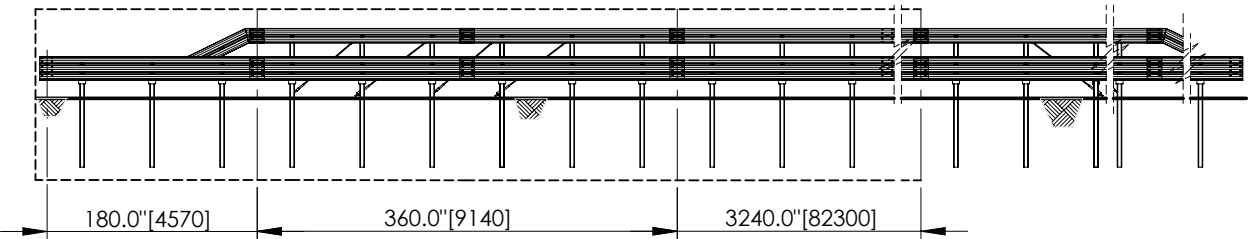


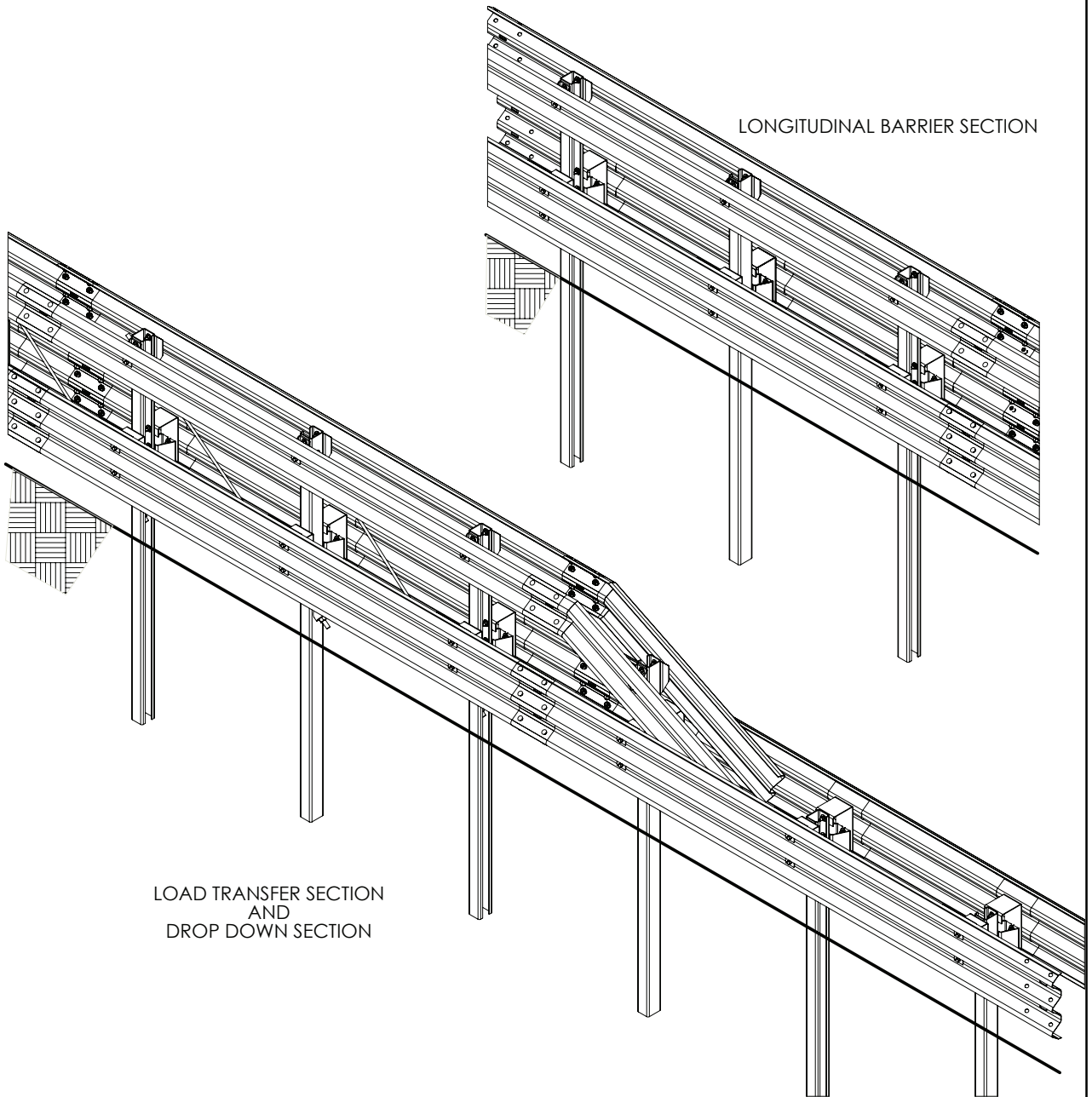
DROP DOWN SECTION

LOAD TRANSFER SECTION

LONGITUDINAL
BARRIER SECTION



LONGITUDINAL BARRIER SECTION



LOAD TRANSFER SECTION
AND
DROP DOWN SECTION

TL-5 STEEL HIGH CONTAINMENT MEDIAN BARRIER



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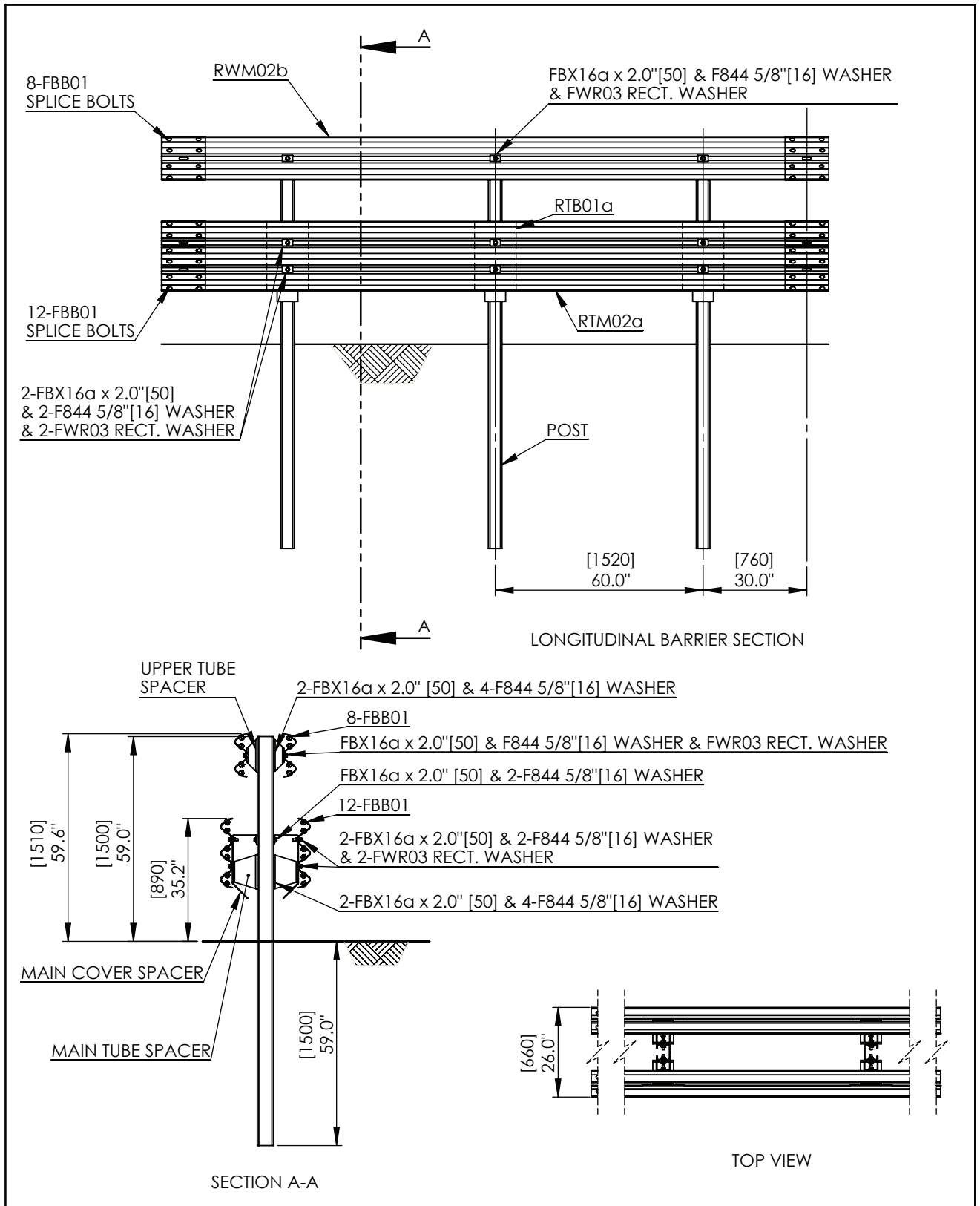
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INTENDED USE

The TL-5 steel high containment median longitudinal barrier should be used in locations where containment and redirection of heavy vehicles is required. This barrier should be used in locations where the maximum dynamic deflection is intended to be 52" [1320mm] or less. This barrier should be used in locations where road users are exposed to severe fixed obstacles (eg. bridge piers, walls ...) or to separate traffic lanes (median separation). This barrier is also an ideal alternative for locations where maintenance and replacement of existing barrier is frequent due to minor impacts. Dynamic deflections measured with test TL5-10 (1,100kg car) and TL5-11 (2,270kg pickup truck) are respectively only 12" [305mm] and 19" [485mm].

COMPONENTS

Unit length = 180 inches [4570 mm]

Designator	Component	System	Number
FBB01	AASHTO Guardrail bolt and recessed nut for splice connection in ASTM A307, Grade B	Longitudinal barrier section	40
FBX16a	AASHTO Hex bolt x 2.0" [50mm] and nut in ASTM A307, Grade B	Longitudinal barrier section	48
F844 5/8" washer	5/8" [16mm] plain round steel washer in accordance to ANSI B18.22, Type B	Longitudinal barrier section	78
FWR03 rect. washer	3" [75mm] x 1.75" [45mm] rectangular washer plate in ASTM A1011, Grade 50	Longitudinal barrier section	18
RWM02b	192.5" [4890mm] W-beam rail 10-ga, ASTM A1011 steel Grade 80	Longitudinal barrier section	2
RTM02a	192.5" [4890mm] Thrie-beam rail 12-ga, ASTM A1011 steel Grade 80	Longitudinal barrier section	2
RTB01a	AASHTO Back-up plates 12-ga, ASTM A1011 steel Grade 50	Longitudinal barrier section	6
Post	118" [3000mm] long TL5 steel post, ASTM A1011 steel Grade 50	Longitudinal barrier section	3
Upper Tube Spacer	3" [76mm] x 4" [102mm] tubular spacer, ASTM A500 steel Grade B	Longitudinal barrier section	6
Main Cover Spacer	3/16" [5mm] thick cover spacer in ASTM A1011, Grade 50	Longitudinal barrier section	6
Main Tube Spacer	5" [127mm] x 7" [178mm] tubular spacer, ASTM A500 steel Grade B	Longitudinal barrier section	6

APPROVALS

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REFERENCES

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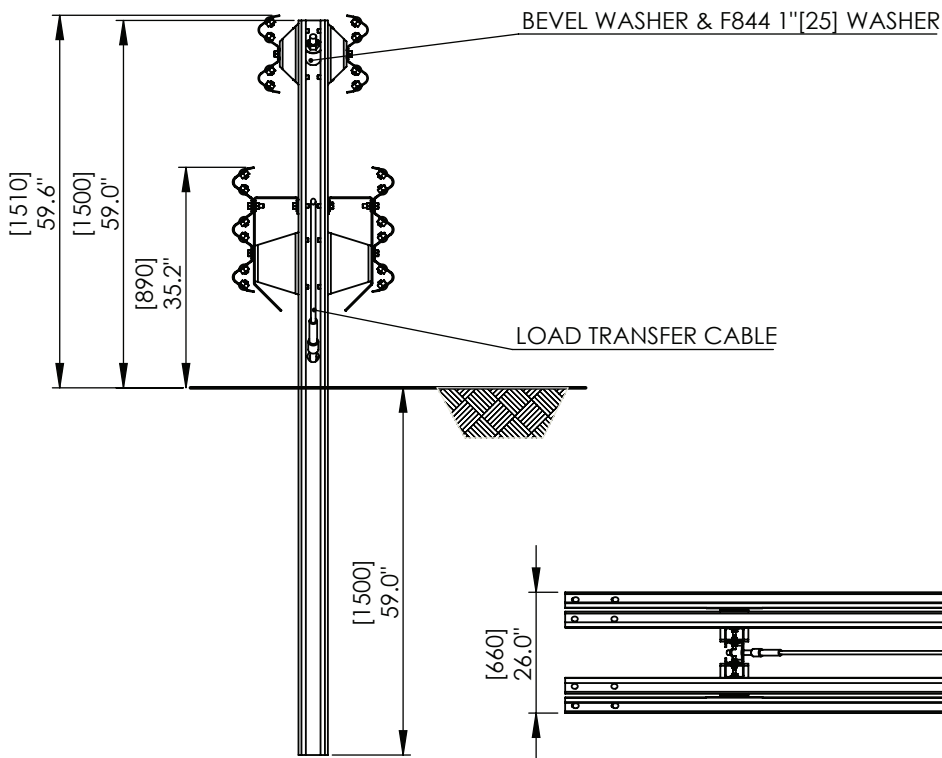
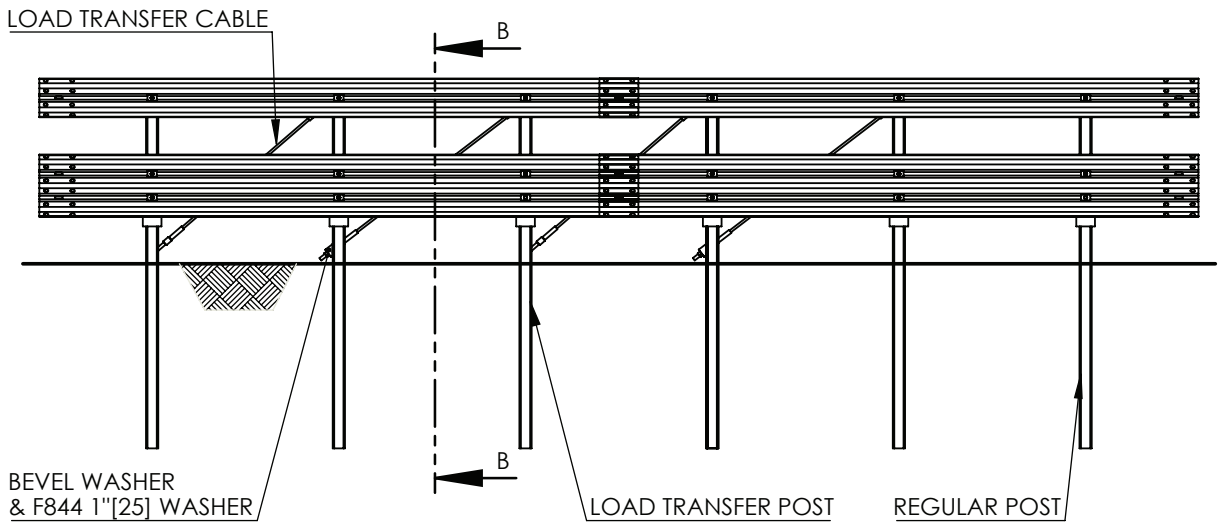
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INTENDED USE

The Load Transfer Section of the TL-5 steel high containment median barrier should be used at each termination of the installed barrier in order to ensure proper transfer of longitudinal traction loads to the ground and prevent significant movement of barrier extremities. The Load Transfer section is made of the same components as the regular Longitudinal Barrier section to which 4 diagonal cables have been added. Cross section of the post is exactly the same as the section of the TL-5 post. Two additional holes in each post allow easy connection of diagonal load transfer cables.

COMPONENTS

Unit length = 360 inches [9140 mm]

Designator	Component	System	Number
FBB01	AASHTO Guardrail bolt and recessed nut for splice connection in ASTM A307, Grade B	Load transfer section	80
FBX16a	AASHTO Hex bolt x 2.0" [50mm] and nut in ASTM A307, Grade B	Load transfer section	96
F844 5/8" washer	5/8" [16mm] plain round steel washer in accordance to ANSI B18.22, Type B	Load transfer section	156
FWR03 rect. washer	3" [75mm] x 1.75" [45mm] rectangular washer plate in ASTM A1011, Grade 50	Load transfer section	36
RWM02b	192.5" [4890mm] W-beam rail 10-ga, ASTM A1011 steel Grade 80	Load transfer section	4
RTM02a	192.5" [4890mm] Thrie-beam rail 12-ga, ASTM A1011 steel Grade 80	Load transfer section	4
RTB01a	AASHTO Back-up plates 12-ga, ASTM A1011 steel Grade 50	Load transfer section	12
Post	118" [3000mm] long TL5 steel post, ASTM A1011 steel Grade 50	Load transfer section	1
Load transfer Post	118" [3000mm] long TL5 steel post, ASTM A1011 steel Grade 50 with two additional 1.8" [46mm] holes	Load transfer section	5
Upper Tube Spacer	3" [76mm] x 4" [102mm] tubular spacer, ASTM A500 steel Grade B	Load transfer section	12
Main Cover Spacer	3/16" [5mm] thick cover spacer in ASTM A1011, Grade 50	Load transfer section	12
Main Tube Spacer	5" [127mm] x 7" [178mm] tubular spacer, ASTM A500 steel Grade B	Load transfer section	12
Load transfer cable (long cable)	3/4" [19mm] W/R guardrail assembly and nuts, total length 90" [2290mm]	Load transfer section	2
Load transfer cable (short cable)	3/4" [19mm] W/R guardrail assembly and nuts, total length 83" [2110mm]	Load transfer section	2
Bevel washer	1 1/8" [29mm] bevel washer in accordance to AISI 1215	Load transfer section	8
F844 1" washer	1" [25mm] plain round steel washer in accordance to ANSI B18.22, Type B	Load transfer section	8

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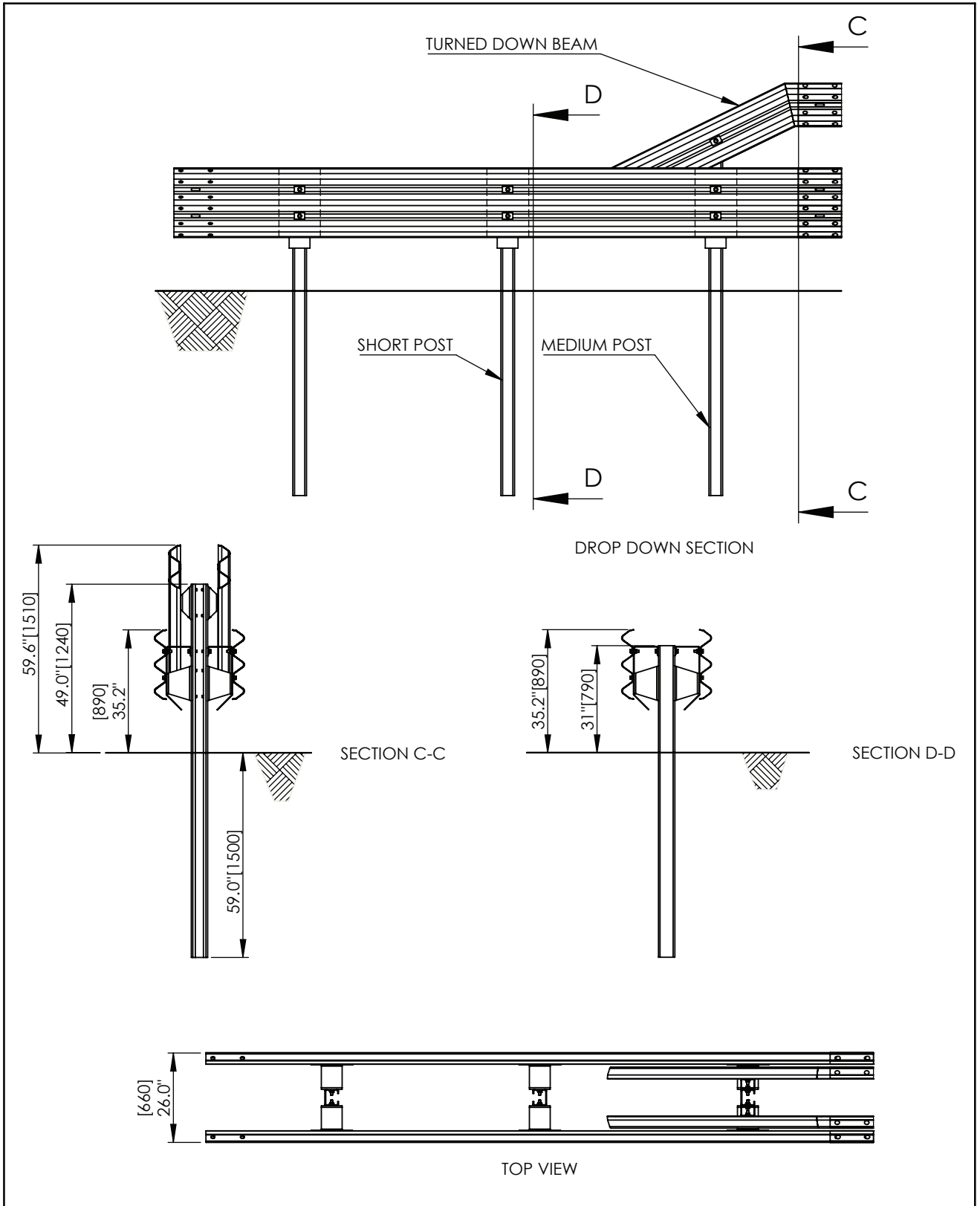
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INTENDED USE

The Drop-down section of the TL-5 steel high containment median barrier should be used when this barrier is connected to a lower containment barrier with no upper channel. The drop-down terminates the upper rail with a proper drop behind the thrie-beam avoiding an unprotected end of the upper rail. Post cross section of the Drop-down section is the same as the TL-5 post geometry of the Longitudinal containment section.

COMPONENTS

Unit length = 180 inches [4570 mm]

Designator	Component	System	Number
FBB01	AASHTO Guardrail bolt and recessed nut for splice connection in ASTM A307, Grade B	Drop-down section	40
FBX16a	AASHTO Hex bolt x 2.0" [50mm] and nut in ASTM A307, Grade B	Drop-down section	36
F844 5/8" washer	5/8" [16mm] plain round steel washer in accordance to ANSI B18.22, Type B	Drop-down section	58
FWR03 rect. washer	3" [75mm] x 1.75" [45mm] rectangular washer plate in ASTM A1011, Grade 50	Drop-down section	14
Upstream Turned-down W-beam	Welded W-beam rail 10-ga, ASTM A1011 steel grade 50 – nominal angle 26° – Upstream end	Drop-down section	1
Downstream Turned-down W-beam	Welded W-beam rail 10-ga, ASTM A1011 steel grade 50 – nominal angle 26° – Downstream end	Drop-down section	1
RTM02a	192.5" [4890mm] Thrie-beam rail 12-ga, ASTM A1011 steel Grade 80	Drop-down section	2
RTB01a	AASHTO Back-up plates 12-ga, ASTM A1011 steel Grade 50	Drop-down section	6
Medium Post	108" [2740mm] long TL5 steel post, ASTM A1011 steel Grade 50	Drop-down section	1
Short Post	90" [2280mm] long TL5 steel post, ASTM A1011 steel Grade 50	Drop-down section	2
Upper Tube Spacer	3"[76mm] x 4" [102mm] tubular spacer, ASTM A500 steel Grade B	Drop-down section	2
Main Cover Spacer	3/16" [5mm] thick cover spacer in ASTM A1011, Grade 50	Drop-down section	6
Main Tube Spacer	5"[127mm] x 7" [178mm] tubular spacer, ASTM A500 steel Grade B	Drop-down section	6

APPROVALS

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