interest to roadside engineers, including traffic tabulations and enalytical presentation of four main factors considered in determining the need for and priority of construction projects, namely:

1. Deficiencies of sight distance, alinement, and grade:

W W

2. Adequacy of surface type; 3. Adequacy of pavement width:

4. General conditions of the highway.

## DISTRICT 10 GROUP MEETING-COLUMBUS, OHIO DALLAS D. DUPRE, JR., Coordinator

(Delaware, Maryland, Ohio, Pennsylvania, District of Columbia)

## FEBRUARY 27-28

This meeting preceded the "First Short Course in Highway Development," February 28 and March 1, 1941, at Ohio State University which was also attended by the representatives of the Public Roads Administration and of the various States comprising District 10.<sup>1</sup>

Informal discussion covered these questions:

TEDERAL-AID PROGRAM - Adequacy of 1-percent fund. Pennsylvania and Ohio were of the opinion that 1 percent is not adequate to accomplish comprehensive roadside development. Desirability of incorporating as many basic operations in general construction in order that 1 percent may be expended for seeding, planting, and mulching operations.

PLAN PREPARATION - Roadside development with general construction. Separate contract practice in District 10 varies but a greater part is under separate contract, although available topsoil is salvaged under general contract and either stock-piled or placed on fill slopes.

ROADSIDE DEVELOPMENT - BY CONTRACT OR FORCE ACCOUNT:

Maryland has done work by contract.

Pennsylvania has done no work by contract but is preparing now to include basic operations in construction contracts. Delaware has used a combination of contract and force account.

Ohio has used both methods and favors the contract; since work comes at times when maintenance and repair forces are busiest,

force account involves putting on extra men for seasonal work.

See Engineering Experiment Station Bulletin No. 109 (Vol. 10, No. 4) July 1941, Highway Development First Short Course on Highway Planning, Directed by Department of Architecture and Landscape Architecture, the Ohio State University, Columbus, Ohio. Price 50 cents.

Discussion pointed out that basic (nonseasonal) operations are better under contract and that seasonal work like seeding, planting, etc., may be better under force account. There is less administrative worry, in the way of expense of equipment and hiring and firing personnel, when work is done by a contractor.

TYPES AND METHOD OF PLANTING - Merit of trench method with slope mulching between trenches.

TYPES AND METHODS OF SEEDING AND SODDING:

Use of commercial fertilizers. Best thickness for sod. Wide variation in methods makes comparison difficult. Delaware sods all slopes. Maryland plants vines on slopes. Ohio uses 2-inch straw mulch.

WAINTENANCE PRACTICES - Possible modifications in mowed areas, etc.

STATE MAINTAINED NURSERIES - It was the general feeling that the maintenance of nurseries by a highway department to produce stock is not advisable.

MEDIAN STRIP FLANTING - Minimum widths in which it is advisable to plant trees. A field inspection was made as described below to determine the possitilities of proper planting as an aid to highway safety, especially in connection with divided highway construction typifying stage development problems.

Nearly 200 years ago, George Washington wrote: 'We ruin the lands that are already cleared and either cut down more wood, if we have it, or emigrate into the western country \* \* \*. A half, a third, or even a fourth of what land we mangle, well-wrought and properly dressed, would produce more than the whole under our system of management: yet such is the force of habit that we cannot depart from it.'