

Appendix K—Natural Resources Technical Report

Part 5

Appendix D— Representative Photographs (continued)

Representative Photographs



Date:
4/14/2015

Taken By:
Thomas Blackwell

Photograph 157

Description:
View of Tributary 54,
facing downstream.
Photograph is taken from
the stream origination
point, facing southwest.



Date:
4/14/2015

Taken By:
Thomas Blackwell

Photograph 158

Description:
View of the stream
origination point
(Freshwater Wetland 38)
of Tributary 55.
Photograph is taken
facing west.

Representative Photographs



Date:
4/14/2015

Taken By:
Thomas Blackwell

Photograph 159

Description:
View of Tributary 55,
facing downstream.
Photograph is taken from
the stream origination
point, facing northeast.



Date:
4/14/2015

Taken By:
Thomas Blackwell

Photograph 160

Description:
View of the stream
origination point
(headcut) of Tributary 56.
Photograph is taken
facing south.

Representative Photographs



Date:
4/14/2015

Taken By:
Thomas Blackwell

Photograph 161

Description:
View of Tributary 56,
facing downstream.
Photograph is taken from
the stream origination
point, facing north
towards Tributary 55.



Date:
4/14/2015

Taken By:
Thomas Blackwell

Photograph 162

Description:
View of Tributary 57,
facing downstream.
Photograph is taken east
of I-26, facing northeast.

Representative Photographs



Date:
4/13/2015

Taken By:
Thomas Blackwell

Photograph 163

Description:
View towards the stream
origination point (pipe) of
Tributary 58. Photograph
is taken facing west.



Date:
4/13/2015

Taken By:
Thomas Blackwell

Photograph 164

Description:
View of Tributary 58,
facing downstream.
Photograph is taken from
the stream origination
point, facing east.

Representative Photographs



Date:
9/20/2017

Taken By:
Matt DeWitt

Photograph 165

Description:
View of Tributary 59,
looking downstream.
The photograph was
taken from the culvert
east of I-26, facing east.



Date:
9/20/2017

Taken By:
Matt DeWitt

Photograph 166

Description:
View of Tributary 59,
looking downstream.
The photograph was
taken on the west side of
I-26, facing east.

Representative Photographs

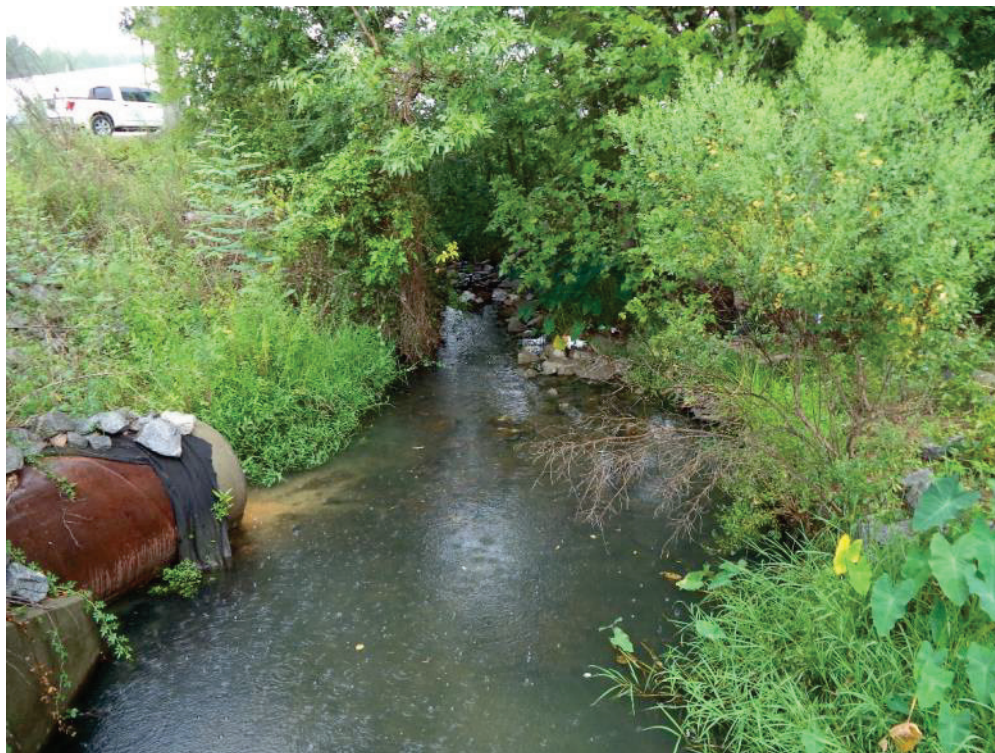


Date:
8/31/2017

Taken By:
Matt DeWitt

Photograph 167

Description:
View of Pond 3. The photograph was taken from a parking lot south of the pond, facing west.



Date:
8/31/2017

Taken By:
Matt DeWitt

Photograph 168

Description:
View of Tributary 60, looking downstream. The photograph was taken from the Western Lane culvert, facing north.

Representative Photographs

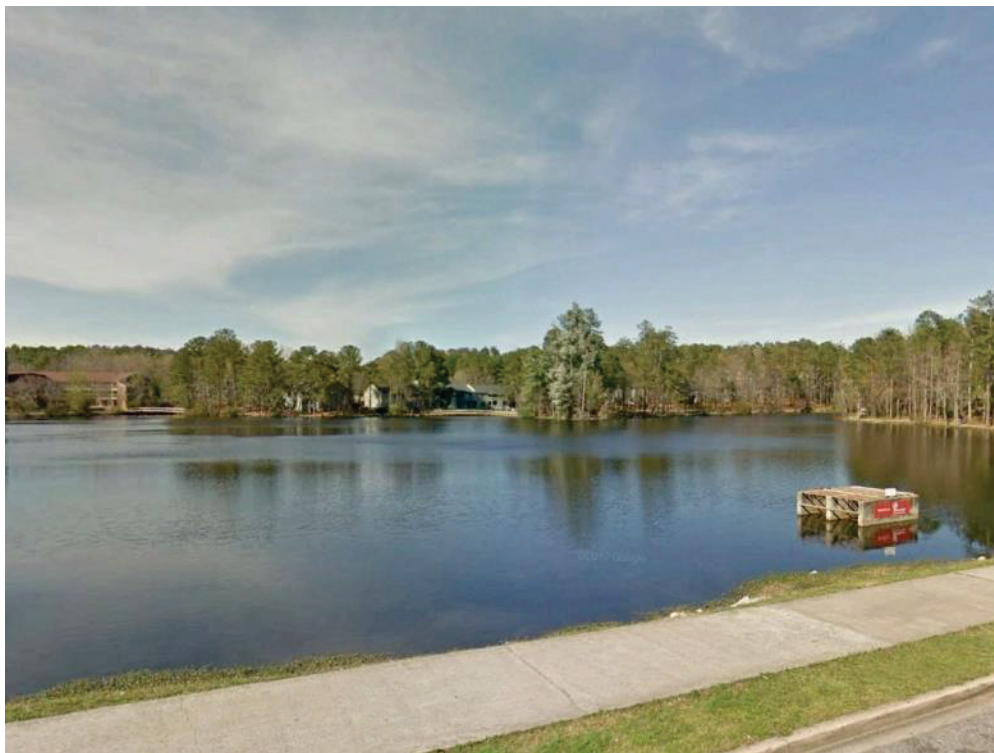


Date:
8/31/2017

Taken By:
Matt DeWitt

Photograph 169

Description:
View of Tributary 60,
looking upstream. The
photograph was taken
from the west side of I-
26, facing south.



Date:
8/31/2017

Taken By:
Matt DeWitt

Photograph 170

Description:
View of Pond 4. The
photograph was taken
from Woodcross road,
facing northeast.

Representative Photographs



Date:
8/31/2017

Taken By:
Matt DeWitt

Photograph 171

Description:
View of Tributary 11,
looking upstream. The
photograph was taken
looking at the culvert
from Pond 4, facing
north.



Date:
8/31/2017

Taken By:
Matt DeWitt

Photograph 172

Description:
View of Tributary 11,
looking downstream.
The photograph was
taken from the middle
reach of the tributary,
facing south.

Representative Photographs



Date:
7/28/2017

Taken By:
Steven Busbee

Photograph 173

Description:
View of Tributary 61,
looking downstream.
The photograph was
taken looking at the
culvert under I-20, facing
south.



Date:
7/28/2017

Taken By:
Steven Busbee

Photograph 174

Description:
View of Tributary 61,
looking downstream. The
photograph was taken
looking at the culverts
under Devaga Road,
facing south.

Representative Photographs



Date:
7/28/2017

Taken By:
Steven Busbee

Photograph 175

Description:
View of Tributary 61,
looking upstream. The
photograph was taken
looking towards the
culverts under Devega
Road, facing north.



Date:
7/28/2017

Taken By:
Steven Busbee

Photograph 176

Description:
View of Freshwater
Wetland 48. The
photograph was taken
from the southwest of
driveway drainage pipe.

Representative Photographs



Date:
7/28/2017

Taken By:
Steven Busbee

Photograph 177

Description:
View of Freshwater
Wetland 49.



Date:
7/28/2017

Taken By:
Steven Busbee

Photograph 178

Description:
View of Freshwater
Wetland 50. The
photograph was taken
looking at the drainage
channel of the wetland.

Representative Photographs



Date:
7/28/2017

Taken By:
Steven Busbee

Photograph 179

Description:
View of Freshwater
Wetland 50. The
photograph was taken
looking at the
southeastern portion of
the wetland.



Date:
7/28/2017

Taken By:
Steven Busbee

Photograph 180

Description:
View of Freshwater
Wetland 50. The
photograph was taken
looking at the drainage
channel of the wetland.

Representative Photographs



Date:
7/25/2017

Taken By:
Kelly Thames

Photograph 181

Description:
View of Tributary 62,
looking downstream. The
photograph was taken
looking towards the
Saluda River, facing
south.



Date:
7/25/2017

Taken By:
Kelly Thames

Photograph 182

Description:
View of Tributary 63,
looking downstream. The
photograph was taken
looking towards the
Saluda River, facing
south.

Representative Photographs



Date:
7/26/2017

Taken By:
Kelly Thames

Photograph 183

Description:
View of Tributary 64,
looking downstream. The
photograph was taken
facing southwest.



Date:
7/26/2017

Taken By:
Kelly Thames

Photograph 184

Description:
View of Tributary 65,
looking downstream. The
photograph was taken
facing southeast.

Representative Photographs



Date:
7/26/2017

Taken By:
Kelly Thames

Photograph 185

Description:
View of Tributary 66,
looking upstream. The
photograph was taken
looking towards Tributary
65, facing west.



Date:
5/4/2015

Taken By:
Kelly Thames

Photograph 186

Description:
View of wetland 51. The
photograph was taken
facing north.

Representative Photographs



Date:
7/25/2017

Taken By:
Kelly Thames

Photograph 187

Description:
View of Wetland 52. The photograph was taken facing southeast.



Date:
7/25/2017

Taken By:
Kelly Thames

Photograph 188

Description:
View of Wetland 53. The photograph was taken facing southeast.

Representative Photographs



Date:
7/25/2017

Taken By:
Kelly Thames

Photograph 189

Description:
View of Wetland 54. The photograph was taken facing northeast.



Date:
7/26/2017

Taken By:
Kelly Thames

Photograph 190

Description:
View of Wetland 55. The photograph was taken facing looking southeast.

Representative Photographs



Date:
7/25/2017

Taken By:
Kelly Thames

Photograph 191

Description:
View of Tributary 68,
looking downstream. The
photograph was taken
facing south.



Date:
7/25/2017

Taken By:
Kelly Thames

Photograph 192

Description:
View of Tributary 67,
looking upstream. The
photograph was taken
from where the tributary
meets Tributary 68,
facing northwest.

Appendix E— Bald Eagle (*Haliaeetus leucocephalus*) Survey Memo

Memorandum

Date: April 29, 2016
To: Mead & Hunt
From: STV Incorporated
Subject: Carolina Crossroads; Bald Eagle (*Haliaeetus leucocephalus*) Survey

Introduction

As part of SCDOT's proposed Carolina Crossroads improvement project, surveys were conducted by STV Incorporated (STV) to determine if the project would have any effect on the federal and state protected bald eagle (*Haliaeetus leucocephalus*). The Carolina Crossroads project study area (PSA) encompasses approximately 396 acres within Lexington and Richland Counties and consists of roadway and intersection improvements along I-20 from the Saluda River to the Broad River, I-26 from US 378 to Broad River Road, and I-126 from Colonial Life Boulevard to I-26; please see Appendix A for a figure depicting the location and extent of the PSA. This document summarizes the results of literature reviews and field surveys conducted to determine the presence of bald eagles and associated nesting habitat within the PSA.

Literature Review and Survey Methodology

Prior to conducting field surveys, STV reviewed the following literature and reference material:

- S.C. Department of Natural Resources (SCDNR) Rare, Threatened, and Endangered Species and Communities Known to Occur in Lexington County, South Carolina (last updated June 11, 2014)
- SCDNR Rare, Threatened, and Endangered Species and Communities Known to Occur in Richland County, South Carolina (last updated June 11, 2014)
- U.S. Department of Agriculture – National Agricultural Imagery Program (NAIP) Aerial Imagery (2013)
- U.S. Fish & Wildlife Service (USFWS) South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species - Lexington County (last updated September 3, 2015)
- USFWS South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species - Richland County (last updated October 20, 2015)
- U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory Map (Accessed November 2015)
- USFWS IPaC – Information, Planning and Conservation System (Accessed November 2015)
- U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps [Columbia North, SC (2014) and Irmo, SC (2014)]
- USGS - National Hydrography Dataset (2012)

Additional information concerning known documented occurrences of bald eagles in Lexington and Richland Counties was obtained from the SCDNR's South Carolina Heritage Trust (SCHT) Program Geographic Database of Rare, Threatened, and Endangered Species Inventory Species (last updated January 17, 2006). STV also coordinated directly with the Heritage Trust Program to obtain more up to date records of any known occurrences within the project vicinity (SCDNR, Personal correspondence with Julie Holling, December 2, 2015).

Bald eagles are large raptors with wingspans of up to seven feet in length. The bald eagle can be found in locations throughout the continental United States. Juvenile bald eagles are mostly dark brown with some white mottling. Adult bald eagles have a dark body, white head and tail, and yellow beak. In South Carolina, bald eagles typically nest in mature trees with open limb structures normally located within 1 kilometer or 3,280 feet from open water (SCDNR, 2015a). Nests are generally between four to six feet in diameter and approximately three feet deep although larger nests have been documented. Bald eagle nests are constructed of sticks and soft material such as dead vegetation, grasses, and pine needles. Nearly 80 percent of the documented nests in South Carolina were found in live mature pine trees, but bald eagles may also nest in live cypress trees or dead trees (SCDNR, 2015). Bald eagles prefer foraging in lakes greater than 35 acres and rivers greater than 330 feet across (USFWS, 2009).

Based on preliminary literature and field reviews, STV environmental scientists identified areas within the PSA containing potential nesting or foraging habitat for the bald eagle. Per USFWS survey protocol (USFWS, 2007), STV surveyed areas encompassing the potential nesting habitat; please see Appendix A, Figure 1 for the location and extent of the bald eagle survey area. Specifically, the USFWS has specified 660 feet to be the distance or buffer at which project construction activities do not disturb nesting eagles so this buffer was included in the survey area. Additionally, where applicable, the survey area was extended approximately 3,280 feet (one km) out from the open water nesting habitat as this is the specified distance in which nesting may occur. Utilizing ArcGIS Version 10.3 software, the 660-foot buffer of the project study area was clipped by the 3,280-foot buffer of open water habitat to create the bald eagle survey area as shown on Figure 1.

The portions of the Broad and Saluda Rivers located within the bald eagle survey area are used highly by recreational boaters including kayakers. Prior to conducting the field surveys, STV communicated with the owners of several local river guide/boat rental companies as to the location of any known reported bald eagle nests or occurrences of activity within the project survey area. STV environmental scientists surveyed potential nesting and foraging habitats for the presence of bald eagle individuals on October 15th and 16th, 2015. Field surveys of potential habitat were also conducted on April 28th and 29th, 2016 from one hour before sunrise to one hour after sunrise when bald eagles are known to be highly active. Potential habitats within the survey area were surveyed (visually inspected) by means of vehicle, pedestrian, and boat transect methods. Specifically, the Broad and Saluda River and associated forest edges were visually inspected by means of canoe. Interior mature forested tracts located adjacent to the rivers not visible by vehicle were inspected by means of pedestrian transects.

Findings and Conclusions

The bald eagle survey area consists primarily of commercial and residential development and maintained roadway and utility right-of-way. Natural habitats within the survey area include the large open waterways associated with the Broad and Saluda Rivers, hardwood floodplain forest, and hardwood-pine forest. Dominant vegetation within the forested habitats included American Sycamore (*Platanus occidentalis*), red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*), box elder (*Acer negundo*), and elm (*Ulmus* spp.). Loblolly pine (*Pinus taeda*) was present within the hardwood floodplain and hardwood-pine forests but at a much lesser extent than the above-noted hardwood species. Representative photographs of the habitats located within the bald eagle survey area are included in Appendix B.

Potential foraging habitat for the bald eagle includes the portions of the Broad and Saluda Rivers located within the survey area. Potential nesting habitat for the bald eagle is present in scattered large pine trees contained within the portions of floodplain forest located adjacent to the Broad and Saluda River. No cypress (*Taxodium* spp.) trees are present within the survey area.

The literature and field reviews conducted by STV revealed the presence of potential nesting and foraging habitat within the survey area including the Broad and Saluda Rivers and mature forested tracts located adjacent to these large waterways; however, no individuals and no evidence of nesting were observed during the field surveys. The habitat within the survey area is determined to be less than optimal and occurrences of bald eagles are unlikely due to the small number of large mature pine trees in the overstory of the forests located adjacent to the rivers and high level of development and associated noise present. Per coordination with Julie Holling, the director of SCDNR's Heritage Trust Program, there is one documented historic bald eagle nesting site located within one mile of the project study area; however, this historic nesting site is located outside of the bald eagle survey area. Additionally, per the local river guides, no bald eagles have been sited on the portions of the Broad or Saluda River located within the survey area.

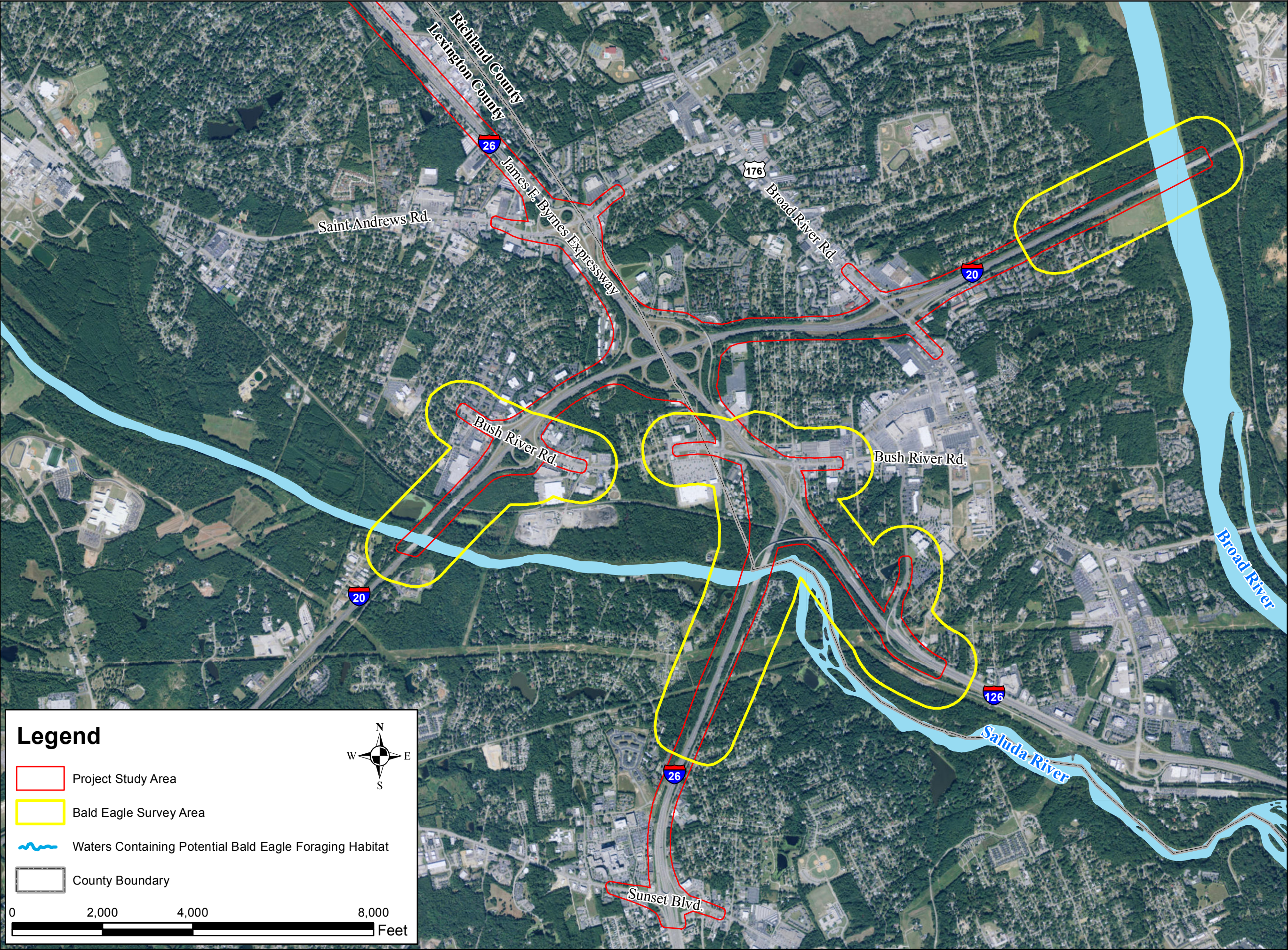
Based on the literature reviews and the field surveys conducted during the optimal bald eagle survey window from October 1st to May 15th as designated by the USFWS, it is determined that the project would have 'no effect' on the bald eagle.

References

- South Carolina Department of Natural Resources (SCDNR). 2015. Bald Eagle (*Haliaeetus leucocephalus*). South Carolina State Wildlife Action Plan – Supplemental Volume: Species of Conservation Concern. Accessed on October 14, 2015 at <http://www.dnr.sc.gov/swap/supplemental/birds/baldeagle2015.pdf>
- SCDNR. 2015a. South Carolina's Bald Eagles – Biology. Accessed on October 7, 2015 at <http://www.dnr.sc.gov/wildlife/baldeagle/biology.html>
- SCDNR. 2006. South Carolina Heritage Trust (SCHT) Geographic Database of Rare, Threatened, and Endangered Species Inventory Species Found in Richland and Lexington County (Last updated January 17, 2006).
- U.S. Department of Agriculture (USDA). 2013. National Agricultural Imagery Program (NAIP) Aerial Imagery. Accessed 2013.
- U.S. Fish & Wildlife Service (USFWS). 2015. IPaC – Information, Planning and Conservation System. Accessed October 7, 2015 at <https://ecos.fws.gov/ipac/gettingStarted/index>.
- USFWS. 2009. Post-delisting Monitoring Plan for the Bald Eagle (*Haliaeetus leucocephalus*) in the Contiguous 48 States. Accessed on October 7, 2015 at https://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BaldEagle/BEPDMP_Jan2013Final.pdf.
- USFWS. 2007. National Bald Eagle Management Guidelines. Accessed October 7, 2015 at <http://www.fws.gov/southeast/es/baldeagle/NationalBaldEagleManagementGuidelines.pdf>
- U.S. Geological Survey (USGS). 2014. Irmo, SC 7.5-minute topographic quadrangle map.
- USGS. 2014. Columbia North, SC 7.5-minute topographic quadrangle map.
- USGS. 2012. National Hydrography Dataset (NHD).

Appendix A

Figures





Client:



Project:

Carolina Crossroads

Title:

Bald Eagle Survey Map

Sources: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and swisstopo.

Notes:

Surveys for the presence of bald eagles and associated nesting or foraging habitat were conducted by STV Inc. on October 15 and 16, 2015 and April 28 and 29, 2016.

Drawn By:	Checked By:
JLK	WSB
Approved By:	Date:
WSB	4/29/2016
STV Inc. Project No.	
4017084	
Figure 1	

Appendix B

Representative Photographs



Photograph 1. View of the eastern side of the Broad River at the Interstate 20 bridge crossing.



Photograph 2. View of the western side of the Broad River at the Interstate 20 bridge crossing.



Photograph 3. View of the southern side of the Saluda River at the Interstate 20 bridge crossing.



Photograph 4. View of the northern side of the Saluda River at the Interstate 20 bridge crossing.



Photograph 5. View facing east at the Interstate 26 bridge crossing of the Saluda River.



Photograph 6. View facing west at the Interstate 26 bridge crossing of the Saluda River.

Appendix F— US Fish and Wildlife Service Concurrence Letter



United States Department of the Interior

FISH AND WILDLIFE SERVICE

176 Croghan Spur Road, Suite 200
Charleston, South Carolina 29407



March 28, 2018

Mr. Edward Frierson
NEPA Coordinator
South Carolina Department of Transportation
P.O. Box 191
Columbia, SC 29202-0191

Re: SCDOT, Natural Resources Technical Report, Carolina Crossroads, Lexington
and Richland Counties, SC, FWS Log No. 2018-I-0645

Dear Mr. Frierson:

The U.S. Fish and Wildlife Service (Service) has received the Natural Resources Technical Report (NRTR) regarding South Carolina Department of Transportation's (SCDOT) proposed Carolina Crossroads project in Lexington and Richland Counties, South Carolina. The proposed project entails redesigning and improving the I-26, I-126, and I-20 corridor by upgrading interchanges, replacing bridges, widening roadways, and other actions. This NRTR includes a review of each of the threatened and endangered (T&E) species that are known to occur, or may occur, within Lexington and Richland Counties. A survey for these species was performed in order to facilitate consultation with the Service as required by the Endangered Species Act of 1973 (ESA), as amended. The results are detailed and tabulated in the NRTR with a final determination of effect.

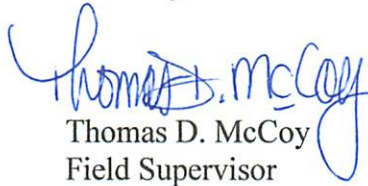
The SCDOT conducted surveys for T&E species that are known to occur in both counties in order to determine their presence within the project corridor. The presence of suitable habitat for each species was also examined during the surveys. The SCDOT did not locate individuals of, or suitable habitat for, the American wood stork, Canby's dropwort, Michaux's sumac, or rough-leaved loosestrife. As such, SCDOT determined the project would have no effect upon these species. Consultation is not required for no effect determinations. Suitable habitat was found for the smooth coneflower and red-cockaded woodpecker (RCW); however, no individuals for either species were located. Due to the presence of suitable habitat SCDOT conclude that the project may affect, but is not likely to adversely affect the RCW or smooth coneflower.

Upon review of the information provided, the Service concurs with SCDOT's determination that the Carolina Crossroads project may effect, but is not likely to adversely affect the RCW or smooth coneflower. Please contact the National Oceanic

and Atmospheric Administration for consultation requirements regarding the Atlantic and short-nose sturgeon. Please note that obligations under section 7 of the ESA must be reconsidered if: (1) new information reveals impacts of this identified action may affect any listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner, which was not considered in this assessment; or (3) a new species is listed or critical habitat is designated that may be affected by the identified action.

If you have any questions regarding the Service's determination, please do not hesitate to contact Mr. Mark Caldwell at (843) 727-4707 ext. 215, and reference FWS Log No. 2018-I-0645.

Sincerely,



Thomas D. McCoy
Field Supervisor

TDM/MAC

Appendix G— Qualifications of Project Team Personnel

Natural Resources Technical Report

The following Project Team staff were responsible for the preparation of this document:

Matthew DeWitt, PWS; Environmental Scientist

Bachelor of Science (B.S.) in Environmental and Natural Resources

Matt DeWitt is a professional wetland scientist (PWS) with twelve (12) years of experience throughout the southeastern United States working in environmental studies, with an emphasis on matters related to the Clean Water Act (CWA). He holds a bachelor's degree in environmental and natural resources, with minors in natural resource management and forestry. Matt has prepared numerous environmental documents pursuant to the National Environmental Policy Act (NEPA), including natural resources technical memorandums, protected species biological assessments, Environmental Assessments (EAs), and assisted in Environmental Impact Statements (EISs). Matt also performs natural resources studies, including wetland delineations, threatened and endangered species surveys, water quality sampling, environmental compliance studies, and mitigation site identification, design and monitoring. Mr. DeWitt acted as Team Leader for field efforts, and performed jurisdictional waters delineations, protected species surveys, and natural resource habitat assessments for the project. Mr. DeWitt also prepared GIS mapping and authored the NRTM document for the project.

Thomas Melton; Staff Scientist

Bachelor of Science (B.S.) in Resource and Environmental Studies

Thomas Melton has worked in environmental science and natural resources consulting for five years. The experience includes commercial and residential development, as well as utilities and energy industry. He performs field work on issues related to Section 404 and 401 of the Clean Water Act (CWA), National Historic Preservation Act (NHPA), and Endangered Species Act (ESA), so as to identify opportunities to avoid or minimize potential environmental impacts. Thomas has performed field assessments and delineations of thousands of acres of undeveloped land across the United States, and is a resource for principles of conservation and government regulations. Mr. Melton performed jurisdictional waters delineations, protected species surveys, and natural resource habitat assessments for the project.

W. Steven Busbee, PWS; Senior Environmental Scientist

Bachelor of Science (B.S.) in Aquaculture, Fisheries, and Wildlife Biology

Master of Science (M.S.) in Forest Resources

Mr. Busbee has over 15 years of experience in ecological studies and environmental assessment throughout the southeastern United States. Mr. Busbee has a Master's Degree in Forest Resources and a Bachelor's Degree in Aquaculture, Fisheries, and Wildlife Biology from Clemson University. Mr. Busbee's experience specifically includes stream and wetland determinations, delineations, functional assessments, natural resource and feasibility studies, preparation of Clean Water Act Section 404/401 permit documents, compensatory wetland mitigation planning and monitoring, protected plant and animal species surveys, invasive plant species surveys, water quality monitoring, and regulatory agency reporting and coordination. Mr. Busbee performed jurisdictional waters delineations, protected species (bald eagle) surveys, and natural resource habitat assessments for the project.

Natural Resources Technical Report

Josh Kotheimer; Environmental Scientist

Bachelor of Science (B.S.) in Environmental Technology and Management

Bachelor of Arts (B.A.) in Chemistry

Graduate Certificate in Geographic Information Science (GIS)

Mr. Kotheimer has three years of experience in performing wetland delineations, environmental compliance inspections, protected species surveys, and mitigation monitoring. His experience also particularly includes the utilization of GPS and GIS software in creating maps/figures for various NEPA and permitting related documents including environmental impact statements, essential fish habitat reports, biological assessments, preliminary site investigations, and jurisdictional determination requests. Mr. Kotheimer performed jurisdictional waters delineations, protected species (bald eagle) surveys, and natural resource habitat assessments for the project.

Thomas Blackwell, PWS; Environmental Scientist

Bachelor of Arts (B.A.) in Natural Sciences

Master of Science (M.S.) in Environmental Resource Management

Thomas Blackwell is a professional wetland scientist (PWS) with more than 10 years of progressive experience in environmental consulting including wetland delineation, Section 404/401 permitting, threatened and endangered species surveys, stream geomorphic assessment and natural channel design, wetland functional assessment, and mitigation planning and design. Mr. Blackwell is trained and certified in NCWAM (North Carolina's rapid wetland assessment methodology). In addition to NCWAM, Thomas is experienced in the use of a number of other qualitative and quantitative rapid wetland assessment methodologies. Mr. Blackwell is experienced in the preparation of NEPA and SEPA environmental documents and has successfully managed numerous complex environmental permitting projects for both private and public sector clients throughout the southeast. Thomas served as HDR team leader for the stream and wetland delineation field effort on this project.

Jason McMaster, PWS; Environmental Scientist

Master of Science (M.S.) in Environmental Studies

Master of Arts (M.A.) in Biology

Jason McMaster is a Professional Wetland Scientist (PWS) in HDR's Charleston office. Jason has over 10 years of experience. Mr. McMaster performs wetland delineations for both State and Federal clients. He has experience using Trimble GPS equipment and is proficient in the use of ArcGIS mapping software. Mr. McMaster also has experience completing Section 404/401 and NPDES permitting for a variety of public sector projects. In addition, Jason has experience performing construction management oversight for environmental compliance, including Stormwater Prevention Pollution Plan (SWPPP) review and compliance/commitment monitoring, on major transportation corridor projects. Prior to joining HDR, Jason spent 4 years with State Dept. of Ocean and Coastal Resource Management (SCDHEC OCRM), in regulatory enforcement. Additionally, he served as the OCRM regulatory liaison for SCDNR's coastal science outreach program and coordinated a joint inspection program with Charleston County's stormwater division. Jason served as a team member for the stream and wetland delineation field effort and provided technical quality control and quality assurance (QA/QC) review for the jurisdictional delineation report.