U.S. Department of Transportation
Federal Highway Administration

South Carolina

1835 Assembly Street, Suite 1270
Columbia, South Carolina 29201
803-765-5411
803-253-3989

December 7, 2023, 2023

In Reply Refer To:
HDA-SC

Mr. Chad Long
Director Environmental Services Office
South Carolina Department of Transportation (SCDOT)
955 Park Street, P.O. Box 191
Columbia, South Carolina 29202

Dear Mr. Long:

The South Carolina Department of Transportation (SCDOT) recently submitted for FHWA's approval, a Categorical Exclusion (CE) to replace the damaged US 17A/21 Bridge over the CSX railroad in Beaufort and Hampton Counties, South Carolina (Federal Project Number P042942). The FHWA finds that the project will not induce significant impacts and will not adversely affect threatened or endangered species or cause adverse impacts to historic resources. Therefore, a CE determination under 23 CFR § 771.117(c)(9) is appropriate for this project. Enclosed is the approved CE for the project.

SCDOT is authorized to proceed with further project development. Please ensure that the project commitments made during the NEPA process are included in the project construction proposal and ultimately carried out. Please address any questions to Mr. J. Shane Belcher at jeffrey.belcher@dot.gov or 803-253-3187.

Sincerely,

J. Shane Belcher

(for) Emily O. Lawton
Division Administrator

Enclosure

ec: Will McGoldrick, SCDOT Alternative Delivery NEPA Coordinator

Non-Programmatic Categorical Exclusion

Project ID: P042942
County(s): Hampton/Beaufort
Date: December 7, 2023

To: Federal Highway Administration

From: Environmental Program Administrator

Project Name: US 17A/21 Emergency Bridge Replacement over CSX

(See Attachment)

The Department proposes to replace the damaged US17A/21 Bridge over the CSX railroad near the Hampton and Beaufort county line, in South Carolina. The Department's environmental review determined effects of this project are as described in the "Programmatic Agreement Between the Federal Highway Administration, South Carolina Division and the South Carolina Department of Transportation Regarding Approval of Actions Classified as Categorical Exclusions for Federal-Aid Highway Projects" dated April 26, 2021, and is in compliance with the required findings reflected below. The project has been assessed for possible effects on the human and natural environment with a determination that no significant environmental impact will occur. The class of action and impact determination documented by this statement would qualify this project as a categorical exclusion under 23 CFR 771.117(c)(9) for reconstruction of a bridge in operation when damaged and declared an emergency where the state can assume CE responsibilities but does require FHWA approval.

Based on an analysis of suitable habitat and observations of the listed species in the project area, the proposed action will have no effect on threatened or endangered species or critical habitats currently listed by the U.S. Fish and Wildlife Service for Hampton and Beaufort Counties.

The project will impact waters of the U.S. and will therefore require a permit or certification authorization under Section 404 and 401 of the Clean Water Act (CWA).

In accordance with Section 106 of the National Historic Preservation Act, it has been determined that one (1) historic site is eligible and would be adversely affected by the proposed undertaking. Coordination with the SC State Historic and Tribal Preservation Office (SHPO/THPO) and the Advisory Council of Historic Preservation (ACHP) has been completed and a Memorandum of Agreement (MOA) with the SHPO has been agreed upon and signed.

Noise analysis was not required for this project as it did not meet the definition of a Type 1 project per the approved noise policy. Since the route is closed to through traffic, there will be minor traffic disruptions to roadway users but that will be temporary in nature and suitable detour routes exist to alleviate the inconvenience.

There will be no relocations associated with project and minimal amounts of right of way will be required to bring the bridge up to current design standards. All acquisition will be conducted in

compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. While blockgroups did indicate minority presence within the project study area (PSA), analysis concluded with no disproportionate or adverse effects to EJ communities. There are no residential or industrial buildings within the PSA. One commercial facility is adjacent to the PSA but will not be affected in its operation or ability to function.

12-7-23
Date

Will McGoldrick Digitally signed by Will McGoldrick Date: 2023.12.07 14:38:44 -05'00'
Environmental Project Manager

12-7-23
Date

J. Shane Belcher Digitally signed by J. Shane Belcher Date: 2023.12.07 16:06:03 -05'00'
Federal Highway Administration

Date: 12/07/2023

NEPA ENVIRONMENTAL COMMITMENTS FORM

Project ID : P042942 | County : Hamp/Bft | District : District 6 | Doc Type: PCE | Total # of Commitments: 12

Project Name: US17A Emergency Bridge Replacement

The Environmental Commitment **Contractor Responsible** measures listed below **are to be included in the contract and must be implemented**. It is the responsibility of the Program Manager to make sure the Environmental Commitment **SCDOT Responsible** measures are adhered to. If there are questions regarding the commitments listed please contact:

CONTACT NAME: Tyler Clark **PHONE #:** 803-737-4596

ENVIRONMENTAL COMMITMENTS FOR THE PROJECT

Water Quality | NEPA Doc Ref: | Responsibility: CONTRACTOR

The contractor will be required to minimize possible water quality impacts through implementation of BMPs, reflecting policies contained in 23 CFR 650B and the Department's Supplemental Specification on Erosion Control Measures (latest edition) and Supplemental Technical Specifications on Seeding (latest edition). Other measures including seeding, silt fences, sediment basins, etc. as appropriate will be implemented during construction to minimize impacts to water quality.

☐ Special Provision

Migratory Bird Treaty Act | NEPA Doc Ref: | Responsibility: CONTRACTOR

The federal Migratory Bird Treaty Act, 16 USC § 703-711, states that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. The South Carolina Department of Transportation (SCDOT) will comply with the Migratory Bird Treaty Act of 1918 in regard to the avoidance of taking of individual migratory birds and the destruction of their active nests.

The contractor shall notify the Resident Construction Engineer (RCE) at least four (4) weeks prior to construction/demolition/maintenance of bridges and box culverts. The RCE will coordinate with SCDOT Environmental Services Office (ESO), Compliance Division, to determine if there are any active birds using the structure. After this coordination, it will be determined when construction/demolition/maintenance can begin. If a nest is observed that was not discovered after construction/demolition/maintenance has begun, the contractor will cease work and immediately notify the RCE, who will notify the ESO Compliance Division. The ESO Compliance Division will determine the next course of action.

The use of any deterrents by the contractor designed to prevent birds from nesting, shall be approved by the RCE with coordination from the ESO Compliance Division. The cost for any contractor provided deterrents will be provided at no additional cost to SCDOT.

☐ Special Provision

Stormwater | NEPA Doc Ref: | Responsibility: CONTRACTOR

Stormwater control measures, both during construction and post-construction, are required for SCDOT projects with land disturbance and/or constructed in the vicinity of 303(d), TMDL, ORW, tidal, and other sensitive waters in accordance with the SCDOT's MS4 Permit. The selected contractor would be required to minimize potential stormwater impacts through implementation of construction best management practices, reflecting policies contained in 23 CFR 650 B and SCDOT's Supplemental Specifications on Seed and Erosion Control Measures (latest edition).

☐ Special Provision

Project ID : P042942	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	SCDOT ENVIRONMENTAL SERVICES

ENVIRONMENTAL COMMITMENTS FOR THE PROJECT

Cultural Resources | NEPA Doc Ref: | Responsibility: CONTRACTOR

The contractor and subcontractors must notify their workers to watch for the presence of any prehistoric or historic remains, including but not limited to arrowheads, pottery, ceramics,flakes, bones, graves, gravestones, or brick concentrations during the construction phase of the project, if any such remains are encountered, the Resident Construction Engineer (RCE) will be immediately notified and all work in the vicinity of the discovered materials and site work shall cease until the SCDOT Archaeologist directs otherwise.

☐ Special Provision

Non-Standard Commitment | NEPA Doc Ref: | Responsibility: SCDOT

SHPO MOA

SCDOT will conduct data recovery per the MOA and deliver a final report to the SHPO and THPO as appropriate.

☐ Special Provision

Non-Standard Commitment | NEPA Doc Ref: | Responsibility: CONTRACTOR

Data Recovery Access

The contractor will coordinate with the data recovery team allowing for safe access to the site in order for data recovery to be completed expeditiously.

☐ Special Provision

Project ID : P042942	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	SCDOT ENVIRONMENTAL SERVICES

ENVIRONMENTAL COMMITMENTS FOR THE PROJECT

USTs/Hazardous Materials | NEPA Doc Ref: | Responsibility: CONTRACTOR

If avoidance of hazardous materials is not a viable alternative and soils that appear to be contaminated are encountered during construction, the South Carolina Department of Health and Environmental Control (SCDHEC) will be informed. Hazardous materials will be tested and removed and/or treated in accordance with the United States Environmental Protection Agency and the SCDHEC requirements, if necessary.

☐ Special Provision

Lead-Based Paint | NEPA Doc Ref: | Responsibility: CONTRACTOR

The existing structures shall be removed and disposed of by the Contractor in accordance with Subsection 202.4.2 of the Standard Specifications. The Contractor's attention is called to the fact that this project may require removal and disposal of structural components containing lead-based paints. Removal and disposal of structural components containing lead-based paints shall comply with all applicable Federal, State, and Local requirements for lead as waste, lead in air, lead in water, lead in soil, and worker health and safety.

☐ Special Provision

Non-Standard Commitment | NEPA Doc Ref: | Responsibility: CONTRACTOR

Threatened and Endangered Species

In the event that a change in species listing occurs during construction, the contractor shall coordinate with ESO staff in preparing necessary documentation to address the change and submit it to ESO to complete Section 7 consultation.

☐ Special Provision

Project ID : P042942	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	SCDOT ENVIRONMENTAL SERVICES

ENVIRONMENTAL COMMITMENTS FOR THE PROJECT

Non-Standard Commitment	NEPA Doc Ref:		Responsibility:	SCDOT

General Permit

The SCDOT will obtain the RGP4 and required mitigation for the project through coordination with the USACE. If the design changes in such a way that conditions and requirements of RGP 4 are not met or alterations occur differing from the approved RGP4, a permit modification may be required. The contractor shall coordinate with the SCDOT Environmental Services Office (ESO) on all permitting activities including all permit modifications as necessary. The contractor shall avoid jurisdictional wetlands to the maximum extent practicable.

☐ Special Provision

	NEPA Doc Ref:		Responsibility:	

☐ Special Provision

	NEPA Doc Ref:		Responsibility:	

☐ Special Provision

Project Description

The South Carolina Department of Transportation (SCDOT) proposes to replace the US17A/21 Bridge over the CSX railroad. The bridge was struck by derailed train cars in early morning hours of September 20, 2023. Substructure damage to the northern abutment shoring wall and piles rendered the bridge damaged beyond repair and unsafe for vehicular traffic. US 17A/21 was immediately closed and detoured and will remain so until the replacement is completed. US17A/21 is a dedicated hurricane evacuation route at this location and is of state and regional importance for emergency events that may require departure from the coastal areas. The replacement will be constructed to meet current design standards, meet desired rail requirements, and correct geometric deficiencies. A project study area (PSA) has been established to encompass all potential impacts of the project (see **Appendix A Project Location**). The PSA encompasses an area approximately 26 acres in size, generally centered on the existing alignment.

Purpose and Need

The purpose of this project is to restore the crossing of US17A/21 over the CSX railroad for all acceptable vehicular traffic in accordance with all current design standards. The need results from damage to structure that is unrepairable resulting from the derailment of passing train cars. The route is a designated evacuation route for emergency events for coastal residents and is a dual US road route carrying approximately 2400 average daily traffic (ADT) and the potential to allow 1800 vehicles per hour (VPH) during evacuation events.

Reasonable Availability of Funding

This project has been awarded FHWA Emergency Relief (ER) funding with a 20% SCDOT Match. This project is under Program Category Emergency Relief. As a result of the emergency funding and process, the cost of this project will not be included within the STIP.

Alternatives Evaluation

Since the bridge was damaged and immediately closed to through traffic, replacing the bridge on current alignment is the most environmentally and economically feasible option. Utilizing the existing rail crossing would be less environmentally damaging than relocating or shifting the alignment. Since damage is limited to substructure elements, maintaining the alignment for the replacement is the most practicable and preferable alternative. SCDOT intends to use the design-build delivery method to replace the bridge. Environmental studies and analysis including a wetland/stream field delineation, cultural resources study, threatened and endangered species biological assessment, hazardous materials, environmental justice analysis, and an assessment of potential relocations were completed. This information was used for assessing impacts. A project location map can be found in **Appendix A Project Location.**

Class of Action Defined

The project qualifies as a CE requiring approval by FHWA. The bridge replacement is covered by 23 CFR 771.117.c.9.i-ii for reconstruction of a bridge in operation when damaged and declared an emergency. The project must also meet the conditions of 23 CFR 771.117.c.9.ii. A—B that:

- Occurs within the existing right-of-way and in a manner that substantially conforms to the preexisting design, function, and location as the original (which may include upgrades to meet existing codes and standards as well as upgrades warranted to address conditions that have changed since the original construction); and
- is commenced within a 2-year period beginning on the date of the declaration.

On September 21, 2023, the Secretary of Transportation sent a letter to FWHA Division Administrator requesting emergency funds be authorized. See **Appendix B Correspondence**.

Acquisitions/Displacements

This project would result in no relocations or displacements.

Public Involvement

A Public Involvement Plan was developed outlining activities proposed to engage the public. A website (https://www.scdot.org/us21-17a-over-csx-rr/default.aspx) was created by SCDOT describing the proposed project, schedule, and contact information. Postcards notifying the public about the project with a map and link to the website were mailed to property owners on October 19, 2023. A public comment period was allowed from October 23, 2023 through November 22, 2023. A total of 3 comments were received. **See Appendix I Public Involvement**.

Socioeconomics and Environmental Justice

Executive Order 12898 requires federal agencies to ensure its actions do not result in disproportionate or adverse effects to minority or low-income communities. "Executive Order (E.O.) 14096—"Revitalizing Our Nation's Commitment to Environmental Justice for All" was enacted on April 21, 2023. E.O. 14096 on environmental justice does not rescind E.O. 12898 – "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," which has been in effect since February 11, 1994 and is currently implemented through DOT Order 5610.2C. This implementation will continue until further guidance is provided regarding the implementation of the new E.O. 14096 on environmental justice." Minority includes persons who are American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino and Native Hawaiian and other Pacific Islander. Low-income populations are defined as the number or percent in households where the household income is less than or

equal to twice the federal poverty level. Low-income populations were calculated by adding the below poverty population and the near poor population between 100 percent and 149 percent of poverty level as prescribed by the US Health and Human Services poverty guidelines. Socioeconomic data was obtained through the Environmental Protection Agency's (EPA) EJ-Screen Environmental Justice Screening Tool for blockgroup analysis in each county. See Table 4 and **Appendix C Environmental Justice** for these results.

Table 4. EPA EJ Screening Tool Results

Identifier	**Hampton County**	Beaufort County	Statewide Average
Minority population	65 %	84%	36 %
Low-income population	49 %	45%	35 %

There are both minority and low-income populations within blockgroups around the PSA. The project area percentages of minority and low-income populations are above the statewide averages. However, there are no substantial impacts to communities or populations other than, at present, they must detour around the closed bridge which may result in some travel time delays. This delay is experienced by all drivers utilizing the route so this impact is equally shared by all route users and is not unique to minority or low-income populations. The replacement and re-opening of the bridge will be of benefit to all users. Therefore, there are no disproportionate impacts to an EJ community. In addition, socioeconomic impacts are not anticipated, as there would be no impacts to community cohesion, access to community facilities, disruption of emergency services. Therefore, in accordance with the provisions of EO. 12898, EO 14096 and FHWA order 6640.23A, no further EJ analysis is required.

Section 106 – Cultural Resources (Archaeological/Historic)

In accordance with 36 CFR 800.4, archival research and coordination with the State Historic Preservation Office (SHPO) was performed to identify and help predict the locations of significant cultural resources in the proposed project's vicinity. The archaeological and architectural surveys performed provided necessary management data to allow for the sites and properties to be evaluated for recommendations of eligibility to the National Register of Historic Places (NRHP).

Background research from the South Carolina Institute of Archaeology and Anthropology (SCIAA) and the NRHP indicated there were no previously recorded archaeology sites or architectural resources within the Area of Potential Effect (APE). Archaeological and architectural surveys were conducted between October 5 and 11, 2023. One new archaeological resource was recorded. No new architectural resources were identified. The archaeological resource was assigned site

number 38HA1138. The site is recommended as eligible for listing in the NRHP under Criteria D. Based on the data provided by background research and the results of the cultural resources surveys an adverse effect to the site will occur and a MOA was developed in coordination with SHPO and appropriate THPO(s). A concurrence letter provided to the SHPO on November 11, 2023 was concurred with on November 6, 2023 for the adverse effect determination. The Catawba Tribe provided a concurrence on December 6, 2023. The MOA was approved on December 7, 2023. SCDOT will conduct data recovery per the MOA and deliver a final report to the SHPO and THPO as appropriate. The existing bridge was not determined eligible for the National Register.

FHWA initiated coordination with the Advisory Council on Historic Preservation (ACHP) on November 7, 2023. No response was received within the allotted 15 days, therefore concurrence was presumed and coordination with SHPO on the MOA continued. A copy of the MOA was provided to the ACHP on December 7, 2023 satisfying 36 CFR Part 800.6(a)(1).

Copies of the cultural resources survey report, correspondence, associated SHPO and THPO concurrences, ACHP coordination and MOA are included in **Appendix D Cultural Resources**.

The contractor will coordinate with the data recovery team allowing for safe access to the site in order for data recovery to be completed expeditiously. The contractor and subcontractors must notify their workers to watch for the presence of any prehistoric or historic remains, including but not limited to arrowheads, pottery, ceramics, flakes, bones, graves, gravestones, or brick concentrations during the construction phase of the project. If any such remains are encountered, the Resident Construction Engineer (RCE) will be immediately notified and all work in the vicinity of the discovered materials and site work shall cease until the SCDOT Archaeologist directs otherwise.

Section 4(f)/6(f)

No impacts for 6(f) would occur as no resources were identified within the PSA. Archaeological site 38H1138 would be considered a 4(f) resource as defined in CFR 23 774.11(e). However, Section 4(f) does not apply to archeological sites where the Administration, after consultation with the SHPO and the ACHP, determines that the archeological resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. Therefore, there are no 4(f) impacts.

Water Quality

The PSA is located in the Broad River/Beaufort River/Port Royal Sound Basin (hydrologic unit code (HUC) 03050208) of the larger Salkehatchie River Basin in South Carolina. No SCDHEC water quality monitoring stations (WQMS) are located within PSA and there are no streams within the

PSA having a WQMS. WQMS RO-14351 was identified several miles downstream of the project and indicated an impairment for dissolved oxygen (DO). A total maximum daily load (TMDL) has not been established for the basin. The contractor will be required to minimize possible water quality impacts through implementation of BMPs, reflecting policies contained in 23 CFR 650B and the Department's Supplemental Specification on Erosion Control Measures (latest edition) and Supplemental Technical Specifications on Seeding (latest edition). Other measures including seeding, silt fences, sediment basins, etc. as appropriate will be implemented during construction to minimize impacts to water quality. See Appendix E Waters Information.

Wetlands and Streams

Field reviews within the PSA were conducted to identify the presence of potential Waters of the U.S. (WOUS) on October 19, 2023 and November 20, 2023. The boundaries of jurisdictional waters, including wetlands, were flagged (delineated) in the field. Potential WOUS identified and delineated within the PSA totaled approximately 3 acres of freshwater wetlands. These waters are presumed jurisdictional for purposes of the project. Wetlands were assessed based on the "Revised Definition of Waters of the United States", published on January 18, 2023 and effective March 20, 2023 (33 CFR Part 328). A copy of the delineation figures are included in **Appendix E Waters Information**. No jurisdictional streams were identified in the PSA.

Permitting

Unavoidable impacts to WOUS will occur as part of constructing the bridge to current design standards and required CSXT requirements. Based on the conceptual design, the project meets the requirements and conditions of USACE SCDOT Regional General Permit for Bridge Replacements 4 (RGP4). The SCDOT will obtain the RGP4 and required mitigation for the project through coordination with the USACE.

If the design changes in such a way that conditions and requirements of RGP 4 are not met or alterations occur differing from the approved RGP4, a permit modification may be required. The contractor shall coordinate with the SCDOT Environmental Services Office (ESO) on all permitting activities including permit modifications as necessary.

The RGP4 has been certified by the SCDHEC Bureau of Water Section 401 Division (BOW) and SCDHEC Office of Ocean and Coastal Resource Management (OCRM).

Floodplains

Floodplain and floodway protection is required under several federal, state, and local laws, including Executive Order 11988, entitled "Floodplain Management," which requires federal

agencies to avoid making modifications to and supporting development in floodplains wherever practical. Floodplains subject to inundation by the one-percent-annual-chance (100 year) flood event are regulated by the Federal Emergency Management Agency (FEMA).

Based upon a review of the floodplain mapping FIRM Maps (see **Appendix E Waters**), a majority of the project is located in Zone X (non-flood zone). Only a small portion of the PSA near the southern boundary of the PSA is designated as an AE flood zone. Zone AE floodplains are areas inundated by 1% annual chance flooding, for which Base Flood Elevations have been developed. The proposed project maintains the existing alignment and does not encroach on the AE flood zone. Therefore no impacts to floodplains would occur.

Threatened and Endangered Species

Pursuant to Section 7 of the Endangered Species Act (ESA), field surveys were conducted for protected species and their habitats within the PSA on September 27, 2023. No federally protected species were observed during field surveys. Based on the projects' utilization of the existing alignment and limited footprint expansion, a determination of "no effect" was made for the listed species. In the event that a change in species listing occurs during construction, the contractor shall coordinate with ESO staff in preparing necessary documentation to address the change and submit it to ESO to complete Section 7 consultation. These species and the findings are detailed in **Appendix F Biological Assessment**.

Noise

The SCDOT Traffic Noise Abatement Policy (February 24, 2023) applies to all Type I Federal Highways Administration (FHWA) projects that receive Federal-aid funds or are subject to FHWA approval. This project does not meet the definition of a Type 1 project and there are no noise-sensitive receptors within the PSA therefore a noise analysis is not required.

Air Quality / Mobile Source Air Toxins (MSATs)

Hampton and Beaufort Counties are in attainment areas for National Ambient Air Quality Standards (NAAQS). As a result, both meet or exceed the standards established by the EPA for criteria pollutants and air quality. Restoring the bridge crossing would not cause air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxic (MSAT) concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause MSAT impacts.

Land Use

The PSA consists primarily of undeveloped forested areas, wetlands, forested areas that have been clear cut, and one commercial facility. Use of these areas are primarily for silviculture and business. The proposed project would result in minimal right of way impacts, WOUS impacts and may modify existing land through acquisition use but will not alter current practices or potential development in the area.

Farmlands

The Farmland Protection Policy Act (FPPA) of 1981 requires evaluation of farmland conversions to nonagricultural uses. Pursuant to 7 CFR § 658.3(c), the FPPA is intended to minimize Federal program impacts on the unnecessary and irreversible conversion of farmland. Farmland can be prime farmland, unique farmland, or farmland of statewide or local importance. Of the total PSA, 2.2 acres are designated as prime farmland 23.4 acres as farmland of statewide importance. Soils designated as farmland within and adjacent to the PSA are primarily undeveloped woodland habitat. Timber harvesting has occurred within the last 1.5 to 5 years on adjacent properties. The project will have no effects on the continuation of this practice.

In accordance with the FPPA, a Farmland Impact Conversion Rating Form for Corridor Type Projects (NRCS-CPA-106) was completed. Sites receiving scores less than 160 are given minimal consideration for protection. The proposed project received a Total Corridor Assessment score of 105. Since this Total Corridor Assessment score is under the 160-point threshold, neither consideration of alternative sites nor additional studies is required under the FPPA. The Farmland Impact Conversion Rating Form is located in **Appendix G Farmland Form**.

Hazardous Materials

On November 8, 2023 asbestos and lead-based paint survey was conducted for the bridge; see **Appendix H Lead and Asbestos Reports**. Asbestos was not found on any bridge components. Lead-Based paint was found on the steel girders and bearing plates. Recommendations for proceeding include that in the event that any suspect painted materials, not addressed in this survey, are encountered, the materials should be presumed coated with lead paint until laboratory analysis can be conducted. The existing structures shall be removed and disposed of by the Contractor in accordance with Subsection 202.4.2 of the Standard Specifications.

APPENDIX A
PROJECT LOCATION

US 17A/21 over CSX

General Location Map

Legend

US21/17A Emergency Bridge

Kline
Ehrhardt
St George
Moncks Corner
Huger
Francis Marion National F
Ridgeville
Girard
Allendale
Summerville
Sardis
Fairfax
Goose Creek
Cottageville
Hanahan
Walterboro
Hiltonia
Hampton
North Charleston
Mt Pleasant
Sylvania
Estill
Ravenel
Charleston
Yemassee
Johns Island
Folly Beach
Newington
Garnett
Kiawah Island
Edisto Island
Ridgeland
Edisto Beach
Statesboro
Beaufort
Brooklet
Port Royal
Springfield
Parris Island
Rincon
Hardeeville
Hilton Head Island
Pembroke
Ellabell
Google Earth
Image Landsat / Copernicus
N
20 mi

US 21/17A

Legend

Harold's Country Club

Major St

County Rd S-25-17

US Hwy 21

Leweountry Feed Bank

Castle Hall Rd

Alpha Genesis Primate Research Center

Le Creuset Rd

RADIO TOWER

Maltese Arms Shooting Club (Real Location)

Pocotaligo Rd

Riley Rd

7 TRACKS

5 TRACKS

4 TRACKS

US21/17A Emergency Bridge

Ferguson Forest Products, Inc

HAMPTON CO

Gregory Rd

Old Sheldon

Google Earth

Earth Point

2000 ft

US 17A/21 over CSX

Project Study Area

Legend

Maltese Arms Shooting Club (Real Location)

Castle Hall Rd

Ferguson Forest Products, Inc

Gregory Rd

Google Earth

N

1000 ft


A 444.1
US 17-21


A 444.1
US17-21

APPENDIX B
CORRESPONDENCE

South Carolina
Department of Transportation

MEMORANDUM

TO: **Christy A. Hall, P.E., Secretary of Transportation**

FROM: **Rob Perry, P.E., Chief Engineer for Bridges**

Date: **September 28, 2023**

RE: **US 21/17A over CSX Railroad Emergency Bridge Replacement**
Project ID P042942

As a result of the bridge strike by a CSX train derailment on September 20, 2023 (FHWA Event Title SC23-1), one bridge along US 21/17A (Frampton Road) that spans the CSX Railroad was damaged and is in need of replacement.

The work required at this location is beyond the capability of the Department's maintenance forces. This bridge is currently closed to traffic and, due to the impact of the detours to the public and its impact to a hurricane evacuation route, it is recommended that the procurement of services be expedited.

It is also recommended that a design-build contract be utilized for construction of this bridge. An emergency procurement as outlined in the SCDOT Design-Build Procurement Manual, providing a single RFP phase, is recommended. This approach will provide the most expeditious solution with the least disruption to vehicular traffic and inconvenience to the general public while insuring an acceptable level of competition to ensure the best value. Please indicate below as to your concurrence to these recommendations.

Recommended for Approval:

Randy Young, P.E.
Interim Deputy Secretary for Engineering

Approved By:

Christy A. Hall, P.E.
Secretary of Transportation

Attachments:
TAC:cg
ec: Chris Gaskins, P.E., P.G., Director of Alternative
Andy Leaphart, P.E., Chief Engineer for Operations
Rob Quetti, Acting Chief of Financial Planning
Brent Rewis, P.E., Deputy Secretary for Intermodal Planning
John Boylston, P.E., Director of Preconstruction

Post Office Box 191
955 Park Street
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Robbie Isgett, P.E., Director of Construction
Chad Long, AICP, Director of Environmental
Mike Barbee, P.E., Director of Rights of Way
Machael Peterson, Director of Planning
Jen Necker, Regional Production Engineer – Lowcountry
Tim Henderson, P.E., District 6 Engineering Administrator
Barbara Wessinger, Chief Counsel
Carmen Wright, Chief Procurement Officer for Project Delivery
Emily Lawton, FHWA Division Administrator

File: PW

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SCDOT
South Carolina
Department of Transportation

Christy A. Hall, P.E.
Secretary of Transportation
803-737-0874 | 803-737-2038 Fax

September 21, 2023

Ms. Emily Lawton
Division Administrator
Federal Highway Administration
1835 Assembly Street, Suite 1270
Columbia, South Carolina 29201

Dear Administrator Lawton:

Thank you and your staff for your close coordination associated with the September 20, 2023 derailment of a CSX Railroad train under the US-21 bridge in Beaufort County, asset ID 834. My staff and I continue to appreciate the close partnership with the South Carolina Division Office.

Under the provisions of Title 23, USC, Section 125, the South Carolina Department of Transportation (SCDOT) requests approval of emergency relief funding to assist in the cost of repairing damages necessary to restore vehicular traffic on US-21 at the county line of Beaufort and Hampton County. The US-21 bridge experienced catastrophic damage due to the freight collision on September 20, 2023. The damage required immediate closure of the bridge.

In coordination with you and your staff, we determined that due to the significant damage sustained to the bridge, repairing the bridge was not a feasible option. In the interim, at the request of CSX Railroad, SCDOT is allowing CSX Railroad to take emergency actions to shore up the bridge in order to return their rail operations to normal service. However, traffic on the US-21 bridge will remain detoured until a new bridge can be constructed. As you know, US-21 is a designated hurricane evacuation route and as such cannot remain closed in perpetuity. SCDOT will pursue an expedited design-build contract to ensure a timely completion of the bridge replacement.

A copy of Governor McMaster's emergency declaration regarding this event is enclosed. Based on the preliminary estimate, SCDOT hereby requests that emergency relief funds in the amount of $12 Million be made available to cover the cost of all phases of work to replace the bridge to include $1.0 Million in quick release funding. SCDOT will continue to refine the cost estimate as we move forward with the expedited design-build procurement in concert with your staff. Again, thank you for your close coordination during this event.

Sincerely,

Christy A. Hall, P.E.
Secretary of Transportation

Enclosures
ec: Randy Young, P.E., Interim Deputy Secretary for Engineering
Maggie Hendry, Acting Deputy Secretary for Finance and Administration

Post Office Box 191
955 Park Street
Columbia, SC 29202-0191

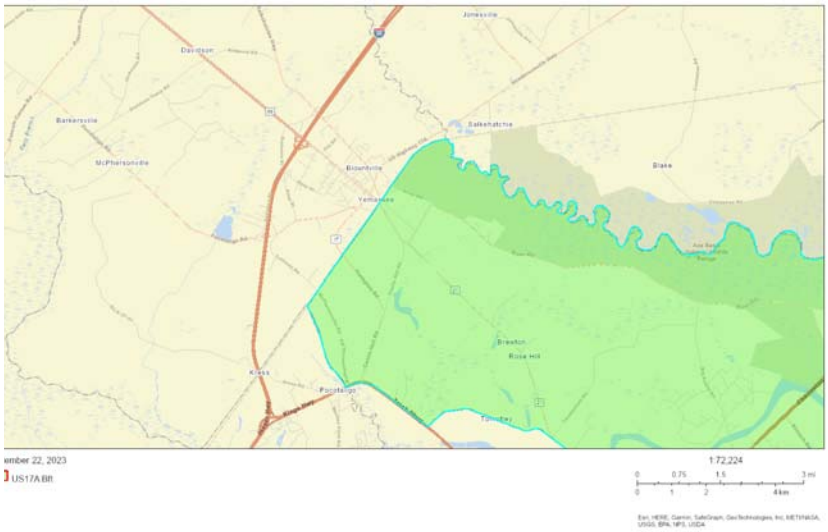
APPENDIX C
ENVIRONMENTAL JUSTICE

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Beaufort County, SC

Blockgroup: 450130001002
Population: 1,380
Area in square miles: 52.94



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	99%
Spanish	1%
Total Non-English	1%

COMMUNITY INFORMATION

Low income: 45 percent
People of color: 84 percent
Less than high school education: 7 percent
Limited English households: 0 percent
Unemployment: 4 percent
Persons with disabilities: 17 percent
Male: 44 percent
Female: 56 percent
81 years
Average life expectancy
$30,321
Per capita income
Number of households: 657
Owner occupied: 67 percent

BREAKDOWN BY RACE

White: 16%
Black: 84%
American Indian: 0%
Asian: 0%
Hawaiian/Pacific Islander: 0%
Other race: 0%
Two or more races: 0%
Hispanic: 0%

BREAKDOWN BY AGE

From Ages 1 to 4	0%
From Ages 1 to 18	10%
From Ages 18 and up	90%
From Ages 65 and up	17%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	0%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

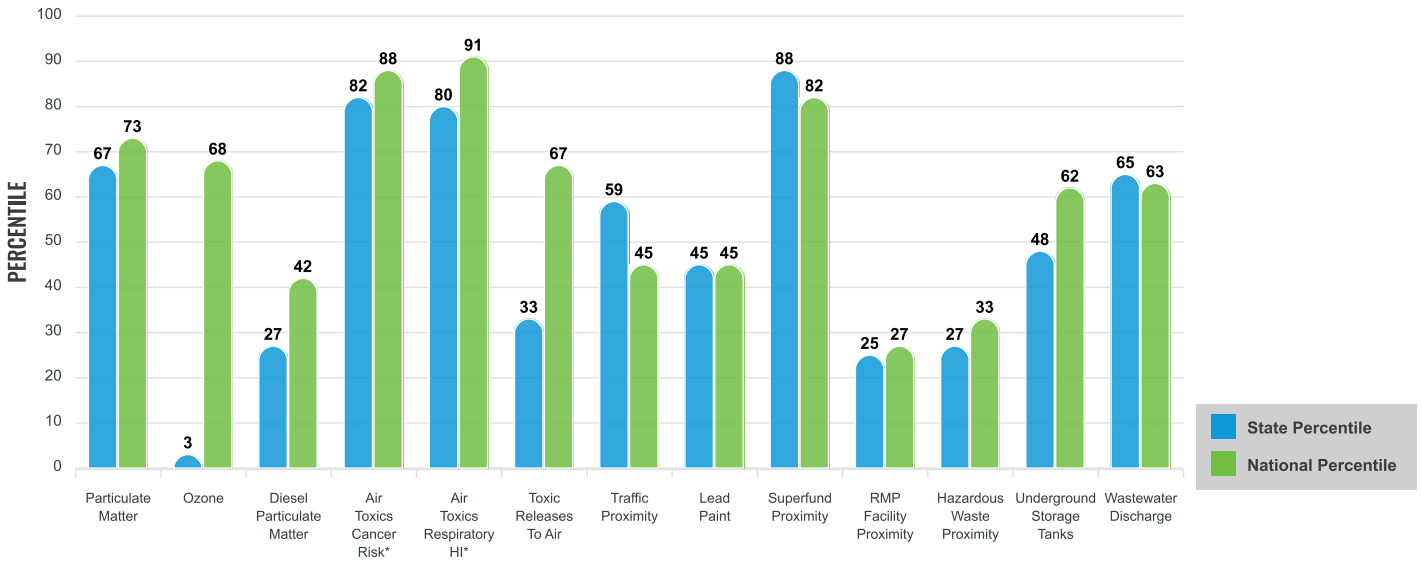
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

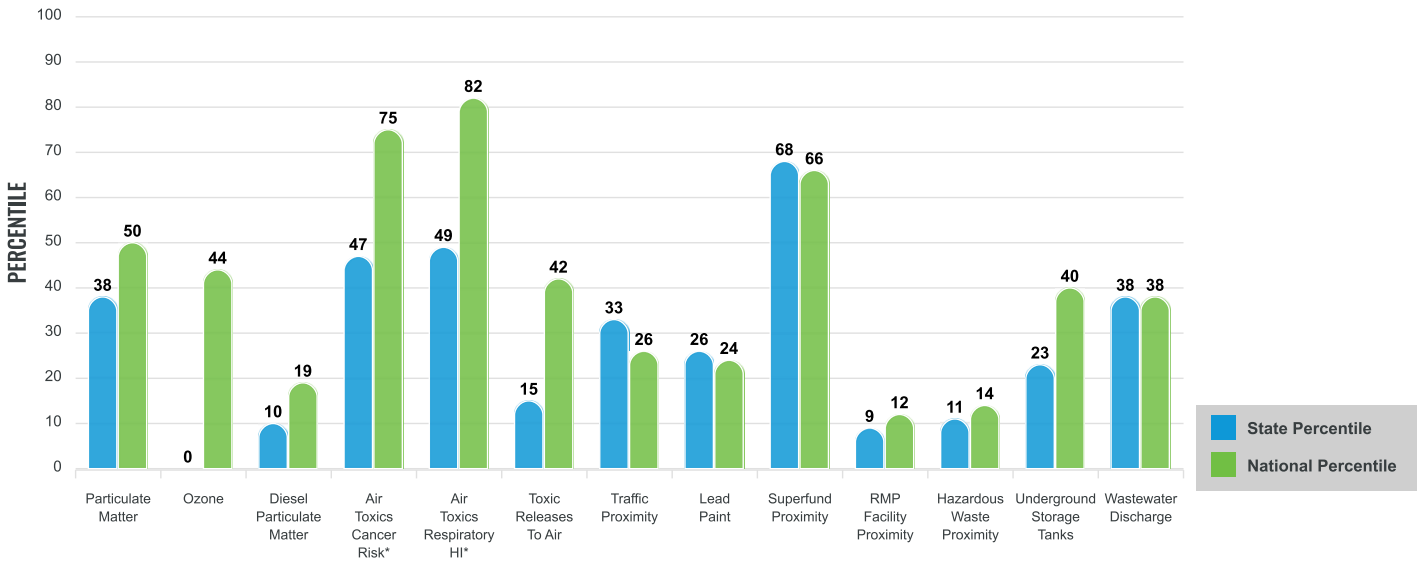
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for Blockgroup: 450130001002

www.epa.gov/ejscreen

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	7.78	8.07	34	8.08	39
Ozone (ppb)	59.2	62.6	1	61.6	33
Diesel Particulate Matter (µg/m^3)	0.0949	0.188	10	0.261	14
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	9	25	52
Air Toxics Respiratory HI*	0.4	0.41	18	0.31	70
Toxic Releases to Air	190	3,000	14	4,600	31
Traffic Proximity (daily traffic count/distance to road)	11	63	28	210	17
Lead Paint (% Pre-1960 Housing)	0.012	0.16	20	0.3	16
Superfund Proximity (site count/km distance)	0.068	0.091	62	0.13	54
RMP Facility Proximity (facility count/km distance)	0.043	0.3	9	0.43	8
Hazardous Waste Proximity (facility count/km distance)	0.051	0.42	10	1.9	10
Underground Storage Tanks (count/km^2)	0.11	2.9	20	3.9	28
Wastewater Discharge (toxicity-weighted concentration/m distance)	7.2E-05	1	33	22	28
SOCIOECONOMIC INDICATORS					
Demographic Index	64%	37%	86	35%	86
Supplemental Demographic Index	14%	15%	47	14%	58
People of Color	84%	38%	91	39%	85
Low Income	45%	36%	66	31%	75
Unemployment Rate	4%	6%	48	6%	47
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	7%	13%	35	12%	43
Under Age 5	0%	5%	0	6%	0
Over Age 64	17%	19%	49	17%	57
Low Life Expectancy	17%	21%	10	20%	23

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund 0
Hazardous Waste, Treatment, Storage, and Disposal Facilities 0
Water Dischargers 1
Air Pollution 1
Brownfields 0
Toxic Release Inventory 0

Other community features within defined area:

Schools 0
Hospitals 0
Places of Worship 6

Other environmental data:

Air Non-attainment ..... No
Impaired Waters ..... Yes

Selected location contains American Indian Reservation Lands* ..... No
Selected location contains a "Justice40 (CEJST)" disadvantaged community ..... Yes
Selected location contains an EPA IRA disadvantaged community ..... Yes

Report for Blockgroup: 450130001002

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	17%	21%	10	20%	23
Heart Disease	7.5	6.8	63	6.1	77
Asthma	10.4	10.4	52	10	66
Cancer	6.7	6.4	65	6.1	62
Persons with Disabilities	18.2%	15%	72	13.4%	80

CLIMATE INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	15%	12%	81	12%	79
Wildfire Risk	51%	19%	80	14%	86

CRITICAL SERVICE GAPS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	33%	19%	83	14%	91
Lack of Health Insurance	7%	11%	32	9%	54
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

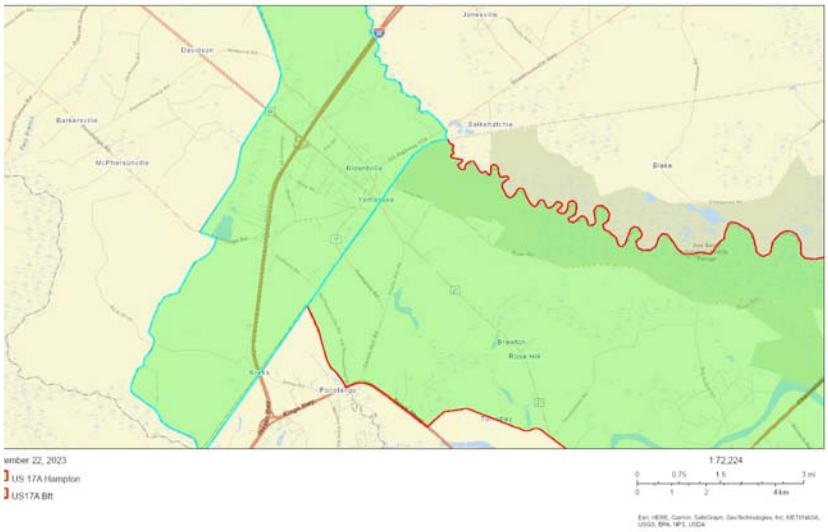
Report for Blockgroup: 450130001002

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Yemassee, SC

Blockgroup: 450499203002
Population: 805
Area in square miles: 21.92



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	100%

COMMUNITY INFORMATION

Low income: 49 percent
People of color: 67 percent
Less than high school education: 23 percent
Limited English households: 0 percent
Unemployment: 4 percent
Persons with disabilities: 27 percent
Male: 40 percent
Female: 60 percent
74 years
Average life expectancy
$20,526
Per capita income
Number of households: 288
Owner occupied: 65 percent

BREAKDOWN BY RACE

White: 33%
Black: 65%
American Indian: 0%
Asian: 0%
Hawaiian/Pacific Islander: 0%
Other race: 0%
Two or more races: 2%
Hispanic: 0%

BREAKDOWN BY AGE

From Ages 1 to 4	7%
From Ages 1 to 18	34%
From Ages 18 and up	66%
From Ages 65 and up	20%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	0%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

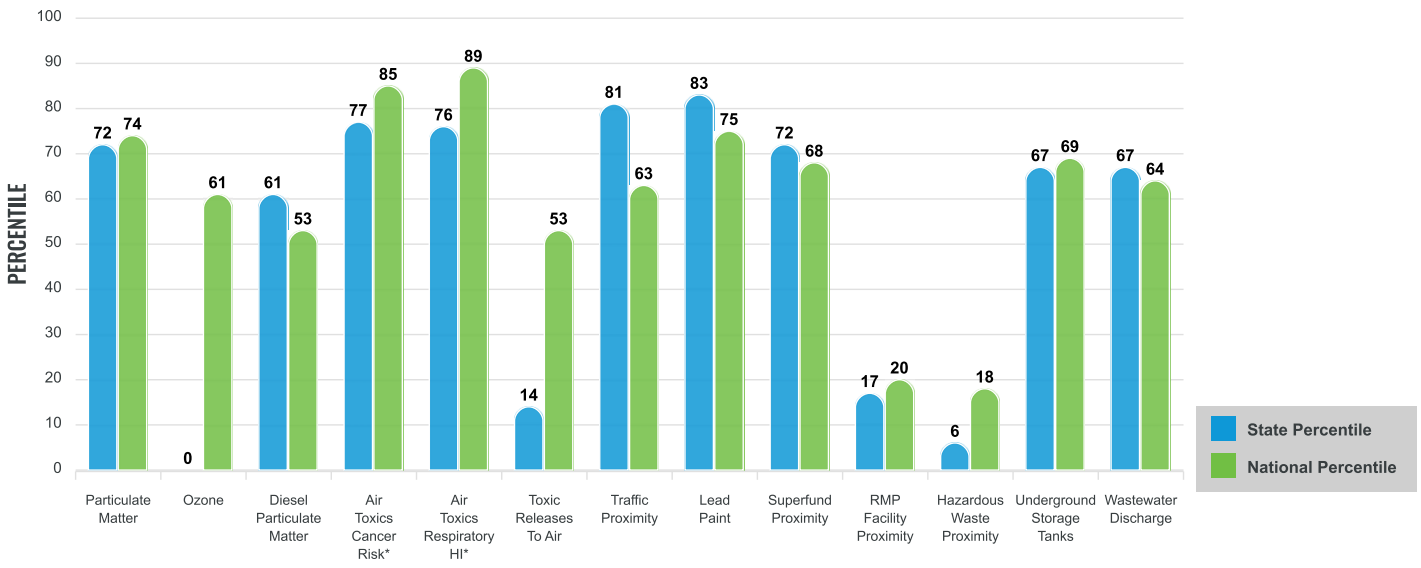
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

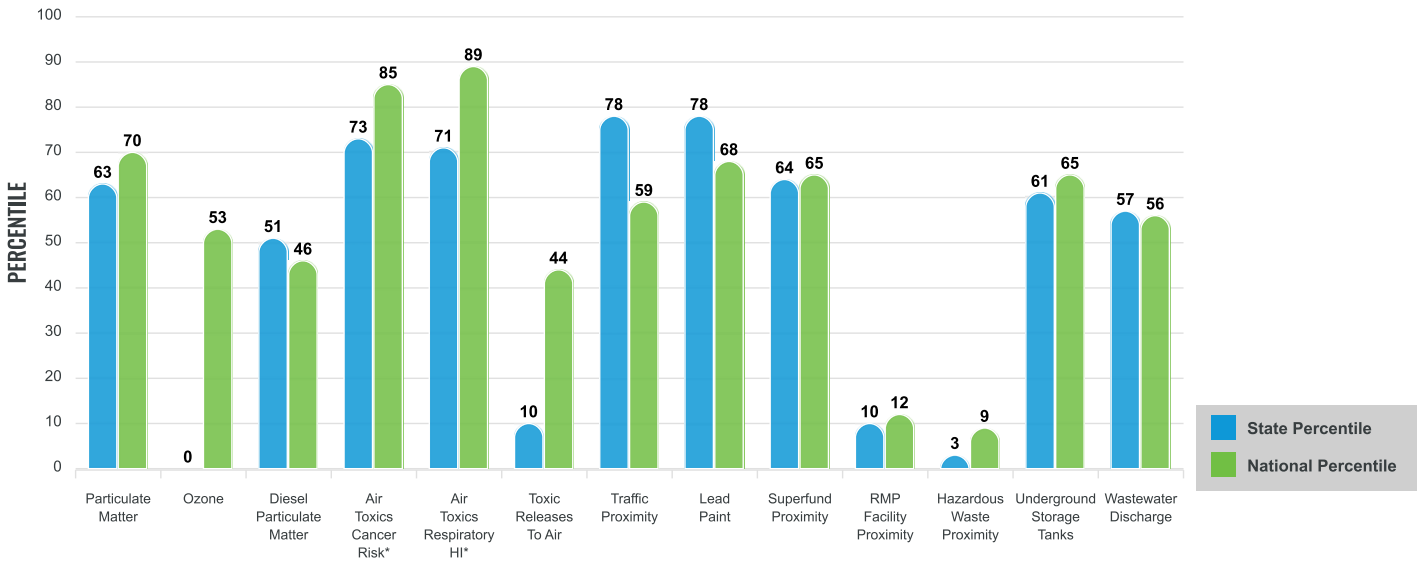
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for Blockgroup: 450499203002

www.epa.gov/ejscreen

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	8.04	8.07	43	8.08	45
Ozone (ppb)	58.7	62.6	0	61.6	29
Diesel Particulate Matter (µg/m^3)	0.124	0.188	30	0.261	23
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	9	25	52
Air Toxics Respiratory HI*	0.4	0.41	18	0.31	70
Toxic Releases to Air	93	3,000	6	4,600	23
Traffic Proximity (daily traffic count/distance to road)	40	63	58	210	35
Lead Paint (% Pre-1960 Housing)	0.17	0.16	67	0.3	45
Superfund Proximity (site count/km distance)	0.041	0.091	41	0.13	37
RMP Facility Proximity (facility count/km distance)	0.036	0.3	7	0.43	6
Hazardous Waste Proximity (facility count/km distance)	0.034	0.42	2	1.9	5
Underground Storage Tanks (count/km^2)	0.53	2.9	40	3.9	40
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.00012	1	38	22	32
SOCIOECONOMIC INDICATORS					
Demographic Index	58%	37%	80	35%	81
Supplemental Demographic Index	20%	15%	76	14%	78
People of Color	67%	38%	81	39%	76
Low Income	49%	36%	72	31%	79
Unemployment Rate	4%	6%	54	6%	54
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	23%	13%	84	12%	85
Under Age 5	7%	5%	70	6%	69
Over Age 64	20%	19%	60	17%	66
Low Life Expectancy	24%	21%	76	20%	88

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund 0
Hazardous Waste, Treatment, Storage, and Disposal Facilities 0
Water Dischargers 0
Air Pollution 2
Brownfields 1
Toxic Release Inventory 0

Other community features within defined area:

Schools 1
Hospitals 0
Places of Worship 1

Other environmental data:

Air Non-attainment ..... No
Impaired Waters ..... Yes

Selected location contains American Indian Reservation Lands* ..... No
Selected location contains a "Justice40 (CEJST)" disadvantaged community ..... Yes
Selected location contains an EPA IRA disadvantaged community ..... Yes

Report for Blockgroup: 450499203002

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	24%	21%	76	20%	88
Heart Disease	7.3	6.8	59	6.1	74
Asthma	11.2	10.4	73	10	82
Cancer	6	6.4	36	6.1	45
Persons with Disabilities	19%	15%	77	13.4%	83

CLIMATE INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	12%	12%	75	12%	73
Wildfire Risk	50%	19%	80	14%	86

CRITICAL SERVICE GAPS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	23%	19%	67	14%	80
Lack of Health Insurance	6%	11%	25	9%	47
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for Blockgroup: 450499203002

APPENDIX D
CULTURAL RESOURCES

MEMORANDUM OF AGREEMENT BETWEEN
THE FEDERAL HIGHWAY ADMINISTRATION,
THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND THE SOUTH CAROLINA STATE HISTORIC PRESERVATION OFFICE

REGARDING THE US 17A/21 OVER CSX RAILROAD EMERGENCY BRIDGE REPLACEMENT, HAMPTON AND BEAUFORT COUNTY, SOUTH CAROLINA

WHEREAS, the Federal Highway Administration (FHWA), in cooperation with the South Carolina Department of Transportation (SCDOT), proposes to replace the United States (US) Route 17A/21 Bridge over CSX Railroad in Hampton and Beaufort County; and

WHEREAS, the SCDOT has defined the undertaking's area of potential effects (APE) as a corridor 2,500 feet (762 meters) from either end of the bridge and 100 feet (30 meters) from the road centerline as shown in Attachment 1; and

WHEREAS, the FHWA has determined that the US 17A/21 bridge replacement project over CSX Railroad in Hampton and Beaufort County, South Carolina, will have an adverse effect upon Archaeological Site 38HA1138, a property determined eligible for inclusion in the National Register of Historic Places, and

WHEREAS, the FHWA and the SCDOT have consulted with the South Carolina State Historic Preservation Office (SHPO) in accordance with Section 106 of the National Historic Preservation Act (54 U.S.C. 306108) and its implementing regulations (36 CFR Part 800) to resolve adverse effects, and

WHEREAS, the FHWA and the SCDOT have notified the Tribal Historic Preservation Offices (THPO's) of the Catawba Nation, the Muscogee (Creek) Nation, and the Eastern Shawnee Tribe of Oklahoma about the undertaking's anticipated impacts on historic properties, as required by 36 C.F.R. § 800.6; and

WHEREAS, the FHWA and the SCDOT has conducted public outreach and invited comment on project alternatives through the development of a public involvement plan, project website, postcards notifying property owners, and a month long public comment period, and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), the FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination providing the specified documentation, and the ACHP has chosen to not to participate, and

NOW, THEREFORE, the FHWA, the SCDOT, and the South Carolina SHPO agree that the undertaking will be implemented according to the following stipulations in order to take into account the effects of the undertaking on Archaeological Site 38HA1138.

I. STIPULATIONS

The FHWA and the SCDOT will ensure that the following stipulations are implemented:

A. The proposed construction will result in unavoidable impacts to portions of Site 38HA1138. SCDOT plans to mitigate through a data recovery effort to excavate, preserve, and document the presence and characteristics of any buried features on the site within the proposed project area.

B. SCDOT's archaeological consultant, or staff, will develop, in coordination with the South Carolina SHPO a treatment plan for data recovery investigations at Archaeological Site 38HA1138. The treatment plan will include a description of the project's research design and sampling strategy. A burial discovery plan will also be developed and attached to the treatment plan. The treatment plan will be submitted to the South Carolina SHPO for review and approval prior to any fieldwork. The South Carolina SHPO will make a reasonable effort to review the treatment plan(s) no later than thirty days after receipt.

C. All plans and reports developed for the treatment of Archaeological Site 38HA1138 shall incorporate guidance from the Secretary of the Interior's "Standards and Guidelines for Archaeological Documentation" (48 FR 44734-37) and the President's Advisory Council on Historic Preservation publication, Treatment of Archaeological Properties (ACHP 1980). In addition, these materials will be consistent with South Carolina Standards and Guidelines for Archaeological Investigations (2013) [or most recent update].

D. An opportunity will be provided for at least one on-site meeting between the SCDOT, the FHWA, and the South Carolina SHPO during the field investigations in order to discuss any necessary revisions to the original scope of work. Any revisions made to the original scope of work will be attached to the approved treatment plan and this agreement.

E. Copies of the draft technical report of data recovery investigations will be submitted to the South Carolina SHPO for review and approval within twelve (12) months from the last day of fieldwork. The draft technical report will be consistent with the standards outlined in South Carolina Standards and Guidelines for Archaeological Investigations (2013) [or most recent update]. The South Carolina SHPO reserves the right to submit the draft technical report to qualified professional archaeologists for the purpose of peer review.

F. Within three (3) months of draft report approval, SCDOT will provide one Portable Document Format (PDF) and one bound copy of the final technical report for the South Carolina SHPO and two bound copies and one compact disk containing a PDF copy of the final technical report for the South Carolina Institute of Archaeology and Anthropology (SCIAA).

G. The SCDOT, in coordination with the SHPO will ensure that all artifacts recovered during archaeological investigations are stabilized and processed for curation at SCIAA. Copies of all records, including but not limited to field notes, maps, catalogue sheets, and representative photographs and negatives will be submitted for curation with the

artifacts. SCDOT will supply the SHPO with documentation that SCIAA has received and accepted the collection.

H. SCDOT, and the SHPO will consult to determine the appropriate format for a public education component. SCDOT will ensure that a public education plan is developed and submitted to the SHPO with the draft technical report. All public education materials will be completed within two (2) years from the last day of fieldwork.

II. Duration

This MOA shall be null and void if its terms are not carried out within five (5) years from the date of its execution, unless the signatories agree in writing to an extension for carrying out its terms.

III. Late Discoveries

If unanticipated cultural materials (e.g., large, intact artifacts or animal bones; large soils stains or patterns of soil stains; buried brick or stone structures; clusters of brick or stone) or human skeletal remains are discovered during construction activities, then the Resident Construction Engineer shall be immediately notified and all work in the vicinity of the discovered materials shall cease until an evaluation can be made by the SCDOT archaeologist in consultation with the South Carolina SHPO.

IV. Monitoring and Reporting

Each year following the execution of this MOA until it expires or is terminated, the SCDOT shall provide all parties to this MOA a summary report detailing work carried out pursuant to its terms. Such reports shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in FHWA's and SCDOT's efforts to carry out the terms of this MOA.

V. Dispute Resolution

The FHWA, the SCDOT, and the South Carolina SHPO will attempt to resolve any disagreement arising from the implementation of the MOA. This will include any disputes that arise concerning the contents of the report(s), including but not limited to its merit as a cultural resource management document.

In the event that the terms of this agreement cannot be carried out, the FHWA and SCDOT will submit a new (or amended) MOA to the South Carolina SHPO, and the ACHP for review. If consultation to prepare a new MOA or amendments proves unproductive, the FHWA will seek ACHP comment in accordance with 36 CFR § 800.6(b)(2).

VI. Amendment and Modification

Any signatory to this MOA may request that it be amended or modified at any time, whereupon the parties will consult with each other to consider such amendment or modification.

VII. Termination

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation VI, above. If within (30) days an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, the FHWA and the SCDOT must either (a) execute an MOA pursuant to 36 CFR § 800.6, or (b) request comments from the ACHP under 36 CFR § 800.7. The FHWA and the SCDOT will notify the signatories as to the course of action it will pursue.

EXECUTION of this Memorandum of Agreement by the Federal Highway Administration, the South Carolina Department of Transportation, and the South Carolina State Historic Preservation Office and implementation of its terms, is evidence that the FHWA has taken into account the effects of the undertaking on Archaeological Site 38HA1138 in accordance with Section 106 of the National Historic Preservation Act (54 U.S.C. Sec. 306108) and its implementing regulations (36 CFR Part 800).

SIGNATORIES:

Federal Highway Administration

By: J. Shane Belcher Date: 12/7/23

South Carolina Department of Transportation

By: [signature] Date: 12/6/23

South Carolina State Historic Preservation Office

By: Elizabeth M. Johnson Date: 12/6/2023

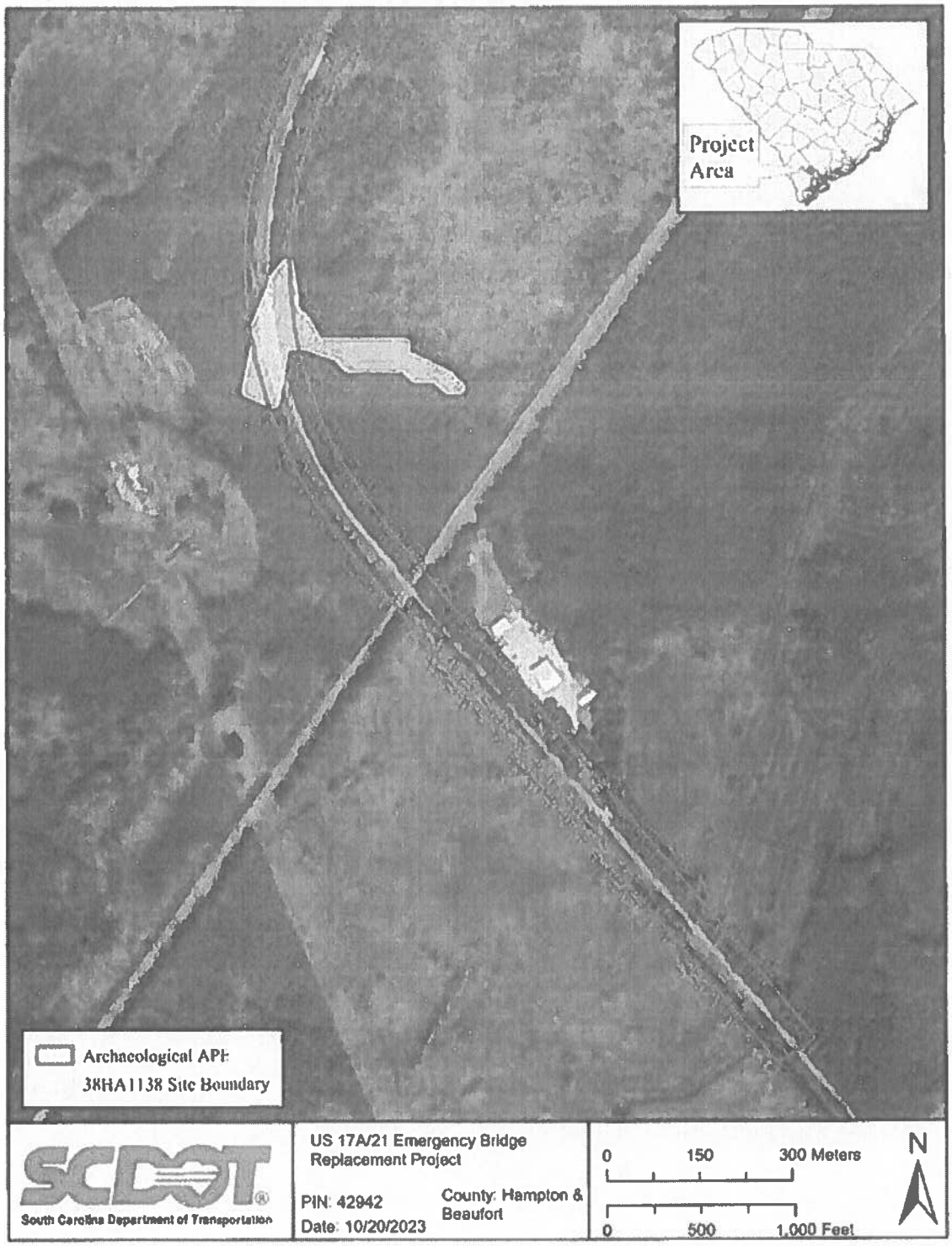


Figure 1. US 17A/21 over CSX Railroad Emergency Bridge Replacement APE Map

Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Office 803-328-2427

December 6, 2023

Attention: Rebecca Shepherd
SCDOT
P.O. Box 191
Columbia, SC 29202-0191

Re. THPO #	TCNS #	Project Description
2024-66-2		Cultural Resources Survey of the US 17A/21 over CSX Railroad Emergency Bridge Replacement Project, Hampton and Beaufort Co., SC

Dear Ms. Shepherd,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail Caitlin.Rogers@catawba.com.

Sincerely,

Caitlin Rogers for

Wenonah G. Haire
Tribal Historic Preservation Officer

South Carolina
Department of Transportation

November 2, 2023

Ms. Mary Sherrer
Review Coordinator for Transportation Projects
State Historic Preservation Office
SC Department of Archives & History
8301 Parklane Road
Columbia, SC 29223

RE: Cultural Resources Survey of the US 17A/21 over CSX Railroad Emergency Bridge Replacement Project, Hampton and Beaufort County, South Carolina

SCDOT Project #: P042942

Dear Ms. Sherrer:

Please find attached a copy of the above referenced report that describes cultural resources investigations conducted for the proposed emergency replacement of the US 17A/21 Bridge over CSX Railroad in Hampton and Beaufort County, South Carolina.

The South Carolina Department of Transportation (SCDOT) in coordination with the Federal Highway Administration (FHWA) proposes to replace US 17A/21 Bridge over CSX Railroad, located southwest of the city of Yemassee at the county line of Hampton and Beaufort counties. The bridge was struck by derailed train cars on September 20, 2023. Substructure damage to the northern abutment shoring wall and piles rendered the bridge damaged beyond repair and unsafe for vehicular traffic. US 17A/21 was immediately closed and detoured and will remain so until the replacement is completed. US17A/21 is a dedicated hurricane evacuation route at this location and is of state and regional importance for emergency events that may require departure from the coastal areas. The replacement will be constructed to meet current design standards, meet desired rail requirements, and correct geometric deficiencies. The project area extends approximately 2,500 feet from either end of the bridge along US 17A/21 and 100-feet from the road centerline. The archaeological survey examined the project area. The architectural survey examined the project area and a 300-ft buffer surrounding project area.

The architectural survey identified one above ground resource. SHPO Site Number 5644 is the current bridge carrying US 17A/21 over CSX Railroad. The bridge was constructed in 1938 altered in 1953. It is recommended **not eligible** for the National Register of Historic Places (NRHP).

The archaeological survey identified one Pre-Contact Native American archaeological site with a minor indeterminate Post-Contact artifact scatter component. 38HA1138 is a Late Archaic to Middle Woodland and possible Contact period ceramic and lithic scatter located along the southeastern rim of a Carolina Bay. The site likely represents short-term, seasonal resource extraction encampments. The site exhibits strong vertical and horizontal integrity. Although no features were identified during the current investigations, the dense quantity of artifacts suggests intact features may be present. A low number of intact, contemporaneous sites have been identified in Hampton County. Additional work at the site could contribute to our current understanding of

the Ceramic Late Archaic, Middle Woodland and/or Contact sub-periods, particularly with respect to the Native American settlement on Carolina Bays in Hampton County and the South Carolina Coastal Plain as a whole. Therefore, 38HA1138 is recommended **eligible** for listing on the NRHP under Criterion D. Furthermore, it is recommended that Section 4(f) of the United States Department of Transportation Act of 1966 shall not apply to this site as it is primarily important due to its potential to provide significant information about the past with minimal value for preservation in place.

Avoidance of site 38HA1138 is not practical due to the design constraints imposed by this on-alignment bridge replacement, which calls for improvements/modifications to the existing approach roadways rather than construction of new approach roads. As the site spans the current alignment of US 17A/21, the relocation of the roadway to the extent necessary to completely avoid the site would require a radical redesign of the proposed project. Efforts were taken to minimize impacts to the site, but it was not possible to eliminate impacts completely. Therefore the US 17A/21 bridge replacement will have an adverse impact on site 38HA1138.

Based on the results of the background research and field investigations, the Department has determined that **one historic property will be affected** by the proposed undertaking. SCDOT recommends that the adverse effect on site 38HA1138 be mitigated through a data recovery effort to excavate, preserve, and document the presence and characteristics of any buried features on the site within the proposed project area. A draft Memorandum of Agreement listing proposed stipulations and protocols governing the data recovery effort is appended to the end of the attached report.

Per the terms of the Section 106 Programmatic Agreement executed on October 6, 2017, the Department is providing this information on behalf of the Federal Highway Administration as an agency official designee, as defined under 36 CFR 800.2, to ensure compliance with Section 106 of the National Historic .

It is requested that you review the enclosed material, and, if appropriate, indicate your concurrence in the Department's findings. **Please respond within 30 days if you have any objections or if you have need of additional information.**

Sincerely,

Rebecca Shepherd
Chief Archaeologist

RES:res
Enclosures: Cultural resources survey report

I ~~(do not)~~ concur in the above determination.

Signed: _____ Date: 11/6/23

ec: Shane Belcher, FHWA
LeeAnne Wendt, Muscogee (Creek) Nation
Brett Barnes, Eastern Shawnee

cc: Wenonah G. Haire, Catawba Nation
Keith Derting, SCIAA

From:	Belcher, Jeffrey (FHWA)
To:	McGoldrick, Will
Subject:	RE: FHWA-SC: Notice of Adverse Effect; US 17A/21 Emergency Bridge Replacement over CSX Railroad, Beaufort & Hampton Counties, SC
Date:	Wednesday, November 29, 2023 12:47:58 PM

I did not receive anything. Based on guidance we are free to move forward with finalizing the MOA for signature. Once signed I'll file it with ACHP to complete the Section 106 process.

J. Shane Belcher
Lead Environmental Specialist
Federal Highway Administration
1835 Assembly Street, Suite 1270
Columbia, SC 29201
Phone: 803-253-3187

From: McGoldrick, Will <McGoldriWR@scdot.org>
Sent: Wednesday, November 29, 2023 11:44 AM
To: Belcher, Jeffrey (FHWA) <Jeffrey.Belcher@dot.gov>
Subject: RE: FHWA-SC: Notice of Adverse Effect; US 17A/21 Emergency Bridge Replacement over CSX Railroad, Beaufort & Hampton Counties, SC

Shane,
So is this considered complete now? We're past the 15 days. Did you get a request for them to participate?

-WM

From: Belcher, Jeffrey (FHWA) <Jeffrey.Belcher@dot.gov>
Sent: Tuesday, November 7, 2023 10:05 AM
To: e106@achp.gov

Cc: McGoldrick, Will <McGoldriWR@scdot.org>; ejohnson <ejohnson@scdah.sc.gov>; Sherrer, Mary <msherrer@scdah.sc.gov>
Subject: FHWA-SC: Notice of Adverse Effect; US 17A/21 Emergency Bridge Replacement over CSX Railroad, Beaufort & Hampton Counties, SC

The Federal Highway Administration, South Carolina Division Office is notifying the ACHP as required by 36 CFR Part 800.6(a)(1) of an adverse effect that will occur as a result of the proposed Emergency Bridge Replacement of the US 17A/21 Bridge over the CSX Railroad in Beaufort and Hampton Counties, South Carolina. The bridge was struck by derailed train cars on September 20, 2023. Substructure damage to the northern abutment shoring wall and piles rendered the bridge damaged beyond repair and unsafe for vehicular traffic. US 17A/21 was immediately closed and detoured and will remain so until the replacement is completed. US17A/21 is a dedicated hurricane evacuation route at this location and is of state and regional importance for emergency events that may require departure from the coastal areas. The replacement will be constructed to meet current design standards, meet desired rail requirements, and correct geometric deficiencies. Modifications to the approach roadway on the north side of the bridge will result in adverse impacts to archaeological site 38HA1138, a Late Archaic through Late Woodland Period site that is recommended eligible for the National Register of Historic Places (NRHP) under Criterion D. Attached are the required documents per 36 CFR Part 800.11(e) for your use to include, a Cultural Resource Survey that includes a description of the methodology for identifying historic resource and the APE; coordination with SHPO/THPOs, and a draft Memorandum of Agreement (MOA). The draft MOA has been developed in coordination with the SHPO to address mitigation efforts for the project. The draft MOA is included for your review and comment. All mitigation stipulations agreed to during the Section 106 process will be included as commitments in the project's NEPA documentation.

Please feel free to reach me with any questions or concerns you may have regarding the project.

J. Shane Belcher
Lead Environmental Specialist
Federal Highway Administration
1835 Assembly Street, Suite 1270
Columbia, SC 29201
Phone: 803-253-3187

From:	Belcher, Jeffrey (FHWA)
To:	e106@achp.gov
Cc:	McGoldrick, Will; ejohnson; Sherrer, Mary
Subject:	FHWA-SC: Notice of Adverse Effect; US 17A/21 Emergency Bridge Replacement over CSX Railroad, Beaufort & Hampton Counties, SC
Date:	Tuesday, November 7, 2023 10:05:46 AM
Attachments:	P042942 US17 Emergency Bridge e106 form.pdf P042942 US17 Emergency Bridge Replacement CR Survey Report.pdf SHPO Concurrence_US 17A Emergency Bridge Replacement.pdf P042942 - US 17A Emergency Bridge Draft MOA 10-24-23.doc

The Federal Highway Administration, South Carolina Division Office is notifying the ACHP as required by 36 CFR Part 800.6(a)(1) of an adverse effect that will occur as a result of the proposed Emergency Bridge Replacement of the US 17A/21 Bridge over the CSX Railroad in Beaufort and Hampton Counties, South Carolina. The bridge was struck by derailed train cars on September 20, 2023. Substructure damage to the northern abutment shoring wall and piles rendered the bridge damaged beyond repair and unsafe for vehicular traffic. US 17A/21 was immediately closed and detoured and will remain so until the replacement is completed. US17A/21 is a dedicated hurricane evacuation route at this location and is of state and regional importance for emergency events that may require departure from the coastal areas. The replacement will be constructed to meet current design standards, meet desired rail requirements, and correct geometric deficiencies. Modifications to the approach roadway on the north side of the bridge will result in adverse impacts to archaeological site 38HA1138, a Late Archaic through Late Woodland Period site that is recommended eligible for the National Register of Historic Places (NRHP) under Criterion D. Attached are the required documents per 36 CFR Part 800.11(e) for your use to include, a Cultural Resource Survey that includes a description of the methodology for identifying historic resource and the APE; coordination with SHPO/THPOs, and a draft Memorandum of Agreement (MOA). The draft MOA has been developed in coordination with the SHPO to address mitigation efforts for the project. The draft MOA is included for your review and comment. All mitigation stipulations agreed to during the Section 106 process will be included as commitments in the project's NEPA documentation.

Please feel free to reach me with any questions or concerns you may have regarding the project.

J. Shane Belcher
Lead Environmental Specialist
Federal Highway Administration
1835 Assembly Street, Suite 1270
Columbia, SC 29201
Phone: 803-253-3187

message only

Advisory Council on Historic Preservation
Electronic Section 106 Documentation Submittal System (e106) Form
MS Word format

Send to: *e106@achp.gov*

Please review the instructions at www.achp.gov/e106-email-form prior to completing this form. Questions about whether to use the e106 form should be directed to the assigned ACHP staff member in the Office of Federal Agency Programs.

I. Basic information

1. **Purpose of notification.** Indicate whether this documentation is to:
   - ☒ Notify the ACHP of a finding that an undertaking may adversely affect historic properties
   - ☐ Invite the ACHP to participate in a Section 106 consultation
   - ☐ Propose to develop a project Programmatic Agreement (project PA) for complex or multiple undertakings in accordance with 36 C.F.R. 800.14(b)(3)
   - ☐ Supply additional documentation for a case already entered into the ACHP record system
   - ☐ File an executed MOA or PA with the ACHP in accordance with 800.6(b)(iv) (where the ACHP did not participate in consultation)
   - ☐ Other, please describe
     Click here to enter text.

2. ACHP Project Number (If the ACHP was previously notified of the undertaking and an ACHP Project Number has been provided, enter project number here and skip to Item 7 below): Click here to enter text.

3. **Name of federal agency** (If multiple agencies, list them all and indicate whether one is the lead agency):

Federal Highway Administration (FHWA)

4. **Name of undertaking/project** (Include project/permit/application number if applicable):

US 17A/21 over CSX Railroad Emergency Bridge Replacement Project

5. **Location of undertaking** (Indicate city(s), county(s), state(s), land ownership, and whether it would occur on or affect historic properties located on tribal lands):

The US 17A/21 bridge over CSX Railroad is located at the border of southeastern Hampton County and northern Beaufort County, approximately one mile southwest of the town of Yemassee. The bridge is surrounded by private land holdings. The bridge replacement would not occur on or affect historic properties located on tribal lands. (**see attached project location map**)

6. Name and title of federal agency official and contact person for this undertaking, including email address and phone number:

J. Shane Belcher
Lead Environmental Specialist
Federal Highway Administration
Phone: 803-253-3187
Email: Jeffery.Belcher@dot.gov

II. Information on the Undertaking*

7. Describe the undertaking and nature of federal involvement (if multiple federal agencies are involved, specify involvement of each):

The South Carolina Department of Transportation (SCDOT) proposes the emergency replacement of the US 17A/21 bridge over CSX Railroad in Hampton and Beaufort County, South Carolina.

Federal funds will be utilized for this bridge replacement project. The Federal Highway Administration the lead federal agency for the undertaking. FHWA is the only federal agency with an involvement in this project. The bridge was struck by derailed train cars on September 20, 2023. Substructure damage to the northern abutment shoring wall and piles rendered the bridge damaged beyond repair and unsafe for vehicular traffic. US 17A/21 was immediately closed and detoured and will remain so until the replacement is completed. US17A/21 is a dedicated hurricane evacuation route at this location and is of state and regional importance for emergency events that may require departure from the coastal areas. The replacement will be constructed to meet current design standards, meet desired rail requirements, and correct geometric deficiencies. Modifications to the approach roadway on the north side of the bridge will result in adverse impacts to archaeological site 38HA1138, a Late Archaic through Late Woodland Period site that is recommended eligible for the National Register of Historic Places (NRHP) under Criterion D.

8. Describe the Area of Potential Effects (APE):

The archaeological Area of Potential Effects (APE) for the project consists of land that will be acquired as new right-of-way (ROW) as well as those areas within existing ROW that are within the construction limits of the project. The archaeological APE is approximately 2,500 feet (762 meters from either end of the bridge and 100 feet (30 meters from the road centerline (**see attached APE map**).

9. Describe steps taken to identify historic properties:

The current project APE was surveyed for cultural resources in October of 2023. Steps to identify historic properties included a Phase I archaeological (shovel test) survey of the project study area, which consisted of a corridor along US 17A/21 that extended 2,500 feet from either side the bridge and 100 feet from either side of the road centerline, along with a survey for above ground resources within a buffer of 300 feet beyond the project study area. In order to adequately evaluate site 39HA1138 for inclusion on the NRHP, a full shovel test delineation of the site outside of the limits of the project study area was undertaken, as well as limited Phase II testing through the excavation of strategically placed 50-by-50

centimeter test units.

10. Describe the historic property (or properties) and any National Historic Landmarks within the APE (or attach documentation or provide specific link to this information):

Archaeological site 38HA1138 is a Pre-Contact seasonal encampment dating to the Late Archaic through Middle Woodland Period (circa 3000 BC to 500 AD). The site measures 305 by 203 meters is situated on a Carolina Bay rim approximately 390 meters northwest of the bridge over CSX Railroad. US 17A/21 bisects the site.

Pre-contact artifacts recovered from the site include 449 ceramics, 131 lithics, and five faunal artifacts. Temporally diagnostic artifacts include 31 Late Archaic (Stallings or Thom's Creek) ceramics, and 35 Middle Woodland (Deptford and Wilmington) ceramics. Potential Contact Period (Ashley) ceramics were also identified. Artifacts were recovered from an average depth of 10-50 centimeters below surface (cmbs) and a maximum depth of 70 cmbs. The site exhibits strong horizontal and vertical integrity of cultural deposits. No features were encountered during the survey and site testing, but due to the dense concentration of artifact and deeply buried deposits the potential for features to be present is high. The site was recommended eligible for inclusion on the NRHP under Criterion D

A copy of the cultural resources survey documenting the site is appended to this document.

11. Describe the undertaking's effects on historic properties:

Modifications to the approach roadway on the north side of the bridge potentially including the addition of fill, excavation/modification of roadway cut banks and ditches, grading, clearing of vegetation, and paving will impact previously undisturbed archaeological deposits within the portions of site 38HA1138 surrounding the US 17A/21.

12. Explain how this undertaking would adversely affect historic properties (include information on any conditions or future actions known to date to avoid, minimize, or mitigate adverse effects):

Construction activities associated with the proposed US 17A/21 emergency bridge replacement project would damage/destroy intact archaeological deposits at site 38HA1138 within the project construction limits. Complete avoidance of the site is not practical due to design constraints imposed by this on-alignment emergency bridge replacement. However, the project design team was asked to reduce impacts to the site to the extent possible without sacrificing safety or compromising the purpose and need of the project. Efforts to reduce impacts to the site consisted of reducing the width of required right-of-way from 110 feet to 75 feet within the southern portion of the site and tapering back to the existing 50 foot ROW within the northern portion of the site.

To mitigate adverse effects to 38HA1138, SCDOT in consultation with the South Carolina SHPO, and FHWA proposes to fund Phase III (data recovery) investigations within the affected portions of the site. The data recovery investigations will focus on recovering a representative sample of artifacts as well as identifying and documenting any subsurface features or deposits that may be present in the proposed project area.

13. Provide copies or summaries of the views provided to date by any consulting parties, Indian tribes or Native Hawai'ian organizations, or the public, including any correspondence from the SHPO and/or THPO.

SHPO correspondence attached.

* see *Instructions for Completing the ACHP* e*106 Form*

III. Additional Information

14. Please indicate the status of any consultation that has occurred to date, including whether there are any unresolved concerns or issues the ACHP should know about in deciding whether to participate in consultation. Providing a list of consulting parties, including email addresses and phone numbers if known, can facilitate the ACHP's review response.

There are no consulting parties involved in this project apart from the SC SHPO and the THPO's of tribes with an interest in the area. There are no outstanding or unresolved concerns.

15 Does your agency have a website or website link where the interested public can find out about this project and/or provide comments? Please provide relevant links:

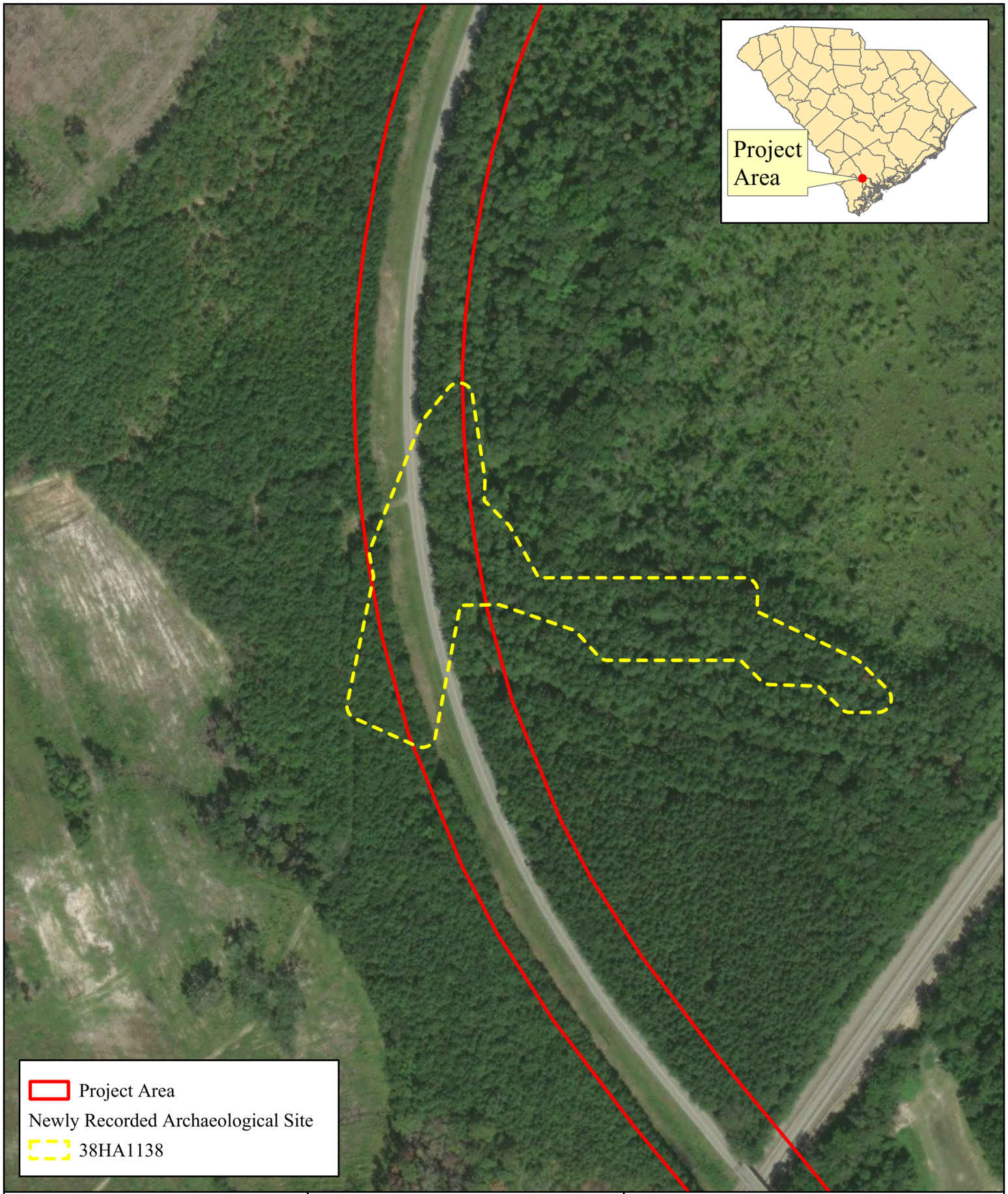
https://www.scdot.org/us17a-21-over-csx-rr/default.aspx

16. Is this undertaking considered a "major" or "covered" project listed on the Federal Infrastructure Projects Permitting Dashboard? If so, please provide the link:

No.

The following are attached to this form (check all that apply):

- ☒ Section 106 consultation correspondence
- ☒ Maps, photographs, drawings, and/or plans
- ☒ Additional historic property information
- ☐ Consulting party list with known contact information
- ☐ Other: Click here to enter text.



South Carolina Department of Transportation

US 17A Emergency Bridge Replacement Project

PIN: 42942

Date: 10/20/2023

County: Hampton & Beaufort

0 60 120 Meters

0 200 400 Feet

N

ARCHAEOLOGICAL FIELD REPORT
SCDOT ENVIRONMENTAL SECTION

TITLE: Cultural Resources Survey of the US 17A/21 over CSX Railroad Emergency Bridge Replacement Project, Hampton and Beaufort County, South Carolina

DATE OF RESEARCH: October 2023

ARCHAEOLOGIST: SCDOT: Rebecca Shepherd, Tracy Martin; **Brockington**: Dave Baluha

COUNTY: Hampton and Beaufort

ARCHITECTURAL HISTORIAN: Tracy Martin

PIN: P042942

PROJECT: US 17A/21 over CSX Railroad Emergency Bridge Replacement Project

DESCRIPTION: The South Carolina Department of Transportation (SCDOT) is proposing the emergency replacement of the US Route 17A/21 bridge (Asset ID 00834) over CSX Railroad in Hampton and Beaufort County, South Carolina (**Figure 1**). The US 17A/21 bridge was damaged during a train derailment on September 20, 2023. Damage to northern abutment shoring wall and piles of the bridge resulted in the loss of structural capacity and repair of the existing bridge is not feasible. US 17A/21 was immediately closed and detoured and will remain so until the replacement is completed. US 17A/21 is a dedicated hurricane evacuation route at this location and is of state and regional importance for emergency events that may require departure from the coastal areas.

SCDOT proposes to demolish the old bridge and replace it along current alignment. The replacement will be constructed to meet both current design standards and desired rail requirements, and to correct geometric deficiencies. The height of the new bridge will be raised five feet to better accommodate rail traffic below it. Minor changes to the current roadway alignment, berms, and ditches are anticipated to facilitate the height increase. The project area for this undertaking consists of corridor 2,500 feet (762 meters) from either end of the bridge and 100 feet (30 meters) from the road centerline. The archaeological survey examined the project area, while the architectural survey examined the area of potential effect (APE), which consists of a 300-foot buffer around the project area (**Figure 2**).

LOCATION: The project area is located at the border of southeastern Hampton County and northern Beaufort County, approximately one mile southwest of the town of Yemassee.

USGS QUADRANGLE: Yemassee **DATE:** 1988 **SCALE:** 7.5'
UTM: WGS 84 **ZONE:** 17 North
EASTING: 513246 **NORTHING:** 3615150

ENVIRONMENTAL SETTING: The project area is located in in both Hampton and Beaufort counties and is situated in the southwestern portion of the Lower Coastal Plain Physiographic Province. The majority of the project area consists of undeveloped land used for timber cultivation. A warehouse for Ferguson Forest Products is located just southeast of the bridge. The CSX Railroad line bisects the project area. **Figures 3 – 6** show examples of how the project area looked at the time of the survey.

NEAREST RIVER/STREAM AND DISTANCE: The closest water source to the project area is an unnamed Carolina Bay located approximately 350 meters northeast of the bridge. The Buckfield

Backwater is located 2 miles northwest of the bridge. The Pocotalgio River is located approximately 2 miles to the southwest of the bridge, while the Combahee River is located approximately 2.75 miles to the northeast.

SOIL TYPE: Ten soil types are present in the Project Area (**Table 1**). The majority of soils within the project area are poorly drained (39.55%). Another 35.60 percent of soils within the project area are well drained, 8.7 percent are moderately well drained, 7.4 percent are somewhat poorly drained, and 8.3 percent are very poorly drained. The majority of the poorly drained soils are located on the south side of the bridge, while the northern side of the bridge is primarily well drained (**Figure 7**).

Table 1. Soil Types Present in the Project Area

Soil Type	Acres in Project Area	Percent of Project Area	Soil Drainage
Argent clay loam	1.9	7.8%	Poorly Drained
Bladen fine sandy loam	7.8	31.7%	Poorly Drained
Coosaw loamy fine sand	1.5	6.1%	Moderately Well Drained
Santee fine sandy loam	1.2	4.8%	Very Poorly Drained
Brookman clay loam, ponded	0.9	3.5%	Very Poorly Drained
Emporia loamy sand, 2 to 6 percent slopes	2.5	10.2%	Well Drained
Haplaquents, loamy	0.6	2.6%	Moderately Well Drained
Ocilla fine sand, 0 to 2 percent slopes	1.8	7.4%	Somewhat Poorly Drained
Pelham loamy sand, 0 to 2 percent slopes	0.1	0.5%	Poorly Drained
Uchee sand, 2 to 6 percent slopes	6.2	25.4%	Well Drained
Total	**24.6**	**100**	

REFERENCE FOR SOILS INFORMATION: USDA-NCRS Soil Survey Division, Custom Soil Resource Report (websoilsurvey.sc.egov.usda.gov)

GROUND SURFACE VISIBILITY: **1-25% _x_ 26-50% ___ 51-75% ___ 76-100% __**

CURRENT VEGETATION: The majority of the area surrounding the project area has been subject to repeated timber harvesting. Vegetation throughout the project area includes grassy roadside margins, mixed pine and hardwood upland forests, forested wetlands, and tracts of planted pine. Timber harvesting occurred to the northwest of the bridge in late 2022 leaving the area clear cut with some light regrowth of saplings and various grasses (see **Figures 3 – 6**).

BACKGROUND INVESTIGATION: Prior to the field investigation the South Carolina Institute of Archaeology and Anthropology (SCIAA) and South Carolina Department of Archives and History (SCDAH) ArchSite 3.2 website was examined to determine if any previously identified archaeological sites, standing structures, or National Register of Historic Places (NRHP) sites, or previous cultural

resources surveys were present within 1 kilometer (0.62 miles) of the project area. No previously recorded cultural resources were present within this search radius or the project APE (**Figure 8**).

Historical maps dating to between 1918 and 1988 and aerial photographs dating to between 1961 and 1978 were also examined to determine if any no-longer-extant structures or architectural features could be identified that might presently be manifested as archaeological sites within the project area. In general, the maps and photos show the project area has remained mostly wooded throughout the period of coverage, and that the transportation corridors within the area have remained essentially unchanged since US 17A/US 21, then the main branch of US 17, was constructed in 1938 (**Figures 9 – 12**).

ARCHAEOLOGICAL SURVEY: An archaeological reconnaissance of the project area was conducted on October 5 and 11, 2023. Field methods consisted of a pedestrian reconnaissance of the entire project area augmented by the excavation of shovel tests. A shovel testing interval of 30 meters was utilized in high probability areas characterized by well drained or moderately well drained soils. Lower probability areas with somewhat poorly drained, poorly drained, or very poorly drained soils were shovel tested at a 60 meter interval. Shovel tests were not excavated in areas of standing water, flagged wetland, or areas of obvious ground disturbance including buried utilities, roadside berms and ditches, or dirt roadways. Shovel tests averaged 30 centimeters in diameter and were excavated until sterile subsoil was encountered. All material was screened through 0.25-inch mesh hardware cloth to facilitate the recovery of any artifacts that might be present.

ARCHAEOLOGICAL SURVEY RESULTS: A total of 79 shovel test locations were investigated along four transects during the archaeological fieldwork for this project. Of those, 29 were not excavated due to the presence of wetlands or disturbance and six were positive for cultural material. (**Figure 13**).

The depth of shovel tests ranged from moderately shallow to deep throughout the project area. The northern half of the project area is situated on a ridge line above adjacent wetlands and consists primarily of well drained soils. A typical shovel test profile in this location consisted of three strata. Stratum I was generally a dark gray (10YR 4/1) loamy sand up to 20 centimeters below surface (cmbs). Stratum II was a light yellowish brown (10YR 6/4) sand from 50 to 80 cmbs. Stratum III was a strong brown (7.5YR 5/8) sandy clay subsoil. The southern half of the project area consisted primarily of poorly drained soils or disturbed and sloped soils adjacent to the bridge embankment. Due the low site probability, this side of the bridge was shovel tested at 60 meter intervals. A typical shovel test profile in this area indicated hydric soil conditions and consisted of two strata: Stratum I, 0-10 cmbs of dark gray (10YR 4/1) loamy sand; Stratum II, 10-30 gray (10YR 6/1) sand mottled with strong brown (7.5YR 5/8) sandy clay and iron oxide concretions.

38HA1138

One new archaeological site was identified. 38HA1138 is a Native American Pre-Contact ceramic and lithic scatter and a minor indeterminate Post-Contact artifact scatter. The site, which measures 305 by 203 meters, is situated on a Carolina Bay rim approximately 390 meters northwest of the US 17A/21 bridge over CSX Railroad. The site is bisected by US 17A/21. (**Figure 14**). The site was first identified by SCDOT archaeologists, but full delineation and testing of the site was completed by SCDOT cultural resources on-call contractor, Brockington and Associates, Inc (Brockington) from October 23-25, 2023.

The attached management summary provides the full results of Brockington's investigations (**Appendix A**). A brief summation of their findings is presented below.

A total of 157 shovel tests and 11 50-by-50 centimeter test units were excavated in and around site 38HA1138 to delineate its boundaries and investigate the site's vertical artifact distribution and overall integrity. Forty-seven of the shovel tests and all 11 test units produced artifacts (**see Appendix A, Figure 3**). Uniform soil conditions were present across the site. A typical profile consisted of four strata, a very dark grayish brown (10YR 3/2) loamy fine sand from 0-20 cmbs, a brownish yellow (10YR 6/6) fine sand from 20-50 cmbs, a very pale brown (10YR 5/8) to white (10YR 8/1) fine sand from 50-70 cmbs, and a strong brown (7.5YR 5/8) clay loam from 70-80+ cmbs (**see Appendix A, Figures 8-10**). Artifacts were recovered from an average depth of 10-50 cmbs and a maximum depth of 70 cmbs. No cultural features were observed, but some shovel tests and test units produced large numbers of artifacts, indicating the potential for features, artifact clusters, or discrete activity areas.

A total of 586 artifacts were recovered from 38HA1138, 585 associated with the pre-contact Native American occupations and one associated with the Post-Contact occupation. **Appendix A, Table 2** lists the artifacts recovered from the site. The Pre-Contact Native American artifacts include 449 ceramics, 131 lithics, and five faunal (bone or calcined bone) artifacts. Temporally diagnostic artifacts include 31 Ceramic Late Archaic (Stallings or Thom's Creek) ceramic artifacts and 35 Middle Woodland (Deptford and Wilmington) ceramic artifacts. Potential Contact Period (Ashley) ceramics were also identified. The lithic artifacts include 128 pieces of debitage and three biface fragments. While a light scatter of artifacts occurs across the site, dense concentrations are present near the center and southwestern portions (**see Appendix A, Figure 12**). The Post-Contact artifacts include one container glass fragment and 3.1 grams of brick fragments. The excavated test units exhibited clear vertical separation between the Middle Woodland and Late Archaic components.

38HA1138 is a large, primarily Native American Pre-Contact Ceramic Late Archaic, Middle Woodland, and Contact Period site. The occupations likely represent short-term, seasonal, resource encampments occupied by band or family level groups. Results from this investigation demonstrated that the site exhibits both horizontal and vertical integrity of cultural deposits, except within the current 20-meter wide ROW. The presence of deeply buried deposits suggests that additional investigation may generate information that can contribute to our current understanding for the Ceramic Late Archaic, Middle Woodland, and Contact sub-periods, particularly with respect to Native American settlement on or near Carolina Bays. Therefore, 38HA1138 is recommended eligible for listing on the NRHP under Criterion D.

ARCHITECTURAL SURVEY: A historic architectural resources survey of the project area was conducted on October 5, 2023. Site survey methods consisted of a visual reconnaissance of the entire project area to locate any structures that had not been detected during the background research.

ARCHITECTURAL SURVEY RESULTS: One historic resource, SHPO Site Number 5644, was recorded in the project APE (**see Figure 14**).

SHPO Site Number 5644

The bridge carrying US 17A/21 over CSX Railroad (SCDOT Asset ID 00834) was built in 1938 to bypass an at-grade crossing of the railroad's busy main line and freight yard. Although the bridge spans the

Hampton and Beaufort County line, it is primarily located within Beaufort County. The bridge carries a 2-lane highway over two tracks of the former Atlantic Coastline (ACL) Railroad main line outside of Yemassee. The tracks are now operated by the CSX Railroad. The 3-span steel stringer bridge measures 123 feet in length and has standard concrete 1-rail high railings cantilevered off the brush curbs, a concrete deck, 6 lines of rolled steel beams, and three column reinforced concrete bents with stylized capitals and circular headed struts and crash walls. According to memos and letters dating to 1953 in the bridge inspection file, the then ACL Railroad company altered the structure by cutting back the earth slopes under the end spans and placing concrete crib retaining walls in order to make room for tracks in the rail yard. Although concrete crib walls were apparently something of a technological novelty at that time, they have since become a very common technology (TranSystems 2006). In September of 2023 a train derailed and struck the northern bridge bent and concrete crib retaining wall causing irreparable damage to the structure. **Figures 15-18** show the bridge as it looked at the time of survey.

The bridge is recorded in the South Carolina Historic Bridge Survey database (TranSystems 2006) where it was evaluated as not eligible for the NRHP. According to that evaluation, the bridge is a common type and one of several complete examples of a steel stringer bridges from the 1930s. It is not individually distinguished for its technology or design. The bridge as also examined for potential significance due to its association with the railroad, which had a local impact on the development of the Yemassee area. However, the bridge was built to improve the operation of vehicular traffic, not rail traffic. Therefore SHPO Site No 5644 was not found to have significance under Criterion A-D.

REMARKS AND RECOMMENDATIONS: The cultural resources survey resulted in the identification of one archaeological site (38HA1138) and one new architectural resource (SHPO Site No. 5644). SHPO Site No. 5644, the bridge carrying US 17A/21 over CSX Railroad, is recommended not eligible for the NRHP. Site 38HA1138 is a Pre-Contact Native American ceramic and lithic scatter with a minor Post-Contact component that is recommended eligible for the NRHP under Criterion D for its research potential.

Avoidance of site 38HA1138 is not practical due to the design constraints imposed by this on-alignment bridge replacement, which calls for improvements/modifications to the existing approach roadways rather than construction of new approach roads. As the site spans the current alignment of US 17A/21, the relocation of the roadway to the extent necessary to completely avoid the site would require a radical redesign of the proposed project. Efforts were taken to minimize impacts to the site, but it was not possible to eliminate impacts completely. The current project design calls for increasing the existing ROW in the site location from 50-feet to 75-feet (**Figure 19**). Construction activities within the site boundary would include the addition of fill, excavation, grading, clearing of vegetation, and paving. Clearing would extend approximately 45-ft from the edge of pavement. Fill will be placed for extending shoulders and slopes and paving operations. Fill material would be added on both the east and west sides of US 17A/21 within the site boundary. Excavation activities will be limited to the west side US 17A/21 for the purpose of re-establishing and maintaining drainage conveyance. An existing ditch on the western side of US 17A/21 will need to be shifted approximately 8-ft to the west. Grading activities will occur within the site boundary where fill and excavation areas would need to be levelled and contoured.

SCDOT has determined that the US 17A/21 bridge replacement will have an adverse effect on site 38HA1138. Data recovery excavation of the site to excavate, preserve, and document the presence and characteristics of any buried features within the area of existing and proposed new ROW is recommended in order to mitigate the adverse effects of this undertaking. A draft Memorandum of Agreement listing proposed stipulations and protocols governing the data recovery effort is appended to the end of this report in **Appendix B**.

SIGNATURE: _____ _____ **DATE:** __November 2, 2023_____

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1943 1943 Yemassee 1:62500 Scale Topographic Quadrangle. Retrieved from USGS Historical Topographic Map Explorer < http://historicalmaps.arcgis.com/usgs/>.

1961 1961 Aerial Photo Single Frames. Entity ID ARCVAP2A0020297, Project VAP2A, Roll 00002, Frame 297, Scale 60,000, Retrieved from USGS Earth Explorer < https://earthexplorer.usgs.gov/>.

1978 1978 Aerial Photo Single Frames. Entity ID AR1VEMN00010011, Project VEMN0, Roll 000001, Frame 11, Scale 80,000, Retrieved from USGS Earth Explorer < https://earthexplorer.usgs.gov/>.

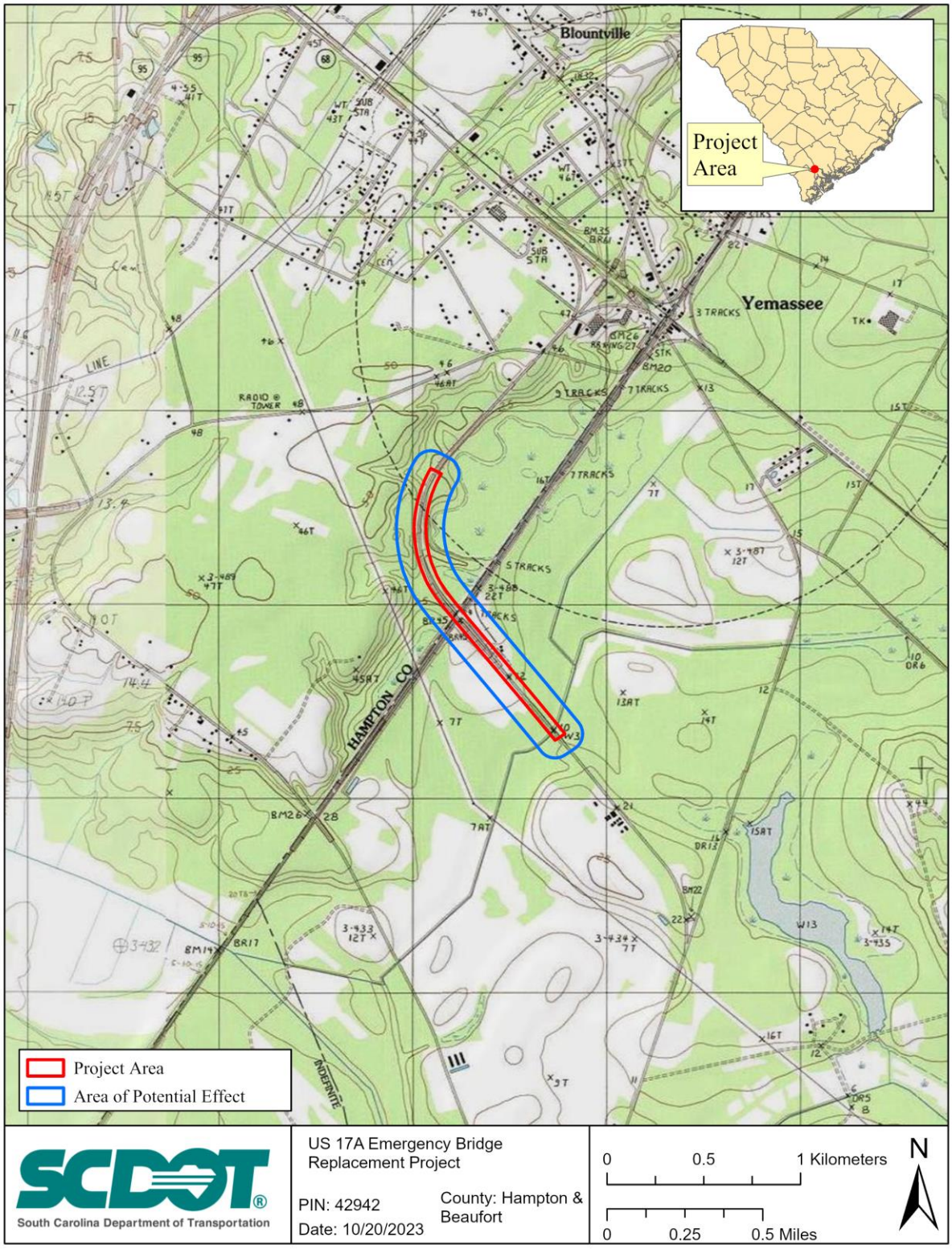


Figure 1. Project Area Location Map, Yemassee 7.5' Quadrangle (USGS 1988).

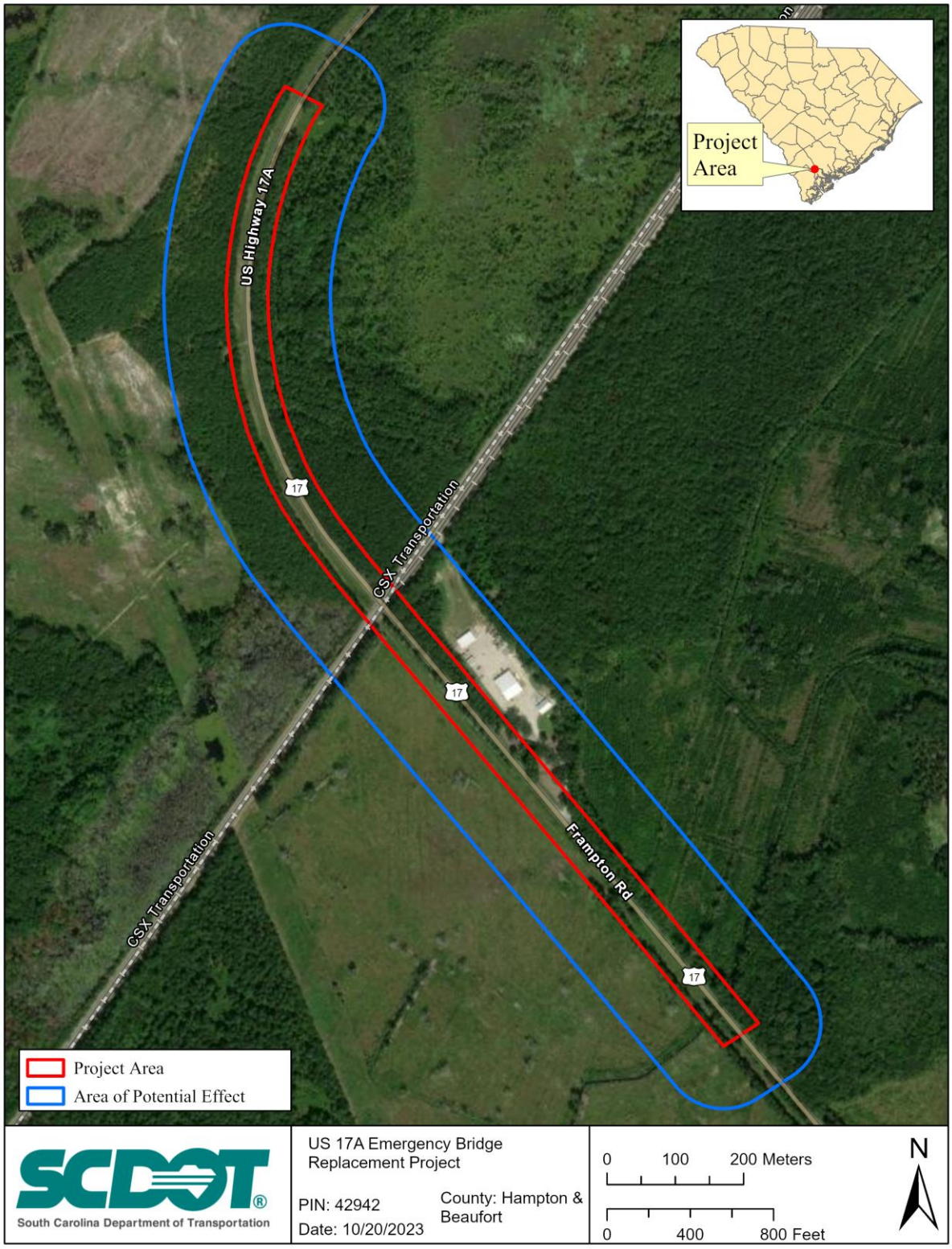


Figure 2. Project Study Area and APE.

Figure 3. Logged area in the northwest quadrant of the bridge, looking south

Figure 4. Northeast quadrant of the bridge, looking north

Figure 5. Looking north from the southern extent of the project area

Figure 6. Looking south from the bridge

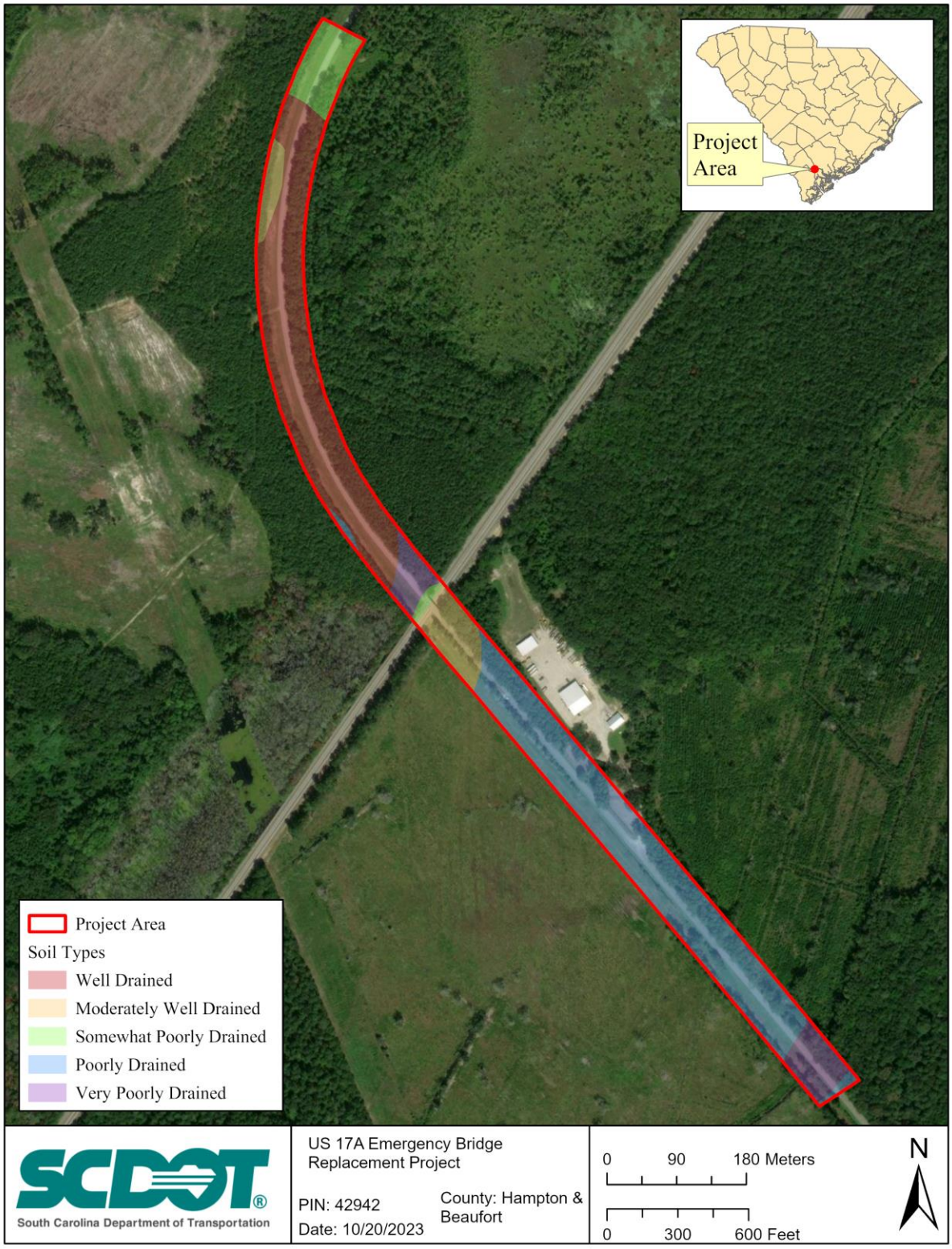


Figure 7. Map Showing Soil Types within the Project Area

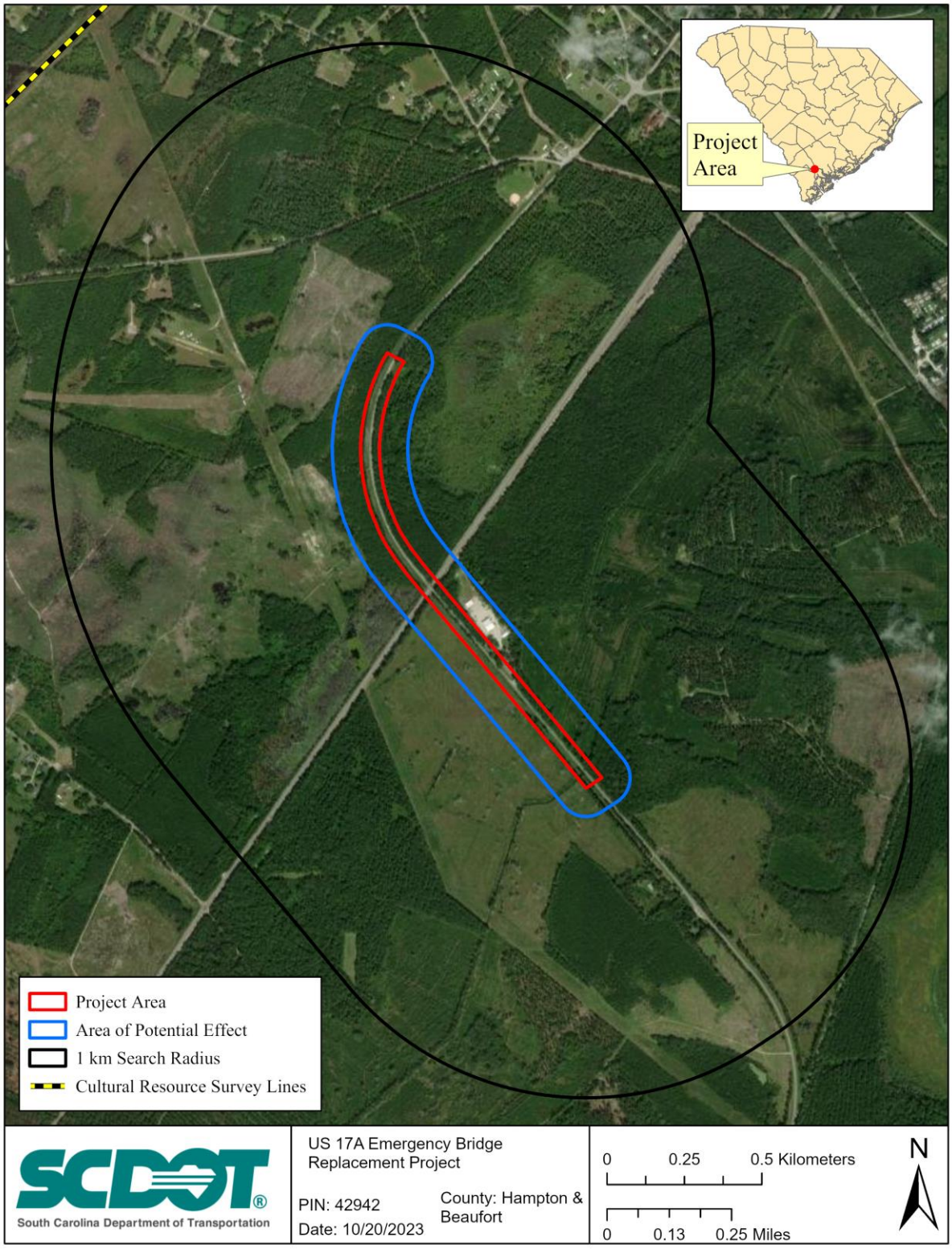


Figure 8. Background Map Showing Previously Recorded Resources within 1 km of the APE

Figure 9. Area of Potential Effect on 1918 Topographic Quadrangle (USGS 1918)

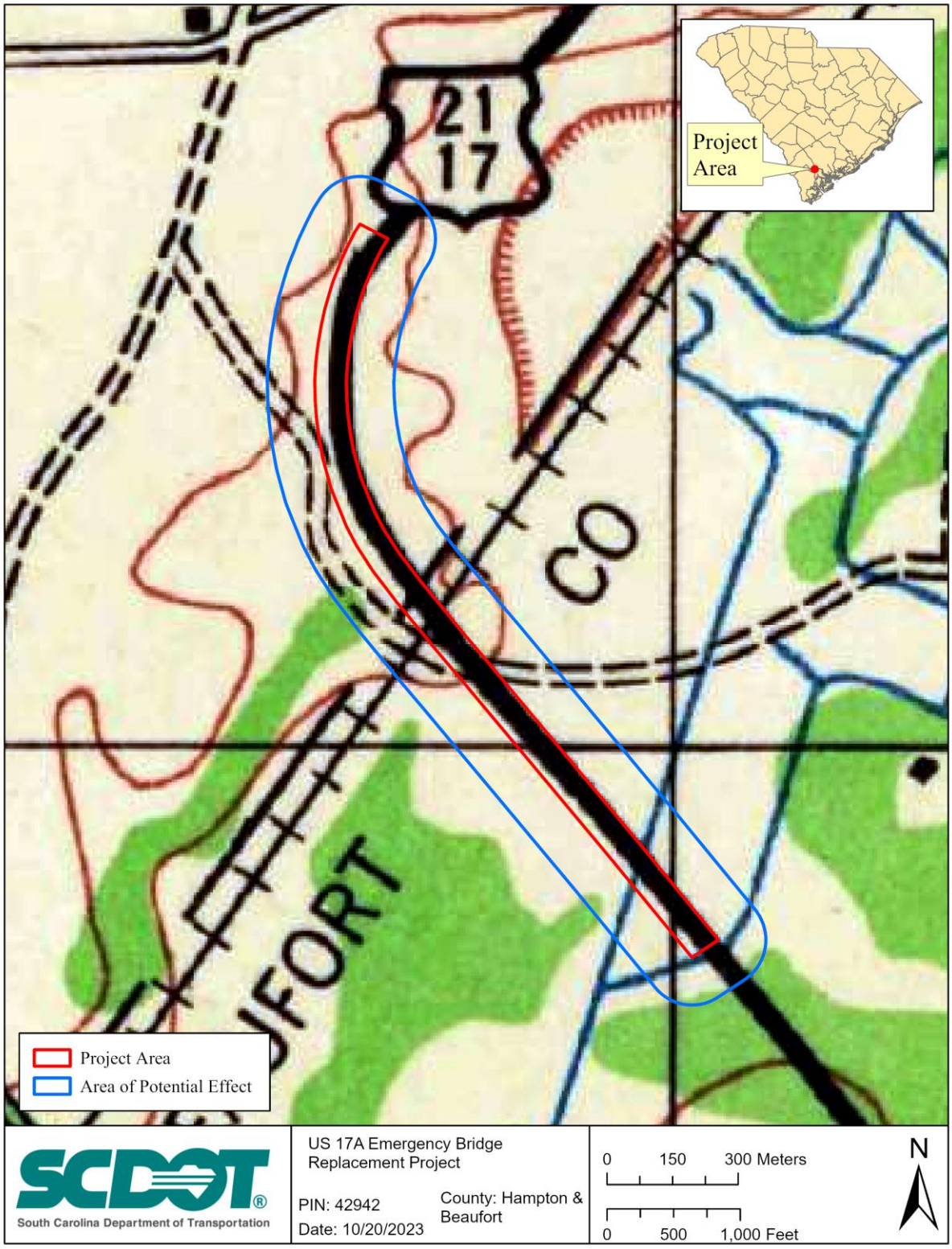


Figure 10. Area of Potential Effect on 1943 Topographic Quadrangle (USGS 1943)

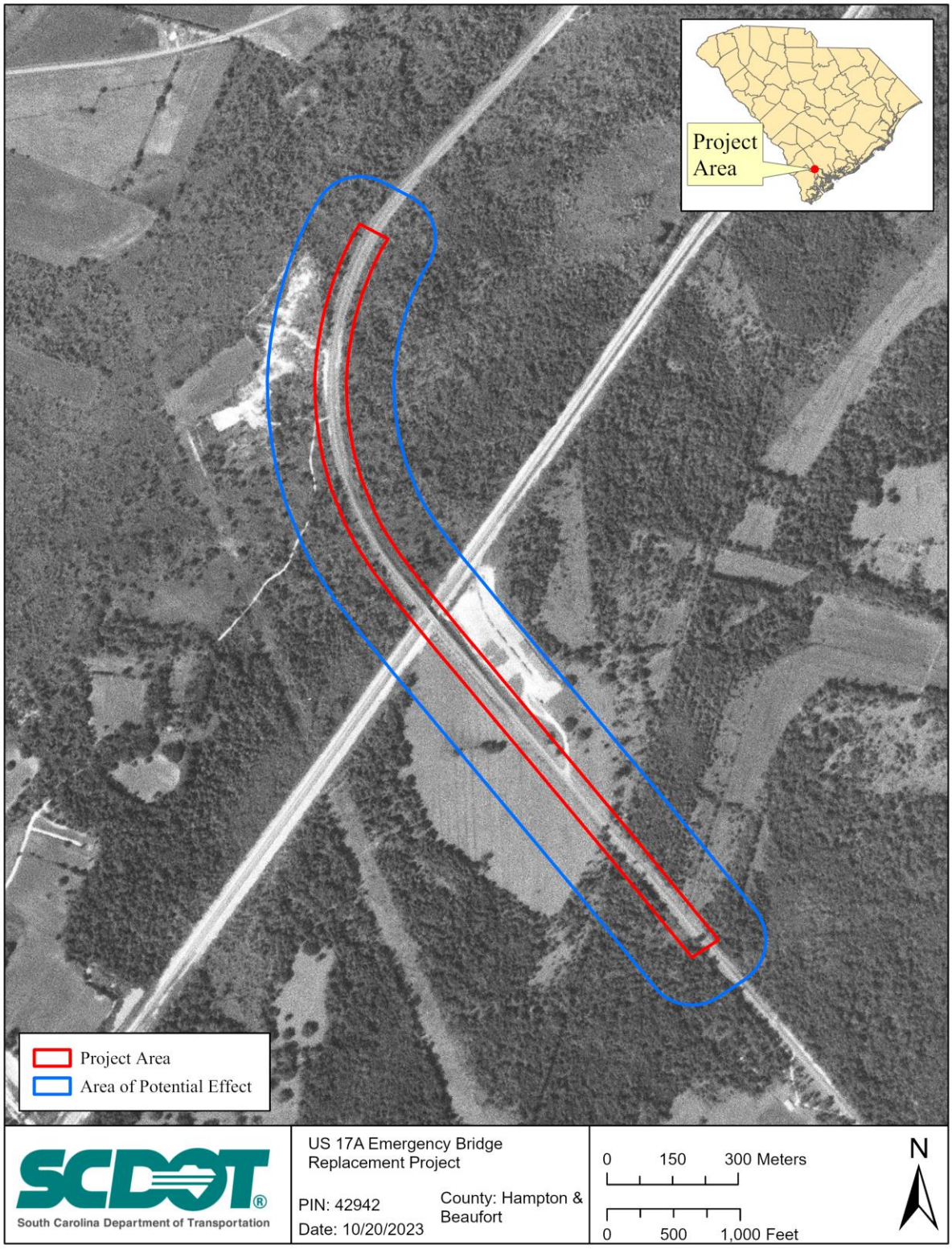


Figure 11. Area of Potential Effect on 1961 Aerial Photograph (USGS 1961)

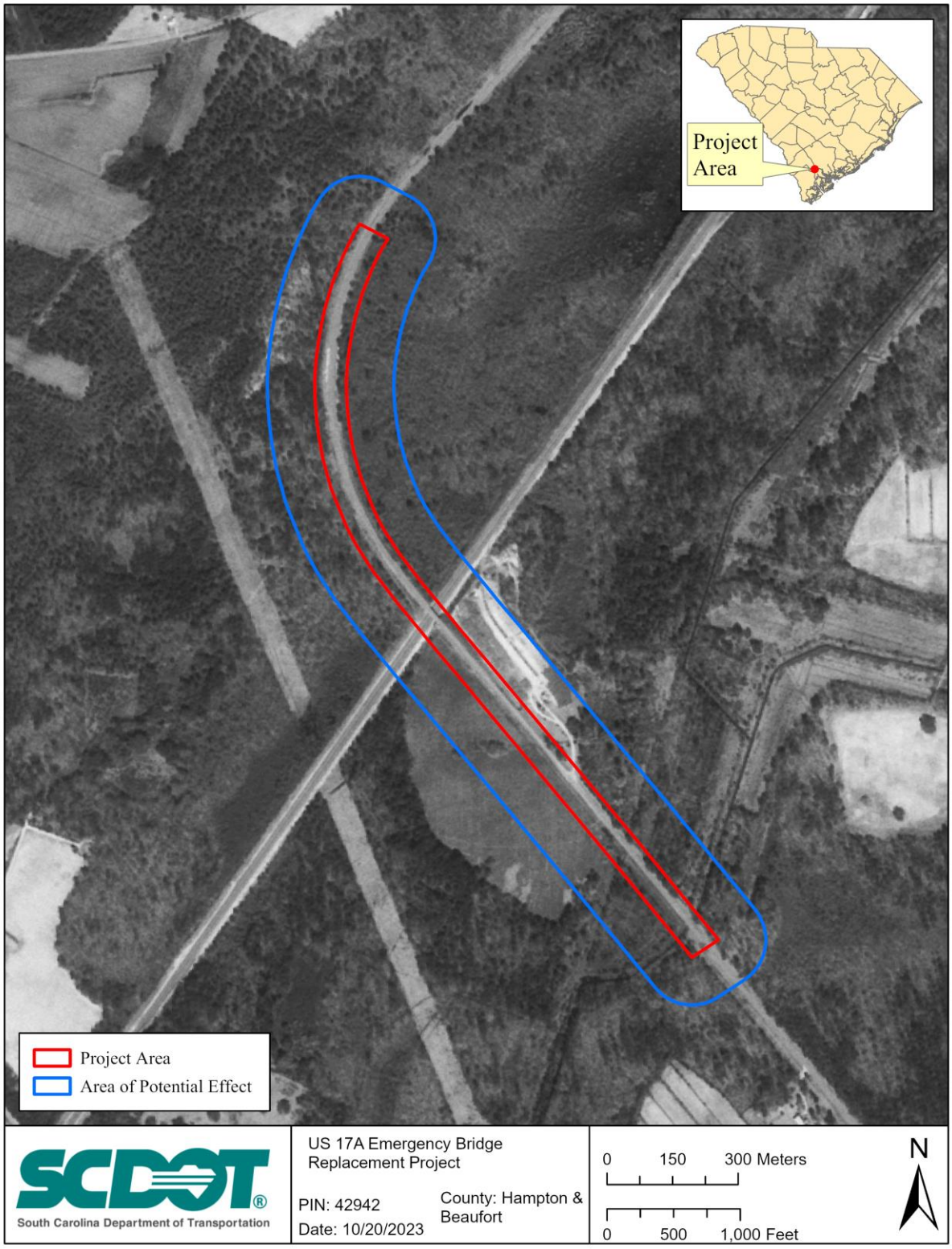


Figure 12. Area of Potential Effect on 1978 Aerial Photograph (USGS 1978)

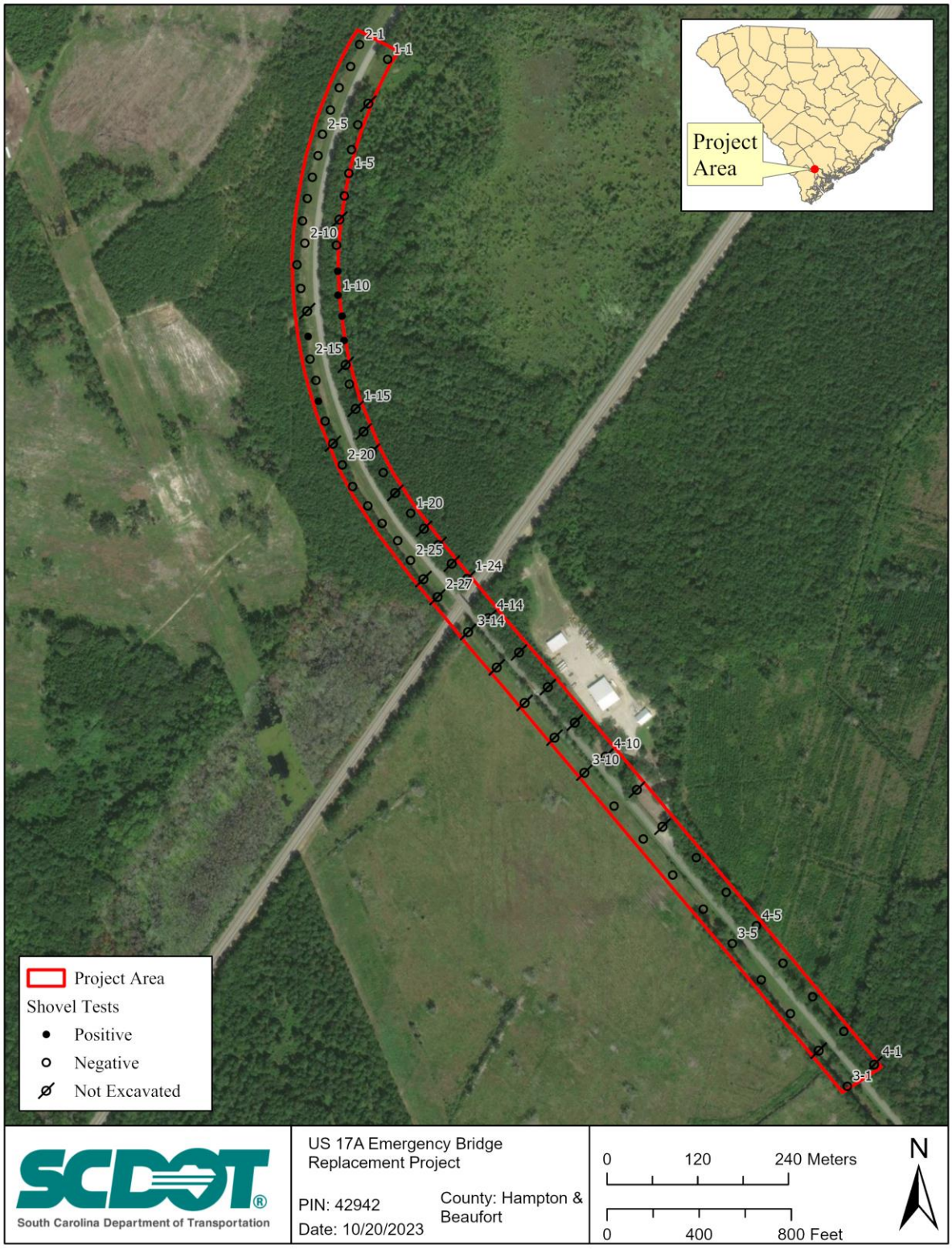


Figure 13. Shovel Test Coverage

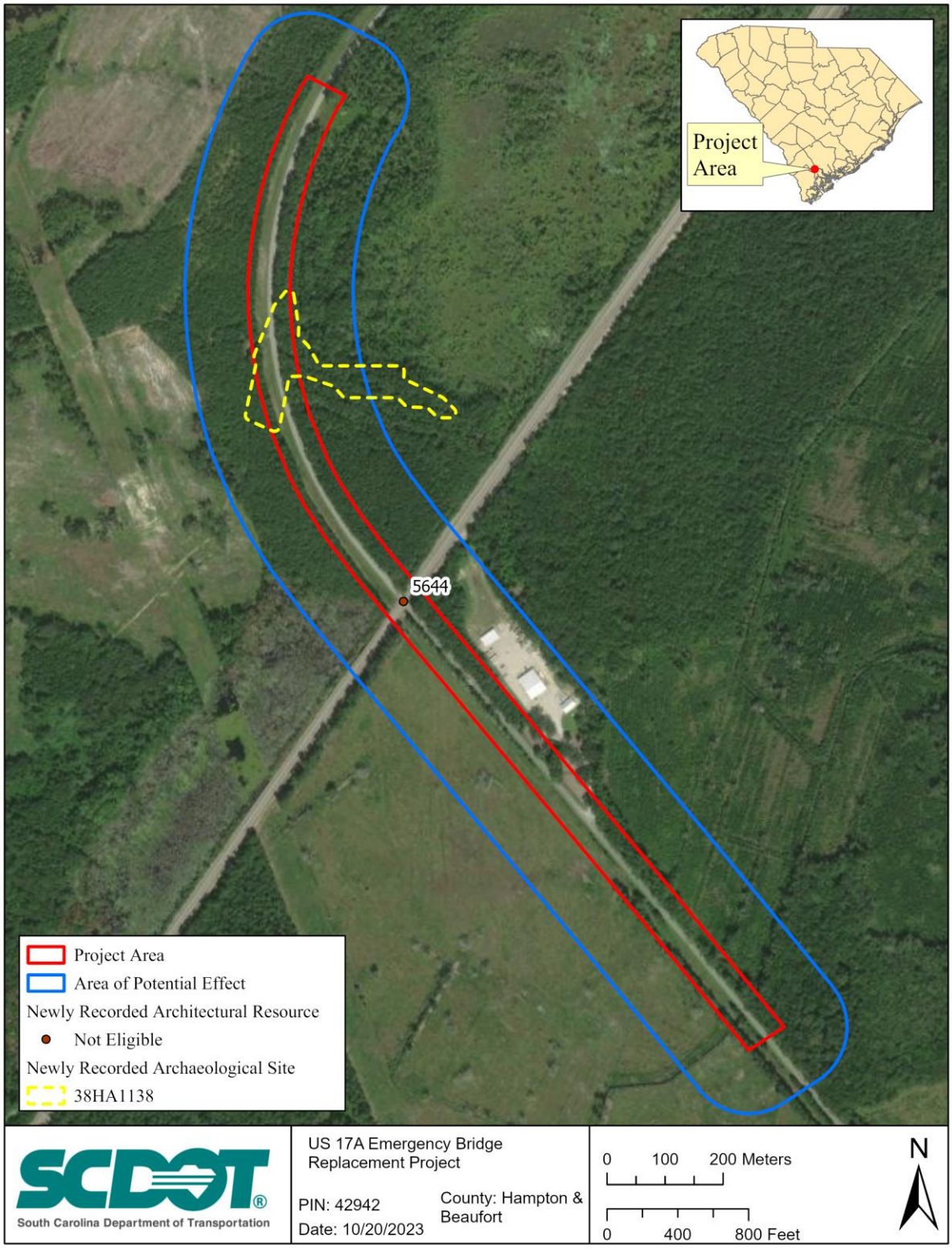


Figure 14. Newly Recorded Resources

Figure 15. SHPO Site No. 5644, looking east

Figure 16. SHPO Site No. 5644, looking northwest, showing a recent temporary repair to the concrete crib retaining wall

Figure 17. SHPO Site No. 5644, looking southeast

Figure 18. SHPO Site No. 5644, bridge bent detail showing recent damage and temporary repairs, looking southeast

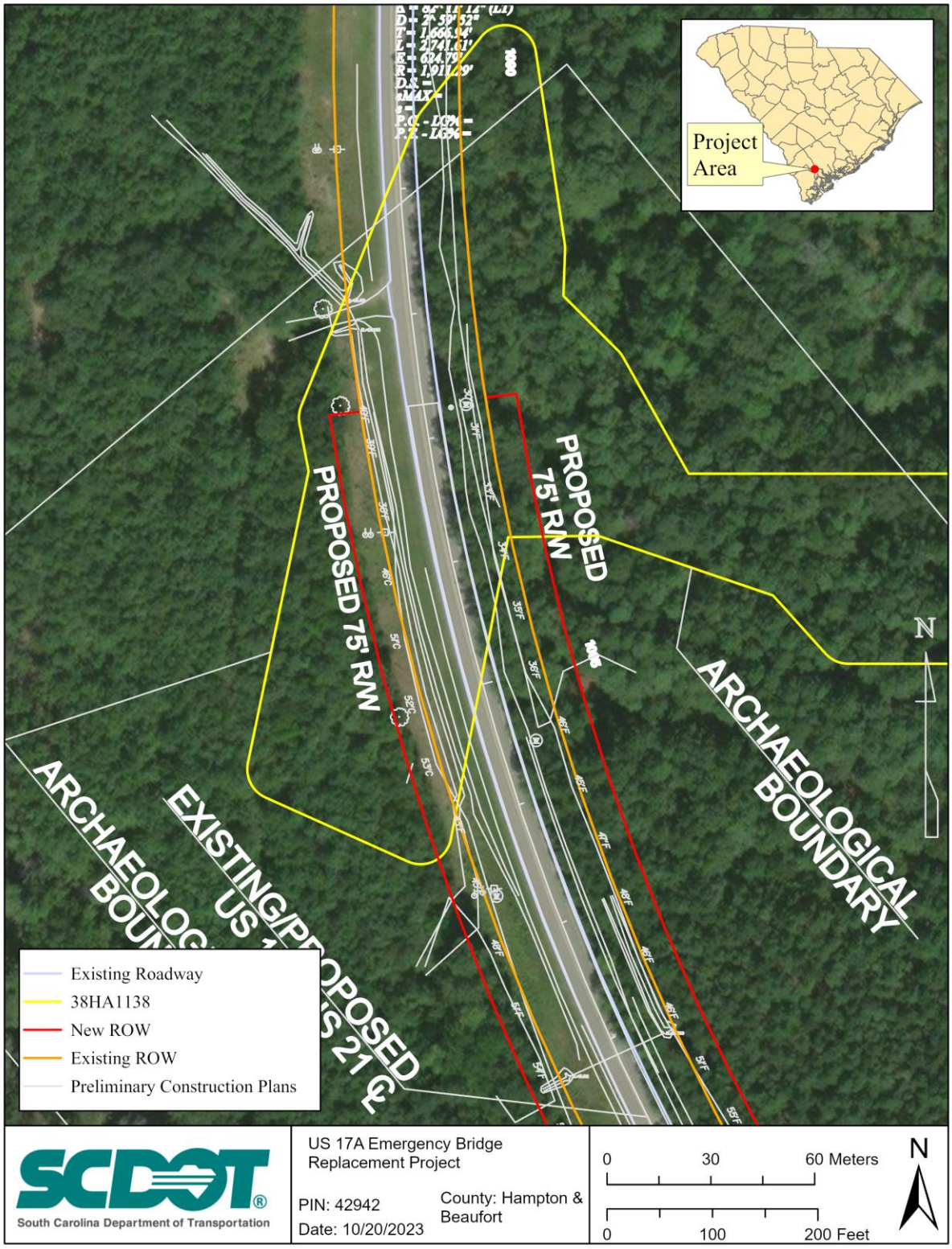


Figure 19. Preliminary construction plans, highlighting the 38HA1138 site boundary with existing and proposed new ROW

Appendix A.

Management Summary detailing the delineation and testing of 38HA1138

US 17A/US21 over CSX Railroad
Emergency Bridge Replacement Project
Hampton County, South Carolina

SCDOT PIN # P042942

Management Summary

October 26, 2023

Brockington and Associates, Inc.

Dave Baluha, MA, RPA (17120)

Introduction

On October 16, 2023, the South Carolina Department of Transportation (SCDOT) contracted Brockington and Associates, Inc. (Brockington) to assist with Phase I intensive archaeological survey of the US Highway (US) 17A/21 over CSX Railroad Emergency Bridge Replacement Project, which is located near Yemasee in southeastern Hampton County, South Carolina. Specifically, Brockington archaeologists were tasked with completing site delineations at 38HA1138, completing the laboratory investigations for the site, preparing a South Carolina Institute of Archaeology and Anthropology (SCIAA) form, providing a detailed site description, and submitting this management summary. Site 38HA1138 is a Native American ceramic and lithic scatter, located along US17A/21 approximately 390 meters (m) northwest of the US 17A/21 bridge over the CSX Railroad. SCDOT archaeologists first identified 38HA1138 during the intensive cultural resources survey of the US 17A/21 over CSX Railroad Emergency Bridge Replacement Project. These investigations follow current South Carolina guidelines for archaeological survey and testing (COSCAPA et al. 2013). Figures 1 and 2 show the location of 38HA1138 and the US 17A/21 over CSX Railroad Emergency Bridge Replacement Project archaeological Area of Potential Effect (APE). The remainder of this management summary presents a detailed site description and National Register of Historic Places (NRHP) assessment for 38HA1138.

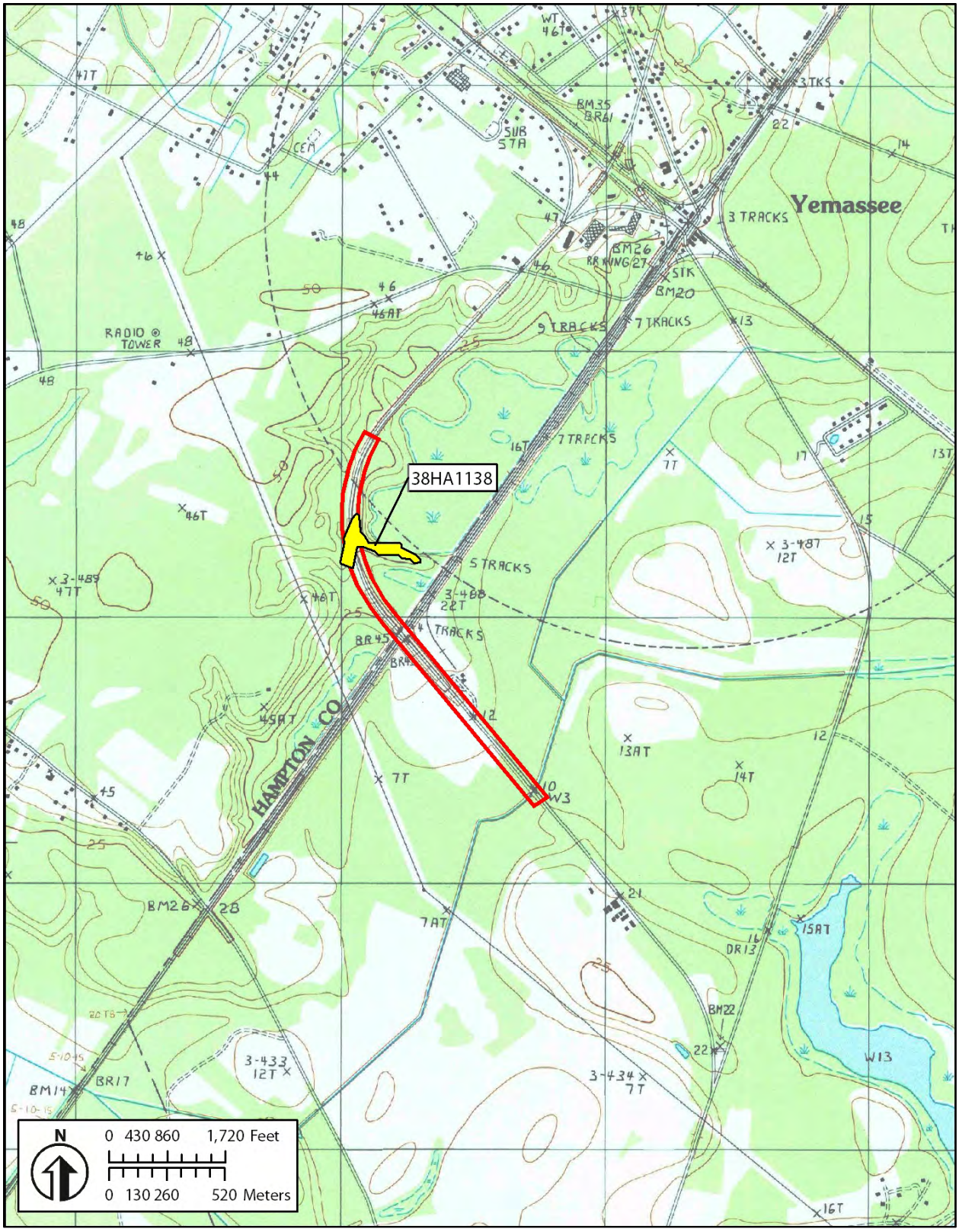


Figure 1 Location of 38HA1138 and the APE (ESRI 2023).

Figure 2 Location of 38HA1138 and the APE (USGS 1988).

Site 38HA1138 Description and NRHP Assessment

Description

Site 38HA1138 is a multi-component site with a major Native American Pre-Contact and Contact ceramic and lithic component and a minor indeterminate Post-Contact artifact scatter located on the southwestern rim of a Carolina Bay. US 17A bisects the site. The site center is 390 m northwest of the US 17A/21 bridge over the CSX Railroad. Figure 3 presents a plan of 38HA1138. Site 38HA1138 measures 305 by 203 m (covering 18,082 m^2), with its long axis oriented east/west (True North [TN]). The landform has been graded below ground surface within the 20-m wide right-of-way (ROW). The site's elevation ranges from 6.70 to 9.76 m amsl, sloping west to east toward the Carolina Bay. In October 2023, vegetation varied across the site, with Southeastern North American Ruderal Forest across upland portions and Atlantic Coastal Plain Clay-Based Carolina Bay Wetland Forest across the adjacent Carolina Bay (Faber-Langendoen 2015; Schafale et al. 2015). Timber west of the road was harvested in 2022, leaving the area clearcut. Ground surface visibility is poor in the wooded portion of the site, fair in the clearcut portion of the site, and excellent along a dirt road and the cutbank that overlooks the roadway in the western portion of the site. We observed artifacts on the ground surface in these areas. Two consecutive negative shovel tests (STs) at 15-m intervals and wetlands define the site boundary. Table 1 provides basic site characteristics. Figures 4-7 presents views of 38HA1138 in October 2023.

Table 1 Site 38HA1138 characteristics.

Site Classification:	*Terrestrial, Open Air*
Cultural Affiliation:	*Native American; Indeterminate*
Categories:	*Processing/Extraction; Domestic*
Site Type(s):	*Ceramic and Lithic Scatter; Artifact Scatter*
Time Period(s):	*Ceramic Late Archaic, Middle Woodland, Contact; Indeterminate Post-Contact*
USGS Quad:	*Yemasee, SC (1988)*
Drainage:	*Combahee*
Nearest Water Source (Distance):	*Unnamed Carolina Bay (0 m East)*
Landform:	*Carolina Bay Rim*
Aspect:	*Facing East*
Elevation:	*6.70-9.76 m above mean sea level (amsl)*
USDA Soils:	*Uchee Sand*
Slope:	*2-6%*
Site Dimensions (Area):	*305 x 203 m (18,082 m^2)*
Current Vegetation:	*Southeastern North American Ruderal Forest; Atlantic Coastal Plain Clay-Based Carolina Bay Wetland Forest*
NRHP Recommendation:	*Eligible (Criterion D)*
Management Recommendation:	*Preservation or Data Recovery*

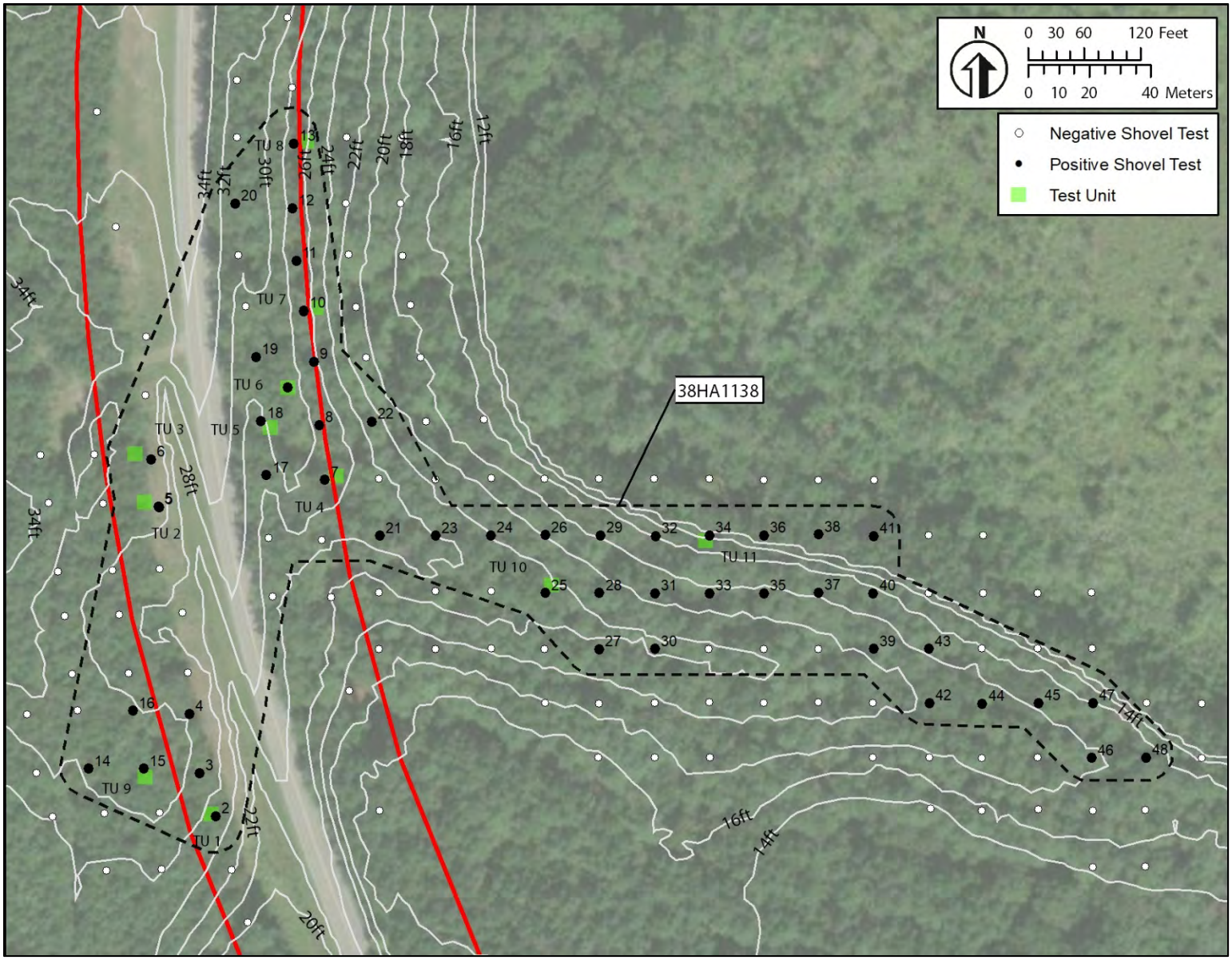


Figure 3 Plan of 38HA1138.

Figure 4 The southwestern portion of 38HA1138 facing north.

Figure 5 The northwestern portion of 38HA1138 facing south.

Figure 6 The northeastern portion of 38HA1138 facing south.

Figure 7 The southeastern portion of 38HA1138 facing west.

Previous Investigation

SCDOT and HDR archaeologists conducted intensive survey of the US17A/US21 over CSX Railroad Emergency Bridge Replacement Project APE on October 5 and 11, 2023. During these investigations, archaeologists excavated 24 STs at 15 and 30-meter intervals in and near 38HA1138. Of these, 12 STs produced a total of 46 artifacts. On October 16, 2023, SCDOT archaeologists Rebecca Shepherd and Tracy Martin contacted Brockington about completing the delineations at 38HA1138. On October 16, 2023, the SCDOT submitted the work order to complete this task.

Current Investigation

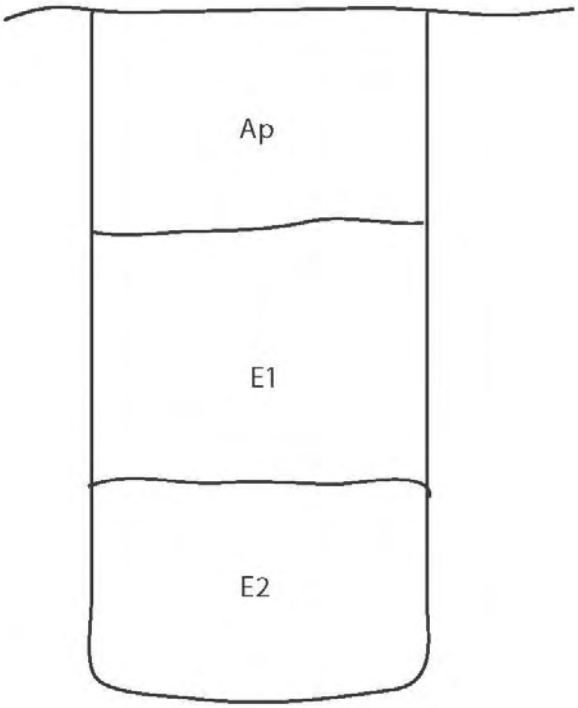
A total of 157 (30 centimeter [cm] diameter) STs and 11 (50-by-50-cm) test units ([TUs] 1-11) have been excavated in and around 38HA1138. These include 24 STs excavated by the SCDOT and 133 STs and 11 TUs excavated by Brockington. All STs were excavated at 15 m intervals. Forty-six of the STs and all 11 TUs produced artifacts. The STs and TUs revealed uniform soil conditions, with fine sands similar to those described by Eppinette (1995) as Uchee sand. Figures 8, 9, and 10 present the profiles of TUs 2, 9, and 10, respectively. A typical ST or TU profile exposed a very dark grayish brown (10YR 3/2) loamy fine sand Ap horizon 0-20 cm below surface (bs), a brownish yellow (10YR 6/6) fine sand E1 horizon 20-50 cm bs, a very pale brown (10YR 7/3) to white (10YR 8/1) fine sand E2 horizon 50-70 cm bs, and a strong brown (7.5YR 5/8) clay loam Bt1 horizon 70-80+ cm bs. Investigators recovered artifacts from an average depth of 10-50 cm bs and a maximum depth of 70 cm bs, or from the Ap, E1, and E2 soil horizons. Investigators observed no cultural features in STs or across the surface of 38HA1138. However, some STs and TUs produced large numbers of ceramic and lithic artifacts and faunal materials, which could indicate the presence of artifact clusters, hearths, or discrete activity areas. STs and TUs excavated along the cut bank or the edge of the landform exhibited shallower Bt1 horizon soils.

Artifact Discussion

A total of 586 artifacts have been recovered from 38HA1138, including 585 associated with Pre-Contact or Contact Native American occupations and one associated with an indeterminate Post-Contact occupation. In addition, we recovered 1.5 grams (g) wood charcoal and 3.1 g brick. Table 2 lists the artifacts recovered from 38HA1138. Figure 11 presents artifact photos of temporally diagnostic ceramic types and flake stone tools. Figure 12 provides an interpolated artifact density map, showing the distribution of Pre-Contact or Contact Native American ceramic and lithic artifacts (artifacts/m^2), highlighting those proveniences that produced temporally diagnostic artifacts.

The 585 Pre-Contact or Contact Native American artifacts include 449 ceramic artifacts, 131 flaked stone artifacts, and five faunal (bone or calcined bone) artifacts. Temporally diagnostic artifacts include 31 Ceramic Late Archaic (Stallings or Thom's Creek) ceramic artifacts and 35 Middle Woodland (Deptford and Wilmington) ceramic artifacts. The remaining 383 ceramics could not be typed. Ceramic Late Archaic surface decorations include plain and punctate varieties. Middle Woodland surface decorations include check stamping, plain, and simple stamping. In addition, we recovered 34 indeterminate complicated stamped sherds from TU 9 that may form part of a single Contact period vessel. We identified temper in 165 sherds, including 15 fiber, 22 grog, and the remaining 128 fine/medium sand.

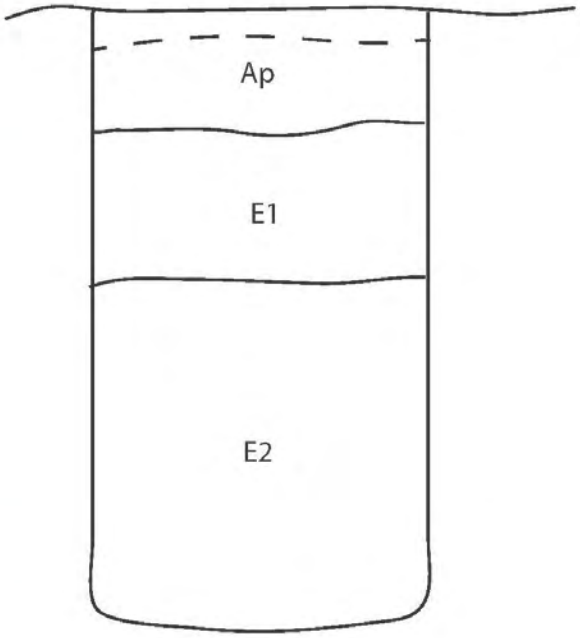
38HA1138
Test Unit 5
North Profile



Ap Horizon Very dark grayish brown (10YR 3/2) loamy fine sand
E1 Horizon Brownish yellow (10YR 6/6) fine sand
E2 Horizon Very pale brown (10YR 8/3) to white (10YR 8/1) fine sand

Figure 8 Profile of TU 2 at 38HA1138.

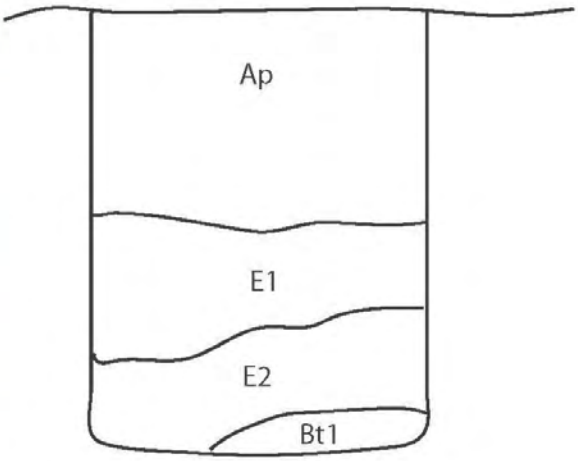
38HA1138
Test Unit 9
North Profile



Ap Horizon Very dark grayish brown (10YR 3/2) loamy fine sand
E1 Horizon Brownish yellow (10YR 6/6) fine sand
E2 Horizon Very pale brown (10YR 8/3) to white (10YR 8/1) fine sand

Figure 9 Profile of TU 9 at 38HA1138.

38HA1138
Test Unit 10
North Profile



Ap Horizon Very dark grayish brown (10YR 3/2) loamy fine sand
E1 Horizon Brownish yellow (10YR 6/6) fine sand
E2 Horizon Very pale brown (10YR 8/3) to white (10YR 8/1) fine sand
Bt1 Horizon Strong brown (7.5YR 5/8) clay loam

Figure 10 Profile of TU 10 at 38HA1138.

Table 2 Artifacts recovered from 38HA1138.

Era	Artifact Class/Description			Count	Weight (g)
Pre-Contact to Contact	Ceramics	Temporally Diagnostic	Stallings plain sherd	15	73.9
			Thom's Creek drag and jab punctate body sherd, fine/medium sand tempered	9	45.9
			Thom's Creek punctate sherd, fine/medium sand tempered	7	36.4
			Deptford check stamped sherd, fine/medium sand tempered	15	91.2
			Wilmington cord marked sherd	20	109.6
		Non-Diagnostic	cord marked sherd, fine/medium sand tempered	54	455.0
			eroded sherd, fine/medium sand tempered	42	254.4
			eroded body sherd, grog tempered	1	4.6
			indeterminate complicated stamped sherd, fine/medium sand tempered	34	396.4
			indeterminate decoration sherd, fine/medium sand tempered	1	3.6
			plain sherd, fine/medium sand tempered	50	381.5
			plain sherd, grog tempered	1	8.7
			residual sherd	184	304.1
			simple stamped sherd, fine/medium sand tempered	16	114.4
	Flaked Stone	Debitage	coastal plain chert 1/4 inch flake fragment	64	25.0
			coastal plain chert 1/4 inch shatter	12	10.6
			coastal plain chert 1/2 inch flake fragment	2	3.2
			coastal plain chert 1/2 inch shatter	1	10.9
			coastal plain chert cortical core reduction 1/4 inch flake	6	4.5
			coastal plain chert cortical core reduction 1/2 inch flake	2	10.0
			coastal plain chert non-cortical bifacial reduction 1/4 inch flake	19	5.9
			coastal plain chert non-cortical bifacial reduction 1/2 inch flake	2	4.5
			coastal plain chert non-cortical bifacial reduction 1/4 inch thinning flake	4	1.5
			coastal plain chert non-cortical core reduction 1/4 inch flake	7	4.8
			coastal plain chert non-cortical core reduction 1/2 inch flake	2	3.4
			coastal plain chert core fragment	4	21.4
			metavolcanic non-cortical bifacial reduction 1/4 inch flake	1	0.5
			orthoquartzite 1/4 inch flake fragment	1	0.1
			translucent quartz 1/4 inch flake fragment	1	0.5
		Tool	coastal plain chert biface tool fragment	3	13.9
	Fauna		bone	1	0.1
			bone, calcined	4	1.4
	Flora		charcoal		1.5
Post-Contact	Ceramics		brick fragment		3.1
	Glass		colorless glass container fragment	1	0.6
			Total	**586**	**2,407.1**

Figure 11 Sample of temporally diagnostic ceramic artifacts and flaked stone tools recovered from 38HA1138.

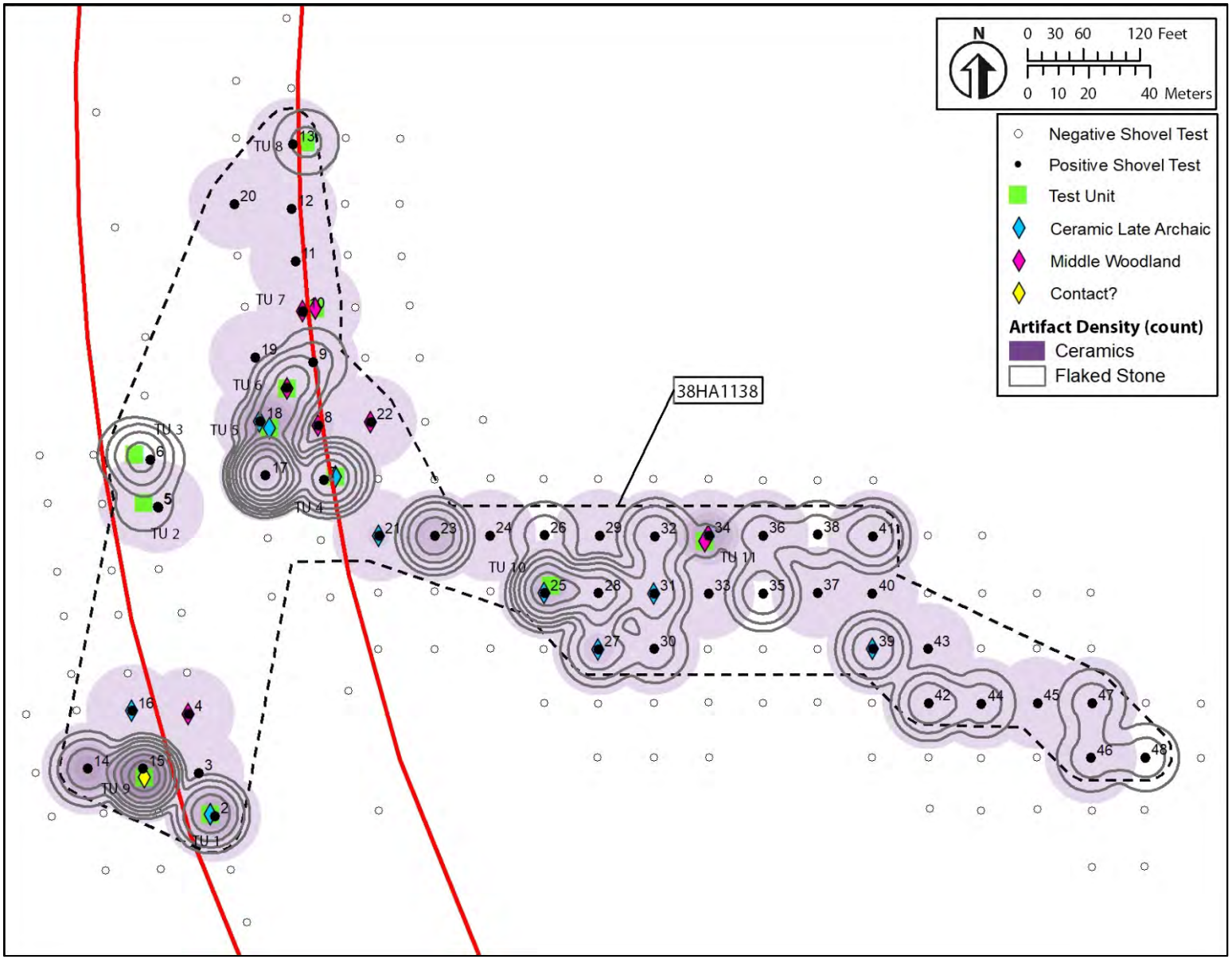


Figure 12 Distribution of Native American ceramic and lithic artifacts (artifacts/m^2) at 38HA1138.

The 131 flaked stone artifacts include 128 pieces of debitage and three stone tools. The three stone tools consist of coastal plain chert biface fragments (Figure 11). Coastal plain chert dominates the flaked stone artifact assemblage, with one each of metavolcanic stone, orthoquartzite, and translucent quartz. The 128 pieces of flaked stone debitage consist primarily of secondary lithic production materials, except for eight cortical reduction flakes and four core fragments. The prevalence of secondary flaked stone debitage suggests site activities focused more on maintenance and less on production of stone tools. Some of the coastal plain chert may have been sourced locally from outcroppings of tertiary shales from the Oligocene Horizon, Parachucla Phase at nearby Bull Point (Elliott and Cable 1994:123). Orthoquartzite is available in streambeds in the region; orthoquartzite hafted bifaces are common in the Charleston Harbor region, especially at Woodland period sites (Baluha et al. 2005). Metavolcanic stone and translucent quartz are only available in the Piedmont.

Artifact Distribution

Figure 12 shows a light ceramic and lithic scatter across the entire site, with dense concentrations near the center of the site and in the southwestern portion of the site. Ceramic Late Archaic and Middle Woodland artifacts are evenly distributed across the site, while the Contact component is isolated in the southwestern portion of the site. Unsurprisingly, these concentrations correlate with the highest portions of the site. These areas likely represent one or more individual households. The TUs exhibit vertical separation between the Middle Woodland and Ceramic Late Archaic components, with Middle Woodland ceramics recovered from Levels 1-4 (0-40 cm bs) and Ceramic Late Archaic ceramics recovered from Levels 3-6 (20-60 cm bs).

Site Summary

Site 38HA1138 is a large (18,082-m^2), multi-component site with a major Native American Pre-Contact Ceramic Late Archaic (Stallings and Thom's Creek) and Middle Woodland (Deptford and Wilmington) and Contact (possibly Ashley) ceramic and lithic scatter and a minor indeterminate Post-Contact artifact scatter. These occupations likely represent short-term, seasonal, resource extraction encampments occupied by band or family level groups. We encountered intact archaeological deposits across several areas at 38HA1138 (Figures 3 and 12). STs and TUs exhibit horizontal and vertical integrity of cultural deposits across the site, except within the current 20-m wide ROW.

NRHP Assessment and Management Recommendations

We assessed the NRHP eligibility of 38HA1138 with respect to Criteria A-D. Site 38HA1138 is a large (18,082 m^2), multi-component site with major Native American Pre-Contact Ceramic Late Archaic and Middle Woodland and Contact (possibly Ashley) components and a minor Post-contact component. We identified intact cultural deposits extending horizontal and vertical deposits at 38HA1138 with artifacts recovered from an average depth of 10-50 cm bs and a maximum depth of 70 cm bs. The underlying Bt1 soil horizon may help to preserve possible cultural features (e.g., pits or post molds) that may have extended into the subsoil. The presence of deeply buried deposits suggests that additional investigation of 38HA1138 may generate information that can contribute to our current understanding of the Ceramic Late Archaic, Middle Woodland, and/or Contact (possibly Ashley) subperiods, particularly with respect to Native American settlement on or near Carolina Bays in Hampton County and across South Carolina's Coastal Plain. Therefore, we recommend 38HA1138 eligible for the NRHP under Criterion D (information potential). Site 38HA1138 should be preserved in place and appropriate documents developed for its management. If that is not possible, additional archaeological investigations should be conducted.

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1988 *Yemasee, SC* quadrangle. United States General Printing Office, Washington, DC.

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Appendix B.

Proposed Draft MOA

DRAFT MEMORANDUM OF AGREEMENT BETWEEN
THE FEDERAL HIGHWAY ADMINISTRATION,
THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND THE SOUTH CAROLINA STATE HISTORIC PRESERVATION OFFICE

REGARDING THE US 17A/21 OVER CSX RAILROAD EMERGENCY BRIDGE REPLACEMENT, HAMPTON AND BEAUFORT COUNTY, SOUTH CAROLINA

WHEREAS, the Federal Highway Administration (FHWA), in cooperation with the South Carolina Department of Transportation (SCDOT), proposes to replace the United States (US) Route 17A/21 Bridge over CSX Railroad in Hampton and Beaufort County; and

WHEREAS, the SCDOT has defined the undertaking's area of potential effects (APE) as shown in Attachment 1; and

WHEREAS, the FHWA has determined that the US 17A/21 bridge replacement project over CSX Railroad in Hampton and Beaufort County, South Carolina, will have an adverse effect upon Archaeological Site 38HA1138, a property determined eligible for inclusion in the National Register of Historic Places, and

WHEREAS, the FHWA and the SCDOT have consulted with the South Carolina (State Historic Preservation Office (SHPO) in accordance with Section 106 of the National Historic Preservation Act (16 U.S.C. Sec. 470f) and it's implementing regulations (36 CFR Part 800) to resolve adverse effects, and

WHEREAS, the FHWA and the SCDOT have notified the Tribal Historic Preservation Offices (THPO's) of the Catawba Nation, the Muscogee (Creek) Nation, and the Eastern Shawnee Tribe of Oklahoma about the undertaking's anticipated impacts on historic properties, as required by 36 C.F.R. § 800.6; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), the FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination providing the specified documentation, and the ACHP has chosen to (or not to) participate, and

NOW, THEREFORE, the FHWA, the SCDOT, the South Carolina SHPO agree that the undertaking will be implemented according to the following stipulations in order to take into account the effects of the undertaking on Archaeological Site 38HA1138.

I. STIPULATIONS

The FHWA and the SCDOT will ensure that the following stipulations are implemented:

A. The proposed construction will result in unavoidable impacts to portions of Site 38HA1138. SCDOT plans to mitigate through a data recovery effort to excavate, preserve, and document the presence and characteristics of any buried features on the site within the area of the proposed project area.

B. SCDOT's archaeological consultant, or staff, will develop, in coordination with the South Carolina SHPO a treatment plan for data recovery investigations at

Archaeological Site 38HA1138. The treatment plan will include a description of the project's research design and sampling strategy. A burial discovery plan will also be developed and attached to the treatment plan. The treatment plan will be submitted to the South Carolina SHPO for review and approval prior to any fieldwork. The South Carolina SHPO will make a reasonable effort to review the treatment plan(s) no later than thirty days after receipt.

C. All plans and reports developed for the treatment of Archaeological Site 38HA1138 shall incorporate guidance from the Secretary of the Interior's "Standards and Guidelines for Archaeological Documentation" (48 FR 44734-37) and the President's Advisory Council on Historic Preservation publication, Treatment of Archaeological Properties (ACHP 1980). In addition, these materials will be consistent with South Carolina Standards and Guidelines for Archaeological Investigations (2013) [or most recent update].

D. An opportunity will be provided for at least one on-site meeting between the SCDOT, the FHWA, and the South Carolina SHPO during the field investigations in order to discuss any necessary revisions to the original scope of work. Any revisions made to the original scope of work will be attached to the approved treatment plan and this agreement.

E. Copies of the draft technical report of data recovery investigations will be submitted to the South Carolina SHPO for review and approval within twelve (12) months from the last day of fieldwork. The draft technical report will be consistent with the standards outlined in South Carolina Standards and Guidelines for Archaeological Investigations (2013) [or most recent update]. The South Carolina SHPO reserves the right to submit the draft technical report to qualified professional archaeologists for the purpose of peer review.

F. Within three (3) months of draft report approval, SCDOT will provide one Portable Document Format (PDF) and one bound copy of the final technical report for the South Carolina SHPO and two bound copies and one compact disk containing a PDF copy of the final technical report for the South Carolina Institute of Archaeology and Anthropology (SCIAA).

G. The SCDOT, in coordination with the SHPO will ensure that all artifacts recovered during archaeological investigations are stabilized and processed for curation at SCIAA. Copies of all records, including but not limited to field notes, maps, catalogue sheets, and representative photographs and negatives will be submitted for curation with the artifacts. SCDOT will supply the SHPO with documentation that SCIAA has received and accepted the collection.

H. SCDOT, the SHPO will consult to determine the appropriate format for a public education component. SCDOT will ensure that a public education plan is developed and submitted to the SHPO with the draft technical report. All public education materials will be completed within two (2) years from the last day of fieldwork.

II. **Duration**

This MOA shall be null and void if its terms are not carried out within five (5) years from the date of its execution, unless the signatories agree in writing to an extension for carrying out its terms.

III. Late Discoveries

If unanticipated cultural materials (e.g., large, intact artifacts or animal bones; large soils stains or patterns of soil stains; buried brick or stone structures; clusters of brick or stone) or human skeletal remains are discovered during construction activities, then the Resident Construction Engineer shall be immediately notified and all work in the vicinity of the discovered materials shall cease until an evaluation can be made by the SCDOT archaeologist in consultation with the South Carolina SHPO.

IV. Monitoring and Reporting

Each year following the execution of this MOA until it expires or is terminated, the SCDOT shall provide all parties to this MOA a summary report detailing work carried out pursuant to its terms. Such reports shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in FHWA's and SCDOT's efforts to carry out the terms of this MOA.

V. Dispute Resolution

The FHWA, the SCDOT, and the South Carolina SHPO will attempt to resolve any disagreement arising from the implementation of the MOA. This will include any disputes that arise concerning the contents of the report(s), including but not limited to its merit as a cultural resource management document.

In the event that the terms of this agreement cannot be carried out, the FHWA and SCDOT will submit a new (or amended) MOA to the South Carolina SHPO, and the ACHP for review. If consultation to prepare a new MOA or amendments proves unproductive, the FHWA will seek ACHP comment in accordance with 36 CFR § 800.6(b)(2).

VI. Amendment and Modification

Any signatory to this MOA may request that it be amended or modified at any time, whereupon the parties will consult with each other to consider such amendment or modification.

VII. Termination

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop and amendment per Stipulation VI, above. If within (30) days an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, the FHWA and the SCDOT must either (a) execute an MOA pursuant to 36 CFR § 800.6, or (b) request comments from the ACHP under 36 CFR § 800.7. The FHWA and the SCDOT will notify the signatories as to the course of action it will pursue.

EXECUTION of this Memorandum of Agreement by the Federal Highway Administration, the South Carolina Department of Transportation, and the South Carolina State Historic Preservation Office and implementation of its terms, is evidence that the FHWA has taken into account the effects of the undertaking on Archaeological Site 38HA1138 in accordance with Section 106 of the National Historic Preservation Act (16 U.S.C. Sec. 470f) and its implementing regulations (36 CFR Part 800).

SIGNATORIES:

Federal Highway Administration

By:_____ Date:

South Carolina Department of Transportation

By:_____ Date:

South Carolina State Historic Preservation Office

By:_____ Date:

Advisory Council on Historic Preservation

By:_____ Date:

APPENDIX E
WATERS

Healthy People Healthly Communities

Watershed and Water Quality Information

General Information

Applicant Name: SCDOT
Address: 121 FRAMPTON RD, YEMASSEE, SC, 29945
MS4 Designation: Not in designated area
Within Coastal Critical Area: No
Waterbody Name: Unnamed Trib

Permit Type: MS4
Latitude/Longitude: 32.673905 / -80.858645
Monitoring Station: RO-14351
Water Classification (Provisional): SFH
Entered Waterbody Name:

Parameter Description

NH3N	Ammonia	CD	Cadmium	CR	Chromium
CU	Copper	HG	Mercury	NI	Nickel
PB	Lead	ZN	Zinc	DO	Dissolved Oxygen
PH	pH	TURBIDITY	Turbidity	ECOLI	Escherichia coli (Freshwaters)
FC	Fecal Coliform (Shellfish)	BIO	Macroinvertebrates (Bio)	TP	(Lakes) Phosphorus
TN	(Lakes) Nitrogen	CHLA	(Lakes) Chlorophyll a	ENTERO	Enterococcus (Coastal Waters)
HGF	Mercury (Fish Tissue)	PCB	PCB (Fish)		

Impaired Status (downstream sites)

Station	NH3N	CD	CR	CU	HG	NI	PB	ZN	DO	PH	TURBIDITY	ECOLI	FC	BIO	TP	TN	CHLA	ENTERO	HGF	PCB
RO-14351	X	X	X	X	X	X	X	X	N	X	X	X	X	X	X	X	X	X	X	X

F = Standards full supported
N = Standards not supported
A = Assessed at upstream station
X = Parameter not assessed at station
WnTN = Within TMDL, parameter not supported
InTN = In TMDL, parameter not supported
WnTF = Within TMDL, parameter full supported
InTF = In TMDL, parameter full supported

Parameters to be addressed (those not supporting standards)

DO - Dissolved Oxygen

Fish Consumption Advisory

Waters of Concern (WOC)

TMDL Information - TMDL Parameters to be addressed

In TMDL Watershed: No
TMDL Report No:
TMDL Document Link:

TMDL Site:
TMDL Parameter:

Report Date: September 20, 2023

US 17A/21 over CSX

NWI

Legend

Maltese Arms Shooting Club (Real Location)

Ferguson Forest Products, Inc

Castle Hall Rd

Gregory Rd

PFO1A PFO1C PFO1/4A PFO1/4C PFO4A PFO4/1Ad PFO4/1C PFO4Ad PSS1C PSS1F PSS1/2F PSS1Cd PEM1A PEM1C PEM1Cd PSS1A PFO1B PFO1Ad PSS4Bd PUBHx R2UBHx

N

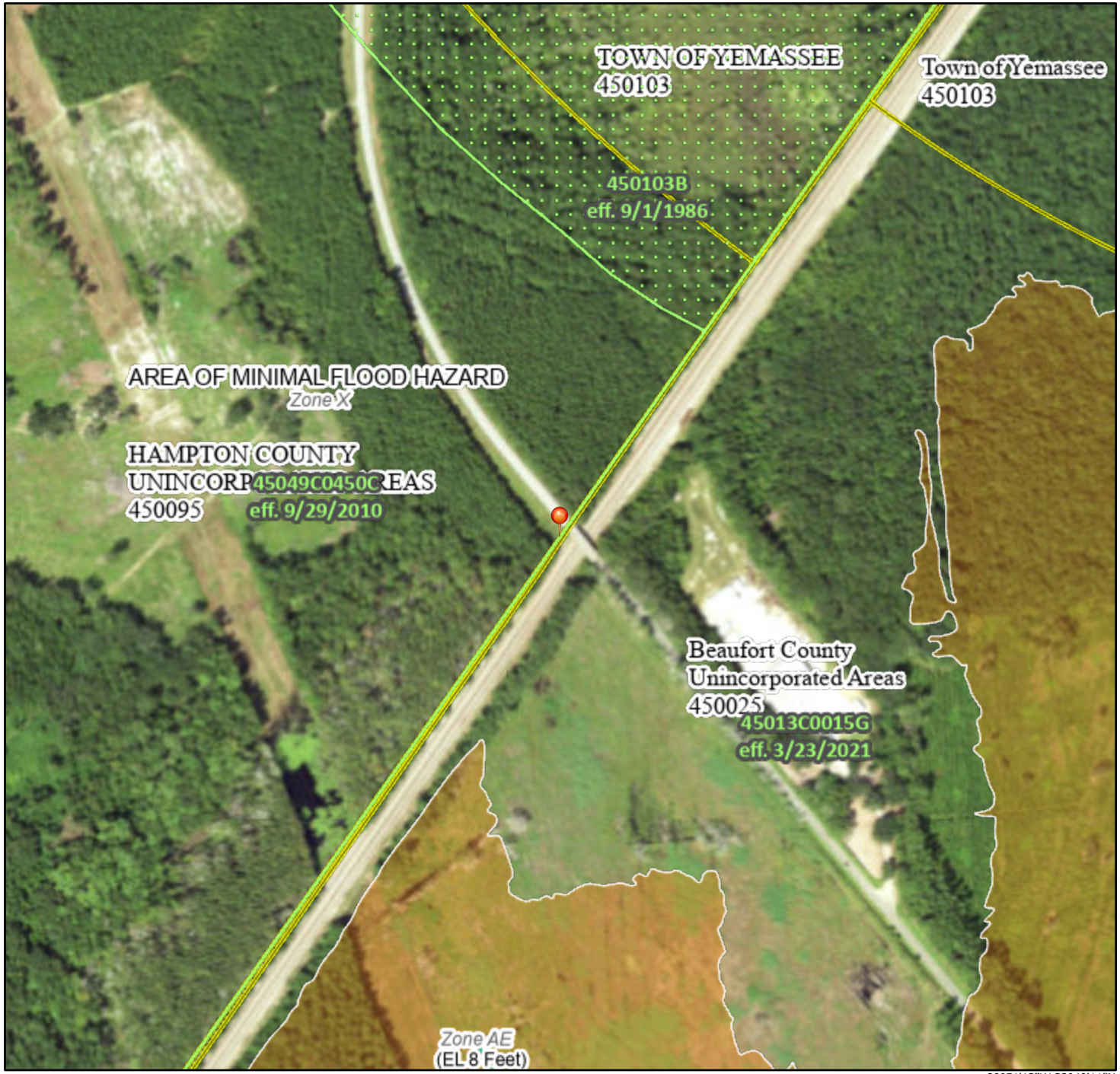
1000 ft

Google Earth

National Flood Hazard Layer FIRMette

FEMA

80°51'51"W 32°40'41"N



80°51'13"W 32°40'11"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/21/2023 at 12:44 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Date: 12-5-23

PERMIT DETERMINATION

FROM Will McGoldrick COMPANY SCDOT

CONTACT INFO (phone and/or email) 803-737-1326; mcgoldriwr@scdot.org

SCDOT PROJECT ENGINEER Tyler Clark

TO Will McGoldrick - Design Build Coordinator

Project Description Emergency Bridge Replacement US17A over CSX Rail near Town of Yemassee

Route or Road No. US17A/US 21 County Hampton/Beaufort

CONST. PIN P042942 OTHER PINS or STRUCTURE # 0834

RESPONSE:

( ) It has been determined that no permits are required because:

( ) The following permit(s) is/are necessary:
(Please check which type(s) of permit the project will need)

USACE Permit ☑ GP ☐ IP ☐ 401 ☐ JD

OCRM Permit ☐ CAP ☐ CZC

Navigable ☐ SCDHEC NAVGP – if checked a USCG and/or USACE navigable permit may also be required, but will be determined during the NEPA and Permitting stages.

Other

Water Classification: SFH *Print and attach the SCDHEC water quality report*

303(d) listed ( ) no ( ) yes, for * Dissolved Oxygen

TMDL developed ( ) no ( ) yes, for *

*List all that apply using the SCDHEC abbreviations

Comments: PD updated from Sept 9. Revised permit type from NW to GP. Nearest receiving waterbody is miles away.

The determination above was based on the most recently available information at the time. This is a preliminary determination and is subject to change if the design of the project is modified.

Biologist, SCDOT/Consultant

12/5/23
Date

Revised 11/2018

APPENDIX F
BIOLOGICAL ASSESSEMENT

United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To: October 03, 2023
Project code: 2024-0000612
Project Name: US17A/21 Emergency Bridge Replacement

Subject: Concurrence verification letter for the 'US17A/21 Emergency Bridge Replacement' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated October 03, 2023 to verify that the **US17A/21 Emergency Bridge Replacement** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to section 7(a)(2) of ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:
If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- American Chaffseed *Schwalbea americana* Endangered
- Canby's Dropwort *Oxypolis canbyi* Endangered
- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Green Sea Turtle *Chelonia mydas* Threatened
- Kemp's Ridley Sea Turtle *Lepidochelys kempii* Endangered
- Leatherback Sea Turtle *Dermochelys coriacea* Endangered
- Loggerhead Sea Turtle *Caretta caretta* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate
- Piping Plover *Charadrius melodus* Threatened
- Pondberry *Lindera melissifolia* Endangered
- Red Knot *Calidris canutus rufa* Threatened
- Red-cockaded Woodpecker *Picoides borealis* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Wood Stork *Mycteria americana* Threatened

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

US17A/21 Emergency Bridge Replacement

DESCRIPTION

The project includes the replacement of the US 17A/21 bridge over the railroad.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.6753297,-80.86000572283582,14z

DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   No

2. Is the project within the range of the northern long-eared bat[1]?

   [1] See northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   No

8. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat.

   No

9. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

   No

10. Does the project include slash pile burning?

    No

11. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    Yes

12. Is there *any* suitable habitat[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

    [1] See the Service's current summer survey guidance for our current definitions of suitable habitat.

    Yes

13. Has a bridge assessment[1] been conducted **within** the last 24 months[2] to determine if the bridge is being used by bats?

    [1] See User Guide Appendix D for bridge/structure assessment guidance

    [2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

    Yes

SUBMITTED DOCUMENTS

- *US 17A Structures Survey Data Sheet.docx https://ipac.ecosphere.fws.gov/project/P27WOJAU75GB7CGXX5XTOU7RZM/projectDocuments/132757858*

14. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)[1]?

    [1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

    Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

    No

15. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

    No

16. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    No

17. Will the project involve the use of **temporary** lighting *during* the active season?

    Yes

18. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?

    Yes

19. Will the project install new or replace existing **permanent** lighting?

    No

20. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    No

21. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

22. Will the project raise the road profile **above the tree canopy**?

    No

23. Is the location of this project consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the project action area is not within suitable Indiana bat and/or NLEB summer habitat and is outside of 0.5 miles of a hibernaculum.

24. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

25. **General AMM 1**
    Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

    Yes

26. **Lighting AMM 1**
    Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

    Yes

PROJECT QUESTIONNAIRE

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   Yes

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

   No

3. Please describe the proposed bridge work:

   The bridge will be replaced on existing alignment within existing SCDOT right of way. There will be some associated roadwork that will be necessary to build the new bridge to current traffic safety standards.

4. Please state the timing of all proposed bridge work:

   This is an emergency repair project that is expected to start in winter 2023.

5. Please enter the date of the bridge assessment:

   9/28/2023

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the committment to implement the following Avoidance and Minimization Measures (AMMs):

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on July 27, 2023. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: South Carolina Department of Transportation
Name: Chris Beckham
Address: 955 Park Street
City: Columbia
State: SC
Zip: 29201
Email beckhamjc@scdot.org
Phone: 8036099464

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To:
Project Code: 2024-0000612
Project Name: US17A/21 Emergency Bridge Replacement

October 03, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
(843) 727-4707

PROJECT SUMMARY

Project Code: 2024-0000612
Project Name: US17A/21 Emergency Bridge Replacement
Project Type: Bridge - Replacement
Project Description: The project includes the replacement of the US 17A/21 bridge over the railroad.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.6753297,-80.86000572283582,14z

Counties: Beaufort and Hampton counties, South Carolina

ENDANGERED SPECIES ACT SPECIES

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis*	Threatened
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	
Piping Plover *Charadrius melodus*	Threatened
Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	
Red Knot *Calidris canutus rufa*	Threatened
There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	
Red-cockaded Woodpecker *Picoides borealis*	Endangered
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	
Wood Stork *Mycteria americana*	Threatened
Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477	

REPTILES

NAME	STATUS
Green Sea Turtle *Chelonia mydas*	Threatened
Population: North Atlantic DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6199	
Kemp's Ridley Sea Turtle *Lepidochelys kempii*	Endangered
There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/5523	
Leatherback Sea Turtle *Dermochelys coriacea*	Endangered
There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1493	
Loggerhead Sea Turtle *Caretta caretta*	Threatened
Population: Northwest Atlantic Ocean DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1110	

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
American Chaffseed *Schwalbea americana* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1286	Endangered
Canby's Dropwort *Oxypolis canbyi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7738	Endangered
Pondberry *Lindera melissifolia* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1279	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Bald and Golden Eagle Protection Act of 1940.

2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort – no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Bald Eagle
Non-BCC
Vulnerable

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Kestrel *Falco sparverius paulus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31

NAME	BREEDING SEASON
Brown-headed Nuthatch *Sitta pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jul 15
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Painted Bunting *Passerina ciris* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 15
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Swallow-tailed Kite *Elanoides forficatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

- PFO4/1Ad

IPAC USER CONTACT INFORMATION

Agency: South Carolina Department of Transportation
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Address: 955 Park Street
City: Columbia
State: SC
Zip: 29201
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LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

South Carolina Department of Transportation

Biological Assessment Report

US 17A/21 Bridge Replacement over CSX Railroad

Beaufort and Hampton Counties

SCDOT Project ID: P042942

October 6, 2023

(Revised December 12, 2023)

Prepared By: Chris Beckham

Table of Contents

1. Project Overview

1.1 Introduction

A biological assessment is an evaluation of the condition of project areas and determining the presence of federally listed species, species proposed for listing, and candidate species as well as designated and proposed critical habitat. The South Carolina Department of Transportation (SCDOT) is required to determine whether our actions may or may not affect the species and critical habitats in the area and areas surrounding the proposed project.

1.2 Federal Nexus

The purpose of this biological assessment (BA) is to address the effect of the US 17A/21 bridge replacement over a CSX railroad on the U.S. Endangered Species Act (ESA) listed species, or their designated critical habitat. Species listed in Section 7 of the Endangered Species Act are under the jurisdiction of the US Fish and Wildlife Service (USFWS) and/or the National Oceanic and Atmospheric Association National Marine Fisheries Service (NOAA-NMFS).

1.3 Project Description

The South Carolina Department of Transportation proposes to replace the existing US 17A/ 21 bridge over a CSX railroad in Beaufort and Hampton Counties. The US 17A/21 bridge over a CSX railroad was damaged during a train derailment on September 20, 2023. Damage to the substructure of the bridge resulted in the loss of structural capacity and the bridge was closed to traffic. Due to the extent of the damage, repair of the existing bridge is not feasible. SCDOT proposes to demolish the old bridge and replace the bridge on the current alignment. This project has been deemed an emergency project by the Governor and the Secretary of Transportation. The location of the project is shown in Appendix A, Figure 1.

1.4 Project Area and Setting

The Project Study Area (PSA) encompasses approximately 40 acres and includes mixed forested upland areas, recently clear cut areas, and a small area of forested wetlands. Upland habitat types in the PSA are comprised of isolated tree species such as water oak *(Quercus nigra)*, sweet gum (*Liquidamber styricflua*), red maple (*Acer rubrum*), and loblolly pine (*Pinus teada*). The upland understory is dominated by new growth of saplings of the canopy species along with various grasses that have grown in areas disturbed during the timber harvest and along the roadway. There is also a utility easement adjacent to the roadway, and a developed commercial business property located adjacent to the PSA. An aerial image of the PSA is shown in Appendix A, Figure 2.

Aquatic resources in the PSA include some wetland areas where timber was recently harvested. These areas have reverted to emergent wetlands dominated by wool grass (*Scirpus cyperinus*), various sedges (*Cyperus spp.*), and soft rush (*Juncus effusus*). Other aquatic resources include a small (approximately 0.2 acre) forested wetland area and several roadside features that are hydrologically connected to the wetland areas.

1.5 Consultation History

The USFWS South Carolina list of endangered and threatened species was reviewed, and an official species list was requested from the USFWS Information, Planning, and Conservation (IPaC) online database. A copy of the IPaC official species list is attached to this report. Additionally, any IPaC determination keys that were that are applicable to this project were completed. The IPaC letters are included in Appendix B.

2. Federally Proposed and Listed Species and Designated Critical Habitat

A search of the USFWS database provided information regarding the potential occurrence of listed (proposed, threatened, or endangered) species within Beaufort and Hampton Counties. As of the date of this report, 15 species are listed as federally threatened or endangered and are under the jurisdiction of the USFWS. Five species are listed as endangered and fall under the jurisdiction of NOAA-NMFS. Four species fall under the jurisdiction of both agencies.

The State and Federal-listed species occurrences were reviewed to determine the presence of their habitat within the PSA. Areas that match the description of these protected species habitats within the PSA were reviewed accordingly. Descriptions of the species and the determinations of potential suitable habitat are included below.

3. Effect Analysis

The impacts associated with the project have been minimized to the greatest extent practicable. Project impacts have been minimized by constructing the new bridge on the existing roadway alignment. Some roadway improvements will be required to construct the new bridge. Specifically, the fill slopes on the existing road will have to be expanded to accommodate the new bridge. The slope improvements will require a minimal amount of fill to be placed in the adjacent wetlands. The impacts from the project will be limited to existing SCDOT right-of-way. The wetland impacts associated with the project will primarily occur within roadside features that drain to or from other jurisdictional waters. The project will also involve some tree clearing that will be necessary for construction access and to install sediment and erosion control BMP's.

A review of the PSA was done using GIS data to analyze species habitat and to look for nearby documented occurrences of each species. A field review was also done on September 27, 2023, to evaluate the PSA for any species or suitable habitat.

3.1 Birds

Bald eagles are large raptors with a wingspan of about seven feet, are dark brown in color, and adults have pure white head and tail. Bald eagles are federally protected by the Bald and Golden Eagle Protection Act (BGEPA). The birds generally nest within two miles of large bodies of water. Their diet is mostly fish but they will also eat other animals. There are no large bodies of water within two miles of the project area, and no bald eagles or their nests were observed in the PSA.

The red-cockaded woodpecker is a species of woodpecker that nests in excavated cavities in longleaf or loblolly pine trees. The preferred habitat for the species includes mature longleaf pine stands with an open or low understory maintained by frequent fires. They often nest in family groups and clusters of nests are sometimes observed within their occupied territory. They forage mostly on mature pines where they flake away bark to look for insects. There is no suitable habitat for the red-cockaded woodpecker within the PSA and no RCW's have been observed within the vicinity of the PSA. The project will have no effect on the red-cockaded woodpecker.

The American wood stork is a large wading bird that occupies a variety of wetland habitat types. Wood stork nesting colonies are typically found within cypress swamps, shallow creeks, or impoundments where there are trees surrounded by water. Preferred foraging habitat for wood storks consists of open water wetlands with a depth between 5 and 15 inches, and patches of submerged or emergent vegetation.

There is no suitable wood stork nesting habitat within the project study area. There is an emergent wetland area located on the west side of the PSA, adjacent to the railroad right-of-way that is suitable foraging habitat for the wood stork. This area is comprised of a portion of a large pond with dead pine trees, emergent wetland vegetation, and some submerged aquatic vegetation. No wood storks were observed using this area during the site visit. The project construction limits will avoid all impacts to this wetland area and result in no loss of suitable foraging habitat. A

determination key in IPaC was completed for the wood stork. Completion of the key resulted in a determination of no effect for the wood stork. A copy of the letter is included in Appendix B.

3.2 Plant Species

American chaffseed is a small, unbranched, perennial herb that grows in fire maintained longleaf pine flatwoods and savannas. There is no such habitat within the PSA and there are no known occurrences of chaffseed in the vicinity of the project. The project will have no effect on American chaffseed.

Canby's dropwort is perennial herb that grows 30 to 50 inches tall, has quill like leaves, and small white flowers that extend from the base of the leaves on compound structures. The plant is found in variety of communities including cypress pine ponds, wet meadows, pineland savannas, and other open wet areas. There are some wetlands in the PSA that are marginally suitable habitat for Canby's dropwort. These wetland areas were recently logged and the removal of the tree canopy encouraged the growth of various sedges, rushes, and grasses. Although some suitable habitat is within the PSA, no Canby's dropwort plants were observed during the field review. Also, a review of Heritage Trust data shows no known occurrences of Canby's dropwort in the vicinity of the project. The project construction limits are expected to avoid all impacts to the emergent wetlands that are suitable habitat for Canby's dropwort. Since impacts to suitable habitat will be avoided, there are no nearby occurrences of the species, and there were no observations of the species during the field review, it has been determined that the project will have no effect on Canby's dropwort.

Pondberry is a deciduous shrub that grows to approximately 2 meters in height. It blooms during February and March with small yellow flowers. In South Carolina, pondberry is usually found in Carolina bays, swampy depressions, the margins of limestone sinks, and recently burned pinelands. These types of habitats are not found

within the PSA. The Heritage Trust data base did not show any known occurrences of pondberry in the vicinity of the project. The project will have no effect on pondberry.

3.3 Fish

Atlantic and shortnose sturgeon are large anadromous fish species that spend most of the year in brackish or salt water, and then move into freshwater to spawn during the spring. Each of the sturgeon species occupy the lower portions or large rivers. Critical habitat has been designated for the Atlantic sturgeon and some waterbodies in South Carolina are listed as critical habitat by NOAA-NMFS. There are no large waterbodies or rivers located in the PSA. For this reason, the project will have no effect on either sturgeon species or sturgeon critical habitat.

3.4 Reptiles

The reptiles listed as threatened or endangered in Beaufort and Hampton Counties include the loggerhead sea turtle, the green sea turtle, Kemp's Ridley sea turtle, and the leatherback sea turtle. These turtles are marine turtles that spend most of their time in ocean waters and migrate to beaches to spawn. The project is not located on the coast and there is no habitat for sea turtles in the PSA. The project will have no effect on any species of sea turtle.

3.5 Amphibians

The frosted flatwoods salamander is a small (9-14cm total length) species of salamander that is found in some areas of the southeastern coastal plain. The species is usually found in seasonally wet, pine flatwoods and pine savannas. Critical habitat was designated for the frosted flatwoods salamander in 2009. There is no suitable habitat for the frosted flatwood salamander in the PSA. The federally designated critical habitat is located in portions of the county located east of the PSA. The project will have no effect on the frosted flatwoods salamander or critical habitat

3.6 Mammals

The project is located inland and there are no large rivers or marine waters in the PSA. There is no suitable habitat for marine mammals such as whales, or West Indian manatees. The project will have no effect on these species.

The PSA is within the range of the Northern long-eared bat. Procedures for the FHWA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and the Northern Long-eared Bat were followed by using the determination key in IPaC. The project was determined to may affect but not likely to adversely affect the northern long-eared bat. A copy of the consistency letter is included in Appendix B.

Tricolored bats forage, travel, and roost in wide variety of wooded habitats. They are also known to roost in manmade structures such as bridges and culverts. Most of the timber in the PSA was recently harvested and there are few remaining trees in the corridor. The trees that remain in the PSA are isolated due to the recent timber harvest or are located in an isolated strip of forest located between the roadway and an area developed for a commercial business. The remaining trees within the construction footprint of the project were inspected for suitable maternity roost habitat during the field visit. No suitable maternity roost trees were found in the areas proposed to be cleared by the project.

There are two manmade structures in the project area that could be utilized for roosting by tricolored bats. One structure is a box culvert and the other structure is the bridge over the CSX railroad. Each of these structures were inspected for bats and/or evidence of bats. No bats were observed on either structure and there was no guano or unexplained staining on the surfaces of the structures. A copy of the structure assessment form is attached in Appendix C.

Suitable foraging and travel habitat for tricolored bats is very diverse. There is a possibility that bats could utilize portions of the PSA as potential foraging and/or travel habitat. The project should not interfere with these activities since there is an abundance of other suitable habitat on properties outside of the PSA. An official effect determination for tricolored bats is not required until the species is officially listed. It is anticipated that the project will have no effect on tricolored bats once the official listing is finalized.

4. Protected Species and Effect Determination

Table 1. Protected Species and Effect Determination

Species	Federal Protection Status	Effect Determination
Bald eagle (*Haliaeetus leucocephalus*)	BGEPA	NE
Red-cockaded woodpecker (*Picoides borealis*)	Endangered	NE
American wood stork (*Mycteria Americana*)	Threatened	NE
Eastern black rail (*Laterallus jamaicensis*)	Threatened	NE
Piping plover (*Charadrius melodus*)	Threatened	NE
Shortnose sturgeon (*Acipenser brevirostrum*)**	Endangered	NE
Atlantic sturgeon (*Acipenser oxyrinchus*)**	Endangered	NE
West Indian manatee (*Trichechus manatus*)	Threatened	NE
Green sea turtle (*Chelonia mydas*)***	Threatened	NE
Frosted flatwoods salamander (*Ambymostoma cingulatum*)	Threatened	NE
Kemp's Ridley sea turtle (*Lepidochelys kempii*)***	Endangered	NE
Leatherback sea turtle (*Dermochelys coriaccea*)***	Endangered	NE
Loggerhead sea turtle (*Caretta carets*)***	Threatened	NE
Right whale (*Balaena glacialis*)**	Endangered	NE
Sei whale (*Balanea glacialis*)**	Endangered	NE
Sperm whale (*Physeter microcephalus*)**	Endangered	NE
Northern Long-eared bat (*Myotis septentrionalis*)	Endangered	MANLAA
Tri-colored bat (*Perimyotis subflavus*)*	At-Risk*	-
American chaffseed (*Schwalbea Americana*)	Endangered	NE
Canby's dropwort (*Oxpolis canbyi*)	Endangered	NE
Pondberry (*Lindera melissifolia*)	Endangered	NE

*****Tricolored bat was proposed as endangered in September 2022. The effect determination will be updated when the listing becomes final.

******These species fall under the jurisdiction of NOAA-NMFS.

*******These species fall under the jurisdiction of NOAA-NMFS and the USFWS.

Key: No Effect (NE), May Affect Not Likely to Adversely Affect (MANLAA), May Affect Likely to Adversely Affect (MALAA

The above effect determinations were decided based upon the findings of the Biological Assessment.

5. Conclusion

Results of the threatened and endangered species study indicate that the proposed action may affect but will not likely adversely affect the northern long-eared bat. The project will have no effect upon any other threatened or endangered species or critical habitats currently listed by the USFWS or the NOAA-NMFS.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To: October 04, 2023
Project code: 2024-0000612
Project Name: US17A/21 Emergency Bridge Replacement

Please provide this document to the Corps with your permit application.

Subject: Consistency letter for the project named 'US17A/21 Emergency Bridge Replacement' for the threatened wood stork, that may occur in your proposed project location, pursuant to the Wood Stork Determination Key.

To whom it may concern:

On October 04, 2023, Chris Beckham used the IPaC determination key ‘Wood Stork Determination Key’; dated May 01, 2023, in the U.S. Fish and Wildlife Service's online IPaC tool, to evaluate potential impacts to the wood stork from a project named 'US17A/21 Emergency Bridge Replacement' in (shown below).This letter is provided pursuant to the Service’s authority under the Endangered Species Act of 1973, as amended (ESA) (87 Stat. 884; 16 U.S.C. 1531et seq.).

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.6753297,-80.86000572283582,14z

The following description was provided for the project 'US17A/21 Emergency Bridge Replacement':

> The project includes the replacement of the US 17A/21 bridge over the railroad.

Based upon your IPaC submission, the proposed project is consistent with a no effect determination for the wood stork.

This letter serves as documentation of your consideration of the wood stork as required under section 7 of the ESA. Critical habitat has not been designated for the wood stork. No further action is required with respect to this species.

If later modifications are made to the project, additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary

This IPaC-generated letter only applies to the wood stork and **does not** apply to the following ESA-protected species that also may occur in the Action area:

- American Chaffseed *Schwalbea americana* Endangered
- Canby's Dropwort *Oxypolis canbyi* Endangered
- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Green Sea Turtle *Chelonia mydas* Threatened
- Kemp's Ridley Sea Turtle *Lepidochelys kempii* Endangered
- Leatherback Sea Turtle *Dermochelys coriacea* Endangered
- Loggerhead Sea Turtle *Caretta caretta* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate
- Northern Long-eared Bat *Myotis septentrionalis* Endangered
- Piping Plover *Charadrius melodus* Threatened
- Pondberry *Lindera melissifolia* Endangered
- Red Knot *Calidris canutus rufa* Threatened
- Red-cockaded Woodpecker *Picoides borealis* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

ADDITIONAL CONSIDERATIONS FOR NON-FEDERALLY LISTED SPECIES

- **Bald Eagle Nest Issues.** If any project related activities are proposed to occur **within 660 feet** of an active or alternate bald eagle (Haliaeetus leucocephalus) nest during the nesting season (October 1 through May 15), we recommend the applicant or their designated agent review the information available for eagle management at https://www.fws.gov/birds/management/managed-species/eagle-management.php. Information is available for avoidance and minimization of impacts, and permitting options, if necessary.

- **Migratory Bird Issues.** To ensure there no violations to the Migratory Bird Treaty Act or State regulation, in the event any native birds are using the structures for nesting, we recommend the applicant or their designated agent coordinate with the appropriate Service office https://www.fws.gov/program/migratory-birds and the Georgia Department of Natural Resources Non-Game Division so that impacts can be avoided and/or minimized.

QUALIFICATION INTERVIEW

1. Does the proposed action require a permit (nationwide, general, or individual permits) from the U.S. Army Corps of Engineers?

   Yes

2. [Semantic] Is the action within 2,500 feet of an active wood stork nesting colony?

   Automatically answered
   No

3. Are you an employee of the U.S. Army Corps of Engineers?

   No

4. Is there suitable wood stork foraging habitat (SFH) within the project area?

   Note: SFH consists of wetland communities and/or impoundments with mosaic of emergent and shallow-open water areas (<25% dense thickets of aquatic vegetation) that are relatively calm and have a water depth between 2 and 15 inches deep)

   Yes

5. Will the project impact SFH?

   No

DETERMINATION KEY DESCRIPTION: WOOD STORK DECISION KEY

This key was last updated in IPaC on [Date, 2021]. Keys are subject to periodic revision. This key is for determining effects to the threatened wood stork resulting from U.S. Army Corps of Engineers' (Corps) permit applications. The purpose of this Key is to assist IPaC users in making appropriate effects determinations for threatened wood stork resulting from U.S. Army Corps of Engineers' (Corps) permit applications pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.) The Key is intended to streamline consultation with the U.S. Fish and Wildlife Service (Service) when the proposed action can be walked through the Key and the appropriate conclusion is the proposed action will have no effect or may affect but not likely to adversely affect the wood stork. For projects where the Service believes that further evaluation of the proposed project is necessary, the Key recommends contacting the local field office and requesting consultation. The Service intends to develop decision keys in the future to provide technical assistance for section 7 consultation for other listed species. Therefore, the Service highly recommends continuing to check this site for improvements and additional streamlining opportunities for other listed species.

The Service is the lead Federal Agency charged with the protection and conservation of Federal Trust Resources, including threatened and endangered species and migratory birds, in accordance with section 7 of the Act, the Bald and Golden Eagle Protection Act, (16 U.S.C. 668-668d) (Eagle Act), and the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 701 et seq.). If a proposed project has the potential to effect bald and golden eagles, or other migratory birds,

additional consultation with the Migratory Bird office may be necessary, please visit: https://www.fws.gov/program/migratory-birds.

This key is based on the following documents:
The Corp's Determination Guidance for Endangered & Threatened Species (EDGES)
Central and North Peninsular Florida 2008 wood stork consultation key
South Florida 2010 wood stork consultation key

IPAC USER CONTACT INFORMATION

Agency: South Carolina Department of Transportation
Name: Chris Beckham
Address: 955 Park Street
City: Columbia
State: SC
Zip: 29201
Email beckhamjc@scdot.org
Phone: 8036099464

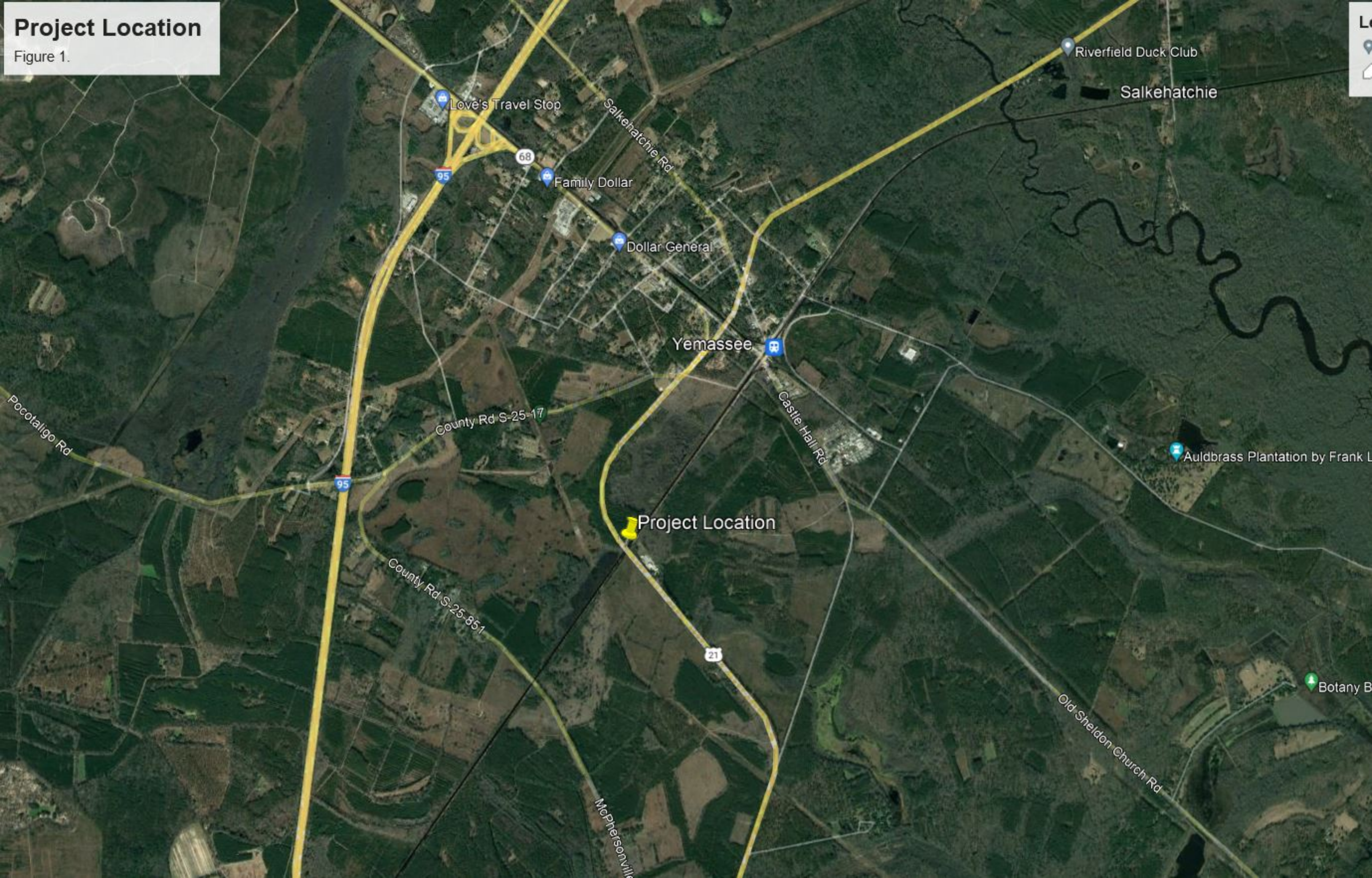
LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Appendix A – Figures

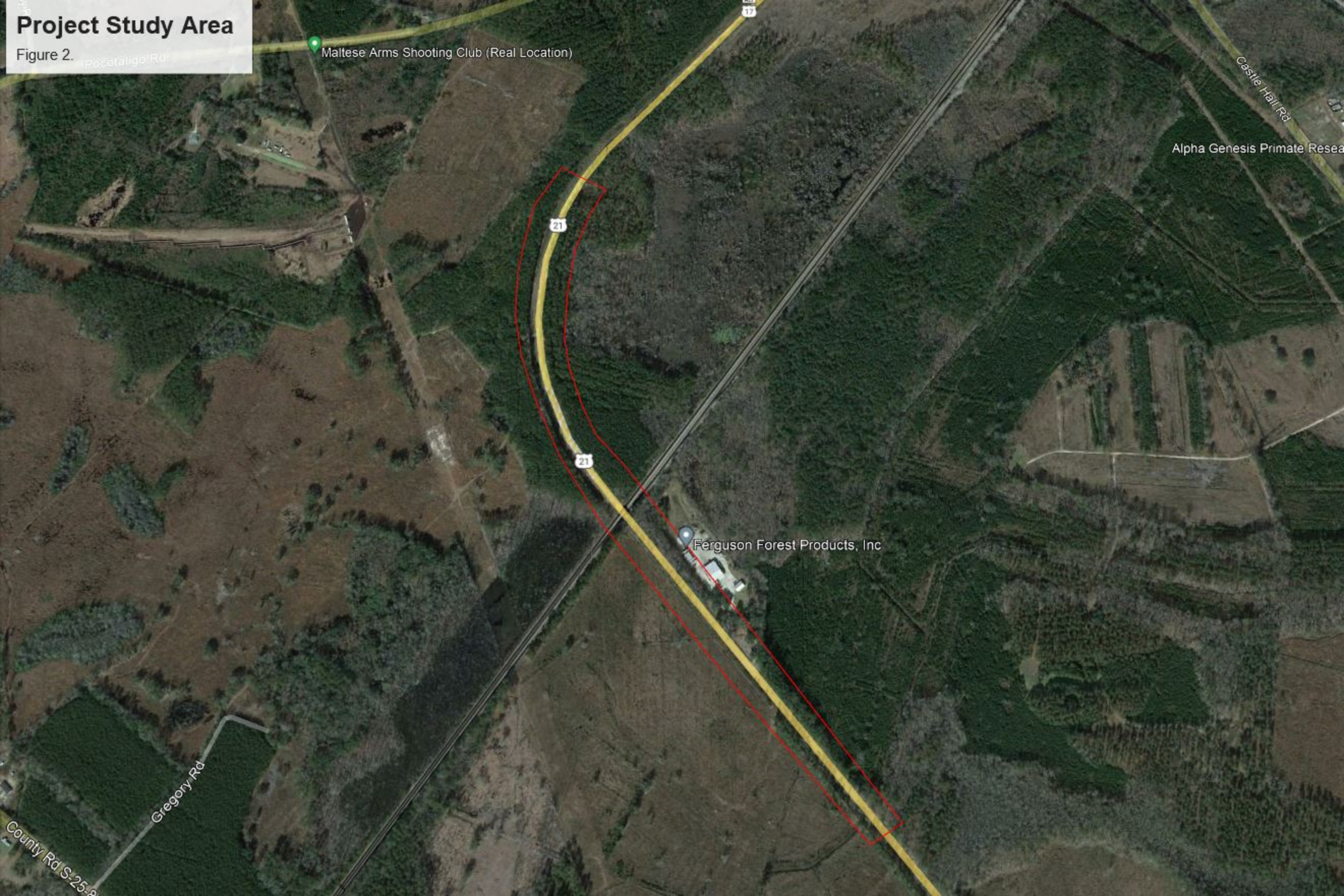
Project Location

Figure 1.



Project Study Area

Figure 2.



Appendix B – USFWS IPaC Coordination Letters and Species List

BEAUFORT COUNTY

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
Amphibian	Frosted flatwoods salamander (T, CH)	*Ambystoma cingulatum*	January 1-April 30	Larvae present in breeding ponds
Bird	American wood stork (T)	*Mycteria americana*	February 15-September 1	Nesting season
Bird	Bald eagle (BGEPA)	*Haliaeetus leucocephalus*	October 1-May 15	Nesting season
Bird	Black-capped petrel (ARS)	*Pterodroma hasitata*	April-October	Offshore water primarily
Bird	Eastern black rail (T)	*Laterallus jamaicensis jamaicensis*	April-June	Minimum of five surveys/survey point
Bird	Piping plover (T, CH)	*Charadrius melodus*	July 15-May 1	Migration and wintering
Bird	Red-cockaded woodpecker (E)	*Picoides borealis*	March 1-July 31	Nesting season
Bird	Red knot (T)	*Calidris canutus rufa*	August 1-May 31	Migration and wintering
Bird	Saltmarsh sparrow (ARS)	*Ammospiza caudacuta*	Fall/winter	Fall/winter surveys
Fish	Atlantic sturgeon* (E)	*Acipenser oxyrinchus**	February 1-April 30	Spawning migration
Fish	Shortnose sturgeon* (E)	*Acipenser brevirostrum**	February 1-April 30	Spawning migration
Insect	Monarch butterfly (C)	*Danaus plexippus*	August-December	Overwinter population departs; March-April
Mammal	Finback whale* (E)	*Balaenoptera physalus**	November 1-April 30	Off the coast
Mammal	Humpback whale * (E)	*Megaptera novaengliae**	January 1-March 31	Migration off the coast
Mammal	Little brown bat (ARS)	*Myotis lucifugus*	Year round	Found in trees, rock crevices, and under bridges
Mammal	Northern long-eared bat (T)	*Myotis septentrionalis*	Year round	Winter surveys not as successful
Mammal	Right whale* (E)	*Balaena glacialis**	November 1-April 30	Off the coast
Mammal	Sei whale* (E)	*Balaenoptera borealis**		
Mammal	Sperm whale* (E)	*Physeter macrocephalus**		
Mammal	Tri-colored bat (ARS)	*Perimyotis subflavus*	Year round	Found in mines and caves in the winter
Mammal	West Indian manatee (T)	*Trichechus manatus*	May 1-November 15	In coastal waters
Plant	American chaffseed (E)	*Schwalbea americana*	May-August	1-2 months after a fire
Plant	Ciliate-leaf tickseed (ARS)	*Coreopsis integrifolia*	August-November	
Plant	Pondberry (E)	*Lindera melissifolia*	February-March	

BEAUFORT COUNTY

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
Reptile	Eastern diamondback rattlesnake (ARS)	*Crotalus adamanteus*	Most of the year	Peak: April-November
Reptile	Florida pine snake (ARS)	*Pituophis melanoleucus mugitus*	Most of year	
Reptile	Green sea turtle ** (T)	*Chelonia mydas **	May 1-October 31	Nesting and hatching
Reptile	Kemp's ridley sea turtle ** (E)	*Lepidochelys kempii**	May 1-October 31	In coastal waters
Reptile	Leatherback sea turtle ** (E)	*Dermochelys coriacea **	May 1-October 31	Nesting and hatching
Reptile	Loggerhead sea turtle ** (T, CH)	*Caretta caretta **	May 1-October 31	Nesting and hatching
Reptile	Spotted turtle (ARS)	*Clemmys guttata*	February-mid April	

Note: There are no federally protected species found in this county in the crustacean and mollusk family categories.

HAMPTON COUNTY

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
Bird	American wood stork (T)	*Mycteria americana*	February 15-September 1	Nesting season
Bird	Bald eagle (BGEPA)	*Haliaeetus leucocephalus*	October 1-May 15	Nesting season
Bird	Red-cockaded woodpecker (E)	*Picoides borealis*	March 1-July 31	Nesting season
Fish	Atlantic sturgeon* (E)	*Acipenser oxyrinchus**	February 1-April 30	Spawning migration
Fish	Robust redhorse (ARS)	*Moxostoma robustum*	Late April-early May	Temperature dependent: 16-24°C
Fish	Shortnose sturgeon* (E)	*Acipenser brevirostrum**	February 1-April 30	Spawning migration
Insect	Monarch butterfly (C)	*Danaus plexippus*	August-December	Overwinter population departs; March-April
Mammal	Northern long-eared bat (T)	*Myotis septentrionalis*	Year round	Winter surveys not as successful
Mammal	Tri-colored bat (ARS)	*Perimyotis subflavus*	Year round	Found in mines and caves in the winter
Plant	Boykin's lobelia (ARS)	*Lobelia boykinii*	May-July/August	
Plant	Canby's dropwort (E)	*Oxypolis canbyi*	Mid-July-September	
Plant	Carolina-birds-in-a-nest (ARS)	*Macbridea caroliniana*	July-November	
Reptile	Eastern diamondback rattlesnake (ARS)	*Crotalus adamanteus*	Most of the year	Peak: April-November
Reptile	Florida pine snake (ARS)	*Pituophis melanoleucus mugitus*	Most of year	
Reptile	Gopher tortoise (C)	*Gopherus polyphemus*	April 1-October 31	Active period
Reptile	Spotted turtle (ARS)	*Clemmys guttata*	February-mid April	

Note: There are no federally protected species found in this county in the amphibian, crustacean, and mollusk family categories.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To:
Project Code: 2024-0000612
Project Name: US17A/21 Emergency Bridge Replacement

October 03, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
(843) 727-4707

PROJECT SUMMARY

Project Code: 2024-0000612
Project Name: US17A/21 Emergency Bridge Replacement
Project Type: Bridge - Replacement
Project Description: The project includes the replacement of the US 17A/21 bridge over the railroad.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.6753297,-80.86000572283582,14z

Counties: Beaufort and Hampton counties, South Carolina

ENDANGERED SPECIES ACT SPECIES

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis*	Threatened
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	
Piping Plover *Charadrius melodus*	Threatened
Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	
Red Knot *Calidris canutus rufa*	Threatened
There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	
Red-cockaded Woodpecker *Picoides borealis*	Endangered
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	
Wood Stork *Mycteria americana*	Threatened
Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477	

REPTILES

NAME	STATUS
Green Sea Turtle *Chelonia mydas*	Threatened
Population: North Atlantic DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6199	
Kemp's Ridley Sea Turtle *Lepidochelys kempii*	Endangered
There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/5523	
Leatherback Sea Turtle *Dermochelys coriacea*	Endangered
There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1493	
Loggerhead Sea Turtle *Caretta caretta*	Threatened
Population: Northwest Atlantic Ocean DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1110	

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
American Chaffseed *Schwalbea americana* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1286	Endangered
Canby's Dropwort *Oxypolis canbyi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7738	Endangered
Pondberry *Lindera melissifolia* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1279	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Bald and Golden Eagle Protection Act of 1940.

2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort – no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Bald Eagle
Non-BCC
Vulnerable

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Kestrel *Falco sparverius paulus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31

NAME	BREEDING SEASON
Brown-headed Nuthatch *Sitta pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jul 15
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Painted Bunting *Passerina ciris* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 15
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Swallow-tailed Kite *Elanoides forficatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

- PFO4/1Ad

IPAC USER CONTACT INFORMATION

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LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To: October 03, 2023
Project code: 2024-0000612
Project Name: US17A/21 Emergency Bridge Replacement

Subject: Concurrence verification letter for the 'US17A/21 Emergency Bridge Replacement' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated October 03, 2023 to verify that the **US17A/21 Emergency Bridge Replacement** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to section 7(a)(2) of ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:
If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- American Chaffseed *Schwalbea americana* Endangered
- Canby's Dropwort *Oxypolis canbyi* Endangered
- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Green Sea Turtle *Chelonia mydas* Threatened
- Kemp's Ridley Sea Turtle *Lepidochelys kempii* Endangered
- Leatherback Sea Turtle *Dermochelys coriacea* Endangered
- Loggerhead Sea Turtle *Caretta caretta* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate
- Piping Plover *Charadrius melodus* Threatened
- Pondberry *Lindera melissifolia* Endangered
- Red Knot *Calidris canutus rufa* Threatened
- Red-cockaded Woodpecker *Picoides borealis* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Wood Stork *Mycteria americana* Threatened

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

US17A/21 Emergency Bridge Replacement

DESCRIPTION

The project includes the replacement of the US 17A/21 bridge over the railroad.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.6753297,-80.86000572283582,14z

DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   No

2. Is the project within the range of the northern long-eared bat[1]?

   [1] See northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   No

8. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat.

   No

9. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

   No

10. Does the project include slash pile burning?

    No

11. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    Yes

12. Is there *any* suitable habitat[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

    [1] See the Service's current summer survey guidance for our current definitions of suitable habitat.

    Yes

13. Has a bridge assessment[1] been conducted **within** the last 24 months[2] to determine if the bridge is being used by bats?

    [1] See User Guide Appendix D for bridge/structure assessment guidance

    [2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

    Yes

SUBMITTED DOCUMENTS

- *US 17A Structures Survey Data Sheet.docx https://ipac.ecosphere.fws.gov/project/P27WOJAU75GB7CGXX5XTOU7RZM/projectDocuments/132757858*

14. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)[1]?

    [1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

    Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

    No

15. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

    No

16. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    No

17. Will the project involve the use of **temporary** lighting *during* the active season?

    Yes

18. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?

    Yes

19. Will the project install new or replace existing **permanent** lighting?

    No

20. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    No

21. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

22. Will the project raise the road profile **above the tree canopy**?

    No

23. Is the location of this project consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the project action area is not within suitable Indiana bat and/or NLEB summer habitat and is outside of 0.5 miles of a hibernaculum.

24. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

25. **General AMM 1**
    Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

    Yes

26. **Lighting AMM 1**
    Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

    Yes

PROJECT QUESTIONNAIRE

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   Yes

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

   No

3. Please describe the proposed bridge work:

   The bridge will be replaced on existing alignment within existing SCDOT right of way. There will be some associated roadwork that will be necessary to build the new bridge to current traffic safety standards.

4. Please state the timing of all proposed bridge work:

   This is an emergency repair project that is expected to start in winter 2023.

5. Please enter the date of the bridge assessment:

   9/28/2023

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the committment to implement the following Avoidance and Minimization Measures (AMMs):

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on July 27, 2023. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

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Zip: 29201
Email beckhamjc@scdot.org
Phone: 8036099464

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218

In Reply Refer To: October 04, 2023
Project code: 2024-0000612
Project Name: US17A/21 Emergency Bridge Replacement

Please provide this document to the Corps with your permit application.

Subject: Consistency letter for the project named 'US17A/21 Emergency Bridge Replacement' for the threatened wood stork, that may occur in your proposed project location, pursuant to the Wood Stork Determination Key.

To whom it may concern:

On October 04, 2023, Chris Beckham used the IPaC determination key ‘Wood Stork Determination Key’; dated May 01, 2023, in the U.S. Fish and Wildlife Service's online IPaC tool, to evaluate potential impacts to the wood stork from a project named 'US17A/21 Emergency Bridge Replacement' in (shown below).This letter is provided pursuant to the Service’s authority under the Endangered Species Act of 1973, as amended (ESA) (87 Stat. 884; 16 U.S.C. 1531et seq.).

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.6753297,-80.86000572283582,14z

The following description was provided for the project 'US17A/21 Emergency Bridge Replacement':

> The project includes the replacement of the US 17A/21 bridge over the railroad.

Based upon your IPaC submission, the proposed project is consistent with a no effect determination for the wood stork.

This letter serves as documentation of your consideration of the wood stork as required under section 7 of the ESA. Critical habitat has not been designated for the wood stork. No further action is required with respect to this species.

If later modifications are made to the project, additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary

This IPaC-generated letter only applies to the wood stork and **does not** apply to the following ESA-protected species that also may occur in the Action area:

- American Chaffseed *Schwalbea americana* Endangered
- Canby's Dropwort *Oxypolis canbyi* Endangered
- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Green Sea Turtle *Chelonia mydas* Threatened
- Kemp's Ridley Sea Turtle *Lepidochelys kempii* Endangered
- Leatherback Sea Turtle *Dermochelys coriacea* Endangered
- Loggerhead Sea Turtle *Caretta caretta* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate
- Northern Long-eared Bat *Myotis septentrionalis* Endangered
- Piping Plover *Charadrius melodus* Threatened
- Pondberry *Lindera melissifolia* Endangered
- Red Knot *Calidris canutus rufa* Threatened
- Red-cockaded Woodpecker *Picoides borealis* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

ADDITIONAL CONSIDERATIONS FOR NON-FEDERALLY LISTED SPECIES

- **Bald Eagle Nest Issues.** If any project related activities are proposed to occur **within 660 feet** of an active or alternate bald eagle (Haliaeetus leucocephalus) nest during the nesting season (October 1 through May 15), we recommend the applicant or their designated agent review the information available for eagle management at https://www.fws.gov/birds/management/managed-species/eagle-management.php. Information is available for avoidance and minimization of impacts, and permitting options, if necessary.

- **Migratory Bird Issues.** To ensure there no violations to the Migratory Bird Treaty Act or State regulation, in the event any native birds are using the structures for nesting, we recommend the applicant or their designated agent coordinate with the appropriate Service office https://www.fws.gov/program/migratory-birds and the Georgia Department of Natural Resources Non-Game Division so that impacts can be avoided and/or minimized.

QUALIFICATION INTERVIEW

1. Does the proposed action require a permit (nationwide, general, or individual permits) from the U.S. Army Corps of Engineers?

   Yes

2. [Semantic] Is the action within 2,500 feet of an active wood stork nesting colony?

   Automatically answered
   No

3. Are you an employee of the U.S. Army Corps of Engineers?

   No

4. Is there suitable wood stork foraging habitat (SFH) within the project area?

   Note: SFH consists of wetland communities and/or impoundments with mosaic of emergent and shallow-open water areas (<25% dense thickets of aquatic vegetation) that are relatively calm and have a water depth between 2 and 15 inches deep)

   Yes

5. Will the project impact SFH?

   No

DETERMINATION KEY DESCRIPTION: WOOD STORK DECISION KEY

This key was last updated in IPaC on [Date, 2021]. Keys are subject to periodic revision. This key is for determining effects to the threatened wood stork resulting from U.S. Army Corps of Engineers' (Corps) permit applications. The purpose of this Key is to assist IPaC users in making appropriate effects determinations for threatened wood stork resulting from U.S. Army Corps of Engineers' (Corps) permit applications pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.) The Key is intended to streamline consultation with the U.S. Fish and Wildlife Service (Service) when the proposed action can be walked through the Key and the appropriate conclusion is the proposed action will have no effect or may affect but not likely to adversely affect the wood stork. For projects where the Service believes that further evaluation of the proposed project is necessary, the Key recommends contacting the local field office and requesting consultation. The Service intends to develop decision keys in the future to provide technical assistance for section 7 consultation for other listed species. Therefore, the Service highly recommends continuing to check this site for improvements and additional streamlining opportunities for other listed species.

The Service is the lead Federal Agency charged with the protection and conservation of Federal Trust Resources, including threatened and endangered species and migratory birds, in accordance with section 7 of the Act, the Bald and Golden Eagle Protection Act, (16 U.S.C. 668-668d) (Eagle Act), and the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 701 et seq.). If a proposed project has the potential to effect bald and golden eagles, or other migratory birds,

additional consultation with the Migratory Bird office may be necessary, please visit: https://www.fws.gov/program/migratory-birds.

This key is based on the following documents:
The Corp's Determination Guidance for Endangered & Threatened Species (EDGES)
Central and North Peninsular Florida 2008 wood stork consultation key
South Florida 2010 wood stork consultation key

IPAC USER CONTACT INFORMATION

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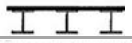
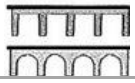
LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Appendix C – Bat Structure Survey Data Sheet

STRUCTURES SURVEY DATA SHEET

Investigator Names(s):Chris Beckham	
Date:9/28/2023	County: Hampton and Beaufort
Lat Long/w3w:	
SCDOT Structure ID:	SCDOT Project No.: P042924

Structure Type:				Underdeck Material:
☐ Parallel Box Beam		☐ Steel I-Beam		☒ Concrete
☐ Pre-Stressed Girder		☐ Flat Slab / Box		☐ Corrugated Steel
☒ Cast in Place		☐ Trapezoidal Box		☐ Other:
		☐ Other:		
Note:				
☒ Culvert - Box				
☐ Culvert - Pipe/Round				

Road Type:			
☐ Interstate	☒ US Highway	☐ State Road	☐ County Road

Surrounding Habitat (check all that apply):				
☐ Residential	☐ Agricultural	☒ Commercial	☒ Pine Forest	☐ Grassland
☐ Riparian	☐ Wetland	☒ Mixed Forest	☐ Bottomland Hardwood	
☐ Other:				

Conditions Under Bridge (check all that apply):			
☐ Bare Ground/Sediment	☐ Concrete	☐ Rip Rap	☐ Flowing Water
☐ Standing Water	☐ Open Vegetation (not obstructing flight path)	☐ Closed Vegetation (may obstruct flight path)	☐ Two Lanes
☐ Four (+) Lanes	☐ Unpaved Road	☒ Railroad	☐ Other:

Bats Present:	
☐ YES	☒ NO

Bat Indicators (check all that apply):				
☐ Visual	☐ Smell	☐ Sound	☐ Staining	☐ Guano

Species Present:	
☐ Big brown (*Eptesicus fuscus*)	☐ Northern long-eared (*Myotis septentrionalis*)
☐ Brazilian free-tailed (*Tadarida brasiliensis*)	☐ Northern yellow (*Lasiurus intermedius*)
☐ Eastern red (*Lasiurus borealis*)	☐ Rafinesque's big-eared (*Corynorhinus rafinesquii*)
☐ Eastern small-footed (*Myotis leibii*)	☐ Silver-haired (*Lasionycteris noctivagans*)
☐ Evening (*Nycticeius humeralis*)	☐ Southeastern (*Myotis austroriparius*)
☐ Hoary (*Lasiurus cinereus*)	☐ Seminole (*Lasiurus seminolus*)
☐ Little brown (*Myotis lucifugus*)	☐ Tri-colored (*Perimyotis subflavus*)
	☐ UNKNOWN

Roost Description (if known, check all that apply):			
☐ Day Roost	☐ Nursery Roost	☐ Night Roost	☐ UNKNOWN
Number of Roosts:			

Roost Design (check all that apply):			
☐ Crack/Crevice/Expansion Joint: Under Bridge		☐ Crack/Crevice/Expansion Joint: Top of Bridge	
☐ Plugged Drain	☐ Under/Along Main Bridge Structure	☐ Rail	☐ Other:

Human Disturbance or Traffic Under Bridge or at Structure?		
☒ High	☐ Low	☐ None

Areas Inspected (check all that apply):			
☒ Vertical Surfaces on I-Beams	☒ Vertical Surfaces between Concrete End Walls and Bridge Deck		
☐ Expansion Joints	☒ Rough Surfaces	☒ Guardrails	☐ Cervices
☐ Other:			
Areas NOT Inspected because of Safety or Inaccessibility:			

Evidence of Migratory Birds Using the Structure?	
☐ YES	☒ NO

Additional Information:
The bridge and the box culvert were both inspected and no evidence of bats or evidence of bats were observed.

APPENDIX G
FARMLANDS

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request	4. Sheet 1 of _____
1. Name of Project **US17A/21 over CSX Railroad**	5. Federal Agency Involved **FHWA**	
2. Type of Project **Bridge Replacement**	6. County and State **Hampton/Beaufort SC**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS	2. Person Completing Form
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated / Average Farm Size
5. Major Crop(s)	6. Farmable Land in Government Jurisdiction **Acres:** **%**	7. Amount of Farmland As Defined in FPPA **Acres:** **%**
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment _____			
	Corridor A	**Corridor B**	**Corridor C**	**Corridor D**
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services	**0**			
C. Total Acres In Corridor	**26**			
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	**2.2**			
B. Total Acres Statewide And Local Important Farmland	**23.4**			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	**0.01**			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	**0**			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	50			

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	**Maximum Points**				
1. Area in Nonurban Use	**15**	**15**			
2. Perimeter in Nonurban Use	**10**	**10**			
3. Percent Of Corridor Being Farmed	**20**	**20**			
4. Protection Provided By State And Local Government	**20**	**0**			
5. Size of Present Farm Unit Compared To Average	**10**	**10**			
6. Creation Of Nonfarmable Farmland	**25**	**0**			
7. Availablility Of Farm Support Services	**5**	**0**			
8. On-Farm Investments	**20**	**0**			
9. Effects Of Conversion On Farm Support Services	**25**	**0**			
10. Compatibility With Existing Agricultural Use	**10**	**0**			
TOTAL CORRIDOR ASSESSMENT POINTS	**160**	**55**	**0**	**0**	**0**
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	**100**	**50**	**0**	**0**	**0**
Total Corridor Assessment (From Part VI above or a local site assessment)	**160**	**55**	**0**	**0**	**0**
TOTAL POINTS *(Total of above 2 lines)*	**260**	**105**	**0**	**0**	**0**

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
			YES ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: **Will McGoldrick**

DATE **10/23/23**

NOTE: Complete a form for each segment with more than one Alternate Corridor

Clear Form

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

APPENDIX H
LEAD AND ASBESTOS REPORTS

ASBESTOS CONTAINING MATERIAL INVESTIGATION REPORT

US 21 (FRAMPTON RD.) RBO CSX RAILROAD HAMPTON AND BEAUFORT COUNTIES, SOUTH CAROLINA

PREPARED FOR:

C/O Mr. Trapp Harris, PE
SCDOT
955 Park Street
Columbia, SC 29201

PREPARED BY:

F&ME Consultants, Inc.
211 Business Park Blvd.
Columbia, South Carolina 29203

November 15, 2023

_____ACM was found.
__X__ACM was not found.

F&ME Project No.: G6400.200

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

This executive summary is intended as an overview for the convenience of the reader. This report should be reviewed in its entirety prior to making any decisions regarding this project.

F&ME Consultants, Inc. (FME) has completed an Asbestos Containing Material (ACM) Investigation of the US 21 (Frampton Rd.) Bridge over CSX Railroad (Bridge) located at the border Hampton and Beaufort Counties, South Carolina at the request of the South Carolina Department of Transportation (SCDOT) (Client). The field investigation was performed on November 8, 2023, in anticipation of an on-alignment replacement of the existing Bridge. This investigation was also conducted pursuant to South Carolina Department of Health and Environmental Control (SCDHEC), United States Environmental Protection Agency (USEPA), National Emission Standards for Hazardous Air Pollutants (NESHAP), and Occupational Safety and Health Administration (OSHA) regulations requiring an ACM investigation prior to any demolition activities.

Per an agreed upon scope of work, FME performed this investigation to identify any ACM that might be encountered during the demolition activities associated with the existing Bridge, and to provide recommendations regarding proper handling and disposal of any ACM found. The investigation of the Bridge identified two (2) suspect materials: bearing pads and expansion joint material. During the field investigation, FME personnel collected samples of each of these materials and assessed their physical conditions. **Laboratory results indicated that the suspect materials sampled during this investigation contained no asbestos.** Therefore, at this time, no special handling or disposal requirements are required regarding ACM. However, during the course of demolition activities, previously concealed ACM might be discovered. If suspect ACM is found, the affected contractor(s) must stop work, take appropriate actions, and notify the Owner/asbestos Consultant for an appropriate response action. The SCDHEC must be notified if any suspect ACM is discovered.

It should be noted that TEM analysis of sample 2-3, expansion joint material returned analytical result of <0.1% asbestos content. The SCDHEC considers any suspect material <1.0% asbestos to be negative. However, OSHA considers a suspect material positive if any asbestos is found in the sample. Therefore, for the purpose of this report, this material is considered to be a non-ACM material. During the demolition activities, the Contractor will be required to follow OSHA guidelines for worker protection when interacting with this material.

We sincerely appreciate the opportunity to assist you with this project. Should you have any questions or require additional information concerning this Investigation, please do not hesitate to contact our office at (803) 254-4540.

Sincerely,

F&ME CONSULTANTS

Michael S. Mincey
Environmental Professional
Asbestos Consultant/Inspector
SCDHEC License No: MP-00161
Expiration Date 01/23/2024

Glynn M. Ellen
Environmental Department Manager
Asbestos Consultant/Management Planner
SCDHEC License No: ASB-22641
Expiration Date 01/23/2024

2. INTRODUCTION

FME has completed an ACM investigation of the US 21 (Frampton Rd.) RBO CSX Railroad, located at the border Hampton and Beaufort Counties, South Carolina. The investigation was performed on November 8, 2023. This investigation was conducted pursuant to SCDHEC, USEPA, NESHAP, and OSHA regulations which require an ACM investigation prior to any demolition activities. Refer to Appendix A, Site Vicinity Map for the location of the Bridge.

It is our understanding that the proposed project will include the complete demolition and removal of the existing Bridge, and replacement with a new bridge along the existing alignment. The purpose of this investigation was to determine if asbestos was present on the existing Bridge by identifying and sampling suspect ACM, obtaining analytical results, quantifying any confirmed ACM, and assessing the physical condition of the ACM, where possible.

This report has been prepared exclusively for the Client and shall not be disseminated in whole or part to other parties without prior consent from Client or FME. No other environmental issues were addressed as part of this report.

3. EXISTING BRIDGE STRUCTURE

The existing Bridge (~123.9'L x 26.0'W, inside curb to inside curb), is located on US 21 (Frampton Rd.) and crosses over CSX Railroad in Hampton and Beaufort Counties, South Carolina. The date of construction of the Bridge is unknown. The structure is a two (2) lane, three (3) span Bridge with concrete decking, and curbing and gutters, with an asphalt overlay. The concrete decking is constructed with pour-in-place (PIP) concrete, supported by six (6) horizontal steel girders. There are six (6) structural steel girders per span that are supported by PIP bent caps with two (2) steel bearing plates between the caps and girders. Each bent cap is supported by concrete piers. No drainage scuppers were noted along the sides of the Bridge. Galvanized metal guardrails are attached to the concrete curbing on either side of the Bridge. Each side of the Bridge has one (1) utility conduit attached to the underside of the concrete guardrail system. Each conduit runs the entire length of the Bridge. Refer to Appendix A, Site Vicinity Map, for the location of the Bridge. Appendix B, Sample Location Plan, for the location of samples taken from the Bridge.

Photo 1: US 21 (Frampton Rd.) RBO CSX Railroad in Hampton and Beaufort Counties, South Carolina.

4. FIELD ASSESSMENT

During the investigation, all accessible bridge components (i.e., bent caps, timber piles, scuppers, expansion joints, etc.) were visually inspected for suspect ACM. Examples of possible suspect materials include bearing pads, expansion joint material, and drainage scuppers. The concrete bridge deck rested directly on six (6) structural steel girders. Each steel girder was supported by two (2) steel bearing plates with a fabric bearing pad in between the bottom steel plate and the tops of each concrete bent cap. Each bent cap is supported by concrete piers. Two (2) suspect materials were observed/visible on the Bridge. The suspect materials noted on the Bridge were a fabric bearing pad and expansion joint material. Samples of these materials were taken from random locations on the Bridge. Appendix B, Sample Location Plan, for detailed sample locations. Also, see Appendix G, Site Photographs, for more details.

5. ASSESSMENT RESULTS

During the investigation, the fabric bearing pads and the expansion joint material were the only suspect materials identified associated with the Bridge. A total of three (3) samples were taken of each of these suspect materials for laboratory analysis, and physical characteristics were recorded. The remaining structural materials (i.e., concrete, steel, etc.) were not considered suspect and were not sampled.

Random samples of these suspect materials were collected for laboratory analysis, and their physical characteristics were recorded. Bulk samples of suspect materials were analyzed by Polarized Light Microscopy (PLM) in accordance with EPA 600/R-93/116. Confirmation Transmission Electron Microscopy (TEM) was also performed on any non-friable organically bound materials that tested negative for asbestos content as per SCDHEC regulations effective May 27, 2011. A *"first positive stop"* protocol was implemented for sample testing. This protocol establishes that if the first sample of a material tested positive for asbestos content, subsequent samples were not to be analyzed, and would be considered positive as well. A total of five (5) samples were analyzed by PLM and one (1) sample was TEM-confirmed. **The results of the analysis indicated that none of the suspect materials sampled during this investigation contained asbestos**. Results of laboratory analysis are summarized in Appendix C, Summary of Sample Results.

It should be noted that TEM analysis of sample 2-3, expansion joint material returned analytical result of <0.1% asbestos content. The SCDHEC considers any suspect material <1.0% asbestos to be negative. However, OSHA considers a suspect material positive if any asbestos is found in the sample. Therefore, for the purpose of this report, this material is considered to be a non-ACM material. During the demolition activities, the Contractor will be required to follow OSHA guidelines for worker protection when interacting with this material.

Appropriate sampling and chain-of-custody protocols were followed to ensure proper handling and delivery of samples to the analytical laboratory. Appendix D, Laboratory Analysis Reports and Appendix E, Chain of Custody Form were provided to show laboratory documentation of the analytical results. Appendix F, Personnel Certification, provides the qualifications for the FME Asbestos Inspector.

6. RECOMMENDATIONS

The results, conclusions, and recommendations of this Investigation are representative of the conditions observed at the site on the date of the field investigation. FME does not assume responsibility for any changes in conditions or circumstances that may have occurred after this investigation.

It is our understanding that the subject Bridge is to be demolished in anticipation of an on-alignment replacement of the existing Bridge. **The results of the analysis indicated that the fabric bearing pad and expansion joint material sampled during this investigation contained no asbestos**. Therefore, there are no foreseen special handling or disposal requirements, regarding asbestos, that will be required for the demolition of this Bridge.

It should be noted that TEM analysis of sample 2-3, expansion joint material returned analytical result of <0.1% asbestos content. The SCDHEC considers any suspect material <1.0% asbestos to be negative. However, OSHA considers a suspect material positive if any asbestos is found in the sample. Therefore, for the purpose of this report, this material is considered to be a non-ACM material. During the demolition activities, the Contractor will be required to follow OSHA guidelines for worker protection when interacting with this material.

If any concealed and/or inaccessible suspect ACM (i.e., bond break bearing materials) are encountered during the demolition activities, the affected contractor(s) must stop work, take appropriate actions, and notify the Owner/asbestos Consultant for an appropriate response action. The SCDHEC must be notified if any suspect ACM is discovered.

This report has been prepared exclusively for the Client and FME and shall not be disseminated in whole or in part to other parties without prior consent from the Client and FME. Use of this document for bidding purposes is not recommended without prior consultation with FME.

We sincerely appreciate the opportunity to be of service to SCDOT in this matter. If you have any questions regarding the information presented herein, please contact our office at (803) 254-4540.

APPENDICES

Appendix A – Site Vicinity Map

Appendix B – Sample Location Plan

Appendix C – Summary of Samples

Appendix D – Laboratory Analysis Reports

Appendix E – Chain of Custody Form

Appendix F – Personnel Certifications

Appendix G – Site Photographs

Appendix A

Site Vicinity Map

FIGURE NUMBER:	F&ME CONSULTANTS PROJECT NUMBER:	
1	G6400.200	ASBESTOS CONTAINING MATERIALS INVESTIGATION US 21 RBO CSX Railroad Hampton/Beaufort Counties, SC Site Vicinity Map Prepared for: SCDOT 955 Park Street Columbia, SC 29201

F&ME CONSULTANTS
211 BUSINESS PARK BLVD.
COLUMBIA, SC 29203

ORIGINAL: November 13, 2023
REVISIONS: 1 2 3
SCALE: AS SHOWN

DRWN. BY: MSM
CHKD. BY: MSM
APPR. BY: GME
NOTES:

Appendix B

Sample Location Plan

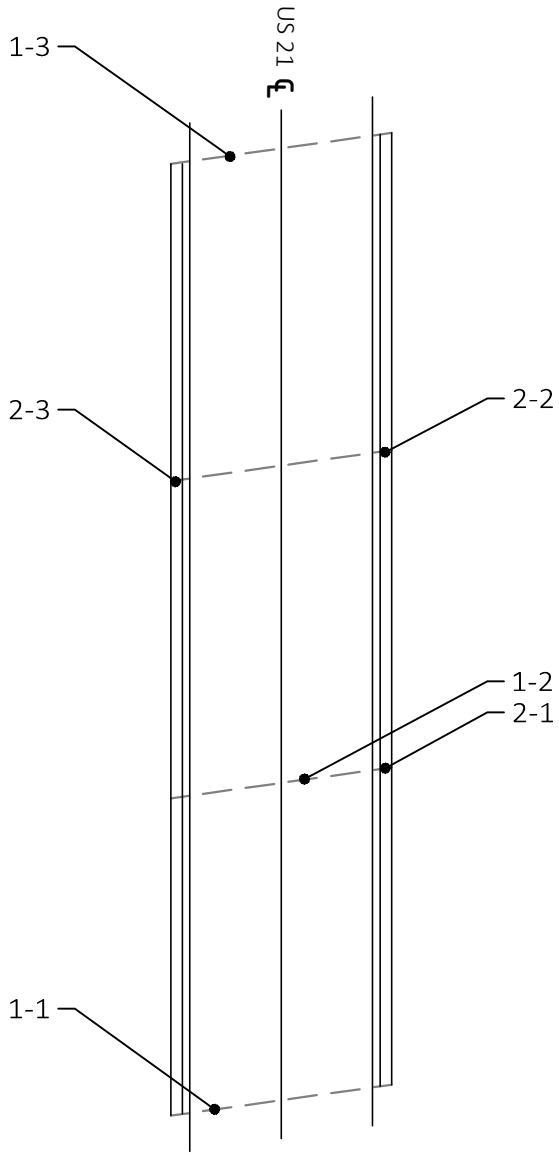


FIGURE NUMBER:	F&ME CONSULTANTS PROJECT NUMBER:	ASBESTOS CONTAINING MATERIALS INVESTIGATION US 21 RBO CSX Railroad Hampton/Beaufort Counties, SC Sample Location Plan Prepared for: SCDOT 955 Park Street Columbia, SC 29201	F&ME CONSULTANTS 211 BUSINESS PARK BLVD. COLUMBIA, SC 29203	ORIGINAL: November 13, 2023 REVISIONS: 1 2 3 SCALE: N.T.S.	DRWN. BY: MSM CHKD. BY: MSM APPR. BY: GME NOTES:
2	G6400.200				

Appendix C

Summary of Samples

Appendix C: Summary of Samples

Sample ID	Description
1-1	Fabric Bearing Pad
1-2	Fabric Bearing Pad
1-3	Fabric Bearing Pad
2-1	Expansion Joint Material
2-2	Expansion Joint Material
2-3	Expansion Joint Material

Appendix D

Laboratory Analysis Reports

EMSL Analytical, Inc.

706 Gralin Street Kernersville, NC 27284

Tel/Fax: (336) 992-1025 / (336) 992-4175

http://www.EMSL.com / kernersvillelab@emsl.com

EMSL Order:	022307783
Customer ID:	FMEC62
Customer PO:	G6400.200
Project ID:	

Attention:	Glynn M. Ellen	**Phone:**	(803) 254-4540
	F & ME Consultants	**Fax:**	(803) 254-4542
	211 Business Park Blvd	**Received Date:**	11/09/2023 9:30 AM
	Columbia, SC 29203	**Analysis Date:**	11/09/2023
		Collected Date:	
Project:	US 21 over CSX Railroad		

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1-1 *022307783-0001*	Bearing Pad	Brown/Gray/Tan Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
1-2 *022307783-0002*	Bearing Pad	Tan Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
1-3 *022307783-0003*	Bearing Pad	Tan Fibrous Homogeneous	97% Cellulose	3% Non-fibrous (Other)	None Detected
2-1 *022307783-0004*	Black Expansion Joint Material	Black Non-Fibrous Homogeneous	10% Cellulose 1% Synthetic	89% Non-fibrous (Other)	None Detected
2-2 *022307783-0005*	Black Expansion Joint Material	Black Fibrous Homogeneous	1% Cellulose <1% Synthetic	99% Non-fibrous (Other)	None Detected

Analyst(s)

Nicole MacDowell (3)

Scott Combs (2)

Stephen Bennett, Laboratory Manager
or Other Approved Signatory

Initial report from: 11/11/2023 14:26:42

EMSL Analytical, Inc.
706 Gralin Street Kernersville, NC 27284
Tel/Fax: (336) 992-1025 / (336) 992-4175
http://www.EMSL.com / kernersvillelab@emsl.com

EMSL Order: 022307783
Customer ID: FMEC62
Customer PO: G6400.200
Project ID:

Attention: Glynn M. Ellen
F & ME Consultants
211 Business Park Blvd
Columbia, SC 29203

Project: US 21 over CSX Railroad

Phone: (803) 254-4540
Fax: (803) 254-4542
Received Date: 11/09/2023 9:30 AM
Analysis Date: 11/10/2023
Collected Date:

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
2-3 *022307783-0006*	Black Expansion Joint Material	Black Non-Fibrous Heterogeneous	100.0 Other	None	<0.1% Chrysotile

Analyst(s)

Stephen Bennett (1)

Stephen Bennett, Laboratory Manager
or other approved signatory

Samples analyzed by EMSL Analytical, Inc. Kernersville, NC

Initial report from: 11/14/2023 13:32:04

Appendix E

Chain of Custody Form

OrderID: 022307783

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 022307783

EMSL ANALYTICAL, INC.
706 GRALIN ST
KERNERSVILLE, NC 27284
PHONE: (336) 992-1025
FAX: (336) 992-4175

Company Name : F&ME Consultants		**EMSL Customer ID: FMEC62**	
Street: 211 Business Park Blvd. Columbia, SC		**City: Columbia**	**State/Province: SC**
Zip/Postal Code: 29203	**Country: USA**	**Telephone #: 803-254-4540**	**Fax #: 803-254-4542**
Report To (Name): Glynn Ellen, Jim Timmons		**Please Provide Results:** ☐ Fax ☒ Email	
Email Address: gellen@fmeconsultants.com, mmincey@fmeconsultants.com		***Purchase Order: G6400.200***	
Project Name/Number: US 21 over CSX Railroad		**EMSL Project ID** *(Internal Use Only)*:	
U.S. State Samples Taken: NC		**CT Samples:** ☐ **Commercial/Taxable** ☐ **Residential/Tax Exempt**	

EMSL-Bill to: ☒ Same ☐ Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour | ☐ 6 Hour | ☐ 24 Hour | ☐ 48 Hour | ☒ 72 Hour | ☒ 96 Hour | ☐ 1 Week | ☐ 2 Week

**For TEM Air 3 hr through 6 hr, please call ahead to schedule *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide*

PCM - Air ☐ Check if samples are from NY
☐ NIOSH 7400
☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
☒ PLM EPA 600/R-93/116 (<1%)
☐ PLM EPA NOB (<1%)
Point Count
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
Point Count w/Gravimetric
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
☐ NYS 198.1 (friable in NY)
☐ NYS 198.6 NOB (non-friable-NY)
☐ NYS 198.8 SOF-V
☐ NIOSH 9002 (<1%)

TEM – Air ☐ **4-4.5hr TAT (AHERA only)**
☐ AHERA 40 CFR, Part 763
☐ NIOSH 7402
☐ EPA Level II
☐ ISO 10312

TEM - Bulk
☒ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP
☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
Fibers >10µm ☐ Waste ☐ Drinking
All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
☐ Microvac - ASTM D 5755
☐ Wipe - ASTM D6480
☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
☐ PLM EPA 600/R-93/116 with milling prep (<1%)
☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)
☐ TEM Qualitative via Filtration Prep
☐ TEM Qualitative via Drop Mount Prep
☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM (BC only)

Other:
☐

☒ **Check For Positive Stop – Clearly Identify Homogenous Group** | **Filter Pore Size (Air Samples):** ☐ **0.8µm** ☐ **0.45µm**

Samplers Name: Mike Mincey | **Samplers Signature:** Mike Mincey

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1-1 thru 1-2	Bearing Pad		
*2-1 thru 2-2	Black Expansion Joint Material		

Client Sample # (s): 1-1 - 2-3 **Total # of Samples:** 6

Relinquished (Client): Mike Mincey **Date:** 11/8/2023 **Time:** 17:00

Received (Lab): JS **Date:** 11-9-23 **Time:** 9:30

Comments/Special Instructions: SC Guidelines, TEM 3rd Sample

(1) EFX 7967 395

Appendix F

Personnel Certifications

SCDHEC ISSUED

Asbestos ID Card

Glynn M Ellen

		Expiration Date:
AIRSAMPLER	AS-00079	01/22/24
CONSULTMP	ASB-22641	01/23/24
CONSULTPD	PD-00098	07/11/24
SUPERAHERA	SA-00455	01/22/24

This card is nontransferable and considered invalid if loaned or given to another person for identification. This card will also be invalid if altered or defaced. This card is property of SCDHEC. It must be returned to the department if the holder's accreditation is revoked or if this card is invalidated. Any person performing regulated asbestos activities without current accreditation shall be subject to legal sanction. This card must be returned upon expiration and/or issuance of a new card.

YOU MUST HAVE THIS IDENTIFICATION CARD WITH YOU ON THE JOB.

For information of corrections contact: SCDHEC - Asbestos Section
2600 Bull Street
Columbia, SC 29201
(803) 898-4289

SCDHEC ISSUED

Asbestos ID Card

Michael Mincey

		Expiration Date:
AIRSAMPLER	AS-00272	01/22/24
CONSULTMP	MP-00161	01/23/24
SUPERAHERA	SA-01424	01/22/24

This card is nontransferable and considered invalid if loaned or given to another person for identification. This card will also be invalid if altered or defaced. This card is property of SCDHEC. It must be returned to the department if the holder's accreditation is revoked or if this card is invalidated. Any person performing regulated asbestos activities without current accreditation shall be subject to legal sanction. This card must be returned upon expiration and/or issuance of a new card.

YOU MUST HAVE THIS IDENTIFICATION CARD WITH YOU ON THE JOB.

For information of corrections contact: SCDHEC - Asbestos Section
2600 Bull Street
Columbia, SC 29201
(803) 898-4289

Appendix G

Site Photographs

Photo 1. Top View of Bridge Deck.

Photo 2. Underside View of Bridge.

Photo 3. Southeast Side View of Bridge.

Photo 4. Southwest Side View of Bridge.

Photo 5. End Bent Underside View.

Photo 6. SCDOT Bridge Asset Placard Attached to the Concrete Guardrail.

LEAD-BASED PAINT INVESTIGATION REPORT

US 21 (FRAMPTON RD.) RBO CSX RAILROAD HAMPTON AND BEAUFORT COUNTIES, SOUTH CAROLINA

PREPARED FOR:

C/O Mr. Trapp Harris, PE
SCDOT
955 Park Street
Columbia, SC 29201

PREPARED BY:

F&ME Consultants, Inc.
211 Business Park Blvd.
Columbia, South Carolina 29203

November 15, 2023

_X_ Yes, LBP was found.
___ No, LBP was not found.

FME Project No.: G6400.200

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

This executive summary is intended as an overview for the convenience of the reader. This report should be reviewed in its entirety prior to making any decisions regarding this project.

F&ME Consultants, Inc. (FME) has completed a Lead-Based Paint (LBP) on the US 21 (Frampton Rd.) over CSX Railroad (Bridge), located at the border of Hampton and Beaufort Counties in South Carolina, at the request of the South Carolina Department of Transportation (SCDOT) (Client). The purpose of the investigation was to locate, identify and test components of the Bridge that are painted or coated with LBP. The field investigation was performed on November 8, 2023, in anticipation of the on-alignment replacement of the existing Bridge. Refer to Appendix A, Site Vicinity Map is provided to show the location of the Bridge. Appendix B, General Bridge Plan, is provided to show the lay-out of the Bridge and a reference for locations of XRF scans.

Per an agreed upon scope of work, this LBP Investigation was conducted to identify accessible Bridge components that have been painted or coated with lead-containing materials that have concentrations greater than or equal ($\geq$) to the regulatory limit of 0.7 mg/cm^2. This investigation includes both a visual evaluation of the physical condition of painted materials as well as quantitative testing of surfaces using an X-Ray Fluorescence (XRF) LBP analyzer. The XRF documents the concentration of lead, if any, in the overall paint or coating. Bridge components were scanned with a Viken XRF analyzer (Model # Pb200i, Serial #1888, Reference Date: 11/01/22) with a limit of detection (LOD) of 0.1 mg/cm^2.

LBP is regulated by multiple government agencies, and each requires different response actions when the concentration of lead exceeds specified thresholds. The Occupational Safety and Health Administration (OSHA) regulates worker exposure to lead dust, and as a result considers materials with any lead content to be a potential hazard. Additionally, South Carolina Department of Health and Environmental Control (SCDHEC) requires some waste materials to be disposed of at specific disposal facilities that are able to manage this waste. Appendix C, XRF Data, is provided to present the XRF data in a user-friendly format. Items in red text contain lead in concentrations regulated by SCDHEC and these materials must be addressed upon disposal. Items in blue and red text contain lead in concentrations that must be considered a potential for worker exposure by OSHA.

The results from the XRF quantitative testing of the Bridge components indicate that lead is present in paint and/or coatings in concentrations greater than or equal to ($\geq$) 0.7 mg/cm^2 in the following Bridge components:

- Gray Steel Girders
- Gray Steel Bearing Plates
- Green Steel Girder Bracket

For more information regarding the specific descriptions and locations of the items that were scanned, refer to the Appendix C, Summary of XRF Data. On the XRF Data Table, items highlighted in Red are positive and contain lead in concentrations greater than or equal to (≥) 0.7 mg/cm^2. Items in Blue text contain lead in concentrations that must be considered a potential for worker exposure by OSHA. Refer to Appendix D, Site Photos for locations and pictures of the materials with concentrations greater than or equal to (≥) 0.7 mg/cm^2. Appendix E includes the inspector's EPA lead-based paint inspector certification.

We appreciate the opportunity to assist you in this project. If you have any questions or require additional information, please feel free to contact our office at (803) 254-4540.

Sincerely,

FME CONSULTANTS

Michael S. Mincey
SC Lead Based Paint Inspector
EPA Certification No. LBP-I-I198708-2 (Exp. 2/21/25)

Glynn M. Ellen
Environmental Department Manager

2. LEAD-BASED PAINT BACKGROUND INFORMATION

Housing and Urban Development (HUD) defines "LBP" as any coating that has a lead concentration of 1.0 milligrams of lead per square centimeter (1.0 mg/cm^2) or greater, or if the lead concentration is greater than one half of a percent (> 0.5%) by weight. The Consumer Product Safety Commission (CPSC) currently considers paint to be lead-containing if the concentration of lead exceeds 90 ppm (0.009% by weight). In 1978, the CPSC banned the sale of LBP to consumers, and banned its application in areas where consumers have direct access to painted surfaces. Both the CPSC and HUD definitions of lead-containing paint are aimed at protecting the general population from exposure to lead in residential settings.

In contrast, the mission of OSHA with respect to lead-containing paint is to protect workers during construction activities that may generate elevated airborne lead concentrations. OSHA states that construction work (including renovation, maintenance, and demolition) carried-out on structures coated with paint having lead concentrations lower than the HUD or CPSC can still result in airborne lead concentrations in excess of regulatory limits. For this reason, OSHA has not defined lead-containing paint, but states that paint having any measurable level of lead may pose a substantial exposure hazard during construction work, depending upon the work performed. Therefore, in these situations, OSHA guidelines and safety procedures should be followed. By OSHA standards and regulations, the employer shall ensure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air (50 ug/m^3) averaged over an 8-hour period.

Additionally, SCDHEC requires the use of specific waste disposal sites if materials contain lead concentrations greater than or equal to ($\geq$) 0.7 mg/cm^2. Due to the anticipated demolition of the structure, the SCDHEC lead disposal requirements were used as a threshold.

3. INTRODUCTION

The existing Bridge (~123.9'L x 26.0'W, inside curb to inside curb), is located on US 21 (Frampton Rd.) and crosses over CSX Railroad in Hampton and Beaufort Counties, South Carolina. The date of construction of the Bridge is unknown. The structure is a two (2) lane, three (3) span Bridge with concrete decking, and curbing and gutters, with an asphalt overlay. The concrete decking is constructed with pour-in-place (PIP) concrete, supported by six (6) horizontal steel girders. There are six (6) structural steel girders per span that are supported by PIP bent caps with two (2) steel bearing plates between the caps and girders. Each bent cap is supported by concrete piers. No drainage

Photo 1 – US 21 (Frampton Rd.) Bridge over CSX Railroad, Hampton and Beaufort Counties, SC.

scuppers were noted along the sides of the Bridge. Galvanized metal guardrails are attached to the concrete curbing on either side of the Bridge. Each side of the Bridge has one (1) utility conduit attached to the underside of the concrete guardrail system. Each conduit runs the entire length of the Bridge. Refer to Appendix A, Site Vicinity Map, for the location of the Bridge. Appendix B, General Bridge Plan, for a layout of the Bridge.

4. INVESTIGATION PROCEDURES AND RESULTS

FME's LBP Investigation sampling protocol consisted of randomly selecting bridge components and scanning them with a Viken X-Ray Fluorescence (XRF) Portable Analyzer (Model # Pb200i, Serial #1888). The following bridge components tested positive for lead in concentrations greater than or equal to (≥) 0.7 mg/cm^2 in the following Bridge components:

- Gray Steel Girders
- Gray Steel Bearing Plates
- Green Steel Girder Bracket

For more information regarding the specific descriptions and locations of the items that were scanned, refer to the Appendix C, Summary of XRF Data. On the XRF Data Table, items highlighted in Red are positive and contain lead in concentrations greater than or equal to (≥) 0.7 mg/cm^2. Items in Blue text contain lead in concentrations that must be considered a potential for worker exposure by OSHA. Refer to Appendix D, Site Photos for locations and pictures of the materials with concentrations greater than or equal to (≥) 0.7 mg/cm^2. Appendix E includes the inspector's EPA lead-based paint inspector certification.

5. RECOMMEMNDATIONS

The results, conclusions and recommendations from this investigation are representative of the conditions observed at the site on the date of the field investigation. FME does not assume responsibility for any changes in conditions or circumstances that occur after the date of the field investigation. No other environmental issues were addressed as part of this report.

The results from the XRF quantitative testing of bridge components scanned indicate that lead was found to be present in paint and/or coatings in concentrations greater than or equal to (≥) 0.7 mg/cm^2 in the following bridge components:

- Gray Steel Girders
- Gray Steel Bearing Plates
- Green Steel Girder Bracket

Items highlighted in Red are positive and contain lead in concentrations greater than or equal to (≥) 0.7 mg/cm^2. Items in Blue text contain lead in concentrations that must be considered a potential for worker exposure by OSHA. Therefore, OSHA regulations and procedures should be followed when impacting these components. If possible, they should be removed in whole and disposed of properly. Also, SCDHEC disposal requirements for lead containing materials should also be followed.

As stated previously, OSHA regulates any measurable level of lead, as it may pose a substantial exposure hazard to workers. Therefore, in these situations, OSHA regulations and safety procedures should be followed. These regulations also list the proper personal protective equipment to be used by the workers disturbing the LBP items and the requirements for personal air monitoring. OSHA's exposure action level (AL) for lead, regardless of respirator use, is an airborne concentration of 30µg/cm^3, averaged over an eight-hour period. The action level (AL) is the level at which an employer must begin specific compliance activities as outlined in OSHA's lead standards. By OSHA standards and regulations, the employer shall ensure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air (50 µg/m^3) averaged over an 8-hour period which is the permissible exposure level (PEL).

SCDHEC regulates the proper disposal of LBP and associated debris. SCDHEC defines two types of LBP debris. The first is LBP *waste*, which is defined as material such as wood, brick and metal that is painted with LBP. The other is LBP *residue* which is defined as residue that is generated from the removal (e.g., scraped, chipped, sandblasted, or chemical) of LBP from a structure. LBP *waste* that comes from a commercial or residential facility may be disposed of in either a class 2 or 3 landfill, while LBP *residue* from a commercial facility must have a toxicity characteristic leaching procedure (TCLP) analysis to determine the lead content. TCLP analysis is used to determine whether or not a waste is a characteristic hazardous waste due to leachability under the South Carolina Hazardous Waste Management Regulations. LBP *residue* with a TCLP analysis result greater than or equal to five milligrams per liter (≥ 5 mg/l) lead must be disposed of in a Subtitle C landfill (Hazardous Waste). However, LBP *residue* from a commercial facility with a TCLP analysis result less than five milligrams per liter (< 5 mg/l) lead is required to be disposed of in a Class 3 landfill.

We sincerely appreciate the opportunity to be of service to SCDOT on this project. If you have any questions regarding the information presented herein, please contact our office at (803) 254-4540.

APPENDICES

Appendix A – Site Vicinity Map

Appendix B – General Bridge Plan

Appendix C – Summary of XRF Data Table

Appendix D – Site Photos

Appendix E – EPA LBP Inspector Certification

Appendix A

Site Vicinity Map

1:58,000

0 0.4 0.8 1.6 mi

0 0.5 1 2 km

FIGURE NUMBER:	F&ME CONSULTANTS PROJECT NUMBER:				
1	G6400.200	LEAD-BASED PAINT INVESTIGATION US 21 RBO CSX Railroad Hampton/Beaufort Counties, SC Site Vicinity Map Prepared for: SCDOT 955 Park Street Columbia, SC 29201	F&ME CONSULTANTS 211 BUSINESS PARK BLVD. COLUMBIA, SC 29203	ORIGINAL: November 13, 2023 REVISIONS: 1 2 3 SCALE: AS SHOWN	DRWN. BY: MSM CHKD. BY: MSM APPR. BY: GME NOTES:

Appendix B

General Bridge Plan

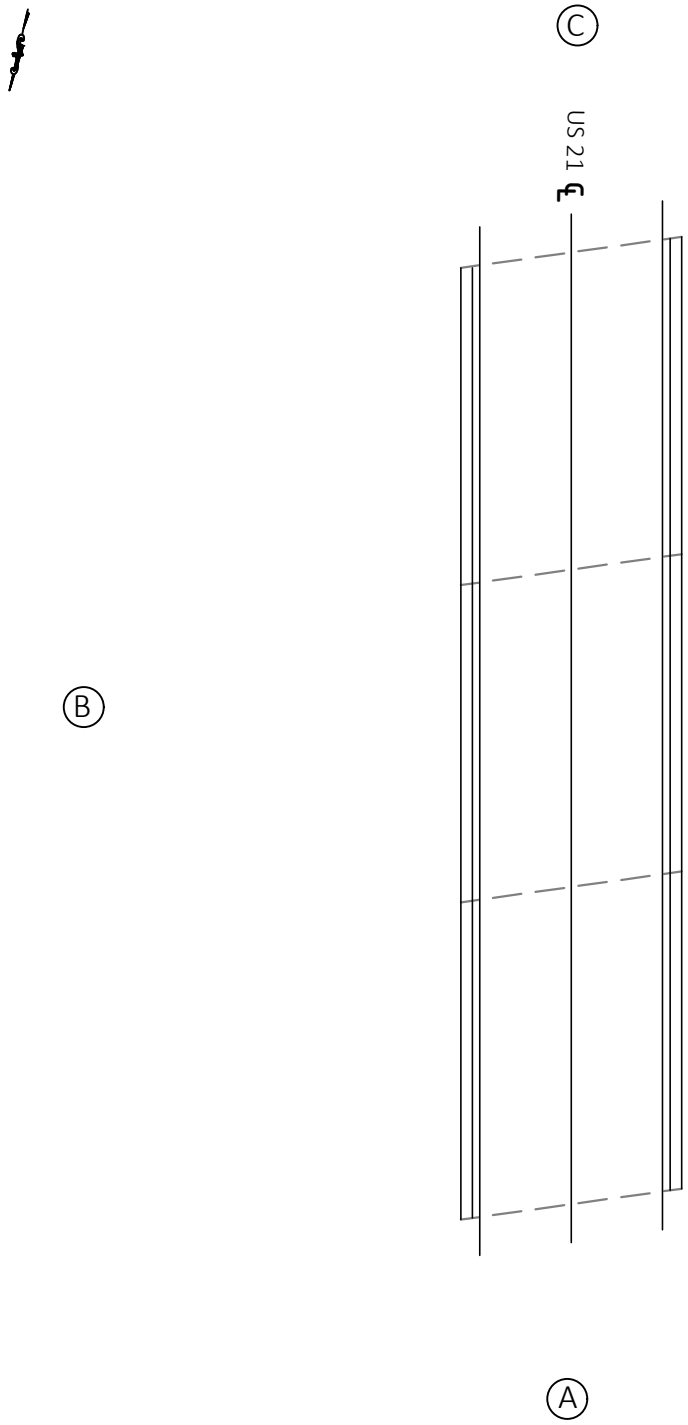


FIGURE NUMBER:	F&ME CONSULTANTS PROJECT NUMBER:	LEAD-BASED PAINT INVESTIGATION US 21 RBO CSX Railroad Hampton/Beaufort Counties, SC Sample Location Plan Prepared for: SCDOT 955 Park Street Columbia, SC 29201	F&ME CONSULTANTS 211 BUSINESS PARK BLVD. COLUMBIA, SC 29203	ORIGINAL: November 13, 2023 REVISIONS: 1 2 3 SCALE: N.T.S.	DRWN. BY: MSM CHKD. BY: MSM APPR. BY: GME NOTES:
2	G6400.200				

Appendix C

Summary of XRF Data Table

Appendix C – XRF Data
Date Scanned: 11/08/2023
US 21 (Frampton Rd.) RBO CSX Railroad

Scan No.	Pbc (mg/cm^2)	Component	Substrate	Side	Condition	Color
1	0.96	Calibrate				
2	0.93	Calibrate				
3	0.93	Calibrate				
4	5.35	Girder	Metal	B	Poor	Gray
5	7.81	Girder	Metal	D	Poor	Gray
6	3.04	Bearing Plate	Metal	A	Poor	Gray
7	8.46	Bearing Plate	Metal	C	Poor	Gray
8	13.38	Girder Bracket	Metal	B	Poor	Green
9	14.00	Girder Bracket	Metal	D	Poor	Green
10	<LOD	Culvert Pipe	Metal	C	Poor	Gray
11	<LOD	Culvert Pipe	Metal	C	Poor	Gray
12	<LOD	Culvert Pipe	Metal	C	Poor	Gray
13	0.99	Calibrate				
14	0.93	Calibrate				
15	0.95	Calibrate				

LOD (Limit of Detection) = 0.1 mg/cm^2

Blue text indicates any concentrations of LBP which OSHA considers a potential exposure risk when removed.

Red text indicates concentrations of LBP that have specific disposal requirements regulated by SCDHEC.

Appendix D

Site Photograph's

Photo 1. Top View of Bridge.

Photo 2. Bridge Asset Number Mounted to Concrete Guardrail.

Photo 3. Southwest Corner View of Bridge.

Photo 4. Southeast Corner View of Bridge.

Photo 5. LBP on Gray Steel Girders and Green Steel Girder Brackets.

Photo 6 LBP on Gray Bearing Plates.

Appendix E

EPA LBP Inspector Certification

United States Environmental Protection Agency

This is to certify that

Michael S Mincey

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Inspector

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires February 21, 2025

LBP-I-I198708-2

Certification #

January 05, 2022

Issued On

Adrienne Priselac, Manager, Toxics Office

Land Division

APPENDIX I
PUBLIC INVOLVEMENT

NOTICE OF SCDOT PROJECT FOR COMMENT

17A/21 over CSX Railroad

Emergency Bridge Replacement Project in Hampton County

PURPOSE

The purpose of this project is to replace the existing US 21/17A bridge over CSX Railroad through an emergency procurement process.

ANTICIPATED SCHEDULE

Construction Begins- Winter 2023
Construction Ends- Summer 2024

COMMENTS

Will Be Accepted from 10/23/2023 until 11/22/2023

SCAN ME

Please visit our website for more information regarding the proposed project https://www.scdot.org/us17a-21-over-csx-rr/default.aspx

Or by visiting http://www.scdot.org - Select the Programs and Projects tab and then select Public Comment

Please contact SCDOT Project Manager Tyler Clark, PE at 803-737-4596 or ClarkTA@scdot.org for questions or to request additional information.

Persons who may require special accommodations may contact Syrees Gillens Oliver at 803-737-1351 or Oliversg@scdot.org.

South Carolina Department of Transportation

NOTICE OF SCDOT PROJECT FOR COMMENT

US 17A/21 over CSX Railroad

Emergency Bridge Replacement Project in Hampton County

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The purpose of this project is to replace the existing US 21/17A bridge over CSX Railroad through an emergency procurement process.

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South Carolina Department of Transportation

PUBLIC ENGAGEMENT OFFICE
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COLUMBIA, SOUTH CAROLINA 29202

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Written comments will be accepted until November 22, 2023

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Postal customer

Written comments will be accepted until November 22, 2023

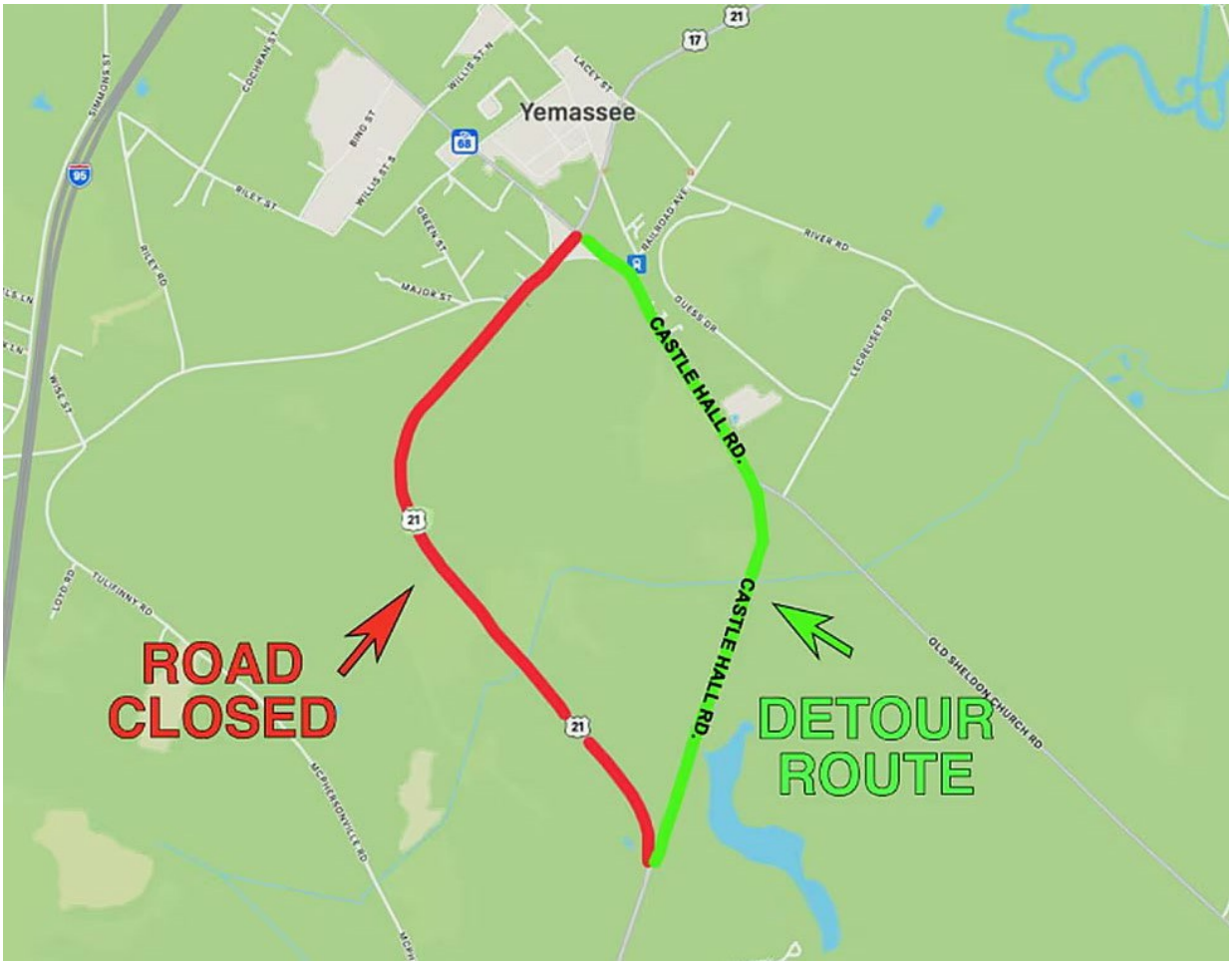
South Carolina
Department of Transportation

Office of Public Engagement
(803) 737-1270 | **media@scdot.org**

SCDOT seeks comments on Hampton County bridge project

Columbia, S.C. (October 27, 2023) - The South Carolina Department of Transportation (SCDOT) requests input from the public regarding proposed plans to replace the existing bridge on U.S. 17A /21 over CSX Railroad. More information about proposed plans is available **on the project website**.

SCDOT will accept comments through November 22, 2023 regarding the proposed project. To provide a comment, **visit this page on the project website**.



About SCDOT

The South Carolina Department of Transportation (SCDOT) is the state agency with oversight of South Carolina's network of highways and bridges, including responsibilities such as planning, design, construction, financing, and roadway safety. To ensure the nation's fourth-largest highway system is prepared to serve the needs of South Carolina's growing economy and population, SCDOT has developed a Strategic 10-Year Plan that addresses improvements to the state's highway and bridge systems. Learn more at **scdot.org**.

McGoldrick, Will

From: SMPSHPT1302@scdot.org
Sent: Friday, October 27, 2023 5:19 PM
To: Clark, Tyler A.
Subject: Comment from SCDOT contact form - US 21/17A over CSX Railroad Emergency Bridge Replacement

Workflow Notification

The following message was sent from the US 21/17A over CSX Railroad Emergency Bridge Replacement contact form:

First Name: Jackson
Last Name: Hurst
Email: ghostlightmater@yahoo.com
Address 1: 4216 Cornell Crossing
City: Kennesaw
State: Georgia
Zipcode: 30144
Phone: 678-628-4232
Comment: I approve and support SCDOT's US 17A/21 over CSX Railroad Emergency Bridge Replacement Project. The aspect that I love about SCDOT's US 17A/21 over CSX Railroad Emergency Bridge Replacement Project is that the existing bridge on US-17A/21 over the CSX Railroad will be replaced with a new bridge that is safer and up to current design standards.

McGoldrick, Will

From: SMPSHPT1302@scdot.org
Sent: Sunday, November 5, 2023 11:58 PM
To: Clark, Tyler A.
Subject: Comment from SCDOT contact form - US 21/17A over CSX Railroad Emergency Bridge Replacement

Workflow Notification

The following message was sent from the US 21/17A over CSX Railroad Emergency Bridge Replacement contact form:

First Name: Brianna
Last Name: Otero
Email: Oterobc@g.cofc.edu
Phone: 8434785527
Comment: After reviewing the US 17A/21 over CSX Railroad Emergency Bridge Replacement Project description, I am in full support of the project. The replacement of the existing bridge serves an important purpose of bringing the old bridge and the roadway to current standards. This alone justifies the replacement because it will be safer for the community. In addition, the project will require labor and thus, employ local workers. By creating jobs, this project will also stimulate the local economy. Based on these factors, the emergency bridge replacement project should be approved and I look forward to seeing its progress.

McGoldrick, Will

From: SMPSHPT1302@scdot.org
Sent: Monday, October 30, 2023 11:16 AM
To: Clark, Tyler A.
Subject: Comment from SCDOT contact form - US 21/17A over CSX Railroad Emergency Bridge Replacement

Workflow Notification

The following message was sent from the US 21/17A over CSX Railroad Emergency Bridge Replacement contact form:

First Name: Mimi
Last Name: Aherne
Email: mimiaherne@gmail.com
Address 1: 13 Radcliffe Pl
City: Charleston
State: SC
Zipcode: 29403
Phone: 4434868873
Comment: As a resident of South Carolina, I support the proposed project to replace the US 17A/21 bridge over the CSX Railroad. This initiative appears to be long overdue and essential for the people of this community. The upgrade to current design and safety standards will undoubtedly enhance the safety of our daily commutes and ensure the long-term viability of our infrastructure. The use of a traffic detour during construction demonstrates a thoughtful approach to minimizing disruptions, which is particularly important for local residents. This project is a clear sign that our local authorities are committed to our well-being, and I am grateful for their efforts to improve our transportation infrastructure.

McGoldrick, Will

From: Clark, Tyler A.
Sent: Thursday, November 16, 2023 1:55 PM
Subject: SCDOT contact form, Response - US 21/17A over CSX Railroad Emergency Bridge Replacement

Good Afternoon,

Thank you for your comment and support of this project.

Please continue to visit the website for additional project information.

Feel free to reach out to me if you have any additional questions or comments.

Thank you!

Tyler A. Clark, PE
Office of Alternative Delivery
P 803.737.4596 **E** ClarkTA@scdot.org
955 Park Street, Room 421, P.O. Box 191, Columbia, SC 29202-0191
LET 'EM WORK. LET 'EM LIVE.