We built several of these bridges, and we had difficulty in developing a rail that would hold cars on the bridge. And then several years later we went back to building a concrete rail—not like you see here but with the narrow rub curb against it.

We did try this without some success, and we went back to concrete. Mr. Constandy. You used what is called a brush curb; is that right?

Mr. Wilson. For the most part; yes.

Mr. Constandy. To keep the vehicle wheels from the parapet, but not wide enough that it creates a hazard?

Mr. Wilson. That is the type that we used.

Mr. Constandy. How wide is that?

Mr. Wilson. I would imagine 4 inches, something of that nature.

Mr. Constandy. Mr. Ricker.

Mr. Ricker. There is another rationale for the safety walk on long bridges, and that is if a vehicle becomes disabled and the passengers have to leave it and walk off, they have a place of refuge. This does not protect them from a violent collision—a vehicle that would otherwise strike the rail. But it does protect them from ordinary traffic crossing the bridge. They have a place to walk.

I do not know that this outweighs the other comments made; but it

is a reason why a safety walk is provided on bridges.

Mr. Constandy. We are back in that area where we have to realize that you cannot get perfection. There has to be a compromise, which affords the greatest degree of protection to the person, whether he is pedestrian or motorist.

How do you feel yourself, Mr. Ricker, about safety walks? Would

you eliminate them?

Mr. RICKER. In most cases, I think I would. On the other hand, with very long bridges, there needs to be some refuge for people who must leave their automobile because it is broken down.

Mr. Constandy. Of course if there is a full shoulder, that is prefer-

able is it not?

Mr. RICKER. Very definitely. Mr. Constandy. Mr. Prisk.

Mr. Prisk. Yes, I might say further with respect to this picture, that this is part of the \$800,000 guardrail rehabilitation project that we mentioned yesterday outside Indianapolis.

Mr. Constandy. So if that is to be effective, would it not be necessary

to treat, in some fashion, the safety walk on this bridge?

Mr. Prisk. I should think so, yes.
Mr. Wilkes. I think I would agree that attaching the guardrail to the wing wall is a partial solution. Perhaps the complete solution would be to provide a longer curb return underneath the guardrail to make an easier transition.

Mr. Constandy. Perhaps they could chop off that piece that sticks

Mr. Wilkes. That goes all the way across the bridge.

Mr. Constandy. Can you cut it off on an angle or would you create

another problem once you do this, trying to find a safe solution?

Mr. Prisk. In terms of transition, it might be of some interest to know that this adjustment in the position of the rail runs back 100 to 150 feet.