

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                     |              |                    |              |           |
|---------------------|--------------|--------------------|--------------|-----------|
| F.A. RTE.           | SECTION      | COUNTY             | TOTAL SHEETS | SHEET NO. |
| VAR.                | 2020-243-GRR | VARIOUS            | 32           | 1         |
| FED. ROAD DIST. NO. | ILLINOIS     | CONTRACT NO. 62N13 |              |           |

D-91-050-21

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# PROPOSED HIGHWAY PLANS

**ROUTE: VARIOUS EXPRESSWAYS AND ARTERIAL  
HIGHWAYS – DISTRICT ONE  
SECTION: 2020-243-GRR  
GUARDRAIL REPAIRS  
VARIOUS COUNTIES  
C-91-050-21**



THIS SECTION IS LOCATED ALONG VARIOUS ROUTES WITHIN COOK, KANE, DUPAGE, LAKE, MCHENRY AND WILL COUNTIES.

**SEE LOCATION MAPS  
SHEETS 5 THRU 13**

C.U.A.N.  
CHICAGO UTILITY ALERT NETWORK  
1-312-744-7000

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

PROJECT MANAGER: J. ALAIN MIDY (847) 221-3056

CONTRACT NO. 62N13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 13, 2020  
*Anthony D'Amico* REGIONAL ENGINEER  
December 4, 2020  
*Scott A. Elk*  
ENGINEER OF DESIGN AND ENVIRONMENT  
December 4, 2020  
*James J. ...*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 13

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

**INDEX OF SHEETS**

- 1. TITLE SHEET
- 2. INDEX OF SHEETS  
LIST OF APPLICABLE STATE STANDARDS  
GENERAL NOTES
- 3-4. SUMMARY OF QUANTITIES
- 5. McHENRY COUNTY LOCATION MAP
- 6. LAKE COUNTY LOCATION MAP
- 7. NORTH KANE COUNTY LOCATION MAP
- 8. NORTH DU PAGE COUNTY LOCATION MAP
- 9. NORTH COOK COUNTY LOCATION MAP
- 10. SOUTH COOK COUNTY LOCATION MAP
- 11. SOUTH KANE COUNTY LOCATION MAP
- 12. SOUTH DU PAGE COUNTY LOCATION MAP
- 13. WILL COUNTY LOCATION MAP
- 14. TYPICAL DETAIL TO ANCHOR STEEL PLATE BEAM  
GUARDRAIL ON CONCRETE (BM-02)
- 15. TYPICAL DETAIL FOR GUARDRAIL ANCHOR BLOCK REPAIR (BM-03)
- 16. TYPICAL DETAILS FOR STEEL PLATE BEAM  
GUARDRAIL ANCHORAGE REPAIR (BM-04)
- 17. DETAIL FOR CENTER LONGITUDINAL GUARDRAIL JOINT (BM-05)
- 18. DETAIL OF STEEL PLATE BEAM GUARDRAIL SPECIAL (BM-06)
- 19. DETAIL OF GUARDRAIL SUPPORT AND END ANCHORAGE (BM-07)
- 20. DETAIL OF THRIE-BEAM GUARDRAIL  
WITH MODIFIED OFFSET BLOCK
- 21. STEEL PLATE BEAM GUARDRAIL STEEL BLOCK-OUT DETAIL
- 22. CURB REMOVAL (PARTIAL) AND SHOULDER WIDENING FOR  
TRAFFIC BARRIER TERMINAL ,TYPE 1 SPECIAL
- 23. STEEL BRIDGE RAIL DETAIL
- 24-26. T6 TERMINAL FOR USE WITH 21" HIGH SPBGR (BM-22)
- 27. ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)
- 28. TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE  
AND MULTI-LANE WEAVE TC-09)
- 29. TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,  
INTERSECTIONS AND DRIVEWAYS (TC-10)
- 30. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TC-14)
- 31. TRAFFIC CONTROL DETAIL FOR SHOULDER CLOSURE AND  
PARTIAL RAMP CLOSURES (TC-17)
- 32. SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE  
OPENINGS (TC-18)

**LIST OF STATE STANDARDS**

|             |   |
|-------------|---|
| 630001-12   | STEEL PLATE BEAM GUARDRAIL  |
| 630301-09   | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS                      |
| 631006-08   | TRAFFIC BARRIER TERMINAL, TYPE 1B   |
| 631011-10   | TRAFFIC BARRIER TERMINAL, TYPE 2  |
| 631026-06   | TRAFFIC BARRIER TERMINAL, TYPE 5  |
| 631031-17   | TRAFFIC BARRIER TERMINAL, TYPE 6  |
| 701006-05   | OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE                        |
| 701011-04   | OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY                                      |
| 701101-05   | OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE                     |
| 701106-02   | OFF-RD OPERATIONS, MULTILANE, > 15' AWAY  |
| 701201-05   | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH                             |
| 701301-04   | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS                                     |
| 701311-03   | LANE CLOSURE, 2L, 2W, MOVING OPERATIONS, DAY ONLY                               |
| 701336-07   | LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS ≥ 45 MPH                 |
| 701400-10   | APPROACH TO LANE CLOSURE, FREEWAY/ EXPRESSWAY                                   |
| 701401-12   | LANE CLOSURE, FREEWAY/ EXPRESSWAY   |
| 701411-09   | LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEED ≥ 45 MPH           |
| 701421-08   | LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY FOR SPEEDS > 45 MPH TO 55 MPH      |
| * 701426-09 | LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS ≥ 45 MPH |
| 701427-05   | LANE CLOSURE, MULTILANE, INTERMITTANT OR MOVING OPERATIONS ≤ 40 MPH             |
| 701428-01   | TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY                            |
| 701501-06   | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED   |
| 701502-09   | URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE                   |
| 701601-09   | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W, WITH NONTRAVERSABLE MEDIAN             |
| 701606-10   | URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN                         |
| 701701-10   | URBAN LANE CLOSURE, MULTILANE INTERSECTION                                      |
| 701801-06   | LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE                   |
| 701901-08   | TRAFFIC CONTROL DEVICES   |
| 720011-01   | METAL POSTS FOR SIGNS, MARKERS & DELINEATORS                                    |
| 782006-01   | GUARDRAIL & BARRIER WALL REFLECTOR MOUNTING DETAILS                             |

**GENERAL NOTES**

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 OR "CUAN" AT (312) 744-700 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

ALL WORK IS TO BE REPLACED IN KIND OR AS INDICATED ON THE CONTRACT QUANTITY SHEET.

GUARDRAIL WORK WILL INCLUDE ALIGNMENT AS NECESSARY TO RESTORE THE RAIL TO THE ORIGINAL CONDITIONS.

REMOVAL OF DAMAGED MATERIALS WILL INCLUDE DISMANTLING, LOADING, HAULING AND DISPOSAL. THE WORK SITE WILL BE LEFT IN A SAFE AND ORDERLY CONDITION.

NO MATERIAL SHOULD BE LEFT ON OR NEAR THE ROADWAY DURING NON-WORKING HOURS.

ANY NECESSARY TRAFFIC CONTROL WILL BE PROVIDED BY THE CONTRACTOR; APPROPRIATE STANDARDS ARE HEREWITH ATTACHED.

THE LIMITS OF THE DAMAGED GUARDRAIL WILL BE MARKED WITH PAINT. THE REPLACEMENT PARTS AND THE QUANTITIES INDICATED ARE WITHIN THESE LIMITS AS MARKED.

REMOVED GUARDRAIL THAT IS NOT REPLACED ON THE SAME DAY MUST BE DELINEATED WITH LIGHTED BARRICADES. NO LOCATIONS WILL BE LEFT WITHOUT EITHER LIGHTED BARRICADES OR RESTORED GUARDRAIL AT ANY TIME.

GUARDRAIL MARKERS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS.

THE CONTRACTOR SHALL TELEPHONE THE IDOT BUREAU OF TRAFFIC OPERATIONS, ELECTRICAL MAINTENANCE SECTION AT 708-524-2145 TO REQUEST THE LOCATE FOR UNDERGROUND ELECTRICAL AND/OR FIBER CABLE PRIOR TO ANY DIGGING AS PER THE CONTRACT.

REMOVAL OF EXISTING TERMINAL SECTIONS INCLUDED IN COST OF NEW TERMINAL SECTIONS

THE CONTRACTOR SHALL SUBMIT ALL DAILY LANE, RAMP AND SHOULDER CLOSURES VIA WWW.IDOTLCS.COM AT LEAST 24 HOURS IN ADVANCE OF ALL DAILY LANE, AND RAMP AND SHOULDER CLOSURES. THE CONTRACTOR SHALL REQUEST AND GAIN THE APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT (847) 705-4151 OR (847) 705-4155.

THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

\* MOVING LANE CLOSURES NOT PERMITTED ON EXPRESSWAYS

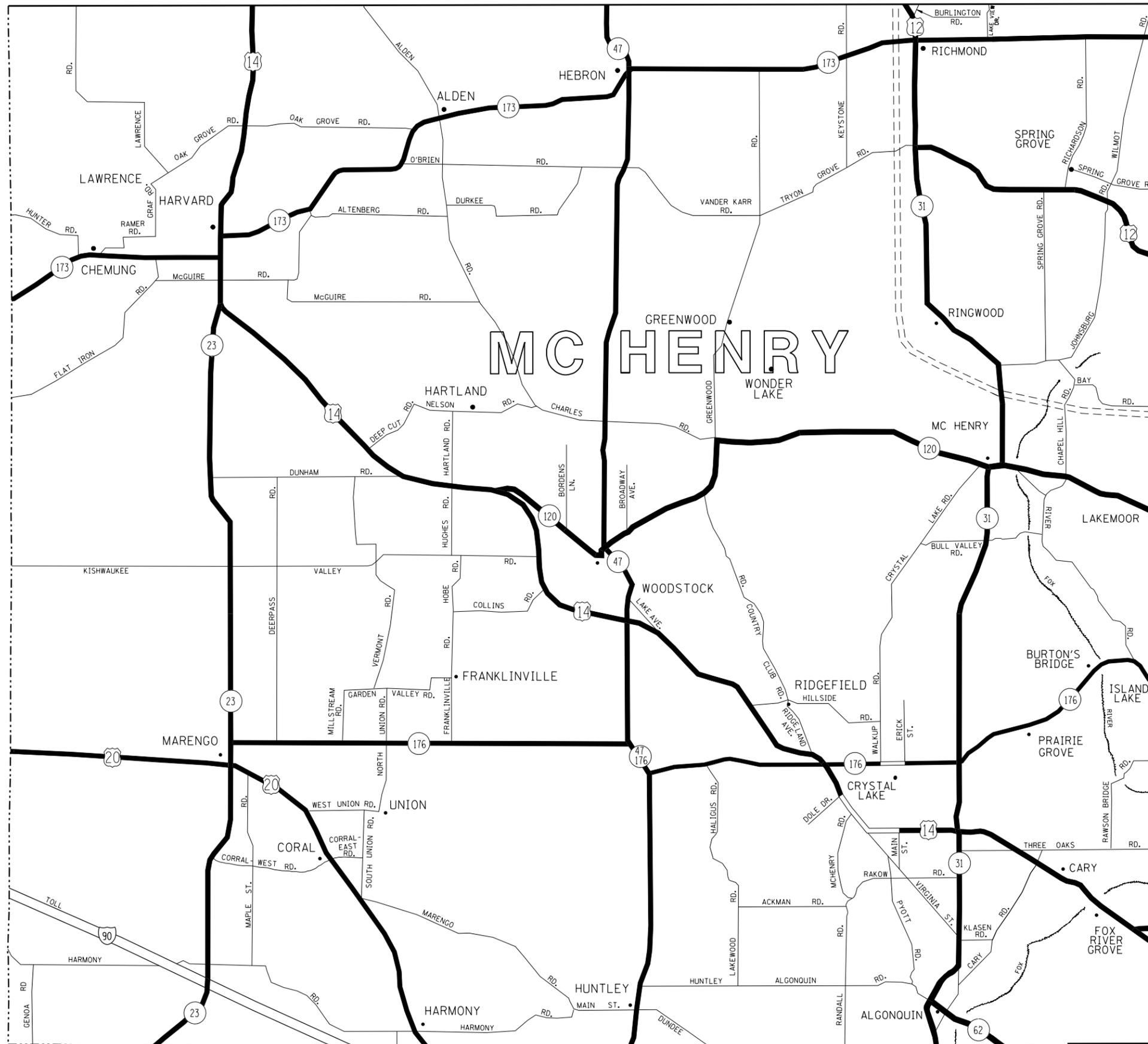
REV-SEP

|   |                    |            |           |   |   |  |  |                    |              |         |              |           |
|---|--------------------|------------|-----------|---|---|--|--|--------------------|--------------|---------|--------------|-----------|
| FILE NAME =   | USER NAME = midyja | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES</b> |  |  | F.A. RTE.          | SECTION      | COUNTY  | TOTAL SHEETS | SHEET NO. |
| pw\plnroom.dot,illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\0134218-sht-pln.dgn |                    | CHECKED -  | REVISED - |   |   |  |  | VAR.               | 2020-243-GRR | VARIOUS | 32           | 2         |
| PLOT SCALE = 100.0000' / 1in.   |                    | DATE -     | REVISED - |   | SCALE: SHEET NO. OF SHEETS STA. TO STA.                   |  |  | CONTRACT NO. 62N13 |              |         |              |           |
| PLOT DATE = 10/10/2020  |                    |            |           |   | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT             |  |  |                    |              |         |              |           |

| SUMMARY OF QUANTITIES |  |      | URBAN<br>TOTAL<br>QUANTITIES | CONSTRUCTION TYPE CODE 0021 |                               |  |  |  | SUMMARY OF QUANTITIES |  |      | URBAN<br>TOTAL<br>QUANTITIES | CONSTRUCTION TYPE CODE 0021 |                               |  |  |  |
|-----------------------|--|------|------------------------------|-----------------------------|-------------------------------|--|--|--|-----------------------|--|------|------------------------------|-----------------------------|-------------------------------|--|--|--|
| CODE NO               | ITEM   | UNIT |                              | 100%<br>STATE<br>0021       | 100%<br>STATE<br>MCHD<br>0021 |  |  |  | CODE NO               | ITEM   | UNIT |                              | 100%<br>STATE<br>0021       | 100%<br>STATE<br>MCHD<br>0021 |  |  |  |
| 63000001              | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS   | FOOT | 386                          | 309                         | 77                            |  |  |  | X6300222              | CONNECTING END SECTION                         | EACH | 3                            | 2                           | 1                             |  |  |  |
| 63100041              | TRAFFIC BARRIER TERMINAL, TYPE 1B                  | EACH | 3                            | 2                           | 1                             |  |  |  | X6300224              | RETURN END SECTION                             | EACH | 3                            | 2                           | 1                             |  |  |  |
| 63100045              | TRAFFIC BARRIER TERMINAL, TYPE 2                   | EACH | 11                           | 9                           | 2                             |  |  |  | X6300225              | SINGLE END SECTION                             | EACH | 17                           | 14                          | 3                             |  |  |  |
| 63100070              | TRAFFIC BARRIER TERMINAL, TYPE 5                   | EACH | 3                            | 2                           | 1                             |  |  |  | X6300230              | STEEL POSTS                                    | EACH | 1262                         | 1010                        | 252                           |  |  |  |
| 63100085              | TRAFFIC BARRIER TERMINAL, TYPE 6                   | EACH | 6                            | 5                           | 1                             |  |  |  | X6300310              | REMOVE AND REPLACE GUARDRAIL CHANNEL           | EACH | 66                           | 53                          | 13                            |  |  |  |
| 63100167              | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH | 62                           | 50                          | 12                            |  |  |  | X6300610              | THRIE BEAM GUARDRAIL ELEMENT PLATES            | EACH | 7                            | 6                           | 1                             |  |  |  |
| 63100169              | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED  | EACH | 10                           | 8                           | 2                             |  |  |  | X6300620              | THRIE-BEAM MODIFIED BLOCKS                     | EACH | 7                            | 6                           | 1                             |  |  |  |
| 78200005              | GUARDRAIL REFLECTORS, TYPE A                       | EACH | 506                          | 405                         | 101                           |  |  |  | X6300630              | THRIE-BEAM POSTS                               | EACH | 7                            | 6                           | 1                             |  |  |  |
| 72501000              | TERMINAL MARKER - DIRECT APPLIED                   | EACH | 23                           | 18                          | 5                             |  |  |  | X6300640              | THRIE BEAM RADIUS ELEMENT PLATES               | EACH | 4                            | 3                           | 1                             |  |  |  |
| X0321563              | REPAIR SPECIAL TRAFFIC BARRIER TERMINAL TYPE 1     | EACH | 322                          | 258                         | 64                            |  |  |  | X6310163              | TRAFFIC BARRIER TERMINAL, TYPE 1, NOSE         | EACH | 10                           | 8                           | 2                             |  |  |  |
| X2300001              | MISSING OR FAILED ANCHOR CABLES                    | EACH | 16                           | 13                          | 3                             |  |  |  | X6310177              | TRAFFIC BARRIER TERMINAL, TYPE 3 (SPECIAL)     | EACH | 4                            | 3                           | 1                             |  |  |  |
| X2300002              | MISSING OR FAILED LAG BOLTS                        | EACH | 16                           | 13                          | 3                             |  |  |  | X6310203              | TRAFFIC BARRIER TERMINAL, TYPE 3 SPECIAL, NOSE | EACH | 3                            | 2                           | 1                             |  |  |  |
| X4402302              | CURB REMOVAL (PARTIAL)                             | FOOT | 149                          | 119                         | 30                            |  |  |  | X6330800              | GUARDRAIL POST VERTICAL ADJUSTMENT             | EACH | 23                           | 18                          | 5                             |  |  |  |
| X6300210              | GUARDRAIL BLOCKS                                   | EACH | 1631                         | 1305                        | 326                           |  |  |  | X6331105              | STEEL POSTS, MODIFIED                          | EACH | 29                           | 23                          | 6                             |  |  |  |
| X6300215              | RAIL ELEMENT PLATES                                | EACH | 2078                         | 1662                        | 416                           |  |  |  | X6331110              | STEEL POSTS, SPECIAL                           | EACH | 18                           | 14                          | 4                             |  |  |  |
| X6300217              | RAIL ELEMENT PLATES (RADIUS)                       | EACH | 111                          | 89                          | 22                            |  |  |  | Z0007124              | STEEL RAILING (SPECIAL)                        | FOOT | 55                           | 44                          | 11                            |  |  |  |

REV-SEP





**DISTRICT NO. 1**

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION**
- FUTURE HIGHWAYS**
- VARIOUS AGENCIES HIGHWAYS**

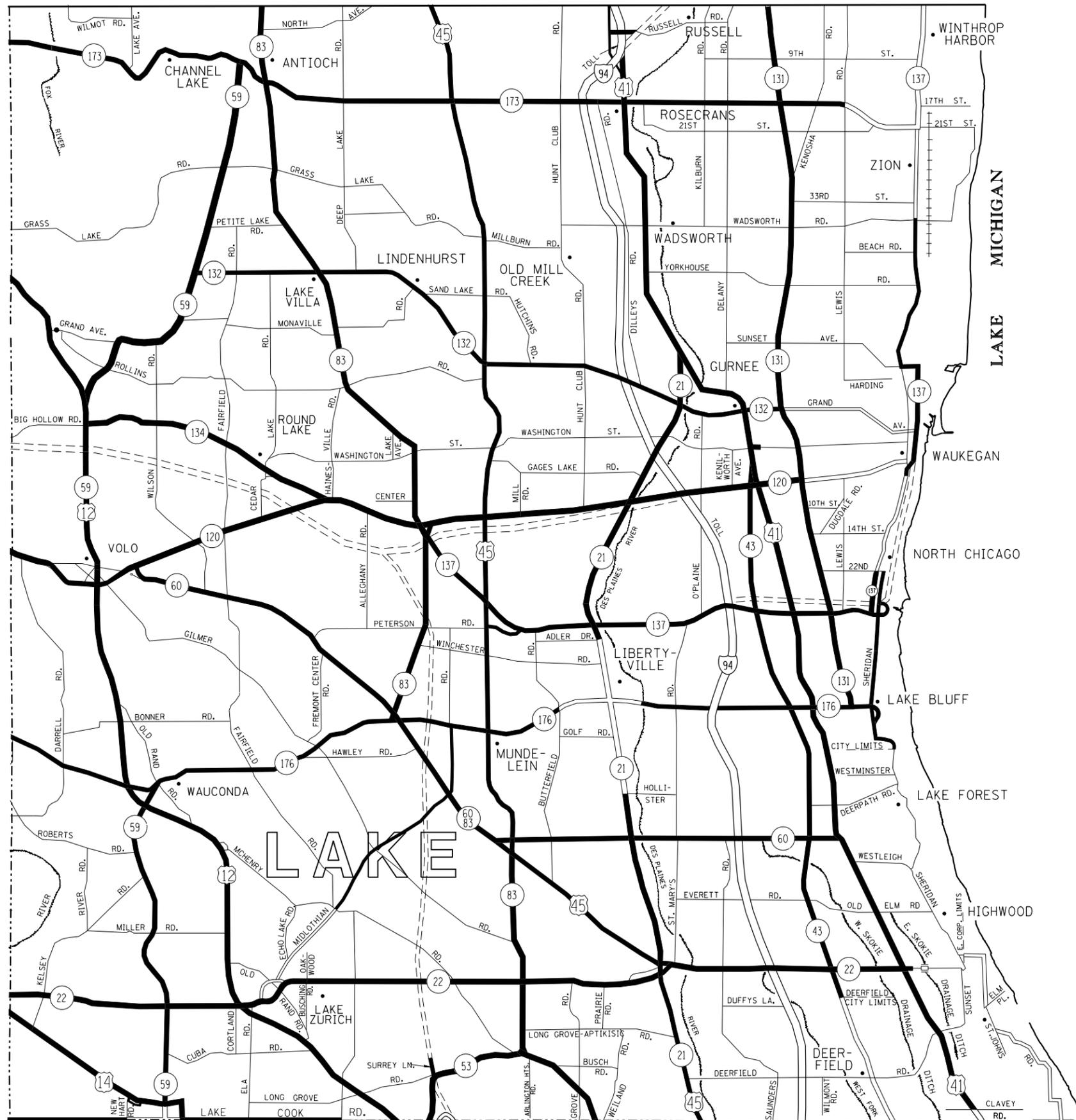
|  |                               |            |           |
|--|-------------------------------|------------|-----------|
| FILE NAME =  | USER NAME = midyja            | DESIGNED - | REVISED - |
| p:\planroom\dot.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\0134218-01\Design\0134218-sht-plan.dgn |                               | REVISOR -  | REVISED - |
|  | PLOT SCALE = 100.0000' / 1" = | CHECKED -  | REVISED - |
|  | PLOT DATE = 10/10/2020        | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP  
MC HENRY COUNTY**

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

|                     |                           |         |                    |           |
|---------------------|---------------------------|---------|--------------------|-----------|
| F.A. RTE.           | SECTION                   | COUNTY  | TOTAL SHEETS       | SHEET NO. |
| VAR.                | 2020-243-GRR              | VARIOUS | 32                 | 5         |
|                     |                           |         | CONTRACT NO. 62N13 |           |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT |         |                    |           |



**DISTRICT NO. 1**

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION**
- FUTURE HIGHWAYS**
- VARIOUS AGENCIES HIGHWAYS**

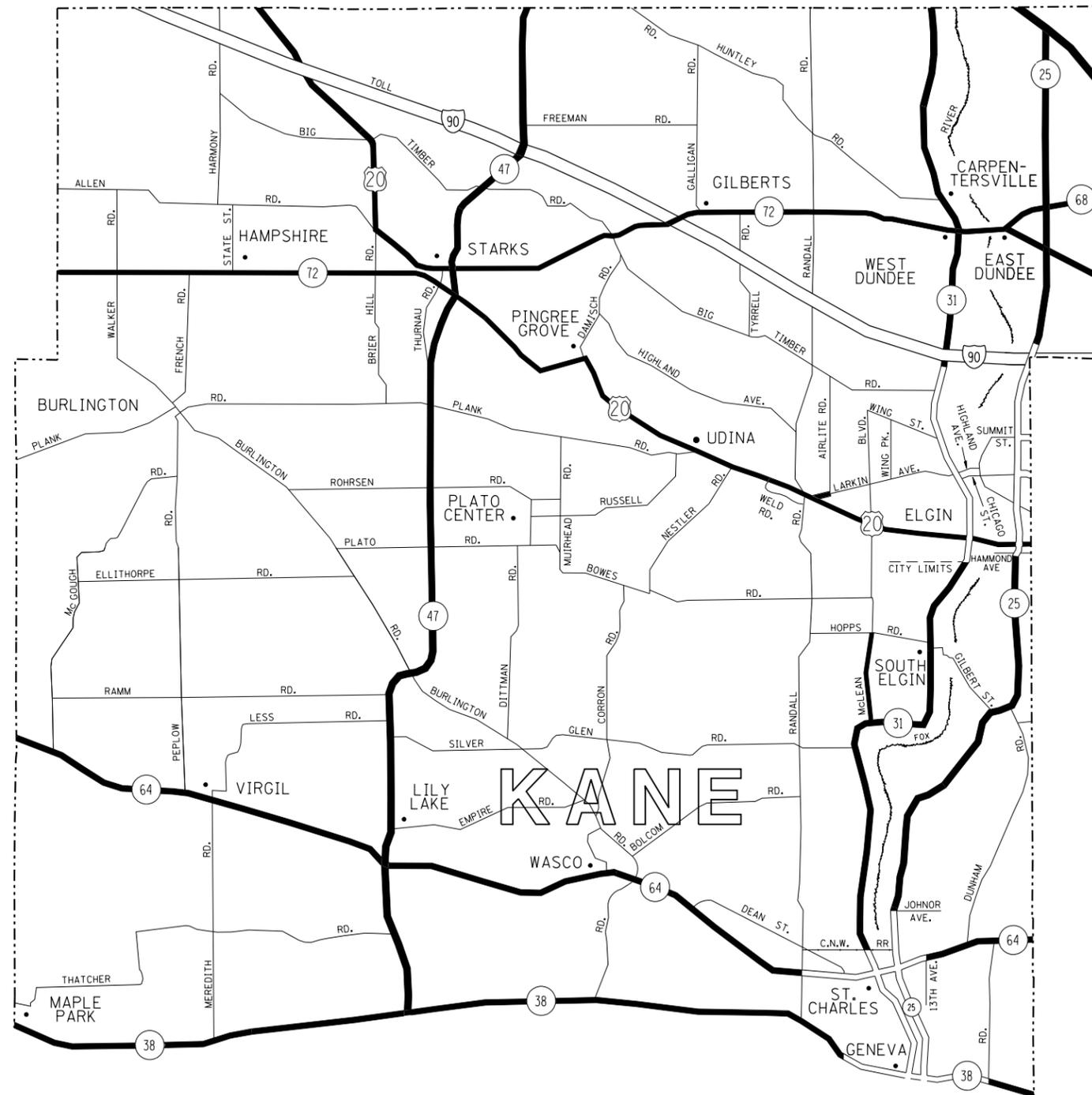
|   |                    |            |           |
|---|--------------------|------------|-----------|
| FILE NAME =   | USER NAME = midyja | DESIGNED - | REVISED - |
| p:\planroom.dot\illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\Drawn\Design\0134218-sht-plan.dgn |                    | DRAWN      |           |
| PLOT SCALE = 100.0000' / in.  | CHECKED -          | REVISED -  |           |
| PLOT DATE = 10/10/2020  | DATE -             | REVISED -  |           |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP  
LAKE COUNTY**

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

|                     |              |                           |                    |           |
|---------------------|--------------|---------------------------|--------------------|-----------|
| F.A. RTE.           | SECTION      | COUNTY                    | TOTAL SHEETS       | SHEET NO. |
| VAR.                | 2020-243-GRR | VARIOUS                   | 32                 | 6         |
|                     |              |                           | CONTRACT NO. 62N13 |           |
| FED. ROAD DIST. NO. |              | ILLINOIS FED. AID PROJECT |                    |           |



**DISTRICT NO. 1**

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION, (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION**
- FUTURE HIGHWAYS**
- VARIOUS AGENCIES HIGHWAYS**

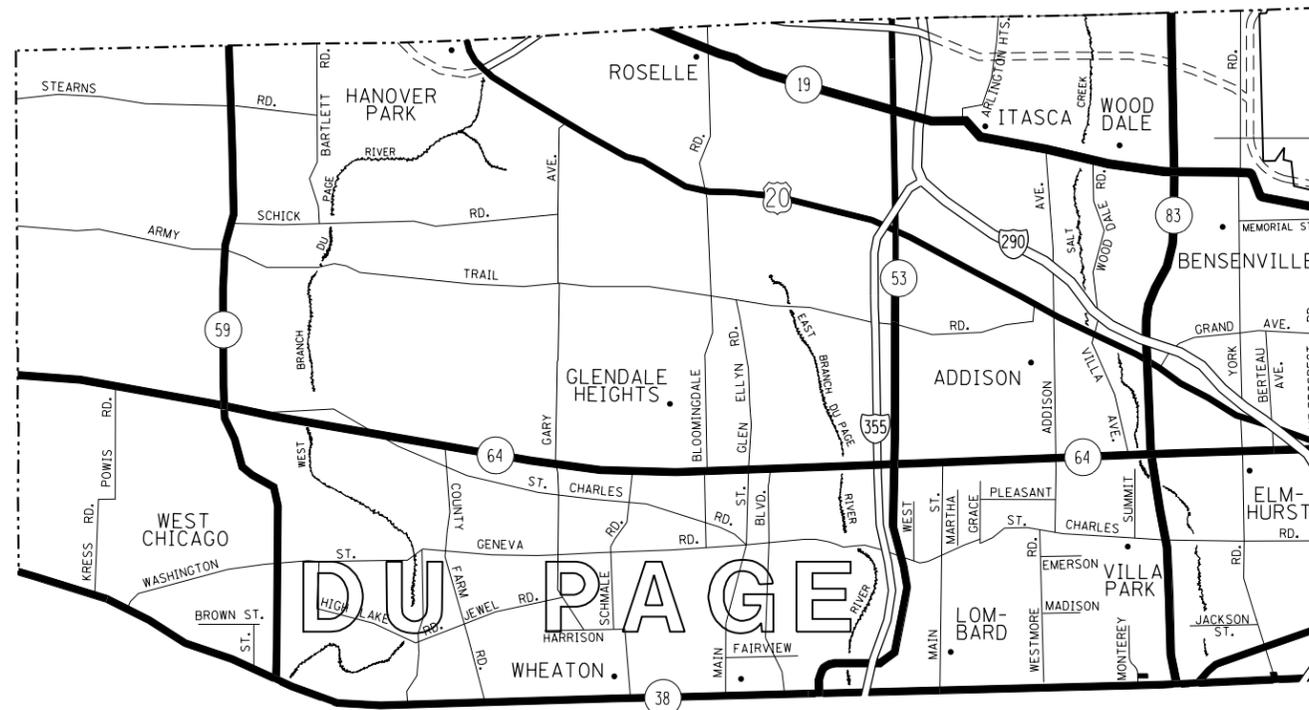
|   |                               |            |           |
|---|-------------------------------|------------|-----------|
| FILE NAME =   | USER NAME = midyja            | DESIGNED - | REVISED - |
| p:\planroom.dot\illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWN\Design\0134218-sht-plan.dgn |                               | REVISED -  | REVISED - |
|   | PLOT SCALE = 100.0000' / 1" = | CHECKED -  | REVISED - |
|   | PLOT DATE = 10/10/2020        | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP KANE COUNTY  
NORTH OF AND INCLUDING IL RTE 38**

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

|                     |              |                           |                    |           |
|---------------------|--------------|---------------------------|--------------------|-----------|
| F.A. RTE.           | SECTION      | COUNTY                    | TOTAL SHEETS       | SHEET NO. |
| VAR.                | 2020-243-GRR | VARIOUS                   | 32                 | 7         |
|                     |              |                           | CONTRACT NO. 62N13 |           |
| FED. ROAD DIST. NO. |              | ILLINOIS FED. AID PROJECT |                    |           |



**DISTRICT NO. 1**

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
- FUTURE HIGHWAYS
- VARIOUS AGENCIES HIGHWAYS

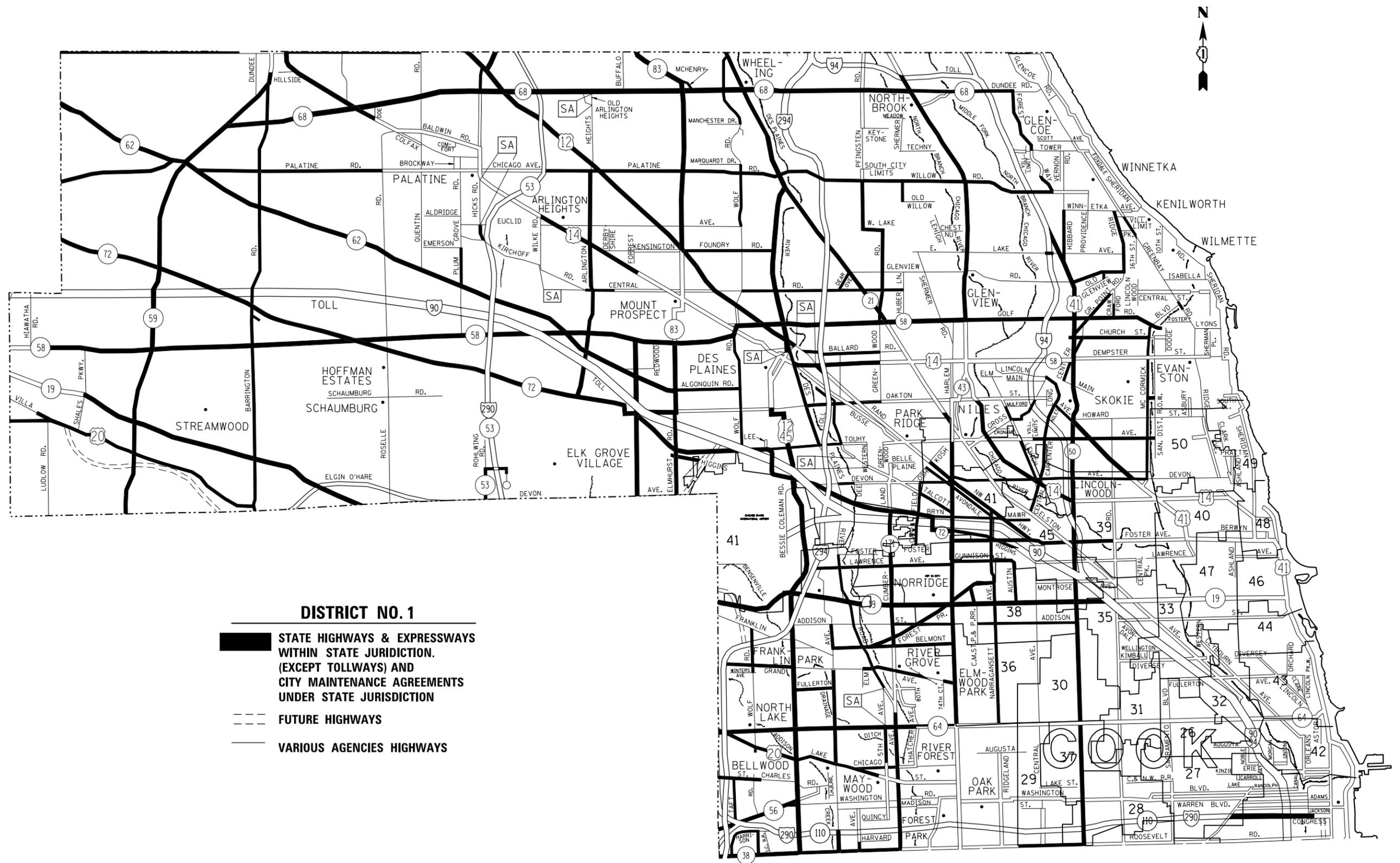
|   |                              |            |           |
|---|------------------------------|------------|-----------|
| FILE NAME =   | USER NAME = midyja           | DESIGNED - | REVISED - |
| p:\planroom.dot\illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\Drawn\Design\0134218-sht-plan.dgn |                              | DRAWN -    | REVISED - |
|   | PLOT SCALE = 100.0000' / in. | CHECKED -  | REVISED - |
|   | PLOT DATE = 10/10/2020       | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP DuPAGE COUNTY  
NORTH OF AND INCLUDING IL RTE 38**

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

|                     |              |                  |                    |           |
|---------------------|--------------|------------------|--------------------|-----------|
| F.A. RTE.           | SECTION      | COUNTY           | TOTAL SHEETS       | SHEET NO. |
| VAR.                | 2020-243-GRR | VARIOUS          | 32                 | 8         |
|                     |              |                  | CONTRACT NO. 62N13 |           |
| FED. ROAD DIST. NO. | ILLINOIS     | FED. AID PROJECT |                    |           |



**DISTRICT NO. 1**

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
- FUTURE HIGHWAYS
- VARIOUS AGENCIES HIGHWAYS

|  |                              |            |           |
|--|------------------------------|------------|-----------|
| FILE NAME =  | USER NAME = midyja           | DESIGNED - | REVISED - |
| pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWN\Design\0134218-sht-plan.dgn |                              | DRAWN -    | REVISED - |
|  | PLOT SCALE = 100.0000' / in. | CHECKED -  | REVISED - |
|  | PLOT DATE = 10/10/2020       | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP COOK COUNTY  
NORTH OF AND INCLUDING IL. RTE 38**

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

|                     |                           |         |                    |           |
|---------------------|---------------------------|---------|--------------------|-----------|
| F.A. RTE.           | SECTION                   | COUNTY  | TOTAL SHEETS       | SHEET NO. |
| VAR.                | 2020-243-GRR              | VARIOUS | 32                 | 9         |
|                     |                           |         | CONTRACT NO. 62N13 |           |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT |         |                    |           |



- DISTRICT NO. 1**
- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
  - FUTURE HIGHWAYS
  - VARIOUS AGENCIES HIGHWAYS

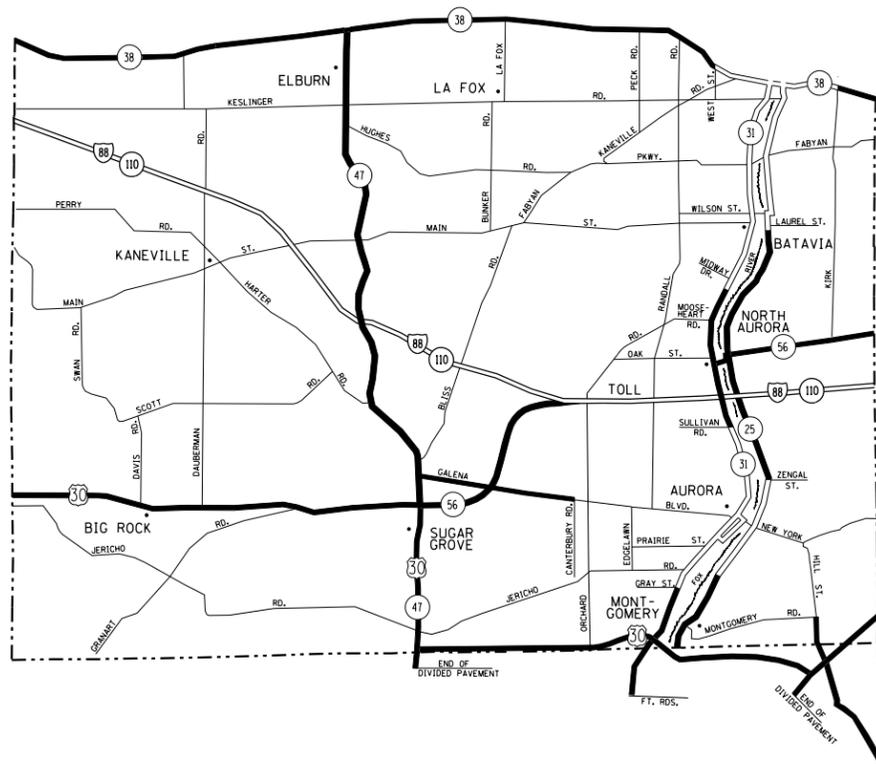
|  |                             |            |           |
|--|-----------------------------|------------|-----------|
| FILE NAME =  | USER NAME = midyja          | DESIGNED - | REVISED - |
| p:\planroom.dot\illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\0134218-sht-plan.dgn |                             | DRAWN -    | REVISED - |
|  | PLOT SCALE = 99.9998' / in. | CHECKED -  | REVISED - |
|  | PLOT DATE = 10/10/2020      | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP COOK COUNTY  
SOUTH OF IL RTE 38**

|        |           |    |        |      |    |      |
|--------|-----------|----|--------|------|----|------|
| SCALE: | SHEET NO. | OF | SHEETS | STA. | TO | STA. |
|--------|-----------|----|--------|------|----|------|

|                     |              |                  |                    |           |
|---------------------|--------------|------------------|--------------------|-----------|
| F.A. RTE.           | SECTION      | COUNTY           | TOTAL SHEETS       | SHEET NO. |
| VAR.                | 2020-243-GRR | VARIOUS          | 32                 | 10        |
|                     |              |                  | CONTRACT NO. 62N13 |           |
| FED. ROAD DIST. NO. | ILLINOIS     | FED. AID PROJECT |                    |           |



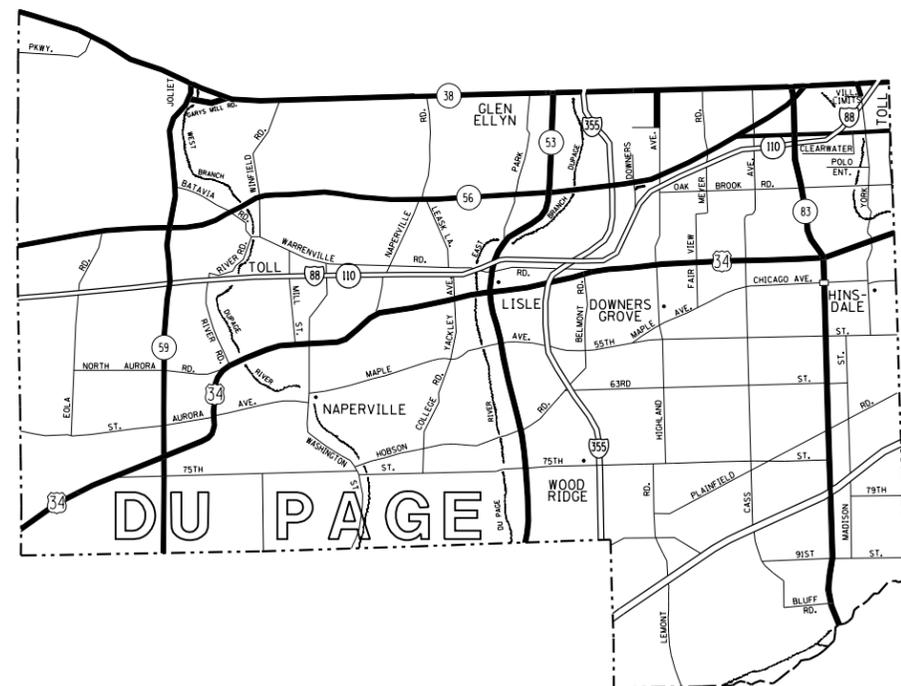
- DISTRICT NO. 1**
- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION, (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
  - FUTURE HIGHWAYS
  - VARIOUS AGENCIES HIGHWAYS

|  |                             |            |           |
|--|-----------------------------|------------|-----------|
| FILE NAME =  | USER NAME = midyja          | DESIGNED - | REVISED - |
| p:\planroom\dot.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\0134218-sht-plan.dgn |                             | DRAWN -    | REVISED - |
|  | PLOT SCALE = 99.9998' / in. | CHECKED -  | REVISED - |
|  | PLOT DATE = 10/10/2020      | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

|   |           |           |              |
|---|-----------|-----------|--------------|
| <b>GUARDRAIL REPAIR LOCATION MAP KANE COUNTY<br/>SOUTH OF IL RTE 38</b> |           |           |              |
| SCALE:  | SHEET NO. | OF SHEETS | STA. TO STA. |

|                     |              |                  |                    |           |
|---------------------|--------------|------------------|--------------------|-----------|
| F.A. RTE.           | SECTION      | COUNTY           | TOTAL SHEETS       | SHEET NO. |
| VAR.                | 2020-243-GRR | VARIOUS          | 32                 | 11        |
|                     |              |                  | CONTRACT NO. 62N13 |           |
| FED. ROAD DIST. NO. | ILLINOIS     | FED. AID PROJECT |                    |           |



**DISTRICT NO. 1**

- STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION, (EXCEPT TOLLWAYS) AND CITY MAINTENANCE AGREEMENTS UNDER STATE JURISDICTION
- FUTURE HIGHWAYS
- VARIOUS AGENCIES HIGHWAYS

|                             |  |            |           |
|-----------------------------|--|------------|-----------|
| FILE NAME =                 | pw\planroom.dot.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\Drawn\Design\0134218-sht-plan.dgn | DESIGNED - | REVISED - |
| USER NAME = miduja          |  | CHECKED -  | REVISED - |
| PLOT SCALE = 99.9998' / in. |  | DATE -     | REVISED - |
| PLOT DATE = 10/10/2020      |  |            |           |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL REPAIR LOCATION MAP DuPAGE COUNTY  
SOUTH OF IL RTE 38**

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

|                     |                           |         |                    |           |
|---------------------|---------------------------|---------|--------------------|-----------|
| F.A. RTE.           | SECTION                   | COUNTY  | TOTAL SHEETS       | SHEET NO. |
| VAR.                | 2020-243-GRR              | VARIOUS | 32                 | 12        |
|                     |                           |         | CONTRACT NO. 62N13 |           |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT |         |                    |           |



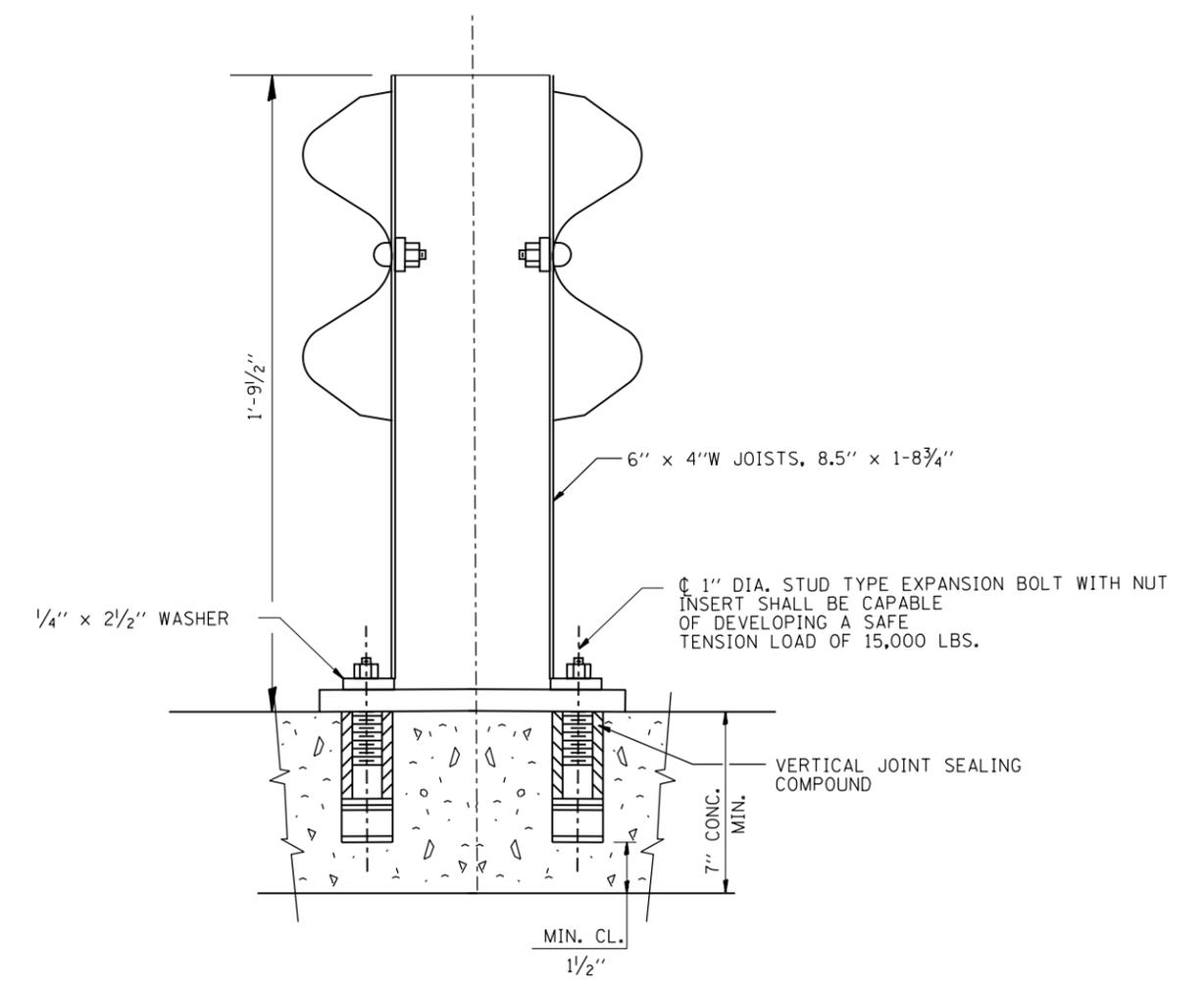
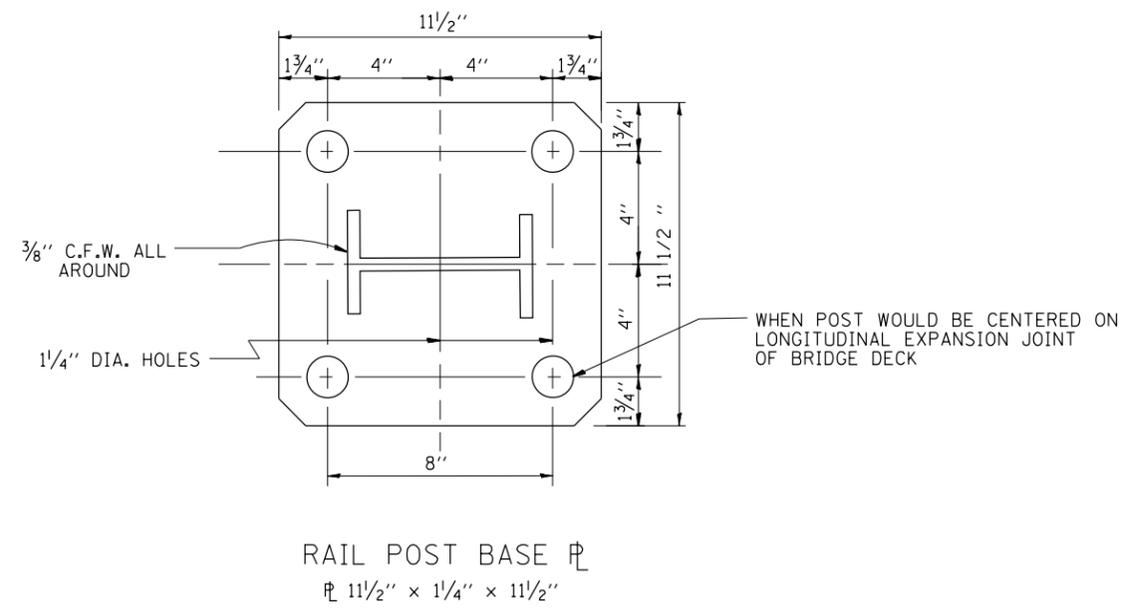
NOTE:  
 FOR DETAILS OF RAIL ELEMENTS, RAIL SPLICING, NUT, BOLT AND SIDE VIEW OF RAIL, SEE STANDARD 2230-2.

ALL WELDS SHALL BE GROUND SMOOTH

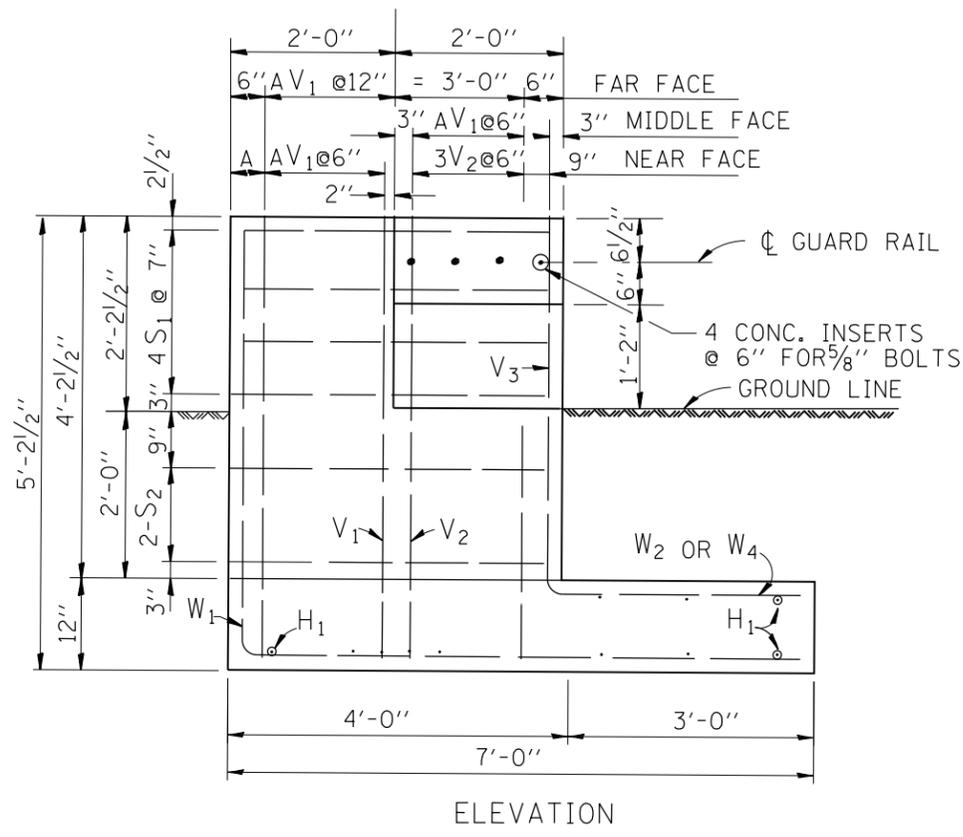
POSTS SHALL BE CUT AND WELDED TO THE BASE PLATE SO THAT THE POST WILL BE PLUMB WHEN ERECTED.

TWO PERCENT (2%) OF ALL ANCHOR BOLTS SHALL BE TEST LOADED IN PLACE, MINIMUM TEST LOAD=8 KIPS. IF ONE ANCHOR BOLT FAILS DURING THE TEST, TWO OTHER ANCHOR BOLTS SHALL BE TESTED. TESTING EQUIPMENT SHALL BE BOLT COMPANIES.

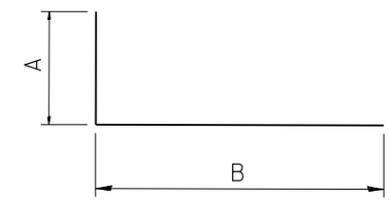
PROVIDE 1/8" AND 2/16" GALVANIZED SHIMS FOR 25% OF THE POSTS.



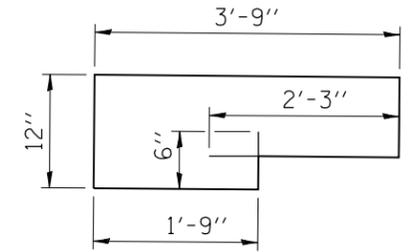
|   |                    |                               |                               |   |   |                         |      |   |                    |              |              |           |    |
|---|--------------------|-------------------------------|-------------------------------|---|---|-------------------------|------|---|--------------------|--------------|--------------|-----------|----|
| FILE NAME =   | USER NAME = midyja | DESIGNED -                    | REVISED - R. RITCHIE 05-02-00 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>ANCHOR DETAIL FOR STEEL PLATE BEAM<br/>GUARDRAIL ON CONCRETE</b> |                         |      | F.A. RTE.   | SECTION            | COUNTY       | TOTAL SHEETS | SHEET NO. |    |
| pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\DRP218-sht-plan.dgn |                    | CHECKED -                     | REVISED -                     |   | SCALE: NONE   | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.   | VAR.               | 2020-243-GRR | VARIOUS      | 32        | 14 |
|   |                    | PLOT SCALE = 100.0000' / 1in. | REVISED -                     |   |   |                         |      |   |                    | BM-02        |              |           |    |
|   |                    | PLOT DATE = 10/10/2020        | REVISED -                     |   |   |                         |      |   |                    |              |              |           |    |
|   |                    | DATE - 10-31-88               | REVISED -                     |   |   |                         |      |   | CONTRACT NO. 62N13 |              |              |           |    |
|   |                    |                               |                               |   |   |                         |      | FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |                    |              |              |           |    |



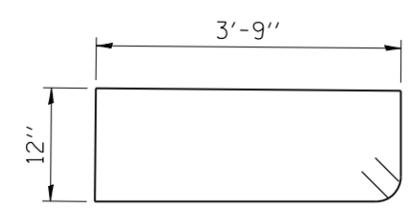
ELEVATION



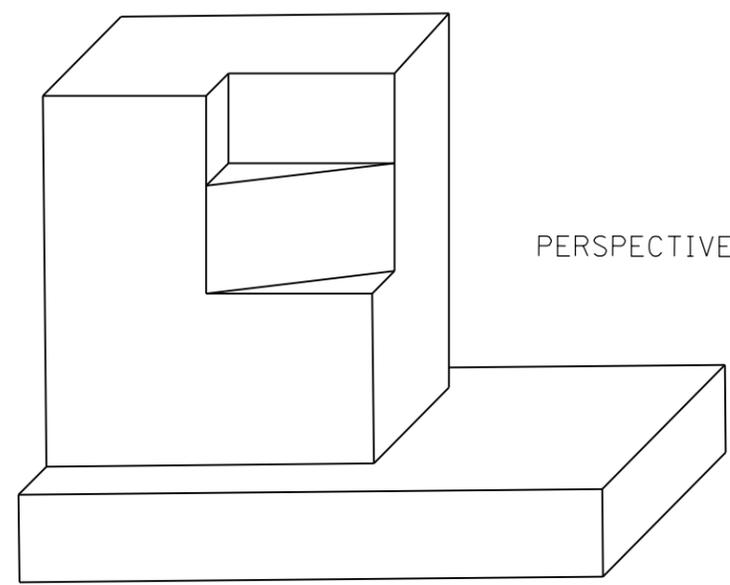
| BAR            | A     | B     | A+B    |
|----------------|-------|-------|--------|
| V <sub>1</sub> | 4'-8" | 6"    | 5'-2"  |
| V <sub>2</sub> | 2'-6" | 6"    | 3'-0"  |
| W <sub>1</sub> | 4'-8" | 6'-6" | 11'-2" |
| W <sub>2</sub> | 2'-0" | 3'-0" | 5'-0"  |
| W <sub>4</sub> | 4'-2" | 3'-0" | 7'-2"  |



S<sub>1</sub> BAR

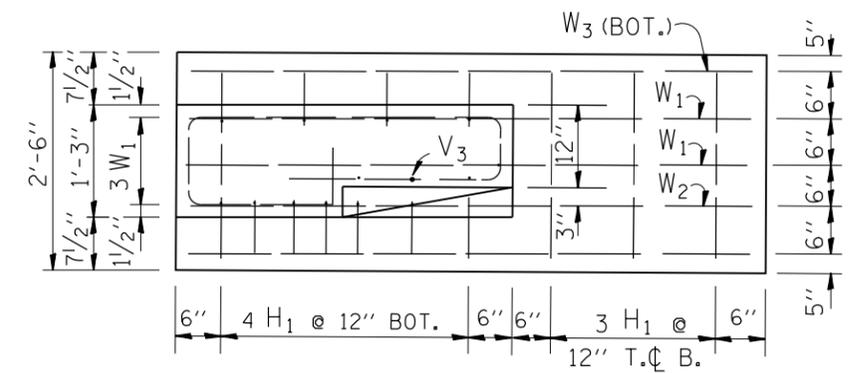


S<sub>2</sub> BAR



PERSPECTIVE VIEW

NOTES: CLASS X CONCRETE SHALL BE USED THROUGHOUT REINFORCEMENT TO BE SIZE #4 UNLESS OTHERWISE NOTED

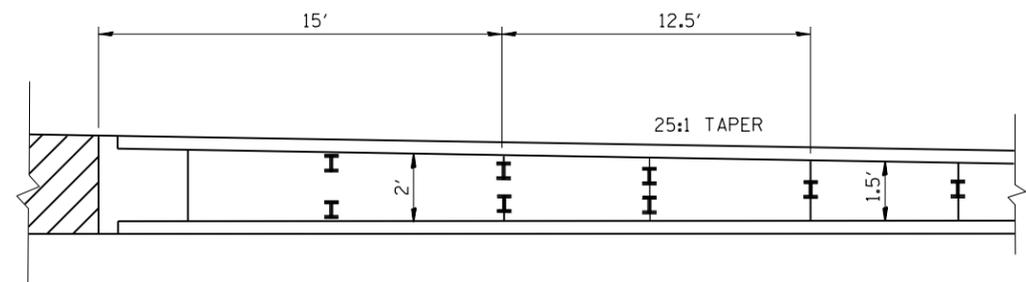
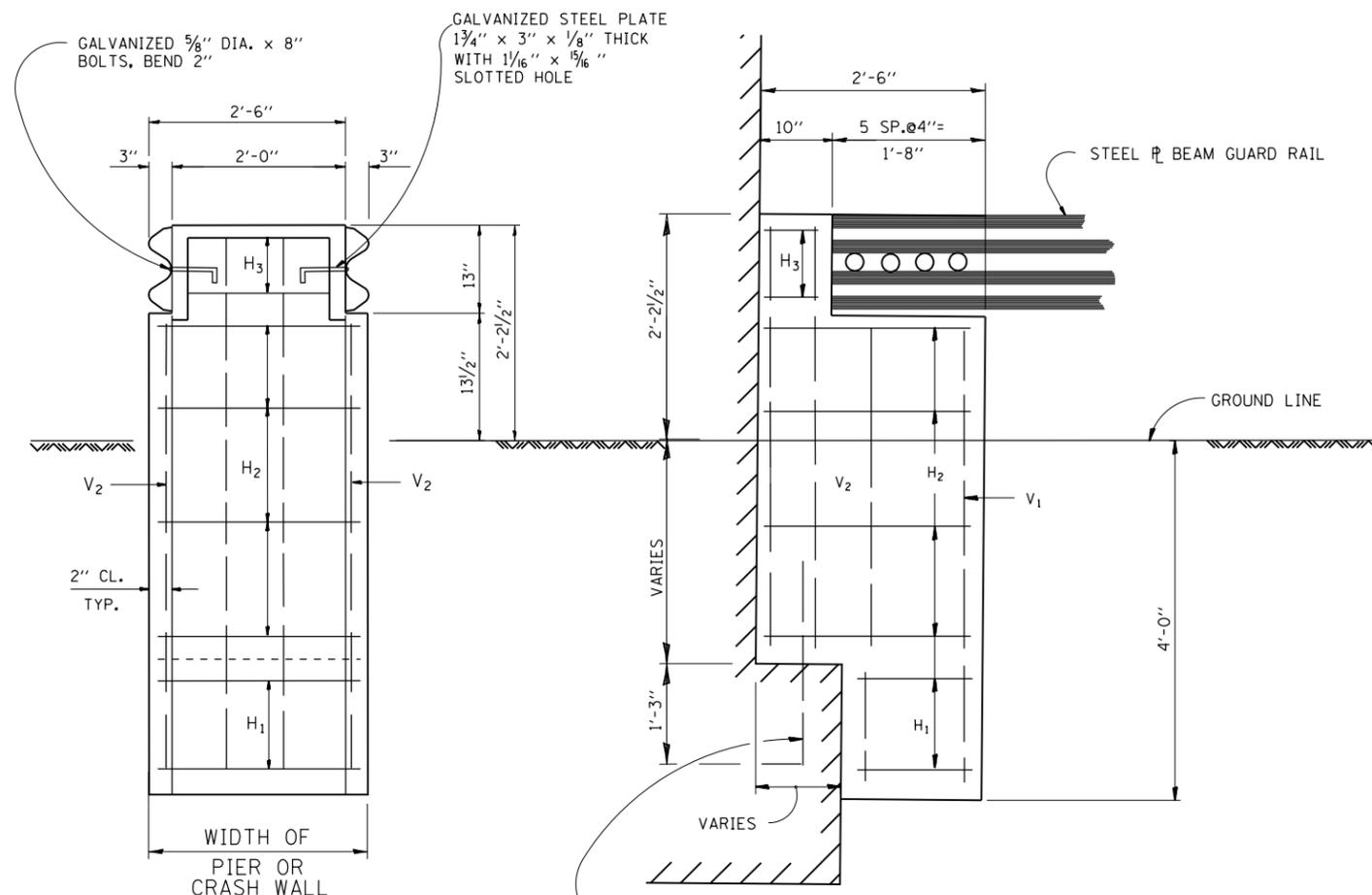


FOOTING PLAN

BAR SCHEDULE

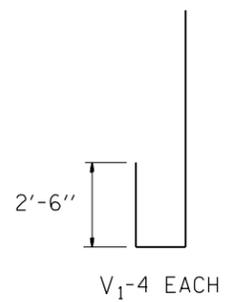
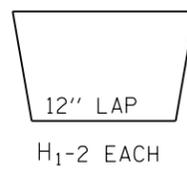
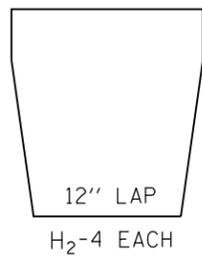
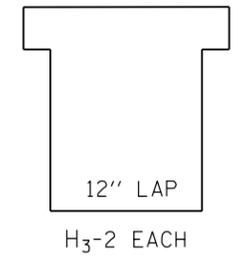
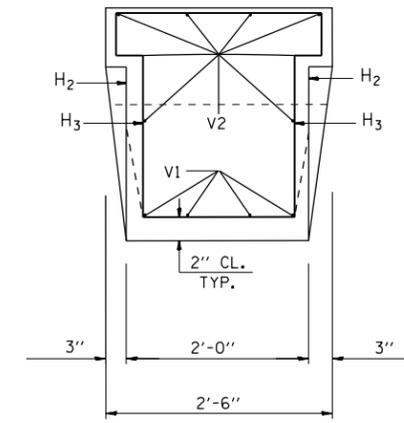
| BAR            | NO. | LENGTH |
|----------------|-----|--------|
| V <sub>1</sub> | 8   | 5'-2"  |
| V <sub>2</sub> | 3   | 3'-0"  |
| V <sub>3</sub> | 4   | 3'-0"  |
| W <sub>1</sub> | 3   | 11'-2" |
| W <sub>2</sub> | 1   | 5'-0"  |
| W <sub>3</sub> | 2   | 6'-6"  |
| W <sub>4</sub> | 2   | 7'-2"  |
| S <sub>1</sub> | 4   | 10'-0" |
| S <sub>2</sub> | 2   | 10'-0" |
| H <sub>1</sub> | 1   | 2'-3"  |

THIS SHEET IS FOR INFORMATION ONLY



GUARD RAIL TRANSITIONS

NOTES: CLASS X CONCRETE SHALL BE USED THROUGHOUT  
REINFORCEMENT TO BE SIZE #4 UNLESS OTHERWISE  
NOTED

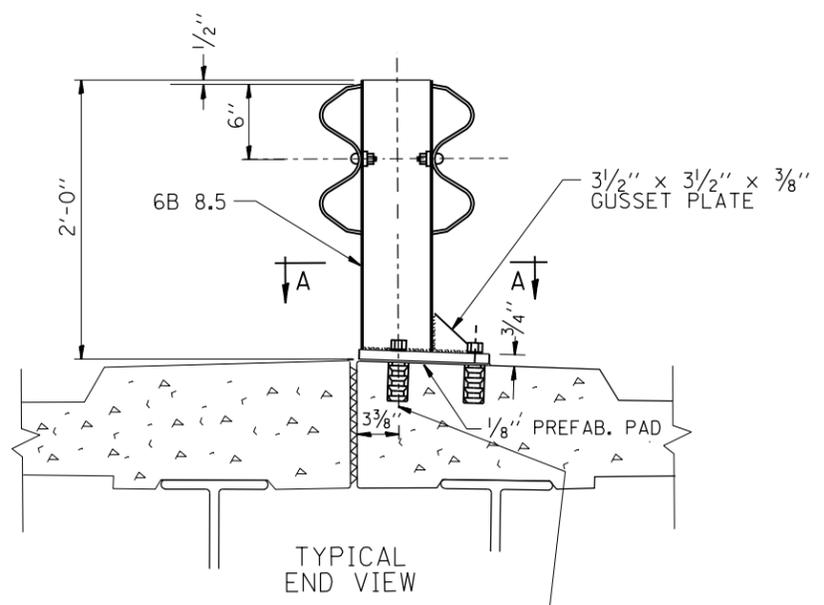


|  |                    |                 |                               |
|--|--------------------|-----------------|-------------------------------|
| FILE NAME =  | USER NAME = midyja | DESIGNED -      | REVISED - R. RITCHIE 05-02-00 |
| pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRWING\Design\DRP218-sht-plan.dgn |                    | CHECKED -       | REVISED -                     |
|  |                    | DATE - 10-31-88 | REVISED -                     |

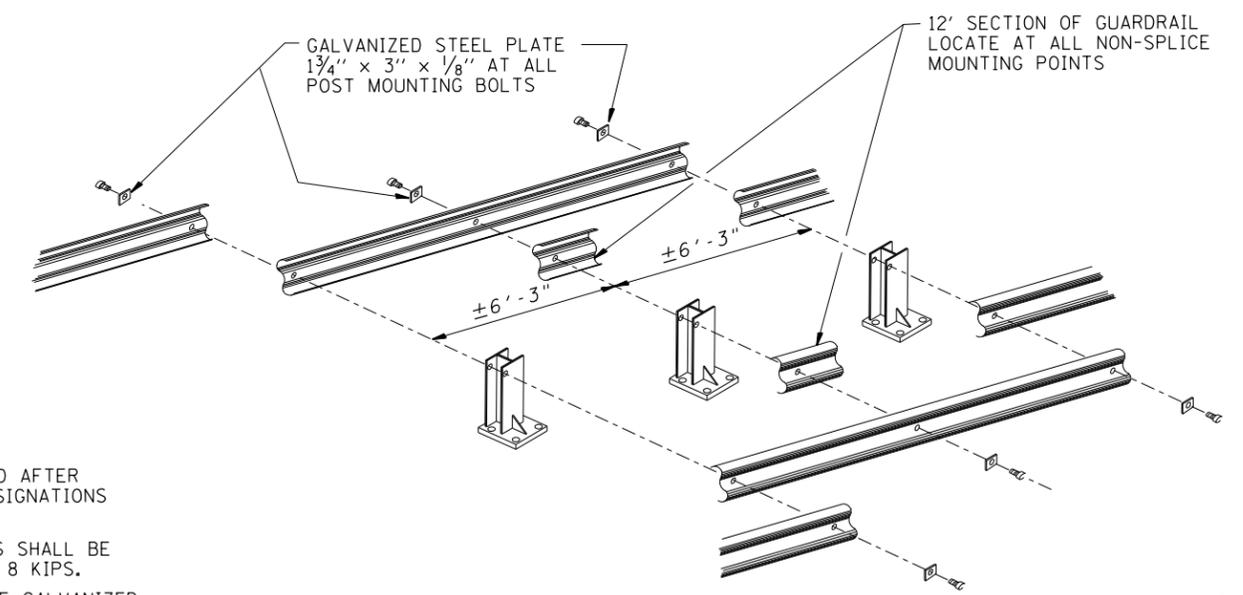
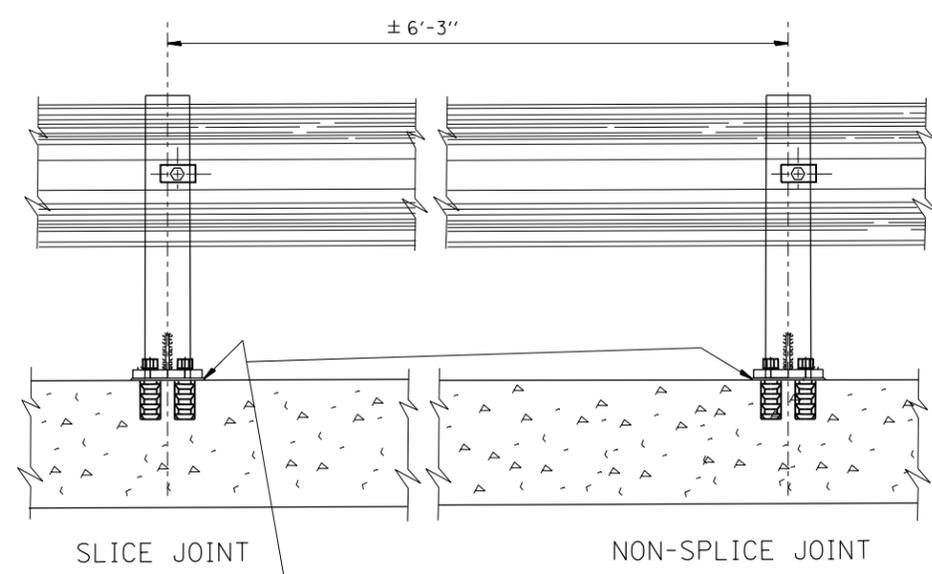
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

| TYPICAL DETAILS FOR STEEL PLATE BEAM GUARDRAIL ANCHORAGE REPAIR |                         |      |         |
|---|-------------------------|------|---------|
| SCALE: NONE   | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

| F.A. RTE.                                       | SECTION      | COUNTY             | TOTAL SHEETS | SHEET NO. |
|---|--------------|--------------------|--------------|-----------|
| VAR.  | 2020-243-GRR | VARIOUS            | 32           | 16        |
| BM-04   |              | CONTRACT NO. 62N13 |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |              |                    |              |           |

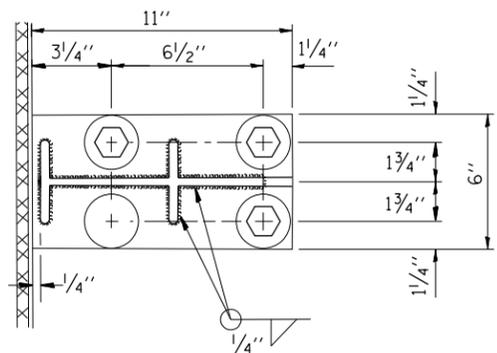


7/8" GALVANIZED ANCHOR BOLTS AND SELF DRILLING EXPANSION SHELLS OR MULTI UNIT TYPE ANCHORS  
1/8" HOLES THRU BASE PLATE



NOTE:

DIAMOND TIPPED DRILL SHALL BE USED TO DRILL THRU REINFORCEMENT BARS



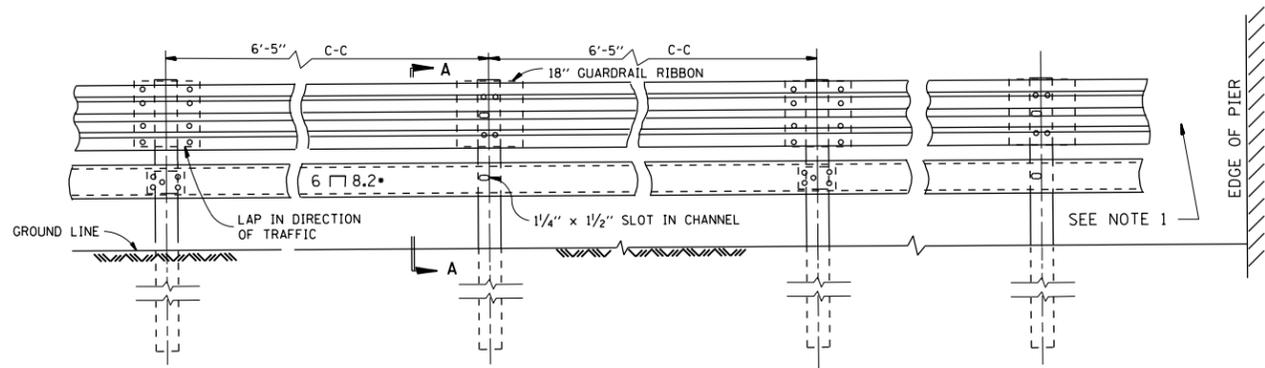
SEC. A-A

NOTE:

POSTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM DESIGNATIONS A-123 AND A-385.  
TWO PERCENT (2%) OF ALL ANCHOR BOLTS SHALL BE TEST LOADED IN PLACE. MIN. TEST LOAD = 8 KIPS.  
ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION A-153.  
FOR MATERIAL COMPOSITION OF PREFABRICATED PAD, SEE ARTICLE 54.9(F), (BEARING AND ANCHORAGE), OF THE STANDARD SPECIFICATIONS.  
PROVIDE 1-1/8" AND 2-1/16" GALVANIZED STEEL SHIMS FOR 25% OF THE POSTS.  
IF ONE ANCHOR BOLT FAILS DURING TEST, TWO OTHER ANCHOR BOLTS SHALL BE TESTED. TESTING EQUIPMENT CAN BE OBTAINED FROM BOLT COMPANIES.

THIS SHEET IS FOR INFORMATION ONLY

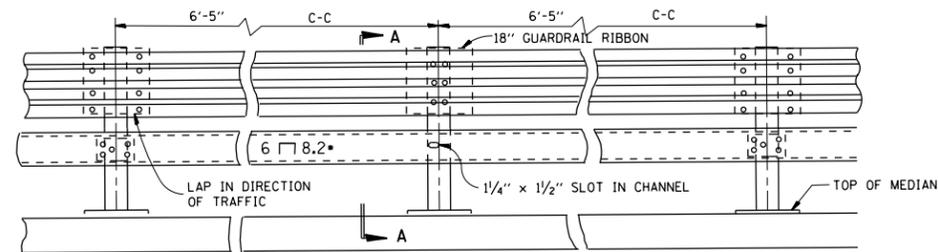
|  |                    |                 |                               |   |   |                         |      |           |         |   |                           |           |    |
|--|--------------------|-----------------|-------------------------------|---|---|-------------------------|------|-----------|---------|---|---------------------------|-----------|----|
| FILE NAME =  | USER NAME = midyja | DESIGNED -      | REVISED - R. RITCHIE 05-02-00 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>TYPICAL DETAIL FOR CENTER LONGITUDINAL JOINT<br/>GUARDRAIL JOINT</b> |                         |      | F.A. RTÉ. | SECTION | COUNTY  | TOTAL SHEETS              | SHEET NO. |    |
| pw:\planroom.dot.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\DRP218-sht-plan.dgn |                    | CHECKED -       | REVISED -                     |   | SCALE: NONE   | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.   | VAR.    | 2020-243-GRR                                    | VARIOUS                   | 32        | 17 |
|  |                    | DATE - 10-31-88 | REVISED -                     |   |   |                         |      |           |         | <b>BM-05</b>                                    | <b>CONTRACT NO. 62N13</b> |           |    |
|  |                    |                 |                               |   |   |                         |      |           |         | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                           |           |    |



ELEVATION

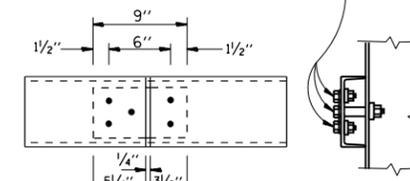
DETAIL OF END SECTION

NOTE 1:  
FOR DETAILS OF GUARDRAIL END ANCHORAGE  
AT PIERS, SEE SHEET NO. \_\_\_\_\_

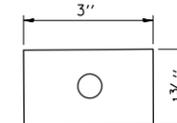


ELEVATION

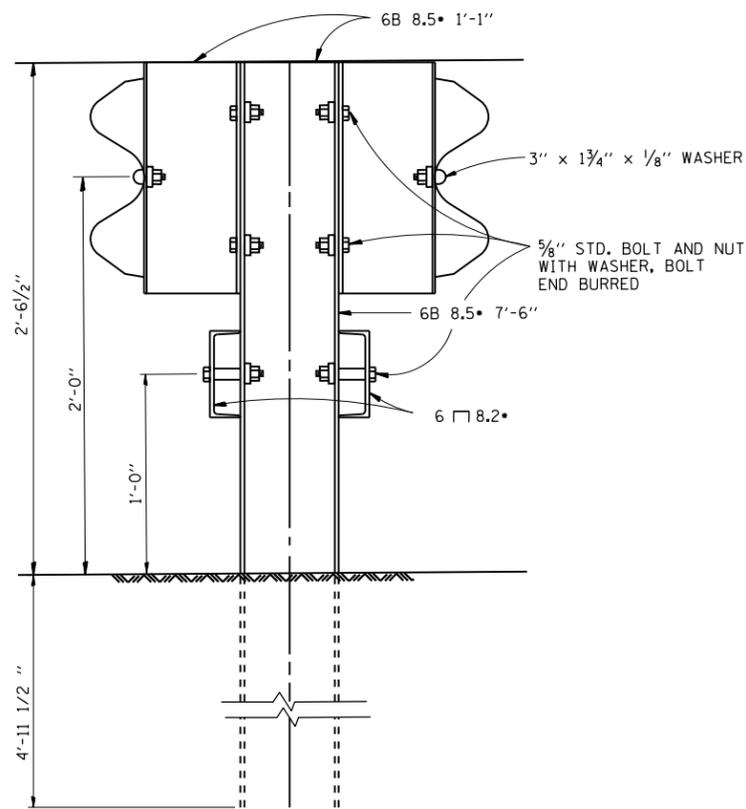
5/8" STD. BOLT AND NUT  
WITH WASHER, BOLT  
END BURRED



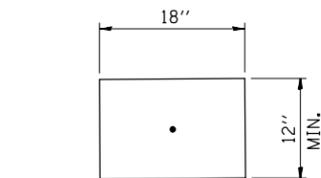
CHANNEL SPLICE  
PLATE 8 3/4" x 4 1/2" x 1/4"



WASHER  
PLATE 3" x 1 3/4" x 1/8"

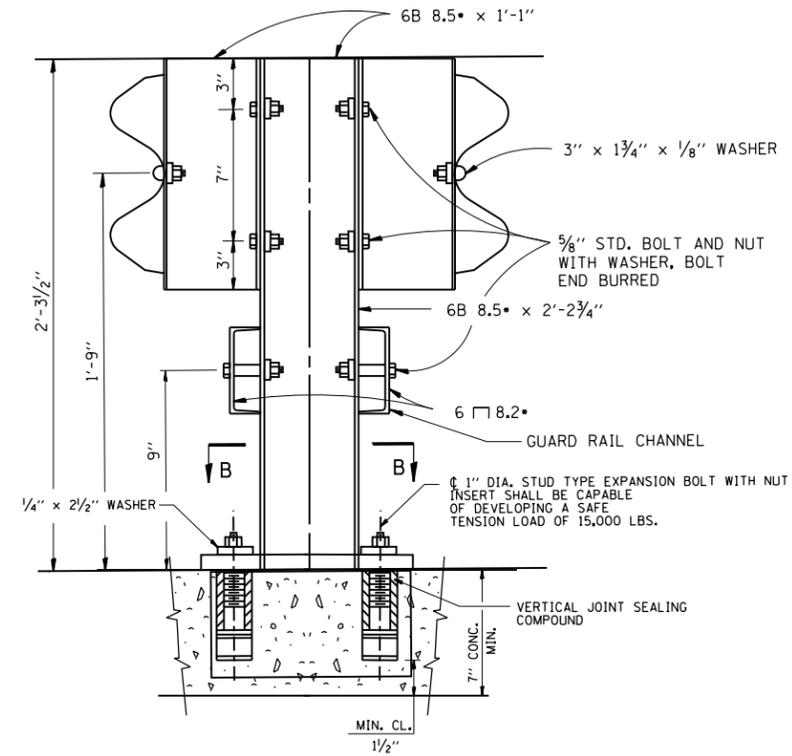


SECTION A-A



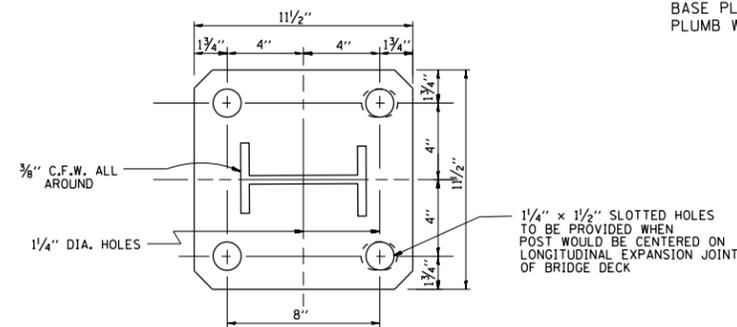
18" GUARDRAIL ELEMENT SPLICE

NOTE:  
FOR DETAIL OF RAIL ELEMENT, RAIL SPLICING, BOLT,  
AND NUT, SEE STATE STANDARD 2230.  
A 1 3/8" x 3" x 1/8" STEEL PLATE WASHER AS SHOWN ON THIS  
DRAWING SHALL BE PLACED BETWEEN THE BOLT HEAD  
AND THE GUARDRAIL RIBBON AT ALL MOUNTING POINTS.  
AN 18" PIECE OF GUARDRAIL RIBBON SHALL BE INSERTED  
BETWEEN THE CONTINUOUS RIBBON AND THE POST AT  
NON-SLICE MOUNTING POINTS.  
RAIL, CHANNELS, POSTS, BASE PLATES, FASTENINGS,  
AND ALL OTHER EXPOSED ACCESSORIES SHALL BE  
GALVANIZED.



SECTION A-A  
ANCHORAGE DETAIL

NOTE:  
ALL WELDS SHALL BE GROUND SMOOTH.  
POSTS SHALL BE CUT AND WELDED TO THE  
BASE PLATE SO THAT THE POSTS WILL BE  
PLUMB WHEN ERECTED.



RAIL POST BASE PLATE  
R 1 1/2" x 1 1/4" x 1 1/2"

SECTION B-B

THIS SHEET IS FOR INFORMATION ONLY

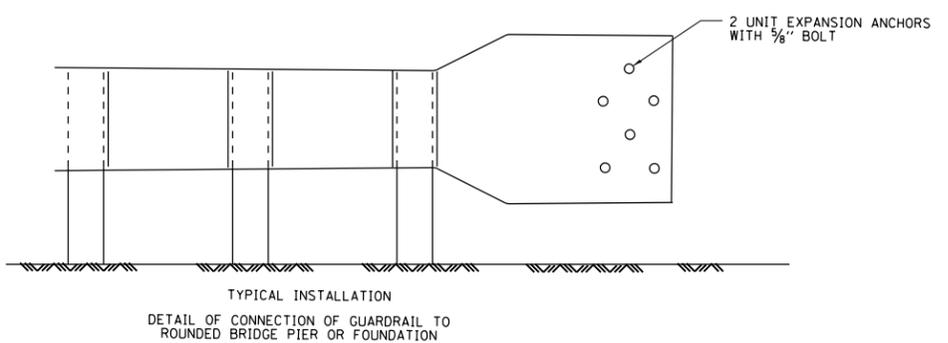
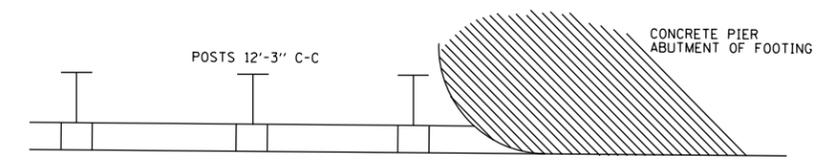
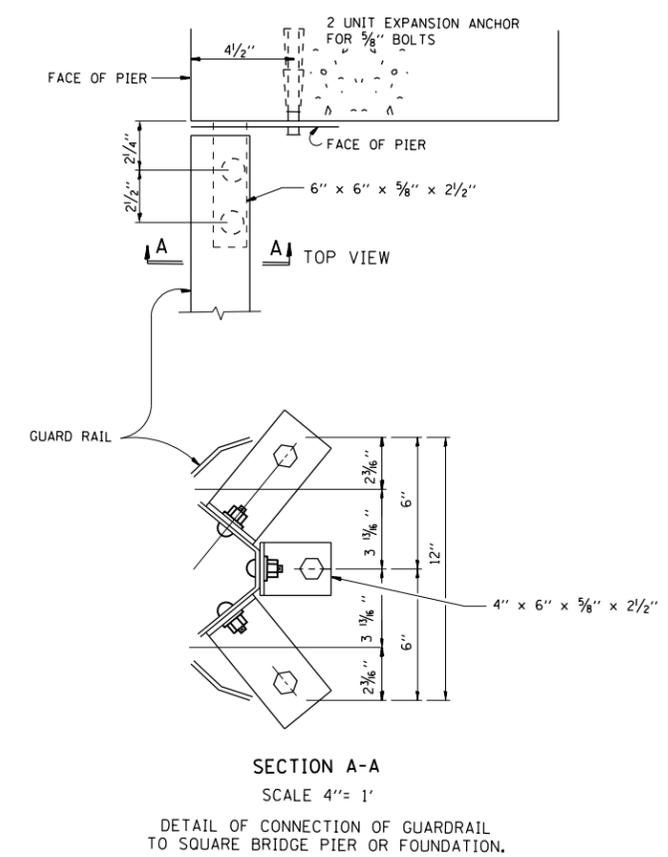
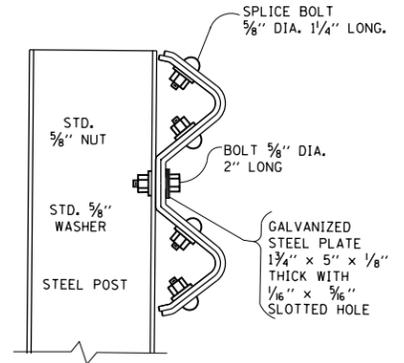
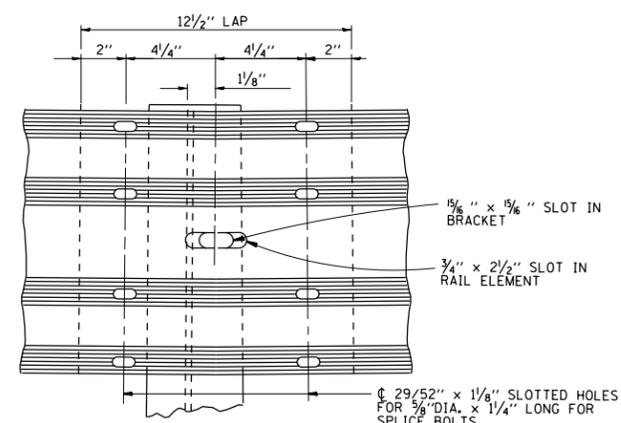
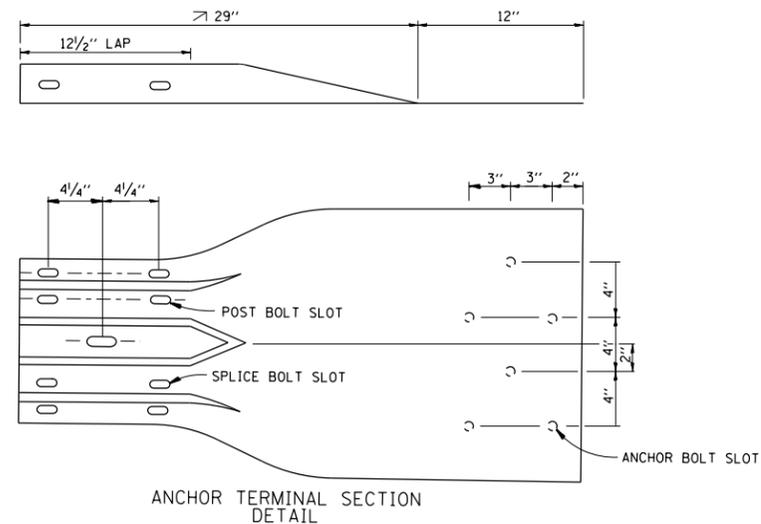
|  |                    |            |                               |
|--|--------------------|------------|-------------------------------|
| FILE NAME =  | USER NAME = midyja | DESIGNED - | REVISED - R. RITCHIE 05-02-00 |
| pw:\planroom.dot\illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\BID\Drawings\Design\DRP218-sht-plen.dgn |                    | CHECKED -  | REVISED -                     |
|  |                    | DATE -     | REVISED -                     |
|  |                    |            |                               |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STEEL PLATE BEAM GUARDRAIL  
SPECIAL

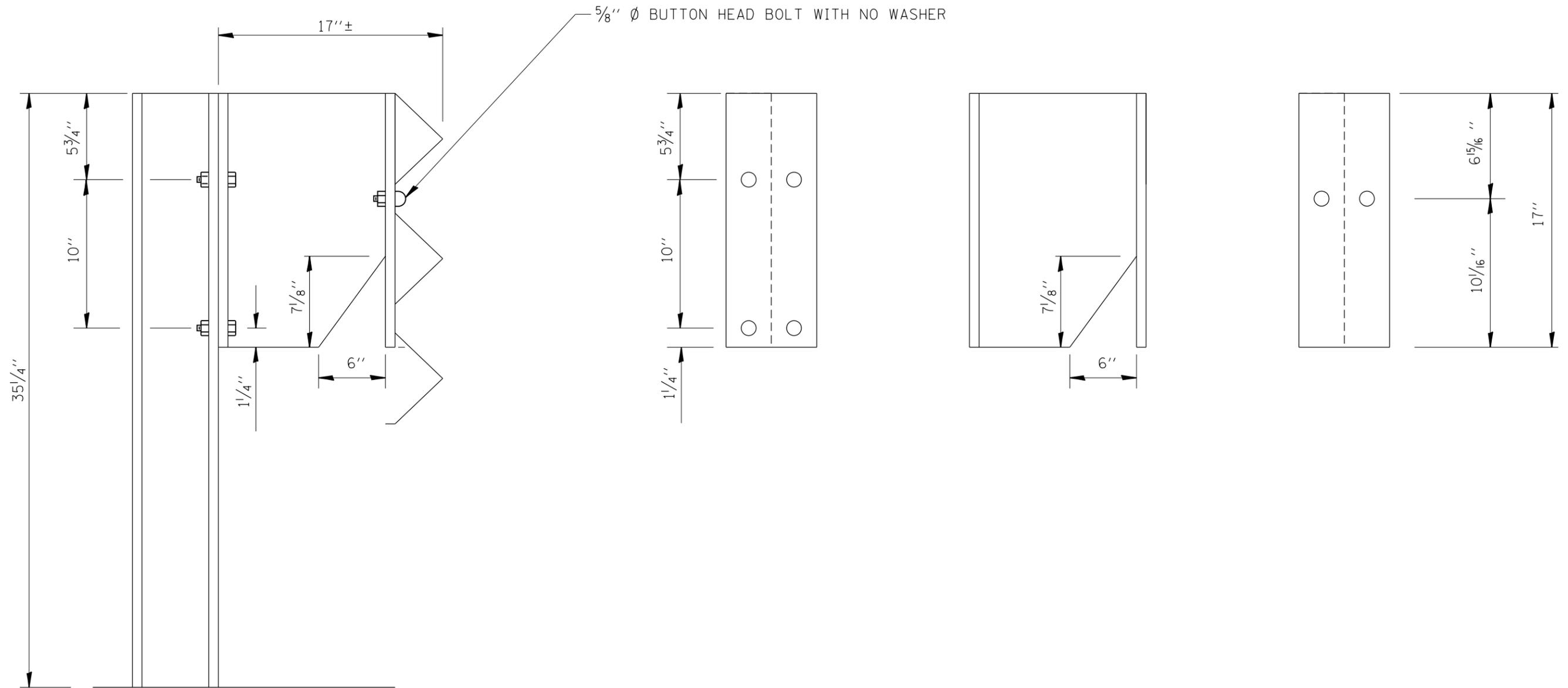
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

|   |              |         |              |                    |
|---|--------------|---------|--------------|--------------------|
| F.A. RTE.                                       | SECTION      | COUNTY  | TOTAL SHEETS | SHEET NO.          |
| VAR.  | 2020-243-GRR | VARIOUS | 32           | 18                 |
|   | BM-06        |         |              | CONTRACT NO. 62N13 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |              |         |              |                    |



THIS SHEET IS FOR INFORMATION ONLY

|   |                               |            |                               |   |  |                         |      |                           |              |   |              |           |
|---|-------------------------------|------------|-------------------------------|---|--|-------------------------|------|---------------------------|--------------|---|--------------|-----------|
| FILE NAME =   | USER NAME = miduja            | DESIGNED - | REVISED - R. RITCHIE 05-02-00 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>DETAIL OF GUARDRAIL SUPPORT<br/>AND END ANCHORAGE</b> |                         |      | F.A. RTE.                 | SECTION      | COUNTY  | TOTAL SHEETS | SHEET NO. |
| pw:\planroom.dot.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\Drawings\Design\DRP218-sht-plan.dgn | PLOT SCALE = 100.0000' / 1in. | CHECKED -  | REVISED -                     |   |  |                         |      | VAR.                      | 2020-243-GRR | VARIOUS   | 32           | 19        |
| PLOT DATE = 10/10/2020  | DATE = 10-31-88               | REVISED -  | REVISED -                     |   | <b>BM-07</b>   |                         |      | <b>CONTRACT NO. 62N13</b> |              |   |              |           |
|   |                               |            |                               |   | SCALE: NONE  | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.                   |              | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |              |           |



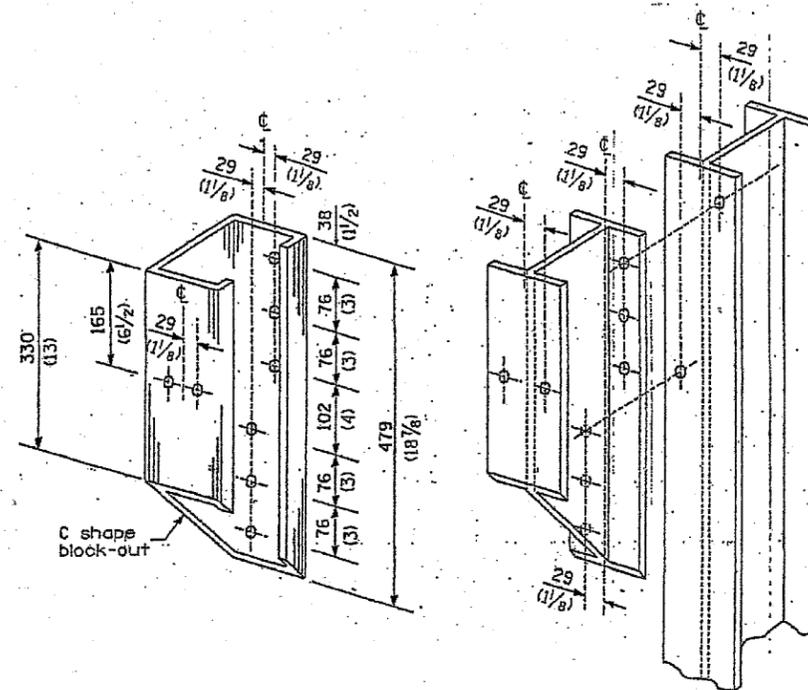
|  |                               |            |           |
|--|-------------------------------|------------|-----------|
| FILE NAME =  | USER NAME = midyja            | DESIGNED - | REVISED - |
| p:\planroom\dot.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\0134218-sht-plan.dgn |                               | DRAWN -    | REVISED - |
|  | PLOT SCALE = 100.0000' / 1in. | CHECKED -  | REVISED - |
|  | PLOT DATE = 10/10/2020        | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL THRE BEAM GUARDRAIL  
WITH MODIFIED OFFSET BLOCK**

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

|   |              |         |                    |           |
|---|--------------|---------|--------------------|-----------|
| F.A. RTE.                                     | SECTION      | COUNTY  | TOTAL SHEETS       | SHEET NO. |
| VAR.  | 2020-243-GRR | VARIOUS | 32                 | 20        |
| FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |              |         | CONTRACT NO. 62N13 |           |



STEEL BLOCK-OUT AND  
STEEL POST DETAILS

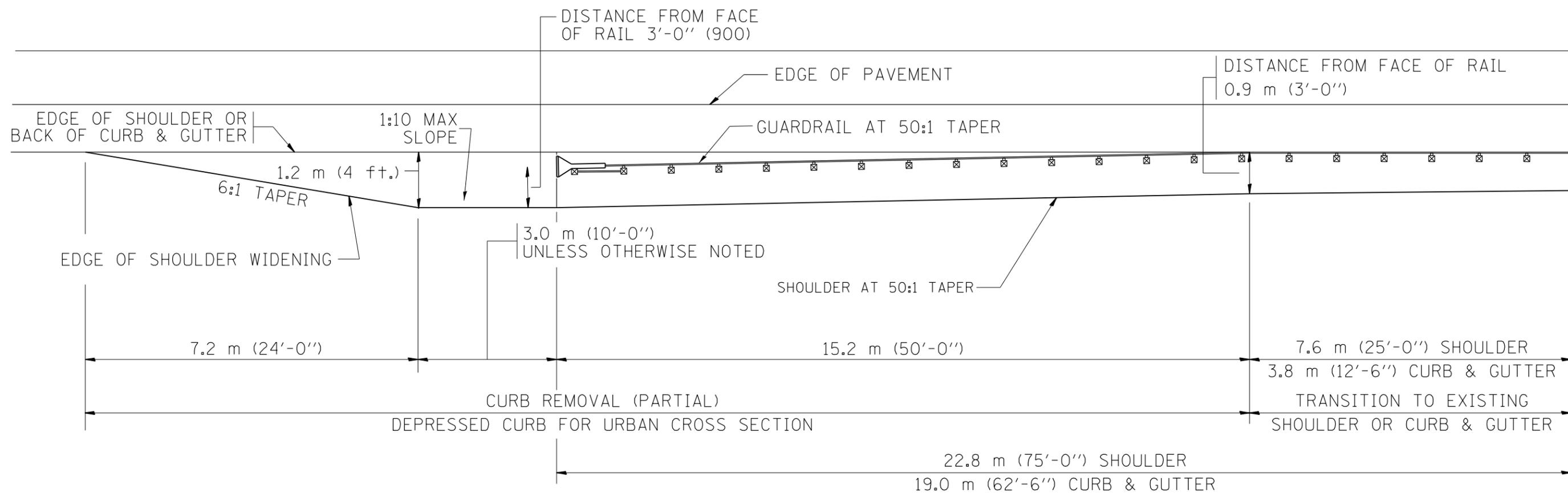
|   |                              |            |           |
|---|------------------------------|------------|-----------|
| FILE NAME =   | USER NAME = midyja           | DESIGNED - | REVISED - |
| pw\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\0134218-sht-plan.dgn |                              | CHECKED -  | REVISED - |
| Default   | PLOT SCALE = 100.0000' / in. | DATE -     | REVISED - |
|   | PLOT DATE = 10/10/2020       |            |           |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**STEEL PLATE BEAM GUARDRAIL**  
**STEEL BLOCK-OUT DETAIL**

SCALE: SHEET OF SHEETS STA. TO STA.

|                    |              |         |                           |           |
|--------------------|--------------|---------|---------------------------|-----------|
| F.A. RTE.          | SECTION      | COUNTY  | TOTAL SHEETS              | SHEET NO. |
| VAR.               | 2020-243-GRR | VARIOUS | 32                        | 21        |
| CONTRACT NO. 62N13 |              |         | ILLINOIS FED. AID PROJECT |           |

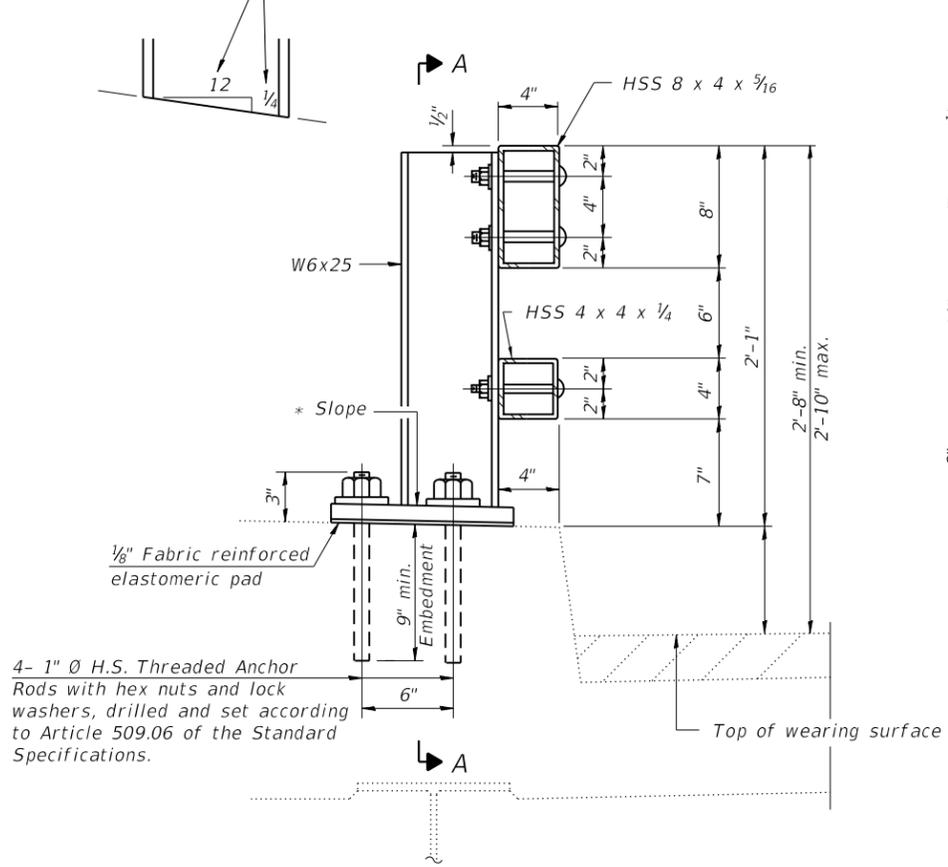


NOTES: THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

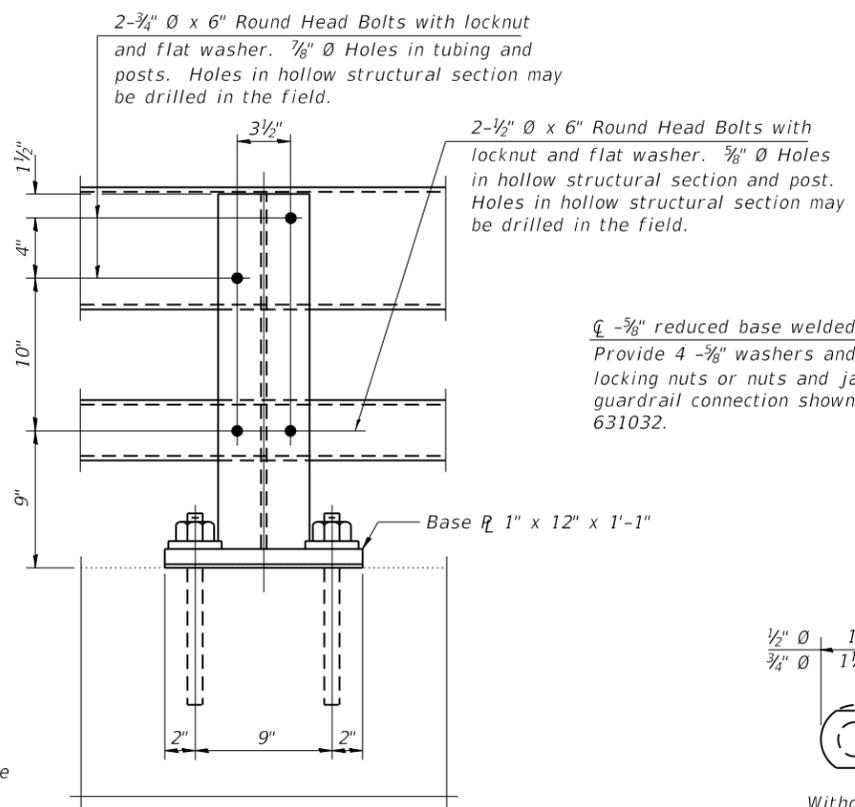
SHOULDER WIDENING SHALL BE IN ACCORDANCE WITH STATE STANDARD 630301

|  |                               |            |           |   |  |                           |              |         |              |           |    |      |
|--|-------------------------------|------------|-----------|---|--|---------------------------|--------------|---------|--------------|-----------|----|------|
| FILE NAME =  | USER NAME = midyja            | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>CURB REMOVAL (PARTIAL) FOR<br/>TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL</b> | F.A. RTE.                 | SECTION      | COUNTY  | TOTAL SHEETS | SHEET NO. |    |      |
| pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\0134218-sht-plan.dgn | DRAWN                         | REVISION   | REVISION  |   |  | VAR.                      | 2020-243-GRR | VARIOUS | 32           | 22        |    |      |
| Default  | PLOT SCALE = 100.0000' / 1in. | CHECKED -  | REVISED - |   |  | CONTRACT NO. 62N13        |              |         |              |           |    |      |
|  | PLOT DATE = 10/10/2020        | DATE -     | REVISED - |   |  | ILLINOIS FED. AID PROJECT |              |         |              |           |    |      |
|  |                               |            |           |   |  | SCALE:                    | SHEET        | OF      | SHEETS       | STA.      | TO | STA. |

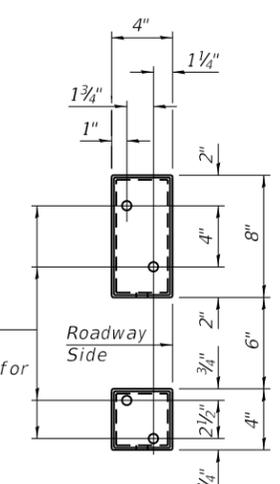
\* Cut bottom end of post to curb slope.



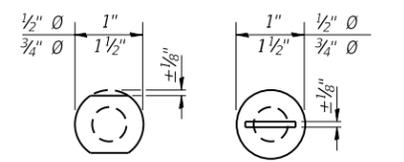
SECTION AT RAIL POST



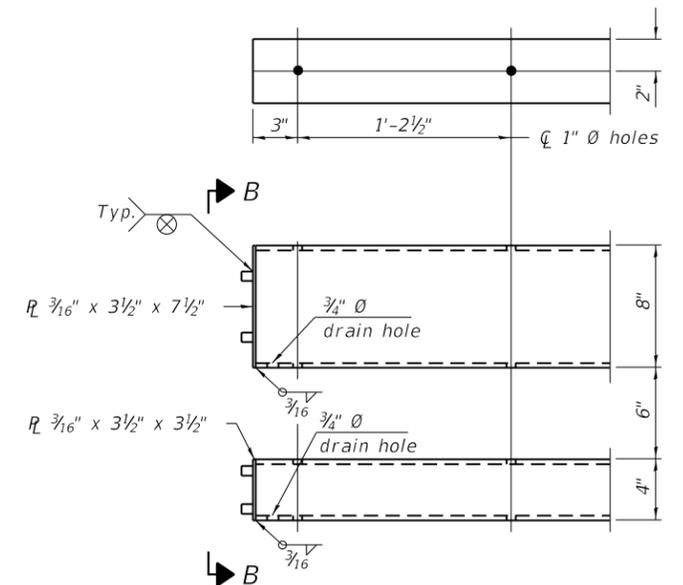
SECTION A-A



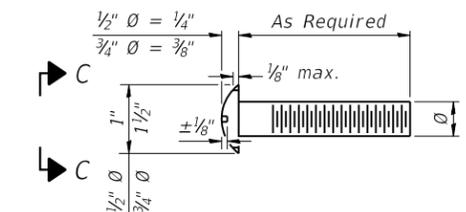
VIEW B-B



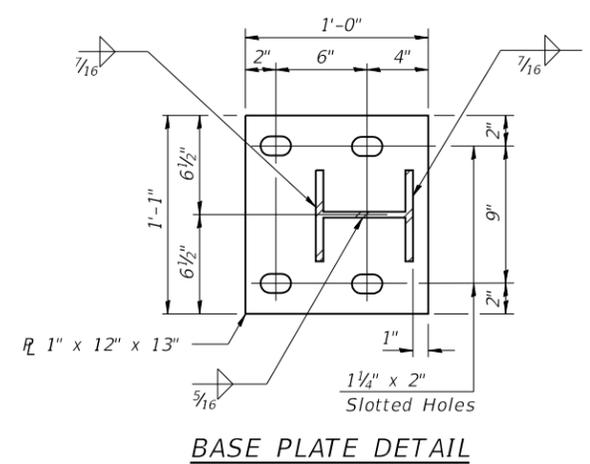
VIEW C-C



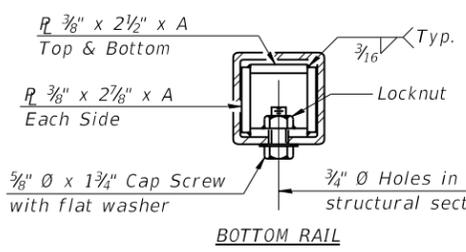
END OF RAIL DETAILS



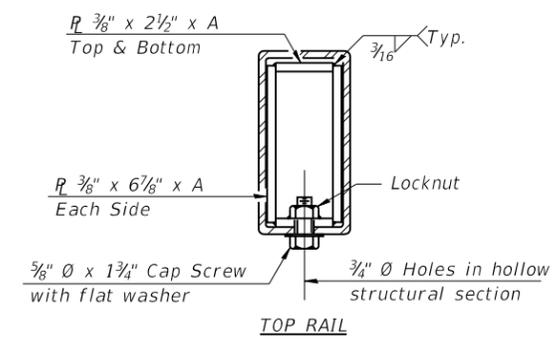
DETAIL OF 1/2" Ø & 3/4" Ø ROUND HEAD BOLTS



BASE PLATE DETAIL

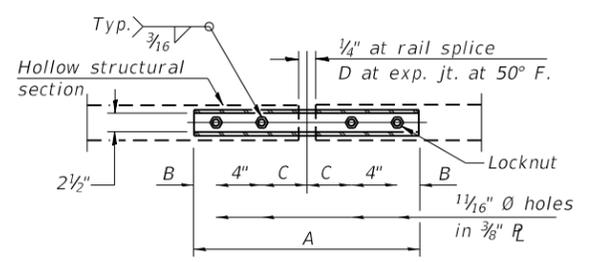


BOTTOM RAIL

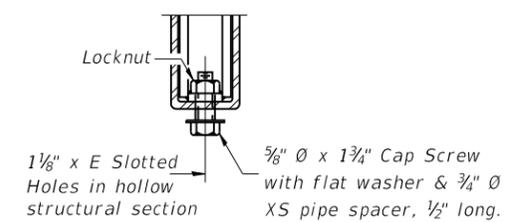


TOP RAIL

SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE R TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

Notes:  
 Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.  
 Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.  
 Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.  
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

SPLICE DIMENSIONS

| T             | D      | A      | B      | C      | E      |
|---------------|--------|--------|--------|--------|--------|
| ≤ 4"          | 2 1/2" | 1'-8"  | 2"     | 4"     | 2 1/2" |
| > 4" ≤ 6 1/2" | 3 3/4" | 2'-0"  | 2 1/2" | 5 1/2" | 3 1/2" |
| > 6 1/2" ≤ 9" | 5"     | 2'-4"  | 3 1/2" | 6 1/2" | 9"     |
| > 9" ≤ 13"    | 7"     | 2'-10" | 4 1/2" | 8 1/2" | 11"    |
| Rail Splice   | 1/4"   | 1'-8"  | 2"     | 4"     | —      |

T = Total movement at expansion joint as shown on the design plans.

BILL OF MATERIAL

| Item                     | Unit | Quantity |
|--------------------------|------|----------|
| Steel Railing, Type 2399 | Foot |          |

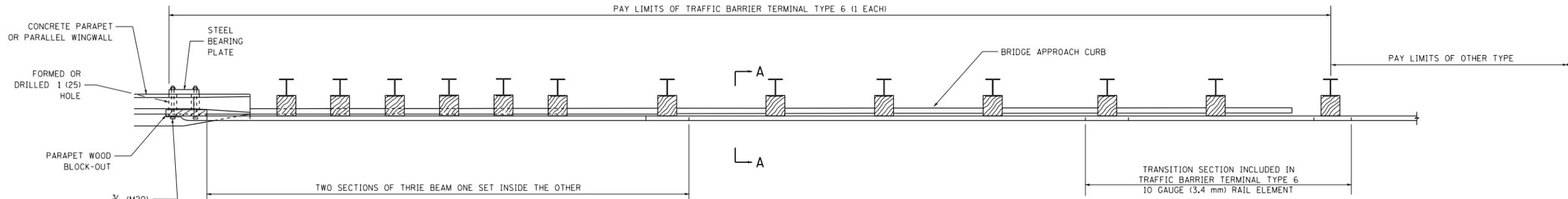
R-31

2-17-2017

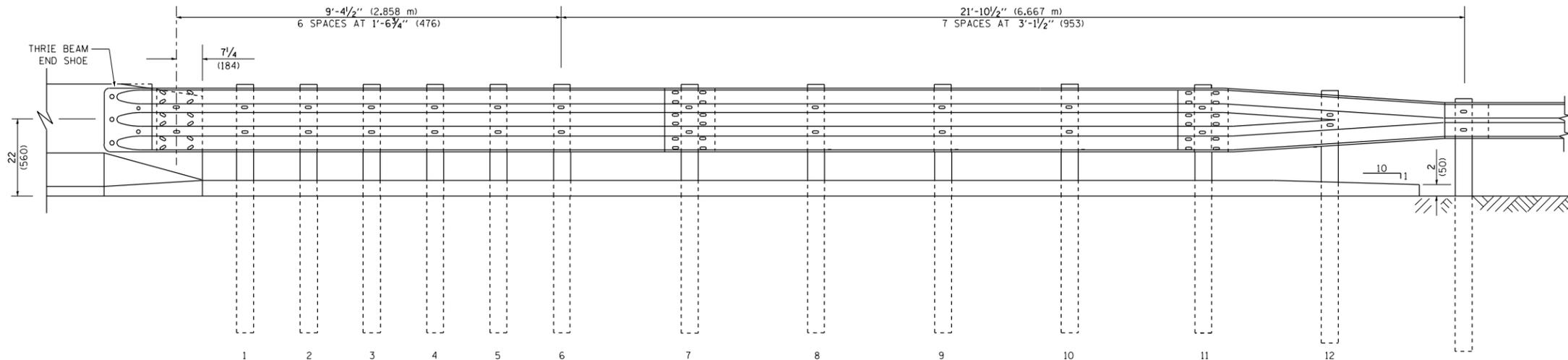
(6'-3" Maximum Post Spacing)

PARAPET OR WINGWALL

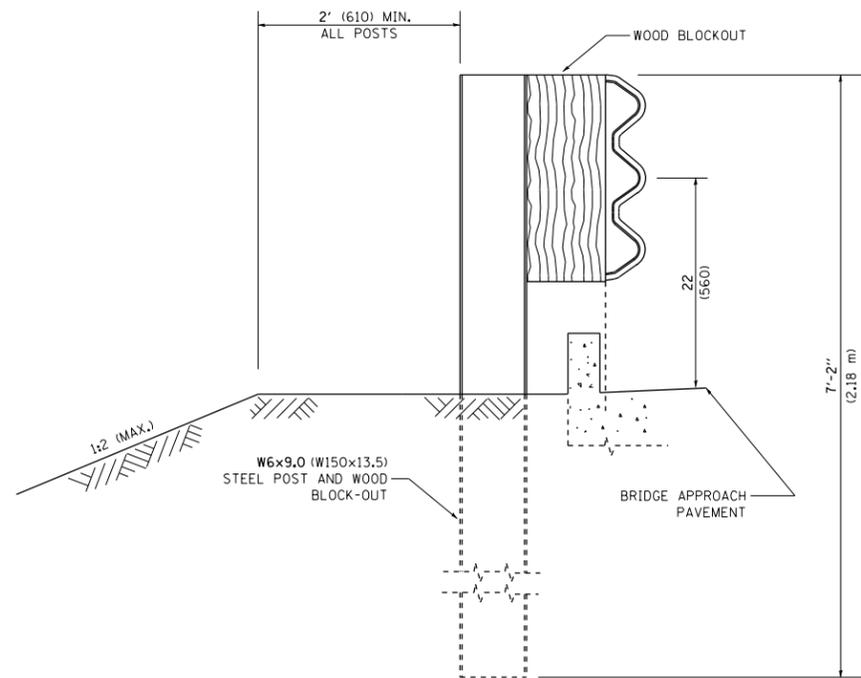
PAY LIMITS OF TRAFFIC BARRIER TERMINAL TYPE 6 (1 EACH)



PLAN



ELEVATION



SECTION A-A

GENERAL NOTES

- TO BE USED WHEN CONNECTING TO EXISTING GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
- SEE STANDARD 630001 FOR DETAILS OF GUARDRAIL NOT SHOWN.
- THRIE BEAM RAIL SHALL BE BOLTED TO BLOCK-OUT AT ALL POSTS.
- SEE STANDARD 420401 FOR DETAILS OF BRIDGE APPROACH PAVEMENT.
- ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

|  |                               |            |                           |
|--|-------------------------------|------------|---------------------------|
| FILE NAME =  | USER NAME = midyja            | DESIGNED - | REVISED - STATE STANDARD: |
| p:\planroom.dot\illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\BIDDING\Design\0134218-sht-plan.dgn |                               | DRAWN      | 631031-05 - 02/19/2008    |
|  | PLOT SCALE = 100.0000' / 1in. | CHECKED -  | REVISED -                 |
|  | PLOT DATE = 10/10/2020        | DATE -     | REVISED -                 |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPE 6 TERMINAL  
FOR USE WITH 21" HIGH SPBGR

SCALE: NONE SHEET NO. 1 OF 3 SHEETS STA. TO STA.

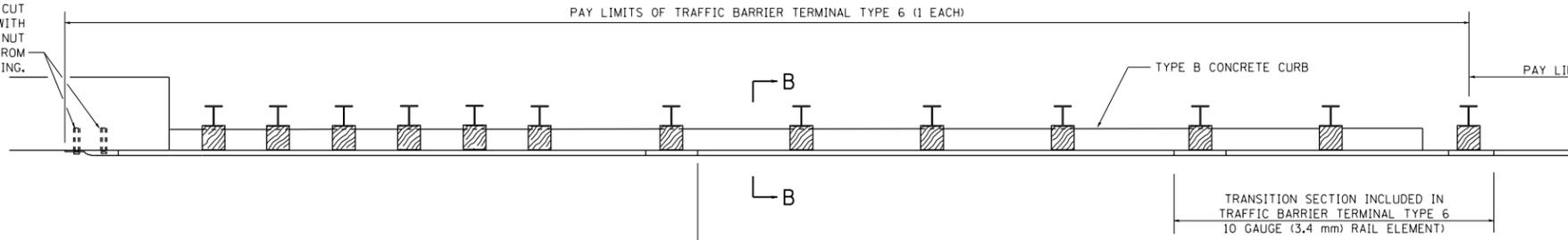
|   |              |                    |              |           |
|---|--------------|--------------------|--------------|-----------|
| F.A. RTE.                                       | SECTION      | COUNTY             | TOTAL SHEETS | SHEET NO. |
| VAR.  | 2020-243-GRR | VARIOUS            | 32           | 24        |
| BM 22   |              | CONTRACT NO. 62N13 |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |              |                    |              |           |

OTHER CONCRETE STRUCTURE

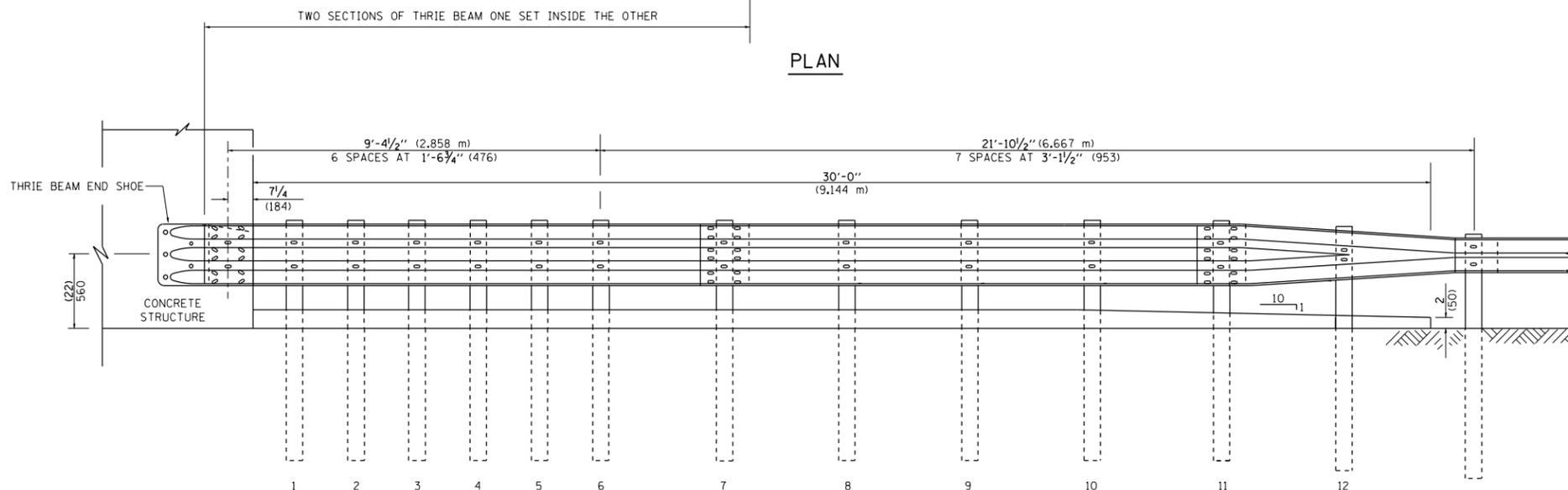
5 EPOXY GROUTED 3/4 (M20) ANCHOR BOLTS WITH STANDARD WASHERS. AFTER TIGHTENING, CUT THE ANCHOR BOLTS FLUSH WITH NUTS, AND DAMAGE THE NUT TO PREVENT IT FROM LOOSENING.

PAY LIMITS OF TRAFFIC BARRIER TERMINAL TYPE 6 (1 EACH)

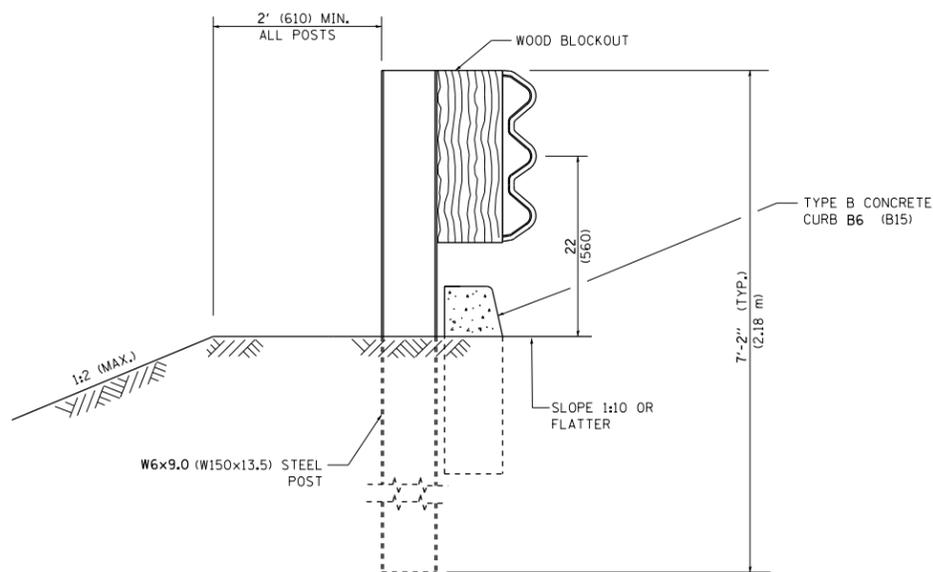
PAY LIMITS OF OTHER TYPE



PLAN



ELEVATION



SECTION B-B

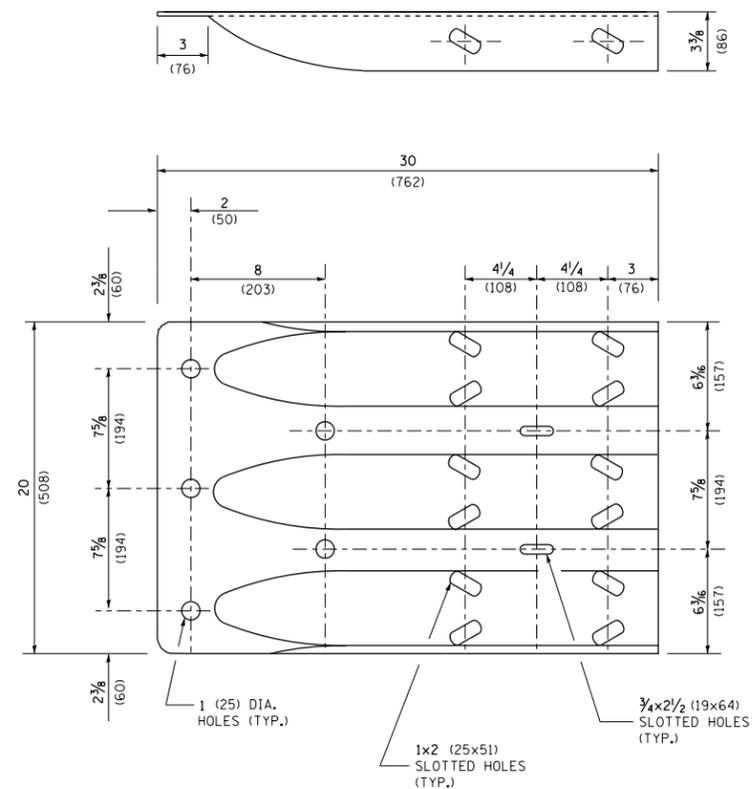
|  |                               |            |                           |
|--|-------------------------------|------------|---------------------------|
| FILE NAME =  | USER NAME = midyja            | DESIGNED - | REVISED - STATE STANDARD: |
| pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\BMDMA\Design\0134218-sht-plan.dgn |                               |            | 631031-05 - 02/19/2008    |
|  | PLOT SCALE = 100.0000' / 1in. | CHECKED -  | REVISED -                 |
|  | PLOT DATE = 10/10/2020        | DATE -     | REVISED -                 |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

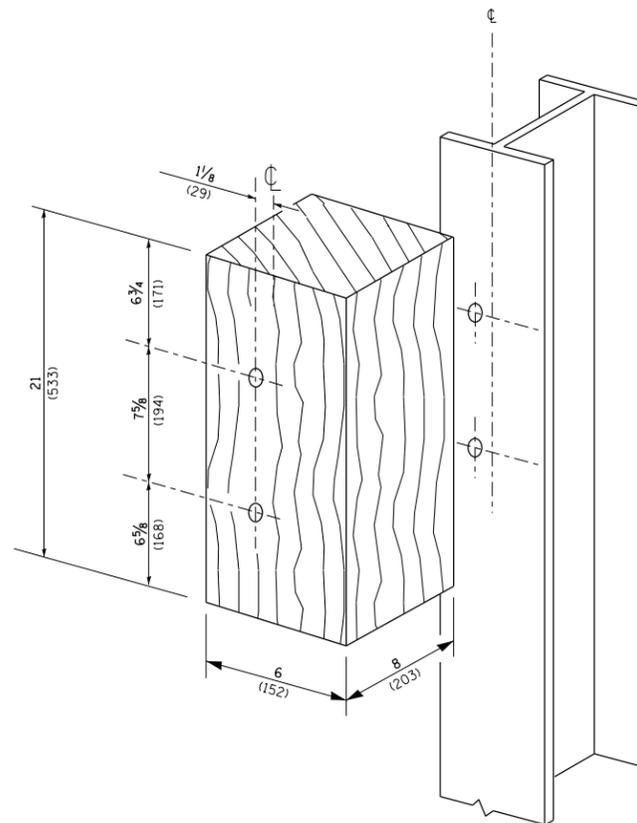
TYPE 6 TERMINAL  
FOR USE WITH 21" HIGH SPBGR

SCALE: NONE SHEET NO. 2 OF 3 SHEETS STA. TO STA.

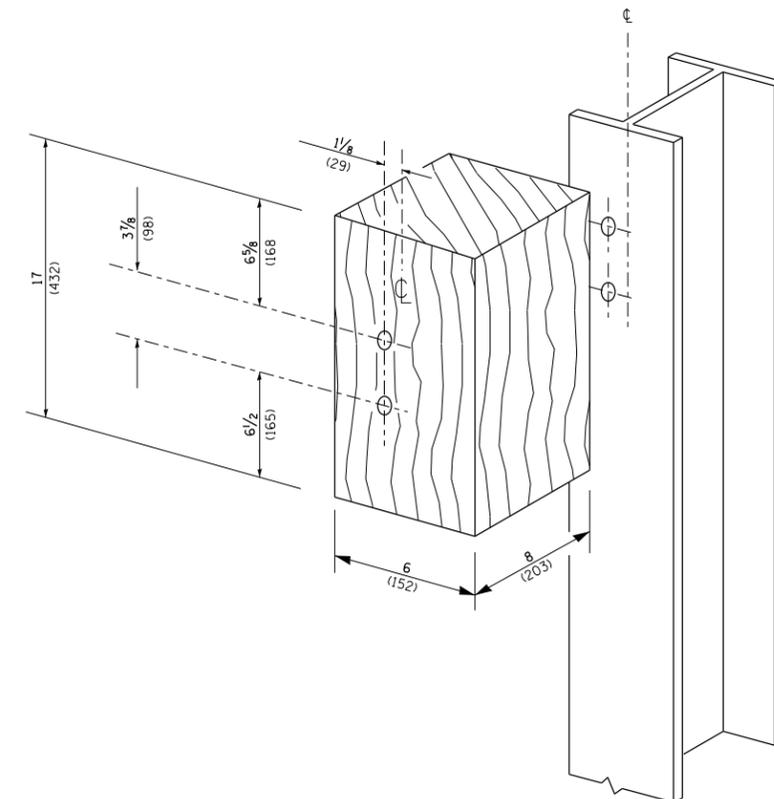
|   |              |                    |              |           |
|---|--------------|--------------------|--------------|-----------|
| F.A. RTE.                                       | SECTION      | COUNTY             | TOTAL SHEETS | SHEET NO. |
| VAR.  | 2020-243-GRR | VARIOUS            | 32           | 25        |
| BM 22   |              | CONTRACT NO. 62N13 |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |              |                    |              |           |



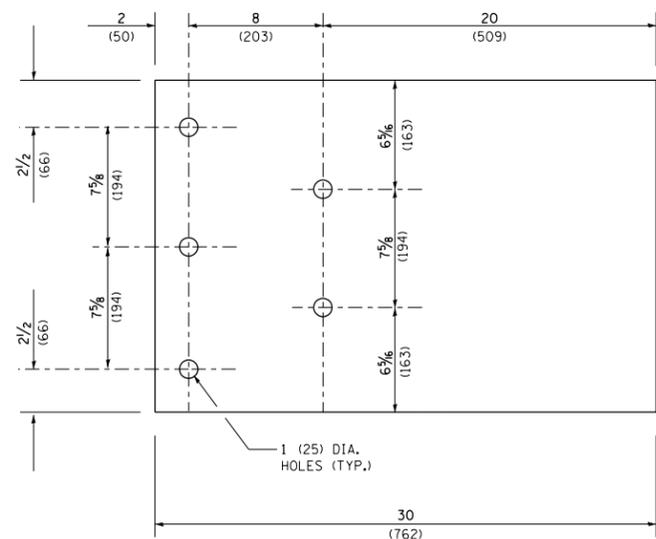
THRIE BEAM END SHOE DETAIL



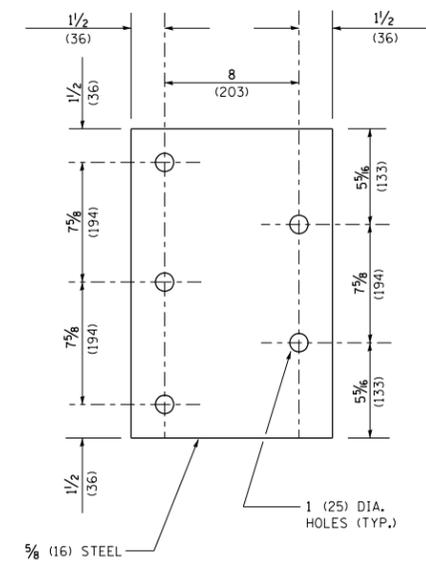
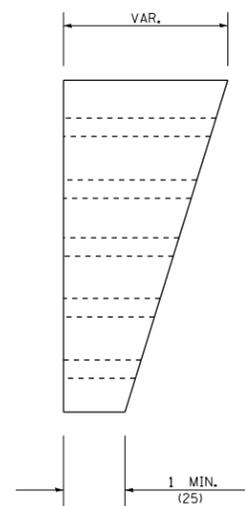
POSTS 1-11 WOOD BLOCKOUT DETAIL



POST 12 WOOD BLOCKOUT DETAIL



PARAPET WOOD BLOCK-OUT DETAIL



PARAPET STEEL BEARING PLATE DETAIL

(5 EACH INDIVIDUAL 5x5x5/8 (125x125x16) STEEL PLATES WITH CENTERED 1 (25) HOLES MAY BE SUBSTITUTED FOR THE PLATE SHOWN.)

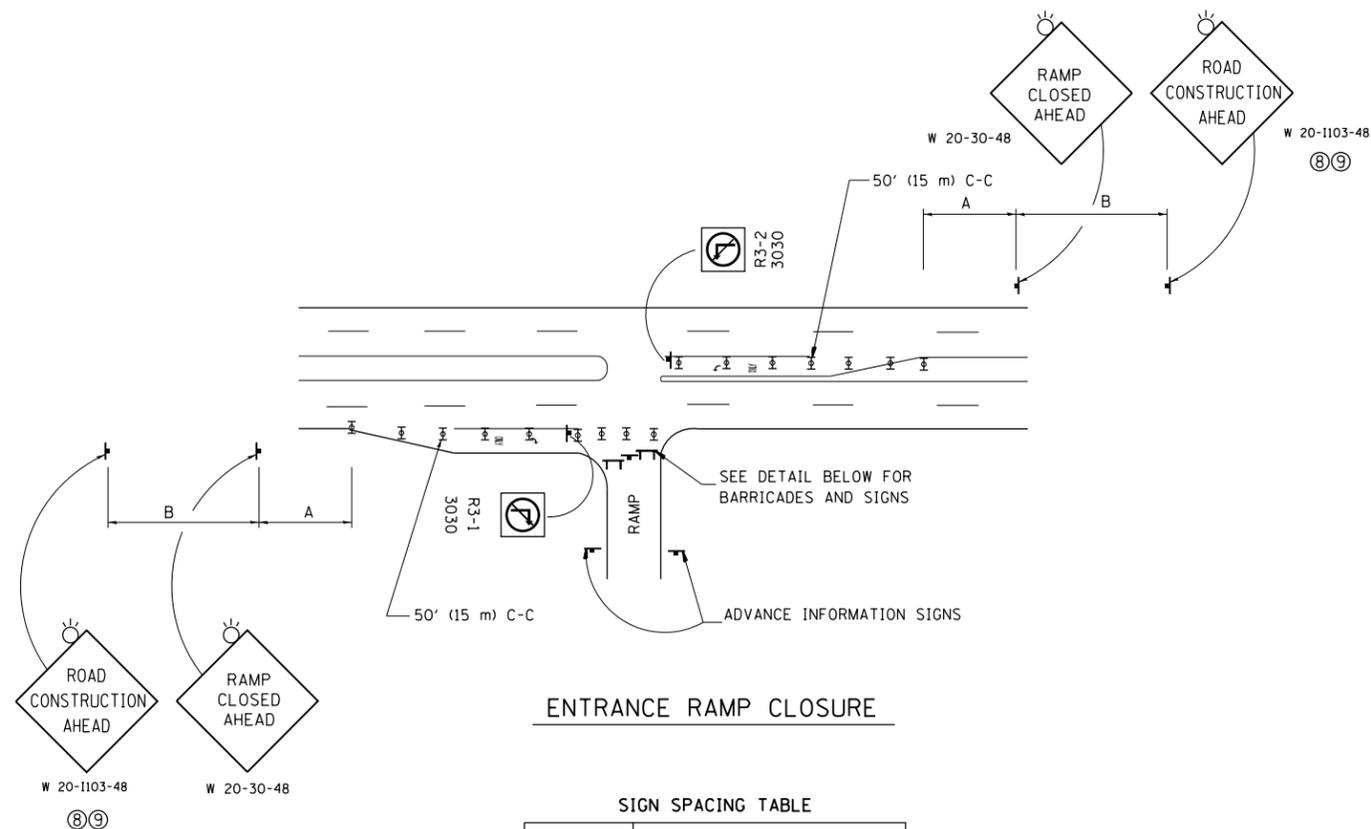
|  |                               |            |                           |
|--|-------------------------------|------------|---------------------------|
| FILE NAME =  | USER NAME = midyja            | DESIGNED - | REVISED - STATE STANDARD: |
| pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\BID\DRAWING\Design\0134218-sht-plan.dgn |                               |            | 631031-05 - 02/19/2008    |
|  | PLOT SCALE = 100.0000' / 1" = | CHECKED -  | REVISED -                 |
|  | PLOT DATE = 10/10/2020        | DATE -     | REVISED -                 |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPE 6 TERMINAL  
FOR USE WITH 21" HIGH SPBGR

SCALE: NONE SHEET NO. 3 OF 3 SHEETS STA. TO STA.

|   |              |                    |              |           |
|---|--------------|--------------------|--------------|-----------|
| F.A. RTE.                                       | SECTION      | COUNTY             | TOTAL SHEETS | SHEET NO. |
| VAR.  | 2020-243-GRR | VARIOUS            | 32           | 26        |
| BM 22   |              | CONTRACT NO. 62N13 |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |              |                    |              |           |

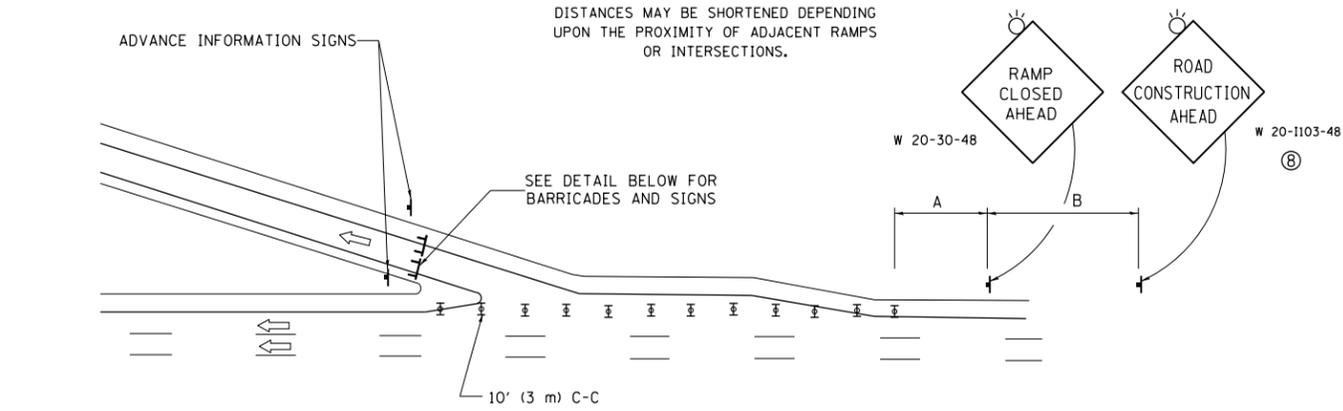


**ENTRANCE RAMP CLOSURE**

**SIGN SPACING TABLE**

| FACILITY                | DISTANCE BETWEEN SIGNS |                  |
|-------------------------|------------------------|------------------|
|                         | A                      | B                |
| EXPRESSWAY<br>>24 HOURS | 1000'<br>(300 m)       | 1500'<br>(450 m) |
| EXPRESSWAY<br><24 HOURS | 500'<br>(150 m)        | 500'<br>(150 m)  |
| ARTERIAL<br>55 MPH      | 500'<br>(150 m)        | 500'<br>(150 m)  |
| ARTERIAL<br>50-45 MPH   | 350'<br>(100 m)        | 350'<br>(100 m)  |
| ARTERIAL<br><45 MPH     | 200'<br>(60 m)         | 200'<br>(60 m)   |

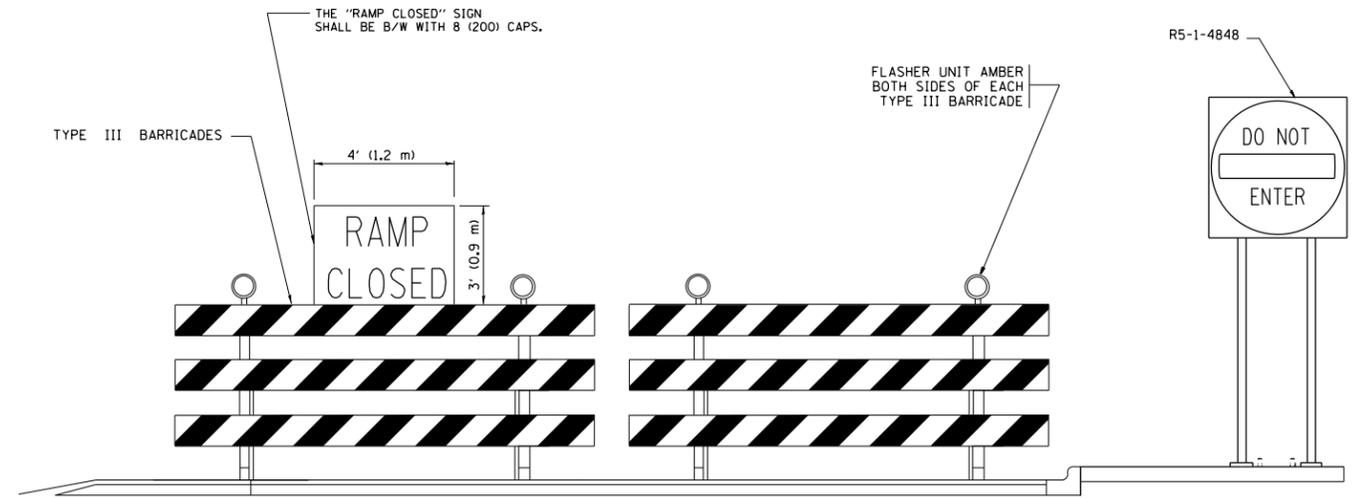
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



**EXIT RAMP CLOSURE**

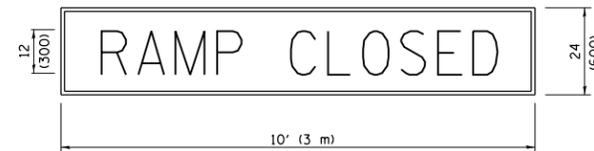
**SYMBOLS**

- ⊥ TYPE II BARRICADE OR DRUM
- ▬ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



**DETAIL FOR REQUIRED BARRICADES & SIGNS**

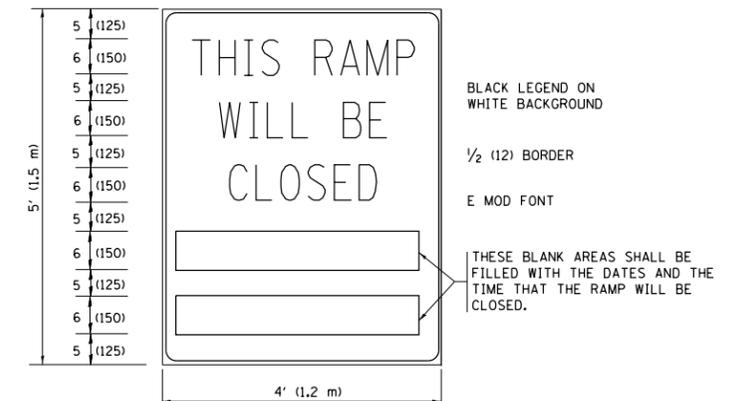
**RAMP CLOSURE ADVANCE WARNING SIGN**



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY  
E MOD FONT  
1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

**RAMP CLOSURE ADVANCE INFORMATION SIGN**



BLACK LEGEND ON WHITE BACKGROUND  
1/2 (12) BORDER  
E MOD FONT

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

**GENERAL NOTES:**

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- ② VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED BY A W20-7 FLAGGER WARNING SIGN.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- ⑦ THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH.
- ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

|  |                               |                   |                        |
|--|-------------------------------|-------------------|------------------------|
| FILE NAME =  | USER NAME = miduja            | DESIGNED - D.W.S. | REVISED - S.P.B. 01-07 |
| pw:\planroom\dot.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\0134218-sht-plan.dgn |                               | CHECKED -         | REVISED - S.P.B. 12-09 |
| Default  | PLOT SCALE = 100.0000' / 1in. | DATE - 02-83      | REVISED - M.D. 06-13   |
|  | PLOT DATE = 10/10/2020        |                   | REVISED - M.D. 01-18   |

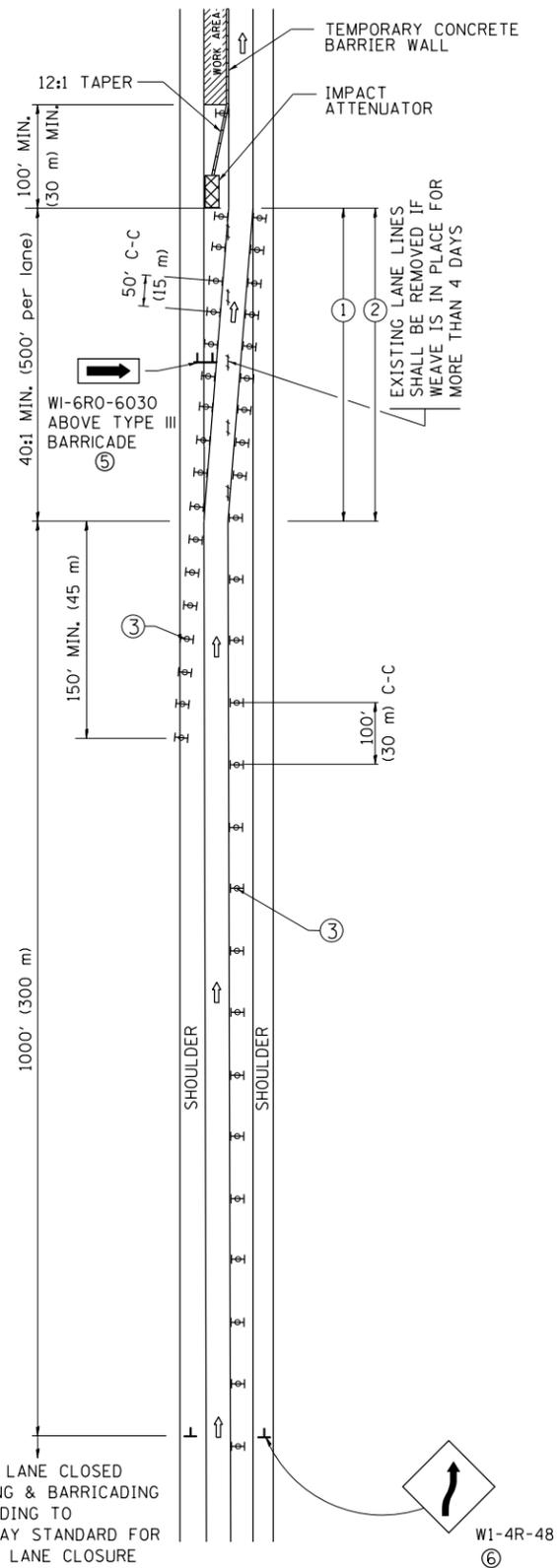
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ENTRANCE AND EXIT RAMP  
CLOSURE DETAILS**

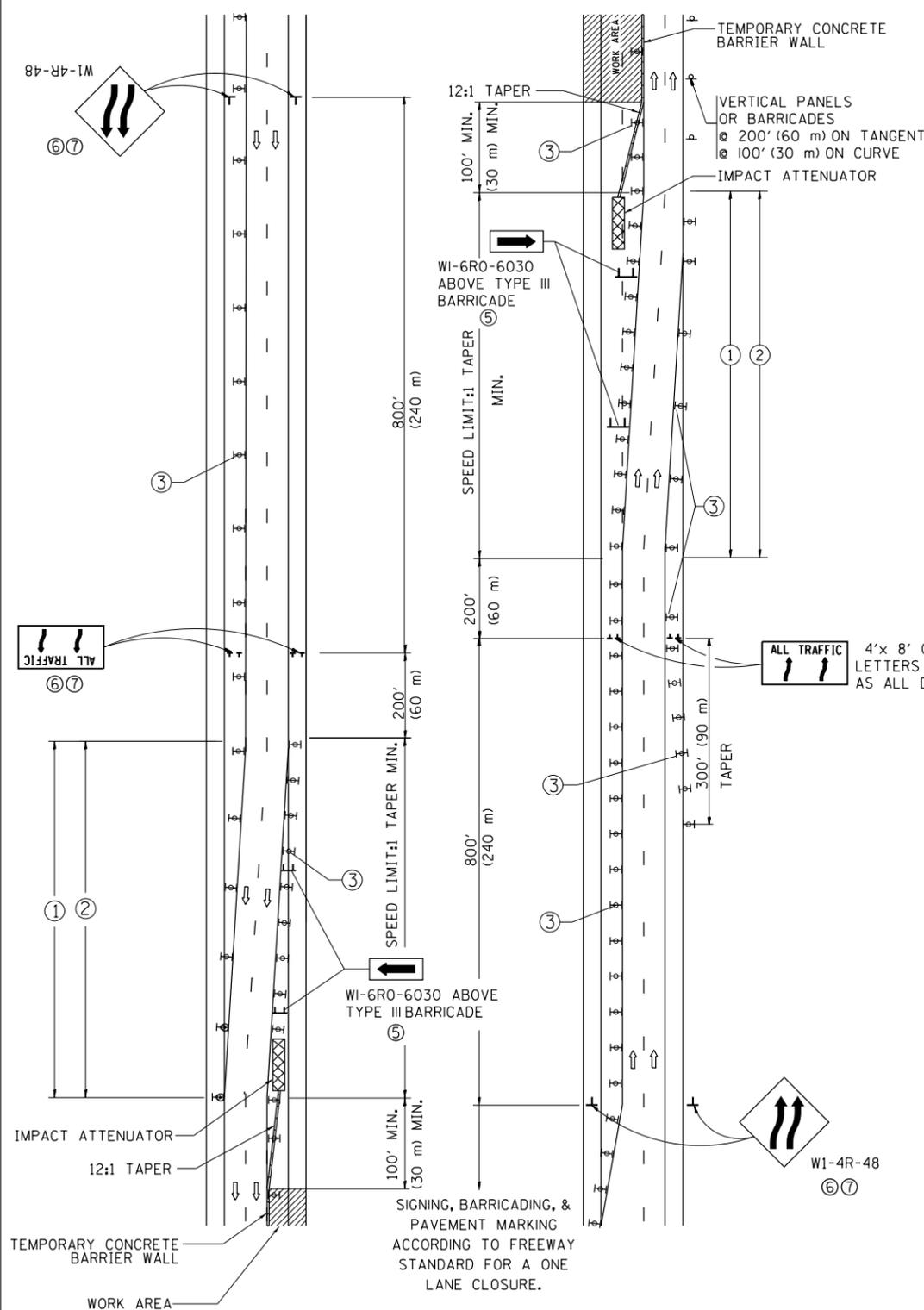
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

|                           |              |                    |              |           |
|---------------------------|--------------|--------------------|--------------|-----------|
| F.A. RTE.                 | SECTION      | COUNTY             | TOTAL SHEETS | SHEET NO. |
| VAR.                      | 2020-243-GRR | VARIOUS            | 32           | 27        |
| TC-08                     |              | CONTRACT NO. 62N13 |              |           |
| ILLINOIS FED. AID PROJECT |              |                    |              |           |

# SINGLE LANE WEAVE



# MULTI-LANE WEAVE



### GENERAL NOTES

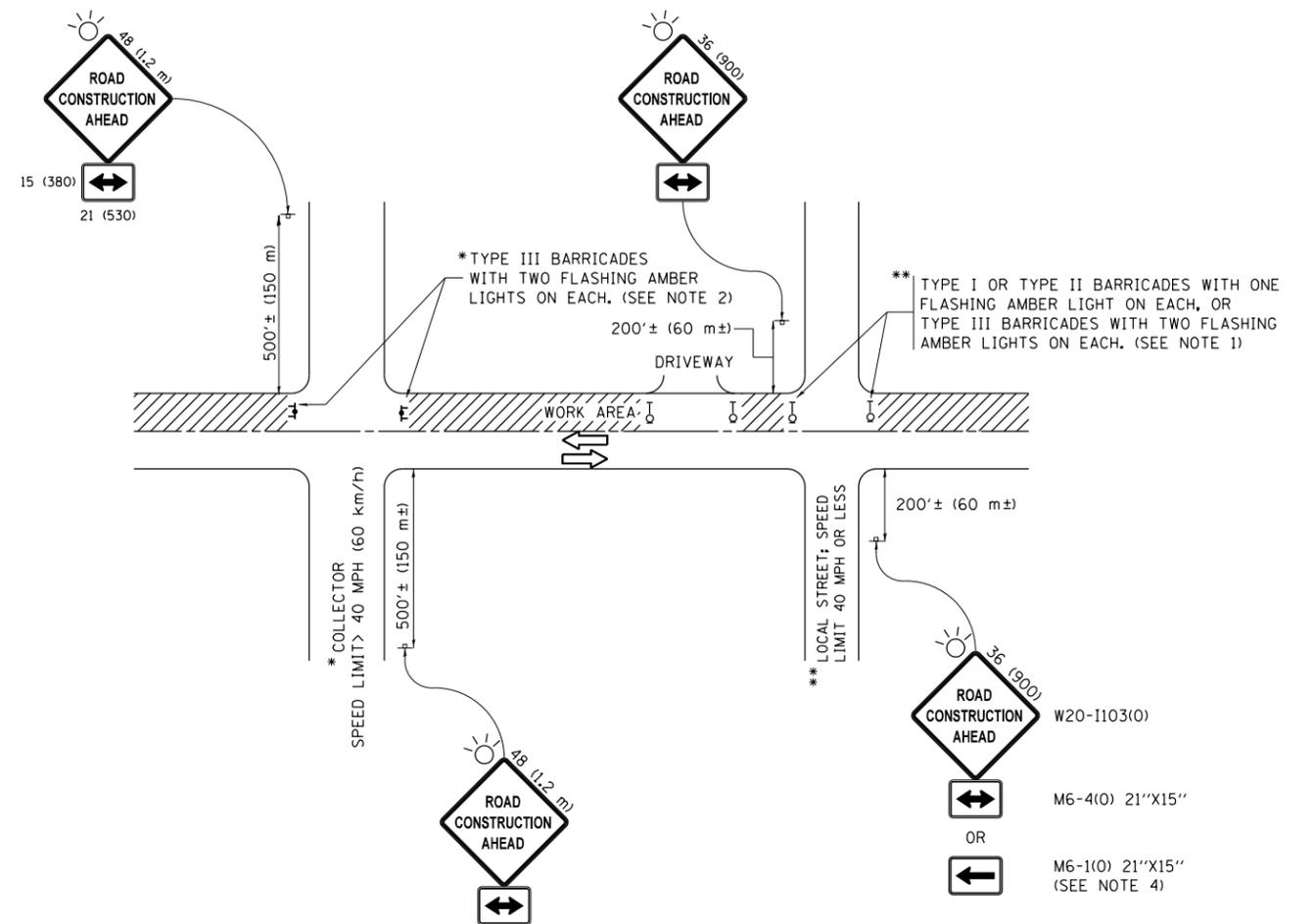
- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.
- CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. WI-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
- WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
- THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

### SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER WALL
- IMPACT ATTENUATOR
- W1-4R-48 (6, 7)
- W24-1-48 (7)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

|  |                    |                |                     |   |  |                         |      |           |   |              |                           |           |    |
|--|--------------------|----------------|---------------------|---|--|-------------------------|------|-----------|---|--------------|---------------------------|-----------|----|
| FILE NAME =  | USER NAME = midyja | DESIGNED - DWS | REVISED - JAF 02-06 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>TRAFFIC CONTROL DETAILS FOR<br/>FREEWAY SINGLE &amp; MULTI-LANE WEAVE</b> |                         |      | F.A. RTE. | SECTION   | COUNTY       | TOTAL SHEETS              | SHEET NO. |    |
| pw:\planroom.dot.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\0134218-sht-plan.dgn |                    | CHECKED -      | REVISED - SPB 01-07 |   | SCALE: NONE  | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.   | VAR.  | 2020-243-GRR | VARIOUS                   | 32        | 28 |
| PLOT SCALE = 100.0000' / 1in.  |                    | DATE - 02-87   | REVISED - SPB 12-09 |   |  |                         |      |           | <b>TC-09</b>                                    |              | <b>CONTRACT NO. 62N13</b> |           |    |
| PLOT DATE = 10/10/2020   |                    |                | REVISED - MD 06-13  |   |  |                         |      |           | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |              |                           |           |    |



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

|   |                               |                   |                                 |
|---|-------------------------------|-------------------|---------------------------------|
| FILE NAME =   | USER NAME = midyja            | DESIGNED - L.H.A. | REVISED - A. HOUSEH 10-15-96    |
| pw:\planroom.dot.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\0134218-sht-plan.dgn |                               | CHECKED -         | REVISED - T. RAMMACHER 01-06-00 |
| Default   | PLOT SCALE = 100.0000' / 1in. | DATE - 06-89      | REVISED - A. SCHUETZE 07-01-13  |
|   | PLOT DATE = 10/10/2020        |                   | REVISED - A. SCHUETZE 09-15-16  |

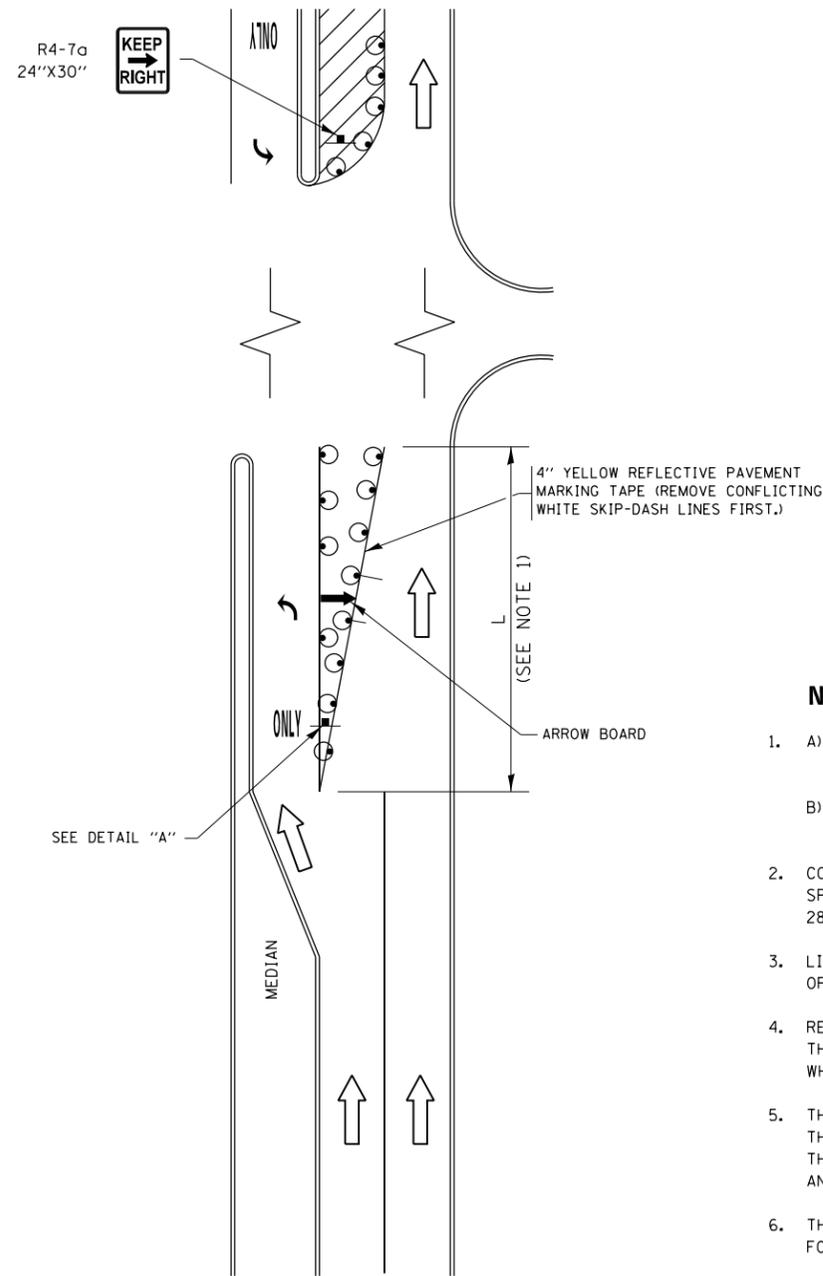
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

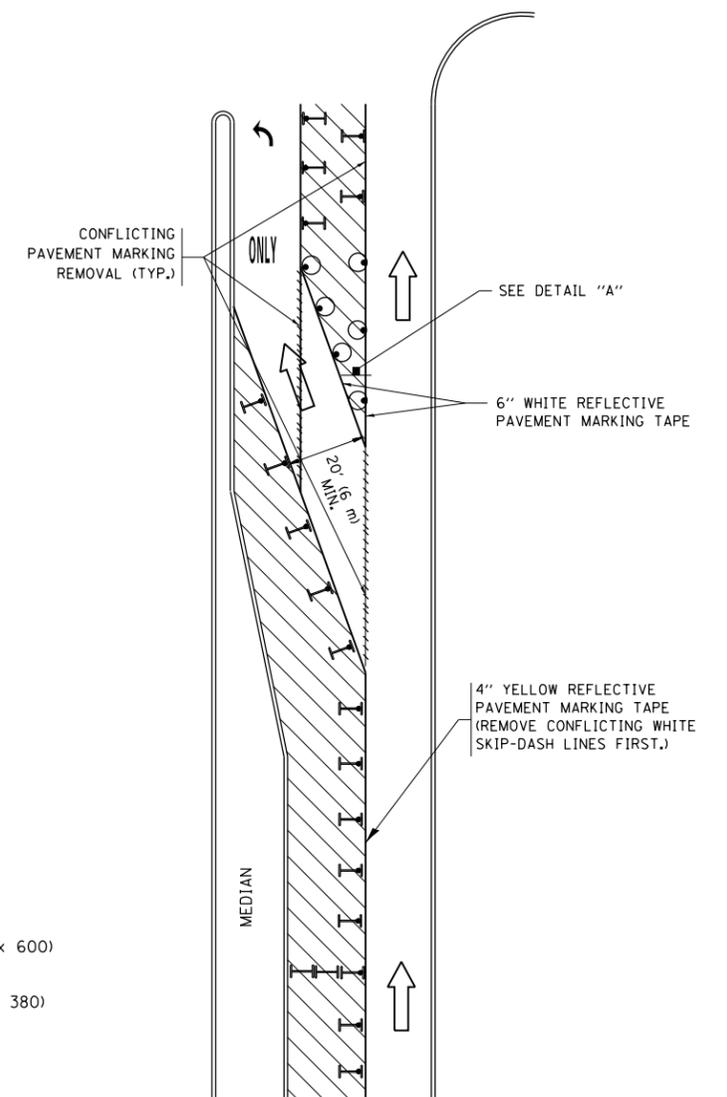
| F.A. RTE.                 | SECTION      | COUNTY  | TOTAL SHEETS              | SHEET NO. |
|---------------------------|--------------|---------|---------------------------|-----------|
| VAR.                      | 2020-243-GRR | VARIOUS | 32                        | 29        |
| <b>TC-10</b>              |              |         | <b>CONTRACT NO. 62N13</b> |           |
| ILLINOIS FED. AID PROJECT |              |         |                           |           |

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

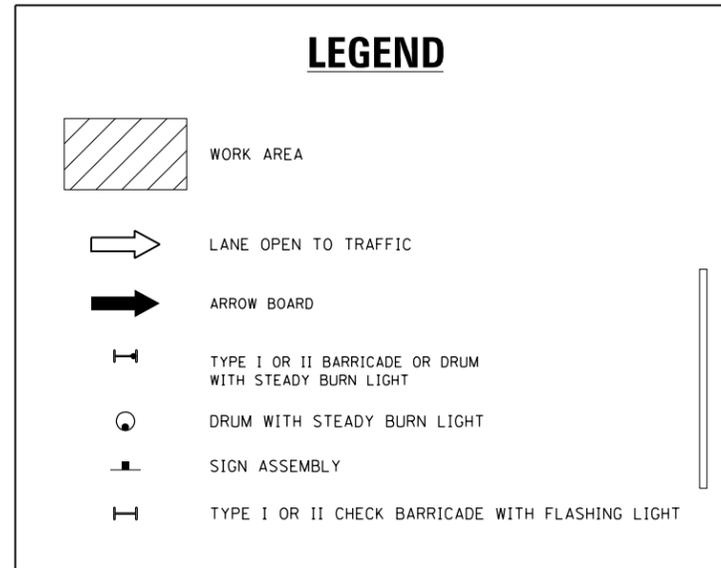


**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE

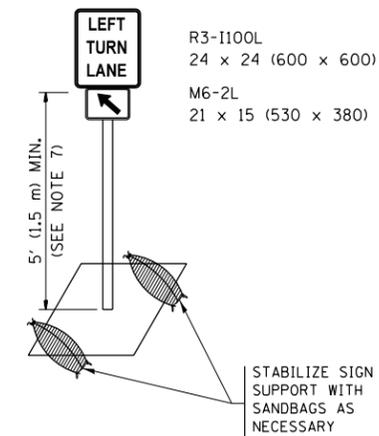


**FIGURE 2**



### NOTES:

1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

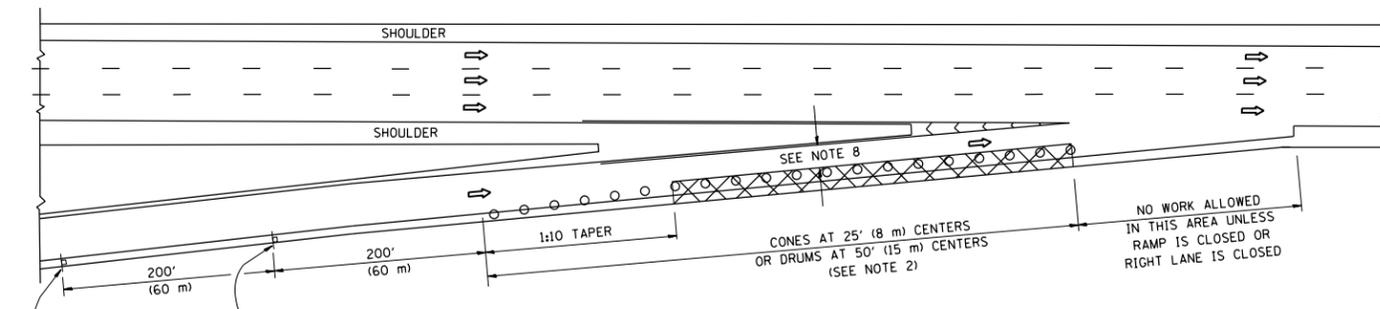


**DETAIL A**

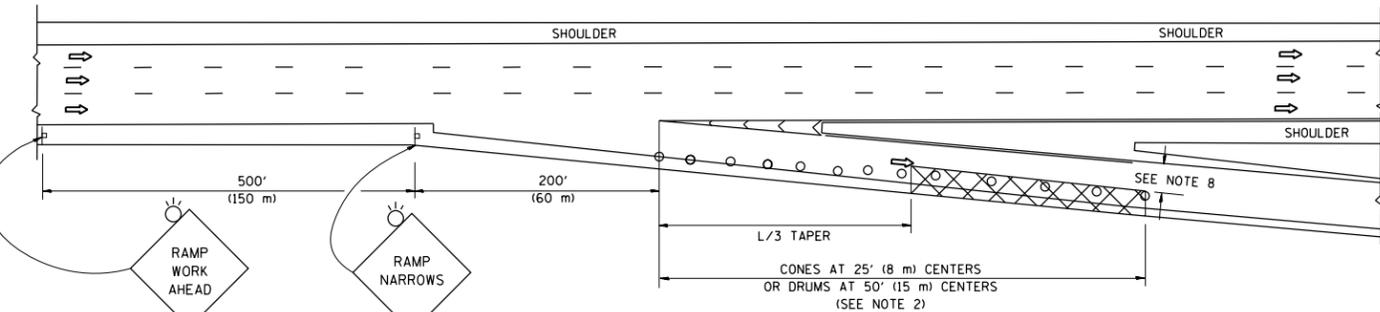
All dimensions are in inches (millimeters) unless otherwise shown.

|  |                              |                                 |                                |   |  |              |              |                           |              |              |
|--|------------------------------|---------------------------------|--------------------------------|---|--|--------------|--------------|---------------------------|--------------|--------------|
| FILE NAME =  | USER NAME = miduja           | REVISED - T. RAMMACHER 09-08-94 | REVISED - R. BORO 09-14-09     | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>TRAFFIC CONTROL AND PROTECTION AT TURN BAYS<br/>(TO REMAIN OPEN TO TRAFFIC)</b> | F.A. R.T.E.  | SECTION      | COUNTY                    | TOTAL SHEETS | SHEET NO.    |
| pw:\planroom.dot.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0134218\REVISED Design\0134218-01-07-95 | REVISED - A. HOUSEH 11-07-95 | REVISED - A. SCHUETZE 07-01-13  | REVISED - A. SCHUETZE 09-15-16 |   |  | VAR.         | 2020-243-GRR | VARIOUS                   | 32           | 30           |
| Default  | PLOT SCALE = 100.0000' / in. | REVISED - A. HOUSEH 10-12-96    | REVISED -                      |   |  | <b>TC-14</b> |              | <b>CONTRACT NO. 62N13</b> |              |              |
|  | PLOT DATE = 10/10/2020       | REVISED - T. RAMMACHER 01-06-00 | REVISED -                      |   |  | SCALE: NONE  |              | SHEET 1 OF 1 SHEETS       |              | STA. TO STA. |

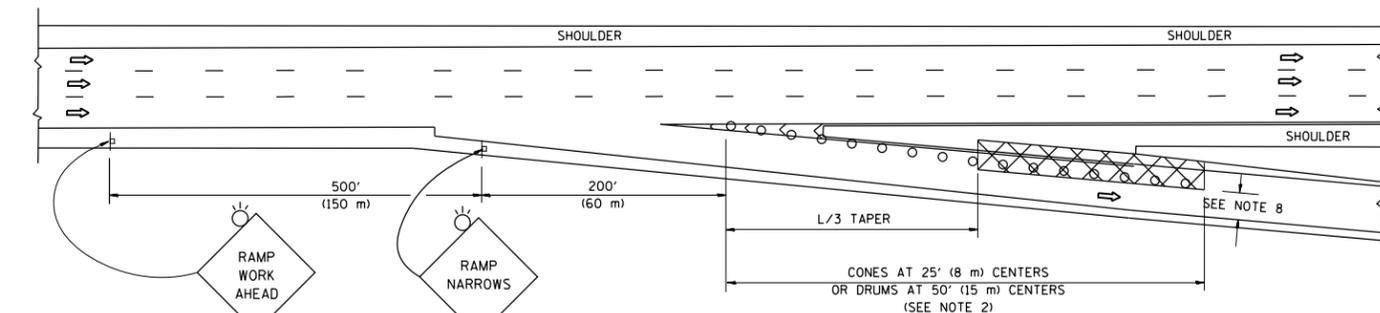
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

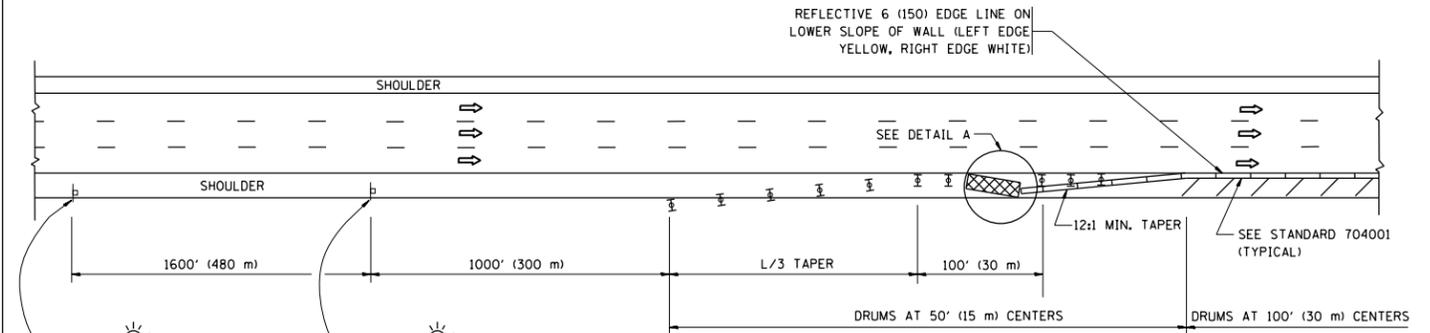
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES

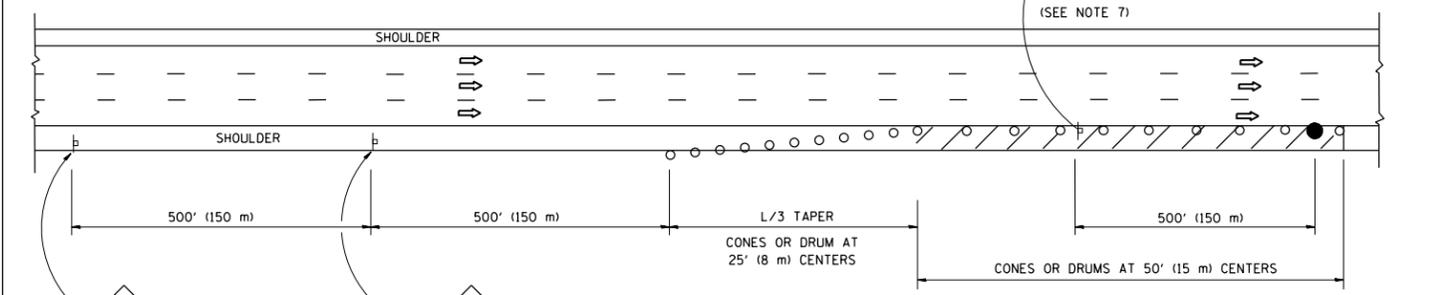
1. THE "L" DISTANCE EQUALS:
 

|                                      |                       |
|--------------------------------------|-----------------------|
| SPEED LIMIT                          | FORMULAS              |
| 45 mph (80 km/h)                     | METRIC ENGLISH        |
| OR GREATER:                          | L=0.65(W)(S) L=(W)(S) |
| W = WIDTH OF OFFSET IN FEET (METERS) |                       |
| S = NORMAL POSTED SPEED MPH (KM/H)   |                       |
2. TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTACLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION  
16' MIN. WIDTH CURVE SECTION.

SHOULDER CLOSURE DETAILS

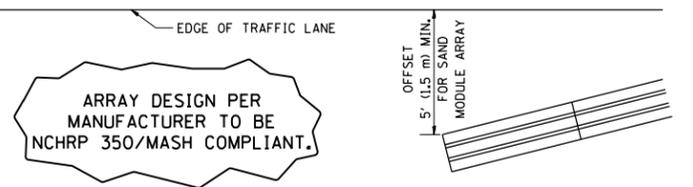


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



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

|  |                               |              |                        |
|--|-------------------------------|--------------|------------------------|
| FILE NAME =  | USER NAME = midyja            | DESIGNED -   | REVISED - S.P.B. 01-07 |
| pw:\planroom.dot.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWING\Design\DWG\15sht-plen.dgn |                               | CHECKED -    | REVISED - S.P.B. 12-09 |
| Default  | PLOT SCALE = 100.0000' / 1in. | DATE - 11-96 | REVISED - M.D. 06-13   |
|  | PLOT DATE = 10/10/2020        |              | REVISED - M.D. 01-18   |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

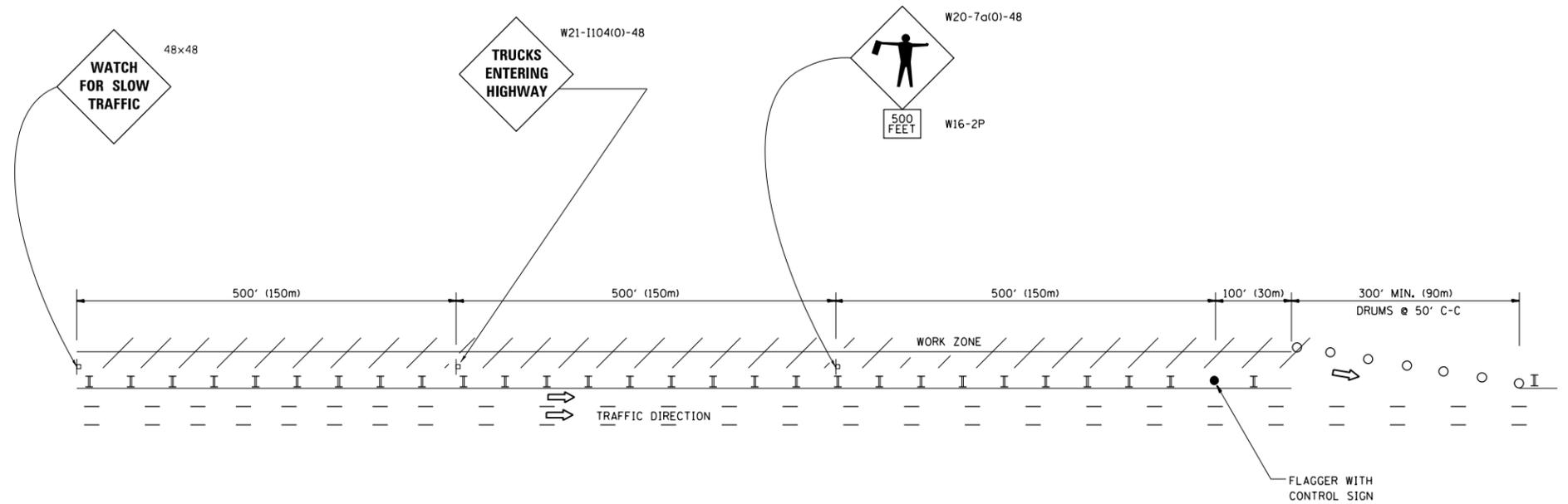
TRAFFIC CONTROL DETAILS FOR FREEWAY  
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

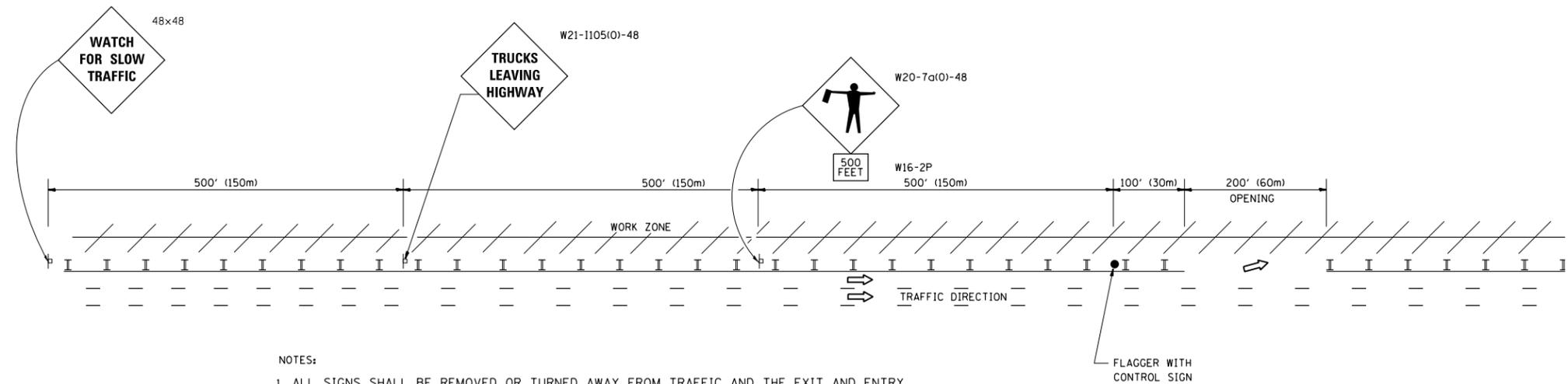
|                           |              |              |              |           |
|---------------------------|--------------|--------------|--------------|-----------|
| F.A. RTE.                 | SECTION      | COUNTY       | TOTAL SHEETS | SHEET NO. |
| VAR.                      | 2020-243-GRR | VARIOUS      | 32           | 31        |
| TC-17                     |              | CONTRACT NO. | 62N13        |           |
| ILLINOIS FED. AID PROJECT |              |              |              |           |

# SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

## WORK ZONE EXIT OPENING



## WORK ZONE ENTRY OPENING



**NOTES:**

1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMP.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

|   |                              |            |                        |   |   |   |              |                           |              |              |
|---|------------------------------|------------|------------------------|---|---|---|--------------|---------------------------|--------------|--------------|
| FILE NAME =   | USER NAME = midyja           | DESIGNED - | REVISED - J.A.F. 02-06 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS<br/>AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS</b> | F.A. RTE.   | SECTION      | COUNTY                    | TOTAL SHEETS | SHEET NO.    |
| pw:\planroom.dot.illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\0134218\DRAWN\Design\0134218-sht-plan.dgn |                              | DRAWN      | REVISED - S.P.B. 01-07 |   |   | VAR.  | 2020-243-GRR | VARIOUS                   | 32           | 32           |
|   | PLOT SCALE = 100.0000' / in. | CHECKED -  | REVISED - S.P.B. 12-09 |   |   | <b>TC-18</b>                                      |              | <b>CONTRACT NO. 62N13</b> |              |              |
|   | PLOT DATE = 10/10/2020       | DATE -     | REVISED - M.D. 06-13   |   |   | SCALE: NONE                                       |              | SHEET NO. 1 OF 1 SHEETS   |              | STA. TO STA. |
|   |                              |            |                        |   |   | FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT |              |                           |              |              |