

**SECTION 56****SIGNS / BARRICADES****1. Applicability**

This standard applies to MAPP and its subsidiary companies where signs, signals, tags, and/or barricades are used as methods of accident prevention.

**2. Purpose and Scope**

The purpose of this standard is to identify those situations where the application of signs, signals, tags, and/or barricades may assist in the control of accidents on MAPP project sites.

**3. Implementation**

Implementation of this standard is the responsibility of the MAPP Superintendent directing activities of the facility, site or project location.

**4. Requirements****4.1. Definitions**

- 4.1.1. Barricade – An obstruction to prevent the passage of persons or vehicles
- 4.1.2. Signs – A display warning of hazards, temporarily and permanently affixed or placed, at locations where said hazards exist
- 4.1.3. Signals – Moving signs, provided by workers such as flaggers, or by devices, such as flashing lights, to warn of possible or existing hazards
- 4.1.4. Tags – Temporary signs, usually attached to a piece of equipment or part of a structure, to warn of existing or immediate hazards.

**4.2. Types of Signs and Tags****4.2.1. Danger Signs**

- 4.2.1.1. Danger signs will be used where an immediate hazard exists.
- 4.2.1.2. Danger signs will have red as the predominant color for the upper panel, white lettering spelling “Danger” in the upper panel, black outline on the border, and a white lower panel for additional sign wording (in black).

**4.2.2. Caution Signs**

- 4.2.2.1. Caution signs will be used only to warn against potential hazards or to caution against unsafe practices.
- 4.2.2.2. Caution signs will have yellow as the predominant color, black upper panel and borders, yellow lettering spelling “Caution” on the black upper panel, and the lower yellow panel for additional sign wording. Black lettering will be used for additional wording.

**SECTION 56****SIGNS / BARRICADES****4.2.3. Exit Signs**

Exit signs, when required, will be lettered in legible red letters, not less than 6 inches (15.25 centimeters [cm]) high, on a white field. The principal width of the lettering will be at least three-quarters of an inch (1.9 cm) in width. Exit signs must also meet all state and local requirements.

**4.2.4. Safety Instruction Signs**

Safety instruction signs, when used, will be white with a green upper panel with white letters to convey the principal message. Any additional wording on the sign will be black letters on the white background.

**4.2.5. Directional Signs**

Directional signs other than automotive warning and temporary traffic control signs specified in Paragraph 6 of this section will be white with a black panel and a white directional symbol. Any additional wording on the sign will be black letters on the white background.

**4.2.6. Traffic Signs**

- 4.2.6.1. Construction areas will be posted with legible traffic signs at points of hazards.
- 4.2.6.2. Traffic control signs or devices used for protection of construction personnel will conform to the Manual on Uniform Traffic Control Devices (MUTCD).

**4.2.7. Accident Prevention Tags**

Accident prevention tags will be used as a temporary means of warning employees of an existing hazard, such as defective tools, equipment, etc. They will not be used in place of, or as a substitute for, accident prevention signs.

**4.2.8. Additional Rules**

Signs and tags will be visible at all times when work is being performed, and will be removed or covered promptly when the hazards no longer exist.

**4.3. Signaling**

- 4.3.1. When operations are such that signs and barricades do not provide the necessary protection on or adjacent to a highway or street, flaggers or other appropriate traffic controls will be provided.

**SECTION 56****SIGNS / BARRICADES**

- 4.3.2. Signaling directions by flaggers will conform to the MUTCD – Section 6E (2003), unless specific state regulations are applicable.
- 4.3.3. Hand signaling by flaggers will be by use of sign paddles meeting MUTCD requirements – Section 6E.03 (2003) or red flags at least 24 inches square. Signs are preferred over flags because they give more positive guidance to the motorist. In periods of darkness, red or white flashing lights on the sign paddles can be used to increase conspicuity. When flashing lights are used, the flash rate will be no less than 50 and no more than 60 flashes per minute.
- 4.3.4. Flaggers will be provided with and will wear class II vest. Orange or Green.

**4.4. Barricades**

- 4.4.1. Barricades must conform to the MUTCD – Section 3F (2003), unless specific state regulations are applicable.
- 4.4.2. If cones or tubular markers are used, they must be predominantly orange and made of a material that can be struck without causing damage to the impacting vehicle. Cones and tubular markers must be a minimum of 28 inches (71 centimeters) in height for all road applications.
- 4.4.3. Develop a barricade plan if a site or facility will routinely use barricades.

**5. Documentation Summary**

The following documentation must be maintained in the project file:

- Barricade plans, as applicable.

**6. Resources**

- Federal Highway Administration (FHWA) Manual of Uniform Traffic Control Devices (2003)
- American National Standards Institute (ANSI) 107-2004 – Standard for High-Visibility Safety Apparel
- ANSI Z535.2-2006 – Environmental and Facility Safety Signs
- ANSI Z535.4-2006 – Safety Tags and Barricade Tapes
- U.S. Occupational Safety and Health Administration (OSHA) Construction Standard – Signs, Signals and Barricades – 1926 Subpart G
- SMS 029 – Personal Protective Equipment
- SMS 032 – Work Zone Traffic Control