

*Wisconsin*

*Manual On Uniform*

*Traffic Control*

*Devices*

**Supplement To The  
Manual On Uniform Traffic  
Control Devices**

**May 25, 2011**

**Wisconsin Manual on Uniform Traffic Control Devices  
Supplement to the Manual on Uniform Traffic Control Devices**

**Introduction**

The Department of Transportation of the State of Wisconsin, referred to hereinafter as the “Department”, has in accordance with Wisconsin Statutes designated the 2009 edition of the Manual on Uniform Traffic Control Devices for Streets and Highways (hereafter designated the Uniform Manual or MUTCD) and addendums, developed by the National Committee on Uniform Traffic Control Devices (NC) and approved by the Federal Highway Administration (FHWA), including all revisions, and errata, as the official Wisconsin Manual on Uniform Traffic Control Devices subject to the modifications set forth in this Supplement. The MUTCD as added, expanded and modified by this Supplement is applicable to the design, use, application, installation, maintenance, and operation of all traffic control devices on all highways in the state. Where a section appears in the MUTCD but no section with the same number appears in the Supplement, the MUTCD section is applicable without amendment.

Statutory reference to the adoption and authority of the Uniform Manual and Supplement is contained in the following sections:

[Wisconsin State Statute 84.02\(4\)\(e\)](#) The department shall adopt a manual establishing a uniform system of traffic control devices for use upon the highways of this state. The system shall be consistent with and, so far as practicable, conform to current nationally recognized standards for traffic control devices.

[Wisconsin State Statute 84.02\(4\)\(f\)](#) The department shall adopt a manual establishing a uniform system of signs, signals, markings and devices for the purpose of regulating, warning or guiding bicycle traffic on highways, streets, and bikeways, as defined in [Wisconsin State Statute 84.60\(1\)\(a\)](#). The system shall be consistent with and shall conform to the system established under par. (e).

[Wisconsin State Statute 349.065](#) Local authorities shall place and maintain traffic control devices upon highways under their jurisdiction to regulate, warn, guide or inform traffic. The design, installation and operation or use of new traffic control devices placed and maintained after the adoption of the uniform traffic control devices manual under [Wisconsin State Statute 84.02\(4\)\(e\)](#) shall conform to the manual. After January 1, 1977, all traffic control devices placed and maintained by local authorities shall conform to the manual.

From time to time there may be revisions to the MUTCD and Supplement. These will be incorporated in the Supplement only upon approval by the Department.

The Secretary has delegated to the State Traffic Engineer of the Department of Transportation the authority to make such specific interpretations, provided that all interpretations tending to cause a substantive change in the provisions of the Manual shall be approved by the Director of the Bureau of Traffic Operations prior to issuance.

## Part 1 – General

### Chapter 1A. General

#### Section 1A.07 Responsibility for Traffic Control Devices

**Standard:**

(01) The Department is responsible for the installation, maintenance and operation of traffic control devices on the State Trunk Highway System and for such devices as it erects on the detours thereof, and for guide signs (route markers and other directional signs) on Connecting Highways. No traffic control devices shall be placed upon the State Trunk Highway System except by authorization of the Department or pursuant to Wisconsin Statutes.

Stop and Yield signs and traffic control signals which control traffic proceeding along a Connecting Highway shall not be placed without the approval of the Department.

#### Section 1A.09 Engineering Study and Engineering Judgment

*Guidance:*

(06) The decision to use a particular device at a particular location should be made on the basis of either an engineering study or the application of engineering judgment. Thus, while this Manual provides Standards, Guidance, and Options for design and application of traffic control devices, this manual should not be considered a substitute for engineering judgment. Engineering judgment should be exercised in the selection and application of traffic control devices, as well as in the location and design of the roads and streets that the devices complement.

**Support:**

(07) Performance of engineering studies and exercising engineering judgment are presumed to include the use of Engineering Technicians or other qualified personnel who are trained in the principles and practices of traffic engineering studies or traffic control devices, and whose normal duties include performing engineering studies and designing, placing, operating and maintaining traffic control devices within a jurisdiction.

#### Section 1A.10 Interpretations, Experimentations Changes and Interim Approvals

**Standard:**

(03) The Department shall be sent copies of any correspondence sent to FHWA for permission to experiment, interim approval or changes. Copies of the correspondence shall be sent to the Wisconsin Department of Transportation, Bureau of Traffic Operations, 4802 Sheboygan Avenue, Room 501, and Madison, WI 53707 Attn: State Traffic Engineer.

#### Section 1A.13 Definitions of Headings, Words, and Phrases in this Manual

**Standard:**

(01) Standard statements shall not be modified or compromised based on engineering judgment or engineering study, except as described in Section 1A.09.

(03) Engineering judgment shall be exercised by an engineer trained and experienced in the principles and practices of traffic engineering and the administration of traffic control devices, or

**by an individual working under the supervision of such an engineer, through the application of procedures and criteria established by the engineer.**

**(03) An engineering study shall be performed by an engineer trained and/or experienced in traffic engineering studies, or by an individual working under the supervision of such an engineer, through the application of procedures and criteria established by the engineer.**

Option:

(03) The engineer described in these definitions may be certified as a Professional Traffic Operations Engineer.

**Part 2 – Signs**

**Chapter 2A. General**

**Section 2A.06 Design of Signs**

Support:

(01) Throughout the Signs portion of the supplement, references are made to signs, which are not mentioned in the MUTCD. Details on the design of these signs can be obtained by writing the State Traffic Engineer’s office or a Region Transportation Traffic section.

Option:

(16) Usage of phone numbers with more than 4 characters will be allowed for the Rideshare info signs (State sign plate D12-2 and D12-2A) in Wisconsin with the example phone numbers: 272-RIDE and 1-800-455-POOL.

**Section 2A.07. Retroreflectivity and Illumination**

*Guidance:*

(06) *Typical applications of LED signs (blinker signs) should be similar to Flashing Beacons in Section 4K. Use of LED (Light Emitting Diodes) sign units may be considered and use should be limited to conditions where:*

**Guideline 1:**

*A traffic and engineering study of a special location with demonstrated crash problem shows that a LED sign is desirable. The study should include an investigation of the crash history, approach speeds and local conditions.*

**Guideline 2:**

*A visibility restriction per the minimum visibility distance chart in 2C.46 as follows:*

Minimum Visibility Distance	
Posted or 85 <sup>th</sup> Percentile Speed	Minimum Visibility Distance
25 MPH	280
30 MPH	335
35 MPH	390
40 MPH	445
45 MPH	500
50 MPH	555
55 MPH	610
60 MPH	665
65 MPH	720

This table on minimum visibility distances references Exhibit 9-55 (Intersection sight distance – left turn from stop) of the 2004 AASHTO Standard Highway and Street Design Manual. Note – This Table is just for determination if the sign is needed: these are not sign placement criteria. This provides an added factor of safety beyond the stopping sight distance criteria.

**Guideline 3:**

*Unusual geometrics (horizontal curves, vertical curves, large number of approach lanes at an intersection.)*

Guideline 4:

*A sight line or visibility problem where the stop sign blends in with the surroundings and is not seen by approaching motorists.*

**Section 2A.09 Shapes**

*Guidance:*

(01) See Wisconsin MUTCD section 2D.11 for the shape of county highway route markers.

**Section 2A.10 Sign Colors**

Support:

Green background with white lettering is widely used and preferred for street name signs because of the good contrast between the two colors.

**Section 2A.11 Dimensions**

**Standard:**

(02) The WISDOT Sign Plate Book shall also be used for section 2B.03 (Size of Regulatory Signs), 2C.04 (Size of Warning Signs), 7B.01 (Size of School Area Signs), 8B.02 (Size of Grade Crossing Signs) and 9B.02 (Design of Bicycle Signs).

Support:

(01) The Department's Sign Plate Book contains sign designs that are predominantly used by the Department. Copies of the Department's sign plate books are available from the Bureau of Traffic Operations Extranet site, ([https://trust.dot.state.wi.us/extntgtwy/dtid\\_bho/extranet/manuals/index.shtm](https://trust.dot.state.wi.us/extntgtwy/dtid_bho/extranet/manuals/index.shtm)). These sign designs generally follow the Federal Standard Highway Signs but sometimes use a different code number.

Option:

Unless otherwise provided in the description of a specific sign or sign type, the FHWA minimum size (Department size code 1) warning and regulatory signs may be used on streets and highways which are neither State Trunk Highways, nor connecting highways and which have no more than one lane for traffic in each direction, and which have a speed limit of 30 mph or less.

**Standard:**

**FHWA minimum size (Department size code 1) signs erected in locations having a speed limit of 35 mph or more shall be replaced with a minimum of a size code 2 S (single lane roadway) and 2 M (multilane roadway) sign as applicable.**

**The minimum sign size on State Trunk Highways or Connecting Highways shall be conventional road size code 2 S or 2 M as noted in the guidance below and as outlined in the 2009 MUTCD sign size tables.**

*Guidance:*

*Conventional road single lane (size code 2S) – minimum size used for single lane roads as provided in Sections 2B.03 and 2C.04.*

*Conventional road multilane (size code 2M) – minimum size used for multilane roads as provided in Sections 2B.03 and 2C.04.*

*Oversize (size code 3) – generally used for conventional roads where special emphasis is needed based on engineering judgment. Note: The oversized table shown in Table 2B-1 does not equate to size code 3; but rather, is the largest size shown for special applications.*

*Expressways (size code 4)*

*Freeways (size code 5)*

*Bicycle (size code 6) intended for use on bicycle paths and trails*

*Snowmobile (size code 7) – intended for snowmobile trail. Snowmobile signs are referenced in DNR Trail Signing Handbook*

### **Section 2A.15 Enhanced Conspicuity for Standard Signs.**

#### **Standard:**

(05) **A separate STATE LAW plaque shall not be used.**

### **Section 2A.16 Standardization of Location**

#### *Guidance:*

(04) *Figure 2A-2 Warning sign on island (W12-1). A 2' minimum mounting height is an option for this sign in order to avoid blocking signal indications or other signs.*

### **Section 2A.18 Mounting Height**

#### **Option:**

The following signs may be mounted at 2' minimum vertical clearance:

W12-1 Double Arrows

The following signs may be mounted at 4' minimum mounting height:

W1-8 Chevrons

R6-4b Chevrons panel (roundabouts)

W5-52 Clearance striper (tiger boards)

D10 Reference posts (mile markers)

W5-56 and W5-56A End of Road Markers

W5-54D object markers

The following signs may be mounted at 5' minimum mounting height:

R1-1F portable or part-time (folding) stop signs

### **Section 2A.19 Lateral Offset**

#### **Option:**

(03) On freeways and expressways where the shoulder is greater than 6' wide, the lateral offset may be 12' minimum from the freeway or expressway edge of driving lane rather than 6' from the edge of the shoulder, but no less than 2' from the edge of gravel.

Where signs are mounted behind crash worthy protection such as guardrail or barrier wall, the lateral offset may be 4'-6" behind the guardrail, which allows for 3' 3" of guardrail deflection.

(07) The first option paragraph is expanded to clarify "where permitted" to mean the signs are permitted by the authority having jurisdiction for the light poles and utility poles.

#### **Section 2A.20 Orientation**

Support:

(02) No significant viewing advantage is obtained by tilting the vertical orientation of signs, and this practice may cause unnecessary construction complication.

#### **Section 2A.21 Posts and Mountings**

**Standard:**

(04) **Reflective strips shall not be installed on State-owned signposts unless authorized by the WisDOT Region Traffic Section based on an Engineering Study.**

## **Chapter 2B. Regulatory Signs, Barricades and Gates**

### **Section 2B.03 Size of Regulatory Signs**

Option:

(04) See Section 2A.11 of this Supplement for sizes of regulatory signs.

Low speed roadways are defined as having a speed limit of 30 MPH or less, where minimum size (size code 1) may be used.

(09) Regulatory signs facing traffic on entrance and exit ramps at service interchange ramps may be conventional road size.

### **Section 2B.04 Right-of-Way at Intersections**

Option:

The use of the R1-1 and R1-2 for right turn bypass may be by engineering judgment in lieu of engineering study.

Option:

(13) Portable or part-time (folding) STOP signs may be used at signalized approaches where, upon restoration of power, and after start-up/initialization, the traffic signal returns to stop-and-go operation.

Support:

(13) Wisconsin State Statute 346.46(1) mandates that a motorist stop before entering the intersection at a STOP sign, except when directed to proceed by a traffic control signal. The traffic signal operation supersedes the operation of the portable or part-time (folding) STOP sign. Therefore, if the portable or part-time (folding) STOP sign message is still displayed when the traffic signal becomes fully operational (stop-and-go operation), the statute permits drivers to proceed through the intersection, if so directed by a traffic signal.

### **Section 2B.05 STOP Sign**

Option:

(08) The use of the plaques (W4-4P, W4-4aP, W4-4bP) is optional per Section 2C.59 based on engineering judgment.

**Standard:**

**Portable or part-time (folding) stop signs shall not be a permanent installation, unless at a signalized approach for usage during a power outage.**

**The unit of government who has jurisdiction of the roadway approaching the STOP sign shall maintain the visibility of the Stop sign all the way to the face of the stop sign. See Section 2C.36 of this Supplement on visibility distances.**

**The unit of government who has jurisdiction of the through roadway shall be responsible for the installation and maintenance of the Stop sign placed on roadways at the approach to the through roadway. See Section 2C.36 of this Supplement on visibility distances.**

### **Section 2B.10 STOP Sign or YIELD sign Placement**

**Standard:**

(05) When a DO NOT ENTER sign is mounted back to back with a stop sign, the DO NOT ENTER sign shall be in the shape of the STOP sign if it obscures the shape of the STOP sign. Use this method only where there is limited space. The preferred mounting method is to mount the DO NOT ENTER sign on a separate post.

(16) Yield sign shall be required on left side at roundabout if a splitter island is available, at multilane approach roundabouts.

**Section 2B.11 Yield Here to Pedestrians Signs and Stop Here for Pedestrians Signs (R1-5 series)**

**Option:**

(07) The R1-5 and R1-5a may also be used at single lane approaches at mid-block pedestrian crossings.

**Guidance:**

*The W11-2 pedestrian warning sign should be used in Advance of the crossing.*

**Standard:**

(01) The R1-5b and R1-5c shall not be used.

**Section 2B.12 In-Street and Overhead Pedestrian Crossing Signs (R1-6, R1-6a, R1-9, R1-9a)**

**Standard:**

(01) The R1-6a (Stop for Pedestrians) shall not be used in Wisconsin. In Wisconsin, Statute 346.24 indicates Yield to Pedestrians. The R1-9a shall not be used in Wisconsin.

The R1-6 sign shall not be used at intersection approaches that are controlled by a stop sign.

The sign support shall be a maximum 2" square or 2" round post that meets NCHRP 350 breakaway standards.

The maximum mounting height shall be 2 feet to the bottom of the sign.

When used, signs shall be installed only at marked and maintained crosswalks.

When used, the In-Street Pedestrian Crossing sign shall be placed in each direction of the two-way street approach or utilize back-to-back signs.

**Guidance:**

*The sign is not recommended for roadways with a speed limit of 45 MPH or higher.*

**Section 2B.13 Speed Limit Sign (R2-1)**

**Standard:**

(01) Speed limit signs required per [Wisconsin State Statute 346.57\(6\)](#) shall be installed.

**Guidance:**

*A speed limit sign should not be erected between a stop ahead sign and stop sign or between a signal ahead sign and traffic signal or between a roundabout ahead sign and the roundabout, nor within or on*

*the approach to a school zone or a school crossing whose limits or locations will normally be defined by the installation of the school advance sign (S1-1) and school speed limit sign (R2-1 and S4-3).*

(01) *Speed zones should be determined according to the Department's Traffic Guidelines Manual, Chapter 13, Section 5, Subject 1 and the Wisconsin Statewide Speed Management Guidelines, [https://trust.dot.state.wi.us/extntgtwy/dtid\\_bho/extranet/manuals/index.shtm](https://trust.dot.state.wi.us/extntgtwy/dtid_bho/extranet/manuals/index.shtm).*

**Standard:**

**Statute 349.11 shall be adhered to for changes to speed limits.**

(08) **The R2-5 series plaques shall not be used on state highways or connecting highways.**

**Section 2B.14 Truck Speed Limit Sign (R2-2P)**

**Standard:**

(01) **Truck speed limit plaques shall not be used in Wisconsin.**

**Section 2B.15 Night Speed Limit Plaque (R2-3P)**

**Standard:**

(01) **Night speed limit plaques shall not be used in Wisconsin.**

**Section 2B.17 Higher Fines Signs and Plaque (R2-6P, R2-10, and R2-11)**

**Standard:**

(01) **The FINES HIGHER plaque shall not be used below or with a warning sign, except the school advance assembly (S1-1 and W16-9P signs).**

**The supplemental plaque specifying the times shall not be used.**

(08) **The supplemental plaque WHEN FLASHING shall not be used, except with temporary work zone speed limit.**

**Section 2B.18 Movement Prohibition signs (R3-1 through R3-4, R3-18, R3-27)**

*Guidance:*

(04) *The No left turn sign should be mounted next to the stop or yield sign.*

*Option:*

(04) *The No left turn sign may be installed under the stop or yield sign in urban areas where space is limited.*

**Section 2B.19 Intersection Lane Control Signs (R3-5 through R3-8)**

**Standard:**

**The word message OK shall not be used.**

*Guidance:*

(05) *R3-8 series signs should only be used as ground mounted signs.*

*Support:*

(09) WISDOT does not recommend the usage of curved stemmed arrows (fish hook arrows) as studies have shown they are no more effective than conventional arrows with dot.

#### **Section 2B.20 Mandatory Movement Lane Control Signs (R3-5, R3-5a, R3-7, and R3-20)**

**Standard:**

(05) If the R3-5, R3-5a or R3-6 is post mounted on an approach with two or fewer through lanes, a supplemental plaque, such as LEFT LANE (R3-5bP), HOV 2+ (R3-5cP), TAXI LANE (R3-5dP), CENTER LANE (R3-5eP), RIGHT LANE (R3-5fP), BUS LANE (R3-5gP), or BOTH LANES shall be added above the sign to indicate the specific lane to which the mandatory movement applies.

#### **Section 2B.21 Optional Movement Lane Control Sign (R3-6)**

**Standard:**

(07) The word OK shall not be used within the border of the (R3-6) sign.

#### **Section 2B.22 Advance Intersection lane Control Sign (R3-8 series).**

**Standard:**

(05) The R3-8 series sign shall only be used as a ground mounted sign. The word message “ok” shall not be used.

#### **Section 2B.24 Two-Way Left Turn Only Signs (R3-9a, R3-9b)**

**Standard:**

(01) Two-Way Left Turn Only (R3-9a or R3-9b) signs shall be used in conjunction with the required pavement markings where a nonreversible lane is reserved for the exclusive use of left-turning vehicles in either direction and is not used for passing, overtaking, or through travel.

#### **Section 2B.26 Reversible Lane Control Signs (R3-9 through R3-9i)**

**Standard:**

(01) Approval for reversible lane control signs shall be obtained from the Department for all state trunk connecting highways.

#### **Section 2B.37 DO NOT ENTER Sign (R5-1)**

*Guidance:*

(02) The DO NOT ENTER sign (R5-1) should be placed on the outside shoulder where the median width is 30 feet (distance measured from edge line to edge line of through lanes) or less and on the median side for median widths greater than 30 feet.

**Standard:**

If the DO NOT ENTER sign is placed back to back with the STOP or YIELD sign it shall not compromise the shape of the STOP sign or YIELD sign. If placed on back of the STOP sign, the DO NOT ENTER sign shall be the same shape as the stop sign or not protrude beyond the edge of the stop sign shape. If placed on back of a YIELD sign it shall not protrude beyond the edges of the YIELD sign.

#### **Section 2B.38 WRONG WAY Sign (R5-1a)**

Option:

(01) Figure 2B-12 (page 76) - Double signing of Do Not Enters or Wrong Ways is optional. A single (right or left depending on width of median) sign may be sufficient.

#### **Section 2B.40 ONE WAY Signs (R6-1, R6-2)**

*Guidance:*

(05) *STOP signs are not recommended in the median in cases where overhanging trucks are an issue.*

#### **Section 2B.41 Wrong Way Traffic Control at Interchange Ramps:**

*Guidance:*

(01) *The WRONG WAY sign should be located approximately 250' or more from the intersection.*

#### **Section 2B.45 Examples of Roundabout Signing**

Option:

(01) In Wisconsin the R3-8 Modified sign is preferred in lieu of the fishhook design.

#### **Section 2B.46 Parking Standing and Stopping Signs (R7 and R8 Series)**

**Standard:**

(01) Pursuant to authority contained in [Wisconsin State Statute 346.503\(3\), \(4\)](#), the Department prescribes the following standards relating to the signing for Disabled Parking Spaces in lieu of the R7-8 shown on page 88 (Figure 2B-24) of this section. (Full details on design and placement are set forth in the [Wisconsin Administrative Code under Trans 200.07 Handicapped Parking signs.](#))

- The sign shall consist of a white rectangle with longer dimension vertical, having green message, a green arrow, if required, and a blue and white international symbol for the barrier-free environments. The sign may be reflective or non-reflective.
- The sign shall include the words “reserved parking” and the words “vehicles with DIS or DIS/VET plates or state disabled card” or other words with a similar meaning.
- The size of the sign shall be not less than 12 inches by 18 inches. When used on a highway with a speed limit of more than 35 miles per hour, it shall be not less than 18 inches by 24 inches.
- A right arrow, left arrow or the words, “This Stall” or similar wording shall be included near the bottom of the sign.

Option:

(01) The sign may include additional supplemental message, which describes local ordinance language as appropriate, or special assignment of the stall or space.

#### **Section 2B.48 Placement of Parking, Stopping and Standing Signs**

*Guidance:*

(02) *Parking signs posted at intervals in long no-parking zones should be spaced in proportion to the speed limit on the street or highway. For highways having 40 miles per hour speed limits or higher the signs may be 300 feet or more apart and still be effective. As the prevailing speed of traffic is reduced spacing should also be reduced. In fully developed residential and business districts, 3 or 4 signs per block may be needed, or more depending on the length of the block. A practical consideration is that there are sufficient signs to give notice or proper enforcement.*

Support:

Pursuant to authority contained in [Wisconsin State Statute 349.13 \(1e\)\(c\)2](#), the Department prescribes these standards relating to Night Parking regulation signs which are intended to be erected at or reasonably near the corporate limits of a city or village. These rules do not apply to signs intended to be erected on individual streets to advise of specific parking regulations on that street even though such restrictions are in effect during night hours.

*Guidance:*

*The primary legend on night parking signs should be in letters not less than 5 inches in height, the secondary legend in letters not less than 3 inches in height, and any minor supplementary legend in letters not less than 1-inch in height.*

Support:

The term primary legend, as used above, includes, but is not necessarily limited to, such phrases as: “No Parking.” “30 Minute Parking,” and “Alternate Side Parking.”

The term secondary legend, as used above, includes, but is not necessarily limited to, such phrase as: “Midnight to 7 AM,” “November 15 to May 15,” and “All City Streets.” The term minor supplementary legend, as used above, includes, but is not necessarily limited to such phrases as: “City Ordinance” and “Contact Police for Details.”

#### **Section 2B.54 No Turn on Red Signs (R10-11 Series, R10-17a and R10-30)**

*Guidance:*

(02) *Where turns on red are prohibited, the No Turn On Red sign should be installed adjacent to the traffic control signal face in the far right quadrant of the intersection (or far left signal where left turns are prohibited).*

Option:

An additional No Turn On Red sign or signs may be installed on an approach where the visibility of the required sign may be impaired, or where the intersection is so wide or so angled that the required sign would be difficult to see.

*Guidance:*

*If an additional No Turn On Red is used, it should normally be on the near side of the intersection.*

Option:

R10-11S No Turn On Red When Children Are Present may be installed at locations where engineering judgment indicates the turn on red movement would conflict with a school crossing.

#### **Section 2B.55 Photo Enforced Signs and plaques (R10-18, R10-19P and R10-19aP)**

**Standard:**

(03) **The Photo Enforced Signs shall only be used when state law authorizes use of photo enforcement.**

#### **Section 2B.56 Ramp Metering signs (R10-28 and R10-29)**

**Standard:**

Preferential lane signs for freeways and expressways shall be the following Wisconsin DOT sign plate numbers:

- W3-8 Ramp Metered when flashing
- R3-11 (HOV symbol) + RAMP Buses, motorcycles and 2 or more occupant car pools only
- R3-11R (HOV symbol) + Left Lane Buses, motorcycles and 2 or more occupant car pools only
- R3-11L (HOV symbol) + Right Lane Buses, motorcycles and 2 or more occupant car pools only

Note: These are used in lieu of those shown in the MUTCD, for consistency.

**Standard:**

A preferential lane “LANE ENDS” sign shall not be required on ramps to freeways and expressways. In lieu of this, the “FORM SINGLE LINE” or the W4-2 lane reduction sign for merges after the ramp signal stop bar shall be used.

**Section 2B.58 Road Closed Sign (R11-2) and Local Traffic Only Signs (R11-3 Series, R11-4)**

Option:

(03) The words “Lane Closed” or “Ramp Closed” may be substituted for Road Closed on the R11-2 sign, where applicable.

**Section 2B.59 Weight Limit Signs (R12-1 through R12-5)**

**Standard:**

(03) Weight Limit signs shall be in compliance with the following provisions: A modification of sign R12-3 reading No Trucks over 6000 lbs or No Trucks over 3 Tons rather than 7000 lbs can be used by a city or village to restrict or prohibit heavy traffic pursuant to [Wisconsin State Statute 349.17](#).

The R12-5 sign shall not be used.

Option:

Other weight limit signs may be used where appropriate, for example:

R12-52 Axle Weight Limit – One Axle (X) Tons, Two Axles Under 8 feet Apart (X) Tons.

R12-56 Weight Limit – 2 Axle Vehicles (X) Tons – 3 or More Axle Vehicles (X) Tons –  
Combination Vehicles (X) Tons.

**Standard:**

Weight Limit signs shall include the words; “By Order of (the authority establishing the weight restriction)” except these words can be omitted on signs erected by cities and villages. Signs for Class “B” Highways shall be established pursuant to [Wisconsin State Statute 349.15\(2\)](#).

In the case of an extended length of restricted highway, a Weight Limit sign shall be placed on the right hand side of the restricted roadway so as to be clearly visible to all vehicles entering the restricted roadway from principal (major) intersecting highways on which the restriction does not apply.

*Guidance:*

*Seasonal Weight Limit signs should be placed at all intersections with State Trunk Highway, at all county lines, and at all city and village limits.*

**Standard:**

**An R12-55 (X) Ton Bridge (X) Miles Ahead sign or R12-57 Weight Limit – 2 Axle Vehicles – (X) Tons – 3 or more Axle Vehicles (X) Tons – Combination Vehicles (X) Tons – On Bridge – (X) Miles Ahead, shall be erected in advance of a bridge on which a weight restriction has been established.**

**Section 2B.60 Weigh Station Signs (R13 series)**

**Standard:**

(01) In Wisconsin, the R13-1 “TRUCKS OVER 4 TONS STOP AT WEIGH STATION shall be used.

**Chapter 2C. Warning Signs and Object Markers**

**Section 2C.04 Size of Warning Signs**

Support:

(02) Table 2C-2 shall be revised as to read that sign W12-1 may be 18" X 18" or 24" X 24" based on engineering judgment.

Option:

See section 2A.11 of this Supplement regarding minimum size application, which applies to warning signs. Minimum size signs (Department size code 1) may be used on low-speed roadways. Low speed roadways are defined as having a speed limit of 30 MPH or less.

**Section 2C.05 Placement of Warning Signs**

Support:

(02) Table 2C-4 in the MUTCD establishes distance values for the location of warning signs. With emphasis added, the language in this MUTCD section indicates the table values are suggested minimum sign placement distances and that the values contained in the table are for guidance purpose and should be applied with engineering judgment. The following table contains the recommended placement distances of warning signs in lieu of the values given in the MUTCD, for urban or rural conditions.

**Table 2C-4 Guidelines for Advanced Placement of Warning Signs  
(English Units)**

Posted or 85 <sup>th</sup> – Percentile Speed	Advanced Placement Distance <sup>1</sup>								
	Condition A: Speed reduction and lane changing in heavy traffic <sup>2</sup>	Condition B Deceleration to the listed advisory speed (mph) for the condition <sup>4</sup>							
		0 <sup>3</sup>	10 <sup>4</sup>	20 <sup>4</sup>	30 <sup>4</sup>	40 <sup>4</sup>	50 <sup>4</sup>	60 <sup>4</sup>	70 <sup>4</sup>
20 mph	225 ft	100 <sup>6</sup>	N/A <sup>5</sup>						
25 mph	325 ft	150 ft	100ft	N/A <sup>5</sup>					
30 mph	460 ft	200 ft	150 ft	100 ft					
35 mph	565 ft	250 ft	200 ft	175 ft	N/A <sup>5</sup>				
40 mph	670 ft	300 ft	275 ft	250 ft	175 ft				
45 mph	775 ft	400 ft	350 ft	300 ft	250 ft	N/A <sup>5</sup>			
50 mph	885 ft	550 ft	425 ft	400 ft	325 ft	225 ft			
55 mph	990 ft	750 ft	500 ft	475 ft	400 ft	300 ft	N/A <sup>5</sup>		
60 mph	1100 ft	1000 ft	575 ft	550 ft	500 ft	400 ft	300 ft		
65 mph	1200 ft	1000 ft	650 ft	625 ft	575 ft	500 ft	375 ft	100 <sup>6</sup>	
70 mph	1250 ft	1000 ft	650 ft	625 ft	575 ft	500 ft	375 ft	375 ft	
75 mph	1350 ft	1000 ft	650 ft	625 ft	575 ft	500 ft	375 ft	375 ft	100 ft <sup>6</sup>

Notes:

1. The distances are adjusted for a sign legibility distance of 180 ft for Condition A. The distances for Condition B have been adjusted for a sign legibility of 250 ft, which is appropriate for an alignment warning symbol sign. For Conditions A and B, warning signs with less than 6-inch legend of more

than four words, a minimum of 100 feet should be added to the advance placement distance to provide adequate legibility of the warning sign.

2. Typical conditions are locations where the road user must use extra time to adjust speed and change lanes in heavy traffic because of a complex driving situation. Typical signs are Merge and Right Lane Ends. The distances are determined by providing the driver a PRT of 14.0 to 14.5 seconds for vehicles maneuvers (2005 AASHTO Policy, Exhibit 3-3, Decision Sight Distance, Avoidance Maneuver E) minus the legibility distance of 180 ft for the appropriate sign.
3. Typical condition is the warning of a potential stop situation. Typical signs are Stop Ahead, Yield Ahead, Signal Ahead and Intersection Warning signs. The distances are based on the 2005 AASHTO Policy, Exhibit 3-1, Stopping Sight Distance, providing a PRT of 2.5 seconds, a deceleration rate of 11.2 feet/second<sup>2</sup>, minus the sign legibility distance of 180 feet.
4. Typical conditions are locations where the road user must decrease speed to maneuver through the warned condition. Typical signs are Turn, Curve, Reverse Turn, or Reverse Curve. The distance is determined by providing a 2.5 second PRT, a vehicle deceleration rate of 10 feet/second<sup>2</sup>, minus the sign legibility distance of 250 feet.
5. No suggested distances are provided for these speeds, as the placement location is dependent on site conditions and other signing. An alignment warning sign may be placed anywhere from the point of curvature up to 100 feet in advance of the curve. However, the alignment warning sign should be installed in advance of the curve and at least 100 feet from any other signs.
6. The minimum advance placement distance is listed as 100 feet to provide adequate spacing between signs.

#### **Section 2C.06 Horizontal Alignment Warning Signs**

*Guidance:*

(03) *If less than 1000 ADT, the Advisory Speed Sign (W13-1P) should be used with the appropriate curve or turn warning sign when the posted speed varies from the curve or turn speed by 10 mph or more.*

#### **Section 2C.07 Horizontal Alignment signs (W1-1 through W1-5 W1-11, W1-15)**

**Standard:**

(01) **On compound curves or turns (the curve or turn being all in one direction) the Advisory Speed plate (W13-1P), where used, shall show the lowest applicable speed.**

*Guidance:*

*If less than 1000 ADT, the Advisory Speed sign (W13-1P) should be used with the Curve or Turn sign on curves or turns where the posted speed varies from the curve speed by 10 mph or more. See Table 2C-5 in the 2009 MUTCD for ADTs of 1000 or more.*

**Standard:**

**When used, a Reverse Curve sign (W1-4) or a Reverse Turn signs (W1-3) shall be used if two curves or turns are separated by a tangent of less than 600 feet. If the first curve or turn is to the right, a Right Reverse Curve or Turn sign shall be used, and if the first curve or turn is to the left, a Left Reverse Curve or Turn sign shall be used.**

*Guidance:*

*In a reverse turn situation a Large Arrow sign (W1-6) and/or a series of Chevron signs (W1-8) should be placed at each of the turns.*

*Guidance:*

*If less than 1000 ADT, the Advisory Speed sign, should be used with the Reverse Curve or Turn sign on curves or turns where the posted speed varies from the curve speed by 10 mph or more. The advisory speed with the reverse curve or turn should be the advisory speed of whichever curve or turn has the lower advisory speed. Where the advisory speed on the first curve or turn is 10 mph or more higher than the advisory speed on the second curve or turn, a Curve or Turn signs with the appropriate Advisory Speed plaque should be erected between the two curves or turns. See Table 2C-5 in the 2009 MUTCD for ADTs of 1000 or more.*

**Standard:**

**If less than 1000 ADT, a Winding Road sign (W1-5) shall be used if there are three or more curves or turns separated by tangent distances of less than 600 feet. When used, the winding road sign shall be placed in accordance with Table 2C-4, Condition B of this supplement. See Table 2C-5 in the 2009 MUTCD for ADTs of 1000 or more.**

*Guidance:*

*For all ADTs, on prolonged sections of highways having continuous winding road conditions, particularly where the advisory speed changes by as much as 10 mph, additional Winding Road signs should be used.*

*If less than 1000 ADT, in a winding road situation at a minimum a Large Arrow sign (W1-6) and/or a series of Chevron signs (W1-8) should be placed at the first curve or turn. See Table 2C-5 in the 2009 MUTCD for ADTs of 1000 or more.*

**Section 2C.09 Chevron Alignment Sign (W1-8)**

**Support:**

The MUTCD classifies the Chevron alignment sign as a sign, but it is basically a delineator with a directional connotation, and it is this aspect of the device, which restricts its use to horizontal curves or far side of an intersection to inform drivers of horizontal alignment change.

*Guidance:*

(05) *It is desirable to begin the chevrons prior to the approach tangent and extend them through the end of the curve and place one chevron directly ahead of an approaching vehicle while the vehicle is on the approach tangent.*

**Section 2C.11 Combination Horizontal Alignment/Intersection sign (W1-10 Series)**

*Guidance:*

(02) *If less than 1000 ADT, the combination horizontal/intersection sign (W1-10) should include an advisory speed plaque where the posted speed varies from the curve speed by 10 mph or more. See Table 2C-5 in the 2009 MUTCD for ADTs of 1000 or more.*

**Section 2C.14 Advisory Exit and Ramp Speed Signs (W13-2, W13-3)**

**Standard:**

(05) **If used, the Exit sign (W13-2) shall be used at off-ramps on freeways and expressways when the ramp connects to a conventional state trunk highway or local crossroad and on ramp connections between freeways where the guide signing establishes that the ramp is an exit.**

**If used, the Ramp sign (W13-3) shall be used at ramps along freeways or expressways which provide access to safety rest areas, scales, scenic outlooks and tourist information centers where the**

traffic must return directly to the freeway or expressway upon leaving the facility; ramps on the continuation of the same numbered freeway; and ramps from local roads or conventional State Trunk Highways serving as connections to freeways, expressways or to other conventional highways.

#### **Section 2C.18 HILL BLOCKS VIEW Sign (W7-6)**

*Guidance:*

(02) Refer to the Minimum Visibility Distance Chart in section 2C.46 when determining the need for a sign.

#### **Section 2C.20 NARROW BRIDGE Sign (W5-2)**

**Standard:**

The word message NARROW BRIDGE sign (W5-2) is the standard sign. A narrow bridge sign shall be used at all two-lane, two-way bridges where the total width of the driving lanes is at least 16 feet but less than 24 feet and where the bridge driving lanes are narrower than the approach driving lanes. A Striped Marker (W5-52) otherwise designated OM-3 shall be installed in line with the bridge parapet or barrier curb when the parapet or curb is less than 6 feet from the edge of the nearest driving lane.

*Guidance:*

On any approach to a bridge where the shoulder is narrowed it is recommended that the convergence be delineated with a minimum of two Lead-In Markers (W5-53), same as Type 2 Object Marker, spaced at 100 feet or proportionately less for lower speed highways.

#### **Section 2C.25 Double Arrow sign (W12-1)**

**Option:**

(01) The Double Arrow sign W12-1 (Department sign code W12-1D) is used to identify an obstruction in the roadway, such as on the approach nose of a raised curb island. The minimum mounting height shall be 2 feet above the roadway.

The W12-1 Double Arrow sign may be modified to show only one diagonal down arrow to the right or left to advise road users that traffic is permitted to pass only to the right or left of a roadway feature or obstruction.

#### **Section 2C.27 Low Clearance Signs (W12-2 and W12-2a)**

**Standard:**

(01) The Low Clearance sign (W12-2) sign shall be used at all points where the clearance over any part of the usually traveled portion of the roadway is less than 14' - 6". Where the clearance is less than 13' - 6" an additional sign to that affect shall be placed at the nearest intersection on which a vehicle can detour onto. The appropriate XXX MILES AHEAD plaque (W57-52) shall be added to the advance sign.

On all freeway/expressway interchanges, low clearance signs shall be placed in advance of the exit over height vehicles can use to avoid the low clearance bridge, as well as at the bridge location itself where the bridge clearance is less than 14' - 6".

*Guidance:*

*On oversize/overweight (OSOW) freight network routes, clearances of 14’-6” or higher should be considered for installation of low clearance signs depending on the OSOW vehicles using specific routes and as approved by the region traffic engineer. Low clearance signs should be considered for clearances of 14’-6” or higher on OSOW secondary routes if the secondary route has structure clearances that are less than on the parallel OSOW primary route.*

Option:

At the discretion of the maintaining authority of a roadway, troublesome or frequently hit structures with clearances at 14’ - 6” and above may be signed.

If a segment of roadway contains a number of structures that are marked for clearances an advance sign may be placed in advance of an exit that would allow an over height vehicle to detour onto another route. If the lowest structure in the segment is below 14’ - 6” the sign shall read “Low Clearance Structures next XX Miles”. If the lowest structure is 14’ - 6” or above the sign shall read “XX’ XX” Minimum Clearance next XX miles”. Both of these signs shall have a black legend on a yellow background.

### **Section 2C.28 BUMP and DIP signs (W8-1, W8-2)**

*Guidance:*

(01) *The recommended signing practice for isolated bumps in the traveled portion of the highway is to install a BUMP (W8-1) or DIP (W8-2) sign at a distance corresponding to that required to reduce speed to an estimated level to prevent damage to cargo or discomfort to passengers. (See Section 2C.05 of MUTCD)*

*An Advisory Speed Plaque (W13-1P) may be used supplementary to a BUMP or DIP sign only after a careful determination of the advisory speed. Conditions shall be monitored to maintain an appropriate advisory speed. Where the advisory speed plaque is 30 mph or less, an additional BUMP or DIP sign may be located at the bump or dip, in which case a Department Single Arrow sign (W12-1L or W12-1R) should be installed below the sign pointing downward toward the bump or dip.*

*A few bumps or dips together should be signed with a Bumps (W8-1A) or Dips (W8-2A) sign.*

*A long series of bumps or dips or a combination of bumps and dips should be signed with a Rough Road sign (W8-8). Rough Road signs, when necessary, should be repeated at a maximum of 3 mile spacing.*

### **Section 2C.32 Surface Condition Signs (W8-5, W8-7, W8-8, W8-11, W8-13 and W8-14)**

Option:

(05) A Bridge May Be Icy sign (W8-64) may be used in place of Bridge Ices Before Road sign (W8-13).

*Guidance:*

*Wisconsin Department of Transportation recommends the use of Bridge May Be Icy sign (W8-64).*

### **Section 2C.36 Advanced Traffic Control Signs (W3-1, W3-2, W3-3, W3-4)**

**Standard:**

(01) A Stop Ahead sign (W3-1) shall be erected by the County in advance of any Stop sign that controls traffic entering a rural State Trunk Highway from a County Trunk Highway regardless of visibility distance.

When a County Trunk Highway approaches a State Trunk Highway in an urban situation or for other roadways approaching a State Trunk Highway, the following shall apply:

A Stop Ahead sign (W3-1) shall be erected in advance of any Stop sign that controls traffic where the Stop sign is not readily visible for a distance shown in the Minimum Visibility Distance table below. Readily visible implies that the entire stop sign should be continuously visible to the approaching driver as the driver proceeds from the minimum visibility distance to the stop location. The unit of government who has jurisdiction of the roadway on which the Stop Ahead sign is to be placed shall be responsible for the installation and maintenance of the Stop Ahead sign.

The unit of government who has jurisdiction of the roadway approaching the Stop sign shall maintain the visibility of the Stop sign all the way to the face of the stop sign.

The unit of government who has jurisdiction of the thru roadway shall be responsible for the installation and maintenance of the Stop sign placed on roadways at the approach to the thru roadway.

*Guidance:*

Posted or 85 <sup>th</sup> Percentile Speed	Minimum Visibility Distance
25 MPH	280
30 MPH	335
35 MPH	390
40 MPH	445
45 MPH	500
50 MPH	555
55 MPH	610
60 MPH	665
65 MPH	720

This table on minimum visibility distances references Exhibit 9-55 (Intersection sight distance – left turn from stop) of the 2004 AASHTO Standard Highway and Street Design Manual. Note – This Table is just for determination if the sign is needed: these are not sign placement criteria. This provides an added factor of safety beyond the stopping sight distance criteria.

*Guidance:*

A Signal Ahead sign (W3-3) should be erected in advance of all traffic control signals having an approach speed limit of 45 mph or greater. It is permissible to omit the Signal Ahead sign from intersections which follow the first signal in a closely spaced series. Closely spaced intersections are defined as approximately 1/4 mile, or less, spacing

See table 4D-2 for minimum sight distance requirements for signals.

**Section 2C.38 Reduced Speed Limit Ahead Signs (W3-5, W3-5a)**

*Guidance:*

(01) *Reduce speed ahead signs are recommended when the regulatory speed is reduced from 65 or 55 mph. See 2009 MUTCD Guidelines for reductions of speed from 50 mph or less.*

*Option:*

The sign may be installed for reductions of speed limits of 10 mph or less.

*Guidance:*

*Wisconsin Department of Transportation recommends the use of the Speed Reduction sign W3-5.*

**Section 2C.42 Lane Ends Signs (W4-2, W9-1, W9-2)**

*Option:*

A lane ends sign may be installed on a freeway parallel entrance ramp.

**Section 2C.46 Intersection Warning signs (W2-1 through W2-8)**

*Guidance:*

*The following guidelines have been developed to aid in determining when a Cross Road (W2-1) or Side Road (W2-2 or W2-3) sign is desirable.*

*Guideline 1:*

*The approaching through highway traffic is not visible to a driver stopped on the crossroad per the minimum visibility distance shown in the table below. At each intersection where a Cross Road or Side Road sign is proposed under this guideline, a separate survey of sight distance should be made along the through highway in each direction from the intersecting road since a sign could be warranted on one approach but not on the other.*

*Guideline 2:*

*A traffic and engineering study of a special location with demonstrated crash potential, shows that a Cross Road or Side Road sign is desirable. The study should include an investigation of the crash history, approach speeds and local conditions. Advisory Speed signs may be used with Cross Road or Side Road signs erected under this guideline, and if used, the speed shown should be based on the data obtained in the study.*

*The Cross Road or Side Road sign is regarded as symbolic rather than pictorial. Modification of the line widths to show the relative importance of the intersecting roads, as an option in the MUTCD, should not be done.*

*Guidance:*

	Minimum Visibility Distance	
Posted or 85 <sup>th</sup> Percentile Speed	Minimum Visibility Distance	
25 MPH	280	
30 MPH	335	
35 MPH	390	
40 MPH	445	
45 MPH	500	
50 MPH	555	
55 MPH	610	
60 MPH	665	
65 MPH	720	

This table on minimum visibility distances references Exhibit 9-55 (Intersection sight distance – left turn from stop) of the 2004 AASHTO Standard Highway and Street Design Manual. Note – This Table is just for determination if the sign is needed: these are not sign placement criteria. This provides an added factor of safety beyond the stopping sight distance criteria.

*On oversize/overweight (OSOW) freight network routes or on roads intersecting OSOW routes, these distances should be re-assessed to consider the stopping distances of OSOW vehicles or the effect of long or slow vehicles crossing the road.*

**Section 2C.49 Vehicular Traffic Warning Signs (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12P, W11-14, W11-15 and W11-15a)**

**Guidance:**

*Refer to the Minimum Visibility Distance Chart in section 2C.46 when determining the need for a sign.*

**Section 2C.50 Nonvehicular Warning Signs (W11-2, W11-3, W11-4, W11-6, W11-7, W11-9 and W11-16 through W11-22)**

**Standard:**

(04) When used, all nonvehicular traffic signs shall be placed in advance of the actual crossing except for the Pedestrian sign (W11-2) and wheelchair sign (W11-9). An additional sign assembly may also be placed at the location of the crossing as well.

When used, the pedestrian sign (W11-2) and wheelchair sign (W11-9) shall be placed at the point of crossing as well as in advance for locations where the posted speed limit is 45 mph or greater. The advanced pedestrian sign shall be supplemented with an AHEAD (W16-19P).

If a distance plaque is used, the legend AHEAD (W16-19P) or NEXT XX MILES shall be used. The distance plaque XX feet (W16-2) or XX meters (W16-2a) shall not be used in Wisconsin for nonvehicular traffic signs.

The W11-15 or W11-15a, Recreational trail crossing sign shall follow the parameters listed above similar to the W11-2 pedestrian sign.

**Option:**

The Snowmobile Crossing signs (W11-6) may be erected to give advance warning where an authorized snowmobile trail, as defined in [Wisconsin State Statute 350.01\(17\)](#), crosses a highway. Refer to Section 2C.37 of this supplement for the Minimum Visibility Distance table when a sign may be desirable.

**Section 2C.55 Distance Plaques (W16-2 series, W16-3 series, W16-4P, W7-3aP)**

**Standard:**

The distance plaque XX feet (W16-2P) or XX meters (W16-2a) shall not be used in Wisconsin for non-vehicular traffic signs.

If used, a distance plaque with the word AHEAD (W19-9p) or NEXT XX MILES shall be used.

**Section 2C.61 PHOTO ENFORCED plaque (W16-10P)**

**Standard:**

(01) The W16-10P plaque shall only be used when state law authorizes use of photo enforcement.

**Section 2C.63 Object Marker Design and Placement Height**

*Guidance:*

(08) *Object Markers in the OM1 (W5-54) series, when used to delineate an island should be installed at a minimum mounting height of 2 feet (See Section 2A.18 of the Wisconsin Supplement).*

**Section 2C.65 Object Markers for Obstructions Adjacent to the Roadway**

Support:

(01) Application of object markers at narrow bridges is covered in Section 2C.20 of the Wisconsin Supplement.

**Section 2C.66 Object Markers for Ends of Roadways**

**Standard:**

(02) Standard end-of-roadway markers shall be solid red retroreflective panels with or without red retroreflectors. The OM4-2 sign shall not be used as an object marker for the end of roadways.

## **Chapter 2D. Guide Signs Conventional Roads**

### **Section 2D.04 Size of Signs**

Support:

(01) See section 2A.12 of this Supplement for sizes of guide signs.

### **Section 2D.11 Design of Route Signs**

**Standard:**

(01) **The M1-6 County Route Sign illustrated in the MUTCD is intended to identify a special system of important County Highways, and shall not be used unless the Wisconsin Counties Association has established a state-wide system as prescribed by the National Association of Counties.**

(13) **The standard County Route Sign (M1-5A) shall be a white square with black border and legend.**

### **Section 2D.20 TRUCK Auxiliary Sign**

*Guidance:*

(01) *A truck route municipally established which is designated as an alternate to a regular numbered State Highway route should be marked at each end with a sign. The sign should consist of the M4-4 truck sign, route marker sign and directional arrow. A sufficient number of Truck Route signs, with appropriate arrow, should be erected along the truck route to enable truckers to follow it without difficulty. A route sign or route marker should be used with each Truck Route Sign.*

Option:

(01) A city or village may establish a truck route or system of truck routes as provided in [Wisconsin State Statute 349.17](#).

### **Section 2D.29 Route Sign Assemblies**

Option:

(09) In reference to figure 2D-6, the Route Sign Assembly may be located on the near right side of the intersection, next to the STOP sign.

### **Section 2D.31 Advance Route Turn Assembly**

**Standard:**

(01) **On a County Trunk Highway at its junction with a State Trunk Highway or another County Trunk Highway, a Junction Assembly shall be used.**

(01) **An Advance Route Turn Assembly and Route Turn Assembly shall be used if the County Trunk Highway turns.**

*Guidance:*

(05) *In rural areas it is recommended that spacing of assemblies as shown in Figure 2D-6 (Sheets 1,2 and 3) be increased considerably where speed limits are high. For example, the Advance Route Turn assembly should be placed between 750 and 1000 feet from the intersection.*

### **Section 2D.35 Trailblazer Assembly**

*Guidance:*

(01) *If trailblazer assemblies directing to a State Trunk Highway are placed by cities or villages, the route selected should be reviewed by the Department, have adequate confirmation signing, sign designed in accordance with the MUTCD, the signs should be maintained in accordance with MUTCD sections 1A.05 and 2A.08 and be the most direct route to the State Trunk Highway.*

### **Section 2D.38 Destination Signs at Circular Intersections**

Support:

(04) WisDOT recommends not using curved-stem arrows on destination signs at circular intersections.

### **Section 2D.43 Street Name Signs (D3-1)**

Option:

(07) For overhead street name signs, 8" upper case letters and 6" lower case letters may be used in lieu of 12" upper case letters and 9" lower case letters when the structural adequacy of the overhead sign support is a factor.



**Standard:**

(20) **Counties and local units of government shall not attach street name signs on WisDOT maintained sign posts (for ground mounted signs). For these situations, the street name signs shall be placed on their own supports, however they shall not obstruct the motorist's view of the STOP sign or any other signs.**

*Guidance:*

(20) *For STOP signs maintained by the County, the local unit of government should request permission from the County to place street name signs on STOP sign posts.*

*On intersections with WisDOT maintained roadways, it is recommended that street name signs be placed in the opposite quadrant as the STOP sign, typically on the left side.*

### **Section 2D.45 Signing on Conventional Roads on Approaches to Interchanges**

Option:

(02) For multi-lane approaches to interchanges, if lateral space for ground mounted entrance direction signs is not available, standard destination (D1 series signs) and advance route turn assemblies (J2 series signs) may be used until an improvement project makes installation of overhead entrance direction signs feasible.

## **Chapter 2E. Guide Signs – Freeways and Expressways**

### **Section 2E. 23 Signing for Intermediate and Minor Interchange Multi-Lane Exits with an Option Lane**

*Guidance:*

(04) *If there is no overhead arrow per lane guide sign or diagrammatic guide sign for multi-lane exit with option lanes then the R3-8 series sign should be installed.*

### **Section 2E.33 Advance Guide Signs**

*Guidance:*

(02) *At intermediate interchanges, only one advance guide sign is required. If the sign is located less than 0.5 mile from the exit, the distance should be the nearest 1/4 mile.*

### **Section 2E.53 Wrong-Way Traffic Control At Interchange Ramps**

**Standard:**

(01) **If a DO NOT ENTER sign is mounted back to back with a stop sign, the DO NOT ENTER sign shall be in the shape of the STOP sign if it obscures the shape of the STOP sign. Use this method only where there is limited space. The preferred mounting method is to mount the DO NOT ENTER sign on a separate post.**

(01) **A DO NOT ENTER sign shall not be mounted back to back with a YIELD sign.**

## **Chapter 2H. General Information Signs**

### **Section 2H.06 Reference Location Signs and Enhanced Reference Location Signs (D10-4, D10-5)**

**Standard:**

(04) Enhanced reference location signs (D10-4) and intermediate enhanced reference location signs (D10-5) shall have blue backgrounds with white numerals, letters, and borders, except for the route shield, which shall be the standard color and shape.

(06) Enhanced reference location signs and intermediate enhanced reference location signs shall be installed in the median.

## **Chapter 2J. Specific Services Signs**

### **Section 2J.01 Eligibility**

#### **Standard:**

(01) Specific Services Signing shall follow [Wisconsin State Statute 86.195](#) and [Wisconsin Administrative Rule TRANS 200.06](#).

## **Chapter 2K. Tourist-Oriented Directional Signs**

### **Section 2K.07 State Policy**

#### **Standard:**

(01) Tourist-Oriented Directional Signs shall follow [Wisconsin State Statute 86.196](#) and [Wisconsin Administrative Rule TRANS 200.08](#).

## **Part 3 – Pavement Marking**

### **Chapter 3B. Pavement and Curb Markings**

#### **Section 3B.03 Other Yellow Longitudinal Pavement Markings**

**Standard:**

In Figure 3B-7, a yellow taper shall connect the yellow two-way left turn markings to the centerline for traffic heading into a designated left turn lane. All two-way markings shall be carried through minor intersections.

#### **Section 3B.06 Edge Line Pavement Markings**

Edge line marking shall not continue through a signalized intersection/driveway.

Edge line marking shall not continue through a stop controlled intersection with a public road.

Edge line marking shall continue through all driveways unless a full width turn lane has been provided.

If used, right edge line pavement markings delineate the right-hand edge of the rightmost traffic lane.

#### **Section 3B.18 Crosswalk Markings**

**Standard:**

Crosswalk areas, which differ in material or color from the adjoining pavement, shall be outlined with white crosswalk lines.

Retroreflective colored pavements shall not be used.

#### **Section 3B.19 Parking Space Markings**

**Support:**

[Wisconsin State Statutes 346.51 to 346.55](#) describe provisions for standing, stopping and parking. Figure 3B-21 (pg. 386) shows parking prohibited for a distance of 20 to 30 feet from the near limits of a crosswalk. [Wisconsin State Statute 346.53\(5\)](#) restricts parking no closer than 15 feet to the near limits of any crosswalk. This limitation would apply on the approach to a traffic signal as well, but in usual practice, prohibitions of up to 100 feet are common on the approach to a signal where the approach is one lane plus parking or otherwise restricted such that provisions need to be made to allow through traffic to bypass left turning traffic thereby increasing intersection efficiency.

#### **Section 3B.21 Speed Measurement Markings**

**Standard:**

Speed measurement markings, if used, shall be white, 24 inches in width and 6 feet in length centered over both edge lines of a freeway.

## **Chapter 3F. Delineators**

### **Section 3F.03 Delineator Application**

*Guidance:*

*As described in the [Wisconsin State Statute 346.41\(3\)](#), the appropriate color for delineators denoting driveways should be blue.*

## **Chapter 3G. Colored Pavements**

### **Section 3G.01 General**

#### **Standard:**

**Crosswalk areas, which differ in material or color from the adjoining pavement, shall be outlined with white crosswalk lines.**

**Retroreflective colored pavements shall not be used.**

## Part 4 – Highway Traffic Signals

### Chapter 4D. Traffic Signal Control Features

#### Section 4D.04 Meaning of Vehicular Signal Indications

**Standard:**

**(03) The following meanings shall be given to highway traffic signal indications for vehicles and pedestrians:**

**C. Steady red signal indications shall have the following meanings:**

**3. No pedestrian, bicyclist, or rider of an electric personal assistive mobility device facing such signal (red signal) shall enter the roadway unless he or she can do so safely and without interfering with any vehicular traffic. (Wisconsin State Statute 346.37(1)(c)2)**

#### Section 4D.11 Number of Signal Faces on an Approach

**Standard:**

**(01) The signal faces for each approach to an intersection or a midblock location shall be provided as follows:**

- D. When a separate left turn phase is provided, at least two signal faces shall be provided to control that movement.**
- E. When right turn signalization is used for a channelized right turn lane, two signal faces shall be installed.**
- F. A signal face shall be placed directly in line with the center of the approach lane or lanes on the stem approach to a “T” intersection.**
- G. Permanent traffic signals shall not be installed on overhead cables or any other means which would permit significant movement under windy conditions.**

**Option:**

Temporary traffic signals may be installed on overhead cables if construction or maintenance operations would not make post or mast arm mounting possible. If installed on overhead cables, temporary traffic signals must be converted to post or mast arm mountings as soon as possible after the construction operation permits.

#### Section 4D.15 Mounting Height of Signal Faces

**Standard:**

**(03) The bottom of the signal housing and any related attachments to a vehicular signal face located over any portion of a highway that can be used by motor vehicles shall be at least 17 feet above the pavement at the highest point on the roadway.**

#### 4D.32 Temporary and Portable Traffic Control Signals

**Option:**

Temporary or portable traffic signals associated with one lane, two-way facilities in temporary traffic control zones, may use a minimum of 2 signal faces per direction.

**Standard:**

**For temporary or portable traffic signals associated with one lane, two-way facilities in temporary traffic control zones, one of the two heads shall be located at least 50 feet, but not more than 100 feet beyond the stopping point. If both heads are located more than 50 feet beyond the stopping point, at least one of the indications shall extend out over the roadway.**

#### **4D.34 Use of Signs at Signalized Intersection**

Option:

Portable or part-time (folding) STOP signs may be positioned at signalized intersections for use during emergencies, such as power failures, when the traffic control signals are dark.

**Standard:**

**When used, portable or part-time (folding) STOP signs shall only be placed on approaches that emergency/conflict flash red.**

## **Chapter 4L. Flashing Beacons**

### **Section 4L.03 Warning Beacon**

#### **Standard:**

**Warning Beacons shall be mounted on the same support as the warning or regulatory sign or marker which the beacon supplements**

**(05) If a Warning Beacon is located over the roadway, the clearance above the pavement shall be a minimum of 17 feet and a maximum of 19 feet.**

## Chapter 4M. Lane-Use Control Signals

### Section 4M.03 Design of Lane-Use Control Signals

#### Standard:

(11) The bottom of the signal housing of any lane-use control signal face shall be a minimum of 17 feet and a maximum of 19 feet above the pavement grade.

**Part 5 – Traffic Control Devices for Low-Volume Roads**

**Chapter 5A. General**

**Sections 5A.03 Design**

**Standard:**

(01) For a sign in Table 5A-1 for which a size is not shown in the “minimum” column, the size as set forth in Table 2B-1, 2C-2, 6F-1 or 8B-1 for that particular sign shall also be applicable on low-volume roads.

## Chapter 5C. Warning Signs

### Section 5C.04 Stop Ahead and Yield Ahead Signs (W3-1, W3-2)

**Standard:**

(01) If the low volume road is a county trunk highway, a Stop Ahead sign shall be erected by the County in advance of any Stop sign, which controls traffic entering a rural state trunk highway from a county trunk highway regardless of visibility restrictions.

*Guidance:*

See visibility charts in Section 2C.36 of this Supplement for other situations that require Stop Ahead signs.

### Section 5C.05 Narrow Bridge Sign (W5-2)

**Standard:**

The criteria listed in Section 2C.20 of this Supplement shall be followed for narrow bridge signing.

### Section 5C.09 Vehicular Traffic Warning and Non-Vehicular Warning Signs (W11 Series and W8-6)

**Standard:**

See section 2C.49 and 2C.50 of the supplement for the required criteria.

### Section 5C.10 Advisory Speed Plaque (W13-1P)

**Standard:**

See section 2C.08 of the supplement regarding determination of an appropriate advisory speed.

*Guidance:*

See Section 2C.07 of this Supplement regarding the criteria as to when to use advisory speed signs with a horizontal alignment sign.

## **Chapter 5E. Markings**

### **Section 5E.04 Delineators**

*Guidance:*

*As described in the [Wisconsin State Statute 346.41\(3\)](#), the appropriate color for delineators denoting driveways should be blue.*

## **Chapter 5F. Traffic Controls for Highway-Rail Grade Crossings**

### **Section 5F.02 Grade Crossing (Crossbuck) Sign and Number of Tracks Plaque (R15-1, R15-2P)**

Support:

(05) Double-sided Crossbuck signs are considered equivalent to back-to-back Crossbuck signs.

### **Section 5F.04 STOP and YIELD Signs**

**Standard:**

(03) When required, placement of the Stop Ahead (W3-1) sign or Yield Ahead (W3-2) sign shall comply with the provisions of Section 8B.06 of the Wisconsin Supplement.

## **Chapter 5G. Temporary Traffic Control Zones**

### **Section 5G.02 Applications**

#### **Standard:**

(03) **Figure 6H-11 shows yield-sign control at a one-lane, two-way site. Yield-sign control shall not be used at one-lane, two-way sites on any roadway declared as a through highway.**

#### **Option:**

At one-lane, two-way sites on roadways declared as through highways, Figures 6H-10, 6H-12, 6H-18, or STOP signs for both directions of travel may be used as appropriate for conditions at the site.

## Part 6 – Temporary Traffic Control

### Chapter 6C. Temporary Traffic Control Elements

#### **Section 6C.04 Advance Warning Area**

*Guidance:*

*For Table 6C-1, the following should be used to differentiate Urban (low speed) roads from Urban (high speed) roads:*

*Urban (low speed): Speed limits of 25-30 mph.*

*Urban (high speed): Speed limits of 35-40 mph.*

*For urban low speed roads, the minimum advance warning area and distance between signs (A, B, and C) in Table 6C-1 should be approximately 200 feet.*

**Option:**

For urban low speed roads, where field conditions such as location of intersections, trees, existing signs or other obstructions dictate, the minimum advance warning area and distance between signs (A, B, and C) in Table 6C-1 may be as short as 100 feet.

#### **Section 6C.08 Tapers**

**Option:**

(05) MUTCD guidance on device spacing says the maximum distance in feet between devices in a taper should not exceed 1.0 times the speed limit in mph. This distance in feet may be modified to a maximum of 1.25 times the speed limit in mph to correspond with the pavement marking cycle length (length of one broken line segment plus one gap).

Devices in a downstream taper or a one-lane, two-way taper may be placed at a spacing of approximately 25 feet.

*Guidance:*

(14) *No fewer than five devices should be used for a one-lane, two-way taper.*

#### **Section 6C.08 Tapers, Section 6C.10 One-Lane, Two-Way Traffic Control, and 6C.15 Stop or Yield Control Method of One-Lane, Two-Way Traffic Control**

**Standard:**

**At one-lane, two-way sites, the MUTCD allows yield-sign control. Yield-sign control shall not be used at one-lane, two-way sites on State Trunk Highways, Connecting Highways, or any other roadways declared as through highways.**

**If STOP signs are used at one-lane, two-way sites, both directions shall be stopped.**

## **Chapter 6F. Temporary Traffic Control Zone Devices**

### **Section 6F.02 General Characteristics of Signs**

*Guidance:*

*Table 6F-1, Note 3: For conventional highways with speed limits of 45 mph or greater, the size of diamond shaped temporary traffic control warning signs should be a minimum of 48 x 48 inches.*

### **Section 6F.03 Sign Placement**

Option:

(11) MUTCD guidance says signs mounted on portable supports should not be used for a duration of more than 3 days. This maximum time duration may be revised to 7 continuous days and nights.

### **Section 6F.06 Regulatory Sign Design**

*Guidance:*

(01) *Temporary traffic control signs not included in the FHWA's "Standard Highway Signs and Markings" book should conform to the Department's "Sign Plate" book.*

### **Section 6F.08 ROAD (STREET) CLOSED Sign (R11-2)**

Option:

The words LANE CLOSED or RAMP CLOSED may be substituted for ROAD (STREET) CLOSED where applicable.

### **Section 6F.09 Local Traffic Only Signs (R11-3a, R11-4)**

Option:

(01) The Local Traffic Only signs may also be used at the point of closure if access beyond the closure is allowed for traffic originating within, or having a destination on, the portion of the roadway closed to through traffic.

The ROAD (STREET) CLOSED TO THRU TRAFFIC (R11-4) sign may be used in rural or urban areas.

*Guidance:*

*Where the point of closure is more than ½ mile beyond the sign (1000 feet if urban), the ROAD CLOSED XX MILES AHEAD, LOCAL TRAFFIC ONLY (R11-3) sign should be used.*

*Where the point of closure is less than ½ mile beyond the sign (1000 feet if urban), the ROAD (STREET) CLOSED TO THRU TRAFFIC sign should be used.*

*At the point of closure where access is allowed beyond the closure for traffic originating within, or having a destination on, the portion of the roadway closed to through traffic, the ROAD (STREET) CLOSED TO THRU TRAFFIC sign should be used.*

### **Section 6F.10 Weight Limit Signs (R12-1, R12-2, R12-5)**

Option:

A marked detour for vehicles weighing more than the weight limit may not always be necessary or practical. Consider the volume of traffic, classification of roadway, and suitability of designating a single detour route for all vehicles weighing more than the limit.

**Standard:**

**The R12-5 symbol sign for combination truck weights shall not be used.**

See Section 2B.59 for more standards on weight limit signs.

**Section 6F.16 Warning Sign Function, Design, and Application**

*Guidance:*

(02) *Temporary traffic control signs not included in the FHWA's "Standard Highway Signs and Markings" book should conform to the Department's "Sign Plate" book.*

*See Section 2C.38 for Guidance for Speed Reduction Signs (W3-5 Series).*

**Section 6F.17 Position of Advance Warning Signs**

*Guidance:*

(01) *For low-speed urban streets, the distance from the closest sign to the temporary traffic control zone and the distance between signs in Table 6C-1 should be approximately 200 feet.*

*Option:*

For low-speed urban streets, where field conditions such as location of intersections, trees, existing signs or other obstructions dictate, the distance from the closest sign to the temporary traffic control zone and the distance between signs in Table 6C-1 may be as short as 100 feet.

**Section 6F.28 EXIT OPEN and EXIT CLOSED Signs (E5-2, E5-2a)**

*Option:*

The EXIT CLOSED panel may be placed horizontally across or below the interchange/intersection guide signs.

**Section 6F.29 EXIT ONLY Sign (E5-3)**

*Guidance:*

*When EXIT ONLY signs are used, the following signs should also be used as needed to provide appropriate guidance for through and exiting traffic:*

- A. Route signs (M1-1, M1-4, M1-5A, M1-6) with directional arrow or USE RIGHT/LEFT LANE plaques;*
- B. Signs indicating to motor vehicle traffic a required maneuver from a specific lane such as RIGHT LANE FOR EXIT ONLY (R3-75); and/or*
- C. Advance Guide, Exit Direction, and Exit Gore signs.*

**Section 6F.50 Other Warning Signs**

*Option:*

The Department's W12-1L and W12-1R signs, with black legend on an orange background, may be used to advise road users that traffic is permitted to pass only to the right or left of a roadway feature or obstruction.

#### **Section 6F.55 Guide Signs**

Option:

(04) Guide signs in temporary traffic control zones may be in their normal colors.

#### **Section 6F.59 Detour Signs (M4-8, M4-8a, M4-8b, M4-9, M4-9a, M4-9b, M4-9c and M4-10)**

Option:

(04) The M4-9 sign may be used for the Detour Arrow sign in lieu of the M4-10 sign.

**Standard:**

**Fluorescent pink Detour signs shall not be used.**

#### **Section 6F.63 Channelizing Devices**

Option:

(08) MUTCD guidance on device spacing says the spacing should not exceed a distance in feet equal to 1.0 times the speed limit in mph when used for taper channelization, and a distance in feet equal to 2.0 times the speed limit in mph when used for tangent channelization. To correspond with the pavement marking cycle length (length of one broken line segment plus one gap), or multiples of the pavement marking cycle length, the device spacing may be modified to a maximum of 1.25 times the speed limit in mph for taper channelization, and 2.5 times the speed limit in mph for tangent channelization.

*Guidance:*

*No fewer than five devices should be used for a one-lane, two-way taper.*

#### **Section 6F.76 Opposing Traffic Lane Divider and Sign (W6-4)**

**Standard:**

**Opposing Traffic Lane Divider (W6-4) signs shall not be used on roadways with speed limits of 45 mph or greater.**

## **Chapter 6G. Type of Temporary Traffic Control Zone Activities**

### **Section 6G.10 Work Within the Traveled Way of a Two-Lane Highway**

#### **Standard:**

(06) For one-lane, two-way conditions on roads with low traffic volumes, the MUTCD allows stop or yield-sign control. Yield-sign control shall not be used for one-lane, two-way conditions on State Trunk Highways, Connecting Highways, or any other roadways declared as through highways.

If STOP signs are used for one-lane, two-way conditions, both directions shall be stopped.

## **Chapter 6H. Typical Applications**

### **Section 6H.01 Typical Applications**

**Support:**

The devices shown in a particular diagram indicate how devices can be used based on the foregoing text and do not create standards or guidance unless supported by a standard or guidance statement in the text or in the notes accompanying that diagram.

Table 6H-3.

**Guidance:**

*The following should be used to differentiate Urban (low speed) roads from Urban (high speed) roads:*

*Urban (low speed): Speed limits of 25-30 mph.*

*Urban (high speed): Speed limits of 35-40 mph.*

*For urban low speed roads, the distance between signs (A, B, and C) should be approximately 200 feet.*

**Option:**

For urban low speed roads, where field conditions such as location of intersections, trees, existing signs or other obstructions dictate, the distance between signs (A, B, and C) may be as short as 100 feet.

Figure 6H-3.

**Option:**

The ROAD WORK NEXT X MILES (G20-1) sign may be omitted.

Figures 6H-3, 6H-6, 6H-10, 6H-12, 6H-15, 6H-23, 6H-24, 6H-25, 6H-26, 6H-27, 6H-32, 6H-33, 6H-37, 6H-43, 6H-44 and 6H-46.

**Guidance:**

*The END ROAD WORK sign should be used on long-term stationary work lasting more than seven (7) days.*

Notes for Figure 6H-4.

**Option:**

Note 2: The Supplemental Distance plaque may be omitted.

Figure 6H-4.

**Option:**

The shadow vehicle may be omitted.

Figure 6H-8.

Option:

The advance route turn sign assembly may be placed as close as 500 feet to the intersection or other distance as determined by engineering judgment.

Figures 6H-8, 6H-9, 6H-19 and 6H-20.

Option:

The M4-9 sign may be used for the Detour Arrow sign in lieu of the M4-10 sign.

Figures 6H-9, 6H-19 and 6H-20.

Option:

The END DETOUR (M4-8a) sign may be omitted.

Figure 6H-11.

**Standard:**

**Yield-sign control shall not be used at one-lane, two-way sites on State Trunk Highways, Connecting Highways, or any other roadways declared as through highways.**

Option:

At one-lane, two-way sites on State Trunk Highways, Connecting Highways, or other roadways declared as through highways, Figures 6H-10, 6H-12, 6H-18, or STOP signs for both directions of travel may be used as appropriate for conditions at the site.

Notes for Figure 6H-14.

Option:

Note 2: As shown on the typical application drawing, the no passing lines are optional.

Figure 6H-17.

Option:

Use of a shadow vehicle may not always be practicable, such as on roadways with traffic volume less than 1500 AADT and with good sight distance.

Notes for Figures 6H-19 and 6H-20.

*Guidance:*

*Where Detour signs are placed on a state trunk highway to mark a detour of a local road, Street Name signs should be used with the Detour signs to indicate the name of the street being detoured.*

Option:

The Street Name sign may be white on green, black on orange, or black on white.

Notes for Figures 6H-40 and 6H-44.

Option:

The acceleration lane may be omitted.

*Guidance:*

*Use of a YIELD or STOP sign should be based on engineering judgment.*

Notes for Figures 6H-41 and 6H-42.

Option:

The EXIT CLOSED panel may be placed horizontally across or below the interchange/intersection guide signs.

Figure 6H-43.

Option:

As an alternative to the ROAD WORK XXXX FT sign with supplementary ON RAMP plaque, a RAMP WORK XXXX FT or RAMP WORK AHEAD sign may be used.

## **Chapter 6I. Control of Traffic Through Traffic Incident Management Areas**

### **Section 6I.01 General**

#### **Standard:**

- (10) **Fluorescent pink Detour signs shall not be used.**

## Part 7 – Traffic Control for School Areas

### Chapter 7B. Signs

#### Section 7B.01 Size of School Signs

Option:

(01) See section 2A.11 of this Supplement for sizes of school signs.

#### Section 7B.03 Position of Signs

Option:

(02) Lateral offset – On expressways where the shoulder is greater than 6 feet wide, the lateral offset may be 12 feet minimum from the expressway edge of the driving lane rather than 6 feet from the edge of shoulder. The sign(s) may be 2 feet from the edge of the gravel portion of the shoulder for State highways and expressways.

Where signs are mounted behind crash worthy protection such as guardrail or barrier wall. The lateral offset may be 4’6” behind the guardrail rather than 6’ offset as required per the Department’s Facilities Development Manual.

#### Section 7B.08 School Sign and Plaques

**Standard:**

(02) The School Sign (S1-1) shall be supplemented with the AHEAD plaque (W16-9p) when used in advance of school crossing or school area or school zone. The XXX feet sign (W16-2 series) shall not be used.

#### Section 7B.09 School Zone sign (S1-1) and plaques (S4-3P, S4-7P) and End School zone sign (S5-2)

**Standard:**

(01) In accordance with [Wisconsin State Statute 118.08](#), an S1-1 School Sign and supplemental plaque (W16-9P, Ahead) shall be erected in advance of the school grounds at the prescribed distance for warning signs at the normal speed limit, where the school grounds border the roadway, regardless of the presence of fencing. “School grounds” refers to public and private schools and their surrounding grounds where any of grades K through 12 are regularly taught during the normal school year.

(02) The S4-3P School plaque shall not be used in Wisconsin.

Support:

The definition of “private school” to see if it qualifies for signing can be found in [Wisconsin State Statute 115.001\(3r\)](#).

#### Section 7B.10 Higher Fines Zone Signs (R2-10, R2-11 ) and plaques

**Standard:**

(03) In Wisconsin the End School Zone sign shall be used in lieu of the End Higher Fines Zone sign.

**The END SCHOOL ZONE sign (S5-2) and FINES HIGHER sign (R2-6P) are required at school zones because fines are double in Wisconsin at school zones per State Statute 346.60.**

**In Wisconsin, the FINES HIGHER sign (R2-6P) shall be used in lieu of the BEGIN HIGHER FINES ZONE sign (R2-10) or FINES DOUBLE sign (R2-6aP) or \$XX FINE sign (R2-6bP)**

**The FINES HIGHER sign (R2-6P) shall be placed under the School Advance Assembly (S1-1 Sign with W16-9p Plaque).**

Option:

The FINES HIGHER sign and END SCHOOL ZONE sign may be installed as school signs are replaced in the area (due to age or condition of signs) or if there is a construction project that will replace the signing in the area.

Option:

The END SCHOOL ZONE sign may be installed below the R2-1 Speed limit sign at the end of the school zone.

#### **Section 7B.12 School Crossing Assembly**

##### **Standard:**

(04) **The R1-6a (Stop for Pedestrians) shall not be used in Wisconsin. In Wisconsin, Statute 346.24 indicates Yield to Pedestrians.**

**If used, the In-Street Pedestrian Crossing sign (R1-6 and S4-3 or in-street S1-1 and 12" x 12" reduced size version W16-9P) shall only be used as an in-street sign, not on the outside shoulder or parking lane.**

**The R1-6 sign shall not be used at intersection approaches that are controlled by a stop sign.**

**The sign support shall be a maximum 2" square or 2" round post that meets NCHRP 350 breakaway standards.**

**The maximum mounting height shall be 2 feet to the bottom of the sign.**

**If used, only one sign (in-street pedestrian crossing sign) per approach shall be used and only at marked crosswalks.**

**If used, the In-Street Pedestrian Crossing sign shall be placed in each direction of the two-way street approach or utilize back to back signs.**

*Guidance:*

*The in-street signs are not recommended for roadways with speeds of 45 mph or higher.*

#### **Section 7B.13 SCHOOL BUS STOP AHEAD Sign [S3-1]**

*Guidance:*

(01) *Refer to the Minimum Visibility Distance table in Section 2C.46 of this Supplement for recommended sight distances, as criteria for installing a sign.*

**Section 7B.15 School Speed Limit Assembly [S4-1P, S4-2P, S4-3P, S4-4P, S4-6P, S5-1]**

**Standard:**

(01) Wisconsin Statutes authorize the authority in charge of the maintenance of the highway to establish and post speed limits at schools and school crossings in accordance with statutory provisions, ([see Wisconsin State Statute 349.11](#)).

Where it is used the School Speed Limit assembly shall be erected separately from and following the S1-1 School Warning sign. A fixed message School Speed Limit sign assembly will consist of an S4-3P School sign, an R2-1 Speed Limit sign with appropriate numerals, and an S4-2P When Children Are Present sign.

The S4-2 supplementary sign shall be used rather than the S4-1P, S4-4P or S4-6P sign.

(03) In Wisconsin, the END SCHOOL ZONE sign (S5-2) shall be used in lieu of the END SCHOOL speed limit sign (S5-3) or the END HIGHER FINES ZONE sign (R2-11).

*Guidance:*

*Because the Fines Higher sign (R2-6P) is required on the School Advance Assembly (S1-1 sign with W16-9P plaque), the Fines Higher sign is not required to be mounted below the School Speed Limit Assembly.*

*Option:*

An alternate sign may be a single panel (S4-51) with corresponding messages in conformance with all aspects of the individual signs (S4-3P, R2-1 and S4-2P).

*Support:*

[Wisconsin State Statute 346.57\(4\)](#) now introduces the term Child and Crossing Guard into the regulations when the 15 mph speed limit is applicable. It is the Department's legal opinion that the message on the S4-2 When Children Are Present sign is the appropriate message to be displayed and not modified to include the terms Child or Crossing Guard.

**Section 7B.16 Reduced Speed School Zone Ahead Sign [S4-5, S4-5a]**

*Guidance:*

(01) *If used, the Wisconsin Department of Transportation recommends the use of the Reduced Speed School Zone Ahead sign S4-5.*

**Section 7B.17 Parking and Stopping Signs [R7 and R8 Series]**

**Standard:**

[Wisconsin State Statute 346.52\(2\)](#) covers parking at schools.

## **Chapter 7C. Markings**

### **Section 7C.02 Crosswalk Markings**

#### **Standard:**

**Crosswalk areas, which differ in material or color from the adjoining pavement, shall be outlined with white crosswalk lines.**

## **Part 8 – Traffic Control for Railroad and Light Rail Transit Grade Crossings**

### **Chapter 8A. General**

#### **Section 8A.02 Use of Standard Devices, Systems, and Practices at Highway-Rail Grade Crossings**

Support:

(09) In Wisconsin the Office of the Commissioner of Railroads has statutory authority over grade crossings and is considered to have jurisdiction over grade crossings even though it is not a highway agency. Minor modifications to existing highway-rail grade crossing traffic control systems, such as upgrading signal lenses or reflective sheeting, do not require approval.

#### **Section 8A.05 Grade Crossing Elimination**

*Guidance:*

(07) *Based on engineering judgment, the TRACKS OUT OF SERVICE (R8-9) sign (see [Figure 8B-1](#)) should be temporarily installed until the tracks are removed or covered.*

Option:

(08) The length of time before the tracks will be removed or covered may be considered in making the decision as to whether to install the sign.

## Chapter 8B. Signs and Markings

### Section 8B.03 Grade Crossing (Crossbuck) Sign (R15-1) and Number of Tracks Plaque (R15-2P) at Active and Passive Grade Crossings

Support:

(11) Double-sided Crossbuck signs are considered equivalent to back-to-back Crossbuck signs.

### Section 8B.04 Crossbuck Assemblies with YIELD or STOP Signs at Passive Grade Crossings

*Guidance:*

(11) *The STOP sign should be placed on a separate post next to the railroad crossbuck sign whenever practical.*

Support:

(21) STOP signs are the responsibility of the maintaining highway agency. Crossbuck signs are the responsibility of the railroad company. Maintenance issues arise when devices of separate responsibility are installed on the same support and need to be avoided when practical.

### Section 8B.06 Grade Crossing Advance Warning Signs (W10 Series)

**Standard:**

(08) **The following criteria further define the conditions under which the highway-rail grade crossing advance warning signs (W10 series) are not required:**

- A. The crossing is in a business district of a city or village, and**
- B. Active warning devices are in use, and**
- C. The highway speed limit is 25 mph or less**

Option:

(09) Placement of the highway-rail grade crossing advance warning signs (W10 series) may be based on prevailing speeds rather than the posted speed limits.

**Standard:**

(10) **If a Yield Ahead or Stop Ahead sign is installed on the approach to the crossing, the Yield Ahead or Stop Ahead sign shall be located in accordance with Table 2C-4 of the federal MUTCD and the Grade Crossing Advance Warning sign shall be located in accordance with Table 2C-4 of the Wisconsin MUTCD Supplement.**

### Section 8B.07 EXEMPT Highway-Rail Grade Crossing Plaques (R15-3P, W10-1aP)

**Standard:**

(04) **The EXEMPT highway-rail grade crossing plaques (R15-3P, W10-1aP) shall be placed at crossings within the control limits of a highway traffic signal (typically defined as the area between the near right signals) or shall only be used when specifically authorized by order of the Commissioner of Railroads.**

Support:

(05) [Wisconsin State Statute 346.45 \(3\)\(b\)](#) exempts vehicles at crossings that are controlled by traffic signals. [Wisconsin State Statute 195.285](#) states that the Commissioner of Railroads has regulatory authority over the use of the EXEMPT plaques.

### **Section 8B.08 Turn Restrictions During Preemption**

*Guidance:*

(01) *At a signalized intersection that is located within 100 feet of a highway-rail grade crossing, measured from the edge of the track to the edge of the roadway, where the intersection traffic control signals are preempted by the approach of a train, all existing turning movements toward the highway-rail grade crossing should be evaluated for prohibition during the signal preemption sequences. This also includes the prohibition of U Turns.*

### **Section 8B.10 TRACKS OUT OF SERVICE Sign (R8-9)**

*Guidance:*

(01) *The TRACKS OUT OF SERVICE (R8-9) sign (see [Figure 8B-1](#)) should be used at a grade crossing instead of a Crossbuck (R15-1) sign and a Number of Tracks (R15-2P) plaque or instead of a Crossbuck Assembly when railroad or LRT tracks have been temporarily or permanently abandoned or taken out of service, but only until such time that the tracks are removed or covered or returned to service.*

### **Section 8B.17 LOOK Sign (R15-8)**

**Standard:**

(03) **Except at station crossings, the LOOK sign (R15-8) shall not be used.**

*Support:*

(04) *Since drivers need to look at all crossings, the LOOK sign would have to be placed at all highway-rail grade crossings to avoid inconsistent messages being conveyed to drivers. It would be impractical to require the LOOK sign at all grade crossings.*

### **Section 8B.22 NO GATES OR LIGHTS Plaque (W10-13P)**

**Standard:**

(01) **The NO GATES OR LIGHTS plaque (W10-13P) shall not be placed at highway-rail or pathway grade crossings.**

*Support:*

(02) *The NO GATES OR LIGHTS plaque would have to be placed at all passive grade crossings to avoid inconsistent messages being conveyed to drivers. It would be impractical to require the NO LIGHTS OR GATES plaque at all passive grade crossings.*

### **Section 8B.24 Storage Space Signs (W10-11, W10-11a, W10-11b)**

*Guidance:*

(02) *If used, the Storage Space (W10-11 and W10-11a) signs should be mounted in advance of the grade crossing at an appropriate location to advise drivers of the space available for highway vehicle storage between the highway intersection and the grade crossing.*

Option:

(04) The Storage Space (W10-11 and W10-11a) signs are optional based on engineering judgment for reasons such as sign clutter or other physical limitations.

### **Section 8B.27 Pavement Markings**

Option:

(07) Determination of the need for railroad crossing pavement markings may be based on prevailing speeds rather than the posted speed limits.

**Standard:**

**(08) As part of an engineering study, the following criteria further define the conditions under which railroad crossing pavement markings are normally not required:**

- A. Active warning devices are not present, and the highway speed limit or prevailing speeds are 35 mph or less, or**
- B. The track is a minor spur and trains operate at 15 mph or less, or**
- C. The highway traffic “at the crossing” is controlled by traffic signals, or**
- D. Where the approach distance is less than 250 feet in rural areas or 100 feet in urban areas.**

Option:

(09) When railroad crossing pavement markings are used, they may be placed such that the Grade Crossing Advance Warning Sign (W10 series) is located anywhere within the limits of the pavement marking symbol.

### **Section 8B.29 Dynamic Envelope Markings**

*Guidance:*

(08) *Supplemental markings should be used between the outline markings of the dynamic envelope. When dynamic envelope pavement markings are used, the DO NOT STOP ON TRACKS (R8-8) sign or storage space sign (W10-11a) should be used.*

**Standard:**

**(09) If used, the supplemental markings shall be 12-inch white diagonals at a 45-degree angle and 5-foot spacing.**

## **Chapter 8C. Flashing-Light Signals, Gates, and Traffic Control Signals**

### **Section 8C.01 Introduction**

#### **Standard:**

(04) **The meaning of flashing-light signals and gates shall be as stated in the “Uniform Vehicle Code” (see Sections 11-701 and 11-703 of the UVC), which is available from the National Committee on Uniform Traffic Laws and Ordinances (see Page i of the federal MUTCD for the address). When active warning devices have been installed, the operative parts shall remain covered or turned until the time the device is placed in regular and continuous service.**

#### *Guidance:*

(10) *If a pedestrian route is provided, sufficient clearance from supports, posts, and gate mechanisms should be maintained for pedestrian travel. Automatic gates are not recommended across sidewalks, recreational trails or bike paths unless the crossing and warning devices are designed to provide an escape route.*

#### **Support:**

(17) Sidewalks, recreational trails and bike paths generally operate as two-way traffic. Unlike highways where individual lanes have only one direction of travel, gates coming down across these types of facilities could trap users in the track zone if escape routes are not provided.

### **Section 8C.02 Flashing-Light Signals**

#### **Option:**

(13) Flashing-light signals may be installed on overhead structures or cantilevered supports as shown in [Figure 8C-1](#) where needed for additional emphasis, or for better visibility to approaching traffic, particularly on multi-lane approaches or highways with profile restrictions. Additional Crossbuck signs may be used on overhead structures or cantilevered supports to supplement the side of highway mounted signs. The Number of Tracks plaque may be used in conjunction with the supplemental Crossbuck but is not required.

### **Section 8C.04 Automatic Gates**

#### **Option:**

(17) In situations where drivers may need more than 3 seconds of notification before gate activation, such as a higher speed highway or where long trucks are prevalent, gate activation may be delayed.

### **Section 8C.09 Traffic Control Signals at or Near Highway-Rail Grade Crossings**

#### *Guidance:*

(11) *If a highway-rail grade crossing is located within 50 feet (or within 75 feet for a highway that is regularly used by multi-unit highway vehicles) of an intersection controlled by a traffic control signal, the use of pre-signals or near side signals upstream of the grade crossing to control traffic approaching the grade crossing should be considered.*

#### **Standard:**

(15) **If a pre-signal or the near-side signal upstream of the grade crossing is installed at an interconnected highway-rail grade crossing near a signalized intersection, a STOP HERE ON RED**

**(R10-6) sign shall be installed near the pre-signal, near the near-side signal, or at the stop line if used. If there is a nearby signalized intersection with insufficient clear storage distance for a design vehicle, or the highway-rail grade crossing does not have gates, a No Turn on Red (R10-11, R10-11a, or R10-11b) sign (see [Section 2B.53](#)) shall be installed for the approach that crosses the railroad track, if applicable.**

Option:

(20) Where traffic control signals are located near a highway-rail grade crossing, supplemental pavement markings *may* be applied between the dynamic envelope and the nearby downstream intersection, when justified by engineering judgment.

**Standard:**

(21) **If used, these markings shall be 12-inch white diagonals at a 45-degree angle and a 5-foot spacing, which shall be adjusted to not interfere with any lane control markings.**

*Guidance:*

(22) *When the supplemental pavement markings are used, the STOP HERE ON RED (R10-6) sign or Storage Space Signs (W10-11, W10-11a, W10-11b) should be used instead of the DO NOT STOP ON TRACKS Sign (R8-8 sign) referenced in Section 8B.29 of this Supplement.*

## **Part 9 – Traffic Control for Bicycle Facilities**

### **Chapter 9B. Signs**

#### **Section 9B.03 STOP and YIELD Signs (R1-1, R1-2)**

*Guidance:*

*D. Whether the shared-use path crosses the highway in perpendicular fashion (mid-block style crossing) or crosses the legs of a roadway like a side path.*

*[Wisconsin State Statute 346.803\(b\)](#) requires bicyclists to “obey each traffic signal or sign facing a roadway which runs parallel and adjacent to the bicycle way”. Stop or yield conditions for bicyclists on parallel sidepaths should generally be consistent with the traffic controls imposed upon traffic of the adjacent roadway.*

#### **Section 9B.04 Bicycle Lane Signs and Plaques (R3-17, R3-17aP, R3-17bP)**

*Guidance:*

*The R3-17aP or R3-17bP sign should be used with either:*

- 1. Bike lane lines markings, or;*
- 2. A bike or bicyclist symbol (see Sections 9C.04 and 9C.05 of the MUTCD) placed to the immediate right of the single line separating the travel lane from the bike/parking lane.*

#### **Section 9B.12 Shared-Use Path Restriction Sign (R9-7)**

*Guidance:*

*Creating a separate pedestrian path is often considered the most effective means of separating and regulating pedestrian and bicycle traffic. The separation should be open space.*

#### **Section 9B.19 Other Bicycle Warning Signs**

*Guidance:*

*The W16-1P sign with the W11-1 sign should be used when roadway conditions change significantly for bicyclists and motorists, for instance when a paved shoulder or bicycle lane is dropped or the pavement narrows.*

#### **Section 9B.21 Bicycle Route Signs (M1-8, M1-8a, M1-9)**

*Guidance:*

*Destination signs should be installed with Bicycle Route Guide signs and should also be installed with Bicycle Route markers.*

## **Chapter 9C. Markings**

### **Section 9C.03 Marking Patterns and Colors on Shared-Use Paths**

**Option:**

Creating a separate pedestrian path is often considered the most effective means of separating and regulating pedestrian and bicycle traffic. The separation should be open space.

**Guidance:**

*Obstructions necessarily placed within shared-use paths, such as bollards, should be reflectorized on BOTH sides.*

### **Section 9C.04 Markings For Bicycle Lanes**

**Guidance:**

*Symbols for bike lanes should include either a symbol of a bicycle or of a bicyclist, see Figures 9C-3, 9C-4, 9C-5, and 9C-6 in the 2009 MUTCD. A directional arrow should be used with either of these symbols.*