

North Carolina Department of Transportation

NEPA/SEPA Consultation Form

TIP Project No.	B-4414
WBS Element	38358.1.2
Federal Aid Project No.	N/A

A. Project Description, Location, and Purpose:

This project replaces Beaufort County Bridge No. 060043 on US 264 over Pungo Swamp. The bridge will be replaced on the existing alignment. Traffic will be detoured offsite during construction. The project is shown in Figure 1.

The replacement structure will be a three-span girder bridge approximately 155-feet long providing an average clear deck width of 40-feet. The bridge will include two 12-foot travel lanes and 8-foot offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately 1.5-feet higher than the existing bridge.

Project construction on US 264 will extend approximately 425-feet from the west end of the new bridge and 418-feet from the east end of the new bridge. The approaches will be widened to provide 12-foot travel lanes with 8-foot shoulders (11-feet with guardrail) including 2-foot paved.

Traffic will be detoured offsite during construction. The proposed detour includes SR 1611 (Jones Bridge Road) and SR 1609 (Free Union Church Road).

The purpose of the project is to replace a structurally deficient bridge. NCDOT records indicates Bridge 060043 was built in 1925 and has a sufficiency rating of 42.29 out of a possible 100 for a new structure. The bridge is considered structurally deficient due a superstructure appraisal of 4 out of 9 and functionally obsolete due to a deck geometry appraisal of 4 out of 9 according to Federal Highway Administration (FHWA) standards.

B. Consultation Phase:

Construction

C. NEPA/SEPA Class of Action Initially Approved as:

FHWA Class II (CE) 07/31/2019

Additional Notes: **TYPE 1(A)**

D. Changes in Proposed Action & Environmental Consequences:

Design Changes

There have been no substantial design changes since the July 2019 CE.

Water Resources

Water resources and classifications in the project study area have not changed since the July 2019 CE.

Archaeology & Historic Architecture

NCDOT has reviewed the Section 106 effects findings for historic properties within the project's area of potential effects (APE), that were made as part of the NEPA analysis. NCDOT has confirmed there is no new information that would alter the original Section 106 findings and, therefore, they remain valid.

Cultural Resources:

One Federally recognized tribe with interests in Beaufort County, the Catawba Indian Nation, was notified of the project in November 2019. Comments have not been received.

Protected Species

Habitat for West Indian manatee is available in the study area. "Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters" will be employed in regard to the "May Affect, Not Likely to Adversely Affect" conclusion for the manatee.

Surveys for rough-leaved loosestrife were conducted and no specimens were observed resulting in a biological conclusion of "No Effect".

The American alligator, green sea turtle, dwarf wedgemussel, Tar River spiny mussel and northern long-eared bat were added to the USFWS list for Beaufort County. A biological conclusion for American alligator is not required due to its similarity of appearance. The biological conclusions for the green sea turtle, dwarf wedgemussel and Tar River spiny mussel are "No Effect".

The programmatic determination for Northern long-eared bat for the NCDOT program is "May Affect, Likely to Adversely Affect". The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for ten years for all NCDOT project with a federal nexus in Division 1-8, which includes Beaufort County where B-4414 is located. This level of incidental take is authorized from the effective date of a final listing determination through December 31, 2030.

A biological conclusion of "No Effect" remains valid for Kemp's Ridley sea turtle, red knot, red wolf, red-cockaded woodpecker, and sensitive joint-vetch.

The Atlantic sturgeon is no longer listed by USFWS for Beaufort County. However, it is still protected by the National Marine Fisheries Service (NMFS). This species biological conclusion remains "No Effect".

E. Conclusion:

The above NEPA/SEPA documentation has been reevaluated (as required by either 23 CFR

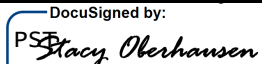
771 or by NC General Statute Chapter 113A Article 1). It has been determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted in Section D. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced document(s) unless noted otherwise herein. Therefore, the original Administrative Action remains valid.

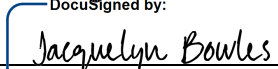
F. Coordination


TGS personnel have discussed the current project parameters with qualified NCDOT representatives. The TGS Project Manager, Marcus Lowery, PE, hereby verifies the involvement of the following staff and the incorporation of their technical input:

TGS Design Engineer:	Marcus Lowery, PE	02/09/2021
Senior Environmental Scientist:	Jason Dilday	02/17/2021
TGS Hydraulics Engineer:	David Petty, PE	02/08/2021
NCDOT Cultural Resources	Mary Pope Furr	03/02/2021

G. Consultation Approval for NCDOT Project B-4414

Prepared By: 3/3/2021 | 9:31 AM PST 
 Date: Stacy B. Oberhausen, PE, CPM
 TGS Engineers

Prepared For: 3/3/2021 | 5:22 PM EST 
 Jacquelyn Bowles, PE
 NCDOT, Structures Management Unit

Reviewed By: 3/3/2021 | 5:26 PM EST 
 Date: John Jamison, Western Regional Team Lead
 NCDOT, Environmental Policy Unit

Approved In adherence with 23 CFR 771 (NEPA) or NC General Statute Chapter 113A Article 1 (SEPA), NCDOT approves this Consultation.

or

Certified NCDOT staff certifies if FHWA signature was previously required or where changes have resulted in FHWA signature being required.

3/10/2021 | 11:31 AM PST 
 Date: David Struts, PE, Project Engineer, PEF/Program Management
 NCDOT, Structures Management Unit

FHWA Approved: FHWA signature required for Type I(B) CE, Type II(B) CE, Type III CE, FONSI or ROD.

N/A
 Date: John F. Sullivan, III, PE, Division Administrator
 Federal Highway Administration

H. Project Commitments (as of 03/03/2021)

Beaufort County
Replace Bridge No. 43 on US 264 over Pungo Swamp
WBS No. 38358.1.2
TIP No. B-4414

The current status for the project commitments as shown in the CE are printed in italics

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

NCDOT Hydraulics Design Unit – FEMA Coordination

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

ACTION: B-4414 was recommended for approval as a type 1 project per NCDOT's MOA on 03/14/2018.

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

NCDOT Hydraulics Design Unit – Buffer Rules

The Tar-Pamlico Basin Rule applies to this project.

ACTION: The Tar-Pamlico Buffer authorization was received on 11/08/2019.

Division Construction – West Indian Manatee

NCDOT will adhere to "Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters" for this project.

Division Construction – Wetlands and Streams

Wetlands will be cleared by hand. Turbidity curtains will be utilized for in-water work.

Environmental Coordination & Permitting (ECAP) – CAMA

A CAMA permit will be required prior to the commencement of construction.

ACTION: A CAMA permit was issued on 12/23/2019.

Division Construction, Resident Engineer's Office – Offsite Detour

In order to have time to adequately reroute school buses, Beaufort County Schools will be contacted at least one month prior to road closure at (252) 946-6209.

Beaufort County Emergency Services will be contacted at least one month prior to road closure to make the necessary temporary reassignments to primary response units at (252) 946-2046.

Division Construction, Public Involvement Group – Postcard

A postcard will be sent to residents notifying of road closure and the off-site detour prior to closure.

Project Commitments (as of 03/03/2021)

Beaufort County
Replace Bridge No. 43 on US 264 over Pungo Swamp
WBS No. 38358.1.2
TIP No. B- 4414

COMMITMENTS FROM PERMITTING

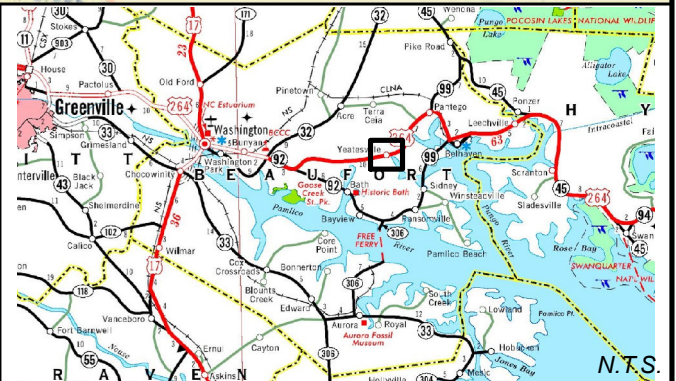
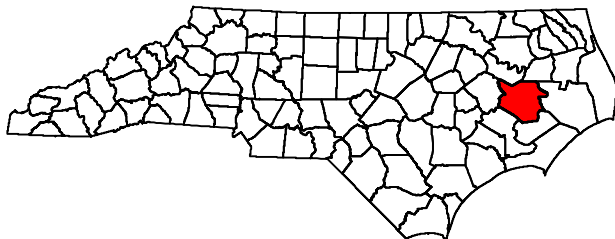
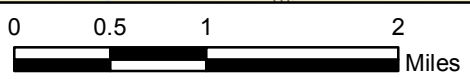
Division Construction – CAMA

CAMA condition #3: The new permanent bridge shall be constructed using top down construction with an off-site detour. Any other construction method may require additional authorization from DCM.

CAMA condition #4: In accordance with correspondence from the permittee on 12/13/19, a temporary work bridge is no longer proposed. All construction access shall be through the use of the existing bridge, the partially constructed new bridge, and existing high ground areas.

Legend

- - - B-4414 Detour Route
- Church
- NCDOT Structure
- Nursing Home
- NCDOT Average Annual Daily Traffic - YR,ADT
- School (Public)



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURES MANAGEMENT UNIT

VICINITY MAP
Beaufort County, NC
Replace Bridge No. 43 on US 264
over Pungo Creek
B-4414

Date: 3-3-2021
Figure 1

15-02-0001***Brief description of review activities, results of review, and conclusions:***

Bridge No. 43 is located west of Belhaven and northeast of Bath in the northern portion of Beaufort County, North Carolina. The project area is plotted in the southwest corner of the Pantego USGS 7.5' topographic quadrangle (Figure 1).

A map review and site file search was conducted at the Office of State Archaeology (OSA) on February 19, 2015. Two previously recorded archaeological sites (31BF248 and 31BF256) are recorded within the APE, while another seven sites (31BF228–31BF231, 31BF247, 31BF249, and 31BF253) are identified within a mile of the bridge. According to the North Carolina State Historic Preservation Office online data base (HPOWEB 2015), there are no known historic architectural resources within the APE that may yield intact archaeological deposits. Topographic maps, USDA soil survey maps, aerial photographs (NC One Map), historic maps (North Carolina maps website) and Google Street View application were examined for information on environmental and cultural variables that may have contributed to prehistoric or historic settlement within the project limits and to assess the level of ground disturbance. An archaeological field investigation was carried out on March 11, 2015, to evaluate the project area.

Bridge No. 43 and US 264 cross Pungo Creek from the northeast to the southwest. The stream drains to the east into the Pungo River. These waterways are part of the Tar-Pamlico drainage basin. The APE resides along a floodplain/marsh with low stream terraces at either end (Figure 2). The area consists of a forested floodplain/marsh and mostly clear residential properties along the eastern terrace and a church property on the western terrace. Previous ground disturbances included buried utilities and channelizing of the creek.

The APE is composed of five soil types according to the USDA soil survey map (see Figure 2). The floodplain/marsh is made up of Muckalee loam (Me), Hyde loam (Hy), and Augusta fine sandy loam (At). These three series are nearly level, very to somewhat poorly drained, and subject to frequent flooding. Usually, these soils are unlikely to yield any significant cultural resources associated with early settlement activities due to being persistently wet. The stream terraces consist of Altavista fine sandy loam (AaA) in the northeast and Seabrook loamy sand (Sb) to the southwest. These series have slope less than 2 percent and are considered moderately well drained. Typically, these soils types would be tested for cultural material since they are considered dry.

A review of the site files shows that the project area was previously surveyed in 1992 by NC DOT archaeologists for the widening of US 264 (TIP R-2601). This investigation resulted in the identification of nine sites (31BF228–31BF231, 31BF247–31BF249, 31BF253, and 31BF256) along US 264 within a mile of the bridge, two (31BF248 and 31BF256) of which fall within the APE. All of the sites except for 31BF248 were determined ineligible for the National Register of Historic Places (NRHP) and required no further work. This includes site 31BF256, which is a historic isolated find. Site 31BF248 on the other hand is reported to consist of the remains of a plank road and boat crossing or bridge as well as a boat landing located on the southside of the current bridge (Figures 3 and 4). During the R-2601 investigation, no historical documentation pertaining to the site was found. Interviews with residents suggested that creek was used to transport goods, but information on an early landing at 31BF248 was not known. The review of the 1957 general reconstruction plans for Project 1050 (US 264) found that the road improvements at that time consisted of widening on existing location and did not indicate the remains of an earlier crossing. Shovel tests were placed as near as possible to the remains but failed to yield artifacts. It is thought that the remains date to the 19th or early 20th century. Avoidance was recommended for Site 31BF248. If the site could not be avoided, then further work was recommended to determine if it's eligible for the National Register.

15-02-0001

Lastly prior to fieldwork, a historic map review was conducted. Most early maps from the 18th and 19th centuries provide only general details concerning the region illustrating just major roads, settlements, and drainages. The 1818 Clements and Price map of *The Country Between the Roanoke and Pungo River* is the first map that was reviewed which identifies a bridge at the current project location (Figure 5). This map labels the Pungo Bridge and depicts a road with a similar alignment as US 264 to the north and SR 1718 (Yeatesville Road) to the south. Although this map confirms an early 19th century bridge at or near the current bridge, it does not authenticate that the wooden remains at site 31BF248 are this bridge. The remaining wooden post could be part of a later structure as this route from Bath has been continually in use. Improvements to the route during the 19th century can be seen in J.H. Colton's 1854 map of North Carolina (Figure 6). This map shows the early alignment of US 264 and the community of Pungo Creek, which would later become Yeatesville. The road appears to cross at or near the current crossing. The 1908 Beaufort County Geological map gives a clearer picture of the project area showing the bridge and nearby homes and churches (Figure 7). These buildings are situated well away from the bridge and do not fall within the APE. Subsequent 20th century maps provide no further or useful information. From this review, a bridge within or very near the project area has been in use since 1818. The remains of one of these early bridges appear to be 31BF248, which falls within the project limits. All other historic structures are outside APE and will not be encountered.

The current archaeological field investigation at Bridge No. 43 consisted of a surface inspection and evaluation of the wooden remnants at site 31BF248 (see Figure 2). No subsurface testing was deemed necessary since the project area was previously investigated with test pits during the R-2601 project. Wooden remains were seen mostly below the water surface (Figures 8 and 9). These consist of a series of round post that range from approximately 3 to 6 feet (ca. 1 to 2 m) in length lying horizontally side by side along both banks. The posts appear to be about 4 in (ca. 10 cm) in diameter. Six vertical posts were observed standing in the water near the western bank, while one vertical post was seen on the east side (Figure 10). The size of the vertical post is unclear, but they are slightly larger than the horizontal post. The remains stretch for approximately 50 feet (15 m) along the eastern bank and 32 feet (10 m) along the western bank. The river current has shifted some of the horizontal post downstream, but otherwise the condition of the site seems to be stable and resembles the site description from the R-2601 project report (Figure 11). Conversations with the caretaker at nearby Mt. Zion Church and local property owners did not reveal any new information for site 31BF248. No one knew for sure if the posts were part of an older bridge or part of a dock (for a ferry crossing). The visible posts are not part of any plank road that traversed the region. No plank roads are recorded in the area and the posts present are not typical used for these roads. The history of the crossing is imprecise. As previously noted, the first recorded bridge is in 1818 with the next mention nearly a 100 years later in 1908. The present bridge is reported to have been built in 1925 and rebuilt or refurbished in 1956 (Figure 12). It is suggested that wooden remains could be part of the 1925 bridge as it is aligned with the old alignment (prior to 1957) for NC 264, but this could not be verified. In addition, an exhausted search through periodicals and internet resources could not produce any significant event or purpose at the bridge site. These remains have low research potential, are not associated with a significant event or people, do not show a distinctive design or construction, and do not have a part in the community's cultural tradition or identity. It is also doubtful that these remains are those of the 1818 bridge, but more likely those of an early 20th century bridge. As a result with this uncertainty and lack of significant elements, site 31BF248 is determined not eligible for the NRHP.

The archaeological investigations for the proposed replacement of Bridge No. 43 show that no significant archaeological sites are within the APE. A previous survey has identified sites 31BF248 and 31BF256 within the project limits. Site 31BF256 was previously determined not eligible for the NRHP, while the current investigation recommended 31BF248 as not eligible. No further archaeological work is required for replacement of Bridge No. 43 in Beaufort County. However, additional work will be required should design plans change to encompass property outside of the currently defined APE.

15-02-0001

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence

Other: **images of historic maps consulted**

Signed:



C. Damon Jones
NCDOT ARCHAEOLOGIST

4/2/15

Date

15-02-0001



HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

PROJECT INFORMATION

Project No:	B-4414	County:	Beaufort
WBS No.:	38358.1.2	Document Type:	PCE or CE
Fed. Aid No:	BRSTP-0264(31)	Funding:	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
Federal Permit(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Permit Type(s):	
Project Description: Replace Bridge No. 43 on US 264 over Pungo Creek.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

Description of review activities, results, and conclusions:

Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on February 4, 2015. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects, which is defined as 1000' from each end of the bridge and 75' from the centerline each way. South of the bridge is a one-story frame church built 1983; the structure is under 50 years of age and not eligible for National Register listing. North of the bridge are several frame houses and mobile homes dating from 1930s, mid-20th Century, and the 1990s. All of the structures are unremarkable and not eligible for National Register listing. Bridge No. 43 is also not eligible based on the NCDOT Historic Bridge Inventory. There are no National Register listed or eligible properties and no survey is required. If design plans change, additional review will be required.

Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:

HPO quad maps and GIS information recording NR, SL, LD, DE, and SS properties for the Beaufort County survey, Beaufort County GIS/Tax information, and Google Maps are considered valid for the purposes of determining the likelihood of historic resources being present.

SUPPORT DOCUMENTATION

Map(s) Previous Survey Info. Photos Correspondence Design Plans

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

Kate Hubbel

2/4/2015

NCDOT Architectural Historian

Date

Historic Architecture and Landscapes NO SURVEY REQUIRED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

February 17, 2021

MEMORANDUM TO: Jacquelyn Bowles, P.E., PEF Coordination

FROM: Jason Dilday, Senior Environmental Specialist

SUBJECT: Water resources and protected species update for a Federal Highway Administration (FHWA) Construction Consultation for the replacement of Bridge 43 on US 264 over Pungo Swamp, Beaufort County, **TIP B-4414.**

REFERENCE: Categorical Exclusion, dated July 2019
Natural Resources Technical Report 2015

Water Resources

The water resource classifications for the streams identified in the Categorical Exclusion remain accurate.

Protected Species

The list of protected species has changed since the completion of the Natural Resources Technical Report (NRTR). Below is the updated status for United States Fish and Wildlife Service (USFS) protected species listed for Beaufort County as of July 17, 2020.

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Alligator mississippiensis</i>	American alligator	T (S/A)	Yes	Not Required
<i>Chelonia mydas</i>	Green sea turtle	T	No	No Effect
<i>Lepidochelys kempii</i>	Kemp's Ridley sea turtle	E	No	No Effect
<i>Myotis septentrionalis</i>	Northern long-eared bat	T	Yes	MALAA
<i>Calidris canutus rufa</i>	Red knot	T	No	No Effect
<i>Canis lupus</i>	Red wolf	EXP	No	No Effect
<i>Picoides borealis</i>	Red-cockaded woodpecker	E	No	No Effect
<i>Trichechus manatus</i>	West Indian manatee	E	Yes	MANLAA

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Alasmidonta heterodon</i>	Dwarf wedgemussel	E	No	No Effect
<i>Parvaspina steinstansana</i>	Tar River spinymussel	E	No	No Effect
<i>Lysimachia asperulaefolia</i>	Rough-leaved loosestrife	E	Yes	No Effect
<i>Aeschynomene virginica</i>	Sensitive joint-vetch	T	No	No Effect

The Atlantic sturgeon is no longer listed by USFWS for Beaufort County. However, it is still protected by the National Marine Fisheries Service (NMFS). The species biological conclusion remains “No Effect”. Habitat for West Indian manatee and rough-leaved loosestrife are available in the study area. “Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters” will be employed in regard to the “May Affect, Not Likely to Adversely Affect” conclusion for manatee. Surveys for rough-leaved loosestrife were conducted and no specimens were observed resulting in a conclusion of “No Effect”. The American alligator, green sea turtle, dwarf wedgemussel, Tar River spinymussel and northern long-eared bat were added to the USFWS list for Beaufort County. A biological conclusion for American alligator is not required due to its similarity of appearance. The biological conclusions for green sea turtle, dwarf wedgemussel and Tar River spinymussel are “No Effect”. Information concerning the northern long-eared bat is below.

Northern long-eared bat (*Myotis septentrionalis*)

The US Fish and Wildlife Service has revised the previous programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the northern long-eared bat (NLEB) (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. Although this programmatic covers Divisions 1-8, NLEBs are currently only known in 19 counties, but may potentially occur in 11 additional counties within Divisions 1-8. NCDOT, FHWA, and USACE have agreed to two conservation measures which will avoid/minimize mortality of NLEBs. These conservation measures only apply to the 30 currently known/potential counties shown on Figure 2 of the PBO at this time. The programmatic determination for NLEB for the NCDOT program is **May Affect, Likely to Adversely Affect**. The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for ten years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Beaufort County where B-4414 is located. This level of incidental take is authorized from the effective date of a final listing determination through December 31, 2030.

Measures to Avoid/Minimize Mortality

1) No tree clearing will occur within 150 feet of a known maternity roost tree May 1 – June 30 in order to protect non-volant young. Winter roost trees are not considered maternity roost trees.

A review of GIS data on January 4, 2020 confirmed there are no **known** maternity roost trees in Cumberland County, so this clearing moratorium will not apply to B-4414.

2) At individual project sites where a total of 1.0 acre or more of tree clearing will occur, no tree clearing will occur during the portion of the day that the air temperature is <40 degrees Fahrenheit in order to protect NLEBs that may be in torpor. This restriction is only subject to the known/potential range (30 coastal counties) that is shown in Figure 2 of the [2020 PBO](#), which includes Duplin County.

Proposals and Specifications Management will add a special provision to the contract if clearing will exceed 1.0 acre.

Project Commitments (Greensheet)

The CE included a Greensheet with project commitments. Permits have been received for this project, and a revised Greensheet is attached.

If there are any additions or edits, please advise ECAP so the appropriate re-distribution can occur.