



**SCORECARD 1-  
December 31, 2017 Categories only**

**Comments**

Category	Generic Item Name <i>intent is to match the name used in the pooled fund effort</i>	Prelim. Cost			Initial Rank	AK	FL	MA	MI	MN	WIS		
		Test	Construction	Total									
BEAM GUARDRAIL	Standard	W-beam guardr. single sided				23							
		Modified G4 (1S) w/ 8" timber blocks (Steel Posts)	\$36,500	\$11,620	\$48,120	16					We include the steel option in our SDD14b15 (see G4 Blocked-out W-beam Guardrail)		
		G4 (2W) Blocked-out W-Beam	\$77,400	\$15,250	\$92,650	15					Note that WisDOT modifies the design for this depending on grading, use of curb and gutter, and mow strips		
		W-beam guardrail - G4 (1S) w/ rubrail	\$77,400	\$15,250	\$92,650	13		FDOT Submitted prior prob. Stmt. Would Like to See this added for 31" MGS			Typically do not use rub railing		
		W-beam guardrail - no block out, weak post				8							
	Special Configurations	Slope	Modified G4 (1S) Guardrail (6" wood blockouts)	\$77,400	\$15,250	\$92,650	5					We include the steel option in our SDD14b15 (see G4 Blocked-out W-beam Guardrail)	
			Culvert	W-Beam Guardrail on 2:1 slope	\$77,400	\$15,250	\$92,650	18					Grading options previously given information was given previously (see G4 Blocked-out W-beam Guardrail)
				Culvert Mounted W-Beam	\$77,400	\$15,250	\$92,650	22				No Standard. Just published design guidance	WisDOT will be sponsoring crash testing of the MwRSF design for MGS.
		Curb	Omitted post - 12' 6" Span				19	to adopt MASH alternative			same here	Multiple lengths up to 25' are allowed under our SDD.	
			Omitted post - 25' Span				15	Same comment			same here		
			Omitted post - 18' 9" Span				13	Same comment			same here		
		Intersection	Box culvert guardrail steel post (w/ "hinge")				10				same here		
			W-Beam Guardrail w/ curb	\$77,400	\$15,250	\$92,650	14					Typically do not use AC curb near beam guard. Guidance for curb was given previously (see G4 Blocked-out W-beam Guardrail)	
			Weak Post IS Design (8' 6" max rad)				19	to adopt MASH alternative			Same as our Short Radius Guardrail	(see comment on "partners comments")	
		Median	Strong Post Intersection Design				17	Same comment			same comment	Has this been crash tested?	
			Weak Post IS Design (35' max rad)				17	Same comment			same comment	(see comment on "partners comments")	
			Short Radius Guardrail	\$77,400	\$15,250	\$92,650	11	AK CRT has min. five radius posts					
		Others	W-Beam Guardrail Median, 8" blockout				20					Typically don't use rub railing or double sided beam guard	
			W-Beam Guardrail Median w/ rubrail (30" height, 8" blockouts, steel or wood poosts)				10		FDOT Submitted a prior Prob, Statemt last for 31". Would Like to See this added for 31" MGS			same comment	
			W-beam guardrail raising for HMA overlays				19					(comment truncated for printing..... Our spec. allow for 3" of block height adjustment and 3" of post adjustment to adjust height	
	W-Beam Guard. w/ steel posts in conc. mow strip		\$77,400	\$15,250	\$92,650	17							
	W-Beam Guard. w/ wood posts in conc. mow strip		\$77,400	\$15,250	\$92,650	9							
	14-gauge w-beam G4 (1S)		\$77,400	\$15,250	\$92,650	1							
	W-Beam Guardrail (25 in. height)		\$36,500	\$11,620	\$48,120	0					Guardrail less than 26 3/4" to top of rail has to have a height adjustment		
	W-Beam Guardrail (24 in. height)		\$36,500	\$11,620	\$48,120	0					Guardrail less than 26 3/4" to top of rail has to have a height adjustment		
	Standard		MGS (12" blockout)				39	Need 8" block out	Add "w/Rub Rail"			MI intends to use MGS with 8" offset blocks	
			W-Beam Guardrail (8" blockout)				39						
		MGS Non-Blocked				18					Not sure of applications		
		MGS (12" blockout) w/ White Pine Posts				3					Native wood species in Wisconsin		
		MGS (12" blockout) w/ Southern Pine (added by LA)				2							
		MGS (12" block) w/ round Douglas Fir posts	\$77,400	\$15,250	\$92,650	0					We allow Douglas Fir posts, We do typically get Douglas Fir Post. We do not allow round posts		
		MGS (12" block) w/ round Ponderosa Pine posts	\$77,400	\$15,250	\$92,650	0							
	Special Configurations	Slope	W-Beam Guardrail (8" blockout) on 2:1 slope (W6x8.5, 8-ft steel posts, 1 foot from break point)				34					MI specifies a 9' long post when placing MGS with 8" offset blocks near a 2:1 slope. Currently, MI allows the posts to be placed at the hinge point, but not on the 2:1 slope.	
			MGS (12" blockout) on 2:1 slope (W6x9, 9-ft long steel posts, post centerline at slope break point)				29					MI intends to use MGS with 8" offset blocks	
			MGS (12" blockout) down from 8:1 slope break	\$77,400	\$15,250	\$92,650	16	Need 8" block out			Not sure of applications	MwRSF has conducted testing with normal post spacing with "normal" embedment missing one post. Note crash testing has been done to make this	
Culvert		MGS (12" blockout) for Long Span Culvert Placement 12'6" 18'9" or 25' span				40	Need 8" block out				MI intends to use MGS with 8" offset blocks.		
		W-Beam Guardrail (8" blockout) on Culvert	\$36,500	\$11,620	\$48,120	36					(see comment on "partners comments")		
		W-Beam Guardr. (8" block) w/ 12ft 6in post spacing	\$36,500	\$11,620	\$48,120	15		Want to see tested with Curb			Not sure of applications		
Flare		MGS (12" blockout) w/ 13:1 flare	\$77,400	\$15,250	\$92,650	20	Need 8" block out				MI intends to use MGS with 8" blocks.		
		MGS (12" blockout) w/ 7:1 flare	\$77,400	\$15,250	\$92,650	19	Need 8" block out				MI intends to use MGS with 8" blocks.		
		MGS (12" blockout) w/ 5:1 flare	\$77,400	\$15,250	\$92,650	15	Need 8" block out				MI intends to use MGS with 8" blocks.		
Curb		MGS (12" blockout) with curb	\$77,400	\$15,250	\$92,650	29	Need 8" block out				MI intends to use MGS with 8" blocks.		
	W-Beam Guardrail (8" blockout) w/ Breakaway Steel Posts on Curb	\$77,400	\$15,250	\$92,650	15					Not sure of applications			
Median	W-Beam Median Barrier (8" blocks)				0								
	MGS Median Barrier (12" blockouts)	\$77,400	\$15,250	\$92,650	25	Need 8" block out	Add "w/Rub Rail"			Have not used much double faced beam guard			
Others	MGS (12" blockout) w/ reduced post spacing	\$77,400	\$15,250	\$92,650	32	Need 8" block out				MI intends to use MGS with 8" offset blocks.			
	MGS (12" blockout) Strong Post Intersection Design				21					MI intends to use MGS with 8" offset blocks.			
Components	Modified W-Beam Weak Post, No Block	\$36,500	\$11,620	\$48,120	5								
	Beam guardrail end sections				39								
	Blocks (8 inches)				38								
	Blocks (12 inches)				0								
	Steel Posts				37								
CAST IN PLACE CONCRETE BARRIERS	Single Slope	Wood Posts				36							
		Guardrail Height Requirements				20					We measure beam guard the same way.		
		Single-Slope (CIP) Vertical Back				29		FDOT Version slightly dif.			WisDOT uses the Caltrans Design		
		Single-Slope (CIP) - Dual-Faced (Sheets 1 & 2 of 3)				27		same comment			MI would prefer an unreinforced barrier with a safety shape (F or NJ)		
		42" Single Slope Barrier (10.8 deg.)	\$134,400	\$31,840	\$166,240	17		FDOT Going to 38" and 44" tall SS			MI would prefer an unreinforced barrier with a safety shape (F or NJ)		
	F-Shape	42" Single Slope Barrier (9.1 deg.)	\$134,400	\$31,840	\$166,240	11		same comment			WisDOT uses the Caltrans Design		
		32" Single Slope Barrier (10.8 deg.)	\$119,200	\$31,840	\$151,040	10		same comment			WisDOT uses the Caltrans Design		
		32" Single Slope Barrier (9.1 deg.)	\$119,200	\$31,840	\$151,040	3		same comment			WisDOT uses the Caltrans Design		
		32" F-Shape Barrier	\$119,200	\$31,840	\$151,040	27	Use if passes MASH TL4, Phase out if it fails						
		42" F-Shape Barrier	\$134,400	\$31,840	\$166,240	26	May use on ARRC and APSC overcrossings				Has been used on individual projects, but there is not a standard		
	Vertical	42" Ontario Wall Median Barrier	\$134,400	\$31,840	\$166,240	6							
		32" New Jersey Barrier	\$119,200	\$31,840	\$151,040	11							
		42" New Jersey Barrier	\$134,400	\$31,840	\$166,240	4							
		42" Vertical Barrier	\$134,400	\$31,840	\$166,240	18		TL-3 with Raised Sidewalk in advance. Failed Caltran MASH Test					
		32" Vertical Barrier	\$119,200	\$31,840	\$151,040	8		TL-2 w/Raised Sidewalk in adv. Passed Caltran MASH TL-2 Test			WisDOT does not typically use this as a standard barrier design. Can be used on spot locations		
Others	42" Vertical Faced Concrete Barrier Incorporating Head Ejection Criteria	\$134,400	\$31,840	\$166,240	8		Should test 54" for TL-5 AASHTO struct. Protect. Reqmts						
	Single-Slope - Light Standard Foundation				25		FDOT slightly dif.			MI would prefer a safety shape (F or NJ) barrier			
	Single-Slope - 42" Light Standard Foundation				25		Same comment			WisDOT does not encourage staff to install stuff on top of a barrier			
	Single-Slope Split				24		Same comment			same comment			
	Single-Slope Wrap				23		Same comment			SDD 14b32 has fixed object protection barriers on page 3			
New Jersey	Single-Slope Cantilever Sign Struct. Foundation				18		Same comment			WisDOT doesn't encourage stuff on top of barrier			
	Single-Slope Sign Bridge Foundation				17		Same comment			SDD 14b32 has fixed object protection barriers on page 3			
	Single-Slope Transition for Monotube Sign Support				17		Same comment			WisDOT does not encourage staff to install stuff on top of a barrier			

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