

# PART 7

## TRAFFIC CONTROL FOR SCHOOL AREAS

### CHAPTER 7A. GENERAL

#### Section 7A.01 Need for Standards

Support:

01 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.

02 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.

03 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.

04 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.

05 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.

*Guidance:*

06 *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.*

07 *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.*

08 *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.*

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

Support:

10 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.

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

12 Parents, school administrators, traffic officials, civic leaders, and vehicle drivers share the responsibility of educating school pedestrians on the use of traffic control devices. Programs in the home and school to train the child as a responsible pedestrian are an important factor in improving their understanding of traffic control devices.

13 The words "School Pedestrians", "Children", and "Students" are used interchangeably and could include student bicyclists for the purpose of determining appropriate cross protection measures.

#### Section 7A.02 School Routes and Established School Crossings

Support:

01 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.

*Guidance:*

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

*03 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.*

*Support:*

*04 There is a need in each school district to establish an organization concerned with students enroute to and from school. Through such an organization, the school district can be responsibly involved in processing requests for traffic safety controls and for safety programs and can coordinate activities within and between the community and public agencies.*

*In order to provide a responsible administrative structure for the school area, each school district is encouraged to:*

- A. Assign student pedestrian responsibilities to a competent staff member and/or*
- B. Organize a school student pedestrian advisory committee to serve the needs of each public and private school.*

*Guidance:*

*05 When the advisory committee structure is used, the committee should include governmental and school district staff who has the responsibility and authority to initiate and provide programs and projects.*

*06 Representatives from the city and/or county superintendent of schools office should be the official members. Advisors should include representatives of the local area Safety Council, traffic engineers, police authorities, the Parent-Teachers Association, Automobile Clubs (AAA), local Bicycle or Pedestrian Advisory Committee, plus others as needed.*

**Staff and Committee Responsibility:**

*07 The duties of staff members and/or each committee should be to guide and coordinate all activities connected with the school traffic safety program, such as:*

- A. Establish traffic safety policies and procedures.*
- B. Recommend priorities for proposed improvement projects.*
- C. Notify the responsible agencies of school-pedestrian-traffic related issues.*
- D. Review and approve the various phases of the school student traffic safety program.*
- E. Review and process requests and complaints.*
- F. Promote good public relations.*

*08 The County Superintendent of School's office should coordinate all student pedestrian committees' actions in establishing and promoting uniform practices for school pedestrian safety throughout the county.*

**School Responsibility:**

*09 Traffic related issues about school pedestrians on the approaches to the school should be referred to the school district or local school principal for review and transmission to the appropriate staff person or to the school student pedestrian advisory committee.*

*Support:*

*10 Refer to CVC 21373 for school board request for traffic control devices.*

**Government Traffic Agency Responsibility:**

**Standard:**

**11 Upon request of the local school district, responsible traffic authorities shall investigate all locations along the school route and recommend appropriate traffic control measures. Refer to CVC 21373.**

*Support:*

*12 The following references from the California Vehicle Code relate to traffic controls for school areas:*

- A. Section 377 – Limit Line.*
- B. Section 627 – Engineering and Traffic Survey.*
- C. Section 21102 – Local Authority to Close Streets.*
- D. Section 21368 – Crosswalks Near Schools.*
- E. Section 21372 – Guidelines for Traffic Control Devices Near Schools.*
- F. Section 21373 – School Board Request for Traffic Control Devices.*

- G. Section 21458 – Curb Markings.
- H. Section 21949 through 21971 – Pedestrians' Rights and Duties.
- I. Section 22350 – Basic Speed Law.
- J. Section 22352 – Prima Facie Speed Limits.
- K. Section 22358.4 – Decrease of Local Limits Near Schools or Senior Centers.
- L. Section 22504 – Unincorporated Area Parking; School Bus Stops.
- M. Section 40802 – Speed Traps.
- N. Section 42200 – Disposition by Cities and Other Local Entities.
- O. Section 42201 – Disposition by County.

### **Section 7A.03 School Crossing Control Criteria**

#### **Support:**

<sup>01</sup> 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.

<sup>02</sup> 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).

<sup>03</sup> Engineering and traffic studies will determine the appropriate measures to be developed at school crossings. The devices and treatments described herein are for use in school zones and do not preclude use of other devices and treatments described elsewhere in this document. Types of school pedestrian measures that can be considered can include:

- A. Warning signs and markings.
- B. School speed limits.
- C. Intersection stop signs.
- D. Flashing yellow beacons.
- E. Traffic signals.
- F. Pedestrian Hybrid Beacons.
- G. Remove visibility obstructions.
- H. School Safety Patrol.
- I. Adult Crossing Guard.
- J. Pedestrian separation structures.
- K. Pedestrian walkways along the roadway.
- L. Pedestrian walkways separated from the roadway.
- M. Parking controls and curb-use zones.

### **Section 7A.04 Scope**

#### **Standard:**

<sup>01</sup> **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:**

<sup>02</sup> 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.

<sup>03</sup> Provisions contained in Chapter 2A and Section 2B.06 are applicable in school areas.




<sup>04</sup> Part 3 contains provisions regarding pavement markings that are applicable in school areas.

05 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.

**Figure 7A-1. Example of School Route Plan Map**



**Legend**

- |  |   |
|--|---|
|  School           |  Signalized Intersection     |
|  Marked Crosswalk |  STOP or YIELD Sign Approach |
|  Crossing Guard   |  Pedestrian Route            |

## CHAPTER 7B. SIGNS

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

#### Standard:

- 01 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 and 7B-1(CA).
- 02 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.
- 03 The sizes in the Minimum column shall be used only where traffic volumes are low and speeds are 30-25 mph or lower, as determined by engineering judgment.
- 04 The sizes in the Oversized column shall be used on expressways.

#### Guidance:

- 05 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:

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

#### Standard:

- 08 The standard sign dimensions prescribed in this California MUTCD, FHWA's "Standard Highway Signs and Markings" book and Caltrans' California Sign Specifications shall be used unless engineering judgment determines that other sizes are appropriate. Where engineering judgment determines that sizes smaller than the standard dimensions are appropriate for use, the sign dimensions shall not be less than the minimum dimensions specified in this California MUTCD, "Standard Highway Signs and Markings" book or Caltrans' California Sign Specifications. See Section 1A.11 for information regarding these publications.

### Section 7B.02 Illumination and ReflectORIZATION

#### Standard:

- 01 The signs used for school area traffic control shall be retroreflectORIZED or illuminated.

### Section 7B.03 Position of Signs

#### Support:

- 01 Sections 2A.16 and 2A.17 contain provisions regarding the placements and locations of signs.
- 02 Section 2A.19 contains provisions regarding the lateral offsets of signs.
- 02a Examples of location of school area signs and California School Assemblies for typical installations are shown in Figures 7B-1(CA), 7B-4, 7B-5 and 7B-5(CA).

#### Option:

- 03 In-roadway signs for school traffic control areas may be used consistent with the requirements of Sections 2B.12, ~~7B-08~~, 7B.11 and 7B.12.

### Section 7B.04 Height of Signs

#### Support:

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

### Section 7B.05 Installation of Signs

#### Support:

- 01 Section 2A.16 contains provisions regarding the installation of signs.
- 02 Examples of school area signing, markings, flashing beacons and overhead school signs are shown in Figures 7B-1(CA), 7B-5(CA), 7B-4 through 7B-6 and Figures 7B-101(CA) through 7B-104(CA).

### **Section 7B.06 Lettering**

Support:

01 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:**

01 ~~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 Advance Warning Assembly (S1-1 with Supplemental Plaque)**

Support:

01 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.

02 The School (S1-1) sign (see Figure 7B-1 or 7B-1(CA)) 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).

02a The School Assemblies A(CA) through E(CA) are shown in Figure 7B-1(CA) and Table 7B-1(CA).

Option:

03 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.

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

**Standard:**

01 ~~If a school zone has been designated under State or local statute, a School (S1-1) sign (see Figure 7B-1 or 7B-1(CA)) shall be installed to identify the beginning point(s) of the designated school zone (see Figure 7B-2).~~

Option:

02 A School Zone (S1-1) sign may be supplemented with a SCHOOL (S4-3P) plaque (see Figure 7B-1 or 7B-1(CA)).

~~03 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.~~

~~04 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).~~

~~05 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.~~

**Standard:**

~~06 The School Warning Assembly A(CA) shall be used on streets with prima facie 25 mph speed limits that are contiguous to a school building or school grounds.~~

~~07 The SCHOOL (S4-3P) plaque shall not be used alone.~~

**Guidance:**

~~08 If used, the School Warning Assembly A(CA) should be posted at the school boundary. Refer to CVC 22352.~~

**Option:**

~~09 If used, the School Warning Assembly A(CA) may be posted up to 500 feet in advance of the school boundary. Refer to CVC 22352.~~

**Support:**

~~10 The School Warning Assembly A(CA) does not need to be posted if there are no school pedestrians using the highway and the school grounds are separated from the highway by a fence, gate or other physical barrier. Refer to CVC 22352.~~

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

**Standard:**

~~01 Where increased fines are imposed for traffic violations within a designated school zone, 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).~~

**Option:**

~~02 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 CHILDREN ARE PRESENT (S4-2P) plaque (see Figure 7B-1), or~~

~~C. A WHEN FLASHING (S4-4P) plaque (see Figure 7B-1) if used in conjunction with a yellow flashing beacon.~~

**Standard:**

~~03 Where a BEGIN HIGHER FINES ZONE (R2-10) sign or a FINES HIGHER (R2-6P) 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) 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:**

~~01 The School Advance Crossing assembly (see Figure 7B-1 or 7B-1(CA)) shall consist of a School Advance warning Assembly D(CA), or a School (S1-1) sign supplemented with an AHEAD (W16-9P) plaque or an XX FEET (W16-2P or W16-2aP) plaque.~~

~~02 Except as provided in Paragraph 3, a School Advance Crossing assembly or Assembly D(CA) 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:**

03 The School Advance Crossing assembly **or Assembly D(CA)** 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.

04 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.

05 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 ~~or R1-6a~~) 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.

**Standard:**

06 **The School Advance Warning Assembly D(CA) shall be used in advance of any School Crosswalk Warning Assembly B(CA), School Crosswalk Warning Assembly E(CA) or the School Speed Limit Assembly C(CA).**

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

**Standard:**

01 **If used, the School Crossing assembly **Assembly B(CA)** (see Figure 7B-1 **or 7B-1(CA)**) shall be installed at the school crossing (see Figures 7B-4 and 7B-5), or as close to it as possible, 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.**

02 **The School Crossing assembly **Assembly B(CA) or E(CA)** shall not be used at crossings other than those adjacent to schools and those on established school pedestrian routes.**

03 **The School Crossing assembly **Assembly B(CA) or E(CA)** shall not be installed on approaches controlled by a STOP (R1-1) sign, a ~~or~~ YIELD (R1-2) sign or a traffic signal.**

**Standard:**

03a **The School Crosswalk Warning Assembly B(CA) or E(CA) shall be posted at all yellow school crosswalks that are not controlled by a STOP (R1-1) sign, a YIELD (R1-2) sign or a traffic signal.**

**Guidance:**

03b *The School Crosswalk Warning Assembly B(CA) or E(CA) should be posted at all white school crosswalks that are not controlled by a STOP (R1-1) sign, a YIELD (R1-2) sign or a traffic signal.*

**Support:**

03c The School Crosswalk Warning Assemblies B(CA) and E(CA) are shown in Figure 7B-1(CA) and 7B-101(CA) through 7B-104(CA).

**Option:**

04 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 R1-6e~~) sign (see Figure 7B-6) may be used at unsignalized school crossings. 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 STATE LAW legend on the R1-6 series signs may be omitted.

05 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 STATE LAW legend on the R1-9 series signs may be omitted.

**Standard:**

05a **If used, the School Crosswalk Warning Assembly E(CA) (see Figures 7B-1(CA) and 7B-101(CA) through 7B-104(CA)) shall be installed in an overhead location at the marked crosswalk, or as close to it as possible, and shall consist of a modified R1-9 sign to show the location of the crossing.**

**Option:**

05b For uncontrolled locations with more than one lane in each direction of travel, advance yield lines (see Section 3B.16) may be used with the 'Yield Here to Pedestrians' signs (R1-5 or R1-5a).



<sup>06</sup> 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 ~~R1-6a~~) or the In-Street Schoolchildren Crossing (R1-6b or ~~R1-6c~~) 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.

**Support:**

<sup>06a</sup> ~~The In-Street Pedestrian Crossing and the In-Street Schoolchildren Crossing (R1-6a and R1-6c) signs are deleted as a stop is not required in California per CVC 21950.~~

**Standard:**

<sup>07</sup> ~~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).~~

<sup>08</sup> ~~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 controlled approaches.~~

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

*Guidance:*

<sup>01</sup> ~~The School Bus Stop Ahead (S3-1) sign (see Figure 7B-1 or 7B-1(CA)) 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.~~

**Standard:**

<sup>02</sup> ~~The School Bus Stop Ahead (S3-1) sign shall be installed in advance of an approved school bus stop where there is not a clear view in advance of the stop from a distance of 200 feet. Refer to CVC 22504(c).~~

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

*Option:*

<sup>01</sup> ~~The SCHOOL BUS TURN AHEAD (S3-2) sign (see Figure 7B-1 or 7B-1(CA)) 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, S4-2P, S4-3P, S4-4P, S4-6P, S5-1) and END SCHOOL SPEED LIMIT Sign (S5-3)**

**Standard:**

<sup>01</sup> ~~A School Speed Limit assembly **Assembly C(CA)** (see Figure ~~7B-1~~ **7B-1(CA)**) 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 based upon an engineering study or where a reduced school speed limit is specified for such areas by statute. The School Speed Limit assembly **Assembly C(CA)** 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~~).~~

<sup>02</sup> ~~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~~).~~

<sup>03</sup> ~~Where increased fines are imposed for traffic violations within a reduced school speed limit zone, 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 reduced school speed limit sign to notify road users.~~

**04 Except as provided in Paragraph 5, the The downstream end of an authorized and posted reduced school speed limit zone shall be identified with an END SCHOOL SPEED LIMIT (S5-3) and/or Speed Limit (R2-1) sign (see Figures 7B-1, 7B-1(CA), and 7B-5 and 7B-5(CA)).**

Option:

~~05 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 and an END SCHOOL SPEED LIMIT (S5-3) sign.~~

~~06 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 or the Speed Limit (R2-1) sign may be posted by itself (see Figures 7B-5(CA) and 7B-102(CA)).~~

*Guidance:*

~~07 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. Refer Figures 7B-1(CA), 7B-5, 7B-5(CA), and 7B-101(CA) through 7B-103(CA).~~

**Standard:**

**08 The School Speed Limit assembly Assembly C(CA) shall be either a fixed-message sign assembly or a changeable message sign.**

**09 The fixed-message School Speed Limit assembly Assembly C(CA) shall consist of a top plaque (S4-3P) with the legend SCHOOL, a Speed Limit (R2-1) sign, and a bottom plaque WHEN CHILDREN ARE PRESENT (S4-1P, S4-2P, 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 7B-1(CA)).**

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:*

11 *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.*

12 *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:**

**13 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.

~~16 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.~~

**Standard:**

**17 The School Speed Limit Assembly C(CA) shall be used on streets with speed limits greater than 25 mph that are contiguous to a school building or school grounds.**

Support:

18 The School Speed Limit Assembly C(CA) is shown in Figure 7B-1(CA).

Option:

<sup>19</sup> If used, the School Speed Limit Assembly C(CA) may be posted up to 500 feet in advance of the school boundary.

**Standard:**

<sup>20</sup> **The “WHEN FLASHING” and specific time period messages shall not be used in school areas in California as they are not supported by CVC 22352. Hence, the Specific Time Period Plaque (S4-1P), WHEN FLASHING (S4-4P) and SCHOOL SPEED LIMIT 20 WHEN FLASHING (S5-1) signs shall not be used in California.**

Support:

<sup>21</sup> The “WHEN FLASHING” message is misleading because it suggests that the speed limit is in force only when the flashing beacons are in operation. The prima facie speed limit of 25 mph is in effect based on the presence of children per CVC 22352, not on the operation of the flashing beacons.

<sup>22</sup> Not using the “WHEN FLASHING” message also addresses the situation when children are present but the flashing beacons are inoperative for any reason.

<sup>23</sup> Not using the “WHEN FLASHING” message does not alter the warrants or the use of a flashing yellow beacon or its effectiveness as an attention-getting device.

<sup>24</sup> The specific time period message is misleading because it suggests that the speed limit is in force only during the time period specified. The prima facie speed limit of 25 mph is in effect based on the presence of children per CVC 22352, not on the time period specified.

**EXTENDED 25 MPH AND/OR REDUCED SPEEDS IN SCHOOL ZONES**

Option:

<sup>25</sup> A local authority may declare a 20 or 15 mph prima facie speed limit within 500 feet of a school building or school grounds and an extended 25 mph prima facie speed limit within 500 to 1000 feet from a school or school grounds.

Support:

<sup>26</sup> The extended 25 mph school speed zone can provide a progressive speed reduction.

**Standard:**

<sup>27</sup> **If the local authority declares by ordinance or resolution the above prima facie speed limits, all of the following criteria shall be met:**

- A. **Street (or highway) is in a residential district.**
- B. **Street (or highway) outside of a school zone has a posted speed limit no greater than 30 mph.**
- C. **Street (or highway) has no more than a total of two through traffic lanes (one in each direction or two in one direction).**
- D. **The reduced school zone speed limit of 20 or 15 mph is within 500 feet of school grounds.**
- E. **The extended school zone speed limit of 25 mph is within 500 to 1000 feet of school grounds.**

<sup>28</sup> **When used, a local ordinance or resolution adopted to establish a 20 or 15 mph reduced school zone speed limit and/or an extended 25 mph school zone speed limit shall not be effective until School Speed Limit Assembly C (CA) giving notice of the speed limit(s) is erected upon the highway.**

<sup>29</sup> **On a State highway, the ordinance or resolution shall not be effective until the ordinance or resolution has been approved by Caltrans and appropriate school zone speed signs are erected upon the State highway.**

<sup>30</sup> **For purposes of a 20 or 15 mph reduced prima facie speed limit, School Speed Limit Assembly C (CA) indicating a speed limit of 20 or 15 mph shall be placed at a distance up to 500 feet away from school grounds. For purposes of an extended 25 mph prima facie speed limit, School Speed Limit Assembly C (CA) indicating a speed limit of 25 mph shall be placed at any distance between 500 to 1,000 feet away from school grounds. Refer to Figure 7B-103(CA).**

<sup>31</sup> **The established school speed limits shall be effective when children are going to or leaving the school, either during school hours or during the noon recess hour. The school speed limits shall also apply when the school grounds are not separated from the highway by a fence, gate, or other physical barrier while the grounds are in use by children (this condition can apply at any time of day or any day of the week).**

<sup>32</sup> **The determination to reduce a prima facie speed limit to 20 or 15 mph and/or extend a 25 mph school zone speed limit, as described above, shall be documented in writing, in an engineering study. The engineering study shall identify the provisions of Section 627 of the California Vehicle Code (CVC) that support the reduced and/or extended school zone speed limit(s).**

*Guidance:*

*33 When preparing an engineering study pursuant to the Standard above, the local authority should cite all elements of an Engineering and Traffic Survey, as discussed in CVC Section 627, that support the need for a reduced speed limit of 20 or 15 mph and/or an extended 25 mph school zone speed limit.*

Support:

*34 The documentation of prevailing speeds found in CVC Section 627 can be used to establish an existing speed profile for the school zone, but the 85<sup>th</sup> percentile speed is not used to set the reduced or extended school speed limit.*

**Standard:**

**35 The local authority shall reimburse Caltrans for all costs incurred by Caltrans under this section.**

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

*Guidance:*

*01 A Reduced School Speed Limit Ahead (S4-5, S4-5a) sign (see Figure 7B-1 or 7B-1(CA)) 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 for the School Advance Warning Assembly D(CA).*

**Standard:**

**02 If used, the Reduced School Speed Limit Ahead sign shall be followed by a School Speed Limit sign or a School Speed Limit assembly Assembly C(CA).**

**03 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 Assembly C(CA).**

### **EXTENDED 25 MPH AND/OR REDUCED SPEEDS IN SCHOOL ZONES**

*Guidance:*

*04 For school area traffic control with a reduced school zone speed limit of 15 mph and/or an extended school zone speed limit of 25 mph in a residential district, the Reduced Speed School Zone Ahead (S4-5, S4-5a) sign should be used to give advance notice of a reduced 15 mph school zone speed limit and/or an extended school zone speed limit of 25 mph.*

Option:

*05 For school area traffic control with a reduced school zone speed limit of 20 mph and/or an extended school zone speed limit of 25 mph in a residential district, the Reduced Speed School Zone Ahead (S4-5, S4-5a) sign may be used to give advance notice of a reduced 15 mph school zone speed limit and/or an extended school zone speed limit of 25 mph.*

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

Option:

*01 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:

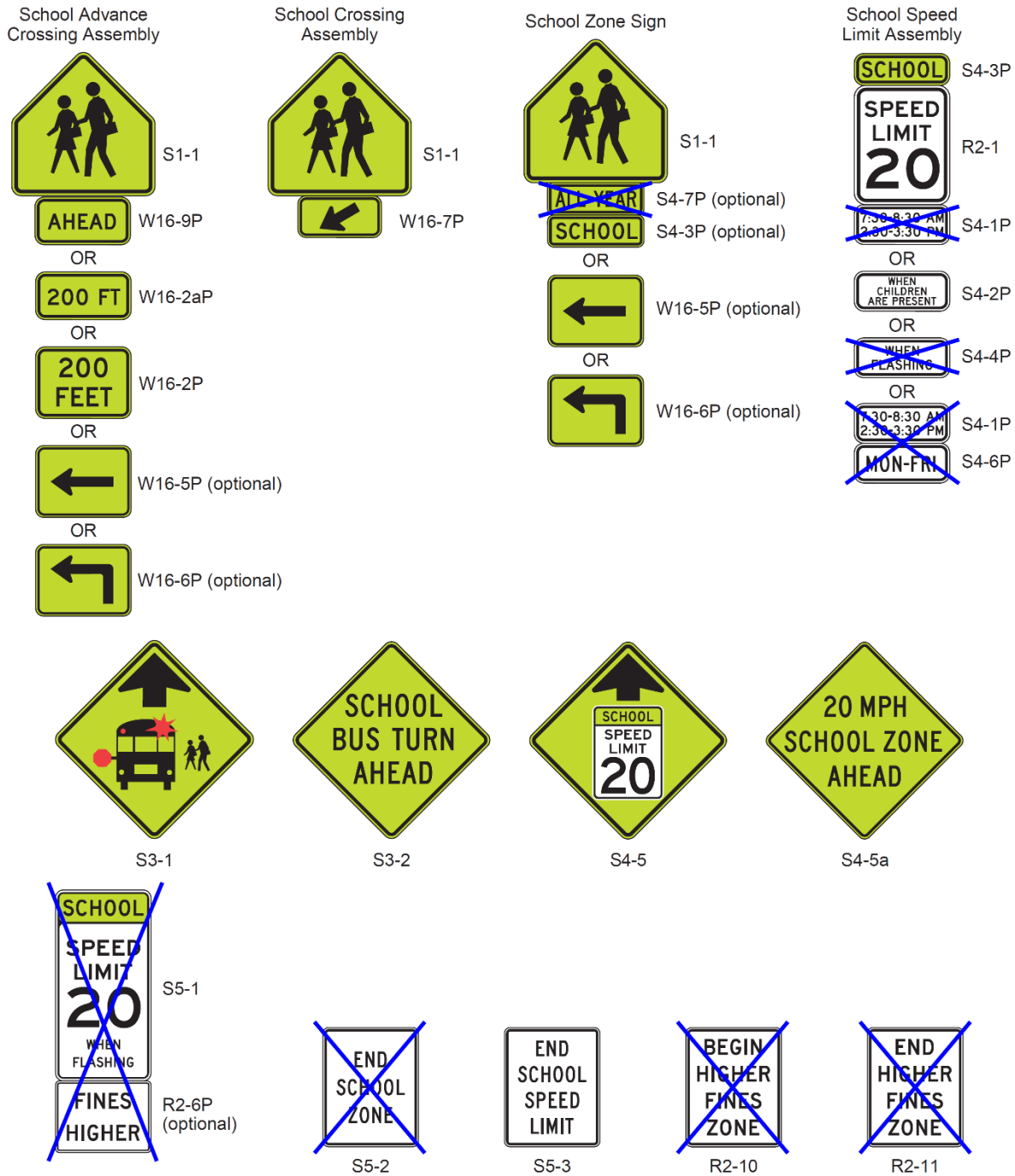
*02 Parking signs and other signs governing the stopping and standing of vehicles in school areas cover a wide variety of regulations. Typical examples of regulations are as follows:*

- 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.

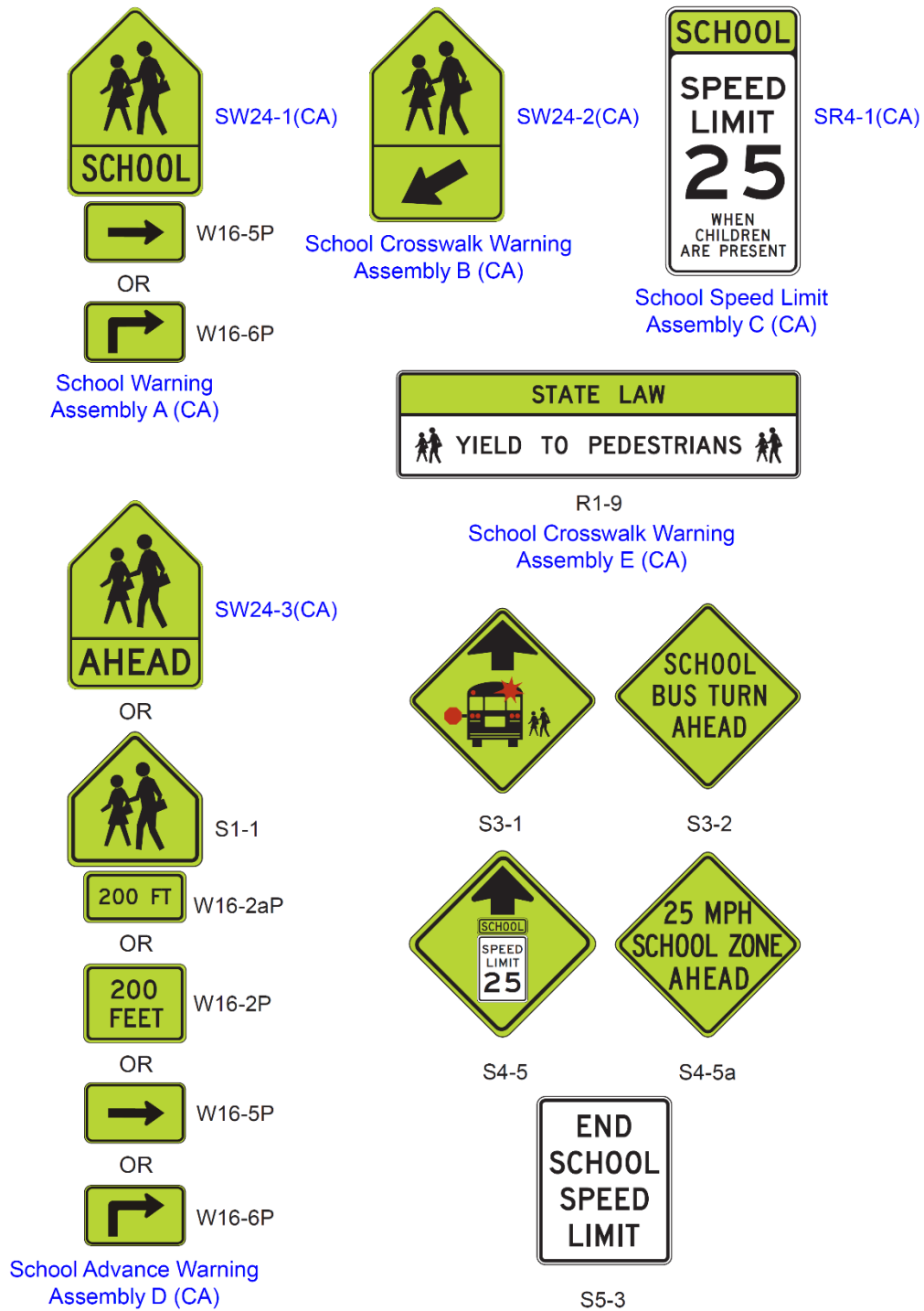
*03 Sections 2B.46, 2B.47, and 2B.48 contain information regarding the signing of parking regulations in school zone areas.*

*04 Street closures are authorized by local ordinance or resolution on streets crossing or dividing school grounds when necessary for the protection of persons attending the school. Refer to CVC 21102.*

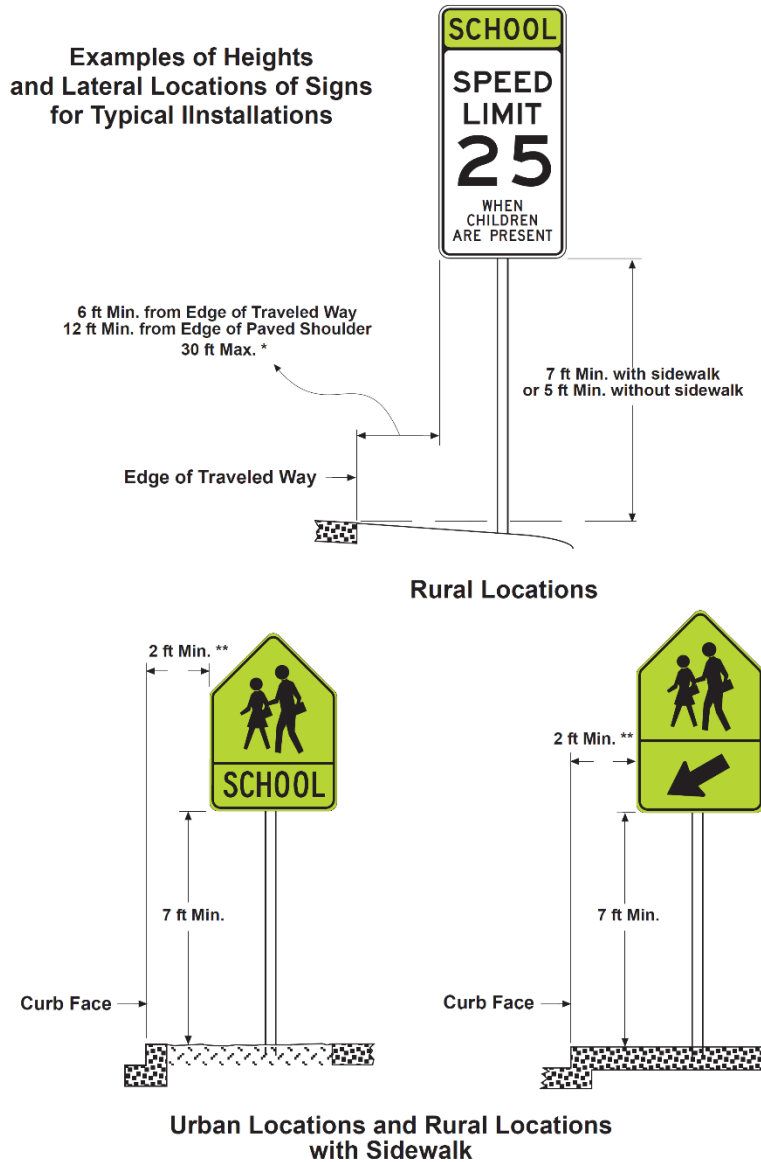
**Figure 7B-1. School Area Signs**



**Figure 7B-1(CA). School Area Signs (Sheet 1 of 2)**



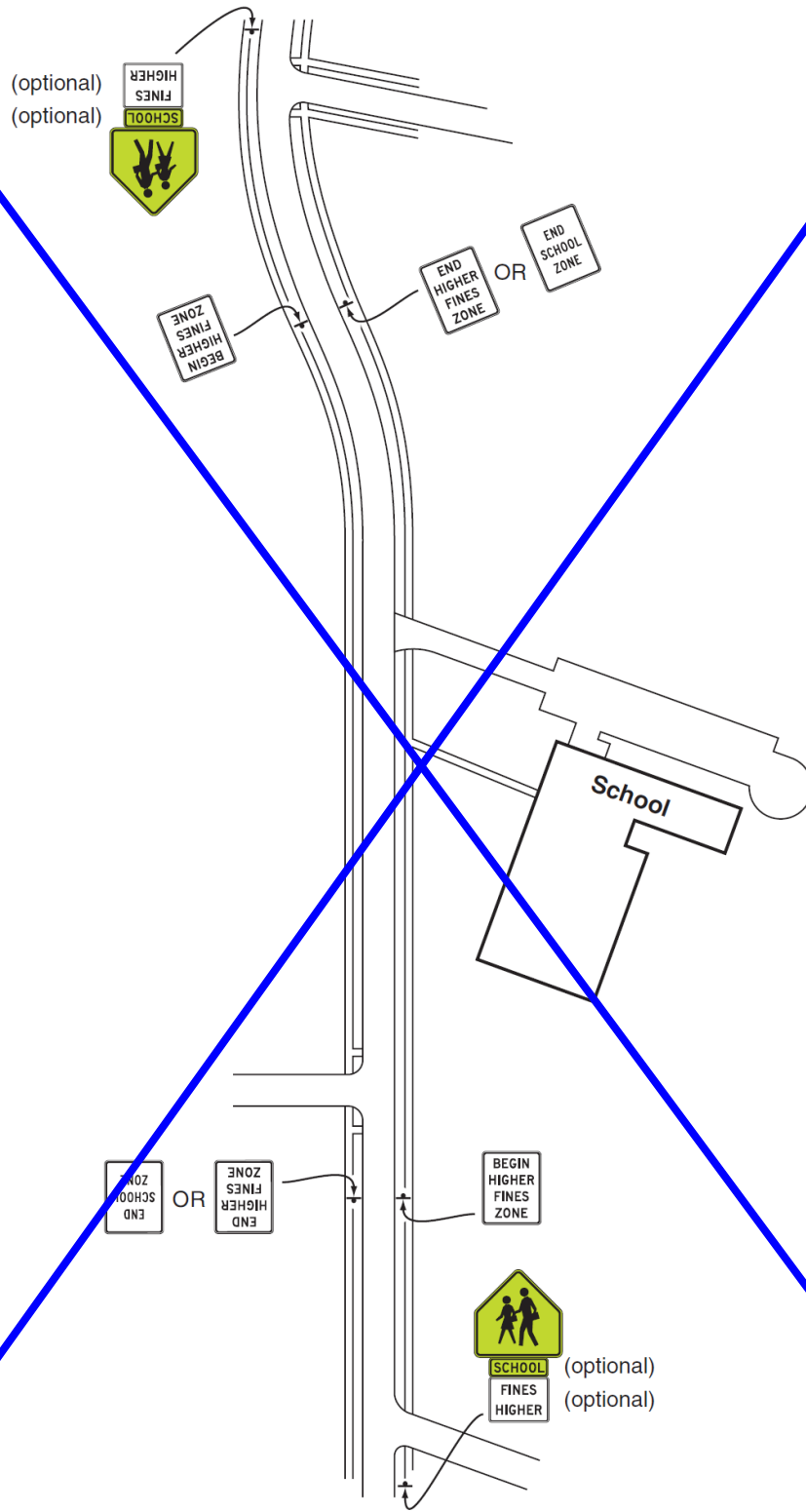
**Figure 7B-1(CA). School Area Signs (Sheet 2 of 2)**



**NOTES:**

- (\*) When clear roadside recovery areas are provided, signs shall be placed as far from the edge of traveled way as possible, up to a maximum of 30 ft. When possible they shall be placed in locations less likely to be hit by a vehicle leaving the traveled way. Signs should not be closer than 6 ft from the edge of a paved shoulder, or if none, 12 ft from the edge of the traveled way.
- (\*\*) In urban areas, where sidewalk width is limited or existing poles are close to the curb, a clearance of 1 ft from the curb face is permissible.

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





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

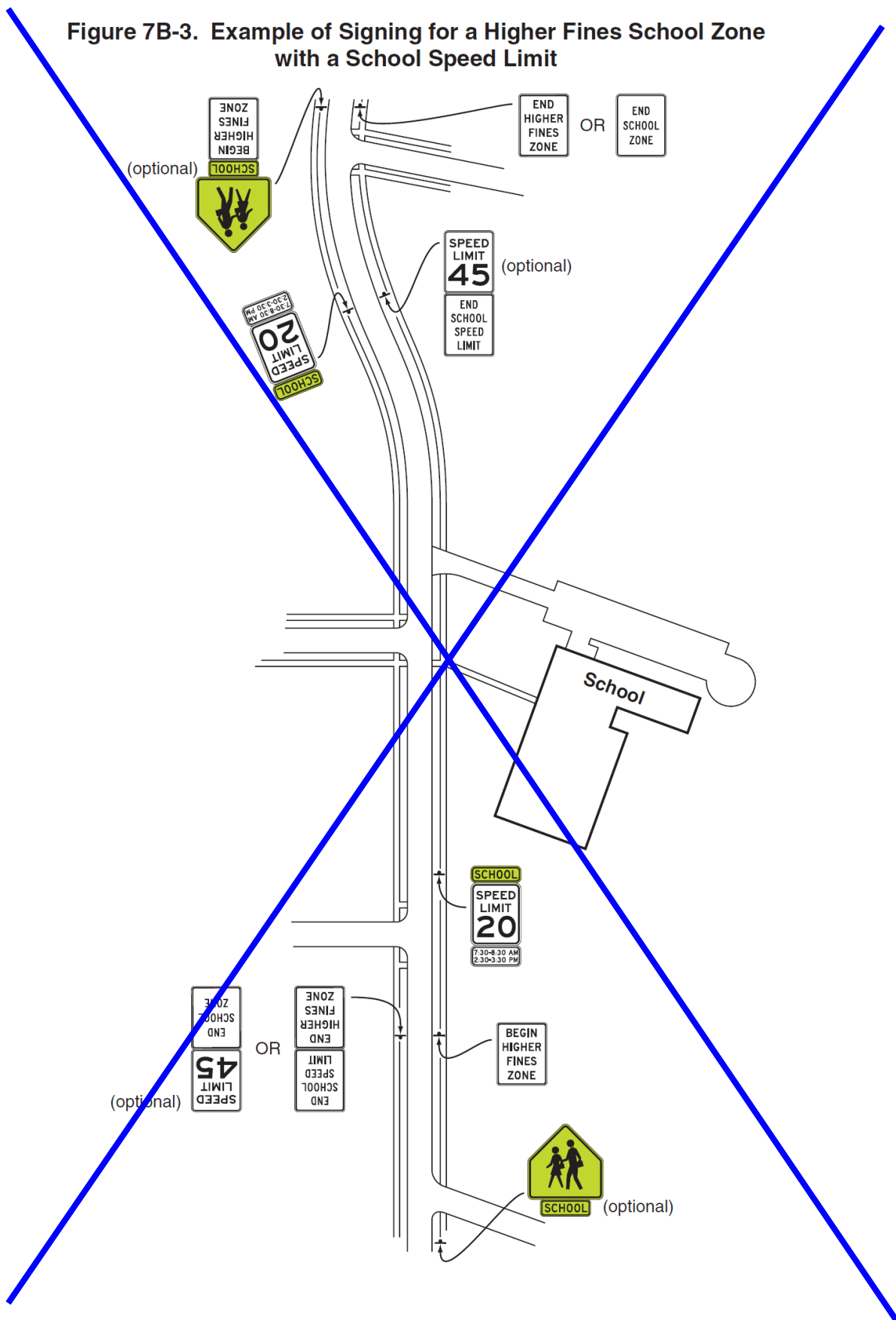
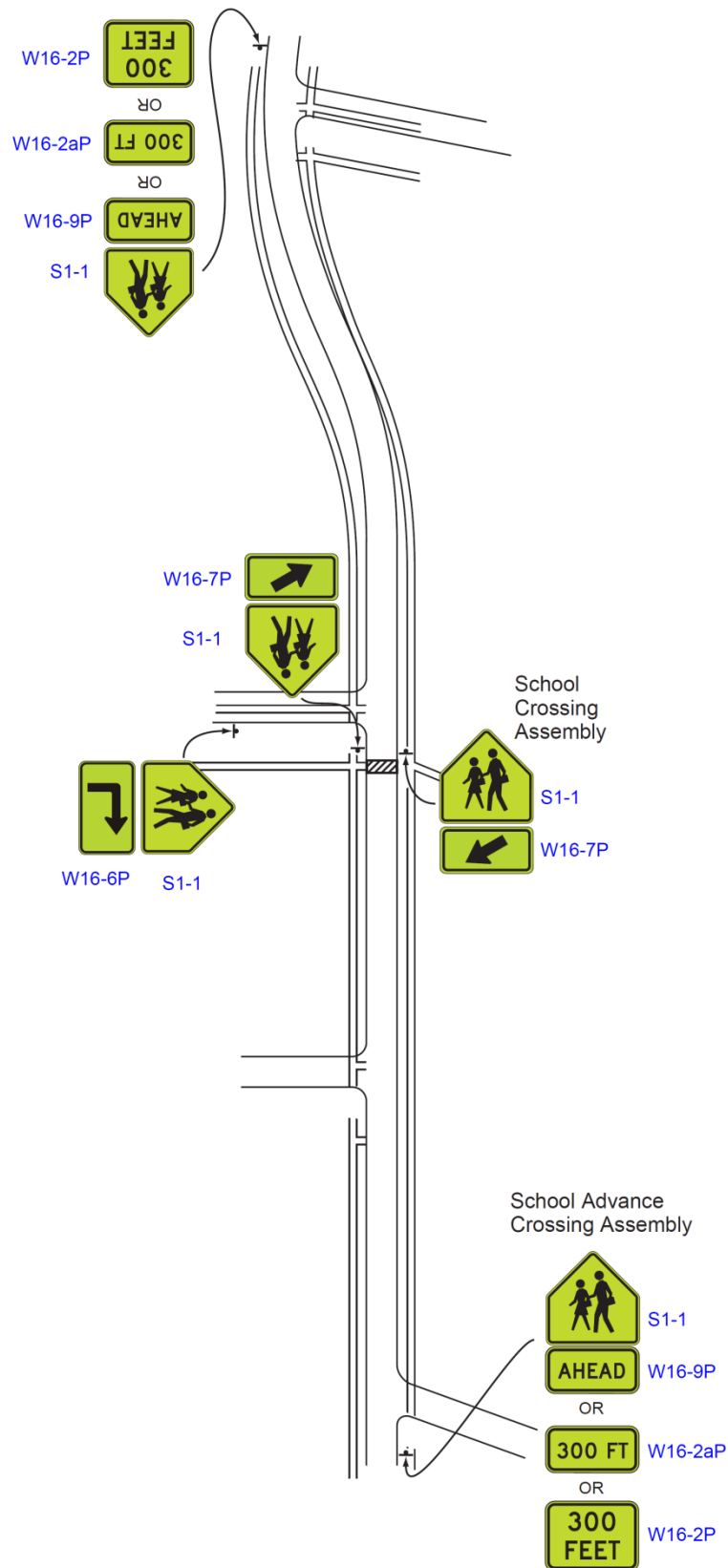
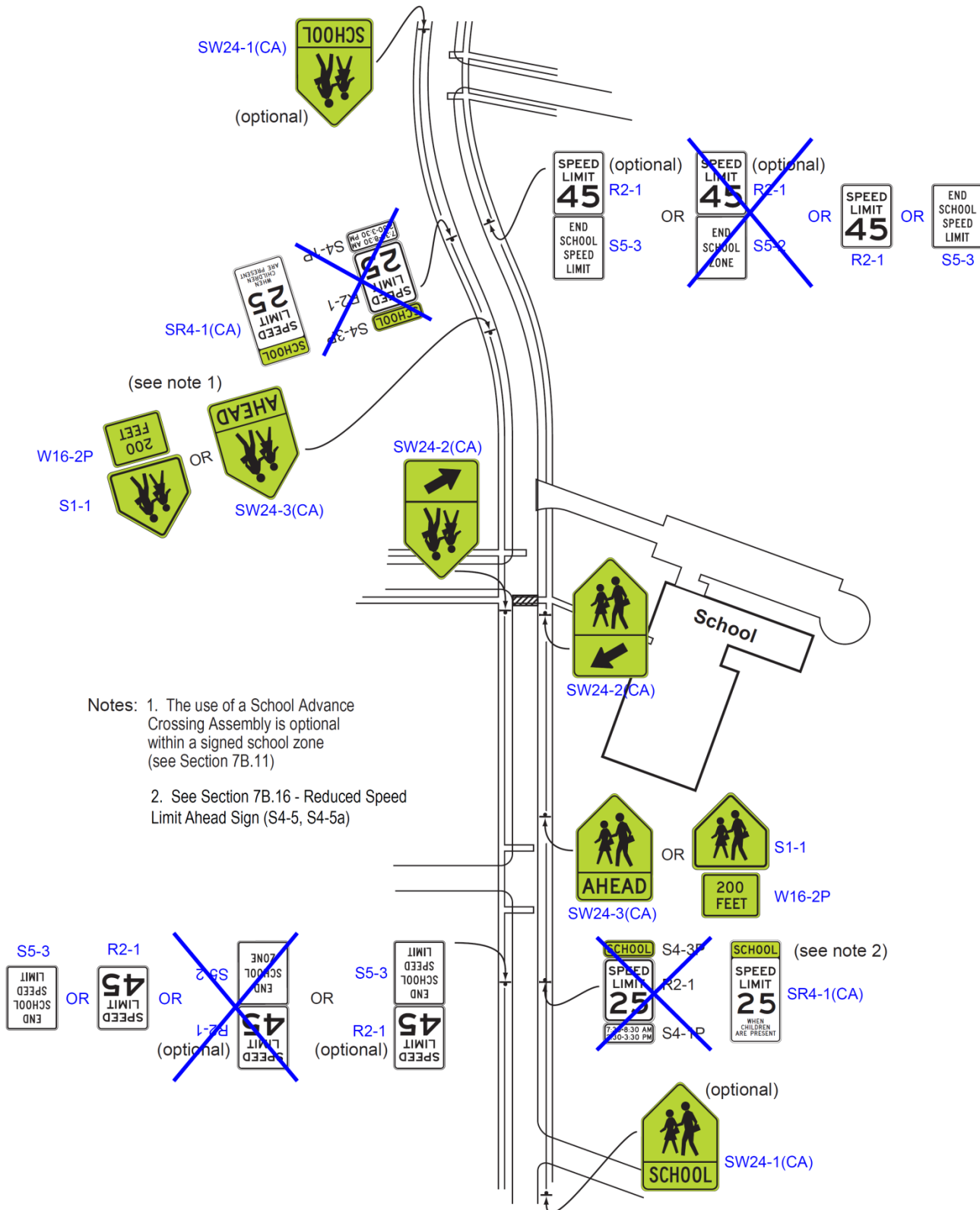


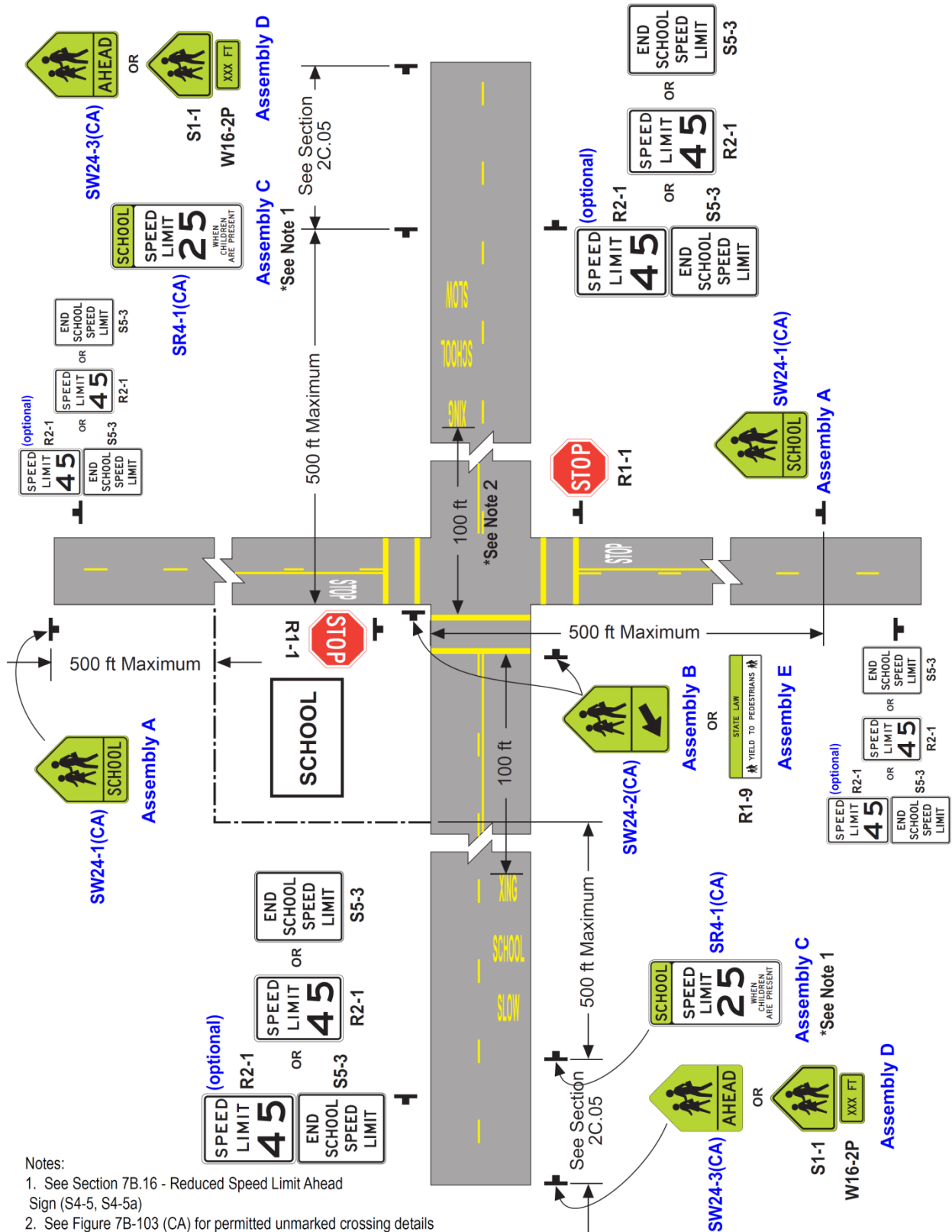
Figure 7B-4. Example of Signing for a School Crossing Outside of a School Zone



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

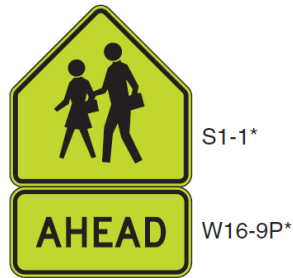


**Figure 7B-5(CA). Example of Signing for a School Zone with a School Speed Limit and a School Crossing**



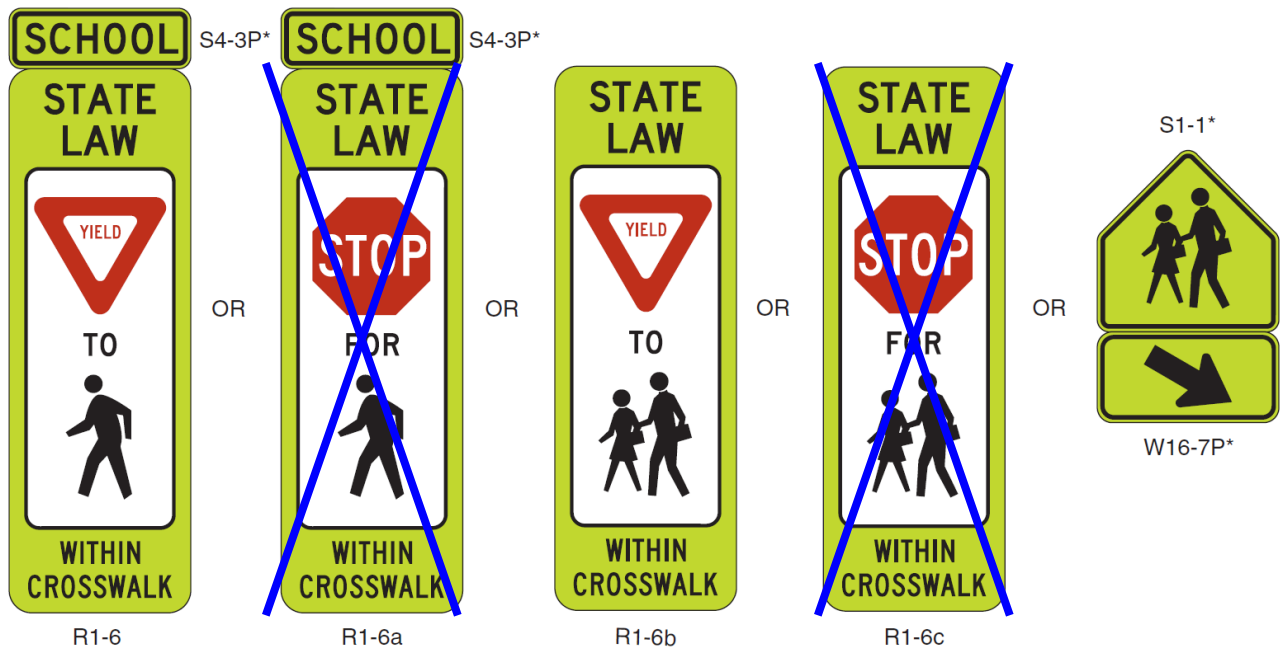
### Figure 7B-6. In-Street Signs in School Areas

#### 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

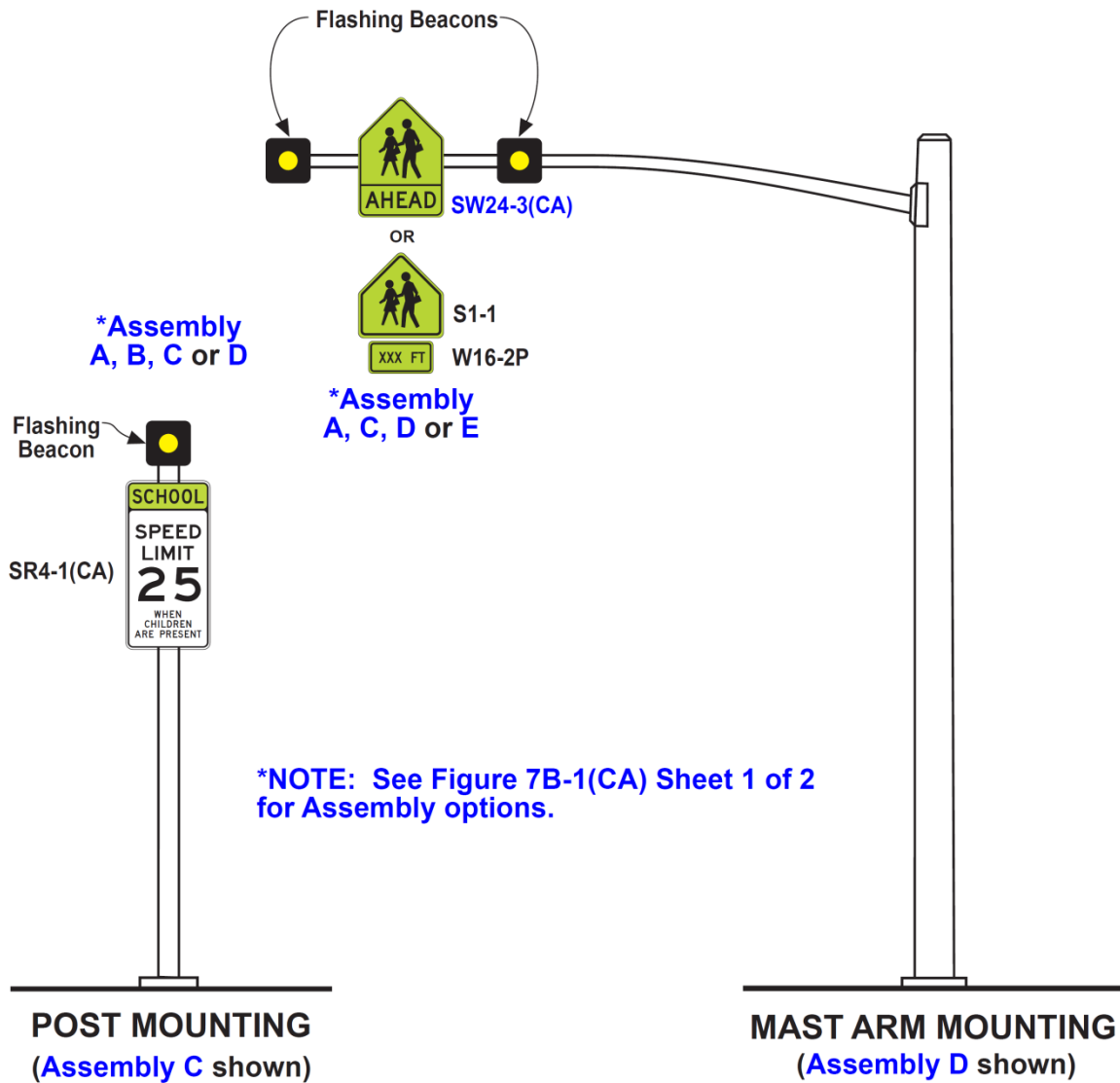
#### B - At the school crossing



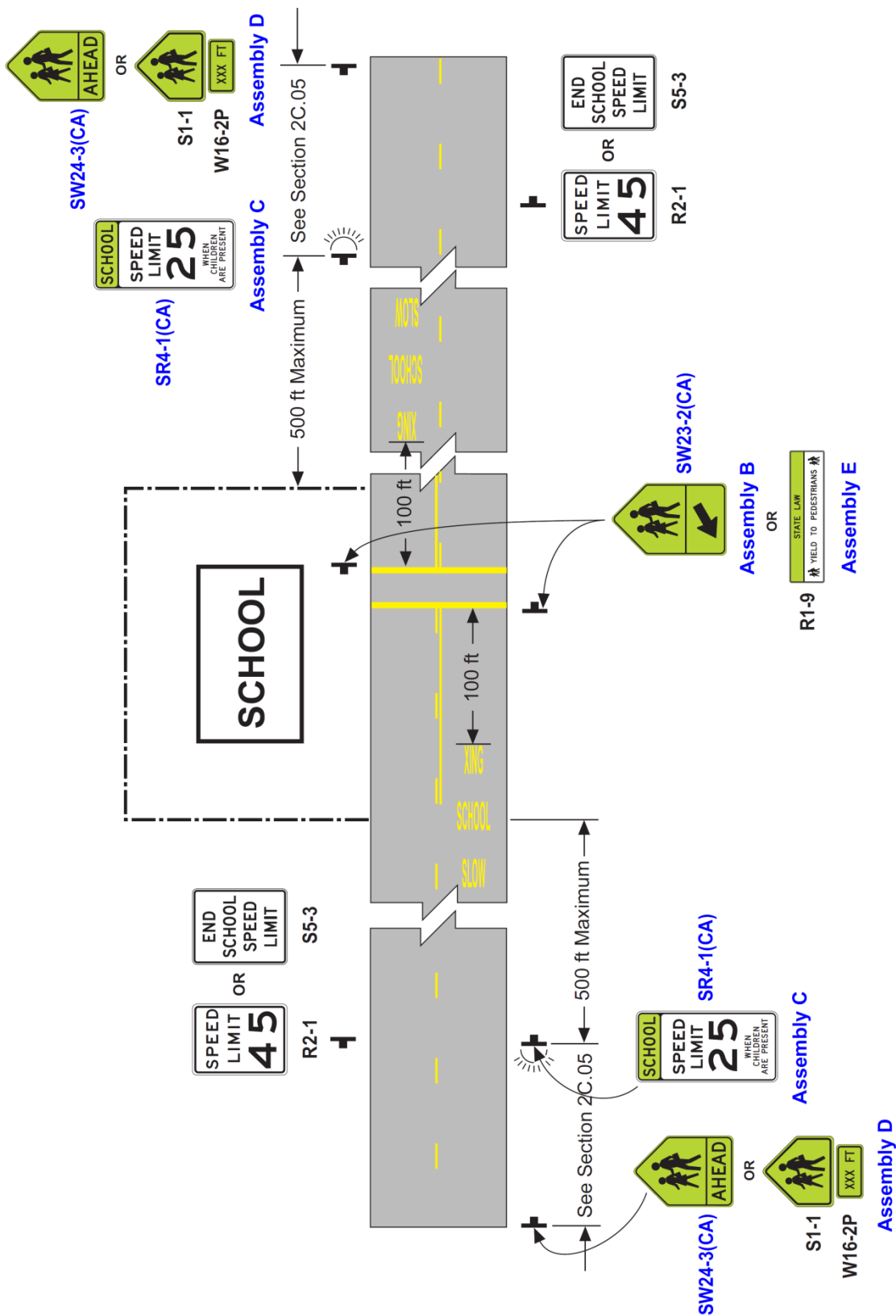
Notes:

1. The use of the STATE 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.

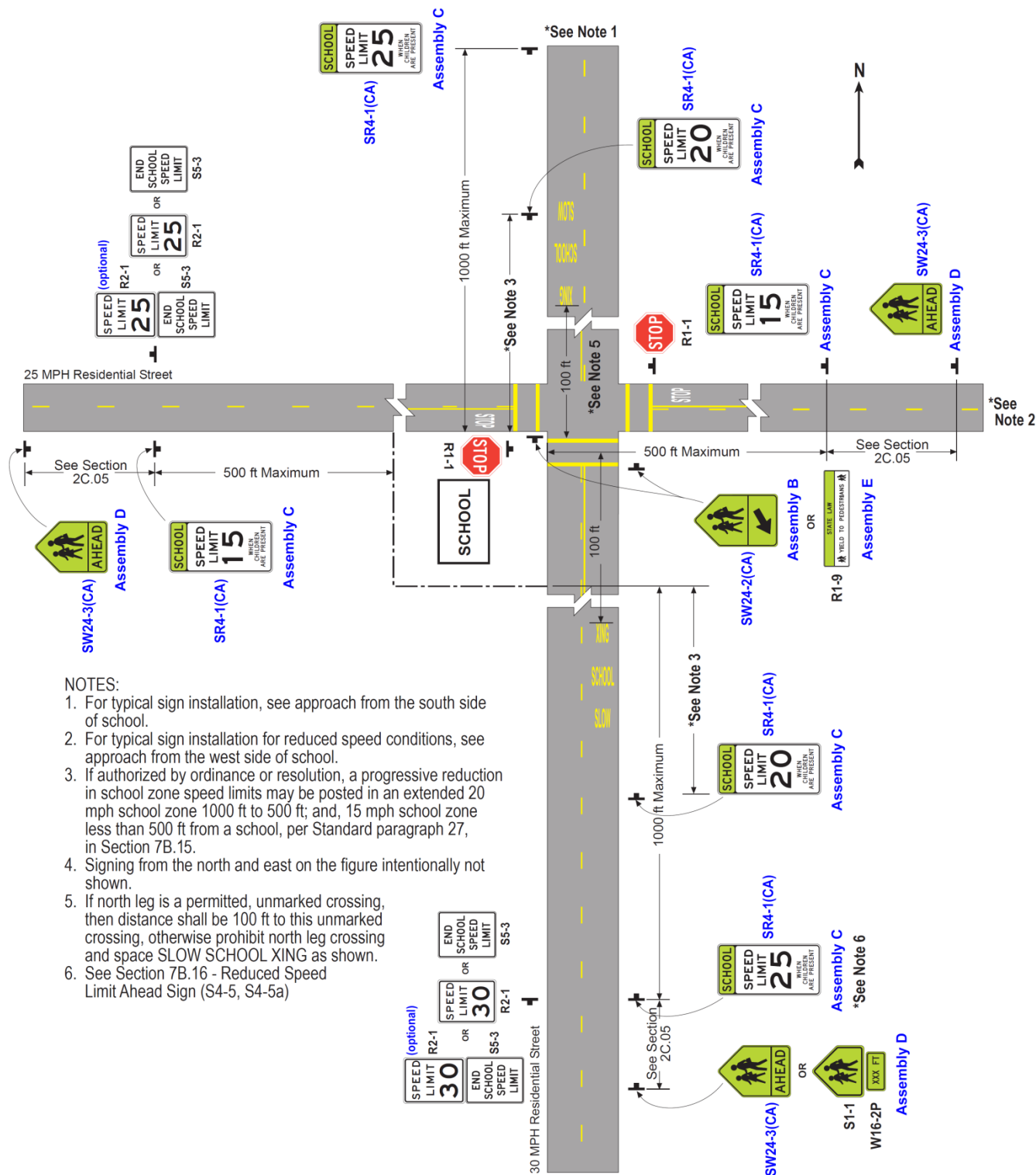
**Figure 7B-101 (CA). Example of School Area Signs with Flashing Yellow Beacons**



**Figure 7B-102 (CA). Example of Signing for Traffic Control in School Areas with Flashing Yellow Beacons**



**Figure 7B-103(CA). Example of Signing for School Area Traffic Control with Extended and/or Reduced School Zone Speed Limits**

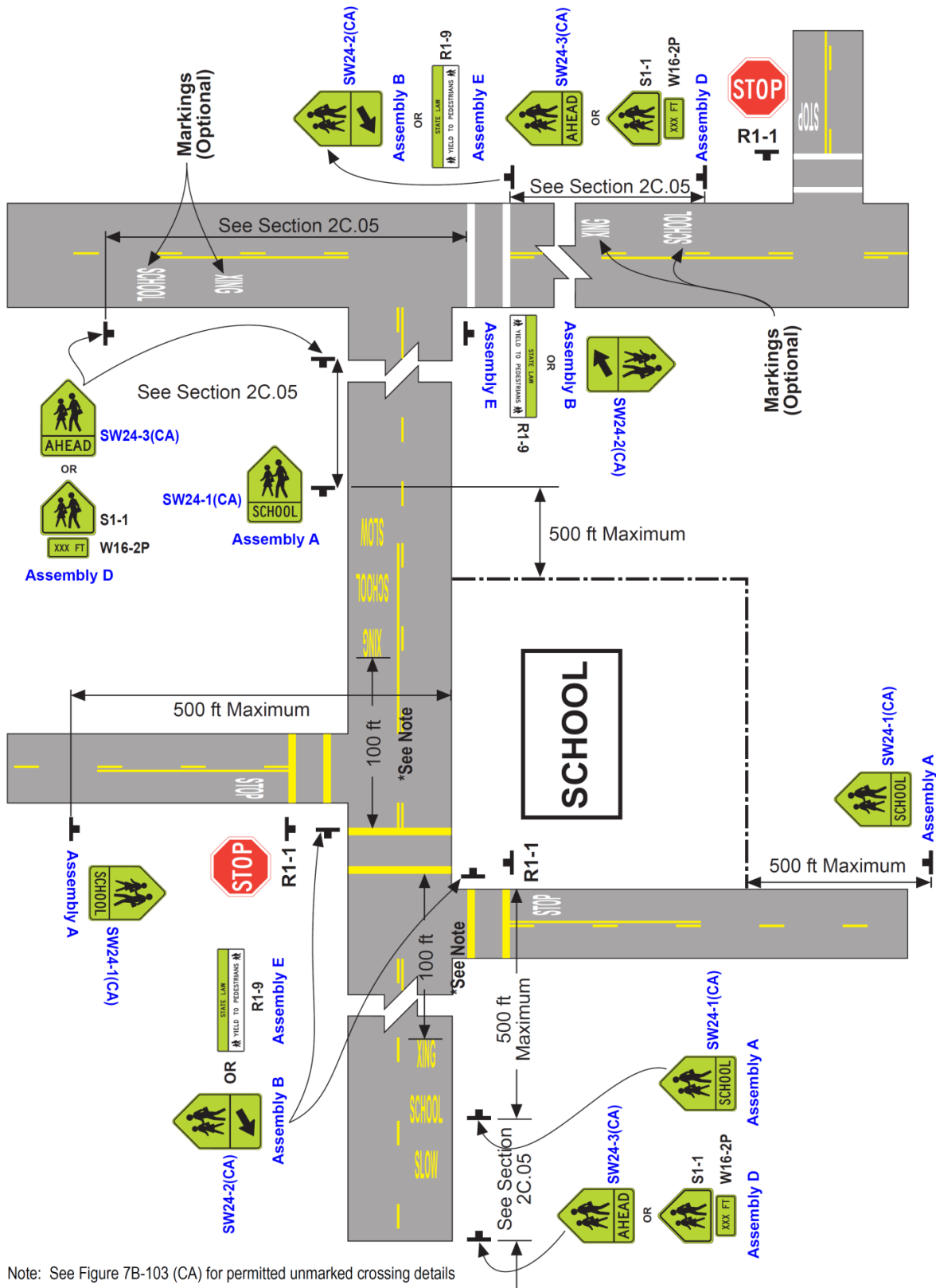


**NOTES:**

1. For typical sign installation, see approach from the south side of school.
2. For typical sign installation for reduced speed conditions, see approach from the west side of school.
3. If authorized by ordinance or resolution, a progressive reduction in school zone speed limits may be posted in an extended 20 mph school zone 1000 ft to 500 ft; and, 15 mph school zone less than 500 ft from a school, per Standard paragraph 27, in Section 7B.15.
4. Signing from the north and east on the figure intentionally not shown.
5. If north leg is a permitted, unmarked crossing, then distance shall be 100 ft to this unmarked crossing, otherwise prohibit north leg crossing and space SLOW SCHOOL XING as shown.
6. See Section 7B.16 - Reduced Speed Limit Ahead Sign (S4-5, S4-5a)



**Figure 7B-104(CA). Example of Signing for School Crosswalk Warning Assembly**



**Table 7B-1. School Area Sign and Plaque Sizes**

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	24 x 30	36 x 48
End School Speed Limit	S5-3	7B.15	24 x 30	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	N/A	N/A
Speed Limit (School Use)	R2-1	7B.15	24 x 30	24 x 30	36 x 48
Begin Higher Fine Zone	R2-10	7B.10	24 x 30		36 x 48
End Higher Fine Zone	R2-11	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 48		36 x 48
When Children Are Present	S4-2P	7B.15	24 x 10	24 x 10	36 x 18
School	S4-3P	7B.09, 7B.15	24 x 8	24 x 8	36 x 12
When Flashing	S4-4P	7B.15	24 x 48		36 x 48
Mon-Fri	S4-6P	7B.15	24 x 48		36 x 48
All Year	S4-7P	7B.09	24 x 48		36 x 48
Fines Higher	R2-6P	7B.10	24 x 48		36 x 24
XX Feet	W16-2P	7B.08	24 x 18	24 x 18	30 x 24
XX Ft	W16-2aP	7B.08	24 x 12	24 x 12	30 x 18
Turn Arrow	W16-5P	7B.08, 7B.09, 7B.11	<del>24 x 42</del> 24 x 18	24 x 18	<del>30 x 48</del>
Advance Turn Arrow	W16-6P	7B.08, 7B.09, 7B.11	<del>24 x 42</del> 24 x 18	24 x 18	<del>30 x 48</del>
Diagonal Arrow	W16-7P	7B.12	24 x 12	24 x 12	30 x 18
Diagonal Arrow (optional size)	W16-7P	7B.12	21 x 15	N/A	N/A
Ahead	W16-9P	7B.11	24 x 12	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  
 4. Larger plaque sizes can optionally be specified to match sign widths in school sign assemblies.

**Table 7B-1(CA). California School Area Sign Assembly Sizes**

Assembly	Sign Designation	Section	Conventional Road	Minimum	Oversized
School Warning Assembly A (CA)	SW24-1(CA)	7B.09	36 x 48	30 x 42	48 x 60
School Crosswalk Warning Assembly B (CA)	SW24-2(CA)	7B.12	36 x 48	30 x 42	48 x 60
School Speed Limit Assembly C (CA)	SR4-1(CA)	7B.15	36 x 72	24 x 48	48 x 96
School Advance Warning Assembly D (CA)	SW24-3(CA)	7B.11	36 x 48	30 x 42	48 x 60
School Crosswalk Warning Assembly E (CA)	R1-9	2B.12, 7B.12	90 x 24	90 x 24	90 x 24

## CHAPTER 7C. MARKINGS

### Section 7C.01 Functions and Limitations

Support:

<sup>01</sup> 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.

<sup>02</sup> 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

Standard:

<sup>00a</sup> **When transverse crosswalk lines are used, they shall be solid white or yellow, marking both edges of the crosswalk, except as noted in the Option. Refer to CVC 21368. They shall be not less than 12 inches nor greater than 24 inches in width.**

Guidance:

<sup>00b</sup> *If transverse crosswalk lines are used to mark a crosswalk, the gap between the lines should not be less than 6 feet. If diagonal or longitudinal lines are used without transverse lines to mark a crosswalk, the crosswalk width should not be less than 6 feet.*

<sup>00c</sup> *Crosswalk lines on both sides of the crosswalk should extend across the full width of pavement or to the edge of the intersecting crosswalk to discourage diagonal walking between crosswalks.*

<sup>01</sup> *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).*

<sup>02</sup> *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.*

<sup>03</sup> *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:

<sup>04</sup> 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.

Support:

<sup>05</sup> Examples of school area signing, markings, flashing beacons and overhead school signs are shown in Figures 7B-1(CA), 7B-5(CA), 7B-4 through 7B-6 and Figures 7B-101(CA) through 7B-104(CA).

<sup>06</sup> Refer to CVC 21368 for crosswalks near schools.

Standard:

<sup>07</sup> **Whenever a marked pedestrian crosswalk has been established in a roadway contiguous to a school building or school grounds, it shall be yellow. If any one of the crosswalks is required to be yellow at an intersection, then all other marked pedestrian crosswalks at that intersection shall also be yellow. Refer to CVC 21368.**

Option:

08 A marked pedestrian crosswalk may be yellow if the nearest point of the crosswalk is not more than 600 feet from a school building or school grounds. Refer to CVC 21368.

09 A marked pedestrian crosswalk may be yellow if the nearest point of the crosswalk is not more than 2800 feet from a school building or school grounds and there are no intervening crosswalks other than those contiguous to the school grounds, and it appears that the facts and circumstances require special marking for the protection and safety of persons attending the school. Refer to CVC 21368.

Guidance:

10 *Diagonal or longitudinal markings should be used when a crosswalk is marked at an uncontrolled crossing location. The diagonal or longitudinal lines should be 12 to 24 inches wide and spaced 12 to 60 inches apart. The spacing design should avoid the wheel paths.*

Option:

11 For added visibility, the area of a crosswalk may be marked with white or yellow diagonal lines at a 45-degree angle to the line of the crosswalk or with white or yellow longitudinal lines parallel to traffic flow. Refer to CVC 21368. When diagonal or longitudinal lines are used to mark a crosswalk, the transverse crosswalk lines may be omitted.

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

~~Option:~~

~~01 If used, the SCHOOL word marking may extend to the width of two approach lanes (see Figure 7C-1).~~

~~Guidance:~~

~~02 If the two-lane SCHOOL word marking is used, the letters should be 10 feet or more in height.~~

Support:

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

**Standard:**

04 **If used, the SCHOOL pavement marking shown in Figure 7C-101(CA) shall be used and it shall be restricted to a single lane.**

Guidance:

05 *On State highways, all letters, numerals, and symbols should be in accordance with Caltrans' Standard Plans publication. See Section 1A.11 for more information regarding this publication.*

**Standard:**

06 **The SLOW SCHOOL XING marking shall be used in accordance with the provisions of CVC 21368 in advance of all yellow school crosswalks (see Figure 7C-101(CA)). They shall not be used where the crossing is controlled by stop signs, traffic signals, or yield signs. They shall be yellow, with the word XING at least 100 feet in advance of the school crosswalk.**

Option:

07 The SCHOOL XING marking and crosswalks may be used at remote locations outside of the school zone.

Support:

08 Remote crosswalk locations are locations near schools, which are not included in CVC 21368 criteria. Also refer to Section 7C.03.

**Standard:**

09 **If the SCHOOL XING marking and crosswalks are used at remote locations outside of the school zone, they shall not be yellow (Refer to CVC 21368), but white.**

Guidance:

10 *The SCHOOL XING marking should be used in advance of all white school crosswalks.*

Option:

11 The SCHOOL marking may be used with the School Assemblies A(CA) or C(CA), except at locations where SLOW SCHOOL XING markings are required.

**Standard:**

12 **If the SCHOOL marking is used with the School Assemblies A(CA) or C(CA) (See Section 7B.11), it shall be yellow.**

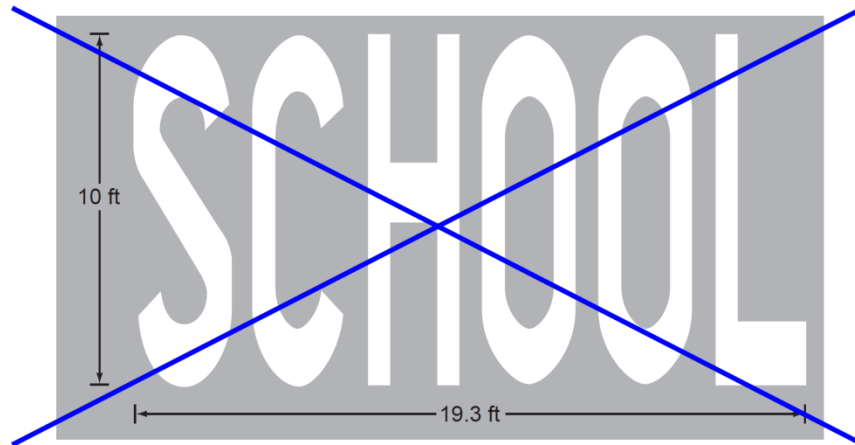
**Guidance:**

<sup>13</sup> If used, the SCHOOL marking should be located adjacent to the School Assemblies A(CA) or C(CA) (See Section 7B.11).

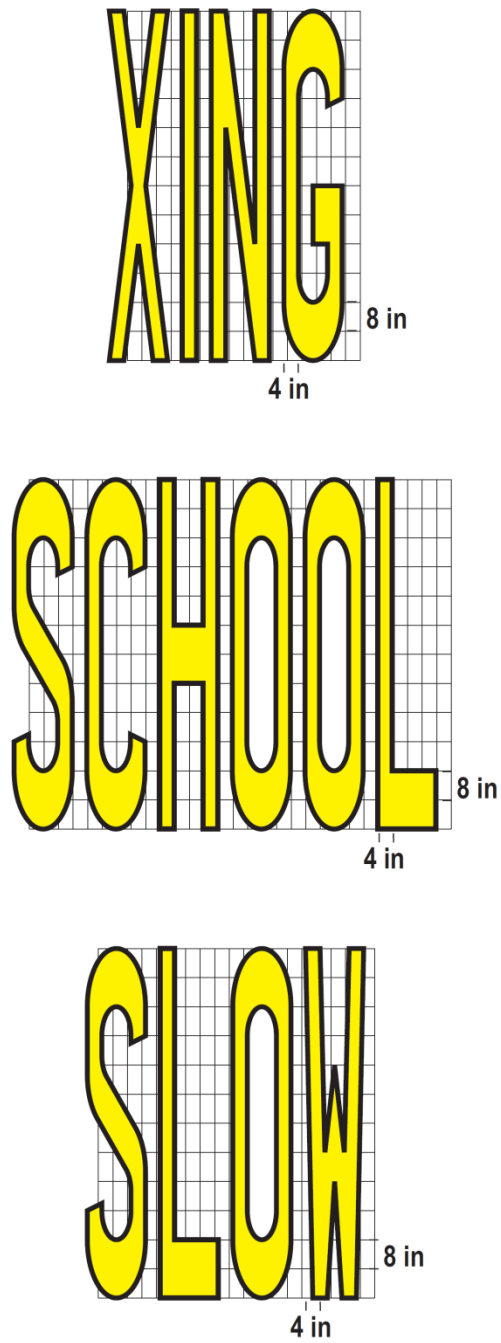
**Support:**

<sup>14</sup> Refer to Section 3B.20 for more details on SCHOOL marking.

**Figure 7C-1. Two-Lane Pavement Marking of "SCHOOL"**



**Figure 7C-101 (CA). Pavement Word Markings for School Areas**



NOT TO SCALE

## CHAPTER 7D. CROSSING SUPERVISION

### Section 7D.01 Types of Crossing Supervision

Support:

- 01 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.
- 02 Information regarding the organization, administration, and operation of a school safety patrol program is contained in the "AAA School Safety Patrol Operations Manual" (see Section 1A.11).

### Section 7D.02 Adult Crossing Guards

Option:

- 01 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.
- 02 Adult Crossing Guards may be assigned at designated school crossings to assist school pedestrians at specified hours when going to or from school. The following suggested policy for their assignment applies only to crossings.

Guidance:

- 03 *An Adult Crossing Guard should be considered when:*
  - A. *Special situations make it necessary to assist elementary school pedestrians in crossing the street.*
  - B. *A change in the school crossing location is being made, but prevailing conditions require school crossing supervision until the change is constructed and it is not reasonable to install another form of traffic control or technique for this period.*

### Criteria for Adult Crossing Guards

Support:

- 04 Adult Crossing Guards normally are assigned where official supervision of school pedestrians is desirable while they cross a public highway, and at least 40 school pedestrians for each of any two hours (not necessarily consecutive) daily use the crossing while going to or from school.

Option:

- 05 Adult crossing guards may be used under the following conditions:
  - 1. At uncontrolled crossings where there is no alternate controlled crossing within 600 feet; and
    - a. In urban areas where the vehicular traffic volume exceeds 350 during each of any two hours (not necessarily consecutive) in which 40 or more school pedestrians cross daily while going to or from school; or
    - b. In rural areas where the vehicular traffic volume exceeds 300 during each of any two hours (not necessarily consecutive) in which 30 or more school pedestrians cross daily while going to or from school.Whenever the critical (85th percentile) approach speed exceeds 40 mph, the guidelines for rural areas should be applied.
  - 2. At stop sign-controlled crossing:  
Where the vehicular traffic volumes on undivided highways of four or more lanes exceeds 500 per hour during any period when the school pedestrians are going to or from school.
  - 3. At traffic signal-controlled crossings:
    - a. Where the number of vehicular turning movements through the school crosswalk exceeds 300 per hour while school pedestrians are going to or from school; or
    - b. Where justified through analysis of the operations of the intersection.

### Legal Authority and Program Funding for Adult Crossing Guards

Option:

- 06 Cities and counties may designate local law enforcement agencies, the governing board of any school district or a county superintendent of schools to recruit and assign adult crossing guards to intersections that meet approved guidelines for adult supervision.

**Support:**

07 There are various methods for funding a school adult crossing guard program. One of these methods is through the use of fines and forfeitures received under the Penal Code. Disposition of these fines and forfeitures is defined in CVC Sections 42200 and 42201.

08 An example of these dispositions by cities and counties is as follows:

- A. Disposition by cities (CVC 42200). Fines and forfeitures received by cities and deposited into a "Traffic Safety Fund" may be used to pay the compensation of school crossing guards who are not regular full-time members of the police department of the city.
- B. Disposition by county (CVC 42201). Fines and forfeitures received by a county and deposited in the road fund of the county may be used to pay the compensation of school crossing guards, and necessary equipment and administrative costs. The board of supervisors may adopt standards for crossing guards and has final authority over the total cost of the crossing guard program.

### **Section 7D.03 Qualifications of Adult Crossing Guards**

**Support:**

01 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:**

02 *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.*

### **Training Programs for Adult Crossing Guards**

**Guidance:**

03 *Adequate training should be provided in adult crossing guard responsibilities and authority. This function can usually be performed effectively by a law enforcement agency responsible for traffic control.*

04 *Training programs should be designed to acquaint newly employed crossing guards with their specific duties, local traffic regulations, and crossing techniques. Training workshops may be used as a method of advising experienced employees of recent changes in existing traffic laws and program procedures. For example, crossing guards should be familiar with the California law which provides that any person who disregards any traffic signal or direction given by a non-student school crossing guard authorized by a law enforcement agency, any board of supervisors of a county or school district shall be guilty of an infraction and subject to the penalties of Section 42001 of the CVC (Section 2815).*

### **Section 7D.04 Uniform of Adult Crossing Guards**

**Standard:**

01 **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.**



## **Section 7D.05 Operating Procedures for Adult Crossing Guards**

### **Standard:**

**01 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, they shall stand in the roadway to indicate that pedestrians are about to use or are using the crosswalk, and that all vehicular traffic must stop.**

**02 Adult crossing guards shall use a STOP paddle. The STOP paddle shall be the primary hand-signaling device.**

**03 The STOP (R1-1) 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:**

**04 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.**

**05 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:**

**06 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.**

### **Option:**

**07 The 24 x 24 inch size of the STOP (C28A(CA) paddle may be used where greater emphasis is needed and speeds are 30 mph or more.**

### **Support:**

**08 See Section 6E.03 for details on STOP paddles and rigid staff.**

## **Section 7D.101(CA) School Safety Patrols**

### **Legal Authority**

#### **Standard:**

**01 For all purposes "School Safety Patrols" shall mean "Student Patrols" as referenced in this California MUTCD.**

**02 School Safety Patrols shall be authorized by the local school board. School authorities shall be responsible for organizing, instructing and supervising patrols with the assistance of the local police.**

#### **Support:**

**03 The California Education Code, Sections 49300 to 49307, and the California Code of Regulations, Sections 570 to 576 and 632, authorize the development of School Safety Patrols and outline rules for implementing these programs within the state.**

### **Uniforms:**

#### **Standard:**

**04 The use of the School Safety Patrol uniforms and insignia shall adhere to the following regulations (California Code of Regulations 576):**

- (a) A school safety patrol member (except a member of the R.O.T.C. or California Cadet Corps on traffic duty in his official uniform) shall wear, at all times while on duty, the basic standard uniform specified in this section,**

except that the rainy day uniform may be worn under appropriate weather conditions. Only the optional additions specified in this section may be added to the uniform.

- (b) The basic standard uniform for patrol members is the white or fluorescent orange Sam Browne belt and either an overseas type federal yellow or fluorescent orange cap or a yellow or fluorescent orange helmet. Optional additions to the basic standard uniform are any or all of the following:
  - (1) Colored piping on the federal yellow cap.
  - (2) Colored striping on the yellow helmet.
  - (3) A red or fluorescent orange upper garment
  - (4) Insignia or a special badge identifying the organization, to be worn on the left breast, left arm, or cap.
- (c) The rainy-day uniform is a federal yellow raincoat and a federal yellow rain hat. The Sam Browne belt may be worn over the raincoat.
- (d) The insignia, or special badge and cap shall be worn only during official school safety patrol duty, except that the governing board may authorize members of the school safety patrol to wear the uniform and insignia for special school safety patrol functions.

### Operating Procedures

#### **Standard:**

<sup>05</sup> Student patrols shall be carefully selected. They shall be students from the fifth grade or higher and shall be at least 10 years of age. Refer to California Code of Regulations Section 571.

#### *Guidance:*

<sup>06</sup> Leadership and reliability should be determining qualities for patrol membership.

#### **Standard:**

<sup>07</sup> Parental approval shall be obtained in writing before a student is used as a member of a student patrol. Refer to California Education Code Section 49302.

#### **Support:**

<sup>08</sup> School Safety Patrols control children, not vehicles.

#### **Standard:**

<sup>09</sup> School Safety Patrols shall stop children back of the curb or edge of the roadway and allow them to cross only when there is an adequate gap in traffic (see California Code of Regulations Sections 570 to 576 and 632 for School Safety Patrols operating procedures and requirements).

#### **Criteria for Student Patrols:**

#### **Option:**

<sup>10</sup> A student patrol may be established at locations where an existing traffic control device, police officer or adult crossing guard is in operation. They may also be used where there are adequate crossing gaps in vehicular flow at an uncontrolled crossing and it is desirable to use student patrols to guide the school pedestrians.

#### **Support:**

<sup>11</sup> To determine the frequency and adequacy of gaps in the traffic stream, refer to Section 7A.03.