

**GENERAL NOTES**

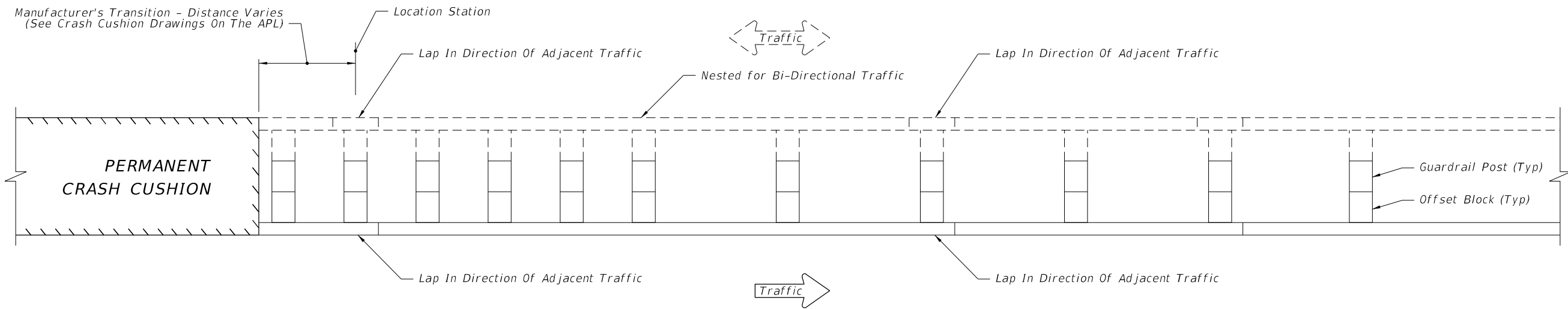
1. Index 430 is applicable for permanent crash cushion installations that shield the ends of Concrete Barrier Wall or Guardrail, only.
2. Design Length is based on a given design speed and the shortest Crash Cushion available on the Approved Products List (APL). When a Length Restriction is not applicable (N/A), then the Contractor has the option to select valid Crash Cushions from the APL which have design lengths greater than or equal to the Design Length identified in the plans. When a Length Restriction is applicable, then the Contractor has the option to select valid Crash Cushions from the APL which have design lengths greater than or equal to the Design Length identified in the plans and that are less than or equal to the Length Restriction identified in the plans.
3. For High Speed Facilities with a Design Speed greater than 60 mph, use a TL-3 Crash Cushion.
4. Assemble and install Crash Cushions according to the limitations noted on the Approved Products List (APL) webpage, the manufacturer's specifications, and the applicable crash cushion drawings posted on the APL.
5. When subjected to reverse direction hits, construct Transition Panels from Concrete Barrier Walls to Crash Cushions; for additional details refer to the applicable crash cushion drawings on the APL.
6. Galvanize metallic components are to meet the requirements in the Specification, Section 967.
7. For Guardrail Applications, construct the Manufacturer's Transition between the Permanent Crash Cushion and the Standard Guardrail Transition; refer to all Standard Guardrail Transition details of this Index.
8. For additional information on the End Measurement for Guardrail Payment, refer to the Standard Specifications for Road and Bridge Construction, Section 536.
9. Provide delineation in accordance with Specification, Section 544.
10. The EOR shall provide the station of the Length of Need (LON) location in the plans.

Design Length (ft.)	Design Speed (mph)	Crash Test Level
5.75	35	TL-2
7.25	40	
7.25	45	
10.25	50	TL-3
13.25	55	
16.00	≥ 60	

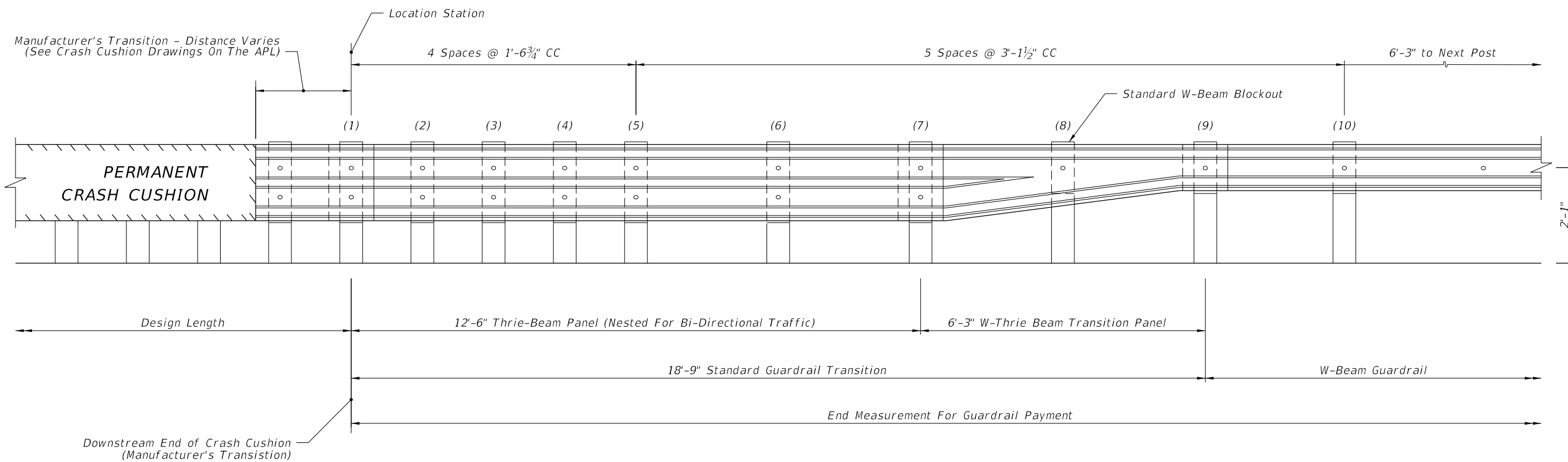
Design Length (ft.)	Design Speed (mph)	Crash Test Level
8.75	35	TL-2
11.50	40	
11.50	45	
14.25	50	TL-3
20.00	55	
22.75	≥ 60	

**PERMANENT CRASH CUSHION APPLICATIONS**

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PLAN VIEW




ELEVATION VIEW

Note:  
Post Numbers 8, 9 and 10 will have Standard  
6"x8"x14" Wooden W-beam Blockouts.

For Additional Information on Standard Guardrail  
Transitions see Design Standard, Index 400.

STANDARD GUARDRAIL TRANSITION

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LAST REVISION 07/01/14	DESCRIPTION:	 FY 2017-18 DESIGN STANDARDS	CRASH CUSHION DETAILS	INDEX NO. 430	SHEET NO. 2 of 2
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