

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**PROPOSED  
 HIGHWAY PLANS**

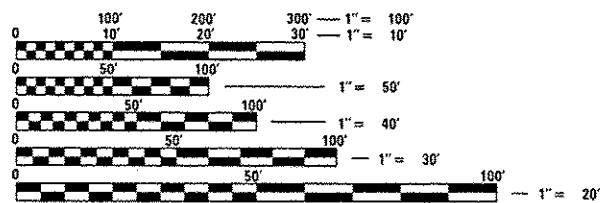
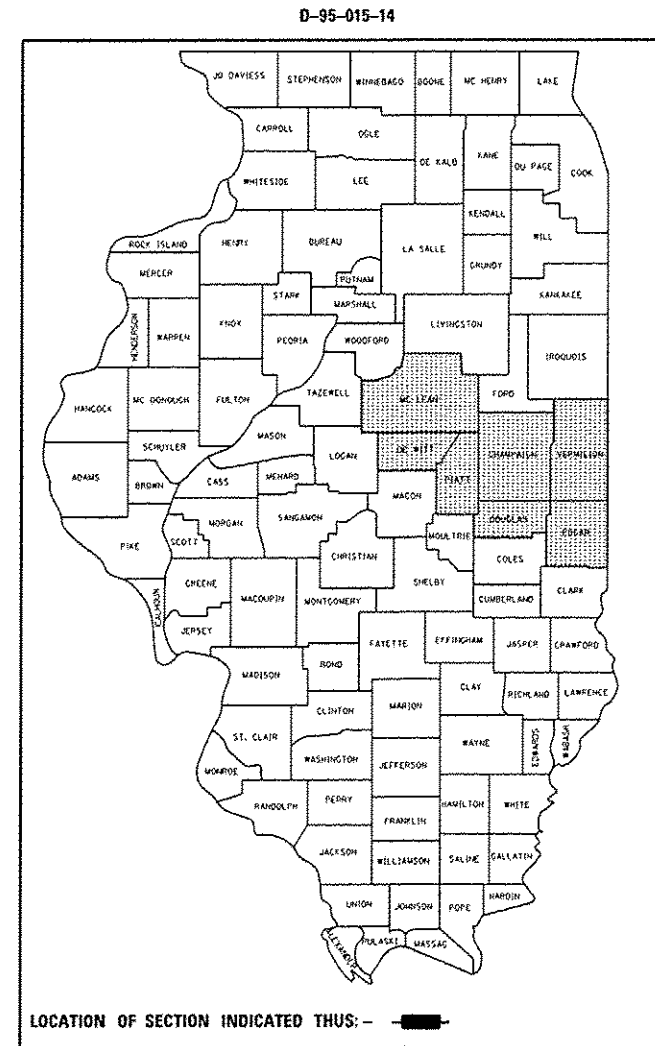
VARIOUS ROUTES  
 SECTION D5 GUARDRAIL & FENCE REPAIR-2015  
 GUARDRAIL & FENCE REPAIR  
 VARIOUS COUNTIES

C-95-015-14

| F.A. RTE. | SECTION | COUNTY   | TOTAL SHEETS       | SHEET NO. |
|-----------|---------|----------|--------------------|-----------|
| VAR.      | *       | VARIOUS  | 10                 | 1         |
|           |         | ILLINOIS | CONTRACT NO. 70A59 |           |

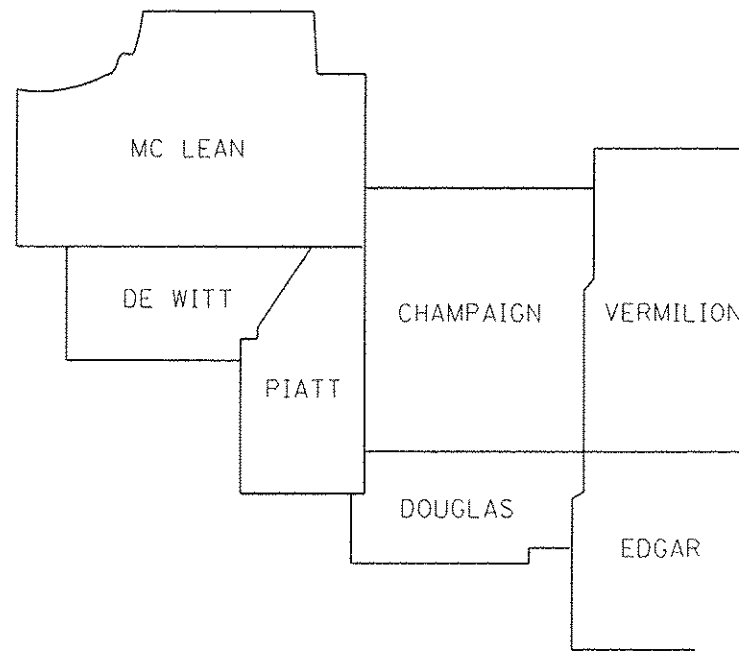
\* D5 GUARDRAIL & FENCE REPAIR-2015

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
 FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3-6



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

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



PROJECT ENGINEER JASON STULTS  
 PHONE NUMBER: (217) 465-4181

CONTRACT NO. 70A59

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED January 30, 2014  
Joseph E. Crowe  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 21, 2014  
John D. Baranzelli, P.E.  
 acting ENGINEER OF DESIGN AND ENVIRONMENT

March 21, 2014  
Omer Osman, P.E.  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS

# INDEX OF SHEETS

| SHEET NO. | DESCRIPTION           |
|-----------|-----------------------|
| 1         | COVER SHEET           |
| 2         | INDEX OF SHEETS       |
| 2         | HIGHWAY STANDARDS     |
| 2         | GENERAL NOTES         |
| 3-6       | SUMMARY OF QUANTITIES |
| 7-10      | PLAN DETAILS          |

# HIGHWAY STANDARDS

| STANDARD NUMBER | NAME OF STANDARD   |
|-----------------|--|
| 000001-06       | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                                   |
| 001006          | DECIMAL OF AN INCH AND OF A FOOT   |
| 630001-10       | STEEL PLATE BEAM GUARDRAIL   |
| 630101-09       | GUARDRAIL MOUNTED ON EXISTING CULVERTS   |
| 630201-06       | PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL                            |
| 630301-06       | SHOUDLER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS                     |
| 631011-09       | TRAFFIC BARRIER TERMINAL, TYPE 2   |
| 631026-05       | TRAFFIC BARRIER TERMINAL, TYPE 5   |
| 631031-12       | TRAFFIC BARRIER TERMINAL, TYPE 6   |
| 631032-08       | TRAFFIC BARRIER TERMINAL, TYPE 6A  |
| 631033-05       | TRAFFIC BARRIER TERMINAL, TYPE 6B  |
| 631046-04       | TRAFFIC BARRIER TERMINAL, TYPE 10  |
| 635006-03       | REFLECTOR AND TERMINAL MARKER PLACEMENT  |
| 635011-02       | REFLECTOR MARKER AND MOUNTING DETAILS  |
| 643001-02       | SAND MODULE IMPACT ATTENUATORS   |
| 664001-02       | CHAIN LINK FENCE   |
| 665001-02       | WOVEN WIRE FENCE   |
| 701001-02       | OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY                        |
| 701006-05       | OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE    |
| 701101-04       | OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE |
| 701106-02       | OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY                     |
| 701201-04       | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH                            |
| 701206-03       | LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS ≥ 45 MPH                          |
| 701301-04       | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS                                    |
| 701400-07       | APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY                                   |
| 701401-08       | LANE CLOSURE, FREEWAY/EXPRESSWAY   |
| 701406-08       | LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY                          |
| 701411-08       | LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH         |
| 701421-06       | LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH    |
| 701422-06       | LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH TO 55 MPH                         |
| 701456-03       | PARTIAL EXIT RAMP CLOSURE FREEWAY/EXPRESSWAY                                   |
| 701428          | TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY                           |
| 701501-06       | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED  |
| 701502-06       | URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE                  |
| 701601-09       | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN             |
| 701602-07       | URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE            |
| 701606-09       | URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN                        |
| 701701-09       | URBAN LANE CLOSURE, MULTILANE INTERSECTION                                     |
| 701901-03       | TRAFFIC CONTROL DEVICES  |

# GENERAL NOTES

**G. N. -100**  
ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

**G. N. -100A**  
ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

**G. N. -631**  
IF THE CONTRACTOR ELECTS TO USE THE ALTERNATE MOUNTING METHOD OF THRU DRILLING THE MOUNTING HOLES FOR THE TRAFFIC BARRIER TERMINALS, TYPE 6, THE HOLES SHALL BE DRILLED USING A CORE DRILL. A HAMMER DRILL WILL NOT BE ALLOWED.

NO COMMITMENTS

• D5 GUARDRAIL & FENCE REPAIR 2015

|                                       |                               |            |           |   |   |                    |                 |              |                           |           |  |
|---------------------------------------|-------------------------------|------------|-----------|---|---|--------------------|-----------------|--------------|---------------------------|-----------|--|
| FILE NAME =                           | USER NAME = oearlockjd        | DESIGNED - | REVISED - | STATE OF ILLINOIS<br>DEPARTMENT OF TRANSPORTATION | INDEX OF SHEETS, HIGHWAY STANDARDS<br>& GENERAL NOTES | F.A. RTE.          | SECTION         | COUNTY       | TOTAL SHEETS              | SHEET NO. |  |
| as\pe_work\pedit\oearlockjd\037778510 | 70459-ht-Canote.dgn           | DRAWN -    | REVISED - |   |   | VAR.               |                 | VARIOUS      | 10                        | 2         |  |
|                                       | PLOT SCALE = 40.0000 ' / 1" = | CHECKED -  | REVISED - |   |   | CONTRACT NO. 70A59 |                 |              |                           |           |  |
| #MODELNAME#                           | PLOT DATE = 1/20/2014         | DATE -     | REVISED - |   |   | SCALE:             | SHEET OF SHEETS | STA. TO STA. | ILLINOIS FED. AID PROJECT |           |  |

| CODE NO  | ITEM   | UNIT | TOTAL<br>QUANTITY | LOCATION OF WORK: |                     |                     | CONSTRUCTION TYPE CODE:               |   |                                       |
|----------|--|------|-------------------|-------------------|---------------------|---------------------|---------------------------------------|---|---------------------------------------|
|          |  |      |                   | VARIOUS<br>ROUTES | VARIOUS<br>COUNTIES | VARIOUS<br>COUNTIES | 0021<br>100% STATE<br>MCHD<br>(07M0I) | 0021<br>100% STATE<br>CONTRACT MAINT<br>(07E0I) | 0021<br>100% STATE<br>HTCB<br>(07A0I) |
| 63000001 | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS             | FOOT | 100.0             |                   |                     |                     | 80.0                                  | 20.0  |                                       |
| 63100045 | TRAFFIC BARRIER TERMINAL, TYPE 2                             | EACH | 5.0               |                   |                     |                     | 4.0                                   | 1.0   |                                       |
| 63100070 | TRAFFIC BARRIER TERMINAL, TYPE 5                             | EACH | 1.0               |                   |                     |                     | 1.0                                   |   |                                       |
| 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6                             | EACH | 1.0               |                   |                     |                     | 1.0                                   |   |                                       |
| 63100087 | TRAFFIC BARRIER TERMINAL, TYPE 6A                            | EACH | 1.0               |                   |                     |                     | 1.0                                   |   |                                       |
| 63100089 | TRAFFIC BARRIER TERMINAL, TYPE 6B                            | EACH | 1.0               |                   |                     |                     | 1.0                                   |   |                                       |
| 63100105 | TRAFFIC BARRIER TERMINAL, TYPE 10                            | EACH | 1.0               |                   |                     |                     | 1.0                                   |   |                                       |
| 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT           | EACH | 5.0               |                   |                     |                     | 4.0                                   | 1.0   |                                       |
| 63100169 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED            | EACH | 5.0               |                   |                     |                     | 4.0                                   | 1.0   |                                       |
| 63400105 | GUARD POSTS  | EACH | 10.0              |                   |                     |                     | 10.0                                  |   |                                       |
| 64300260 | IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 | EACH | 1.0               |                   |                     |                     | 1.0                                   |   |                                       |
| 64300370 | IMPACT ATTENUATORS (FULLY REDIRECTIVE, WIDE), TEST LEVEL 3   | EACH | 1.0               |                   |                     |                     | 1.0                                   |   |                                       |
| 66400105 | CHAIN LINK FENCE, 4'   | FOOT | 300.0             |                   |                     |                     | 200.0                                 | 100.0   |                                       |
| 66400305 | CHAIN LINK FENCE, 6'   | FOOT | 200.0             |                   |                     |                     | 125.0                                 | 75.0  |                                       |

\* 05 GUARDRAIL & FENCE REPAIR 2015

|                                      |                              |            |           |   |                              |       |    |        |              |         |                    |                 |              |
|--------------------------------------|------------------------------|------------|-----------|---|------------------------------|-------|----|--------|--------------|---------|--------------------|-----------------|--------------|
| FILE NAME *                          | USER NAME = ceerlock_d       | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>SUMMARY OF QUANTITIES</b> |       |    |        | F.A.<br>RTE. | SECTION | COUNTY             | TOTAL<br>SHEETS | SHEET<br>NO. |
| en\p\work\p\dot\ceerlock_d\0377705\0 | 720459-sht-500.dgn           | DRAWN -    | REVISED - |   |                              |       |    |        | VAR.         | *       | VARIOUS            | 10              | 3            |
|                                      | PLOT SCALE = 40.0000 ' / in. | CHECKED -  | REVISED - |   | SCALE:                       | SHEET | OF | SHEETS | STA.         | TO STA. | CONTRACT NO. 70A59 |                 |              |
| #MODELNAME#                          | PLOT DATE = 1/20/2014        | DATE -     | REVISED - |   | ILLINOIS FED. AID PROJECT    |       |    |        |              |         |                    |                 |              |

| CODE NO  | ITEM  | UNIT | TOTAL<br>QUANTITY       | LOCATION OF WORK: |                   |                    | 100% STATE<br>MCHD           | 100% STATE<br>CONTRACT MAINT | 100% STATE<br>HTCB |
|----------|---|------|-------------------------|-------------------|-------------------|--------------------|------------------------------|------------------------------|--------------------|
|          |   |      |                         | VARIOUS<br>ROUTES | VARIOUS<br>ROUTES | VARIOUS<br>ROUTES  |                              |                              |                    |
|          |   |      | CONSTRUCTION TYPE CODE: |                   |                   | 0021               | 0021                         | 0021                         |                    |
|          |   |      |                         |                   |                   | 100% STATE<br>MCHD | 100% STATE<br>CONTRACT MAINT | 100% STATE<br>HTCB           |                    |
| 66500105 | WOVEN WIRE FENCE, 4'                                    | FOOT | 4,000.0                 | 3,000.0           |                   |                    | 1,000.0                      |                              |                    |
| 66501200 | WOVEN WIRE GATES, 4' X 8' DOUBLE                        | EACH | 1.0                     | 1.0               |                   |                    |                              |                              |                    |
| 78200410 | GUARDRAIL MARKERS, TYPE A                               | EACH | 10.0                    | 8.0               |                   |                    | 2.0                          |                              |                    |
| 78201000 | TERMINAL MARKER - DIRECT APPLIED                        | EACH | 20.0                    | 17.0              |                   |                    | 3.0                          |                              |                    |
| X0325256 | REPAIR HIGH TENSION CABLE (BRIFEN)                      | FOOT | 100.0                   | 40.0              |                   |                    | 20.0                         | 40.0                         |                    |
| X0325258 | REPAIR HIGH TENSION CABLE SYSTEM END SECTION (BRIFEN)   | EACH | 2.0                     | 1.0               |                   |                    |                              | 1.0                          |                    |
| X0325260 | REPAIR POSTS (BRIFEN)                                   | EACH | 10.0                    | 4.0               |                   |                    | 2.0                          | 4.0                          |                    |
| X0325899 | REPAIR HIGH TENSION CABLE (GIBALTAR)                    | FOOT | 4,000.0                 | 1,500.0           |                   |                    | 1,000.0                      | 1,500.0                      |                    |
| X0325901 | REPAIR POSTS (GIBALTAR)                                 | EACH | 400.0                   | 150.0             |                   |                    | 100.0                        | 150.0                        |                    |
| X0325975 | REPAIR HIGH TENSION CABLE SYSTEM END SECTION (GIBALTAR) | EACH | 12.0                    | 5.0               |                   |                    | 2.0                          | 5.0                          |                    |
| X0326201 | REPAIR HIGH TENSION CABLE (TRINITY)                     | FOOT | 400.0                   | 150.0             |                   |                    | 100.0                        | 150.0                        |                    |
| X0326202 | REPAIR POSTS (TRINITY)                                  | EACH | 40.0                    | 15.0              |                   |                    | 10.0                         | 15.0                         |                    |
| X0326203 | REPAIR HIGH TENSION CABLE SYSTEM END SECTION (TRINITY)  | EACH | 5.0                     | 2.0               |                   |                    | 1.0                          | 2.0                          |                    |
| X6330725 | STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)               | FOOT | 25.0                    |                   |                   |                    | 25.0                         |                              |                    |

• 05 GUARDRAIL & FENCE REPAIR 2015

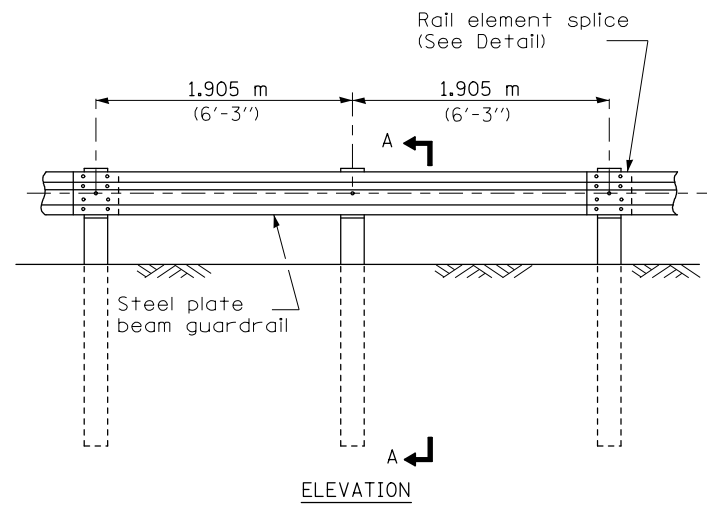
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| FILE NAME =  | USER NAME = oearlockjd | DESIGNED - | REVISED -                 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>SUMMARY OF QUANTITIES</b> |    |        |      | F.A.<br>RTE. | SECTION            | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |
| o:\p\work\p\dot\oearlockjd\0377705\070A59-ht-500.dgn | DRAWN -                | REVISED -  | VAR.                      |   |                              |    |        |      |              | VARIOUS            | 10     | 4               |              |
| PLOT SCALE = 40,0000' / 1"                           | CHECKED -              | REVISED -  | SCALE:                    |   | SHEET                        | OF | SHEETS | STA. | TO STA.      | CONTRACT NO. 70A59 |        |                 |              |
| MODELNAME#   | DATE -                 | REVISED -  | ILLINOIS FED. AID PROJECT |   |                              |    |        |      |              |                    |        |                 |              |

| CODE NO  | ITEM   | UNIT  | TOTAL<br>QUANTITY | LOCATION OF WORK: |                     |                     | CONSTRUCTION TYPE CODE:    |                                      |                            |
|----------|--|-------|-------------------|-------------------|---------------------|---------------------|----------------------------|--------------------------------------|----------------------------|
|          |  |       |                   | VARIOUS<br>ROUTES | VARIOUS<br>COUNTIES | VARIOUS<br>COUNTIES | 0021<br>100% STATE<br>MCHD | 0021<br>100% STATE<br>CONTRACT MAINT | 0021<br>100% STATE<br>HTCB |
| X6331110 | STEEL POSTS, SPECIAL                                       | EACH  | 2.0               |                   |                     |                     |                            |                                      |                            |
| X6340205 | GUARD POSTS REMOVAL  | EACH  | 10.0              |                   |                     |                     |                            |                                      |                            |
| X6432110 | REPLACE IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3 | EACH  | 20.0              |                   |                     |                     |                            |                                      |                            |
| X6640594 | CHAIN LINK FENCE POST 4'                                   | EACH  | 25.0              |                   |                     |                     |                            |                                      |                            |
| X6640601 | CHAIN LINK FENCE POST 6'                                   | EACH  | 25.0              |                   |                     |                     |                            |                                      |                            |
| Z0008760 | EMERGENCY WORK CALL OUT                                    | EACH  | 40.0              |                   |                     |                     |                            |                                      |                            |
| Z0012752 | CONCRETE STRUCTURE REPAIR                                  | CU FT | 12.0              |                   |                     |                     |                            |                                      |                            |
| Z0020210 | PULL POST ARRANGEMENT                                      | EACH  | 30.0              |                   |                     |                     |                            |                                      |                            |
| Z0052000 | REPAIR STEEL PLATE BEAM GUARDRAIL, TYPE A                  | FOOT  | 3,000.0           |                   |                     |                     |                            |                                      |                            |
| Z0052100 | REPAIR STEEL PLATE BEAM GUARDRAIL, TYPE B                  | FOOT  | 25.0              |                   |                     |                     |                            |                                      |                            |
| Z0052410 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)  | EACH  | 4.0               |                   |                     |                     |                            |                                      |                            |
| Z0052415 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (FLARED)   | EACH  | 4.0               |                   |                     |                     |                            |                                      |                            |
| Z0052600 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 2                    | EACH  | 2.0               |                   |                     |                     |                            |                                      |                            |
| Z0053000 | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 5                    | EACH  | 1.0               |                   |                     |                     |                            |                                      |                            |

• D5 GUARDRAIL & FENCE REPAIR 2015

|                                      |                              |            |           |   |                              |       |    |        |                           |         |         |                 |              |
|--------------------------------------|------------------------------|------------|-----------|---|------------------------------|-------|----|--------|---------------------------|---------|---------|-----------------|--------------|
| FILE NAME =                          | USER NAME = eearlockjd       | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>SUMMARY OF QUANTITIES</b> |       |    |        | F.A.<br>RTE.              | SECTION | COUNTY  | TOTAL<br>SHEETS | SHEET<br>NO. |
| o:\p\work\p\dot\eeearlockjd\0377705\ | 72059-akt-500.dgn            | DRAWN -    | REVISED - |   |                              |       |    |        | VAR.                      | *       | VARIOUS | 10              | 5            |
|                                      | PLOT SCALE = 48,0000' / 1" = | CHECKED -  | REVISED - |   | CONTRACT NO. 70A59           |       |    |        | ILLINOIS FED. AID PROJECT |         |         |                 |              |
| #MODELNAME#                          | PLOT DATE = 1/28/2014        | DATE -     | REVISED - |   | SCALE:                       | SHEET | OF | SHEETS | STA.                      | TO STA. |         |                 |              |

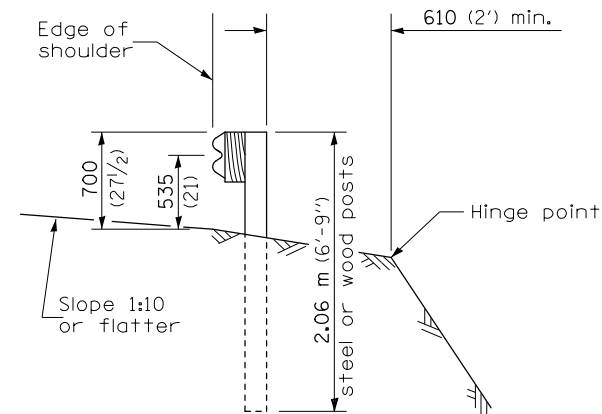




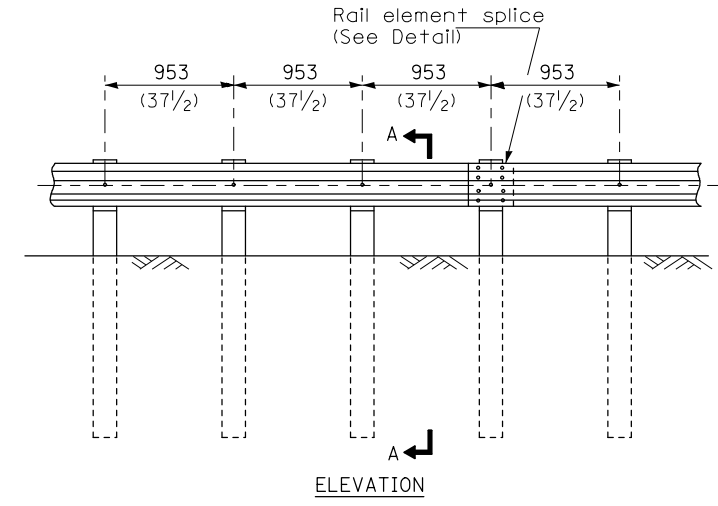
ELEVATION

**TYPE A**

1.905 m (6'-3") Typical post spacing



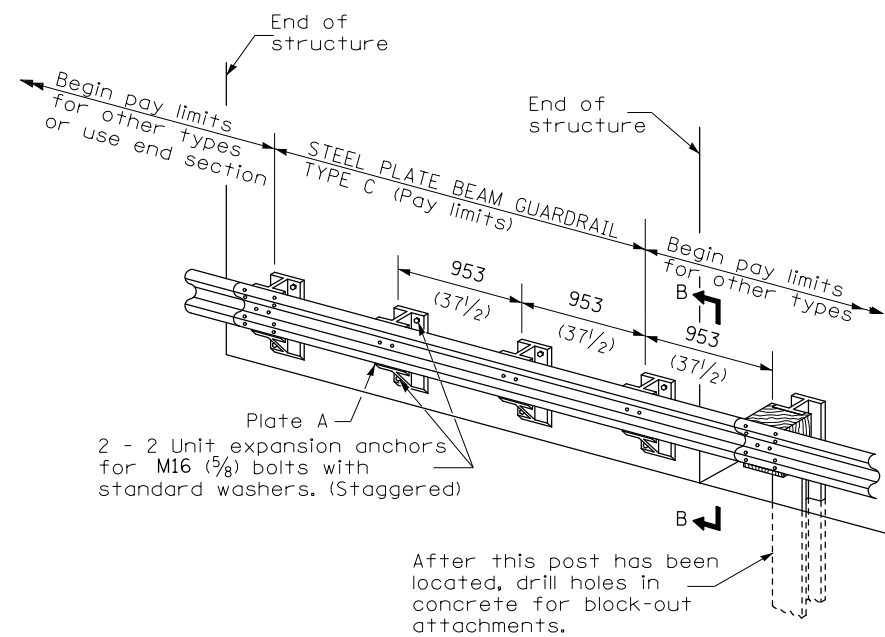
SECTION A-A



ELEVATION

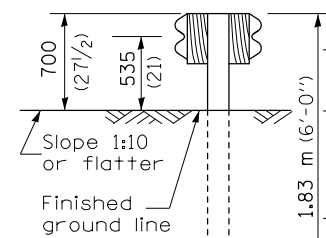
**TYPE B**

953 (37 1/2) Closed post spacing

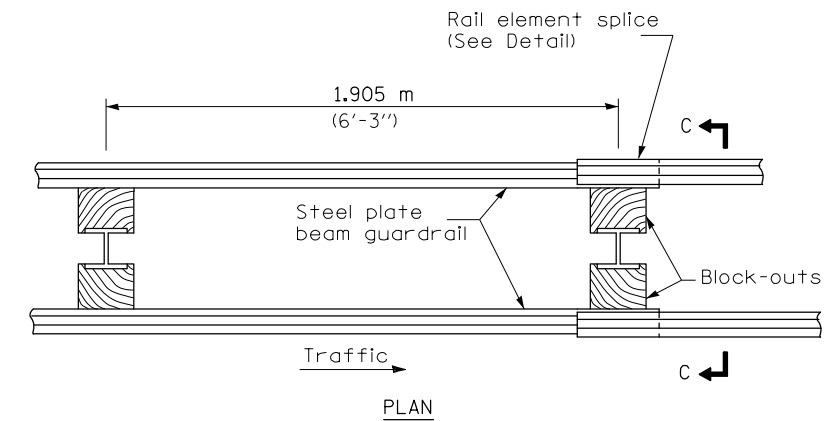


**TYPE C**

953 (37 1/2) Block-out spacing



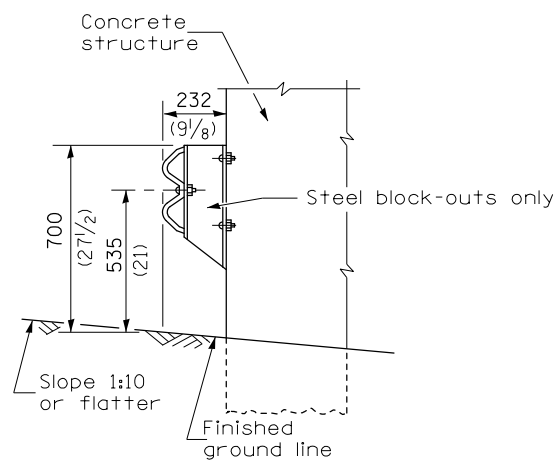
SECTION C-C



PLAN

**TYPE D**

Double steel plate beam guardrail  
1.905 m (6'-3") typical post spacing



SECTION B-B

**GENERAL NOTES**

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

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

| DATE   | REVISIONS                                    |
|--------|--|
| 4-1-06 | Deleted plate washer F.                      |
| 1-1-05 | Rev. post in impervious material on sheet 4. |

**STEEL PLATE BEAM GUARDRAIL**

(Sheet 1 of 4)

**STANDARD 630001-06**

|  |                             |            |           |
|--|-----------------------------|------------|-----------|
| FILE NAME =  | USER NAME = ceerlockjd      | DESIGNED - | REVISED - |
| ei:\pwwork\pwwork\ceerlockjd\0377705\0570059-sht-Details.dgn |                             | DRAWN -    | REVISED - |
| \$MODELNAME\$  | PLOT SCALE = 40.0000' / in. | CHECKED -  | REVISED - |
|  | PLOT DATE = 1/30/2014       | DATE -     | REVISED - |

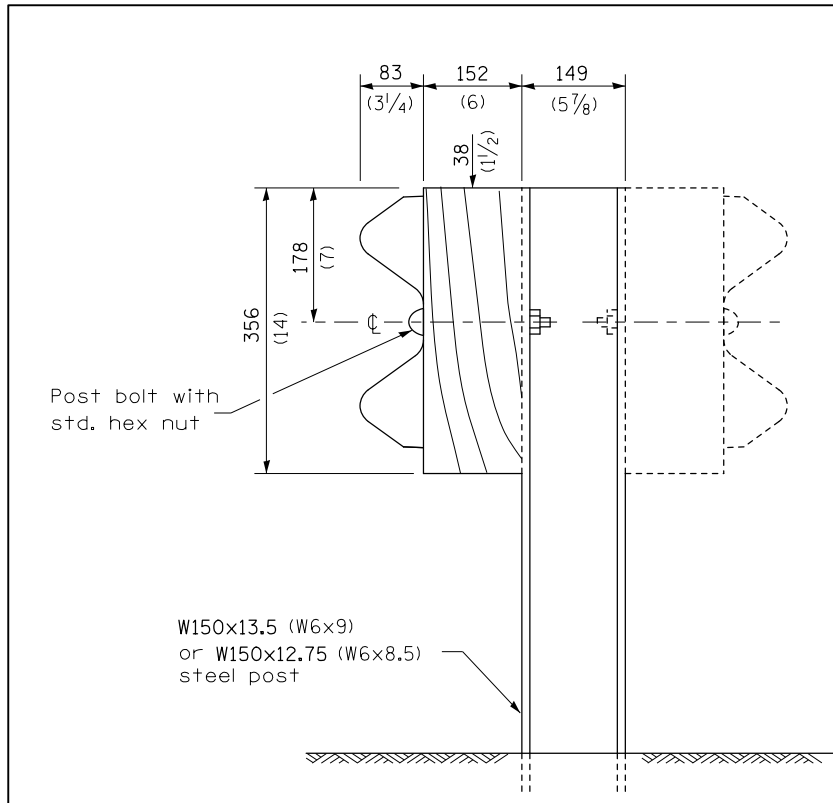
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF 27 1/2" STEEL PLATE BEAM GUARDRAIL**

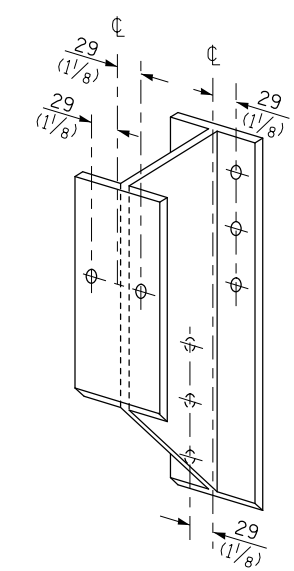
SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

|                           |         |         |                    |           |
|---------------------------|---------|---------|--------------------|-----------|
| F.A. RTE.                 | SECTION | COUNTY  | TOTAL SHEETS       | SHEET NO. |
| VAR.                      | .       | VARIOUS | 10                 | 7         |
|                           |         |         | CONTRACT NO. 70A59 |           |
| ILLINOIS FED. AID PROJECT |         |         |                    |           |

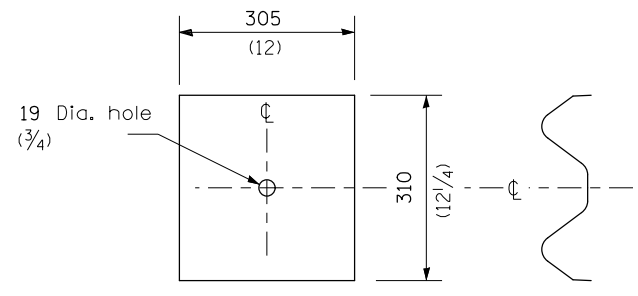
• D5 GUARDRAIL & FENCE REPAIR 2015



**STEEL POST CONSTRUCTION**



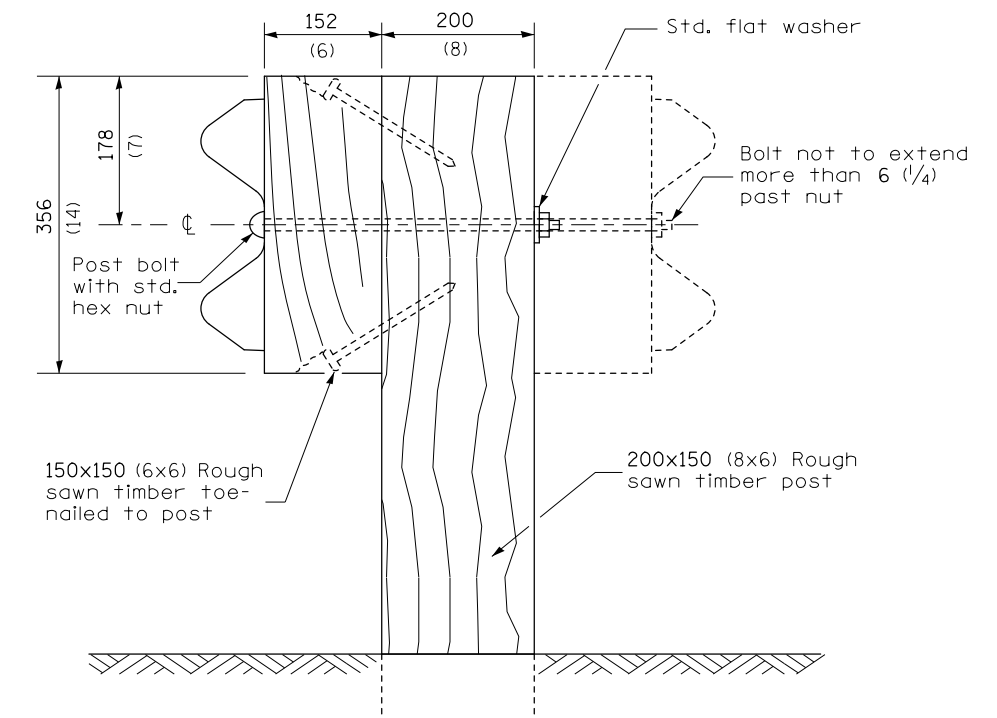
**STEEL BLOCK-OUT DETAIL**



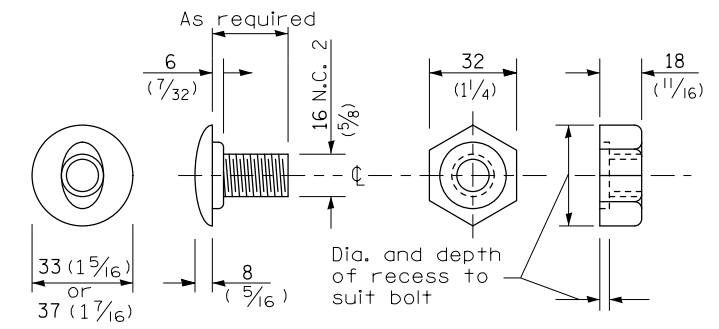
**NOTE**

Plate A shall be placed between rail element and block-out at non-splice mounting points only when steel block-outs are used.

**PLATE A**



**WOOD POST CONSTRUCTION**



**POST OR SPLICE BOLT & NUT**

**STEEL PLATE BEAM  
GUARDRAIL**  
(Sheet 2 of 4)  
**STANDARD 630001-06**

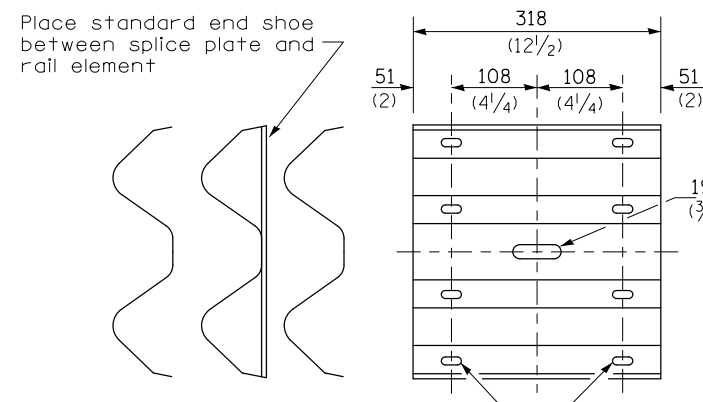
|  |                             |            |           |
|--|-----------------------------|------------|-----------|
| FILE NAME =  | USER NAME = ceerlockjd      | DESIGNED - | REVISED - |
| c:\pwork\work\pwork\ceerlockjd\0377705\0570A59-sht-Details.dgn |                             | DRAWN -    | REVISED - |
|  | PLOT SCALE = 40.0000' / in. | CHECKED -  | REVISED - |
| \$MODELNAME\$  | PLOT DATE = 1/30/2014       | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

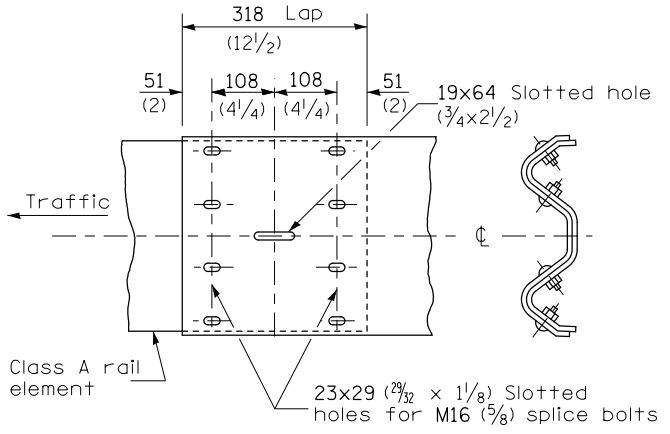
**DETAIL OF 27 1/2" STEEL PLATE BEAM GUARDRAIL**  
SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

|                                    |         |         |                    |           |
|------------------------------------|---------|---------|--------------------|-----------|
| • D5 GUARDRAIL & FENCE REPAIR 2015 |         |         |                    |           |
| F.A. RTE.                          | SECTION | COUNTY  | TOTAL SHEETS       | SHEET NO. |
| VAR.                               | •       | VARIOUS | 10                 | 8         |
|                                    |         |         | CONTRACT NO. 70A59 |           |
| ILLINOIS FED. AID PROJECT          |         |         |                    |           |

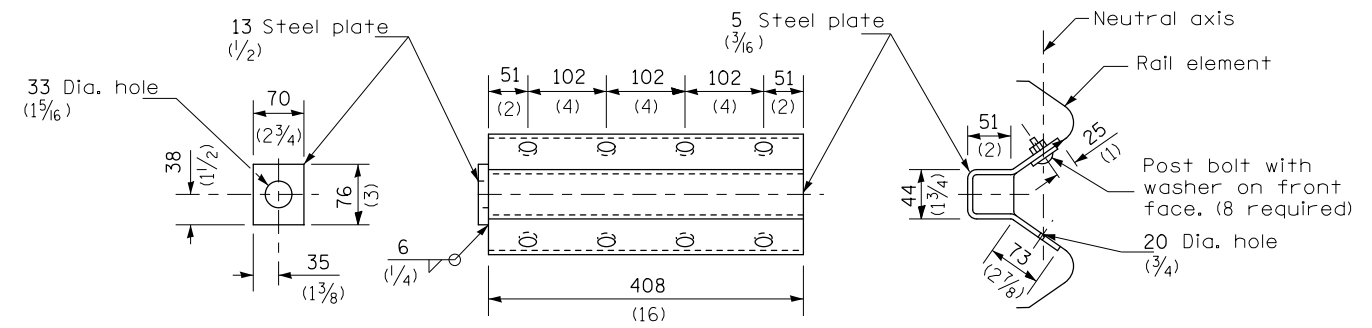




**SPLICE PLATE**

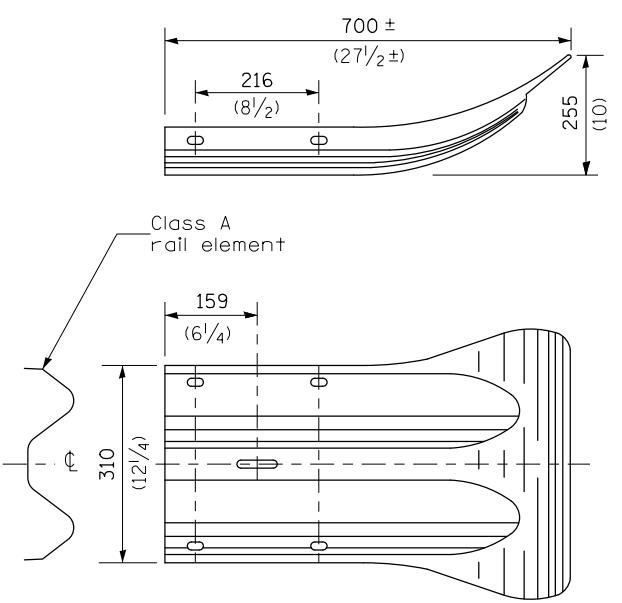


**RAIL ELEMENT SPLICE**

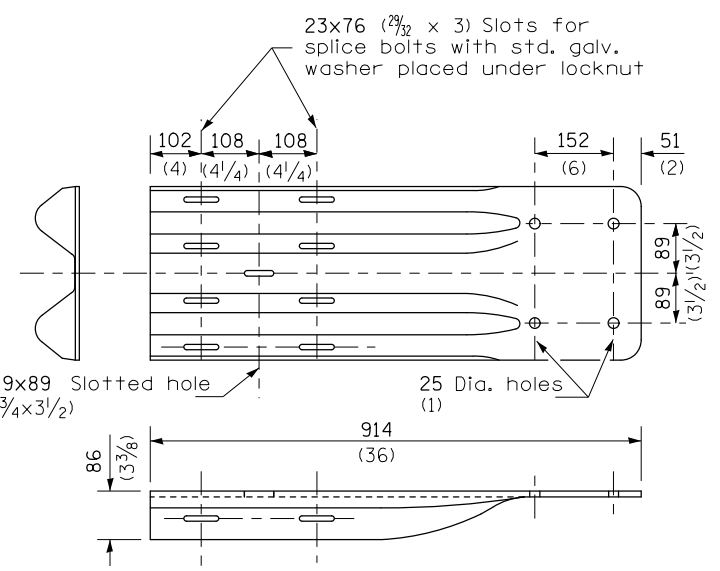


NOTE  
Anchor plate T shall be used to attach cable assembly to guardrail when required on traffic barrier terminals.

**ANCHOR PLATE T DETAILS**



**END SECTION**

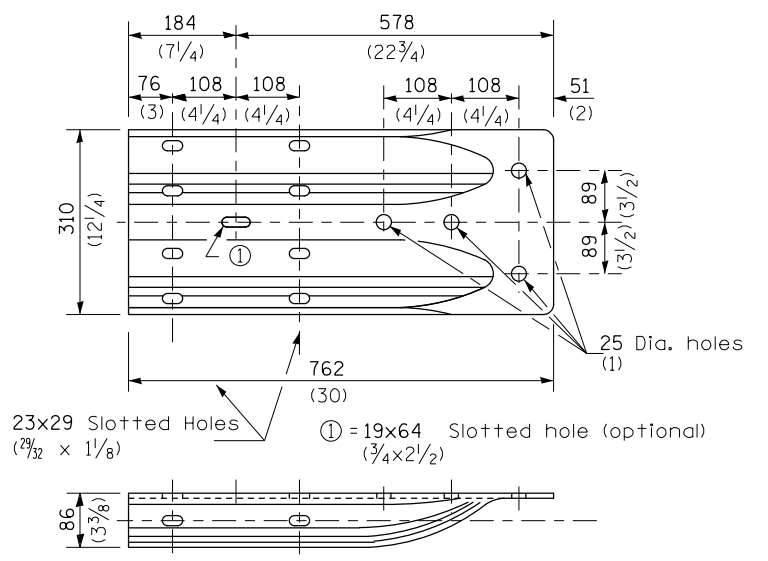


NOTE  
When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

The standard end shoe shall be attached to the concrete with pre-drilled or self-drilling anchor bolts. The anchor cone shall be set flush with the surface of the concrete.

Externally threaded studs protruding from the surface of the concrete will not be permitted.

**END SHOE**

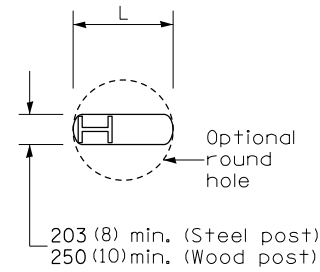


**ALTERNATE END SHOE**

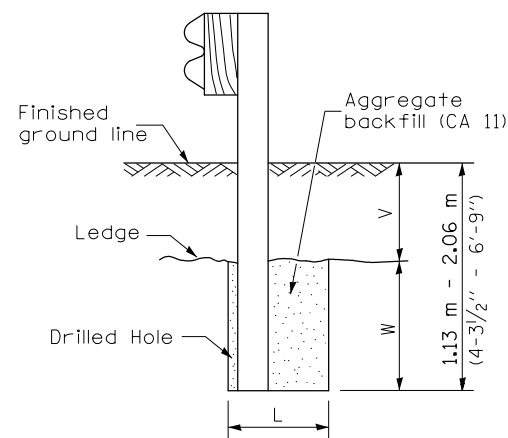
**STEEL PLATE BEAM  
GUARDRAIL**

(Sheet 3 of 4)

**STANDARD 630001-06**



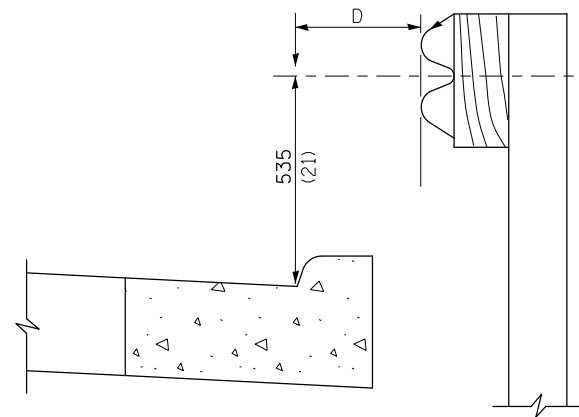
PLAN



Note:  
Ledge line is top of rock ledge or hard slag fill.

ELEVATION

**FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED**

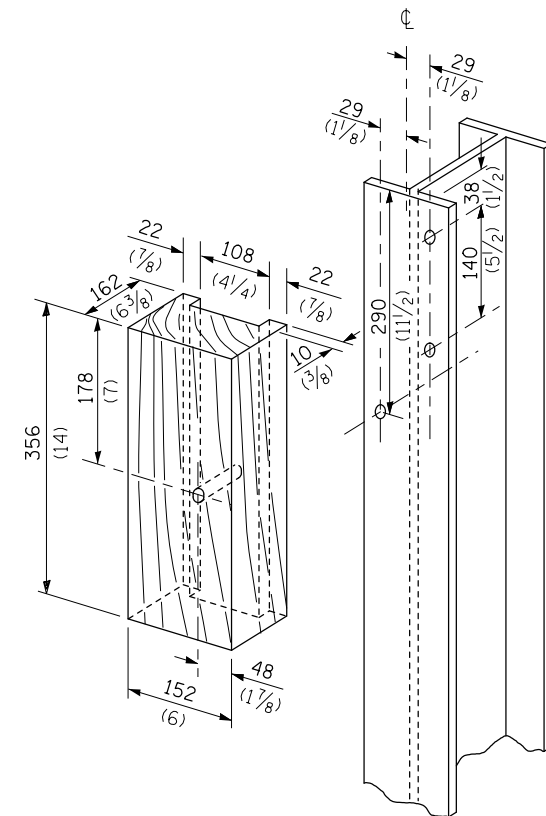


Note:

If it is necessary for D to be more than 300 (12) and less than 3.0 m (10'-0") type M-5 (M-2) curb and gutter (Std. 606001) shall be used in front of and in advance of the guardrail.

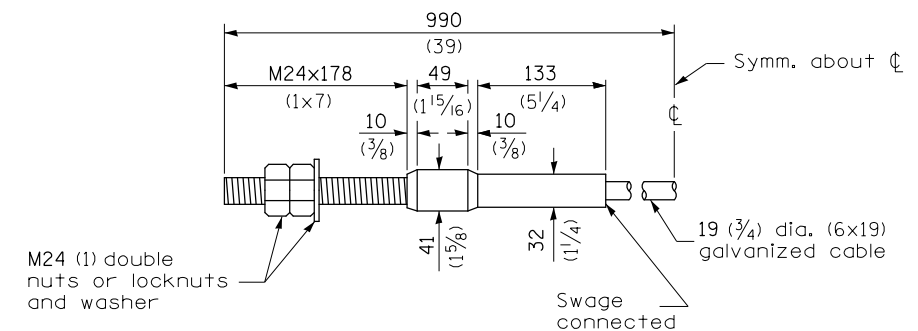
**GUARDRAIL PLACED BEHIND CURB**

(D = 0 desirable to 300 (12) maximum)



**WOOD BLOCK-OUT AND STEEL POST DETAILS**

| V                               | W                   | L           |             |
|---------------------------------|---------------------|-------------|-------------|
|                                 |                     | Steel Post  | Wood Post   |
| 0 - 460<br>(0 - 18)             | 610<br>(24)         | 530<br>(21) | 580<br>(23) |
| >460 - 825<br>(>18 - 41.5)      | 305<br>(12)         | 203<br>(8)  | 250<br>(10) |
| >825 - 1.13 m<br>(>41.5 - 53.5) | 305 - 0<br>(12 - 0) | 203<br>(8)  | 250<br>(10) |



**CABLE ASSEMBLY**

(18,100 kg (40,000 lbs.) min. breaking strength)  
Tighten to taut tension.

**STEEL PLATE BEAM GUARDRAIL**

(Sheet 4 of 4)

**STANDARD 630001-06**

|  |                             |            |           |
|--|-----------------------------|------------|-----------|
| FILE NAME =  | USER NAME = ceerlockjd      | DESIGNED - | REVISED - |
| ci:\pw\work\p\dot\ceerlockjd\0377705\0570059-sht-Details.dgn |                             | DRAWN -    | REVISED - |
|  | PLOT SCALE = 40.0000' / in. | CHECKED -  | REVISED - |
| \$MODELNAME\$  | PLOT DATE = 1/30/2014       | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF 27 1/2" STEEL PLATE BEAM GUARDRAIL**

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

|                           |         |         |                    |           |
|---------------------------|---------|---------|--------------------|-----------|
| F.A. RTÉ.                 | SECTION | COUNTY  | TOTAL SHEETS       | SHEET NO. |
| VAR.                      | •       | VARIOUS | 10                 | 10        |
|                           |         |         | CONTRACT NO. 70A59 |           |
| ILLINOIS FED. AID PROJECT |         |         |                    |           |

• D5 GUARDRAIL & FENCE REPAIR 2015