

REPORT OF PROJECT COMMITTEE ON STABILIZED TURF SHOULDERS

Harry H. Iurka, Chairman
Senior Landscape Architect
New York State Department of Public Works

THE Project Committee on Stabilized Turf Shoulders presented, through the Highway Research Board's Highway Research Correlation Service Circular No. 164 of May 1952, a summary of its findings, giving recommendations for construction and maintenance, a statement of questions still to be answered, and a bibliography. No information has been obtained which would change the recommendations except in details as given herewith. Additional recent data are also given.

For the specification of the surface course of a stabilized turf shoulder the current specification, for stabilized surface courses, of the American Association of State Highway Officials should be used. The current specification is AASHO Designation: M47-49. (1)*

Recent studies of the performance of concrete pavements by the Highway Research Board Committee on Maintenance of Concrete Pavement as Related to the Pumping Action of Slabs have shown the value of selection of shoulder material for nonshrink characteristics, compaction to a density of not less than 95 percent of standard (AASHO T99-49), and adequate shoulder maintenance. (2)

The Highway Research Board Committee on Geometric Highway Design has prepared Research Problem Statement Number 13 "Geometric Design of Highway Shoulders." This study, when completed, will undoubtedly provide answers to the questions of what cross-section design of turf shoulders should be recommended and additional data on the costs of construction and maintenance of various types of shoulders. Valuable data have been presented recently on these comparative costs. (3) Average unit bid prices received by the New York State Department of Public Works in 1952 on three contracts for which the specification of stabilized turf shoulder construction is given in the preceding reference varied from \$0.153 to \$0.323 per square yard. These prices compare very favorably with those reported at our meeting last year. (4)

H. C. Nikola of Rutgers University has advised the New York State Department of Public Works that frequent moderately heavy rains amounting to an accumulative fall of 2½ inches should be sufficient to remove calcium chloride used in stabilizing run-of-bank gravel sufficiently to permit a growth of turf.

BIBLIOGRAPHY

1. "Standard Specifications for Highway Materials and Methods of Sampling and Testing"; Part 1, Specifications, 6th Edition, American Association of State Highway Officials, 1950.
2. "Performance of Concrete Pavement on Granular Subbase", Highway Research Board Bulletin 52. 1952.
3. "Eleventh Short Course on Roadside Development", Department of Landscape Architecture, Ohio State University, and the Ohio Department of Highways. 1952. Panel On Use of Turf in Soil Stabilization of Shoulders, Slopes and Ditches.

*Numbers in parenthesis refer to Bibliography.

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4. "Stable Shoulders". H. C. Nikola. Report of Committee on Roadside Development, Highway Research Board 31st Annual Meeting, 1952.
5. "Shoulder Width and Slope Practices". "Better Roads" Forum; February, 1952; March, 1952.
6. "Annual Loss of Surfacing Material". "Better Roads" Forum; June, 1952.
7. "Water Penetration Tests". "California Agriculture"; October, 1952.