



Staff Report
City of Richmond, Virginia
Urban Design Committee
Staff Report



UDC 2023-03	Conceptual Review	Meeting Date: 2/9/2023
Applicant/Petitioner	Thomas Westbrook, City of Richmond Department of Public Works	
Project Description	Conceptual 17.05 review of the replacement of a bridge on E. Broad Street.	
Project Location		
Address: 1554 E. Broad Street		
Property Owner: City of Richmond		
<p>City of Richmond Department of Public Works is proposing to replace an existing bridge on E. Broad Street due to structural deficiencies.</p> <p>This application is to amend a previous CONCEPT approval to reflect a new scope of work.</p> <p>Only the bridge span will now be replaced. Existing supporting abutments will remain.</p>		
UDC Recommendation	Approval, with Conditions	
Staff Contact	Ray Roakes, Raymond.roakes@rva.gov , 804-646-5467	
Previous Reviews	A Concept for the bridge replacement was approved at the July 7, 2022 UDC meeting and by CPC on July 18, 2022. <i>This application amends the previous approval.</i>	
Staff Recommendations	<p><u>Previously Approved Conditions:</u></p> <p>The bridge be designed to include a rectangular pedestrian tunnel, as generally shown in the exhibits provided with the application.</p> <p>Existing granite curbing and cobblestone underneath of the bridge be retained and protected during construction.</p> <p>Applicant coordinate final design of the bridge with the Department of Environmental Quality to analyses the project's impact on the existing floodplain and floodway.</p> <p>Any existing historic resources be protected during construction, including existing masonry abutting the existing wingwalls on the southern side of the bridge.</p> <p>Lighting be provided within the pedestrian culvert. Additional details on lighting, finished, and art to be submitted to UDC with final review package.</p> <p>An anti-graffiti sealant be applied within the tunnel to protect against damage from vandalism.</p>	

	<p><u>New Recommended Conditions:</u></p> <p>Staff recommends the Applicant show on plans that the Existing granite curbing and cobblestone underneath of the bridge be retained and protected during construction – for FINAL submission.</p> <p>Staff recommends the Applicant coordinate final design of the bridge with the Department of Environmental Quality to analyze the project's impact on the existing floodplain and floodway.</p> <p>Staff recommends the Applicant coordinate the review of the final design of the bridge with the Department of Historic Resources.</p> <p>Staff recommends the Applicant coordinate the final design of the bridge with the Heritage Campus Project Management team.</p> <p>Staff recommends that the Applicant note on plans that any existing historic materials will be protected during construction, including existing masonry abutting the existing wingwalls on the southern side of the bridge – for FINAL submission.</p> <p>Staff recommends the Applicant show on plans that lighting be provided within the pedestrian culvert. Additional details on lighting, finishes, and art to be submitted to UDC for FINAL submission.</p> <p>Staff recommends the Applicant show on plans that an anti-graffiti sealant be applied within the tunnel to protect against damage from vandalism, but also take into account potential for future art installation – for FINAL submission.</p> <p>Staff recommends that the Applicant revise plans to appropriately screen utilities from view that are installed on the underside of the bridge – for FINAL submission.</p>
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Findings of Fact

Site Description	<p>The bridge is located within the City of Richmond limits on Broad Street over abandoned CSXT Right-of-Way, approximately 1,000 feet west of the intersection of Broad Street and 18th Street. The bridge is adjacent to the Lumpkin's Slave Jail and Richmond African Burial Ground. The project location map is provided in Attachment 1 of this report. The proposed tunnel will be constructed in the same location as the existing bridge.</p>
Scope of Review	<p>The proposed bridge replacement is subject to design review under Section 17.05 of the Richmond City Charter as a "public structure".</p>
Project Description	<p>The purpose for this project is to replace the existing structurally deficient bridge carrying Broad Street over CSXT Right-of-Way with a new structure to eliminate a structurally deficient bridge from the City's inventory.</p> <p>The existing bridge and approach roadway consists of a four-lane facility located in an urban area. The roadway is classified as a Primary Arterial with a posted speed limit of 25 mph. The existing 34-foot, single span structure was constructed in 1909 and consists of a concrete span and concrete and block supports underneath. The bridge currently carries four travel lanes of Broad Street, two in each direction.</p> <p>The travel width of the existing bridge is approximately 42'-0" measured face-to-face of curb with an out-to-out width of approximately 66'-0". The land in the immediate vicinity of the project is generally urban or open space, with several historical areas nearby.</p> <p>Previous plans included replacing the entire structure of the bridge – span and supports. UDC and Planning Commission reflected concerns that the then proposed walkway underneath the bridge would be not be wide enough to reflect best design practices for user safety and site flow.</p> <p>The current version of the plans, to be reviewed with this application, proposes to maintain the existing abutment side walls and to replace only the bridge deck/span. As such, the width of the walkway</p>

	<p>underneath the bridge will remain the same. The newly proposed replacement of the bridge deck will also more closely reflect the design of the existing bridge than previous proposals.</p> <p>Staff recommends the condition “Staff recommends the Applicant coordinate the final design of the bridge with the Heritage Campus Project Management team.” Specifically, the Applicant should contact Senior Historic Preservation Manager Kim Chen to determine if any future electrical hookup opportunities should be made possible with this plan in relation to future use of the site.</p> <p>The Applicant will also continue to work with the Virginia Department of Historical Resources in regards to the current bridge historical value and how the proposed project affects surrounding assets.</p> <p>Since the current proposal more closely reflects the design of the existing bridge and maintains the existing abutments, Staff recommends approval of this application with the recommended conditions.</p>
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Urban Design Guidelines and Master Plan

	Text	Staff Analysis
Richmond 300 Master Plan	<p>Objective 4.1.e</p> <p><i>e. Encourage development that respects and preserves the natural features of the site through sensitive site design, avoids substantial changes to the topography, and minimizes property damage and environmental degradation resulting from disturbance of natural systems.</i></p> <p>Goal 9: Streets, Bridges & Connections</p> <p><i>Building and improving Richmond's street network and bridges is critical to connect our neighborhoods to one another and provide multiple routes for pedestrians, cyclists, and transit moving around the city. (pg. 122)</i></p> <p>Objective 9.2: Improve and Create Bridges</p> <p><i>a. Develop and implement a plan to rehabilitate and repair city bridges so that less than 10% of bridges are rated as structurally deficient and all bridges have been substantially renovated and maintained.</i></p>	<p>This proposal helps meet the Goal 9 outlined in the Richmond 300 Master Plan by replacing an existing structurally deficient bridge that has been rated “poor” by VDOT.</p> <p>Staff notes that the proposed bridge and culvert are located within a 100-year Floodplain and Floodway. In order to minimize any future environmental degradation as a result of this project, <u>Staff recommends the Applicant coordinate final design of the bridge with the Department of Environmental Quality to analyze the project’s impact on the existing floodplain and floodway.</u></p>
Urban Design Guidelines		
Environment, Public Parks, Design Considerations, pg. 9	<p><i>Certain design considerations should be addressed in any project, regardless of the type of park. Historic elements should be surveyed and preservation should be considered for both facilities and landscapes. Impacts to the natural landscape should be assessed and should generally be minimized when constructing man-made elements.</i></p> <p><i>Lighting and landscaping should allow for surveillance and policing activities, but should be designed primarily to accommodate the intended use of the park.</i></p>	<p>There are several historical elements on site that should be preserved as part of this reconstruction project. These items include: (i) any existing granite curbing and cobblestone below the bridge, (ii) the existing masonry abutments flanking either side of the wing walls on the south side of the tunnel, and (iii) the larger pieces of masonry located in the fill on the north side of the bridge.</p> <p><u>Staff recommends the Applicant show on plans that the Existing granite curbing and cobblestone underneath of the bridge be retained and protected during construction – for FINAL submission.</u></p>

		<p><u>Staff recommends that the Applicant note on plans that any existing historic materials will be protected during construction, including existing masonry abutting the existing wingwalls on the southern side of the bridge – for FINAL submission.</u></p> <p><u>Staff recommends the Applicant coordinate the review of the final design of the bridge with the Department of Historic Resources.</u></p>
Transportation, Provision of New Sidewalk, pg. 4	<i>Existing granite curbing and stormwater inlets should be retained. Any new granite curbing should match existing curbs.</i>	<p>Staff also notes that there are existing brick-paved sidewalks with granite curbs on the bridge. The plans provided with this application note that these features will be reconstructed as part of this project.</p> <p><u>Staff recommends the Applicant show on plans that the Existing granite curbing and cobblestone underneath of the bridge be retained and protected during construction – for FINAL submission.</u></p>
Community Character, Illumination, pg. 22	<i>Consistent levels of illumination should be maintained in public areas. Safe and comfortable circulation depends more on the consistency of illumination than on the level or brightness of the lighting. All light sources should be shielded to reduce glare, spill light, and wasted light.</i>	<p>Staff notes that the preliminary structures report submitted with the application recommends the inclusion of pedestrian lighting within the resulting culvert. However, no information on any proposed lighting has been provided with this application.</p> <p><u>Staff recommends the Applicant show on plans that lighting be provided within the pedestrian culvert. Additional details on lighting, finishes, and art to be submitted to UDC for FINAL submission.</u></p>
Building Design and Detail Durability and Maintenance (P. 15)	<i>Where appropriate, substances that resist graffiti should be applied to building materials to reduce maintenance requirements.</i>	<u>Staff recommends the Applicant show on plans that an anti-graffiti sealant be applied within the tunnel to protect against damage from vandalism, but also take into account potential for future art installation – for FINAL submission.</u>
Walls, Fencing, and Screening Design (P.21)	<i>All trash receptacles, dumpsters, fuel tanks and significant building mechanical equipment on the exterior of a building should be screened.</i>	<p>While not a building, this location is very important historically and will likely see increase in users as further investment into the surrounding area is undertaken. All infrastructure in this location should be designed to high standards of character.</p> <p><u>Staff recommends that the Applicant revise plans to appropriately screen utilities from view that are installed on the underside of the bridge – for FINAL submission.</u></p>