V. TYPES AND METHODS OF SIGNING

A. General Requirements

Signs shall meet the following standards:

- 1. They shall conform in size, shape, color, material, and message with those included in this Manual or in the MUTCD.
- 2. The use of stripes (other than the standard border) or other geometric patterns or contrasting colors on or around the sign in an attempt to make it more conspicuous shall not be permitted; however, standard fluorescent red/orange flags or yellow flashing lights may be used for added emphasis so long as they do not interfere with the sign message.
- 3. All signs used shall be properly retroreflectorized except for parking and pedestrian prohibition signs. Retroreflectorization of the sign face shall be accomplished using an approved weatherproof, retroreflectorized sheeting, high intensity prismatic or as approved for night conditions. Paint impregnated with glass beads shall not be used. Where retroreflectorization is rendered ineffective due to extraneous light sources, the sign shall be illuminated either externally or internally. Where external illumination is used, the source shall be properly shielded to reduce glare. Street or highway lighting shall not be considered adequate for illuminating signs. All reflectorized or illuminated signs should be checked by the Contractor during the hours of darkness to insure that they are functioning properly.
- 4. Signs shall be constructed from material which will not deteriorate abnormally under normal weather conditions. Sign blanks should be weatherproof plywood or non corrosive metal. Roll up signs fabricated from vinyl coated nylon or vinyl coated nylon mesh may also be used. If such signs are not retroreflectorized, they shall not be used at night.

Sign placement and usage shall generally conform to illustrations in Chapter XI of this Manual unless special circumstances indicate that some other placement is more advantageous to convey the proper message to the traveling public. The code number given below each sign in Figures V - 1 and V - 2 is the City of Seattle's identification number and the one in parentheses is the MUTCD designation. In addition, the following shall be adhered to:

- a. Signs shall be placed in a position so that they will convey their message most effectively without restricting lateral clearances or sight distance.
- b. Normally, signs shall be mounted on the right-hand side of the roadway; however, dual installations (one sign on the left side and one on the right) should be used where increased emphasis is necessary, and on one one way streets. Signs may also be placed in a closed lane if such placement is most advantageous and does not present a hazard. Signs shall not be placed where they obstruct bicycle or pedestrian movement.



- c. All permanent curb or shoulder mounted construction signs shall be mounted to maintain a standard minimum horizontal clearance of 2' from the curb or pavement edge and a standard minimum vertical clearance of 7' above the ground. Where equipment, pedestrians, vehicles, or other obstructions obscure the signs or when they are used on high-volume, high-speed facilities, higher mounting heights should be used.
- d. Signs may be pedestal- or post-mounted or may be mounted on portable sign supports, high level warning devices, or utility poles (with authorization of the utility in question). All signs and mounting apparatus shall be securely fastened or weighted so that they are not moved or blown over by wind or passing traffic.
- e. Spacing of advance warning signs shall be as indicated in the tables included with the illustrations in Chapter XI unless special circumstances indicate that different spacing would be more advantageous. Advance warning signs used for flagging operations must be set up and spaced in accordance with WAC 296-155-305.

B. Regulatory Signs

Since Regulatory Signs impose legal obligations and/or restrictions, all shall comply with specifications contained in the MUTCD and their use must be approved by the Traffic Engineer prior to installation. Several of the more commonly used regulatory signs are included here for reference as to size and designation. No existing regulatory sign shall be changed without permission of the City Traffic Engineer.

C. Warning Signs

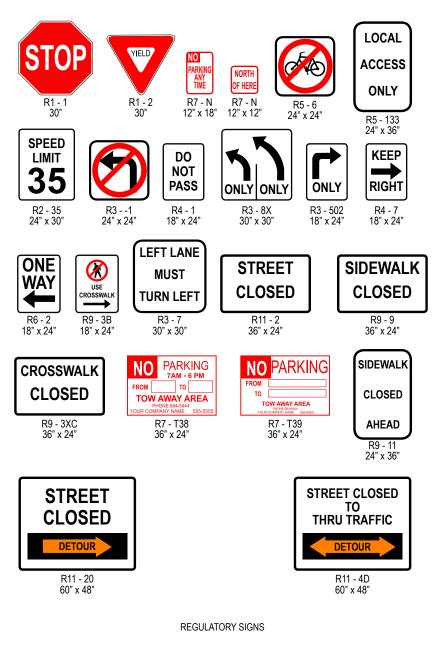
Warning Signs as used herein are generally diamond shaped with black symbols or letters on an orange background. Warning signs are used to alert motorists of abnormal conditions on the roadway resulting from construction or maintenance work. The more commonly used construction warning signs and sizes are illustrated in this section. Warning signs not included here and deemed necessary for a specific project shall comply with those included in the MUTCD.

Reference should be made to Table XI - 1 and the illustrations in Chapter XI of this Manual for use, spacing, position, etc., of the warning signs.

D. Guide Signs

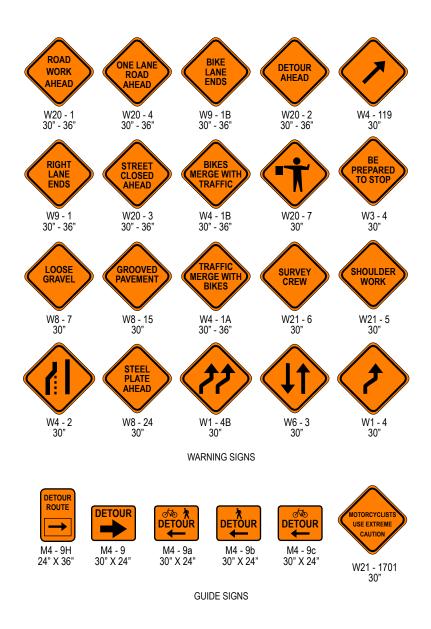
The function of this class of sign on a construction project is to indicate to the motorist the path they must follow through a detour in order to bypass the construction and continue to their original destination. The most common are Detour and Detour Arrow signs. The street name may be added to define the detour route.





(Figure V - 1)

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(Figure V - 2)

E. Special Signs

As needed for specific projects, signs with special or non standard messages may be required to properly convey information to the motorist, bicyclist or pedestrian. These signs should follow as closely as possible principles and standard set forth in this Manual and shall be approved by the Traffic Engineer before installation.





