

From: [Debra M. Butchart](#)
To: [BR](#)
Subject: Bridge Advertisement (DSI 24-007) LRFD Seismic Guide Specifications
Date: Wednesday, April 23, 2025 7:42:00 AM

The [EPG](#), [CADD cells](#), and [Missouri Standard Specifications](#) have been updated as described below:

Implementation Statement: Effective immediately for design checks not started.

(The Implementation Statement is a recommendation by the Development Section. The SPM is responsible for the level of implementation for any particular job.)

Revision Date	Items Revised	Description of Change
Apr. 2025	EPG: 751.5, 751.9, 751.11, 751.22, 751.31, 751.37, 751.38, 751.39, 751.40, 751.50	EPG updated to clarify seismic detail requirements for columns, non-oversized drilled shafts (difference between drilled shaft and column diameter is $\leq 12"$), oversized drilled shafts (difference between drilled shaft and column diameter is $\geq 18"$), spread footings, and pile cap footings.
	Bridge Standard Drawings: NA	<ul style="list-style-type: none"> Seismic detail option: For simplification use minimum #5 spiral/hoop bar. For minimum seismic detail requirements, See EPG 751.9.1.2. For T-joints (column joints) in SDC C and D detail requirements, See EPG 751.9.1.2.4.
	MicroStation Cells: KEY1	
	Std. Specifications: 701	<ul style="list-style-type: none"> Complete seismic design option: If minimum seismic details do not meet requirements, then modify EPG 751.9.1.2 information and increase bar size and/or reduced spacing/pitch as needed per SGS.
	Standard Plans: NA	
	Bridge Special Provisions: NA	<ul style="list-style-type: none"> Dowel bar in beam cap: For seismic design category SDC B, C and D, dowel bars shall develop minimum L_d into diaphragm but shall not extend into slab and develop minimum L_d into beam but 3" minimum clear from bottom face of the beam. Dowel bars shall not be hooked to meet development requirements. Section thru Key for Intermediate Bent (KEY1) CADD standard cell has been updated. Seismic hoop hooks shall be staggered around the column at about one-third of the hoop circumference. Intermediate bent: Beam width to depth and column diameter to beam depth ratio shall be per SGS. Longitudinal reinforcement and spiral bar shall not be spliced in plastic hinge area. If splice is unavoidable, a mechanical bar splice

		<p>shall be used. Spiral does not need to meet end tail requirements of SGS.</p> <ul style="list-style-type: none"> • Column longitudinal reinforcement: Updated minimum clear spacing requirements to include ½-inch buffer for mechanical bar splices. Lap splices and mechanical bar splices are to be alternately staggered at least 24" at two different locations. Area of longitudinal reinforcement $\leq 4\%$ of column gross area. Use note G1.45 (EPG 751.50) when mechanical bar splices (MBS) are to be specified on the plans for column and drilled shaft vertical reinforcement. • Specification will be updated per letting schedule.
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Follow links above for more information (internal only).

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