

Title 158 WAC

DESIGN STANDARDS COMMITTEE--ARTERIAL STREETS

Chapter
158-04 **Washington state county arterial design standards.**

Chapter 158-04 WAC WASHINGTON STATE COUNTY ARTERIAL DESIGN STANDARDS

WAC
158-04-010 Washington state county arterial design standards.
158-04-990 Appendix A--Form.

WAC 158-04-010 Washington State County Arterial Design Standards. The Washington State County Arterial Design Standards adopted August 1, 1968 by the Design Standards Committee are hereby made a permanent rule pursuant to RCW 43.32.020.

A copy of these Design Standards will be available upon request to the State Aid Division, Department of Highways.

Counties shall apply these Design Standards in accordance with RCW 36.86.080. [Order 1, § 158-04-010, filed 9/16/68, effective 11/16/68.]

WAC 158-04-990 Appendix A--Form.

APPENDIX A--Form WASHINGTON STATE COUNTY ARTERIAL DESIGN STANDARDS

PROPOSED May 15, 1968 ADOPTED August 1, 1968

AVERAGE DAILY TRAFFIC (ADT) Current												Under 250			250-400		400-750	
DESIGN HOURLY VOLUME (DHV) 15 Yrs. Hence												100-200		200-400		400+		
SHARPEST CURVE (Degrees, and Radius in Feet)		Max.		Min.		Max.		Min.		Max.		Min.		Max.		Min.		
		D°	R'	D°	R'	D°	R'	D°	R'	D°	R'	D°	R'	D°	R'			
Flat		8.5	694	8.5	694	7.5	758	7.5	758	7.0	833							
Rolling		13.5	427	13.5	427	12.5	464	12.5	464	11.5	508							
Mountainous		25.0	231	25.0	231	23.0	250	23.0	250	21.0	273							
GRADIENT*		Maximum				Maximum				Maximum				Maximum				
Flat		6%				6%				6%				4%				
Rolling		8%				8%				7%				5%				
Mountainous		11%				11%				9%				7%				
PAVEMENT WIDTH		Minimum				Minimum				Minimum				Minimum				
		20'				20'				22'				24'				
		24'												24'				
STOPPING SIGHT DISTANCE																		
Flat		350'				350'				350'				350'				
Rolling		275'				275'				275'				350'				
Mountainous		200'				200'				200'				350'				

	PROPOSED May 15, 1968					ADOPTED August 1, 1968				
WIDTH OF ROADWAY**	28'	28'	34'	40'	40'	28'	34'	40'	40'	40'
NUMBER OF LANES	2	2	2	2	2	2	2	2	2	2
NEW BRIDGES#										
Curb to Curb Width (Ft.)	26"	26"	28'	40'	40'	26"	26"	28'	40'	40'
Design Load (AASHO)	HS-20	HS-20	HS-20	HS-20	HS-20	HS-20	HS-20	HS-20	HS-20	HS-20
Vertical Clearance	14.5'	14.5'	14.5'	14.5'	14.5'	14.5'	14.5'	14.5'	14.5'	14.5'
RIGHT OF WAY WIDTH	60'	60'	60'	Adequate	Adequate	60'	60'	60'	Adequate	Adequate

*May be steeper for short distances

**For guardrail installation, width of shoulder to be additional two feet

#All bridge curbs to meet state standards
Sidewalks to be determined on an individual basis

Geometric Design Standards for over 600 DHV shall be determined from the results of an engineering study based on AASHO or acceptable standards

SHEET 1 of 2

Where ADT is over 750 and the Design Speed is 50 mph or greater, those features for safety as described in the report of the special AASHO Traffic Safety Committee, February 1967, to the maximum extent practicable and feasible will be incorporated in roadway plans.

There are highway design and construction features wherever possible for accident prevention and survivability including at least the following:

1. Roadsides clear of obstacles, with clear distance being determined on the basis of traffic volumes, prevailing speeds, and the nature of development along the street or highway.
2. Supports for traffic control devices and lighting that are designed to yield or break away under impact wherever appropriate.
3. Protective devices that afford maximum protection to the occupants of vehicles wherever fixed objects cannot reasonably be removed or designed to yield.
4. Bridge railings and parapets which are designed to minimize severity of impact, to retain the vehicle, to redirect the vehicle so that it will move parallel to the roadway, and to minimize danger to traffic below.
5. Guardrails, and other design features which protect people from out-of-control vehicles at locations of special hazards such as playgrounds, schoolyards and commercial areas.

SHEET 2

[Order 1, Appendix A (codified as WAC 158-04-990),
filed 9/16/68, effective 11/16/68.]