

REPORT OF PROJECT COMMITTEE ON EDUCATION

By

Dallas D. Dupre, Chairman

The Committee on Education, believing that there is a strong need for a definite roadside development technical educational program for State highway administrative and operating staffs (and this includes the landscape architect and the engineer), and a definite need for a re-awakening of these staffs and the general public to the motives, methods and results of an intelligent and organized roadside development program, does herewith make its recommendations for accomplishing the desired ends.

A. First, the technical personnel shall be instructed and informed through the adoption of the following program:

1. Each State highway department should organize and conduct annual or seasonal conferences within itself, to reach from the top men to reasonably near the bottom, the latter referring to the men who actually supervise or do the work in the field. This program could be developed to include the "GI" in-service training requirements.

2. For a given area or district of States, a general conference or "short course" shall be inaugurated, organized similar to the Iowa and Ohio conferences and in cooperation with a leading educational institution.

Proceedings of these district conferences should be published and given wide dissemination through the present Highway Research Board distribution set-up.

In organizing programs for such conferences the State highway departments and other public agencies are urged to furnish talent freely to neighboring States as is requested from their personnel in order to have the benefit of a wide field of experience and knowledge.

It is recommended that the Chief Landscape Architect of Public Roads Administration or an able assistant attend these conferences insofar as possible to advance national viewpoints, to indicate Public Roads Administration interest and to lend prestige.

3. Coordinators' meetings for each administrative highway area should be re-established by the Coordinating Executive Committee on Roadside Development of the Highway Research Board and of the American Association of State Highway Officials, for their value in spreading like-area information and experiences, and for fostering valuable personal contacts.

4. Highway department landscape personnel should be fully aware of the value of and should exert every effort in attending and participating in State and National conferences such as those of the Highway Research Board and the American Association of State Highway Officials and such State and National conferences as are called by agronomy associations, seed and weed authorities, State forestry associations, recreation and travel groups, American Road Builders

Association, and so on. State highway directors or commissioners should fully realize the importance of this participation by landscape personnel, the same as is stressed for the others of the engineering staffs. It would assist in producing a more articulate, aggressive and intelligent approach to the work on the part of the landscape personnel.

5. It is strongly recommended that Highway landscape personnel prepare and submit for publication to the "trade" magazines and the local press a continuous supply of articles dealing with technical and practical landscape operations, specifications and like subjects. These articles will be welcomed by the editors and publishers and will afford a constant source of information and publicity to the engineer, the contractor and to the public.

6. The availability and accessibility of sources of information on roadside development are important. A complete and running bibliography should be maintained. In addition, an edited condensation of the most worthy published articles or "papers," mimeographed and distributed to the States, to schools and colleges, and to others who are interested or who may request them, would be of great educational value. Until the task becomes too large, warranting other procedure, the present Committee will volunteer to do this work, using the Highway Research Board correlation and distribution service wherever possible. Collected, cataloged and available material such as this would provide study matter for college reading and for "GI" in-service training and would be a general source for reference.

7. It is recommended that the Coordinating Executive Committee on Roadside Development of the Highway Research Board and of the American Association of State Highway Officials re-establish photographic contests for the execution of regular roadside development in highway design and construction projects, giving thought to several awards for different phases of the work in any one contest, this procedure to foster wider interest and publicity. Such a program will promote better work and will create renewed zeal among the landscape architects and the engineers, as proven by past experiences.

B. In the second place, the general public shall be informed and energized through the following channels or by these or other methods:

1. State roadside councils, State garden clubs, and civic organizations where established and active have been invaluable in creating favorable public opinion toward roadside development, through wide-spread individual participation, through the Press, and by private and public meetings. Such State-wide groups are invaluable in promoting and securing passage of needed or "authority" legislation covering highway development programs and are of value in creating a demand for roadside development among the highway directors, commissions and other chief engineers.

2. The value of personal contacts between the highway landscape architect or engineer and the public cannot be over-emphasized. This is accomplished by attending and talking before garden clubs, civic organizations, meetings of nurserymen, etc.

Exhibits at local, county and State fairs, and at local and State club meetings are excellent and should be fostered.

3. The Press is always open to human-interest news stories and photographs, such as roadside park developments and attendance records, mileage of erosion control, memorial tree plantings and so on. Every use should be made of this source of public information and education.

C. Third, in order to promote technical educational training so that key positions may be filled with competent and trained men and so that these positions will be interesting to trained men, it is recommended that:

1. The Highway Research Board authorize this Committee to recommend to Civil Engineering colleges and to colleges giving degrees in Landscape Architecture that they revise their curricula to the extent that students so inclined may elect courses of study that will fit them for positions which will have to do with the complete development of the highway. The courses of study for students in Civil Engineering might well include such subjects as erosion control practices, an appreciation of landscape design and some general horticultural practices. For students in Landscape Architecture the stress would be placed on additional surveying and topographical work, highway design, roads and pavements, drainage or hydraulics, as well as ecology, geology and geography.

It is well recognized now that all schools are burdened with work due to heavy enrollments. However, they are in a period of transition, and this Committee, with the assistance and approval of the full Committee on Roadside Development offers to prepare a recommended series of courses of study, both required and elective, for submitting to the schools within the year 1948.

2. In order that landscape architects in public positions may feel secure in these positions, the protection of Civil Service is necessary. A simple and direct classification, including duties and qualifications, covering the essential positions in a State highway department should be approved and sent to all State highway and Civil Service departments as a working model for setting up administrative and operative organizations.

The outline should be so prepared that other governmental agencies doing roadside development work could receive and profit by the suggested organization set-up, with possible minor adjustments to be made by them.

The Committee attaches hereto its recommended classifications as Appendix A.

In conclusion, the Committee believes that roadside development will make great strides in the immediate future and that steps should now be taken to assist laggard or dormant States. Much thought has been given in our meetings to the foregoing matter over the past few years. The adoption of the operating suggestions and prompt dissemination of them is earnestly recommended.

Appendix A

The Project Committee on Education makes the following recommendation for the organization of the landscape personnel within State highway departments or within county, township and city departments which are now carrying out or are planning to carry out programs of highway landscape development.

This recommended organization has also been prepared for the guidance of Civil Service Commissions in setting up regulations and examinations for certifying acceptable personnel for positions coming under their jurisdiction.

This outline is general and basic only, and each agency would of necessity work out further details in order to fit the classifications into its own organization.

A. The Head of the Division of Roadside Development Landscape Architect or Landscape Engineer.

Duties: The landscape architect or engineer shall have responsible charge and be administrative director of all roadside development activities including supervision of landscape considerations in highway location, design, and construction, conservation, erosion control, roadside parks, and roadside maintenance activities; have active supervision over roadside development personnel, supervise preparations of plans and specifications, estimates and cost analyses, supervise State nurseries and public grounds (if applicable); shall handle roadside development public relations; shall be responsible to director or commissioner of highways.

Qualifications: A degree in Landscape Architecture at an accredited school, or its equivalent, and with a minimum of four years of progressive practical experience including supervisory capacity for at least two years in roadside development work with a State highway department or similar department which has carried on comprehensive roadside development programs. "Equivalent" may be taken as a combination of technical education and experience, substituting two years of responsible roadside development experience for each year of the required education in an accredited college or university. Substitution shall not be allowed for the four years of progressive practical experience.

B. Assistant to the Head of the Division of Roadside Development Landscape Architect or Landscape Engineer.

Duties: The assistant landscape architect or engineer shall be assistant and subordinate to the landscape architect with minor administrative duties; shall prepare and check plans and specifications, estimates and cost data; make inspections of sites, projects, maintenance activities, and field operations; shall make public utility contacts for general operations; shall have detailed charge of State nurseries and public grounds (if applicable), and shall keep costs and records; shall assist in public relations activities.

Qualifications: A degree in Landscape Architecture or its equivalent, plus a minimum of two years of progressive practical experience in roadside development work with a State highway department or similar department which has carried on comprehensive roadside or similar development programs.

"Equivalent" may be taken as a combination of technical education and experience, substituting two years of responsible roadside development experience for each year of the required education in an accredited college or university. Substitution shall not be allowed for the two years of progressive practical experience.

C. Assistant in Charge of Division or District Roadside Development. Division or District Landscape Architect or Engineer.

Duties: The division or district landscape architect or engineer shall have responsible charge of all roadside development activities, including supervision and direction of roadside development personnel in his division or district; he shall be under general direction of the head landscape architect; shall prepare or assist in preparation of plans and specifications, estimates and cost data; shall recommend roadside development construction projects and initiate erosion control and other maintenance projects; shall inspect construction and maintenance operations; shall supervise all tree pruning in district, both departmental and utility; shall handle public relations activities in his district; shall directly supervise State nurseries in his district (if applicable).

Qualifications: A degree in Landscape Architecture or its equivalent. A minimum of two years of progressive practical experience in roadside development work with a State highway department or similar department which has carried on comprehensive roadside programs is highly desirable.

"Equivalent" may be taken as a combination of technical education and experience, substituting two years of responsible roadside development experience for each year of the required education in an accredited college or university. Substitution shall not be allowed for the two years of progressive practical experience.

D. Landscape Field Superintendents.

Duties: The landscape field superintendent shall be directly responsible to the division or district landscape architect, and upon assignment shall have charge of roadside development groups or crews; shall assign and direct employees and equipment in his groups; shall act as project engineer on roadside development construction projects; shall have active charge of crews on erosion control projects and maintenance operations; shall keep field construction and maintenance costs, payrolls and records.

Qualifications: High school education and a minimum of three years of progressive practical experience, roadside development work preferred, or in large nursery, landscape contracting or forestry operations.

E. Landscape Inspector, Landscape Foreman.

Duties: The landscape inspector or landscape foreman shall be directly responsible to the division or district landscape architect or to the landscape field superintendents; shall assist the landscape field superintendent in all

roadside development operations, including staking out of the work, inspections, pruning and maintenance, and shall keep records and costs of his operations as required.

Qualifications: High school education and a minimum of three years of progressive practical experience, roadside development work preferred, or in large nursery, landscape contracting or forestry operations.