TECHNICAL COMMITTEE: Regulatory & Warning Signs Recommendation

TOPIC: Integrate Low Volume Rural Roads into rest of MUTCD

Task Force Members: Pline, Ranck, Carlson, Heydel

STATUS/DATE OF ACTION:
- RWSTC Drafts: 07/04/12, 08/24/12, 10/29/12, 02/24/13, updated 8-24-13 with size chart, 12/20/13, revised 1-9-14
- RWSTC Approval: 06/26/13
- Transmitted to Sponsors: November 2013
- RWSTC Approval: 1-9-14
- Council Approval: 1-10-14

ORIGIN OF REQUEST: Jim Pline, Fred Ranck

AFFECTED SECTIONS OF MUTCD: Parts 1, 2, 3, 5, 6, 7 and 8.

SUMMARY:
This proposed change will incorporate the Low Volume Road provisions of the MUTCD, ie. Part 5, into the appropriate other parts of the MUTCD. Part 5, Low Volume Roads as it presently exists will be deleted or used for another subject.

RESEARCH: None applicable

DISCUSSION
MUTCD Part 5, Traffic Control Devices for Low Volume Roads, was approved and included as a separate Chapter in the 2000 MUTCD and has been retained as a separate Part in the 2003 and 2009 Editions. Initially, this was approved as a separate portion of the MUTCD because there were questions on the requirements that would be applicable to rural low volume roads. There was also concern that local jurisdictions may have some difficulty in determining from the 816 pages of the MUTCD those provisions that were applicable on their low volume roads. It was also expected that the separate part would encourage local jurisdictions to apply traffic control devices on their
road systems improving the national goal towards uniformity. The ten years of separate
publication and emphasis of traffic control for rural low volume roads has not resulted in
any significant concerns or major modifications to the original provisions. Recognizing
these minimal requirements and the desire to reduce the size of the MUTCD, it is time
to incorporate Part 5 into the other appropriate Parts of the Manual deleting Part 5.

RECOMMENDED MUTCD PROVISIONS/ REVISIONS
Note: Proposed changes to the MUTCD are shown in Underlined Red and removed text is
shown as strike through red.

Add to Definition: “Low Volume Rural Road” to Section 1A.13 Definition of Headings,
Words and Phrases in this Manual.

Low Volume Rural Road – A category of paved or unpaved conventional or special purpose
roadways lying outside of built-up areas of cities, towns and communities with a traffic volume less
than 400 vehicles AADT.

Revise the Definition for “Conventional Road”

41. Conventional Road – a street or highway other than a low-volume road (as defined in Section
5A.01), expressway, or freeway.

Section 2A.01 Function and Purpose of Signs
03 Because the requirements and standards for signs depend on the particular type of highway
upon which they are to be used, the definitions for freeway, expressway, conventional road, low
volume rural road and special purpose road given in Section 1A.13 shall apply in Part 2.

Section 2A.03 Standardization of Application

Support:
01 It is recognized that urban traffic conditions differ from those in rural environments, and in
many instances signs are applied and located differently. Where pertinent and practical, this
Manual sets forth separate recommendations for urban and rural conditions.

Low volume rural roads typically include access to rural residences, agricultural, recreational,
resource management and development such as mining, logging and grazing and local roads in
rural areas. On low-volume rural roads, the use of traffic control devices is limited to essential
information regarding regulation, guidance and warning. On low-volume rural roads, it is
important to consider the needs of unfamiliar road users for occasional, recreational, and
commercial transportation purposes.

Guidance:
02 Signs should be used only where justified by engineering judgment or studies, as provided in
Section 1A.09.

03 Results from traffic engineering studies of physical and traffic factors should indicate the
locations where signs are deemed necessary or desirable.
04 Roadway geometric design and sign application should be coordinated so that signing can be effectively placed to give the road user any necessary regulatory, warning, guidance, and other information.

05 On low-volume roads, the needs of unfamiliar road users for occasional, recreational, and commercial transportation purposes should be considered. Relocated to Support, Line 73 above.

Standard:
05 Each standard sign shall be displayed only for the specific purpose as prescribed in this Manual. Determination of the particular signs to be applied to a specific condition shall be made in accordance with the provisions set forth in Part 2. Before any new highway, private road open to public travel (see definition in Section 1A.13), detour, or temporary route is opened to public travel, all necessary signs shall be in place. Signs required by road conditions or restrictions shall be removed when those conditions cease to exist or the restrictions are withdrawn.

Section 2A.11 Dimensions

Support:
01 The "Standard Highway Signs and Markings" book (see Section 1A.11) prescribes design details for up to five different sizes depending on the type of traffic facility, including bikeways. Smaller sizes are designed to be used on bikeways and some other off-road applications. Larger sizes are designed for use on freeways and expressways, and can also be used to enhance road user safety and convenience on other facilities, especially on multi-lane divided highways and on undivided highways having five or more lanes of traffic and/or high speeds. The intermediate sizes are designed to be used on other highway types.

Standard:
02 The sign dimensions prescribed in the sign size tables in the various Parts and Chapters in this Manual and in the "Standard Highway Signs and Markings" book (see Section 1A.11) shall be used unless engineering judgment determines that other sizes are appropriate. Except as provided in Paragraph 3, where engineering judgment determines that sizes smaller than the prescribed dimensions are appropriate for use, the sign dimensions shall not be less than the minimum dimensions specified in this Manual.

The sizes shown in the Minimum columns that are smaller than the sizes shown in the Conventional Road columns in the various sign size tables in this Manual shall only be used on low-speed roadways, alleys, private roads open to public travel, and on low-volume rural roads with operating speeds of 30 mph or less, and where the reduced legend size would be adequate for the regulation or warning or where physical conditions preclude the use of larger sizes.

Option:
03 For alleys with restrictive physical conditions and vehicle usage that limits installation of the Minimum size sign (or the Conventional Road size sign if no Minimum size is shown), both the sign height and the sign width may be decreased by up to 6 inches.

Section 2A.19 Lateral Offset

10 On conventional, low-volume rural and special purpose roads in areas where it is impractical to locate a sign with the lateral offset prescribed by this Section because of roadside features such as terrain, shrubbery and/or trees, a lateral offset of at least 2 feet may be used.
Section 2B.01 Application of Regulatory Signs

Standard:
01 Regulatory signs shall be used to inform road users of selected traffic laws or regulations and indicate the applicability of the legal requirements.

02 Regulatory signs shall be installed at or near where the regulations apply. The signs shall clearly indicate the requirements imposed by the regulations and shall be designed and installed to provide adequate visibility and legibility in order to obtain compliance.

03 Regulatory signs shall be retroreflective or illuminated (see Section 2A.07) to show the same shape and similar color by both day and night, unless specifically stated otherwise in the text discussion in this Manual for a particular sign or group of signs.

04 The requirements for sign illumination shall not be considered to be satisfied by street or highway lighting.

Support:
05 Section 1A.09 contains information regarding 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.

06 On low-volume rural roads, the need for regulatory signs is limited. Enforcement is a consideration.

Section 2B.03 Size of Regulatory Signs

Standard:
03 Except as provided in Paragraphs 4 and 5, the minimum sizes for regulatory signs facing traffic on multi-lane conventional roads shall be as shown in the Multi-lane column of Table 2B-1.

The typical size of regulatory signs applied on low-volume rural roads with operating speeds of 30 mph or less shall be in accordance with the minimum column of Table 2B-1.

Section 2B.06 STOP Sign Applications

Guidance:
01 STOP signs should be used if engineering judgment indicates that one or more of the following conditions exist:

A. Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;
B. Street entering a through highway or street;
C. Unsignalized intersection in a signalized area; and/or
D. High speeds, restricted view, or crash records indicate a need for control by the STOP sign.
On low-volume rural roads, a STOP sign should be considered at an intersection where engineering judgment indicates that Item A above is applicable or where the intersection has inadequate sight distance for the operating vehicle speeds.

Section 2B.09 YIELD Sign Application

Option:

YIELD signs may be used instead of STOP signs if engineering judgment indicates that one or more of the following conditions exist:

A. When the ability to see all potentially conflicting traffic is sufficient to allow a road user travelling at the posted speed, the 85th-percentile speed, or the statutory speed to pass through the intersection or to stop in a reasonably safe manner.

B. If controlling a merge-type movement on the entering roadway where acceleration geometry and/or sight distance is not adequate for merging traffic operation.

C. The second crossroad of a divided highway, where the median width at the intersection is 9 m (30 ft) or greater. In this case, a STOP sign may be installed at the entrance to the first roadway of a divided highway, and a YIELD sign may be installed at the entrance to the second roadway.

D. An intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.

On low-volume rural roads, a YIELD sign may be used at an intersection instead of a STOP sign if engineering judgment indicates that the YIELD would provide adequate control.

Section 2C.02 Application of Warning Signs

Warning signs provided in this Manual cover most of the conditions that are likely to be encountered. Additional warning signs for low-volume roads (as defined in Section 5A.01), temporary traffic control zones, school areas, grade crossings, and bicycle facilities are discussed in Parts 5 through 10, respectively.

Section 2C.04 Size of Warning Signs

Except as provided in Section 2A.11, the sizes for warning signs shall be as shown in Table 2C-2.

Guidance:

The typical size of warning signs used on low-volume rural roads with operating speeds of 30 mph or less should be in accordance with the minimum column of Table 2C-2.

Support:

Section 2A.11 contains information regarding the applicability of the various columns in Table 2C-2.

Section 2C.16 Hill Signs (W7-1, W7-1a)

Guidance:

The Hill (W7-1) sign (see Figure 2C-4) should be used in advance of a downgrade on a freeway, expressway or a conventional road where the length, percent of grade, horizontal curvature, and/or other physical features require special precautions on the part of road users.
Section 2C.20 NARROW BRIDGE Sign (W5-2)

Guidance:
01 A NARROW BRIDGE (W5-2) sign (see Figure 2C-5) should be used in advance of any bridge or culvert having a two-way roadway clearance width of 16 to 18 feet, or any bridge or culvert having a roadway clearance less than the width of the approach travel lanes.

02 Additional emphasis should be provided by the use of object markers, delineators, and/or pavement markings.

Option:
03 A NARROW BRIDGE sign may be used in advance of a bridge or culvert on which the approach shoulders are narrowed or eliminated.

04 The NARROW BRIDGE sign may be omitted on low-volume rural roads.

Section 2C.21 ONE LANE BRIDGE Sign (W5-3)

Guidance:
01 A ONE LANE BRIDGE (W5-3) sign (see Figure 2C-5) should be used on two-way roadways in advance of any bridge or culvert:

A. Having a clear roadway width of less than 16 feet, or
B. Having a clear roadway width of less than 18 feet when commercial vehicles constitute a high proportion of the traffic, or
C. Having a clear roadway width of 18 feet or less where the sight distance is limited on the approach to the structure.

02 Additional emphasis should be provided by the use of object markers, delineators, and/or pavement markings.

Option:
01 The ONE LANE BRIDGE sign may be omitted on low volume rural roads where there is adequate sight distance to the bridge from either approach.

Section 2C.XX NO TRAFFIC SIGNS sign (W18-1)

Option
01 A W18-1 warning sign with the legend NO TRAFFIC SIGNS may be used only on low-volume rural roads to advise road users that no signs are installed along the distance of the road. The sign may be installed at the point where road users would enter the low volume road or where, based on engineering judgment, the road user might need this information.

02 A W7-3aP, W16-2P, or W16-9P supplemental plaque (see Figure 5C-2) with the legend NEXT XX MILES, XX FEET, or AHEAD may be installed below the W18-1 sign when appropriate.
Section 2D.01 Scope of Conventional Road Guide Sign Standards

Standard:
01 The provisions of this Chapter shall apply to any road or street other than low-volume roads (as defined in Section 5A.01), expressways, and freeways.

Section 2D.02 Application

Support:
01 Guide signs are essential to direct road users along streets and highways, to inform them of intersecting routes, to direct them to cities, towns, villages, or other important destinations, to identify nearby rivers and streams, parks, forests, and historical sites, and generally to give such information as will help them along their way in the most simple, direct manner possible.

02 Chapter 2A addresses placement, location, and other general criteria for signs.

03 Guide signs generally are not used on low-volume rural roads except to guide road users back to the major roadways.

Section 2D.36 Destination and Distance Signs

Support:
01 In addition to guidance by route numbers, it is desirable to supply the road user information concerning the destinations that can be reached by way of numbered or unnumbered routes. This is done by means of Destination signs and Distance signs.

Option:
02 Route shields and cardinal directions may be included on the Destination sign with the destinations and arrows.

Guidance:
03 If Route shields and cardinal directions are included on a Destination sign, the height of the route shields should be at least two times the height of the upper-case letters of the principal legend and not less than 18 inches, and the cardinal directions should be in all upper-case letters that are at least the minimum height specified for these signs.

04 If used, destination names on low-volume rural roads should be as specific and descriptive as possible. Destinations such as campgrounds, ranger stations, and recreational areas should be clearly indicated so that they are not interpreted to be communities or locations with road user services.

Section 3A.02 Standardization of Application

Standard:
01 Each standard marking shall be used only to convey the meaning prescribed for that marking in this Manual. When used for applications not described in this Manual, markings shall conform in all respects to the principles and standards set forth in this Manual.

Support:
02 Typically, pavement markings are not used on low-volume rural roads and special purpose roads. Any markings used, however, should comply with the provisions of this Part.

Guidance:
02 Before any new highway, private road open to public travel (see definition in Section 1A.13), paved detour, or temporary route is opened to public travel, all necessary markings should be in place.

Standard:
03 Markings that must be visible at night shall be retroreflective unless ambient illumination assures that the markings are adequately visible. All markings on Interstate highways shall be retroreflective.
04 Markings that are no longer applicable for roadway conditions or restrictions and that might cause confusion for the road user shall be removed or obliterated to be unidentifiable as a marking as soon as practical.

Option:
05 Until they can be removed or obliterated, markings may be temporarily masked with tape that is approximately the same color as the pavement.

Section 6A.01 General

Support:
01 Whenever the acronym "TTC" is used in Part 6, it refers to "temporary traffic control."

Standard:
02 The needs and control of all road users (motorists, bicyclists, and pedestrians within the highway, or on private roads open to public travel (see definition in Section 1A.13), including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA), Title II, Paragraph 35.130) through a TTC zone shall be an essential part of highway construction, utility work, maintenance operations, and the management of traffic incidents.

Support:
03 When the normal function of the roadway, or a private road open to public travel, is suspended, TTC planning provides for continuity of the movement of motor vehicle, bicycle, and pedestrian traffic (including accessible passage); transit operations; and access (and accessibility) to property and utilities.
04 The primary function of TTC is to provide for the reasonably safe and effective movement of road users through or around TTC zones while reasonably protecting road users, workers, responders to traffic incidents, and equipment.
05 Of equal importance to the public traveling through the TTC zone is the safety of workers performing the many varied tasks within the work space. TTC zones present constantly changing conditions that are unexpected by the road user. This creates an even higher degree of vulnerability for the workers and incident management responders on or near the roadway (see Section 6D.03). At the same time, the TTC zone provides for the efficient completion of whatever activity interrupted the normal use of the roadway.
06 Consideration for road user safety, worker and responder safety, and the efficiency of road user flow is an integral element of every TTC zone, from planning through completion. A
concurrent objective of the TTC is the efficient construction and maintenance of the highway and
the efficient resolution of traffic incidents.

No one set of TTC devices can satisfy all conditions for a given project or incident. At the same
time, defining details that would be adequate to cover all applications is not practical. Instead,
Part 6 displays typical applications that depict common applications of TTC devices. The TTC
selected for each situation depends on type of highway, road user conditions, duration of
operation, physical constraints, and the nearness of the work space or incident management
activity to road users.

The temporary traffic control for low-volume rural and special purpose roads will
generally be minimal, recognizing the lower speeds and traffic volumes. A limited number of
signs, maintenance vehicle warning flashers or a single flagger could be adequate for most
situations.

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

**Standard:**

Except as provided in Section 2A.11, the sizes for TTC signs and plaques shall
be as shown in Table 6F-1. The sizes in the minimum column shall only be used on
low volume rural roads, and local streets or roadways where the 85th-percentile
operating speed or posted speed limit is 30 mph or less than 35 mph.

**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 on low-volume rural roads,
special purpose roads and or where traffic volumes are low and operating speeds are
30 mph or less, 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.

Signs and plaques larger than those shown in Table 7B-1 may be used (see Section 2A.11).

**Section 8B.02 Sizes of Grade Crossing Signs**
The sizes of grade crossing signs shall be as shown in Table 8B-1.

The sign sizes in the minimum column should be used on low-volume rural roads where the operating speed is 30 mph or less and special purpose roads.

Revise the following Sign Size Tables as noted in RED below.

**Table 2B-1 Regulatory Sign and Plaque Sizes**

<table>
<thead>
<tr>
<th>Sign</th>
<th>Code</th>
<th>Conv. Rd</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>R1-1</td>
<td>30x30</td>
<td>30x30</td>
<td>30x30</td>
</tr>
<tr>
<td>Yield</td>
<td>R1-2</td>
<td>36x36/36</td>
<td>30x30/30</td>
<td>30x30/30</td>
</tr>
<tr>
<td>Speed Limit</td>
<td>R2-1</td>
<td>24x30</td>
<td>18x24</td>
<td>18x24</td>
</tr>
<tr>
<td>Do Not Pass</td>
<td>R4-1</td>
<td>24x30</td>
<td>18x24</td>
<td>18x24</td>
</tr>
<tr>
<td>Pass With Care</td>
<td>R4-2</td>
<td>24x30</td>
<td>18x24</td>
<td>18x24</td>
</tr>
<tr>
<td>Keep Right</td>
<td>R4-7</td>
<td>24x30</td>
<td>18x24</td>
<td>18x24</td>
</tr>
<tr>
<td>Do Not Enter</td>
<td>R5-1</td>
<td>30x30</td>
<td>-</td>
<td>30x30</td>
</tr>
<tr>
<td>No Trucks</td>
<td>R5-2</td>
<td>24x24</td>
<td>-</td>
<td>24x24</td>
</tr>
<tr>
<td>One Way</td>
<td>R6-2</td>
<td>24x30</td>
<td>18x24</td>
<td>18x24</td>
</tr>
<tr>
<td>NoParking (symbol)</td>
<td>R8-3</td>
<td>24x24</td>
<td>12x12</td>
<td>18x18</td>
</tr>
<tr>
<td>No Parking</td>
<td>R8-3a</td>
<td>24x30</td>
<td>18x24</td>
<td>18x24</td>
</tr>
<tr>
<td>No Parking (Plaque)</td>
<td>R8-3c,3d</td>
<td>24x18</td>
<td>12x9</td>
<td>18x12</td>
</tr>
<tr>
<td>Road Closed</td>
<td>R11-2</td>
<td>48x30</td>
<td>-</td>
<td>48x30</td>
</tr>
<tr>
<td>Rd Closed Local Traffic</td>
<td>R11-3a</td>
<td>60x30</td>
<td>-</td>
<td>60x30</td>
</tr>
<tr>
<td>Bridge Out, Local Tr</td>
<td>R11-3b</td>
<td>60x30</td>
<td>-</td>
<td>60x30</td>
</tr>
<tr>
<td>Rd Closed to Thru</td>
<td>R11-4</td>
<td>60x30</td>
<td>-</td>
<td>60x30</td>
</tr>
<tr>
<td>Weight Limit</td>
<td>R12-1</td>
<td>24x30</td>
<td>-</td>
<td>24x30</td>
</tr>
<tr>
<td>Railroad Crossbuck</td>
<td>R15-1</td>
<td>48x9</td>
<td>-</td>
<td>48x9</td>
</tr>
<tr>
<td>Number of Tracks</td>
<td>R15-2</td>
<td>27x18</td>
<td>-</td>
<td>27x18</td>
</tr>
</tbody>
</table>

**Table 2C-2 Warning Sign and Plaque Sizes**

<table>
<thead>
<tr>
<th>Sign</th>
<th>Code</th>
<th>Conv. Rd</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal Align.</td>
<td>W1-1,2,3,4,5</td>
<td>30x30</td>
<td>-</td>
<td>24x24</td>
</tr>
<tr>
<td>One Dir Arrow</td>
<td>W1-6</td>
<td>48x24</td>
<td>-</td>
<td>36x18</td>
</tr>
<tr>
<td>Two Dir Arrow</td>
<td>W1-7</td>
<td>48x24</td>
<td>-</td>
<td>36x18</td>
</tr>
<tr>
<td>Chevron Align</td>
<td>W1-8</td>
<td>18x24</td>
<td>-</td>
<td>12x18</td>
</tr>
<tr>
<td>Intersection Warn</td>
<td>W2-1,4,5</td>
<td>30x30</td>
<td>24x24</td>
<td>24x24</td>
</tr>
<tr>
<td>Stop Ahead</td>
<td>W3-1</td>
<td>30x30</td>
<td>30x30</td>
<td>24x24</td>
</tr>
<tr>
<td>Yield Ahead</td>
<td>W3-2</td>
<td>30x30</td>
<td>30x30</td>
<td>24x24</td>
</tr>
<tr>
<td>Be Prepared to Stop</td>
<td>W3-4</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
<tr>
<td>Road Narrows</td>
<td>W5-1</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
</tbody>
</table>
Narrow Bridge W5-2 36x36 30x30 30x30
One Lane Bridge W5-3 36x36 30x30 30x30
Hill W7-1,1a 30x30 24x24 24x24
XX % Grade W7-3 24x18 - 24x18
Next XX Miles W7-3a 24x18 - 24x18
Pavement Ends W8-3 36x36 30x30 30x30
Truck Crossing W8-6 36x36 24x24 30x30
Loose Gravel W8-7 36x36 24x24 30x30
Rough Road W8-8 36x36 24x24 30x30
Road May Flood W8-18 36x36 24x24 30x30
Flood Gauge W8-19 12x72 - 12x72
RR Advance Warning W10-1 24 Dia 18 Dia 24 Dia
Crossing Warning W10-2,3,4 30x30 24x24 30x30
Entering/Crossing W 11 Series 30x30 24x24 24x24
Advisory Speed Pl W13-1 18x18 - 18x18
Dead End/No Outlet W14-1,2 30x30 24x24 24x24
Dead End/No Outlet W14-1a,2a 36x8 - 24x6
Supp. Distance Pl W16-2 24x18 - 18x12
Diagonal Arrow Pl W16-7p 24x12 - 24x12
Ahead Plaque W16-9p 24x12 - 24x12
No Traffic Signs W18-1 - 30x30 30x30

### Table 6F-1. Temporary Traffic Control Zone Sign & Plaque Size

<table>
<thead>
<tr>
<th>Sign</th>
<th>Code</th>
<th>Conv. Rd.</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>R1-1</td>
<td>30 x 30</td>
<td>-</td>
<td>30 x 30</td>
</tr>
<tr>
<td>Stop (On Paddle)</td>
<td>R1-1</td>
<td>18 x 18</td>
<td>-</td>
<td>18 x 18</td>
</tr>
<tr>
<td>Road Work XX Ft</td>
<td>W20-1</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
<tr>
<td>Rd Closed w/distance</td>
<td>W20-3</td>
<td>36x36</td>
<td>30x30</td>
<td>30 x30</td>
</tr>
<tr>
<td>OneLane RD w/Dist.</td>
<td>W20-4</td>
<td>36x36</td>
<td>30x30</td>
<td>30 x30</td>
</tr>
<tr>
<td>Flagger</td>
<td>W20-7a</td>
<td>36x36</td>
<td>30x30</td>
<td>30 x30</td>
</tr>
<tr>
<td>Workers</td>
<td>W21-1a</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
<tr>
<td>Fresh Oil</td>
<td>W21-2</td>
<td>36x36</td>
<td>30x30</td>
<td>24x24</td>
</tr>
<tr>
<td>Road Machinery Ahd</td>
<td>W21-3</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
<tr>
<td>Shoulder Work</td>
<td>W21-5</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
<tr>
<td>Survey Crew</td>
<td>W21-6</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
<tr>
<td>Utility Work Ahead</td>
<td>W21-7</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
</tbody>
</table>

### Table 7B-1 School Area Sign and Plaque Sizes

<table>
<thead>
<tr>
<th>Sign</th>
<th>Code</th>
<th>Conv. Rd.</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>S1-1</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
<tr>
<td>School Stop Ahd</td>
<td>S3-1</td>
<td>36x36</td>
<td>30x30</td>
<td>30x30</td>
</tr>
<tr>
<td>Sch Bus Turn Ahd</td>
<td>S3-2</td>
<td>36 x36</td>
<td>30 x30</td>
<td>30 x30</td>
</tr>
</tbody>
</table>
Reduced School Speed Limit Ahd | S4-5.5a | 36x36 | 30x30 | 30x30

Table 8B-1. Grade Crossing Sign and Plaque Minimum Sizes

<table>
<thead>
<tr>
<th>Sign</th>
<th>Code</th>
<th>Conv. Rd.</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>R1-1</td>
<td>30 x30</td>
<td>-</td>
<td>30x30</td>
</tr>
<tr>
<td>Yield</td>
<td>R1-2</td>
<td>36X36X36</td>
<td>30X30X30</td>
<td>30X30X30</td>
</tr>
<tr>
<td>Tracks out of Service</td>
<td>R8-9</td>
<td>24 X24</td>
<td>--</td>
<td>24 X 24</td>
</tr>
<tr>
<td>Crossbuck</td>
<td>R15-1</td>
<td>48 X 9</td>
<td>---</td>
<td>48 X 9</td>
</tr>
<tr>
<td>No. of Tracks</td>
<td>R15-2P</td>
<td>27 X 18</td>
<td>--</td>
<td>27 X 18</td>
</tr>
<tr>
<td>Exempt</td>
<td>R15-3P</td>
<td>24 X 12</td>
<td>--</td>
<td>24 X12</td>
</tr>
<tr>
<td>Gr Xing Adv Warn</td>
<td>W10-1</td>
<td>36 Dia</td>
<td>--</td>
<td>24 Dia</td>
</tr>
<tr>
<td>Xing &amp; Inter Adv Warn</td>
<td>W10-2,3,4</td>
<td>36 X36</td>
<td>--</td>
<td>30 x 30</td>
</tr>
<tr>
<td>Low Ground Clear</td>
<td>W10-5</td>
<td>36 x 36</td>
<td>--</td>
<td>30 x 30</td>
</tr>
</tbody>
</table>

RWSTC VOTE 6-26-13: For: Unanimous

RWSTC VOTE: 1-9-14 For: Unanimous

Council Vote: 1-10-14 For: Unanimous

Against:

Abstentions:

C:NCUTCD/June 2013/Pline/Integrate Low Volume Roads 6-26-13 READY FOR SPONSORS, updated 8-24-13 with size chart, revised following sponsor comments 1-9-14, approved by COUNCIL 1-10-14