

TYPICAL TRUSS SPAN – EAST ELEVATION
(WEST ELEVATION SIMILAR)
1" = 10'-0"

NOTES:

- 1. FOR BRIDGE RAILING DETAILS, SEE BRIDGE SHEET B57.

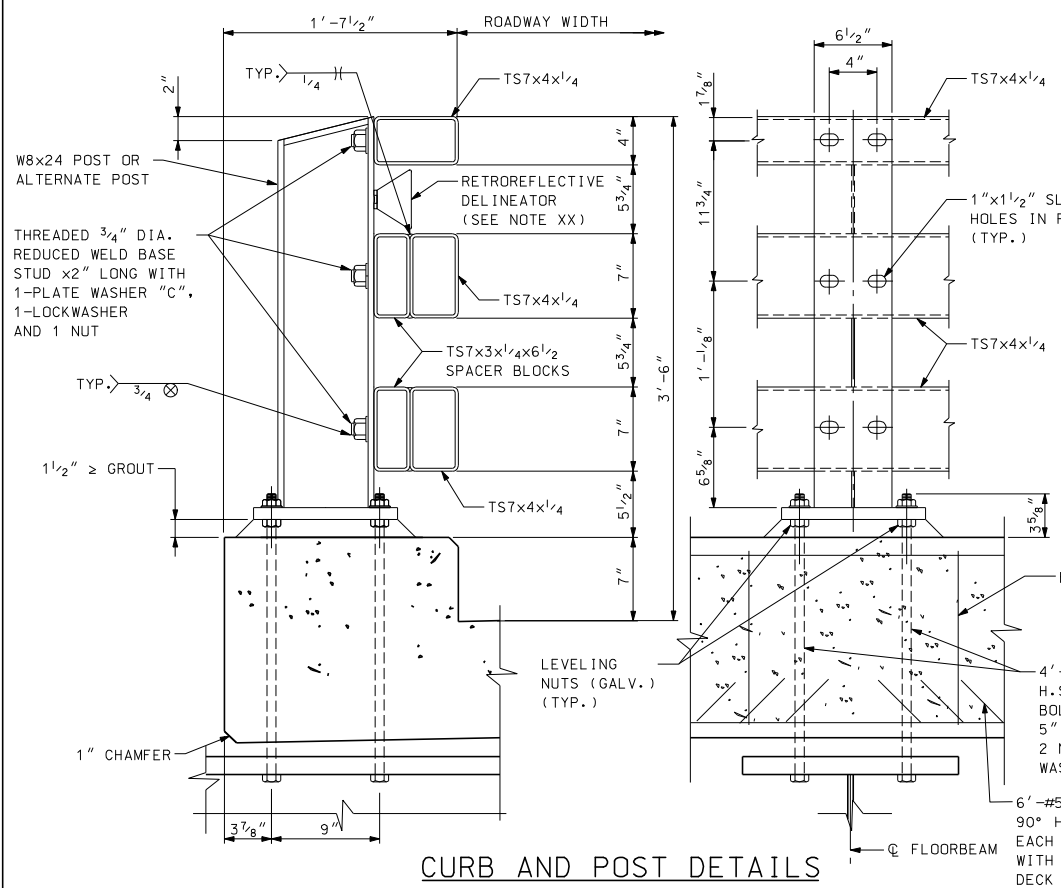
PRELIMINARY PLANS
SEPTEMBER 12, 2011



| STATE OF NEW HAMPSHIRE | | | | | | | | | |
|--|-------|------------|--|---------|---------------|--|---------|--|--|
| DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN | | | | | | | | | |
| TOWN | TOWNS | BRIDGE NO. | | SBRNO\$ | STATE PROJECT | | SSTNO\$ | | |
| LOCATION | | SBRDESCRS | | | | | | | |
| BRIDGE RAIL ELEVATION | | | | | | | | | |
| BRIDGE SHEET | | | | | | | | | |
| B580\$BT\$ | | | | | | | | | |
| FILE NUMBER | | | | | | | | | |
| \$BRFILNO\$ | | | | | | | | | |
| TOTAL SHEETS | | | | | | | | | |
| \$CSHTOTS | | | | | | | | | |

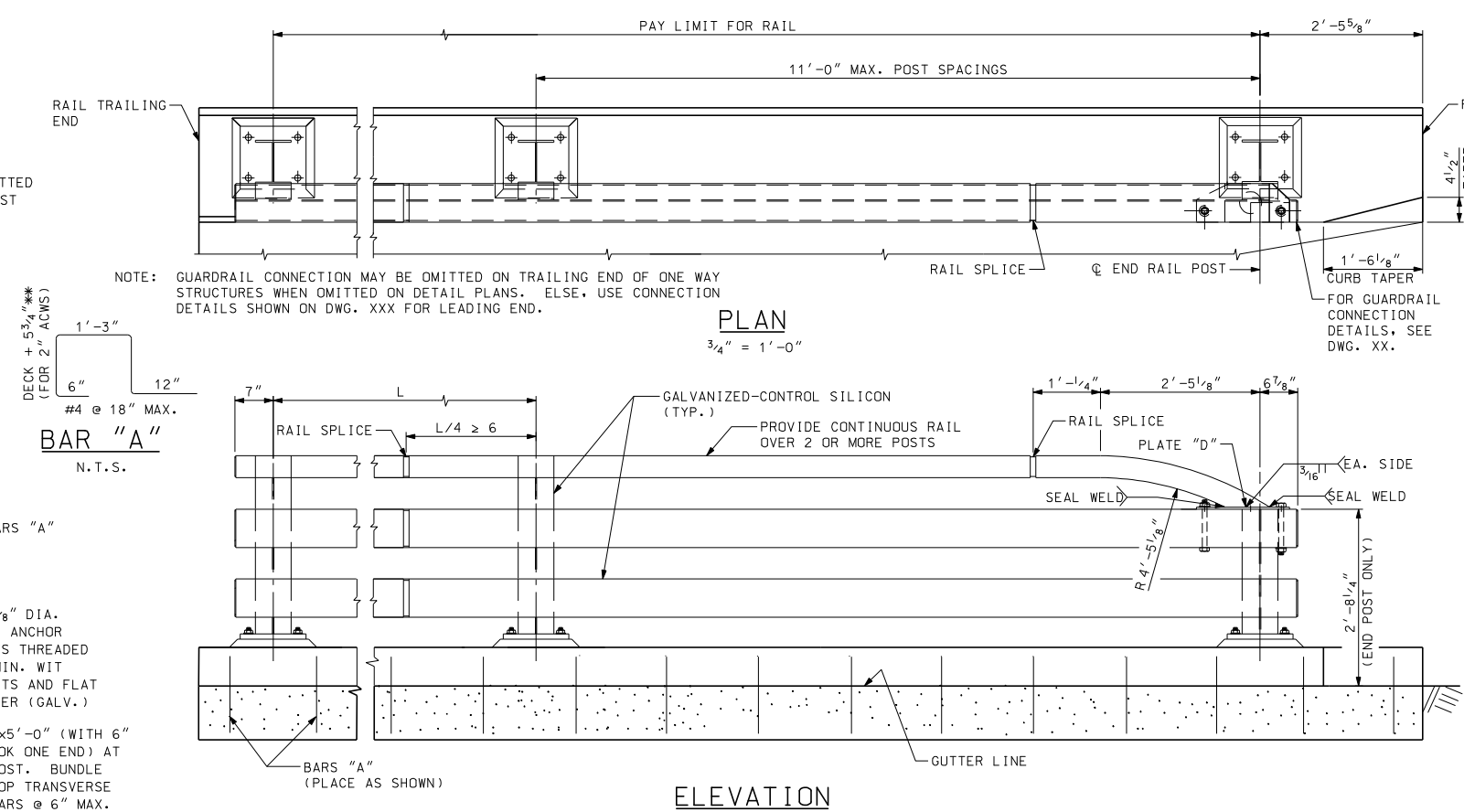
| SUBDIRECTORY | DGN LOCATOR | SHEET SCALE |
|--------------|--------------|-------------|
| XX | \$FILENAME\$ | 1" - 10'-0" |

| REVISIONS AFTER PROPOSAL | | BY | DATE | BY | DATE | FILE NUMBER |
|--------------------------|-----|-------|---------------------|-----------|--------------|-------------|
| DESIGNED | JN | 09/11 | CHECKED | TPZ | 09/11 | \$BRFILNO\$ |
| DRAWN | SPL | 09/11 | CHECKED | GT | 09/11 | \$BRFILNO\$ |
| QUANTITIES | XX | XX/XX | CHECKED | XX | XX/XX | \$BRFILNO\$ |
| ISSUE DATE | | | FEDERAL PROJECT NO. | SHEET NO. | TOTAL SHEETS | \$CSHTOTS |
| REV. DATE | | | XXXXXX | XX | \$CSHTOTS | \$CSHTOTS |



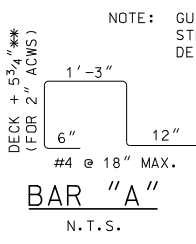
CURB AND POST DETAILS
1 1/2" = 1'-0"

NOTE:
SET TOP OF POST 3'-6" ABOVE FINISH GRADE.
DIMENSION MARKED THUS ** WILL VARY WITH
DEPTH OF ACWS.



PLAN
3/4" = 1'-0"

ELEVATION
3/4" = 1'-0"



BAR "A"
N.T.S.

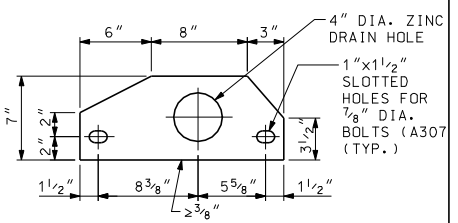


PLATE "D"
1 1/2" = 1'-0"

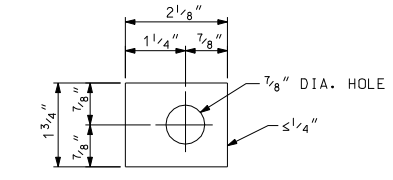


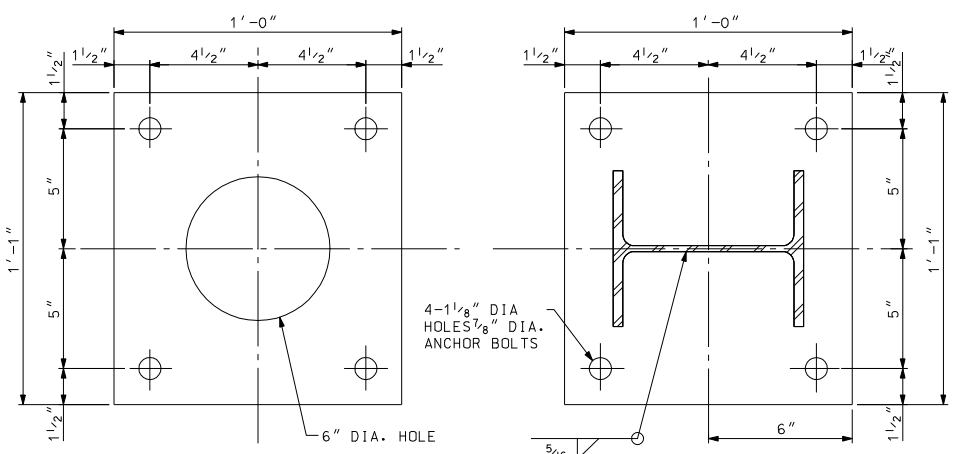
PLATE WASHER - "C"
6" = 1'-0"

RAIL NOTES:

- ITEM XXX, BRIDGE RAIL SHALL INCLUDE POSTS, BASE PLATES, ANCHOR PLATES, ANCHOR RODS, RAIL ASSEMBLY BOLTS, NUTS, WASHERS, STUDS, STRUCTURAL TUBING, SPLICE BARS, PIPE SPACERS, ALL APPURTENANCES, AND GALVANIZING.
- BRIDGE RAIL POSTS SHALL BE SET NORMAL (90 DEGREES) TO THE PROFILE GRADE.
- ENDS OF RAIL TUBE SECTIONS SHALL BE SAWED OR MILLED AND SHALL BE TRUE AND SMOOTH. ALL CUT EDGES OF ALL MATERIAL SHALL BE GROUND SMOOTH.
- EACH PIECE OF RAIL TUBING SHALL BE ATTACHED TO A MINIMUM OF THREE (3) POSTS.
- BOLT HOLES SHALL BE DRILLED OR PUNCHED. FLAME CUTTING MAY BE USED TO FINISH SLOTTED HOLES IF MECHANICALLY GUIDED.
- MILL OR SHOP TRANSVERSE WELDS SHALL NOT BE PERMITTED ON ANY RAIL ELEMENT. RAIL ELEMENTS USED ON CURVES SHALL USE 3/8" WALL TUBES AND SHALL BE SHOP FORMED TO THE REQUIRED CURVATURE.
- NO PUNCHING, DRILLING, CUTTING OR WELDING SHALL BE PERMITTED AFTER GALVANIZING, AND FOR INSTALLATION OF DELINEATORS. DAMAGED AREAS OF GALVANIZING SHALL BE THOROUGHLY CLEANED, PRETREATED, AND PAINTED WITH TWO COATS OF ORGANIC ZINC-RICH GALVANIZING REPAIR PAINT, HAVING A MINIMUM 94% ZINC BY WEIGHT, TO A THICKNESS EQUAL TO THE ORIGINAL COATING ACCORDING TO THE STANDARD SPECIFICATIONS AND ASTM A780.
- NUTS FOR THREADED ANCHOR RODS CONNECTING THE BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
- THREADS FOR ANCHOR RODS MAY BE ROLLED OR CUT. IF CUT THREADS ARE USED, BOLT DIAMETER SHALL NOT BE LESS THAN NOMINAL DIAMETER. IF ROLLED THREADS ARE USED, ROD DIAMETER SHALL NOT BE LESS THAN ROOT DIAMETER OF THREADS.

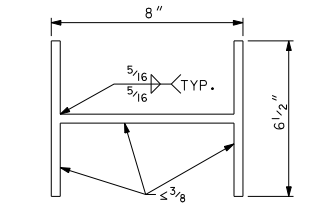
MATERIAL NOTES:

- STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500, GRADE B. STRUCTURAL STEEL TUBING. RAIL TUBING SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH REQUIREMENTS OF 15 FT. LBS. AT 0°F. FOR ASTM A500, GRADE B, THE TEST SAMPLES SHALL BE TAKEN AFTER FORMING THE TUBES. CHARPY V-NOTCH IS NOT REQUIRED FOR SPLICE TUBES.
- RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A572 GR 50, EXCEPT ANCHOR PLATES MAY BE ASTM A36.
- THREADED STUDS AND MATCHING NUTS FOR RAIL-TO-POST ATTACHMENT SHALL CONFORM TO ASTM A276 TYPE 304, STAINLESS STEEL, AND SHALL BE TORQUE TESTED PER AWS D1.5, 7.7.1. ALL OTHER BOLTS AND NUTS SHALL CONFORM TO ASTM A307 AND ASTM A563 GRADE A RESPECTIVELY OR BETTER, EXCEPT THAT ASTM A307 NUTS MAY BE USED ON THE BOTTOM OF ANCHOR ASSEMBLY. WASHERS SHALL BE HARDENED STEEL COMMERCIAL TYPE A PLAIN WIDE WASHERS AND SHALL MEET THE DIMENSIONAL REQUIREMENTS OF A.N.S.I. B18.22. ANCHOR RODS SHALL CONFORM TO ASTM A449.
- ALL STEEL COMPONENTS (EXCEPT STAINLESS) SHALL BE GALVANIZED AFTER FABRICATION IN CONFORMANCE TO AASHTO M232 (ASTM A153) AND AASHTO M111 (ASTM A123). THE GALVANIZING KETTLE SHALL HAVE 0.05 TO 0.09 PERCENT NICKEL. GALVANIZED SURFACES SHALL HAVE A UNIFORM APPEARANCE AND GALVANIZED MATERIAL SHALL BE PROPERLY STORED. IF PAINTING IS REQUIRED SEE SPECIAL PROVISIONS FOR 708.
- STUDS SHALL BE WELDED ON AFTER TUBES ARE GALVANIZED BY SPOT GRINDING OFF GALVANIZING, WELDING ON STUDS, THEN TOUCH UP GALVANIZING PER NOTE #7 ABOVE.
- RETROREFLECTIVE DELINEATORS, BOLTS, NUTS, WASHERS AND FIELD DRILLING OF POSTS, INCLUDING GALVANIZING TOUCH-UP, SHALL BE SUBSIDIARY TO ITEM XXX. SEE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (DL-1) FOR ADDITIONAL DETAILS AND SPACING.

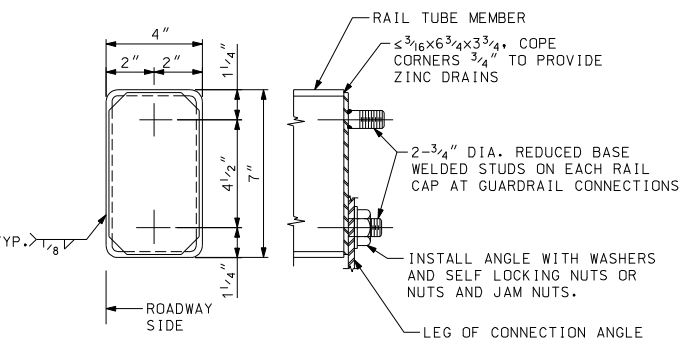


CURB AND POST DETAILS
3" = 1'-0"

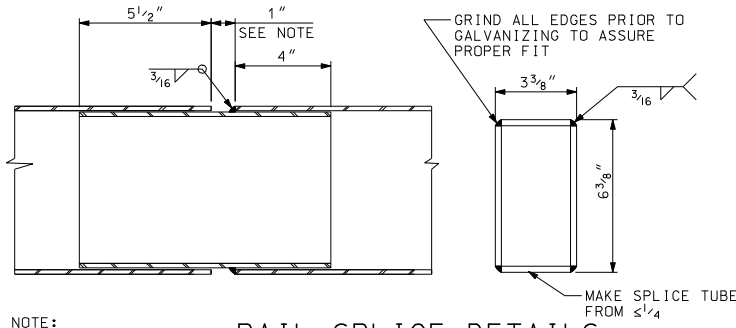
BASE PLATE DETAILS
3" = 1'-0"



ALTERNATE POST
3" = 1'-0"



RAIL CAP DETAILS
3" = 1'-0"



RAIL SPLICE DETAILS
3" = 1'-0"

NOTE:
1" GAP UNLESS NOTED OTHERWISE ON DETAIL PLANS. RAIL SPLICE WILL BE NEEDED IN PANEL THAT HAS A DECK EXPANSION JOINT.

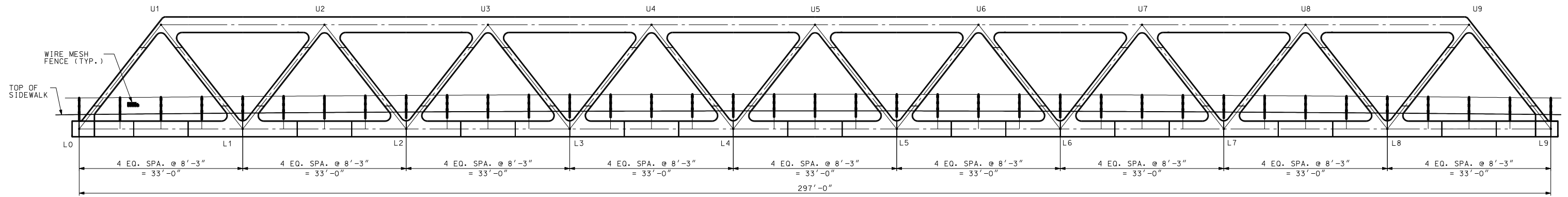
RAILING WEIGHT
WGT. = 2.014 KIP/POST (INCLUDES 7" NORMAL WEIGHT CONCRETE CURB)
CENTER OF GRAVITY = 0.908 FT

PRELIMINARY PLANS
SEPTEMBER 12, 2011

ARCHER WESTERN CONTRACTORS

HNTB
The HNTB Companies
Engineers Architects Planners

| STATE OF NEW HAMPSHIRE | | | | | | | | | | | |
|--|--------|------------|--------|---------------|--------|--------------|---------------------|-------|---------|-----------|--------------|
| DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN | | | | | | | | | | | |
| TOWN | STOWNS | BRIDGE NO. | SBRNOS | STATE PROJECT | SSTNOS | BRIDGE SHEET | | | | | |
| LOCATION SBRDESCRS | | | | | | DESIGNED | BY | DATE | CHECKED | TPZ | DATE |
| | | | | | | DRAWN | SPL | 09/11 | CHECKED | GT | 09/11 |
| | | | | | | QUANTITIES | XX | XX/XX | CHECKED | XX | XX/XX |
| | | | | | | ISSUE DATE | FEDERAL PROJECT NO. | | | SHEET NO. | TOTAL SHEETS |
| | | | | | | REV. DATE | XXXXXX | | | XX | \$CSHTOTS |



TYPICAL TRUSS SPAN – EAST ELEVATION
(WEST ELEVATION SIMILAR)
1" = 10'-0"

NOTES:

- 1. FOR PEDESTRIAN RAILING DETAILS, SEE BRIDGE SHEET B59.

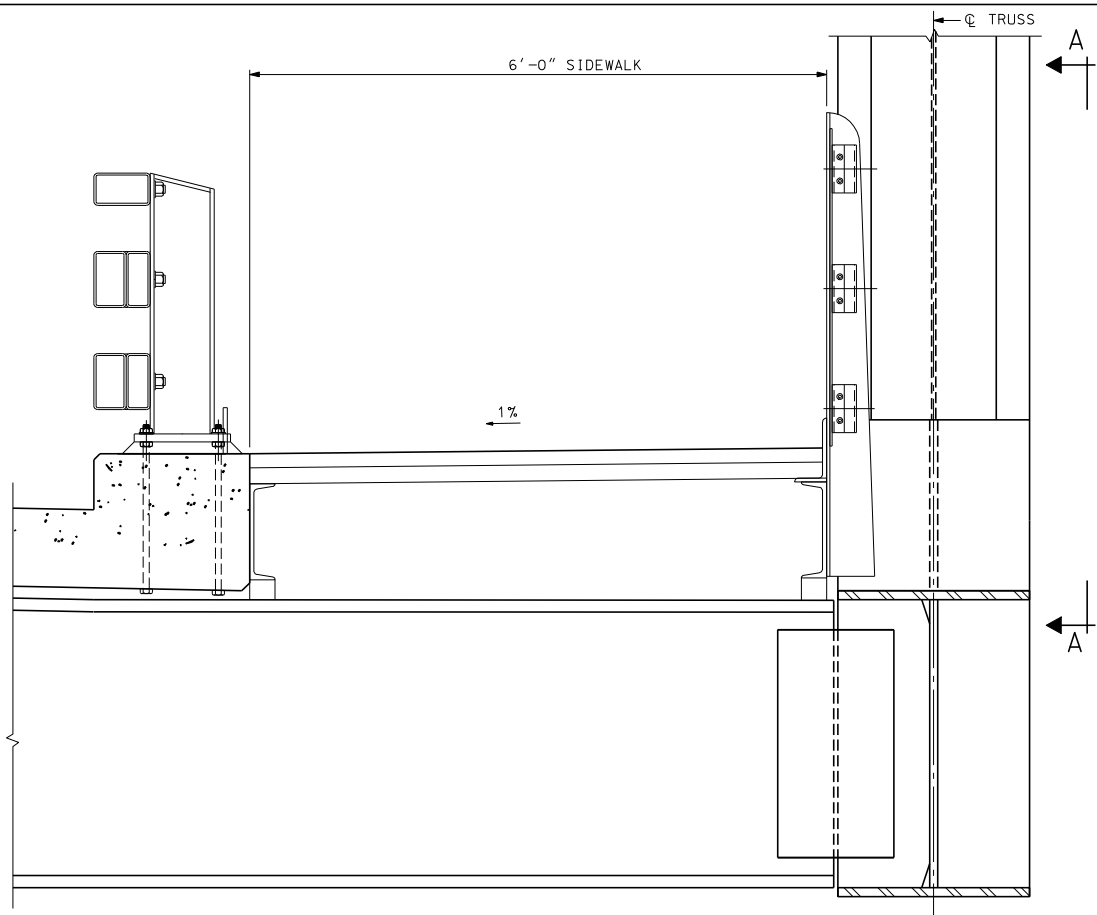
PRELIMINARY PLANS
SEPTEMBER 12, 2011



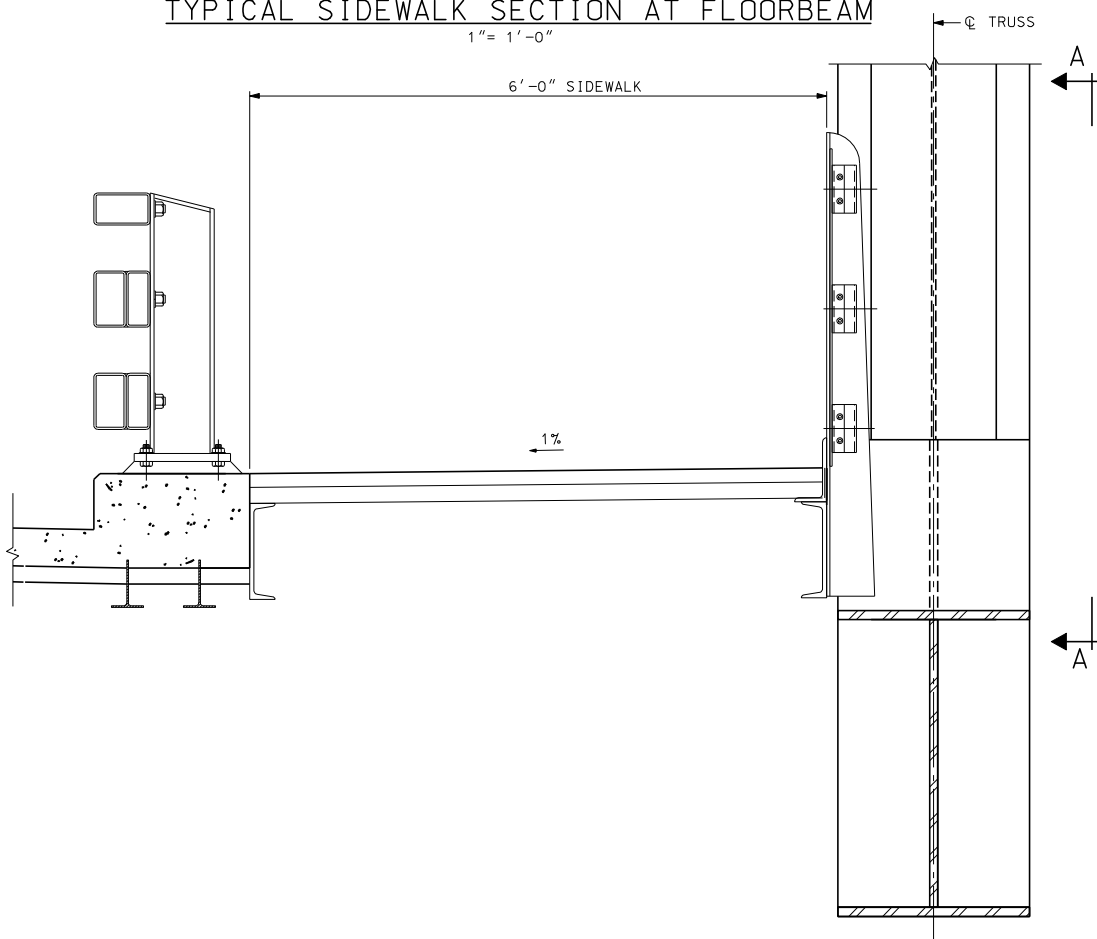
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| STATE OF NEW HAMPSHIRE | | | | | | | | | | | |
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| TOWN | STOWNS | BRIDGE NO. | SBRNO\$ | STATE PROJECT | SSTNO\$ | | | | | | |
| LOCATION SBRDESCRS | | | | | | | | | | | |
| BRIDGE PEDESTRIAN RAILING ELEVATION | | | | | | | | | | | |
| BRIDGE SHEET | | | | | | | | | | | |
| B60\$BT\$ | | | | | | | | | | | |
| FILE NUMBER | | | | | | | | | | | |
| SBRFILNO\$ | | | | | | | | | | | |
| TOTAL SHEETS | | | | | | | | | | | |
| SCSHTOTS | | | | | | | | | | | |

| | | |
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| SUBDIRECTORY | DGN LOCATOR | SHEET SCALE |
| XX | \$FILENAME\$ | 1" = 10'-0" |

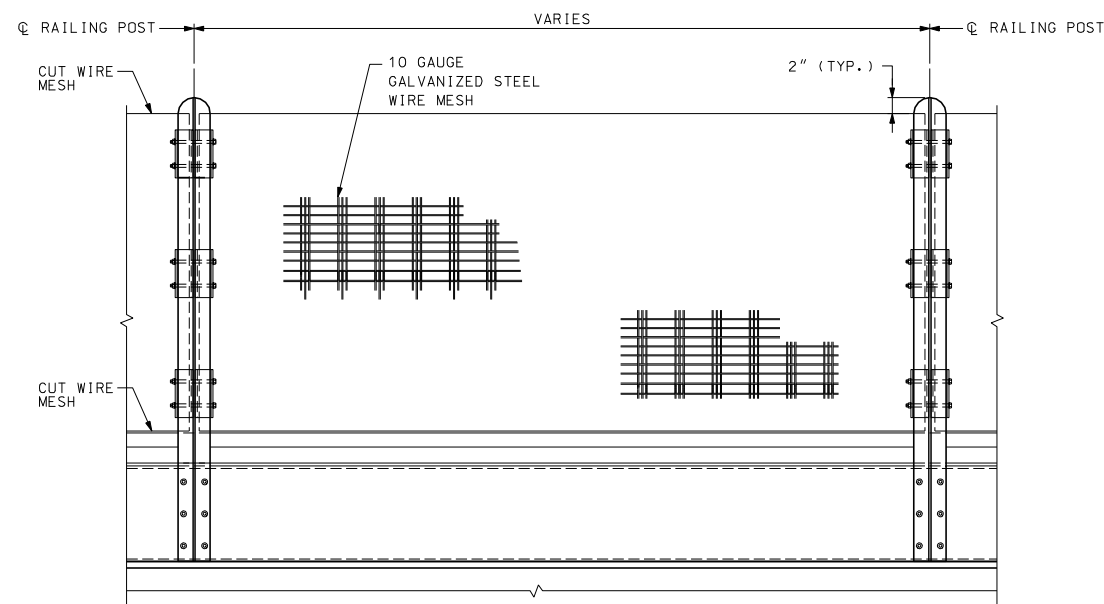
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| DESIGNED | JN | 09/11 | CHECKED | TPZ | 09/11 |
| DRAWN | SPL | 09/11 | CHECKED | GT | 09/11 |
| QUANTITIES | XX | XX/XX | CHECKED | XX | XX/XX |
| ISSUE DATE | | | FEDERAL PROJECT NO. | | SHEET NO. |
| REV. DATE | | | XXXXXX | | XX |



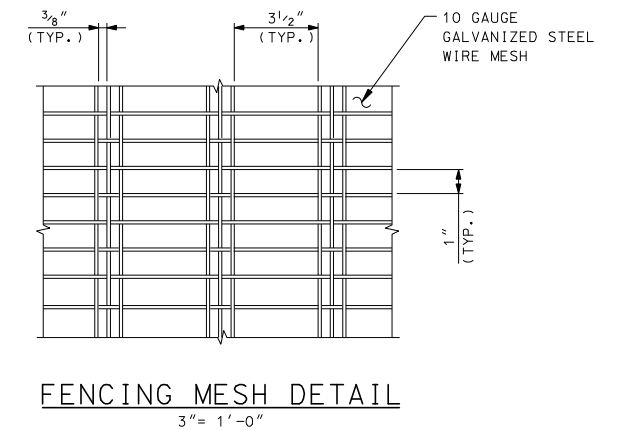
TYPICAL SIDEWALK SECTION AT FLOORBEAM
1" = 1'-0"



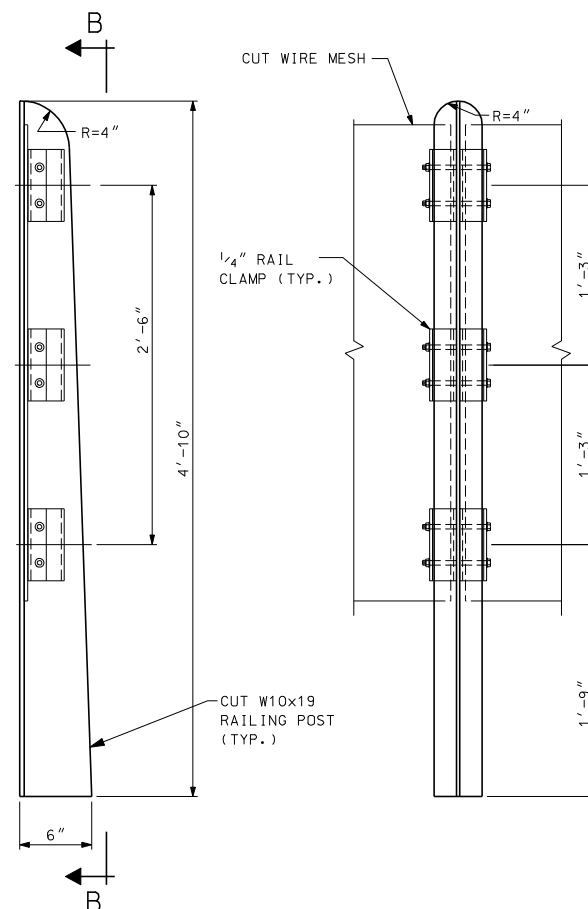
TYPICAL SIDEWALK SECTION BETWEEN FLOORBEAMS
1" = 1'-0"



VIEW A-A
1" = 1'-0"

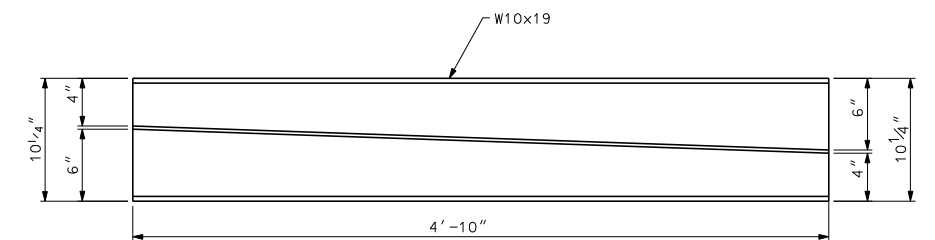


FENCING MESH DETAIL
3" = 1'-0"

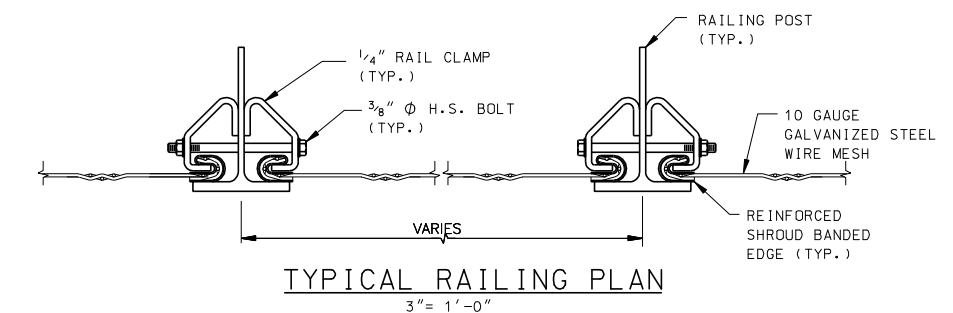


RAILING POST GEOMETRY
1 1/2" = 1'-0"

VIEW B-B
1 1/2" = 1'-0"



W10x19 CUTTING DIAGRAM
1 1/2" = 1'-0"



TYPICAL RAILING PLAN
3" = 1'-0"

NOTES:

1. ALL RAILING STEEL SHALL BE ARCHITECTURALLY EXPOSED STRUCTURAL STEEL CONFORMING TO SECTION 10 OF AISC CODE OF STANDARD PRACTICE.
2. POSTS AND MESH SHALL BE SET PERPENDICULAR TO DECK.

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SEPTEMBER 12, 2011



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|--|--------|------------|--------|---------------|---------|-----------------------------------|-------|---------------------|---------|-----------|--------------|
| DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN | | | | | | | | | | | |
| TOWN | STOWNS | BRIDGE NO. | SBRNOS | STATE PROJECT | \$STNOS | BRIDGE SHEET | | | | | |
| LOCATION \$BRDESCRS | | | | | | PEDESTRIAN RAIL AND FENCE DETAILS | | | | | |
| REVISIONS AFTER PROPOSAL | | | | | | BY | DATE | BY | DATE | | |
| | | | | | | CSE | 09/11 | CHECKED | TPZ | 09/11 | |
| | | | | | | DRAWN | PRE | 09/11 | CHECKED | GT | 09/11 |
| | | | | | | QUANTITIES | XX | XX/XX | CHECKED | XX | XX/XX |
| | | | | | | ISSUE DATE | | FEDERAL PROJECT NO. | | SHEET NO. | TOTAL SHEETS |
| | | | | | | REV. DATE | | XXXXXX | | XX | \$CSHTOTS |

| SUBDIRECTORY | DGN LOCATOR | SHEET SCALE |
|--------------|--------------|-------------|
| XX | \$FILENAME\$ | AS NOTED |