## CITY OF SCHENECTADY

## OFFICE OF THE MAYOR



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Mr. David Giacalone 16 Washington Ave. #3 Schenectady, NY 12305

Dear David:

Your e-mail to me dated September 30, 2013, expressed the concerns you have with the re-construction details of the Western Gateway Bridge. Others have the same concerns. This letter is intended to provide you with information that we here in the City are aware of pertaining to the bridge details and what actions we believe may be warranted now.

First and foremost, as you probably know, the Western Gateway Bridge is owned and maintained by the New York State Department of Transportation. Consequently, they are responsible for all design features of the bridge, existing and new. We are very fortunate to have a current City employee that worked for the NYSDOT for 34 years and actually designed the current Western Gateway Bridge to help us understand how the design and reconstruction may have evolved for this bridge, what the current standards are, and what can be done now, if anything.

Last year, the Governor announced that there would be new bridge construction money available throughout the State with a relatively short time frame to use it. In order to satisfy the short availability window and take advantage of the funding, projects with a quick design and bid document preparation time frame were desirable. The Western Gateway Bridge Deck Replacement Project, while already in the conceptual state, met this need. In addition, the DOT decided to use a design/build consulting firm approach which has become a more frequently used approach by the Department.

When a bridge project touches municipal jurisdictions like the Western Gateway Bridge does, the NYSDOT typically works with the jurisdictions to seek their input on the design details. Where and when possible, they would incorporate change suggestions. Obviously, they have standards with preferred details which they use for any bridge design. These standards can and do change over time. It is important to note that when the DOT uses a consultant instead of

in house personnel for the design on a project, they expect that consultant to perform as the Department would. This means, among other thing, they would make appropriate contact with the local governments for input.

Traffic railings, on bridges like the Western Gateway Bridge, can be either at the curb line or on the outside of the sidewalk. Both are acceptable and both conform to the current design and safety standards. Concrete safety shape barriers or vertical faced concrete barriers are currently the preferred choice of railings for bridges over steel railings because they are easier to maintain and provide better re-directive capabilities. If the traffic barrier is located at the curb with a sidewalk behind it, a pedestrian railing would be needed at the outside of the sidewalk. The minimum height for a pedestrian railing on a bridge is 42". If the traffic barrier is located at the outside of the sidewalk, it must serve as both the traffic barrier and the pedestrian railing since you would not have another traffic barrier at the curb nor could you place a pedestrian railing at the curb in front of the traffic barrier. There would be no other railing at the curb line. Either one of these systems would satisfy DOT standards.

Ultimately, the type of railing system on any bridge is the choice of the designer and the owner choosing between systems that meet standards. This can be modified within acceptable systems by input from agencies and individuals that are not directly associated with the designers or owners; such as the municipality where the bridge is located. Here is where aesthetics and local concerns can come into play if the locals are consulted.

Regarding the Western Gateway Bridge, we in the City were not solicited for comment on the railing system choice. We were only informed of the final decision. We suspect that because of the fast track that this reconstruction project was on, some of these external communications may have been sacrificed.

As you know, the bridge is currently about half done with the vertical faced concrete barrier on the south side of the bridge in place. The north side of the bridge will be completed with a steel railing. This is the side that has the bikeway and a sidewalk as decided by the DOT. The concrete barrier on the south side of the bridge is an integral part of the sidewalk connected by reinforcing steel. Any modification to change that railing system now would have serious implications. It would significantly delay the completion of the bridge and require another construction season with associated significant increases in cost. Moving the traffic barrier location from the outside of the sidewalk to the curb line, which some people have suggested, would create even more problems and higher costs with expanded requirements for anchoring the railing system in the deck (existing) and the termination of the railing off the bridge. Either change would probably require removal of part the structural slab and sidewalk which is very extensive and expensive work. It would also create an undesirable cold joint between the existing portion of concrete deck and the new portion which is likely to shorten the service life of the bridge deck.

I believe it was truly unfortunate that the local officials and every day citizens did not have an opportunity to comment on the bridge's details before construction began, as is normally done. It is also unfortunate that the choice of railings by the consultant and the DOT inhibits the southern view from the bridge. However, I don't believe the choice of concrete was a

consequence of expanding the width of the lanes and/or the sidewalks. I believe it was simply a project decision based on the experience and preference of the designers.

Therefore, while I understand that some people are not happy with the outcome, the decision is solely that of New York State. Thank you for your concerns and I have passed them along to New York State Department of Transportation.

Very truly yours,

Gary R. McCarthy

GRM;mmh