

Mr. CONSTANDY. Exit roadway?

Mr. PRISK. Excuse me, exit roadway. Right.

The grades, I think, still could be accommodated. They are not too much different at the bridge crossing.

Mr. CONSTANDY. Mr. Wilkes, in this situation the twin bridges have been paved over on the main roadway. We have the peculiarity of the third bridge carrying the exit lane. I just was wondering whether it would be feasible, for instance, to pave the space between those two?

Mr. WILKES. Being the same additional cost, and normally on an exit ramp, it is an angle away from the main roadway so it would be a pretty strong taper if the bridge is any length at all. And of course, you would not have the exposure, normally you would not have the volume of traffic on an exit ramp that you would have on a through lane.

Mr. CONSTANDY. No. I suppose the greatest hazard here is the traffic, the heavy volume of traffic, on the main line and on its right side.

Mr. WILKES. That is correct.

I might also comment here, for example, turning down the ends of the metal rail.

Mr. CONSTANDY. Yes. As you suggested before.

Mr. WILKES. I think they have done an adequate job here.

I would expect that that dimension, instead of being 26 as Mr. Prisk suggested, is probably 27. Because that is what the standards require for traffic rail.

Mr. PRISK. I am not going to argue about an inch.

Mr. SKEELS. I have one comment to make on this rail, or two rather. First, I agree that it appears to be too low. It may meet the 27-inch requirement but I question this, whether or not this height is adequate. In fact, we have some information on rails of this height that have been mounted.

The second thing, the rail itself is back from the face of the concrete parapet underneath. It is installed back of it as it has to be, I guess, in this type of installation. And I question if a car strikes the concrete whether or not it ever strikes the rail at all until after it is in the process of rolling over. The rail ought to be—the face of the metal ought to line up vertically, at least, with the base of the concrete.

Mr. PRISK. Mr. Constandy, I wonder if we might ask Mr. Skeels at this point what the height of the rail is on the design they have developed at General Motors Proving Ground.

Mr. SKEELS. The height of the concrete portion of that is 32 inches to the top of the concrete. And the height of the steel rail that is installed on top of that, I can't quote you exactly but it is approximately another 14 to 15 inches. This makes a total height then of about 47 inches.

Mr. CONSTANDY. Why that high. Mr. Skeels?

Mr. SKEELS. Well, the concrete portion itself was made high enough to do the job with passenger cars. In other words, if you had nothing but passenger cars on the bridge, the concrete portion would prevent them from going over.

We felt with high center gravity trucks, this probably was not high enough, and they needed additional height, and so the metal rail is installed to take care of possible needs of truck-type vehicles.

Mr. CONSTANDY. Such should be reflected in highway designs.