

Chapter Hy 34

COUNTY TRUNK HIGHWAY STANDARDS

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Hy 34.01 General. (1) Pursuant to chapter 84, section 84.01 (9) (b), Wis. Stats., the highway commission, hereinafter referred to as the commission, prescribed these rules relating to improvement projects for the construction, reconstruction and processes incidental to building, fabricating or bettering a county trunk highway but not maintenance. Maintenance work includes all those measures and activities necessary to preserve the highway facility, as nearly as possible, in the condition of its construction. Maintenance work generally involves no changes in horizontal alignment, roadway widths, or grade.

(2) Any county trunk highway improvement project, were construction is started after January 1, 1977, shall follow the rules stated herein.

History: Cr. Register, September, 1971, No. 189, eff. 10-1-71; am. (2), Register, November, 1976, No. 251, eff. 12-1-76.

Hy 34.02 County trunk highway standards. (1) GEOMETRIC DESIGN. The geometric design standards to be applied to urban county trunk highway improvement projects shall be in conformance with the current state (division of highways) criteria, and, if applicable, federal criteria for the class of highway involved. The minimum geometric design standards to be applied to county trunk highway improvement projects shall be:

MINIMUM DESIGN STANDARDS FOR RURAL COUNTY TRUNK HIGHWAYS

DESIGN CLASS	TRAFFIC VOLUME ①		ROADWAY							STRUCTURE	
	CURRENT ADT	DESIGN YEAR ADT	DESIGN SPEED	ROADWAY WIDTH	SURFACE WIDTH	MAXIMUM HORIZONTAL CURVE ②	TERRAIN ③	MAXIMUM % GRADE	STOPPING SIGHT DISTANCE	HIGHWAY LOAD	CLEAR ROWY. WIDTH FOR STRUCT. ④
C1	Under 250	Under 500	40	28	20	12°-30'	F	10	275	H 20	24
							R	12			
							M	15			
C2	250-400	500-800	50	30	22	7°-30'	F	6	350	H 20	28
							R	7			
							M	9			
C3	400-750	800-1500	50	34	22	7°-30'	F	6	350	HS 20	28
							R	7			
							M	9			
C4	750-2000	1500-4000	50	40	24	7°-30'	F	6	350	HS 20	40
							R	7			
							M	9			
C5	Over 2000	Over 4000	60	44	24	5°-00'	F	5	475	HS 20	44
							R	6			
							M	6			

① Use DESIGN YEAR ADT to determine DESIGN CLASS for highways where a substantial traffic growth is expected. The ratio of DESIGN YEAR ADT to CURRENT ADT is not necessarily 2:1 as may be interpreted from comparing the two traffic columns.

② Maximum curvature for design speed shown and superelevation rate of 0.08 foot per foot.

③ Terrain: Flat (F), Rolling (R), Mountainous (M).

④ Structures in Design Classes C4 and C5 with a total length over 100 feet may be designed with a clear roadway width of 30 feet.

LEGEND

MAX = Maximum
% = Percent

STRUCT. = Structure
RDWY. = Roadway

(2) **DEFINITIONS.** (a) *Average daily traffic (ADT).* The average 24-hour volume, during a stated period divided by the number of days in that period. Unless otherwise specified, the period is one year.

(b) *Design speed.* The maximum safe speed that can be maintained over a specified section of highway when conditions are so favorable that the design features of the highway govern.

(c) *Roadway width.* The portion of a highway including shoulders, for vehicular use. A divided highway has 2 or more roadways.

(d) *Surface width.* The portion of the roadway, exclusive of shoulders, for the movement of vehicles. This portion of the roadway may also be referred to as the traveled way.

(e) *Shoulder width.* The portions of the roadway between the traveled way and the inside edges of slopes of ditches or fills exclusive of auxiliary lanes, curbs, and gutters.

(f) *Horizontal curve.* Any change in direction on a horizontal plane based on circular curvature.

(g) *Percent grade.* The rate of rise or fall of the surface of the roadway measured along the centerline expressed as a percentage. Thus a 1% grade will rise or fall one foot in 100 feet.

(h) *Sight distance (stopping sight distance).* The distance required by a driver of a vehicle, traveling at the average speed for a given highway design speed to bring his vehicle to a stop after an object on the roadway becomes visible. The height of eye in this case is 3.75 feet and the height of object is 6 inches.

(i) *District engineer.* The Wisconsin department of transportation, division of highways, district office, district engineer.

(j) *Highway load.* The highway live load for which the structures on the county trunk highways are to be designed.

History:Cr. Register, September, 1971, No. 189, eff. 10-1-71; r. and recr. Register, November, 1976, No. 251, eff. 12-1-76.

Hy 34.03 Deviations from the standards. (1) Deviations from these standards as outlined in section Hy 34.02 may be authorized in special cases where the strict application of these standards may be impractical and where such deviation is not contrary to the public interest, safety, and the intent of section 84.01 (9) (b), Wis. Stats. Any deviation from the rules herein shall be approved by the district engineer in writing.

History:Cr. Register, September, 1971, No. 189, eff. 10-1-71.

Hy 34.04 Project review. (1) On or before December 1 of each year the county highway commissioner shall file with the district engineer a report for his county certifying that any and all county trunk highway improvement projects for which funds were expended or obligated during that year were in conformance with the minimum standards established pursuant to section 84.01 (9) (b) Wis. Stats.

The certification shall be on forms prescribed by the commission. All county trunk highway improvement projects shall be reviewed by the district engineer for compliance with the standards stated herein. If any county has not complied with these standards the district engineer shall notify the county in writing stating the items which are noncomplying. When such non-complying projects have subsequently been made to comply with the standards, the district engineer shall so certify on forms designated for this purpose by the commission. If on July 1 of any year there are any remaining non-complying projects which have not been made to comply as certified by the district engineer, they shall be reported by the commission to the highway advisory committee of the legislative council.

History:Cr. Register, September, 1971, No. 189, eff. 10-1-71.