

Job Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 560: Night Traffic Control

Introduction: Conducting highway construction and maintenance activities during night hours could provide an advantage when traditional daytime traffic control strategies cannot achieve an acceptable balance between worker and public safety, traffic and community impact, and the ability to perform the construction operations. The two basic conditions that must be met for night work to offer any advantage are reduced traffic volumes, and easy set up and removal of the traffic control patterns on a nightly basis. Following are safety guidelines for safe nighttime traffic control:

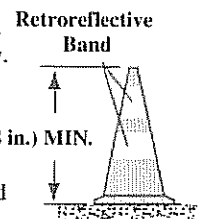
- **Considering** the safety issues inherent to night work, consideration should be given to enhancing traffic controls to provide added visibility and driver guidance, and increased protection for workers. Speeds are often higher at night necessitating greater visibility at a time when visibility is reduced. The incidence of impaired (alcohol or drugs), fatigued, or drowsy drivers are higher at night.
- **Consideration** should be given to providing additional lights and retroreflective markings to workers, work vehicles, and equipment.
- **Temporary lighting** should be provided where workers are active to supply sufficient illumination to safely perform the work tasks, because typical street and highway lighting is rarely adequate to provide sufficient levels of illumination for operations.
- **Temporary lighting** for night work should be designed such that the glare does not interfere with driver visibility, or create visibility problems for truck drivers, equipment operators, flaggers, or other workers.
- **Consideration** should also be given to stationing uniformed law enforcement officers and lighted patrol cars at night work locations where there is a concern that high speeds or impaired drivers might result in undue risks for workers or other drivers.
- **Desired illumination** levels vary depending upon the nature of the task involved. An average horizontal luminance of 50 lux (5 foot candles) can be adequate for general activities.
- **All TTC devices** shall be retroreflective or illuminated if utility work is performed during nighttime hours. When used at nighttime, flags are required to be retroreflectorized red. Flaggers must be thoroughly trained before working in traffic control.
- **The reduced number** of devices in utility work zones should be offset by the use of high-visibility devices, such as high-intensity rotating, flashing, oscillating, or strobe lights on work vehicles, or high-level warning devices.



Worker Safety Apparel: All night workers exposed to the risks of moving roadway traffic or construction equipment should wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Safety Apparel", or equivalent revisions, and labeled as ANSI 107-1999 standard performance for Class 1, 2, or 3 risk exposure.

Warning Lights: Type A low-intensity flashing warning lights are used to warn road users during nighttime hours that they are approaching or proceeding in a potentially hazardous area. Type A warning lights may be mounted on channelizing devices. Type B high-intensity flashing warning lights are used to warn road users during nighttime hours that they are approaching a potentially hazardous area. Type B warning lights are designed to operate 24 hours per day and may be mounted on advance warning signs, or on independent supports. Type C steady-burn warning lights, and Type D 360-degree steady-burn warning lights may be used during nighttime hours to delineate the edge of the traveled way.

- **All signs** used at night must be retroreflective with a material that has a smooth, sealed outer surface, or illuminated to show the same shape and similar color both day and night. The fluorescent versions of orange provide higher conspicuity than standard orange, especially during twilight.
- **Portable** changeable message signs are required to automatically adjust their brightness under varying light conditions to maintain legibility. Arrow panel elements must be capable of at least a 50 percent dimming from full brilliance. The dimmed mode is used for nighttime operation.
- **When cones** are used at night on all highways, or when more conspicuous guidance is needed, cones must be a minimum of 28 inches in height.
- **For nighttime use**, cones are required be retroreflectorized, or equipped with lighting devices for maximum visibility. Each cone must have a minimum of two orange and two white stripes with the top stripe being orange. For nighttime use, tubular markers shall be retroreflectorized.
- **When used** to channelize vehicular traffic, the temporary traffic barrier must be supplemented with delineation, pavement markings, or channelizing devices for improved nighttime visibility. All pavement markings and devices used to delineate road user paths must be carefully reviewed during nighttime periods. Flashing warning beacons should be operated 24 hours per day.
- **When nighttime** work is being performed, floodlights should be used to illuminate the work area, equipment crossings, and other areas. Floodlighting must not produce a disabling glare condition for approaching road users, flaggers, or workers.
- **Except** in emergency situations, flagger stations are required to be illuminated at night.



Conclusion: All night traffic control workers should be trained on how to work next to motor vehicle traffic in a way that minimizes their vulnerability. Night traffic control workers having specific temporary traffic control responsibilities should be trained in TTC techniques, device usage, and placement. Follow these safety guidelines for safe nighttime traffic control.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Employee Signatures: _____
(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

City of San Angelo Foreman/Supervisor's Signature: _____

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.