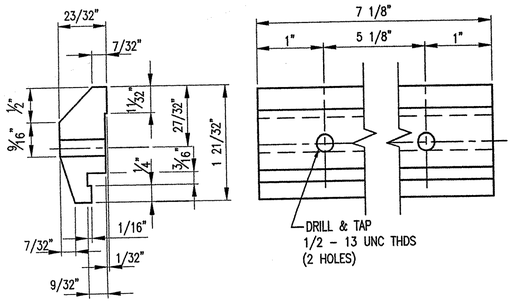
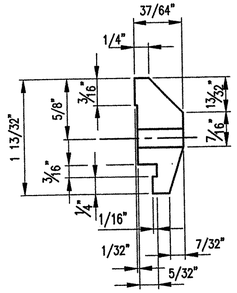
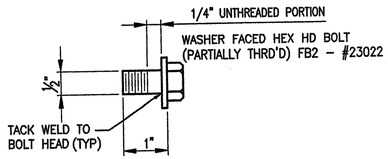
'OR PATH DIRECTORY - E LB1 (R0)(RL SDWK)-MODEL PLT - E LB1 (R0)(SL SDWK)-MODEL PLT - 12/26/04 7 14 22 AM



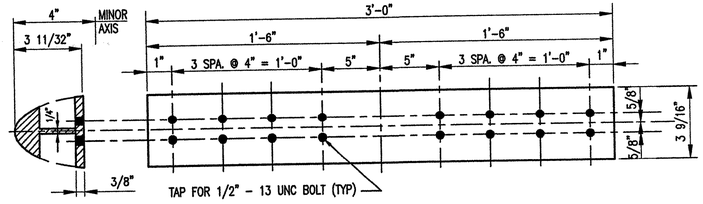
88 ~ REQ'D CLAMP BAR CB-03-A #19447
(BARRIER RAIL)



44 ~ REQ'D CLAMP BAR CB-01-B #28596
(HANDRAIL)



SPLICE BOLT DETAILS



8 ~ REQ'D SPLICE SLEEVES SS-03 (BARRIER RAIL) #19501

GENERAL NOTES

ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001 AND ITS LATEST REVISIONS.

DESCRIPTION	ASTM	ALLOY/GR.	REMARKS
RAILS, POSTS, BASES, SPLICES, CLAMP BARS, PINS, & BALUSTER FRAMES	B221	6061-T6 OR 6351-T5	MIN. YIELD STRENGTH Fy = 35,000 psi.
BALUSTERS	B221	6061 OR 6351	T4 - USED FOR SUPERIOR EXPANDING QUALITIES
RIVETS	B316	6061-T6	BUTTON HD., CONE PT.
SET SCREWS FOR BALUSTERS	F880	TYPE 303	
STAINLESS STEEL BOLTS	A193	GRADE B8	
ANCHOR RODS	A449		GALV. A153
STEEL HEX. NUTS	A563	GRADE DH	GALV. A153
STEEL WASHERS	F436		GALV. A153
ANCHOR PLATES	A569		COMMERCIAL QUALITY (PLAIN)
ALUMINUM WASHERS	B209	2024-T4	ALCLAD
PREFORMED PADS			SECTION 731.01 OR 731.02
ELECTRODES FOR WELDING		AWS A5.10 ER5356	

POSTS TO BE NORMAL TO GRADE AND RAILS SHALL BE PARALLEL TO GRADE.
RAILS TO BE ATTACHED TO A MINIMUM OF THREE POSTS WHEN POSSIBLE.

ALL RAILS AND WELDS TO BE FREE FROM ALL BURRS AND ROUGH EDGES. ENDS OF TUBE SECTIONS SHALL BE SAWED OR MILLED. GRIND ALL CUT EDGES SMOOTH.

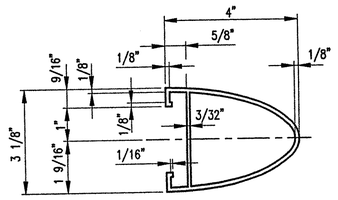
ALL THREADS TO BE UNC CLASS 2A/2B.

ALL EXTRUSION TOLERANCES NOT SHOWN SHALL BE IN ACCORDANCE WITH ASTM B221.

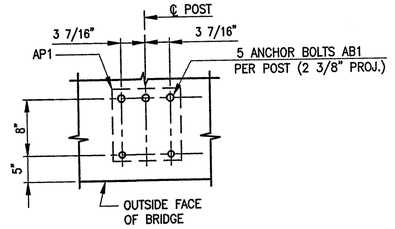
IF CUT THREADS ARE USED, BOLT DIAMETER SHALL NOT BE LESS THAN NOMINAL DIAMETER. IF ROLLED THREADS ARE USED, BOLT DIAMETER SHALL NOT BE LESS THAN THE ROOT DIAMETER OF THREADS

THE SPLICE BAR SHALL BE ATTACHED TO THE RAIL ELEMENT AS FOLLOWS:
THE RAIL SPLICE AT THE BRIDGE EXPANSION JOINT SHALL BE FASTENED ON BOTH SIDES OF THE RAIL SPLICE USING THE PARTIALLY THREADED BOLTS, WITH THE WASHER FACED BOLT, TIGHTENED SECURELY TO THE END OF THREADS, AND LEAVING A 1/8" GAP, THIS ALLOWS EXPANSION ON BOTH SIDES OF THE JOINT.

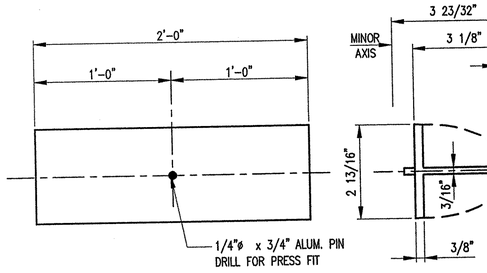
ALL NUTS SHALL COMPLY WITH AMERICAN HEXAGON ANSI SPECIFICATIONS B18.2



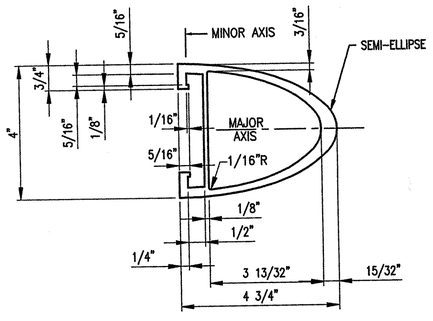
TYPICAL SECTION (HANDRAIL)



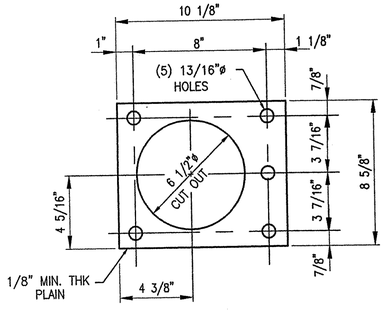
TYPICAL ANCHOR BOLT SETTING



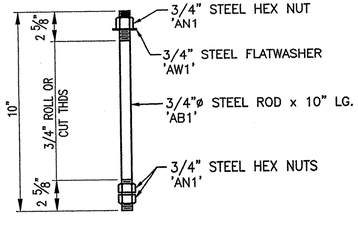
4 ~ REQ'D SPLICE SLEEVES SS-23 (HANDRAIL)



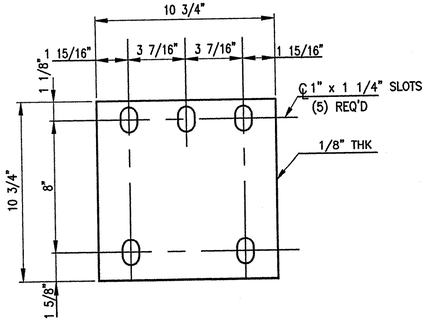
TYPICAL SECTION (BARRIER RAIL)



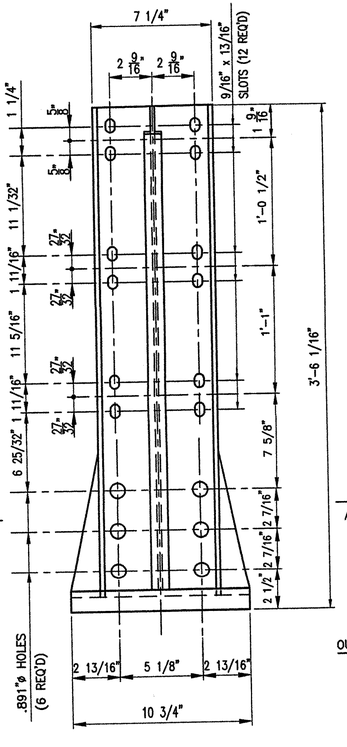
22 ~ REQ'D ANCHOR PLATE AP1 #14520

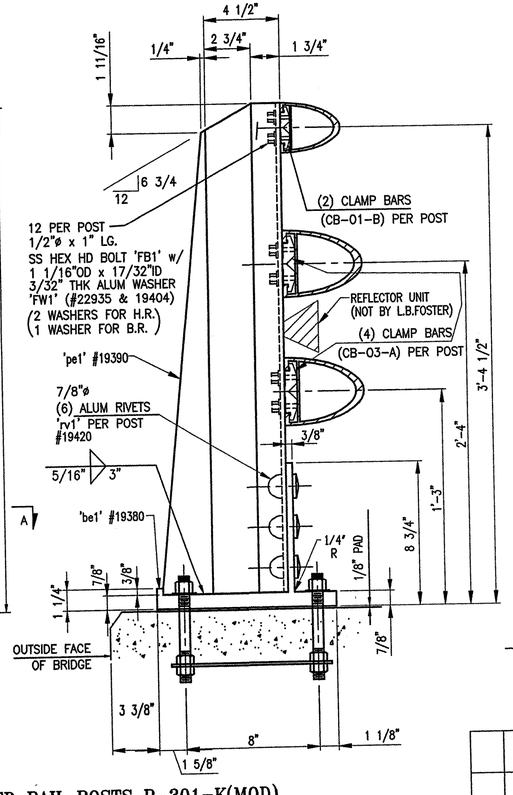


110 ~ REQ'D ANCHOR BOLTS AB1

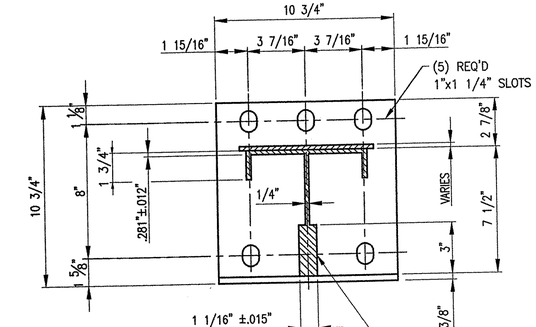


22 ~ REQ'D FABRIC PADS 'EP1' #19220

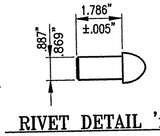




22 ~ REQ'D FABRICATED RAIL POSTS P-301-K(MOD) (SIDEWALK)



SECTION A-A



RIVET DETAIL 'rv1'

VTrans RECEIVED
CK'D BY GW CK'D BY
JAN 12 2005
RESUBMIT APPROVED
BY DATE 2/4/05

BRIDGE No. 21
PROJECT No. BRS 0147(5)S ITEM No: 525.23

APPROVED: REC'D APPROVAL
DRAWING

L.B. FOSTER COMPANY
1016 GREENTREE ROAD
PITTSBURGH, PENNSYLVANIA 15220

FOR: BECK & BELLUCCI, INCORPORATED
VERMONT AGENCY OF TRANSPORTATION
TOWN OF ROYALTON, COUNTY OF WINDSOR
3-LINE SEMI-ELLIP. ALUM. BRIDGE RAIL FOR VT RTE 14
OVER THE WHITE RIVER - GENERAL NOTES AND TYP DETAILS

MADE CMS DATE 09/29/04 JOB No. AR0170 CUST. No.
CHECK AW DATE 10/21/04 DRAWING LB1 REV. No.

REV.	DESCRIPTION	BY	DATE