

## Section 648 Locating No-passing Zones

### 648.1 Description

- (1) This section describes locating and marking both ends of no-passing zones on the pavement surface independently from existing no-passing zones.

### 648.2 Materials

- (1) Furnish paint that will be readily visible until no-passing barrier lines are placed. Use white on asphalt and black on concrete.

### 648.3 Construction

#### 648.3.1 Equipment

- (1) Furnish two vehicles equipped with two-way communications equipment, full-width flashing yellow light bars with 360 degree visibility, and distance measuring instruments (DMI). Ensure that DMI have an accuracy of at least 10 foot per mile and decrease the measured distance when the vehicle backs up.
- (2) Provide a target on the lead vehicle 42 inches above the roadway offering a sharp cutoff when it appears and disappears. Ensure that the observer's eye in the trailing vehicle is 42 inches above the roadway.

#### 648.3.2 Locating No-Passing Zones

- (1) Establish no-passing zones where there is inadequate sight distance conforming to the methods described in 3-2-2 of the department's traffic guidelines manual. Do not allow the line-of-sight to extend outside the shoulder and ensure that there are no blind spots within the required sight distance.
- (2) Establish both ends of no-passing zones to an accuracy of 50 feet. If the no-passing zone is less than 500 feet long, extend the zone to 500 feet by lengthening at its beginning in each traffic direction. Conform to the no-passing zone sight distance requirements as follows:

POSTED SPEED LIMIT	NO-PASSING ZONE SIGHT DISTANCE	MINIMUM DISTANCE <sup>[1]</sup> BETWEEN ZONES
25 - 30 mph	0.10 miles/528 feet	0.10 miles/528 feet
35 - 40 mph	0.13 miles/686 feet	0.10 miles/528 feet
45 - 50 mph	0.16 miles/845 feet	0.13 miles/686 feet
55 mph	see <sup>[2]</sup>	0.15 miles/792 feet

<sup>[1]</sup> If the distance between 2 successive no-passing zones is less than the minimum distance between zones, connect the 2 zones.

<sup>[2]</sup> The no-passing zone sight distance is specified in the special provisions.

- (3) Establish no-passing barrier lines as the plan details show for features including but not limited to the following:
  1. Major intersections with full right turn lane or bypass lanes.
  2. Two-lane to four-lane divided highway transitions.
  3. Median islands.
  4. Two-lane bridges less than 24 feet wide.
  5. Railroad - highway grade crossings.
  6. Climbing lanes and passing lanes.
- (4) If the contract specifies, also establish no-passing zones on detour routes. Unless the engineer directs otherwise, use state trunk highway criteria to locate no-passing zones on county trunk highways and local roads on the detour route. Base the locations on posted detour speed limits.
- (5) Establish no-passing zones at other locations the contract specifies and at engineer-directed special locations. Check with the engineer before beginning work to determine if there are special no-passing zones to mark under the contract.
- (6) Check the correctness of no-passing zones leading into and out of the project limits. Ensure that the minimum distance between zones and sight distance are correct.

#### 648.3.3 No-Passing Zone Marks

- (1) Spray paint T's and dots on the roadway to mark the beginning and end of all no-passing zones. Make T's one foot by one foot with at least a 2-inch wide line with a 3 to 4 inch diameter dot on the centerline adjacent to the T stem.

#### 648.3.4 No-Passing Zone Log

- (1) Upon completing the work, furnish the engineer 4 copies of department form [DT2124](#). Locate features to the 1/100 of a mile. For east-west roads, log entries from west to east. For north-south roads, log entries from south to north. Log the following:

- Date of survey.
- Cardinal direction of travel.
- Beginning and ending of each no-passing barrier line in both directions.
- Sight distance and speed criteria for each zone.
- Location of features requiring no-passing barrier lines specified in [648.3.2](#).
- Useful geographical references including but not limited to county and regional boundary lines, county trunk highways, and starts and ends of all bridges.

**648.4 Measurement**

- (1) The department will measure Locating No-Passing Zones by the mile acceptably completed, measured as the actual centerline length of road surveyed and reported to the nearest 1/100 of a mile.

**648.5 Payment**

- (1) The department will pay for the measured quantity at the contract unit price under the following bid item:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
648.0100	Locating No-Passing Zones	MI

- (2) Payment is full compensation for all the work required under this section.