

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G10.224.3
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AT&T Co Standard

GUARDING WORK AREAS

JOB PRESURVEY—WORK AREA PROTECTION

1. GENERAL

1.01 This section contains a check list of items to be considered in developing a plan for guarding work areas.

1.02 Safe job planning in connection with the use of warning devices involves not only the actual arrangement of the devices but also the related locations of men and equipment while working. The main objective is to (1) **prevent injury to workmen and to the public** and (2) **interfere with traffic and pedestrians as little as possible.**

1.03 After completing a plan of a setup for warning devices at a particular location, the setup should be analyzed from the point of view of a motor vehicle driver and a pedestrian.

1.04 Initial warning devices for traffic control should be placed sufficiently ahead of work areas to give the driver time to stop if necessary before reaching the work area. The following table gives recommended distances for placing initial warning signs ahead of work operations for various speed limits:

<u>Speed Limit in Miles per Hour</u>	<u>Distance in Feet</u>
25 or below	25- 50
35	150-250
45	250-350
55 or above	350-500

1.05 The spacing of traffic warning cones is also dependent on the normal traffic speeds. Where the normal traffic speeds are less than 25 miles per hour, the maximum distance between cones should be about 10 feet. Where normal traffic speeds are in excess of 25 miles per hour, such as on high speed

highways, it is suggested that the maximum spacing in feet be approximately that of the allowable speed limit in miles per hour. As an example, if the speed limit is 50 miles per hour, the cones should be spaced at intervals of about 50 feet. More cones may be used particularly at the work location to "round off" the traffic channel and to clearly define the work area.

1.06 If available, a motor vehicle equipped with warning flags and/or warning lights may serve as a very effective barrier for vehicular traffic. The vehicle should be placed between the work area and the oncoming traffic and should have the brakes set and the transmission engaged in **reverse gear**. On dark days or during the hours of darkness vehicles used as barricades **shall be lighted by floodlights**. Under some extremely hazardous conditions, it may be found desirable to use more than one vehicle to adequately guard the work area.

1.07 Where a vehicle is used for this purpose, there are a number of factors to be considered in determining which direction the truck should be faced, i.e., toward oncoming traffic or in the same direction as the traffic flow. Headlights should be off when facing oncoming traffic. The principal concern is to afford maximum protection to the workman. Some of the factors to be considered are:

- a. Requirements of local laws and regulations.
- b. Location of work area to be protected with respect to traffic flow. For example, when oncoming drivers cannot observe the protected work area for a reasonable distance, facing the work vehicle in the same direction as the oncoming traffic may avoid possible confusion to a driver suddenly approaching a vehicle facing in the opposite direction from the normal traffic flow.
- c. Amount of equipment, tools, and materials which must be unloaded from the bed and side boxes of the truck.
- d. Location of materials and work space on the particular type of truck.
- e. Amount of work which **must** be done at the side or rear of the vehicle.
- f. Safety considerations and difficulty in turning the truck around to face oncoming traffic.

1.08 When a vehicle is used in guarding a work area, it should be considered supplemental to all other warning devices necessary to adequately safeguard the area and not as a substitute for any device. In this way, the work area is protected should it be necessary to remove the vehicle.

1.09 At busy intersections in highways and city streets or other heavy traffic locations, the supervisor should presurvey the location and then discuss the protection plan with the workman before the work is started.

2. PRESURVEY CHECK LIST

2.01 Before leaving the storeroom or garage for a job location, a workman should check to see that all warning devices are in operating condition and give consideration to whether warning devices in addition to those normally carried will be necessary.

2.02 The following items should be considered in planning for guarding the work area before starting work:

- (a) Is traffic high speed or low speed?
- (b) Is traffic congested or light?
- (c) Will character of traffic change during job operation?
- (d) Will barricades be necessary?
- (e) Will a flasher or other emergency lighting equipment be required?
- (f) Will flagman be required when setting up and removing the equipment? During job operation?
- (g) Will local and state laws or regulations relative to traffic control, warning signals, guards, etc., be complied with? Is a permit required?
- (h) Would it be helpful to discuss the safety features of the job with the nearby police officer?
- (i) Where will it be possible to keep all materials, tools, and equipment pertaining to the job during work operations? After working hours?
- (j) Along routes to or near special events, such as baseball games, race tracks, etc., is it possible to schedule job on days or hours with least traffic?
- (k) Where will pump and lighting equipment be located with respect to the work location?
- (l) Will job operation cause interference to a pedestrian or vehicular crossing such as a school crossing, bus stop, etc.?
- (m) Can warning devices be placed in traffic lane or lanes in which manhole is located?
- (n) If truck is on the job, where should it be located for maximum protection?
- (o) In a manhole, is the ladder in such a position that user must face approaching traffic?