

Construction & Maintenance

1. Adequate protection from traffic, in addition to signs, shall be provided when employees and equipment are working on or near the traveled portion of any highway, roadway, or right-of-way, including flagging.
2. Hard hats, steel shoes and clean bright reflective vests are to be worn by all service, maintenance, and construction personnel while conducting business on highways, roadways, or right-of-ways. No bright colored shirts, jackets, or coats are to be substituted for regulation orange vests.
3. Properly trained, neat, alert flaggers wearing brightly colored reflective vests shall be provided when any part of the highway or roadway is being blocked due to any type of construction or work activity.
4. Portable signs ("Crews Working," "Road Repairs Ahead," and similar signs used as advance warning of highway operation) should be neat, legible, and have bright orange flags attached.
 - a. "Crews Working and Surveying" - these signs are to be used as advance warnings to the traveling public and placed no less than 50 steps or no more than 200 steps from each end of the work or equipment. When long sections of road are considered a work site, signs shall be spaced more than one-half mile apart.
 - b. "Road Repairs Ahead" - these signs shall be placed on the right hand shoulder of the road when personnel are engaged in machining or pulling ditches or patching long sections where "Crew Working" signs are impractical. "Crew Working" signs may be used between "Road Repairs Ahead" signs.
 - c. "Mowing Operations Ahead" - these signs shall be placed on the right hand shoulder, or median area when applicable. (These signs may be used when mowing the right-of-way over long sections where it is impractical to use "Crew Working" signs.)
5. Signs should be regularly relocated as work progresses so that the signs are never more than 1/4 mile from the work site. Signs must not be left when the personnel and equipment are off the road for any reason, including lunch periods.
6. Undermining excavation is prohibited.
7. Hard hats are to be worn by all employees working under bridges, overhead construction, around cranes, blasting or any other place where flying or falling objects are likely to cause head injuries and when directed by a supervisor.
8. Oil burners of a tar kettle shall be removed before lighting. If the burner has gone out, it is not to be relit and inserted under the kettle until sufficient time has elapsed to allow all fumes to be blown out of the heating box. The kettle must not be moved while the burner is lit.

9. All applicable state and federal safety regulations, as well as applicable industrial safety standards, shall be complied with at all times, whether or not they are specially mentioned in this Handbook.
10. In regard to cranes and derricks, employees must comply with the manufacturer's specification and limitations as well as the tests and maintenance standards of the industry.
 - a. Rated load capacities, recommended operating speeds, and special hazard warning or instructions shall be posted on all equipment and be visible from the operator's station or from the most appropriate location to maximize its purpose. Operators shall comply with such warnings or instructions.
 - b. Equipment shall be inspected before each use and all deficiencies corrected. This includes complete inspection of all functional operating mechanisms, air and hydraulic systems, chains, rope slings, and hooks. Lighting equipment shall be visually inspected daily.
 - c. Accessible areas within the swing radius of the revolving superstructure shall be barricaded.
 - d. Except where electrical distribution and transmission lines have been de-energized and visibly grounded at point of work, or where insulating barriers not a part of or an attachment of the equipment or machinery have been erected to prevent physical contact with the lines, no part of a crane or its load shall be operated within 10 feet of a line rated 50kV or below; 10 feet plus 0.4 inches for each 1 kV for lines rated over 50 kV; or twice the length of the line insulator, but never less than 10 feet.
 - e. Regular job site inspection, including inspection of equipment, shall be made by supervisory and departmental management personnel to assure protection of the public as well as the employees.
11. No employee shall operate a chain saw without first receiving training on the proper use and operation of the equipment and obtaining the proper safety equipment.