

Design Speed (mph)	Pier End Inside Clear Zone	Pier End Outside Clear Zone
	Required Minimum Length	
≥ 50	Calculated Length of Need or 100 ft, whichever is greater	100 ft
≤ 45	Calculated Length of Need or 50 ft, whichever is greater	50 ft

LENGTH-OF-NEED REQUIREMENT FOR PIER PROTECTION

Figure 49-4K