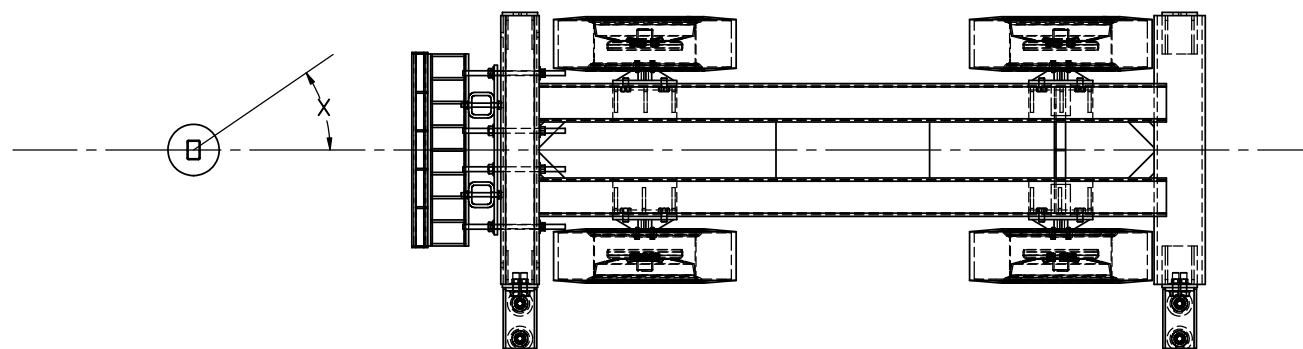
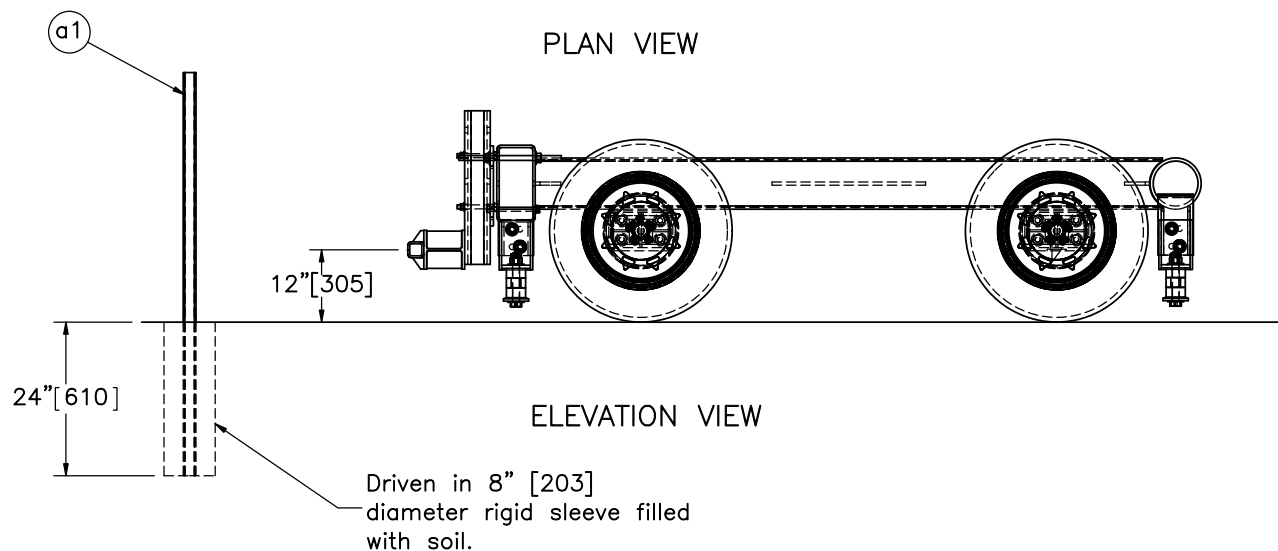


Test No.	Part No.	Post Type	Bogie No.	Impact Speed mph [km/h]	Impact Angle (X)
CTPB-12	a1	HSS 3x2x1/8 [76x51x3] with two 1" [25] holes	3	20 [32.2]	0°
CTPB-13	a1	HSS 3x2x1/8 [76x51x3] with two 1" [25] holes	3	20 [32.2]	25°

0° = Weak Axis, 90° = Strong Axis



PLAN VIEW



ELEVATION VIEW

- Notes: (1) Additional camera positioned for a zoomed-in view of the base of the post (holes).
(2) Measure post thickness three times on each end prior to installation.



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Cable Median Barrier
Post Testing
Test Nos. CTPB-11-13

Concrete Tarmac Foundation
Test Layout

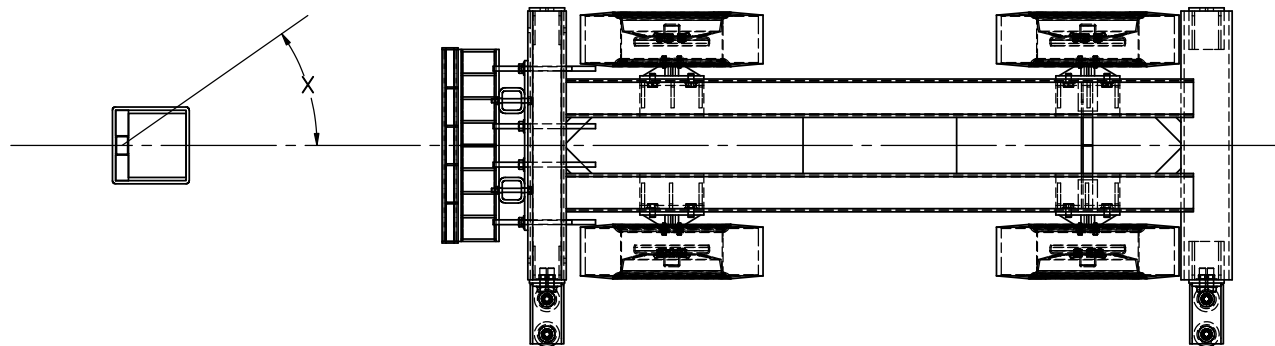
DWG. NAME.
CTPB-11-13_R4

SCALE: 1:30
UNITS: in.[mm]

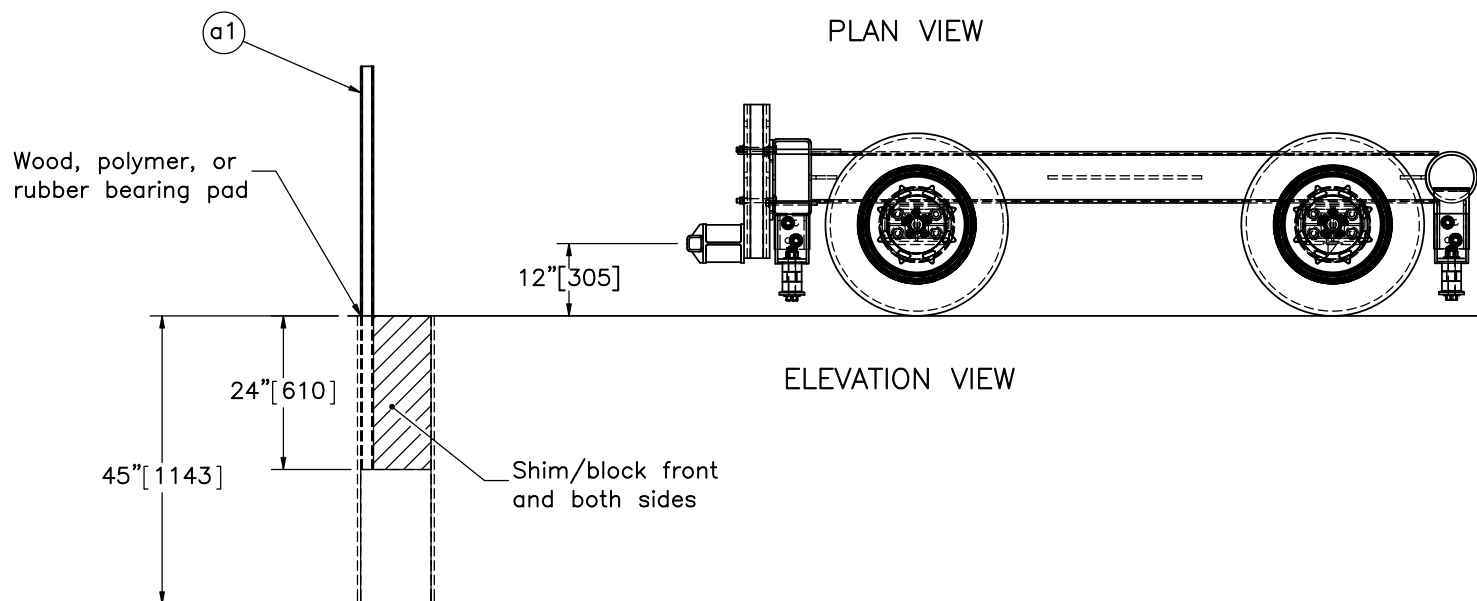
SHEET:
1 of 4
DATE:
10/31/18
DRAWN BY:
MES/DTM/E
TJ
REV. BY:
JEK/KAL/M
P

Test No.	Part No.	Post Type	Bogie No.	Impact Speed mph [km/h]	Impact Angle (X)
CTPB-11	a1	HSS 3x2x1/8 [76x51x3] with two 1" [25] holes	3	20 [32.2]	0°

0° = Weak Axis, 90° = Strong Axis



PLAN VIEW



ELEVATION VIEW

- Notes:
- (1) Drawing shows weak axis impact orientation.
 - (2) A 21" [533] spacer is placed at the bottom of the rigid sleeve to raise the post to the correct height.
 - (3) Shim material to fit. Posts must be placed in holes with wood and steel shims and made tight (i.e., no gaps).
 - (4) Additional camera positioned for a zoomed-in view of the base of the post (holes).
 - (5) Measure post thickness three times on each end before installation.



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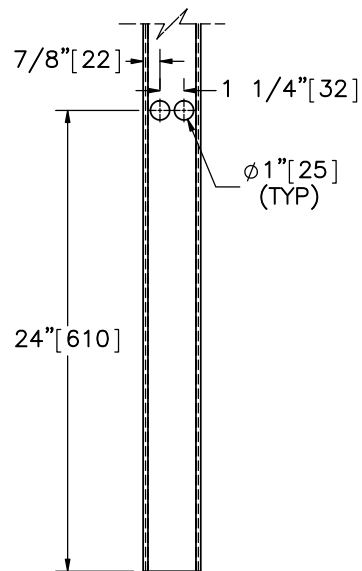
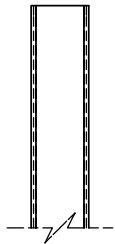
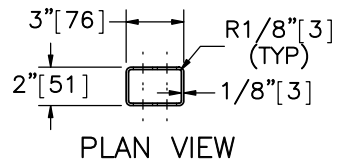
Cable Median Barrier
Post Testing
Test Nos. CTPB-11-13

Sleeve Foundation Test Layout

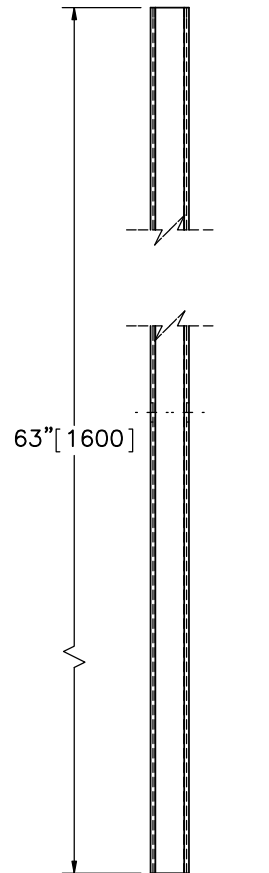
DWG. NAME.
CTPB-11-13_R4

SCALE: 1:30
UNITS: in.[mm]

SHEET:
2 of 4
DATE:
10/31/18
DRAWN BY:
MES/DTM/E
TJ
REV. BY:
JEK/KAL/M
P



ELEVATION VIEW



PROFILE VIEW

Part a1



Cable Median Barrier
Post Testing
Test Nos. CTPB-11-13

Post Details

DWG. NAME.
CTPB-11-13_R4

SCALE: 1:10
UNITS: in./mm

SHEET:
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DATE:
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DRAWN BY:
MES/DTM/E
TJ
REV. BY:
JEK/KAL/M
P

Item No.	QTY.	Description	Material Spec	Galvanization Spec
a1	3	HSS 3x2x1/8 [76x51x3], 63" [1,600] Long Steel Post with two 1" [25] holes	ASTM A500 Gr. C**	ASTM A123*

* Component does not need to be galvanized for testing purposes.

** ASTM A500 Gr. B may be used if material cert shows that the min. elongation, tensile strength, and yield strength meet ASTM A500 Gr. C.
(Min. elongation: 21%, Tensile strength: 62 ksi [427 MPa], Yield strength: 50 ksi [345 MPa])



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Cable Median Barrier
Post Testing
Test Nos. CTPB-11-13

Bill of Materials

DWG. NAME.
CTPB-11-13_R4

SCALE: None
UNITS: in.[mm]

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DRAWN BY:
MES/DTM/E
TJ
REV. BY:
JEK/KAL/M
P

REV.	DATE OF ISSUE	Page	NATURE OF CHANGES	REVIEWER	REVISED BY
0	8/28/2017	—	Originated from drawing CTPB_R5. Removed unused posts.	—	MES
1	8/28/2017	—	ReNUMBER tests.	JEK	MES
		1	Corrected post orientation. Edited and added table. Added angle measurement.		
		2	Edited and added table. Added angle measurement.		
		3	Removed page.		
		BOM	Corrected part no. a1 quantity. Removed AASHTO galv. spec.		
2	8/31/2017	1	Test matrix fixed. Added weak and strong axis impact note. Altered post note.	KAL	DTM
		2	Test matrix fixed. Added weak and strong axis impact note. Altered post note. Added note 1. Added embedment depth dimension.		
		4	Removed hardware guide column in BOM.		
3	9/5/2017	1	Edited leader note and dimension.	MP	MES
		2	Edited dimension.		
4	10/31/2018	1	CTPB numbers were mismatched.	KAL	ETJ
		2	CTPB numbers were mismatched.		