⇩ Project Type / Design Elements ⇧	Horiz. Align.	Vert. Align.	Lane Width	Shldr Width (13)	On/Off Conn.	Median Width	Cross Slope Lane	Cross Slope Shldr	Fill/Ditch Slopes	Clear Zone	Sign. (10)	Delini. (9)	Illumin.	Vert. Clear. (11)	Bike & Ped.	Bridges: Lane Width	Bridges: Shldr Width	Bridges: Structural Capacity	Barriers: Term. & Trans. Section (12)	Barriers: Std Run	Barriers: Bridge Rail (14)(19)	
(1-1) Preventive Maintenance																						
Pavement Restoration																						
(1-2) Diamond Grinding										EU	EU	F		DE					F	EU	F	
(1-3) Milling with HMA Inlays									EU	F	EU	F		DE					F	EU	F	
(1-4) Nonstructural Overlay				DE			EU	EU	EU	F	EU	F		EU					F	F	F	
Pavement Rehab./Resurf.																						
(1-5) HMA Structural Overlays	EU	DE	F	F	F(17)	DE	F	EU	F	F	EU	F	F	F		F	DE		F	F	F	
(1-6) PCCP Overlays	EU	DE	F	F	F(17)	DE	F	EU	F	F	EU	F	F	F		F	DE		F	F	F	
(1-7) Dowel Bar Retrofit	EU	DE	F	F	F(17)	DE	DE		F	F	EU	F	F	DE			DE		F	F	F	
Bridge Rehabilitation																						
(1-8) Bridge Deck Rehabilitation												F		F		F	DE	(11)	F(6)	F(22)	F	
Safety																						
(1-9) Median Barrier				DE															F(20)	F(20)		
(1-10) Guardrail Upgrades				DE						F									F	F(23)		
(1-11) Bridge Rail Upgrades																			F	F(22)	F	
Reconstruction (16)																						
(1-12) New/Reconstruction	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	

Design Matrix 1:
Interstate Routes (Main Line)
Figure 325-3

☐ Not Applicable
F Full design level. See Chapter 440.
DE Design Exception to full design level.
EU Evaluate Upgrade to full design level.

(6) Applies only to bridge end terminals and transition sections.
(9) Continuous shoulder rumble strips required in rural areas. See Chapter 700.
(10) See Chapter 820.
(11) See Chapter 1120.
(12) Impact attenuators are considered as terminals.
(13) See Chapters 440 and 640.
(14) Includes crossroad bridge rail. See Chapter 710.
(16) For design elements not in the matrix headings, apply full design level as found in the applicable chapters and see 325.03(2).
(17) DE for existing acceleration/deceleration lanes when length meets posted freeway speed and no significant accidents. See Chapter 940.
(19) The funding sources for bridge rail are a function of the length of the bridge. Consult programming personnel.
(20) Applies to median elements only.
(22) Upgrade barrier, if necessary, within 200 ft of the end of the bridge.
(23) See description of Guardrail Upgrades Project Type, 325.03(1) regarding length of need.

Design Matrix 1:
Interstate Routes (Main Line)
Figure 325-3 (continued)