

CONTENTS

DESCRIPTION

Flared Energy Absorbing
Terminal - FLEAT-MT
Assembly For Wood
Breakaway Post System

DRAWING NAME

MEDFLT-W-US-R4.DWG

Flared Energy Absorbing
Terminal - FLEAT-MT
Assembly For Steel
Breakaway Post System

MEDFLT-S-US-R6.DWG

FLEAT-MT NOTES

1. The guardrail end anchorage system represented on this Qualified Products List (QPL) drawing is a proprietary design by Road Systems, Inc. and marketed under the trade name FLEAT-MT. Any infringement on the rights of the designer shall be the sole responsibility of the user.
2. The FLEAT-MT is suitable for all design speeds.
3. This Qualified Products List (QPL) drawing is provided by the Florida Department of Transportation solely for the use by the Department and its assignees.
4. The FLEAT-MT shall be assembled in accordance with the details, procedures and specifications called for in these drawings.
5. The FLEAT-350 is intended for use as an approach end guardrail anchorage for median double faced guardrail. The effective length of the FLEAT-MT is 37.5' outside of any other standard guardrail, guardrail transitions or other special treatments. The approach side rail has an 18.5' straight flare with the impact head offset 2' from the normal guardrail alignment. The opposing side rail and impact head begin 18.5' downstream of the approach side impact head, without flare or offset to the normal guardrail alignment.
6. The beginning of length of need is at Post No. 3.
7. See Department standard specification Section 536 for timber breakaway post material requirements, and, Design Standards Index No. 400 for timber breakaway post dimensional requirements and for galvanizing requirements of metallic components.
8. The BCT cable anchor assemblies require jam nuts on both ends of each cable.
9. The FLEAT-MT shall be paid for under the contract unit price for Guardrail, End Anchorage Assembly (Double Face Terminal), EA and shall be full compensation for furnishing and installing all components in accordance with the plans; and the details, procedures and specifications called for in these drawings.

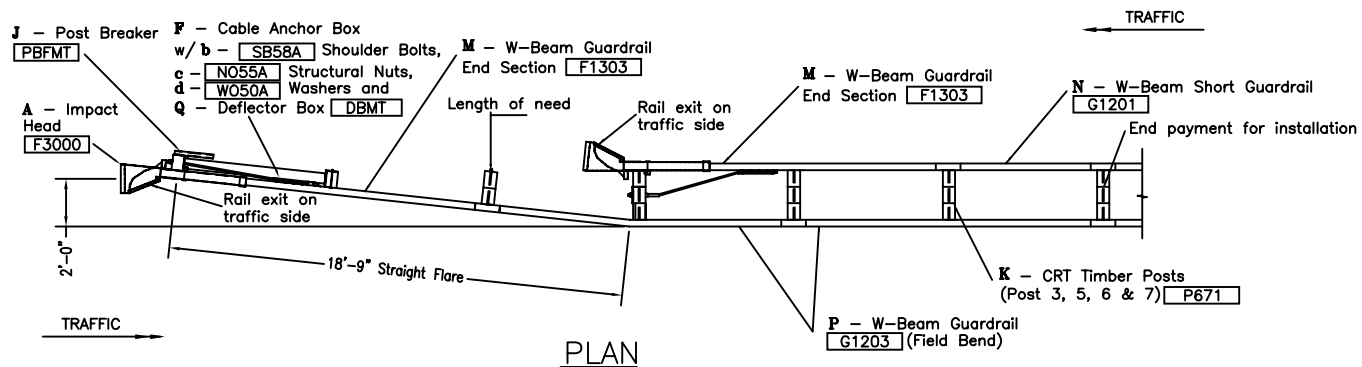
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

FLEAT-MT

DATE:

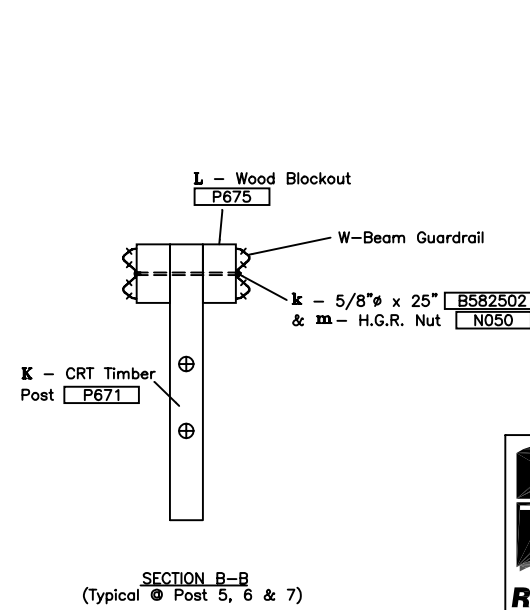
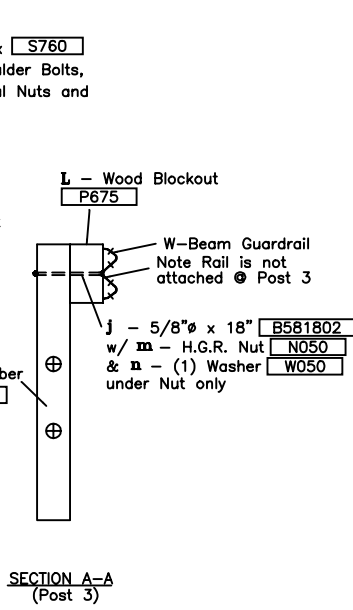
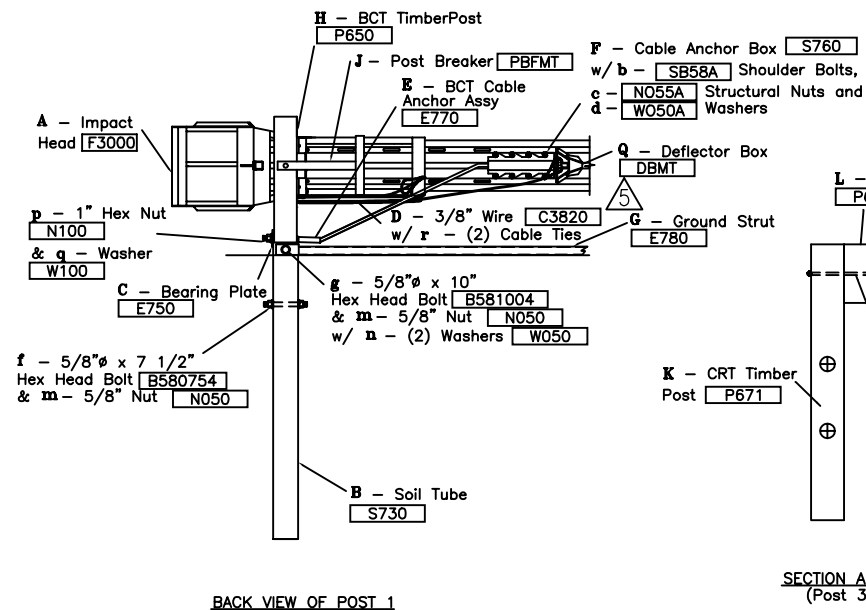
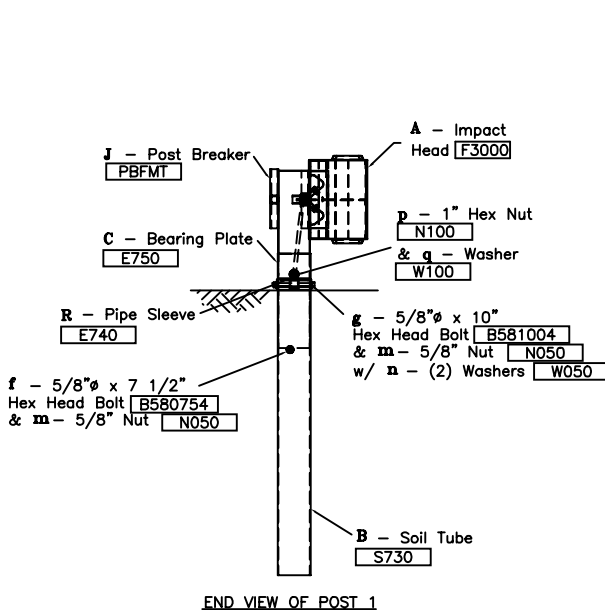
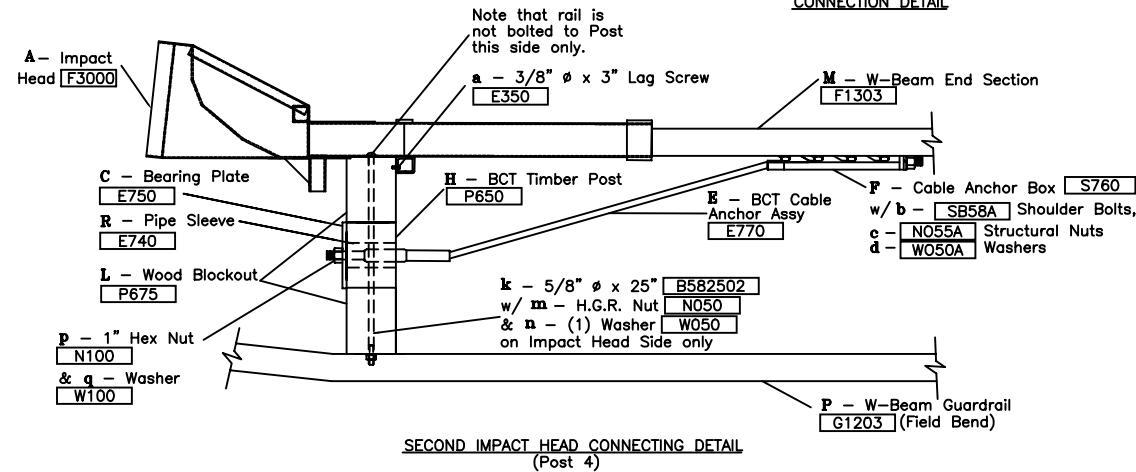
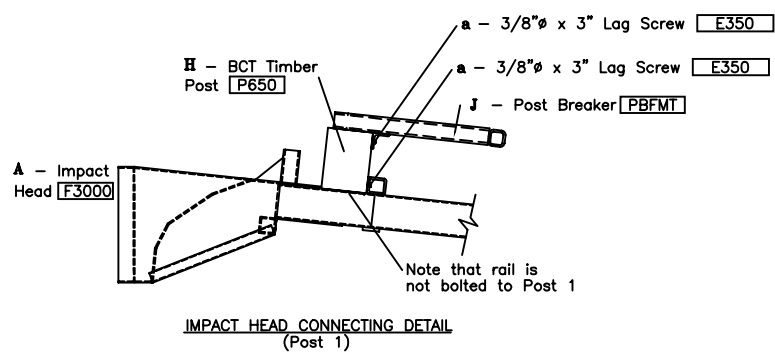
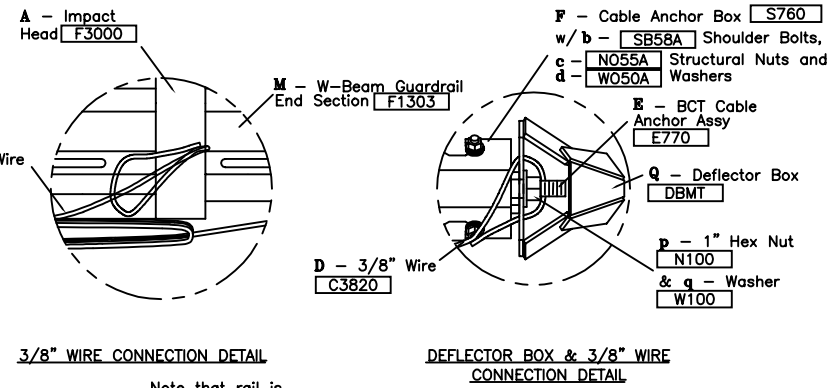
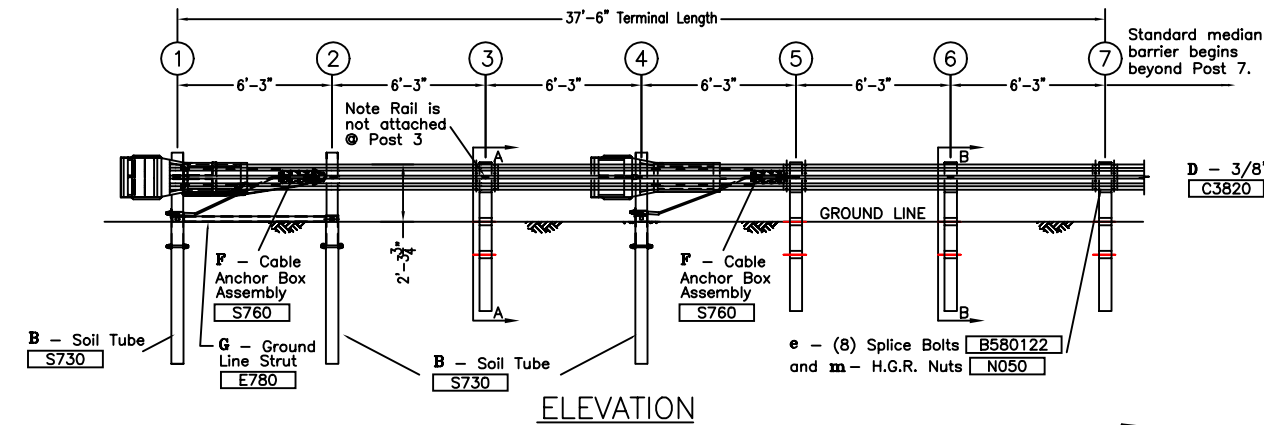
08/26/03

QPL No. 536-0211



GENERAL NOTES

1. Breakaway posts are required with the FLEAT-MT.
2. All bolts, nuts, cable assemblies, cable anchors and plates shall be galvanized.
3. The soil tubes shall not protrude more than 4" above ground (measured along a 5'-0" cord). Site grading may be necessary to meet this requirement.
4. The soil tubes may be driven with an approved driving head. Soil tubes should not be driven with the post in the tube. If the tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent settlement.
5. When rock is encountered during excavation, a 12" Dia. post hole, 20" deep may be used if approved by the engineer. Granular material will be placed in the bottom of the hole approx. 2 1/2" deep to provide drainage. The soil tubes will be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
6. The breakaway cable assembly must be taut. A locking device, (vice grips or channel lock pliers) should be used to prevent the cable from twisting, when tightening nuts.



ITEM	QTY	DESCRIPTION
A	2	FLEAT IMPACT HEAD (F3000)
B	3	*FOUNDATION SOIL TUBE, 6" x 8" (S730)
C	2	BEARING PLATE (E750)
D	1	3/8" WIRE 20'-0" (C3820)
E	2	BCT CABLE ANCHOR ASSEMBLY (E770)
F	2	CABLE ANCHOR BOX (S760)
G	1	GROUND STRUT (E780)
H	3	5 1/2" x 7 1/2" x 3'-9" WOOD POSTS 1, 2, & 4 (P650)
J	1	POST BREAKER (PBFMT)
K	4	6" x 8 x 6'-0" WOOD CRT POSTS 3, 5, 6 & 7 (P671)
L	9	TIMBER BLOCKOUT (P675)
M	2	W-BEAM GUARDRAIL END SECTION, 12 GA. (F1303)
N	1	W-BEAM GUARDRAIL SHORT SECTION, 12 GA. 6'-3" LG. (G1201)
P	2	W-BEAM GUARDRAIL, 12 GA. (G1203)
Q	1	DEFLECTOR BOX (DBMT)
R	2	PIPE SLEEVE (E740)
HARDWARE		
a	6	3/8" DIA. x 3" LAG SCREW (E350)(POST 1, 4 & POST BREAKER)
b	16	1/2" DIA. CABLE ANCHOR BOX SHOULDER BOLT (SB58A)
c	16	1/2" A325 STRUCTURAL NUT (N055A)
d	32	1/2" WASHER (W050A)
e	40	5/8" DIA. x 1 1/4" SPLICE BOLT (B580122) (5 SPLICES)
f	3	5/8" DIA. x 7 1/2" HEX BOLT (B580754) (FOUNDATION TUBES)
g	3	5/8" DIA. x 10" HEX BOLT (B581004) (FOUNDATION TUBES)
h	1	5/8" DIA. x 10" H.G.R. BOLT (B581002) (POST 2)
j	1	5/8" DIA. x 18" H.G.R. BOLT (B581802) (POST 3)
k	4	5/8" DIA. x 25" H.G.R. BOLT (B582502) (POSTS 4-7)
m	52	5/8" H.G.R. NUT (N050)
n	9	5/8" H.G.R. WASHER (W050) (FOUNDATION TUBES, POSTS 2-4)
p	4	1" ANCHOR CABLE HEX NUT (N100)
q	4	1" ANCHOR CABLE WASHER (W100)
r	2	Cable Tie

Foundation Tube Options For Posts 1, 2 & 4

- *6'-0" Split Foundation Tubes S730
- *6'-0" Solid Foundation Tubes E731
- *5'-0" Foundation Tubes S735 W/Soil Plates SP600
- *4'-6" Foundation Tubes E735 W/Soil Plates SP600



Flared Energy Absorbing Terminal - FLEAT-MT Assembly For Wood Breakaway Post System

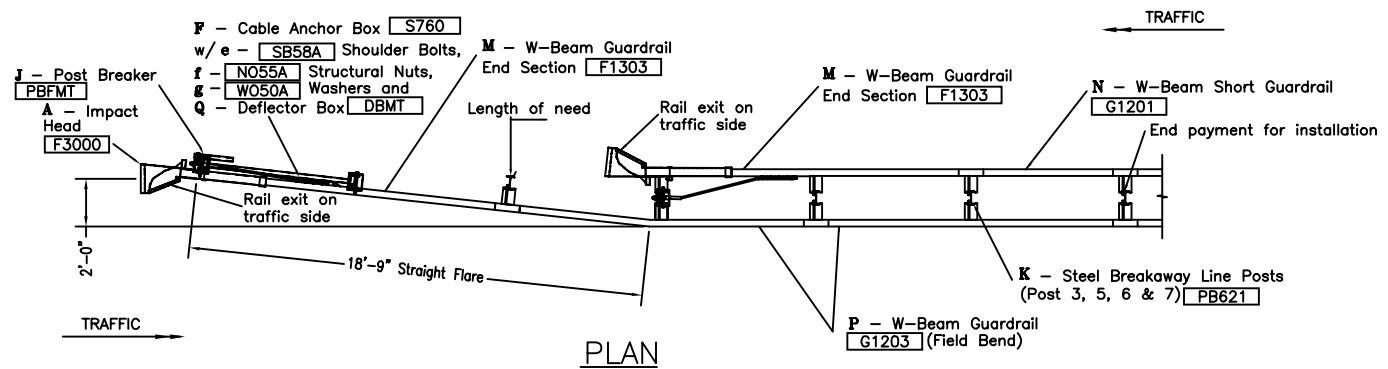
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or Phone: 330-346-0721

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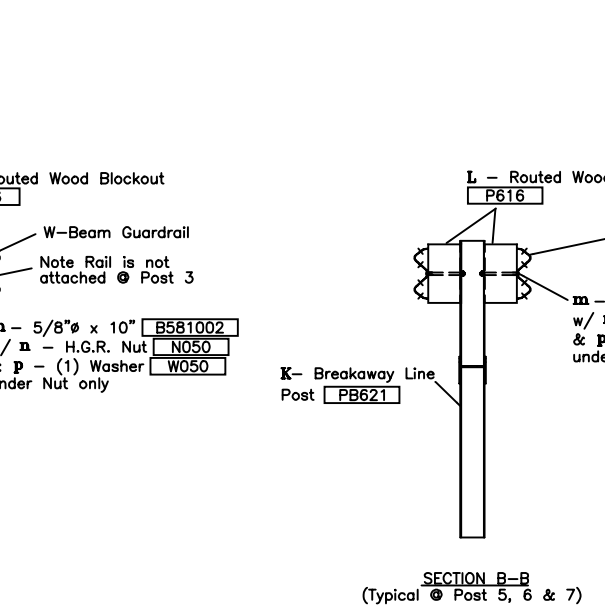
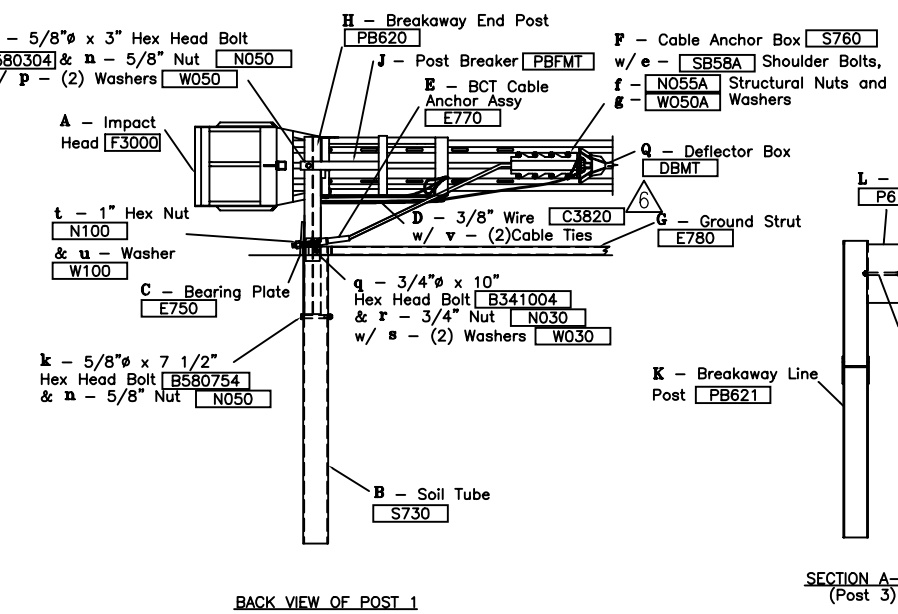
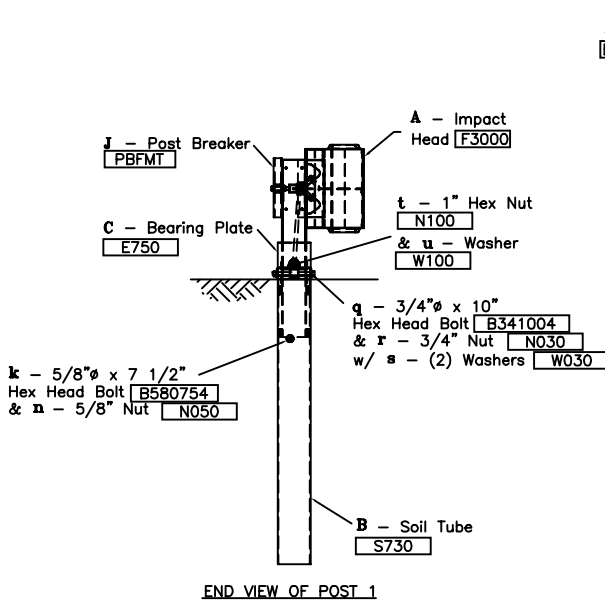
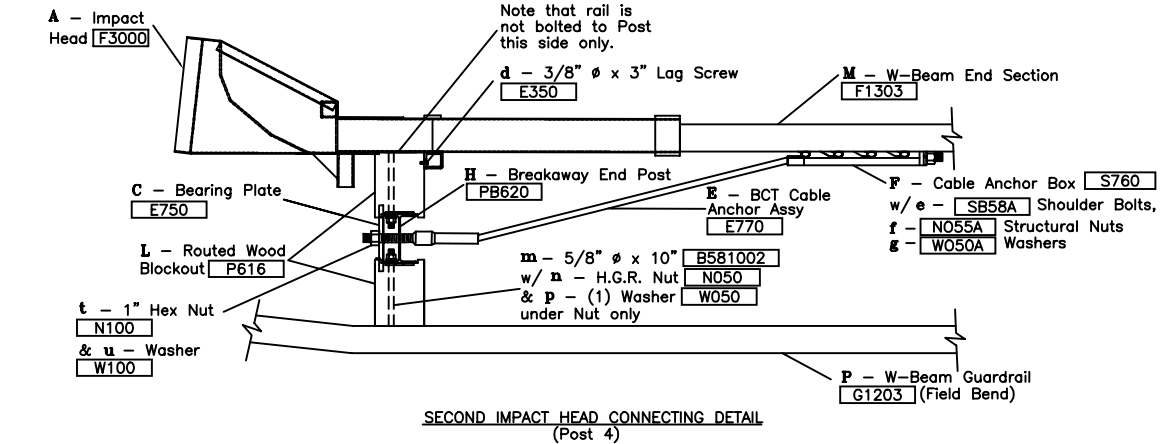
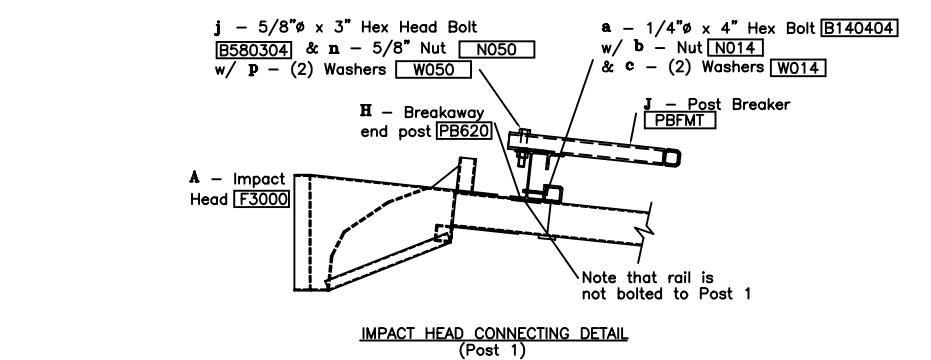
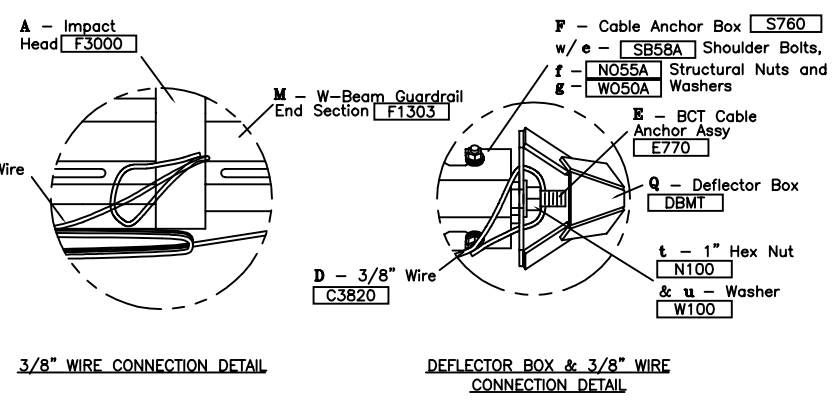
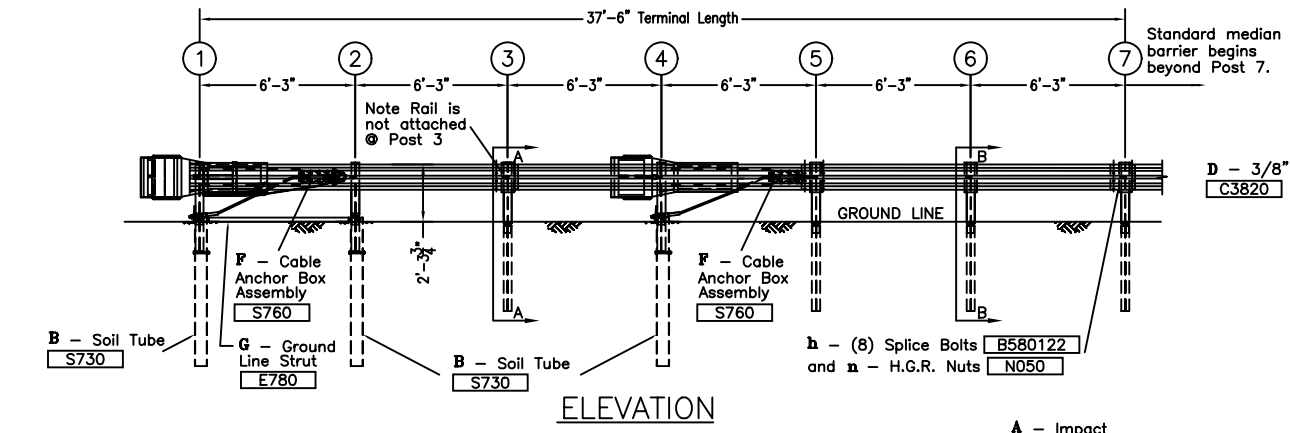
By: SML
Rev: 5

Sheet: A1

Date: 04\10\02



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B	3	*FOUNDATION SOIL TUBE, 6" x 8" (S730)
C	2	BEARING PLATE (E750)
D	1	3/8" WIRE 20'-0" (C3820)
E	2	BCT CABLE ANCHOR ASSEMBLY (E770)
F	2	CABLE ANCHOR BOX (S760)
G	1	GROUND STRUT (E780)
H	3	BREAKAWAY END POSTS 1, 2, & 4 (PB620)
J	1	POST BREAKER (PBFMT)
K	4	BREAKAWAY LINE POSTS 3, 5, 6 & 7 (PB621)
L	9	ROUTED TIMBER BLOCKOUT OR RECYCLED EQUIV. (P616)
M	2	W-BEAM GUARDRAIL END SECTION, 12 GA. (F1303)
N	1	W-BEAM GUARDRAIL SHORT SECTION, 12 GA. 6'-3" LG. (G1201)
P	2	W-BEAM GUARDRAIL, 12 GA. (G1203)
Q	1	DEFLECTOR BOX (DBMT)
HARDWARE		
a	2	1/4" DIA. x 4" HEX BOLT (B140404) (POST 1)
b	2	1/4" HEX NUT (N014) (POST 1)
c	4	1/4" WASHER (W014) (POST 1)
d	2	3/8" DIA. x 3" LAG SCREW (E350) (POST 4)
e	16	1/2" DIA. CABLE ANCHOR BOX SHOULDER BOLT (SB58A)
f	16	1/2" A325 STRUCTURAL NUT (NO55A)
g	32	1/2" WASHER (W050A)
h	41	5/8" DIA. X 1 1/4" SPLICE BOLT (B580122) (5 SPLICE/POST 2)
j	1	5/8" DIA. x 3" HEX BOLT (B580304) (POST BREAKER)
k	3	5/8" DIA. x 7 1/2" HEX BOLT (B580754) (FOUNDATION TUBES)
m	9	5/8" DIA. x 10" H.G.R. BOLT (B581002) (POSTS 3-7)
n	54	5/8" H.G.R. NUT (N050)
p	12	5/8" H.G.R. WASHER (W050) (POST BREAKER, POSTS 2-7)
q	3	3/4" DIA. x 10" HEX BOLT (B341004) (FOUNDATION TUBES)
r	3	3/4" HEX NUT (N030) (FOUNDATION TUBES)
s	6	3/4" WASHER (W030) (FOUNDATION TUBES)
t	4	1" ANCHOR CABLE HEX NUT (N100)
u	4	1" ANCHOR CABLE WASHER (W100)
v	2	CABLE TIE

Foundation Tube Options For Posts 1 & 2 & 4

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- *6'-0" Solid Foundation Tubes E731
- *5'-0" Foundation Tubes S735 W/Soil Plates SP600
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Flared Energy Absorbing Terminal - FLEAT Median Assembly For Steel Breakaway Post System		Sheet: A1
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