



South Carolina Department of Transportation
On Behalf of the Federal Highway Administration - South Carolina Division Office



PROCESSING FORM FOR PROGRAMMATIC CATEGORICAL EXCLUSIONS
NON MAJOR FEDERAL ACTIONS

State ID P031832

Fed Project # P031832

Route S-87

County Union

Part 1 - Project Description

Include the Project Name/Description

S-87 (Delta Road) over Padgett's Creek Bridge Replacement

The purpose of this project is to replace the bridge to correct the load restriction placed on it as well as resolve structural deficiencies. The existing bridge is posted for load restrictions due to being substandard (functionally obsolete and structurally deficient). It has a sufficiency rating of 49.2. The proposed repair involves replacing the current 56' long bridge with a new bridge on the same alignment.

NEPA studies revealed no significant impacts or effects to resources within the project study area.

It is not anticipated new right of way will be required for the replacement of this structure. The project is surrounded by US Forest Service lands. If right of way is needed, it will be minor in nature. Existing right of way has been identified as being 66' or 33' to each side from the centerline.

Part 2 - PCE Type

Select the appropriate Categorical Exclusion from 23 CFR Part 771.117 that best fits the entire project from the drop-down menu. **Reference Appendix A of the PCE Agreement for a more detailed description of each CE contained in 23 CFR 771.117.**

23 CFR 771.117(c) Bridge rehabilitation, reconstruction, or replacement or railroad crossing improvements

23 CFR 771.117(d)

Part 3 - Thresholds

To be processed as a Programmatic Categorical Exclusion (PCE) the following conditions must be met in addition to the General Criteria (as outlined in the PCE Agreement between FHWA-SC and SCDOT). Place a "X" in the appropriate box below. If the answer is "Yes" to any of the below criteria, SCDOT will consult with FHWA-SC to determine the appropriate level of NEPA documentation required and forward to FHWA-SC for approval. ***Reference Part 4 of the Processing form or Section IV of the PCE Agreement for more details and definitions regarding each threshold.**

1.	Involves any unusual circumstances as described in <u>*23 CFR Part 771.117(b)</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
2.	The acquisition of more than <u>*minor amounts</u> of temporary or permanent strips of right-of-way	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Part 3 - Thresholds Continued

3.	Involves acquisitions that result in residential or non-residential displacements	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
4.	Results in capacity expansion of a roadway by adding through lanes	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5.	Involves construction that would result in <u>*major traffic disruptions</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6.	Involves <u>*changes in access control</u> requiring FHWA approval	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7.	An adverse effect determination under Section 106 of the National Historic Preservation Act.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
8.	Use of Section 4(f) property that cannot be documented with a FHWA <i>de minimis</i> determination or a programmatic Section 4(f) other than the programmatic evaluation for the use of historic bridges	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
9.	Any use of a Section 6(f) property	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
10.	Requires an Individual USACE 404 Permit	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
11.	Requires an Individual U.S. Coast Guard Permit.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
12.	Work encroaching in a regulatory floodway, adversely affecting the base floodplain (100 yr.) pursuant to E.O. 11988 and 23 CFR Part 650 Subpart A	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
13.	Construction in, across, or adjacent to a river designated as a National Wild and Scenic River	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
14.	Involves an increase of 15 dBA or greater on any noise receptor or abatement measures are found to be feasible and reasonable due to noise impacts	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
15.	May affect and is likely to adversely affect a Federally listed species or designated critical habitat or projects with impacts subject to the BGEPA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
16.	Involves acquisition of land for hardship, protective purposes, or early acquisition	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
17.	Does not meet the latest Conformity Determination for air quality non-attainment areas (if applicable).	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
18.	Any known or potential <u>major</u> hazardous waste sites within the right-of-way.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
19.	Is not included in or is inconsistent with the STIP and/or TIP	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Part 3 Continued - Additional criteria to be completed for disposal of excess right-of-way PCE

1. Is the parcel part of a SCDOT environmental mitigation effort or could it be used for environmental mitigation?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Is there a formal plan to use this parcel for a future transportation project (is it part of an approved LRTP)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Part 4 - Threshold Definitions

Unusual Circumstances (23 CFR Part 771.117) - Unusual circumstances are defined as:

- a. Significant environmental impacts;
- b. Substantial controversy on environmental grounds;
- c. Significant impact on properties protected by Section 4(f) of the DOT ACT or Section 106 of the National Historic Preservation Act; or
- d. Inconsistencies with any Federal, State, or local law, requirement, or administrative determination relating to the environmental aspects of the action.

Minor Amount of Right-of-Way (ROW):

A minor amount of ROW is defined as less than 3 acres per linear mile for linear projects or less than 10 acres of impacts for non-linear projects (eg: intersections, bridges), and no removal of major property improvements. Examples of major improvements include residential and business structures, or the removal of other features which would change the functional utility of the property. Removal of minor improvements, such as fencing, landscaping, sprinkler systems, and mailboxes would be allowed.

Major Traffic Disruptions:

A major traffic disruption is defined as an action that would result in: a) adverse effects to through-traffic businesses or schools, b) substantial change in environmental impacts, or c) public controversy associated with the use of the temporary road, detour, or ramp closure.

Changes in Access Control:

Requires approval from FHWA for changes in access control on the Interstate system (eg: Interchange Modification Reports or Interchange Justification Reports).

Additional Comments if Needed:

This bridge is part of a design-build bridge package consisting of 9 bridges to be replaced under one contract. All bridges in this package are located in District 4. Public involvement included postcard mailers.

Relevant field studies and environmental reviews have been completed to determine that the project meets the criteria set forth in the Programmatic Categorical Exclusion Agreement signed by FHWA-SC and SCDOT. It is understood that any additions/deletions to the project may void environmentally processing the project as presently classified; consequently, any engineering changes must be brought to the attention of SCDOT Environmental Services Office immediately. A copy of this form is included in the project file and one (1) copy has been provided to FHWA.

Prepared By:

Will McGoldrick

 Digitally signed by Will McGoldrick
 Date: 2021.04.22 12:05:13 -04'00'

Date

Apr 22, 2021

Primavera:

☐

Yes

☐

No

P2S Date:

Apr 20, 2020

Does the project contain

commitments?: (if Yes attach to form)

☒

Yes

☐

No

Date: 04/01/2021

SCDOT
NEPA ENVIRONMENTAL COMMITMENTS FORM



Project ID : P031832 County : Union District : District 4 Doc Type: PCE Total # of Commitments: 5

Project Name: S-87 (Delta Road) over Padgettss Creek 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: Brad Reynolds

PHONE #: 803-737-1440

ENVIRONMENTAL COMMITMENTS FOR THE PROJECT

Water Quality

NEPA Doc Ref:

Responsibility:

SCDOT

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:

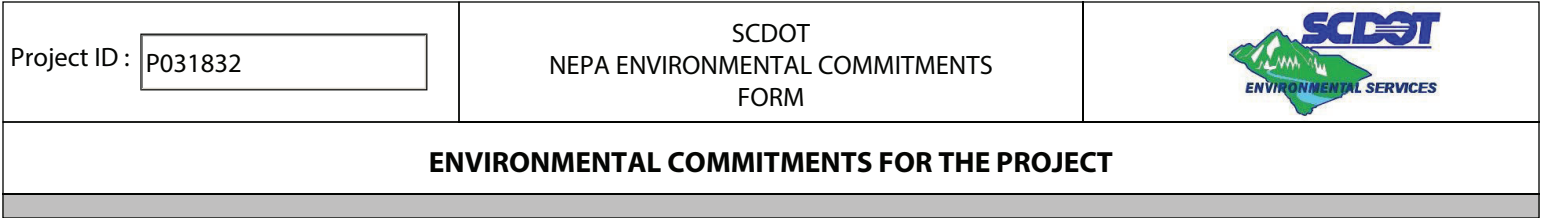
SCDOT

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 : <input type="text" value="P031832"/>	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	
ENVIRONMENTAL COMMITMENTS FOR THE PROJECT		
<div></div>		

Project ID : <input type="text" value="P031832"/>	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	
ENVIRONMENTAL COMMITMENTS FOR THE PROJECT		



Project ID : <input type="text" value="P031832"/>	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	
ENVIRONMENTAL COMMITMENTS FOR THE PROJECT		

Cultural Resources

NEPA Doc Ref:

Responsibility:	CONTRACTOR
-----------------	------------

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

Lead-Based Paint

NEPA Doc Ref:

Responsibility:	CONTRACTOR
-----------------	------------

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

NEPA Doc Ref:

Responsibility:	
-----------------	--

Special Provision

March 29, 2021

Ms. Elizabeth Johnson
Director, Historical Services, D-SHPO
State Historic Preservation Office
SC Department of Archives & History
8301 Parklane Road
Columbia, SC 29223

RE: Cultural Resources Survey for the S-87 (Delta Road) over Padgetts Creek Bridge Replacement, Union County, South Carolina.

Dear Ms. Johnson:

Please find attached a copy of the above referenced report that describes cultural resources investigations conducted by the South Carolina Department of Transportation (SCDOT) for the replacement of the bridge carrying Delta Road over Padgetts Creek in **Union County**, South Carolina. The current bridge is a two-lane structure that has become functionally obsolete.

The area of direct effect (ADE) for archaeological resources for the project consists of land that will be acquired as new right-of-way (ROW) as well as areas within existing ROW that might be affected by the undertaking. The ADE is approximately 490 feet in length and 150 feet wide. New ROW will be acquired in all four quadrants of the bridge in order to accommodate the new bridge structure and to facilitate future maintenance. All of this new ROW is on land owned by the United States Forest Service (USFS). The area of potential effect (APE) is a 300-foot buffer around the ADE used for the architectural survey

The cultural resources survey identified one architectural resource (SHPO Site Number 1426), the current bridge carrying S-87 over Padgetts Creek. The two-lane bridge was constructed 1954. This resource is recommended **not eligible** for listing on the NRHP. No archaeological resources were identified.

Based on the results of the background research and field investigations, the SCDOT has determined that **no historic properties will be affected** by the proposed undertaking.

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. 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,



Tracy Martin
Chief Archaeologist



Enclosures: Cultural resources survey report

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

Signed:  Date: 3/31/2021

ec: Shane Belcher, FHWA
Russell Townsend, Eastern Band of Cherokee Indians
Stephen J. Yerka, Eastern Band of Cherokee Indians
Elizabeth Toombs, Cherokee Nation
LeeAnne Wendt, Muscogee (Creek) Nation
Karen Pritchett, United Keetoowah
Charlotte Wolfe, United Keetoowah

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

ARCHAEOLOGICAL FIELD REPORT
SCDOT ENVIRONMENTAL SECTION



TITLE: Cultural Resources Survey for the S-87 (Delta Road) over Padgett's Creek Bridge Replacement, Union County, South Carolina

DATE OF RESEARCH: February 25, 2021

COUNTY: Union

PIN: 31832

ARCHAEOLOGIST: Tracy Martin, Rebecca Shepherd

ARCHITECTURAL HISTORIAN: Tracy Martin

PROJECT: S-87 (Delta Road) over Padgett's Creek Bridge Replacement

DESCRIPTION: The South Carolina Department of Transportation (SCDOT) is proposing the replacement of the S-87 (Delta Road) bridge over Padgett's Creek in Union County, SC (**Figure 1**). The current bridge is a two-lane structure that has become functionally obsolete. The bridge is proposed to be replaced in kind and in the same location. The area of direct effect (ADE) for archaeological resources 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 might be affected by the undertaking. The ADE is approximately 149 meters (490 feet) in length and 46 meters (150 feet) wide. New ROW will be required in all four quadrants of the bridge in order to accommodate the new bridge structure and to facilitate future maintenance (**Figure 2**). A total of approximately 1.157 acres of new ROW is anticipated to be acquired for the project. All of this new ROW is on land owned by the United States Forest Service (USFS). The area of potential effect (APE) is a 300-foot buffer around the ADE used for the architectural survey (see Figure 2).

An Archaeological Resources Protection Act (ARPA) permit was acquired on February 17, 2021. This permit was required in order to investigate the portion of the project area within USFS property. The permit was obtained through the USFS Francis Marion/Sumter National Forest Office in Whitmire, South Carolina and was facilitated by Nolen Caudell of the USFS.

LOCATION: The project area is located in southern Union County. The town of Whitmire is approximately 3.5 miles to the southwest.

USGS QUADRANGLE: Whitmire North

UTM: WGS 84

EASTING: 448807

DATE: 1970

ZONE: 17 North

NORTHING: 3821440

SCALE: 7.5'

ENVIRONMENTAL SETTING: The project area is located in the central Piedmont Physiographic Province. The majority of project area consists of grassy pasture on either side of Padgett's Creek. **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 Padgett's Creek, which bisects the project area east to west.

SOIL TYPE: Two soil types are present within the project area (**Figure 7**). The majority is Cartecay-Toccoa complex, which comprises 76 percent of the project area. This soil is considered somewhat poorly drained. Cecil sandy loam comprises 24 percent and is confined to the northern third of the project area. This soil is considered well drained.

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: Vegetation within the project area consists of grassy pastures with patches of moderately dense blackberry and greenbrier. The areas immediately adjacent to the creek contain a moderate amount of pine and hardwood trees. The margins along the road had recently been cut leaving a sparse line of immature pine and hardwood in some areas. The southwestern quadrant consisted of a dense patch of greenbrier and saplings (see **Figures 3 – 6**).

BACKGROUND INVESTIGATION: Prior to the field investigation the South Carolina cultural resources online GIS database (ArchSite) was examined to determine if any previously identified archaeological sites, historic structures or National Register of Historic Places (NRHP) sites were present within a quarter mile of the project area (**Figure 8**). There are no previously recorded cultural resources in ArchSite that are located within the APE. There is one archaeological site recorded within a quarter mile. Site 38UN0007 is approximately a quarter mile to the southeast and contained Early, Middle, and Late Archaic bifaces and associated lithics scattered over a 6 acre area. The site was recorded in 1971 by the University of South Carolina and its eligibility status is indeterminate. A review of the SCDOT historic bridge inventory indicated that the current bridge (Asset # 2096) carrying S-87 over Padgett Creek is present within the ADE but is not recommended eligible for the NRHP.

In addition, historical maps dating to between 1914 and 1970 were examined to determine if any structures or architectural features could be identified within the project area (SCDOT 1939 and 1951; USDA 1914; USGS 1941, 1953, and 1970). None of the maps examined showed structures within or adjacent to the project area.

ARCHAEOLOGICAL SURVEY: The archaeological survey was conducted on February 25, 2021. Field methods consisted of a pedestrian reconnaissance augmented with shovel testing. Shovel tests were approximately 30 centimeters in diameter and were excavated at 30-meter intervals. Shovel tests were not excavated in areas of obvious ground disturbance or in areas of standing water. These methods were consistent with South Carolina standards and guidelines. All soils were screened through 0.25-inch mesh hardware cloth to ensure systematic artifact recovery.

ARCHAEOLOGICAL SURVEY RESULTS: A total of 12 shovel test locations were investigated (**Figure 9**). Of those, three were not excavated due to ground disturbance or standing water. All of the shovel test pits were within grassy pasture.

The soil profiles were consistently shallow, but somewhat inconsistent in composition across the project area. Most of the shovel test pits were brown (10YR 4/3), olive brown (2.5YR 4/3), or dark brown (10YR 3/3) sand until approximately 10 centimeters below surface (cmbs) followed by brown (10YR 5/3) sand mottled with pale brown (10YR 6/3) sand, red (2.5YR 4/6) clay, or reddish brown (2.5YR 4/4) clay. Several shovel tests had more than two strata present. Shovel test pit 1-1 consisted of dark brown (10YR 3/3) loamy sand to 5 cmbs followed by brown (10YR 4/3) loamy sand to 10 cmbs. Brown (7.5YR 4/3) sand was present between 15 and 25 cmbs. This was underlain by light brown (7.5YR 6/3) sandy clay mottled with dark yellowish-brown (10YR 4/6) clay to at least 35 cmbs. Shovel test pit 1-5 contained dark brown (10YR 3/3) loam for 5 cmbs followed by brown loamy sand for 5 centimeters. This was underlain by light reddish brown (5YR 6/4) clay loam followed by a forth stratum of reddish-brown (5YR 5/4) clay. Shovel test pits 2-4 – 2-6 were not excavated because they were located within a disturbed area of ditch.

No artifacts or above-ground archaeological features were found during the archaeological reconnaissance of the project area and no additional archaeological investigations are recommended.

ARCHITECTURAL SURVEY: A historical resources survey of the project area was conducted on February 25, 2021. 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 resource was identified (SHPO Site Number 1426), the current bridge carrying S-87 over Padgetts Creek (Bridge No. 4470008700100). The bridge has been recorded in the SCDOT Historic Bridge Database (Trans Systems). According to the database, the two-lane bridge was constructed 1954 by SCDOT maintenance forces and according to the SCDOT Bridge Inspection Files is a 4 span, 56 foot long precast slab bridge with no railings. It is supported on timber pile and precast concrete cap beam bents. The slabs are composed of the standard 14 foot long units or "planks" with tie rods at the ends of the spans. It is a later undistinguished example of a highly successful standardized design that was developed by state engineers specifically to address the pressing need to replace bridges on the state's secondary road system beginning in the late 1940s. South Carolina was among the first states in the Southeast to adopt precast designs for secondary road bridges, and the practice proved so economical and efficient that more than 1,100 nearly identical precast slab bridges were placed statewide from 1947 to 1960. It is the early complete prototypical examples that best represent the significance of the precast technology. This later example has no innovative or distinctive details. It is not historically or technologically significant. **Figures 9 and 10** show the bridge as it looked at the time of survey. SHPO Site Number 1426 is recommended not eligible for the NRHP. No additional aboveground investigations are recommended.

REMARKS AND RECOMMENDATIONS: The cultural resources survey for the proposed replacement of the S-87 (Delta Road) bridge over Padgetts Creek identified no new archaeological resources. One new historic resource was recorded, SHPO Site Number 1426, the current bridge in the ADE. This bridge is recommended not eligible for the NRHP. No historic properties will be affected by the proposed undertaking. No additional cultural resources investigations are recommended.

SIGNATURE: _____ **DATE:** _____

References Cited

South Carolina Department of Transportation (SCDOT)

- 1939 General Highway and Transportation Map, Union County South Carolina. Retrieved from University of South Carolina, University Libraries, Digital Collections.
<<https://digital.tcl.sc.edu/digital/collection/scrm/id/287/rec/1>>.

Trans Systems

South Carolina Historic Bridge Database. Access Database on file at SCDOT Headquarters, Columbia, South Carolina.

United States Department of Agriculture (USDA)

- 1914 Soil Survey of Union County, South Carolina. Retrieved from USDA Natural Resources Conservation Service.
<https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/south_carolina/unionSC1914/Soil_map.pdf>.

United States Geological Survey (USGS)

- 1941 Spartanburg 1:250,000 Scale Topographic Quadrangle. Retrieved from USGS Historical Topographic Map Explorer. < <http://historicalmaps.arcgis.com/usgs/>>.
- 1953 Spartanburg 1:250,000 Scale Topographic Quadrangle. Retrieved from USGS Historical Topographic Map Explorer. < <http://historicalmaps.arcgis.com/usgs/>>.
- 1970 Whitmire North 1:24,000 Scale Topographic Quadrangle. Retrieved from USGS Historical Topographic Map Explorer. < <http://historicalmaps.arcgis.com/usgs/>>.

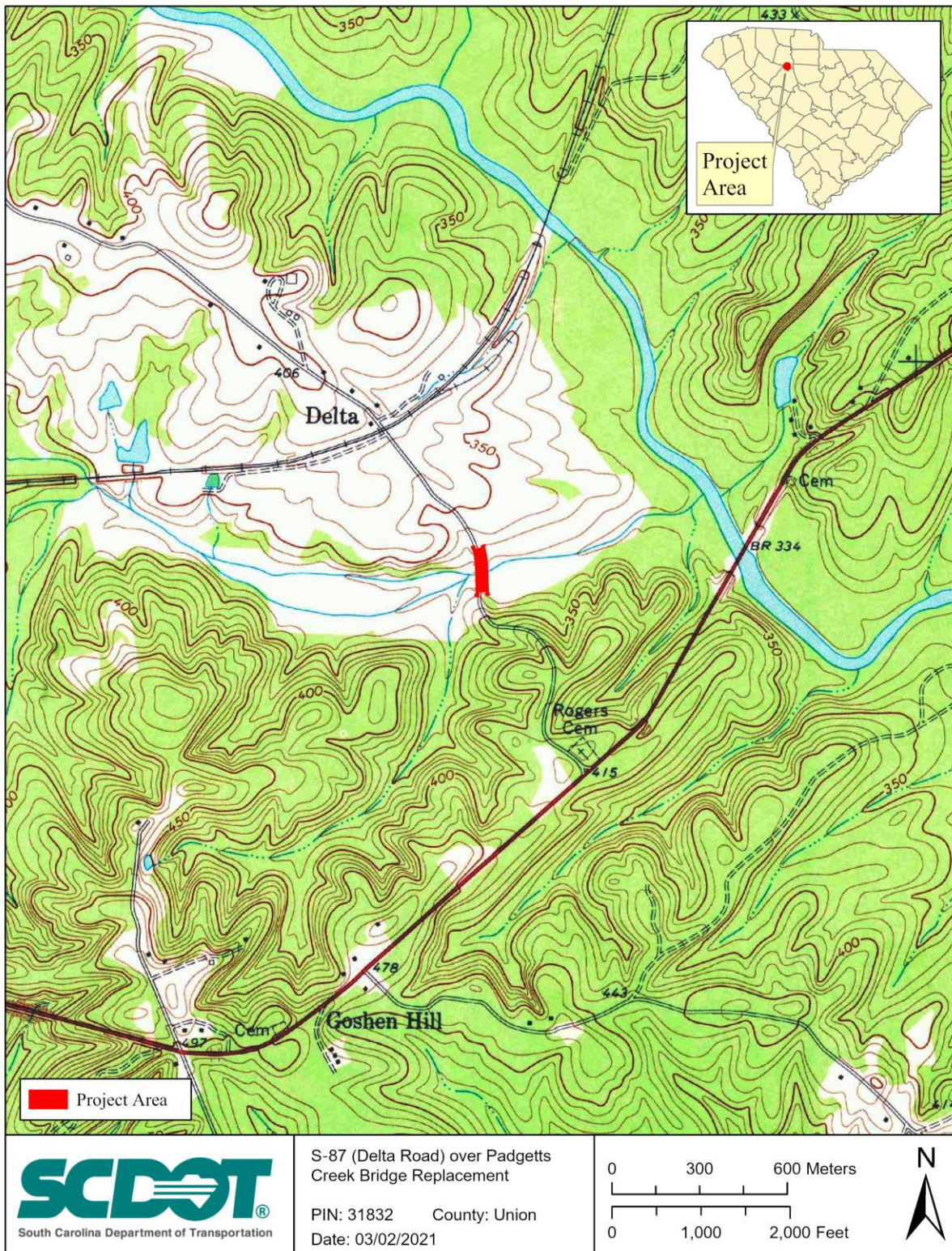


Figure 1. Project Area Location Map (USGS 1970).

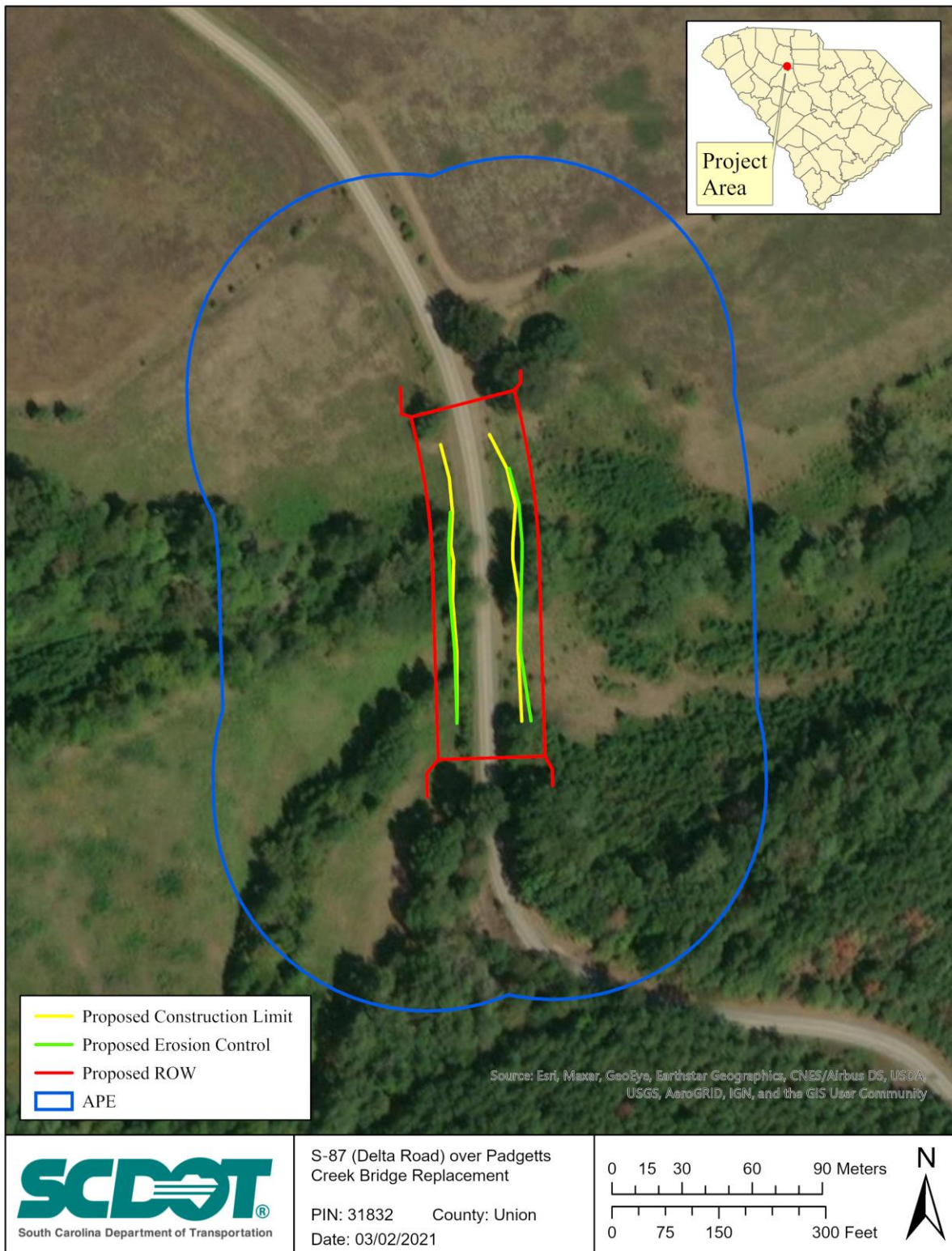


Figure 2. Project Plans Map Showing Architectural APE.



Figure 3. Facing North from North Side of Bridge.



Figure 4. Facing South towards Bridge.



Figure 5. Facing South from West Side of Road.



Figure 6. Facing South from West Side of Road.



Figure 7. Map Showing Soils within the Project Area.

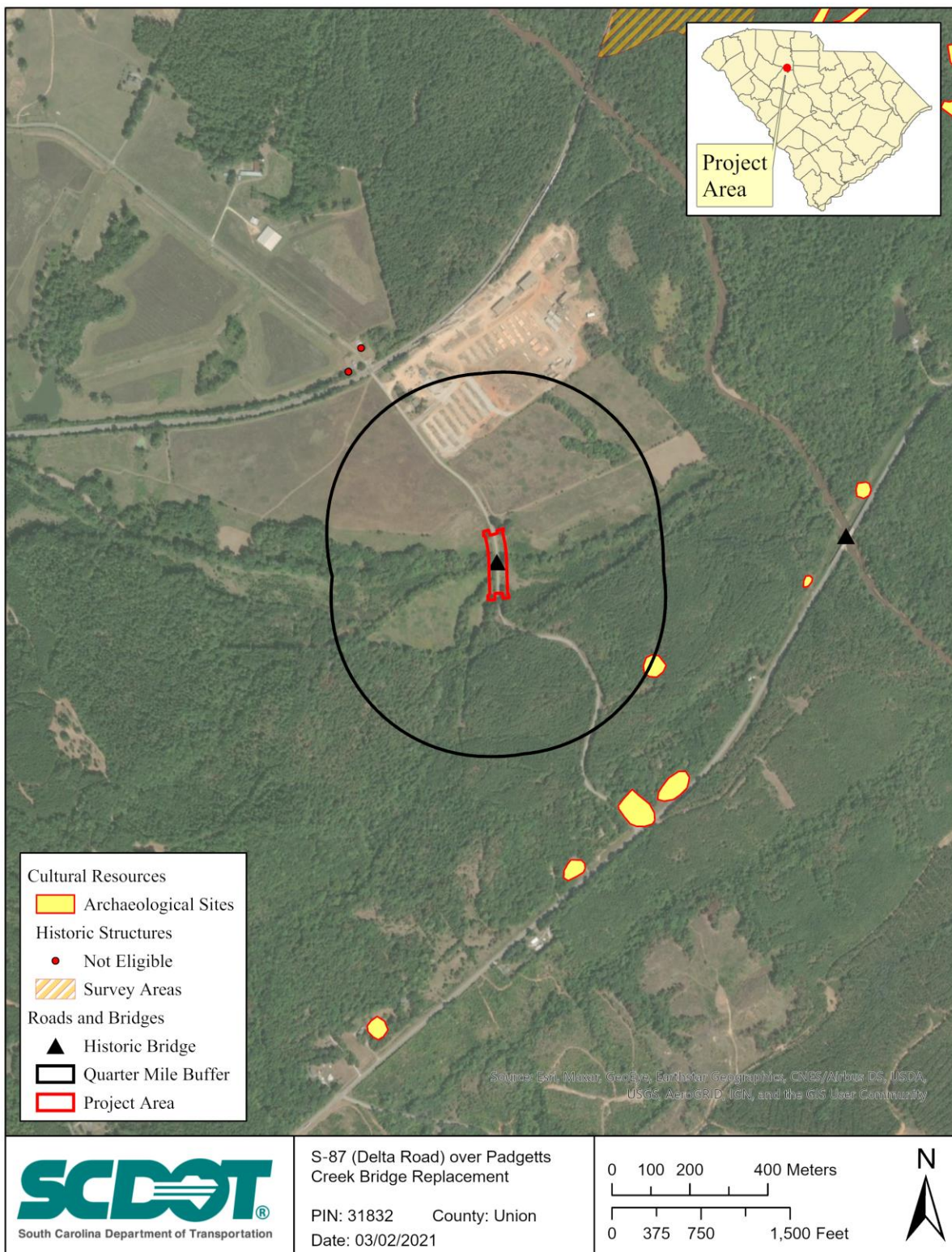


Figure 8. Background Research Map Showing Previously Recorded Cultural Resources.

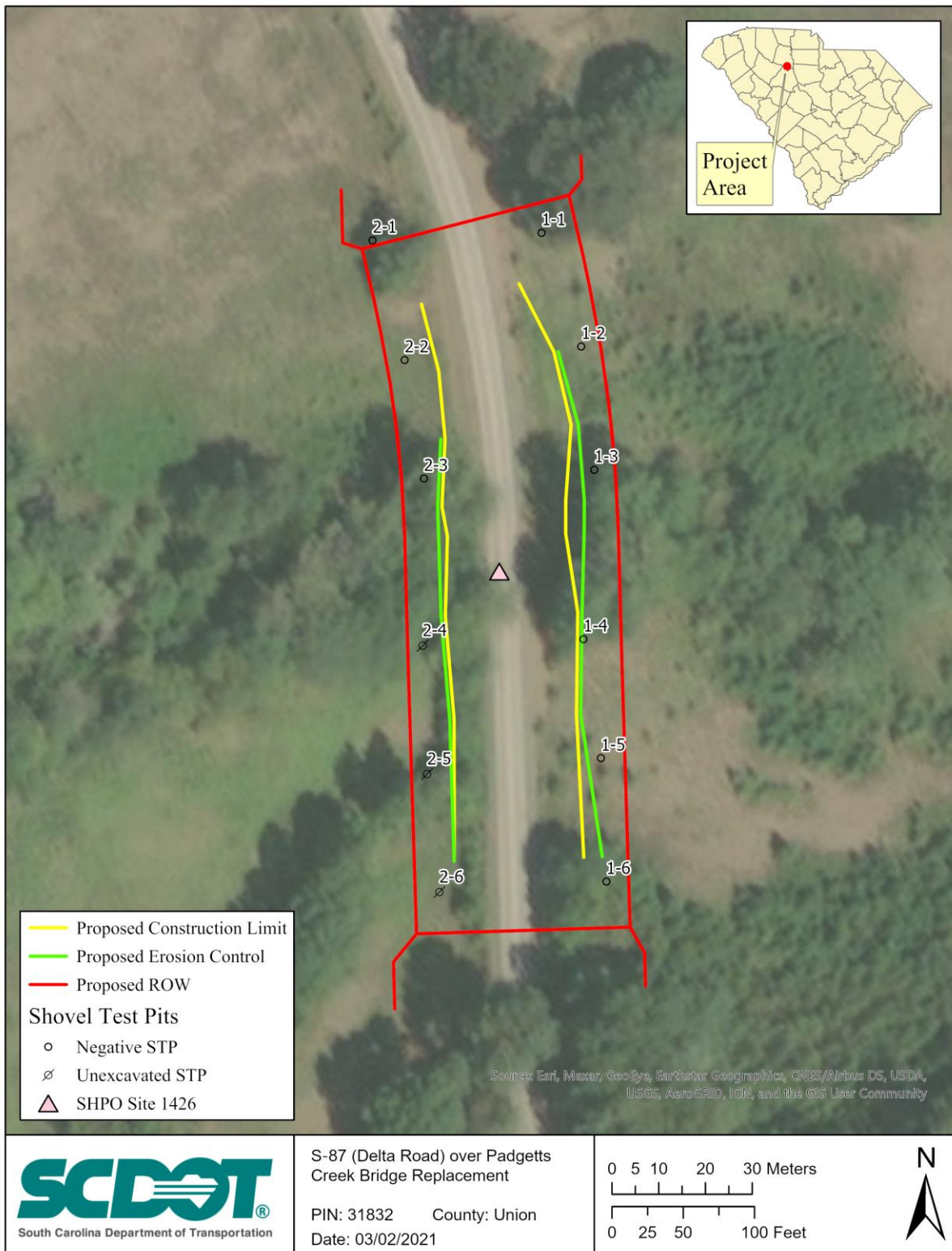


Figure 9. Map Showing the Locations of Shovel Tests and Newly Recorded Resource.



Figure 10. SHPO Site 1426, Facing Southwest.



Figure 11. SHPO Site 1426, Facing Southeast.

From: [McGoldrick, Will](#)
To: [Altman, Ann-Marie](#)
Subject: Re: mussel survey S-97 in Lancaster county
Date: Thursday, August 1, 2019 4:13:01 PM

This should work. Thank you

Will McGoldrick | DB Env. Coordinator
SCDOT Environmental Services Office
Mobile Reply

On Aug 1, 2019, at 1:56 PM, Altman, Ann-Marie <AltmanAM@scdot.org> wrote:

Hi Will,

We completed the mussel survey for the S-97 bridge replacement project in Lancaster county yesterday. We did not find any mussels. It looked like great habitat, however there was very little water.

Thanks!

*Ann-Marie Altman
Permits Manager-RPG 4 (Upstate)/Biologist
SCDOT Environmental Services
803-737-0946 (office)*

Biological Survey of S-97 Bridge Replacement over
Tributary to Flat Creek in Lancaster County, S.C.
September 30, 2020

Pursuant to Section 7 of the Endangered Species Act a field survey was conducted on the proposed new right of way. The following list of threatened (T) and endangered (E) species was obtained from the U.S. Fish and Wildlife Service:

Animals

Bald eagle (*Haliaeetus leucocephalus*) – BGEPA
Carolina heelsplitter (*Lasmigona decorata*) – E

Plants

Black spored quillwort (*Isoetes melanospora*) – E
Pool sprite (*Amphianthus pusillus*) – T
Schweinitz's sunflower (*Helianthus schweinitzii*) – E
Smooth sunflower (*Echinacea laevigata*) – E

Methods

The project area was examined by GIS and field reconnaissance methods on September 21, 2020. Habitats surveyed were determined by each species' ecological requirements.

Results

The project consists of replacing the S-97 Bridge over a tributary to Flat Creek in Lancaster County. The tributary is a small stream located within the Carolina Slate Belt Ecoregion. Species composition in the forested areas adjacent to the stream include an overstory dominated by loblolly pine (*Pinus taeda*), sweet gum (*Liquidambar styraciflua*), sour wood (*Oxydendrum arboretum*), silver maple (*Acer saccharinum*), and white oak (*Quercus alba*). The shrub layer is comprised mostly of American holly (*Ilex opaca*), and flowering dogwood (*Cornus florida*) with some woody vines such as greenbrier (*Smilax spp.*) and muscadine (*Vitis rotundifolia*). There are some areas cleared of woody vegetation along the roadway and within a utility easement that crosses the road. Vegetation in the maintained cleared areas is comprised of various herbaceous plants including tickseed sunflower (*Bidens aristosa*).

According to the Heritage Trust database of endangered, threatened and rare species, there were no occurrences of any federally listed species in the vicinity of the project. There is no habitat for the black spored quillwort or pool sprite. There is habitat for the Carolina heelsplitter and the two listed sunflower species. The field survey of the project study area resulted in no observations of the Carolina heelsplitter, smooth

sunflower, or Schweinitz's sunflower. Additionally, the proposed work on the bridge over the tributary to Flat Creek should have no impact on the Carolina heelsplitter critical habitat located approximately three miles downstream in Flat Creek.

Based on lack of suitable habitat and/or no observations of the listed species, results of the threatened and endangered species study indicate that the proposed action will have no effect upon any threatened or endangered species or critical habitats currently listed by the USFWS.

Prepared by: Chris Beckham 10/1/2020
SCDOT Biologist Date

Date: 9/15/20

PERMIT DETERMINATION

FROM Will McGoldrick COMPANY SCDOT

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

SCDOT PROJECT ENGINEER Brad Reynolds

TO <select one>

Project Description CLRB 2021-1 District 2 Bridge Replacement Package; replace bridge over Padgett's Cr

Route or Road No. S-87 County Union

CONST. PIN P031834 OTHER PINS or STRUCTURE # _____

RESPONSE:

☒ It has been determined that no permits are required because:
Streams should be avoided and no wetland features identified in field

☐ 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: FW *Print and attach the SCDHEC water quality report*

303(d) listed ☒ no ☐ yes, for * _____

TMDL developed ☐ no ☒ yes, for * Fecal

*List all that apply using the SCDHEC abbreviations

Comments: part of 9 bridge package

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.

Will McGoldrick
Biologist, SCDOT/Consultant

Digitally signed by Will McGoldrick
DN: cn=Will McGoldrick, o=SCDOT, ou=ESO,
email=mcgoldrwr@scdot.org, c=US
Date: 2020.09.29 22:08:45 -04'00'

9-29-20
Date



8/4/2020

Watershed and Water Quality Information

General Information

Applicant Name: SCDOT **Permit Type:** MS4
Latitude: 34.5354 **Longitude:** -81.5579
MS4 Designation: Not in designated area **Monitoring Station:** B-051
Within Coastal Critical Area: NO **Water Classification (Provisional):** FW
Waterbody Name: PADGETTS CREEK **Entered Waterbody Name:**

Parameter Descriptions

NH3N
 CR
 CU
 HG
 NI
 PB
 ZN
 DO
 PH

Ammonia
 Chromium
 Copper
 Mercury
 Nickel
 Lead
 Zinc
 Dissolved Oxygen
 pH

FC
 FCB
 BIO
 TP
 TN
 CHLA
 ENTERO
 HGF
 PCB

Fecal Coliform
 Fecal Coliform (Shellfish)
 Macroinvertebrates (Bio)
 (Lakes) Phosphorus
 (Lakes) Nitrogen
 (Lakes) Chlorophyll a
 (Beach) Enterococcus
 Mercury (Fish)
 PCB (Fish)

Impaired Status (downstream sites)

Station	NH3N	CR	CU	HG	NI	PB	ZN	DO	PH	TURBIDITY	ECOLI	FCB	BIO	TP	TN	CHLA	ENTERO	HGF	PCB
B-051	X	X	X	X	X	X	X	X	X	X	T	A	X	X	X	X	X	X	X
B-349	F	F	F	F	F	X	F	F	F	F	A	A	X	X	X	X	X	X	X
B-047	A	A	A	A	A	X	A	A	A	A	A	A	X	X	X	X	X	X	X

F = Standards Fully Supported
 N = Standards Not Supported

A = Assessed at Upstream Station
 X = Parameter Not Assessed at Station

T = Within TMDL Approved Watershed

Parameters to be addressed (those not supporting standards)

ECOLI

Fish Consumption Advisory

TMDL Information - TMDL Parameters to be addressed

In TMDL Watershed: Yes **TMDL Site:** B-051
TMDL Report No: 021-04 **TMDL Parameter:** Fecal
TMDL Document Link: https://www.scdhec.gov/sites/default/files/docs/HomeAndEnvironment/Docs/tmdl_tyger_fc.pdf



S-87 Union
Bridge over Padgett's Creek
P031832

Legend
S-889 York x 2

- Wetland Types**
- Estuarine and Marine Deepwater
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Other

Status Map

- Digital Data
- No Data

(72)

Carle's Wildlife Hwy

1000 ft

Earth Point

National Flood Hazard Layer FIRMette



81°33'47"W 34°32'18"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

81°33'9"W 34°31'48"N

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
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped
		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

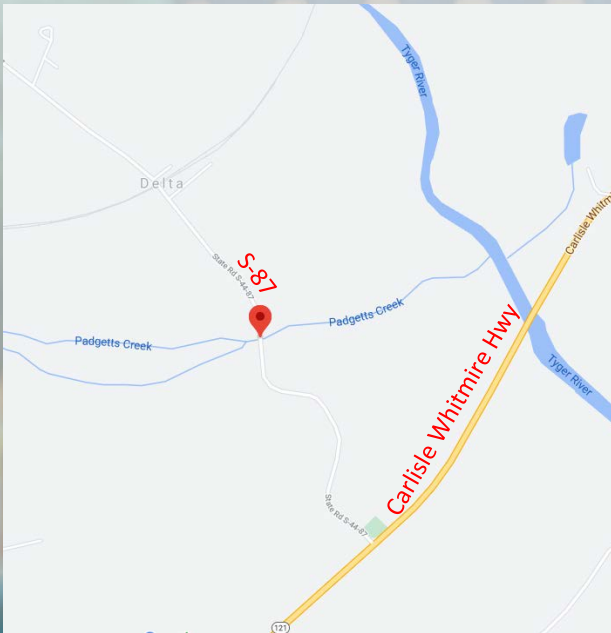
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **8/4/2020 at 8:42 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded 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.



PUBLIC ANNOUNCEMENT

SCDOT proposes to replace the S-87 Bridge over Padgett's Creek in Union County



This design-build project bridge package consists of all work necessary to replace the bridges to improve safety and address bridge deficiencies that could lead to bridge failure. The current bridges will be replaced with new bridges on the same alignment.

Work will include the associated roadway and drainage work necessary to tie the new approaches to the existing roadway. All of these bridges will be closed and detoured during construction.

Visit the project website to view more information and to make comments on the project. You can also make comments by contacting the project manager at the information below.

scdotgis.online/CLRB2021

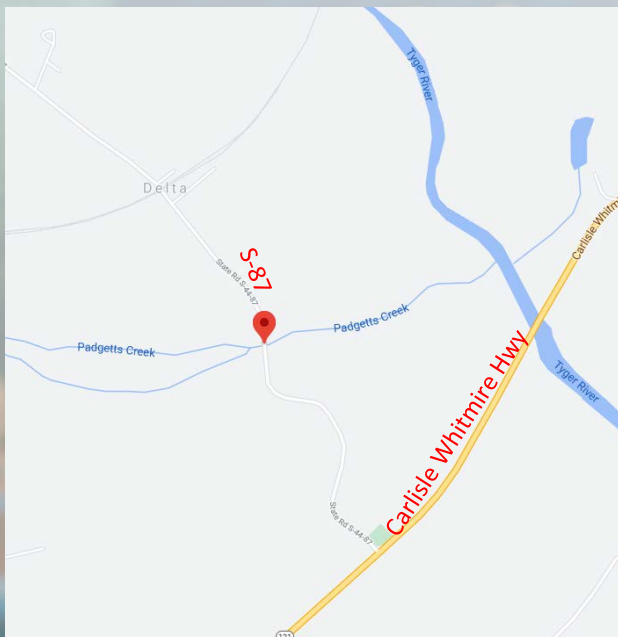
Limited Internet access? Contact the Project Manager to request hard copies of project information.

Questions or concerns, please contact Michael Pitts (803) 737-2566 or PittsME@scdot.org



PUBLIC ANNOUNCEMENT

SCDOT proposes to replace the S-87 Bridge over Padgett's Creek in Union County



This design-build project bridge package consists of all work necessary to replace the bridges to improve safety and address bridge deficiencies that could lead to bridge failure. The current bridges will be replaced with new bridges on the same alignment. Work will include the associated roadway and drainage work necessary to tie the new approaches to the existing roadway. All of these bridges will be closed and detoured during construction.

Visit the project website to view more information and to make comments on the project. You can also make comments by contacting the project manager at the information below.

scdotgis.online/CLRB2021

Limited Internet access? Contact the Project Manager to request hard copies of project information.

Questions or concerns, please contact Michael Pitts (803) 737-2566 or PittsME@scdot.org



ENVIRONMENTAL SERVICES OFFICE
PO BOX 191
COLUMBIA SOUTH CAROLINA 29202

PRSR STD
U.S. POSTAGE
PAID
COLUMBIA, SC
PERMIT NO.108

*To speak with an
interpreter, please contact
SCDOT at (855) 467-2368
or (803) 737-1200.*

*Para hablar con un
intérprete, comuníquese
con SCDOT al (855) 467-
2368 número gratuito ó
(803) 737-1200.*

*****ECRWSEDDM*****

Postal Customer
Union, SC 29178



ENVIRONMENTAL SERVICES OFFICE
PO BOX 191
COLUMBIA SOUTH CAROLINA 29202

PRSR STD
U.S. POSTAGE
PAID
COLUMBIA, SC
PERMIT NO.108

*To speak with an
interpreter, please contact
SCDOT at (855) 467-2368
or (803) 737-1200.*

*Para hablar con un
intérprete, comuníquese
con SCDOT al (855) 467-
2368 número gratuito ó
(803) 737-1200.*

*****ECRWSEDDM*****

Postal Customer
Union, SC 29178