

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G10.224.1
Issue 3, February, 1956
AT&T Co Standard

GUARDING WORK AREAS

GENERAL

1. GENERAL

1.01 This group of practices covers the description and use, including typical examples, of the standard warning devices for guarding work areas. Warning devices are used for the purpose of giving **maximum** protection to workmen, plant and equipment, and to the public in general while causing a **minimum** of interference with vehicular traffic and pedestrians. The following practices covering Guarding Work Areas are included in this group.

- (a) Section G10.224.1 General
- (b) Section G10.224.2 Standard Warning Devices, Description and Use
- (c) Section G10.224.3 Job Presurvey—Work Area Protection
- (d) Section G10.224.4 Underground and Buried Plant
- (e) Section G10.224.5 Aerial Plant

Issue 2 of Section G10.224.1 is canceled.

1.02 The important matter of protecting telephone workmen and the general public through **planned protected work areas** and **traffic** guidance must be given consideration in advance of any work operations at all locations.

1.03 In guarding work areas and especially **those that are exposed to vehicular** traffic it is always preferable to provide **more** protection than may appear necessary rather than to underprotect.

1.04 State and local laws relative to traffic control, warning signals, color of lenses in flashers, guards, etc., should be complied with. It is a good practice to notify the local law enforcement official where a minor traffic dislocation is involved. In the case of a major traffic dislocation, such as the blocking of a traffic lane on a highway, the police force having jurisdiction should be consulted first.

1.05 It is impracticable in this group of practices to cover every situation that may be encountered. The instructions and illustrations provided are intended as typical examples that will illustrate the principles to be followed for placing warning devices so as to provide the most effective protection for workmen and the public.

1.06 When used in this group of practices, the **initial warning sign** is the first warning device, usually a Men Working Sign that the oncoming vehicle approaches.

2. PRECAUTIONS

2.01 Every employee must realize that **continual alertness is required to supplement the best warning equipment available** in order to obtain **maximum safety**. On arterial highways, for instance, the noise caused by a car out of control striking a distant warning device may give sufficient time for an alert workman to get in the clear.

2.02 When placing signs, barricades, etc., carefully observe all moving traffic and exercise extreme caution when entering the roadway to place the warning devices.

2.03 One purpose of warning devices is to indicate to drivers of approaching vehicles the presence of open manholes or other work operations so that the drivers can change their speed and course as required to avoid accidents. By guiding the flow of traffic around or to the sides of the work area, the safety of the workmen as well as of the operators of the vehicles is greatly increased. Warning devices should be placed in the traffic lane in which the manhole or other work is located, **before** positioning the truck, opening a manhole or starting other work. The devices should be removed as soon as the cover has been replaced or the work has been completed.

2.04 **Warning devices should be kept clean and in good condition.** Warning signs should be handled carefully and placed in or on the truck or trailer so that tools and material will not come in contact with the panel and damage the device or the warning panel. Warning flags should be carefully stored when not in use. Flags which are dirty, torn, or badly faded should be replaced.

2.05 Every effort should be made to **reduce exposure time** of the workmen and others to possible danger. **All discussions should take place off the street and not in a traffic lane.**

2.06 A height for the C warning mast (equipped with flags when visibility is good or a warning flasher and possibly flags at night or when visibility is poor) should be carefully chosen so that visibility will not be impaired or obstructed by

trees, shrubbery, a parked car, a line of moving cars, etc. Where necessary, two or more warning masts equipped with flags or flashers may be used at different levels above the ground for added visibility.

2.07 Where, because of hills, curves, etc., a vehicle driver can not see the work area from the vicinity of the initial warning sign, a mast with flags and/or flasher should also be placed at this location in addition to those at the work area.

2.08 Floodlights when used should be placed in such a manner that light will not glare into approaching traffic.

2.09 Displayed warning flags should be inspected from time to time to see that they are not wrapped around their supports.

2.10 Displayed flashers should be inspected from time to time to see that they are operating at the proper flashing rate of 75 to 95 flashes per minute. A slower rate generally indicates that the batteries should be changed. **The flashing rate has been set by the manufacturer and adjustments must not be made in the field.**

2.11 Warning devices should be arranged in the setup or process of setting up or storing so that hazards will not be created for pedestrians.

2.12 While working on private property, pedestrian lanes, or parkways, an effort should be made to close all holes in the earth either permanently or temporarily before leaving the location. If this is impracticable, the holes should be fenced **with a snow fence or equivalent** or a watchman placed on duty to prevent small children or animals from falling into them. This fencing or guarding may be in addition to or part of the normal warning devices used at this location.

2.13 Where practical all work areas should be roped off by use of one-inch cotton tape or equivalent.

2.14 When it is necessary that obstructions such as open ditches or holes, splicer's tool carts, piles of dirt, etc., occur on busy sidewalks, barricades, muslin or tape, etc., should be placed in a manner that will guide the pedestrians safely around the obstructions.

2.15 Kerosene lanterns should be clean, adjusted and fueled before using. Lanterns should be displayed between sunset and sunrise and when required on dark days. When lanterns are to be used to protect a work area or equipment overnight, they should be lighted not later than 1/2 hour before sunset. It is desirable to light and place the lanterns about 5 minutes before

leaving the location which will afford an opportunity to observe their operation.

2.16 Along railroads, near bridges, or at other points where red lanterns might be confused with operational signals, the supervisor should determine the type of warning to be used. Also amber color in flasher lenses may be required by local laws or ordinances in certain locations.

2.17 If at the conclusion of the day's work, it is desired to leave manhole guards or barricades near the work location, secure them to a pole, post or a trailer where they will least likely cause interference. Do not secure guards or barricades to corner poles, fire plugs, nor to poles carrying either fire or police call boxes.

2.18 Added protection on icy pavement may be secured by spreading sand and salt in the vehicle approach sections near the work area. This material will provide increased traction for a motor vehicle in the act of stopping.

2.19 In locations such as crowded streets, dangerous intersections, highways, etc., additional warning devices such as barricades, extra manhole guards, raised flags, etc., should be employed. If the placing of guards, etc., will not afford adequate protection or if circumstances are such that the use of sufficient guards is not practicable, a workman should be stationed at a location that will give traffic sufficient warning. He should be keen and alert and equipped with a flag in the daytime and a lantern at night. A firm but courteous attitude should be the most effective. The supervisor should be consulted in regard to extra help for this purpose when it is required.