Critical Area Commission

STAFF REPORT July 6, 2022

APPLICANT: Maryland Department of Transportation State Highway Administration **JURISDICTION:** Wicomico County **PROPOSAL:** Replacement of Bridge No. 2200400 on US 13 Business over East Branch of Wicomico River (Phase 2) **COMMISSION ACTION:** Vote **STAFF RECOMMENDATION:** Approval with Conditions **STAFF:** Michael Grassmann **APPLICABLE LAW**/ COMAR 27.02.05 State Agency Actions Resulting in **REGULATIONS:** Development on State-Owned Lands

DISCUSSION

The Maryland Department of Transportation State Highway Administration (MDOT SHA) is proposing to replace Bridge No. 2200400 over East Branch of Wicomico River on US 13 Business (South Salisbury Boulevard) in Wicomico County, Maryland. The new bridge will be approximately 11 feet wider than the existing bridge and will include the addition of a sidewalk on the west side and a multi-use path on the east side. The proposed work will also include the continuation of the multi-use path along the east side of US 13 Business from East Carroll Street to East Main Street, the installation of a stormwater management (SWM) Best Management Practice (BMP), storm drain improvements, grinding and resurfacing of the existing roadway, signage and pavement marking upgrades, and landscaping. Temporary pavement will also be installed for maintenance of traffic and pedestrian safety during bridge demolition and construction. All areas of temporary pavement will be either restored to their pre-existing conditions or converted to the multi-use path.

The purpose of the proposed bridge replacement is to provide a safe and reliable crossing for motorists, pedestrians, and bicyclists along US 13 Business in the City of Salisbury. The existing bridge is a two-span solid timber plank bridge built in 1937 and currently exhibits structural deficiencies in the deck, substructure, and superstructure. The existing bridge also has a posted weight restriction, limiting commercial vehicle access, and is too narrow to support Americans with Disabilities Act (ADA)-compliant sidewalks. The new bridge will eliminate the weight restriction and will consist of a single span prestressed concrete slab bridge that will be widened on the east side to accommodate a multi-use path. This multi-use path will provide a safe off-

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street ADA-compliant facility that will separate users from motorists on US 13 Business within the "Riverwalk" area of downtown Salisbury and connect to additional City planned bikeways and existing trails.

These improvements are considered Phase 2 of MDOT SHA Contract No. WI2225180. Phase 1 consists of utility relocations, which are still in progress, with an anticipated completion date of Spring 2023, prior to the start of the main Phase 2 construction. Phase 1 was reviewed and approved as a Category II project under the existing Memorandum of Understanding (MOU) between MDOT and the Critical Area Commission in 2018.

Project Impacts

The entirety of the project's limits of disturbance (LOD) fall within the Critical Area. The total LOD is 1.20 acres. The disturbance within the Critical Area is unavoidable due to the scope of the project and proposed improvements. Per COMAR 27.02.05.03-1, as a linear project within the SHA right-of-way (ROW), this project is reviewed in accordance with the requirements of an Intensely Developed Area (IDA). The surrounding land is also mapped as IDA. Many of the impacts associated with the Phase 2 improvements occur within areas disturbed by Phase 1. Phase 1 impacts and mitigation were reviewed and approved by Critical Area staff in July of 2018 as a Category II project under the existing Memorandum of Understanding (MOU) between MDOT and the Critical Area Commission. As a result, Phase 2 impacts are considered exclusive of Phase 1 impacts, with only the additional ground disturbance under Phase 2 accounted for and mitigated in this submittal.

Buffer Impacts and Tree Clearing and Mitigation

A site plan showing all Buffer impacts and tree clearing associated with Phase 1 and Phase 2 of this project is included with this staff report (Attachment 1). As a result of construction activities associated with the proposed Phase 2 improvements, 3 individual trees will be removed within the Critical Area Buffer, which is expanded due to the presence of hydric soils. Temporary and permanent disturbance to the Buffer is proposed due to grading operations associated with the replacement of the existing bridge, the storm drain improvements and the installation of the multi-use path. The temporary impacts within the existing ROW will be 10,272 square feet (sf), and permanent impacts total 421 sf.

MDOT SHA proposes to mitigate the 421 sf of permanent disturbance at a 1:1 ratio at an offsite location, the previously approved Firehouse Mitigation Site, located in Worcester County (Attachment 2). This site has been used to address mitigation needs of past MDOT SHA projects within the Critical Area, including the Phase 1 utility relocations associated with this project. Only a portion of the Firehouse Site is planted, so excess acreage remains for additional plantings to address the Phase 2 mitigation needs.

The 3 trees removed with this Phase will be replaced at a 1:1 ratio onsite with native species consisting of various shade and flowering trees.

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Stormwater: Critical Area 10% Phosphorus Compliance

This project requires compliance with the Critical Area 10% stormwater pollutant reduction, with a requirement of 0.32 lbs P/yr. The installation of a bioswale will provide the needed treatment with a total load reduction of 0.43 lbs P/yr, resulting in an excess of 0.11 lbs P/yr for the project.

Permits and Agency Reviews

Maryland Department of the Environment (MDE)

Wetland Authorizations

A Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal, or Nontidal Wetland (JPA) was submitted to MDE on February 7, 2018 for the Phase 2 improvements. A Tidal Wetlands License was issued by the Maryland Board of Public Works on August 1, 2018 (with an extended expiration date of August 1, 2024).

Stormwater Management Compliance and Erosion and Sediment Control

Coordination with MDOT SHA's Plan Review Division for Stormwater Management (SWM) and Erosion and Sediment Control (ESC) approval is ongoing. Because the LOD for the project is above 1-acre, a National Pollutant Discharge Elimination System (NPDES) permit is also required. SWM, ESC, and NPDES approval will be forwarded upon issuance.

Maryland Department of Natural Resources (DNR)

MDOT SHA received a response from DNR-Environmental Review Program (DNR-ERP) on May 3, 2022. DNR-ERP noted a "Use II" stream closure period and provided comments on the best management practices related to the proposed project. DNR-Wildlife and Heritage Service determined there are no official State or Federal records for any listed plant or animal species within the project area.

Maryland Historical Trust (MHT)

A Memorandum of Agreement (MOA) between the Federal Highway Administration, MDOT SHA and MHT was executed in November 2017 to address the replacement of Bridge No. 2200400, which is eligible for inclusion on the National Register of Historic Places. The MOA stipulates the measures to mitigate the adverse effect resulting from the bridge replacement and requires MDOT SHA to submit a historic context report for timber-concrete composite bridges, prepare a lesson plan on bridge engineering per Maryland State Science, Technology, Engineering and Mathematics (STEM) standards and complete a Maryland Inventory of Historic Properties (MIHP) Addendum Form for the existing bridge to reflect demolition. The historic context report and MIHP Addendum Form have been completed in accordance with the MOA. Coordination with MHT regarding the STEM lesson plan is ongoing. Per an email dated June 8, 2022, MHT did not have any outstanding concerns regarding CAC approval of this project.

Climate Resiliency

As required under COMAR 27.02.05.03, State agencies proposing development on State-owned lands shall demonstrate that the agency has considered the likelihood of inundation by sea level

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rise over the course of the design life of the project and demonstrate whether the development incorporates climate resilient practices in order to avoid or minimize environmental or structural damage associated with a coastal hazard, an extreme weather event, sea level rise, and other coastal impacts.

Based on available climate related data included with the application, the new bridge is vulnerable at the 1 to 2-foot and 2 to 5-foot inundation levels, with the approach roadways and multi-use path vulnerable at the 5 to 10-foot inundation level. Hurricane storm surges from category 2, 3 and 4 storms will affect the new bridge, the approach roadways, and the multi-use path. No wetland adaptation areas are within or adjacent to the Phase 2 improvements.

The proposed project has been designed in accordance with current American Association of State Highway and Transportation Officials (AASHTO) standards. The new bridge has a design life of 75 years, while the multi-use path and resurfaced roadway has an anticipated service life of 25 years. Per hydraulic modeling, the 100-year storm reaches the new bridge but does not overtop it.

Coast Smart Construction Program siting and design criteria do not apply to this project because the majority of the funding for the project is coming from federal funding sources.

Public Notice Requirements

In accordance with the provisions of COMAR 27.03.01.03, public informational signs were posted at the project site on June 16, 2022. Photos of the signs at the project site were forwarded to CAC staff on June 17, 2022. MDOT SHA advertised a notice of opportunity for public comment in conjunction with the posting of the signs in the local newspaper on June 22, 2022, and MDOT SHA's website. As of the writing of this staff report, no public comment has been received.

Staff Recommendation

Commission staff recommends the Critical Area Commission approve the project with the following condition:

1. Prior to the start of construction, MDOT SHA shall submit a copy of all final plans, permits, and approvals, including stormwater management plans, MDE stormwater and erosion and sediment control approval, and NPDES approval, to Commission staff.



CRITICAL AREA BUFFER IMPACTS AREA MITIGATION MITIGATION TYPE (SQ. FT.) RATIO REQUIRED PHASE 1 CRITICAL AREA BUFFER IMPACTS 6,534 1:1 6,534* PHASE 2 TEMPORARY CRITICAL AREA BUFFER IMPACTS 10,272 N/A N/A PHASE 2 PERMANENT CRITICAL AREA BUFFER IMPACTS 421 1:1 421 TOTAL 17,227 421 N/A * Phase 1 CAB mitigation requirement (6,534 SF / 0.15 AC) previously completed at Firehouse Site. NO PROPOSED MITIGATION FOR TEMPORARY IMPACTS

<u>GENERAL LEGEND</u>	
IMPACTS	

FEATURES		IMPACTS	
CHESAPEAKE BAY CRITICAL AREA	CBCA	TEMPORARY CRITICAL AREA BUFFER	
CRITICAL AREA BUFFER	САВ	PERMANENT CRITICAL AREA BUFFER	
PHASE 2 LIMIT OF DISTURBANCE	- LOD -	PHASE 2 TREE IMPACT	х
PHASE 1 LIMIT OF DISTURBANCE	LOD		
MEAN HIGH WATER LINE	MHW		

CRITICAL AREA TREE IMPACTS				
ТҮРЕ	# OF TREES	CANOPY IMPACT (SQ. FT.)	MITIGATION RATIO	MITIGATION REQUIRED
PHASE 1 TREES REMOVED	22	N/A	1:1	22
PHASE 2 TREES TO BE REMOVED	3	N/A	1:1	3
TOTAL				25







SITE INFORMATION

Area = 437,063 SF

See Sheet LA-02 for Master Plant Schedule

GENERAL NOTES

1. ADDITIONAL TOPSOIL IS NOT REQUIRED IN THIS CONTRACT.

2. REMOVE INVASIVE PLANTS PER SPECIAL PROVISIONS.

- 3. REMOVE DEAD TREES AND VINE COVERED TREES AS DETERMINED BY SITE ENINGEER. 4. SAVE AND PROTECT HEALTHY NATIVE TREES AS DETERMINED BY SITE ENGINEER.
- 5. MOW AREA AS NEEDED TO ALLOLW SUCCESSFUL PLANTING OF LANDSCAPE MATERIAL.
- 6. NORTHINGS & EASTINGS POINTS ARE SHOWN FOR CONVENIENCE AND MAY BE ADJUSTED TO ACCOMMODATE EXISTING FIELD CONDITIONS AND SITE ENGINEER APPROVAL.

FIREHOUSE MITIGATION SITE Off-Site Mitigation Planting Plan

Addresses 421 SF (0.01 AC) Critical Area Buffer Mitigation Requirement for Phase 2

10 <u>0′</u>	0	<u>100′</u>	200'
A. 73	SCALE:	1 "=100'	1

FIREHOUSE CRITICAL AREA PLANTING ISLE OF WRIGHT BAY WATERSHED US 113, 1300 FEET EAST OF PITTS ROAD

LANDSCAPE PLAN			
SCALE <u>1" = 100</u>	ADVERTISED DATE	CONTRACT NO. <u>AZ124A21</u>	
DESIGNED BY DRAWN BY CHECKED BY MDE/PRD	TPC TPC JRP :00-AA-0000 >	COUNTY <u>WORCHESTER</u> LOGMILE HORIZONTAL SCALE VERTICAL SCALE	
DRAWING NO.	LD- 01 or	= 02 SHEET NO. 01 OF 02	