

4 | 3 | 2 | 1

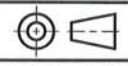
**31" X-LITE END TERMINAL - PARALLEL**

**DRAWING INDEX**

SHEET NO	DESCRIPTION
1 OF 4	GENERAL NOTES
2 OF 4	X-LITE PARALLEL END TERMINAL SYSTEM LAYOUT
3 OF 4	X-LITE PARALLEL END TERMINAL SYSTEM DETAILS
4 OF 4	BILL OF MATERIALS

1. THE GUARDRAIL END ANCHORAGE SYSTEM REPRESENTED ON THIS QUALIFIED PRODUCT LIST (QPL) IS A PROPRIETARY DESIGN BY BARRIER SYSTEMS, INC (BSI) AND MARKETED UNDER THE TRADE NAME X-LITE.
2. THESE DRAWINGS ARE SUFFICIENT FOR PLAN DETAILS FOR THE X-LITE PARALLEL END TERMINAL WHEN INSTALLED IN CONNECTION WITH SHOULDER GUARDRAIL, AND PRECLUDES THE REQUIREMENT FOR SHOP DRAWING SUBMITTALS UNLESS THE PLANS OTHERWISE CALL FOR SUCH SUBMITTALS. THE X-LITE PARALLEL END TERMINAL SHALL BE ASSEMBLED IN ACCORDANCE WITH THE MANUFACTURER'S DETAILED DRAWINGS, PROCEDURES, AND SPECIFICATIONS.
3. THE X-LITE PARALLEL END TERMINAL IS AVAILABLE IN A STEEL POST CONFIGURATION ONLY. POSTS #1 AND #3 ARE CRIMPED STEEL W6X8.5 OR W6X9 WIDE FLANGE POSTS. POST #2 IS A SPECIAL STEEL FLANGED POST WITH AN INTEGRAL SOIL PLATE (SEE MANUFACTURER DETAILS).
4. THE X-LITE PARALLEL END TERMINAL IS INTENDED FOR USE AS AN APPROACH END GUARDRAIL ANCHORAGE FOR SHOULDER GUARDRAIL. THE BEGINNING OF LENGTH OF NEED IS LOCATED AT POST #3. THE EFFECTIVE LENGTH OF THE X-LITE PARALLEL END TERMINAL IS 53'-1 1/2". THE ALIGNMENT OF THE X-LITE PARALLEL END TERMINAL CAN BE OFFSET UP TO 2'-0"
5. THE X-LITE PARALLEL END TERMINAL CANNOT BE USED IN MEDIANS WHERE HORIZONTAL CLEARANCE REQUIRES THE USE OF A BACKRAIL.
6. FOR DETAILS OF SHOULDER WIDENING, MISCELLANEOUS ASPHALT PAVEMENT AND PAY LIMITS, SEE INDEX 400.
7. THE X-LITE PARALLEL END TERMINAL SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR GUARDRAIL, END ANCHORAGE ASSEMBLY (PARALLEL), PER EA AND SHALL BE FULL COMPENSATION FOR FURNISHING AND INSTALLING ALL COMPONENTS IN ACCORDANCE WITH THE PLANS, MANUFACTURER'S DETAILED DRAWINGS, PROCEDURES AND SPECIFICATIONS, AND THIS DRAWING.
8. MAINTAIN A RELATIVELY CLEAR AND TRAVERSABLE RUN-OUT AREA BEHIND AND BEYOND ALL GATING END TERMINALS.
9. SITE CONDITIONS: SINCE THE X-LITE IS ONLY AVAILABLE IN A STEEL POST CONFIGURATION, IT MAY NOT BE USED IF THE FRONT OF A SIDEWALK OR SHARED USE PATH IS LOCATED 4' OR LESS FROM THE BACK OF THE X-LITE POSTS.
10. REGARDING THE ORIENTATION OF PANEL LAP SPLICES, INSTALL THE X-LITE SYSTEM AS SHOWN IN THE DRAWINGS, REGARDLESS OF THE DIRECTION OF TRAFFIC IN THE ADJACENT LANES (I.E. PANEL LAPPING MAY NOT BE IN THE DIRECTION OF TRAFFIC UNDER SOME CONDITIONS).
11. FOR THE X-LITE SYSTEM TO FUNCTION PROPERLY, I.E. TELESCOPE TO ABSORB ENERGY, THE GUARDRAIL PANELS WITHIN THE END TERMINAL MUST BE PROPERLY LAPPED STARTING FROM THE TERMINAL HEAD; FIRST PANEL IS LAPPED ON TOP OF START OF SECOND PANEL, SECOND PANEL IS LAPPED OVER TOP OF THIRD PANEL.

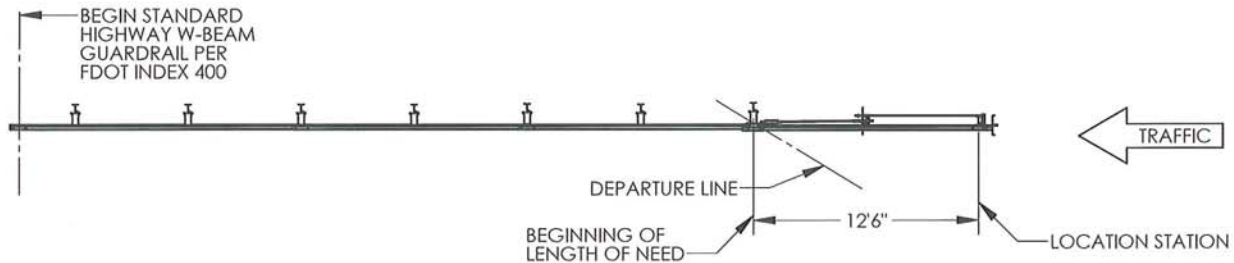


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<b>APPROVALS</b> DRAWN BY: NMB DRAWN DATE: 4/29/14 APPRD BY: GAD APPRD DATE: 11/4/14		<small>INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-1994</small>  THIRD ANGLE PROJECTION		<b>LINDSAY</b> <small>TRANSPORTATION SOLUTIONS</small> TITLE <b>X-LITE PARALLEL END TERMINAL</b> <b>2'-1" MOUNTING HEIGHT/ TL3 PARALLEL</b> <b>FDOT QPL NO. S536-003-011</b>	
REV: 2 SCALE: NTS SHEET: 1 OF 4		ADD NOTES 108.11 5/11/17 ADD NOTE TO SHEET 9/24/15 AP01031 4/29/14 ECN# DATE		SIZE: B DWG NO.: BSI-1401002-AP REV: 2	

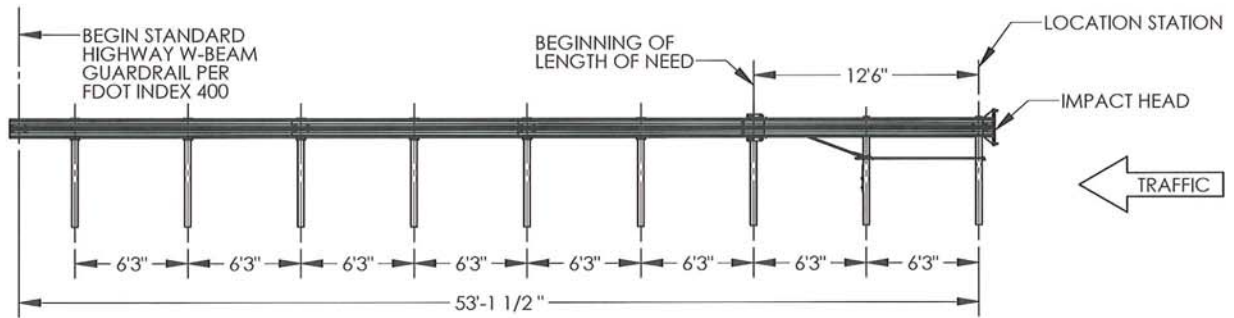
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SYSTEM WIDTH	MODEL NUMBER	DESIGN SPEED	TEST LEVEL	SYSTEM LENGTH	SYSTEM HEIGHT	DESIGN LENGTH
22"	XLTSUST	≤ 45 MPH	TL-2	53'-1 1/2"	2'-1"	53'-1 1/2"
22"	XLTSUST	≥ 50 MPH	TL-3	53'-1 1/2"	2'-1"	53'-1 1/2"



**PLAN VIEW**



**ELEVATION VIEW**

**X-LITE PARALLEL END TERMINAL SYSTEM LAYOUT**



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APPR'D BY:	GAD
APPR'D DATE:	11/4/14

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:

FRACTIONS	DECIMAL	ANGLES
±1/16	.XX = ±.03 .XXX = ±.010	±1/2°

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-1994

**THIRD ANGLE PROJECTION**

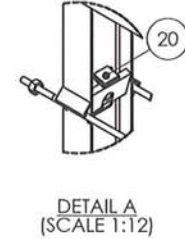
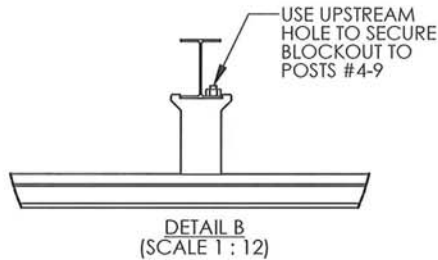
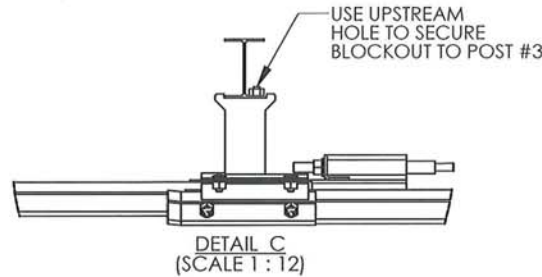
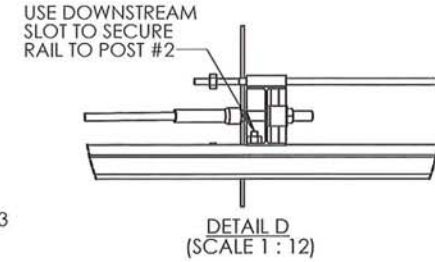
REV	ECN#	DATE
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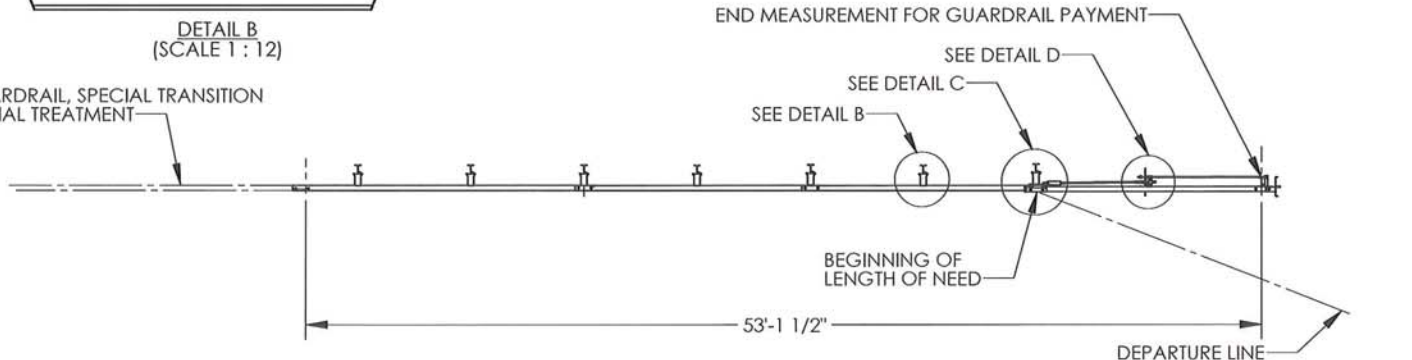
		<small>BARRIER SYSTEMS INC. 3333 Vacca Valley Parkway Ste 800 Vacaville, CA 95688 tel: 888-500-3691 www.barriersystemsinc.com</small>	
<b>TITLE</b> <b>X-LITE PARALLEL END TERMINAL</b> <b>2'-1" MOUNTING HEIGHT/ TL3 PARALLEL</b> <b>FDOT QPL NO. S536-003-011</b>			
SIZE	DWG NO.	REV.	
B	BSI-1401002-AP	0	
SCALE	1:80	SHEET	2 OF 4

NOTES: UNLESS OTHERWISE SPECIFIED.

1. ALL GUARDRAIL POSTS, PANELS, BLOCKOUTS AND ASSOCIATED HARDWARE SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION 536 AND DESIGN STANDARD INDEX 400. ALL METALIC COMPONENTS SHALL MEET THE GALVANIZING REQUIREMENTS FOR GUARDRAIL, STANDARD SPECIFICATION 967
2. IF ROCK EXCAVATION IS ENCOUNTERED, CONSULT THE MANUFACTURER'S INSTALLATION MANUAL FOR RECOMMENDATIONS.
3. WHEN SITE CONDITIONS PERMIT, POSTS MAY BE DRIVEN. IF POSTS ARE PLACED IN A DRILLED HOLE, THE BACKFILL MATERIAL MUST BE SATISFACTORILY COMPACTED TO PREVENT SETTLEMENT.
4. THE SPECIAL SHEAR BOLTS USED TO CONNECT THE W-BEAM PANELS TO POSTS #5 AND 7 ARE DIFFERENT THEN STANDARD SPLICE BOLTS. FOR EASY IDENTIFICATION THEY ARE SUPPLIED WITH YELLOW HEADS.



STANDARD GUARDRAIL, SPECIAL TRANSITION OR OTHER SPECIAL TREATMENT



**X-LITE PARALLEL END TERMINAL DETAILS**

NOTE: PARALLEL END TERMINAL MAY BE FLARED AT A RATE OF 1:25' FOR THE FIRST 25 FEET.



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 FRACTIONS DECIMAL ANGLES  
 1/16 .003 ±1/2°  
 .001 ±0.010

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-1994

**APPROVALS**

DRAWN BY: NMB  
 DRAWN DATE: 4/29/14  
 APPRD BY: GAD  
 APPRD DATE: 11/4/14

THIRD ANGLE PROJECTION



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REV 0  
 ECN# AP01031  
 DATE 4/29/14



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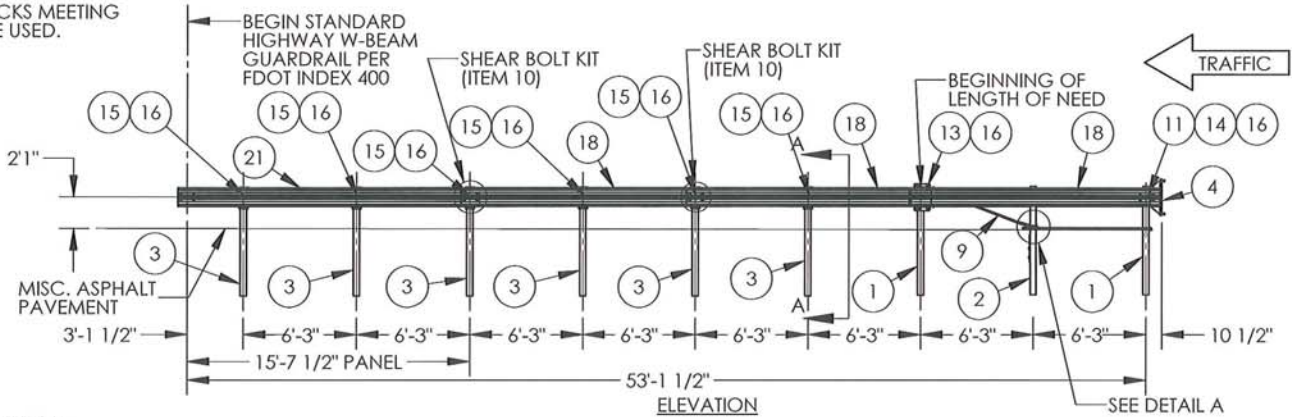
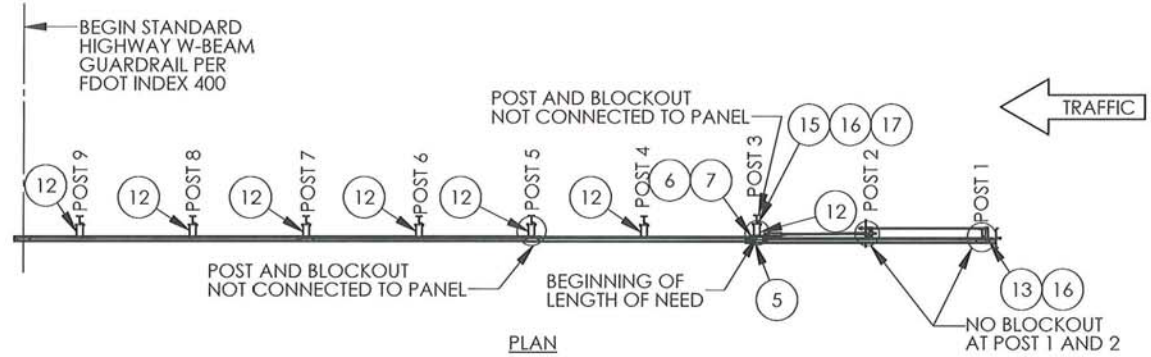
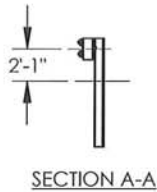
TITLE  
**X-LITE PARALLEL END TERMINAL**  
**2'-1" MOUNTING HEIGHT/ TL3 PARALLEL**  
**FDOT QPL NO. S536-003-011**

SIZE DWG NO. BSI-1401002-AP  
 SCALE 1:80  
 SHEET 3 OF 4

### BILL OF MATERIALS

ITEM	PART NO	DESCRIPTION	QTY	SPEC
1	BSI-1310024-00	XLITE, CRIMPED POST SLOTS, GALV	2	X-LITE
2	BSI-1012086-00	POST II, GALV	1	X-LITE
3	BSI-1012078-00	LINE POST, GALV	6	FDOT
4	BSI-1012103-00	IMPACT HEAD, X-LITE, GALV	1	X-LITE
5	BSI-1012093-00	SLIDER PANEL, FRONT, XLITE, GALV	1	X-LITE
6	BSI-1012090-00	Slider Bracket, X-Lite	1	X-LITE
7	BSI-1012096-00	BACK SLIDER PANEL, X-LITE, GALV	1	X-LITE
8	BSI-1102001-KT	Ground Strut Kit, X-Lite	1	X-LITE
9	BSI-1012104-00	Cable Anchor Assembly, X-Lite	1	X-LITE
10	K080123	Kit, X-Tension Shear Bolt,	2	X-LITE
11	BSI-1102027-00	WASHER, SQUARE, X-LITE, GALV	1	X-LITE
12*	4002337	W-Beam Timber Blockout PDB01b	7	FDOT
13	4001115	Guardrail Bolt 5/8-11x 1 1/4	16	FDOT
14	2000302	Bolt CH 5/8-11x2 MGal	2	FDOT
15	2001635	Bolt CH 5/8-11x10 Gr5 MGal	7	FDOT
16	4001116	Guardrail Nut Recessed 5/8-11	33	FDOT
17	2001380	Wshr 1" F436 Flat Rd Struct	1	FDOT
18	4000443	W-Beam Guardrail RWM02a	3	FDOT
19	BSI-1106016-KT	X-Lite Soil Plate Kit	1	X-LITE
20	BSI-1303005-00	Bracket, X-Lite, Cable Retention	1	X-LITE
21	BSI-1403002-00	Panel, 15'-7 1/2", Galv,	1	FDOT

\* IN LIEU OF TIMBER OFFSET BLOCKS, COMPOSITE OFFSET BLOCKS MEETING THE REQUIREMENTS OF SPECIFICATION SECTION 536 MAY BE USED.



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 FRACTIONS: ±1/16  
 DECIMAL: .XX ±.03  
 ANGLES: ±1/2°  
 XXX ±.010

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-1994

**APPROVALS**

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DRAWN DATE:	4/29/14
APPRD BY:	GAD
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TITLE: **X-LITE PARALLEL END TERMINAL 2'-1" MOUNTING HEIGHT/ TL3 PARALLEL FDOT QPL NO. S536-003-011**

SIZE	DWG NO.	REV.
B	BSI-1401002-AP	0

SCALE: NTS SHEET: 4 OF 4