U.S. Department of Transportation
Federal Highway Administration

South Carolina

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Columbia, South Carolina 29201
803-765-5411
803-253-3989

June 2, 2015

In Reply Refer To:
HDA-SC

Mr. Randy Williamson
Director, Environmental Services Office
South Carolina Department of Transportation
955 Park Street, P.O. Box 191
Columbia, SC 29202

Dear Mr. Williamson:

The South Carolina Department of Transportation (SCDOT) recently submitted a Categorical Exclusion (CE) for the Proposed Interstate 77 (I-77) Roadway Widening and Rehabilitation in Richland County, South Carolina (Federal Project Number P027002). The FHWA has determined that the project will not have significant impacts and that there will be no effect on threatened or endangered species or adverse impacts to historic resources. Enclosed is the approved CE for the project.

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 you may have concerning this project to Mr. J. Shane Belcher at 803-253-3187 or jeffrey.belcher@dot.gov.

Sincerely,

J. Shane Belcher

(for) Robert D. Thomas
Acting Division Administrator

Enclosure

ec:
Ms. Heather Robbins, NEPA Division Manager

Reading File

May 2015

CATEGORICAL EXCLUSION
TYPE C

Project Number: P027002

To: Federal Highway Administration

From: SCDOT, Heather Robbins, NEPA Division Manager

Project: I-77 Roadway Widening and Improvements

Project Description

The South Carolina Department of Transportation (SCDOT) proposes to widen approximately seven miles of Interstate 77 (I-77), in both directions, from Percival Road/SC-12 (mile marker 15) on the southern terminus to Killian Road (mile marker 22) on the northern terminus and rehabilitate the pavement surface along the existing lanes from Two Notch Road (mile marker 17) to Killian Road. The project also includes rehabilitating approximately five miles of pavement on the existing I-77 southbound lanes from Killian Road (mile marker 22) to Blythewood Road/SC-59 (mile marker 27) in Richland County, South Carolina (see **Figure 1 and Figure 2 in Appendix A**). From Percival Road (SC 12) to I-20 and from SC 277 to approximately mile marker 25, the existing segments of I-77 within the project limits consist of three southbound travel lanes and three northbound travel lanes. From I-20 to SC 277 and from mile marker 25 to Blythewood Road (S-59), the existing segments of I-77 consist of two travel lanes in each direction. The widening includes adding a single travel lane to the existing median in each direction, improving various exit ramps, and widening ten mainline bridges along I-77. The rehabilitation includes removing the pavement surface along the existing lanes and replacing it with new pavement. The existing project corridor consists of various commercial buildings, including one gas station, residential areas, streams and wetlands. Construction is anticipated to begin in spring 2016.

Purpose and Need

The purpose of the proposed project is to improve operational efficiency and accommodate future traffic volumes along the interstate corridor by increasing I-77's capacity. The existing project limits do not provide enough travel lanes for the traffic through the area, resulting in traffic congestion starting as early as year 2017 when the segment of I-77 between SC 277 and Killian Road is projected to operate at level of service (LOS) E (see Table 1 below and **Appendix B** for traffic data). The proposed widening project will provide the required number of lanes to operate at LOS D or better for the entire project corridor through design year 2037. The goals and objectives of the proposed project are to promote economic benefit, while avoiding and minimizing environmental impacts and mitigating unavoidable impacts.

Table 1: Peak Hour Directional Volumes & LOS

Route	Termini From	Termini To	Year	Peak Hour Directional				
					No-Build		Build	
				Volume	Existing # of Lanes in Each Direction	LOS	Proposed # of Lanes in Each Direction	LOS
I-77	SC 12	I-20	2013	4,281	3	C	-	-
I-77	SC 12	I-20	2017	4,452	3	D	4	C
I-77	SC 12	I-20	2027	4,942	3	D	4	C
I-77	SC 12	I-20	2037	5,432	3	E	4	C
I-77	I-20	SC 277	2013	2,902	2	D	-	-
I-77	I-20	SC 277	2017	3,018	2	D	3	B
I-77	I-20	SC 277	2027	3,350	2	D	3	C
I-77	I-20	SC 277	2037	3,682	2	E	3	C
I-77	SC 277	Killian Road	2013	4,952	3	D	-	-
I-77	SC 277	Killian Road	2017	5,150	3	E	4	C
I-77	SC 277	Killian Road	2027	5,717	3	E	4	D
I-77	SC 277	Killian Road	2037	6,283	3	F	4	D

Source: SCDOT Average Annual Daily Traffic data, see **Appendix B**.

Reasonable Availability of Funding

This project was identified under Act 98 of 2013, which provided SCDOT additional funding for bridge, resurfacing, and mainline interstate projects. All projects identified for funding have been prioritized and selected based on Act 114 criteria, including at a minimum, financial viability, public safety, traffic volume and congestion, potential for economic development, truck traffic, pavement condition, environmental impacts, alternative transportation solutions, and consistency with local land use plans. The priority criteria for mainline interstate widening projects, including the proposed I-77 widening, includes traffic volume, public safety, truck traffic, pavement condition, financial viability, environmental impacts, and economic development. Act 98 provided an annual appropriation to SCDOT, which in turn will transfer an equivalent amount to the South Carolina Transportation Infrastructure Bank (SCTIB) to be used to finance mainline interstate improvements. The pavement rehabilitation portion of the project is funded by the Federal Highway Administration (FHWA) Interstate Program.

FHWA requires demonstration of fiscal constraint at the NEPA stage of project development. Fiscal constraint is met when the Long Range Transportation Plan (LRTP), Transportation Improvement Program (TIP) and the Statewide Transportation Improvement Program (STIP) have sufficient financial information for demonstration that a project in the Metropolitan Transportation Plan (MTP), TIP and STIP can be implemented using committed, available, or reasonably available revenue resources. FHWA's Office of Planning, Environment, and Realty issued an informational memorandum on January 28, 2008, explaining the relationship between certain Transportation Planning and Air Quality Conformity regulations and the timing of a final NEPA decision.

The total estimated project construction cost is $62.6 million and is outlined on page 26 and page 28 in the 2014-2019 STIP (Revision 10 – August 21, 2014).[1]

Preferred Alternative – Widening Inside to the Median

This alternative would widen I-77 from Percival Road to Killian Road by adding a single travel lane in each direction to the existing median and repaving existing lanes (see Figure 3 and Figure 4 below).

Alternatives Analysis

Three alternatives, including the Preferred and No-Build were considered. The No-Build alternative was carried forward for a baseline comparison of impacts. Only two alternatives (Alternative 1 – Widening Inside to the Median and Alternative 2 – Widening to the Outside of Existing Roadway) met the purpose and need for the project.

Alternative 1 (Preferred) – Widening Inside to the Median

This alternative consists of widening the interstate from Percival Road to Killian Road by adding a single travel lane in each direction to the inside (within existing median), improving various exit ramps, and widening ten mainline bridges along I-77. This alternative provides an additional travel lane and improves operational efficiency and LOS along the corridor with minimal environmental and community impacts. By widening to the inside, the project would have no affect to cultural resources, and require no new right-of-way. This alternative would impact freshwater wetlands and streams and is anticipated to require a Section 404 Individual Permit (IP) with the expectation of reducing stream impacts through design minimization to an amount within the impact thresholds of the SCDOT General Permit (GP).

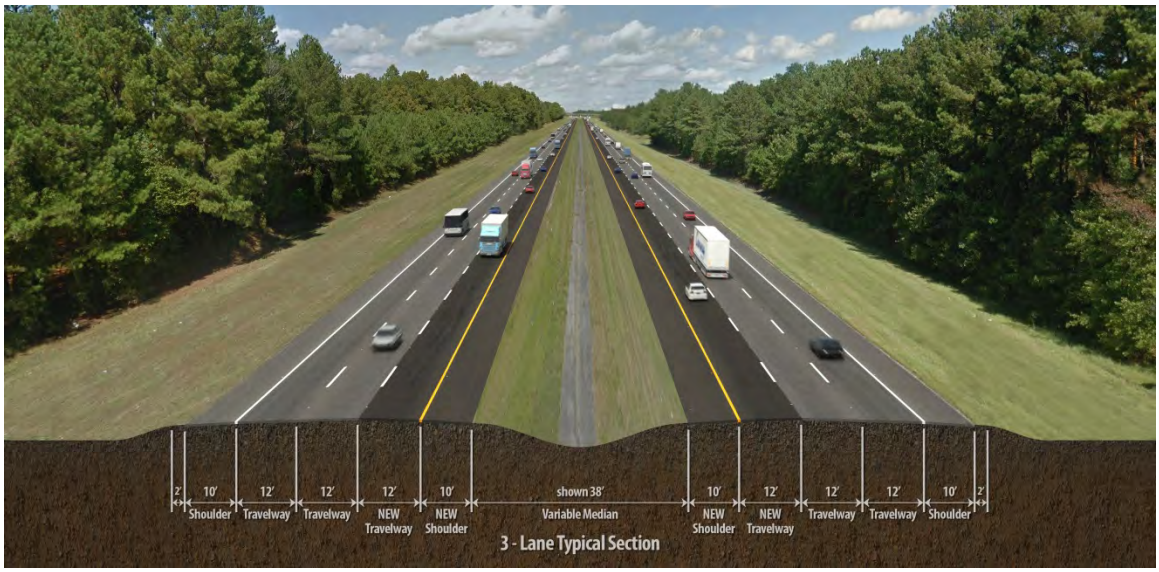

Figure 3: Proposed Typical 6-lane section
I-20 to SC 277

[1] SCDOT Statewide Transportation Improvement Program. 2013. *STIP 2014-2019*. *South Carolina's Six Year Transportation Program: October 1 – September 30, 2019*. Approved August 15, 2013.

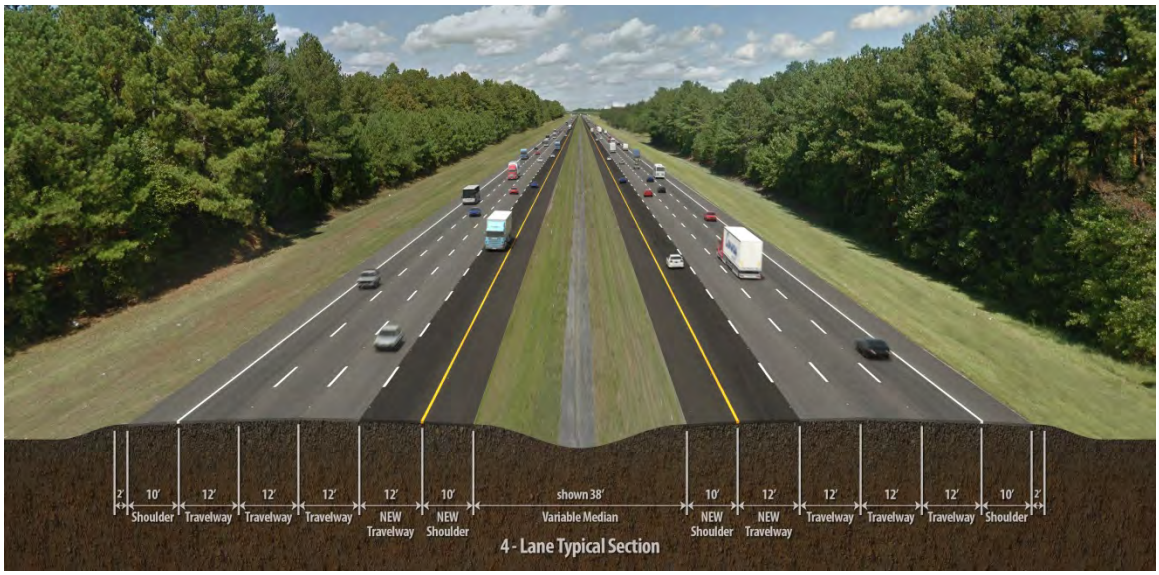

Figure 4: Proposed Typical 8-lane section
Percival Road (SC 12) to I-20 and SC 277 to Killian Road

Alternative 2 – Widening to the Outside of Existing Roadway

This alternative consists of widening the interstate from Percival Road to Killian Road by adding a single travel lane in each direction to the outside of the existing roadway. This alternative provides an additional travel lane and would improve operational efficiency and LOS along the corridor with minimal community impacts. By widening to the outside, the project would likely result in utility impacts and require new right-of-way. In addition, this alternative would have potential effects to cultural resources within previously undisturbed areas of the project corridor and impact greater than 0.30 acre of freshwater wetlands and greater than 300 linear feet of streams, which would require a Section 404 IP. This alternative would have greater wetland and stream impacts than Alternative 1 and due to the increased stream and wetland impacts, would result in increased costs for mitigation.

Table 2: Alternative Comparison

Alternative	Proposed New Right-of-Way (acres)	Estimated Stream Impacts (linear feet)	Estimated Wetland/Open Water Impacts (acres)	Estimated Mitigation Costs ($)*
Alternative 1 – Widening inside to the median	0	317	0.09	198,125
Alternative 2 – Widening to the outside of existing roadway	~0.50	1,090	0.73	900,425

*Mitigation costs are based on current wetland and stream credit pricing and subject to change and credit availability.

Alternative 3 – No-Build

This alternative would propose no new design changes and would maintain the existing lane configuration. The LOS, operational efficiency, and interstate capacity would not be improved and accommodation would not be made for future traffic volumes; therefore, the No-Build alternative would not meet the purpose and need of the project and was therefore, eliminated from further consideration.

Comparison of Alternatives

Table 2 summarizes the impacts associated with each alternative. The analysis shows that Alternative 1 (the Preferred Alternative) would result in less overall project costs, taking into account wetland and stream mitigation costs, and right-of-way acquisition. Alternative 1 would result in less impact to streams and wetlands than Alternative 2. Alternative 1 best meets the purpose of the project while minimizing costs and impacts to the human and natural environment.

Socioeconomics and Demographics

As of 2010, Richland County has an estimated resident population of 384,504, making it the second most populated county in the state (out of 46 counties total) (US Census Bureau 2010)[2] (Table 3). Richland County had a 19 percent growth rate between the years of 2000 and 2010, the eighth fastest growing county in South Carolina. This trend of population growth is expected to continue with a 70 percent increase expected between 2000 and 2030 in Richland County.

Table 3: Estimated and Projected Population, Richland County

2000 Census	2010 Census	2009 Projection	2010 Projection	2020 Projection	2030 Projection	% Growth 2000-2030
320,677	384,504	404,400	424,300	440,100	456,000	70.3

Sources: http://www.sccommunityprofiles.org/census/proj_c2010.php
http://www.sccommunityprofiles.org/census2010data.php

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations directs federal agencies to analyze "the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low income communities" when doing a NEPA analysis. The project corridor includes portions of seven Census Tracts (CT) (see **Figure 5 in Appendix C**):

- CT 101.02
- CT 113.03
- CT 113.04
- CT 113.05
- CT 114.04
- CT 114.12
- CT 9801

[2] US Census Bureau. 2010 Census. American FactFinder. Accessed April 6 and 7, 2015. Available from: http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

Socioeconomic data was obtained for these tracts from the 2010 Census including population, income, education levels, and housing characteristics for those living near the project corridor (See **Table 6** in **Appendix C**).

Approximately 35,000 people live in the CTs encompassing the project corridor. The population within the referenced CTs ranges from 23 percent to 50 percent white (average of 32 percent for all seven CTs), which is on average lower than Richland County's percentage (47 percent) and the state percentage (66 percent). The median age for those living in the CTs encompassing the project corridor is 31 to 39.5 years of age (average of 35 years old). This is slightly higher than the median age for Richland County (33 years old) and slightly lower than the median age for the state (38 years old). The median household income in the relevant CTs is equal to the levels for Richland County and the state. The percentage of individuals living below the poverty level is on average lower (13 percent) than the county and state percentages (17 and 18 percent, respectively). Based on this data, there are no disproportionate impacts to Environmental Justice populations.

Acquisitions/Displacements

After review of the proposed project, it has been determined that the project would not result in the relocation/displacement of any commercial or residential establishments. No new right-of-way will be acquired.

If any relocations or displacements were required, the SCDOT would process any new right-of-way acquisitions and relocations in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 United States Code [U.S.C.] 4601 *et seq*.). The purpose of these regulations is to ensure that owners of real property to be acquired for Federal and federally-assisted projects are treated fairly and consistently, to encourage and expedite acquisition by agreements with such owner, to minimize litigation and relieve congestion in the courts, and to promote public confidence in Federal and federally-assisted land acquisition programs.

Public Involvement

A Public Information Meeting (PIM) was held to inform local residents, businesses and local emergency responders about the project and to involve them in the project development process. Notice of the meeting was published in *The State* newspaper on March 2, 2015 and posted on SCDOT online and on social media (Twitter and Facebook) on March 9, 2015. The meeting was held on Tuesday, March 17, 2015 from 5 pm to 7 pm at Centura College, located at 7500 Two Notch Road, Columbia, South Carolina. Large displays showing the proposed project were available at the meeting for the public to review. SCDOT, FHWA, and design team personnel were readily available for attendees to discuss the project and answer questions. Project summary handouts and comment forms were provided and tablet computers were available to the public for completing electronic comment forms. Thirty-three (33) people attended the meeting. All attendees were encouraged to provide their concerns regarding the project. The comment period ended on April 1, 2015. As a result of the PIM a total of 10 written comments were received. Two comments were received by phone call prior to the meeting (See **Appendix D** for PIM documents). The majority of respondents were in support of the proposed project.

Section 106 - Cultural Resources (Archaeological/Historic)

In accordance with Title 36 Code of Federal Regulations (CFR), Part 800.4 (36 CFR 800.4), background research and an intensive architectural survey of the project's Area of Potential Effects (APE) was conducted in September 2014 to determine if previous cultural resources investigations and previously identified archaeological sites are located in the project limits. The APE extends 300 feet on either side of the road centerlines and is at least 600 feet wide. The architectural survey investigations identified five historic architectural resources within the APE, recommended not eligible for the National Register of Historic Places (NRHP). Three previously identified archeological sites are located within one-quarter mile of the project area. No previously identified historic architectural resources are located within one-quarter mile of the project area. Construction will take place within the existing right-of-way and the majority of construction will occur within previously disturbed areas of the project corridor; therefore, no archaeological investigations are required because the APE was previously disturbed. On March 6, 2015, the State Historic Preservation Office (SHPO) concurred with the findings that no historic properties will be affected by the proposed undertaking. On March 17, 2015 the Catawba Indian Nation-Tribal Historic Preservation Office concurred with the findings (see Archaeological Field Report and concurrences in **Appendix E**).

Section 4f/6f Resources

The basic purpose of Section 4(f) documentation is to protect "public parks and recreation lands, wildlife, and waterfowl refuges, and historic sites" from encroachment by public transportation facilities. In addition to mandating the physical protection of certain lands, (avoiding unintended physical "use" of them), Section 4(f) also addresses proximity impacts such as noise and vibration which may constitute a "constructive use" without actually intruding into the protected area. The FHWA rules require that when the physical location of a project will produce severe impacts to the activities, features, or attributes of a publicly owned park, recreation area, or wildlife and waterfowl refuge, or any significant historical site, then a Section 4(f) Evaluation must be completed. No Section 4(f) resources were identified within the project boundaries and thus there are no anticipated impacts to these resources.

Section 6(f) resources are places such as public parks, trails, courts, and other recreational areas that were purchased in part through federal grants from the Land and Water Conservation Fund Act of 1965 and are protected from conversion to non-public recreational uses. No Section 6(f) properties are located within the project limits and thus there are no anticipated impacts to these resources.

Water Quality

The South Carolina Department of Health and Environmental Control (SCDHEC) conducts water quality assessment and protection on a watershed basis. SCDHEC has assigned a classification to each State Water based on the desired uses of each waterbody, not on natural or existing water quality. Classifications protect waters for recreation, ecological resources, fish and aquatic life survival and propagation, and industrial and agricultural uses. Each classification has specific pollutant thresholds. Waters that exceed the threshold for their specific classification are targeted for water quality management action and are listed on the State of South Carolina Section 303(d) List. Monitoring stations around the state provide the data necessary to assess the quality of surface waters.

In November 2014 and April 2015, the SCDHEC's Water Quality and Watersheds tools were accessed to determine if any impaired waters were located within one-quarter mile upstream or downstream of the project area. No impaired waters were identified within one-quarter mile of the project area. . Within the project area, the Broad River and Gills Creek tributaries, including Crane Creek, Cumbess Creek, and Jackson Creek are classified as Fresh Water (FW) according to SCDHEC's water classification system (R.61-68-Water Classifications and Standards, effective June 22, 2012)[3] (see Permit Determination Form in **Appendix F**).

The project corridor is located within two total maximum daily load (TMDL) watersheds. The southern portion of the project corridor, between Percival Road and Farrow Road, is located in the Gills Creek watershed, or hydrologic unit 03050110-02. SCDHEC developed a dissolved oxygen (DO) TMDL for two monitoring stations, C-048 and C-017, within the Gills Creek watershed. The two stations were included as impaired on the state's 2008 §303(d) list due to low DO concentrations. Water quality monitoring (WQM) station C-017 is located on Gills Creek at Bluff Road, over nine miles south of the project corridor. WQM station C-048 is located along the project corridor on Jackson Creek at Windsor Lake spillway on Windsor Lake Boulevard. According to SCDHEC Technical Document: 011N-18, possible causes of low DO in the watershed include wildlife, failing septic systems, illicit connections, leaking sewers, sanitary sewer overflows, illicit dumping in water bodies, natural biochemical oxygen demand in swamps, agricultural runoff, pet wastes, and stormwater runoff. WQM Station C-048 currently supports water quality standards and it, as well as the associated stream segment, is no longer included on the 2014 §303(d) list.[4]

The northern portion of the project corridor, between Farrow Road and Blythewood Road, is located in the Crane Creek – Broad River watershed, or hydrologic unit 03050106-07. In 2005, SCDHEC established a TMDL for fecal coliform for the Broad River, which includes the Crane Creek – Broad River watershed. WQM station B-110 is located over one mile downstream of the I-77 project on the Elizabeth Lake Spillway. In 2004, WQM station B-110 barely surpassed the threshold of no more than ten percent of the instantaneous samples (400 colony forming units/100 milliliters). According to the SCDHEC Technical Report Number: 028-05, the most probable sources of fecal coliform loading at WQM station B-110 are from stormwater runoff within MS4 areas and nonpoint sources such as failing onsite waste disposal systems, leaking sewers, pets, and wildlife. As of 2014, WQM station B-110 fully supports recreational uses and is not listed for fecal coliform impairments.[5]

[3] South Carolina Department of Health and Environmental Control (SCDHEC). 2012. *R.61-68, Water Classifications & Standards.* Effective June 22, 2012.

[4] SCDHEC. 2010. Total Maximum Daily Load for Gills Creek Watershed. SCDHEC Monitoring Stations: C-048, C-017 (Hydrologic Unit Codes: 03050110-0201, -0202, -0203) Dissolved Oxygen. *SCDHEC Technical Document: 011N-18*.

[5] SCDHEC. 2005. Total Maximum Daily Loads for Fecal Coliform for Turkey Creek, Meng Creek, Browns Creek, Gregorys Creek, Dry Fork, Sandy River, Elizabeth Lake, Little River, Winnsboro Branch, Jackson Creek, and Mill Creek watersheds and the lower portion of the Upper Broad River, South Carolina. Hydrologic Unit Code: 03050106 (B-086, B-136, B-064, B-243, B-155, B-335, B-046, B-074, B-075, B-110, B-316, B-280, B-337, B-145, B-350, B-123, B-077, B-102, B-338). *SCDHEC Technical Report Number: 028-05*.

Section 402 of the Clean Water Act (CWA) provides for various National Pollutant Discharge Elimination System (NPDES) permits, including stormwater discharges from land disturbing activities. SCDHEC administers the NPDES permitting program in the state. To minimize water quality impacts, SCDOT would implement its Erosion and Sediment Control Program, as approved by SCDHEC, during the construction phase of the project. Erosion and sediment control measures would be included in construction contract specifications. A NPDES permit would be acquired before the proposed construction begins. As the operator of a large Municipal Separate Storm Sewer System (MS4), SCDOT is also required to obtain NPDES permit coverage to discharge pollutants into Waters of the State, in accordance with its MS4 Permit.

The proposed project is not expected to have long-term impacts to water quality in the watersheds. Stormwater control measures, both during construction and post construction, are required for SCDOT projects with land disturbance and/or construction near §303(d), TMDL, outstanding resource waters (ORW), tidal, and other sensitive waters in accordance with the SCDOT's MS4 Permit.

The contractor would also be required to minimize potential stormwater impacts through implementation of construction best management practices, reflecting policies contained in 23 CFR 650B and SCDOT's *Supplemental Specifications on Seeding and Erosion Control Measures* (January 01, 2015). SCDHEC may require additional water quality protection and stormwater treatment measures during and after construction.

Wetlands and Streams

The United States Army Corps of Engineers (USACE), through Section 404 of the CWA, has regulatory authority over waters of the U.S., including wetlands. This authority empowers the USACE to identify wetland/upland boundaries and to regulate alterations of jurisdictional wetlands. These boundaries are established in accordance with the methodology in the 1987 Corps of Engineers Wetlands Delineation Manual. A jurisdictional delineation of the project corridor was conducted in August 2014 for the presence of jurisdictional waters of the U.S., including wetlands and streams. The jurisdictional delineation identified areas of freshwater wetlands, lakes or open water, and streams within the project corridor. A request for verification of the delineated features was submitted to the USACE on January 23, 2015. A field verification meeting was conducted with the USACE on May 12, 2015. The USACE approved the approximate-preliminary jurisdictional delineation on PENDING DATE. A copy of the USACE's approval letter and jurisdictional delineation maps are included in **Appendix F** (PENDING).

Permitting

A USACE Section 404 permit is required for impacts to jurisdictional waters of the U.S., including wetlands. Section 404 of the CWA is administered by the USACE. Depending on the type and extent of jurisdictional waters of the U.S., including wetlands, to be affected, Section 404 permitting requirements can range from activities that are considered exempt or preauthorized to those requiring preconstruction notification (PCN) for a Nationwide Permit (NWP), SCDOT GP, or IP from the USACE.

Based on preliminary design and estimates, impacts to jurisdictional streams slightly exceed 300 linear feet of impacts and trigger an IP; however, due to the intent to deliver this project under a design-build contract, SCDOT anticipates that avoidance and minimization efforts, including, but not limited to reducing the construction footprint, can minimize impacts to jurisdictional waters of the U.S. within the threshold of a SCDOT

GP. Under the SCDOT GP, impacts are not to exceed 3.0 acres of freshwater impacts and/or 300 linear feet of jurisdictional stream impacts. Based on preliminary coordination, compensatory mitigation for wetland and stream impacts would require purchasing mitigation credits from an approved mitigation bank, based on credit availability. Permittee-responsible mitigation to cover the mitigation credits may be required if no credits are available at the time of permitting. The required mitigation for this project will be determined during final design through consultation with SCDOT, the USACE and other resource agencies. Estimated preliminary impacts to waters of the U.S. are in Table 4 below.

Table 4 - Amount of impact to Waters of the U.S. (Preferred Alternative)

Wetland Type	Approximate Amount of Waters	Estimated Amount of Impact	Estimated Mitigation Credits
Freshwater wetlands	4.5 acres	0.02 acre	0.22
Open water (lakes/ponds)	2.1 acres	0.07 acre	0.78
Jurisdictional streams	5,580 linear feet	317 linear feet	1,457

SCDHEC administers the Water Quality Certification program pursuant to Section 401 of the CWA. Section 401 requires that the state issue certification for any activity which requires a USACE Section 404 permit and may result in a discharge to State waters. All activities requiring a Section 404 permit result in a discharge to waters or wetlands. Therefore, SCDHEC must take certification action on all Section 404 permit applications. The Section 404 permit is not valid until Section 401 certification is approved.

Floodplains

The stream crossings at Crane Creek, Cumbess Creek, Jackson Creek, and Little Jackson Creek are located in special flood hazard area Zone AE, areas of high risk for flooding subject to inundation by the 1 percent annual-chance flood where base flood elevations are shown. Each of these crossings is eligible for “No-Rise” certifications since there will be no anticipated change in the 100-year flood elevations. The remainder of the proposed project area is located within Zone X, an area of minimal flood hazard outside of the 0.1 percent and 0.2 percent annual-chance (500-year) flood area, as defined by the Federal Emergency Management Agency (FEMA). FEMA Flood Insurance Rate Maps (FIRMs) for the project are in **Appendix G**. All major bridge and culvert crossings contain the floods with no overtopping of the roadway. Based on the hydraulic analysis of the preconstruction and post construction discharges, the planned roadway improvements will have no significant impact on either flood elevations or flood widths (**Appendix G**). A floodplain checklist was completed and can also be found in **Appendix G**.

Essential Fish Habitat

No essential fish habitat is present within the project limits.

Threatened and Endangered Species

A field survey of the project area, consisting of the project corridor within the existing SCDOT right-of-way (approximately 120 feet from the centerline of the northbound and southbound lanes and ramps) was conducted pursuant to Section 7 of the Endangered

Species Act. The following list of endangered (E), threatened (T), and candidate (C) species within Richland County was obtained from the U.S. Fish and Wildlife Service (USFWS) in October 2014 and then verified in February 2015:

Table 5 – Federally Protected Species in the Project Area

	Federally Protected Species	Scientific Names	Federal Status
Animals	Atlantic Sturgeon	*Acipenser oxyrinchus*	E
	Carolina heelsplitter	*Lasmigona decorate*	E
	Red-cockaded woodpecker	*Picoides borealis*	E
	Shortnose sturgeon	*Acipenser brevirostrum*	E
	Wood stork	*Myceteria americana*	E
	Bald Eagle	*Haliaeetus leucocephalus*	BGEPA*
Plants	Canby's dropwort	*Oxypolis canbyi*	E
	Rough-leaved loosestrife	*Lysimachia asperulaefolia*	E
	Smooth coneflower	*Echinacea laevigata*	E
	Georgia aster	*Symphyotrichum georgianum*	C

*Federally protected under the Bald and Golden Eagle Protection Act (BGEPA)

A survey of bird species nesting under bridges within the proposed project corridor was conducted in August 2014 in compliance with the Migratory Bird Treaty Act. During the survey, barn swallow nests were found under bridges at the following locations: I-20, Two Notch Road, State Route 277 Ramp, Farrow Road, and Hard Scrabble Road (S40-83). In accordance with the Migratory Bird Treaty Act, a full survey of these nests and coordination with the USFWS will be performed prior to any permit submittal and/or construction activity.

Methods

The project area was initially surveyed in the field in August 2014 for endangered and threatened species. Habitats surveyed were determined by each species' ecological requirements.

Results

Based on the literature and field visits it was determined that rough-leaved loosestrife and smooth coneflower are the only species which may be affected by the proposed project. For the rough-leaved loosestrife, although no individuals were identified during the survey, this plant was past its seasonal flowering stage (spring); thus identification may have proved difficult. Additionally, South Carolina Department of Natural Resources (SCDNR) data indicates that an area of potential habitat does exist in the southern portion of the proposed project boundary. Therefore, the proposed project may affect, but is not likely to adversely affect this species. For the smooth coneflower, although no individuals were identified during the survey, this plant was past its seasonal flowering stage (May through July); thus identification may have proved difficult. Additionally, one of its preferred habitats is along roadsides; therefore, this project may affect, but is not likely to adversely affect this species. A copy of the biological assessment as well as the USFWS concurrence letter (dated February 20, 2015) can be found in **Appendix H**.

Noise

In accordance with 23 CFR 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise," effective July 2011 and the SCDOT *Traffic Noise Abatement Policy*, effective September 1, 2014, a noise analysis is required for proposed federal-aid highway projects that will physically alter an existing highway or increase the number of

through-traffic lanes. A noise analysis was conducted to evaluate the existing noise levels and potential noise impacts associated with the proposed project. A copy of the noise analysis report can be found in **Appendix I**. The existing (2017) and design year (2037) traffic noise levels for the existing, No-Build, and build alternatives were predicted for noise sensitive sites (each representing one noise sensitive receptor) using the FHWA's latest traffic noise modeling software, Traffic Noise Model (TNM), version 2.5. A receptor is a discrete or representative location of a noise sensitive site or area based on the land use category. Existing land uses within the corridor are mainly residential (category B) with various category C (golf course/cemetery), category D (church/hospital), and category E (hotel/office) land uses in the corridor. Existing traffic noise levels were measured in the field and then compared against TNM results to verify the accuracy of the traffic noise model. If the modeled and measured levels are within plus or minus 3 A-weighted decibels (dBA) of one another, this is an indication that the model is within the accepted level of accuracy.

Approximately 459 noise sensitive receptors were identified within the project area. Based on the noise analysis, the project is anticipated to generate noise impacts at 249 of the 459 noise sensitive receptors along the project corridor.

When traffic noise impacts are identified, FHWA and SCDOT require that noise abatement be evaluated for feasibility and reasonableness. Noise abatement was evaluated for the affected receptors. The most feasible abatement measure for the project was noise barriers. A noise barrier evaluation was performed to determine whether feasible and reasonable barriers could be constructed at the noise sensitive sites as means to reduce or eliminate traffic noise impacts. Sixteen areas within the project corridor were evaluated for noise barriers in accordance with SCDOT guidelines. The noise barriers evaluated were either unable to achieve a 5 dBA reduction for at least 75 percent or more of the affected receptors, unable to achieve an 8 dBA reduction for at least 80 percent of the benefited receptors, or are not cost effective. If the cost per benefitted receptor is more than $30,000 then the barrier is determined to not be cost effective. Therefore, noise barriers were evaluated, but not proposed. Noise abatement measures were found to be not feasible and reasonable per SCDOT guidelines and there appears to be no feasible and reasonable solutions available to mitigate the noise impacts.

Mobile Source Air Toxics (MSATs)

The purpose of this project is to improve operational efficiency and accommodate future traffic volumes along the interstate corridor in Richland County. Richland County is currently in attainment with national ambient air quality standards. This CE includes a basic analysis of the likely MSAT emission impacts of this project. However, available technical tools do not enable us to predict the project-specific health impacts of the emission changes associated with the alternatives in this CE. Due to these limitations, the following discussion is included in accordance with Council on Environmental Quality (CEQ) regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information:

Evaluating the environmental and health impacts from MSATs on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.

As discussed above, in Appendix C of FHWA's December 6, 2012 guidance, "Interim Guidance Update on Air Toxic Analysis for NEPA Documents," technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project. Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis. A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by the FHWA entitled *A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives*, found at: www.fhwa.dot.go/environment/air_quality/air_toxics/research_and_analysis/methodology/methodology00.cfm

For each alternative in this CE, the amount of MSATs emitted would be proportional to the vehicle miles traveled (VMT), or Average Annual Daily Traffic (AADT), assuming that other variables such as fleet mix are the same for each alternative. The AADT estimated for each of the Build Alternatives (96,000 vehicles per day projected for 2035) is slightly higher than that for the No-Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in AADT would lead to higher MSAT emissions for the action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to the U.S. Environmental Protection Agency's (EPA) MOVES2010b model, emissions of all of the priority MSAT decrease as speed increases. Because the estimated AADT under each of the Alternatives are nearly the same, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by over 80 percent between 2010 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, AADT or VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the Alternative 2 (Widening to Outside of Existing Roadway) would have the effect of moving some traffic closer to nearby homes, schools and businesses; therefore, there may be localized areas where ambient concentrations of MSATs could be higher under Alternative 2 than Alternative 1 (Preferred Alternative) and the No-Build Alternative. However, the magnitude and the duration of these potential increases compared to the No-Build alternative and Alternative 1 cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No-Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT

levels to be significantly lower than today. Alternative 1 (Preferred Alternative) would widen the roadway inside to the median, away from potential receptors. Localized increases in MSAT concentrations are not anticipated under Alternative 1 (Preferred Alternative).

Land Use

The proposed project is located in the City of Columbia and unincorporated areas of Richland County, South Carolina. Land use in the surrounding areas consists of commercial and residential development with various golf courses, cemeteries, churches, hospitals, and hotels and wooded areas immediately adjacent to the roadway. Residential and mixed-use developments are planned near Blythewood Road and Killian Road and the roadway improvements provide economic benefit. The proposed project is not expected to modify existing land use or change the timing or density of development in the area. The project is not in conflict with any plan, existing land use, or zoning regulation.

Farmlands

The project has been assessed under the provisions of the Farmland Protection Policy Act (FPPA) of 1981. The FPPA outlines several different criteria that determine the presence of prime farmland. Prime farmland is land that is best suited for producing high yield crops because of soil quality, growing season, and moisture content. These criteria were scored on a Farmland Conversion Impact Rating Form for Corridor Type Projects (NRCS-CPA-106). Sites that score above 260 points total are eligible for protection under the FPPA, while sites receiving lower ratings are considered less eligible. Sites that score less than 160 points do not meet the criteria for FPPA protection. The total score is comprised of (1) the Relative Value of Farmland score and (2) the Total Corridor Assessment score. The Relative Value of Farmland (to be converted by the referenced alternative) score is assessed on a scale of 0 to 100. The Total Corridor Assessment score pertains to the use of land, the availability of farm support services, investments in existing farms, and the amount of land that could be rendered non-farmable due to construction of the proposed project. The Total Corridor Assessment has a scale of 0 to 160 points. According to an agreement with Natural Resources Conservation Service (NRCS), SCDOT and FHWA, if a site's Total Corridor Assessment score (NRCS-CPA-106 Form Section VI) is less than 100 points, Sections III, IV and V do not need to be completed and no additional assessment by the NRCS district office would be necessary. The Preferred Alternative received a Total Corridor Assessment score of 35. Since this Total Corridor Assessment score does not exceed the 100-point threshold described above, further coordination with NRCS and mitigation actions are not required. Refer to **Appendix J** for the Farmland Impact Conversion Rating Forms for Corridor Type Projects form (NRCS-CPA-106).

Hazardous Materials

The area directly adjacent to the interstate corridor outside of the existing right-of-way predominately consists of woody area, private property, and commercial buildings with low potential for underground storage tanks (USTs). Therefore, there is low potential for uncovering USTs or other hazardous-material-containing sites during construction activities for the Preferred Alternative or Alternative 2.

An examination of the project area within a one-half mile radius of the corridor and review of environmental records available at SCDHEC was conducted to determine if any sites with potential or existing environmental contamination were present within or

directly adjacent to the project corridor. The project corridor is the existing right-of-way, approximately 120 feet from the centerline of the northbound and southbound lanes and ramps. Databases included, but were not limited to, above ground storage tanks (ASTs), USTs, leaking underground storage tanks (LUSTs), dry cleaners, and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites. The records review indicated that three USTs are within or abutting the project corridor (see **Figures 6a, 6b, and 6c in Appendix K**). The first UST site is Site #18025 (Pantry Express 600), associated with an existing Shell gas station located at 1909 Percival Road. The site is on the west side of Percival Road, approximately 100 feet outside of the I-77 right-of-way and is approximately 800 feet outside (southeast) of the construction limits. The second site, Site #09938 (Blue Cross Blue Shield of SC), is located at 2501 Faraway Drive on the southeast quadrant of I-77 and I-20. The site is approximately 200 feet outside of the right-of-way for the I-77 off-ramps to I-20 and is an abandoned UST (abandoned in 1991) that was subsequently removed. Releases were reported in 1993 and no compliance was required. The third site, Site #07474 (Rent-All Shops), is located at 7809 Two Notch Road on the southwest quadrant of Two Notch Road and I-77, less than 150 feet outside of the I-77 right-of-way. It is an abandoned UST (abandoned in 1993) that was subsequently removed. Releases were reported in 1993 and no compliance was required. This site is approximately 200 feet outside and up gradient of the construction limits. The proposed project will not require any new right-of-way and the sites are outside and/or up gradient from the proposed construction limits for the Preferred Alternative and Alternative 2; therefore, no further investigation is required.

It is SCDOT's practice to avoid the acquisition of USTs and other hazardous waste materials, if at all possible. If avoidance of hazardous materials is not a viable alternative and soils that appear to be contaminated with petroleum products were encountered during construction, SCDHEC will be informed. If stained soils or potentially hazardous materials are identified during construction, further investigation in the form of Phase I Environmental Site Assessment may be required to assess potential recognized environmental concerns. Hazardous materials will be tested and removed and/or treated with the U.S. Environmental Protection Agency (EPA) and SCDHEC requirements, if necessary.

The bridges within the project corridor were assessed for lead based paint and asbestos. Lead-based paint exceeding the SCDHEC disposal limit of 0.7 milligrams (mg)/centimeters squared (cm^2) was detected in the green painted bolt plates, I-beams and braces of the I-77 bridges over Edgewater Drive and in the green painted bolt plates and I-beams braces of I-77 bridges over I-20 and I-20 ramp. Lead-based paint exceeding the SCDHEC disposal limit was also detected in the green painted bolt plates and I-beams of the I-77 bridges over the I-77 ramp near the I-20 traffic interchange and in the green painted bolt plates of the I-77 bridge over Windsor Lake Boulevard. In addition, lead-based paint exceeding the SCDHEC disposal limit was detected in the gray painted bolt plates of the I-77 bridges over Windsor Lake and although the traffic striping on the I-77 roadway throughout the project limits could not be sampled due to traffic safety reasons, it is presumed that the I-77 striping is lead-containing. Destructive actions (sanding, burning, demolition, component removal, paint preparation) to the lead-containing paint surfaces will require the contractor to comply with the standards of SCDHEC and Occupational Safety and Health Administration (OSHA), including but not limited to proper disposal, initial exposure monitoring, the use of personal protective equipment, and medical surveillance. If additional painted components are discovered during renovation activities, the paint should be tested prior to any destructive actions (sanding, burning, demolition, component removal, paint preparation) or disposal.

SCDHEC Regulation 61-107.19 permits demolition materials painted with lead-based paint (≥ 0.7 mg/cm^2) to be disposed in a permitted Class Two (C&D) or Class Three Subtitle D, Municipal Solid Waste (MSW) landfill. However, accumulations of paint waste (chips, dust, or flakes) from the identified areas of lead-based paint may be classified as hazardous waste, which requires disposal in a Subtitle C (hazardous waste) landfill. The hazardous waste regulations include Title 40 Code of Federal Regulations parts 260 through 272. A sample of accumulated paint waste should be collected for analysis via Toxicity Characteristic Leaching Procedure (TCLP) to determine the waste's lead content and hazardous waste characteristics.[6]

The EPA and SCDHEC define materials as asbestos-containing if an asbestos content greater than one percent (>1%) is detected in a representative sample. Asbestos in concentrations greater than 1 percent was not identified in any of the structures sampled. If additional suspect materials are discovered during the planned renovation activities, bulk samples must be collected and analyzed for asbestos content prior to continuation of work. Prior to the demolition of any regulated facility or structure, written notification must be submitted to SCDHEC at least ten working days in advance of the demolition.

Community Impacts within the Project Corridor

The public information meeting indicated that there is general support of the proposed project. The comments received included a desire to extend the widening of I-77 to Blythewood Road and to improve the Killian Road traffic interchange. Overall under the Preferred Alternative, there would be no significant adverse effect on public facilities, businesses, or services as a result of the proposed project; nor is the proposed project expected to adversely affect the social environment or local economy.

[6] S&ME. 2014. *Asbestos & Lead-Based Paint Assessment Report.* December 2, 2014.

Environmental Commitments

Permitting

Impacts to jurisdictional waters will be permitted under a Department of the Army Section 404 permit from the U.S. Army Corps of Engineers (USACE). Based on preliminary design, it is anticipated that the proposed project would be permitted under SCDOT's General Permit (GP). SCDOT will provide the USACE with information regarding any proposed demolition and construction activities during the Section 404 permitting process.

The required mitigation for this project will be determined through consultation with the USACE and other resource agencies. A detailed stream and wetland compensatory mitigation plan will be developed once final design is complete.

A NPDES permit would be acquired before the proposed construction begins. As the operator of a large Municipal Separate Storm Sewer System (MS4), SCDOT is also required to obtain NPDES permit coverage to discharge pollutants into Waters of the State, in accordance with its MS4 Permit.

Water Quality

Stormwater control measures, both during construction and post construction, are required for SCDOT projects constructed near §303(d), TMDL, outstanding resource waters (ORW), tidal, and other sensitive waters in accordance with SCDOT's MS4 Permit.

The 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 the SCDOT's *Supplemental Specifications on Seeding and Erosion Control Measures* (January 01, 2015). Other measures including seeding, silt fences and sediment basins, as appropriate will be implemented during construction to minimize impacts to Waters of the U.S.

Migratory Bird Treaty Act

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 Department 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. Prior to construction/demolition of the bridges the Resident Construction Engineer (RCE) will coordinate with SCDOT Environmental Services Office to determine if there are any active nests on the bridges. After this coordination, it will be determined whether construction/demolition can begin. After construction/demolition has begun, measures can be taken to prevent birds from nesting, such as screens, noise producers, and deterrents etc. If during construction or demolition a nest is observed on the bridge that was not discovered during the biological surveys, the contractor will cease work and immediately notify the SCDOT Environmental Services Office. SCDOT biologists will determine whether the nest is active and the species utilizing the nest. After this coordination, it will be determined whether construction/demolition can resume or whether a temporary moratorium will be put into effect. All costs for determining the need

for, the placing of deterrents, and applying of all special actions including, but not limited to, removing nests and any costs associated with conducting work in compliance with the Migratory Bird Treaty Act as stated herein will not be paid for separately but will be considered to have been included with other items of work.

USTs/Hazardous Materials

If avoidance of hazardous materials is not a viable alternative and soils that appear to be contaminated with petroleum products were encountered during construction, SC Department of Health and Environmental Control (SCDHEC), will be informed. Hazardous materials will be tested and removed and/or treated with the U.S. Environmental Protection Agency (EPA) and SCDHEC requirements, if necessary.

If potentially hazardous materials are encountered, an odor is identified, or significantly stained soil is visible during construction, further investigation in the form of a Phase I Environmental Site Assessment may be required to assess potential recognized environmental concerns.

Lead-based paint was detected on bridge surfaces in the project limits. Destructive actions (sanding, burning, demolition, component removal, paint preparation) to the lead-containing paint surfaces will require the contractor to comply with the standards of SCDHEC and Occupational Safety and Health Administration (OSHA), including but not limited to proper disposal, initial exposure monitoring, the use of personal protective equipment, and medical surveillance. If additional painted components are discovered during renovation activities, the paint should be tested prior to any destructive actions (sanding, burning, demolition, component removal, paint preparation) or disposal.

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.

Asbestos-containing materials was not detected in any of the structures sampled in the project limits; however, if additional suspect materials are discovered during the planned construction activities, bulk samples must be collected and analyzed for asbestos content prior to continuation of work.

Prior to the demolition of any regulated facility or structure, written notification must be submitted to SCDHEC at least ten working days in advance of the demolition.

Cultural Resources

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 ease until the SCDOT Archaeologist directs otherwise.

6/1/2015
Date

Heather M. Robbins
Environmental Project Manager

6/2/2015
Date

J. Shane Belcher
Federal Highway Administration

Date: 05/13/2015	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	

Project ID : P027002 | County : Richland | District : District 1 | Doc Type: CE-C | Total # of Commitments: 6

Project Name: I-77 Roadway Widening and Improvements

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: Tyke Redfearn **PHONE #:** (803) 737-1430

ENVIRONMENTAL COMMITMENTS FOR THE PROJECT

General Permit Responsibility: CONTRACTOR

Impacts to jurisdictional waters will be permitted under a Department of the Army Section 404 permit from the U.S. Army Corps of Engineers. Based on preliminary design, it is anticipated that the proposed project would be permitted under SCDOT's General Permit (GP). The required mitigation for this project will be determined through consultation with the USACE and other resource agencies.

Stormwater 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).

Water Quality Responsibility: SCDOT

The contractor will be required to minimize possible water quality impacts through implementation of construction BMPs, reflecting policies contained in 23 CFR 650B and the Department's Supplemental Specifications on Seeding and Erosion Control Measures (January 01, 2015). Other measures including seeding, silt fences, sediment basins, etc. as appropriate will be implemented during construction to minimize impacts to Water Quality

Project ID : P027002	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	SCDOT ENVIRONMENTAL SERVICES

ENVIRONMENTAL COMMITMENTS FOR THE PROJECT

Migratory Bird Treaty Act (all bridge and box culvert projects) — 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 Department 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. Prior to construction/demolition of the bridges the Resident Construction Engineer (RCE) will coordinate with SCDOT Environmental Services Office to determine if there are any active nests on the bridge. After this coordination, it will be determined whether construction/demolition can begin. After construction/demolition has begun, measures can be taken to prevent birds from nesting, such as screens, noise producers, and deterrents etc. If during construction or demolition a nest is observed on the bridge that was not discovered during the biological surveys, the contractor will cease work and immediately notify the SCDOT Environmental Services Office. SCDOT biologists will determine whether the nest is active and the species utilizing the nest. After this coordination, it will be determined whether construction/demolition can resume or whether a temporary moratorium will be put into effect. All costs for determining the need for, the placing of deterrents, and applying of all special actions including, but not limited to, removing nests and any costs associated with conducting work in compliance with the Migratory Bird Treaty Act as stated herein will not be paid for separately but will be considered to have been included with other items of work.

Non-Standard Commitment — Responsibility: CONTRACTOR

Lead-Based Paint

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.

Cultural Resources — 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.

I-77 Roadway Widening and Improvements

Categorical Exclusion Type C

Project ID: P027002

Index of Appendices: