

## **PART 8. TRAFFIC CONTROL FOR RAILROAD AND LIGHT RAIL TRANSIT GRADE CROSSINGS**

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# PART 8

## TRAFFIC CONTROL FOR RAILROAD AND LIGHT RAIL TRANSIT GRADE CROSSINGS

### CHAPTER 8B. SIGNS AND MARKINGS

#### Section 8B.02 Sizes of Grade Crossing Signs

**Standard:**

- 01 The sizes of grade crossing signs shall be as shown in [Table 8B-1\(VA\) in this Supplement](#).


**Option:**

- 02 Signs larger than those shown in [Table 8B-1\(VA\) in this Supplement](#) may be used (see [Section 2A.11 of this Supplement](#)).

**Table 8B-1(VA). Grade Crossing Sign and Plaque Minimum Sizes**

| Sign or Plaque                 | Sign Designation | Section         | Conventional Road |                 | Expressway   | Minimum         | Oversized |
|--------------------------------|------------------|-----------------|-------------------|-----------------|--------------|-----------------|-----------|
|                                |                  |                 | Single Lane       | Multi-Lane      |              |                 |           |
| Stop                           | R1-1             | 8B.04,<br>8B.05 | 30 x 30           | 36 x 36         | 36 x 36      | —               | 48 x 48   |
| Yield                          | R1-2             | 8B.04,<br>8B.05 | 36 x 36<br>x 36   | 48 x 48 x<br>48 | 48 x 48 x 48 | 30 x 30 x<br>30 | —         |
| No Right Turn<br>Across Tracks | R3-1a            | 8B.08           | 24 x 30           | 30 x 36         | —            | —               | —         |
| No Left Turn<br>Across Tracks  | R3-2a            | 8B.08           | 24 x 30           | 30 x 36         | —            | —               | —         |
| Do Not Stop on<br>Tracks       | R8-8             | 8B.09           | 24 x 30           | 24 x 30         | 36 x 48      | —               | 36 x 48   |
| Tracks Out of<br>Service       | R8-9             | 8B.10           | 24 x 24           | 24 x 24         | 36 x 36      | —               | 36 x 36   |
| Stop Here When<br>Flashing     | R8-10            | 8B.11           | 24 x 36           | 24 x 36         | —            | —               | 36 x 48   |
| Stop Here When<br>Flashing     | R8-10a           | 8B.11           | 24 x 30           | 24 x 30         | —            | —               | 36 x 42   |
| Stop Here on Red               | R10-6            | 8B.12           | 24 x 36           | 24 x 36         | —            | —               | 36 x 48   |
| Stop Here on Red               | R10-6a           | 8B.12           | 24 x 30           | 24 x 30         | —            | —               | 36 x 42   |

| Sign or Plaque                                     | Sign Designation | Section | Conventional Road |            | Expressway | Minimum | Oversized |
|--|------------------|---------|-------------------|------------|------------|---------|-----------|
|  |                  |         | Single Lane       | Multi-Lane |            |         |           |
| Grade Crossing (Crossbuck)                         | R15-1            | 8B.03   | 48 x 9            | 48 x 9     | —          | —       | —         |
| Number of Tracks (plaque)                          | R15-2P           | 8B.03   | 27 x 18           | 27 x 18    | —          | —       | —         |
| Exempt (plaque)                                    | R15-3P           | 8B.07   | 24 x 12           | 24 x 12    | —          | —       | —         |
| Light Rail Only Right Lane                         | R15-4a           | 8B.13   | 24 x 30           | 24 x 30    | —          | —       | —         |
| Light Rail Only Left Lane                          | R15-4b           | 8B.13   | 24 x 30           | 24 x 30    | —          | —       | —         |
| Light Rail Only Center Lane                        | R15-4c           | 8B.13   | 24 x 30           | 24 x 30    | —          | —       | —         |
| Light Rail Do Not Pass                             | R15-5            | 8B.14   | 24 x 30           | 24 x 30    | —          | —       | —         |
| Do Not Pass Stopped Train                          | R15-5a           | 8B.14   | 24 x 30           | 24 x 30    | —          | —       | —         |
| No Motor Vehicles On Tracks Symbol                 | R15-6            | 8B.15   | 24 x 24           | 24 x 24    | —          | —       | —         |
| Do Not Drive On Tracks                             | R15-6a           | 8B.15   | 24 x 30           | 24 x 30    | —          | —       | —         |
| Light Rail Divided Highway Symbol                  | R15-7            | 8B.16   | 24 x 24           | 24 x 24    | —          | —       | —         |
| Light Rail Divided Highway Symbol (T-Intersection) | R15-7a           | 8B.16   | 24 x 24           | 24 x 24    | —          | —       | —         |
| Look   | R15-8            | 8B.17   | 36 x 18           | 36 x 18    | —          | —       | —         |
| Grade Crossing Advance Warning                     | W10-1            | 8B.06   | 36 Dia.           | 36 Dia.    | 48 Dia.    | —       | 48 Dia.   |
| Exempt (plaque)                                    | W10-1aP          | 8B.07   | 24 x 12           | 24 x 12    | —          | —       | —         |
| Grade Crossing and Intersection Advance Warning    | W10-2,3,4        | 8B.06   | 36 x 36           | 36 x 36    | 48 x 48    | —       | 48 x 48   |
| Low Ground Clearance                               | W10-5            | 8B.23   | 36 x 36           | 36 x 36    | 48 x 48    | —       | 48 x 48   |
| Low Ground Clearance (plaque)                      | W10-5P           | 8B.23   | 30 x 24           | 30 x 24    | —          | —       | —         |

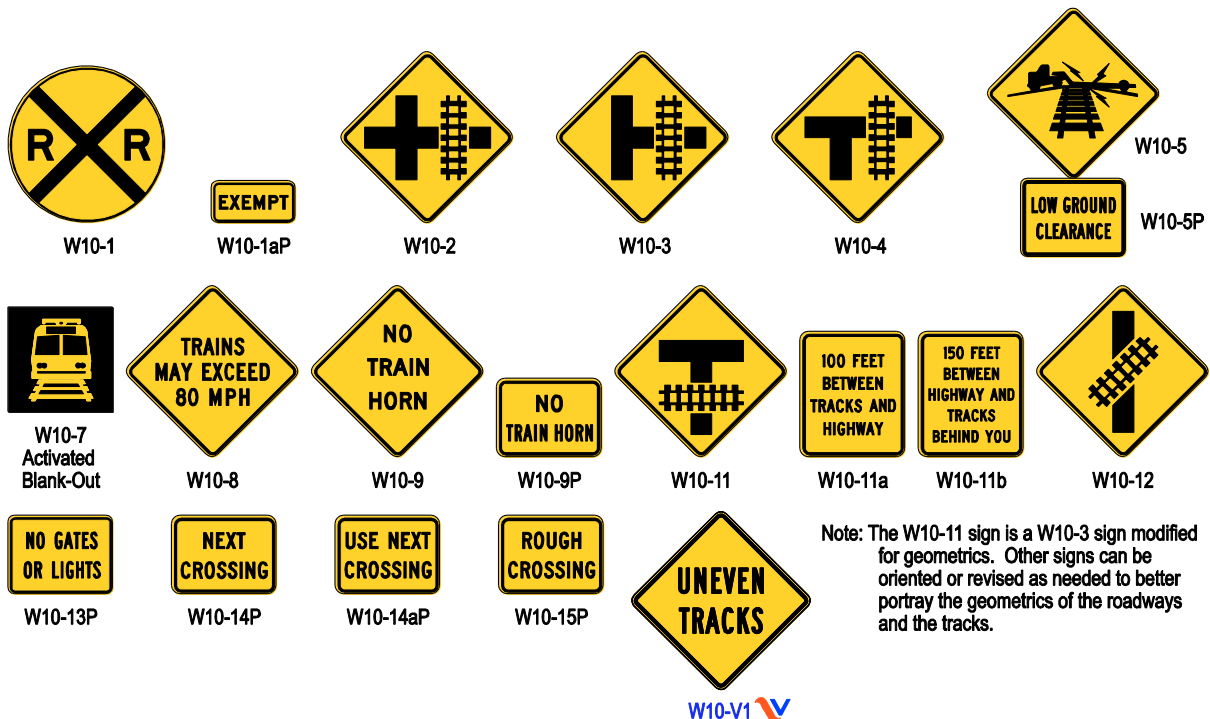
| Sign or Plaque   | Sign Designation | Section      | Conventional Road |                | Expressway     | Minimum  | Oversized      |
|--|------------------|--------------|-------------------|----------------|----------------|----------|----------------|
|  |                  |              | Single Lane       | Multi-Lane     |                |          |                |
| Light Rail Activated Blank-Out Symbol  | W10-7            | 8B.19        | 24 x 24           | 24 x 24        | —              | —        | —              |
| Trains May Exceed 80 MPH   | W10-8            | 8B.20        | 36 x 36           | 36 x 36        | 48 x 48        | —        | 48 x 48        |
| No Train Horn  | W10-9            | 8B.21        | 36 x 36           | 36 x 36        | 48 x 48        | —        | 48 x 48        |
| No Train Horn (plaque)   | W10-9P           | 8B.21        | 30 x 24           | 30 x 24        | —              | —        | —              |
| Storage Space Symbol   | W10-11           | 8B.24        | 36 x 36           | 36 x 36        | 48 x 48        | —        | 48 x 48        |
| Storage Space XX Feet Between Tracks & Highway   | W10-11a          | 8B.24        | 30 x 36           | 30 x 36        | —              | —        | —              |
| Storage Space XX Feet Between Highway & Tracks Behind You  | W10-11b          | 8B.24        | 30 x 36           | 30 x 36        | —              | —        | —              |
| Skewed Crossing  | W10-12           | 8B.25        | 36 x 36           | 36 x 36        | 48 x 48        | —        | 48 x 48        |
| No Gates or Lights (plaque)  | W10-13P          | 8B.22        | 30 x 24           | 30 x 24        | —              | —        | —              |
| Next Crossing (plaque)   | W10-14P          | 8B.23        | 30 x 24           | 30 x 24        | —              | —        | —              |
| Use Next Crossing (plaque)   | W10-14aP         | 8B.23        | 30 x 24           | 30 x 24        | —              | —        | —              |
| Rough Crossing (plaque)  | W10-15P          | 8B.23        | 30 x 24           | 30 x 24        | —              | —        | 36 x 30        |
|  <b>Virginia Specific Signs</b>   |                  |              |                   |                |                |          |                |
| <b>UNEVEN TRACKS</b>   | <b>W10-V1</b>    | <b>8B.06</b> | <b>36 x 36</b>    | <b>36 x 36</b> | <b>36 x 36</b> | <b>—</b> | <b>48 x 48</b> |
| <b>Notes:</b> <ol style="list-style-type: none"> <li>1. Larger signs may be used when appropriate.</li> <li>2. Dimensions in inches are shown as width x height.</li> <li>3. Table 9B-1 shows the minimum sizes that may be used for grade crossing signs and plaques that face shared-use paths and pedestrian facilities.</li> </ol> |                  |              |                   |                |                |          |                |

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

**Standard:**

- 01 A Highway-Rail Grade Crossing Advance Warning (W10-1) sign (see [Figure 8B-4\(VA\) in this Supplement](#)) shall be used on each highway in advance of every highway-rail grade crossing, and every highway-LRT grade crossing in semi-exclusive alignments, except in the following circumstances:
  - A. On an approach to a grade crossing from a T-intersection with a parallel highway if the distance from the edge of the track to the edge of the parallel roadway is less than 100 feet and W10-3 signs are used on both approaches of the parallel highway;
  - B. On low-volume, low-speed highways crossing minor spurs or other tracks that are infrequently used and road users are directed by an authorized person on the ground to not enter the crossing at all times that approaching rail traffic is about to occupy the crossing;
  - C. In business or commercial areas where active grade crossing traffic control devices are in use; or
  - D. Where physical conditions do not permit even a partially effective display of the sign.

**Figure 8B-4(VA). Warning Signs and Plaques for Grade Crossings**



- 02 **The placement of the Grade Crossing Advance Warning sign shall be in accordance with Section 2C.05 of the MUTCD and Table 2C-4.**
- 03 **A Yield Ahead (W3-2) or Stop Ahead (W3-1) Advance Warning sign (see Figure 2C-6(VA) in this Supplement) shall also be installed if the criteria for their installation given in Section 2C.36 of the MUTCD is met. If a Yield Ahead or Stop Ahead sign is installed on the approach to the crossing, the W10-1 sign shall be installed upstream from the Yield Ahead or Stop Ahead sign. The Yield Ahead or Stop Ahead sign shall be located in accordance with Table 2C-4. The minimum distance between the signs shall be in accordance with Section 2C.05 of the MUTCD and Table 2C-4.**

**Option:**

- 04 On divided highways and one-way streets, an additional W10-1 sign may be installed on the left-hand side of the roadway.

**Standard:**

- 05 **If the distance between the tracks and a parallel highway, from the edge of the tracks to the edge of the parallel roadway, is less than 100 feet, W10-2, W10-3, or W10-4 signs (see Figure 8B-4(VA) in this Supplement) shall be installed on each approach of the parallel highway to warn road users making a turn that they will encounter a grade crossing soon after making a turn, and a W10-1 sign for the approach to the tracks shall not be required to be between the tracks and the parallel highway.**
- 06 **If the W10-2, W10-3, or W10-4 signs are used, sign placement in accordance with the guidelines for Intersection Warning signs in Table 2C-4 using the speed of through traffic shall be measured from the highway intersection.**

*Guidance:*

- 07 *If the distance between the tracks and the parallel highway, from the edge of the tracks to the edge of the parallel roadway, is 100 feet or more, a W10-1 sign should be installed in advance of the grade crossing, and the W10-2, W10-3, or W10-4 signs should not be used on the parallel highway.*
- 08 *The UNEVEN TRACKS (W10-V1) sign (see Figure 8B-4(VA) in this Supplement) should be installed at rail sidings or other rail crossings of varying elevations which may constitute a hazard to vehicles crossing at normal speeds.*

