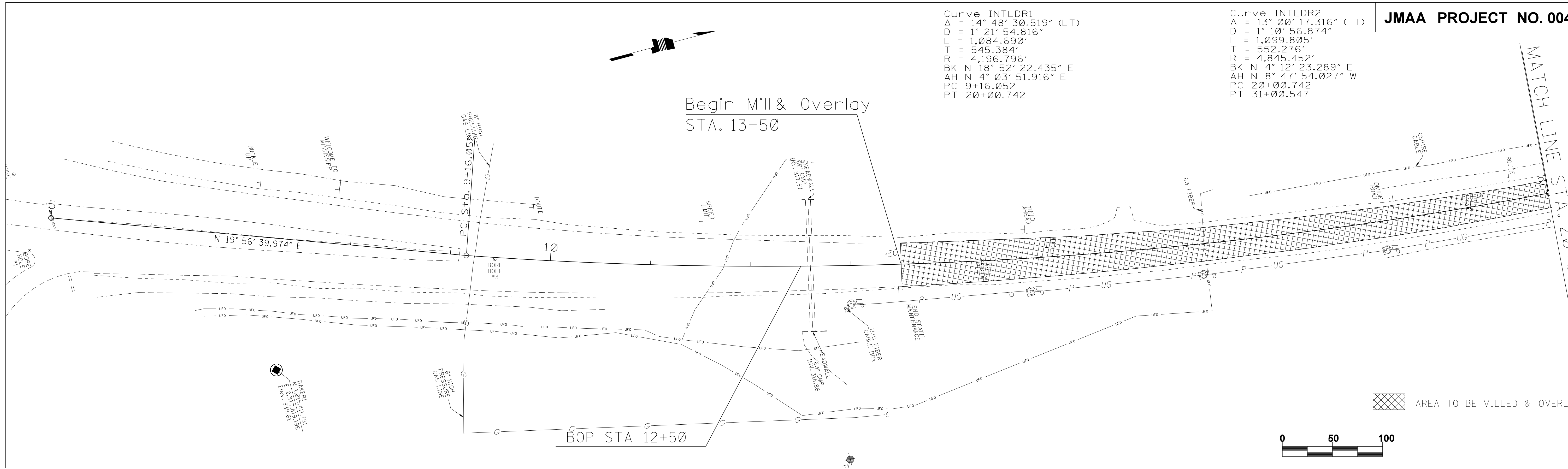
THE BACKGROUND OF ALL WARNING SIGNS ("W" SERIES) EXCEPT W10-1 SHALL BE ORANGE. THE W10 - BACKGROUND SHALL BE YELLOW IN ALL CASES.

TRAFFIC CONTROL SIGNING

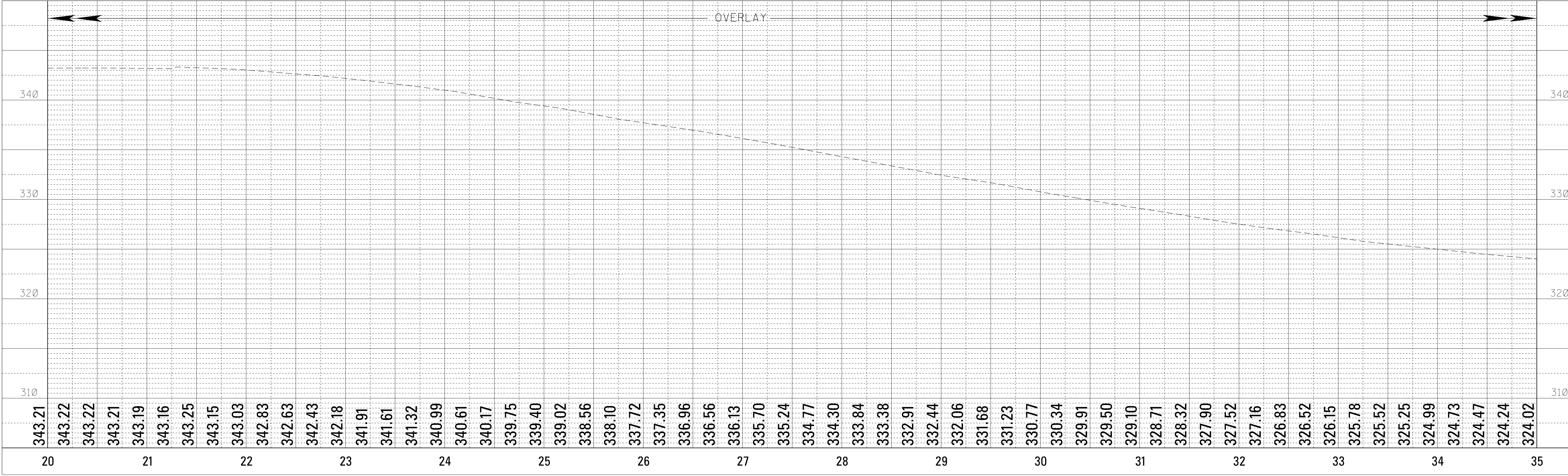
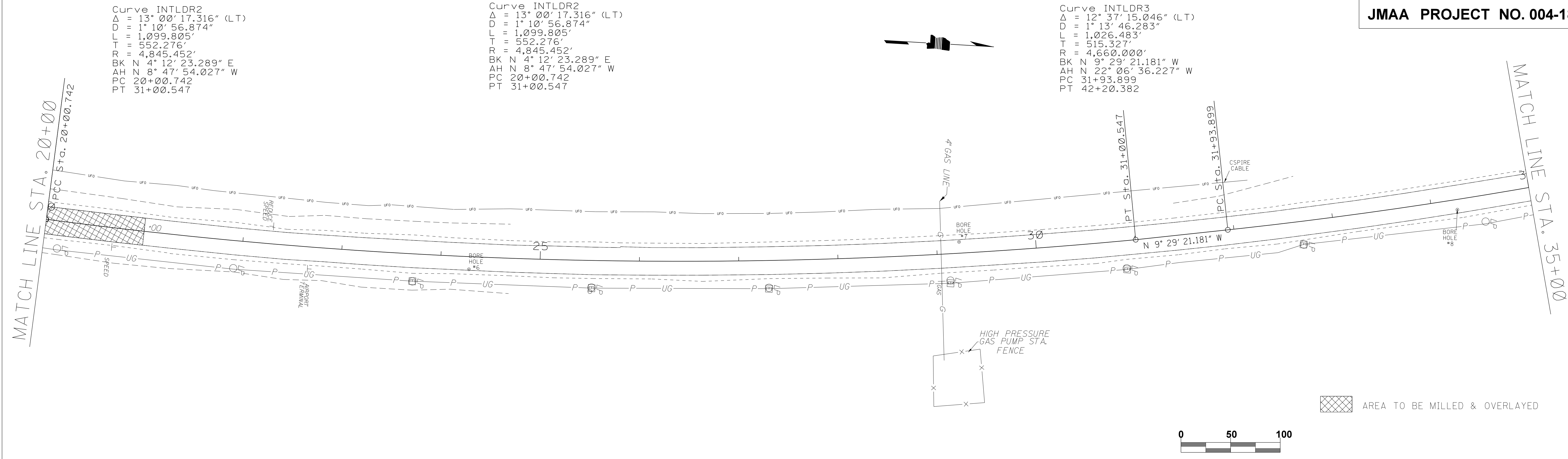
|          |    |                   |      |  |  |
|----------|----|-------------------|------|--|--|
|          |    |                   |      |  |  |
|          |    |                   |      |  |  |
|          |    |                   |      |  |  |
| REVISION | BY | DESCRIPTION       | DATE |  |  |
|          |    | DRAWING REVISIONS |      |  |  |

| DESIGN TEAM  |       |            |
|--------------|-------|------------|
| DESIGNED     | DRAWN | CHECKED    |
|              |       |            |
| SCALE: 1"=1' |       | DATE: 2019 |

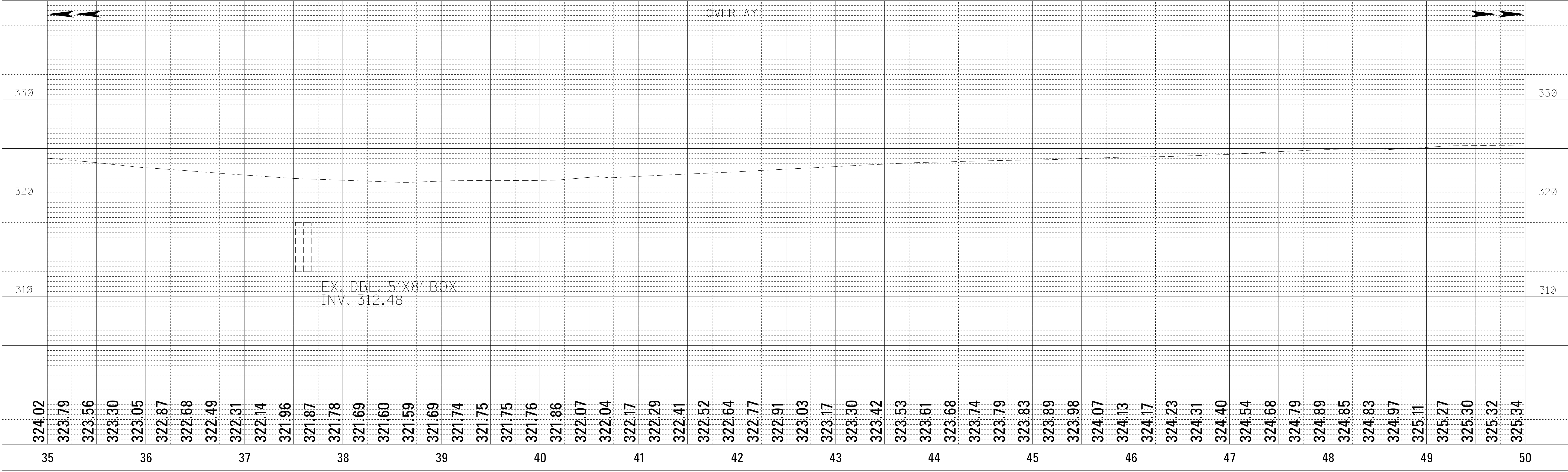
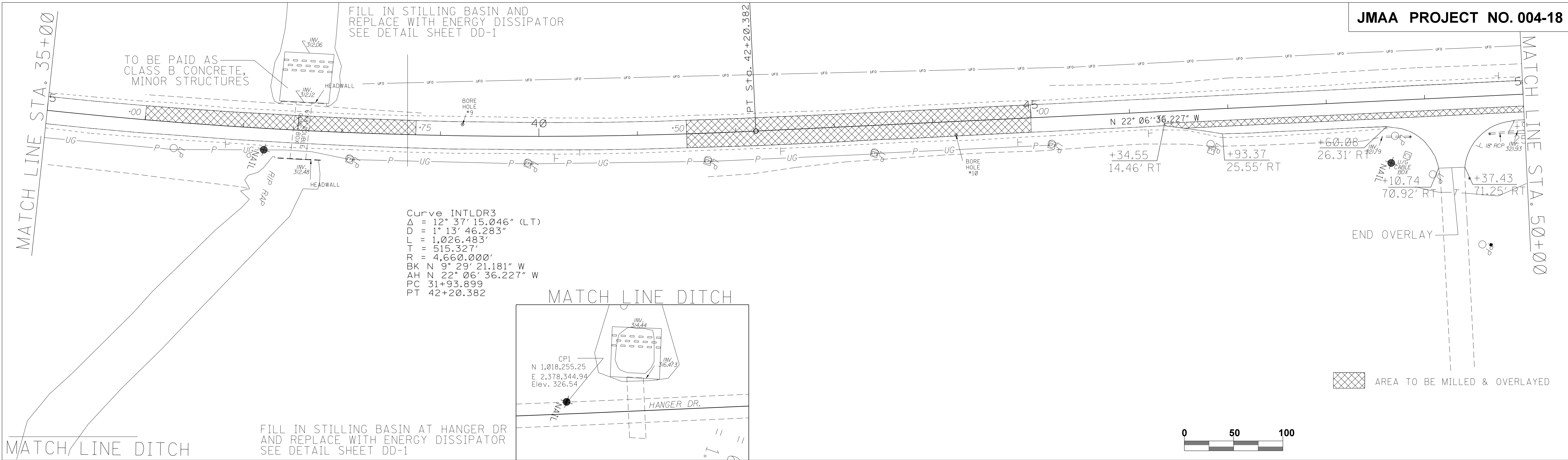




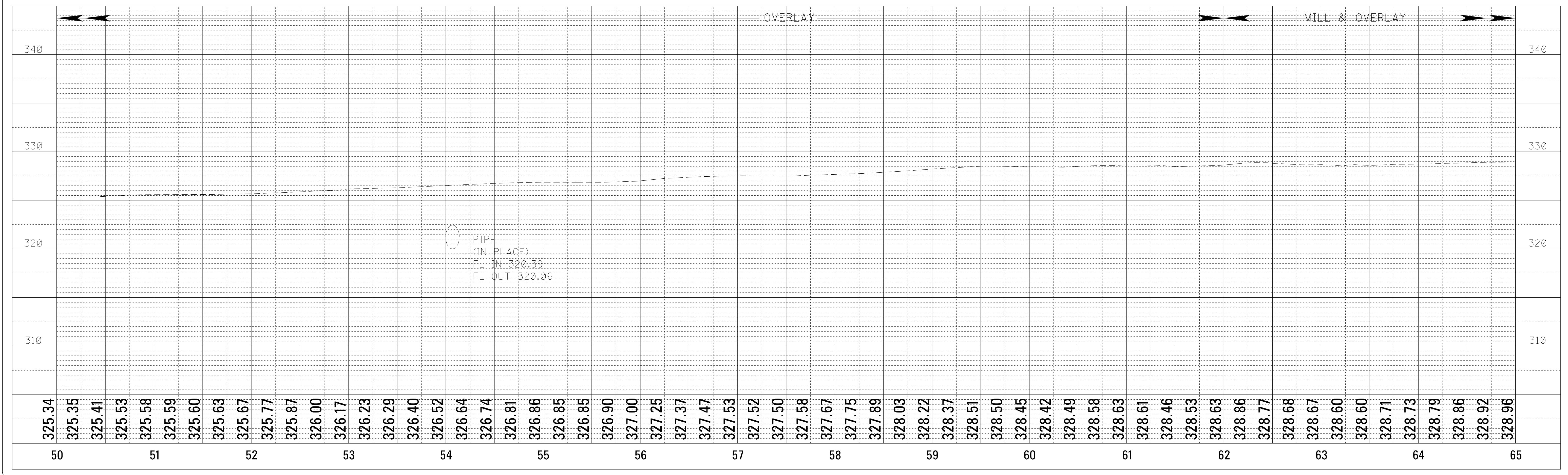




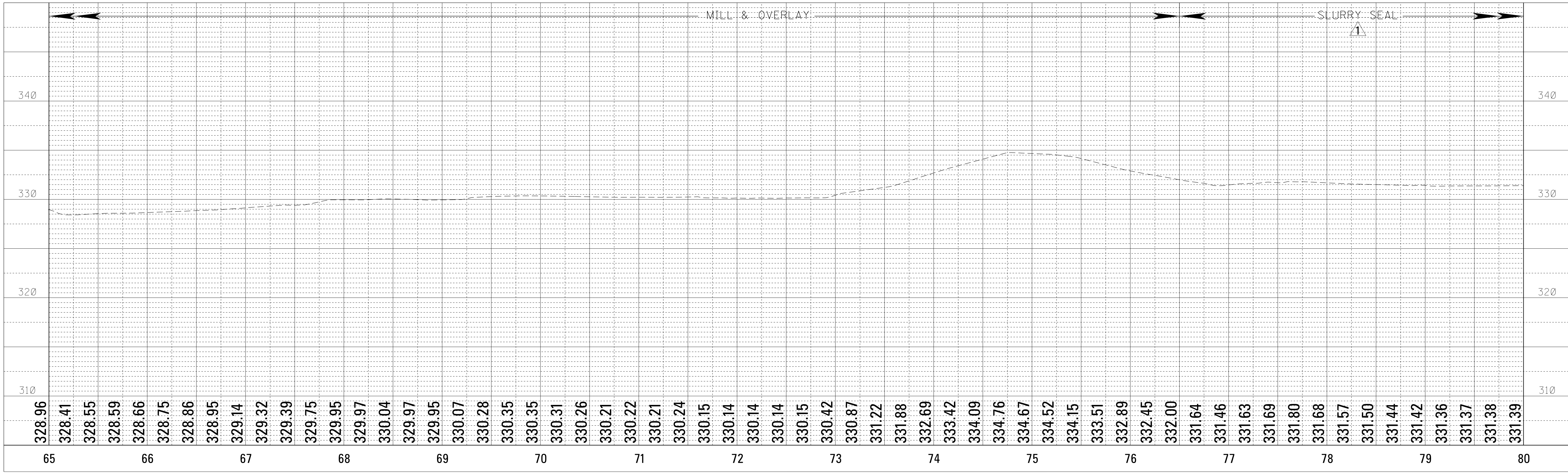
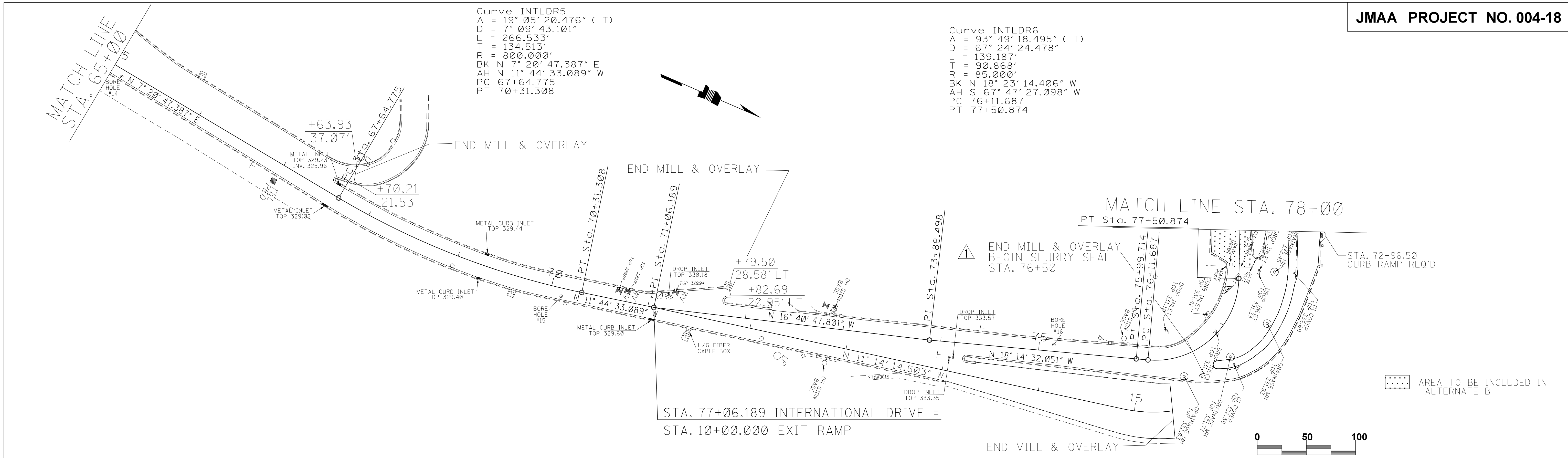




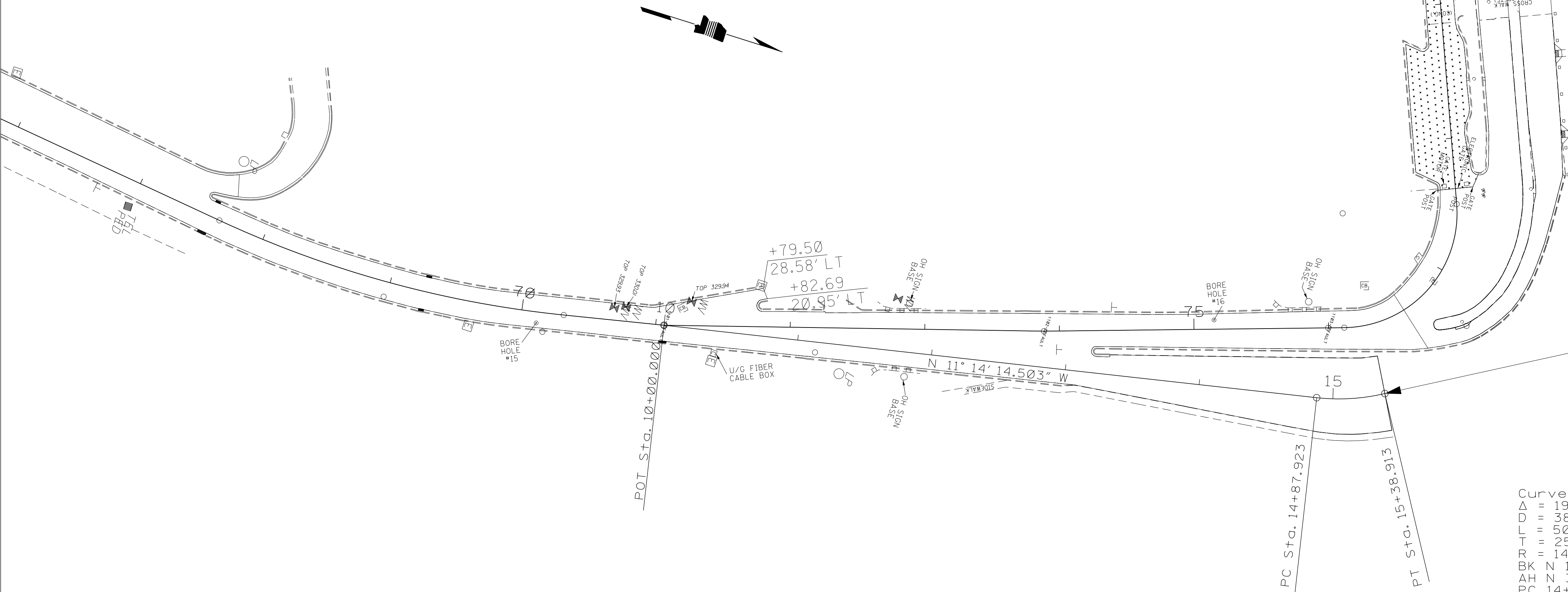






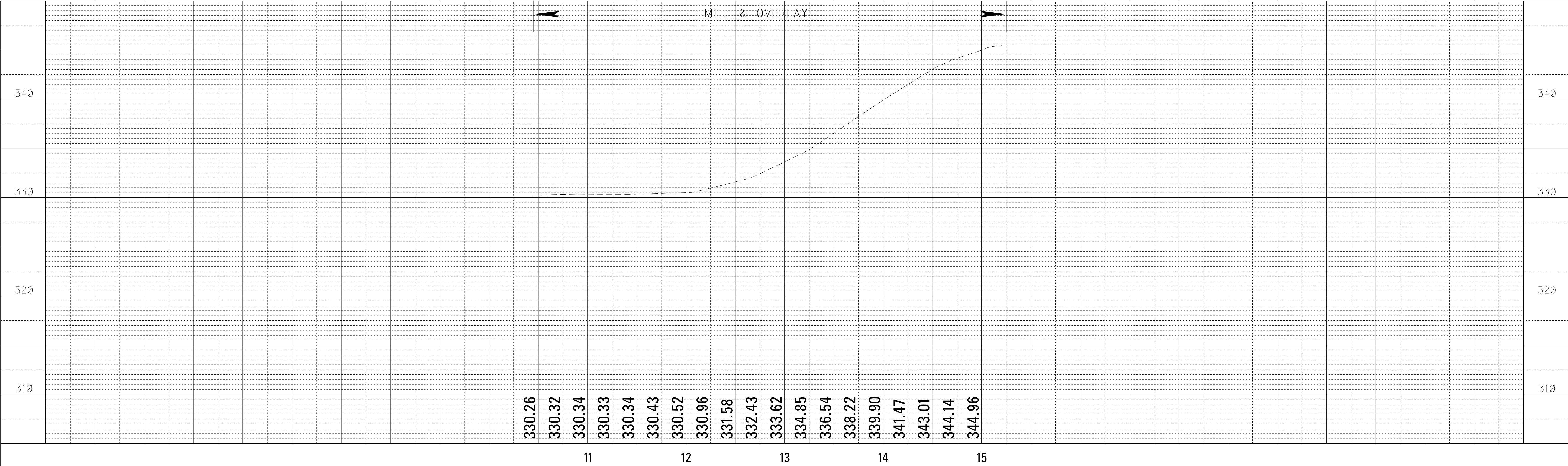
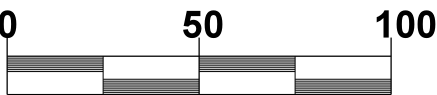




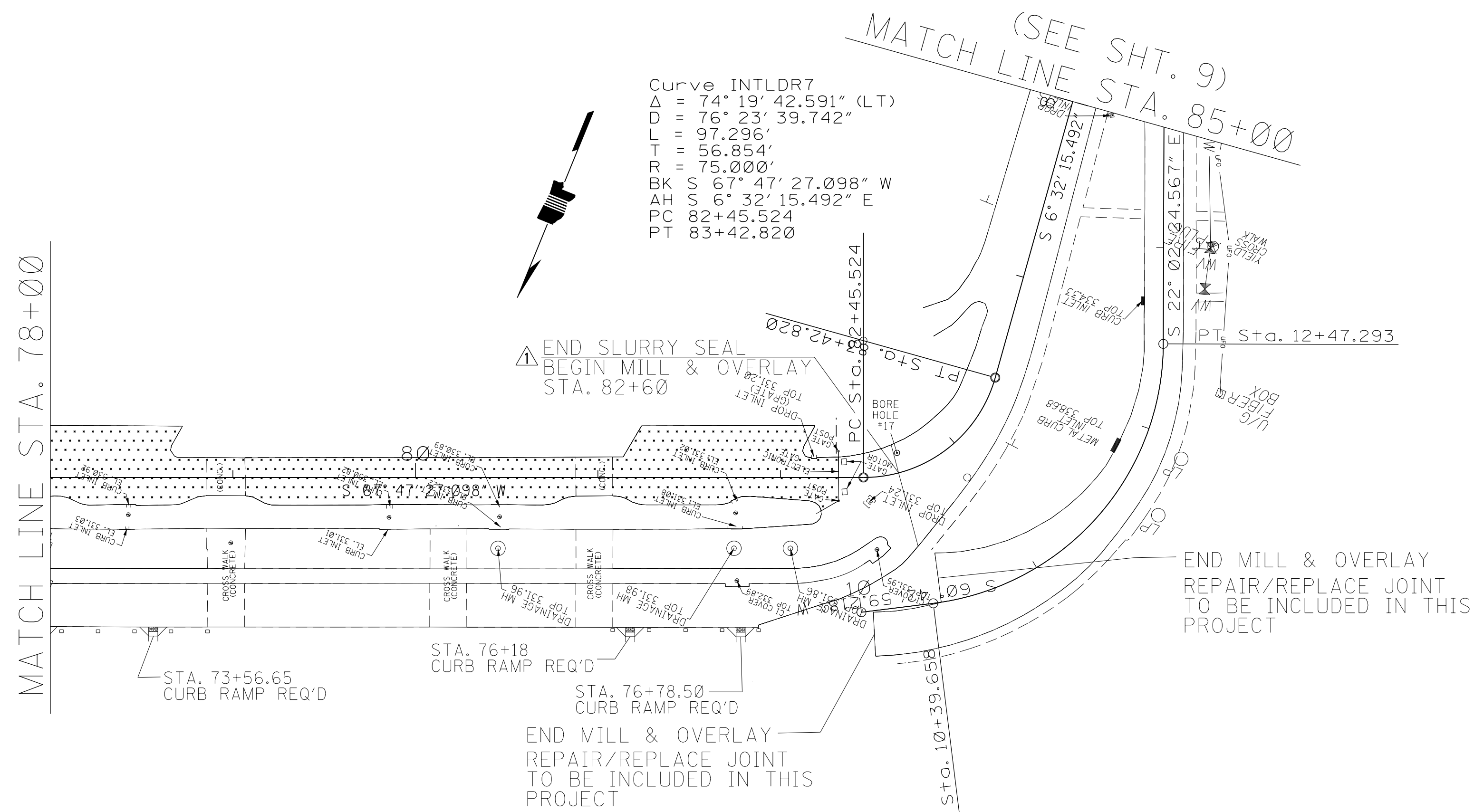


REPAIR/REPLACE JOINT  
TO BE INCLUDED IN THIS  
PROJECT

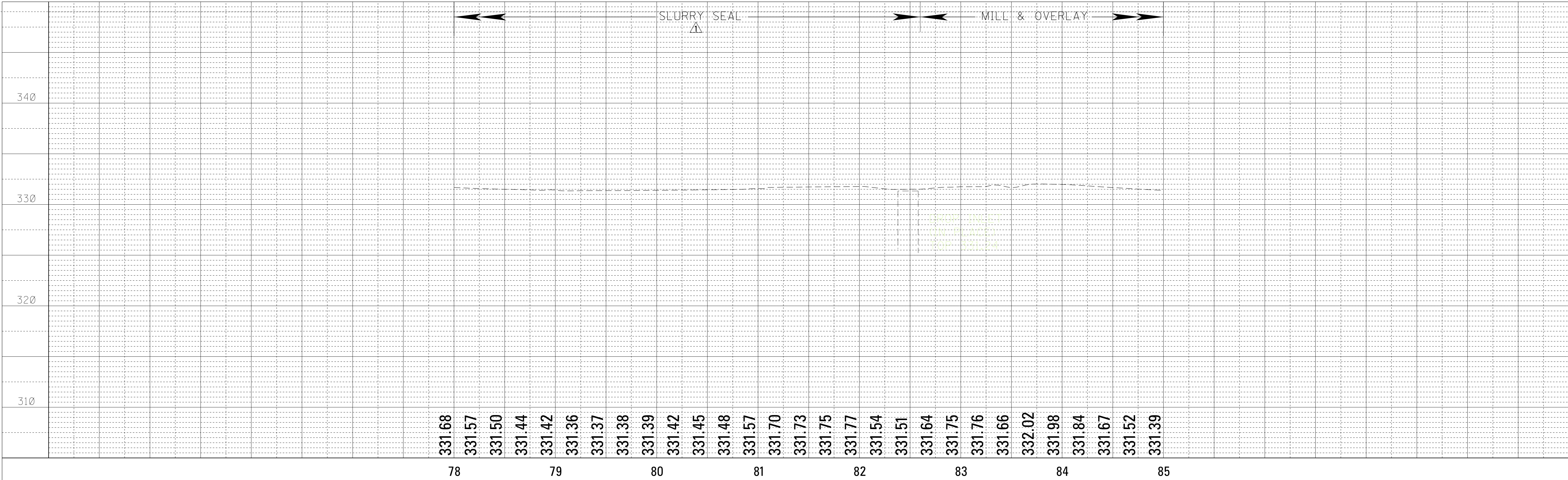
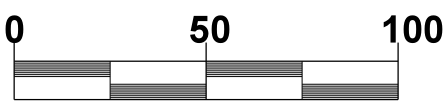
Curve EXITRAMP1  
Δ = 19° 37' 30.264" (LT)  
D = 38° 29' 18.159"  
L = 50.990'  
T = 25.747'  
R = 148.865'  
BK N 11° 14' 14.503" W  
AH N 30° 51' 44.768" W  
PC 14+87.923  
PT 15+38.913





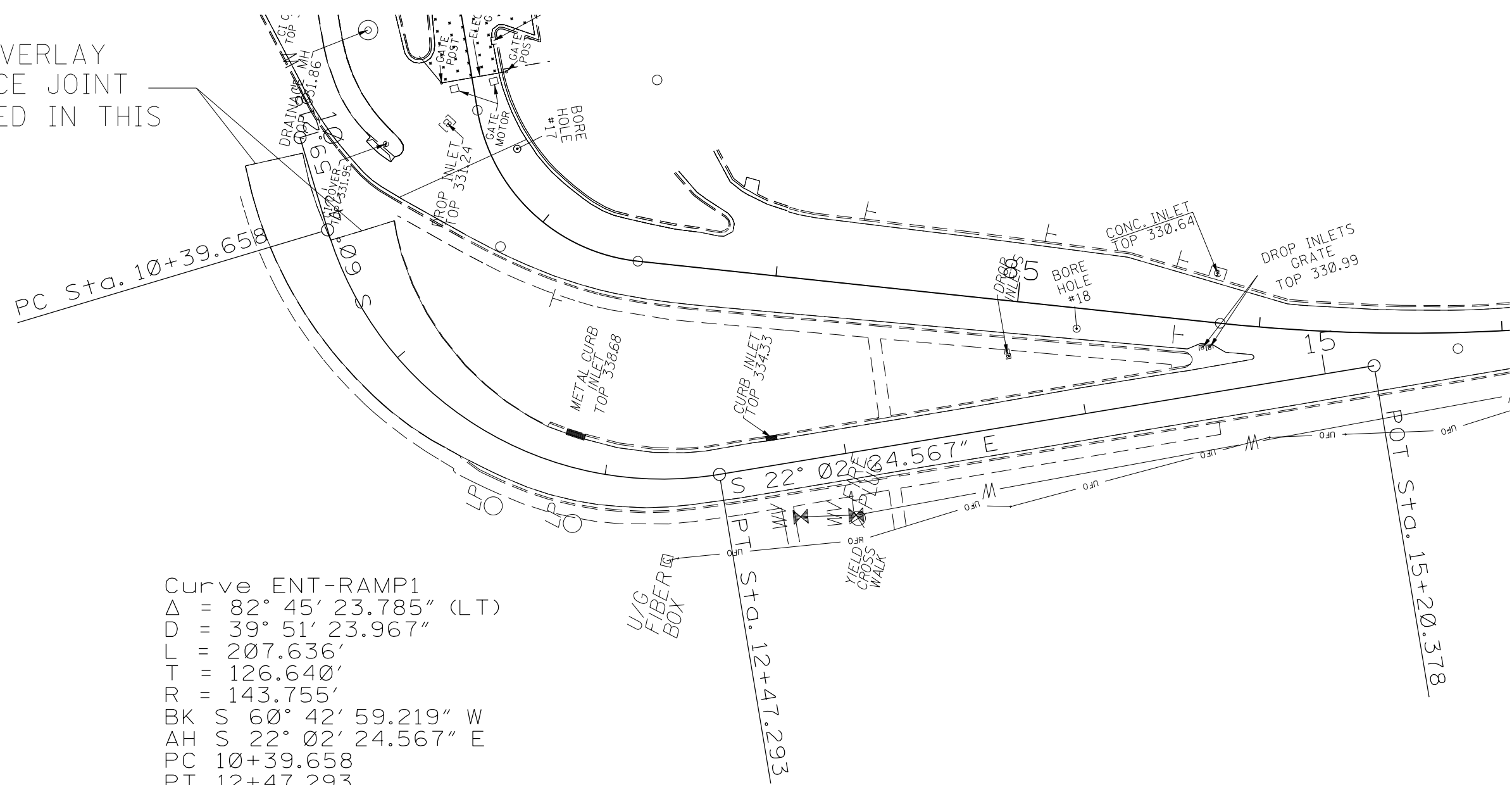


AREA TO BE INCLUDED IN ALTERNATE B

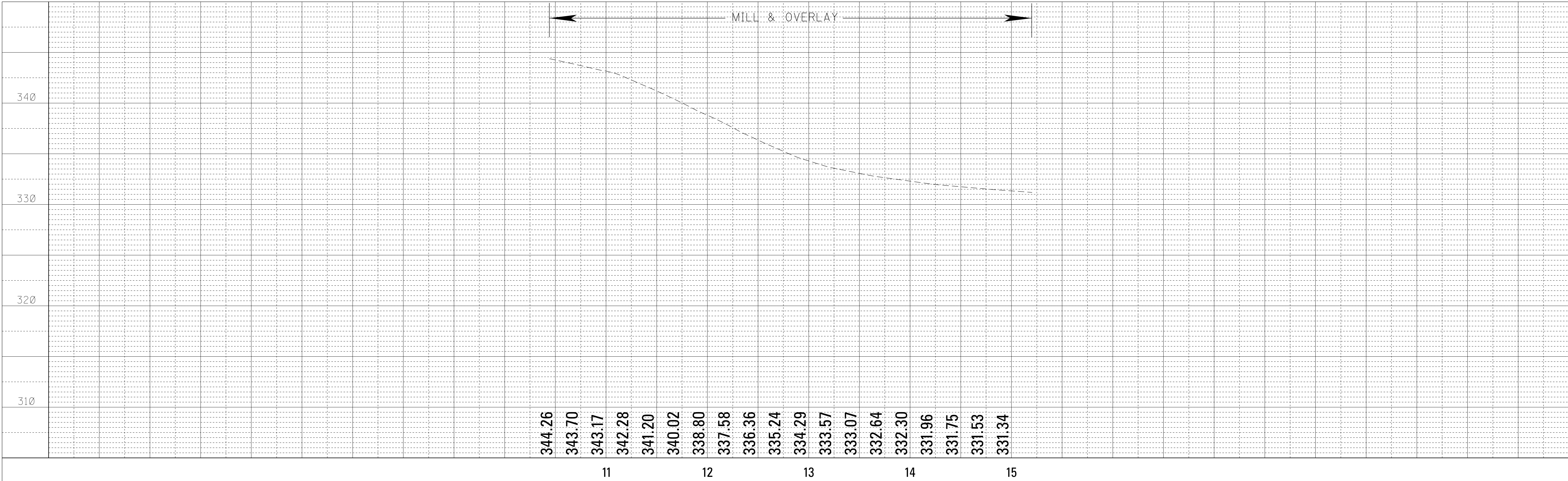
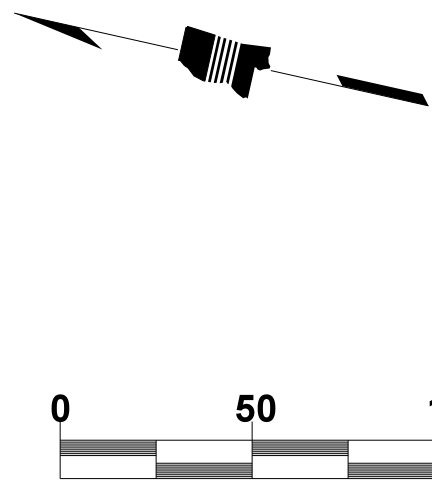




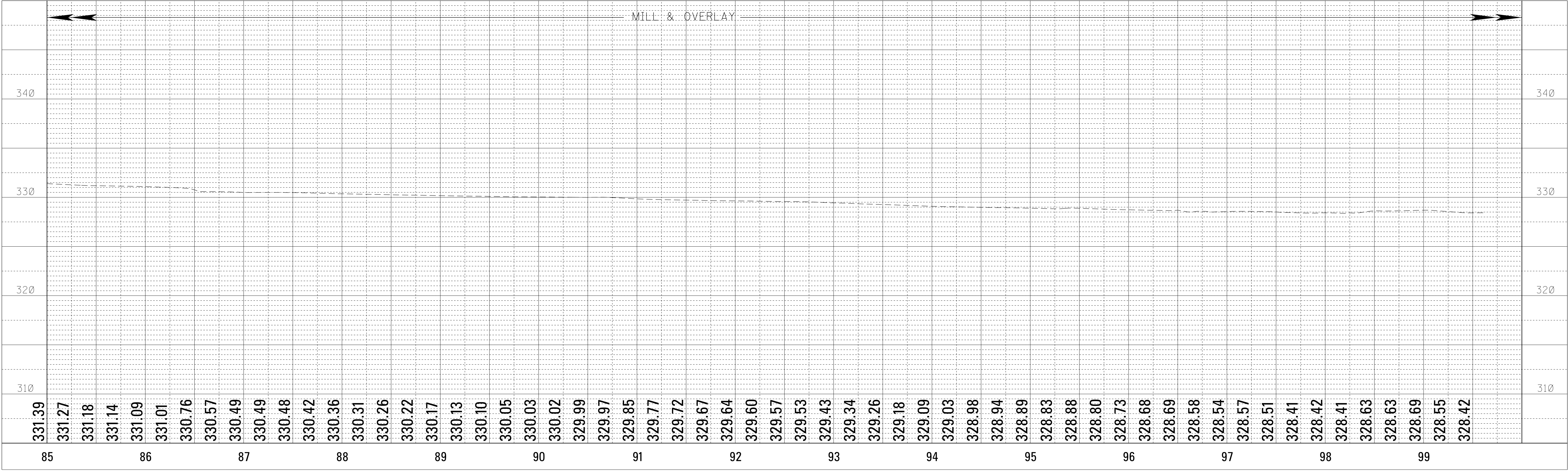
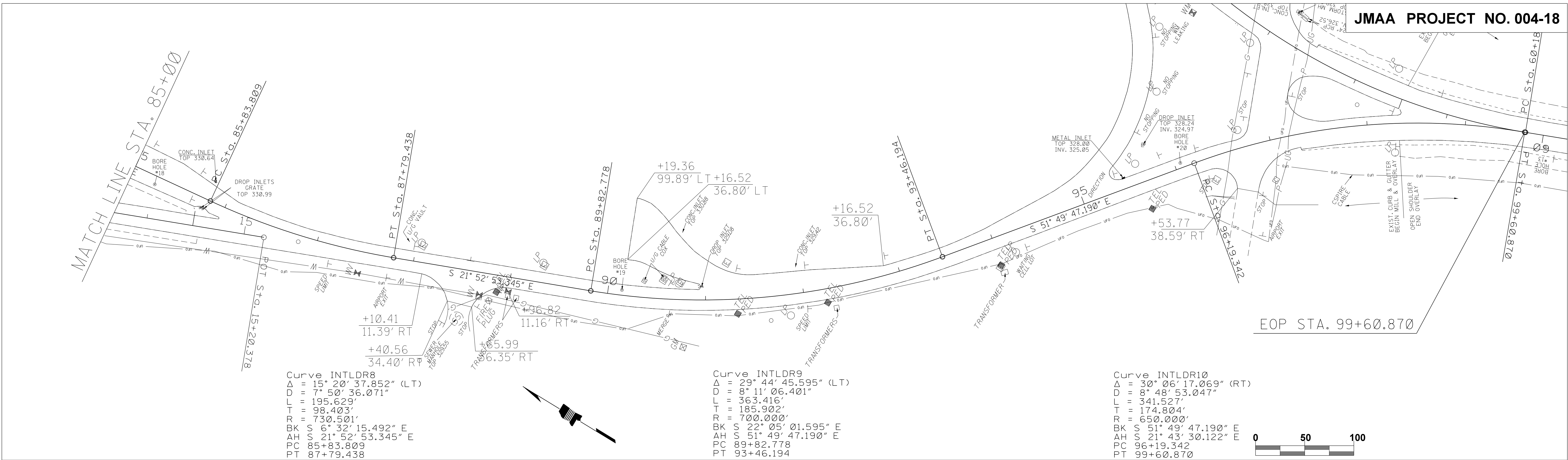
END MILL & OVERLAY  
REPAIR/REPLACE JOINT  
TO BE INCLUDED IN THIS  
PROJECT



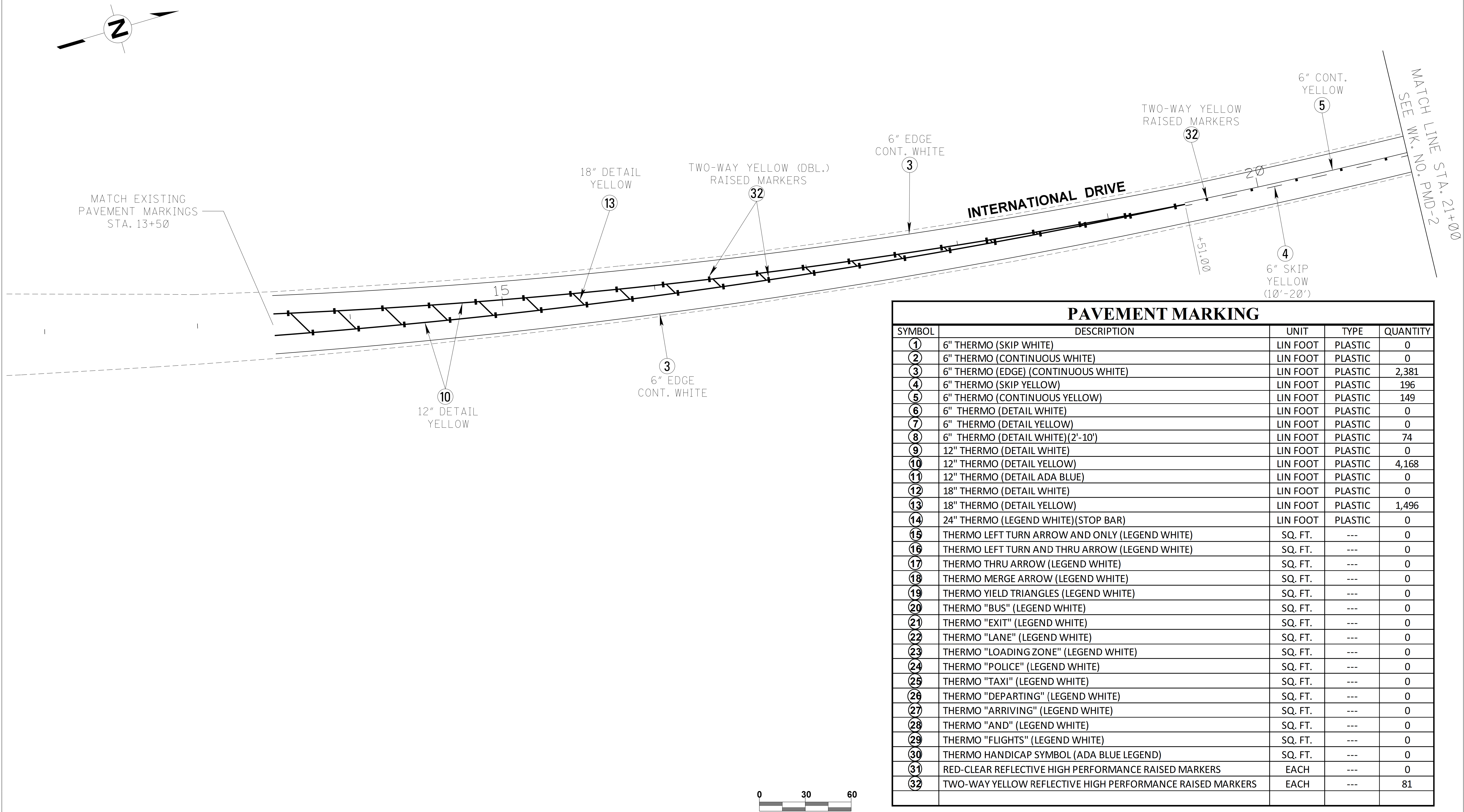
Curve ENT-RAMP1  
Δ = 82° 45' 23.785" (LT)  
D = 39° 51' 23.967"  
L = 207.636'  
T = 126.640'  
R = 143.755'  
BK S 60° 42' 59.219" W  
AH S 22° 02' 24.567" E  
PC 10+39.658  
PT 12+47.293





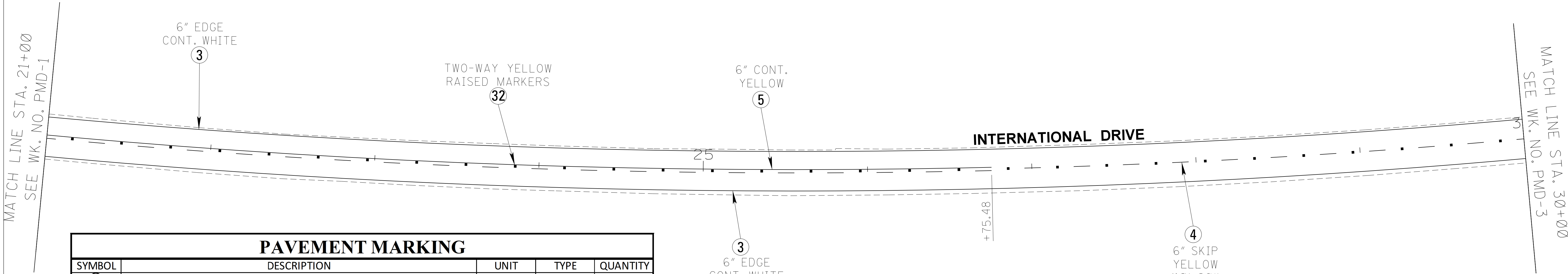
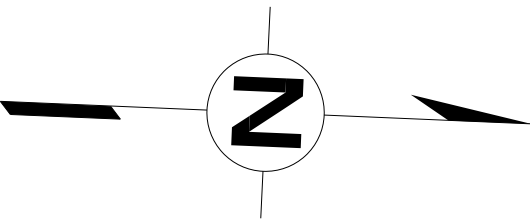




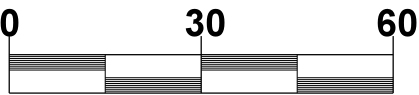


| PAVEMENT MARKING |                                                           |          |         |          |
|------------------|-----------------------------------------------------------|----------|---------|----------|
| SYMBOL           | DESCRIPTION                                               | UNIT     | TYPE    | QUANTITY |
| ①                | 6" THERMO (SKIP WHITE)                                    | LIN FOOT | PLASTIC | 0        |
| ②                | 6" THERMO (CONTINUOUS WHITE)                              | LIN FOOT | PLASTIC | 0        |
| ③                | 6" THERMO (EDGE) (CONTINUOUS WHITE)                       | LIN FOOT | PLASTIC | 2,381    |
| ④                | 6" THERMO (SKIP YELLOW)                                   | LIN FOOT | PLASTIC | 196      |
| ⑤                | 6" THERMO (CONTINUOUS YELLOW)                             | LIN FOOT | PLASTIC | 149      |
| ⑥                | 6" THERMO (DETAIL WHITE)                                  | LIN FOOT | PLASTIC | 0        |
| ⑦                | 6" THERMO (DETAIL YELLOW)                                 | LIN FOOT | PLASTIC | 0        |
| ⑧                | 6" THERMO (DETAIL WHITE)(2'-10')                          | LIN FOOT | PLASTIC | 74       |
| ⑨                | 12" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑩                | 12" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 4,168    |
| ⑪                | 12" THERMO (DETAIL ADA BLUE)                              | LIN FOOT | PLASTIC | 0        |
| ⑫                | 18" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑬                | 18" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 1,496    |
| ⑭                | 24" THERMO (LEGEND WHITE)(STOP BAR)                       | LIN FOOT | PLASTIC | 0        |
| ⑮                | THERMO LEFT TURN ARROW AND ONLY (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑯                | THERMO LEFT TURN AND THRU ARROW (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑰                | THERMO THRU ARROW (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ⑱                | THERMO MERGE ARROW (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ⑲                | THERMO YIELD TRIANGLES (LEGEND WHITE)                     | SQ. FT.  | ---     | 0        |
| ⑳                | THERMO "BUS" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉑                | THERMO "EXIT" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉒                | THERMO "LANE" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉓                | THERMO "LOADING ZONE" (LEGEND WHITE)                      | SQ. FT.  | ---     | 0        |
| ㉔                | THERMO "POLICE" (LEGEND WHITE)                            | SQ. FT.  | ---     | 0        |
| ㉕                | THERMO "TAXI" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉖                | THERMO "DEPARTING" (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ㉗                | THERMO "ARRIVING" (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ㉘                | THERMO "AND" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉙                | THERMO "FLIGHTS" (LEGEND WHITE)                           | SQ. FT.  | ---     | 0        |
| ⑳                | THERMO HANDICAP SYMBOL (ADA BLUE LEGEND)                  | SQ. FT.  | ---     | 0        |
| ㉑                | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS      | EACH     | ---     | 0        |
| ㉒                | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS | EACH     | ---     | 81       |

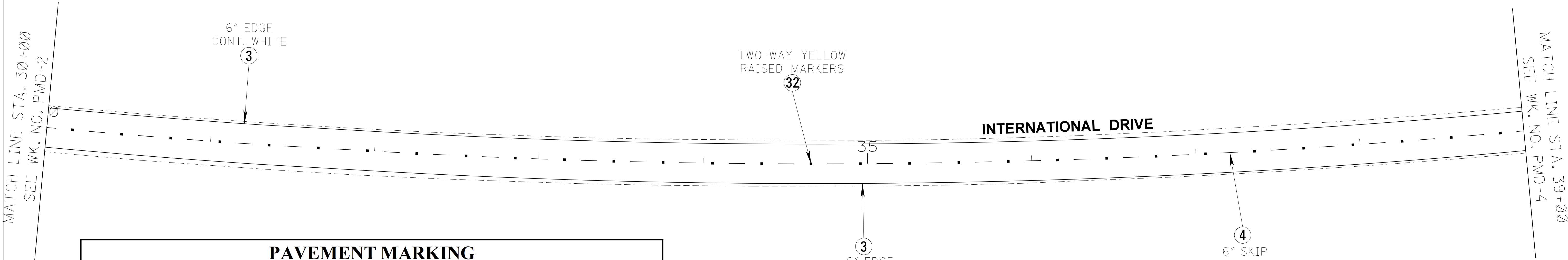
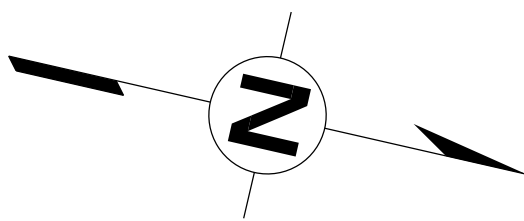




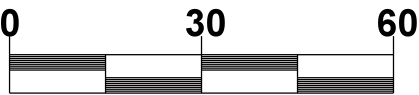
| PAVEMENT MARKING |                                                           |          |         |          |
|------------------|-----------------------------------------------------------|----------|---------|----------|
| SYMBOL           | DESCRIPTION                                               | UNIT     | TYPE    | QUANTITY |
| ①                | 6" THERMO (SKIP WHITE)                                    | LIN FOOT | PLASTIC | 0        |
| ②                | 6" THERMO (CONTINUOUS WHITE)                              | LIN FOOT | PLASTIC | 0        |
| ③                | 6" THERMO (EDGE) (CONTINUOUS WHITE)                       | LIN FOOT | PLASTIC | 1,800    |
| ④                | 6" THERMO (SKIP YELLOW)                                   | LIN FOOT | PLASTIC | 1,200    |
| ⑤                | 6" THERMO (CONTINUOUS YELLOW)                             | LIN FOOT | PLASTIC | 575      |
| ⑥                | 6" THERMO (DETAIL WHITE)                                  | LIN FOOT | PLASTIC | 0        |
| ⑦                | 6" THERMO (DETAIL YELLOW)                                 | LIN FOOT | PLASTIC | 0        |
| ⑧                | 6" THERMO (DETAIL WHITE)(2'-10')                          | LIN FOOT | PLASTIC | 0        |
| ⑨                | 12" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑩                | 12" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑪                | 12" THERMO (DETAIL ADA BLUE)                              | LIN FOOT | PLASTIC | 0        |
| ⑫                | 18" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑬                | 18" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑭                | 24" THERMO (LEGEND WHITE)(STOP BAR)                       | LIN FOOT | PLASTIC | 0        |
| ⑮                | THERMO LEFT TURN ARROW AND ONLY (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑯                | THERMO LEFT TURN AND THRU ARROW (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑰                | THERMO THRU ARROW (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ⑱                | THERMO MERGE ARROW (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ⑲                | THERMO YIELD TRIANGLES (LEGEND WHITE)                     | SQ. FT.  | ---     | 0        |
| ⑳                | THERMO "BUS" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉑                | THERMO "EXIT" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉒                | THERMO "LANE" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉓                | THERMO "LOADING ZONE" (LEGEND WHITE)                      | SQ. FT.  | ---     | 0        |
| ㉔                | THERMO "POLICE" (LEGEND WHITE)                            | SQ. FT.  | ---     | 0        |
| ㉕                | THERMO "TAXI" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉖                | THERMO "DEPARTING" (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ㉗                | THERMO "ARRIVING" (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ㉘                | THERMO "AND" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉙                | THERMO "FLIGHTS" (LEGEND WHITE)                           | SQ. FT.  | ---     | 0        |
| ⑳                | THERMO HANDICAP SYMBOL (ADA BLUE LEGEND)                  | SQ. FT.  | ---     | 0        |
| ㉑                | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS      | EACH     | ---     | 0        |
| ㉒                | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS | EACH     | ---     | 30       |
|                  |                                                           |          |         |          |



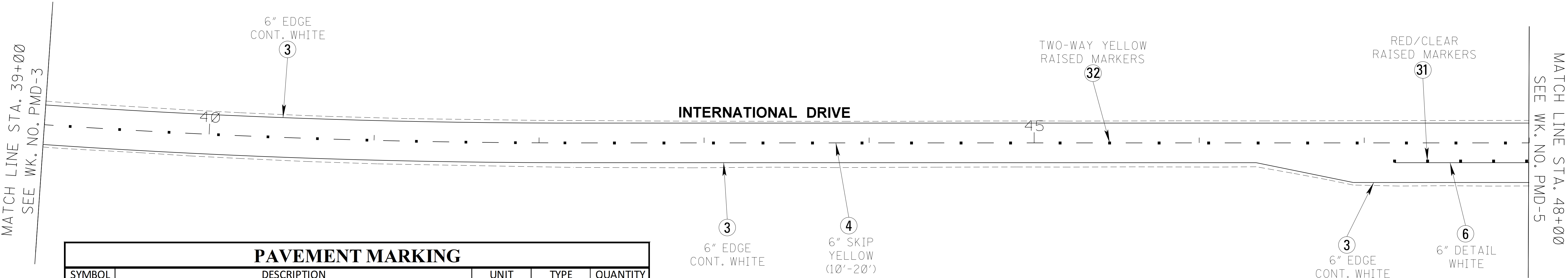
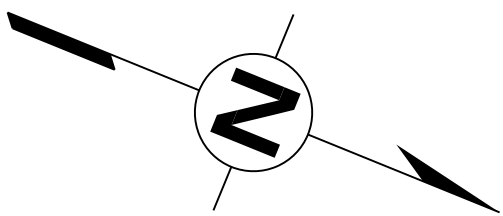




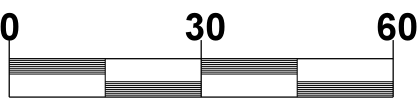
| PAVEMENT MARKING |                                                           |          |         |          |
|------------------|-----------------------------------------------------------|----------|---------|----------|
| SYMBOL           | DESCRIPTION                                               | UNIT     | TYPE    | QUANTITY |
| ①                | 6" THERMO (SKIP WHITE)                                    | LIN FOOT | PLASTIC | 0        |
| ②                | 6" THERMO (CONTINUOUS WHITE)                              | LIN FOOT | PLASTIC | 0        |
| ③                | 6" THERMO (EDGE) (CONTINUOUS WHITE)                       | LIN FOOT | PLASTIC | 1,800    |
| ④                | 6" THERMO (SKIP YELLOW)                                   | LIN FOOT | PLASTIC | 1,200    |
| ⑤                | 6" THERMO (CONTINUOUS YELLOW)                             | LIN FOOT | PLASTIC | 0        |
| ⑥                | 6" THERMO (DETAIL WHITE)                                  | LIN FOOT | PLASTIC | 0        |
| ⑦                | 6" THERMO (DETAIL YELLOW)                                 | LIN FOOT | PLASTIC | 0        |
| ⑧                | 6" THERMO (DETAIL WHITE)(2'-10')                          | LIN FOOT | PLASTIC | 0        |
| ⑨                | 12" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑩                | 12" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑪                | 12" THERMO (DETAIL ADA BLUE)                              | LIN FOOT | PLASTIC | 0        |
| ⑫                | 18" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑬                | 18" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑭                | 24" THERMO (LEGEND WHITE)(STOP BAR)                       | LIN FOOT | PLASTIC | 0        |
| ⑮                | THERMO LEFT TURN ARROW AND ONLY (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑯                | THERMO LEFT TURN AND THRU ARROW (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑰                | THERMO THRU ARROW (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ⑱                | THERMO MERGE ARROW (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ⑲                | THERMO YIELD TRIANGLES (LEGEND WHITE)                     | SQ. FT.  | ---     | 0        |
| ⑳                | THERMO "BUS" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉑                | THERMO "EXIT" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉒                | THERMO "LANE" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉓                | THERMO "LOADING ZONE" (LEGEND WHITE)                      | SQ. FT.  | ---     | 0        |
| ㉔                | THERMO "POLICE" (LEGEND WHITE)                            | SQ. FT.  | ---     | 0        |
| ㉕                | THERMO "TAXI" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉖                | THERMO "DEPARTING" (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ㉗                | THERMO "ARRIVING" (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ㉘                | THERMO "AND" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉙                | THERMO "FLIGHTS" (LEGEND WHITE)                           | SQ. FT.  | ---     | 0        |
| ㉚                | THERMO HANDICAP SYMBOL (ADA BLUE LEGEND)                  | SQ. FT.  | ---     | 0        |
| ⑳                | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS      | EACH     | ---     | 0        |
| ㉛                | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS | EACH     | ---     | 30       |







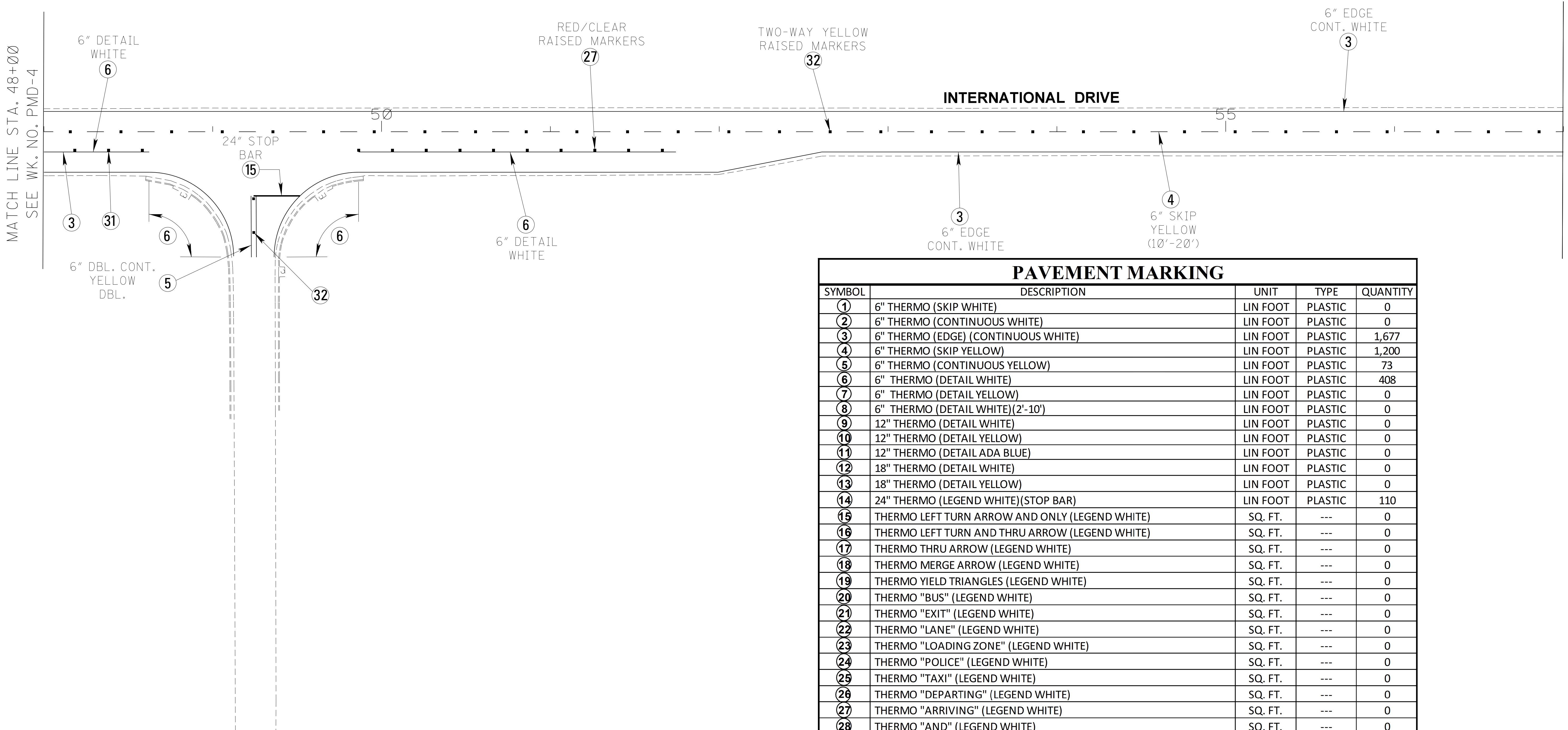
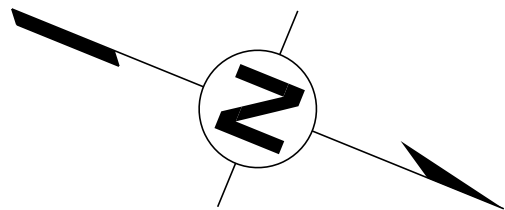
| PAVEMENT MARKING |                                                           |          |         |          |
|------------------|-----------------------------------------------------------|----------|---------|----------|
| SYMBOL           | DESCRIPTION                                               | UNIT     | TYPE    | QUANTITY |
| ①                | 6" THERMO (SKIP WHITE)                                    | LIN FOOT | PLASTIC | 0        |
| ②                | 6" THERMO (CONTINUOUS WHITE)                              | LIN FOOT | PLASTIC | 0        |
| ③                | 6" THERMO (EDGE) (CONTINUOUS WHITE)                       | LIN FOOT | PLASTIC | 1,801    |
| ④                | 6" THERMO (SKIP YELLOW)                                   | LIN FOOT | PLASTIC | 1,199    |
| ⑤                | 6" THERMO (CONTINUOUS YELLOW)                             | LIN FOOT | PLASTIC | 0        |
| ⑥                | 6" THERMO (DETAIL WHITE)                                  | LIN FOOT | PLASTIC | 81       |
| ⑦                | 6" THERMO (DETAIL YELLOW)                                 | LIN FOOT | PLASTIC | 0        |
| ⑧                | 6" THERMO (DETAIL WHITE)(2'-10')                          | LIN FOOT | PLASTIC | 0        |
| ⑨                | 12" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑩                | 12" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑪                | 12" THERMO (DETAIL ADA BLUE)                              | LIN FOOT | PLASTIC | 0        |
| ⑫                | 18" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑬                | 18" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑭                | 24" THERMO (LEGEND WHITE)(STOP BAR)                       | LIN FOOT | PLASTIC | 0        |
| ⑮                | THERMO LEFT TURN ARROW AND ONLY (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑯                | THERMO LEFT TURN AND THRU ARROW (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑰                | THERMO THRU ARROW (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ⑱                | THERMO MERGE ARROW (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ⑲                | THERMO YIELD TRIANGLES (LEGEND WHITE)                     | SQ. FT.  | ---     | 0        |
| ⑳                | THERMO "BUS" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉑                | THERMO "EXIT" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉒                | THERMO "LANE" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉓                | THERMO "LOADING ZONE" (LEGEND WHITE)                      | SQ. FT.  | ---     | 0        |
| ㉔                | THERMO "POLICE" (LEGEND WHITE)                            | SQ. FT.  | ---     | 0        |
| ㉕                | THERMO "TAXI" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉖                | THERMO "DEPARTING" (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ㉗                | THERMO "ARRIVING" (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ㉘                | THERMO "AND" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉙                | THERMO "FLIGHTS" (LEGEND WHITE)                           | SQ. FT.  | ---     | 0        |
| ㉚                | THERMO HANDICAP SYMBOL (ADA BLUE LEGEND)                  | SQ. FT.  | ---     | 0        |
| ③①               | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS      | EACH     | ---     | 4        |
| ③②               | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS | EACH     | ---     | 30       |
|                  |                                                           |          |         |          |



|          |    |                   |      |
|----------|----|-------------------|------|
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
| REVISION | BY | DESCRIPTION       | DATE |
|          |    | DRAWING REVISIONS |      |

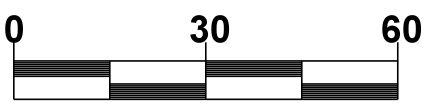
| DESIGN TEAM   |       |            |
|---------------|-------|------------|
| DESIGNED      | DRAWN | CHECKED    |
|               |       |            |
| SCALE: 1"=30' |       | DATE: 2019 |





PAVEMENT MARKING

| SYMBOL | DESCRIPTION                                               | UNIT     | TYPE    | QUANTITY |
|--------|-----------------------------------------------------------|----------|---------|----------|
| ①      | 6" THERMO (SKIP WHITE)                                    | LIN FOOT | PLASTIC | 0        |
| ②      | 6" THERMO (CONTINUOUS WHITE)                              | LIN FOOT | PLASTIC | 0        |
| ③      | 6" THERMO (EDGE) (CONTINUOUS WHITE)                       | LIN FOOT | PLASTIC | 1,677    |
| ④      | 6" THERMO (SKIP YELLOW)                                   | LIN FOOT | PLASTIC | 1,200    |
| ⑤      | 6" THERMO (CONTINUOUS YELLOW)                             | LIN FOOT | PLASTIC | 73       |
| ⑥      | 6" THERMO (DETAIL WHITE)                                  | LIN FOOT | PLASTIC | 408      |
| ⑦      | 6" THERMO (DETAIL YELLOW)                                 | LIN FOOT | PLASTIC | 0        |
| ⑧      | 6" THERMO (DETAIL WHITE)(2'-10')                          | LIN FOOT | PLASTIC | 0        |
| ⑨      | 12" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑩      | 12" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑪      | 12" THERMO (DETAIL ADA BLUE)                              | LIN FOOT | PLASTIC | 0        |
| ⑫      | 18" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 0        |
| ⑬      | 18" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑭      | 24" THERMO (LEGEND WHITE)(STOP BAR)                       | LIN FOOT | PLASTIC | 110      |
| ⑮      | THERMO LEFT TURN ARROW AND ONLY (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑯      | THERMO LEFT TURN AND THRU ARROW (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑰      | THERMO THRU ARROW (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ⑱      | THERMO MERGE ARROW (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ⑲      | THERMO YIELD TRIANGLES (LEGEND WHITE)                     | SQ. FT.  | ---     | 0        |
| ⑳      | THERMO "BUS" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉑      | THERMO "EXIT" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉒      | THERMO "LANE" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉓      | THERMO "LOADING ZONE" (LEGEND WHITE)                      | SQ. FT.  | ---     | 0        |
| ㉔      | THERMO "POLICE" (LEGEND WHITE)                            | SQ. FT.  | ---     | 0        |
| ㉕      | THERMO "TAXI" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉖      | THERMO "DEPARTING" (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ㉗      | THERMO "ARRIVING" (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ㉘      | THERMO "AND" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉙      | THERMO "FLIGHTS" (LEGEND WHITE)                           | SQ. FT.  | ---     | 0        |
| ⑳      | THERMO HANDICAP SYMBOL (ADA BLUE LEGEND)                  | SQ. FT.  | ---     | 0        |
| ⑳      | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS      | EACH     | ---     | 21       |
| ㉑      | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS | EACH     | ---     | 30       |
|        |                                                           |          |         |          |



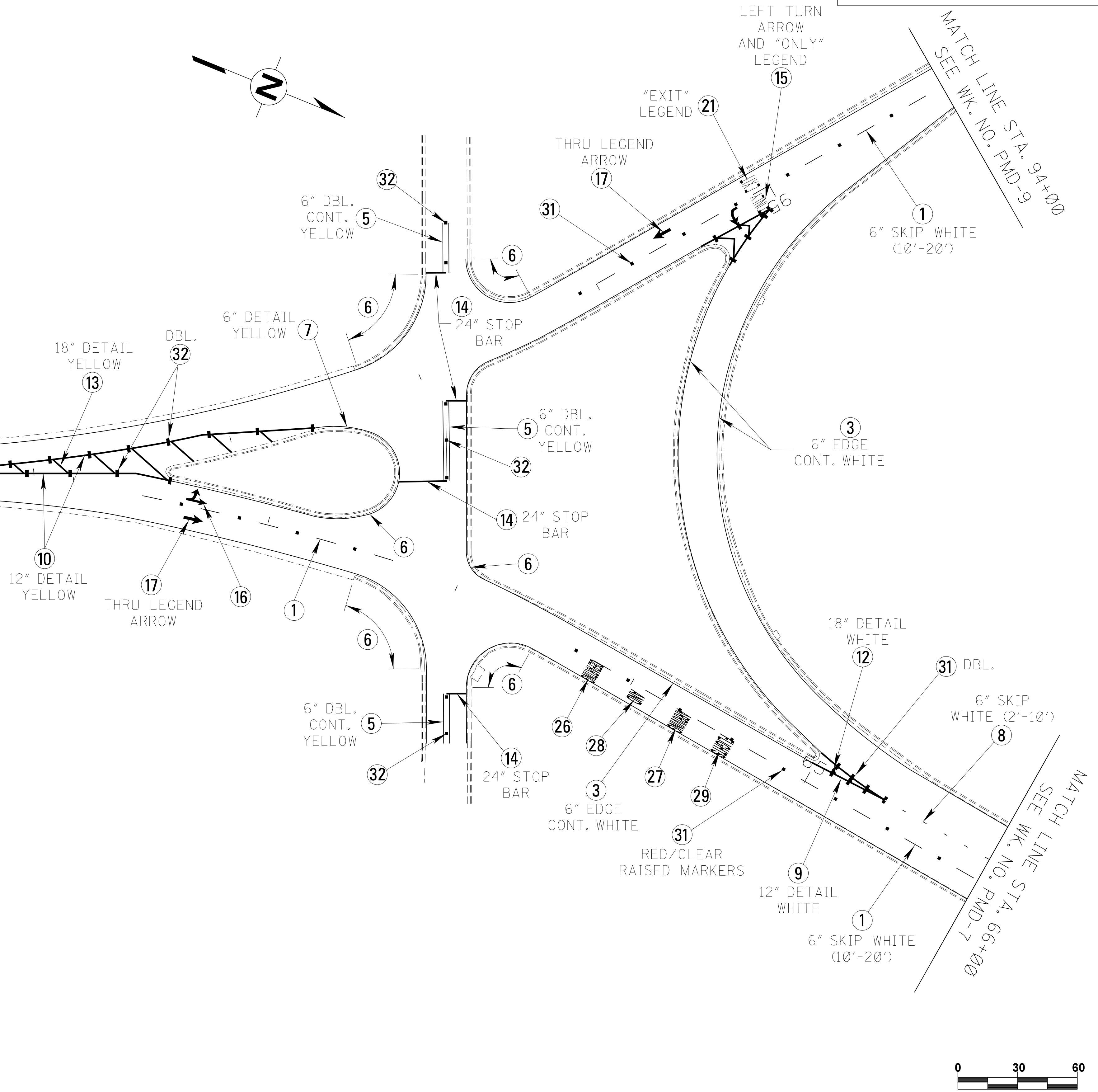
|          |    |                   |      |
|----------|----|-------------------|------|
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
| REVISION | BY | DESCRIPTION       | DATE |
|          |    | DRAWING REVISIONS |      |

|               |       |            |
|---------------|-------|------------|
| DESIGN TEAM   |       |            |
| DESIGNED      | DRAWN | CHECKED    |
| SCALE: 1"=30' |       | DATE: 2019 |



MATCH LINE STA. 57+00  
SEE WK. NO. PMD-5

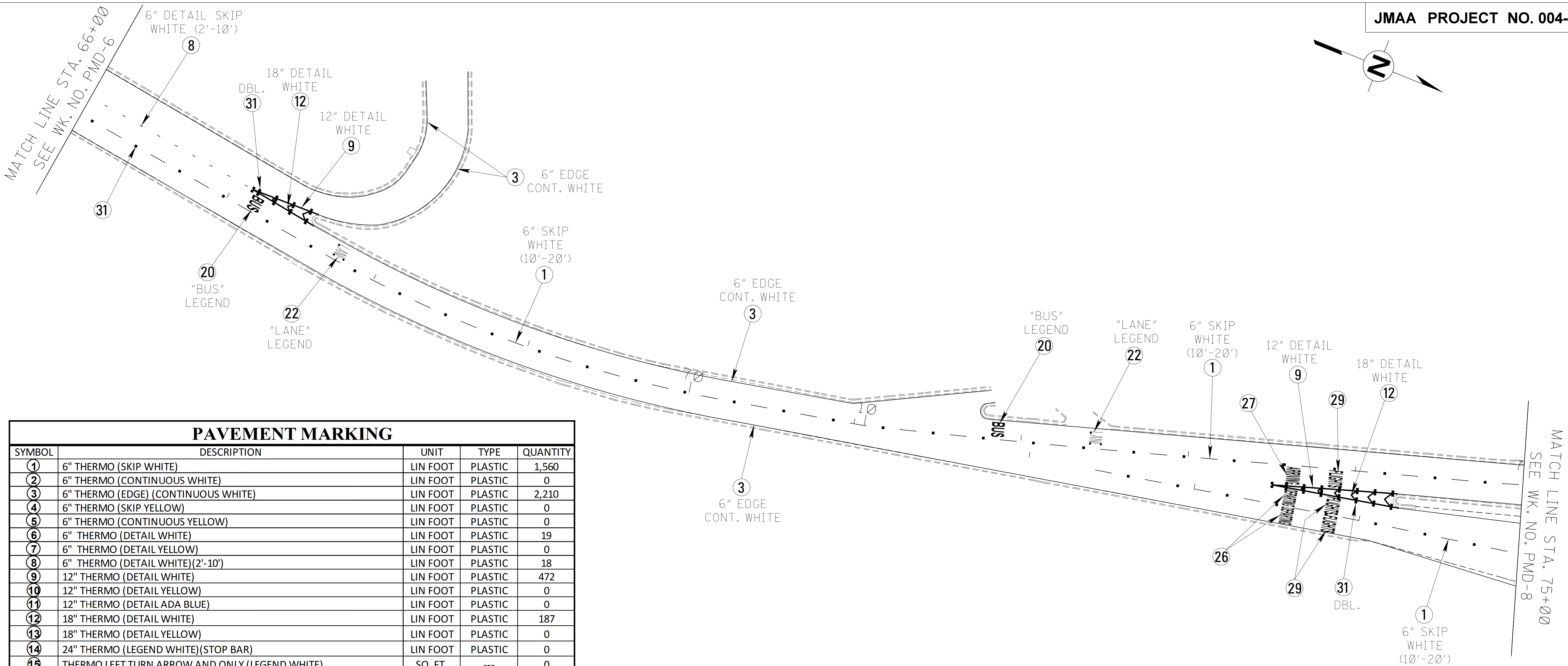
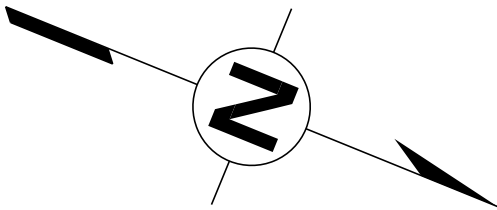
| PAVEMENT MARKING |                                                           |          |         |          |
|------------------|-----------------------------------------------------------|----------|---------|----------|
| SYMBOL           | DESCRIPTION                                               | UNIT     | TYPE    | QUANTITY |
| 1                | 6" THERMO (SKIP WHITE)                                    | LIN FOOT | PLASTIC | 800      |
| 2                | 6" THERMO (CONTINUOUS WHITE)                              | LIN FOOT | PLASTIC | 0        |
| 3                | 6" THERMO (EDGE) (CONTINUOUS WHITE)                       | LIN FOOT | PLASTIC | 2,776    |
| 4                | 6" THERMO (SKIP YELLOW)                                   | LIN FOOT | PLASTIC | 383      |
| 5                | 6" THERMO (CONTINUOUS YELLOW)                             | LIN FOOT | PLASTIC | 181      |
| 6                | 6" THERMO (DETAIL WHITE)                                  | LIN FOOT | PLASTIC | 381      |
| 7                | 6" THERMO (DETAIL YELLOW)                                 | LIN FOOT | PLASTIC | 59       |
| 8                | 6" THERMO (DETAIL WHITE)(2'-10')                          | LIN FOOT | PLASTIC | 0        |
| 9                | 12" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 310      |
| 10               | 12" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 764      |
| 11               | 12" THERMO (DETAIL ADA BLUE)                              | LIN FOOT | PLASTIC | 0        |
| 12               | 18" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 122      |
| 13               | 18" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 301      |
| 14               | 24" THERMO (LEGEND WHITE)(STOP BAR)                       | LIN FOOT | PLASTIC | 218      |
| 15               | THERMO LEFT TURN ARROW AND ONLY (LEGEND WHITE)            | SQ. FT.  | ---     | 38       |
| 16               | THERMO LEFT TURN AND THRU ARROW (LEGEND WHITE)            | SQ. FT.  | ---     | 28       |
| 17               | THERMO THRU ARROW (LEGEND WHITE)                          | SQ. FT.  | ---     | 25       |
| 18               | THERMO MERGE ARROW (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| 19               | THERMO YIELD TRIANGLES (LEGEND WHITE)                     | SQ. FT.  | ---     | 0        |
| 20               | THERMO "BUS" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| 21               | THERMO "EXIT" (LEGEND WHITE)                              | SQ. FT.  | ---     | 19       |
| 22               | THERMO "LANE" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| 23               | THERMO "LOADING ZONE" (LEGEND WHITE)                      | SQ. FT.  | ---     | 0        |
| 24               | THERMO "POLICE" (LEGEND WHITE)                            | SQ. FT.  | ---     | 0        |
| 25               | THERMO "TAXI" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| 26               | THERMO "DEPARTING" (LEGEND WHITE)                         | SQ. FT.  | ---     | 48       |
| 27               | THERMO "ARRIVING" (LEGEND WHITE)                          | SQ. FT.  | ---     | 46       |
| 28               | THERMO "AND" (LEGEND WHITE)                               | SQ. FT.  | ---     | 19       |
| 29               | THERMO "FLIGHTS" (LEGEND WHITE)                           | SQ. FT.  | ---     | 42       |
| 30               | THERMO HANDICAP SYMBOL (ADA BLUE LEGEND)                  | SQ. FT.  | ---     | 0        |
| 31               | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS      | EACH     | ---     | 50       |
| 32               | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS | EACH     | ---     | 36       |



|          |    |                   |      |  |
|----------|----|-------------------|------|--|
|          |    |                   |      |  |
| REVISION | BY | DESCRIPTION       | DATE |  |
|          |    | DRAWING REVISIONS |      |  |

| DESIGN TEAM   |       |            |
|---------------|-------|------------|
| DESIGNED      | DRAWN | CHECKED    |
| SCALE: 1"=30' |       | DATE: 2019 |



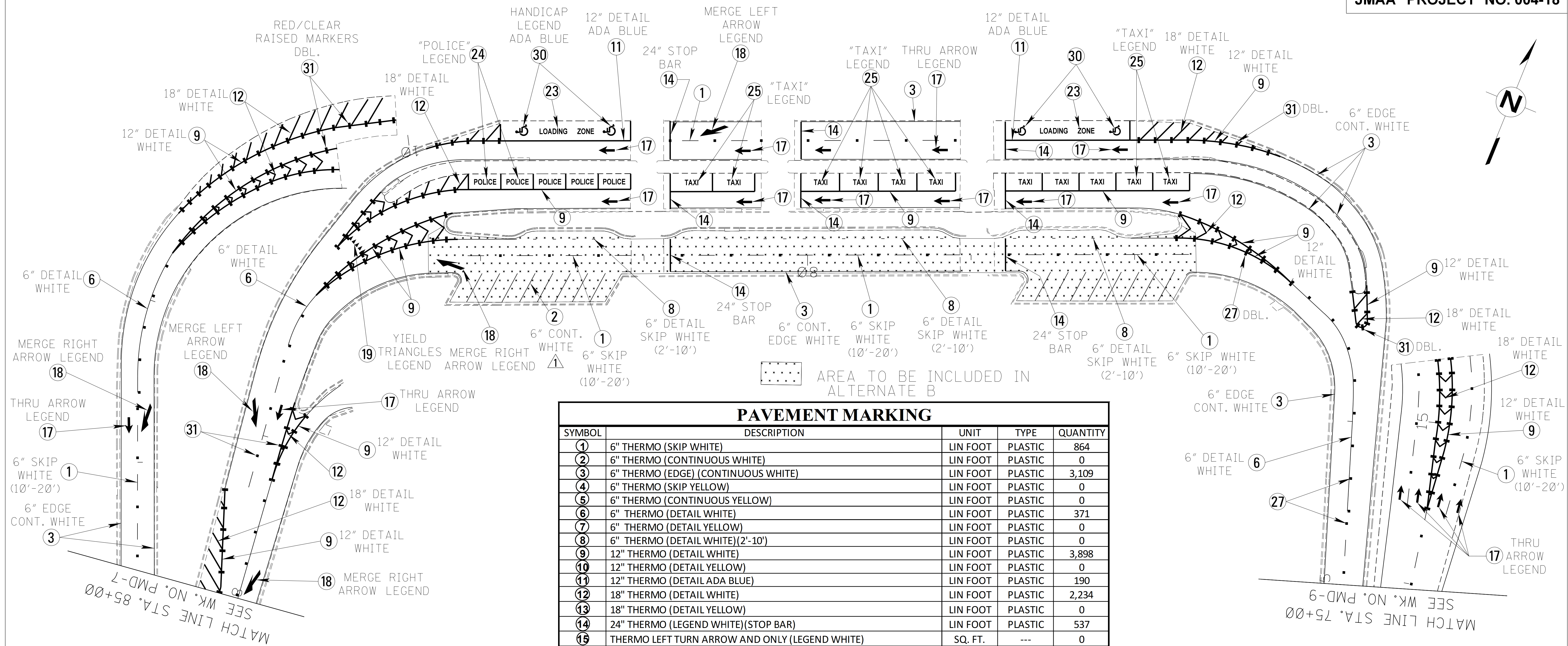


| PAVEMENT MARKING |                                                           |          |         |          |
|------------------|-----------------------------------------------------------|----------|---------|----------|
| SYMBOL           | DESCRIPTION                                               | UNIT     | TYPE    | QUANTITY |
| ①                | 6" THERMO (SKIP WHITE)                                    | LIN FOOT | PLASTIC | 1,560    |
| ②                | 6" THERMO (CONTINUOUS WHITE)                              | LIN FOOT | PLASTIC | 0        |
| ③                | 6" THERMO (EDGE) (CONTINUOUS WHITE)                       | LIN FOOT | PLASTIC | 2,210    |
| ④                | 6" THERMO (SKIP YELLOW)                                   | LIN FOOT | PLASTIC | 0        |
| ⑤                | 6" THERMO (CONTINUOUS YELLOW)                             | LIN FOOT | PLASTIC | 0        |
| ⑥                | 6" THERMO (DETAIL WHITE)                                  | LIN FOOT | PLASTIC | 19       |
| ⑦                | 6" THERMO (DETAIL YELLOW)                                 | LIN FOOT | PLASTIC | 0        |
| ⑧                | 6" THERMO (DETAIL WHITE)(2'-10')                          | LIN FOOT | PLASTIC | 18       |
| ⑨                | 12" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 472      |
| ⑩                | 12" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑪                | 12" THERMO (DETAIL ADA BLUE)                              | LIN FOOT | PLASTIC | 0        |
| ⑫                | 18" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 187      |
| ⑬                | 18" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑭                | 24" THERMO (LEGEND WHITE)(STOP BAR)                       | LIN FOOT | PLASTIC | 0        |
| ⑮                | THERMO LEFT TURN ARROW AND ONLY (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑯                | THERMO LEFT TURN AND THRU ARROW (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑰                | THERMO THRU ARROW (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ⑱                | THERMO MERGE ARROW (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ⑲                | THERMO YIELD TRIANGLES (LEGEND WHITE)                     | SQ. FT.  | ---     | 0        |
| ⑳                | THERMO "BUS" (LEGEND WHITE)                               | SQ. FT.  | ---     | 36       |
| ㉑                | THERMO "EXIT" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉒                | THERMO "LANE" (LEGEND WHITE)                              | SQ. FT.  | ---     | 45       |
| ㉓                | THERMO "LOADING ZONE" (LEGEND WHITE)                      | SQ. FT.  | ---     | 0        |
| ㉔                | THERMO "POLICE" (LEGEND WHITE)                            | SQ. FT.  | ---     | 0        |
| ㉕                | THERMO "TAXI" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉖                | THERMO "DEPARTING" (LEGEND WHITE)                         | SQ. FT.  | ---     | 96       |
| ㉗                | THERMO "ARRIVING" (LEGEND WHITE)                          | SQ. FT.  | ---     | 46       |
| ㉘                | THERMO "AND" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉙                | THERMO "FLIGHTS" (LEGEND WHITE)                           | SQ. FT.  | ---     | 126      |
| ⑳                | THERMO HANDICAP SYMBOL (ADA BLUE LEGEND)                  | SQ. FT.  | ---     | 0        |
| ㉑                | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS      | EACH     | ---     | 86       |
| ㉒                | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS | EACH     | ---     | 0        |

|                   |    |             |      |  |
|-------------------|----|-------------|------|--|
|                   |    |             |      |  |
|                   |    |             |      |  |
|                   |    |             |      |  |
|                   |    |             |      |  |
| REVISION          | BY | DESCRIPTION | DATE |  |
| DRAWING REVISIONS |    |             |      |  |

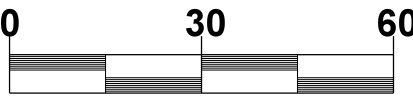
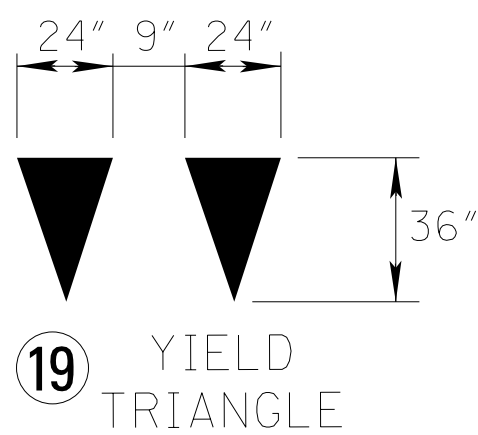
| DESIGN TEAM   |       |            |
|---------------|-------|------------|
| DESIGNED      | DRAWN | CHECKED    |
| SCALE: 1"=30' |       | DATE: 2019 |



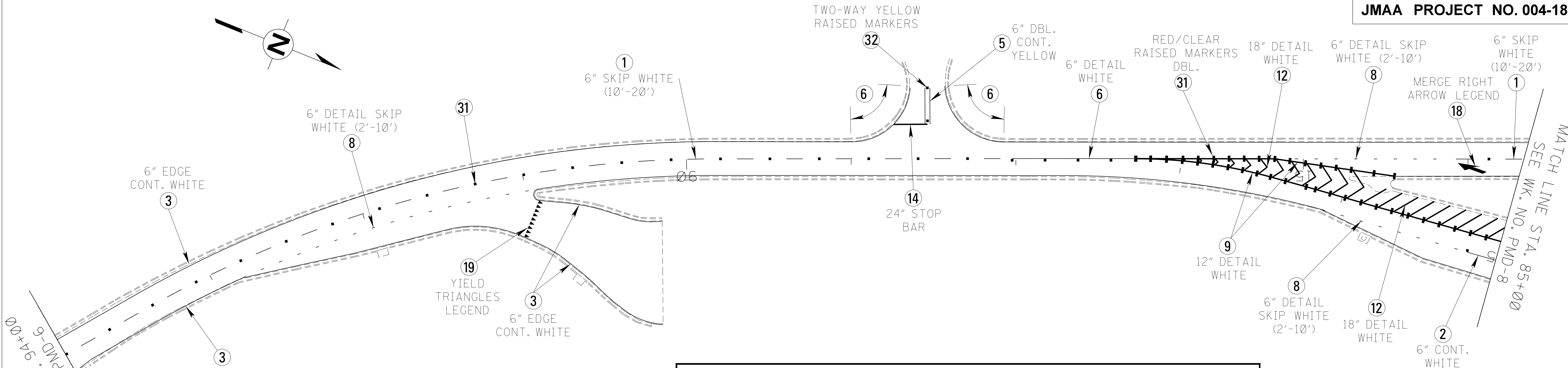


AREA TO BE INCLUDED IN  
ALTERNATE B

| PAVEMENT MARKING |                                                           |          |         |          |
|------------------|-----------------------------------------------------------|----------|---------|----------|
| SYMBOL           | DESCRIPTION                                               | UNIT     | TYPE    | QUANTITY |
| ①                | 6" THERMO (SKIP WHITE)                                    | LIN FOOT | PLASTIC | 864      |
| ②                | 6" THERMO (CONTINUOUS WHITE)                              | LIN FOOT | PLASTIC | 0        |
| ③                | 6" THERMO (EDGE) (CONTINUOUS WHITE)                       | LIN FOOT | PLASTIC | 3,109    |
| ④                | 6" THERMO (SKIP YELLOW)                                   | LIN FOOT | PLASTIC | 0        |
| ⑤                | 6" THERMO (CONTINUOUS YELLOW)                             | LIN FOOT | PLASTIC | 0        |
| ⑥                | 6" THERMO (DETAIL WHITE)                                  | LIN FOOT | PLASTIC | 371      |
| ⑦                | 6" THERMO (DETAIL YELLOW)                                 | LIN FOOT | PLASTIC | 0        |
| ⑧                | 6" THERMO (DETAIL WHITE)(2'-10')                          | LIN FOOT | PLASTIC | 0        |
| ⑨                | 12" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 3,898    |
| ⑩                | 12" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑪                | 12" THERMO (DETAIL ADA BLUE)                              | LIN FOOT | PLASTIC | 190      |
| ⑫                | 18" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 2,234    |
| ⑬                | 18" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑭                | 24" THERMO (LEGEND WHITE)(STOP BAR)                       | LIN FOOT | PLASTIC | 537      |
| ⑮                | THERMO LEFT TURN ARROW AND ONLY (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑯                | THERMO LEFT TURN AND THRU ARROW (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑰                | THERMO THRU ARROW (LEGEND WHITE)                          | SQ. FT.  | ---     | 209      |
| ⑱                | THERMO MERGE ARROW (LEGEND WHITE)                         | SQ. FT.  | ---     | 196      |
| ⑲                | THERMO YIELD TRIANGLES (LEGEND WHITE)                     | SQ. FT.  | ---     | 15       |
| ⑳                | THERMO "BUS" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉑                | THERMO "EXIT" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉒                | THERMO "LANE" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉓                | THERMO "LOADING ZONE" (LEGEND WHITE)                      | SQ. FT.  | ---     | 51       |
| ㉔                | THERMO "POLICE" (LEGEND WHITE)                            | SQ. FT.  | ---     | 68       |
| ㉕                | THERMO "TAXI" (LEGEND WHITE)                              | SQ. FT.  | ---     | 91       |
| ㉖                | THERMO "DEPARTING" (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ㉗                | THERMO "ARRIVING" (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ㉘                | THERMO "AND" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉙                | THERMO "FLIGHTS" (LEGEND WHITE)                           | SQ. FT.  | ---     | 0        |
| ㉚                | THERMO HANDICAP SYMBOL (ADA BLUE LEGEND)                  | SQ. FT.  | ---     | 16       |
| ㉛                | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS      | EACH     | ---     | 312      |
| ㉜                | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS | EACH     | ---     | 0        |







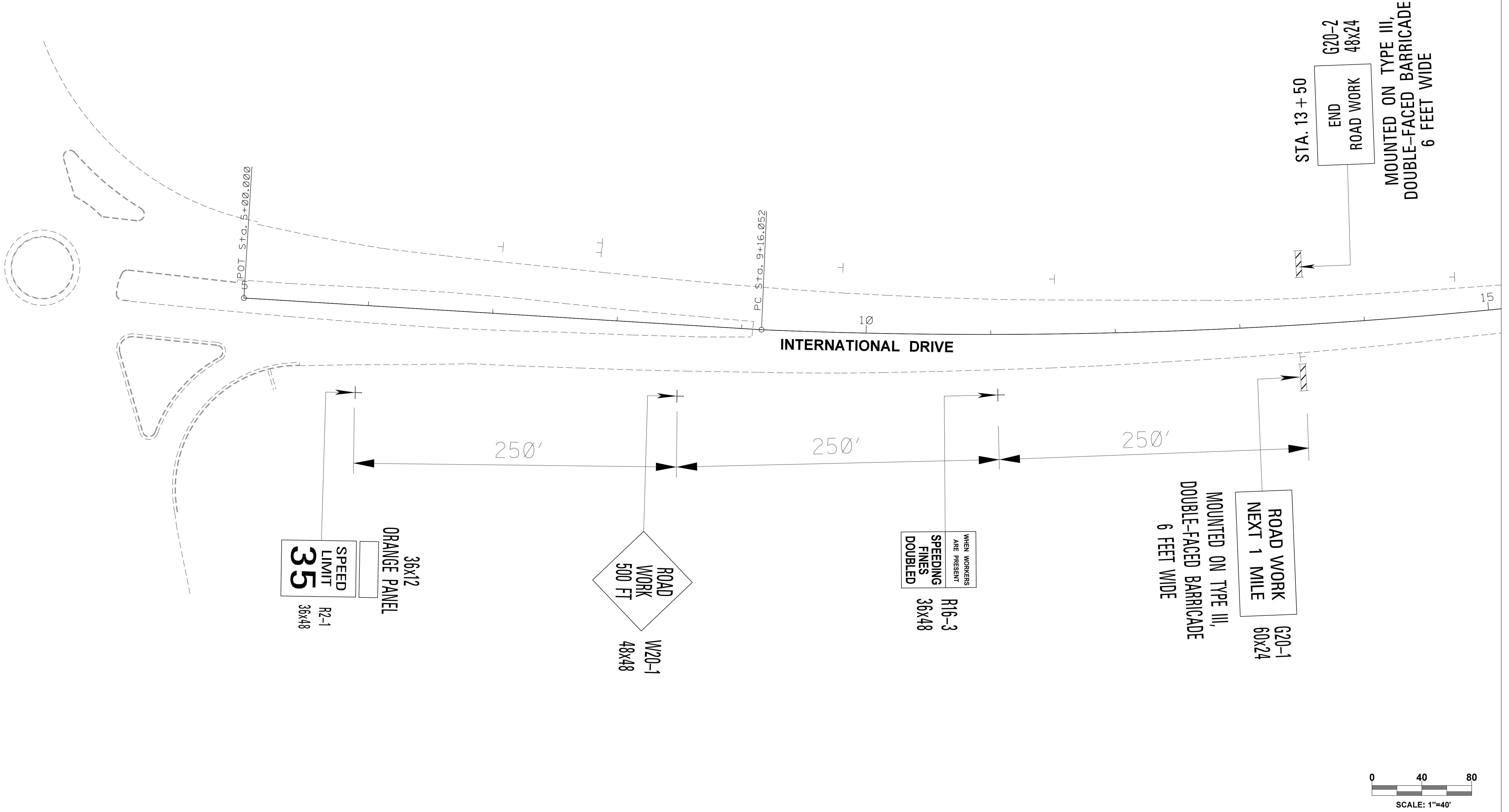
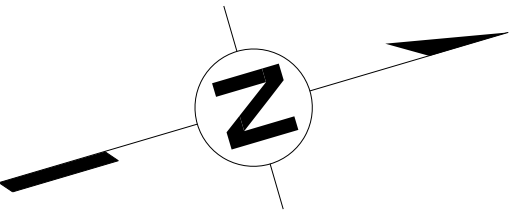
| PAVEMENT MARKING |                                                           |          |         |          |
|------------------|-----------------------------------------------------------|----------|---------|----------|
| SYMBOL           | DESCRIPTION                                               | UNIT     | TYPE    | QUANTITY |
| ①                | 6" THERMO (SKIP WHITE)                                    | LIN FOOT | PLASTIC | 888      |
| ②                | 6" THERMO (CONTINUOUS WHITE)                              | LIN FOOT | PLASTIC | 0        |
| ③                | 6" THERMO (EDGE) (CONTINUOUS WHITE)                       | LIN FOOT | PLASTIC | 1,606    |
| ④                | 6" THERMO (SKIP YELLOW)                                   | LIN FOOT | PLASTIC | 0        |
| ⑤                | 6" THERMO (CONTINUOUS YELLOW)                             | LIN FOOT | PLASTIC | 44       |
| ⑥                | 6" THERMO (DETAIL WHITE)                                  | LIN FOOT | PLASTIC | 567      |
| ⑦                | 6" THERMO (DETAIL YELLOW)                                 | LIN FOOT | PLASTIC | 0        |
| ⑧                | 6" THERMO (DETAIL WHITE)(2'-10')                          | LIN FOOT | PLASTIC | 66       |
| ⑨                | 12" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 771      |
| ⑩                | 12" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑪                | 12" THERMO (DETAIL ADA BLUE)                              | LIN FOOT | PLASTIC | 0        |
| ⑫                | 18" THERMO (DETAIL WHITE)                                 | LIN FOOT | PLASTIC | 950      |
| ⑬                | 18" THERMO (DETAIL YELLOW)                                | LIN FOOT | PLASTIC | 0        |
| ⑭                | 24" THERMO (LEGEND WHITE)(STOP BAR)                       | LIN FOOT | PLASTIC | 82       |
| ⑮                | THERMO LEFT TURN ARROW AND ONLY (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑯                | THERMO LEFT TURN AND THRU ARROW (LEGEND WHITE)            | SQ. FT.  | ---     | 0        |
| ⑰                | THERMO THRU ARROW (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ⑱                | THERMO MERGE ARROW (LEGEND WHITE)                         | SQ. FT.  | ---     | 39       |
| ⑲                | THERMO YIELD TRIANGLES (LEGEND WHITE)                     | SQ. FT.  | ---     | 0        |
| ⑳                | THERMO "BUS" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉑                | THERMO "EXIT" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉒                | THERMO "LANE" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉓                | THERMO "LOADING ZONE" (LEGEND WHITE)                      | SQ. FT.  | ---     | 0        |
| ㉔                | THERMO "POLICE" (LEGEND WHITE)                            | SQ. FT.  | ---     | 0        |
| ㉕                | THERMO "TAXI" (LEGEND WHITE)                              | SQ. FT.  | ---     | 0        |
| ㉖                | THERMO "DEPARTING" (LEGEND WHITE)                         | SQ. FT.  | ---     | 0        |
| ㉗                | THERMO "ARRIVING" (LEGEND WHITE)                          | SQ. FT.  | ---     | 0        |
| ㉘                | THERMO "AND" (LEGEND WHITE)                               | SQ. FT.  | ---     | 0        |
| ㉙                | THERMO "FLIGHTS" (LEGEND WHITE)                           | SQ. FT.  | ---     | 0        |
| ㉚                | THERMO HANDICAP SYMBOL (ADA BLUE LEGEND)                  | SQ. FT.  | ---     | 0        |
| ⑳①               | RED-CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS      | EACH     | ---     | 104      |
| ⑳②               | TWO-WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS | EACH     | ---     | 2        |
|                  |                                                           |          |         |          |



|                   |    |             |      |
|-------------------|----|-------------|------|
|                   |    |             |      |
|                   |    |             |      |
|                   |    |             |      |
| REVISION          | BY | DESCRIPTION | DATE |
| DRAWING REVISIONS |    |             |      |

| DESIGN TEAM   |       |            |
|---------------|-------|------------|
| DESIGNED      | DRAWN | CHECKED    |
| SCALE: 1"=30' |       | DATE: 2019 |





| REVISION | BY | DESCRIPTION | DATE |
|----------|----|-------------|------|
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |

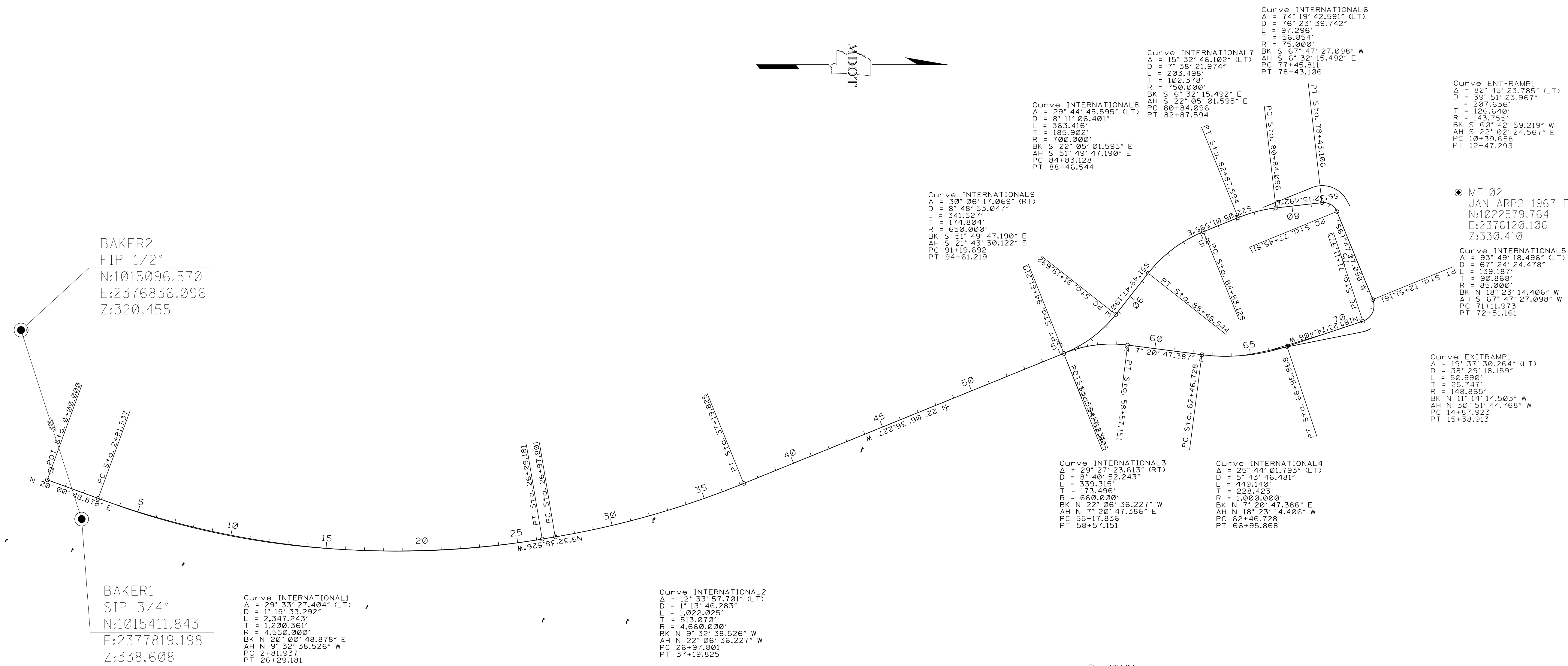
| DESIGN TEAM   |       |         |      |
|---------------|-------|---------|------|
| DESIGNED      | DRAWN | CHECKED |      |
|               |       |         |      |
| SCALE: 1"=30' |       | DATE:   | 2019 |



JACKSON MUNICIPAL AIRPORT AUTHORITY  
Jackson, Mississippi  
**CONSTRUCTION SIGNING**  
INTERNATIONAL DRIVE

|             |      |
|-------------|------|
| DRAWING NO. | CS-1 |
| SHEET       | 30   |





GPS CONTROL NOTES

HORIZONTAL DATUM: NAD 83 (93) MS WEST ZONE (US SURVEY FEET)

| HORIZONTAL MONUMENT | NORTH       | EAST        |
|---------------------|-------------|-------------|
| JAX 3               | 1010649.020 | 2354871.242 |

VERTICAL DATUM: NAVD 88 (US SURVEY FEET)

| VERTICAL MONUMENT | ELEVATION |
|-------------------|-----------|
| JAX 3             | 274.24    |

ALL AZIMUTHS AND DISTANCES ARE  
GRID VALUES, US SURVEY FEET

CONVERSION VALUES PROJECT AVERAGE

|                                  |                |
|----------------------------------|----------------|
| GROUND TO GRID (COMBINED) FACTOR | 0.99994491     |
| GRID TO GEODETIC AZIMUTH         | +00° 06' 02.6" |

**Michael Baker**  
**INTERNATIONAL**  
310 NEW POINTE DRIVE  
RIDGELAND, MS, 39157  
PH: (601) 608-8700 FAX: (601) 607-8701

| REVISION | BY | DESCRIPTION | DATE |
|----------|----|-------------|------|
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |

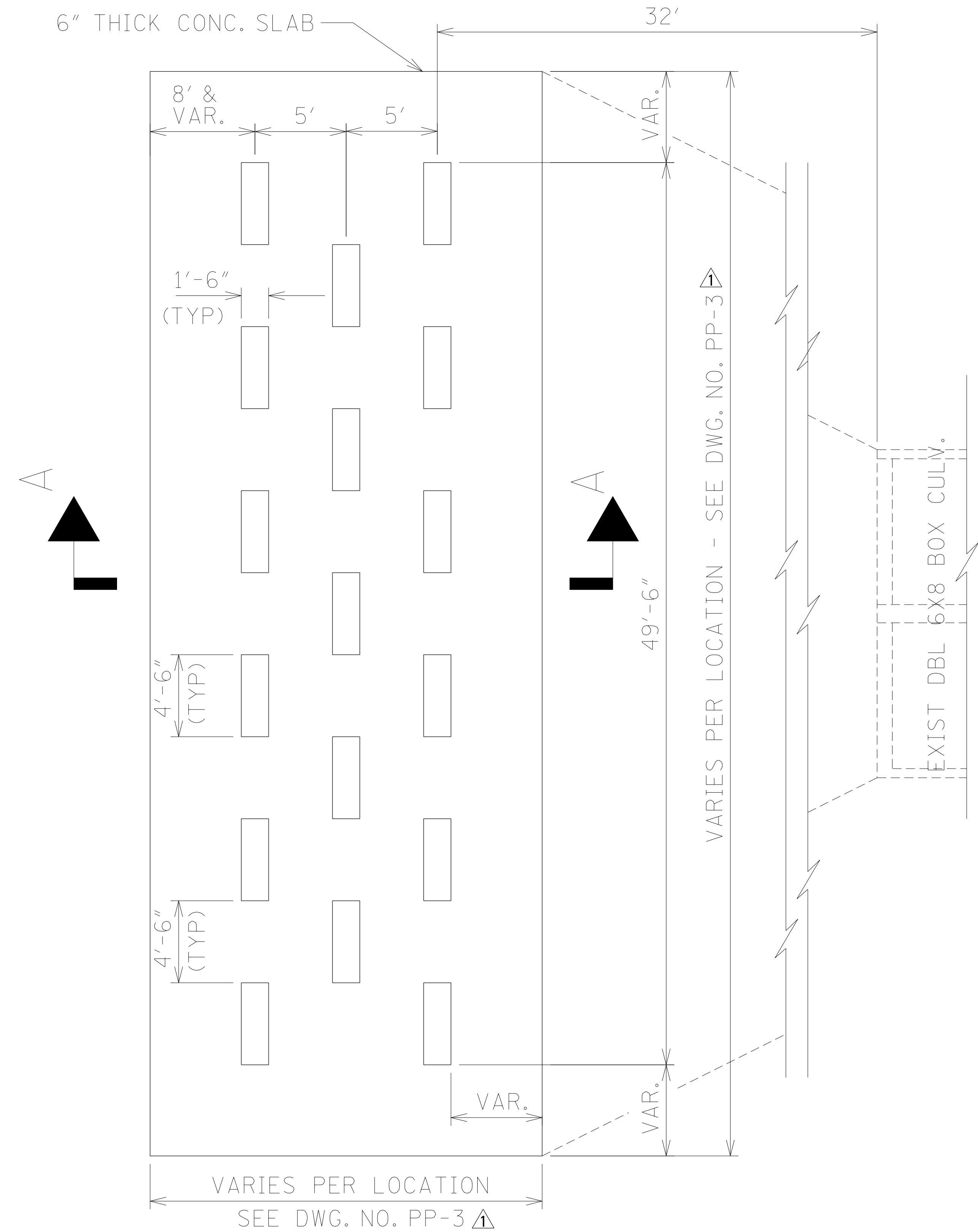
| DESIGN TEAM  |       |         |
|--------------|-------|---------|
| DESIGNED     | DRAWN | CHECKED |
|              |       |         |
| SCALE: 1"=1' | DATE: | 2019    |



JACKSON MUNICIPAL AIRPORT AUTHORITY  
Jackson, Mississippi  
**SURVEY CONTROL**  
INTERNATIONAL DRIVE

DRAWING NO.  
**SC-1**  
SHEET **31**

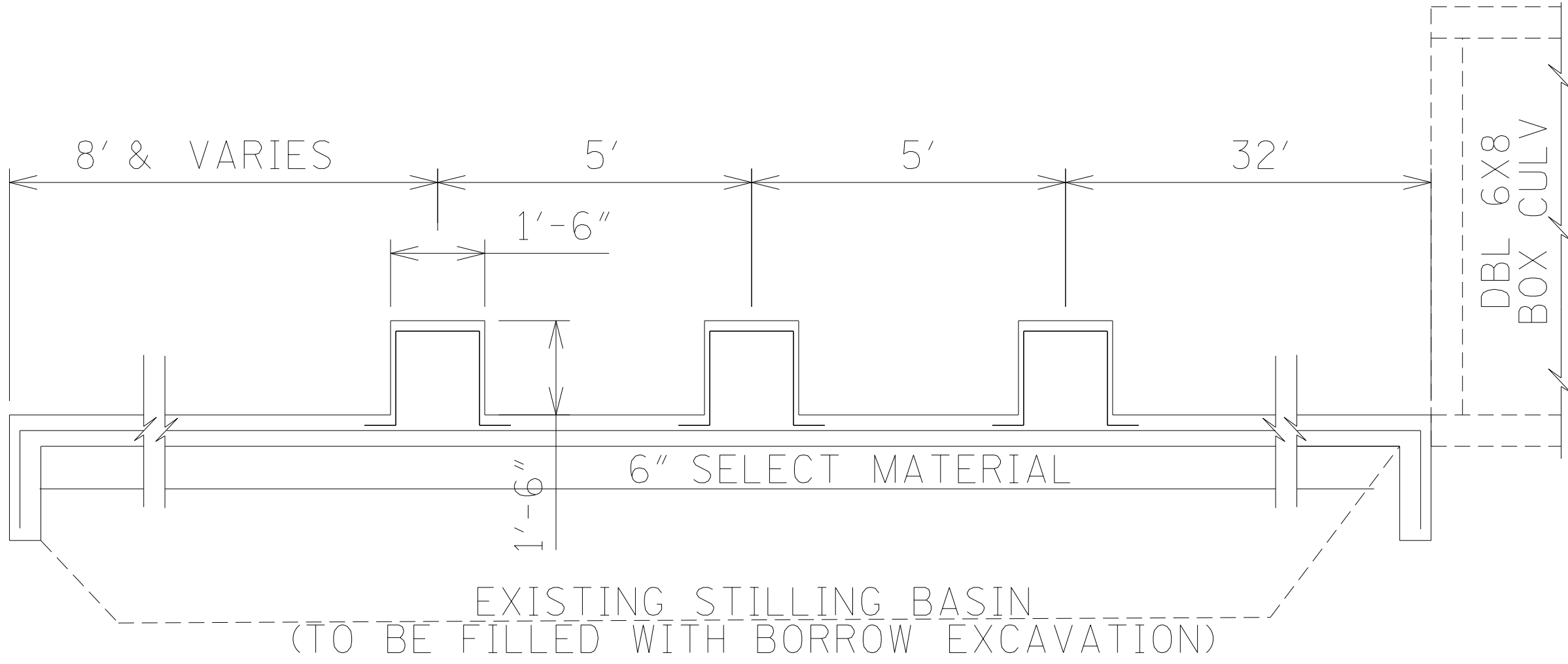




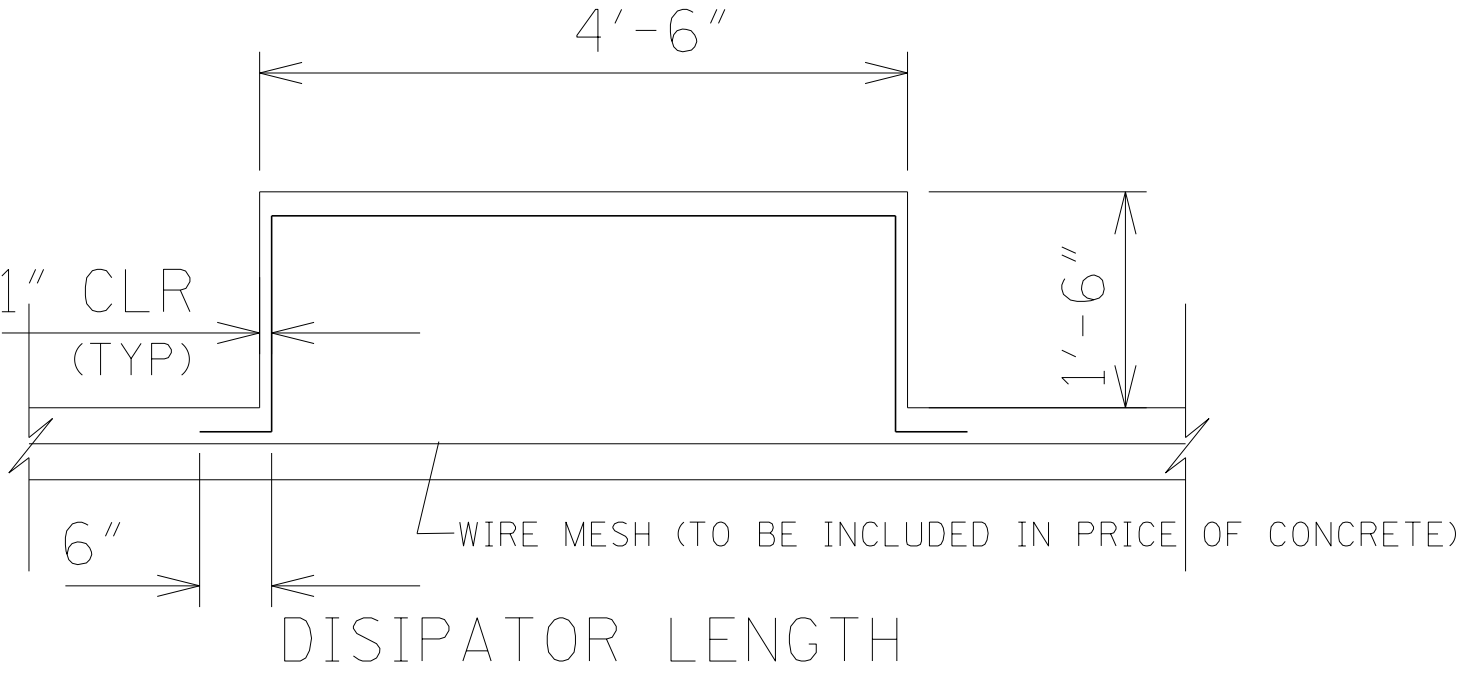
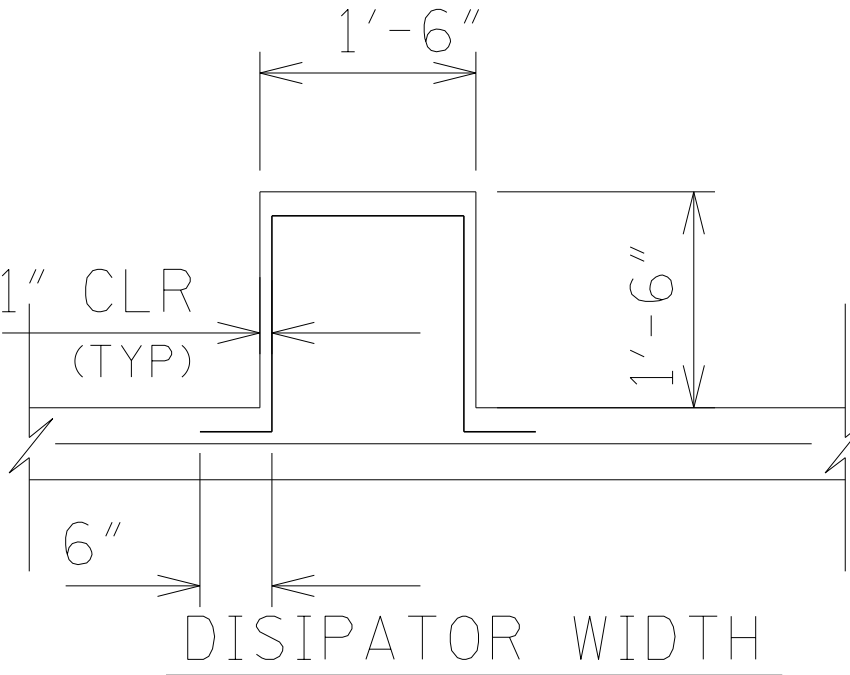
PLAN VIEW

SEE PP-3 FOR ELEVATIONS OF SLAB

6" CONCRETE THICKNESS



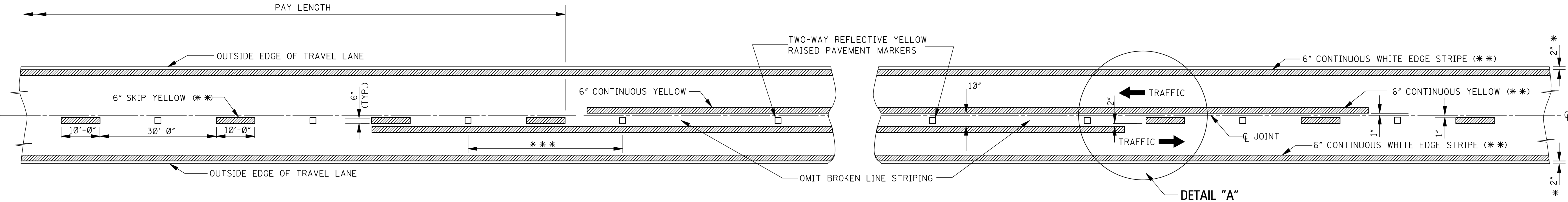
SECTION "A-A"



REINFORCING DETAIL

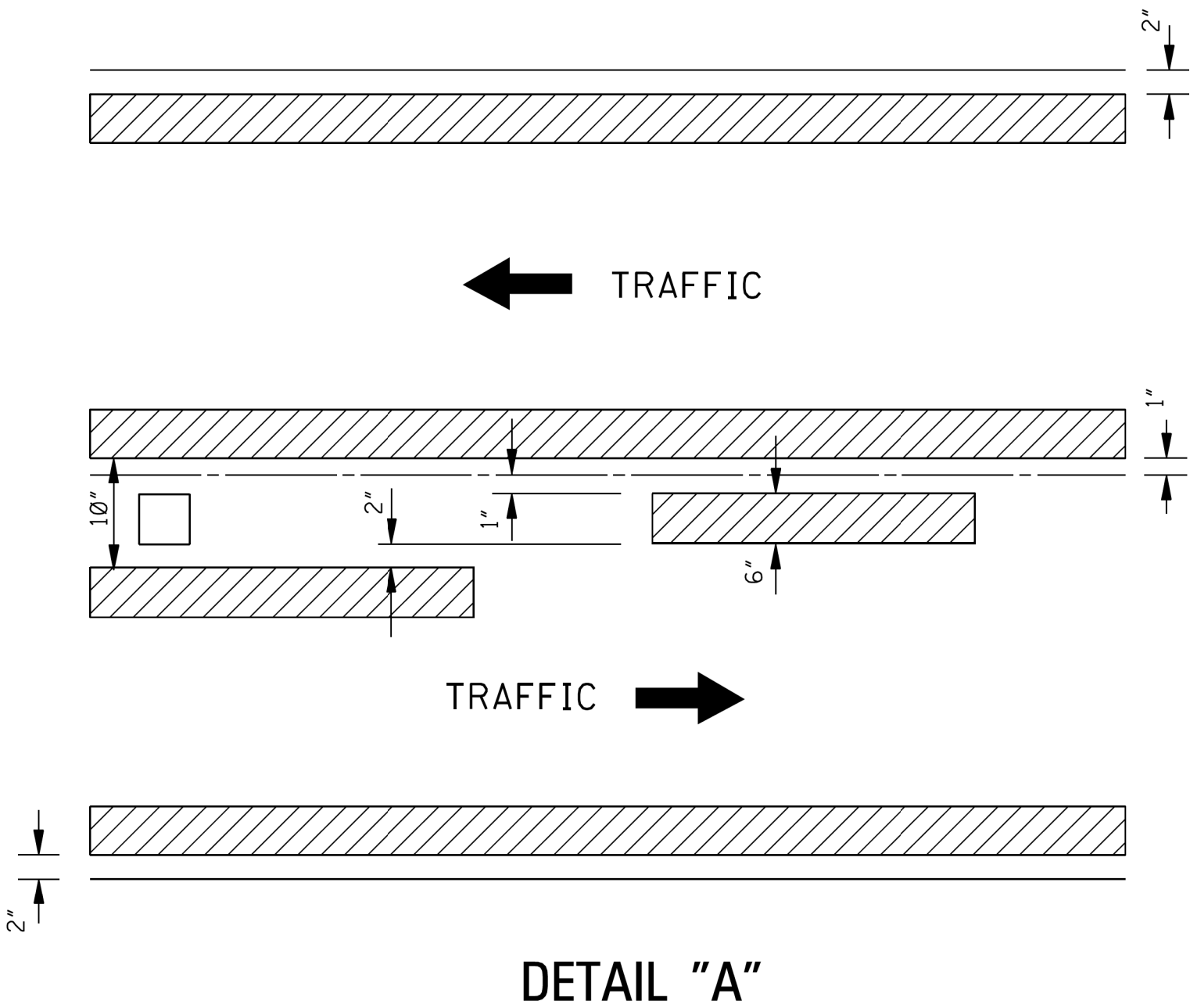
- NOTES:
1. CLASS B STRUCTURAL CONCRETE, MINOR STRUCTURES
  2. REINFORCING STEEL - ASTM A615, GRADE 40 UNLESS NOTED.
  3. LAP REINFORCING STEEL 30 BAR DIAMETERS MIN. @ SPLICES UNLESS NOTED.
  4. CHAMFER EXPOSED EDGES OF CONCRETE 3/4" UNLESS NOTED.
  5. PLACE REINFORCING STEEL WITH THE CENTER OF THE OUTSIDE BARS 2" FROM THE SURFACE OF THE CONCRETE





TWO-WAY TRAFFIC  
(ASPHALT OR CONCRETE PAVEMENT)

NOTE: THE CRITERIA FOR NO-PASSING ZONES  
CAN BE FOUND IN THE MDOT ROADWAY  
DESIGN MANUAL, SECTION 11-1.01.



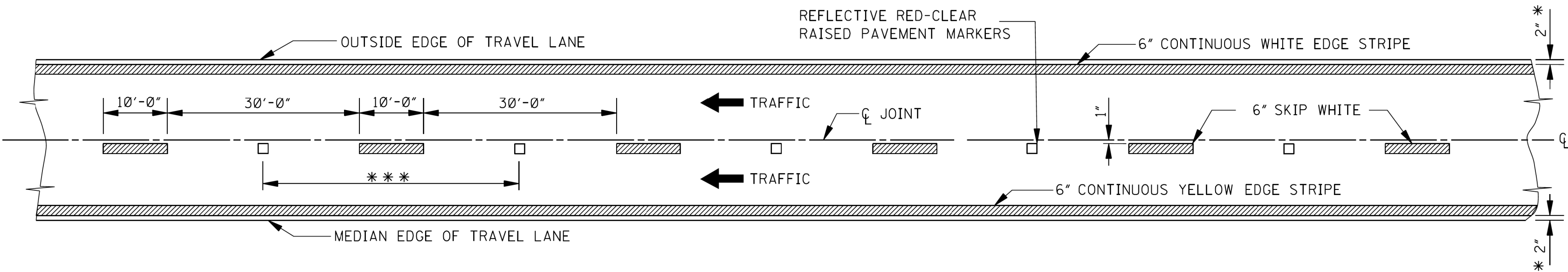
GENERAL NOTES:

- \* 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS. FOR STRIPING ON RUMBLE STRIP SECTIONS REFER TO WK. SHEETS RS-1, RS-2, AND RS-3.
- \*\* 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR PLASTIC AS INDICATED IN PAY ITEMS).
- \*\*\* 3. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:

|                    | URBAN AREA<br>(ft-in) | RURAL AREA<br>(ft-in) |
|--------------------|-----------------------|-----------------------|
| TANGENT SECTIONS   | 40'-0"                | 80'-0"                |
| HORIZONTAL CURVES  | 40'-0"                | 40'-0"                |
| INTERCHANGE LIMITS | 40'-0"                | + 40'-0"              |

+ NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.

- 4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."

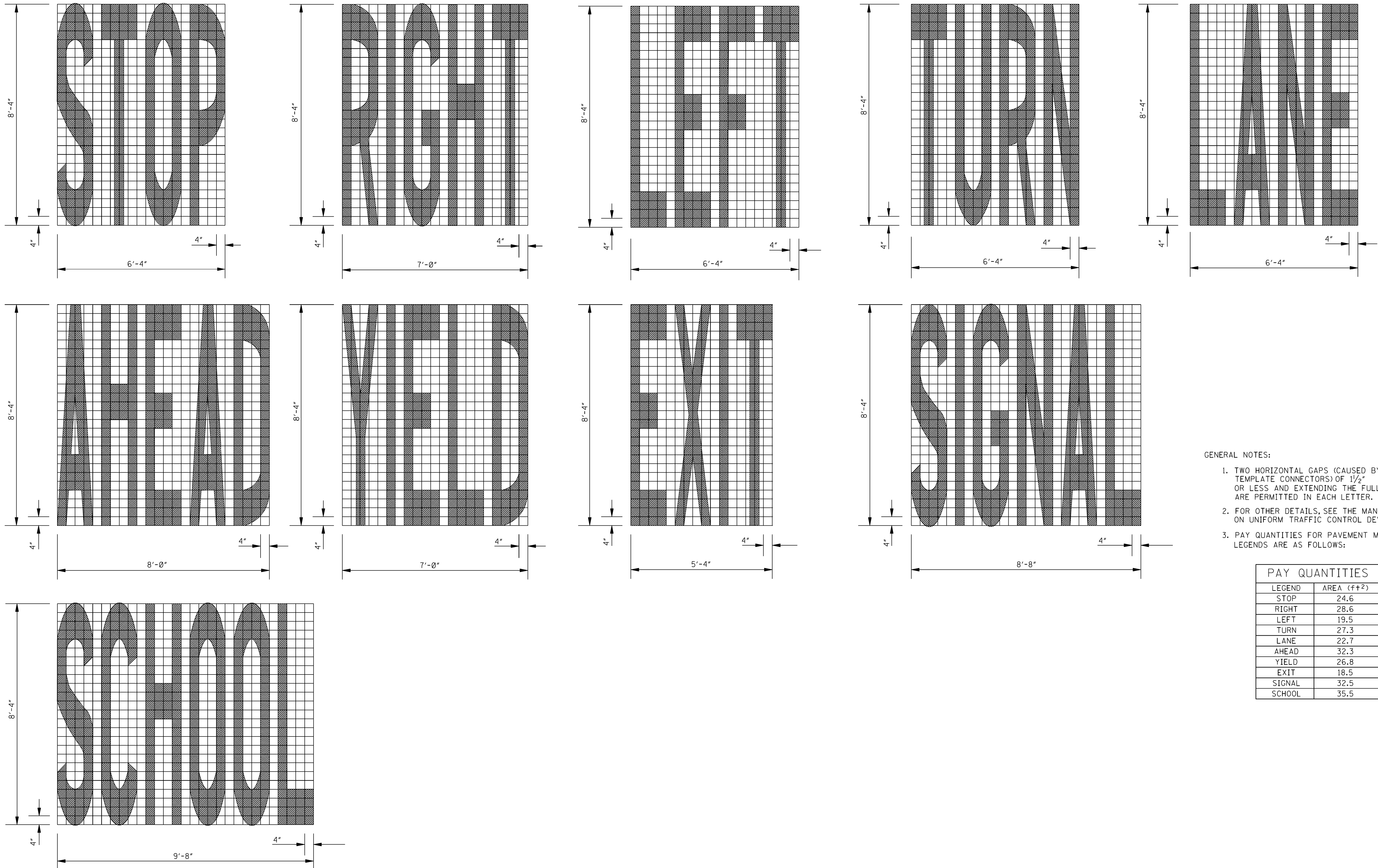


4-LANE WITH ONE-WAY TRAFFIC

| REVISION | BY | DESCRIPTION | DATE |
|----------|----|-------------|------|
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |

| DESIGN TEAM   |       |            |
|---------------|-------|------------|
| DESIGNED      | DRAWN | CHECKED    |
|               |       |            |
| SCALE: 1"=30' |       | DATE: 2019 |





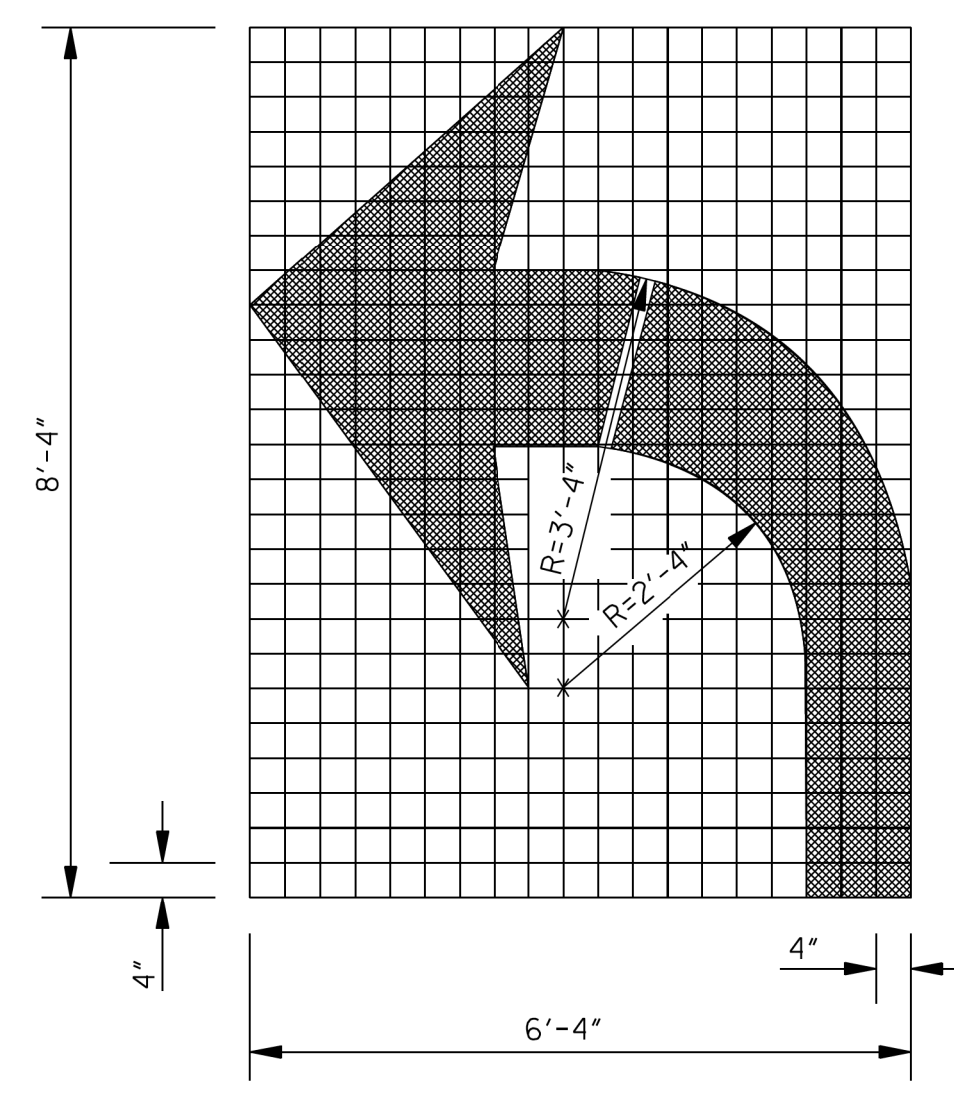
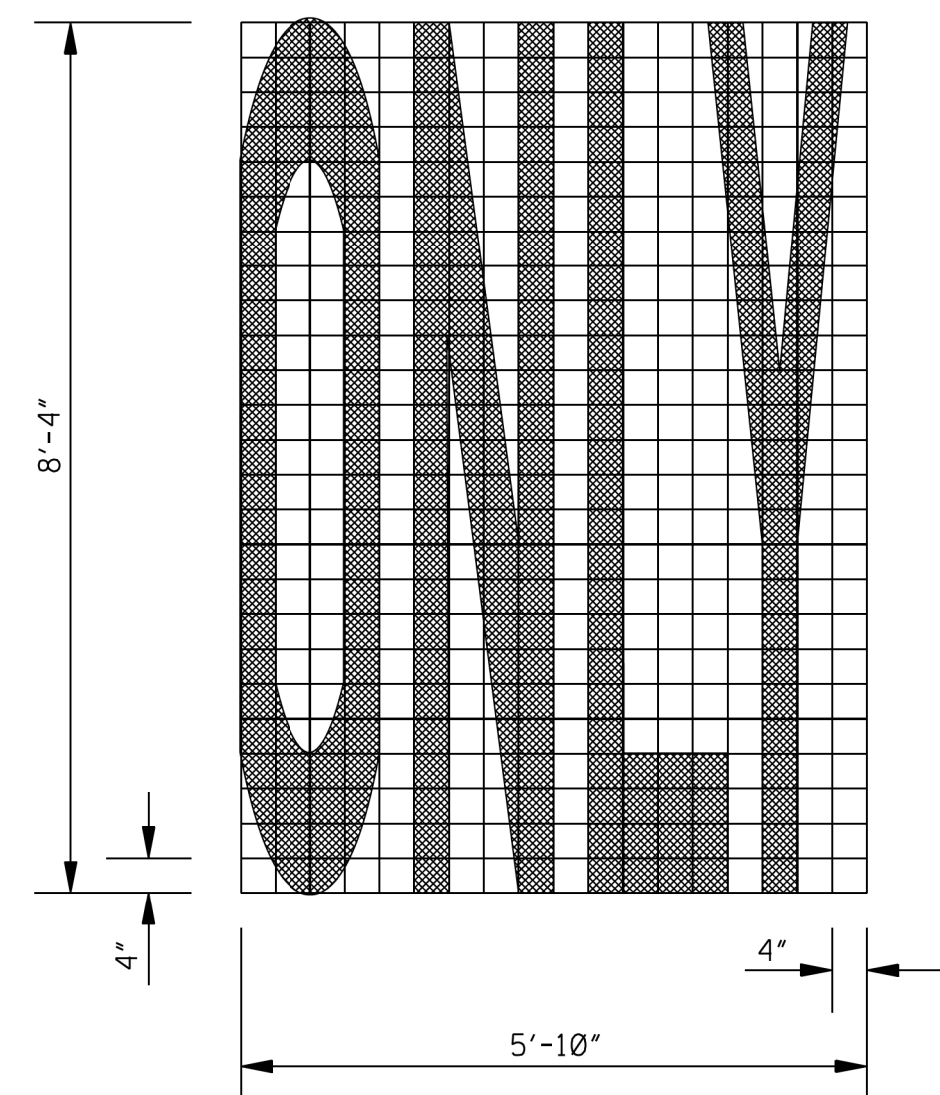
- GENERAL NOTES:
1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
  2. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
  3. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

| PAY QUANTITIES |            |
|----------------|------------|
| LEGEND         | AREA (ft²) |
| STOP           | 24.6       |
| RIGHT          | 28.6       |
| LEFT           | 19.5       |
| TURN           | 27.3       |
| LANE           | 22.7       |
| AHEAD          | 32.3       |
| YIELD          | 26.8       |
| EXIT           | 18.5       |
| SIGNAL         | 32.5       |
| SCHOOL         | 35.5       |

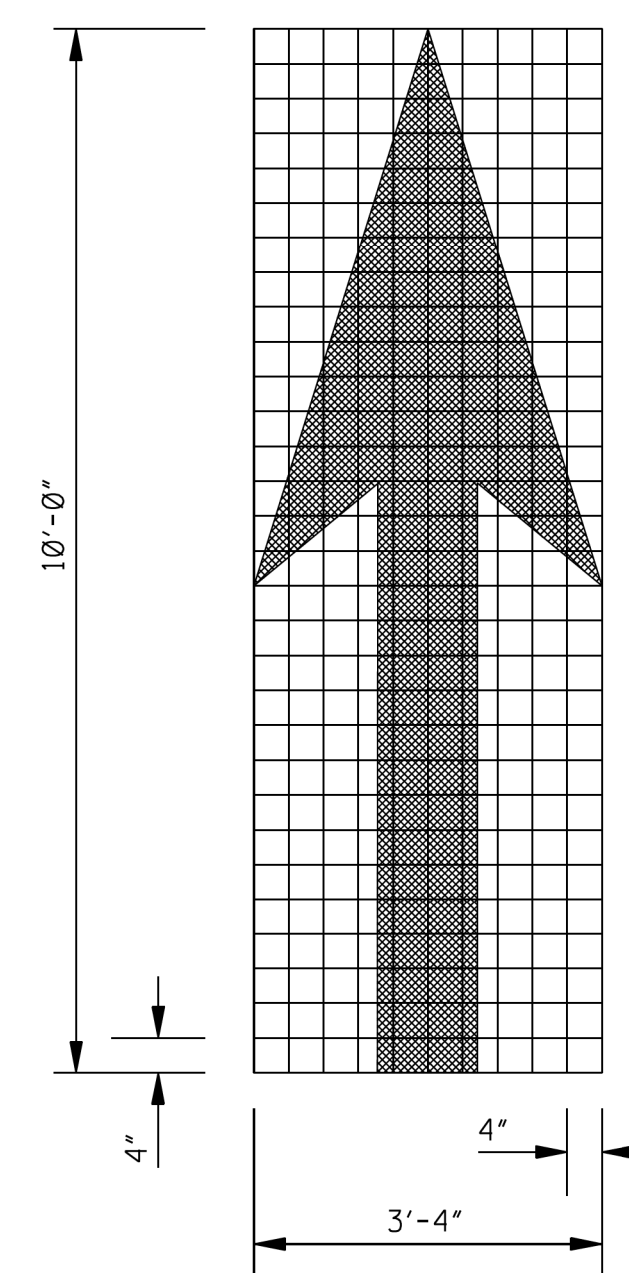
| REVISION | BY | DESCRIPTION | DATE |
|----------|----|-------------|------|
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |

| DESIGN TEAM   |       |            |
|---------------|-------|------------|
| DESIGNED      | DRAWN | CHECKED    |
|               |       |            |
| SCALE: 1"=30' |       | DATE: 2019 |

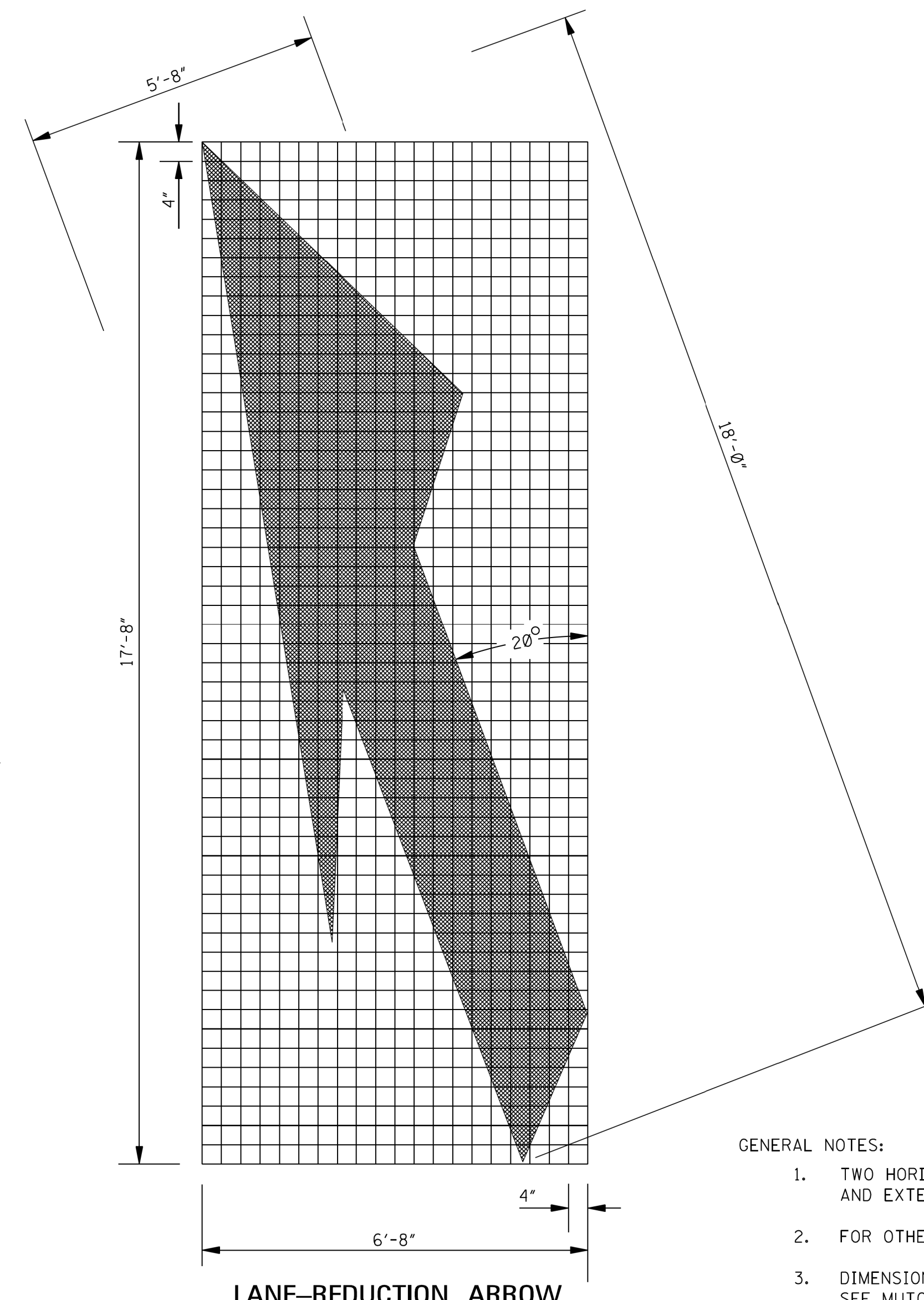




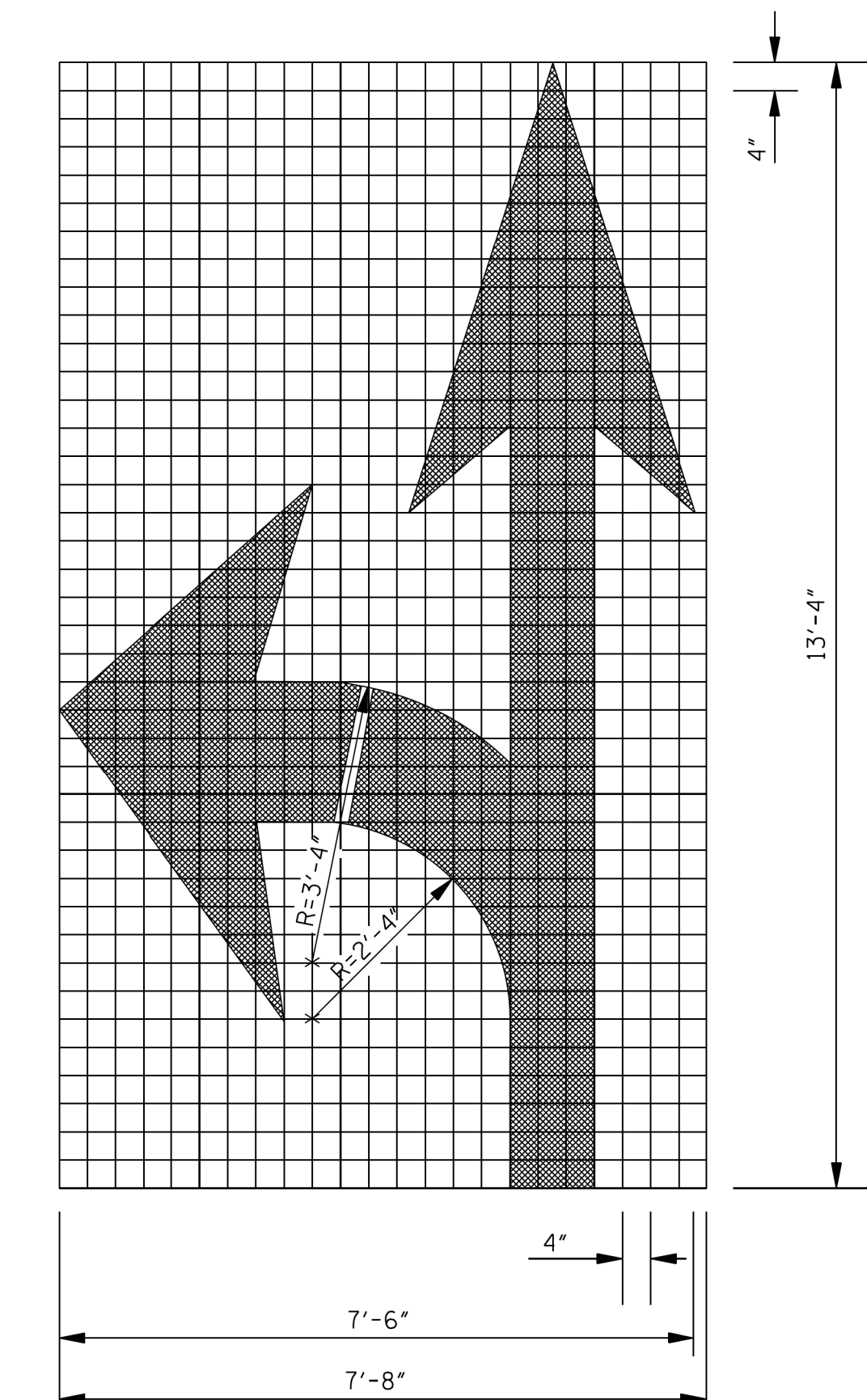
TURN ARROW



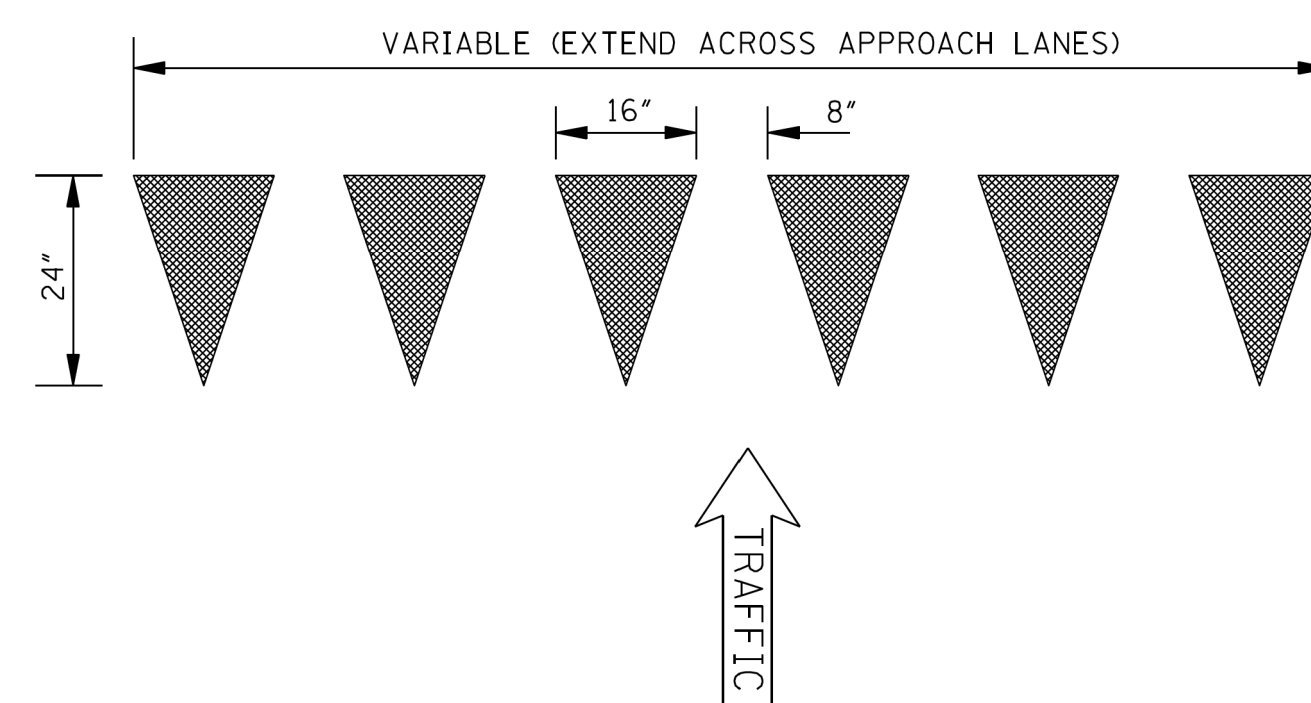
THRU ARROW



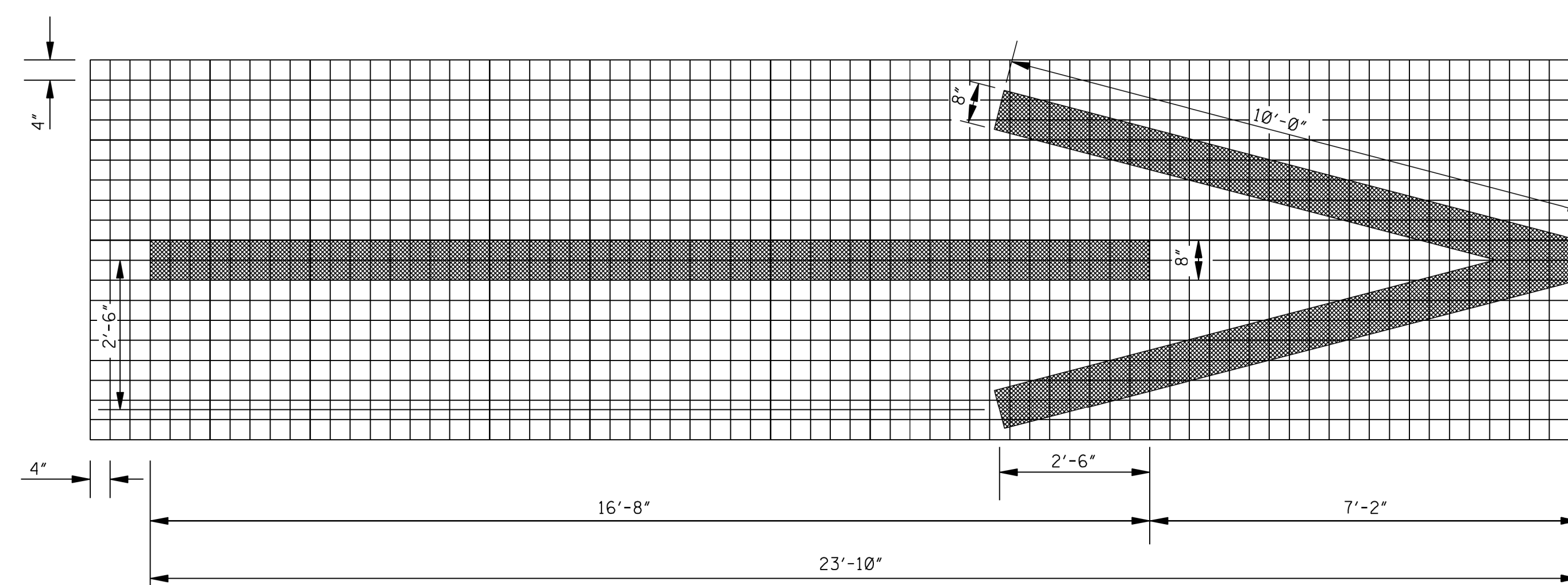
LANE-REDUCTION ARROW



COMBINATION ARROW



YIELD LINE



## 1-WAY ARROW

- GENERAL NOTES:

1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
2. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. DIMENSIONS OF THE YIELD LINE MAY VARY WITH APPROVAL OF THE ENGINEER. SEE MUTCD, LATEST EDITION, FOR ALLOWABLE DIMENSIONS.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

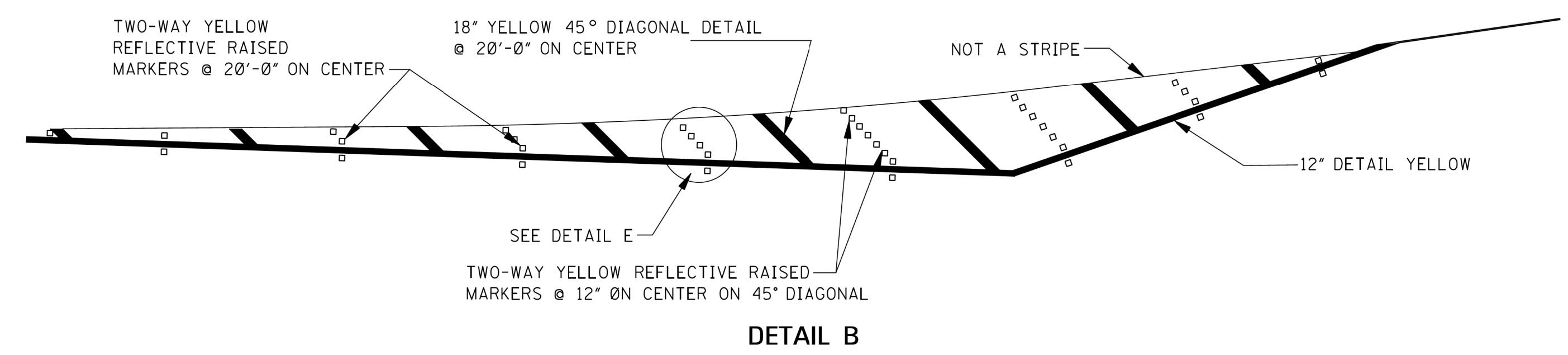
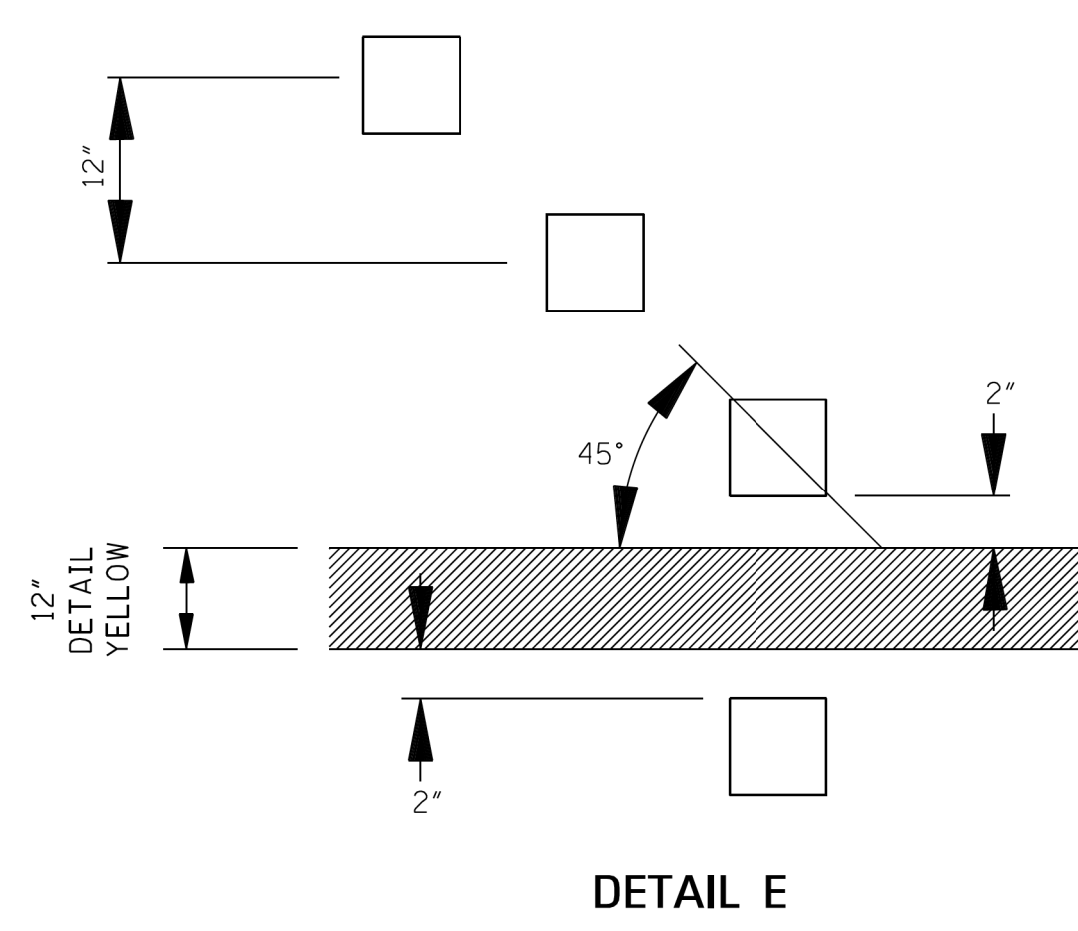
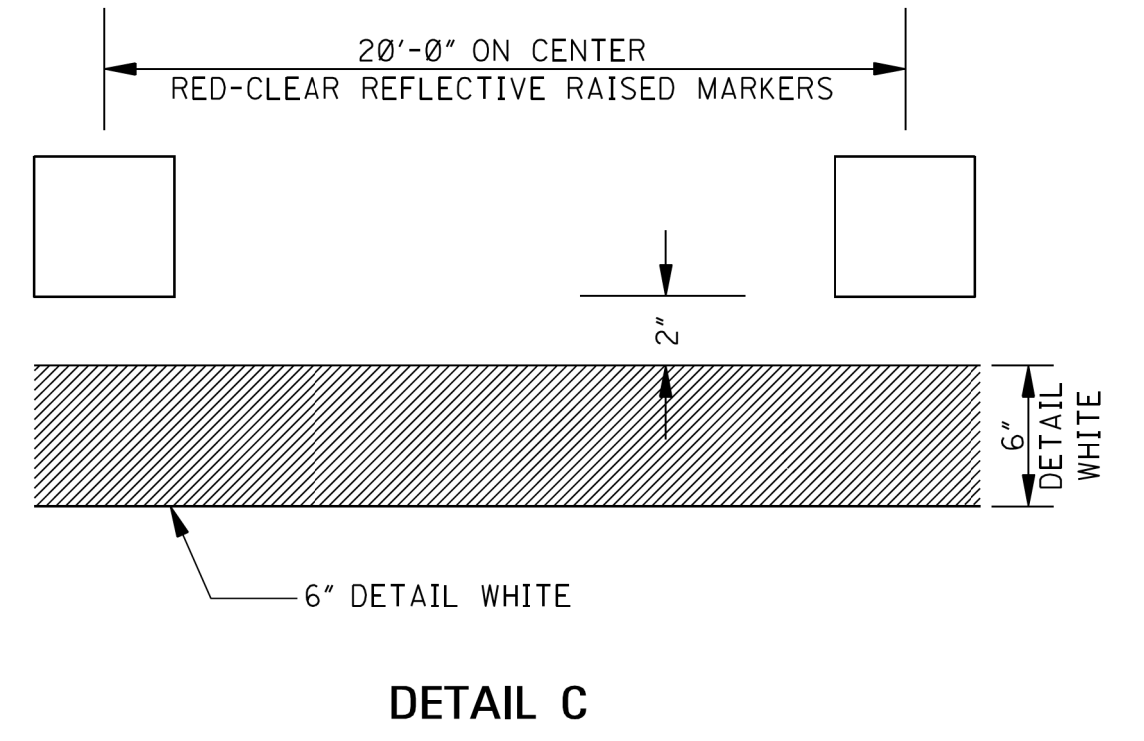
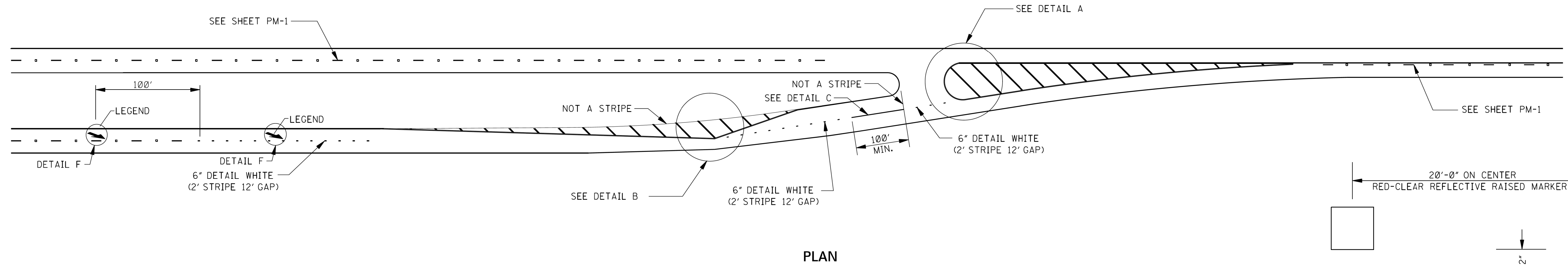
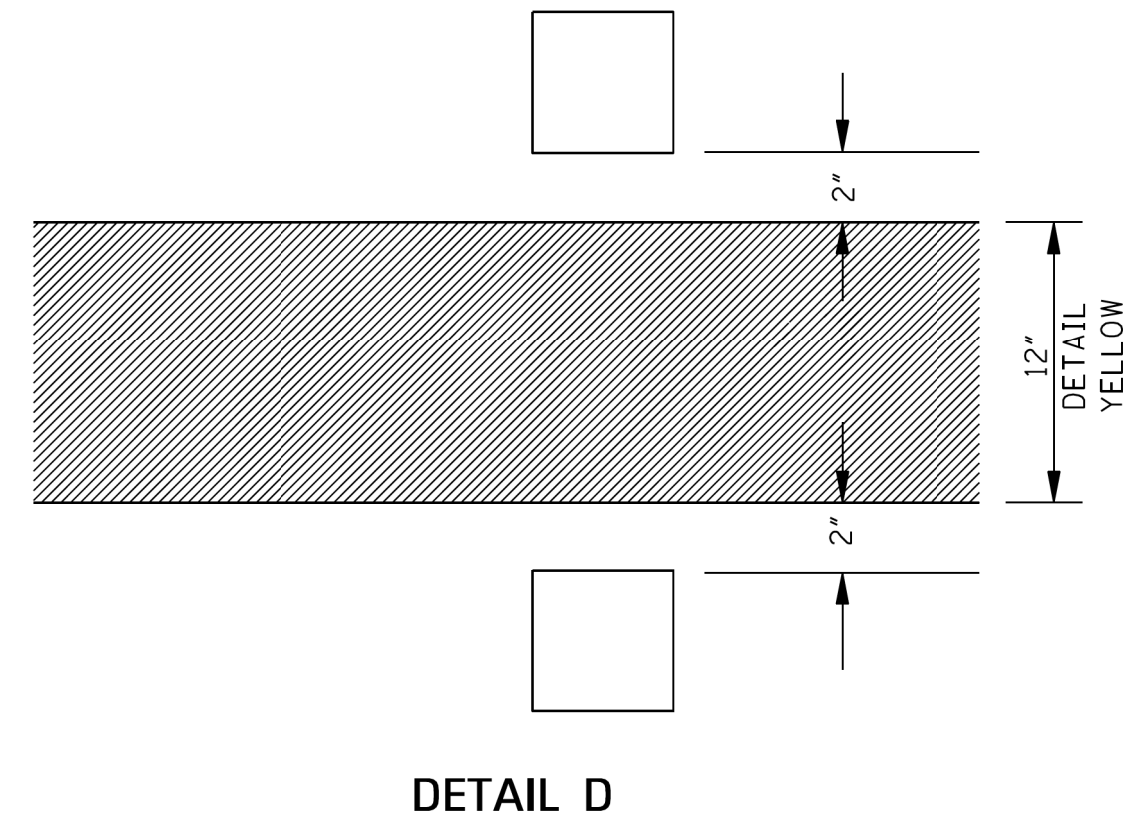
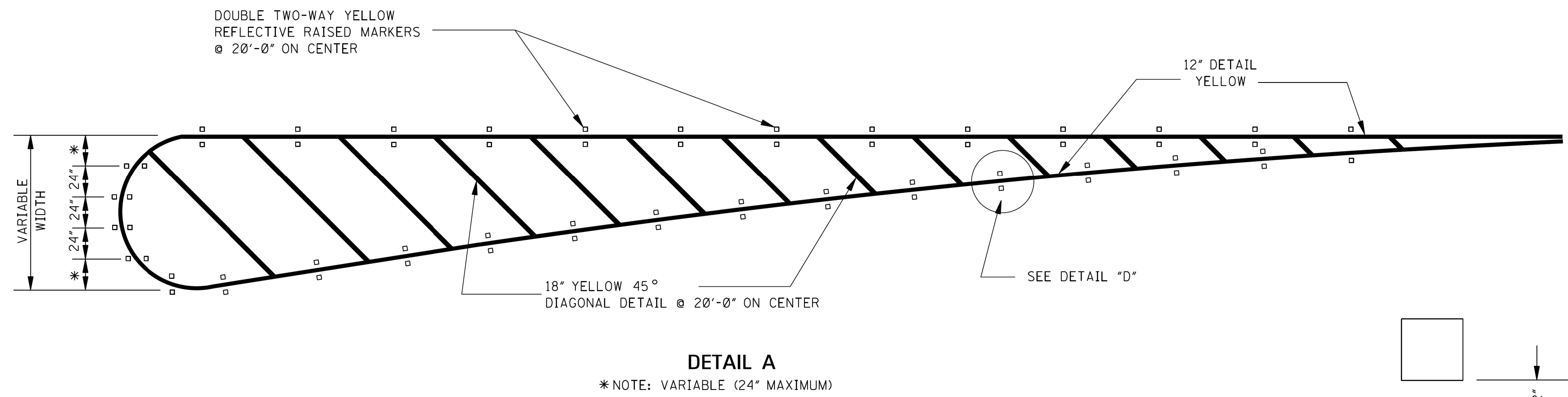
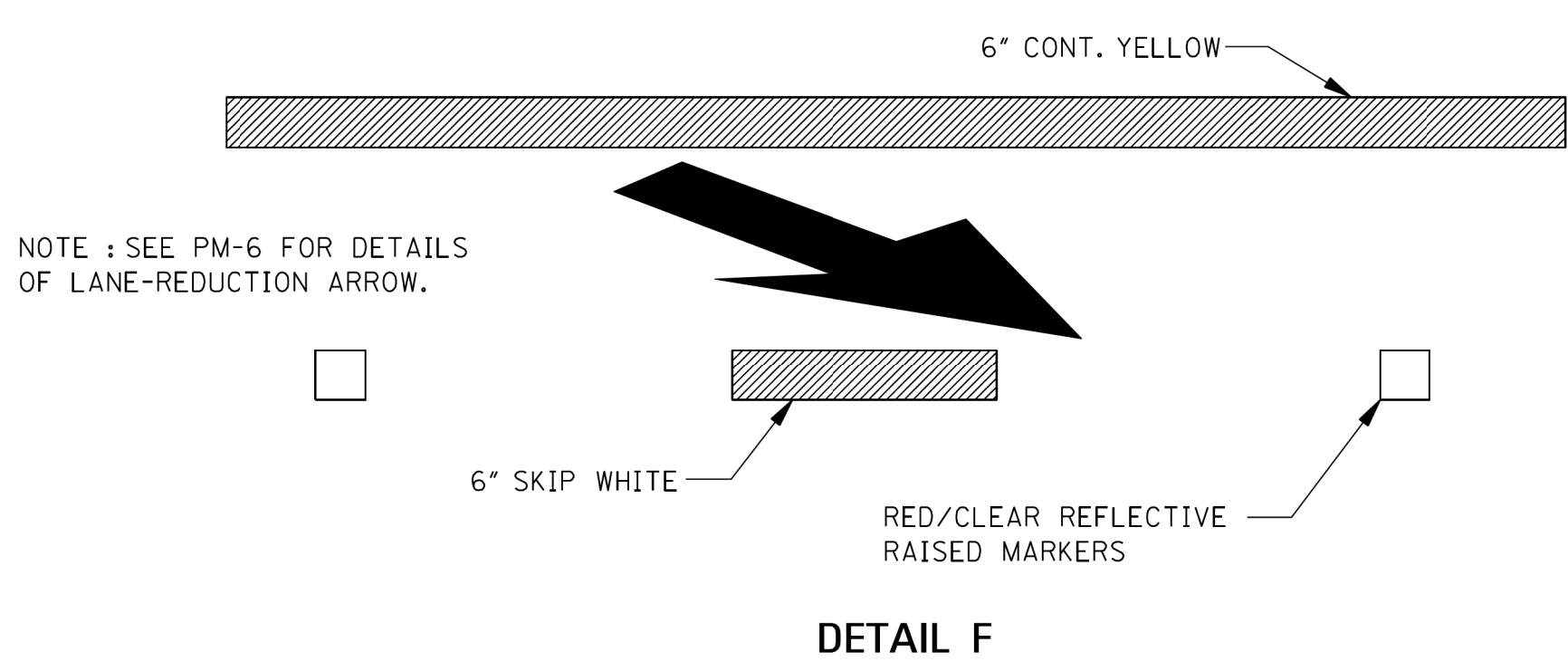
2. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. DIMENSIONS OF THE YIELD LINE MAY VARY WITH APPROVAL OF THE ENGINEER. SEE MUTCD, LATEST EDITION, FOR ALLOWABLE DIMENSIONS.

3. DIMENSIONS OF THE YIELD LINE MAY VARY WITH APPROVAL OF THE ENGINEER. SEE MUTCD, LATEST EDITION, FOR ALLOWABLE DIMENSIONS.

4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

| PAY QUANTITIES          |                         |
|-------------------------|-------------------------|
| LEGEND/SYMBOL           | AREA (ft <sup>2</sup> ) |
| ONLY                    | 22.0                    |
| TURN ARROW              | 16.4                    |
| THRU ARROW              | 12.3                    |
| COMB. ARROW             | 27.5                    |
| 1-WAY ARROW             | 24.3                    |
| LANE REDUCTION<br>ARROW | 40.0                    |

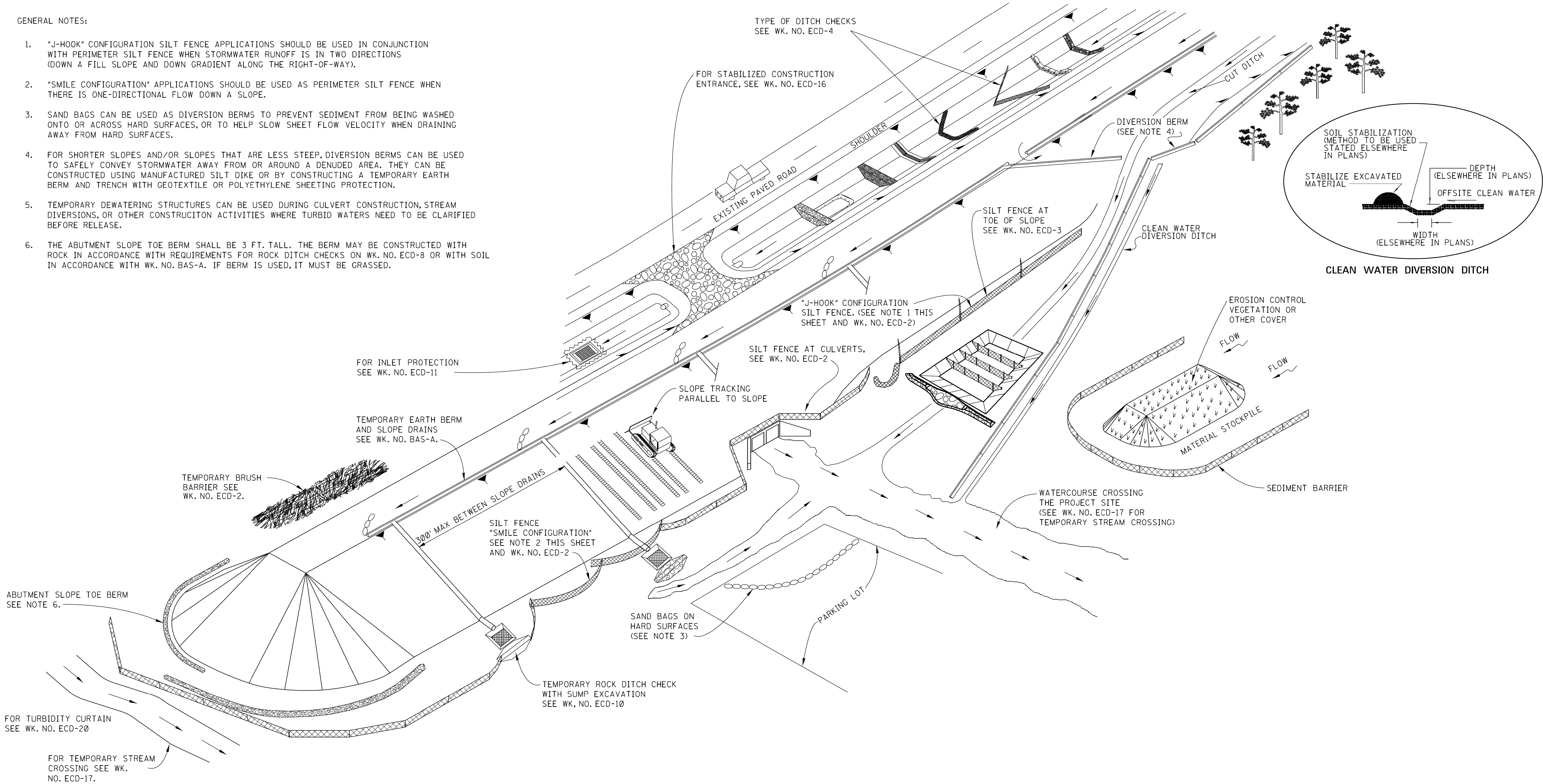






GENERAL NOTES:

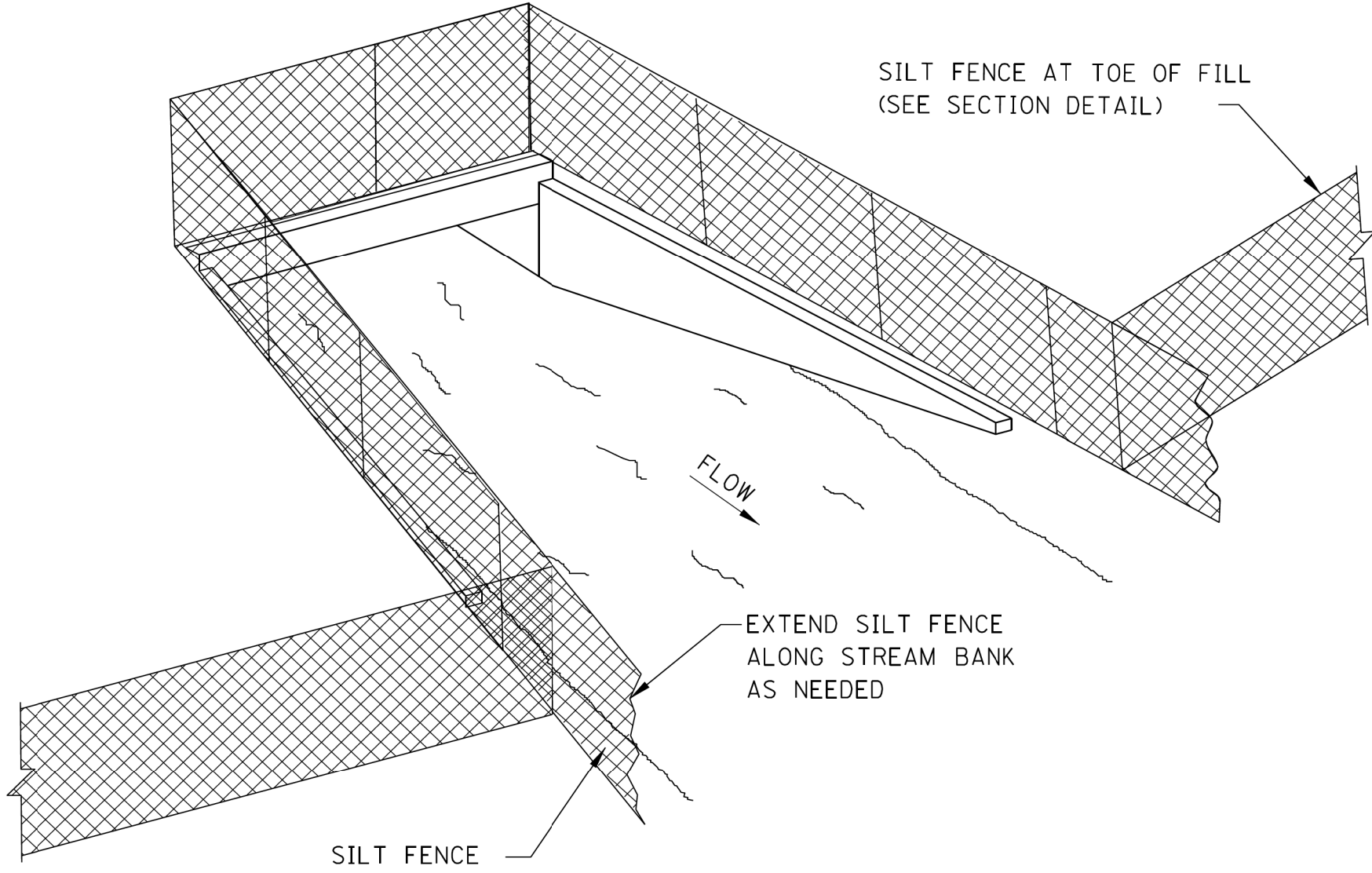
- 1. "J-HOOK" CONFIGURATION SILT FENCE APPLICATIONS SHOULD BE USED IN CONJUNCTION WITH PERIMETER SILT FENCE WHEN STORMWATER RUNOFF IS IN TWO DIRECTIONS (DOWN A FILL SLOPE AND DOWN GRADIENT ALONG THE RIGHT-OF-WAY).
- 2. "SMILE CONFIGURATION" APPLICATIONS SHOULD BE USED AS PERIMETER SILT FENCE WHEN THERE IS ONE-DIRECTIONAL FLOW DOWN A SLOPE.
- 3. SAND BAGS CAN BE USED AS DIVERSION BERMS TO PREVENT SEDIMENT FROM BEING WASHED ONTO OR ACROSS HARD SURFACES, OR TO HELP SLOW SHEET FLOW VELOCITY WHEN DRAINING AWAY FROM HARD SURFACES.
- 4. FOR SHORTER SLOPES AND/OR SLOPES THAT ARE LESS STEEP, DIVERSION BERMS CAN BE USED TO SAFELY CONVEY STORMWATER AWAY FROM OR AROUND A DENUDED AREA. THEY CAN BE CONSTRUCTED USING MANUFACTURED SILT DIKE OR BY CONSTRUCTING A TEMPORARY EARTH BERM AND TRENCH WITH GEOTEXTILE OR POLYETHYLENE SHEETING PROTECTION.
- 5. TEMPORARY DEWATERING STRUCTURES CAN BE USED DURING CULVERT CONSTRUCTION, STREAM DIVERSIONS, OR OTHER CONSTRUCTION ACTIVITIES WHERE TURBID WATERS NEED TO BE CLARIFIED BEFORE RELEASE.
- 6. THE ABUTMENT SLOPE TOE BERM SHALL BE 3 FT. TALL. THE BERM MAY BE CONSTRUCTED WITH ROCK IN ACCORDANCE WITH REQUIREMENTS FOR ROCK DITCH CHECKS ON WK. NO. ECD-8 OR WITH SOIL IN ACCORDANCE WITH WK. NO. BAS-A. IF BERM IS USED, IT MUST BE GRASSED.



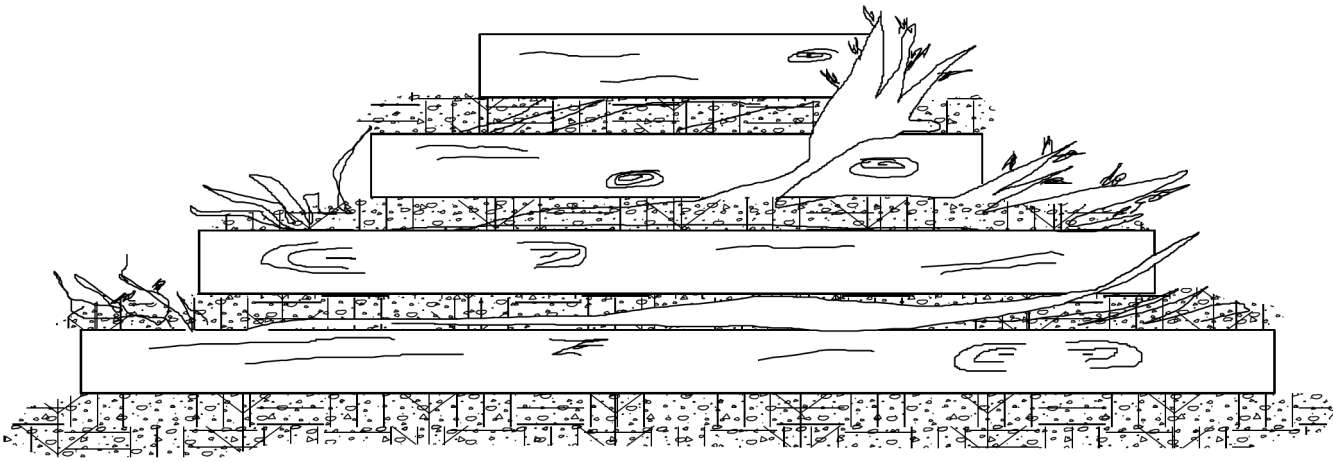
|          |    |                   |      |  |  |
|----------|----|-------------------|------|--|--|
|          |    |                   |      |  |  |
|          |    |                   |      |  |  |
|          |    |                   |      |  |  |
| REVISION | BY | DESCRIPTION       | DATE |  |  |
|          |    | DRAWING REVISIONS |      |  |  |

|               |       |            |
|---------------|-------|------------|
| DESIGN TEAM   |       |            |
| DESIGNED      | DRAWN | CHECKED    |
| SCALE: 1"=30' |       | DATE: 2019 |

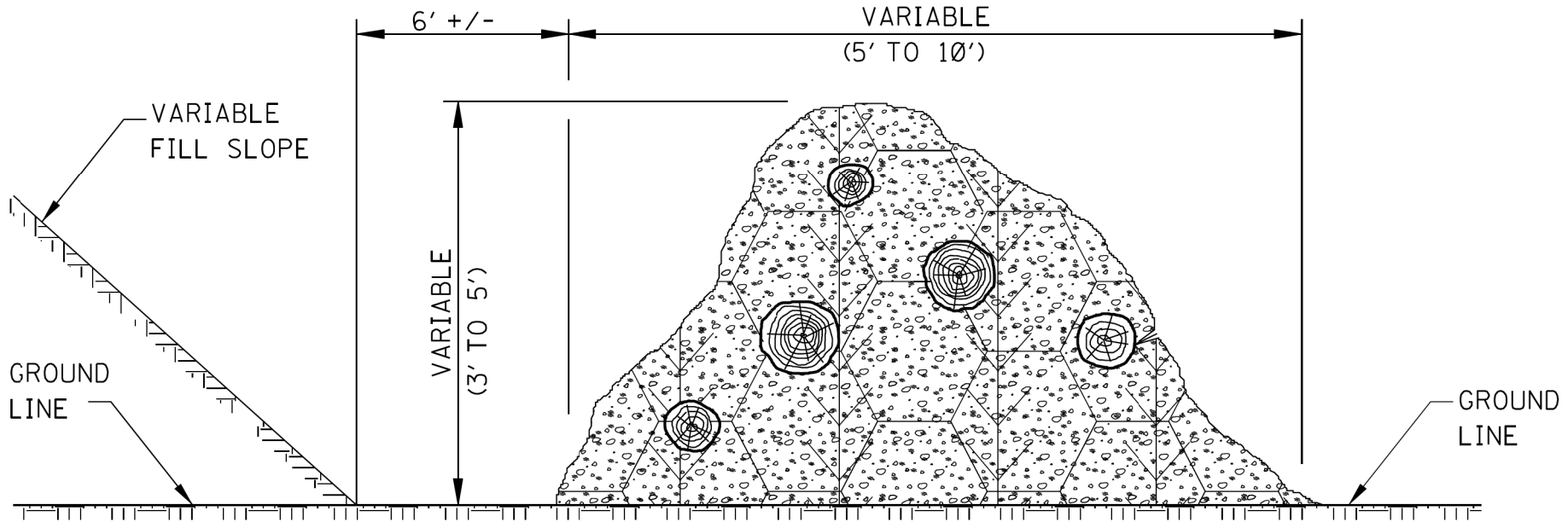




SEDIMENT BARRIER AT CROSS DRAIN



FRONT ELEVATION

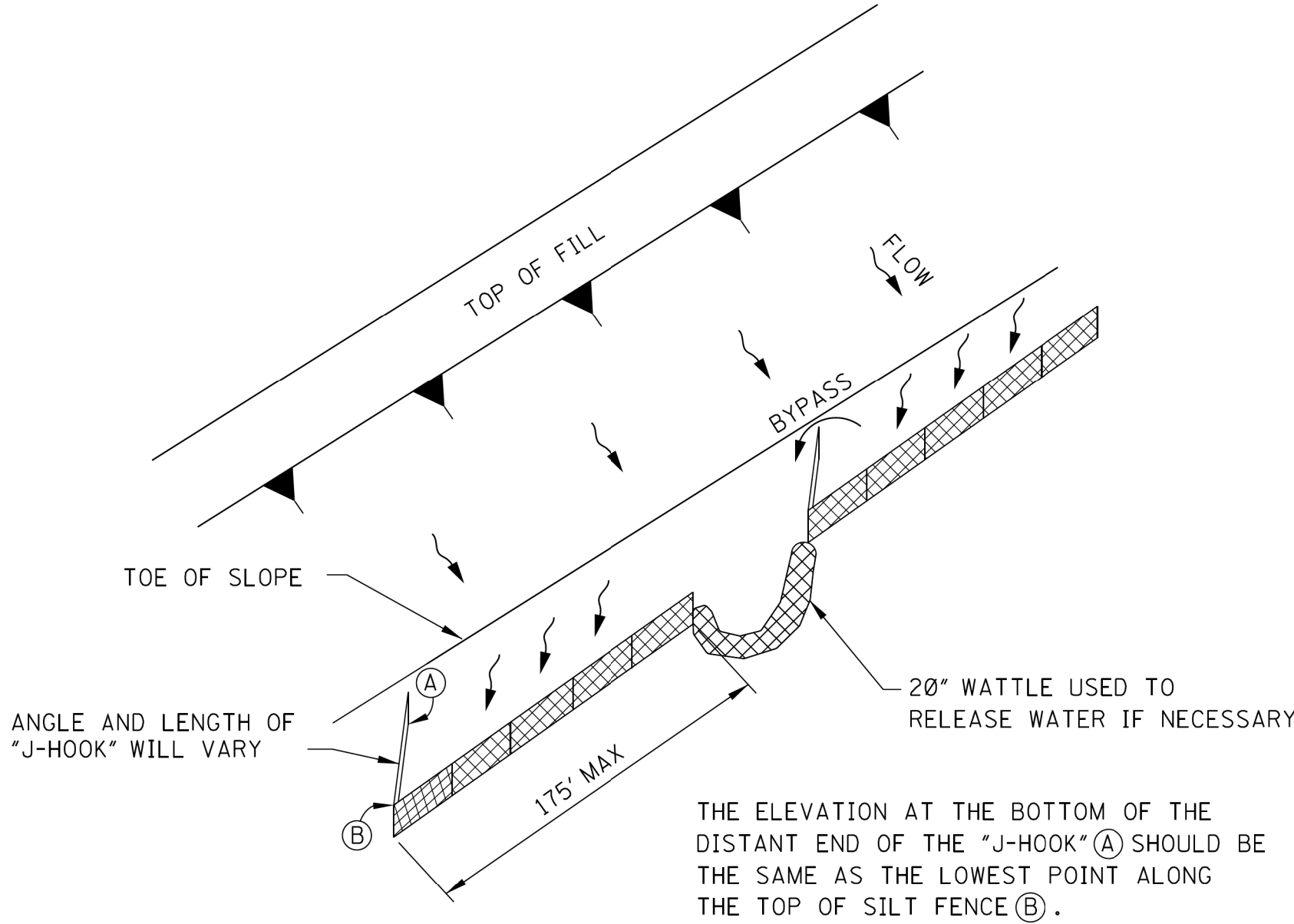


SIDE ELEVATION

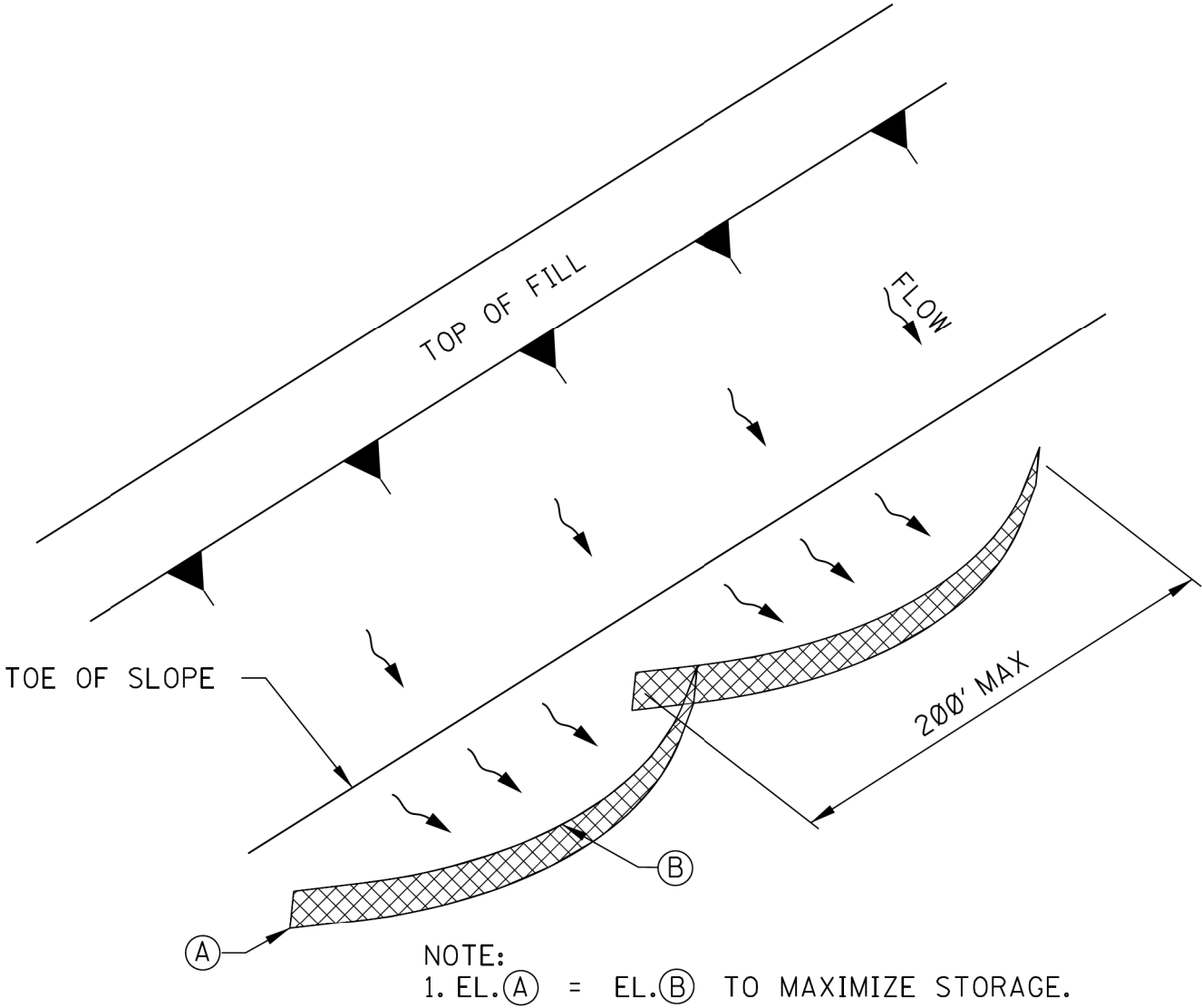
TEMPORARY BRUSH BARRIER

- NOTES:
1. BRUSH BARRIER MAY BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
  2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TO TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED OR PERMITTED BY THE ENGINEER.
  3. TO ALLOW WATER TO SEEP THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.
  4. THE BRUSH BARRIER MAY BE CHOKED WITH FILTER FABRIC. THE COST OF FABRIC TO BE INCLUDED IN OTHER ITEMS BID.
  5. TEMPORARY BRUSH BARRIER WILL NOT BE MEASURED FOR SEPARATE PAYMENT.

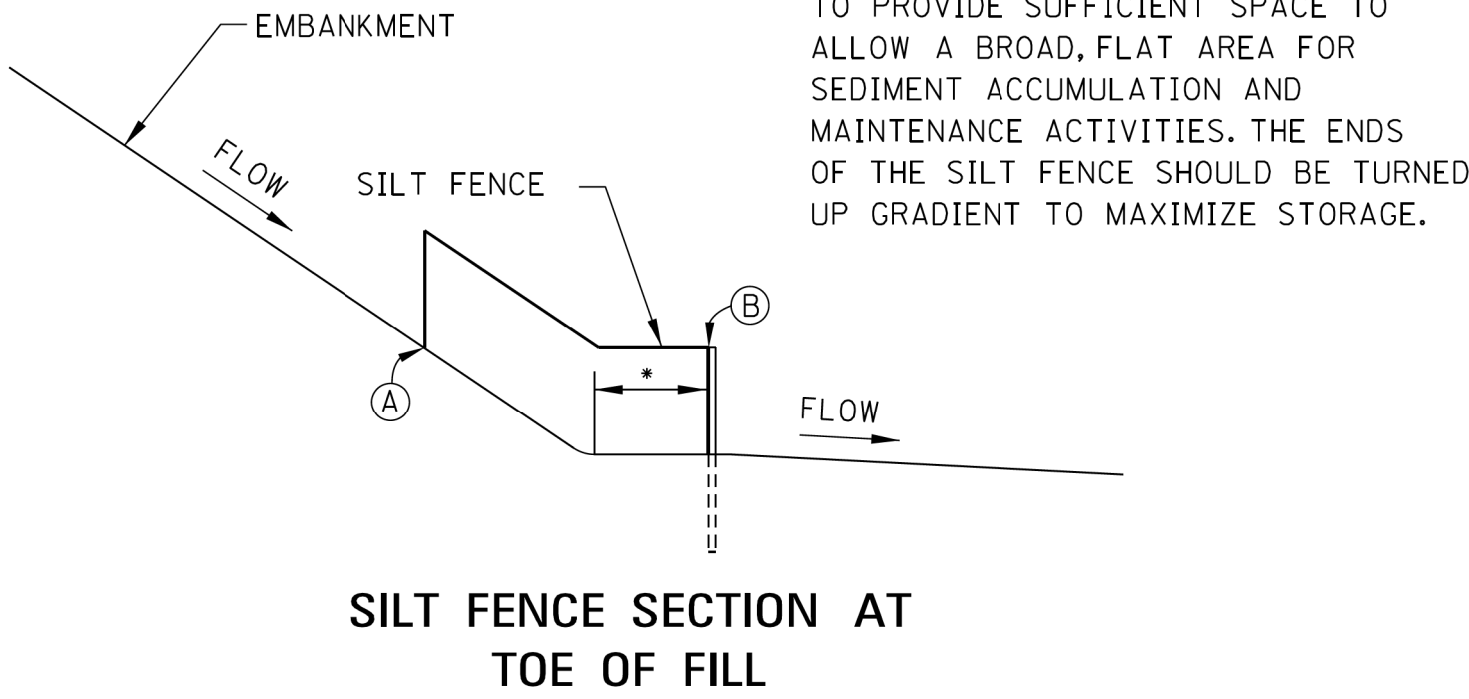
NOTE: ANCHOR AND INSTALL SILT FENCE PER DETAILS SHOWN ON WK. NO. ECD-3



"J-HOOK" SILT FENCE APPLICATION



"SMILE-CONFIGURATION" SILT FENCE APPLICATION

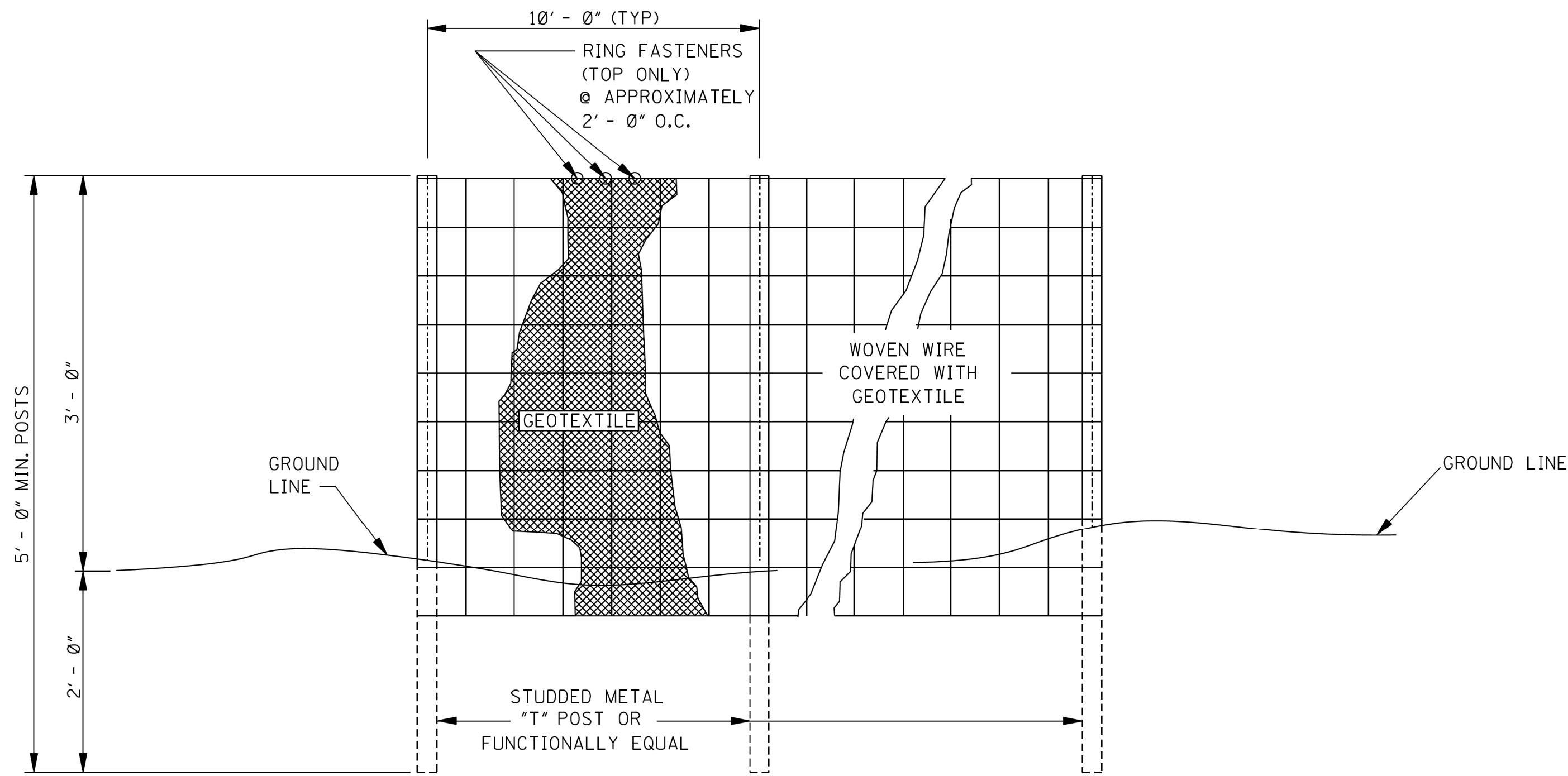


- SILT FENCE SHOULD BE LOCATED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE SUFFICIENT SPACE TO ALLOW A BROAD, FLAT AREA FOR SEDIMENT ACCUMULATION AND MAINTENANCE ACTIVITIES. THE ENDS OF THE SILT FENCE SHOULD BE TURNED UP GRADIENT TO MAXIMIZE STORAGE.

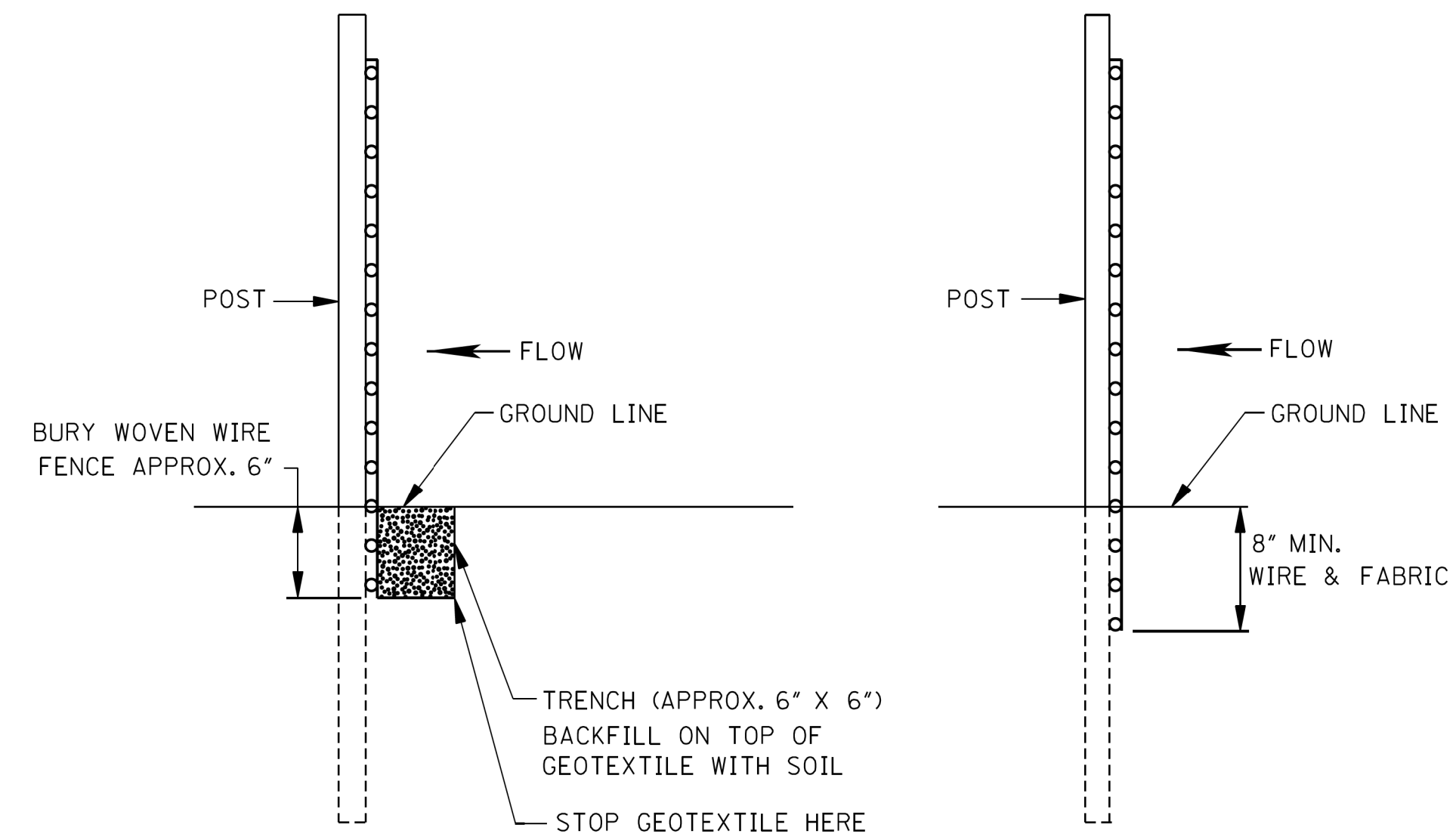
| REVISION | BY | DESCRIPTION | DATE |
|----------|----|-------------|------|
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |

| DESIGN TEAM   |       |            |
|---------------|-------|------------|
| DESIGNED      | DRAWN | CHECKED    |
|               |       |            |
| SCALE: 1"=30' |       | DATE: 2019 |





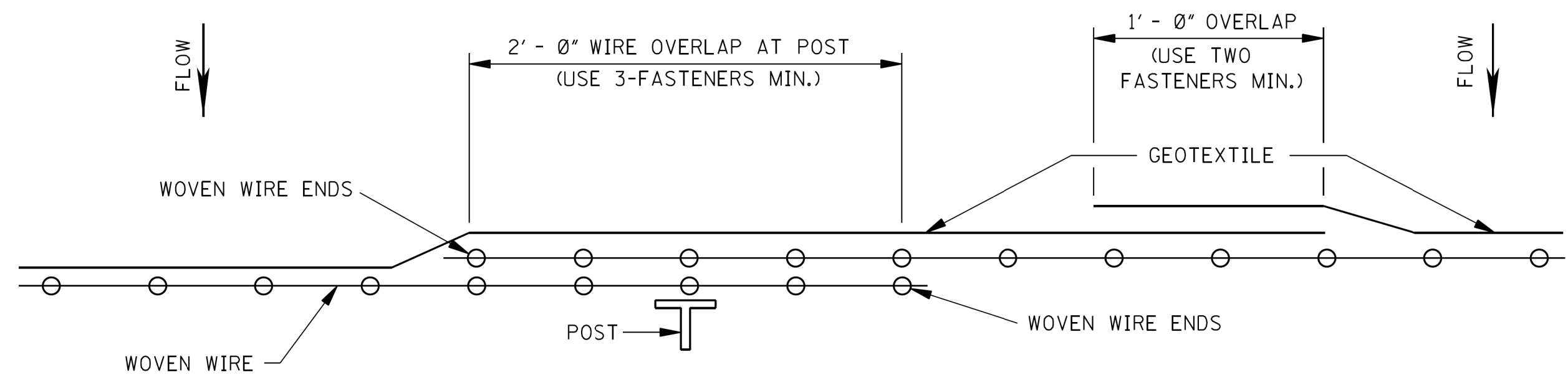
ELEVATION VIEW



METHOD I

METHOD II  
MECHANICAL INSTALLATION

SIDE VIEW



PLAN VIEW

REQUIRED LAPPING

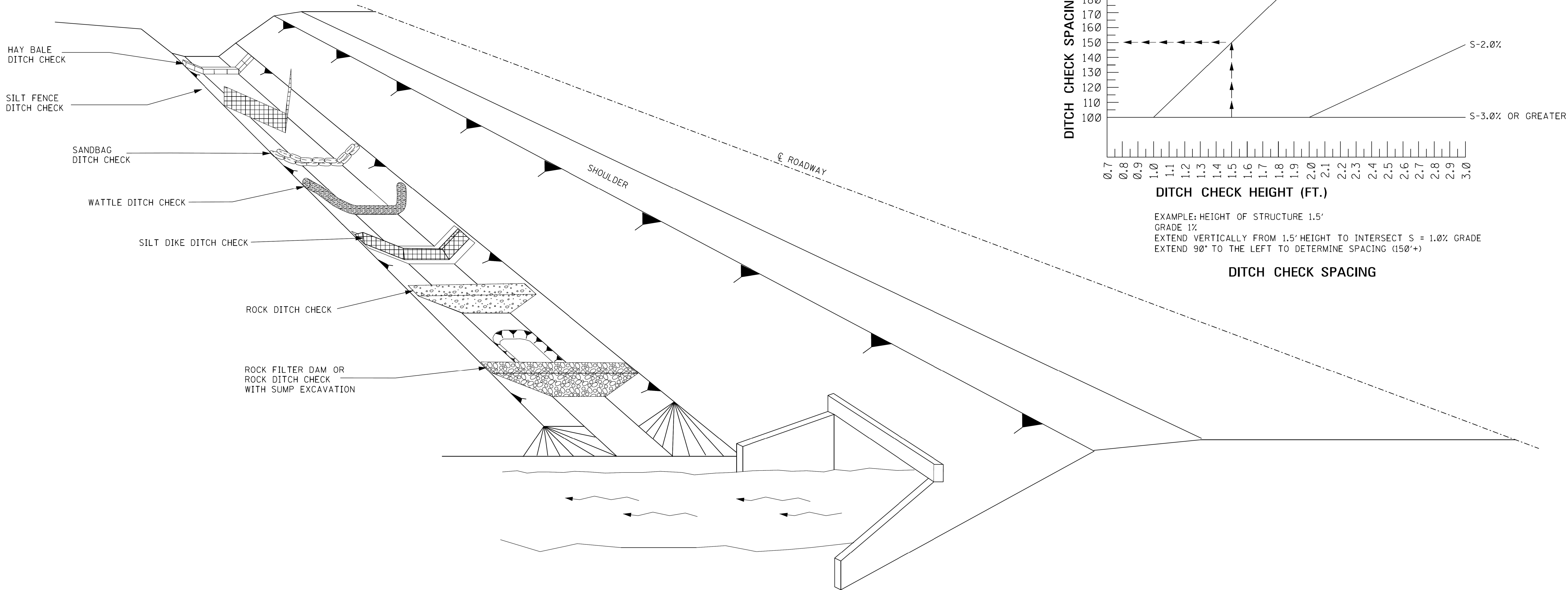
GENERAL NOTES:

1. SILT FENCES SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
2. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHOULD BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STEAMS AND CHANNELS.
3. SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
4. WHENEVER POSSIBLE SILT FENCE SHOULD BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AN FACILITATES SEDIMENTATION.
5. THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
6. METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF DETAIL.
7. WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
8. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.

|          |    |                   |      |
|----------|----|-------------------|------|
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
| REVISION | BY | DESCRIPTION       | DATE |
|          |    | DRAWING REVISIONS |      |

|               |       |            |
|---------------|-------|------------|
| DESIGN TEAM   |       |            |
| DESIGNED      | DRAWN | CHECKED    |
| SCALE: 1"=30' |       | DATE: 2019 |





GENERAL NOTES:

- 1

THE DITCH CHECK PERSPECTIVE ILLUSTRATES A TOOL BOX OF TEMPORARY PRACTICES THAT MAY BE USED. DITCH CHECKS ARE INSTALLED TO CONTROL RUNOFF VELOCITY AND THUS REDUCE EROSION AND PROVIDE FOR TRAPPING OF SEDIMENTS.
- 2

SELECTION OF THE APPROPRIATE DITCH CHECK SHOULD BE A FUNCTION OF CONSTRUCTION PHASE, DRAINAGE AREA, DITCH GRADIENT, SOIL TYPE, ECONOMY AND SAFETY.
- 3

DITCH CHECKS CAN BE REMOVED FOR MAINTENANCE AND/OR REPLACEMENT BUT MUST REMAIN IN PLACE UNTIL UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED. MAINTENANCE INCLUDES REMOVAL OF SEDIMENT BEGINNING WHEN SEDIMENT ACCUMULATION REACHES ½ THE CAPACITY OR HEIGHT OF THE STRUCTURE AND NEVER ALLOWING FOR SEDIMENT TO ACCUMULATE MORE THAN ½ THE VOLUME OR HEIGHT OF THE DITCH CHECK STRUCTURE.
- 4

HAY BALES SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
- 5

SILT FENCE DITCH CHECKS SHOULD BE USED WHERE IT HAS BEEN DETERMINED THAT HAY BALE CHECKS ARE INADEQUATE. SILT FENCE DITCH CHECKS SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
- 6

SANDBAG DITCH CHECKS SHOULD BE USED FOR VELOCITY REDUCTION AND MINIMAL SEDIMENT TRAPPING IN CONCRETE PAVED DITCHES OR IN DITCHES THAT HAVE ROCK BOTTOMS.
- 7

WATTLE DITCH CHECKS CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
- 8

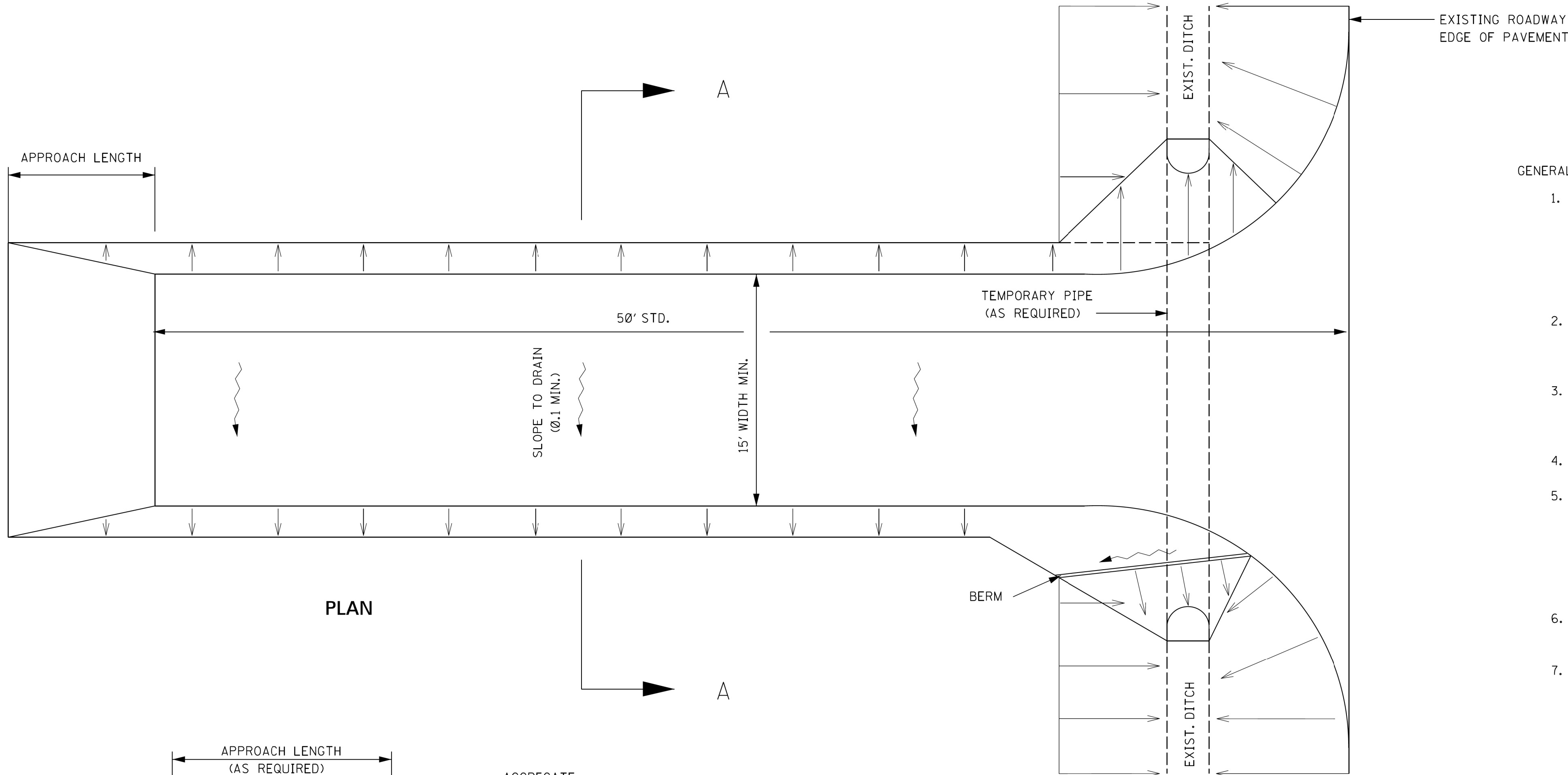
SILT DIKES CAN BE USED IN DITCHES WITH CONCENTRATED FLOWS WITHIN THE CLEAR ZONE WHERE RIPRAP CAN NOT BE USED, AS CONSTRUCTION PROGRESSES.
- 9

ROCK DITCH CHECKS WITH SUMP EXCAVATION CAN BE PLACED IN DITCHES TO ASSURE ON-SITE SEDIMENT TRAPPING REQUIREMENTS ARE MET. DITCH CHECK WITH SUMP EXCAVATION IS USED WHEN DITCHES RECEIVE DRAINAGE FROM CUT OR FILL SLOPES OR OTHER CRITICAL AREAS WHERE SOIL EROSION IS EXPECTED. DRAINAGE AREA FOR A TEMPORARY SEDIMENT TRAP SHOULD BE LIMITED TO 3 ACRES. THEY CAN BE USED IN SERIES TO INCREASE ON-SITE SEDIMENT TRAPPING EFFICIENCY.
- 10

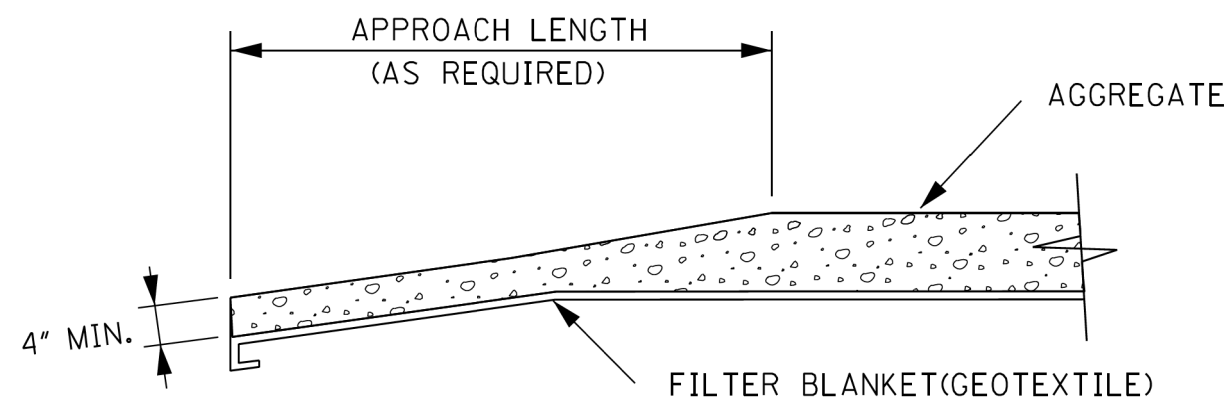
DITCH CHECKS, IN NO CASE, SHALL BE PLACED IN LIVE STREAMS.
- 11

CONFIGURATION AND SPACING MAY BE ADJUSTED IF APPROVED BY THE ENGINEER TO ACCOMMODATE TRAVELWAY SAFETY, WATER FLOW, OR SOIL AND INSTALLATION CHALLENGES.

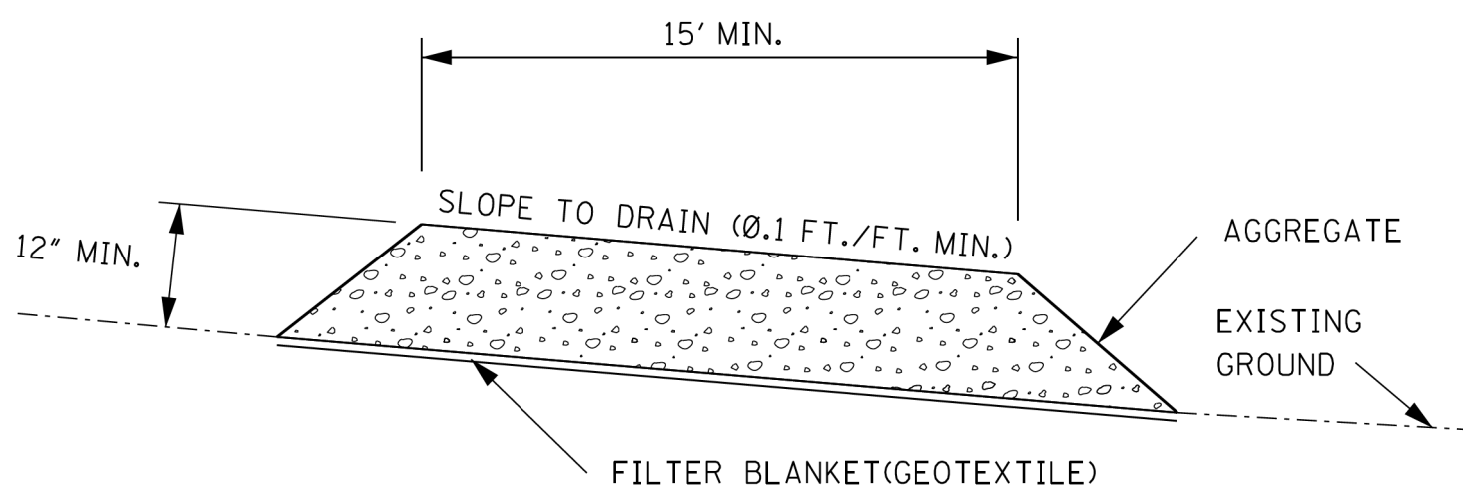




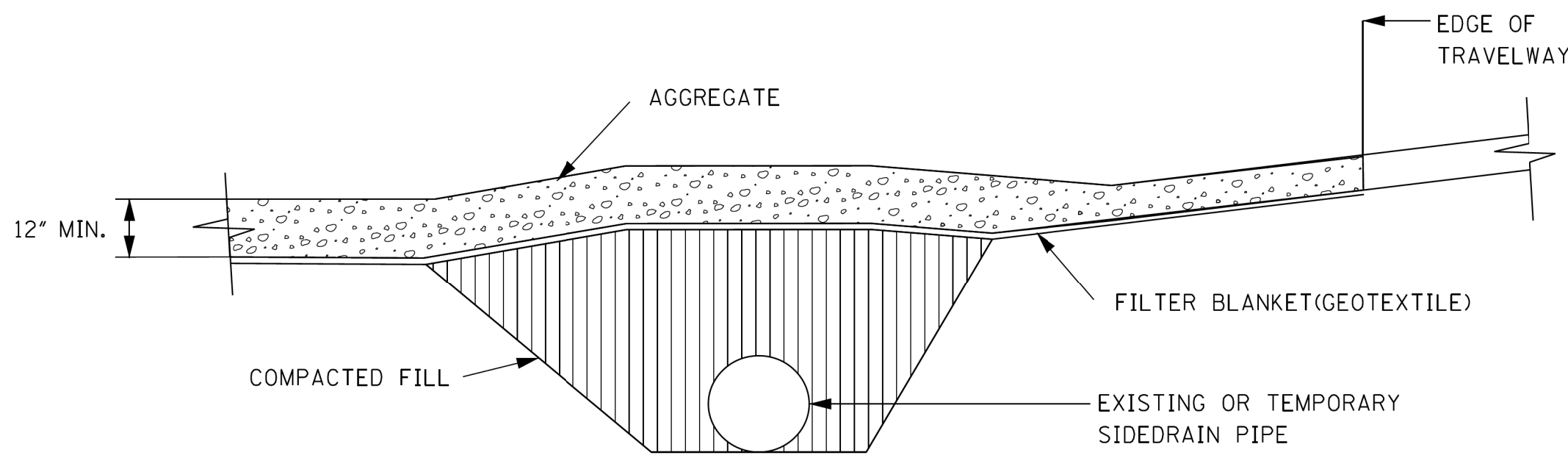
PLAN



TRANSITION DETAIL



SECTION A-A



RURAL CONNECTION DETAIL

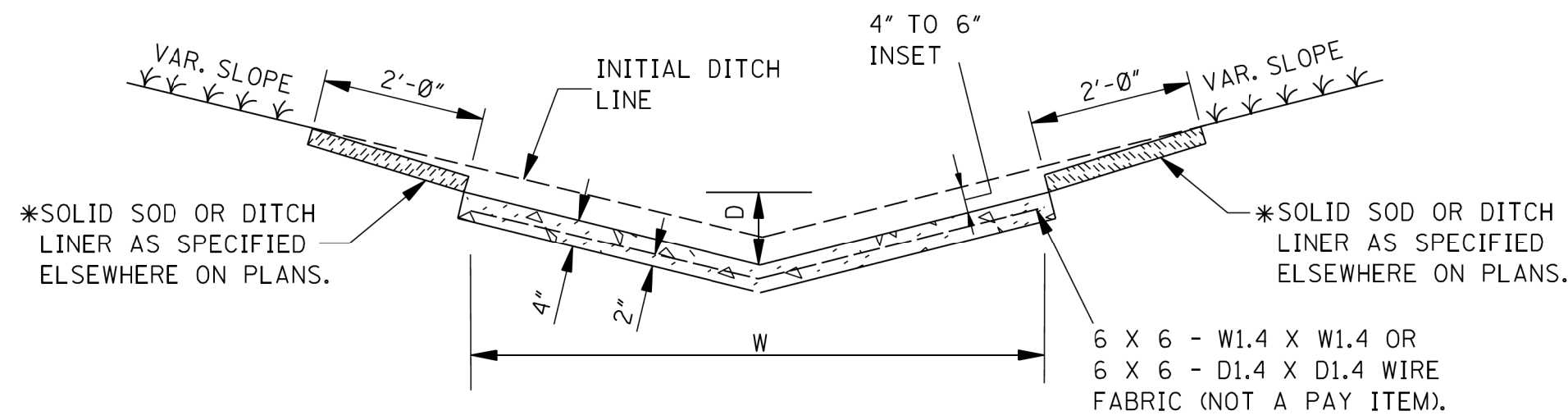
GENERAL NOTES:

1. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT POINTS OF EGRESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFFSITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE PROJECT SHALL BE DIRECTED THRU THE STABILIZED ENTRANCE. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STABILIZED ENTRANCE.
2. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFFSITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ITS USE.
3. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO PUBLIC ROADS (INCLUDING THE STABILIZED CONSTRUCTION ENTRANCE AGGREGATE AND CONSTRUCTION MUD) SHOULD BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER.
4. SIZE III STABILIZER AGGREGATE OR LARGER SHALL BE USED.
5. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION TO PREVENT OFFSITE TRACKING. THE STABILIZED CONSTRUCTION ENTRANCE SHOULD BE RINSED WHEN NECESSARY TO MOVE ACCUMULATED MUD DOWNWARD THRU THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STABILIZED ENTRANCE MAY BE REQUIRED TO LIMIT THE MUD TRACKED.
6. THE NOMINAL SIZE OF A STANDARD STABILIZED CONSTRUCTION ENTRANCE IS 15' X 50' UNLESS OTHERWISE SHOWN IN THE EROSION CONTROL PLAN.
7. COSTS OF ALL ITEMS ON THIS SHEET SHALL BE INCLUDED IN OTHER ITEMS BID.

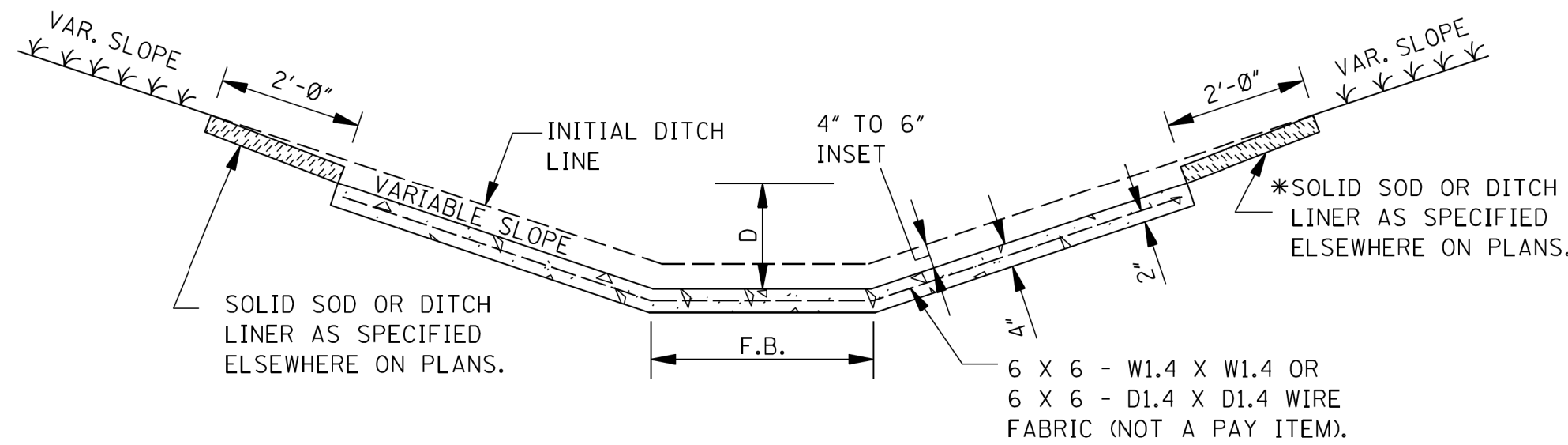
|          |    |                   |      |  |
|----------|----|-------------------|------|--|
|          |    |                   |      |  |
|          |    |                   |      |  |
|          |    |                   |      |  |
|          |    |                   |      |  |
| REVISION | BY | DESCRIPTION       | DATE |  |
|          |    | DRAWING REVISIONS |      |  |

|               |       |            |
|---------------|-------|------------|
| DESIGN TEAM   |       |            |
| DESIGNED      | DRAWN | CHECKED    |
| SCALE: 1"=30' |       | DATE: 2019 |

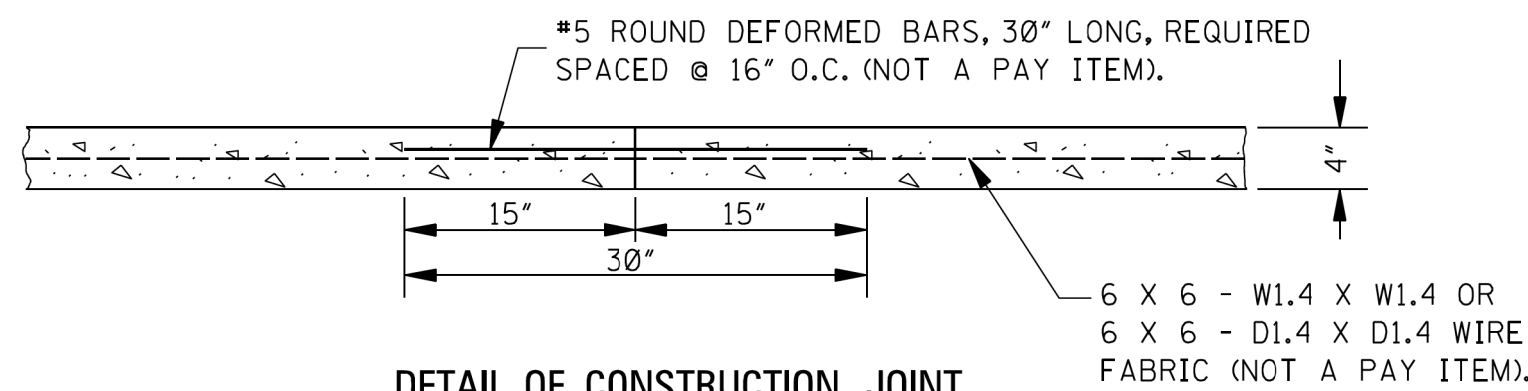




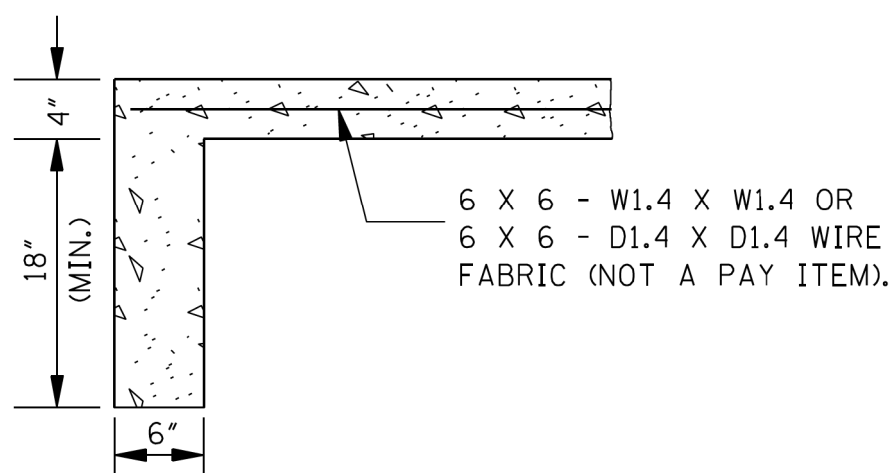
"V" TYPE SECTION



FLAT BOTTOM SECTION



DETAIL OF CONSTRUCTION JOINT



DETAIL OF TOE WALL

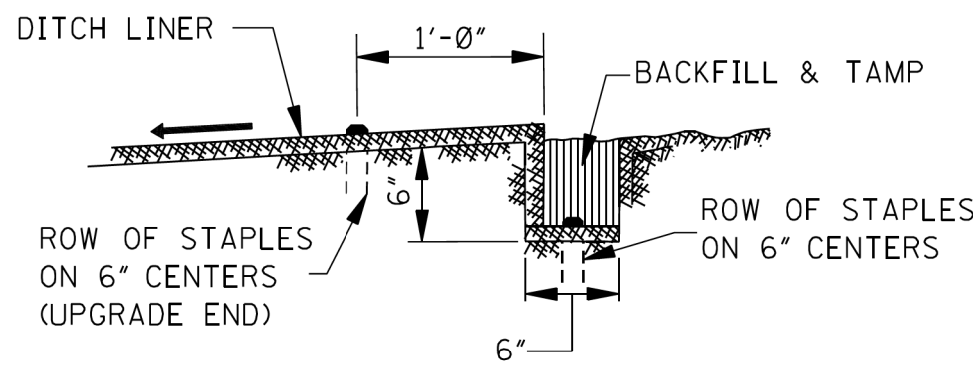
NOTE: TOE WALL REQUIRED  
UPSTREAM AND DOWNSTREAM.

CONCRETE PAVED DITCH

NOTES:

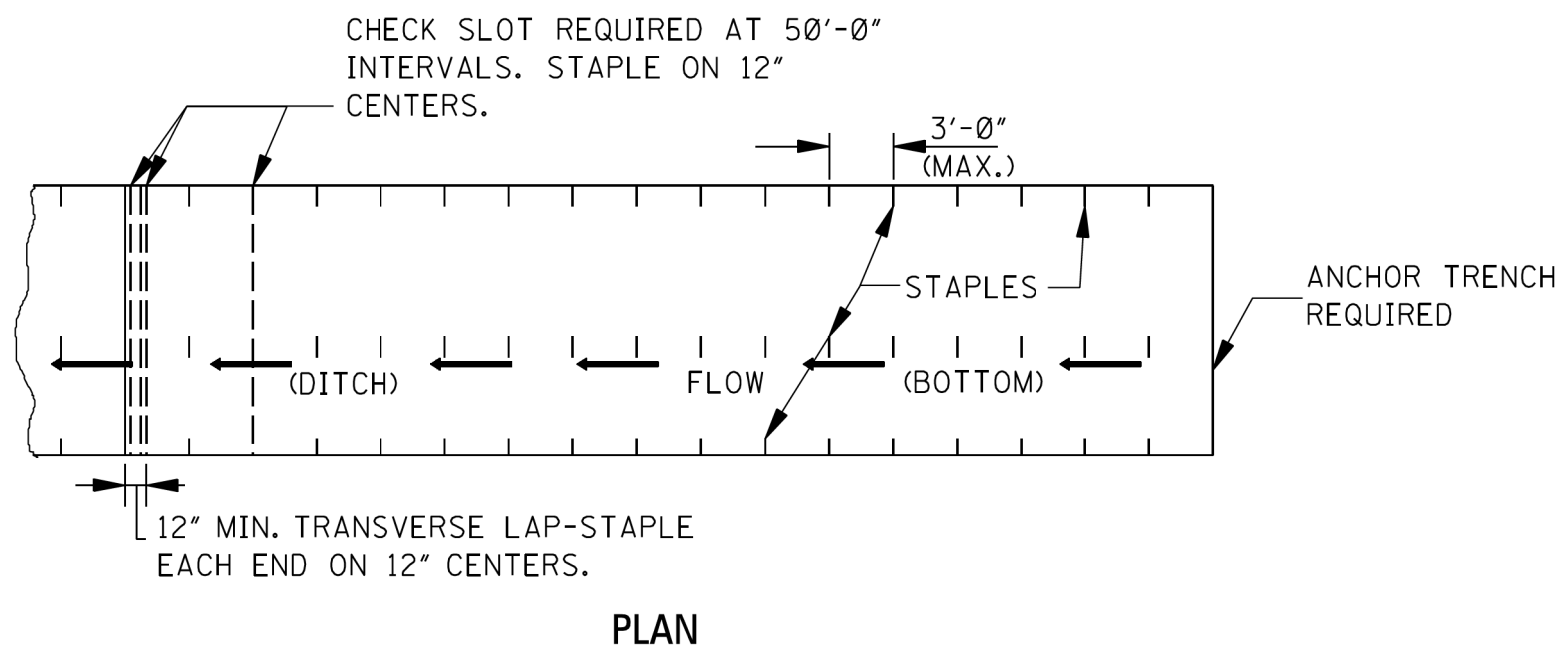
1. CONCRETE PAVED DITCHES SHALL BE GROOVED AT 20'-0" INTERVALS. THE GROOVES SHALL BE CUT TO A DEPTH OF NOT LESS THAN 1".
2. DIMENSIONS D & W ARE AS FOLLOWS:  
D(MINIMUM) = 6"  
D(NOMINAL) = 9"  
W(MINIMUM) = 24"
3. CHAIR SUPPORTS FOR THE WIRE MESH WILL NOT BE REQUIRED. HOWEVER, THE CONTRACTOR SHALL PLACE THE WIRE MESH IN A SATISFACTORY AND WORKMANLIKE MANNER TO ENSURE THAT THE FINAL POSITION IS REASONABLY NEAR THE POSITION INDICATED.

\*4. CENTER ROW OF STAPLES MAY BE OMITTED ON DITCH LINER.

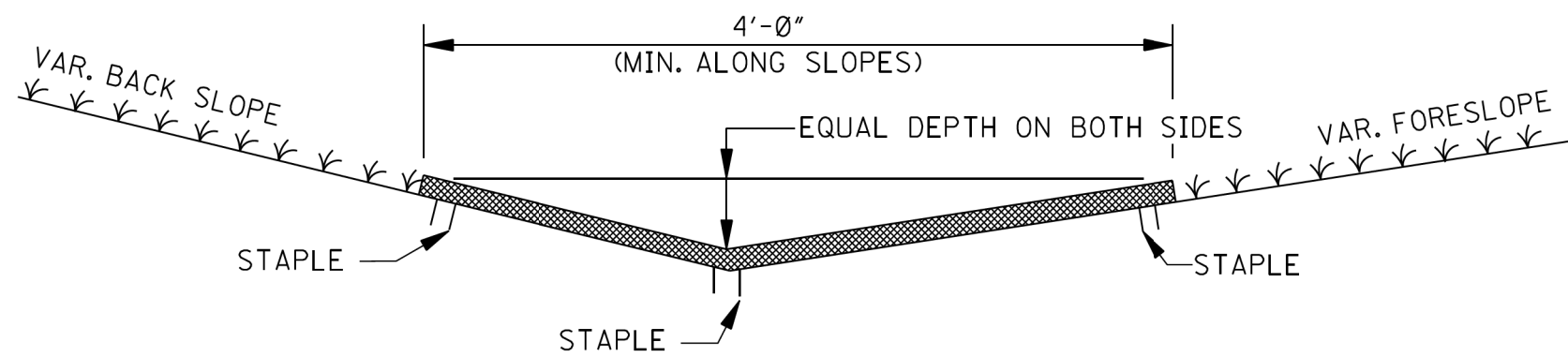


ANCHOR TRENCH DETAIL

NOTE: ANCHOR TRENCH REQUIRED AT THE BEGINNING  
AND ENDING OF EACH AREA TO BE COVERED, EXCEPT  
DOWNSTREAM END ADJOINING A STRUCTURE.



PLAN

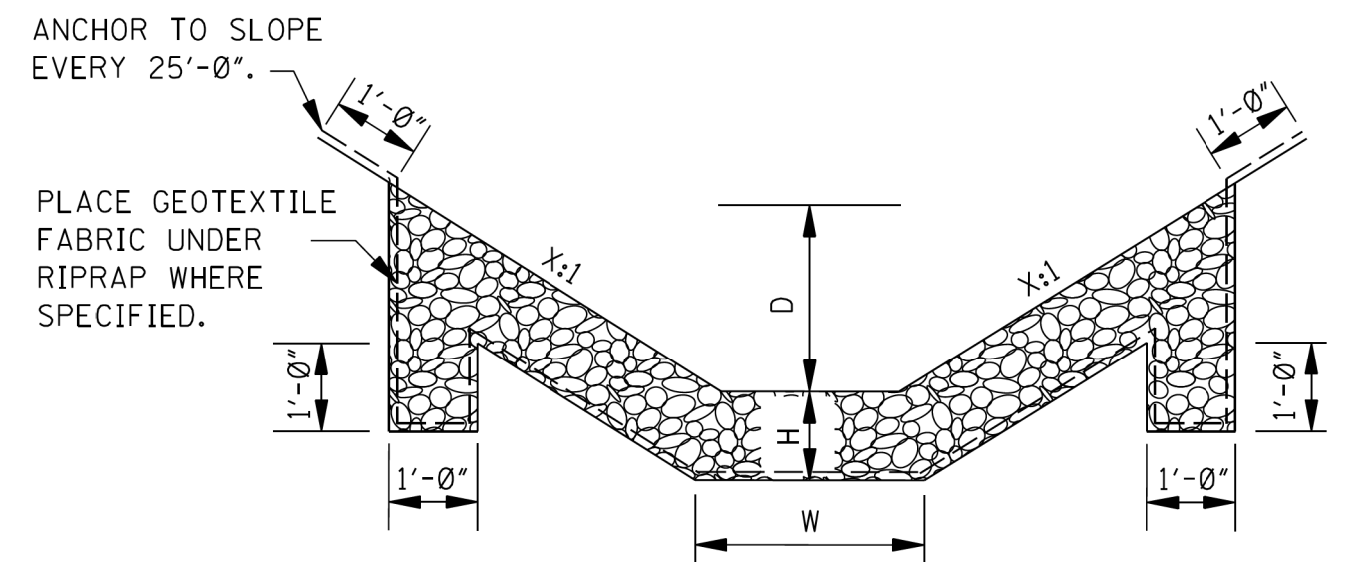


SECTION

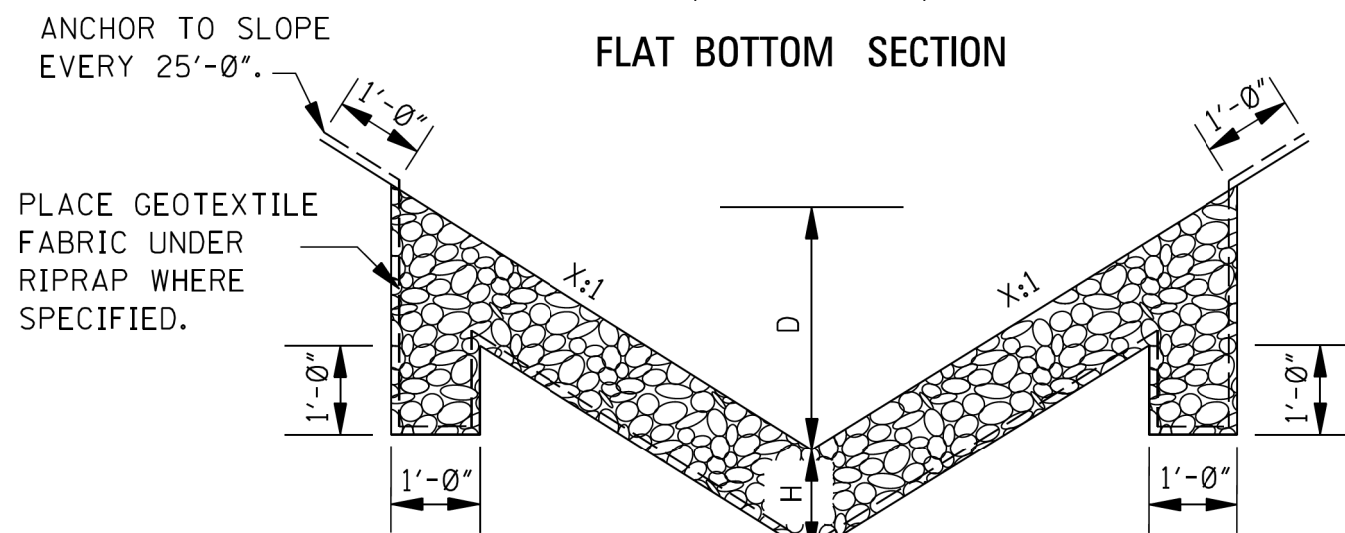
DITCH LINER TREATMENT

(EXCELSIOR BLANKET, JUTE MESH OR EROSION CONTROL FABRIC)

NOTE: DITCHES TREATED WITH DITCH LINER  
WILL BE VEGETATED PRIOR TO TREATMENT,  
UNLESS OTHERWISE INDICATED.



FLAT BOTTOM SECTION

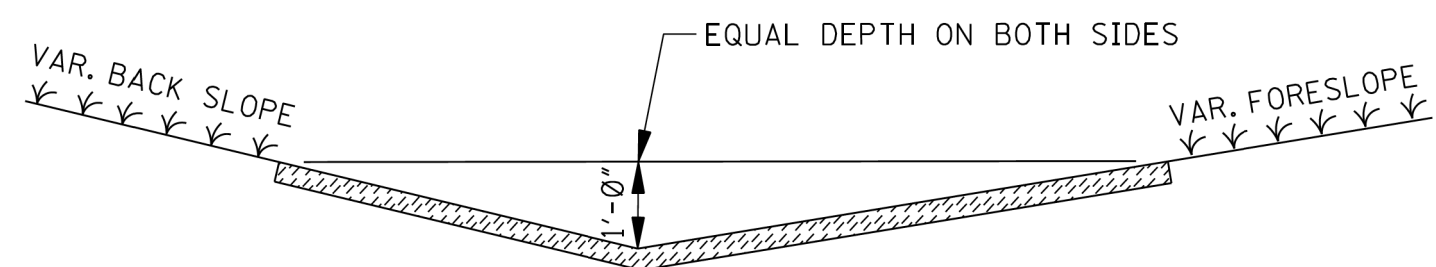


"V" TYPE SECTION  
RIPRAP TREATMENT

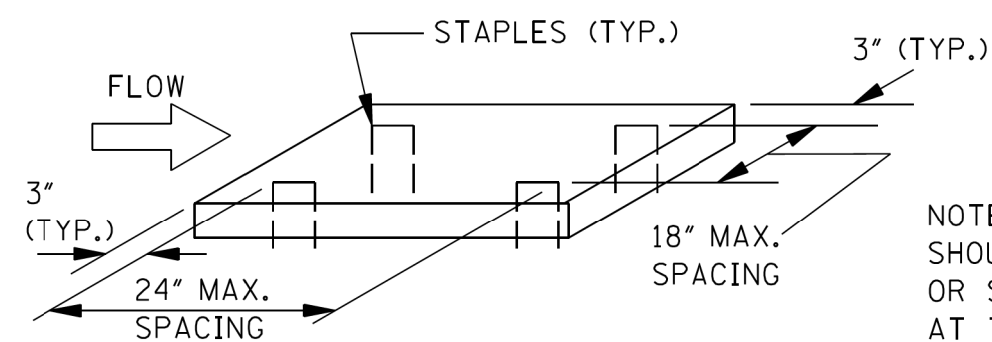
NOTES:

1. DIMENSIONS D, W AND X ARE VARIABLE AND ARE SHOWN ELSEWHERE ON THE PLANS.
2. THE RIPRAP SIZE AND MINIMUM DEPTH "H" FOR RIPRAP TREATMENT ARE AS FOLLOWS.

| RIPRAP SIZE & MINIMUM DEPTH "H" |                   |
|---------------------------------|-------------------|
| H (in)                          | RIPRAP SIZE (lbs) |
| 12"                             | 100               |
| 18"                             | 300               |



SOLID SOD TREATMENT



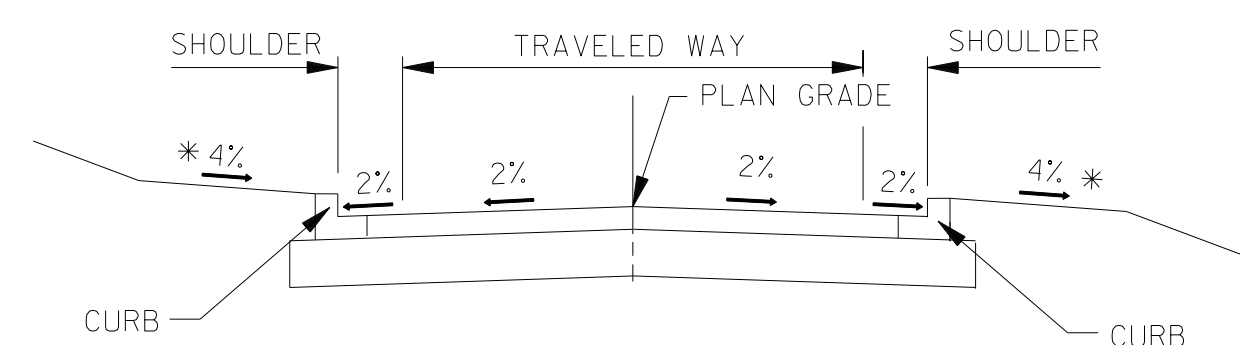
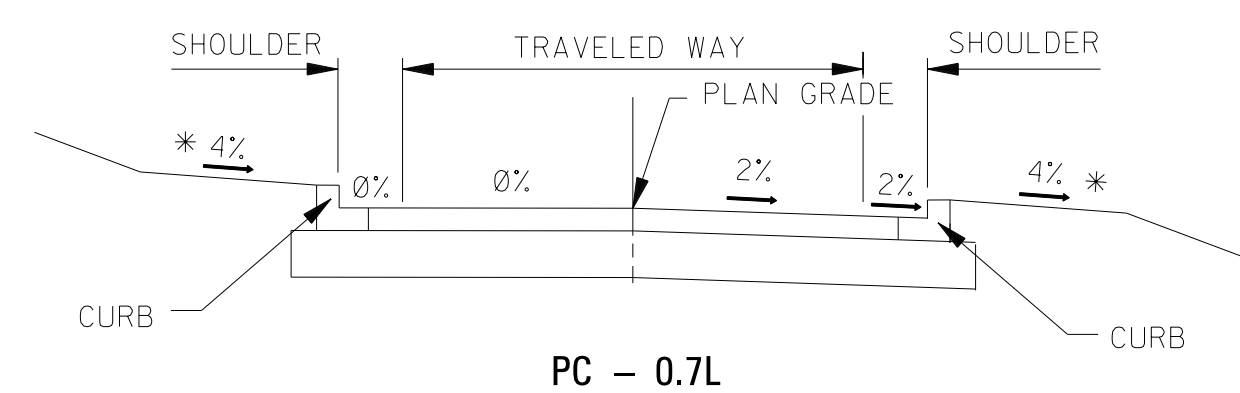
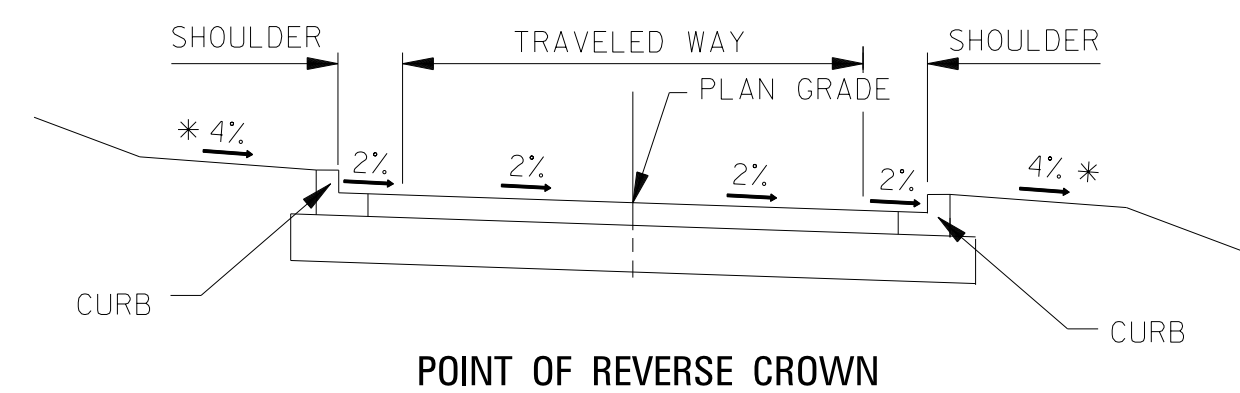
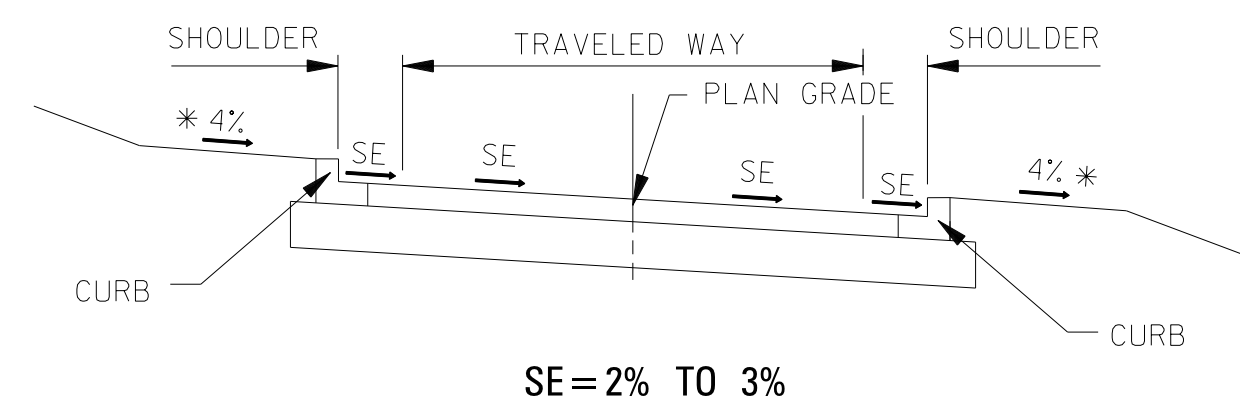
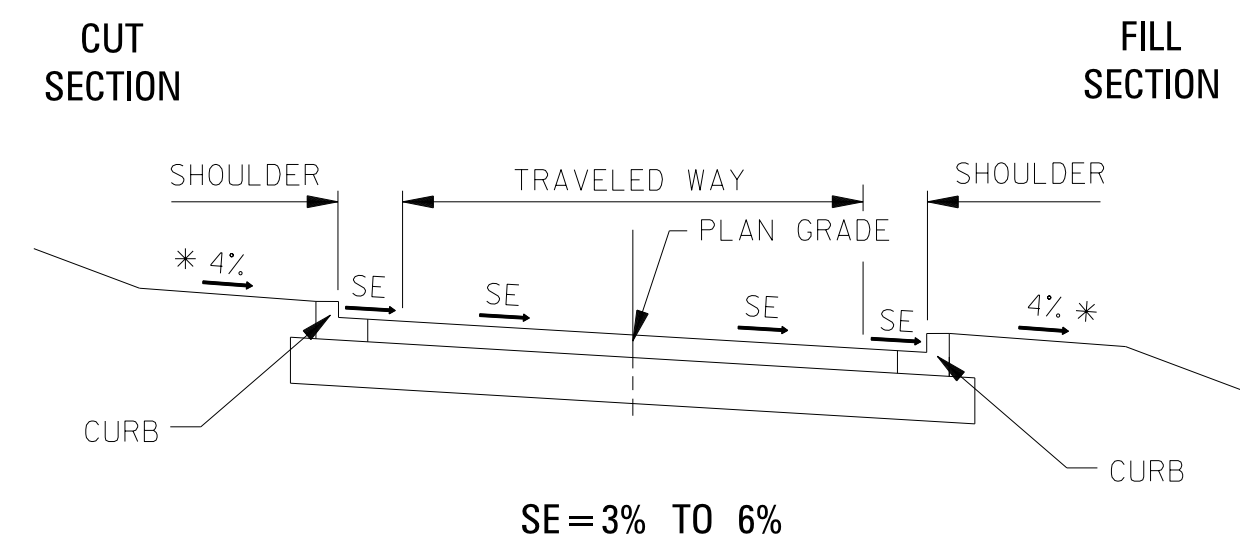
NOTE: SOLID SOD (STRIPS OR BLOCKS)  
SHOULD BE STAPLED, PINNED, PEGGED  
OR STAKED AT THE FOUR CORNERS OR  
AT THE MAXIMUM SPECIFIED SPACING.

GENERAL NOTE:

1. FOR LOCATION OF APPROPRIATE DITCH TREATMENTS, SEE PLAN SHEETS AS DENOTED BY THE FOLLOWING LEGEND OR AS DIRECTED BY THE ENGINEER:

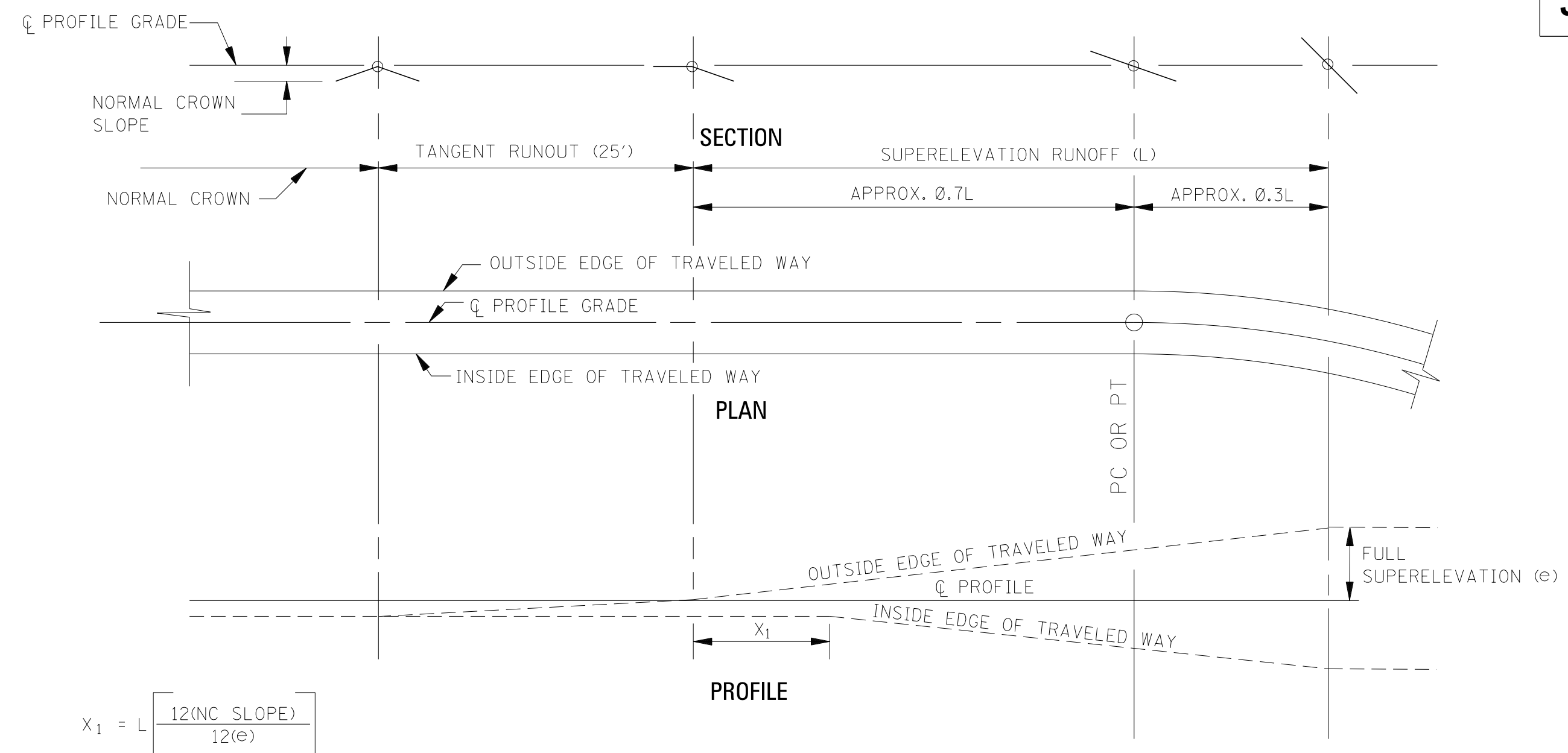
|  |                      |
|--|----------------------|
|  | DITCH LINER          |
|  | SOLID SOD            |
|  | CONCRETE PAVED DITCH |
|  | RIPRAP               |





## DETAILS OF SHOULDER TREATMENT

NOTE: TYPICAL, OR AS SHOWN  
ELSEWHERE ON PLANS.



| e                        | V = 20 mph            |        | V = 25 mph             |        | V = 30 mph             |        | V = 35 mph             |        | V = 40 mph             |        | V = 45 mph             |        |
|--------------------------|-----------------------|--------|------------------------|--------|------------------------|--------|------------------------|--------|------------------------|--------|------------------------|--------|
|                          | R (ft+)               | L(ft+) | R (ft+)                | L(ft+) | R (ft+)                | L(ft+) | R (ft+)                | L(ft+) | R (ft+)                | L(ft+) | R (ft+)                | L(ft+) |
| NC                       | 107                   | 0      | 198                    | 0      | 333                    | 0      | 510                    | 0      | 762                    | 0      | 1039                   | 0      |
| 0.020                    | 92                    | 32     | 167                    | 34     | 273                    | 36     | 408                    | 39     | 593                    | 41     | 794                    | 44     |
| 0.022                    | 91                    | 36     | 165                    | 38     | 270                    | 40     | 404                    | 43     | 586                    | 46     | 785                    | 49     |
| 0.024                    | 91                    | 39     | 164                    | 41     | 268                    | 44     | 400                    | 46     | 580                    | 50     | 776                    | 53     |
| 0.026                    | 90                    | 42     | 163                    | 45     | 265                    | 47     | 396                    | 50     | 573                    | 54     | 767                    | 58     |
| 0.028                    | 89                    | 45     | 161                    | 48     | 263                    | 51     | 393                    | 54     | 567                    | 58     | 758                    | 62     |
| 0.030                    | 89                    | 49     | 160                    | 51     | 261                    | 55     | 389                    | 58     | 561                    | 62     | 750                    | 67     |
| 0.032                    | 88                    | 52     | 159                    | 55     | 259                    | 58     | 385                    | 62     | 556                    | 66     | 742                    | 71     |
| 0.034                    | 88                    | 55     | 158                    | 58     | 256                    | 62     | 382                    | 66     | 550                    | 70     | 734                    | 76     |
| 0.036                    | 87                    | 58     | 157                    | 62     | 254                    | 65     | 378                    | 70     | 544                    | 74     | 726                    | 80     |
| 0.038                    | 87                    | 62     | 155                    | 65     | 252                    | 69     | 375                    | 74     | 539                    | 79     | 718                    | 84     |
| 0.040                    | 86                    | 65     | 154                    | 69     | 250                    | 73     | 371                    | 77     | 533                    | 83     | 711                    | 89     |
| 0.042                    | 85                    | 68     | 153                    | 72     | 248                    | 76     | 368                    | 81     | 528                    | 87     | 703                    | 93     |
| 0.044                    | 85                    | 71     | 152                    | 75     | 246                    | 80     | 365                    | 85     | 523                    | 91     | 696                    | 98     |
| 0.046                    | 84                    | 75     | 151                    | 79     | 244                    | 84     | 361                    | 89     | 518                    | 95     | 689                    | 102    |
| 0.048                    | 84                    | 78     | 150                    | 82     | 242                    | 87     | 358                    | 93     | 513                    | 99     | 682                    | 107    |
| 0.050                    | 83                    | 81     | 149                    | 86     | 240                    | 91     | 355                    | 97     | 508                    | 103    | 675                    | 111    |
| 0.052                    | 83                    | 84     | 148                    | 89     | 238                    | 95     | 352                    | 101    | 503                    | 108    | 668                    | 116    |
| 0.054                    | 82                    | 88     | 147                    | 93     | 236                    | 98     | 349                    | 105    | 498                    | 112    | 662                    | 120    |
| 0.056                    | 82                    | 91     | 146                    | 96     | 234                    | 102    | 346                    | 108    | 494                    | 116    | 655                    | 124    |
| 0.058                    | 81                    | 94     | 145                    | 99     | 233                    | 105    | 343                    | 112    | 489                    | 120    | 649                    | 129    |
| e <sub>max</sub> = 0.060 | R <sub>min</sub> = 81 | 97     | R <sub>min</sub> = 144 | 103    | R <sub>min</sub> = 231 | 109    | R <sub>min</sub> = 340 | 116    | R <sub>min</sub> = 485 | 124    | R <sub>min</sub> = 643 | 133    |

KEY:

R = RADIUS OF CURVE (ft)

V = DESIGN SPEED (mph)

e = FULL SUPERELEVATION RATE (ft/ft)

L = MINIMUM LENGTH OF SUPERELEVATION RUNOFF  
(FROM ADVERSE CROWN REMOVED TO FULL SUPER) (ft)

NC = NORMAL CROWN

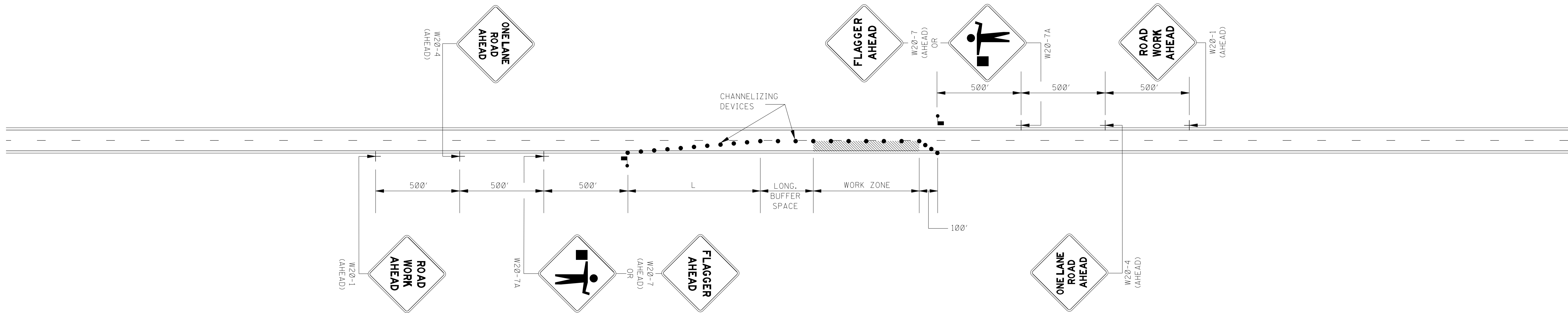
GENERAL NOTES:

1. SE RATE IS DETERMINED FROM A RADIUS EQUAL TO OR SLIGHTLY SMALLER THAN, THE RADIUS OF THE CURVE.
2. SUPERELEVATION RUNOFF LENGTH (L) FROM TABLE IS USED DIRECTLY FOR ROTATION OF 1-LANE WIDTH (i.e., TWO 1/2 LANES ROTATED ABOUT THE CENTERLINE).  
FOR GREATER WIDTHS OF ROTATION:  
L (2 LANES) = 1.5(L) (TABLE)  
L (3 LANES) = 2.0(L) (TABLE)
3. A VERTICAL CURVE WITH A LENGTH (IN FEET) EQUAL TO THE DESIGN SPEED (IN mph) SHOULD BE PLACED AT EXCESSIVE ANGULAR BREAKS.

\*4. THE MAXIMUM CROSS SLOPE ALLOWED WILL BE 2%  
WHERE A SIDEWALK IS REQUIRED.

**(URBAN FACILITY,  $V \leq 45$  mph)**





- LEGEND
- FLAGGER
  - CHANNELIZING DEVICES

GENERAL NOTES:

1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

| POSTED SPEED AND/OR DESIGN SPEED | MAXIMUM CHANNELIZING DEVICE SPACING (ft) |                             | MINIMUM LONGITUDINAL BUFFER SPACE (ft) | TAPER † RATES |
|----------------------------------|------------------------------------------|-----------------------------|----------------------------------------|---------------|
|                                  | TAPER                                    | ALONG LANE LINE & WORK ZONE |                                        |               |
| mph                              |                                          |                             |                                        |               |
| ≤40                              | 40                                       | 80                          | 170                                    | 27:1          |
| 45                               | 45                                       | 90                          | 220                                    | 45:1          |
| 50                               | 50                                       | 100                         | 280                                    | 50:1          |
| 55                               | 55                                       | 110                         | 335                                    | 55:1          |
| 60                               | 60                                       | 120                         | 415                                    | 60:1          |
| 65                               | 65                                       | 130                         | 485                                    | 65:1          |
| 70                               | 70                                       | 140                         | 575                                    | 70:1          |

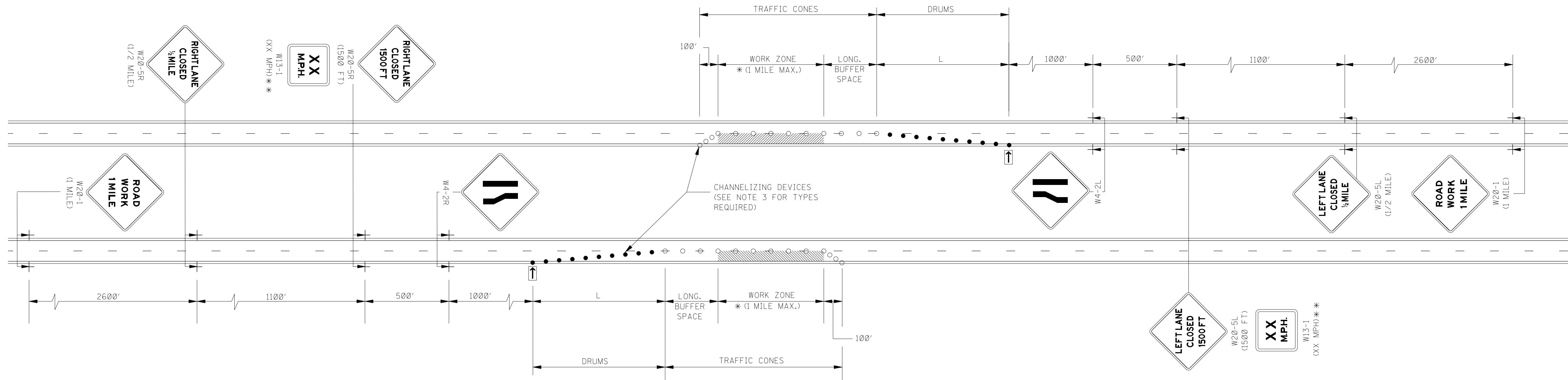
† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:  
L = WS FOR SPEEDS OF 45 mph OR GREATER  
L = WS<sup>2</sup>/60 FOR SPEEDS OF 40 mph OR LESS  
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET  
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET  
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 24" IN HEIGHT.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" x 48".
5. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
6. WHERE THE WORK ZONE IS STATIONARY, THE W20-7 (500 FT.) SIGN OR THE W20-7A SIGN TOGETHER WITH THE W20-7 (500 FT.) SUPPLEMENTAL PLATE SHOULD BE USED TO INDICATE THE DISTANCE TO THE FLAGGER.

|          |    |                   |      |
|----------|----|-------------------|------|
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
|          |    |                   |      |
| REVISION | BY | DESCRIPTION       | DATE |
|          |    | DRAWING REVISIONS |      |

|                       |             |               |
|-----------------------|-------------|---------------|
| DESIGN TEAM           |             |               |
| DESIGNED _____        | DRAWN _____ | CHECKED _____ |
| SCALE: (NOT TO SCALE) |             | DATE: _____   |





GENERAL NOTES:

1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

| POSTED SPEED<br>AND/OR<br>DESIGN SPEED | MAXIMUM<br>CHANNELIZING<br>DEVICE SPACING<br>(ft) <sup>†</sup> |                                   | MINIMUM<br>LONGITUDINAL<br>BUFFER SPACE<br>(ft) | TAPER <sup>†</sup><br>RATES |
|----------------------------------------|----------------------------------------------------------------|-----------------------------------|-------------------------------------------------|-----------------------------|
|                                        | TAPER                                                          | ALONG<br>LANE LINE &<br>WORK ZONE |                                                 |                             |
| mph                                    |                                                                |                                   |                                                 |                             |
| ≤40                                    | 40                                                             | 80                                | 170                                             | 27:1                        |
| 45                                     | 45                                                             | 90                                | 220                                             | 45:1                        |
| 50                                     | 50                                                             | 100                               | 280                                             | 50:1                        |
| 55                                     | 55                                                             | 110                               | 335                                             | 55:1                        |
| 60                                     | 60                                                             | 120                               | 415                                             | 60:1                        |
| 65                                     | 65                                                             | 130                               | 485                                             | 65:1                        |
| 70                                     | 70                                                             | 140                               | 575                                             | 70:1                        |

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:  
L = WS FOR SPEEDS OF 45 mph OR GREATER  
L = WS<sup>2</sup>/60 FOR SPEEDS OF 40 mph OR LESS  
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET  
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET  
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

2. FLASHING ARROW PANEL SHALL BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. CHANNELIZING DEVICE TYPES FOR:  
A. APPROACH TAPER- REFLECTORIZED PLASTIC DRUMS  
B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT)  
C. EXIT TAPER- TRAFFIC CONES (28" HEIGHT)
4. WHEN THERE IS NO EXISTING HAZARD, ALL SIGNS SHALL BE COVERED OR REMOVED AND THE DRUMS SHALL BE MOVED TO THE SHOULDER EDGE AT THE END OF THE WORK DAY.
5. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING SIGNS, PLASTIC DRUMS, AND ARROW BOARD. WHEN THE CONSTRUCTION ZONE IS MOVED AHEAD, ALL SIGNS, PLASTIC DRUMS AND ARROW BOARD SHALL BE IN PLACE ON THE SECOND ZONE BEFORE REMOVING ANY SIGNS, PLASTIC DRUMS OR ARROW BOARD ON THE FIRST ZONE.
6. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
7. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" X 48".

LEGEND

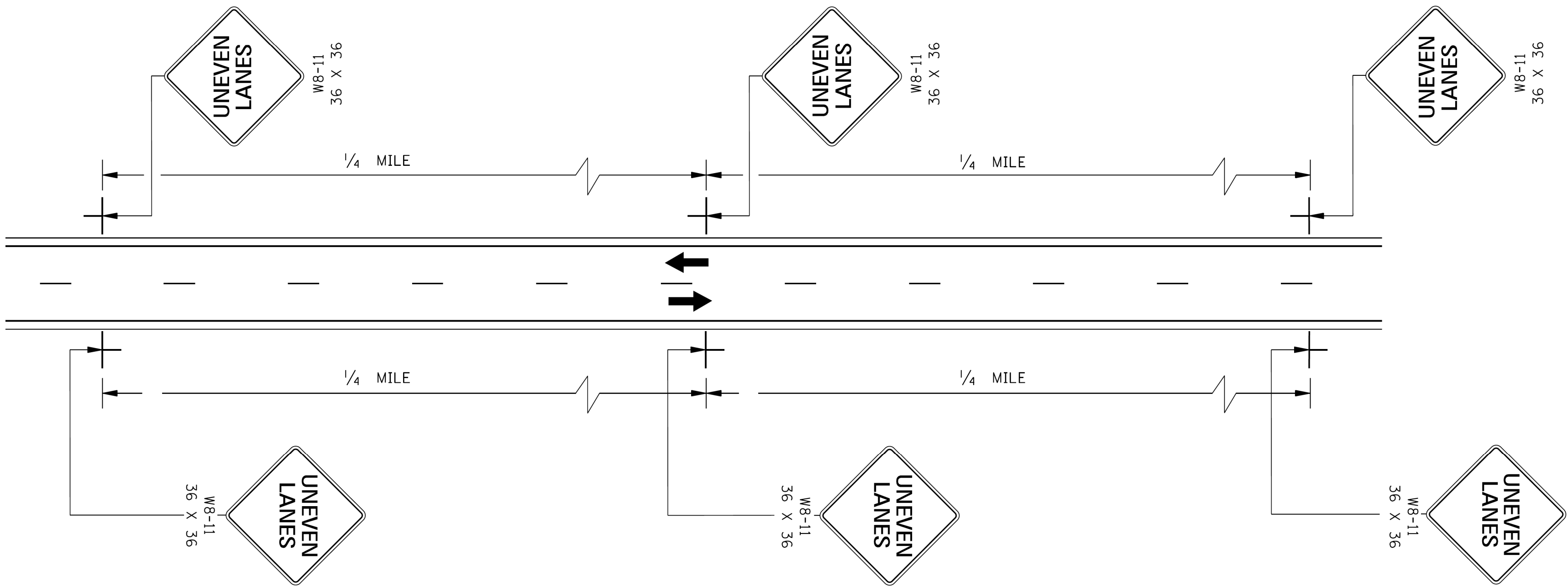
- \* OR AS SHOWN ELSEWHERE OF THE PLANS.
- \*\* THE LEGEND ON W13-1 (XX MPH) SUPPLEMENTAL PLATE SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT.
- FLASHING ARROW PANEL (TYPE "C")
- REFLECTORIZED FREE-STANDING PLASTIC DRUMS
  - TRAFFIC CONES (28" HEIGHT)

(4-LANE: MEDIAN LANE OR OUTSIDE LANE CLOSURE)  
(WORK DAY ONLY)

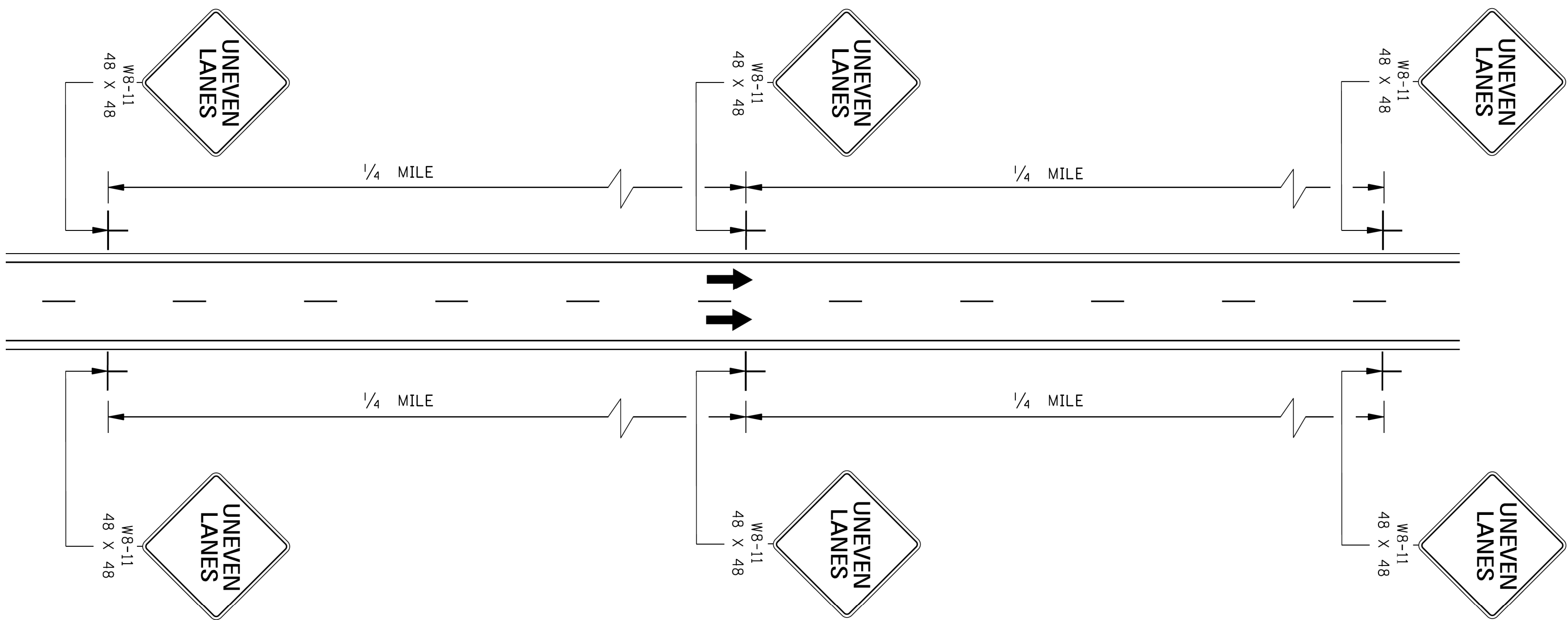
|          |    |                   |      |  |
|----------|----|-------------------|------|--|
|          |    |                   |      |  |
|          |    |                   |      |  |
|          |    |                   |      |  |
|          |    |                   |      |  |
| REVISION | BY | DESCRIPTION       | DATE |  |
|          |    | DRAWING REVISIONS |      |  |

| DESIGN TEAM           |       |         |  |
|-----------------------|-------|---------|--|
| DESIGNED              | DRAWN | CHECKED |  |
| SCALE: (NOT TO SCALE) |       | DATE:   |  |





TWO-WAY TRAFFIC



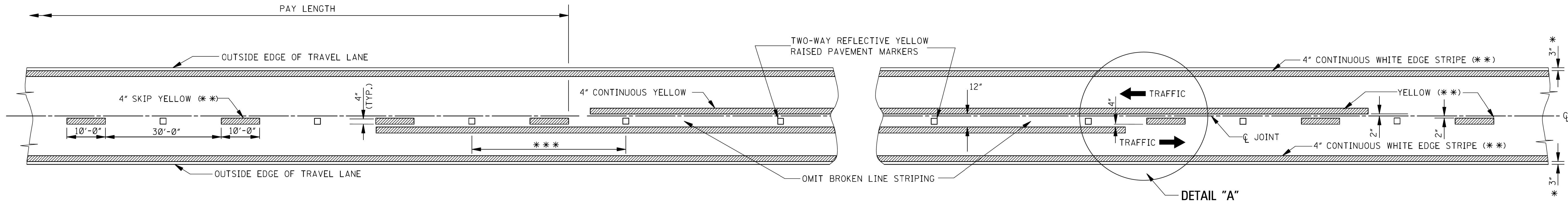
ONE-WAY TRAFFIC

- GENERAL NOTES:
- 1. UNEVEN LANE LINE:
    - A. IF LESS THAN OR EQUAL TO 1 1/2", NO SIGNS REQUIRED.
    - B. IF GREATER THAN 1 1/2" AND LESS THAN OR EQUAL TO 2 1/4", PLACE SIGNS AS SHOWN ON THIS SHEET.
    - C. IF GREATER THAN 2 1/4", TRAFFIC SHOULD NOT BE ALLOWED TO CROSS UNEVEN LANE LINE.
  - 2. THE W8-11 SIGNS SHOULD BE SPACED AT 1/4-MILE INTERVALS THROUGHOUT UNEVEN LANE LINE LIMITS.
  - 3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

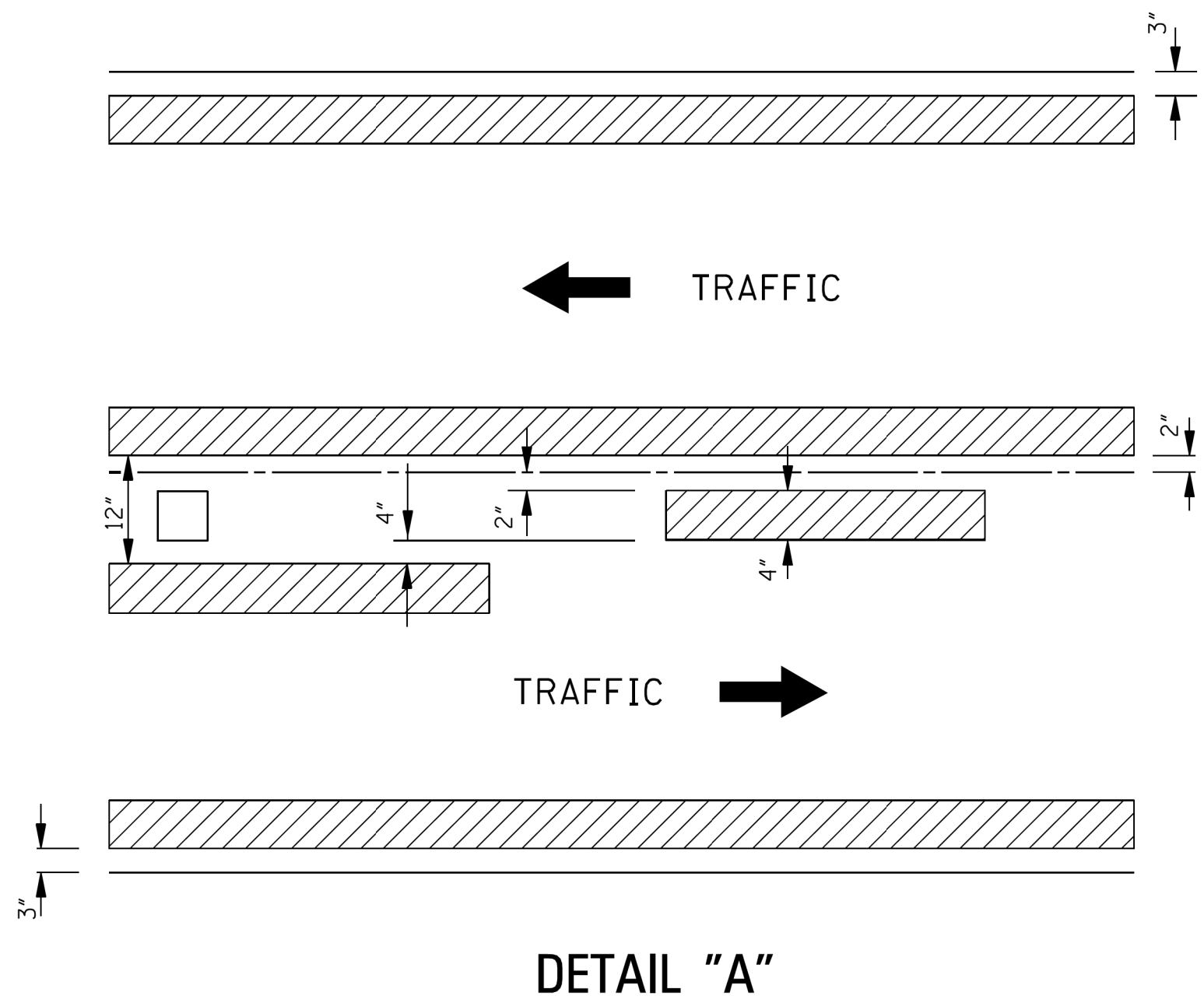
|          |    |                   |      |  |
|----------|----|-------------------|------|--|
|          |    |                   |      |  |
|          |    |                   |      |  |
|          |    |                   |      |  |
|          |    |                   |      |  |
|          |    |                   |      |  |
| REVISION | BY | DESCRIPTION       | DATE |  |
|          |    | DRAWING REVISIONS |      |  |

|               |       |            |
|---------------|-------|------------|
| DESIGN TEAM   |       |            |
| DESIGNED      | DRAWN | CHECKED    |
| SCALE: 1"=30' |       | DATE: 2019 |

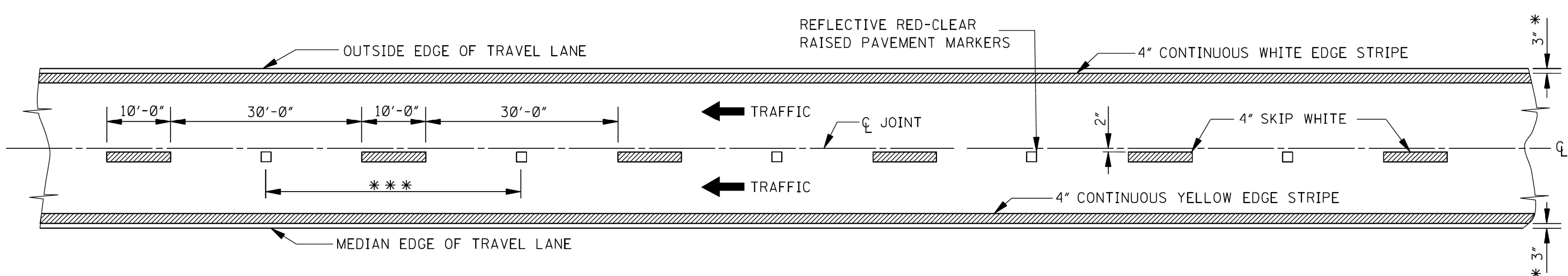




TWO-WAY TRAFFIC  
(ASPHALT OR CONCRETE PAVEMENT)

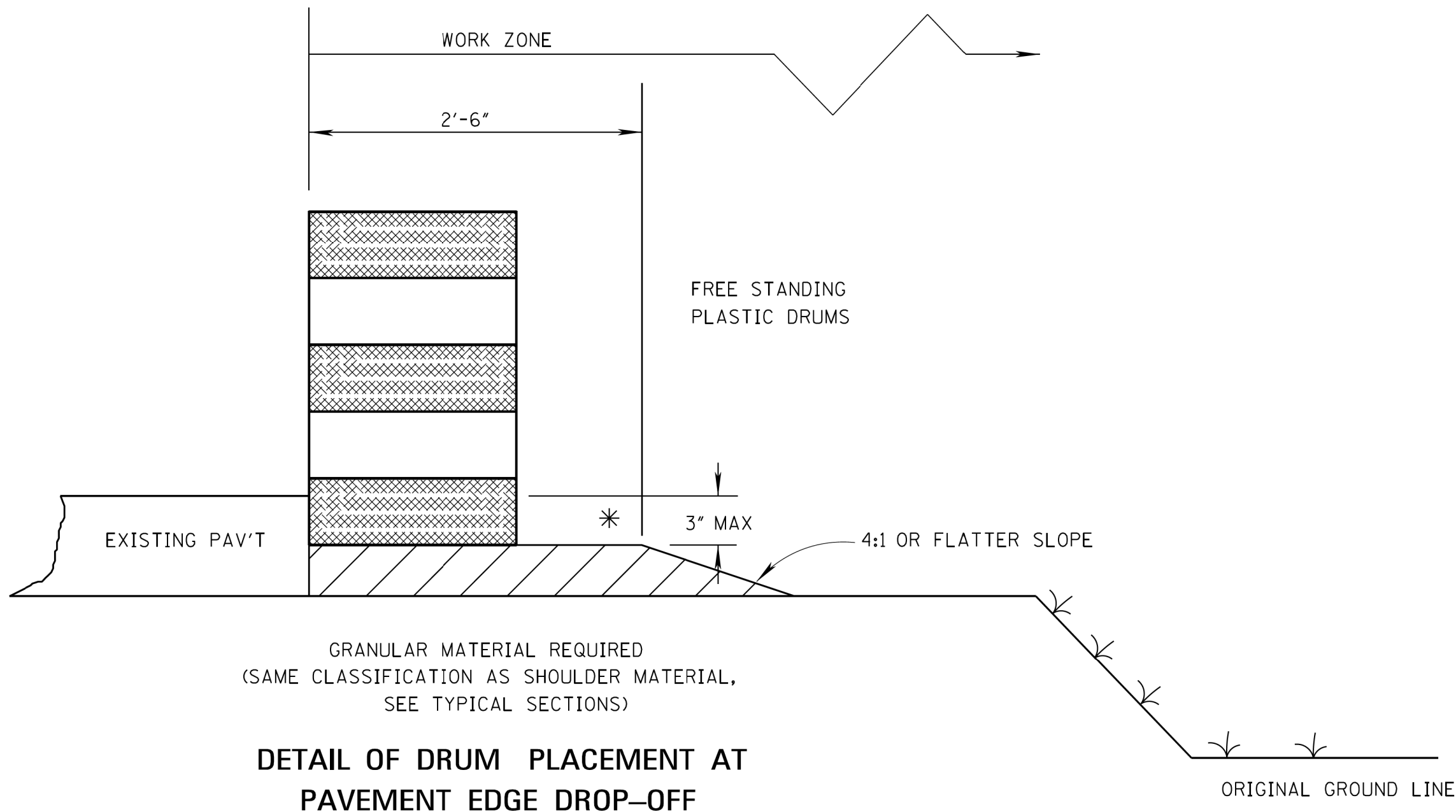
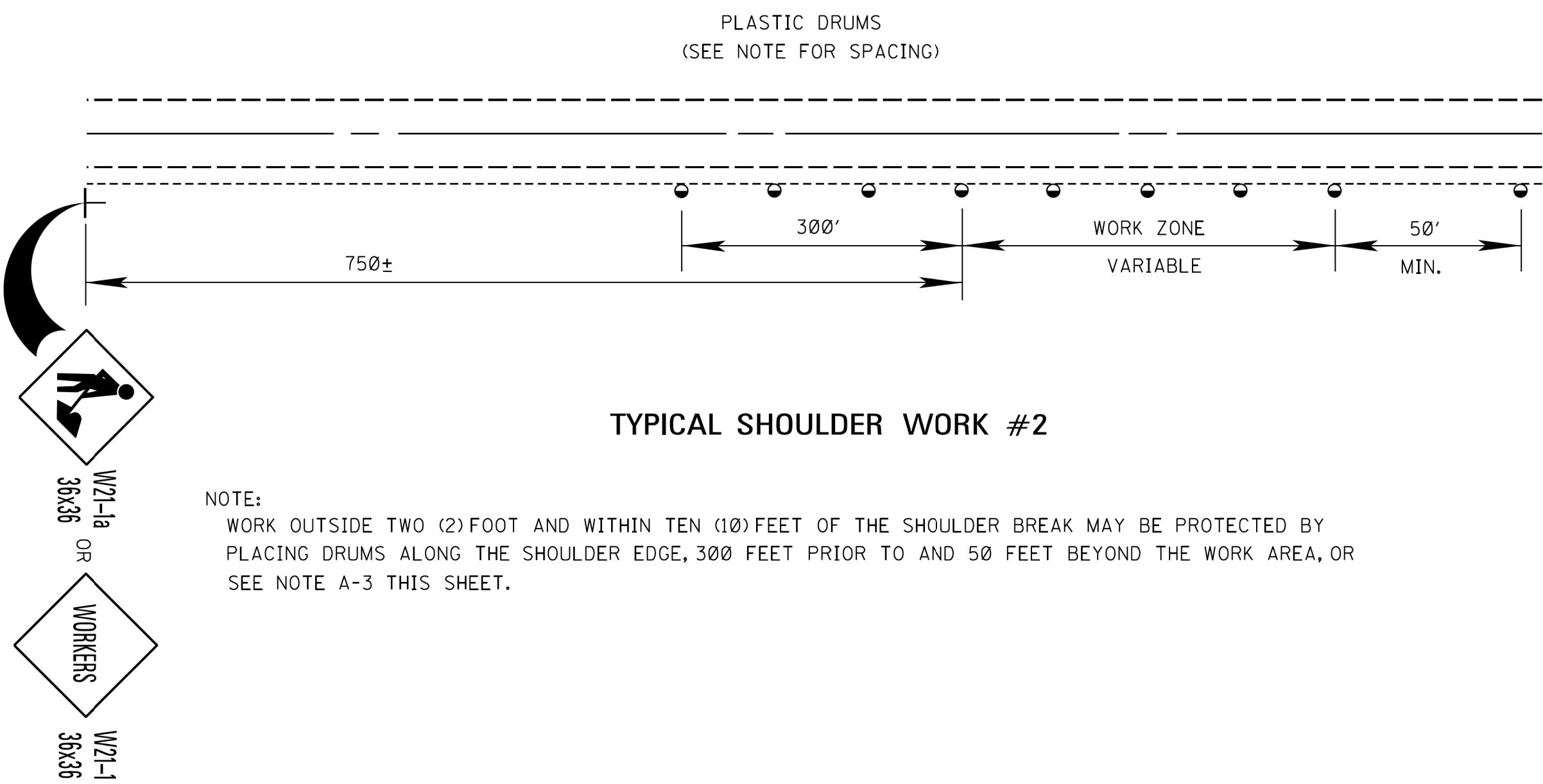
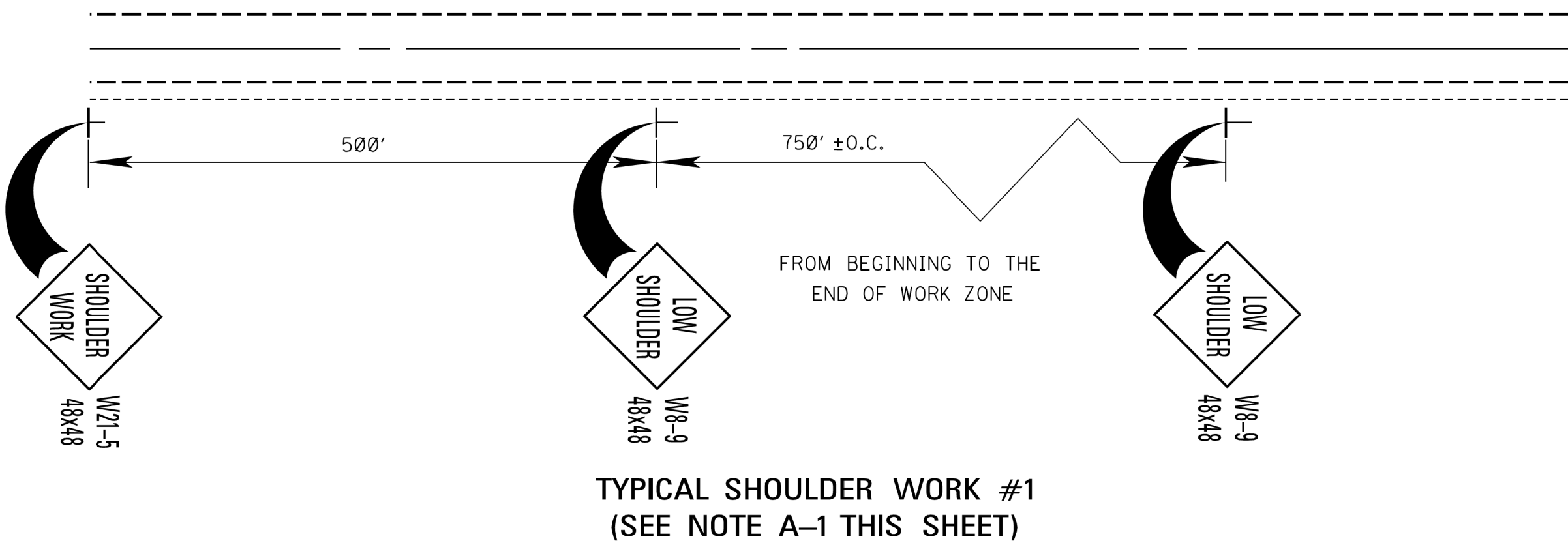
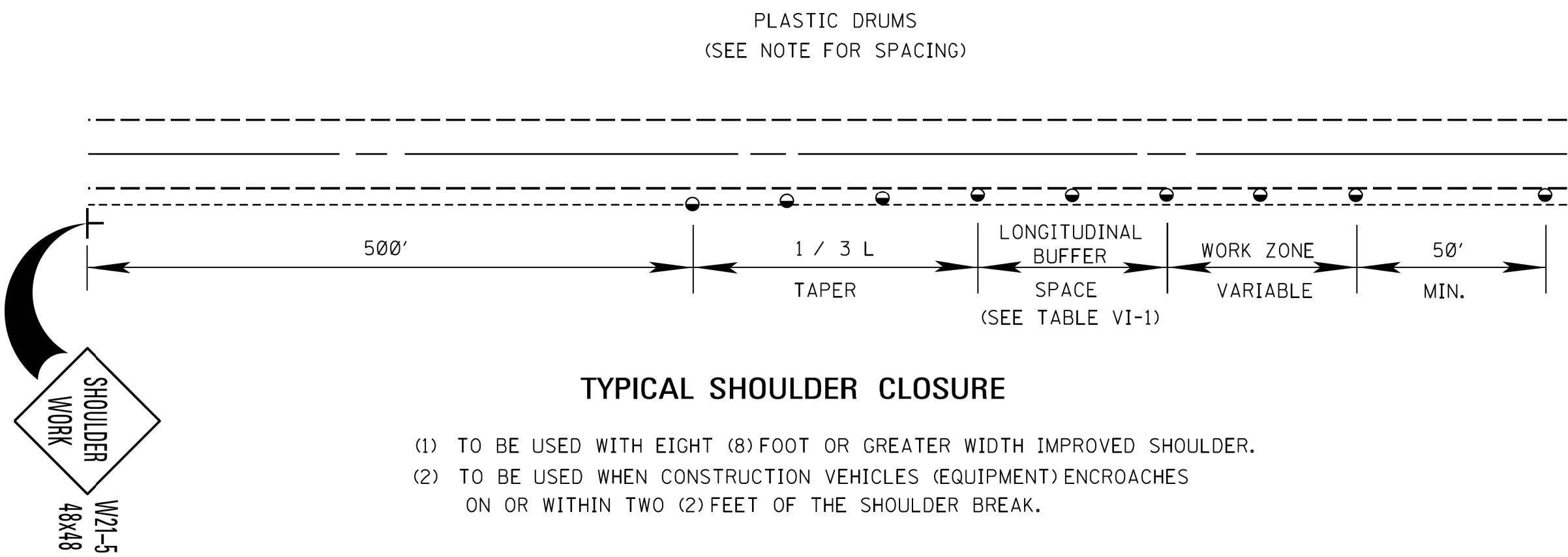


- GENERAL NOTES:
- \* 1. 3" UNLESS SHOWN ELSEWHERE ON THE PLANS.
  - \*\* 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR TAPE AS INDICATED IN PAY ITEMS).
  - 3. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
  - \*\*\* 4. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:
- |                    | URBAN AREA<br>(ft-in) | RURAL AREA<br>(ft-in) |
|--------------------|-----------------------|-----------------------|
| TANGENT SECTIONS   | 40'-0"                | 80'-0"                |
| HORIZONTAL CURVES  | 40'-0"                | 40'-0"                |
| INTERCHANGE LIMITS | 40'-0"                | + 40'-0"              |
- + NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
5. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."



4-LANE WITH ONE-WAY TRAFFIC





NOTES:

\* A. PAVEMENT EDGE DROP-OFF

- IF LESS THAN TWO AND ONE QUARTER (2.25) INCHES-NO PROTECTION REQUIRED. PLACE A SHOULDER WORK SIGN (W21-5) 500 FEET IN ADVANCE OF WORK ZONE SHOULDER AND A LOW SHOULDER SIGN (W8-9) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE @ (750'±0.0.).
- TWO AND ONE QUARTER TO THREE INCHES-PLACE DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER. CONES MAY BE USED IN PLACE OF DRUMS, PANELS, AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE M.U.T.C.D. (1 / 3 L, WHERE L IS THE TAPER LENGTH IN FEET.)
- GREATER THAN THREE (3) INCHES-POSITIVE SEPARATION OR WEDGE WITH 4:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT (8) FEET OR MORE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND DROP-OFF, THEN DRUMS, PANELS OR BARRICADES MAY BE USED.
- FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN THREE (3) INCHES MAY BE PROTECTED WITH DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.
- LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

B. DRUM SPACING

- TANGENTS = 2 X S
- TAPERS = L / 3  
WHERE L = S X W  
L = TAPER LENGTH IN FEET  
S = SPEED IN MPH (POSTED OR 85 PERCENTILE)  
W = WIDTH OF OFFSET IN FEET

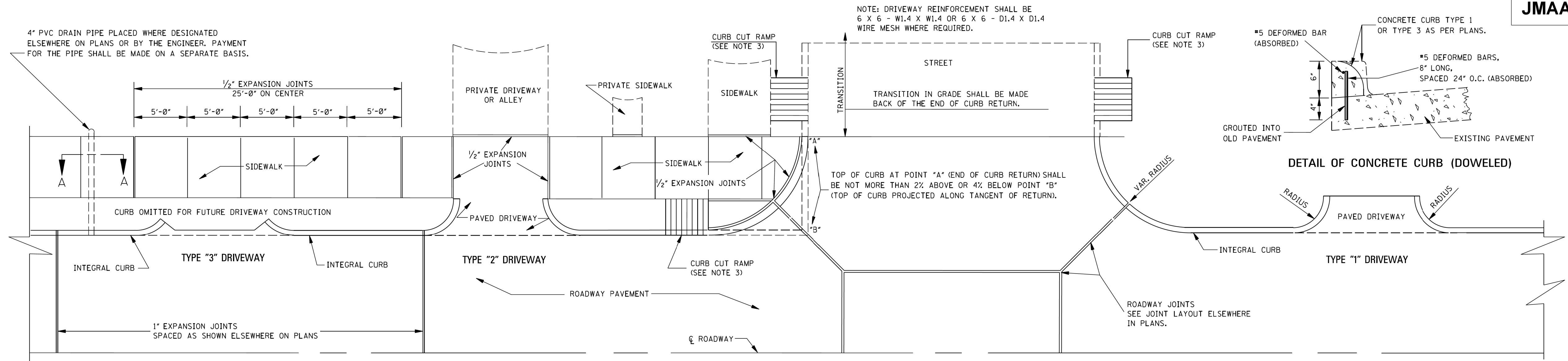
C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

TABLE VI-1. GUIDELINES FOR LENGTH OF  
LONGITUDINAL BUFFER SPACE

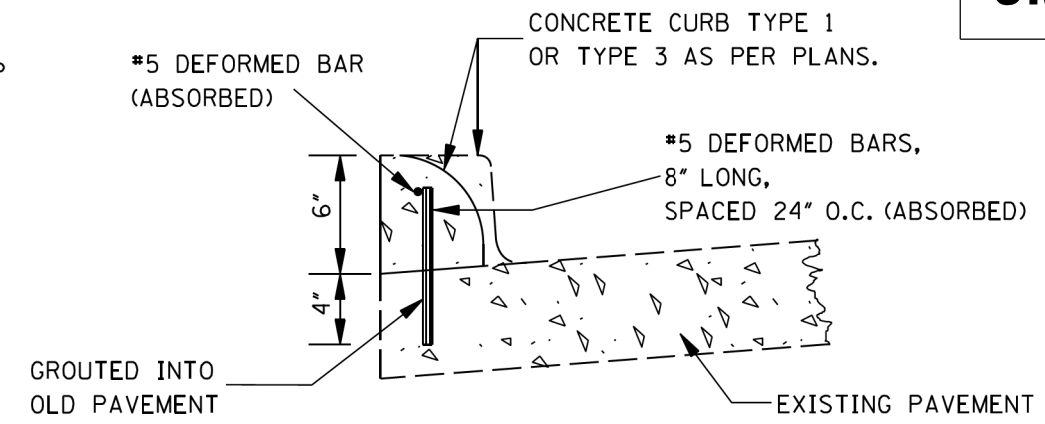
| * * SPEED (MPH) | LENGTH (FEET) |
|-----------------|---------------|
| 20              | 35            |
| 25              | 55            |
| 30              | 85            |
| 35              | 120           |
| 40              | 170           |
| 45              | 220           |
| 50              | 280           |
| 55              | 335           |
| 60              | 415           |
| 65              | 485           |

\* \* POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

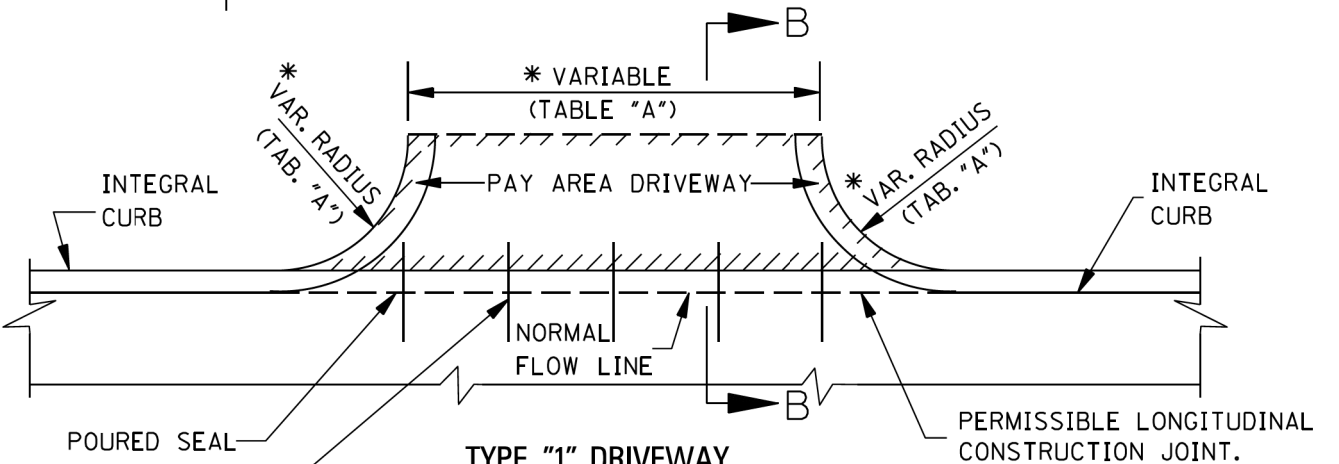




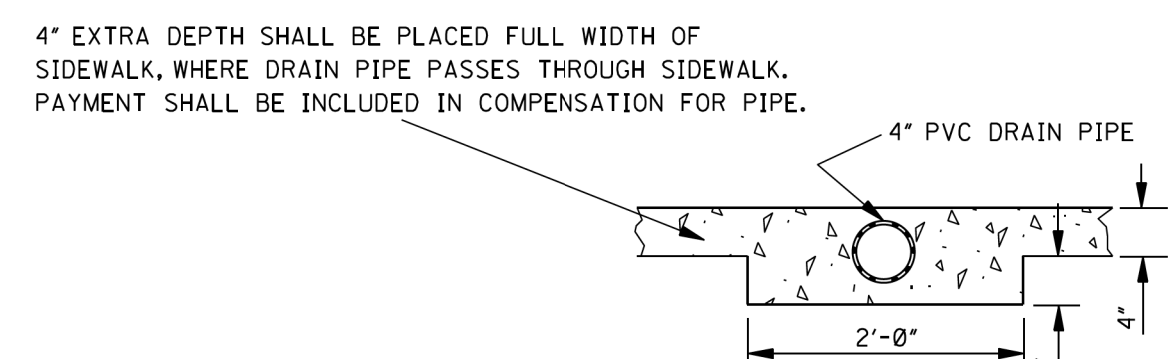
PLAN SHOWING ARRANGEMENT OF INTEGRAL CURB, DRIVEWAYS AND SIDEWALK



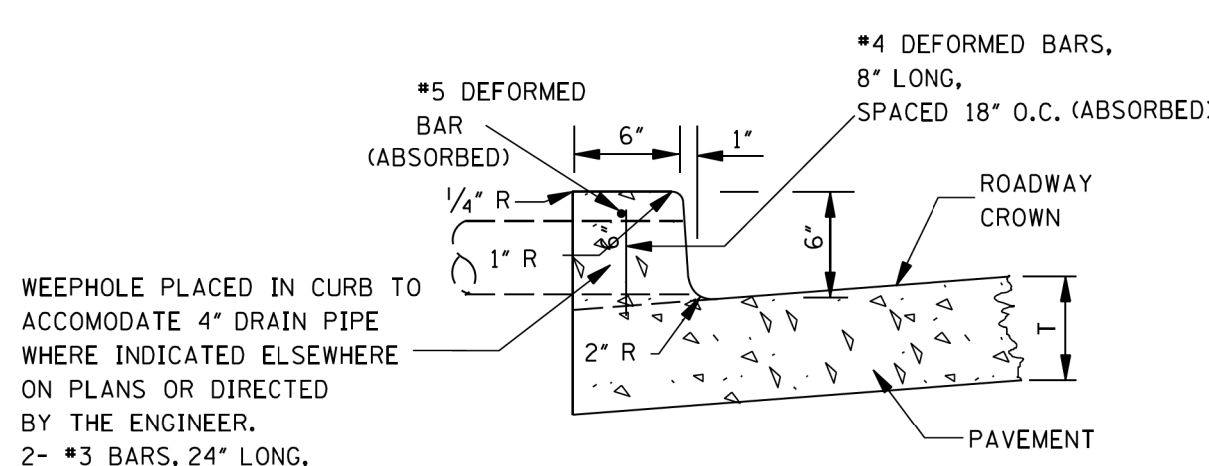
DETAIL OF CONCRETE CURB (DOWELED)



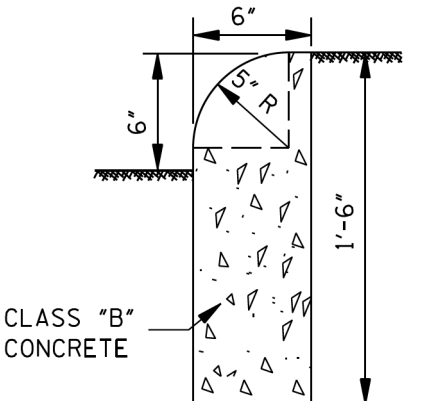
PLAN OF CONCRETE DRIVEWAY



SECTION A-A

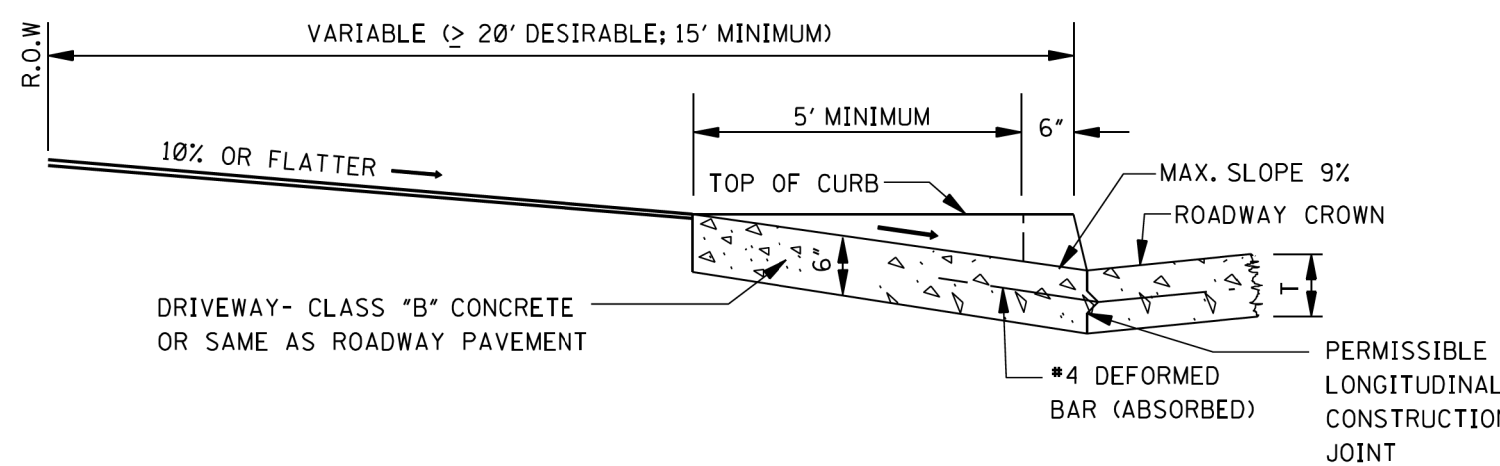


TYPE "1" DETAIL OF INTEGRAL CURB

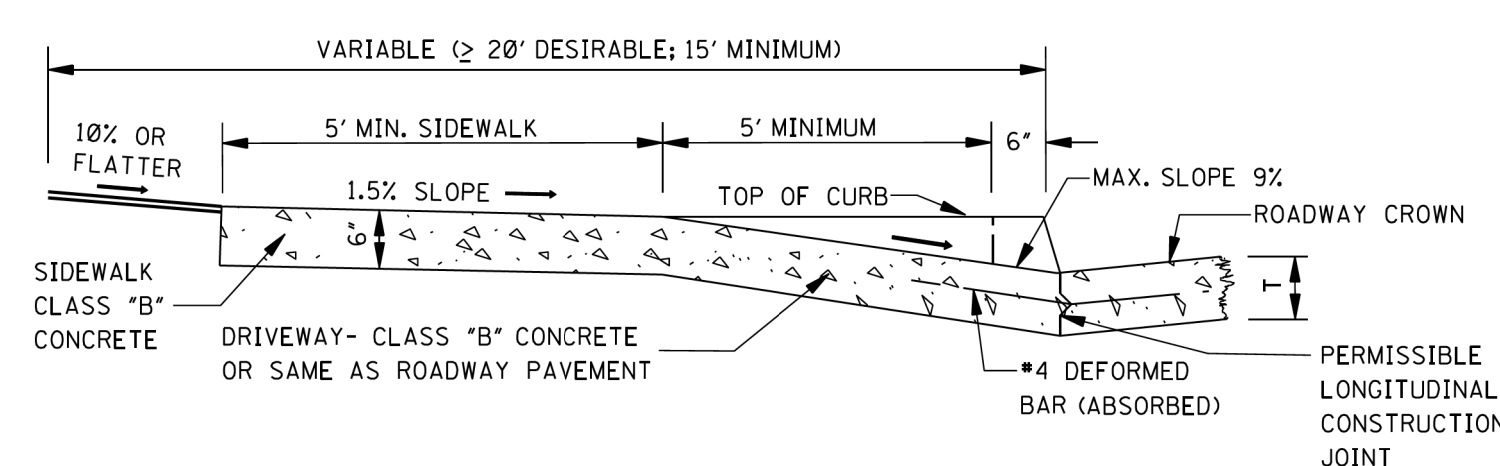


DETAIL OF HEADER CURB

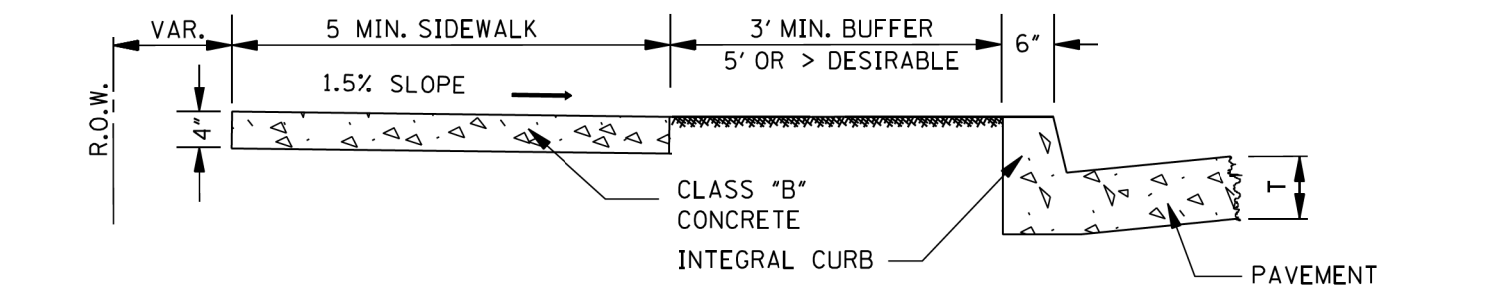
CONTRACTION JOINTS REQUIRED AT 20' O.C.  
EXPANSION JOINTS REQUIRED AT 60' O.C.  
UNLESS OTHERWISE DIRECTED BY ENGINEER.



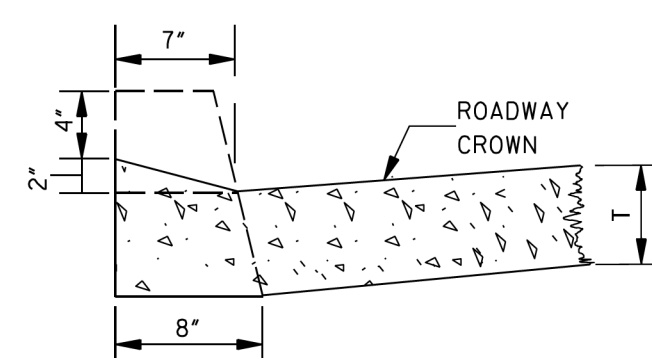
SECTION B-B



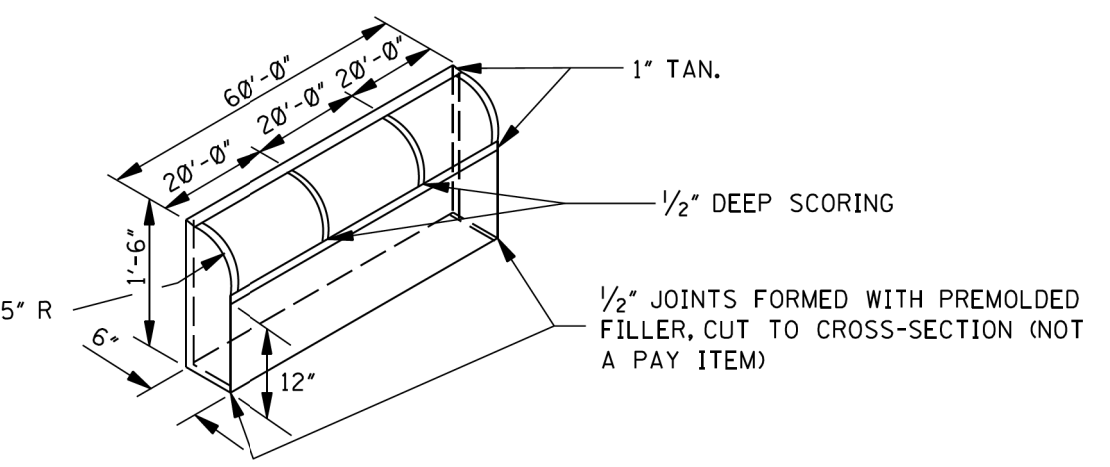
SECTION C-C



SECTION D-D



SECTION E-E



ISOMETRIC HEADER CURB DETAIL SHOWING JOINTS

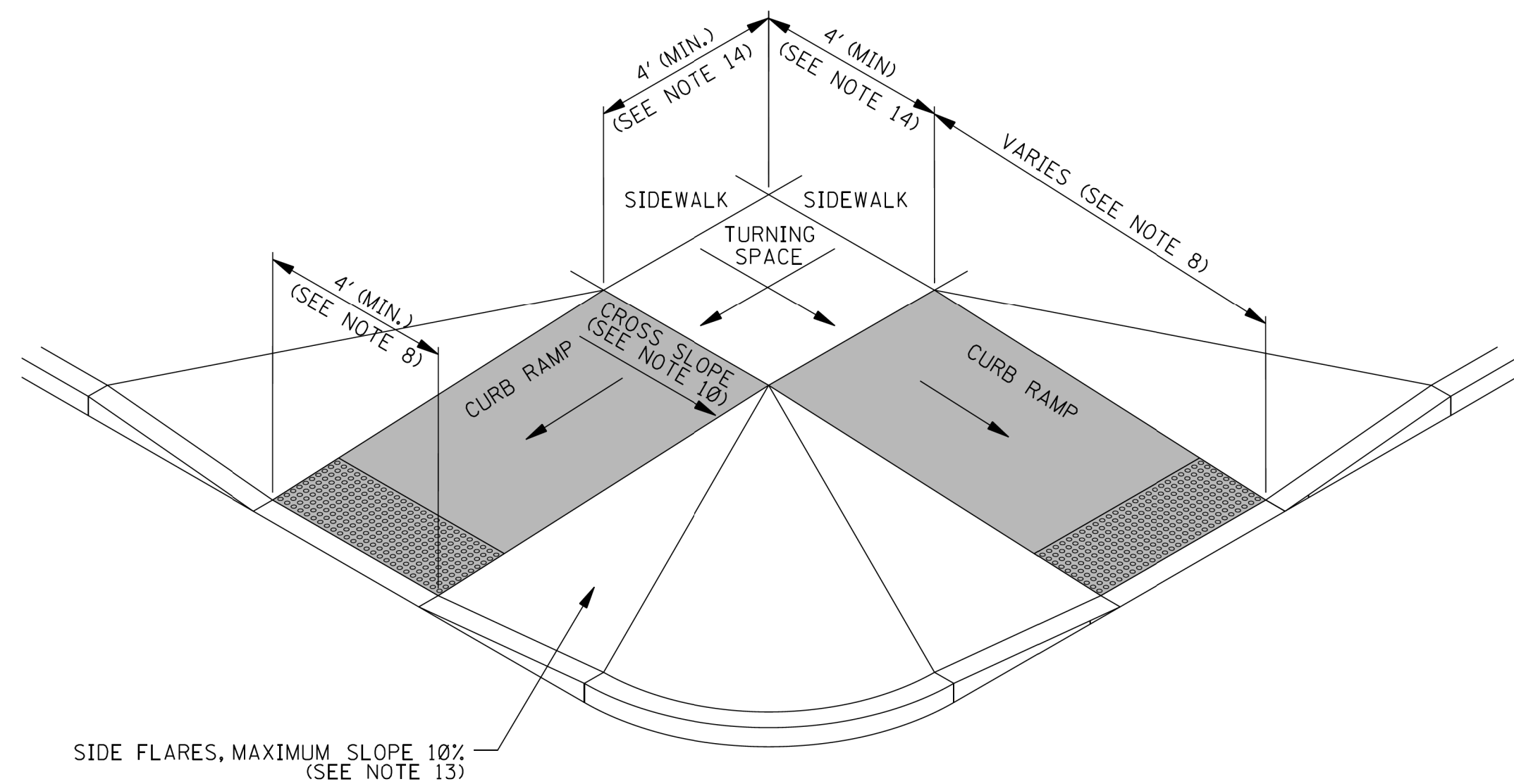
GENERAL NOTES:

1. TRAVERSE CONTRACTION JOINTS ARE REQUIRED AT 20' ON CENTER FOR ALL CONCRETE DRIVEWAYS THAT EXTEND PAST THE END OF THE CURB RETURN. A 1/2" WIDE EXPANSION JOINT IS REQUIRED AT THE END OF THE CURB RETURN AND AT 60' ON CENTER THROUGHOUT THE LENGTH OF THE DRIVEWAY. A LONGITUDINAL CONTRACTION JOINT IS REQUIRED FOR ALL DRIVEWAYS EXCEEDING 20' IN WIDTH.
2. SEE WK. NOS. CR-1, CR-2, CR-3 & CR-4 FOR DETAILS OF CURB-CUT RAMPS.
3. MAXIMUM 2% CROSS-SLOPE ON SIDEWALKS.

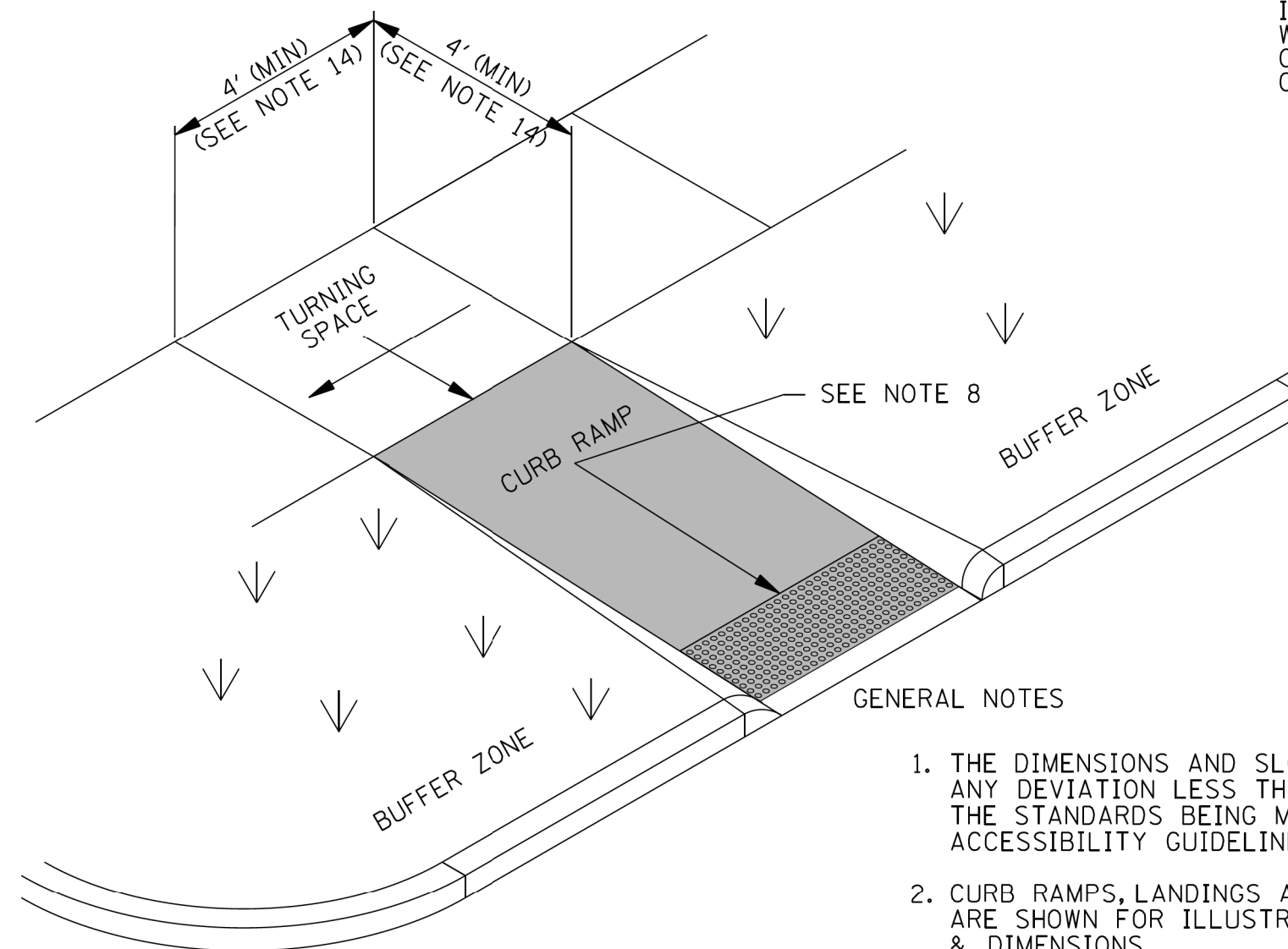
| REVISION | BY | DESCRIPTION | DATE |
|----------|----|-------------|------|
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |

| DESIGN TEAM   |       |            |
|---------------|-------|------------|
| DESIGNED      | DRAWN | CHECKED    |
|               |       |            |
| SCALE: 1"=30' |       | DATE: 2019 |



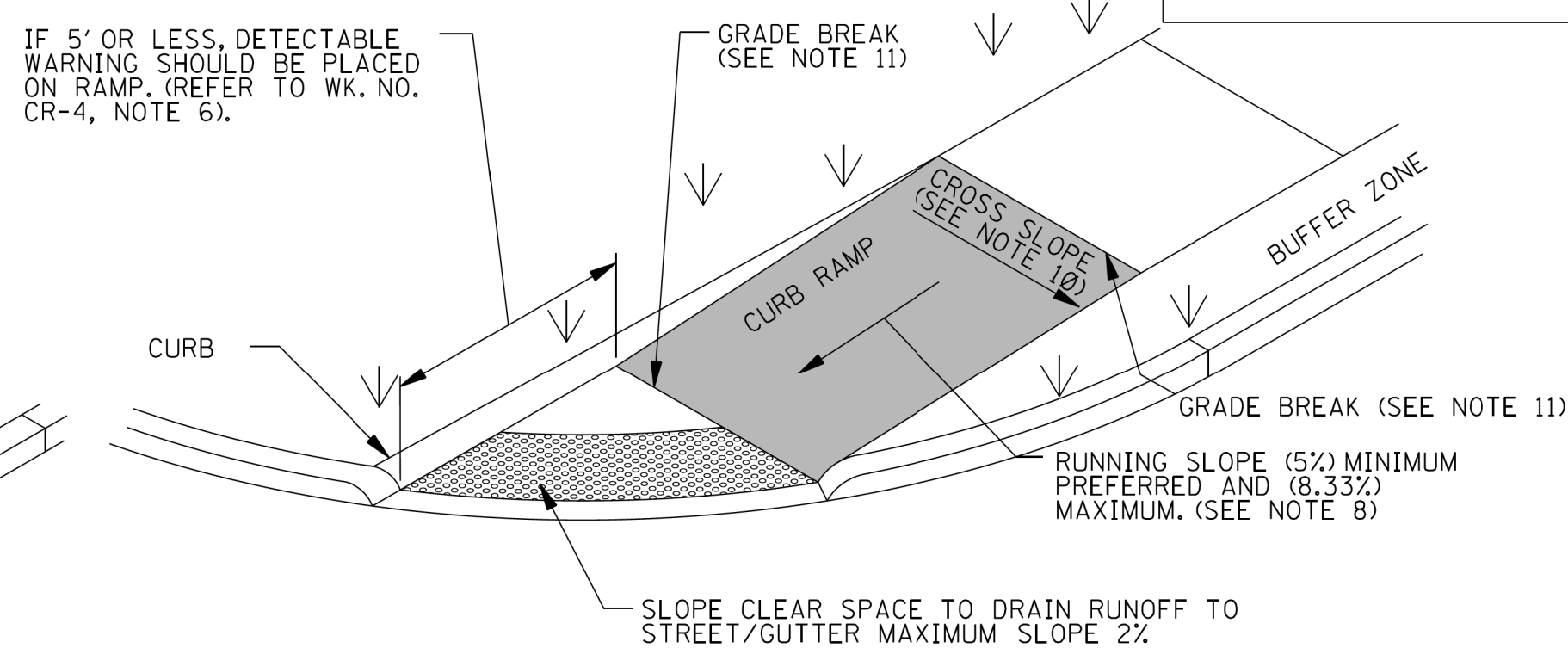


TYPE 1 – PERPENDICULAR CURB RAMP



TYPE 2 – PERPENDICULAR RETURNED CURB RAMP

SIDES OF CURB RAMPS MAY BE RETURNED, PROVIDING USEFUL DIRECTIONAL CUES, IF PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, POLES, OR EQUIPMENT.

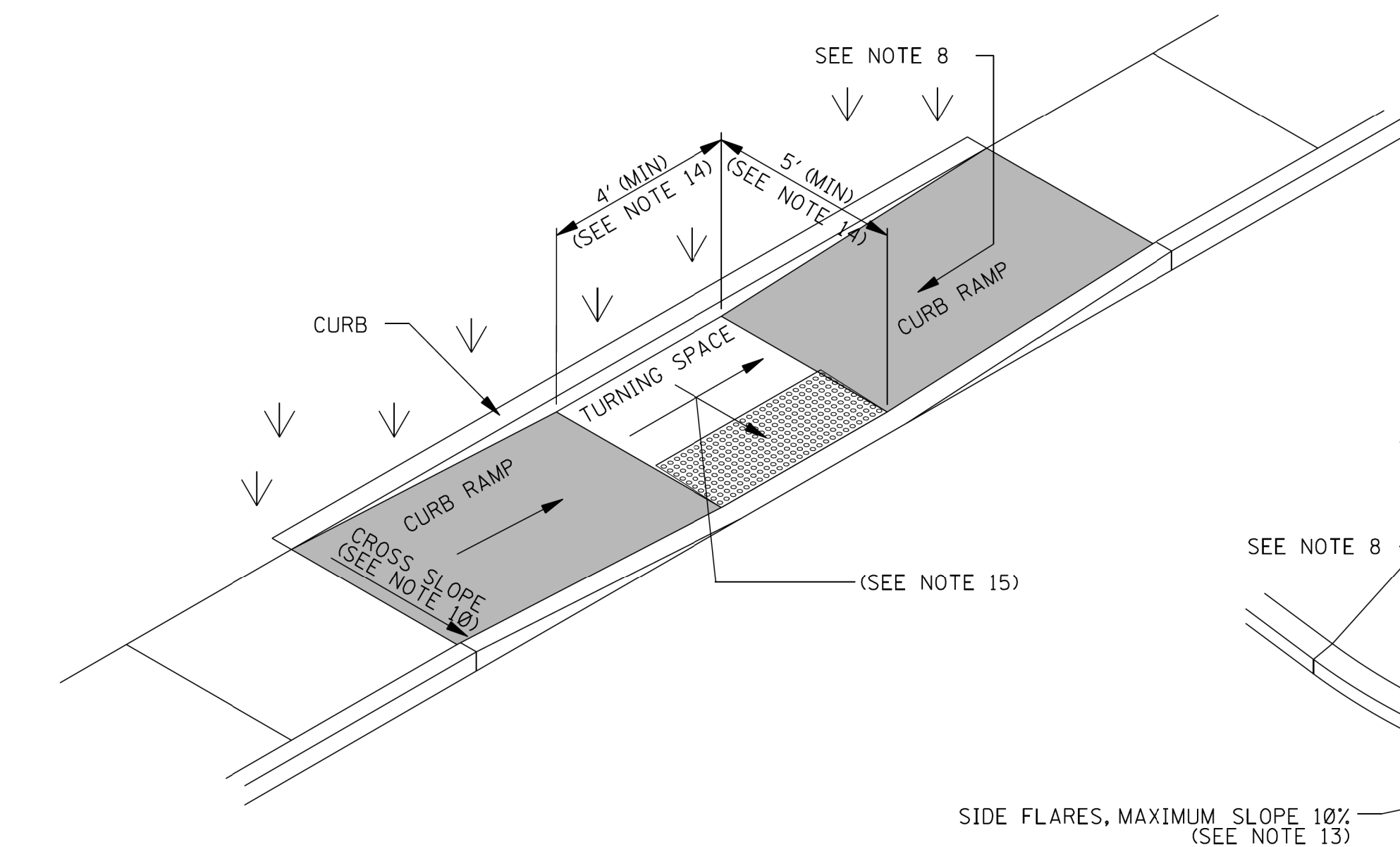


TYPE 3 – ALTERNATE PERPENDICULAR RETURNED CURB RAMP

- GENERAL NOTES
1. THE DIMENSIONS AND SLOPES PRESENTED IN THE DETAILS ARE THE MINIMUM NECESSARY TO COMPLY WITH THE ADA AND MDOT STANDARDS. ANY DEVIATION LESS THAN THE MINIMUM WIDTH OR GREATER THAN THE MAXIMUM SLOPE FROM THESE STANDARDS MUST BE DOCUMENTED WITH THE STANDARDS BEING MET TO THE GREATEST EXTENT PRACTICABLE AND CONSISTENT WITH THE MOST CURRENT PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG).
  2. CURB RAMPS, LANDINGS AND BLENDED TRANSITIONS MAY REQUIRE THE USE OF DETECTABLE WARNINGS. DETECTABLE WARNINGS ON THIS SHEET ARE SHOWN FOR ILLUSTRATION ONLY. REFER TO THE DETECTABLE WARNING DETAILS ON WK. NO. CR-4 FOR DETAILS ON PLACEMENT, ORIENTATION & DIMENSIONS.
  3. THE LOCATION, ORIENTATION, AND TYPE OF CURB RAMPS SHOULD BE AS SHOWN IN THE PLANS.
  4. ANY COMBINATION OF PERPENDICULAR, PERPENDICULAR RETURNED, AND PARALLEL CURB RAMPS MAY BE USED TO ACHIEVE AN ACCESSIBLE DESIGN AS LONG AS THE BASIC REQUIREMENTS FOR CURB RAMPS ARE MET.
  5. CURB RAMPS SHALL BE PAID FOR AS SIDEWALK.
  6. THE THICKNESS OF THE CURB RAMP SHALL BE A MINIMUM OF 4".
  7. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

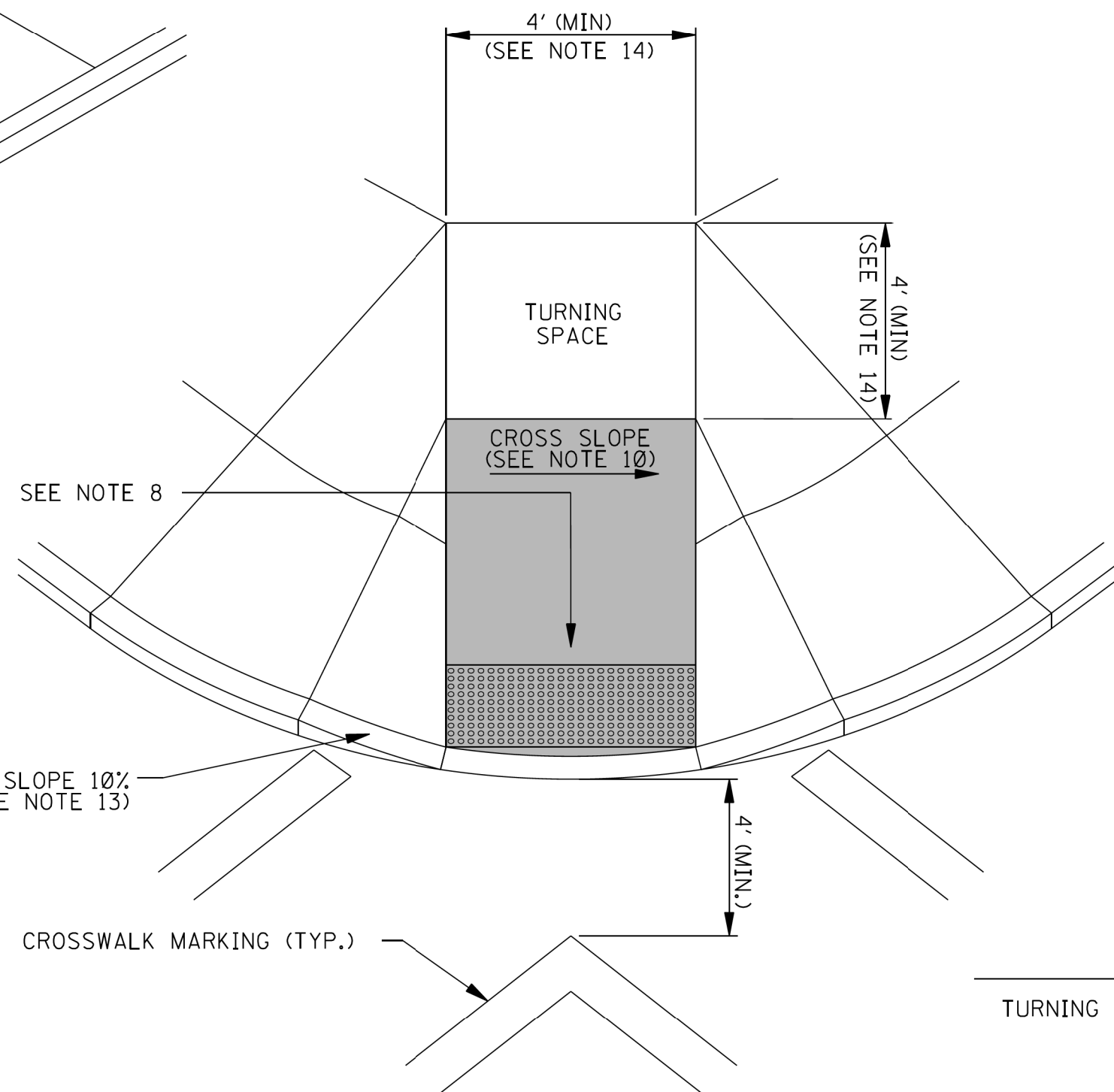
CURB RAMP NOTES:

8. THE CLEAR WIDTH OF CURB RAMP RUNS (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE THE WIDTH OF THE SIDEWALK, OR 4' MINIMUM. THE RUNNING SLOPE OF A CURB RAMP SHALL BE 5% MINIMUM, AND 8.33% MAXIMUM (7.1% PREFERRED). THE RUNNING SLOPE OF BLENDED TRANSITIONS SHALL BE 5% MAXIMUM.
  9. WHERE THE SLOPE OF THE ROADWAY EXCEEDS 8.33%, THE CURB RAMP LENGTH IS THE LENGTH NECESSARY TO MEET THE EXISTING SIDEWALK. IT IS NOT NECESSARY THAT THE RAMP EXCEED 15'.
  10. THE CROSS SLOPE OF CURB RAMPS, BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE 2% MAXIMUM (1.5% PREFERRED). AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE IS PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
  11. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
  12. RAMP TRANSITIONS BETWEEN WALKS, TURNING SPACES, LANDINGS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES.
  13. WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP, FLARED SIDES SHALL BE SLOPED 10% MAXIMUM, MEASURED PARALLEL TO THE CURB LINE.
- TURNING SPACE NOTES:
14. A TURNING SPACE 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED AT THE TOP OF PERPENDICULAR RAMPS AND AT THE BOTTOM OF PARALLEL RAMPS. TURNING SPACES ARE ALLOWED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED BY A CURB, WALL, OR OTHER OBSTRUCTION, THE TURNING SPACE SHALL BE 4' MINIMUM BY 5' MINIMUM, WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF TRAVEL TOWARD THE CONSTRAINT.
  15. THE RUNNING SLOPE OF TURNING SPACES SHALL BE 2% MAXIMUM (1.5% PREFERRED). THE CROSS SLOPE OF TURNING SPACES SHALL BE 2% MAXIMUM (1.5% PREFERRED). AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
  16. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
  17. THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF CURB RAMP RUNS, BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE 5% MAXIMUM. IT IS BEST PRACTICE TO PROVIDE A 2" LEVEL STRIP AT THE GUTTER IF THE GRADE BREAK EXCEEDS 11%.



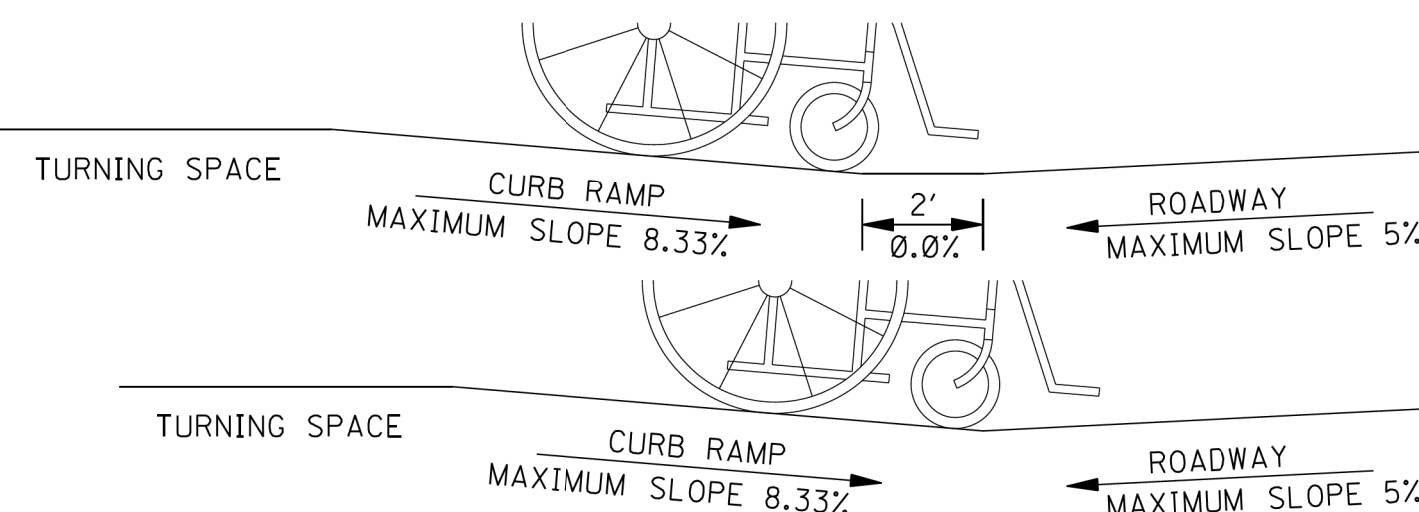
TYPE 4 – PARALLEL CURB RAMP

THE CURB BEHIND THE TURNING SPACE AND RAMPS IS NOT REQUIRED, BUT IS SUGGESTED FOR RETAINING SOIL AND PROVIDING AN EDGE FOR PEDESTRIANS WITH VISUAL IMPAIRMENTS.



TYPE 5 – DIAGONAL CURB RAMP

DIAGONAL CURB RAMPS ARE UNACCEPTABLE IN NEW CONSTRUCTION. THEY MAY BE USED FOR ALTERATIONS ONLY IF IT IS THE ONLY OPTION THAT WILL WORK.



COUNTER SLOPE CONDITIONS

**Michael Baker**  
INTERNATIONAL

310 NEW POINTE DRIVE  
RIDGELAND, MS 39157  
PH: (601) 608-8700 FAX: (601) 607-8701

| REVISION | BY | DESCRIPTION | DATE |
|----------|----|-------------|------|
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |

| DESIGN TEAM   |       |         |
|---------------|-------|---------|
| DESIGNED      | DRAWN | CHECKED |
|               |       |         |
| SCALE: 1"=30' | DATE: | 2019    |

**JMAA**  
Jackson Municipal Airport Authority

JACKSON MUNICIPAL AIRPORT AUTHORITY  
Jackson, Mississippi

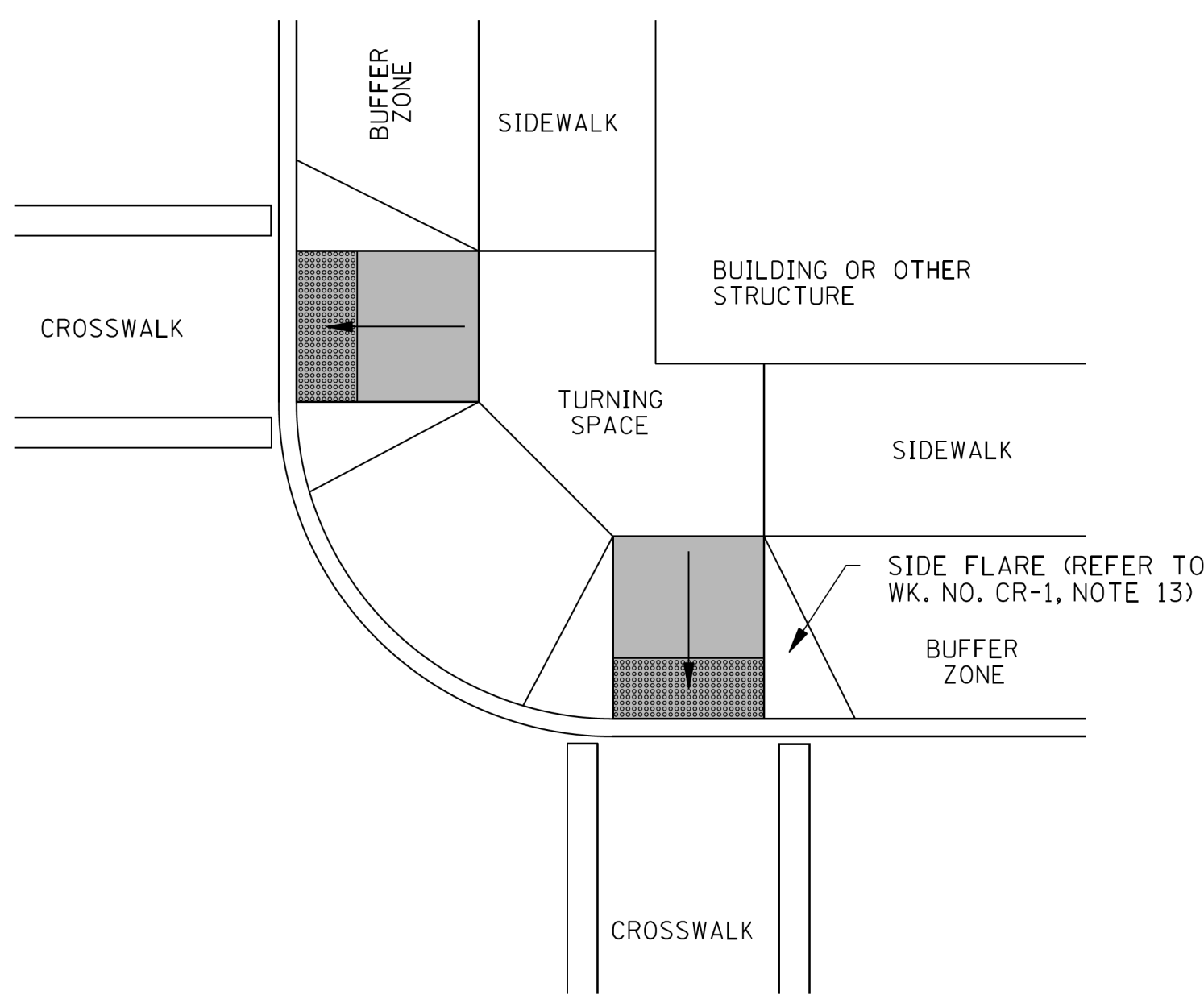
**CURB RAMPS: RAMP DESIGN ELEMENTS**

DRAWING NO.

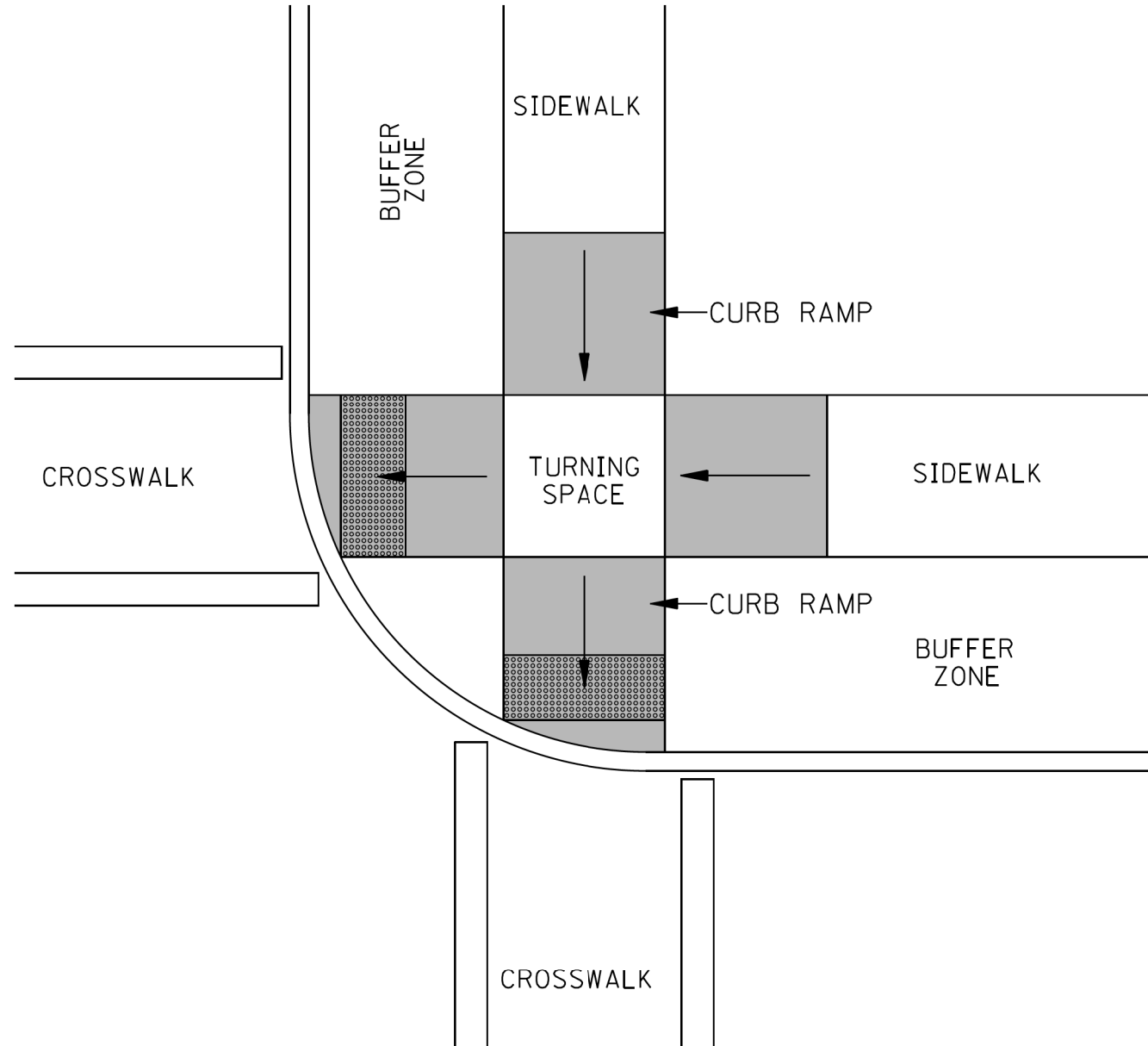
**CR-1**

SHEET 50

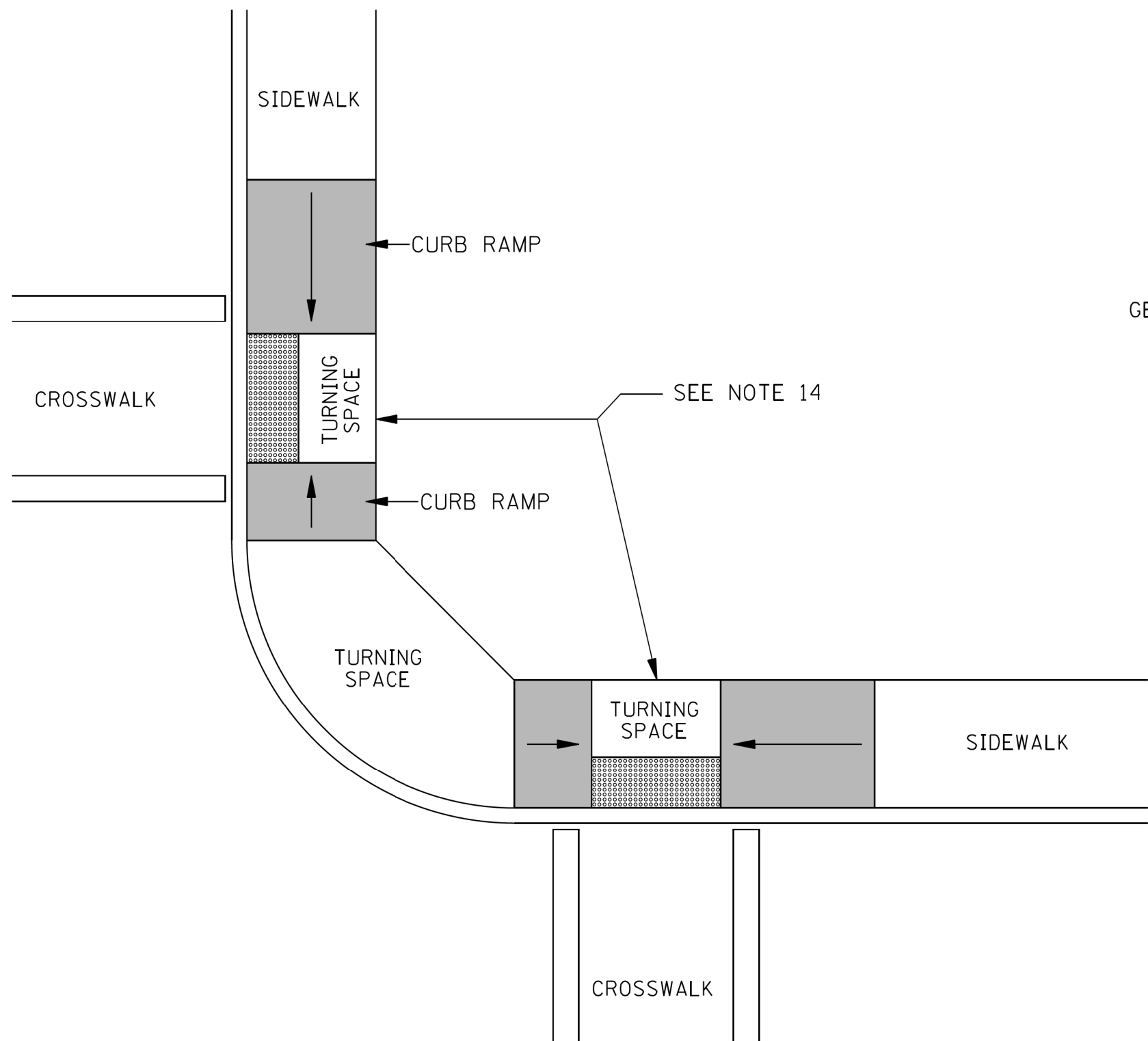




CURB RAMP CONFIGURATION: TYPE A



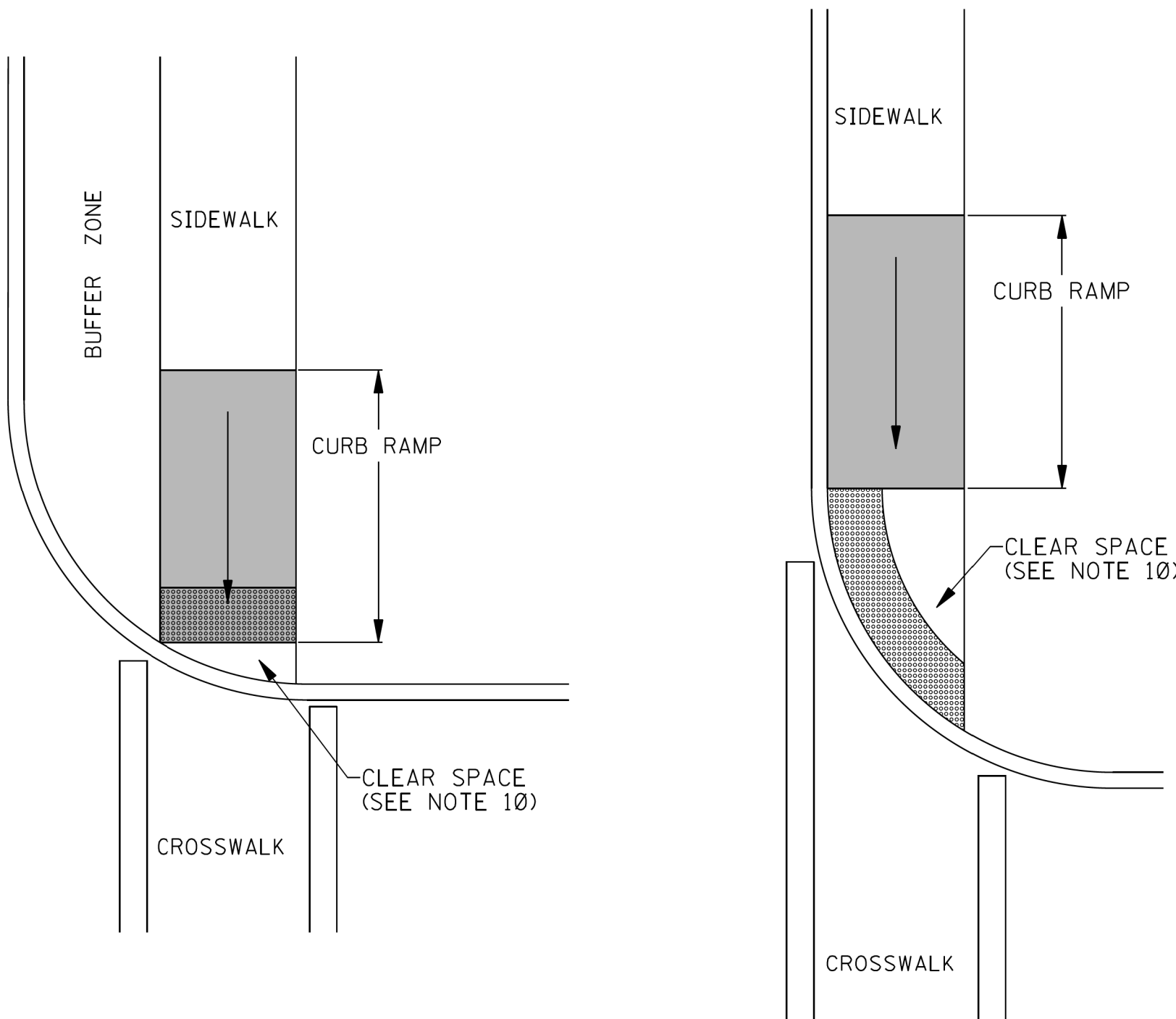
CURB RAMP CONFIGURATION: TYPE B



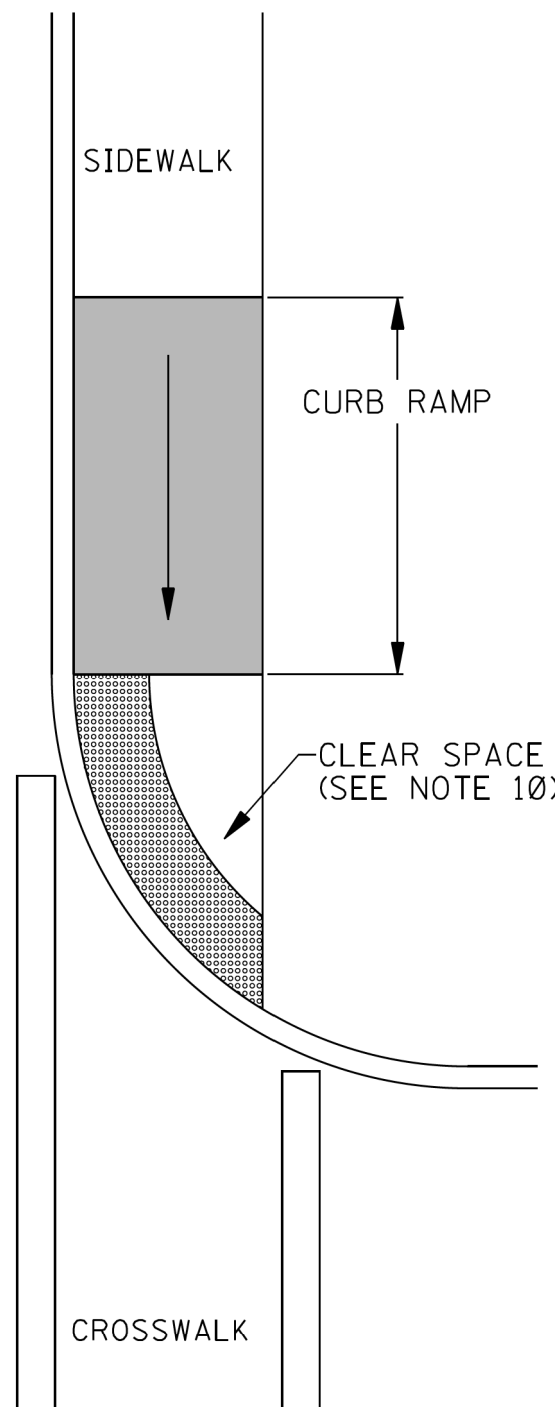
CURB RAMP CONFIGURATION: TYPE C

- GENERAL NOTES:
1. FOR DIMENSIONS & GEOMETRIC VALUES REFER TO WK. NO. CR-1.
  2. THE CONFIGURATIONS SHOWN GENERICALLY REPRESENT THE MOST COMMON SITUATIONS ENCOUNTERED. THEY ARE INTENDED TO PRESENT CURB RAMP DESIGN CONCEPTS. SITE CONDITIONS AT INDIVIDUAL LOCATIONS REQUIRE SPECIFIC DESIGNS. CURB RAMP DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF WK. NOS. CR-1, CR-2, CR-3 AND CR-4.
  3. COORDINATE TRAFFIC CONTROL DEVICES, UTILITY LOCATIONS, SIGNS, STREET FURNITURE AND DRAINAGE TO ENSURE A CONTINUOUS PEDESTRIAN ACCESS ROUTE AT ALL CURB RAMP LOCATIONS. GUIDANCE FOR CROSSWALK MARKINGS AND TRAFFIC CONTROL DEVICES IS PROVIDED IN THE MUTCD.
  4. DETECTABLE WARNINGS SHOWN ON THIS SHEET ARE FOR ILLUSTRATION ONLY. FOR SPECIFIC PLACEMENT ORIENTATIONS AND DIMENSIONS REFER TO WK. NO. CR-4.
  5. THE CROSS SLOPE OF CURB RAMPS, BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE 2% MAXIMUM (1.5% PREFERRED). AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
  6. DIAGONAL CURB RAMPS ARE UNACCEPTABLE IN NEW CONSTRUCTION. THEY MAY BE USED FOR ALTERATIONS ONLY IF IT IS THE ONLY OPTION THAT WILL WORK.
  7. GRATES SHALL NOT BE LOCATED ON CURB RAMPS, BLENDED TRANSITIONS, TURNING SPACES, OR LANDINGS. ACCESS COVERS OF SIMILAR SURFACES SHALL COMPLY WITH APPLICABLE SURFACE REQUIREMENTS.
  8. UTILITIES, SIGNS, AND OTHER FIXED OBJECTS SHALL NOT BE PLACED ON A CURB RAMP, PEDESTRIAN ACCESS ROUTE, OR IN A MANNER THAT INTERFERES WITH THE USE OF THE CURB RAMP.
  9. THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM, AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.
  10. THERE SHALL BE A CLEAR SPACE AT THE BOTTOM OF THE ALTERNATE PERPENDICULAR RETURNED CURB RAMP. IT SHALL SLOPE TO DRAIN RUNOFF TO STREET/GUTTER AND HAVE A MAXIMUM SLOPE OF 2% (1.5% PREFERRED).
  11. TURNING SPACES MAY OVERLAP WITH ADJACENT TURNING SPACES OR A SINGLE TURNING SPACE MAY SERVE MULTIPLE CURB RAMPS.
  12. TURNING SPACES MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.
  13. THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES WITHIN MEDIANS AND PEDESTRIAN REFUGE ISLANDS SHALL BE 5' MINIMUM.
  14. BEYOND THE BOTTOM GRADE BREAK, A TURNING SPACE OF 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

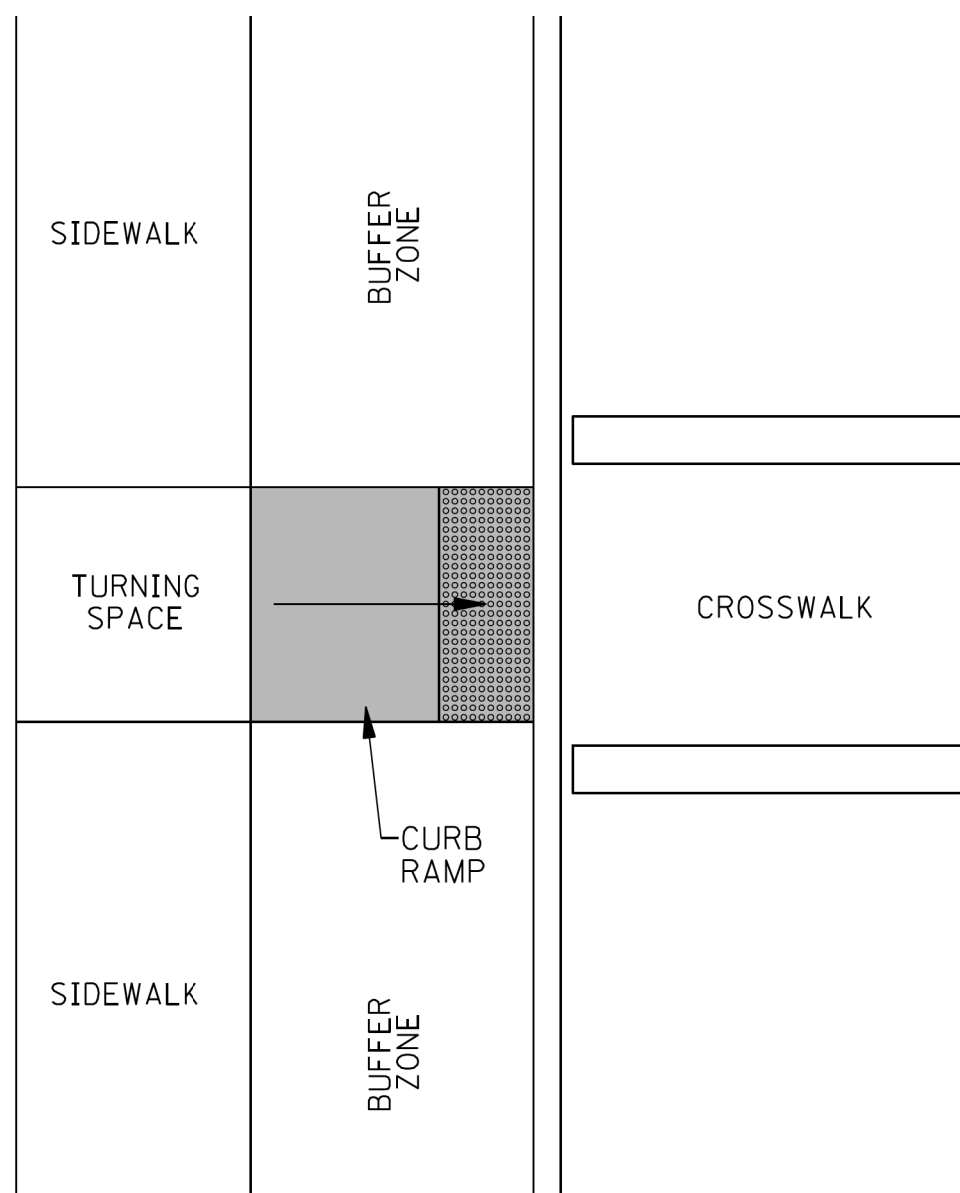
NOTE: SEE WK. NO. CR-4 FOR  
DETECTABLE WARNING DIMENSIONS  
AND PLACEMENT ORIENTATION.



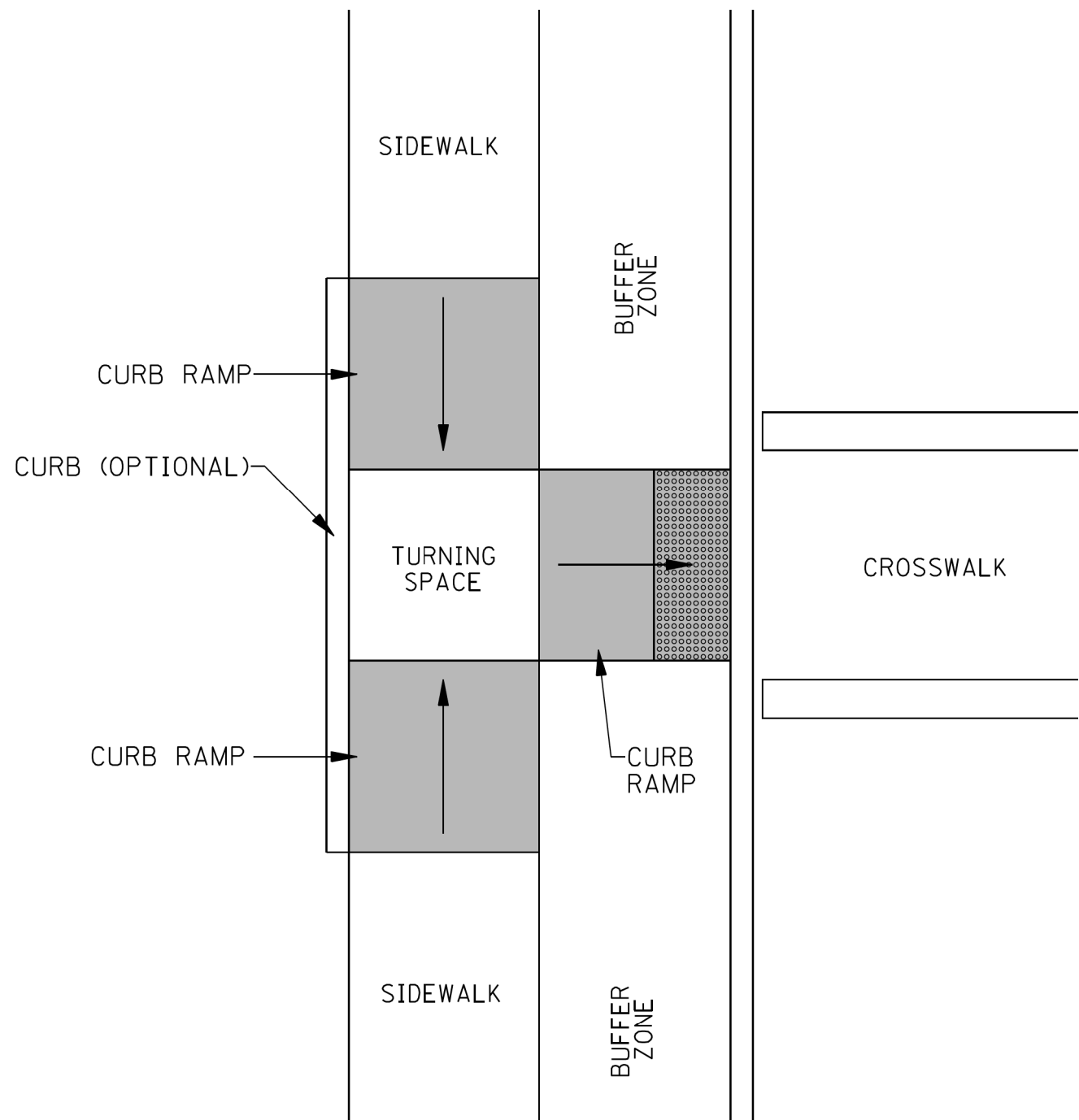
CURB RAMP CONFIGURATION: TYPE D



CURB RAMP CONFIGURATION: TYPE E



CURB RAMP CONFIGURATION: TYPE F



CURB RAMP CONFIGURATION: TYPE G  
MID BLOCK CROSSING

THE CURB BEHIND THE TURNING SPACE AND RAMPS IS NOT  
REQUIRED, BUT IS SUGGESTED FOR RETAINING SOIL AND  
PROVIDING AN EDGE FOR PEDESTRIANS WITH VISUAL  
IMPAIRMENTS.

|          |    |                   |      |  |
|----------|----|-------------------|------|--|
|          |    |                   |      |  |
|          |    |                   |      |  |
|          |    |                   |      |  |
|          |    |                   |      |  |
| REVISION | BY | DESCRIPTION       | DATE |  |
|          |    | DRAWING REVISIONS |      |  |

|               |       |            |
|---------------|-------|------------|
| DESIGN TEAM   |       |            |
| DESIGNED      | DRAWN | CHECKED    |
|               |       |            |
| SCALE: 1"=30' |       | DATE: 2019 |



GENERAL NOTES:

1. THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING UNIT (THE DOMES AND THE ENTIRE 2' LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.
2. ALL DETECTABLE WARNINGS SHOWN ON THIS SHEET SHALL BE PAID FOR - PER SQUARE FEET, UNLESS OTHERWISE NOTED IN THE PLANS.

DETECTABLE WARNING UNIT DIMENSIONS:

3. DETECTABLE WARNING SURFACES SHALL EXTEND 2' MINIMUM IN THE DIRECTION OF PEDESTRIAN TRAVEL. AT CURB RAMPS AND BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP RUN (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITION, OR TURNING SPACE. AT PEDESTRIAN AT-GRADE RAIL CROSSINGS NOT LOCATED WITHIN A STREET OR HIGHWAY, DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE CROSSING. AT BOARDING PLATFORMS FOR BUSES AND RAIL VEHICLES, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL LENGTH OF THE PUBLIC USE AREAS OF THE PLATFORM. AT BOARDING AND ALIGHTING AREAS AT SIDEWALK OR STREET LEVEL TRANSIT STOPS FOR RAIL VEHICLES, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL LENGTH OF THE TRANSIT STOP.

HOME ALIGNMENT:

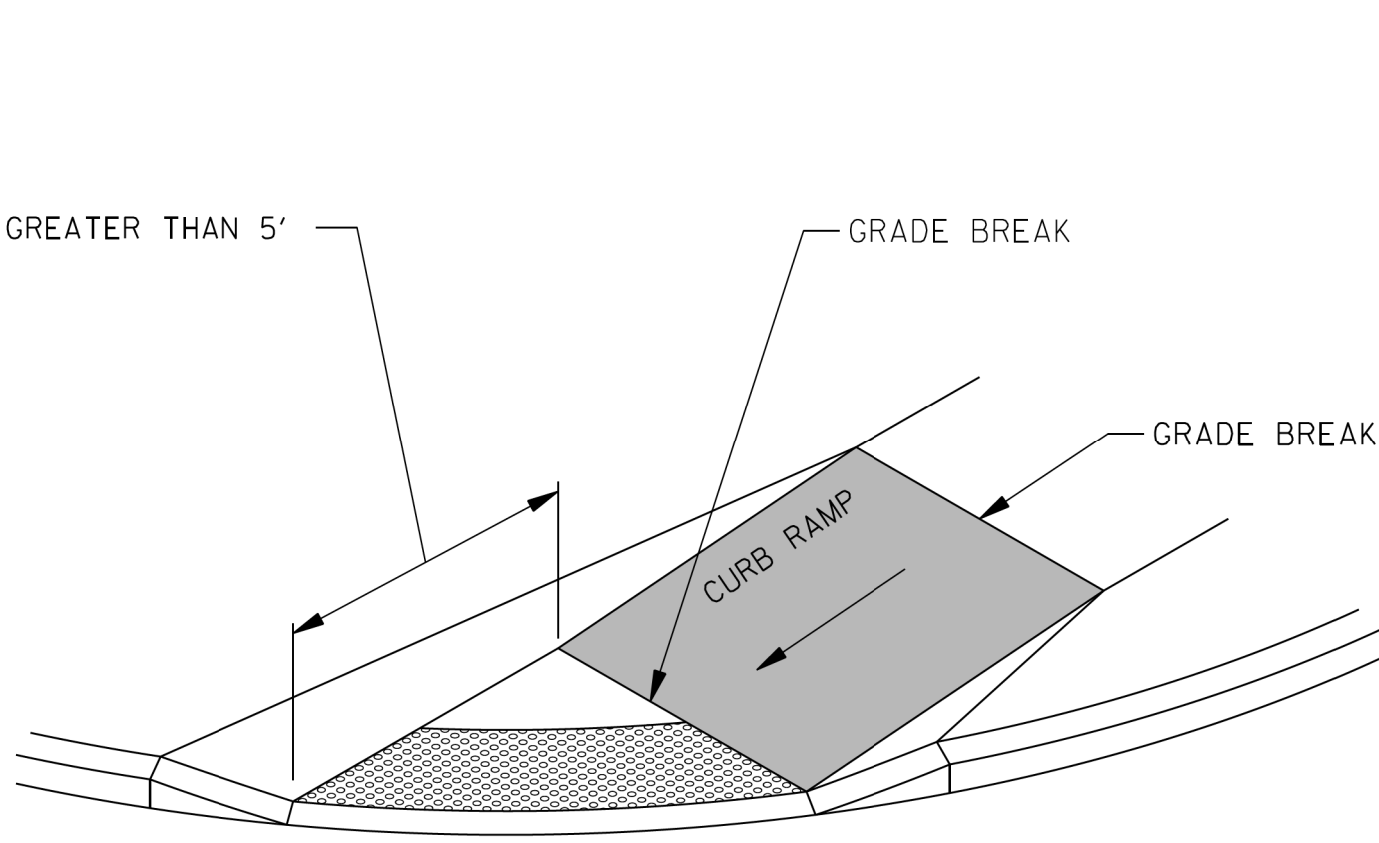
4. THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE GRADE BREAK AT THE RAMP LANDING OR BETWEEN THE CURB RAMP AND THE STREET.
5. WHERE DOMES ARE ARRAYED RADIALY THEY MAY DIFFER IN HOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET.

COLOR REQUIREMENTS:

6. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, STREET OR HIGHWAY, OR PEDESTRIAN ACCESS ROUTE SURFACE, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.

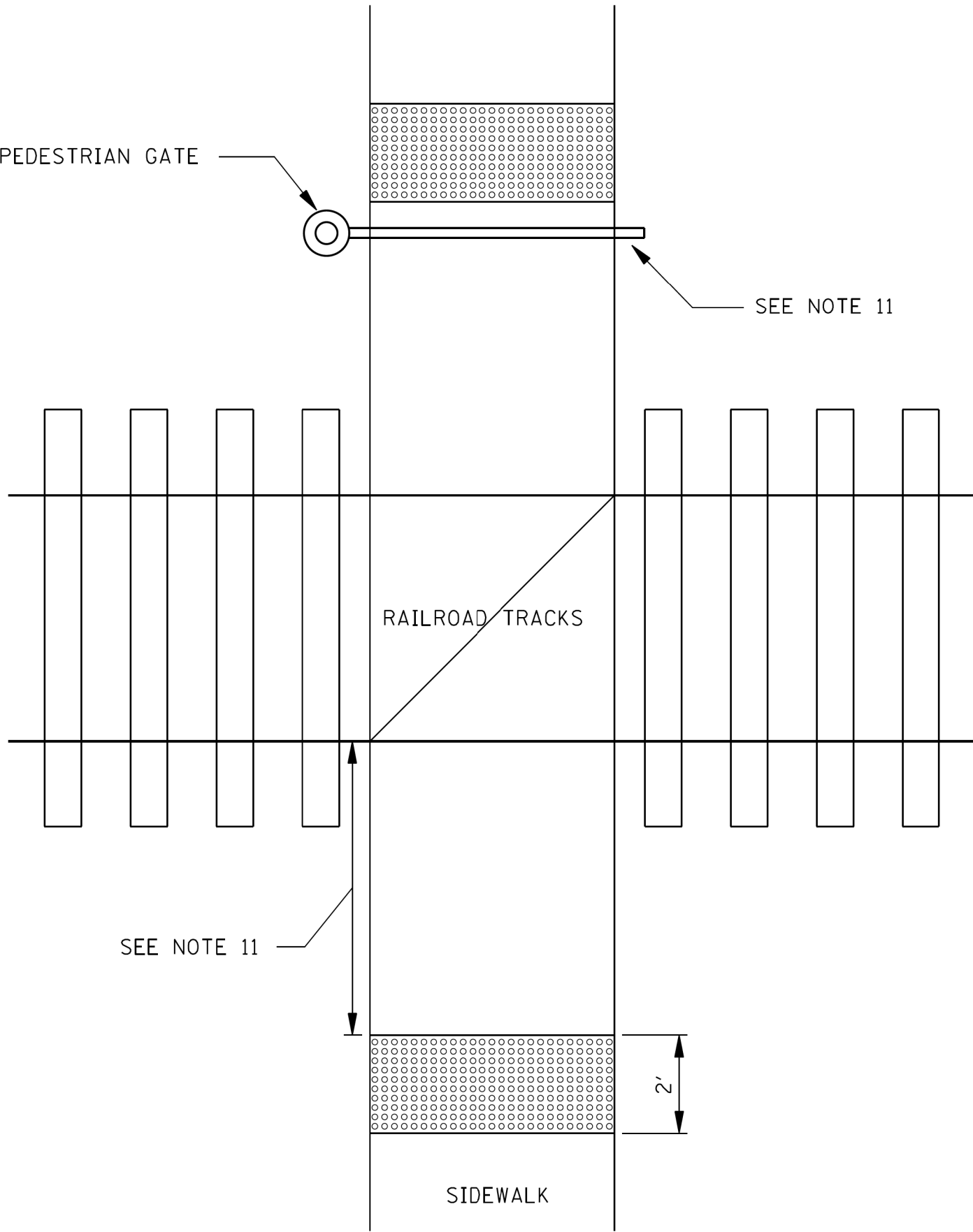
DETECTABLE WARNINGS LOCATIONS:

7. ON PERPENDICULAR CURB RAMPS, WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE IN FRONT OF THE BACK OF CURB, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE BACK OF CURB. WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS 5' OR LESS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE RAMP RUN WITHIN ONE HOME SPACING OF THE BOTTOM GRADE BREAK. WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS MORE THAN 5', DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE LOWER LANDING AT THE BACK OF CURB.
8. ON PARALLEL CURB RAMPS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE TURNING SPACE AT THE FLUSH TRANSITION BETWEEN THE STREET AND SIDEWALK.
9. ON BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE BACK OF CURB. WHERE RAISED PEDESTRIAN STREET CROSSINGS, DEPRESSED CORNERS, OR OTHER LEVEL PEDESTRIAN STREET CROSSINGS ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE FLUSH TRANSITION BETWEEN THE STREET AND THE SIDEWALK.
10. AT CUT-THROUGH PEDESTRIAN REFUGE ISLANDS, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE EDGES OF THE PEDESTRIAN ISLAND AND SHALL BE SEPARATED BY A 2' MINIMUM LENGTH OF SURFACE WITHOUT DETECTABLE WARNINGS.
11. AT PEDESTRIAN AT-GRADE RAIL CROSSINGS NOT LOCATED WITHIN A STREET OR HIGHWAY, DETECTABLE WARNING SURFACES SHALL BE PLACED ON EACH SIDE OF THE RAIL CROSSING. THE EDGE OF THE DETECTABLE WARNING SURFACE NEAREST THE RAIL CROSSING SHALL BE 6' MINIMUM AND 15' MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. WHERE PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL.
12. AT BOARDING PLATFORMS FOR BUSES AND RAIL VEHICLES, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE BOARDING EDGE OF THE PLATFORM.
13. AT BOARDING AND ALIGHTING AREAS AT SIDEWALK OR STREET LEVEL TRANSIT STOPS FOR RAIL VEHICLES, DETECTABLE WARNING SURFACES SHALL BE PLACED AT THE SIDE OF THE BOARDING AND ALIGHTING AREA FACING THE RAIL VEHICLES.

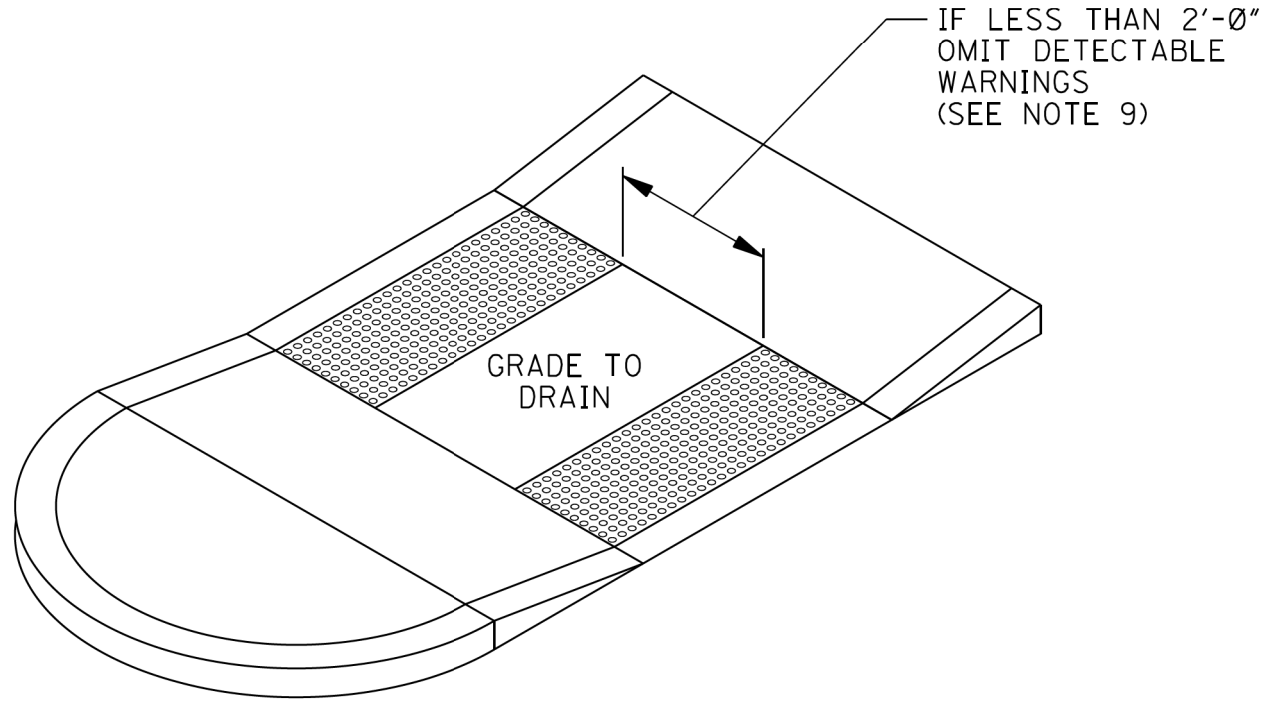


DETECTABLE WARNING PLACEMENT DETAIL 1

NOTE: IF THE DISTANCE FROM THE GRADE BREAK IS GREATER THAN OF EQUAL TO 5', DETECTABLE WARNINGS SHALL BE PLACED ALONG THE RADIUS OF THE CURVE AS SHOWN IN THE ABOVE DETAIL.

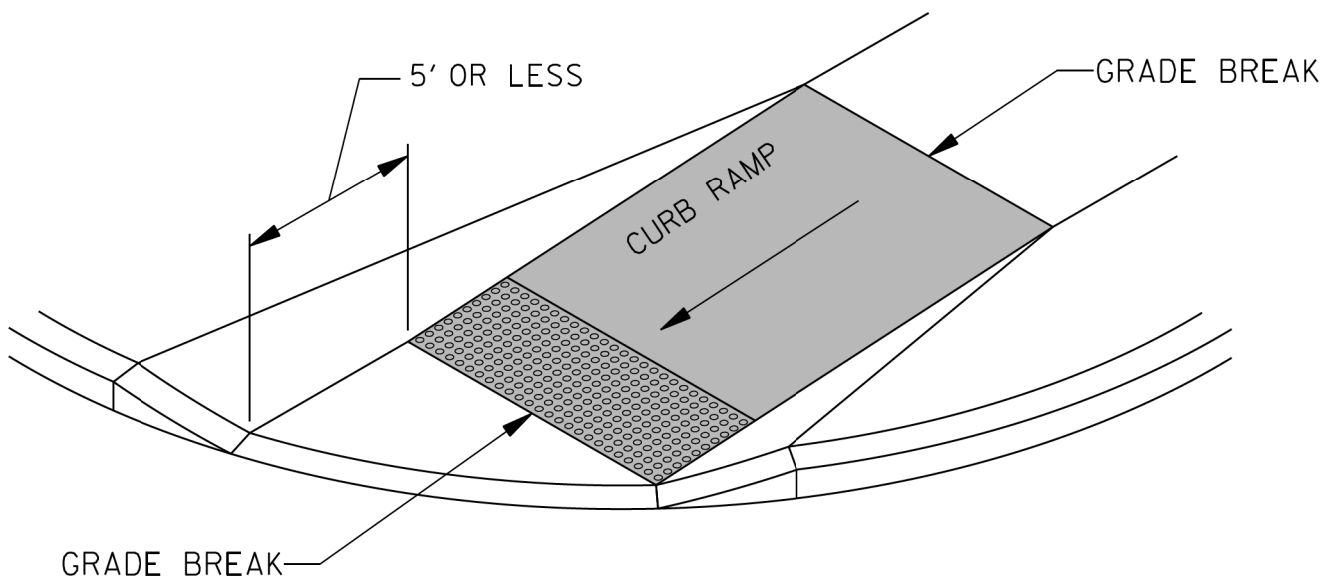


DETECTABLE WARNINGS AT RAILROAD CROSSING



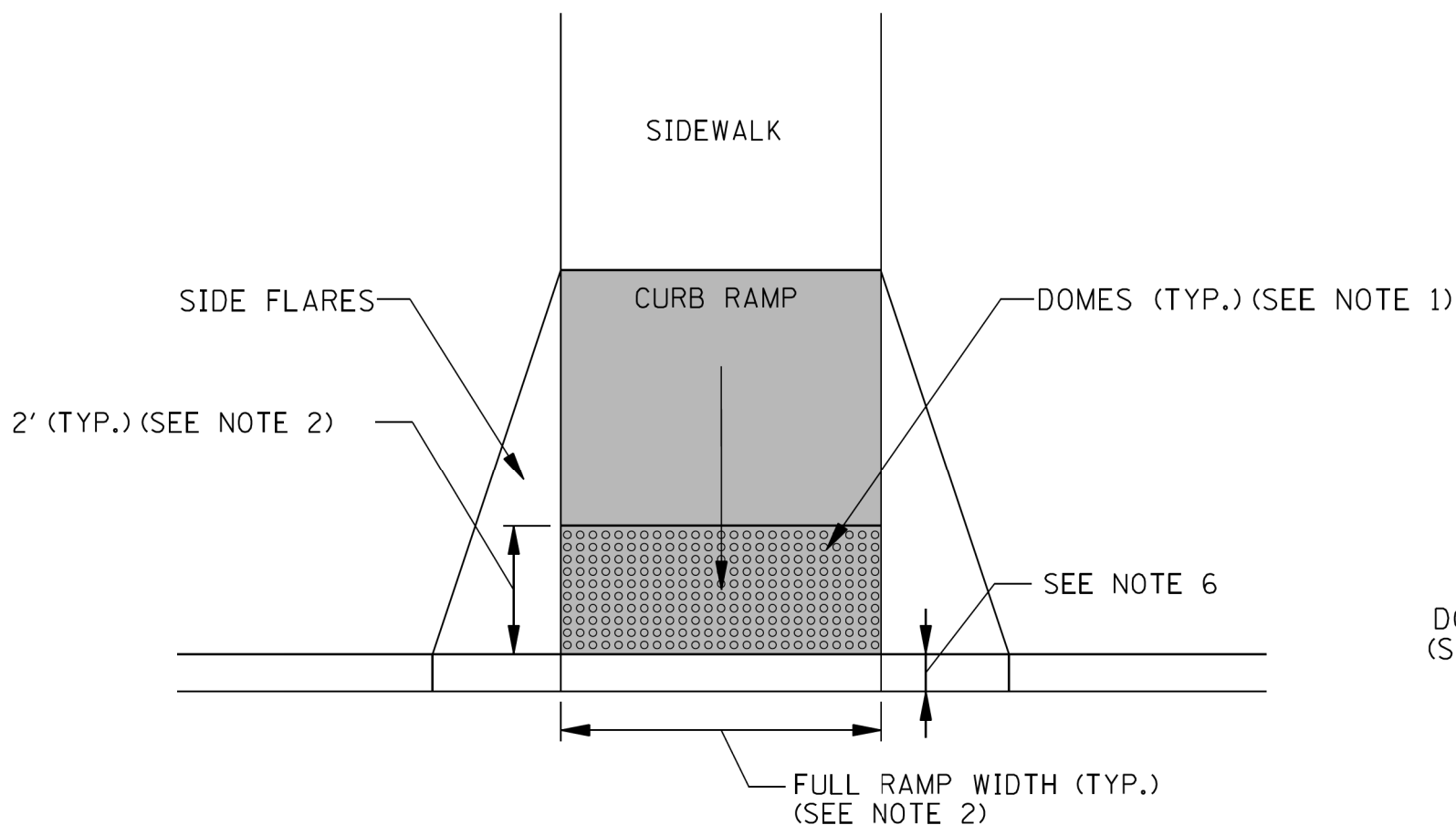
DETECTABLE WARNINGS AT MEDIAN ISLANDS

NON-ELEVATED CROSSING

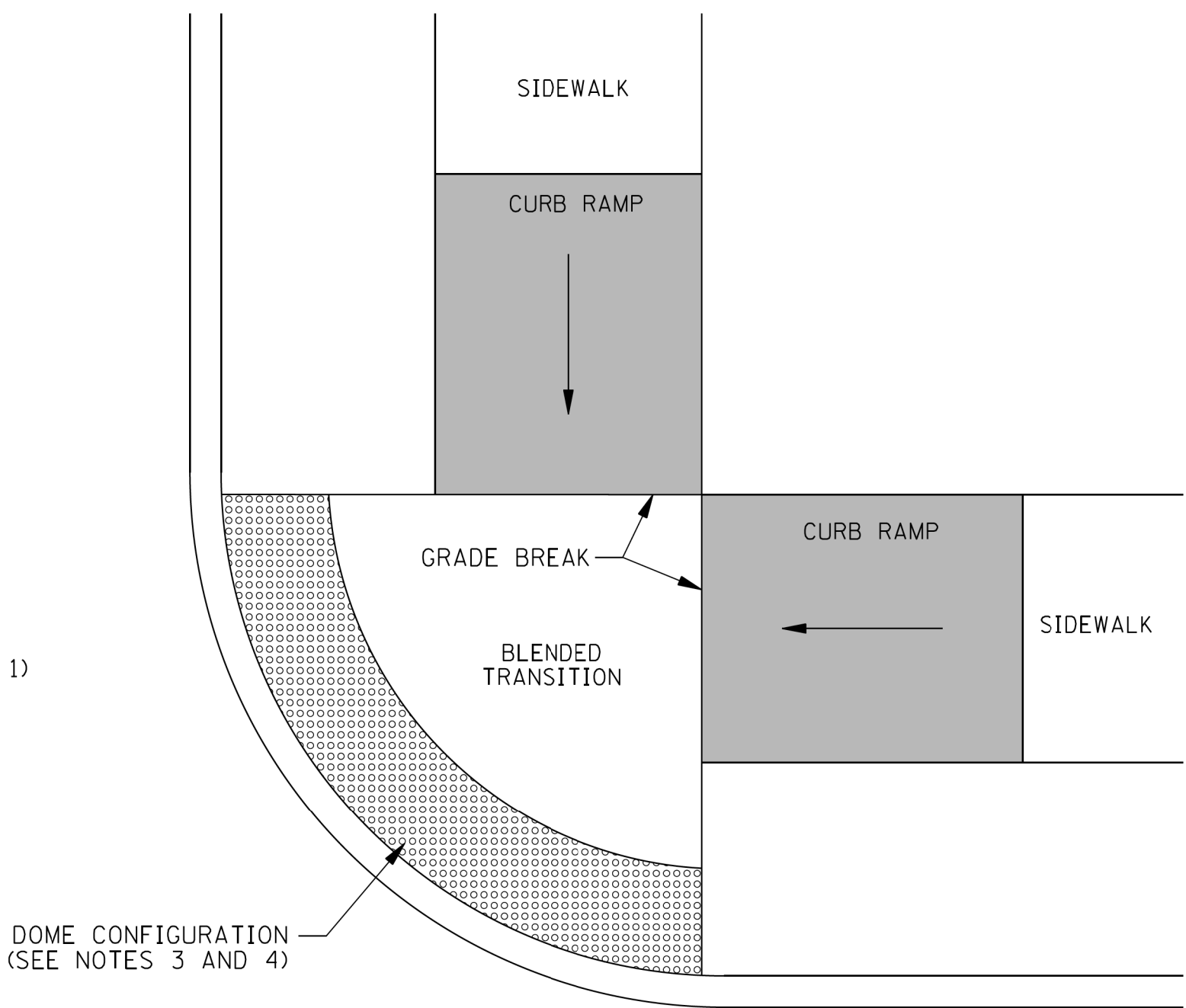


DETECTABLE WARNING PLACEMENT DETAIL 2

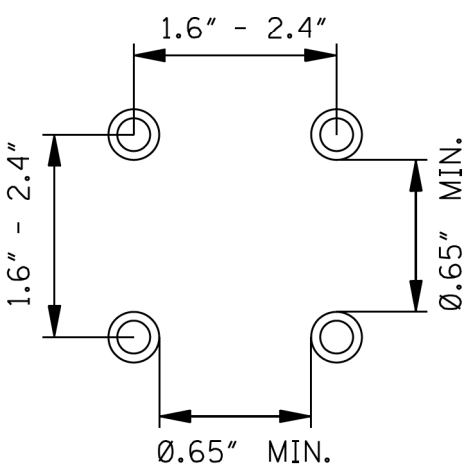
NOTE: IF THE DISTANCE FROM THE GRADE BREAK IS LESS THAN OR EQUAL TO 5', DETECTABLE WARNINGS SHALL BE PLACED ON THE CURB RAMP ALONG THE BOTTOM GRADE BREAK WITH ONE CORNER 5" TO 9" FROM THE FRONT OF THE CURB OR EDGE OF THE ROADWAY.



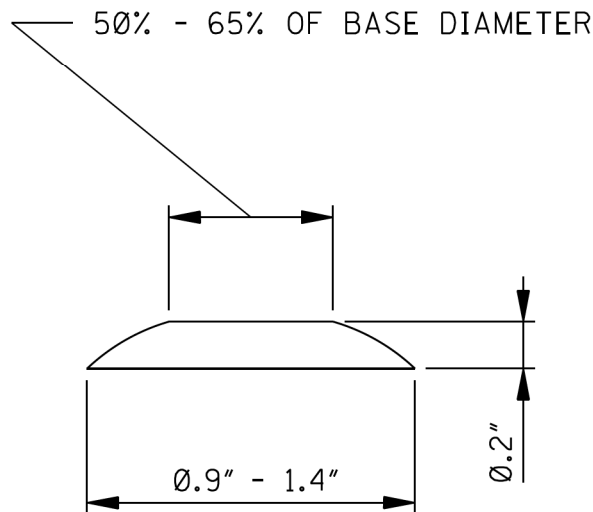
DETECTABLE WARNING AT CURB RAMP



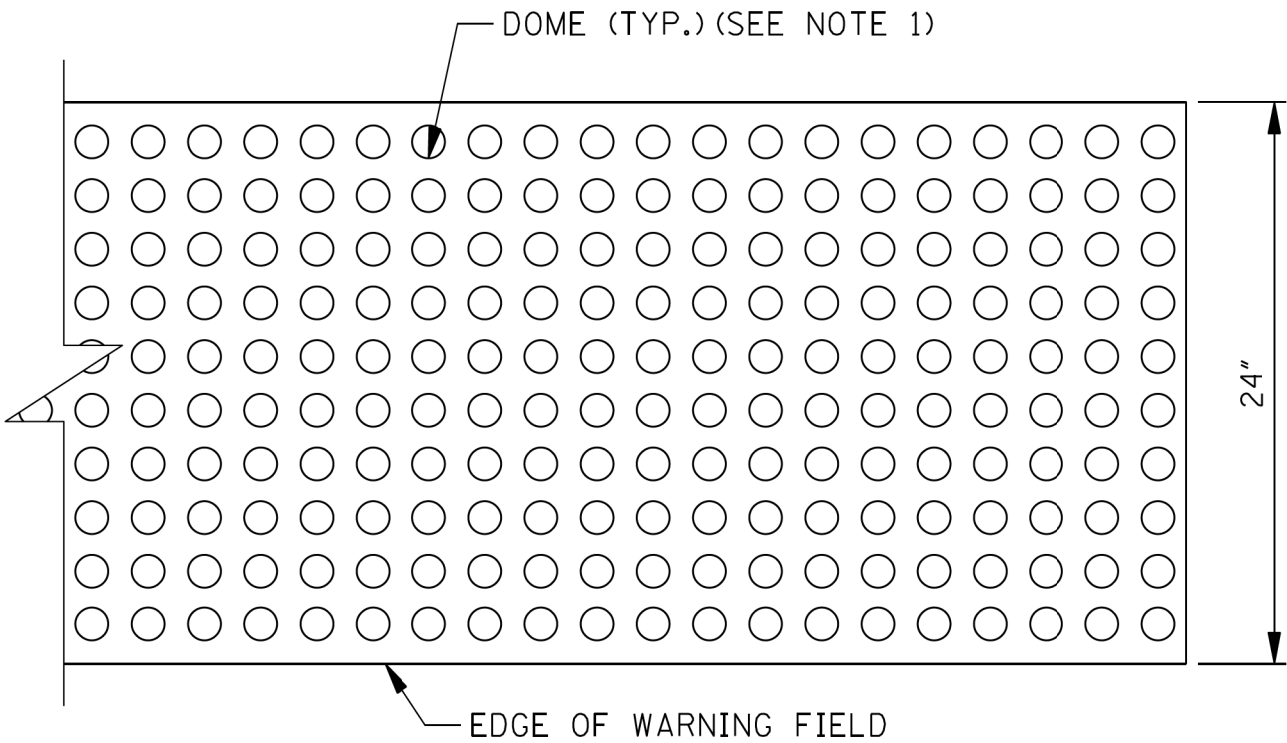
DETECTABLE WARNING AT BLENDED TRANSITION (CONFIGURATION: TYPES K AND J)



HOME SPACING



HOME SECTION



DETECTABLE WARNING LAYOUT

| REVISION | BY | DESCRIPTION | DATE |
|----------|----|-------------|------|
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |
|          |    |             |      |

| DESIGN TEAM   |       |            |
|---------------|-------|------------|
| DESIGNED      | DRAWN | CHECKED    |
|               |       |            |
| SCALE: 1"=30' |       | DATE: 2019 |