616.8.35M (TA-35M) Mobile Operation on a Multi-Lane Highway

- Use this typical application for mobile operations on a multi-lane highway.
  1. For other operations that require workers on foot, refer to the proper lane closure Typical Application.

- Always use a protective vehicle with a flashing arrow panel (FAP) and a truck/trailer mounted attenuator (TMA) #1:
  1. Activate high intensity rotating, flashing, oscillating, or strobe lights.
  2. Position TMA #1 a minimum of 150 feet behind the work vehicle, if possible.
  3. Operate the FAP in the appropriate mode.

- When using additional TMAs between TMA #1 and the advance warning vehicle:
  1. Activate high intensity rotating, flashing, oscillating or strobe lights.
  2. Position additional TMAs a minimum of 150 feet in advance of the next TMA, if possible.
  3. Operate the FAP in the appropriate mode.

- Always use a shoulder advance warning vehicle with a FAP and the appropriate lane closure sign when a shoulder is available next to the lane closure:
  1. Activate high intensity rotating, flashing, oscillating, or strobe lights.
  2. Always use a TMA if the shoulder advance warning vehicle encroaches into the lane of traffic.
  3. Operate the FAP with the appropriate arrow mode.

- Use one of the following advance warning methods when a shoulder is not available next to the lane closure:
  1. When using an advance warning vehicle, position it on the opposite shoulder a minimum of one mile behind any TMA in the lane.
  2. When using an advanced warning vehicle with or without a TMA, equip it with a FAP set in the four-corner or alternating diamond caution mode or a CMS with the appropriate lane closure message, and an appropriate lane closure sign.

- For roadways posted at 45 mph or below, always use a protective vehicle with a flashing arrow panel (FAP). If available, use a truck/trailer mounted attenuator (TMA). Shoulder advance warning vehicle is optional.
  1. Activate high intensity rotating, flashing, oscillating, or strobe lights.
  2. Position the protective vehicle/TMA a minimum of 150 feet in advance of the work space, if possible.
  3. Equip the vehicle with a FAP and operate the flashing arrow panel (FAP) with the appropriate arrow mode.
  4. Equip the advance warning vehicle with a FAP set in the appropriate mode or a CMS with the appropriate lane closure message, and an appropriate lane closure sign.

- For more information on proper TMA operation refer to EPG 612.1.3.1.2.

For other operations, refer to:

- Short Duration:
  1. EPG 616.33SD (TA-33SD) Short Duration Lane Closure on a Multi-Lane Highway.

- Stationary:
  1. EPG 616.33S (TA-33S) Stationary Lane Closure on a Multi-Lane Highway.
616.8.35M (TA-35M) Mobile Operation on Divided or Multi-Lane Undivided Highways

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MoDOT Maintenance Vehicles
(IF AVAILABLE, USE EMERGENCY ALERT LIGHTS AND AUDIBLE ALERT SYSTEM)
616.8.35M (TA-35M) Two lanes: Right Lane Closed with Right Shoulder Advance Warning Vehicle

<table>
<thead>
<tr>
<th>SPEED (Permanent Posted MPH)</th>
<th>SPACING LENGTH (FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-35</td>
<td>245</td>
</tr>
<tr>
<td>40-45</td>
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<tr>
<td>50-55</td>
<td>660</td>
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<tr>
<td>60-70</td>
<td>840</td>
</tr>
</tbody>
</table>

Date:
Type of Work:
Location:
Work Zone Specialist:
Field Notes:
616.8.35M (TA-35M) Two lanes: Left Lane Closed with Left Shoulder Advance Warning Vehicle

<table>
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<tr>
<th>SPEED</th>
<th>SPACING LENGTH (ft.)</th>
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<tbody>
<tr>
<td>Permanent Posted (mph)</td>
<td>Spacing (T2)</td>
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Type of Work:

Location:

Work Zone Specialist:

Field Notes:
616.8.35M (TA-35M) Two lanes: Left Lane Closed with Narrow/No Shoulders with Right Shoulder Advance Warning Vehicle

Date:

Type of Work:

Location:

Work Zone Specialist:

Field Notes:
616.8.35M (TA-35M) Three or more lanes: Center Lane Closed with Left Shoulder Advance Warning Vehicle

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Type of Work:

Location:

Work Zone Specialist:

Field Notes:
616.8.35M (TA-35M) Three or more lanes: Center Lane Closed with Right Shoulder Advance Warning Vehicle

Date:
Type of Work:
Location:
Work Zone Specialist:
Field Notes:

Three or More Lanes Center Lane (Full Shoulders)

TMA #1 Protective Vehicle Required
TMA Required

TMA #2 Protective Vehicle Required
TMA Required

TMA #3 Protective Vehicle Required
TMA Required

Advance Warning Vehicle Protective Vehicle Required
TMA (Optional)

Flash Warning Panel (FAP)
Protective Vehicle

Truck or Trailer Mounted Attenuator (TMA)
616.8.35M (TA-35M) Three or more lanes: Right Lane Closed with Right Shoulder
Advance Warning Vehicle

<table>
<thead>
<tr>
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<th>SPACING LENGTH (ft.) Spacing (T2)</th>
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<tr>
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616.8.35M (TA-35M) Three or more lanes: Left Lane Closed with Left Shoulder Advance Warning Vehicle

### Spacing Length (ft.)

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**Date:**

**Type of Work:**

**Location:**

**Work Zone Specialist:**

**Field Notes:**
616.8.35M (TA-35M) Three or more lanes: Left Lane Closed with Narrow/No Shoulders with Right Shoulder Advance Warning Vehicle

Date:
Type of Work:
Location:
Work Zone Specialist:
Field Notes:
616.8.35M (TA-35M) Undivided Multi-Lanes: Left Lane Closed with Right Shoulder Advance Warning Vehicle

Date:

Type of Work:

Location:

Work Zone Specialist:

Field Notes:
### 616.8.35M (TA-35M) Undivided Multi-Lanes: Right Lane Closed with Right Shoulder Advance Warning Vehicle

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#### Diagram:
- **UNDIVIDED MULTI-LANE RIGHT LANE (FULL SHOULDERS)**
- **TMA #1 PROTECTIVE VEHICLE REQUIRED**
- **TMA REQUIRED**
- **WHEN USING ADDITIONAL TMA PROTECTIVE VEHICLE REQUIRED**
- **TMA REQUIRED**
- **ADVANCE WARNING VEHICLE PROTECTIVE VEHICLE REQUIRED**
- **TMA (OPTIONAL)**

**Minimum 150 feet**

- **Flashig Arrow Panel (FAP)**
- **Work Vehicle**
- **Truck or Trailer Mounted Attenuator (TMA)**

**Date:**

**Type of Work:**

**Location:**

**Work Zone Specialist:**

**Field Notes:**
616.8.35M (TA-35M) Two lanes: Right Lane Closed with Right Shoulder
45 mph or Below Example

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Date:
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Location:
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Field Notes:
616.8.35M (TA-35M) Two lanes: Left/Right Lane Closed with Narrow/No Shoulders
45 mph or Below Example

Date:

Type of Work:

Location:

Work Zone Specialist:

Field Notes:
616.8.35M (TA-35M) Three or more lanes: Center Lane Closed
45 mph or Below Example

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