117 D.-1.

The aggregate of materials passing the 14 in screen and retained on a 10-mesh screen shall not exceed 70 per cent. by weight of the dry mixture. 22 The aggregate of materials passing the 10-mesh screen shall not exceed 40 per cent. by weight of the dry mixture. Stone-dust passing the 200-mesh screen shall constitute between 2 and 5 per cent. of the dry mixture.

Sand passing the 10-mesh screen shall conform to the following proportions by weight:—

Passing 200-mesh screen—between 2 and 6 per cent.

Passing 80-mesh screen—between 24 and 48 per cent.

Passing 40-mesh screen—between 60 and 80 per cent. Passing 10-mesh screen—100 per cent.

The materials of the complete dry mixture, including the addition of stone-dust, which will pass a 10-mesh screen shall conform to the following proportions by weight:-

Passing 200-mesh screen—between 10 and 18 per cent.

Passing 80-mesh screen—between 30 and 50 per cent.

Passing 40-mesh screen—between 60 and 80 per cent.

Passing 10-mesh screen—100 per cent.

The exact proportions within the above limits shall be so regulated, under the direction of the engineer, as to produce a dense mixture with minimum voids, and with the voids filled with bituminous material.

The materials, the method of weighing and mixing, and the placing and rolling of the surface mixture, shall conform to the requirements heretofore specified for asphalt-concrete base.

Seal Coat.—As soon as possible after the rolling of the surface mixture is finished, and while the surface is still fresh and clean, a seal coat of asphaltic cement of proper consistency to be flexible when cold shall be spread over the surface. It shall be applied at a temperature of from 200° to 350° F. and evenly spread with rubber squeeges or mops. Only a sufficient coat shall be spread to flush the surface voids without leaving an excess. There shall be spread over the asphaltic-cement flush coat a quantity of stone screenings in an amount equal to not less than 20 lb. nor more than 25 lb. per square yard of surface covered. The stone screenings shall be broken to size such that all will pass a \(\frac{3}{6}\text{-in.-mesh}\) screen and 75 per cent. of which shall be retained on a 10-mesh screen, and shall be spread either from a spreading-cart or by sweeping with brooms. The time at which the screenings shall be spread and the manner of spreading shall be within the control of the engineer.

ENCLOSURE C.—SPECIFICATION FOR PORTLAND CEMENT CONCRETE PAVEMENT.

Description.—Before placing side forms, the earth beneath them shall be excavated to the proper grade, and shall be hard and compact. Side forms shall have full bearing upon the earth throughout their length.

Side forms of timber or steel shall be placed with exactness to the required grade and alignment of the edge of the finished pavement, and be so supported during the entire operation of placing, tamping, and finishing the pavement that they will not at any time deviate laterally nor at any time deviate vertically more than $\frac{1}{4}$ in. from a straight-edge 10 ft. in length.

Timber side forms shall be No. 1 common Oregon pine, and straight. They shall not be less than

16 ft. long, not less than $2\frac{1}{2}$ in. thick, and their depth shall be at least 1 in. more than the specified depth of the edge of the pavement. They shall have square top edges, square butt joints, and shall not contain enough knots or other imperfections to impair their strength. They shall have no wane on the edge to be placed uppermost.

Timber side forms shall rest upon 2 in. by 3 in. stakes, spaced not greater than 4 ft. apart, driven with their tops to the line and grade for the bottom of the side form. Stakes for nailing on the outside shall be placed 4 ft. apart at the intermediate points.

Timber side forms shall be secured by side stakes not less than 3 in. in width, 1½ in. in thickness, and not less than 18 in. in length. The length of stakes shall be increased when the character of the soil will not give sufficient bearing to an 18 in. stake. Side forms shall be staked at intervals not greater than 4 ft., and the tops of the stakes shall be 1 in. below the top edge of the side form. Side forms shall be spliced with a section of timber 2 ft. in length, 1 in. thick, and 6 in. wide, which shall be nailed lengthwise, lapping the joints.

Steel side forms for this work shall be straight, free from warp, of approved section, and shall have a flat surface on top of not less than $1\frac{3}{4}$ in.

When side forms are used more than once, only straight forms shall be used, and all warped forms and split-timber forms shall be discarded.

Before being placed, all forms shall be thoroughly cleaned.

Maintenance.—If material is dumped upon the subgrade it shall be at least 6 in. from the forms. Side forms must be trued up and maintained to the required line and grade in advance of placing concrete for a distance of one day's run of the mixer, and the contractor shall provide expert sideform men for this purpose. When side forms do not conform to the correct line and grade, or have become loose, this shall always be considered sufficient cause to stop the work, until the fault is

Removing.—Side forms shall not be removed until at least twenty-four hours after placing the pavement, and in all cases they shall remain in place until the edge of the pavement no longer requires the protection of the forms.

The contractor shall provide sufficient forms so that there shall be no delay in the placing of the pavement due to lack of forms.