

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

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MAIN CONDUIT
LAYING PINE CONDUIT

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1. INSPECTION

1.01 Examine all pieces of Pine Conduit for evidence of decay or other defects, such as loose knots or splits, that extend through the walls. Conduit containing such defects, except where they appear only in the mortises or tenons, should be discarded.

1.02 Warped pieces should not be used if the deviation from straightness would create offsets likely to hinder cable installation, consideration being given to the length of the conduit run and other factors that affect the cable placing operation. In general, no piece of conduit should be used, unless approved by the supervisor or inspector, if it is warped in more than one direction along any lengthwise surface or if the offset shown by a straight-edge laid along the concave side exceeds 1/16 inch per foot of length.

1.03 The bore of the conduit should be reasonably smooth and free from jogs and offsets. Remove any deposits of dirt or other litter that may have accumulated during storage.

1.04 Examine the fasteners holding together the halves of split Pine Conduit and replace any that are loose or missing.

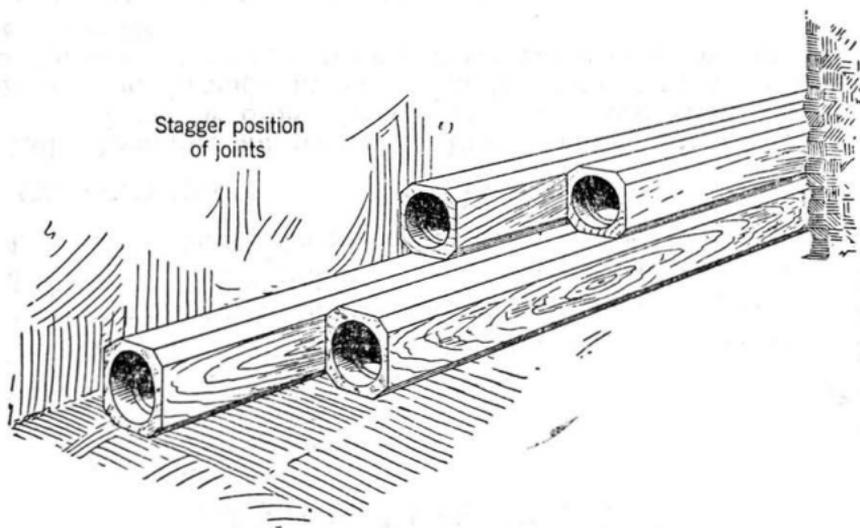
2. GENERAL INSTRUCTIONS FOR LAYING

2.01 Lay the conduit in the formation shown in the detail plans. Align the sections accurately so as to avoid offsets in otherwise straight runs.

2.02 Do not place Pine Conduit near steam mains or in any other location where the conduit will be subjected to excessive heat. Such exposure may result in the formation of acetic acid, with the possibility of subsequent damage to the sheath of cable installed in the duct.

3. LAYING PINE CONDUIT

3.01 Pine Conduit, whether the bored or the split type, ordinarily is laid without base or top protection, although in special cases creosoted Plank may be employed to reinforce the structure. In such cases the construction required will be indicated on the detail plans. Join the conduit carefully to avoid damage to the mortises or tenons and stagger the joints vertically and horizontally as shown.



3.02 Long radius curves in Pine Conduit can be constructed by selecting a number of short (2 to 3 foot) pieces for the curved section and laying these with the mortise and tenon joints opened slightly on the outside of the curve. If opening the joints in this manner is likely to result in silt entering the ducts, seal the opening by trowelling a 1/2 inch collar of mortar around the joint.

3.03 Included with each lot of Pine Conduit are a number of short pieces having a mortise on each end. These pieces may be used up by placing them at random in the run with the regular pieces when not required for other purposes. They are included for use when it is desired to reverse the position of the conduit end for end and to make it unnecessary to form mortises on lengths cut in the field.

3.04 When it is necessary to cut a piece of Pine Conduit to obtain a desired length, measure the required distance from the mortised end and make the cut through the piece at that point. To form a new tenon on the mortised piece, measure 1-1/8 inches from the cut end and mark across all four sides and chamfers. With a hand saw, make saw cuts into the chamfers to a depth of about 3/4 inch and into the sides to a depth of about 1/4 to 3/8 inch. Working from the end, remove the wood with a chisel to the depth of the saw cuts. Shape the tenon to a circular cross-section, removing as much more wood as is necessary to reduce the thickness of the tenon wall to slightly over 1/4 inch.

3.05 A tenon can also be formed on the cut end of the remaining length to produce a double-tenon piece which can be combined with a double-mortise piece and used elsewhere.

4. PLUGGING DEAD-ENDED DUCTS

4.01 When plugging dead-ended 3-1/2 inch Pine Conduit use 3 inch round wooden Conduit Plugs wrapped in cheese-cloth and faced with cement mortar.