HIGHWAY DESIGN: ITS RELATION TO LANDSCAPE OBJECTIVES*

By A. R. Nichols, Consultant Landscape Architect, Department of Highways, State of Minnesota

Highway design has been concerned essentially with the engineering objectives of the scientific solution of the problems of grading, paving, alignment, profile, cross section, drainage and maintenance. These were prerequisites of good construction but were incomplete in their relation to the proper blending of the construction into the natural landscape. Highway design in its broadest application will not only meet the requirements of safety and utility but will aim for ideals in the realm of landscape objectives and incorporate beauty in the completed structure. The landscape objectives may be summarized as follows;

which deferre &

(4)

- (1) The utilization of existing scenic advantages in the determining of a proposed route intended largely for pleasure traffic;
- (2) The harmonizing of construction with natural topography by coordinating the work of the engineer with the landscape architect in all stages of reconnaissance, planning and construction.
 - (3) The conservation of existing vegetation and trees as far as is consistent with utilitarian requirements;
 - The planting of new material primarily as a contributing agent to control erosion and to accomplish a natural transition between construction and nature,
 - (5) The creation of featural developments such as outlooks, concourses, parking spaces, picnic areas, historical marker sites and similar strategic areas where the public can stop for rest and enjoyment;
 - (6) The promotion of liberal right of way for the elimination of old scars on existing roads, the greater ease of blending construction into the natural topography on both old and new roads, and for the protection of the roadside in case of future widening;

*This paper has been published in full in the 17th Proceedings, Highway Research Board, 1938. (7) The encouragement of separation of commercial from pleasure motor traffic, thus permitting parkway emphasis and greater latitude in the design of the pleasure route'.

(8) The attainment of zoning for the hetter control, regulation and restriction of billboards and commercial structures along the highway. / AUTHAR/

Such objectives logically go hand in hand with engineering objectives and will reduce drastic departures from the natural lay of the land and automatically reduce the problems of erosion and of maintenance. The total of all objectives is a balance of safety, good construction, economical maintenance and natural beauty.

a kenter of the second state of the

If a shirth mouth the U. S. 7 to the Provide

So rented that spectral sectors is then show a

Lettiened vehanica pilot apprend of all a state

and a proving the second second to a training the second second second

second state and shall be a measure and shall be a second state of the

There is the second second second in the second sec

folicity data by Marchen, Arrest of Indentity and and

and should be provided to serve

teriore and the second second

and the second second

the second state of the second s

strate and \$5.0 of the local state of \$1.0 in the second at \$2.0

million from the state of the second state of the

[1] M. L. Serris, P. Martin, T. H. Shiro, M. M. Martin, M. Martin, Phys. Rev. L 76, 101 (1997). A rest of the second state of the second state of the second state of the second state of the second state.

* Considering Will Deep Tay, And Arthur and Arthur Arthur Arthur Deep Taylor (Constraint) Taylor (Const

[addition of the second secon second sec