

of elevations can best be done before the ground freezes or before much snow has fallen. Land clearing and rough grading can normally best be done before snow has covered the site.

The items cited above fall into the category of planning the winter job. They are dealt with more easily before freeze-up or snowfall. This does not mean that they cannot be done in winter — they can, but with difficulty.

SITE ORGANIZATION

Water Supply for Construction Purposes

In winter, precautions must be taken against freezing of water pipes to ensure an adequate water supply for on-site concrete, masonry, and plaster work. In addition, water should be available for fire-fighting purposes. Water pipes can be protected against freezing by insulating or heating.

Where water under pressure is available, a frost well can be put down to the depth of the water main. The bottom of the well must be equipped to drain to a sewer or porous ground so that the service pipe can be readily emptied at night. Where necessary the valves and couplings can be protected by a layer of straw. The well should be covered to exclude snow. Rubber or plastic hoses are often used as temporary service lines. These hoses should be emptied when not in use and stored under cover. Pipes should be supported in such a way that no water can remain in them when they are drained.

Insulation for temporary service pipes can be provided by placing the pipe in a trench and backfilling before freeze-up. If trenching is not practicable then pipes can be laid in boxes filled with shavings or sawdust. Four to 6 inches of dry insulation will prevent freezing of still water in pipes for 24 hours on most construction sites. A small amount of insulation may be enough if water is being run continually through the pipe but the pipe must be drained after working hours if the water is shut off.