



2020 GUARDRAIL CATALOG

PROUDLY PROVIDING THE FOLLOWING SERVICES

SALES, DESIGN, DELIVERY, PARTS, INSTALLATION AND REPAIR:

- Guardrail
- Road Signs
- Fence
- Highway Cable Barrier
- Attenuators
- Turf Restoration
- Drilled Shaft Foundations

INTRODUCTION

ACTION TRAFFIC MAINTENANCE, INC



Family Owned & Operated Since 1982

ABOUT US

Action Traffic Maintenance is a family owned business with over 35 years expertise. We are DOT Pre-Qualified in Michigan and Indiana for Guardrail, Permanent Signing, Highway Cable Barrier, Fencing and Attenuators. We take pride in being dynamic and flexible to meet our clients needs.

A WORD TO THE USER

As a user of this catalog, we hope you take advantage of our ability to purchase, supply and install any and all material relating to guardrail, signing, fencing, and much more. Please feel free to reach out to us with any and all questions. We can customize our services to fit your needs! We certainly appreciate your continued patronage.

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ACTION TRAFFIC MAINTENANCE, INC



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Action Traffic Maintenance, 810-695-7516

STANDARD GUARDRAIL COMPONENTS

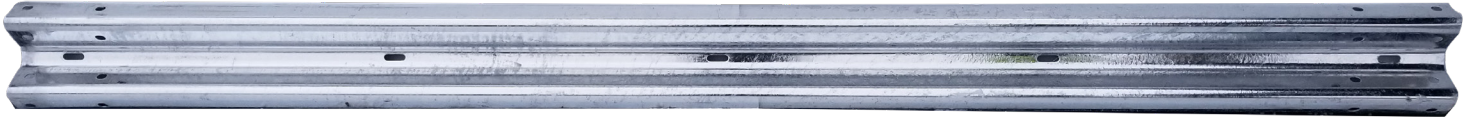
THE MOST COMMONLY USED GUARDRAIL COMPONENTS



STANDARD GUARDRAIL COMPONENTS

W BEAM PANEL

Price: \$87.50 Part #: S0001



THRIE BEAM PANEL

Price: \$168.00 Part #: S0002



STANDARD GUARDRAIL COMPONENTS

STEEL GUARDRAIL POST

Comes in 6', 7', 8' and 9' lengths

6' Post Price: \$43.25 Part #: S0003

7' Post Price: \$51.50 Part #: S0004

8' Post Price: \$59.50 Part #: S0005

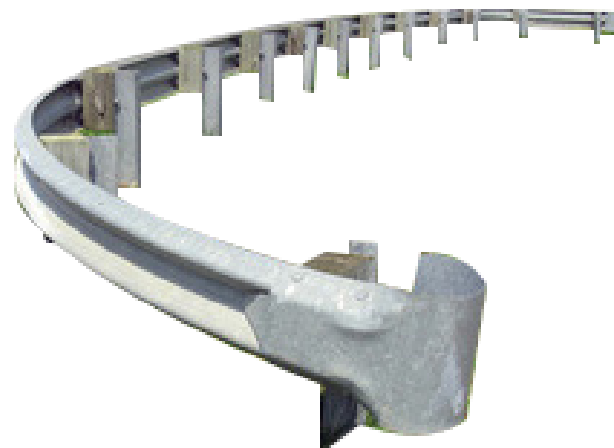
9' Post Price: \$67.50 Part #: S0006



CURVED W-BEAM PANEL

Price: \$142.50 Part #: S0007

Please specify Convex/Concave and Radius



STANDARD GUARDRAIL COMPONENTS

CURVED THRIE BEAM PANEL

Price: \$330.00 Part #: S0008



6" X 8" X 14" PLASTIC OFFSET BLOCK

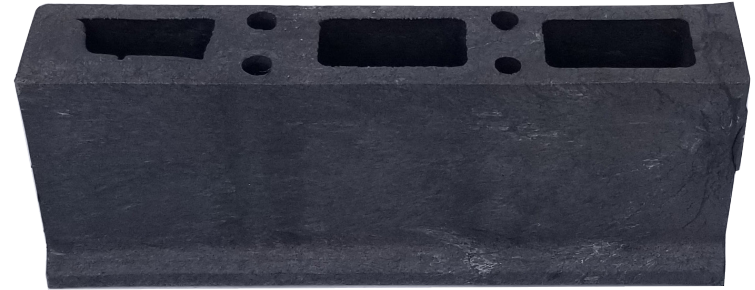
Price: \$5.00 Part #: S0009



STANDARD GUARDRAIL COMPONENTS

6" X 8" X 21.75" PLASTIC OFFSET BLOCK

Price: \$10 Part #: S00010



6" X 8" X 72" WOOD POST

Price: \$56.25 Part #: S0011

Please specify hole configuration



STANDARD GUARDRAIL COMPONENTS

6" X 8" X 96" WOOD POST

Price: \$68.75 Part #: S00012

Please specify hole configuration



6" X 8" X 14" WOOD OFFSET BLOCK

Price: \$10.00 Part #: S0013



STANDARD GUARDRAIL COMPONENTS

6" X 8" X 21.75" WOOD OFFSET BLOCK

Price: \$15.00 Part #: S00014



BRIDGE ANCHOR PANEL

Price: \$262.50 Part #: S0015

They come in varying hole patterns, please specify

10 HOLE PANEL



5 HOLE PANEL



STANDARD GUARDRAIL COMPONENTS

TRANSITION

Price: \$119.00 Part #: S00016



W BEAM BRIDGE SHOE

Price: \$70.00 Part #: S0017



STANDARD GUARDRAIL COMPONENTS

THRIE BEAM BRIDGE SHOE

Price: \$70.00 Part #: S00018



W-BEAM BUFFER

Price: \$46.25 Part #: S0019



STANDARD GUARDRAIL COMPONENTS

THRIE-BEAM BUFFER

Price: \$84.00 Part #: S00020



5/8" GUARDRAIL NUT

Price: \$0.42 Part #: S0021



STANDARD GUARDRAIL COMPONENTS

1 1/4" X 5/8" GUARDRAIL SPLICE BOLT

Price: \$0.42 Part #: S00022



5/8" GUARDRAIL WASHER

Price: \$0.21 Part #: S0023



STANDARD GUARDRAIL COMPONENTS

10" GUARDRAIL POST BOLT

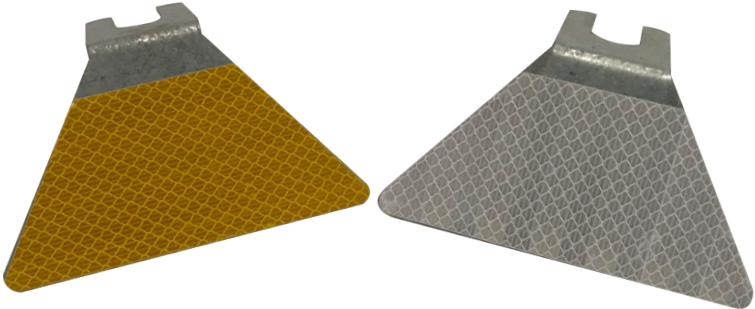
Price: \$1.43 Part #: S00024



GUARDRAIL REFLECTOR

Price: \$5.25 Part #: S0025

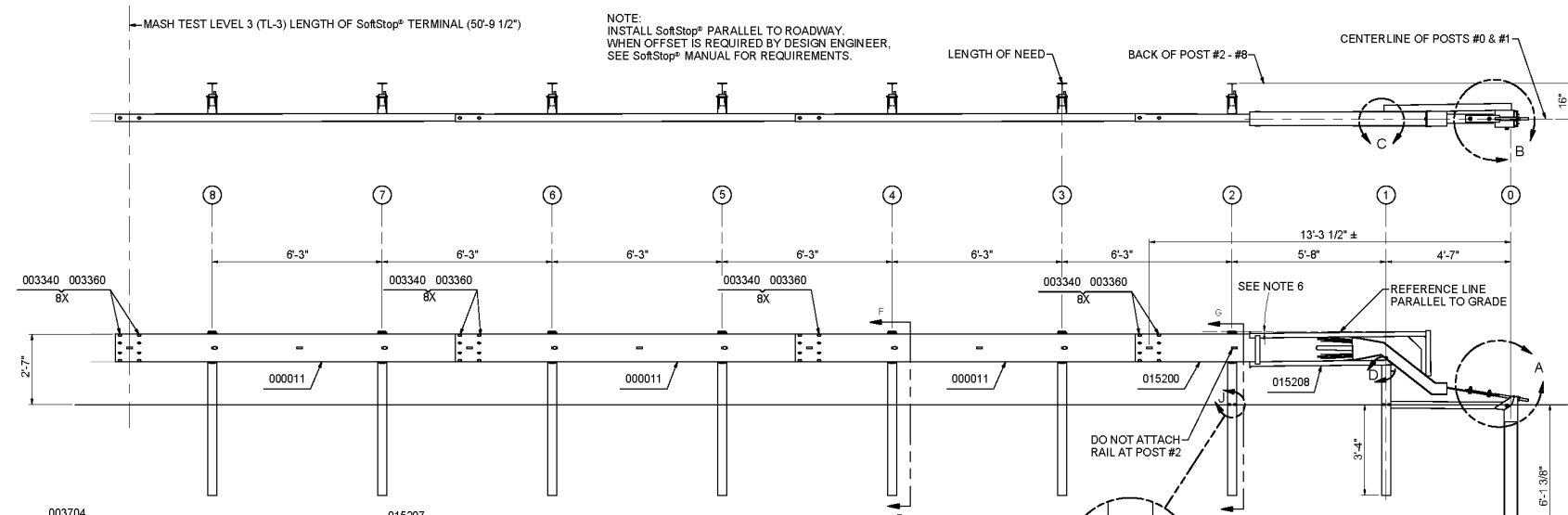
Please Specify Color



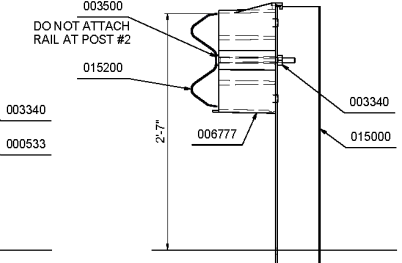
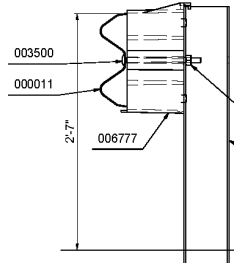
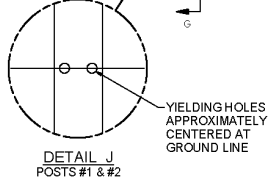
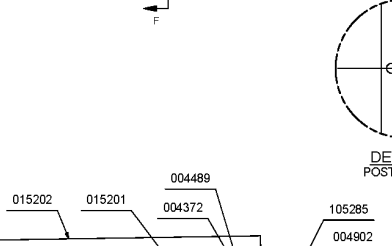
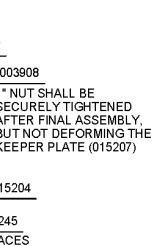
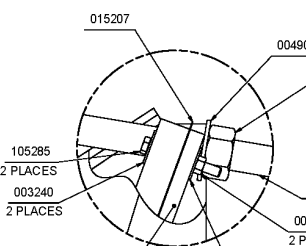
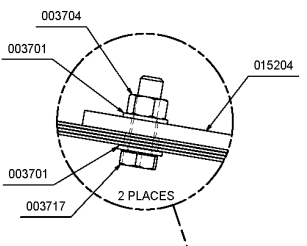
SOFTSTOP APPROACH SYSTEM—MASH COMPLIANT



PARTS LIST		
PART NO.	QTY.	DESCRIPTION
000011	3	12/12/6/3 1.5/S
000533	6	6"O POST - W6 x 8.5
006777	7	KING BLOCK 4" X 7 1/2" X 1'-2"
015000	1	6"O SYT PST/8.5/31" GR HT
015200	1	SFST-ANCHOR G. RAIL 12'-6"
015201	2	SFST-ANCHOR ANGLE
015202	1	SFST-ANGLE STRUT
015203	1	SFST-POST#1 SYTP
015204	1	SFST-ANCHOR PADDLE
015205	1	SFST-POST#0
015206	1	SFST-PLATE WASHER
015207	1	SFST-KEEPER PLATE
015208	1	SFST-IMPACT HEAD
~ HARDWARE ~		
003240	6	5/16 ROUND WASHER WIDE
003245	3	5/16 HEX NUT
003340	41	5/8" GR HEX NUT
003360	32	5/8"x1.25" GR BOLT
003381	1	5/8"x1.75" HEX BOLT A325
003500	7	5/8"x10" GR BOLT A307
003701	4	3/4" ROUND WASHER F436
003704	2	3/4" HVY HEX NUT A563 DH
003712	2	3/4"x2.5" HEX BOLT A325
003908	1	1" HVY HEX NUT A563 DH
004372	4	5/8" WASHER F436
004489	1	5/8"x9" HEX BOLT A325
004902	1	1" ROUND WASHER F436
105285	2	5/16"x2.5" HEX BOLT GRD 5
105286	1	5/16"x1.5" HEX BOLT GRD 5



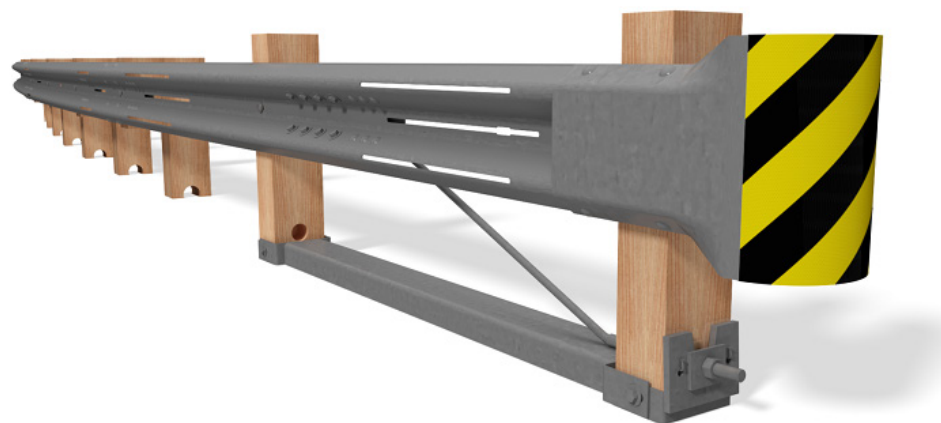
NOTE:
INSTALL SoftStop® PARALLEL TO ROADWAY.
WHEN OFFSET IS REQUIRED BY DESIGN ENGINEER,
SEE SoftStop® MANUAL FOR REQUIREMENTS.



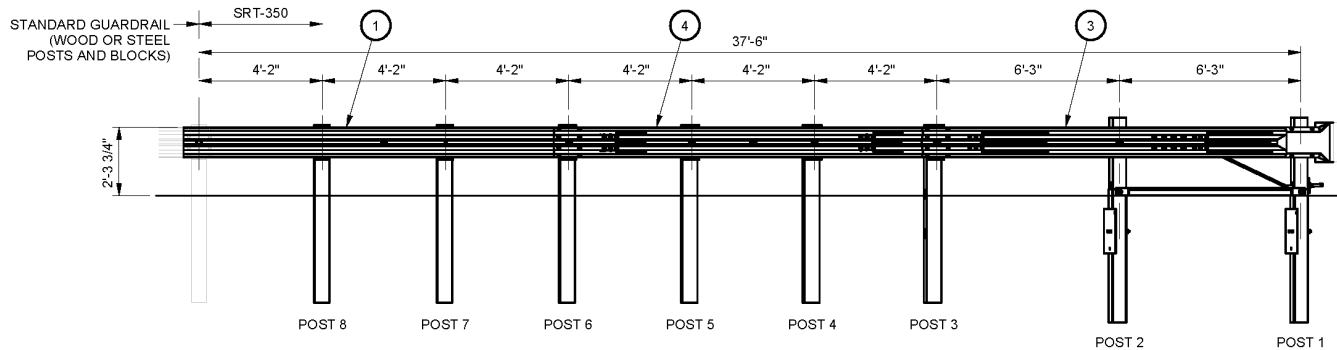
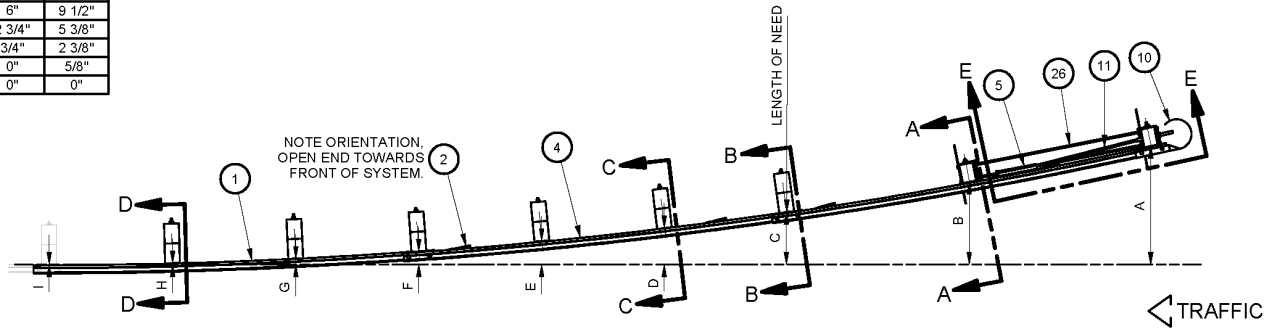
- NOTES:
- REFER TO SoftStop® ASSEMBLY MANUAL.
 - PROPER SITE GRADING SHOULD BE ACCOMPLISHED IN ACCORDANCE WITH LOCAL SPECIFYING AGENCY GUIDELINES AND THE AASHTO ROADSIDE DESIGN GUIDE.
 - DO NOT ATTACH THE SoftStop® DIRECTLY TO A RIGID BARRIER.
 - UNDER NO CIRCUMSTANCES SHALL THE GUARDRAIL WITHIN THE SoftStop® BE CURVED.
 - MANUFACTURER SUGGESTS CUSTOMER TO PROVIDE REFLECTORIZATION OF THE TERMINAL.
 - IT IS ACCEPTABLE TO INSTALL THE SoftStop® IMPACT HEAD PARALLEL TO THE GRADE LINE OR WITH AN UPWARD TILT. SEE SoftStop® ASSEMBLY MANUAL FOR SPECIFIC DETAILS.

REVISION	DATE	BY	CHKD	DESCRIPTION
EST	11/14/2012	BS		ESTIMATE
REV	11/14/2012	BS		REVISION
TOLERANCES PER CEMC-THP-SF-001, UNLESS OTHERWISE SPECIFIED				
DO NOT SCALE DRAWING				
ECO	DAB	REV	BY	CHK
4103	10/10/13	5	DDP	KWL
4844	8/21/17	7	DDP	KWL
UPDATED BY DIMENSION REPLACEMENT LENGTH OF RAIL CALL OUT MISSING FROM REV 7				
4889	7/27/17	H	DDP	KWL
EST UNFINISHED WT. 0.0 LB		P/N: 500646		
SS 646		1 of 1		

SRT APPROACH SYSTEM—NCHRP 350 COMPLIANT



POST OFFSET			
DIM	3'-0"	3'-6"	4'-0"
A	36"	42"	48"
B	22 1/4"	27 3/4"	33 1/2"
C	11 3/4"	16 1/2"	21 1/4"
D	6 3/4"	10 5/8"	14 3/4"
E	3"	6"	9 1/2"
F	3/4"	2 3/4"	5 3/8"
G	0"	3/4"	2 3/8"
H	0"	0"	5/8"
I	0"	0"	0"



PARTS LIST			
ITEM	STOCK NO.	DESCRIPTION	QTY.
1	000009	12/12/6/3 /S	1
2	009960	SRT SLOT GUARD BRKT.W/ DECAL	4
3	000030	12/12/6/S SRT-1 W/ DECAL	1
4	000039	12/12/6/S SRT-2 W/ DECALS	1
5	000700	CABLE ANCHOR BRACKET	1
6	000705	2" X 5 1/2" PIPE	1
7	000740	4/6 T.S.-CAT & ET	2
8	000766	.25"X 18"X 24"SOIL PL-3H	2
9	000775	PL 5/8 x 6 x 8	1
10	000907	SRT BUFFER	1
11	003000	CSL 3/4X6/6/DBL SWG/NOHWD	1
12	003300	WASHER,FLAT,5/8 X 1 3/4, G	20
13	003340	5/8 RECESSED HEX NUT	66
14	003360	5/8"X1.25" GR BOLT	44
15	003380	5/8"X1.5" HEX BOLT A307	8
16	003478	5/8" X7.5" HEX BOLT A307	4
17	003497	5/8"X9.5" HEX BOLT A307	2
18	003500	5/8"X10" GR BOLT A307	2
19	003580	5/8 POST BOLT	6
20	003900	1" ROUND WASHER F844	1
21	003910	1" HEX NUT A563	2
22	004063	WD 6'0 POST 6X8 CRT	6
23	004075	WD BLK 6X8X14	6
24	005968	NAIL 16d (3 1/2")	2
25	006058	POST_WD.BRKWY,7 1/2X5 1/2X3'-9.W/STRP	2
26	009852	STRUT & YOKE ASSY	1
27	009961	PL 3/8 x 3 x 4	1

OFFSET NOTE:
 THE POST OFFSET DIMENSIONS ARE GIVEN TO THE CENTER OF THE TRAFFIC FACE OF THE BLOCKOUTS, EXCEPT AT THE FIRST TWO POSTS WHERE THE DIMENSION IS TO THE CENTER OF THE TRAFFIC FACE OF THE POST. OFFSET POINTS ARE TO BE LOCATED BY CHORD MEASUREMENTS AT THE BACK OF THE RAIL EQUAL TO THE NOMINAL POST SPACINGS SHOWN. POSTS ARE TO BE SET APPROXIMATELY RADIAL TO THE RAILING AT EACH POST LOCATION.

* REFER TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, STANDARD DRAWINGS, AND/OR PROPOSAL DOCUMENTS FOR ALLOWABLE SYSTEM END OFFSET.

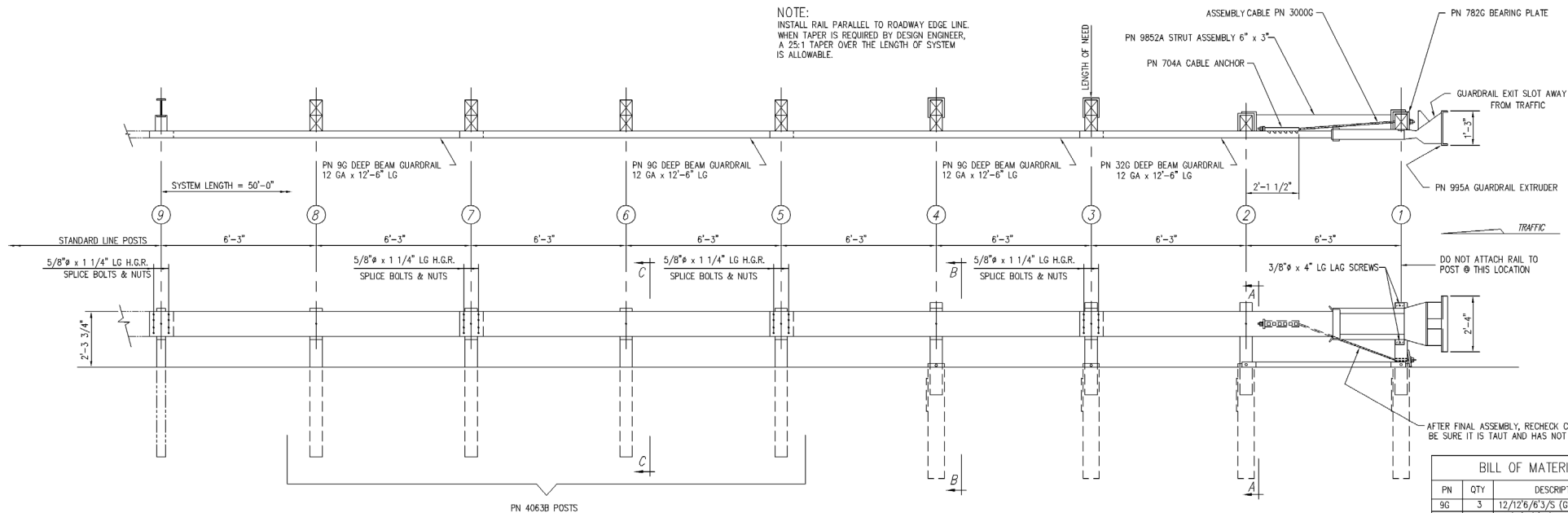
MATERIAL SEE PARTS LIST	DRAWN: D. Kohfeld	DATE: 11/29/2016	TOLERANCES PER CEMC-THP-SF-001, UNLESS OTHERWISE SPECIFIED.			SRT-350 SLOTTED RAIL TERMINAL POST LAYOUT & ERECTION DETAIL (12.5, 8 POSTS, SOIL PLATE) P/N 500694B				
	CHECKED: K Looney	DATE: 1/10/2017	DO NOT SCALE DRAWING							
	UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS ACCORDING TO ASME Y14.5M AND CEMC-THP-SE-003 UNLESS OTHERWISE SPECIFIED.			ECO	Date			Rev	By	Chk.
	Revision			4564	1/10/17			-	DK	/
INITIAL RELEASE										
EST UNFINISHED WT: 1006 lbs		DRAWING: SS 694		REV: -		SHEET: 1 of 2				

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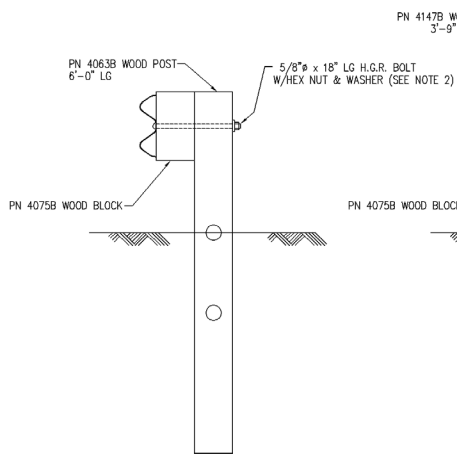
ET PLUS APPROACH SYSTEM—NCHRP 350 COMPLIANT



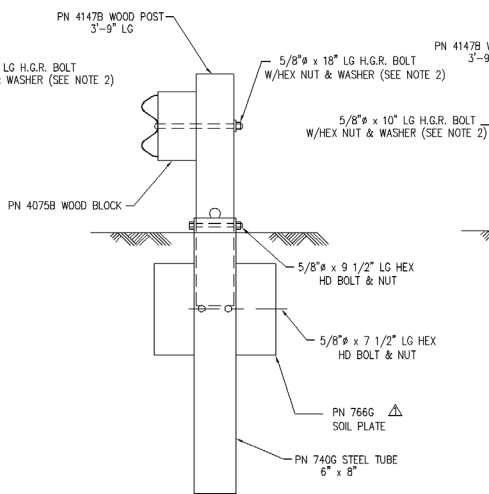
NOTE:
INSTALL RAIL PARALLEL TO ROADWAY EDGE LINE.
WHEN TAPER IS REQUIRED BY DESIGN ENGINEER,
A 25:1 TAPER OVER THE LENGTH OF SYSTEM
IS ALLOWABLE.



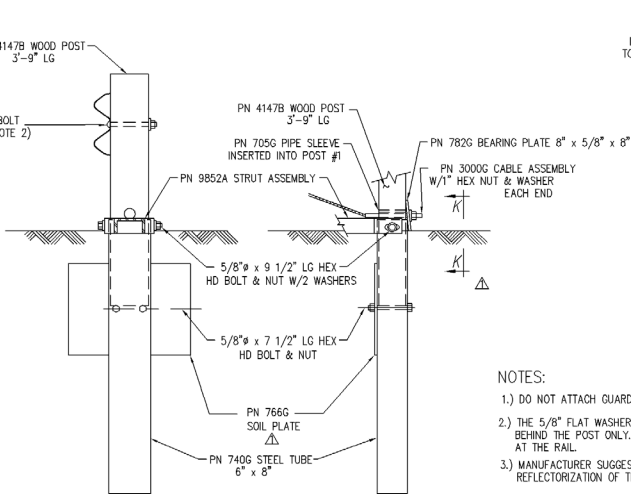
BILL OF MATERIAL		
PN	QTY	DESCRIPTION
9G	3	12/12/6/6/3/5 (GUARDRAIL)
32G	1	12/12/6/6/3/5 ANC (GUARDRAIL)
704A	1	CABLE ANCHOR BRACKET
705G	1	2" x 5 1/2" PIPE
740G	4	4" TUBE SLEEVE
766G	4	1/4" x 18" x 24" SOIL PLATE
782G	1	5/8" x 8" x 8" BEARING PLATE
995A	1	ET PLUS EXTRUDER
3000G	1	CABLE 3/4" x 6/6
3300G	11	5/8" WASHER
3340G	51	5/8" HEX NUT
3360G	32	5/8" x 1 1/4" SPLICE BOLT
3478S	8	5/8" x 7 1/2" HEX HD BOLT
3497S	4	5/8" x 9 1/2" HEX HD BOLT
3500G	1	5/8" x 10" POST BOLT
3580C	6	5/8" x 18" POST BOLT
3900C	2	1" WASHER
3910C	2	1" HEX NUT
4063B	4	WD 6" POST 6 x 8
4075B	6	WD BLOCK 1'2" 6" x 8" DR
4147B	4	WD 3'9" POST 5 1/2" x 7 1/2"
4228G	2	3/8" x 4" LAG SCREW
9852A	1	6'3" STRUT ASSEMBLY



SECTION "C-C"
(TYP @ POSTS # 5, 6, 7 & 8)



SECTION "B-B"
(TYP @ POSTS #3 & 4)

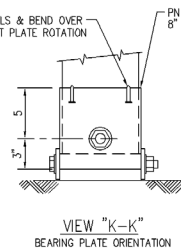


SECTION "A-A"
(@ POST #2)

PARTIAL VIEW @ POST #1

NOTES:

- DO NOT ATTACH GUARDRAIL TO POST # 1.
- THE 5/8" FLAT WASHER IS USED UNDER THE NUT, BEHIND THE POST ONLY. NO WASHER IS USED AT THE RAIL.
- MANUFACTURER SUGGESTS CUSTOMER TO PROVIDE REFLECTORIZATION OF TERMINAL.



2	B.T.	L.H.	9/02/07	REVISED TITLE BLOCK; CONNECTED RAILS @ POSTS 3,5,&7
1		L.H.	3/21/02	CHANGED SOIL PLT P.C.#; UPDATED VIEWS; ADDED VIEW K-K
REV.	CH'D	BY	DATE	REMARKS

ET-PLUS

ET-PLUS, 50'-0"
PLAN, ELEVATION & SECTION
12'-6" RAIL, SLEEVE W/PL POSTS 1-4

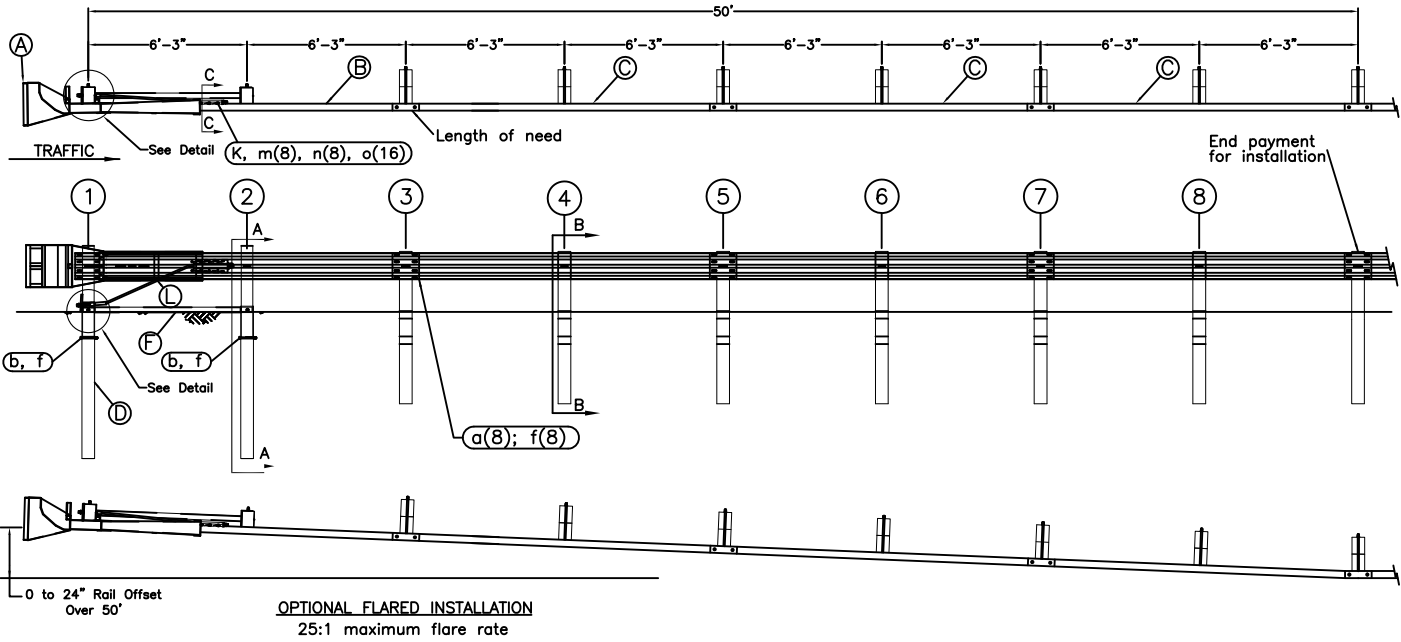
TRINITY HIGHWAY PRODUCTS, LLC.
2525 STEMMONS FREEWAY
DALLAS, TX 75207

DRAWN	BT
CHECKED	
APPROVED	
DATE	11/21/00
ENS. FILE #	SS327-01E
SHT. NO.	E1 OF 1
DRAWING NO.	SS-327
REV.	2

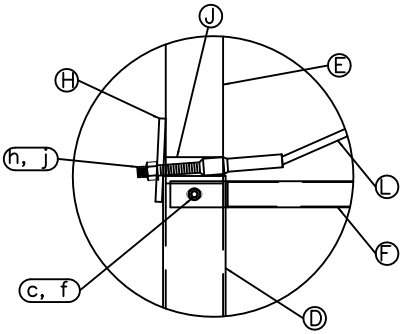
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SKT APPROACH SYSTEM—NCHRP 350 COMPLIANT

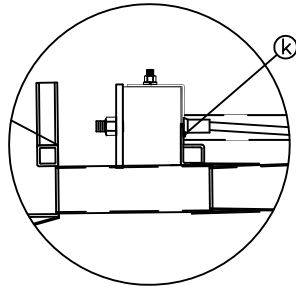




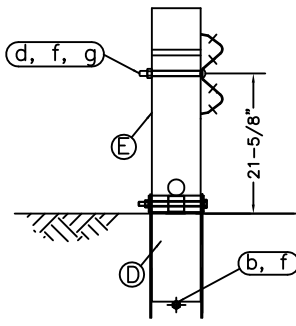
ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	S3000
B	1	W-BEAM END SECTION, 12'-6", 12 Ga.	S1303
C	3	W-BEAM, 12'-6", 12 Ga.	G1203
D	2	FOUNDATION TUBE	E731
E	2	BCT WOOD POST	UP650
F	1	GROUND STRUT	E780
G	6	CRT WOOD POST	UP671
H	1	BEARING PLATE	E750
J	1	PIPE SLEEVE	E740
K	1	CABLE ANCHOR BOX	S760
L	1	BCT CABLE ANCHOR ASSEMBLY	E770
M	6	TIMBER BLOCKOUT OR RECYC. EQUIV.	P675
HARDWARE (ALL DIMENSIONS IN INCHES)			
a	24	5/8 ϕ x 1 1/4 SPLICE BOLT	B580122
b	2	5/8 ϕ x 7 1/2 HEX BOLT	B580754
c	2	5/8 ϕ x 10 HEX BOLT	B581004
d	1	5/8 ϕ x 10 H.G.R. BOLT	B581002
e	6	5/8 ϕ x 18 H.G.R. BOLT	B581802
f	35	5/8 ϕ H.G.R. NUT	N050
g	7	5/8 ϕ WASHER	W050
h	2	1 ANCHOR CABLE HEX NUT	N100
j	2	1 ANCHOR CABLE WASHER	W100
k	2	3/8 x 3 LAG SCREW	E350
m	8	CABLE ANCHOR BOX SHOULDER BOLT	SB12A
n	8	1/2 A325 STRUCTURAL NUT	N012A
o	8	1/2 STRUCTURAL WASHER	W012A



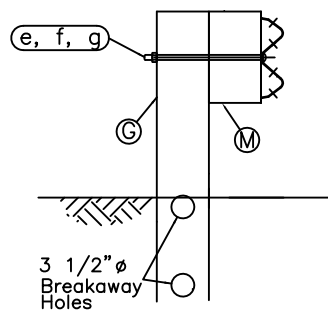
POST #1 CONNECTION DETAIL



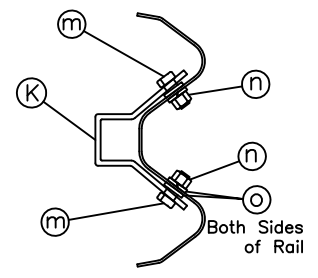
IMPACT HEAD CONNECTION DETAIL



SECTION A-A
Post #2



SECTION B-B
Posts 3 thru 8



SECTION C-C
Anchor Bracket

SKT WOOD POST

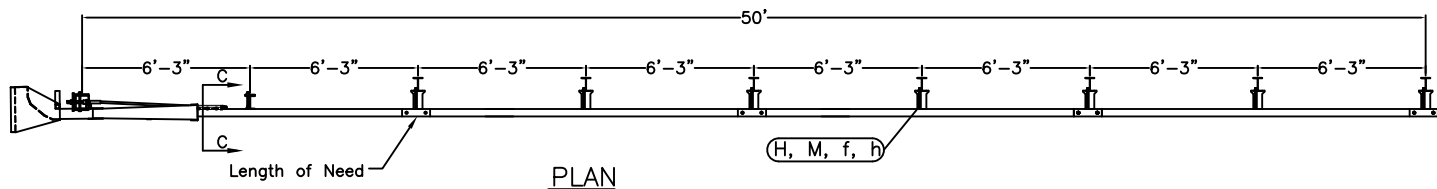
- GENERAL NOTES:
1. Breakaway posts are required with the SKT.
 2. All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
 3. The foundation tubes shall not protrude more than 4" above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
 4. When competent rock is encountered, a 12" ϕ post hole, 20" into the rock surface may be used if approved by the engineer for Posts 1&2. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first two posts can be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
 5. 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.
 6. A site evaluation should be considered if there is less than 25' between the outlet side of the terminal and any adjacent driving lane.
 7. The soil tubes may be driven with an approved driving head. They shall not be driven with the post in the tube.
 8. The wood blockouts should be "toe-nailed" to the rectangular wood posts to prevent them from turning when the wood shrinks.

RSI
Road Systems, Inc.
Big Spring, TX
Sales: 432-263-2435
Technical: 330-346-0721

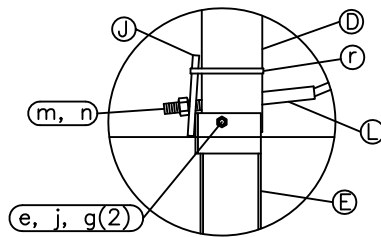
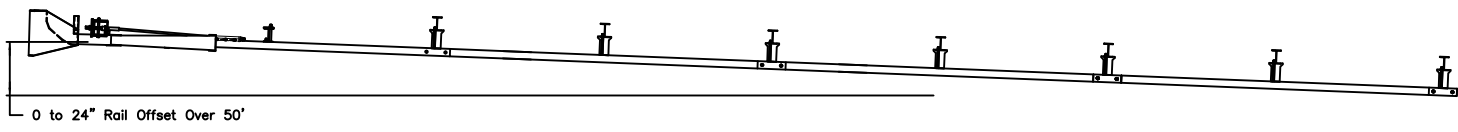
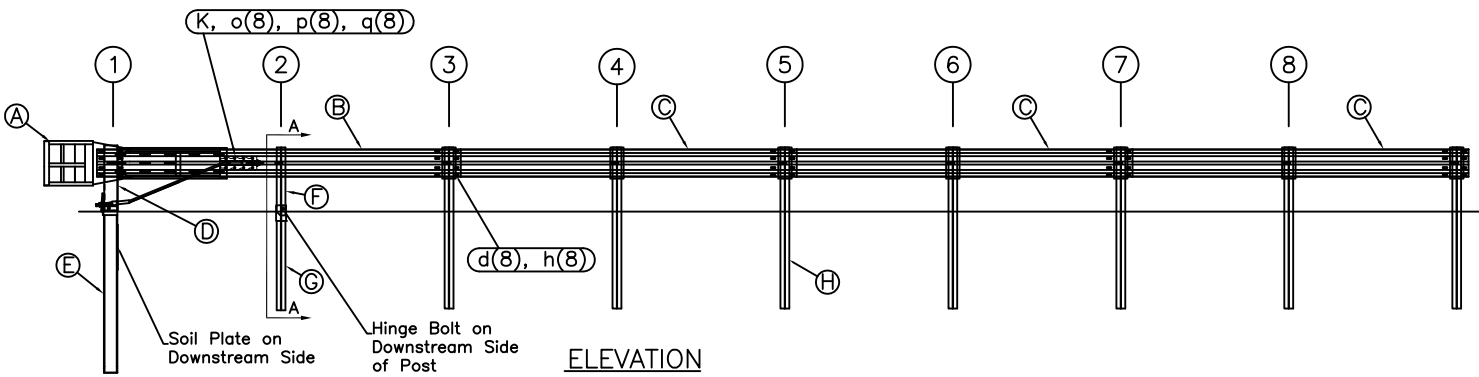
Sequential Kinking Terminal
SKT - Assembly
Wood Post System

Drawing Name: SKT-W-2US
Scale: NONE

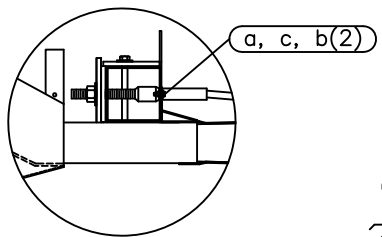
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Date: 10/06/12
By: JRR
Rev: 0



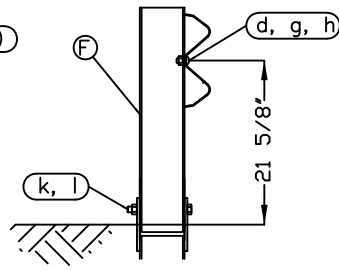
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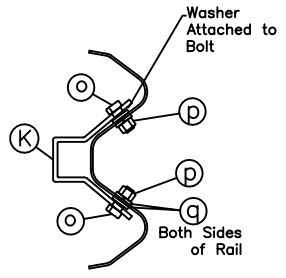
Post #1 Connection Detail



Impact Head Connection Detail



SECTION A-A
Post #2



SECTION C-C
Anchor Bracket

ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	SKT IMPACT HEAD	S3000
B	1	SKT ANCHOR RAIL 12'-6"	SF1303
C	3	W-BEAM GUARDRAIL 12'-6"	G1203
D	1	FIRST POST TOP (6X6X4" Tube)	TPHP1A
E	1	FIRST POST BOTTOM (6" W6X15)	TPHP1B
F	1	UNIVERSAL HINGE POST #2 UPPER	UHP2A
G	1	HINGED POST LOWER	HP-B
H	6	STEEL LINE POST (6" W6X9)	P621
J	1	BEARING PLATE	E750
K	1	CABLE ANCHOR BOX	S760
L	1	BCT CABLE ANCHOR ASSEMBLY	E770
M	6	RECYCLED PLASTIC BLOCK OR EQUIV.	CBSP-14

HARDWARE (ALL DIMENSIONS IN INCHES)			
a	2	5/16 x 1 HEX BOLT GRD 5	B5160104A
b	4	5/16 WASHER	W0516
c	2	5/16 HEX NUT	N0516
d	25	5/8 x 1 1/4 SPLICE BOLT	B580122
e	1	5/8 x 9 HEX BOLT GRD 5	B580904A
f	6	5/8 x 10 H.G.R. BOLT	B581002
g	3	5/8 WASHER	W050
h	31	5/8 H.G.R. NUT	N050
j	1	5/8 NUT	N055
k	1	3/4 x 8 1/2 HEX BOLT GRD A449	B340854A
l	1	3/4 HEX NUT	N030
m	2	1" ANCHOR CABLE HEX NUT	N100
n	2	1" ANCHOR CABLE WASHER	W100
o	8	1/2 RSI SHOULDER BOLT W/WASHER	SB12A
p	8	1/2 STRUCTURAL NUT	N012A
q	8	1/2 STRUCTURAL WASHER	W012A
r	1	BEARING PLATE RETAINER TIE	CT-100ST

- GENERAL NOTES:
- All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
 - The lower sections of the Posts 1&2 shall not protrude more than 4 in above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
 - The lower sections of the hinged posts should not be driven with the upper post attached. If the post is placed in a drilled hole, the backfill material must be satisfactorily compacted to prevent settlement.
 - When competent rock is encountered, a 12" Ø post hole, 20 in. deep cored into the rock surface may be used if approved by the engineer for post 1. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first post can be field cut to length, placed in the hole and backfilled with suitable backfill. The soil plate may be trimmed if required.
 - A site evaluation should be considered if there is less than 25' between the outlet side of the terminal and any adjacent driving lane.
 - 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.

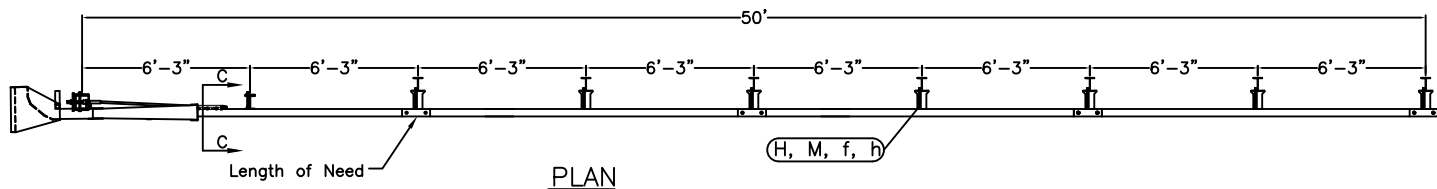
SKT STEELPOST



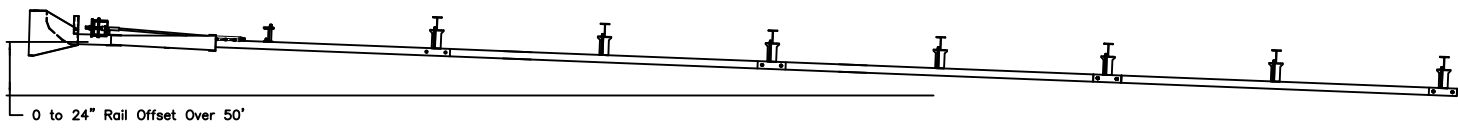
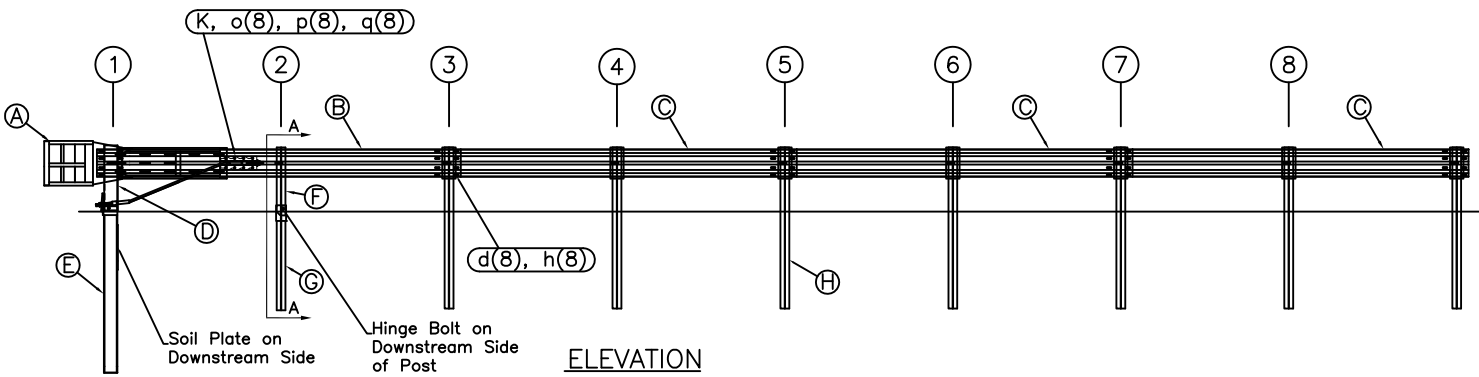
SKT-SP Terminal TL-3 Standard Post System		Sheet: 1
2 Post System		Date: 11/29/12
Drawing Name: SKT-SP-50		By: JRR
Scale: None		Rev: 0

FLEAT APPROACH SYSTEM—NCHRP 350 COMPLIANT

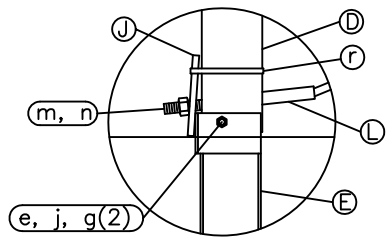




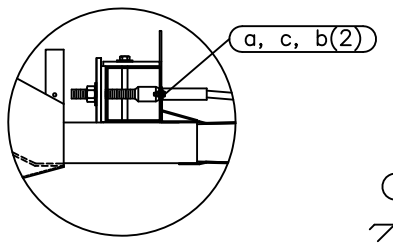
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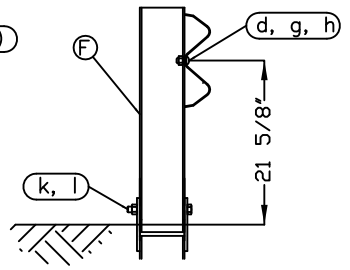
OPTIONAL FLARED INSTALLATION
25:1 maximum flare rate



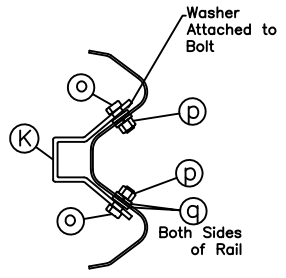
Post #1 Connection Detail



Impact Head Connection Detail



SECTION A-A
Post #2



SECTION C-C
Anchor Bracket

ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	SKT IMPACT HEAD	S3000
B	1	SKT ANCHOR RAIL 12'-6"	SF1303
C	3	W-BEAM GUARDRAIL 12'-6"	G1203
D	1	FIRST POST TOP (6X6X ¹ / ₂ Tube)	TPHP1A
E	1	FIRST POST BOTTOM (6' W6X15)	TPHP1B
F	1	UNIVERSAL HINGE POST #2 UPPER	UHP2A
G	1	HINGED POST LOWER	HP-B
H	6	STEEL LINE POST (6' W6X9)	P621
J	1	BEARING PLATE	E750
K	1	CABLE ANCHOR BOX	S760
L	1	BCT CABLE ANCHOR ASSEMBLY	E770
M	6	RECYCLED PLASTIC BLOCK OR EQUIV.	CBSP-14

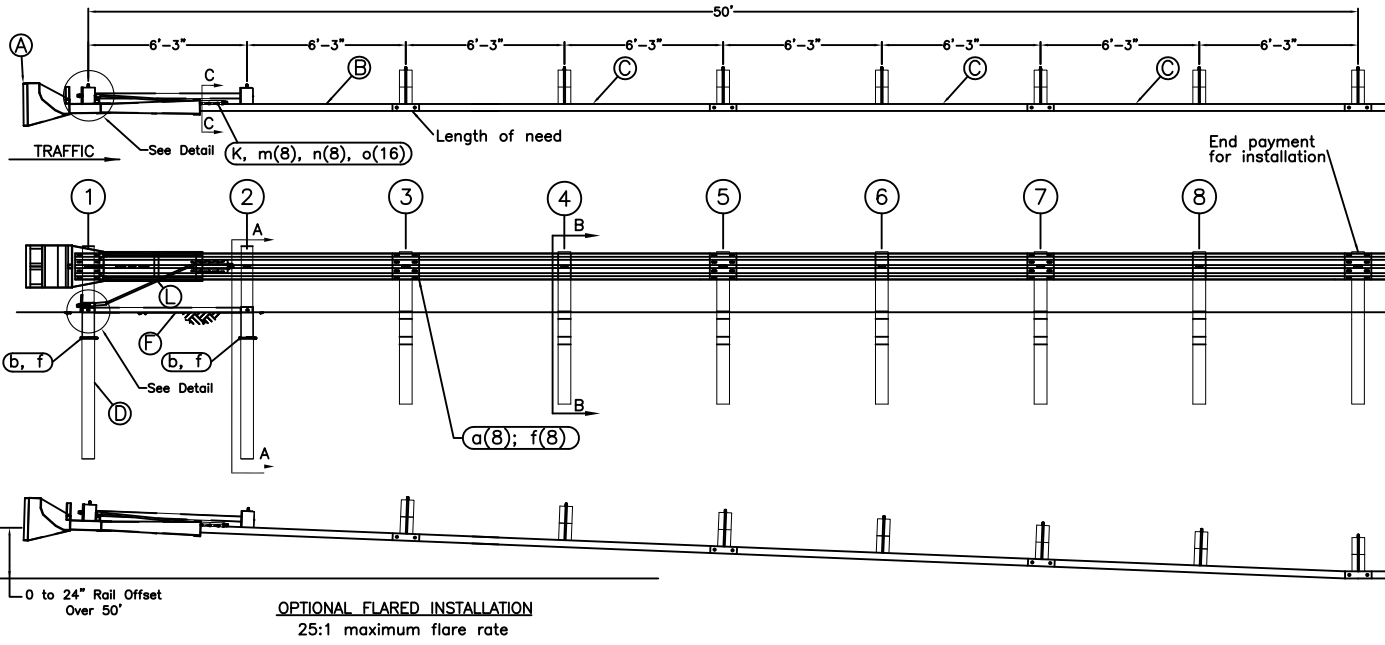
HARDWARE (ALL DIMENSIONS IN INCHES)			
a	2	5/16 x 1 HEX BOLT GRD 5	B5160104A
b	4	5/16 WASHER	W0516
c	2	5/16 HEX NUT	N0516
d	25	5/8 x 1 1/4 SPLICE BOLT	B580122
e	1	5/8 x 9 HEX BOLT GRD 5	B580904A
f	6	5/8 x 10 H.G.R. BOLT	B581002
g	3	5/8 WASHER	W050
h	31	5/8 H.G.R. NUT	N050
j	1	5/8 NUT	N055
k	1	3/4 x 8 1/2 HEX BOLT GRD A449	B340854A
l	1	3/4 HEX NUT	N030
m	2	1" ANCHOR CABLE HEX NUT	N100
n	2	1" ANCHOR CABLE WASHER	W100
o	8	1/2 RSI SHOULDER BOLT W/WASHER	SB12A
p	8	1/2 STRUCTURAL NUT	N012A
q	8	1/2 STRUCTURAL WASHER	W012A
r	1	BEARING PLATE RETAINER TIE	CT-100ST

- GENERAL NOTES:**
- All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
 - The lower sections of the Posts 1&2 shall not protrude more than 4 in above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
 - The lower sections of the hinged posts should not be driven with the upper post attached. If the post is placed in a drilled hole, the backfill material must be satisfactorily compacted to prevent settlement.
 - When competent rock is encountered, a 12" Ø post hole, 20 in. deep cored into the rock surface may be used if approved by the engineer for post 1. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first post can be field cut to length, placed in the hole and backfilled with suitable backfill. The soil plate may be trimmed if required.
 - A site evaluation should be considered if there is less than 25' between the outlet side of the terminal and any adjacent driving lane.
 - 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.

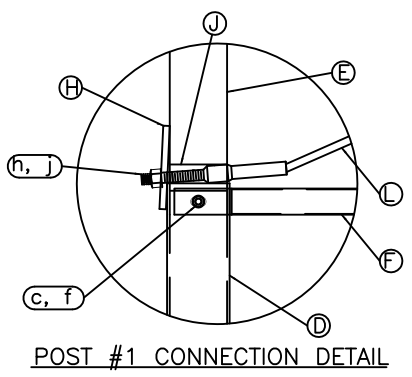
FLEAT STEEL POST



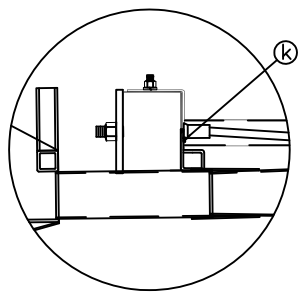
SKT-SP Terminal TL-3 Standard Post System		Sheet: 1
2 Post System		Date: 11/29/12
Drawing Name: SKT-SP-50		By: JRR
Scale: None		Rev: 0



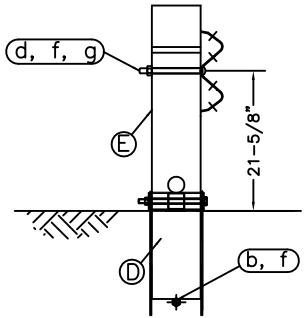
ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	S3000
B	1	W-BEAM END SECTION, 12'-6", 12 Ga.	S1303
C	3	W-BEAM, 12'-6", 12 Ga.	G1203
D	2	FOUNDATION TUBE	E731
E	2	BCT WOOD POST	UP650
F	1	GROUND STRUT	E780
G	6	CRT WOOD POST	UP671
H	1	BEARING PLATE	E750
J	1	PIPE SLEEVE	E740
K	1	CABLE ANCHOR BOX	S760
L	1	BCT CABLE ANCHOR ASSEMBLY	E770
M	6	TIMBER BLOCKOUT OR RECYC. EQUIV.	P675
HARDWARE (ALL DIMENSIONS IN INCHES)			
a	24	5/8 ϕ x 1 1/4 SPLICE BOLT	B580122
b	2	5/8 ϕ x 7 1/2 HEX BOLT	B580754
c	2	5/8 ϕ x 10 HEX BOLT	B581004
d	1	5/8 ϕ x 10 H.G.R. BOLT	B581002
e	6	5/8 ϕ x 18 H.G.R. BOLT	B581802
f	35	5/8 ϕ H.G.R. NUT	N050
g	7	5/8 ϕ WASHER	W050
h	2	1 ANCHOR CABLE HEX NUT	N100
j	2	1 ANCHOR CABLE WASHER	W100
k	2	3/8 x 3 LAG SCREW	E350
m	8	CABLE ANCHOR BOX SHOULDER BOLT	SB12A
n	8	1/2 A325 STRUCTURAL NUT	N012A
o	8	1/2 STRUCTURAL WASHER	W012A



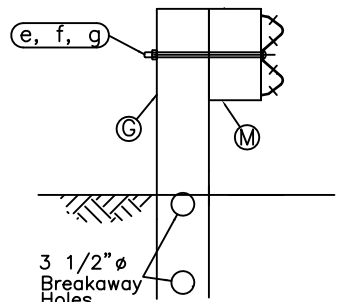
POST #1 CONNECTION DETAIL



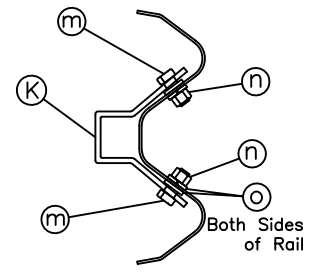
IMPACT HEAD CONNECTION DETAIL



SECTION A-A
Post #2



SECTION B-B
Posts 3 thru 8



SECTION C-C
Anchor Bracket

FLEAT WOOD POST

- GENERAL NOTES:**
- Breakaway posts are required with the SKT.
 - All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
 - The foundation tubes shall not protrude more than 4" above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
 - When competent rock is encountered, a 12" ϕ post hole, 20" into the rock surface may be used if approved by the engineer for Posts 1&2. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first two posts can be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
 - 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.
 - A site evaluation should be considered if there is less than 25' between the outlet side of the terminal and any adjacent driving lane.
 - The soil tubes may be driven with an approved driving head. They shall not be driven with the post in the tube.
 - The wood blockouts should be "toe-nailed" to the rectangular wood posts to prevent them from turning when the wood shrinks.

RSI
Road Systems, Inc.
Big Spring, TX
Sales: 432-263-2435
Technical: 330-346-0721

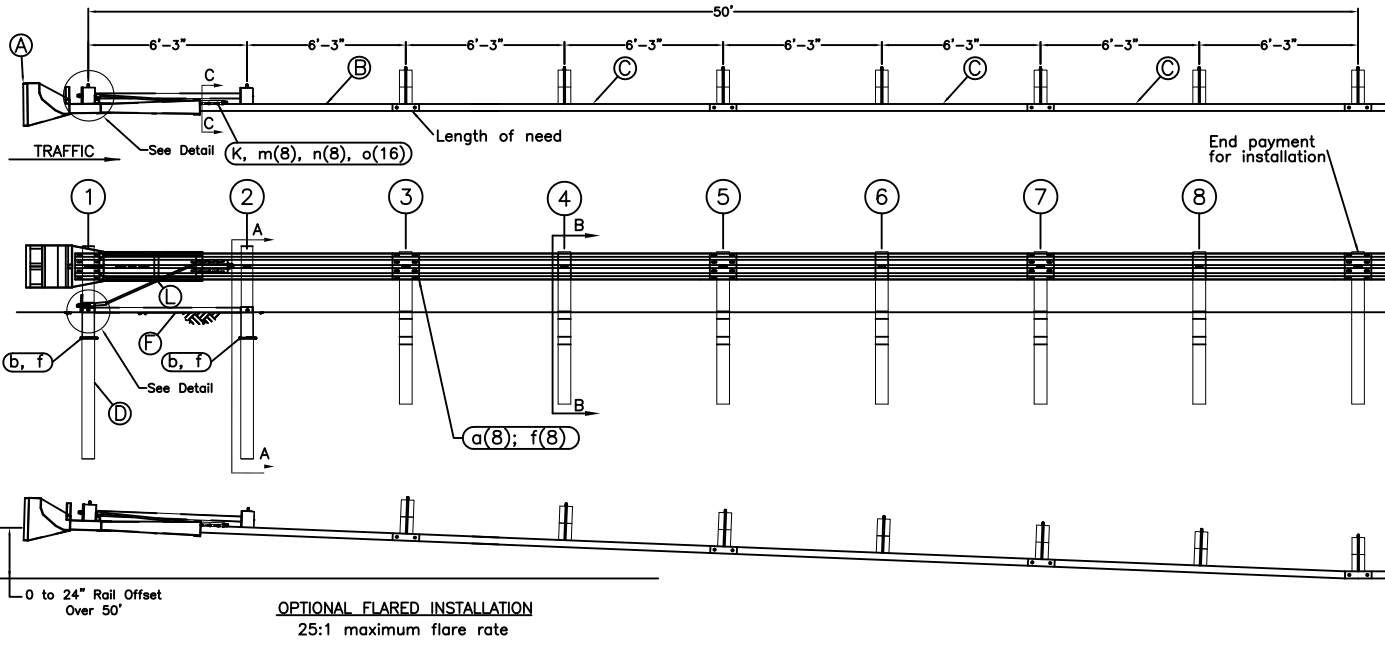
**Sequential Kinking Terminal
SKT - Assembly
Wood Post System**

Drawing Name: SKT-W-2US Scale: NONE

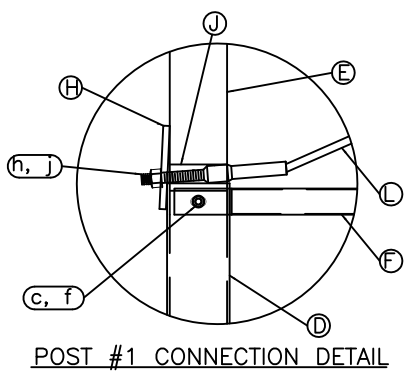
Sheet: 1
Date: 10/06/12
By: JRR
Rev: 0

FLEAT MT APPROACH SYSTEM—NCHRP 350 COMPLIANT

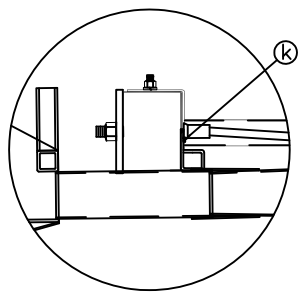




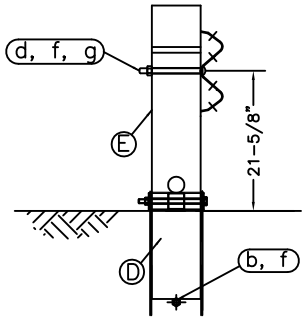
ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	S3000
B	1	W-BEAM END SECTION, 12'-6", 12 Ga.	S1303
C	3	W-BEAM, 12'-6", 12 Ga.	G1203
D	2	FOUNDATION TUBE	E731
E	2	BCT WOOD POST	UP650
F	1	GROUND STRUT	E780
G	6	CRT WOOD POST	UP671
H	1	BEARING PLATE	E750
J	1	PIPE SLEEVE	E740
K	1	CABLE ANCHOR BOX	S760
L	1	BCT CABLE ANCHOR ASSEMBLY	E770
M	6	TIMBER BLOCKOUT OR RECYC. EQUIV.	P675
HARDWARE (ALL DIMENSIONS IN INCHES)			
a	24	5/8 ϕ x 1 1/4 SPLICE BOLT	B580122
b	2	5/8 ϕ x 7 1/2 HEX BOLT	B580754
c	2	5/8 ϕ x 10 HEX BOLT	B581004
d	1	5/8 ϕ x 10 H.G.R. BOLT	B581002
e	6	5/8 ϕ x 18 H.G.R. BOLT	B581802
f	35	5/8 ϕ H.G.R. NUT	N050
g	7	5/8 ϕ WASHER	W050
h	2	1 ANCHOR CABLE HEX NUT	N100
j	2	1 ANCHOR CABLE WASHER	W100
k	2	3/8 x 3 LAG SCREW	E350
m	8	CABLE ANCHOR BOX SHOULDER BOLT	SB12A
n	8	1/2 A325 STRUCTURAL NUT	N012A
o	8	1/2 STRUCTURAL WASHER	W012A



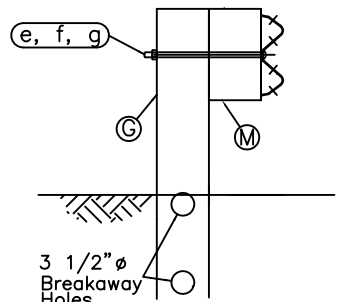
POST #1 CONNECTION DETAIL



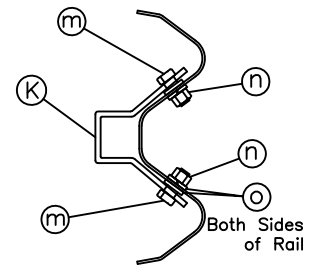
IMPACT HEAD CONNECTION DETAIL



SECTION A-A
Post #2



SECTION B-B
Posts 3 thru 8



SECTION C-C
Anchor Bracket

FLEAT MT

- GENERAL NOTES:
1. Breakaway posts are required with the SKT.
 2. All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
 3. The foundation tubes shall not protrude more than 4" above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
 4. When competent rock is encountered, a 12" ϕ post hole, 20" into the rock surface may be used if approved by the engineer for Posts 1&2. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first two posts can be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
 5. 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.
 6. A site evaluation should be considered if there is less than 25' between the outlet side of the terminal and any adjacent driving lane.
 7. The soil tubes may be driven with an approved driving head. They shall not be driven with the post in the tube.
 8. The wood blockouts should be "toe-nailed" to the rectangular wood posts to prevent them from turning when the wood shrinks.

RSI
Road Systems, Inc.
Big Spring, TX
Sales: 432-263-2435
Technical: 330-346-0721

Sequential Kinking Terminal
SKT - Assembly
Wood Post System

Drawing Name: SKT-W-2US
Scale: NONE

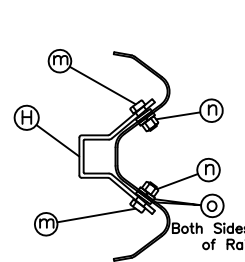
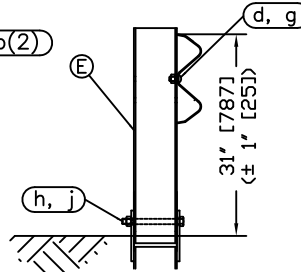
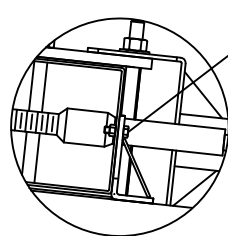
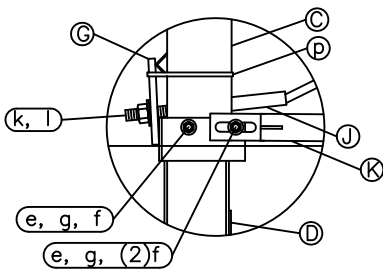
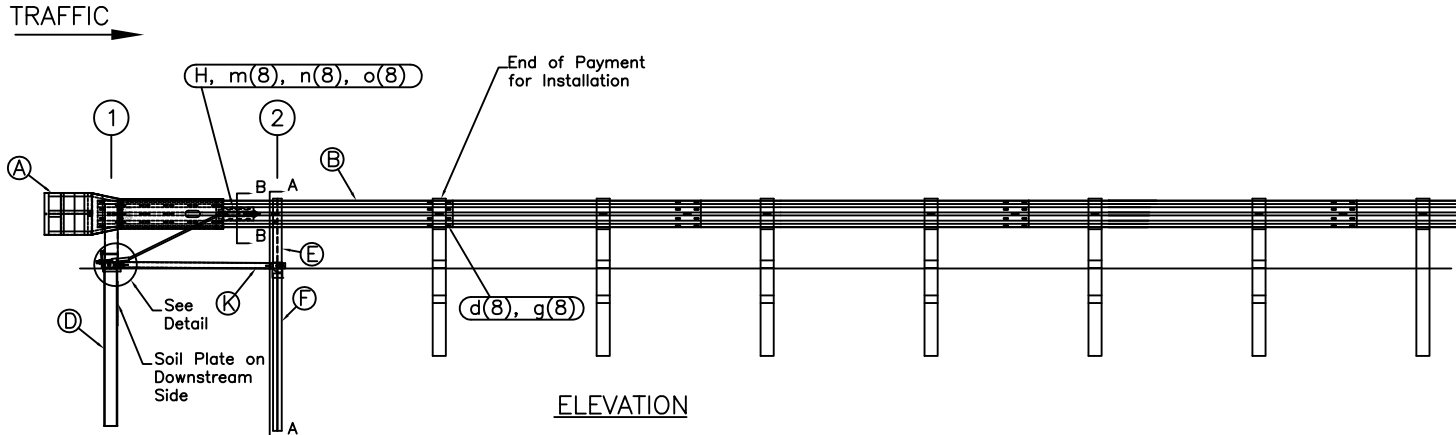
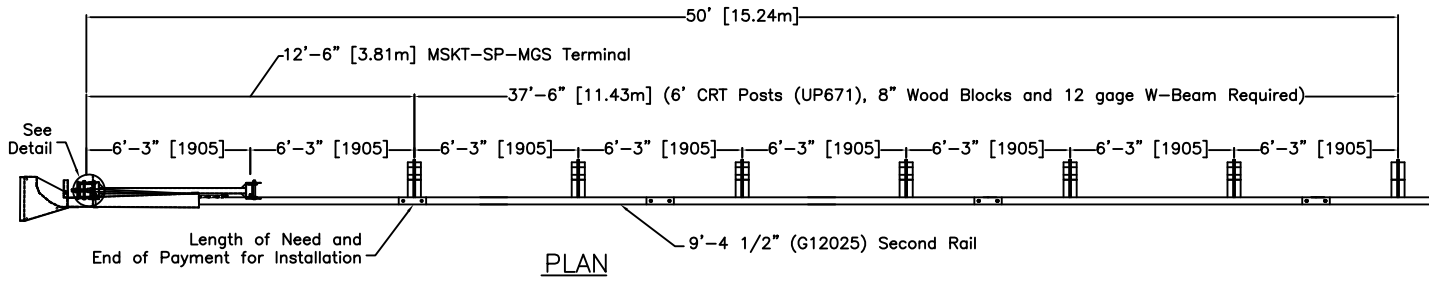
Sheet: 1
Date: 10/06/12
By: JRR
Rev: 0

MSKT APPROACH SYSTEM—MASH COMPLIANT

TWO OPTIONS AVAILABLE: WOOD AND STEEL



MKST WOOD POST



ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	MS3000
B	1	W-BEAM GUARDRAIL END SECTION, 12 Ga.	SF1303
C	1	FIRST POST TOP (6X6X1/4" Tube)	MTPHP1A
D	1	FIRST POST BOTTOM (6' W6X15)	MTPHP1B
E	1	SECOND POST ASSEMBLY TOP	UHP2A
F	1	SECOND POST ASSEMBLY BOTTOM	HP2B
G	1	BEARING PLATE	E750
H	1	CABLE ANCHOR BOX	S760
J	1	BCT CABLE ANCHOR ASSEMBLY	E770
K	1	STRUT	MS785
HARDWARE (ALL DIMENSIONS IN INCHES)			
o	2	5/16 x 1 HEX BOLT GRD 5	B5160104A
b	4	5/16 WASHER	W0516
c	2	5/16 HEX NUT	N0516
d	9	5/8 Dia. x 1 1/4 SPLICE BOLT (POST #2)	B580122
e	2	5/8 Dia. x 9 HEX BOLT GRD 5	B580904A
f	3	5/8 WASHER	W050
g	11	5/8 Dia. H.G.R NUT	N050
h	1	3/4 Dia. x 8 1/2 HEX BOLT GRD A449	B340854A
j	1	3/4 Dia. HEX NUT	N030
k	2	1 ANCHOR CABLE HEX NUT	N100
l	2	1 ANCHOR CABLE WASHER	W100
m	8	1/2 RSI SHOULDER BOLT W/WASHER	SB12A
n	8	1/2 STRUCTURAL NUT	N012A
o	8	1/2 STRUCTURAL WASHER	W012A
p	1	BEARING PLATE RETAINER TIE	CT-100ST

GENERAL NOTES:

- All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
- The lower sections of the Posts 1&2 shall not protrude more than 4 in [100] above the ground (measured along a 5' [1.5m] cord). Site grading may be necessary to meet this requirement.
- The lower section of the hinged post should not be driven with the upper post attached. If the post is placed in a drilled hole, the backfill material must be satisfactorily compacted to prevent settlement.
- When competent rock is encountered, a 12" [300] Ø post hole, 20 in. [500] deep cored into the rock surface may be used if approved by the engineer for Posts 1 and/or 2. Granular material will be placed in the bottom of the hole, approximately 2.5" [60] deep to provide drainage. The first and/or second post can be field cut to length, placed in the hole and backfilled with suitable backfill. The soil plate may be trimmed if required.
- 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.



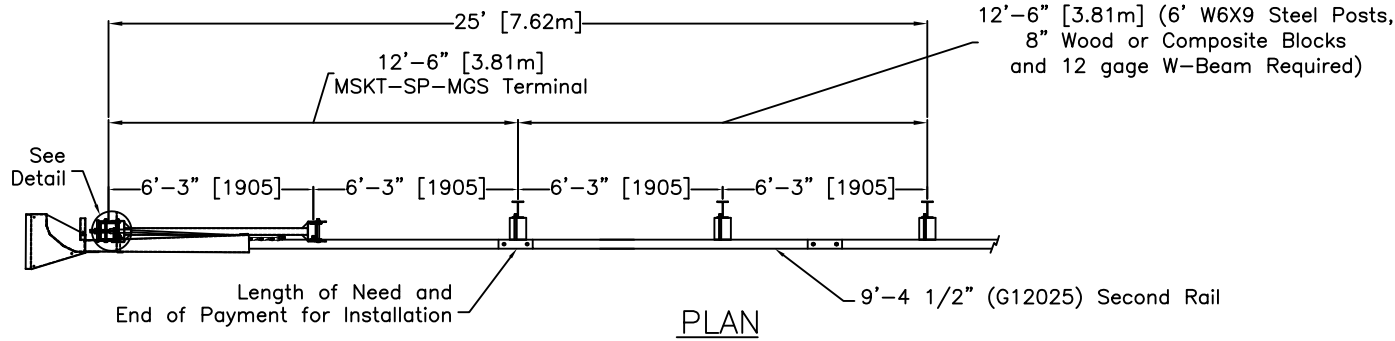
MSKT-MGS-W
Terminal
Test Level 3

Drawing Name: MSKT-MGS-W

Scale: None

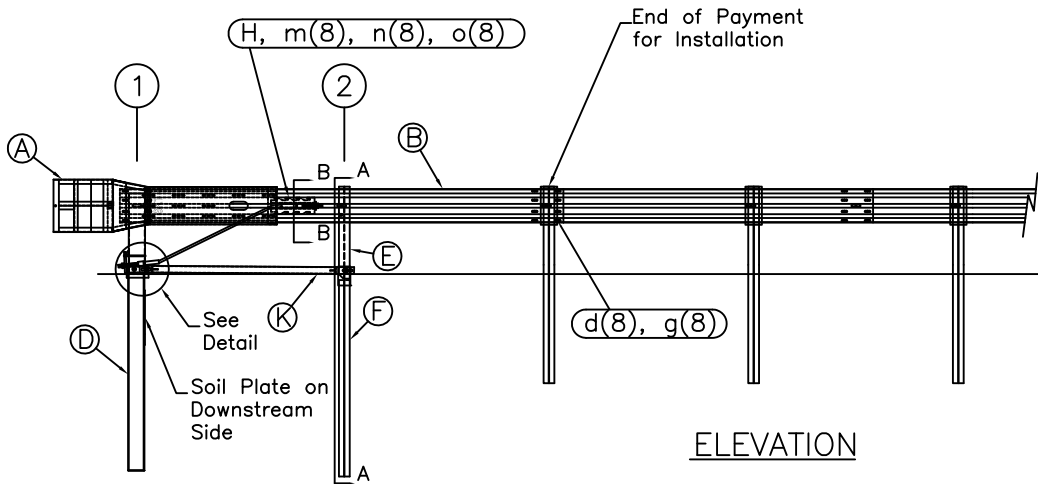
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By: JRR
Rev: 0

MKST STEEL POST

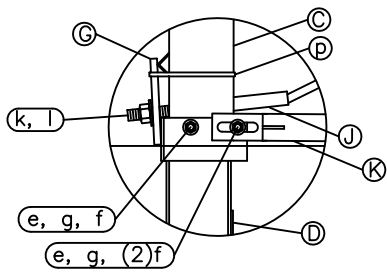


PLAN

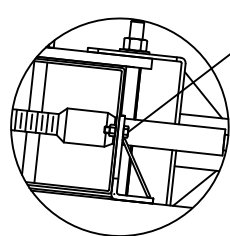
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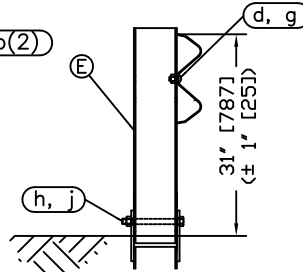
ELEVATION



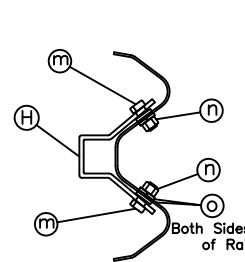
Post #1 Connection Detail



Impact Head Connection Detail



SECTION A-A
Post #2



SECTION B-B
Anchor Bracket

ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	MS3000
B	1	W-BEAM GUARDRAIL END SECTION, 12 Ga.	SF1303
C	1	FIRST POST TOP (6X6X $\frac{1}{4}$ " Tube)	MTPHP1A
D	1	FIRST POST BOTTOM (6' W6X15)	MTPHP1B
E	1	SECOND POST ASSEMBLY TOP	UHP2A
F	1	SECOND POST ASSEMBLY BOTTOM	HP2B
G	1	BEARING PLATE	E750
H	1	CABLE ANCHOR BOX	S760
J	1	BCT CABLE ANCHOR ASSEMBLY	E770
K	1	STRUT	MS785
HARDWARE (ALL DIMENSIONS IN INCHES)			
o	2	5/16 x 1 HEX BOLT GRD 5	B5160104A
b	4	5/16 WASHER	W0516
c	2	5/16 HEX NUT	N0516
d	9	5/8 Dia. x 1 1/4 SPLICE BOLT (POST #2)	B580122
e	2	5/8 Dia. x 9 HEX BOLT GRD 5	B580904A
f	3	5/8 WASHER	W050
g	11	5/8 Dia. H.G.R. NUT	N050
h	1	3/4 Dia. x 8 1/2 HEX BOLT GRD A449	B340854A
j	1	3/4 Dia. HEX NUT	N030
k	2	1 ANCHOR CABLE HEX NUT	N100
l	2	1 ANCHOR CABLE WASHER	W100
m	8	1/2 RSI SHOULDER BOLT W/WASHER	SB12A
n	8	1/2 STRUCTURAL NUT	N012A
o	8	1/2 STRUCTURAL WASHER	W012A
p	1	BEARING PLATE RETAINER TIE	CT-100ST

GENERAL NOTES:

- All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
- The lower sections of the Posts 1&2 shall not protrude more than 4 in [100] above the ground (measured along a 5' [1.5m] cord). Site grading may be necessary to meet this requirement.
- The lower section of the hinged post should not be driven with the upper post attached. If the post is placed in a drilled hole, the backfill material must be satisfactorily compacted to prevent settlement.
- When competent rock is encountered, a 12" [300] Ø post hole, 20 in. [500] deep cored into the rock surface may be used if approved by the engineer for Posts 1 and/or 2. Granular material will be placed in the bottom of the hole, approximately 2.5" [60] deep to provide drainage. The first and/or second post can be field cut to length, placed in the hole and backfilled with suitable backfill. The soil plate may be trimmed if required.
- 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.



**MSKT-SP-MGS
Terminal
Test Level 2**

Drawing Name: MSKT-SP-MGS-TL2

Scale: None

Sheet: 1
Date: 07/30/16
By: JRR
Rev: 0

2020 ORDER FORM



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