

INFORMATION HANDOUT

For Contract No. 10-0W5604
At 10-SJ-12-5.0/11.0

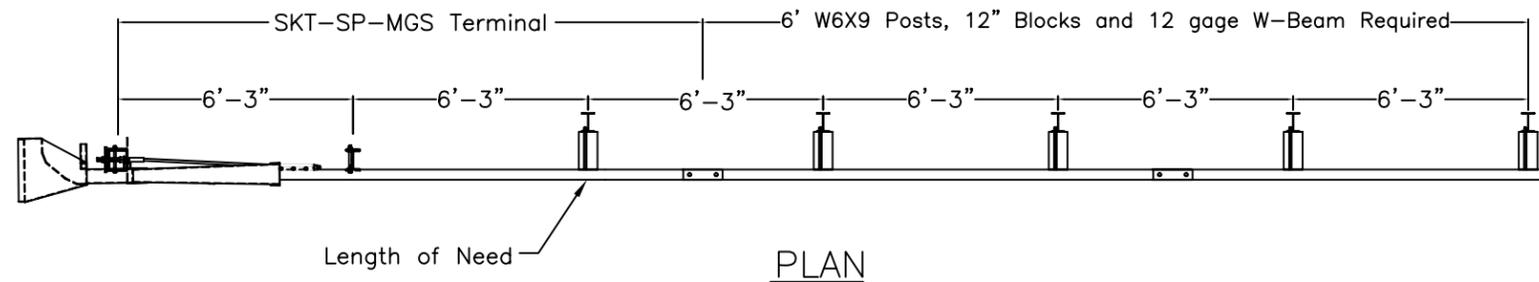
Identified by
Project ID 1012000010

MATERIALS INFORMATION

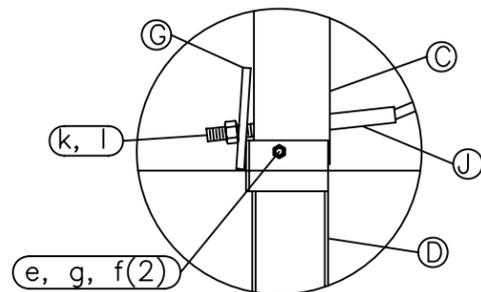
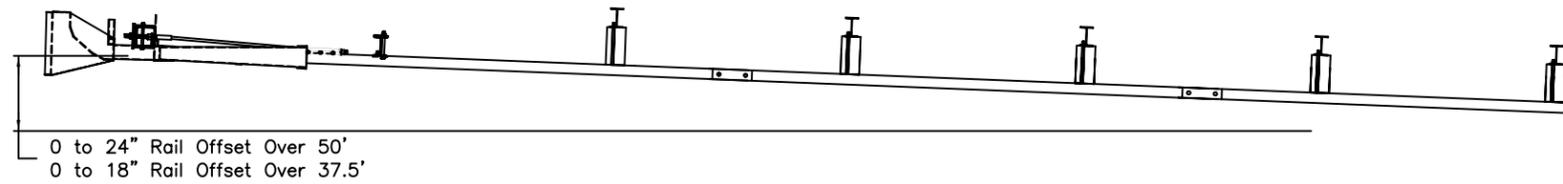
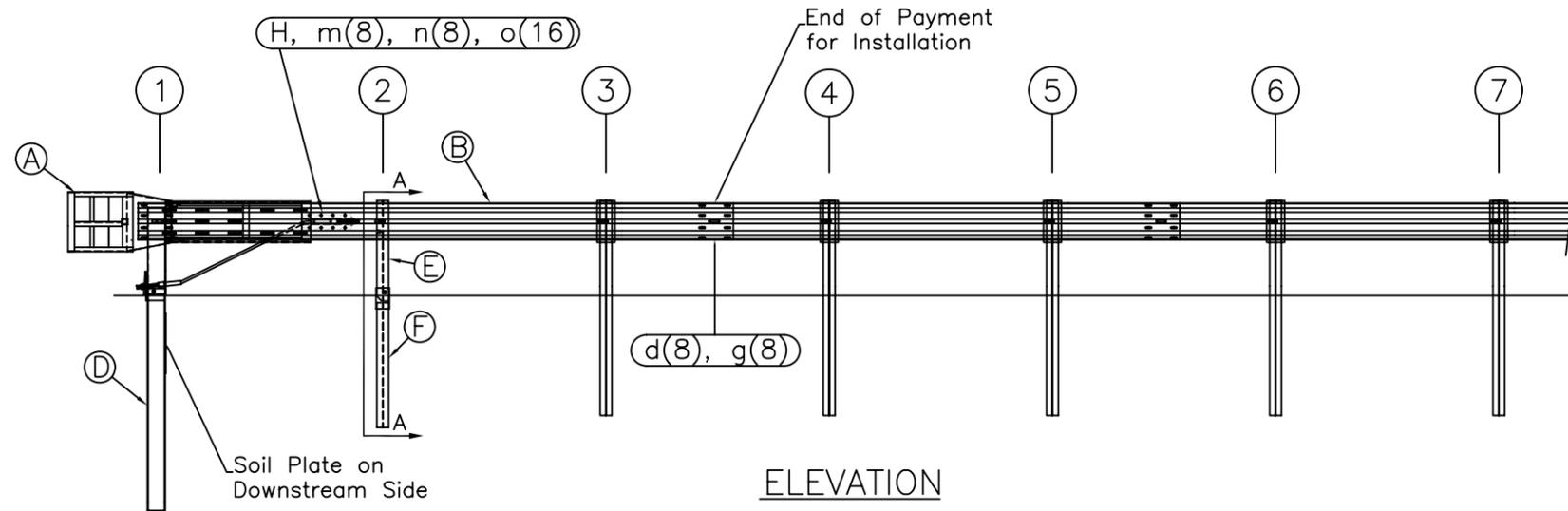
[Manufacturer's Drawings for Alternative In-Line Terminal System](#)

[Water Source](#)

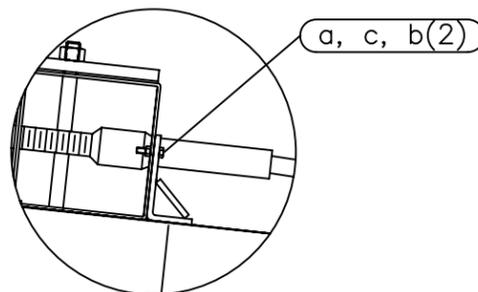
REPLACED PER ADDENDUM No. 5 Dated February 12, 2015



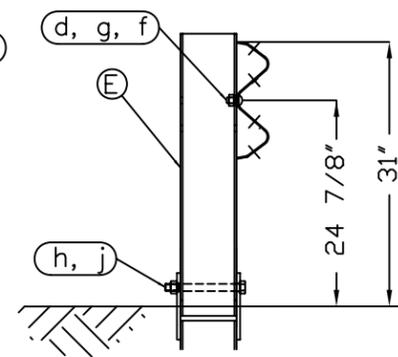
TRAFFIC →



Post #1 Connection Detail



Impact Head Connection Detail



SECTION A-A
Post #2

ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	S3000
B	1	W-BEAM GUARDRAIL END SECTION, 12 Ga.	MGS-SF1303
C	1	FIRST POST TOP (6X6X $\frac{1}{2}$ Tube)	TPHP1A
D	1	FIRST POST BOTTOM (6' W6X15)	TPHP1B
E	1	SECOND POST ASSEMBLY TOP	UHP2A
F	1	SECOND POST ASSEMBLY BOTTOM	HP3B
G	1	BEARING PLATE	E750
H	1	CABLE ANCHOR BOX	S760
J	1	BCT CABLE ANCHOR ASSEMBLY	E770

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	9	5/8 Dia. x 1 1/4 SPLICE BOLT (POST #2)	B580122
e	1	5/8 Dia. x 9 HEX BOLT GRD 5	B580904A
f	3	5/8 WASHER	W050
g	10	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	CABLE ANCHOR BOX SHOULDER BOLT	SB58A
n	8	1/2 A325 STRUCTURAL NUT	N055A
o	16	1 1/16 OD x 9/16 ID A325 STR. WASHER	W050A

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" \varnothing 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.



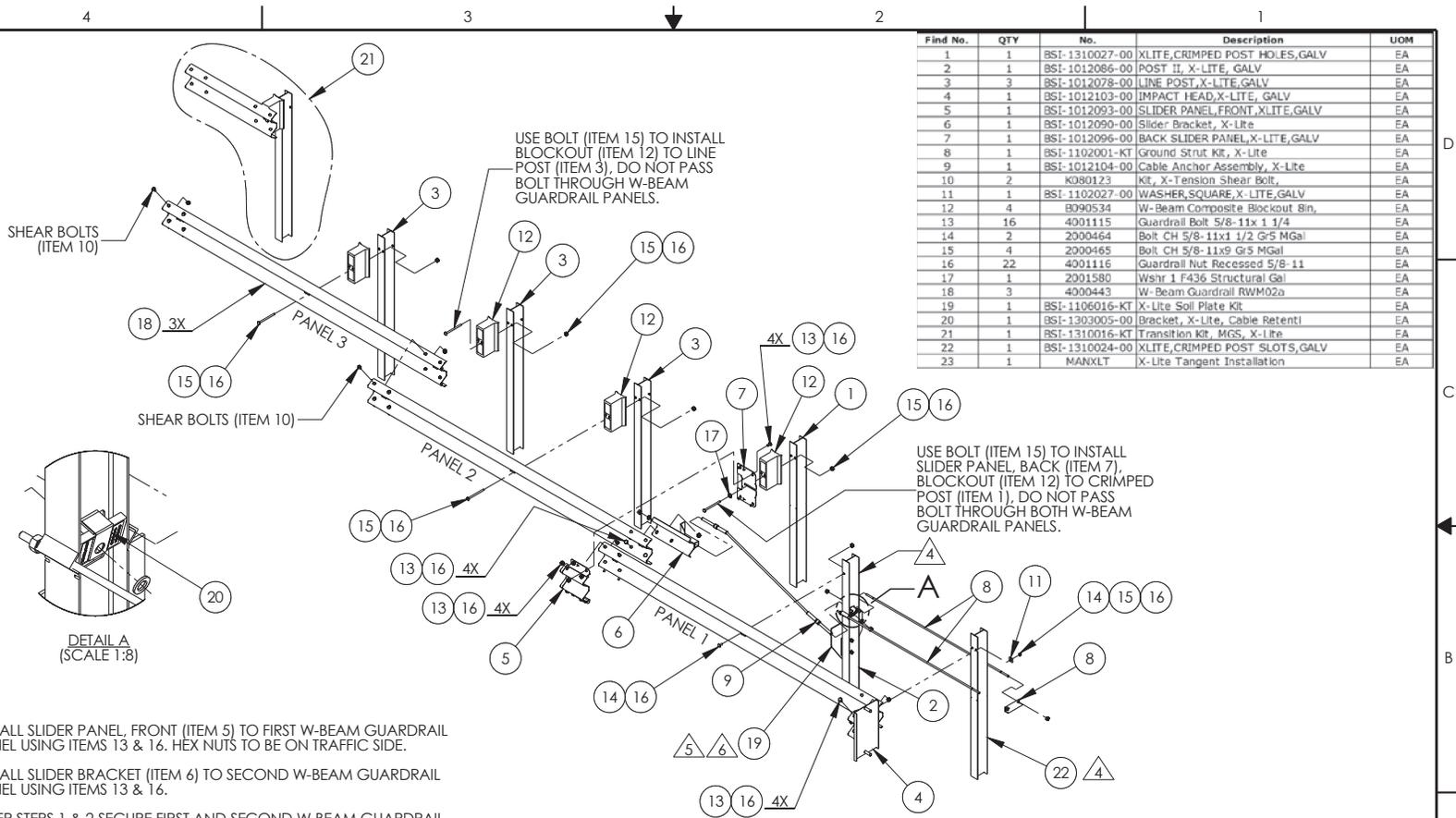
SKT-SP-MGS Terminal
Midwest Guardrail System
31" Top of Rail

Drawing Name: SKT-SP-S-MGS

Scale: None

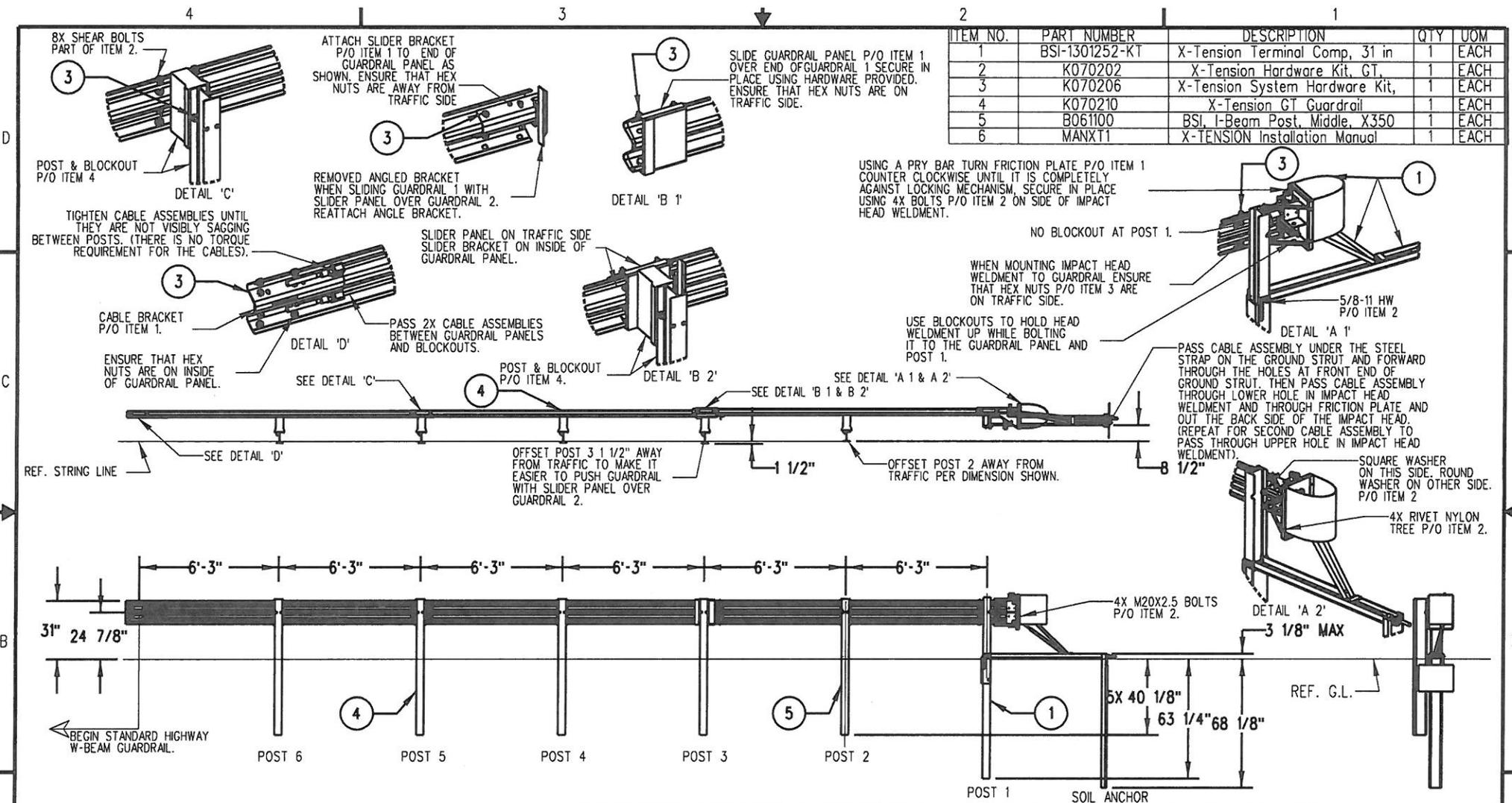
Sheet: 1
Date: 02/24/10
By: JRR
Rev: 0

Find No.	QTY	No.	Description	UOM
1	1	BSI-1310027-00	XLITE, CRIMPED POST HOLES, GALV	EA
2	1	BSI-1012066-00	POST II, X-LITE, GALV	EA
3	3	BSI-1012078-00	LINE POST, X-LITE, GALV	EA
4	1	BSI-1012103-00	IMPACT HEAD, X-LITE, GALV	EA
5	1	BSI-1012093-00	SLIDER PANEL, FRONT, X-LITE, GALV	EA
6	1	BSI-1012090-00	Slider Bracket, X-Lite	EA
7	1	BSI-1012096-00	BACK SLIDER PANEL, X-LITE, GALV	EA
8	1	BSI-1102001-KT	Ground Strut Kit, X-Lite	EA
9	1	BSI-1012104-00	Cable Anchor Assembly, X-Lite	EA
10	2	KD80123	Kit, X-Tension Shear Bolt,	EA
11	1	BSI-1102027-00	WASHER, SQUARE, X-LITE, GALV	EA
12	4	B090534	W-Beam Composite Blockout Bin,	EA
13	16	4001115	Guardrail Bolt 5/8-11x 1 1/4	EA
14	2	2000464	Bolt CH 5/8-11x1 1/2 Gr5 MGal	EA
15	4	2000465	Bolt CH 5/8-11x9 Gr5 MGal	EA
16	22	4001116	Guardrail Nut Recessed 5/8-11	EA
17	1	2001580	Wshr 1 F436 Structural Gal	EA
18	3	4000443	W-Beam Guardrail RWM02a	EA
19	1	BSI-1106016-KT	X-Lite Soil Plate Kit	EA
20	1	BSI-1303005-00	Bracket, X-Lite, Cable Retenti	EA
21	1	BSI-1310016-KT	Transition Kit, MGS, X-Lite	EA
22	1	BSI-1310024-00	XLITE, CRIMPED POST SLOTS, GALV	EA
23	1	MANXLT	X-Lite Tangent Installation	EA



- INSTALL SLIDER PANEL, FRONT (ITEM 5) TO FIRST W-BEAM GUARDRAIL PANEL USING ITEMS 13 & 16. HEX NUTS TO BE ON TRAFFIC SIDE.
- INSTALL SLIDER BRACKET (ITEM 6) TO SECOND W-BEAM GUARDRAIL PANEL USING ITEMS 13 & 16.
- AFTER STEPS 1 & 2 SECURE FIRST AND SECOND W-BEAM GUARDRAIL PANEL USING ITEMS 7, 13 & 16. HEX NUTS TO BE ON TRAFFIC SIDE.
- SLOT ON POSTS 1 AND 2 TO FACE GUARDRAIL PANEL.
- IF ROCK OR STIFF SOIL IS ENCOUNTERED, THE POST AND SOIL PLATE MAY BE INSTALLED BY AUGERING AND BACKFILLING THE HOLE. EXTRA CARE MUST BE TAKEN TO PREVENT SETTLEMENT OR LATERAL DISPLACEMENT OF THE POST. BACKFILL MATERIAL SHALL BE COMPACTED TO OPTIMUM COMPACTION.
- IF ROCK IS ENCOUNTERED, THE SOIL PLATE MAY BE MODIFIED IF APPROVED BY THE PROJECT ENGINEER.

© 2010 BARRIER SYSTEMS INC. THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BARRIER SYSTEMS INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF BARRIER SYSTEMS INC. IS PROHIBITED.		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ±1/16 .XX ±.03 ±1/2° .XXX ±.010		3333 Vaca Valley Parkway Ste 800 Vacaville, CA 95688 Tel: 888-800-3691 www.barriersystemsinc.com	
APPROVALS DRAWN BY: JMT DRAWN DATE: 10/09/2013 APPRD BY: GAD APPRD DATE: 10/09/13		INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-1994 THIRD ANGLE PROJECTION DO NOT SCALE DRAWING		TITLE: X-LITE SYSTEM ASSEMBLY, TANGENT, TRANSITION TO MGS SIZE: B DWG NO.: XLTSUS-MGS SCALE: 1:40 SHEET: 1 OF 2	
				REV. B	



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	UOM
1	BSI-1301252-KT	X-Tension Terminal Comp, 31 in	1	EACH
2	K070202	X-Tension Hardware Kit, GT.	1	EACH
3	K070206	X-Tension System Hardware Kit,	1	EACH
4	K070210	X-Tension GT Guardrail	1	EACH
5	B061100	BSL I-Beam Post, Middle, X350	1	EACH
6	MANXT1	X-TENSION Installation Manual	1	EACH

- NOTES: UNLESS OTHERWISE SPECIFIED.
- SYSTEM TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.
 - ONLY TIGHTEN THE CABLE ASSEMBLIES USING THE NUTS AT THE CABLE BRACKET (SEE DETAIL 'D'). DO NOT TIGHTEN THE CABLES AT THE FRONT OF THE GROUND ANCHOR.
 - WHEN DRIVING STEEL POST, ENSURE THAT A DRIVING CAP WITH TIMBER OR PLASTIC INSERT IS USED TO PREVENT DAMAGE TO THE GALVANIZING TO THE TOP OF THE POST.

1/2012 BARRIER SYSTEMS INC. THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BARRIER SYSTEMS INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF BARRIER SYSTEMS INC. IS PROHIBITED.		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMAL ANGLES $\pm 1/16$ $\pm .015$ $\pm 1/2^\circ$ $\pm .010$ $\pm .010$	
APPROVALS DRAWN BY: NMV DRAWN DATE: 2/08/13 APPR'D BY: JMT APPR'D DATE: 2/08/13		THIRD ANGLE PROJECTION  INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-1994 DO NOT SCALE DRAWING	
REV	ECN*	DATE	SCALE
B	2067	03/02/13	B
A	2022	2/08/13	B
1			1:50

LINDSAY
TRANSPORTATION SOLUTIONS

BARRIER SYSTEMS INC.
3333 Voco Valley Parkway, Ste 800
Vocaville, GA 30688
Tel: 800-800-5691
www.barriersystemsinc.com

TITLE: X-TENSION GUARDRAIL TERMINAL SYSTEM
STEEL POST WITH COMPOSITE BLOCKOUT
31" RAIL HEIGHT

SIZE: B
DWG NO.: XTGTSS5
SCALE: 1:50
SHEET: 1 OF 1

Avalos, Jodie R@DOT

From: Gutierrez, Nomer J@DOT
Sent: Thursday, September 18, 2014 8:18 PM
To: Alam, Sheikh M@DOT
Cc: Avalos, Jodie R@DOT; Akuva, Iorzua@DOT
Subject: FW: FW: 10-0W560: Water Conservation

Hi Sheikh,

I was able to get the commitment to supply water during construction of the Hwy 12 CAPM project from the Woodbridge Irrigation District.

Thanks.

Nomer Gutierrez, PE
Design Manager
CR PJD, Design IV-Branch I D-10/Unit #1454
Tel. No. (209) 948-7079
Cell. No. (209) 681-9251

From: Lana Falcon [mailto:wid.lanafalcon@gmail.com]
Sent: Thursday, September 18, 2014 3:24 PM
To: Gutierrez, Nomer J@DOT
Subject: Re: FW: 10-0W560: Water Conservation

Mr. Gutierrez,

I just spoke with our Manager, Anders Christensen, about your project at Hwy 12 & Flag City July/Aug 2015. Our District will have an adequate supply available to help you with Construction water (as you mentioned approx. 400,000 gallons). Please go ahead and put us on the list for available water for your project. Use the following address/contact information for your system:

Woodbridge Irrigation District

Attn: Lana Falcon / Jennifer Duffy

Office address: 18750 N. Lower Sacramento Road

Woodbridge, CA 95258

Mailing address: P.O. Box 580

Woodbridge, CA 95258

Phone Number: (209) 625-8438

Fax Number: (209) 625-8663

Our District does require that an Application for Construction Water be completed and an application fee of \$100 to be paid prior to taking water. Weekly load sheets must be filled out and provided to the District to track the use of water. For 2014 the rate for construction water was \$2.50 / 1,000 gallons. Please note that the rates may increase slightly for next year. Please let me know if you have any questions!

Thank You!

On Thu, Sep 18, 2014 at 2:59 PM, Gutierrez, Nomer J@DOT <nomer.gutierrez@dot.ca.gov> wrote:

fyi

Nomer Gutierrez, PE

Design Manager

CR PJD, Design IV-Branch I D-10/Unit #1454

Tel. No. [\(209\) 948-7079](tel:(209)948-7079)

Cell. No. [\(209\) 681-9251](tel:(209)681-9251)

From: Gutierrez, Nomer J@DOT
Sent: Thursday, September 18, 2014 2:53 PM
To: 'wit.lanafalcon@gmail.com'
Cc: Sheikh Alam (sheikh_alam@dot.ca.gov)
Subject: FW: 10-0W560: Water Conservation

Please let me know if you can supply water during construction for an overlay project in Hwy 12 next year by summer time. If I can get an email from you today or tomorrow I will really appreciate it.

Thanks.

Thanks.