TAILGATE SAFETY TALKS

Nighttime Construction Safety

Basic nighttime construction maintenance and protection of traffic specifications must be adhered to during nighttime construction to ensure the safety of you, other workers and the traveling public. All workers, other than those inside an enclosed cab, must wear hard hats with retro reflective tape and nighttime apparel during nighttime operations at all times. Vehicles and equipment in nighttime work zones shall be equipped with rotating amber beacons which shall be visible from all directions. Vehicles operating or parked on the pavement of a closed roadway or travel lane shall display 4-way flashers or beacons at all times.

Our safety depends on others seeing us, as well as our seeing others. During nighttime construction only be in illuminated areas have at least level 1 illumination (50 lx or 5 footcandles), always wear reflective hard hat and nighttime apparel, be sure your vehicle/equipment is illuminated with amber rotating lights and be vigilant of all vehicles, trucks and equipment!

References:


A. Protective Helmets. Protective helmets shall meet current OSHA standards for impact, electrical shock, and burn protection. Protective helmets used during nighttime operations shall be equipped with a minimum of 7500 mm² of reflective tape on all four sides (i.e., 25 mm by 75mm strip - 1875 mm² per side). Protective helmets for flaggers shall be orange.

C. Nighttime Apparel. Nighttime Apparel shall consist of a vest, shirt, or jacket; orange, fluorescent orange, yellow, fluorescent yellow, yellow-green, fluorescent yellow-green or combination of these colors meeting the requirements of ANSI 107 Class 2.


In addition to the requirements of basic maintenance and protection of traffic, additional requirements for maintenance and protection of traffic during nighttime operations shall be as follows:

A. Worker Apparel. All contractors' employees involved in nighttime operations shall wear at all times protective helmets and Nighttime Apparel. All Nighttime Apparel shall be closed front and rear and in clean condition to maintain color, visibility, reflectivity, and conspicuity. Truck drivers and equipment operators shall wear Nighttime Apparel when out of an enclosed cab.
B. **Vehicle Protection.** All vehicles and equipment in the traffic control zone shall be equipped with rotating amber beacons which shall be visible from all directions for a minimum of 300 m during daylight. Beacons shall be mounted in a manner which does not cause glare for the driver or operator.

Vehicles operating or parked on the pavement of a closed roadway or travel lane shall display 4-way flashers or beacons at all times.

Rollers shall display a 50 mm band of reflective tape on the front and rear (60 000 mm² per end minimum).

All trucks shall display a minimum of 60 000 mm² of reflective tape on the rear.

Haul trucks shall display a 600 mm by 1200 mm orange reflective sign with the legend “Construction Vehicle - Do Not Follow” in black lettering on the tailgate.

All construction equipment when moving at a speed below the operating speed of traffic in an open travel lane or on a shoulder adjacent to an open travel lane shall be equipped with an amber rotating beacon and shall be followed by a chase vehicle equipped with an amber rotating beacon and 4-way flashers.

Vehicles (except for rollers) shall travel facing in the same direction as adjacent traffic in order to avoid glare and confusion to drivers.

C. **Signs, Delineation and Guiding Devices.** All signs, delineators and guiding devices for nighttime operations shall be kept clean and visible with good reflectivity.

Type III construction barricades shall be used whenever an entire roadway or ramp is closed to traffic.

Plastic drums or 300 mm by 600 mm vertical panels shall be used for channelizing and delineating lane closures. Oversize (900 mm) cones may be used on tangent runs beyond the completion of the lane closure tapers. Spacing shall be in accordance with the following:

<table>
<thead>
<tr>
<th>Estimated Operating Speed (km/h)</th>
<th>Maximum Spacing (m)</th>
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<tbody>
<tr>
<td>30</td>
<td>6.0</td>
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<tr>
<td>50</td>
<td>9.0</td>
</tr>
<tr>
<td>≥70</td>
<td>12.0</td>
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</tbody>
</table>

Delineation at gores or intersections shall be spaced at intervals equal to one-half of the above table values and shall consist of plastic drums or 300 mm by 600 mm vertical panels except that every other device may be an oversize (900 mm) cone at the Contractor's option.

When traffic will be traveling adjacent to closed travel lanes; two plastic drums, two 300 mm by 600 mm vertical panels or two oversize (900 mm) cones shall be placed transversely in each closed lane at 225 m maximum intervals (unless a lesser spacing is shown on the plans) except where it would interfere with paving, rolling or other ongoing operations. A Type III construction barricade may be substituted at the Contractor's option. No additional payment for Type III construction barricades will be made when used for this purpose.

**EI 95-005 Lighting for Nighttime Operations - Special Specifications**
Level I (50 lx or 5 footcandles) - All areas of general construction operations including excavation; cleaning and sweeping; landscaping; planting and seeding. Level I shall also be provided at the area of lane and/or road closures continuously throughout the period of closure, including the setup and removal of the closures.