

## SAFETY FEATURES OF ROADSIDE DEVELOPMENT

By

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The subject of roadside safety features was discussed by Mr. Sheets. One of the most important questions was said to be that of shoulder treatment. How wide should the shoulder be, and how wide the ditch. Narrow shoulders constitute one of the greatest hazards that we have ever made, and it appears that we should resolve to build no more of them except on roads of a definitely local character, or none which are not at least one full traffic lane in width. Another special hazard is the building of canyons beside the shoulders in the form of so-called drainage ditches. It seems that we should not only go in for flat slopes from the edges of the shoulders to the ditch line, but further that we need to eliminate the deep ditches that have often been constructed in the past. It is difficult to understand why a ditch has to be any deeper than is required to take care of surface water. One of the greatest things we can do is to build shoulders of ample width, generally not less than one traffic lane wide, not more than 4 to 1 in slope and then not build the ditch any deeper than we must.

Another safety feature concerns pavement crown. This may not be roadside work, but it is an important matter to take care of the drainage on the pavement itself, to get the water into the ditch. Among other things, water left on the pavement and allowed to freeze creates the additional problem of ice removal and skidding hazards.

Another consideration is that we have made a considerable number of guesses and estimates about highway design, and after surveying the fruits of our labor we realize the fact that we did a lot more than the public wanted us to do. We should plant so as not to interfere with sight distances and safety. And while we are considering where we should put the trees and shrubbery, we might at the same time consider where not to put the billboards.

Ten years from now we will probably all recognize the fact that in addition to the regular surfaced area we must provide an emergency roadway in the form of a stabilized shoulder which remains travelable in all seasons of the year.