HISTORIC PRESERVATION REVIEW BOARD
STAFF REPORT AND RECOMMENDATION

Landmark/District:	**Taft Bridge, Rock Creek Park Historic District**	(**X**) Agenda
Address:	**Connecticut Avenue NW**	( ) Consent Calendar
Meeting Date:	**October 26, 2023**	( ) New Construction
H.P.A. Numbers:	**23-509**	(**X**) Alteration
		(**X**) Demolition

The District Department of Transportation (DDOT) is proposing to implement a pedestrian railing improvement project on the William Howard Taft Bridge to help prevent self-inflicted deaths.

Taft Bridge
The William Howard Taft Bridge, originally known as the Connecticut Avenue Bridge, is one of several picturesque bridges that span Rock Creek Park. The Taft Bridge was designed by noted engineer George S. Morison, along with supervising architect Edward Pearce Casey, and constructed between 1897 and 1907. At the time of completion, it was the largest monolithic concrete arch bridge of its time. Thus, the bridge is not only noteworthy for its beautiful design, stately lion sculptures, and decorative, eagle-topped cast iron lampposts, but also because it was constructed entirely of concrete with no metal reinforcement of any kind. After the death of President Taft in 1930, the bridge was renamed in his honor, in part because he is believed to have frequently walked over the structure while serving as the Chief Justice of the United States. Taft Bridge was included as a landmark in the DC Inventory of Historic Sites in 1964 and listed in the National Register of Historic Places in 2003.

Taft Bridge has been altered on a few occasions since it was constructed. In 1936 the roadway was widened and the walkways on either side were reduced in width. More significant alterations of a similar nature occurred between 1993-1995 when the entire deck was replaced and widened. This resulted in the complete removal of the original pedestals and railings. At about the same time, earlier attempts to weatherproof the lion sculptures failed so the sculptures had to be removed. Replica lion sculptures were installed in 2000. Despite these changes, the bridge still retains a great deal of integrity, especially when considering the enormous size of the remaining sections of the structure that retain their original form.

Proposal
Self-inflicted deaths have occurred on several District bridges but statistics show that fully half of the twenty-six (26) suicides which happened between 2010 to 2022 occurred on the Taft Bridge. It is for this reason that a new railing system is proposed to be installed as soon as possible.

DDOT has consulted with HPO, CFA, NCPC and other review agencies over the last several months to evaluate a variety of design options. At HPO's request, DDOT identified as wide a range of potential solutions as possible, including fourteen (14) different approaches that utilized netting, wires, fencing, glazing and other materials. The effects of installing these materials on the inboard and outboard sides of the bridge were evaluated along with the effects of installing them on top of, in the same plane as, and in differing planes than the existing bridge components. These early evaluation efforts resulted in the elimination of several approaches due to their failure to meet program requirements, aesthetic concerns or difficulties associated with long-term maintenance. Three approaches were ultimately selected to carry forward for the Board's consideration.

Option 1 proposes the introduction of glazed panels affixed to the existing pedestals and railings with stainless steel posts. Option 2 involves the introduction of wire mesh panels supported by metal posts. Option 3 and its four variants, Options 3B, 3C, 3D and 3E, propose replacing the existing concrete pedestals and metal railings with taller elements that provide the necessary level of protection. The four variants make use of relatively subtle design details to break down the scale of the taller elements.

Evaluation

One might assume Option 1 would have the least visual impact since glass is "clear," but even vision glass is noticeable because of its color, sheen and the inevitable build-up of dirt over time – which could create a permanent maintenance concern. The visual effects of glazing would also be exacerbated by the metal panels and fasteners which would have to be installed every few feet along with regular gaps between the panes of glass. These new elements would introduce a competing architectural rhythm that would detract from the comparatively simple, more generously spaced rhythm of the original design. Even the edges of the glass would be distinguishable, especially the top edge which would introduce discernable lines approximately eight feet above the bridge deck. The potential need to introduce a frit for bird protection could further increase the visual impact, and while DDOT claims a film could be applied to prevent graffiti, the effectiveness of that product is not as well-known as the degree to which Taft Bridge is already a target for vandals.

Option 2 would introduce most of the same visually discordant elements as Option 1 yet be even more jarring because of the greater visibility of the wire mesh. Of all the options, this might also be the most likely to appear like an interim solution since the wire mesh panels could be mistaken for a temporary fence.

Unfortunately, all three options would negatively affect the bridge's historic integrity so the choice among the three may ultimately hinge on the question of whether an "additive" approach (i.e. Options 1 and 2) or an "integrated" one (i.e. Option 3) would disrupt the bridge's character to a lesser degree. Since additive approaches arguably introduce more obvious interventions, the most appropriate choice seems to be the integrated option because it offers a solution that appears "intentional" and a design that results in what most may agree looks like a "finished product."

To be clear, Option 3 would substantially alter the proportions of Morison's original design by increasing the height of the pedestals, railings and lampposts to a noticeable degree. Yet it is important to remember that these historical dimensions have already been compromised, most notably when the bridge deck was widened in the mid-90s. The additional width not only changed the way the bridge appears from below, but also made the pedestals, railings and lampposts appear shorter by spacing them further apart. Interestingly, this additional width may help mitigate the additional height required to allow the modified elements to provide the necessary protection. It is also important to note that Option 3 would require no demolition or alteration of historic fabric because the original pedestals and railings were also replaced in the 90s. Drawings from those earlier rehabilitation projects indicate that the original pedestals were made of decorative stone but later replaced with concrete. The lampposts are the only remaining historic fabric, but they would not be altered, only relocated once again. Otherwise, no entirely new elements such as metal supports and no new competing rhythms would be introduced as part of Option 3. To further offset the additional height and better integrate the modified elements with the historic design, Option 3 proposes four subvariants:

Option 3B – "Articulation of Concrete Mass" incorporates an angled setback on the modified pedestals just below the lampposts as well as a narrow reveal on all pedestals at approximately the same height as the existing pedestals;

Option 3C – "Modulation and Articulation" repeats the details of Option 3B but retains the historic lampposts at their existing height (i.e. 15' rather than 20'-6" above the bridge deck) by modifying the pedestals and incorporating a small railing in front of lamppost bases;

Option 3D – "Concrete Cap Addition" is the same as Option 3B except that it retains the existing pedestals and uses lightweight concrete to construct the additional height directly on top of them, thus avoiding demolition; and

Option 3E – "Painted Metal Cap Addition" attempts to differentiate between the original and new pedestal height by utilizing different materials for both.

Incorporating some of the subvariant details described above is critically important since failing to do so would emphasize the substantial change in height that Option 3 requires. However, Options 3D and 3E would cause noticeable differences between the upper and lower sections of the pedestals (i.e. existing vs. new concrete in the former and concrete vs. painted metal in the latter). These differences would attract attention and detract from the original design intent. Option 3C would offer the benefit of maintaining the lamppost's original height, but would do so only by obscuring the bases of the lampposts within recesses in the pedestals and behind small railings, thus resulting in what would appear to be "stunted" lampposts. By comparison, Option 3B would deemphasize the height increase through subtle details and allow the bases of the lampposts to remain fully visible. Given these benefits, HPO considers Option 3B to be the most appropriate approach.

Recommendations

For the reasons outlined above, HPO recommends that the Board recognize the urgency and need for the proposed modifications and find Option 3B compatible with the historic landmark and delegate any remaining design review to HPO.

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