



Advanced Work Zone Terminology



Alternate Pedestrian Routes (APR)

A temporary pedestrian facility created to replace an existing pedestrian facility impacted by a work zone. To comply with the Manual on Traffic Control Devices (MUTCD), the APR must contain accessibility features consistent with the features present in the impacted pedestrian facility. (See also – Temporary Pedestrian Accessibility Route)

Average Daily Traffic (ADT)

The average 24-hour volume, being the total volume during a stated period divided by the number of days in that period.

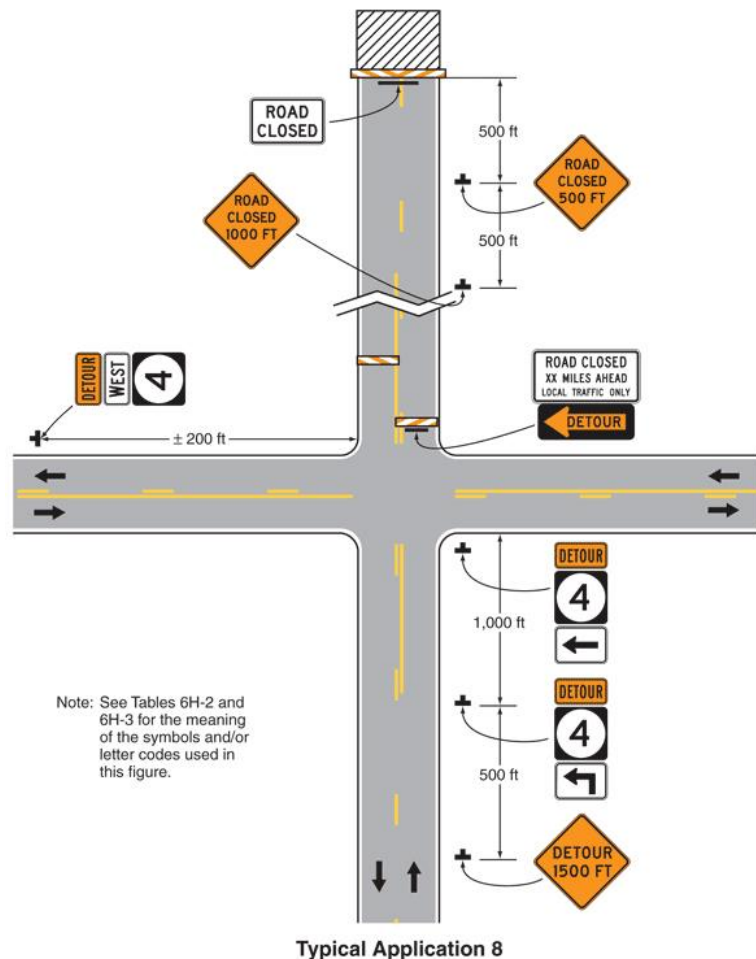
Deadheading

The process of transporting vehicles and equipment between work sites while traveling at less than the minimum speed limit or substantially slower than prevailing traffic, totally or partially in the travel lanes.

Detour Route

When a road is closed and a detour is established, the traffic control zone includes the area in which a detour route begins. The detour route extends beyond the zone to divert traffic around the site and return it to the original route.

Figure 6H-8. Road Closure with an Off-Site Detour (TA-8)



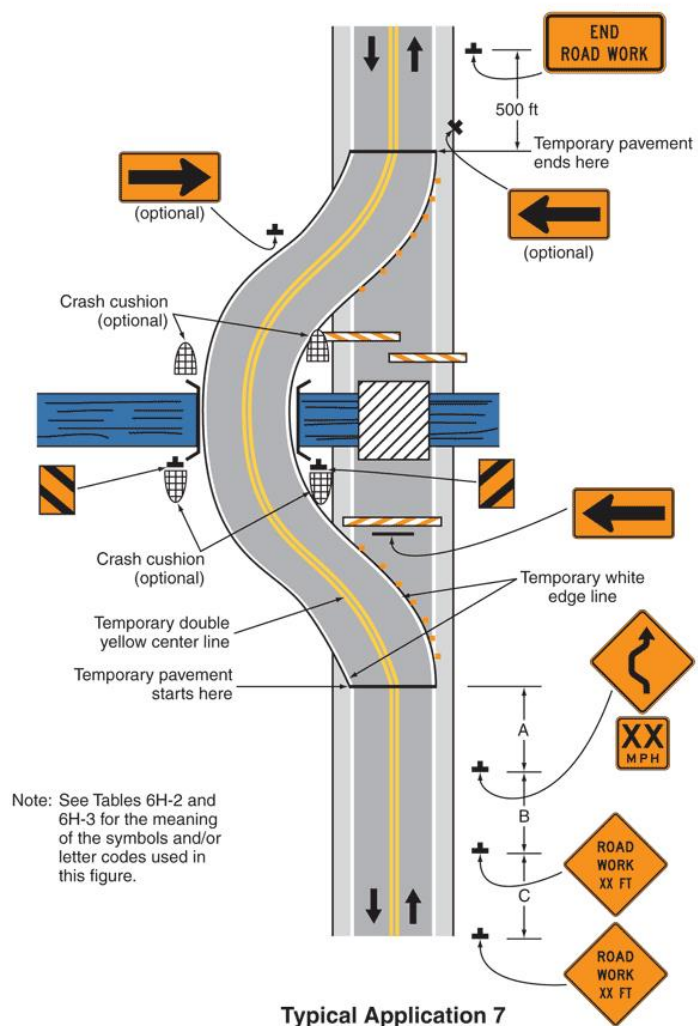
Distance, Sight

Distance needed for a driver to detect an unexpected or otherwise difficult-to-perceive information source or condition in a roadway environment that may be visually cluttered, recognize the condition or its potential threat, select an appropriate speed and path, and initiate and complete the maneuver safely and efficiently. Because decision sight distance offers drivers additional margin for error and affords them sufficient length to maneuver their vehicles at the same or reduced speed, rather than to just stop, its values are substantially greater than stopping sight distance.

Diversion

Traffic is diverted onto a temporary roadway generally constructed within or adjacent to the right-of-way or onto a frontage road.

Figure 6H-7. Road Closure with a Diversion (TA-7)



Engineering Judgment

The evaluation of available pertinent information, and the application of appropriate principles, standards, guidance and practices, for the purpose of deciding upon the applicability, design, operation or installation of a traffic control device. Engineering judgment shall be exercised by

an engineer, or by an individual working under the supervision of an engineer, through the application of procedures and criteria established by the engineer.

Fixed Object

Hazards that are firm, unyielding and greater than 4 inches in height along the roadside such as bridge piers, abutments, footings, walls, posts, trees, construction equipment, supplies, stockpiles and large boulders.

High Speed Road

A roadway where the posted speed limit is 45 miles per hour or greater.

Lane Narrowing

Lane narrowing is a reduction in lane width for those lanes carried through the activity area in order to maintain the maximum number of open lanes while accommodating the needs of the work activity.

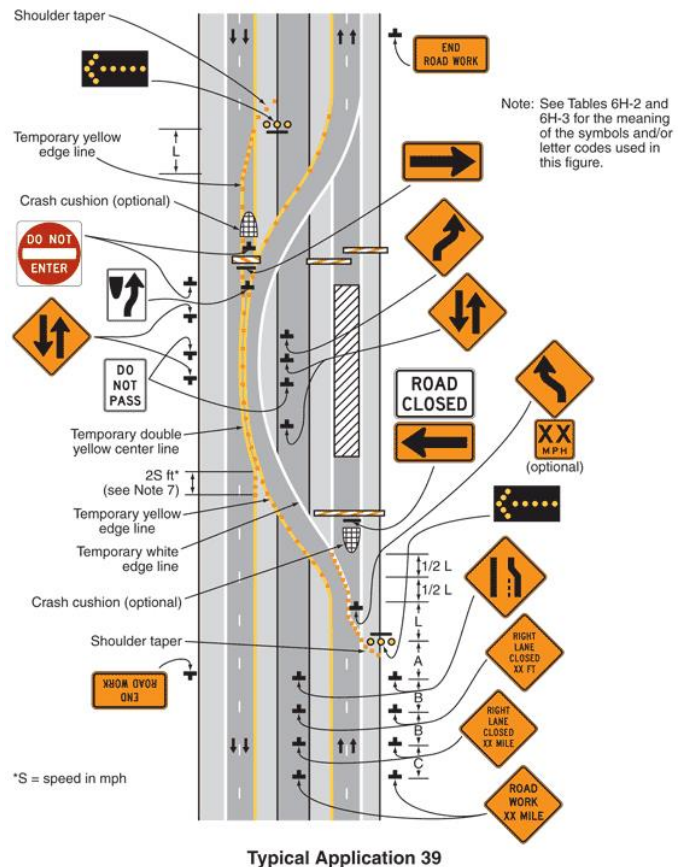
Manual for Assessing Safety Hardware (MASH)

Presents uniform guidelines for crash testing permanent and temporary highway safety features and recommends evaluation criteria to assess test results. Published in 2009 as an update and replacement for NCHRP 350.

Median Crossover

In the context of work zone closures, a median crossover occurs where one directional roadway is closed to traffic and that direction of travel is carried diagonally across the median onto the other directional roadway.

Figure 6H-39. Median Crossover on a Freeway (TA-39)



National Cooperative Highway Research Program Report 350 (NCHRP 350)

Document that contains recommended crash-testing procedures for evaluating a variety of roadside safety hardware, including traffic control devices that are used in work zones. NCHRP 350 was published in 1993 by the Transportation Research Board (TRB).

Nonstandard Traffic Sign

A nonstandard traffic sign does not conform to the design, application or placement criteria prescribed by the MUTCD and does not meet the requirements for a special sign. The MUTCD permits special warning signs under Section 2C-41, in which it is stated that warning signs other than those specified in the MUTCD may be required under special conditions.

Pavement Markings

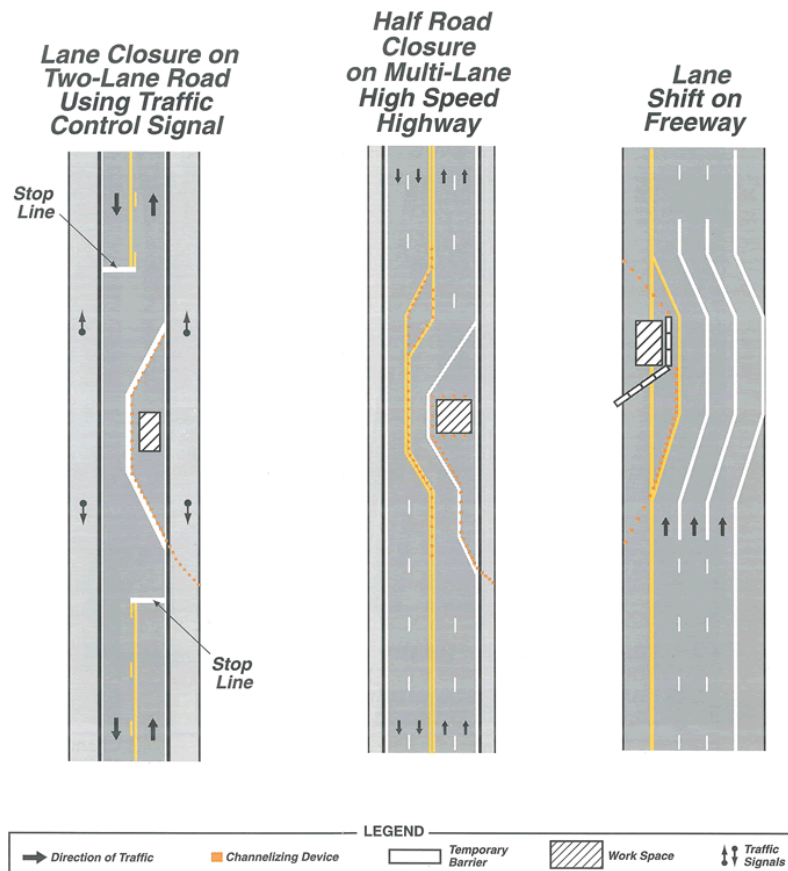
Used to convey messages to roadway users. They indicate which part of the road to use, provide information about conditions ahead, and indicate where passing is allowed.

Yellow lines separate traffic flowing in opposite directions. Drivers should stay to the right of the yellow lines.

A solid yellow line indicates that passing is prohibited. A dashed yellow line indicates that passing is allowed.

White lines separate lanes for which travel is in the same direction. A double white line indicates that lane changes are prohibited. A single white line indicates that lane changes are discouraged. A dashed white line indicates that lane changes are allowed.

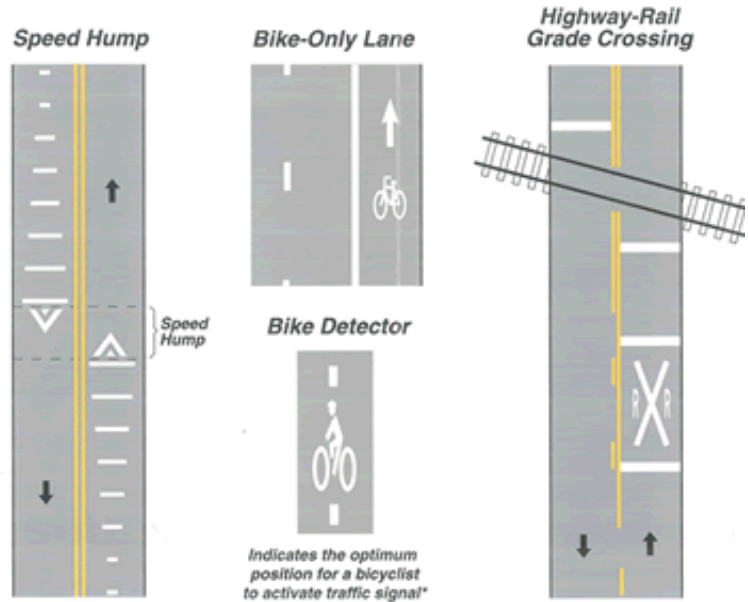
Work Zone Pavement Markings



Pavement Symbols

Symbols are used to indicate permitted lane usages. A diamond indicates a lane reserved for use by high-occupancy vehicles. A bicycle indicates a lane reserved for bicyclists. Arrows show required or permitted movements at intersections. A row of solid triangles indicates that the road user must yield.

Miscellaneous Lane Markings



Source: FHWA

Raised Pavement Marker (RPM)

Raised pavement markers to enhance or temporarily replace painted lines and make traffic lanes more visible to drivers at night, making dangerous curves visible and guiding the drivers of the alignment of the road.



Source: FHWA

Ramp

Part of the roadway used to carry traffic onto and off of the freeway.

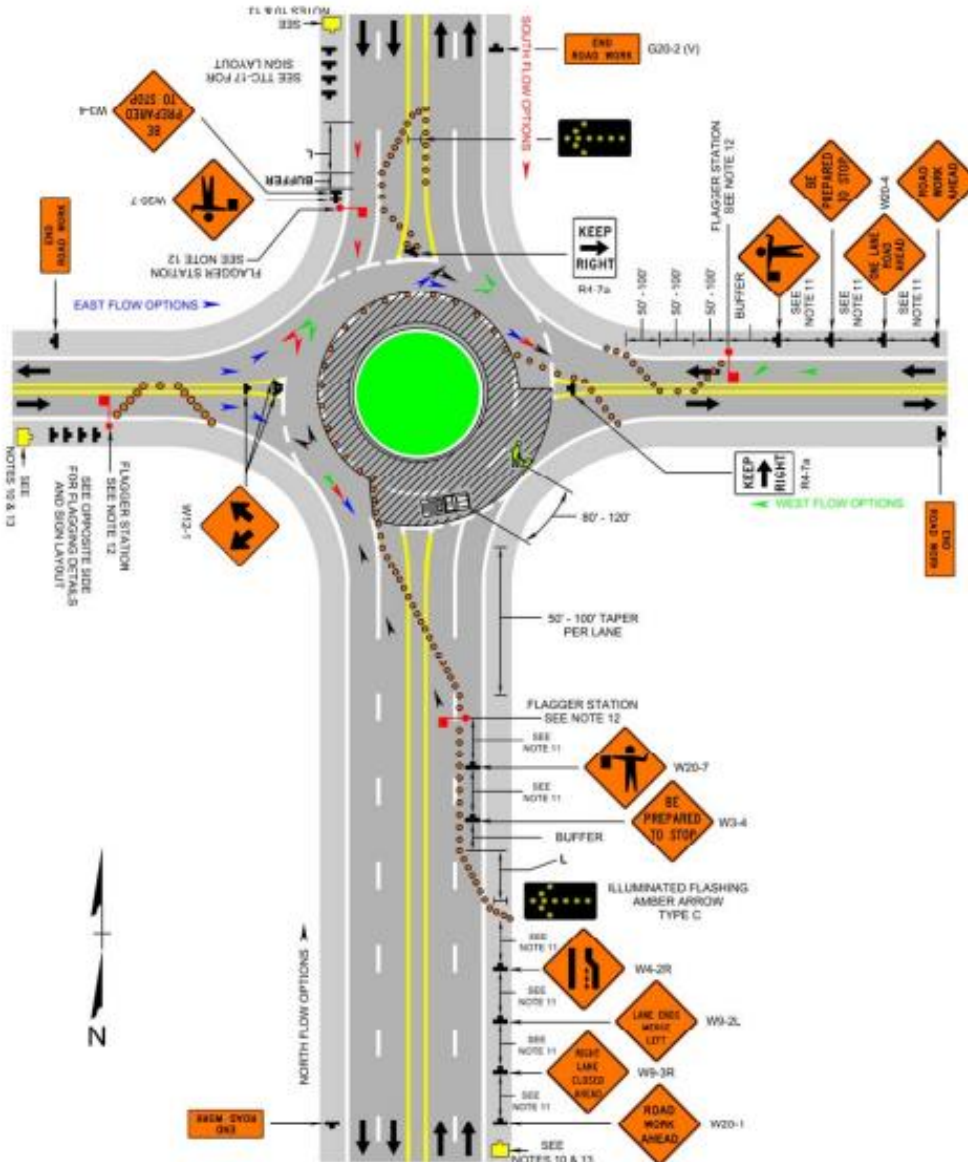
Road Authority

The roadway agency or private owner having jurisdiction over a road open to public travel.

Roundabout

Type of circular intersection or junction in which road traffic is permitted to flow in one direction around a central island, and priority is typically given to traffic already in the junction.
(See figure on next page.)

Outside Lane Closure Operation on a Multi-Lane Roundabout
(Figure TTC-33.1)



Source: VA WAPM

Special Traffic Sign

A special traffic sign meets a need not covered by a standard sign and has been approved for use by the proper authority.

Standard Traffic Sign

A standard traffic sign, as defined in the MUTCD, is used for a specific purpose and is placed in a prescribed location.

Stopping Sight Distance (SSD)

Stopping sight distance is the sum of two distances: (1) the distance traversed by the vehicle from the instant the driver sights an object necessitating a stop to the instant the brakes are applied; and (2) the distance needed to stop the vehicle from the instant brake application begins. These are referred to as brake reaction distance and braking distance, respectively.

Temporary Pedestrian Access Route (TPAR)

A temporary pedestrian facility created to replace an existing pedestrian facility impacted by a work zone. To comply with the MUTCD, the TPAR must contain accessibility features consistent with the features present in the impacted pedestrian facility. (See also – Alternate Pedestrian Routes)

Traffic Barrier

For work zone traffic control, a barrier is a device designed to prevent vehicular penetration into areas behind the barrier.



Source: ATSSA

Traffic Engineering

Traffic Engineering is the subdiscipline of transportation engineering that addresses the planning, design and operation of streets and highways, their networks, adjacent land uses and interaction with other modes of transportation and their terminals. The Institute of Transportation Engineers (ITE) provides a wide variety of tools and training materials that address traffic engineering.

Traffic Shifting

Traffic shifting is the lateral displacement of one or more travel lanes from their normal travel path in order to accommodate a workspace in the roadway. All lanes are carried through, and no merging operations are involved. (See figure on right.)

Traffic Splitting

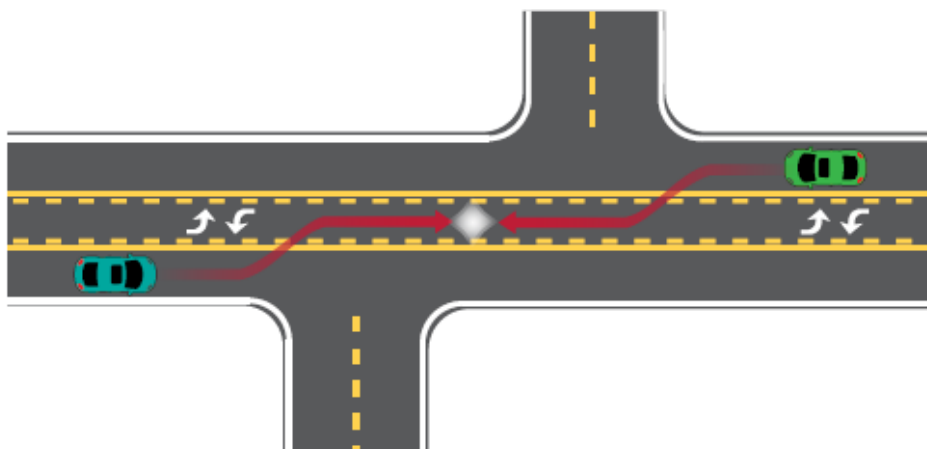
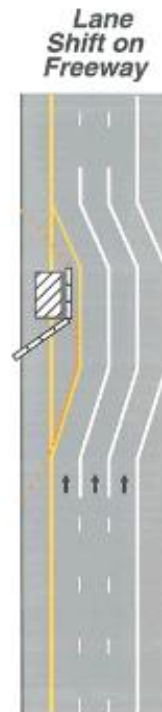
Traffic splitting is the situation encountered on a multilane roadway where open travel lanes are carried around both sides of a work space.

Turn Lane Closure

The closure of a right or left turn lane for work operations. Signing in the TTC zone shall provide adequate warning to the motorists and provide an alternative turning maneuver. Layouts from the various roadway types should be reviewed for the best alternate depending upon roadway intersection design, traffic control (stop, yield, signals, etc.), speed limit and volume.

Two-Way, Left Turn Lane

That part of the roadway that has a continuous two-way, left turn lane located between the opposing lanes of traffic. This design variation may be found on either two-lane, two-way roads or multi-lane roads.



Source: FHWA

Vulnerable Road User (VRU)

A nonmotorist such as a bicyclist, other cyclist (e.g., electric power-assisted bicycle) and person on personal conveyance (e.g., wheelchair, skateboard). A vulnerable road user may include people walking, biking or rolling. A vulnerable road user also includes a highway worker on foot in a work zone, given they are considered a pedestrian. It does not include a motorcyclist. The definition of a VRU may vary between states and is typically defined in a State's Codes and Statutes, typically under "Motor Vehicle," "Transportation" or "Vehicle Code". For a specific State Vehicle Code, consult <https://law.justia.com/codes/>.

Additional Acronyms

ADT – Average Daily Traffic

APR – Alternate Pedestrian Routes

SSD – Stopping sight distance

MASH – Manual for Assessing Safety Hardware

MUTCD – Manual on Uniform Traffic Control Devices

NCHRP 350 – National Cooperative Highway Research Program Report 350

RPM – Raised Pavement Marker (RPM)

TPAR – Temporary Pedestrian Access Route (TPAR)

VRU – Vulnerable Road User

Additional reference: Texas A&M Transportation Institute