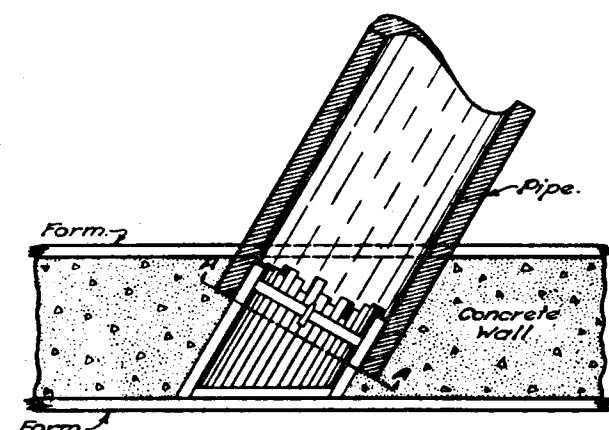
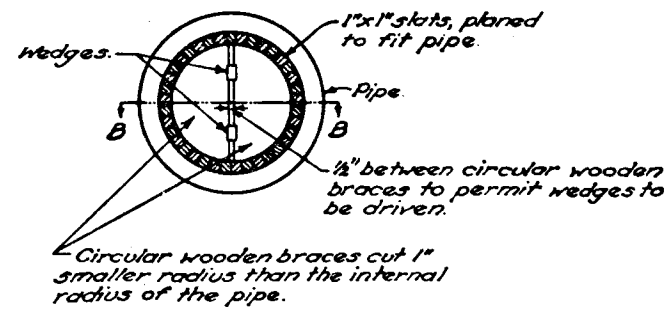


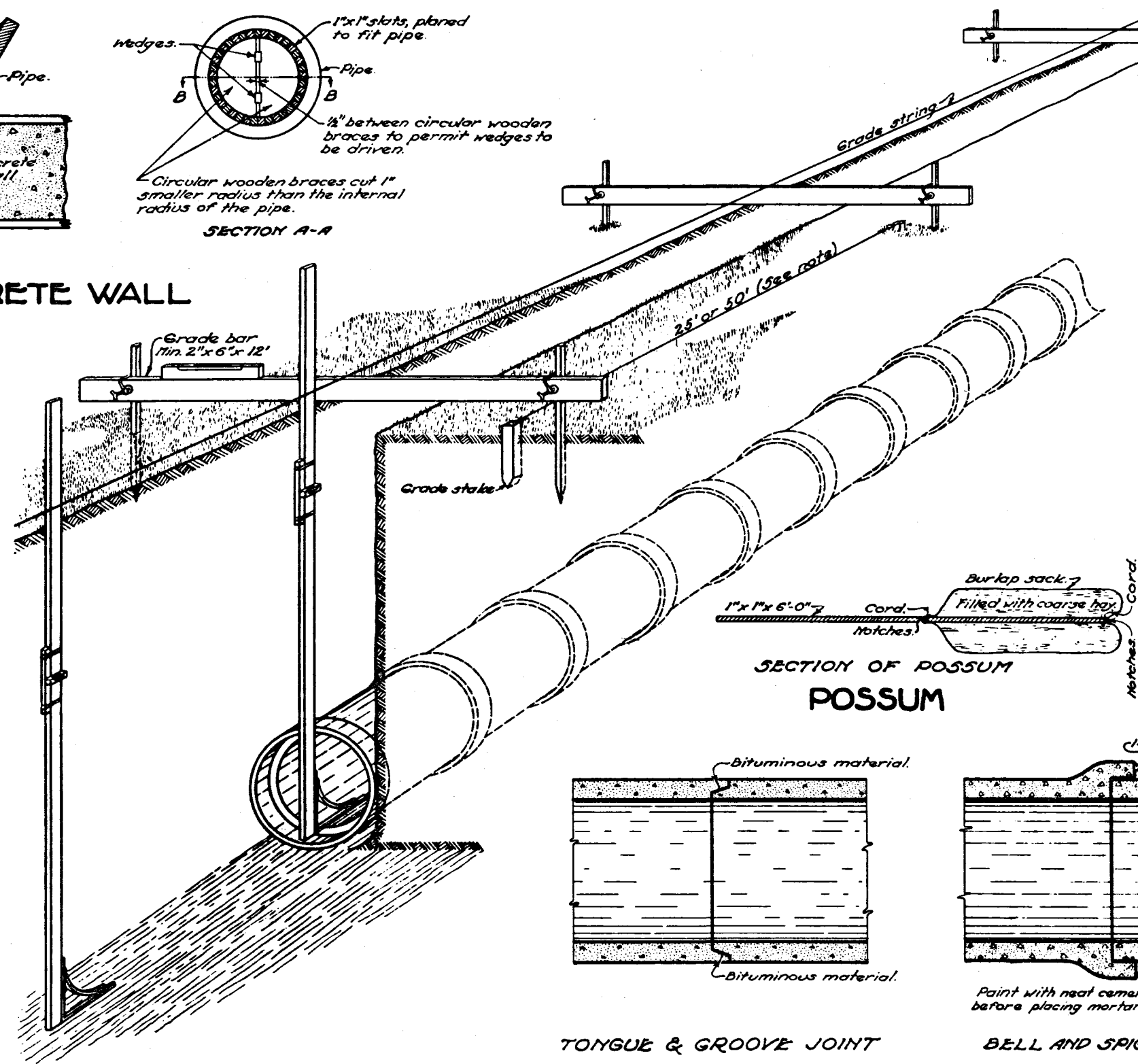
CONSTRUCTION METHODS



SECTION B-B
Through wall and pipe
BARRELLING CONCRETE WALL



SECTION A-A



LAYING PIPE

TONGUE & GROOVE JOINT

PIPE JOINTS

BELL AND SPIGOT JOINT

NOTES

BARRELLING OUT CONCRETE WALL:—When necessary that the pipe be barrelled out to the required length, it shall be done according to the details shown hereon.

GRADE STAKES shall be set at the following intervals:—
For grades less than 0.70% — 25 feet.
For grades of 0.70% and over — 50 feet.

GRADE POLE shall be a straight pole dressed with corners rounded, size depending on the length but approximately 1" x 2". The pole shall be equipped with a metal bracket on the bottom with a projecting length of 12". Notches shall be cut on the pole for the depth of the flow line below the grade string and for the depth of trench. A spirit level shall be used on the pole to determine when the pole is vertical.

POSSUM or swab is for wiping out any excess mortar from the inside of the pipe and shall be made and used as follows:— The stem is 1" x 1" x 6'-0" and made of strong wood. The burlap sack shall be filled around the stem in such a manner so that the stem will remain practically central when the swab is in the pipe and the stem is unsupported. The swab, when pulled ahead, shall drag the entire circumference of the pipe so that any mortar which has entered at the joints will be dragged ahead. The length of the stem shall be such that the swab will not pass a joint where the backfill has not been tamped. After every tenth pipe laid, the swab shall be removed and cleaned.

PIPE JOINTS:— When the construction item calls for sealed joints, they shall conform to the appropriate details shown for pipe joints.

ALTERNATE METHOD OF INSTALLATION:—Where tongue and groove pipe, 36" diameter or over is used, the slanting portion of the tongue shall be given one or more coats of Sect. 11-5.6 F-1 bituminous material before placing. After the pipe has been placed in true alignment and blocked, any opening remaining between the inner surface of the pipe and the slanting portion of the tongue may be filled with stiff cement mortar consisting of one part of cement to two parts of clean sand.

The remaining openings in the joint shall be filled with additional bituminous material by brushing or by pouring.

BUREAU OF LOCATION & RIGHT OF WAY
OHIO DEPARTMENT OF HIGHWAYS

PIPE CULVERTS

STANDARD
CONSTRUCTION S-27 P.C. 3
DRAWING

APPROVED M.D.S. CHIEF ENGINEER

DATE:
9-1933
5-1934
6-17-35
1-1-36
3-1-39
1-1-45
2-20-45