

# WOOD BARRICADES REPLACED ON HIGHWAY PROJECTS

**Rodney I. Smith, President of Smith Cattleguard Company** in Midland, Virginia (a precast concrete products firm), has announced the acceptance of temporary safety barrier made of precast concrete by the State of Virginia Highway Department. The details of this new product were worked out by the Smith Cattleguard Company in conjunction with the State of Virginia. This new barrier can be readily installed on either side, or both sides, of any construction job, whether it be a small or large job, and for the first time offers true protection for both the motorist and the workmen performing the tasks on the work side of the barrier.

This is accomplished through the Smith Cattleguard Company's use of the well-known standard concrete "safety-shape", also known in the highway department safety circles as the New Jersey Shape concrete median barrier. This barrier is very similar to the permanent barrier used all around the Washington 495 beltway. The difference is that the Smith Barrier is made in 12' long sections and with an interlocking tongue and groove system which gives a continuity of mass, which, in effect, equals the performance of barrier that is cast in place permanently. But with the unique double tongue and groove method, any one piece of barrier can be moved without disturbing adjacent pieces to divert traffic through or, in case of traffic problems relating to the change of construction sites within a given job, traffic can be rerouted simply by lifting and changing position of a number of pieces of barrier.

The basis for the safety claim of the New Jersey Shape is this—When an automobile hits this barrier the gentle slope tends to raise the automobile up and slow it

down quickly to a safe level of speed. As the automobile slows down it returns back to the lane of traffic still headed in the same direction. There is no other barrier that can achieve this as safely. The Smith Cattleguard Company has manufactured similar earlier versions of this barrier as far back as 1971 and it has been in use for over 5 years on the Whitehurst Freeway in Washington, D.C.

The only change, according to Smith, is the substantial advancement concerning the tongue and groove connection between the pieces. This new design developed by the Smith Cattleguard Company and the State of Virginia has resulted in a dramatic lowering of prices which brings this new type of barrier within reach of the dollars allotted for safety on almost any construction job. The Smith Cattleguard Company has thousands of feet of this barrier in stock for immediate delivery to any construction site throughout the State of Virginia, Washington, D.C., Maryland, West Virginia and North Carolina.

Another innovative feature being offered for the very first time with this type of barrier in the eastern United States is the availability of these units on a rental basis to any and all contractors or state and city highway departments. The Smith Cattleguard Company will deliver these units to the jobsite and upon completion of a given construction project, will then remove the barrier from the construction site back to their storage yard where it is again ready for immediate rental. Being able to use this barrier over and over has helped contribute substantially to the economy of using this type of barrier. The contractors and state agencies do not have to have a large capital investment since the barrier can be rented for durations

as short as several days or several months.

The basic concept for this tongue and groove concrete barrier has been proven with several million vehicle miles of testing and actual field conditions in the states of Oregon and Washington. The Smith Cattleguard Company has imported the well-proven western U.S. technology to the east coast and has made several important improvements in this product which gives the tax paying citizens in our area the advantages of the many years of experience with this product on the west coast.

It should be noted that the State of Virginia has had this barrier in use for over one year on the I-95 bridge over the I-495 beltway with results that have achieved the highest hopes of everyone as far as ease of installation and actual safety record. Based on these early confirmations of a real answer to the temporary barrier situation, the State of Virginia has specified this barrier on many jobs throughout the state where it has since achieved a likewise outstanding safety record.



**Richard Rand, Vice President, Sales, of Smith Cattleguard Company displays stock of Median Barrier.**



Median Barrier is placed on Route 1 in Alexandria. The new barriers which replace those constructed of wood are now approved by the Virginia Department of Highways and Transportation. The wooden barriers required constant attention and readjustment during the life of a project and were found to create hazards when struck by a vehicle. According to safety claims concerning the concrete barrier when an automobile strikes it the gentle slope tends to slow the vehicle to a safe speed and return it to the lane of traffic.

