Introduction


The drawings are presented in English units and shown in inches. For word messages, only the overall length and placement of the characters are shown. The spacing between individual letters should be checked visually to attain the most satisfying balance. All lettering is designed by size and series, referring to the FHWA Standard Alphabets for Highway Signs included in the 2004 edition. Only the Series 2000 Standard Alphabet may be used.

For symbol messages, the overall height and width of the symbol and its placement on the sign is shown. The exact detail of the symbol is shown on a grid. All symbols and symbol drawings are contained in the Appendix. Any symbol may be enlarged to any size if done proportionally. The grid is provided as a reference to ensure the proportional relationship(s) remain correct.

Most of the arrow and intersection symbols must be made for both right and left applications. While only one design is shown in each case, the symbols can be reversed without change in any dimensions. In some instances an inversion of the completed sign drawing will accomplish the same purpose.

Sign colors specified on the sign drawings refer to the standard colors listed in the current MN MUTCD. Actual colors used in fabricating signs shall conform to color tolerance charts available from FHWA.


Modification to FHWA codes:

All Minnesota designs that are a modification of a federal design will be designed with an “M” at the end of the code. The rest of the code will mirror the federal code.

S3-2M

If there is another modification of the same sign, an “a” will be added at the end of the code. If there are multiple codes, the last letter will be changed alphabetically.

D-2Ma

Minnesota Special Designs:

All Minnesota special designs start with the numbers associated with the sign design and after the dash an "X" will be placed and numbering will start numerically.

R5-X1
If there is another similar sign with a minor word change and it maintains the same basic meaning, an “a” will be placed after the code. If there are multiple codes, the last letter will be changed alphabetically.

R12-X2a

If a plaque is associated with that sign code then a “P” will be added at the end

R12-X1P

**Definitions:**

*Overlay:*

An overlay is a separate sign panel that is installed on top of a larger sign panel. The overlay cannot be installed by itself. The intent is to change part of a message on the sign without replacing the entire sign panel.

*Plaque:*

A plaque is a sign mounted above or below a primary sign providing additional information concerning the primary sign. A plaque cannot be installed by itself, it must accompany a primary sign.

*Punch Code:*

A punch code is the layout of mounting bolt holes.