



BILL OF MATERIAL					
Mk.	Qty.	Description	Size/Shape	Length/Qty.	Material
26		BRIDGE RAIL POST	W200x35.9	1.829m	A572m Gr. 345
4		TRANSITION POST	W200x35.9	1.829m	A572m Gr. 345
1		HAND RAIL (DROP END) W/133.915m RAD.			
		horizontal tube	TS150x76x6.4	3.048m	A500 Gr. B
		drop tube	TS150x76x6.4	1.144m	A500 Gr. B
		end tube	TS150x76x6.4	219mm	A500 Gr. B
1		HAND RAIL (DROP END) W/142.084m RAD.			
		horizontal tube	TS150x76x6.4	3.048m	A500 Gr. B
		drop tube	TS150x76x6.4	1.144m	A500 Gr. B
		end tube	TS150x76x6.4	219mm	A500 Gr. B
1		HAND RAIL (DROP END) W/133.915m RAD.			
		horizontal tube	TS150x76x6.4	4.007m	A500 Gr. B
		drop tube	TS150x76x6.4	1.144m	A500 Gr. B
		end tube	TS150x76x6.4	219mm	A500 Gr. B
1		HAND RAIL (DROP END) W/142.084m RAD.			
		horizontal tube	TS150x76x6.4	4.007m	A500 Gr. B
		drop tube	TS150x76x6.4	1.144m	A500 Gr. B
		end tube	TS150x76x6.4	219mm	A500 Gr. B
3		HAND RAIL TUBE W/133.915m RAD.	TS150x76x6.4	5.683m	A500 Gr. B
3		HAND RAIL TUBE W/142.084m RAD.	TS150x76x6.4	5.683m	A500 Gr. B
3		BRIDGE RAIL TUBE W/133.915m RAD.	TS203x102x4.8	5.683m	A500 Gr. B
3		BRIDGE RAIL TUBE W/142.084m RAD.	TS203x102x4.8	5.683m	A500 Gr. B
1		BRIDGE RAIL TUBE W/133.915m RAD.	TS203x102x4.8	5.360m	A500 Gr. B
1		BRIDGE RAIL TUBE W/142.084m RAD.	TS203x102x4.8	5.360m	A500 Gr. B
1		BRIDGE RAIL TUBE W/133.915m RAD.	TS203x102x4.8	4.400m	A500 Gr. B
1		BRIDGE RAIL TUBE W/142.084m RAD.	TS203x102x4.8	4.400m	A500 Gr. B
60		TUBE BLOCKOUT	TS203x102x4.8	150mm	A500 Gr. B
26		SHELF BRACKET	L127x89x9.5	165mm	A36M
16		HAND RAIL SPLICE BAR			
		flat bar	20 x 127mm	787mm	A572m Gr. 345
		square bar	20 x 20mm	787mm	A36M
8		BRIDGE RAIL SPLICE	C180x18.2	787mm	A572m Gr. 345
30		HEX BOLT	M16	330mm	A325M
26		HEX BOLT	M16	114mm	A325M/A307
144		HEX BOLT	M16	50mm	A325M
32		HEX BOLT	M20	102mm	A325M/A307
200		HEX NUT	M16		A563 Gr. DH
290		PLAIN WASHER	M16		F436M
30		SPECIAL WASHER	5 x 44mm	75mm	A572m Gr. 345
32		HEAVY HEX NUT	M20		A563M
32		PLAIN WASHER	M20		F436M
*		52 ANCHOR ROD U-BOLT	M24		A449
*		208 HEX NUT	M24		A563M
*		104 PLAIN WASHER	M24		F436M
*		104 PLATE WASHER	6 x 50mm	127mm	A572m Gr. 345
14		W-BEAM PANEL	-6-3" SPACING	10 Ga.	M180 B2

NOTES:  
 1. HEAVY DUTY STEEL BEAM GUARD RAIL SHALL CONFORM TO VT. SPECIFICATION 732. AASHTO M180 B2.  
 2. STRUCTURAL STEEL TUBING SHALL CONFORM TO VT. SPECIFICATION 732. ASTM A500 Gr. B.  
 3. ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 AND SHALL CONFORM TO VT. SPECIFICATION 714 UNLESS OTHERWISE NOTED.  
 4. BRIDGE RAIL POSTS, SPECIAL WASHERS, SPLICE BARS AND PLATE WASHERS SHALL CONFORM TO AASHTO M223/M223M AND SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111. PRIOR TO GALVANIZING ALL CORNERS AND EDGES OF STEEL PLATES, SHAPES, ETC. SHALL BE GROUND TO A 2mm RAD.  
 5. SEE STANDARD DRAWING G-1 AND G-1D FOR ADDITIONAL DETAILS CONCERNING GUARD RAIL.  
 6. SEE STANDARD DRAWING SB-R6-82 FOR APPROACH RAIL DETAILS AND FOR INFORMATION RELATIVE TO SCHEDULE 1 AND SCHEDULE 2. ALL APPROACH RAIL SHALL BE HEAVY DUTY STEEL BEAM GUARD RAIL. ALSO SEE STD. DWG. SB-R6-82 FOR HANDRAIL DETAIL.  
 7. ALL POSTS SHALL BE SET NORMAL TO GRADE.  
 8. SPLICES FOR THE STEEL BEAM GUARD RAIL SHALL LAP IN THE DIRECTION OF TRAFFIC.  
 9. SEE STANDARD DRAWING G-1 FOR DETAILS OF DELINEATORS. A DELINEATOR SHALL BE LOCATED AT EVERY FIFTH POST. PAYMENT SHALL BE SUBSIDIARY TO OTHER ITEMS.  
 10. A RAILING JOINT SPLICE SHALL BE PROVIDED AT EACH SUPERSTRUCTURE EXPANSION JOINT.  
 11. ALL FIELD CUT OR DRILLED AREAS SHALL BE COATED WITH ZINC RICH PAINT.  
 12. FOR RADII LESS THAN 289.560m, THE TUBING SHALL BE SHOP BENT TO FIT THE APPLICABLE CURVE.  
 13. THE DROP-WEIGHT TEAR TEST IN SECTION 732 SHALL NOT APPLY TO THE STRUCTURAL TUBING ON THIS STANDARD.  
 14. ALL BOLTS AND RELATED HARDWARE SHALL CONFORM TO AASHTO M164 TYPE 1 BOLTS, HOT DIPPED OR MECHANICALLY GALVANIZED PER SPECIFICATION.

FASCIA MOUNTED POST WITH CURB  
 W-8 x 24 (A572 GR 50)  
 W 200 x 35.9 / 345

SPECIAL WASHER DETAIL  
 5mm THICK (A572M GR 345)  
 17 x 25 SLOTTED HOLE  
 75, 38, 22, 44

REVISIONS		
No.	Remarks	Date
0	Initial submittal	4/30/03

RECEIVED  
 OK'D BY: [Signature]  
 MAY 07 2003  
 SUBMITTED BY: GSR  
 APPROVED BY: [Signature]  
 DATE: 5/16/03

**HIGHWAY SAFETY CORP.**  
 GLASTONBURY, CT

ITEM 525.44 - FASCIA MTD. TUBING W/HANDRAIL  
 TOWN OF FAIR HAVEN, VT  
 RUTLAND COUNTY, OVER POULTNEY RIVER  
 ROUTE No. TH 6, CL 2 BRIDGE No. 6  
 PROJECT No. BRO 1443(32)

DRAWN: J. Ruiz  
 CHECKED: [Signature]  
 DATE: 2/25/03  
 SCALE: NONE  
 REVISION NO.: 1350  
 GENERAL CONTRACTOR: [Blank]  
 SUB CONTRACTOR: F.R. LAFAYETTE  
 SIZE: D REVISION: 0  
 SHEET NO.: 2 of 2