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PART 7

TRAFFIC CONTROL FOR SCHOOL AREAS

CHAPTER 7A. GENERAL

Section 7A.01 Need for Standards

Support

Regardless of the school location, the best way to achieve effective traffic control is through the uniform application of realistic policies, practices, and standards developed through engineering judgment or studies.

Pedestrian safety depends upon public understanding of accepted methods for efficient traffic control. This principle is especially important in the control of pedestrians, bicycles, and other vehicles in the vicinity of schools. Neither pedestrians on their way to or from school nor other road users can be expected to move safely in school areas unless they understand both the need for traffic controls and how these controls function for their benefit.

Procedures and devices that are not uniform might cause confusion among pedestrians and other road users, prompt wrong decisions, and contribute to crashes. To achieve uniformity of traffic control in school areas, comparable traffic situations need to be treated in a consistent manner. Each traffic control device and control method described in Part 7 fulfills a specific function related to specific traffic conditions.

A uniform approach to school area traffic controls assures the use of similar controls for similar situations, which promotes appropriate and uniform behavior on the part of motorists, pedestrians, and bicyclists.

A school traffic control plan permits the orderly review of school area traffic control needs, and the coordination of school/pedestrian safety education and engineering measures. Engineering measures alone do not always result in the intended change in student and road user behavior.

A school route plan for each school serving elementary to high school students should be prepared in order to develop uniformity in the use of school area traffic controls and to serve as the basis for a school traffic control plan for each school.

The school route plan, developed in a systematic manner by the school, law enforcement, and traffic officials responsible for school pedestrian safety, should consist of a map (see Figure 7A-1) showing streets, the school, existing traffic controls, established school walk routes, and established school crossings.

The type(s) of school area traffic control devices used, either warning or regulatory, should be related to the volume and speed of vehicular traffic, street width, and the number and age of the students using the crossing.

School area traffic control devices should be included in a school traffic control plan.

Support:

Reduced speed limit signs for school areas and crossings are included in this Manual solely for the purpose of standardizing signing for these zones and not as an endorsement of mandatory reduced speed zones.

"School" and "school zone" are defined in Section 1A.13.

Section 7A.02 School Routes and Established School Crossings

Support:

To establish a safer route to and from school for schoolchildren, the application of planning criterion for school walk routes might make it necessary for children to walk an indirect route to an established school crossing located where there is existing traffic control and to avoid the use of a direct crossing where there is no existing traffic control.

School walk routes should be planned to take advantage of existing traffic controls.

The following factors should be considered when determining the feasibility of requiring children to walk a longer distance to a crossing with existing traffic control:

- A. The availability of adequate sidewalks or other pedestrian walkways to and from the location with existing control,
- B. The number of students using the crossing,
- C. The age levels of the students using the crossing, and
- D. The total extra walking distance.

Standard:

A roadway authority shall establish school crossings considered necessary for the safety of school children on streets and highways under their jurisdiction. The establishment of a school crossing shall be based upon a traffic and engineering study conducted by the authority having jurisdiction, in consultation with the superintendent of the school district. Having established a school crossing, the roadway authority shall erect school crossing signs, in conformance with the Manual on streets or highways under its jurisdiction, in consultation with the superintendent of the school district per Section 257.613a of the "Michigan Vehicle Code."

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The "Michigan Vehicle Code" has the following provisions in Section 613a regarding school crossings.

MICHIGAN VEHICLE CODE (EXCERPT) Act 300 of 1949

257.613a School crossings; establishment; basis; determination; notice; erection of school crossing signs.

Sec. 613a. (1) Except as provided in subsections (2) and (3), the state transportation department, a county road commission, or a local authority shall establish school crossings considered necessary for the safety of schoolchildren on streets and highways under its jurisdiction. The establishment of a school crossing shall be based upon a traffic and engineering study conducted by the authority having jurisdiction, in consultation with the superintendent of the school district.

(2) If considered necessary under subsection (1) or pursuant to a traffic and engineering study conducted under subsection (4), a school crossing shall be established within a safe distance from a school located on a street or highway on which the speed limit is 25 miles or more per hour.

(3) Upon request of the superintendent of the school district, the following individuals shall meet at not less than 5-year intervals to consider whether a traffic and engineering study should be conducted to determine whether a school crossing is required under subsection (2):

(a) The superintendent of the school district in which the school is located or his or her designee.

(b) The head of the local authority having jurisdiction to maintain the road or his or her designee or, if there is no local authority, an individual designated by the director of the state transportation department.

(c) The chief of police of the local unit of government in which the road is located or his or her designee or, if the local unit of government does not have a police department, the county sheriff or his or her designee.

(4) If the individuals described in subsection (3) determine by unanimous vote that a traffic and engineering study should be conducted, the individuals shall notify the authority having jurisdiction to maintain the road in writing of that determination. If the authority is notified under this subsection that a traffic and engineering study should be conducted, the authority shall conduct the study.

(5) Having established a school crossing, the state transportation department, county road commission, or local authority shall erect school crossing signs, in conformance with the manual of uniform traffic control devices provided for in section 608, on streets or highways under its jurisdiction.

History: Add. 1978, Act 227, Imd. Eff. June 14, 1978;3/Am. 2004, Act 201, Imd. Eff. July 13, 2004. Popular name: The Jasmine Miles Schoolchildren Safety Act

Section 7A.03 School Crossing Control Criteria

Support:

The frequency of gaps in the traffic stream that are sufficient for student crossing is different at each crossing location. When the delay between the occurrences of adequate gaps becomes excessive, students might become impatient and endanger themselves by attempting to cross the street during an inadequate gap. In these instances, the creation of sufficient gaps needs to be considered to accommodate the crossing demand.

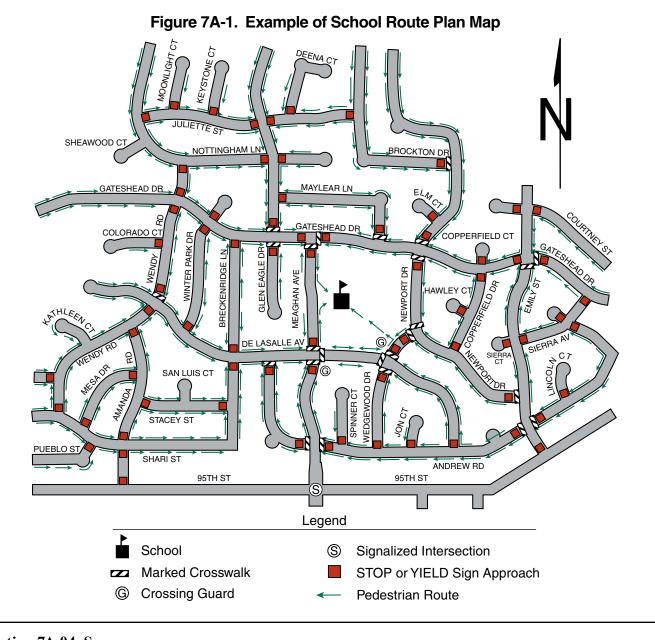
A recommended method for determining the frequency and adequacy of gaps in the traffic stream is given in the "Traffic Control Devices Handbook" (see Section 1A.11).



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Section 7A.04 Scope

Standard:

Part 7 sets forth basic principles and prescribes standards that shall be followed in the design, application, installation, and maintenance of all traffic control devices (including signs, signals, and markings) and other controls (including adult crossing guards) required for the special pedestrian conditions in school areas.

Support:

- Sections 1A.01 and 1A.08 contain information regarding unauthorized devices and messages. Sections 1A.02 and 1A.07 contain information regarding the application of standards. Section 1A.05 contains information regarding the maintenance of traffic control devices. Section 1A.08 contains information regarding placement authority for traffic control devices. Section 1A.09 contains information regarding engineering studies and the assistance that is available to jurisdictions that do not have engineers on their staffs who are trained and/or experienced in traffic control devices.
- Provisions contained in Chapter 2A and Section 2B.06 are applicable in school areas.
- Part 3 contains provisions regarding pavement markings that are applicable in school areas.
- Part 4 contains provisions regarding highway traffic signals that are applicable in school areas. The School Crossing signal warrant is described in Section 4C.06.

Sect. 7A.04 December 2009

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CHAPTER 7B. SIGNS

Section 7B.01 Size of School Signs

Standard:

Except as provided in Section 2A.11, the sizes of signs and plaques to be used on conventional roadways in school areas shall be as shown in Table 7B-1.

- The sizes in the Conventional Road column shall be used unless engineering judgment determines that a minimum or oversized sign size would be more appropriate.
- The sizes in the Minimum column shall be used only where traffic volumes are low and speeds are 30 mph or lower, as determined by engineering judgment.
- The sizes in the Oversized column shall be used on expressways.

Guidance:

The sizes in the Oversized column should be used on roadways that have four or more lanes with posted speed limits of 40 mph or higher.

Option:

- The sizes in the Oversized column may also be used at other locations that require increased emphasis, improved recognition, or increased legibility.
- of Signs and plaques larger than those shown in Table 7B-1 may be used (see Section 2A.11).

Table 7B-1.	School Area	Sign and	Plaque	Sizes
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Sign	Sign Designation	Section	Conventional Road	Minimum	Oversized
School	S1-1	7B.08	36 x 36	30 x 30	48 x 48
School Bus Stop Ahead	S3-1	7B.13	36 x 36	30 x 30	48 x 48
School Bus Turn Ahead	S3-2	7B.14	36 x 36	30 x 30	48 x 48
Reduced School Speed Limit Ahead	S4-5, S4-5a	7B.16	36 x 36	30 x 30	48 x 48
School Speed Limit XX When Flashing	S5-1	7B.15	24 x 48	_	36 x 72
End School Zone	S5-2	7B.09	24 x 30	_	36 x 48
End School Speed Limit	S5-3	7B.15	24 x 30	_	36 x 48
In-Street Ped Crossing	R1-6, R1-6a, R1-6b, R1-6c	7B.11, 7B.12	12 x 36	_	_
Speed Limit (School Use)	R2-1	7B.15	24 x 30	_	36 x 48
Begin Higher Fines Zone	R2-10	7B.10	24 x 30	_	36 x 48
End Higher Fines Zone	R2-11	7B.10	24 x 30	_	36 x 48
End Double Fines Zone	R2-11a	7B.10	24 x 30	_	36 x 48



Plaque	Sign Designation	Section	Conventional Road	Minimum	Oversized
X:XX to X:XX AM X:XX to X:XX PM	S4-1P	7B.15	24 x 10	_	36 x 18
School	S4-3P	7B.09, 7B.15	24 x 8	_	36 x 12
When Flashing	S4-4P	7B.15	24 x 10	_	36 x 18
Mon-Fri	S4-6P	7B.15	24 x 10	_	36 x 18
All Year	S4-7P	7B.09	24 x 12	_	30 x 18
Fines Higher	R2-6P	7B.10	24 x 18	_	36 x 24
XX Feet	W16-2P	7B.08	24 x 18	_	30 x 24
XX Ft	W16-2aP	7B.08	24 x 12	_	30 x 18
Turn Arrow	W16-5P	7B.08, 7B.09, 7B.11	24 x 12	_	30 x 18
Advance Turn Arrow	W16-6P	7B.08, 7B.09, 7B.11	24 x 12	_	30 x 18
Diagonal Arrow	W16-7P	7B.12	24 x 12	_	30 x 18
Diagonal Arrow (optional size)	W16-7P	7B.12	21 x 15	_	_
Ahead	W16-9P	7B.11	24 x 12	_	30 x 18

Note: 1. Larger sizes may be used when appropriate

- 2. Dimensions are shown in inches and are shown as width x height
- 3. Minimum sign sizes for multi-lane conventional roads shall be as shown in the Conventional Road column

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Section 7B.02 Illumination and Reflectorization

Standard:

The signs used for school area traffic control shall be retroreflectorized or illuminated.

Section 7B.03 Position of Signs

Support:

- Sections 2A.16 and 2A.17 contain provisions regarding the placements and locations of signs.
- Section 2A.19 contains provisions regarding the lateral offsets of signs.

Option:

In-roadway signs for school traffic control areas may be used consistent with the requirements of Sections 2B.12, 7B.11, and 7B.12.

Section 7B.04 Height of Signs

Support:

Section 2A.18 contains provisions regarding the mounting height of signs.

Section 7B.05 Installation of Signs

Support

Section 2A.16 contains provisions regarding the installation of signs.

Section 7B.06 Lettering

Support:

The "Standard Highway Signs and Markings" book (see Section 1A.11) contains information regarding sign lettering.

Section 7B.07 Sign Color for School Warning Signs

Standard:

School warning signs, including the "SCHOOL" portion of the School Speed Limit (S5-1) sign and including any supplemental plaques used in association with these warning signs, shall have a fluorescent yellow-green background with a black legend and border unless otherwise provided in this Manual for a specific sign.

Section 7B.08 School Sign (S1-1) and Plaques

Support:

- Many state and local jurisdictions find it beneficial to advise road users that they are approaching a school that is adjacent to a highway, where additional care is needed, even though no school crossing is involved and the speed limit remains unchanged. Additionally, some jurisdictions designate school zones that have a unique legal standing in that fines for speeding or other traffic violations within designated school zones are increased or special enforcement techniques such as photo radar systems are used. It is important and sometimes legally necessary to mark the beginning and end points of these designated school zones so that the road user is given proper notice.
- The School (S1-1) sign (see Figure 7B-1) has the following four applications:
 - A. School Area the S1-1 sign can be used to warn road users that they are approaching a school area that might include school buildings or grounds, a school crossing, or school related activity adjacent to the highway.
 - B. School Zone the S1-1 sign can be used to identify the location of the beginning of a designated school zone (see Section 7B.09).
 - C. School Advance Crossing if combined with an AHEAD (W16-9P) plaque or an XX FEET (W16-2P or W16-2aP) plaque to comprise the School Advance Crossing assembly, the S1-1 sign can be used to warn road users that they are approaching a crossing where schoolchildren cross the roadway (see Section 7B.11).
 - D. School Crossing if combined with a diagonal downward pointing arrow (W16-7P) plaque to comprise the School Crossing assembly, the S1-1 sign can be used to warn approaching road users of the location of a crossing where schoolchildren cross the roadway (see Section 7B.12).

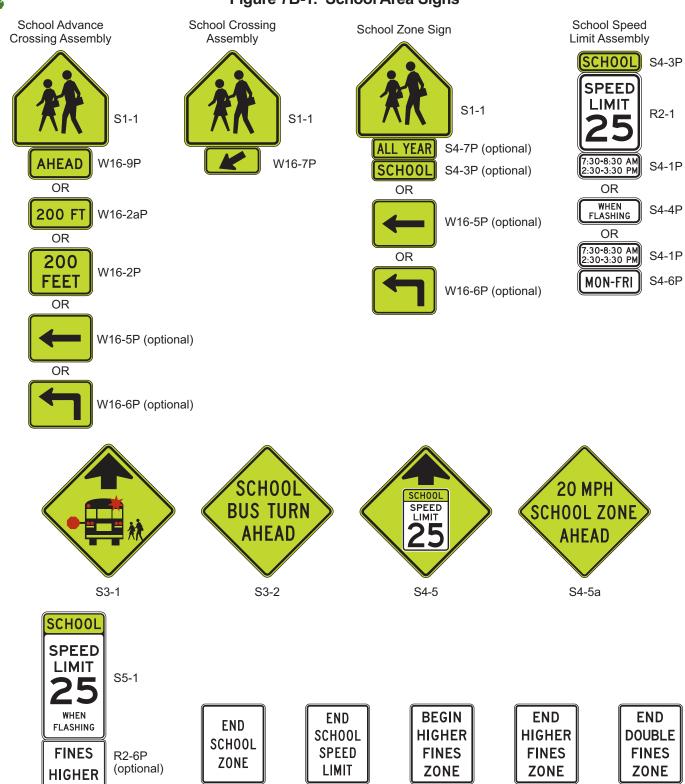
Option:

If a school area is located on a cross street in close proximity to the intersection, a School (S1-1) sign with a supplemental arrow (W16-5P or W16-6P) plaque may be installed on each approach of the street or highway to warn road users making a turn onto the cross street that they will encounter a school area soon after making the turn.

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Figure 7B-1. School Area Signs



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S5-3

R2-10

R2-11

R2-11a

S5-2

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Section 7B.09 School Zone Sign (S1-1) and Plaques (S4-3P, S4-7P) and END SCHOOL ZONE Sign (S5-2) Standard:

If a school zone has been designated under Section 257.627a(1)(c) of the "Michigan Vehicle Code", a School (S1-1) sign (see Figure 7B-1) shall be installed to identify the beginning point(s) of the designated school zone (see Figure 7B-2). The school zone extends not more than 1,000 feet from the property line of the school in each direction. If two or more schools occupy the same property or adjacent properties, one of the following applies, as applicable:

- (i) If the hours of instruction at the schools are the same, then a single combined school zone shall be established.
- (ii) If the hours of instruction at the schools are different, overlapping school zones shall be established. Option:
- A School Zone (S1-1) sign may be supplemented with a SCHOOL (S4-3P) plaque (see Figure 7B-1).
- A School Zone (S1-1) sign may be supplemented with an ALL YEAR (S4-7P) plaque (see Figure 7B-1) if the school operates on a 12-month schedule.
- The downstream end of a designated school zone may be identified with an END SCHOOL ZONE (S5-2) sign (see Figures 7B-1 and 7B-2).
- If a school zone is located on a cross street in close proximity to the intersection, a School Zone (S1-1) sign with a supplemental arrow (W16-5P or W16-6P) plaque may be installed on each approach of the street or highway to warn road users making a turn onto the cross street that they will encounter a school zone soon after making the turn.

Section 7B.10 <u>Higher Fines Zone Signs (R2-10, R2-11, R2-11a) and Plaques</u> Standard:

Where increased fines are imposed for moving violations within a designated school zone per 257.601b of the "Michigan Vehicle Code", a BEGIN HIGHER FINES ZONE (R2-10) sign (see Figure 7B-1) or a FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP), or \$XX FINE (R2-6bP) plaque (see Figure 2B-3) shall be installed as a supplement to the School Zone (S1-1) sign to identify the beginning point of the higher fines zone (see Figures 7B-2 and 7B-3).

Where appropriate, one of the following plaques may be mounted below the sign that identifies the beginning point of the higher fines zone:

- A. An S4-1P plaque (see Figure 7B-1) specifying the times that the higher fines are in effect,
- B. A WHEN FLASHING (S4-4P) plaque (see Figure 7B-1) if used in conjunction with a yellow flashing beacon.

Deleted C.

Standard:

Where a BEGIN HIGHER FINES ZONE (R2-10) sign or a FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP) or \$XX FINE (R2-6bP) plaque supplementing a School Zone (S1-1) sign is posted to notify road users of increased fines for traffic violations, an END HIGHER FINES ZONE (R2-11) sign (see Figure 7B-1), END DOUBLE FINES ZONE (R2-11a) or an END SCHOOL ZONE (S5-2) sign shall be installed at the downstream end of the zone to notify road users of the termination of the increased fines zone (see Figures 7B-2 and 7B-3).

Section 7B.11 School Advance Crossing Assembly

Standard:

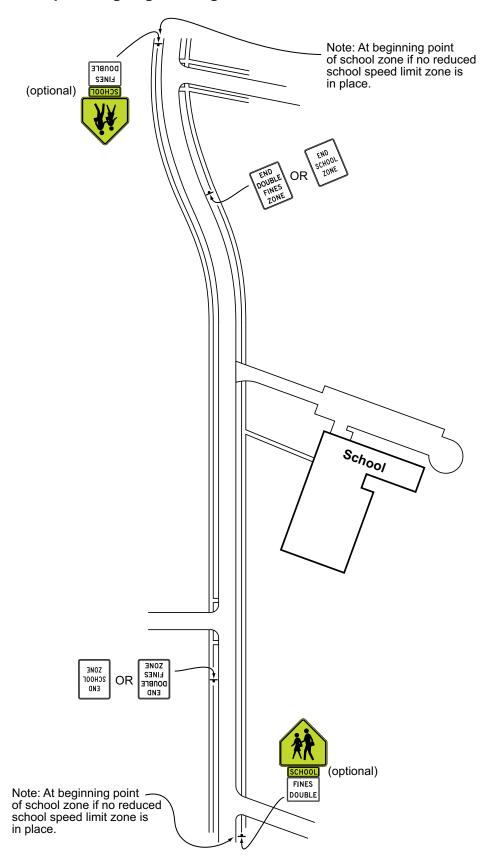
- The School Advance Crossing assembly (see Figure 7B-1) shall consist of a School (S1-1) sign supplemented with an AHEAD (W16-9P) plaque or an XX FEET (W16-2P or W16-2aP) plaque.
- Except as provided in Paragraph 3, a School Advance Crossing assembly shall be used in advance (see Table 2C-4 for advance placement guidelines) of the first School Crossing assembly (see Section 7B.12) that is encountered in each direction as traffic approaches a school crosswalk (see Figure 7B-4).

 Option:
- The School Advance Crossing assembly may be omitted (see Figure 7B-5) where a School Zone (S1-1) sign (see Section 7B.09) is installed to identify the beginning of a school zone in advance of the School Crossing assembly.
- If a school crosswalk is located on a cross street in close proximity to an intersection, a School Advance Crossing assembly with a supplemental arrow (W16-5P or W16-6P) plaque may be installed on each approach of the street or highway to warn road users making a turn onto the cross street that they will encounter a school crosswalk soon after making the turn.

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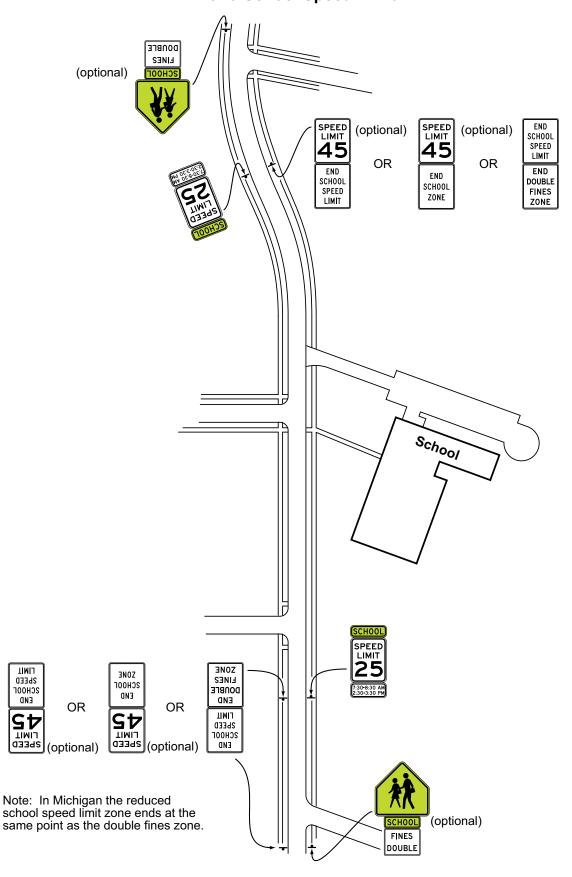
Figure 7B-2. Example of Signing for a Higher Fines School Zone without a School Crossing



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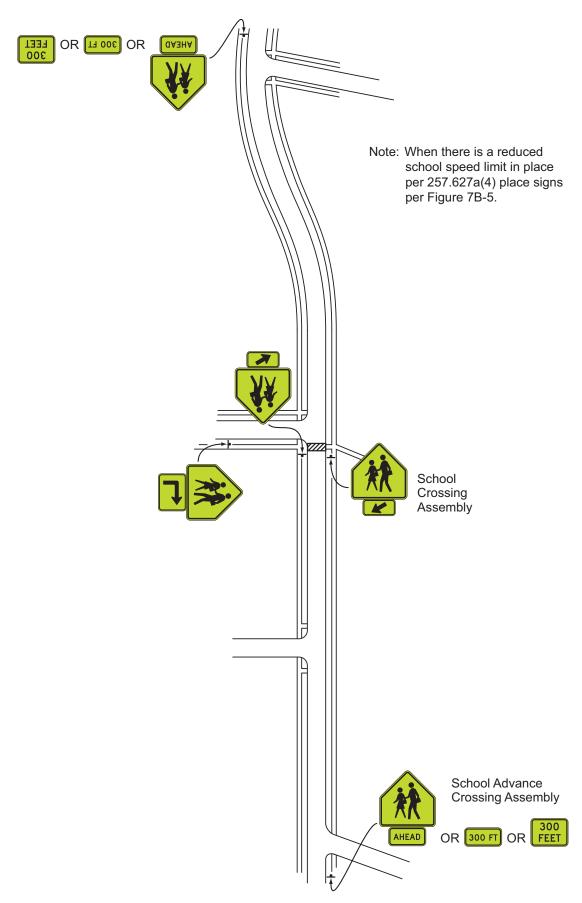
Figure 7B-3. Example of Signing for a Higher Fines School Zone with a School Speed Limit



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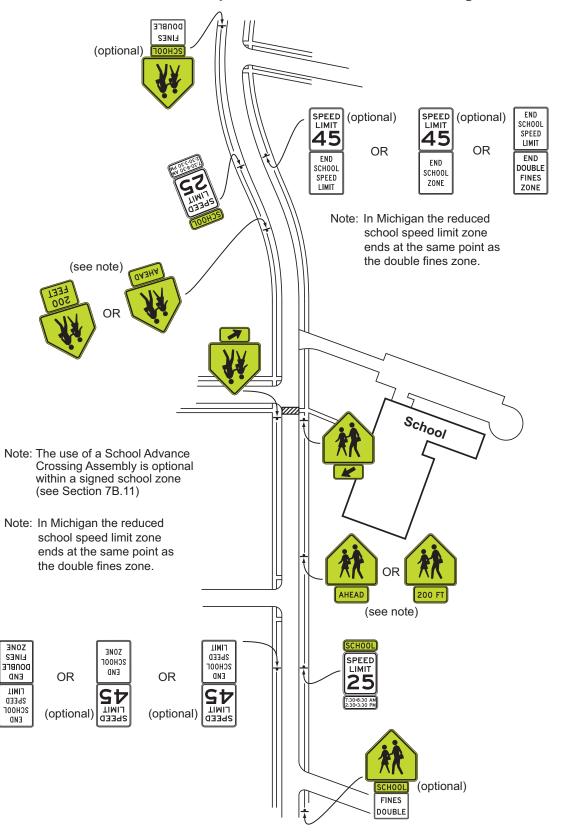
Figure 7B-4. Example of Signing for a School Crossing Not Next to a School



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Figure 7B-5. Example of Signing for a School Zone with a School Speed Limit and a School Crossing



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Figure 7B-6. In-Street Signs in School Areas

A - In advance of the school crossing



* Reduced size signs: S1-1 12 x 12 inches S4-3P 12 x 4 inches W16-7P 12 x 6 inches

W16-9P 12 x 6 inches

B - At the school crossing



Notes:

- 1. The use of the LOCAL LAW legend is optional on the R1-6 series signs (see Section 7B.12).
- 2. The use of the SCHOOL plaque above the R1-6 and R1-6a signs is optional.



A 12-inch reduced size in-street School (S1-1) sign (see Figure 7B-6), installed in compliance with the mounting height and special mounting support requirements for In-Street Pedestrian Crossing (R1-6) signs (see Section 2B.12), may be used in advance of a school crossing to supplement the post-mounted school warning signs. A 12 x 6-inch reduced size AHEAD (W16-9P) plaque may be mounted below the reduced size in-street School (S1-1) sign.

Section 7B.12 School Crossing Assembly

Standard:



- The School Crossing assembly (see Figure 7B-1) shall be installed at established marked crosswalk(s) (see Figures 7B-4 and 7B-5), or as close to it as possible as per Section 257.613a of the "Michigan Vehicle Code", and shall consist of a School (S1-1) sign supplemented with a diagonal downward pointing arrow (W16-7P) plaque to show the location of the crossing.
- The School Crossing assembly shall not be used at crossings other than those adjacent to schools and those on established school pedestrian routes.
- The School Crossing assembly shall not be installed on approaches controlled by a STOP or YIELD sign.

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Option:

The In-Street Pedestrian Crossing (R1-6 or R1-6a) sign (see Section 2B.12 and Figure 7B-6) or the In-Street Schoolchildren Crossing (R1-6b or R1-6c) sign (see Figure 7B-6) may be used at unsignalized school crossings where a local regulation or ordinance specifically requires that a driver must yield or stop for a pedestrian in a crosswalk. If used at a school crossing, a 12 x 4-inch SCHOOL (S4-3P) plaque (see Figure 7B-6) may be mounted above the sign. The LOCAL LAW legend on the R1-6 series signs may be omitted.

- The Overhead Pedestrian Crossing (R1-9 or R1-9a) sign (see Section 2B.12 and Figure 2B-2) may be modified to replace the standard pedestrian symbol with the standard schoolchildren symbol and may be used at unsignalized school crossings. The LOCAL LAW legend on the R1-9 series signs may be omitted.
- A 12-inch reduced size in-street School (S1-1) sign (see Figure 7B-6) may be used at an unsignalized school crossing instead of the In-Street Pedestrian Crossing (R1-6) or the In-Street Schoolchildren Crossing (R1-6b) sign. A 12 x 6-inch reduced size diagonal downward pointing arrow (W16-7P) plaque may be mounted below the reduced size in-street School (S1-1) sign.

Standard:

- If an In-Street Pedestrian Crossing sign, an In-Street Schoolchildren Crossing sign, or a reduced size in-street School (S1-1) sign is placed in the roadway, the sign support shall comply with the mounting height and special mounting support requirements for In-Street Pedestrian Crossing (R1-6 or R1-6a) signs (see Section 2B.12).
- The In-Street Pedestrian Crossing sign, the In-Street Schoolchildren Crossing sign, the Overhead Pedestrian Crossing sign, and the reduced size in-street School (S1-1) sign shall not be used at signalized locations.

Section 7B.13 School Bus Stop Ahead Sign (S3-1)

Guidance:

- The School Bus Stop Ahead (S3-1) sign (see Figure 7B-1) should be installed in advance of locations where a school bus, when stopped to pick up or discharge passengers, is not visible to road users for an adequate distance and where there is no opportunity to relocate the school bus stop to provide adequate sight distance.

 Support:
- The "Michigan Vehicle Code" has the following provisions in Section 257.1855 (4) and (5) regarding the location of discharging or receiving pupils:

THE PUPIL TRANSPORTATION ACT (EXCERPT) Act 187 of 1990

- 257.1855 Actuation of alternately flashing lights; procedures for receiving and discharging pupils from bus; crossing road; prohibited stops; instruction on proper school bus etiquette; reimbursement; "required to cross the roadway" explained; visibility.
- (4) The driver of a school bus shall not stop the bus for the purpose of receiving or discharging pupils in the following instances:
- (a) Within 200 feet of a public or private roadway intersection unless the stop is approved by the school administrator or entity under contract with a school to provide pupil transportation services.
- (b) Upon a limited access highway or freeway, or upon any other highway or roadway that has been divided into 2 roadways by leaving an intervening space, a physical barrier, or clearly divided sections so constructed as to impede vehicular traffic if the pupils are required to cross the roadway.
- (c) Upon a roadway constructed or marked to permit 3 or more separate lanes of vehicular traffic in either direction if the pupils are required to cross the roadway.
- (5) The driver of a school bus when using the alternately flashing overhead red lights shall not stop the bus on any highway or roadway for the purpose of receiving or discharging pupils under the following conditions:
- (a) If the lawful speed limit is more than 35 miles per hour and the stopped bus is not clearly and continuously visible to approaching vehicles on that highway or roadway for at least 400 feet. When the distance from the stopped bus to the end of the highway or roadway is less than 400 feet, clear and continuous visibility must be available from the bus to the end of the highway or roadway.
- (b) If the lawful speed limit is 35 miles per hour or less and the stopped bus is not clearly and continuously visible to approaching vehicles on that highway or roadway, for at least 200 feet. When the distance from the stopped bus to the end of the highway or roadway is less than 200 feet, clear and continuous visibility must be available from the bus to the end of the highway or roadway.
 - (c) Within 50 feet of an intersection if the intersection is controlled by a traffic control signal.

History: 1990, Act 187, Eff. Aug. 15, 1990;¾Am. 1990, Act 322, Imd. Eff. Dec. 20, 1990;¾Am. 1991, Act 184, Imd. Eff. Dec. 27, 1991;¾Am. 2000, Act 49, Imd. Eff. Mar. 29, 2000;¾Am. 2004, Act 231, Imd. Eff. July 21, 2004;¾Am. 2006, Act 108, Eff. Aug. 15, 2006;¾Am. 2006, Act 320, Imd. Eff. July 20, 2006.

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Section 7B.14 SCHOOL BUS TURN AHEAD Sign (S3-2)

Option:

The SCHOOL BUS TURN AHEAD (S3-2) sign (see Figure 7B-1) may be installed in advance of locations where a school bus turns around on a roadway at a location not visible to approaching road users for a distance as determined by the "0" column under Condition B of Table 2C-4, and where there is no opportunity to relocate the school bus turn around to provide the distance provided in Table 2C-4.

Section 7B.15 School Speed Limit Assembly (S4-1P, S4-3P, S4-4P, S4-6P, S5-1) and END SCHOOL SPEED LIMIT Sign (S5-3)

Standard:

- A School Speed Limit assembly (see Figure 7B-1) or a School Speed Limit (S5-1) sign (see Figure 7B-1) shall be used to indicate the speed limit where a reduced school speed limit zone has been established in accordance with Section 257.627a of the "Michigan Vehicle Code". The School Speed Limit assembly or School Speed Limit sign shall be placed at or as near as practical to the point where the reduced school speed limit zone begins (see Figures 7B-3 and 7B-5).
 - If a reduced school speed limit zone has been established, a School (S1-1) sign shall be installed in advance (see Table 2C-4 for advance placement guidelines) of the first School Speed Limit sign assembly or S5-1 sign that is encountered in each direction as traffic approaches the reduced school speed limit zone (see Figures 7B-3 and 7B-5).
 - 3 Paragraph deleted.
- Except as provided in Paragraph 5, the downstream end of an authorized and posted reduced school speed limit zone shall be identified with an END SCHOOL SPEED LIMIT (S5-3) sign (see Figures 7B-1 and 7B-5).
- The "Michigan Vehicle Code" has the following provisions in Section 257.627a (2) through (4) regarding the setting of school speed limits.

MICHIGAN VEHICLE CODE (EXCERPT) Act 300 of 1949

257.627a "Regularly scheduled school session," "school," and "school zone" defined; prima facie speed limit in school zone; signs; applicability of section to walkway; location of school; school in session year-round.

- (2) A school zone speed limit on a highway segment in a school zone, which, except as otherwise provided in this subsection, shall be in force not more than 30 minutes before the first regularly scheduled school session, rounded to the nearest multiple of 5 minutes, until school commences, and from dismissal until not more than 30 minutes after the last regularly scheduled school session, rounded to the nearest multiple of 5 minutes, may be decreased by not more than 20 miles per hour less than the speed limit normally posted but shall be not less than 25 miles per hour. A school superintendent may begin the 30-minute period before the first regularly scheduled school session described in this subsection at a time that is less than 30 minutes before the first regularly scheduled school session and that extends beyond the time school commences, may begin the 30-minute period after dismissal at a time other than dismissal, and, if a school has an off-campus lunch period, may designate the period provided for off-campus lunch as a period during which the school zone speed limit described in this subsection applies.
- (3) School zone speed limits shall not apply to a limited access highway or a highway segment over which a pedestrian overhead walkway is erected, if the walkway is adjacent to school property.
- (4) Notwithstanding the requirements for a school zone as defined in subsection (1)(c), if a school is located in an area that requires school children to cross a state trunk line highway or county highway that has a speed limit of 35 miles per hour or more to attend that school, the school superintendent may submit a request to the state transportation commission, county road commission, or local authority having jurisdiction over the roadway, as applicable, for a school crossing as permitted under section 613a. If, based on the traffic engineering studies, the road authority determines the need for a lower speed limit, the road authority may designate the crossing as a school zone. Before submitting a request, the school superintendent shall have completed a school route plan as prescribed by section 7A-1 of the Michigan manual of uniform traffic control devices.

History: Add. 1978, Act 42, Imd. Eff. Mar. 7, 1978; 4Am. 1979, Act 21, Eff. Mar. 27, 1980; 4Am. 1980, Act 222, Imd. Eff. July 18, 1980; 4Am. 1996, Act 574, Imd. Eff. Jan. 16, 1997; 4Am. 2000, Act 110, Imd. Eff. May 22, 2000; 4Am. 2005, Act 88, Imd. Eff. July 20, 2005, Am. 2016, Act 446, Imd. Eff. January 5, 2017

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Option:

If a reduced school speed limit zone ends at the same point as a higher fines zone, an END SCHOOL ZONE (S5-2) sign may be used instead of a combination of an END HIGHER FINES ZONE (R2-11) sign or END DOUBLE FINES ZONE (R2-11a) Sign and an END SCHOOL SPEED LIMIT (S5-3) sign.

- A standard Speed Limit sign showing the speed limit for the section of highway that is downstream from the authorized and posted reduced school speed limit zone may be mounted on the same post above the END SCHOOL SPEED LIMIT (S5-3) sign or the END SCHOOL ZONE (S5-2) sign.
 - Guidance:
- The beginning point of a reduced school speed limit zone should be at least 200 feet in advance of the school grounds, a school crossing, or other school related activities; however, this 200-foot distance should be increased if the reduced school speed limit is 30 mph or higher.

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Standard:

The School Speed Limit assembly shall be either a fixed-message sign assembly or a changeable message sign.

The fixed-message School Speed Limit assembly shall consist of a top plaque (S4-3P) with the legend SCHOOL, a Speed Limit (R2-1) sign, and a bottom plaque (S4-1P, S4-4P, or S4-6P) indicating the specific periods of the day and/or days of the week that the special school speed limit is in effect (see Figure 7B-1).

Option:

10 Changeable message signs (see Chapter 2L and Section 6F.60) may be used to inform drivers of the school speed limit. If the sign is internally illuminated, it may have a white legend on a black background. Changeable message signs with flashing beacons may be used for situations where greater emphasis of the special school speed limit is needed.

Guidance:

- Even though it might not always be practical because of special features to make changeable message signs conform in all respects to the standards in this Manual for fixed-message signs, during the periods that the school speed limit is in effect, their basic shape, message, legend layout, and colors should comply with the standards for fixed-message signs.
- A confirmation light or device to indicate that the speed limit message is in operation should be considered for inclusion on the back of the changeable message sign.

Standard:

Fluorescent yellow-green pixels shall be used when the "SCHOOL" message is displayed on a changeable message sign for a school speed limit.

Option:

- 14 Changeable message signs may use blank-out messages or other methods in order to display the school speed limit only during the periods it applies.
- 15 Changeable message signs that display the speed of approaching drivers (see Section 2B.13) may be used in a school speed limit zone.
- A Speed Limit Sign Beacon (see Section 4L.04) also may be used, with a WHEN FLASHING legend, to identify the periods that the school speed limit is in effect.

Section 7B.16 Reduced School Speed Limit Ahead Sign (S4-5, S4-5a)

Guidance:

A Reduced School Speed Limit Ahead (S4-5, S4-5a) sign (see Figure 7B-1) should be used to inform road users of a reduced speed zone where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates that advance notice would be appropriate.

Standard:

- 12 If used, the Reduced School Speed Limit Ahead sign shall be followed by a School Speed Limit sign or a School Speed Limit assembly.
- The speed limit displayed on the Reduced School Speed Limit Ahead sign shall be identical to the speed limit displayed on the subsequent School Speed Limit sign or School Speed Limit assembly.

Section 7B.17 Parking and Stopping Signs (R7 and R8 Series)

Option:

- Parking and stopping regulatory signs may be used to prevent parked or waiting vehicles from blocking pedestrians' views, and drivers' views of pedestrians, and to control vehicles as a part of the school traffic plan. Support:
- Parking signs and other signs governing the stopping and standing of vehicles in school areas cover a wide variety of regulations. Typical examples of regulations are as follows:
 - A. No Parking X:XX AM to X:XX PM School Days Only,
 - B. No Stopping X:XX AM to X:XX PM School Days Only,
 - C. XX Min Loading X:XX AM to X:XX PM School Days Only, and
 - D. No Standing X:XX AM to X:XX PM School Days Only.
- Sections 2B.46, 2B.47, and 2B.48 contain information regarding the signing of parking regulations in school zone areas.

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CHAPTER 7C. MARKINGS

Section 7C.01 Functions and Limitations

Support:

- Markings have definite and important functions in a proper scheme of school area traffic control. In some cases, they are used to supplement the regulations or warnings provided by other devices, such as traffic signs or signals. In other instances, they are used alone and produce results that cannot be obtained by the use of any other device. In such cases they serve as an effective means of conveying certain regulations, guidance, and warnings that could not otherwise be made clearly understandable.
- Pavement markings have some potential limitations. They might be obscured by snow, might not be clearly visible when wet, and might not be durable when subjected to heavy traffic. In spite of these potential limitations, they have the advantage, under favorable conditions, of conveying warnings or information to the road user without diverting attention from the road.

Section 7C.02 Crosswalk Markings

Guidance:

- Crosswalks should be marked at all intersections on established routes to a school where there is substantial conflict between motorists, bicyclists, and student movements; where students are encouraged to cross between intersections; where students would not otherwise recognize the proper place to cross; or where motorists or bicyclists might not expect students to cross (see Figure 7A-1).
- Crosswalk lines should not be used indiscriminately. An engineering study considering the factors described in Section 3B.18 should be performed before a marked crosswalk is installed at a location away from a traffic control signal or an approach controlled by a STOP or YIELD sign.
- Because non-intersection school crossings are generally unexpected by the road user, warning signs (see Sections 7B.11 and 7B.12) should be installed for all marked school crosswalks at non-intersection locations. Adequate visibility of students by approaching motorists and of approaching motorists by students should be provided by parking prohibitions or other appropriate measures.

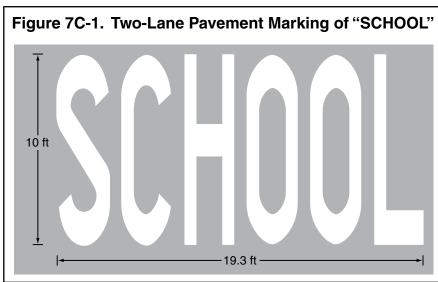
 Support:
- Section 3B.18 contains provisions regarding the placement and design of crosswalks, and Section 3B.16 contains provisions regarding the placement and design of the stop lines and yield lines that are associated with them. Provisions regarding the curb markings that can be used to establish parking regulations on the approaches to crosswalks are contained in Section 3B.23.

Section 7C.03 Pavement Word, Symbol, and Arrow Markings

Option:

- If used, the SCHOOL word marking may extend to the width of two approach lanes (see Figure 7C-1). *Guidance:*
- 12 If the two-lane SCHOOL word marking is used, the letters should be 10 feet or more in height.

 Support:
- Section 3B.20 contains provisions regarding other word, symbol, and arrow pavement markings that can be used to guide, warn, or regulate traffic.



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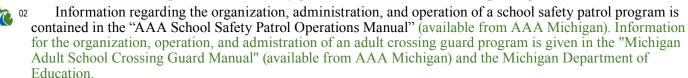
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CHAPTER 7D. CROSSING SUPERVISION

Section 7D.01 Types of Crossing Supervision

Support:

- There are three types of school crossing supervision:
 - A. Adult control of pedestrians and vehicles by adult crossing guards,
 - B. Adult control of pedestrians and vehicles by uniformed law enforcement officers, and
 - C. Student and/or parent control of only pedestrians with student and/or parent patrols.



Section 7D.02 Adult Crossing Guards

Option:

Adult crossing guards may be used to provide gaps in traffic at school crossings where an engineering study has shown that adequate gaps need to be created (see Section 7A.03), and where authorized by law.



OHA Adult crossing guards are the responsibility of the local law enforcement agency having immediate jurisdiction of the crossing. They shall receive a minimum of four hours of instruction before performing the duties of the adult crossing guard. Two hours of additional instruction shall be given annually to an adult crossing guard before the beginning of each school year. The courses of instruction shall be approved by the Department of Education and the Department of State Police and conducted by the local law enforcement agency having jurisdiction, or its designee.



Sections 257.613b, 257.613c, and 257.613d of the "Michigan Vehicle Code" define the responsibility of an adult crossing guard.

Section 7D.03 Qualifications of Adult Crossing Guards

Support:

High standards for selection of adult crossing guards are essential because they are responsible for the safety of and the efficient crossing of the street by schoolchildren within and in the immediate vicinity of school crosswalks.

Guidance:

- Adult crossing guards should possess the following minimum qualifications:
 - A. Average intelligence;
 - B. Good physical condition, including sight, hearing, and ability to move and maneuver quickly in order to avoid danger from errant vehicles;
 - C. Ability to control a STOP paddle effectively to provide approaching road users with a clear, fully direct view of the paddle's STOP message during the entire crossing movement;
 - D. Ability to communicate specific instructions clearly, firmly, and courteously;
 - E. Ability to recognize potentially dangerous traffic situations and warn and manage students in sufficient time to avoid injury.
 - F. Mental alertness;
 - G. Neat appearance;
 - H. Good character;
 - I. Dependability; and
 - *J.* An overall sense of responsibility for the safety of students.

Section 7D.04 Uniform of Adult Crossing Guards

Standard:

Law enforcement officers performing school crossing supervision and adult crossing guards shall wear high-visibility retroreflective safety apparel labeled as ANSI 107-2004 standard performance for Class 2 as described in Section 6E.02.

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Section 7D.05 Operating Procedures for Adult Crossing Guards

Standard:

Adult crossing guards shall not direct traffic in the usual law enforcement regulatory sense. In the control of traffic, they shall pick opportune times to create a sufficient gap in the traffic flow. At these times, their presence in the roadway serves as an easily recognized indication that pedestrians are about to use or are using the crosswalk, and that all vehicular traffic must stop. When all traffic has stopped, the adult crossing guard allows the children to cross.

When it is necessary to stop traffic adult crossing guards shall use a STOP paddle at an assigned crossing only during assigned duty times. The STOP paddle shall be the primary hand-signaling device.

The STOP (R1-1b) paddle shall be an octagonal shape. The background of the STOP face shall be red with at least 6-inch series upper-case white letters and border. The paddle shall be at least 18 inches in size and have the word message STOP on both sides. The paddle shall be retroreflectorized or illuminated when used during hours of darkness.

Option:

The STOP paddle may be modified to improve conspicuity by incorporating white or red flashing lights on both sides of the paddle. Among the types of flashing lights that may be used are individual LEDs or groups of LEDs.

The white or red flashing lights or LEDs may be arranged in any of the following patterns:

- A. Two white or red lights centered vertically above and below the STOP legend,
- B. Two white or red lights centered horizontally on each side of the STOP legend,
- C. One white or red light centered below the STOP legend,
- D. A series of eight or more small white or red lights having a diameter of 1/4 inch or less along the outer edge of the paddle, arranged in an octagonal pattern at the eight corners of the STOP paddle (more than eight lights may be used only if the arrangement of the lights is such that it clearly conveys the octagonal shape of the STOP paddle), or
- E. A series of white lights forming the shapes of the letters in the legend.

Standard:

If flashing lights are used on the STOP paddle, the flash rate shall be at least 50, but no more than 60, flash periods per minute.

Section 7D.MI06 (Michigan) Student Patrols

Guidance:

The local school board should authorize student patrols. School authorities should be responsible for organizing, instructing and supervising patrols with assist of local law enforcement.

Option

Students patrols may be used to direct and control children at crossings near schools where adequate gaps in traffic occur frequently enough so that gaps do not need to be created.

Student patrols may be used to direct and control children at signalized intersections where turning movements are not a problem, and may be used to assist adult crossing guards in the control of children at crossing locations used by large numbers of children.

Standard:

Per Michigan statute, student patrols shall not be responsible for directing vehicular traffic. They shall not function as uniformed law enforcement officers or adult crossing guards.

Section 7D.MI07 (Michigan) Operating Procedures for Student Patrols

Guidance:

Student patrols control children, not vehicles. They should stop children back of the curb or edge of the roadway to allow them to cross only when there is an adequate gap in traffic..

Standard:

Because they are not authorized to direct vehicular traffic, student patrols shall not use a STOP paddle.

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