

Chapter Trans 205

COUNTY TRUNK HIGHWAY STANDARDS

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Note: Chapter Hy 34 as it existed on December 31, 1986 was repealed and a new chapter Trans 205 was created effective January 1, 1987.

Trans 205.01 Purpose. (1) Pursuant to s. 84.01 (9) (b), Stats., the department of transportation adopts these rules relating to projects for constructing or reconstructing and relating to processes incidental to building, fabricating or bettering a county trunk highway, but not relating to maintenance of a county trunk highway. Maintenance includes all those measures and activities necessary to preserve a highway, as nearly as possible, in the condition of its construction. Maintenance generally involves no change in horizontal alignment, roadway widths or grade.

(2) Any county trunk highway improvement project, on which construction is started after January 1, 1987, shall follow this chapter.

History: Cr. Register, December, 1986, No. 372, eff. 1-1-87.

Trans 205.02 Definitions. As used in this chapter:

(1) "Average daily traffic" or "ADT" means the average 24-hour traffic volume during a stated period divided by the number of days in that stated period; unless otherwise specified, the stated period is one year.

(2) "Bridge design load" means the maximum vehicle loading that a bridge is designed to accommodate without exceeding the allowable working capacity of any structural member or group or system of structural members.

(3) "Design speed" means 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.

(4) "District director" means a Wisconsin department of transportation, division of highways and transportation services, district office director.

Note: The department of transportation district offices and addresses are as follows:

District 1.....	2101 Wright Street.....	Madison 53704
District 2.....	141 N.W. Barstow Street	Waukesha 53187
District 3.....	944 Vanderperren Way.....	Green Bay 54304
District 4.....	1681 2nd Avenue South.....	Wisconsin Rapids 54494
District 5.....	3550 Mormon Coulee Road ...	LaCrosse 54601
District 6.....	718 W. Claremont Avenue....	Eau Claire 54701
District 7.....	Hanson Lake Road.....	Rhineland 54501
District 8.....	1701 N. Fourth Street	Superior 54880

(5) "Functional classification" has the meaning set forth in ch. Trans 76.

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(6) "HS20" has the meaning set forth in the American association of state highway and transportation officials (AASHTO) standard specifications for highway bridges, 13th edition 1983, as amended by interim specifications-bridges 1984 and 1985, published by AASHTO.

Note: The AASHTO standard specifications for highway bridges are available from AASHTO, 444 North Capitol Street, N.W., Washington, D.C. 20001. Copies of the relevant portion of the AASHTO standard are on file at the offices of the department of transportation, secretary of state and revisor of statutes.

(7) "Roadway" means the portion of a highway, including shoulders, for vehicular use.

Note: Under this definition, a divided highway has two or more roadways.

(8) "Shoulder" means that portion of a roadway that is contiguous to the traveled way and is used primarily for vehicle stopping in an emergency.

(9) "Traveled way" means the portion of the roadway designed for movement of vehicles, exclusive of the shoulders.

History: Cr. Register, December, 1986, No. 372, eff. 1-1-87.

Trans 205.03 County trunk highway standards. (1) The design standards for urban county trunk highway improvement projects shall conform with the applicable department of transportation criteria, and, if applicable, with the federal criteria for the class of highway involved. The minimum design standards for rural county trunk highway improvement projects shall be as set forth below for each of the rural county trunk highway functional classifications. The functional classification for a particular rural county trunk highway segment shall be that shown for the segment on the most current department of transportation rural functional system map prepared under ch. Trans 76 for local transportation aids purposes or, if applicable, on the most current federal aid system map.

(2) The rural county trunk highway minimum design standards for each of the rural county trunk highway functional classifications are as shown in the following tables:

TABLE (a) - ARTERIALS*

Design Class	Design ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway	BRIDGES***	
						Design Load	Clear Roadway Width in Feet
A1	Under 3500	60**	24	6	36	HS20	36
A2	3500-7000	60	24	10	44	HS20	44
A3	Over 7000	65	24(2)	6 Left 10 Right	40(2)	HS20	40

*Minimum design standards for sight distance, horizontal alignment and vertical alignment shall conform with applicable department of transportation criteria.

**For design class A1 the desirable design speed is 60 mph, but a minimum design speed of 55 mph is acceptable.

***The full width of bridge approach roadways shall continue across all new bridges, except when a bridge is a major structure on which design dimensions are subject to individual economic studies because of high unit cost.

Chapter Trans 207

DESIGN AND CONSTRUCTION OF MUNICIPAL HIGHWAY
 BRIDGES IN OR OVER NAVIGABLE STREAMS

Trans 207.01	Purpose (p. 379)	Trans 207.08	Waterway alterations (p. 384)
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Trans 207.04	Definitions (p. 380)	Trans 207.11	Notification to department of natural resources (p. 387)
Trans 207.05	Requirements of a conceptual plan (p. 383)	Trans 207.12	Public notices (p. 388)
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Trans 207.07	Flood flow requirements (p. 384)		

Trans 207.01 Purpose. The purpose of this chapter is to interpret and implement s. 84.01 (23), Stats., relating to providing standards and specifications for the design and construction of municipal public highway bridges, arches, and culverts over and in navigable streams to prevent undue impairment of public rights in navigable waters. In adopting these standards the department of transportation has followed these general guidelines.

(1) Constructing authorities are not empowered to block passage completely on any navigable stream, but on the other hand it is unreasonable to expect that unlimited overhead clearance be allowed on all streams. This means that a consideration of navigation blockage usually narrows to a question of degree of restriction: "How much physical restriction is possible at the site without preventing the movement of people, goods, and equipment that would reasonably be expected to pass through the site?"

(2) A constructing authority, in developing a rationale for partial restriction, shall not base such a rationale solely on highway needs and bridge costs but also on the fact that some sort of navigation is possible through the site and it will be accommodated by the proposed highway-water crossing.

(3) In an area only accessible by canoes, a drainage structure could conceivably be placed which was too small to accommodate a canoe. A portage route would have to be available, however, which was freely open to the public. In this way "passage" is assured for the type of navigation reasonably expected at the site.

(4) The portage concept is only reasonable in an area where the craft and equipment concerned can reasonably be carried by one or 2 persons for a short distance.

(5) In some cases, providing a sufficient pass-through clearance for vessels and flood water will still not be enough to accommodate the associated incidents of navigation. For example, it may be in the public interest to span an area of critical habitat as well. All of the pertinent factors encountered at each highway-water crossing must receive due consideration.

(6) New highway bridges or replacements of existing highway bridges over or in navigable waters shall minimize alteration of critical features of water habitats.

History: Cr. Register, June, 1981, No. 306, eff. 7-1-81.

Trans 207.02 Applicability. (1) COUNTY, TOWN, VILLAGE AND CITY HIGHWAY BRIDGES. (a) Pursuant to s. 84.01 (23), Stats., the standards in this chapter apply to the construction of county, town, village, and city highway bridges, arches, and culverts in or over navigable streams. The standards do not apply to projects under the supervision of the department that are done in compliance with s. 30.12 (4), Stats.

(b) These standards also apply to highway approaches to structures, but only within the physical areas defined in sub. (2) and only to those features of the proposed construction which would have an effect on water quality and other water-related aspects as described in this chapter.

(2) APPLICABLE AREA LIMITS OF HIGHWAY APPROACHES TO STRUCTURES. (a) All portions of a highway-water crossing which are proposed for construction and lie within the floodplain are within the purview of these standards, except that in those cases where the highway approach lies roughly parallel to the waterway but within the flood plain, the portion of highway approach under the purview of these standards shall approximate the distance from the structure abutment to the floodplain limit assuming a right-angle crossing.

(b) It is not the intent of these standards that the scope of what is proposed for construction be expanded solely for the purpose of including portions of existing adjacent roadways which are within the limits of the floodplain and not in conformance with the erosion control criteria established in s. Trans 207.09 except that overflow sections shall be addressed as provided in s. Trans 207.09 (3) (b).

(3) PERMITS FROM FEDERAL AGENCIES. In addition to complying with these standards, it may be necessary for constructing authorities to obtain permits from federal agencies such as the U.S. coast guard and the U.S. army corps of engineers.

History: Cr. Register, June, 1981, No. 306, eff. 7-1-81.

Trans 207.03 Responsibilities of constructing authorities. (1) Prior to the execution of construction contracts or work orders a certification shall be made by the constructing authorities that the standards of this chapter have been observed in the project design and will be observed through the construction phase.

(2) Town boards or village boards receiving county aid for construction under the provisions of s. 81.38, Stats., may defer responsibility of certification to the county if full charge of the work has been left to the county highway committee as set forth in s. 81.38 (4), Stats.

Note: Responsible officials should be aware that structures shall conform to this chapter to obtain funding under s. 81.38 (5), Stats.

History: Cr. Register, June, 1981, No. 306, eff. 7-1-81.

Trans 207.04 Definitions. (1) "Active stream erosion zone" means that portion of the roadway embankment at bridge abutments or ends of culverts and arches which, in conjunction with the structure, gives shape to the waterway opening and is directly exposed to flowing water during a Register, December, 1987, No. 384

TABLE (b) - COLLECTOR*

Design Class	TRAFFIC VOLUME		ROADWAY WIDTH DIMENSIONS IN FEET**				BRIDGES	
	Current ADT	Design ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway	Design Load	Clear Roadway Width in Feet
C1	0-400		40	22-24	2-4	26-32	HS20	26-30
C2	400-750	Under 1500	50	22-24	6	34-36	HS20	28-30
C3		1500-3500	55	24	6	36	HS20	32-34***
C4		Over 3500	60	24	8	40	HS20	40***

*Minimum design standards for sight distance, horizontal alignment, and vertical alignment shall conform to the applicable department of transportation criteria.

**Where a range of widths is shown, the smaller number is the minimum width and the larger number is the maximum width eligible for federal or state project participation.

***Bridges in design classes C3 or C4 having a total length over 100 feet may be designed with a clear roadway width of 30 feet.

TABLE (c) - LOCAL*

Design Class	TRAFFIC VOLUME		ROADWAY WIDTH DIMENSIONS IN FEET**				BRIDGES	
	Current ADT	Design ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway	Design Load	Clear Roadway Width in Feet
L1	0-250		40	20-22	2-4	24-30	HS20	24-28
L2	250-400		40	22	2-4	26-30	HS20	26-30
L3	400-750	Under 1500	50	22-24	6	34-36	HS20	28-30
L4		1500-3500	55	24	6	36	HS20	30-34***
L5		Over 3500	60	24	8	40	HS20	40***

*Minimum design standards for sight distance, horizontal alignment and vertical alignment shall conform with applicable department of transportation criteria.

**Where a range of widths is shown, the smaller number is the minimum width and the larger number is the maximum width eligible for federal or state project participation.

***Bridges in design class L4 or L5 having a total length over 100 feet may be designed with a clear width of 30 feet.

History: Cr. Register, December, 1986, No. 372, eff. 1-1-87.

Trans 205.04 Deviation from standards. A district director may authorize deviations from the standards in s. Trans 205.03 in special cases in which the strict application of those standards is impractical and in which the deviation is not contrary to the public interest and safety and is not contrary to the intent of s. 84.01 (9) (b), Stats. Any deviation from the standards shall be approved in writing by the district director.

History: Cr. Register, December, 1986, No. 372, eff. 1-1-87.

Trans 205.05 Project review. (1) On or before December 1 of each year, each county highway commissioner shall file with the appropriate district director a report for the county certifying that any and all county trunk highway improvement projects for which funds were expended or obligated during that year conformed to the minimum standards established under s. 84.01 (9) (b), Stats. The certification shall be on forms prescribed by the department of transportation. All county trunk highway improvement projects shall be reviewed by the district director for compliance with the standards stated in s. Trans 205.03.

(2) If any county has not complied with the standards, the district director shall notify the county in writing stating the items which are

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noncomplying. When the noncomplying projects have subsequently been made to comply with the standards, the district director shall certify compliance on forms designated for this purpose by the department of transportation. If on July 1 of any year there are in a county any remaining non-complying projects that have not been made to comply as certified by the district director, those projects shall be reported by the department of transportation to the appropriate legislative committees.

History: Cr. Register, December, 1986, No. 372, eff. 1-1-87.