

# Type I Ground Disturbing Categorical Exclusion Action Classification Form

STIP Project No.	<u>B-5301</u>
WBS Element	<u>46015.1.1</u>
Federal Project No.	<u>BRSTP-0033(13)</u>

A. Project Description:

State Transportation Improvement Program (STIP) project B-5301 proposes to replace Bridge No. 87 on new location to the north. Traffic will be maintained on the existing bridge during construction. Bridge No. 87 is located on NC 33 over Norfolk Southern Railroad, in Pitt County, just one-half mile northwest of the Town of Grimesland and approximately 10 miles southeast of the City of Greenville. NC 33 is the main route from Grimesland to Greenville with a high amount of truck traffic and school buses. The land immediately surrounding the bridge is rural in nature and contains active farmland. Vehicular traffic was noted as heavy during site visits.

The existing bridge is 212 feet long and approximately 32.7 feet wide, carrying two lanes of traffic. The replacement structure will be a three span bridge approximately 240 feet long, with two 12-foot lanes and 4-foot shoulders. The bridge length is based on preliminary design information and is set by rail requirements. The roadway grade of the new structure will be raised approximately 4.5 to 4.75 feet from the existing structure to provide required clearance over Norfolk Southern Railroad. The total length of the project is approximately 3,100 feet.

The approach roadway will extend approximately 1,381 feet from the west end of the new bridge and 1,478 feet from the east end of the new bridge. The approaches will be widened to include a 32-foot pavement width, providing two 12-foot lanes and a minimum of 4-foot paved shoulder. Paved shoulder width will vary in areas with guardrail. The roadway is classified as a Major Collector and will be designed to AASHTO Guidelines with a design speed of 60 miles per hour (mph).

B. Description of Need and Purpose:

NCDOT Bridge Management Unit records indicate Bridge No. 87 has a sufficiency rating of 38.31 out of a possible 100 for a new structure. Bridge No. 87 was built in 1938 and is structurally deficient due to a deck condition, substructure condition and structural evaluation appraisal of 4 out of 9. The appraisal of the deck geometry was rated at 2 out of 9, which also classifies Bridge No. 87 as functionally obsolete.

The substructure of Bridge No. 87 is composed of precast prestressed concrete piles with reinforced concrete caps. The superstructure of Bridge No. 87 is composed of reinforced concrete deck girders. Many of the concrete bridge components, such as piles, caps and deck continue to become deteriorated due to age (79 years old) and use. Many of the concrete components have deep cracking exposing rebar in some cases. Repairs have been made in most locations, however, further repairs will continue to be costly and only a short term solution for maintenance purposes. With railroad traffic underneath, a vertical underclearance of only 21 feet 8 inches, a lateral underclearance of only 10 feet 9.5 inches, the bridge is approaching the end of its useful life and is need of replacement.

C. Categorical Exclusion Action Classification:

TYPE I A

D. Proposed Improvements – Type I Action Classifications.

28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in paragraph (e) of this section.

E. Special Project Information:

Schedule: Right of Way (ROW) is scheduled for February 2018 and construction is scheduled for February 2020.

Costs: (The 2016 - 2025 STIP shows that the project is anticipated to cost \$2,815,000.) Current costs based on 2016 pricing:

Construction costs	\$5,000,000
ROW costs	\$ 556,520
<u>Utility costs</u>	<u>\$ 183,982</u>
Total	\$5,740,502

Alternatives:

**No Build** – The no build alternative would result in eventually closing the road which is unacceptable given the volume of traffic served by NC 33.

**Rehabilitation** – Bridge No. 87 was constructed in 1938 and the materials within the bridge are reaching the end of their average useful life span. Rehabilitation would require replacing the majority of bridge components which would constitute effectively replacing the bridge. Additionally, rehabilitation would not address limited vertical and horizontal clearances for the railroad.

**Off-site Detour** – A replace in place alternative with off-site detour was evaluated for replacement of Bridge No. 87. The shortest available off-site detour route is approximately 8.2 miles long and includes segments of Mobleys Bridge Road, Robert Little Road, Brick Kiln Road and Avon Road. However, during environmental studies for the project, a low income population was identified west of the existing bridge. Further investigation (see Public Involvement Section) determined that a temporary road closure and off-site detour would be a hardship on the low income population and would result in disproportionately high and adverse impacts to this low income population. Due to these impacts a new alignment alternative was developed and the off-site detour alternative was eliminated from further consideration.

**New Alignment (Preferred)** – Bridge No. 87 will be replaced along a new location alignment (approximately 53 feet offset from existing centerline to proposed centerline), located northeast of the existing bridge (**see Figure 2A**). The existing bridge will be utilized to maintain traffic during construction and will be removed once the new bridge is completed.

Traffic:

Base Year (2017)	-	8,100 vpd
Future (2035)	-	11,400 vpd
TT-STs	-	3%
Duals	-	5%

Bicycle and Pedestrian Accommodations:

There are no designated bicycle and pedestrian routes within the study area. However, pedestrian activity was documented along the project during field reviews and the bridge is within easy walking distance to Grimesland, which increases the likelihood of the occasional pedestrian. Therefore, the design plans include a 4-foot offset between the outside of the travel lane and bridge rail parapet on the bridge structure, and continuing as paved shoulder on the approaches.

Public Involvement:

NCDOT provided a property owner notification to the landowners of upcoming fieldwork in March on 2012. One landowner/business owner provided feedback noting concerns with an off-site detour and potential impacts to businesses that are dependent on passing traffic.

In order to evaluate the potential impacts to the community, a survey was conducted of the low income residents west of the bridge to determine if a temporary road closure during construction would have negative impacts on these nearby communities. A four-person team conducted a survey on September 11, 2015. The team included one person fluent in Spanish that served as an interpreter. A total of 29 interviews were conducted across 91 homes.

The following questions were asked to each individual resident interviewed:

1. Do you travel across the overpass to work?
2. Do you travel to a school across the overpass? If so, is this on a bus?
3. Do you travel across the overpass for food, medical, shopping, or other reasons? If so, how often?
4. Do you feel the overpass closure would be a severe, moderate, or minor impact to you during construction?

If the resident was not home, a project information card was left at the home. The card included the same survey questions and provided instructions for calling the project hotline in both English and Spanish. Results include:

- Eleven (11) individual residents (38%) said they, or a member of their household, drive across the overpass for work, daily.
- Fifteen (15) individual residents (52%) said there was a child in the home that crosses the overpass to get to school.
- Four (4) individual residents (13%) that had a child in school said they cross the overpass to take that child to and from school. Two of these four respondents were parents of a child in a school in Washington, NC.
- Nineteen (19) individual residents (66%) said they traveled across the overpass for food, medical, shopping, or other reasons. Twelve (12) of these 19 respondents stated they travel across the overpass at least once a day for this reason.
- There were several special cases of individual residents that travel across the overpass multiple times a day. This includes a property owner that estimated crossing as many as eight times a day, and a resident that drives into Grimesland to pick up a coworker to carpool into Greenville.

- Thirteen (13) individual residents (45%) stated that the project would be a “Severe” impact during construction.
- Four (4) homes surveyed included Spanish-speaking residents. An interpreter was provided.

The project hotline was monitored through September 23, 2015, and received calls from six residents. Three of the calls were from local business owners concerned about the impact on their business as a result of decreased through traffic during the temporary road closure. Many local businesses serve travelers going from Greenville to Washington, who would likely bypass the area via U.S. 264 during construction.

Additional outreach to impacted property owners was also conducted to discuss the potential impacts. A letter was sent to property owners on September 28, 2015, informing them that NCDOT representatives would be coming to their property on October 6, 2015 to discuss potential project impacts. The letter was sent to eighteen recipients, which included both property owners and renters/occupants.

In general, property owners noted concerns with maintaining driveway access during construction, existing flooding caused by existing roadway drains onto property, impacts to fencing, and impacts to local businesses. Results of this outreach showed that while low income populations are present in the Direct Community Impact Area, no notably adverse community impacts are anticipated with the proposed new alignment alternative; thus, impacts to minority and low income populations do not appear to be disproportionately high and adverse. Benefits and burdens resulting from the project are anticipated to be equitably distributed throughout the community.

F. Project Impact Criteria Checklists:

<u>Type I &amp; II - Ground Disturbing Actions</u>		Yes	No
<u>FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA</u> <u>(FHWA Signature Required If "Yes" Selected)</u>			X
<p>If the proposed improvement (identified above in Sections C &amp; D) is a:</p> <ul style="list-style-type: none"> <li>• Type I Action for #s 2, 3, 6, 7, 8, 9, 12, 18, 21, 22, 23, 24, 25, 26, 27, <b>28</b>, &amp;/or 30; &amp;/or</li> <li>• Type II Action</li> </ul> <p>then answer the threshold criteria questions (below) and questions 8 - 31 for ground disturbing actions.</p> <p>In addition, if any of questions 1-7 are marked "yes" then the CE will require FHWA approval.</p>			
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.</p>			
<u>Other Considerations</u>		Yes	No
8	Does the project result in a finding of "may affect not likely to adversely affect" or less for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Does the project impact anadromous fish?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project impact waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Other Considerations (continued)</u>		Yes	No
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains? Are there project commitments identified?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Does the project involve hazardous materials and landfills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT's Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F

**8. Northern Long-eared Bat:** The US Fish and Wildlife Service has developed a 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. The programmatic determination for NLEB for the NCDOT program is “May Effect, 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 five years for all NCDOT projects with federal nexus in Divisions 1-8, which includes Pitt County, where STIP project B-5301 is located.

H. Project Commitments

**Hydraulics Unit, Natural Environment Section – Buffer Rules**

The Tar-Pamlico River Basin Rule applies to this project.

**Roadway Design, Structure Design – Railroad**

During final design, all utility providers and railroad operators will be coordinated with to ensure that the proposed design and construction of the project will not substantially disrupt service.



I. Categorical Exclusion Approval

STIP Project No. B-5301  
WBS Element 46015.1.1  
Federal Project No. BRSTP-0033(13)

**Prepared By:**

10/16/17 Matthew Potter  
Date Matthew Potter, PE, Project Manager – AECOM

**Prepared For:** NCDOT Project Delivery  
North Carolina Department of Transportation

**Reviewed By:**

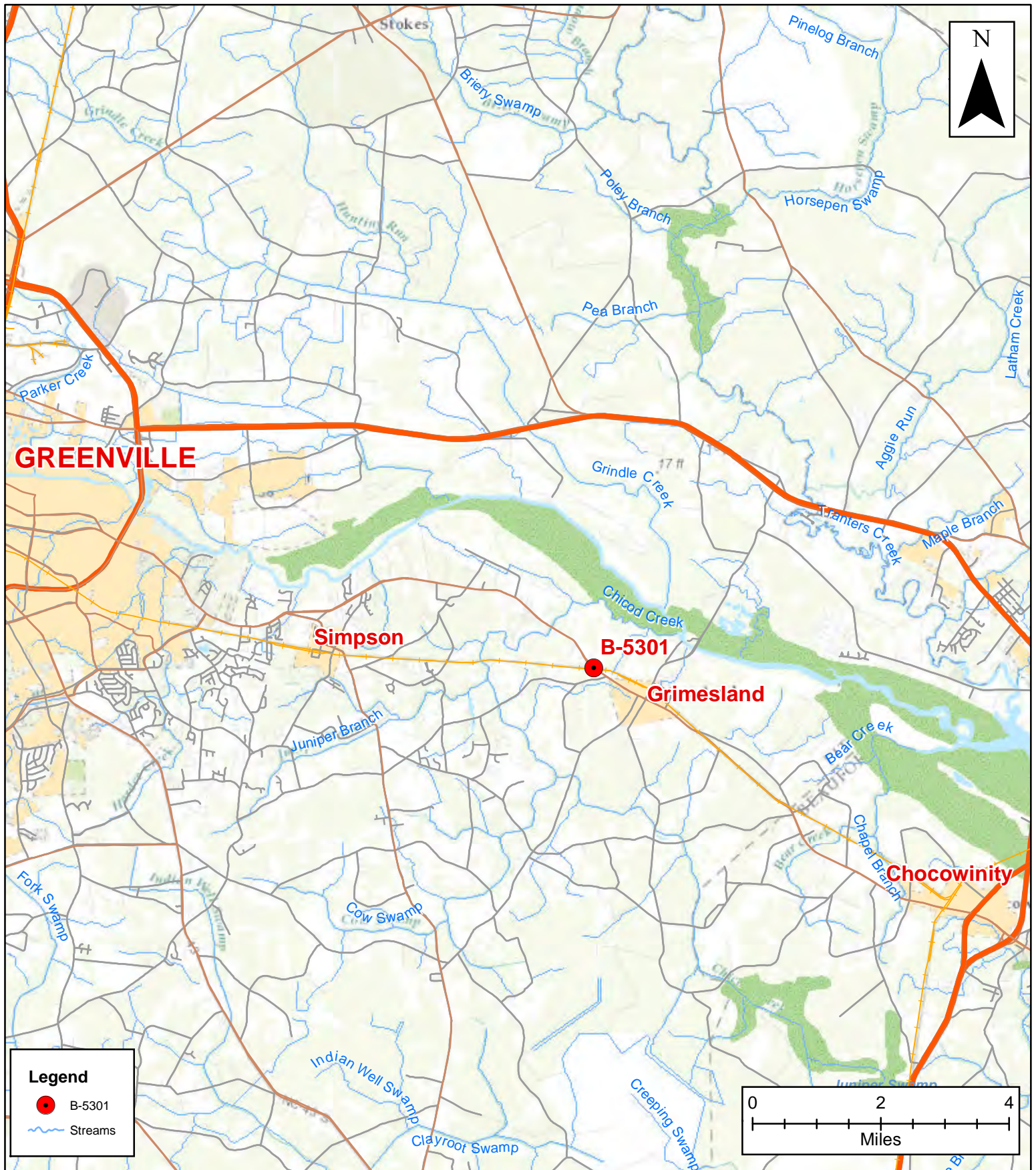
10.16.17 R. Deaton  
Date Robert Deaton, Project Development Engineer  
Project Delivery Team  
North Carolina Department of Transportation

- Approved**
- If Type I (Non-Ground Disturbing) Categorical Exclusion with an answer of "no" to question 3.
  - If Type I or Type II (Ground Disturbing) Categorical Exclusions with an answer of "no" to all of the threshold questions (1 through 7) of Section F.
- Certified**
- If Type I (Non-Ground Disturbing) Categorical Exclusion with an answer of "yes" to question 3.
  - If Type I or Type II (Ground Disturbing) Categorical Exclusions with an answer of "yes" to any of the threshold questions (1 through 7) of Section F.
  - If classified as Type III Categorical Exclusion.

10.16.17 Brian Yamamoto  
Date Brian Yamamoto, PE, Deputy Team Lead  
Project Delivery Team  
North Carolina Department of Transportation

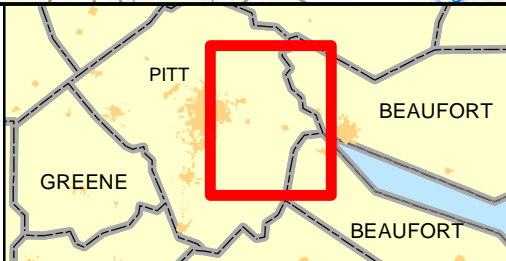
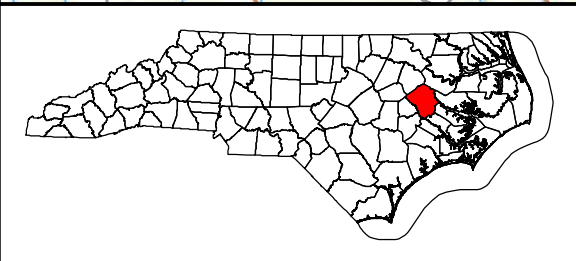
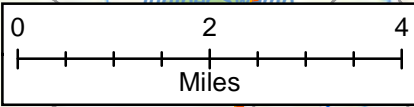
FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

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



**Legend**

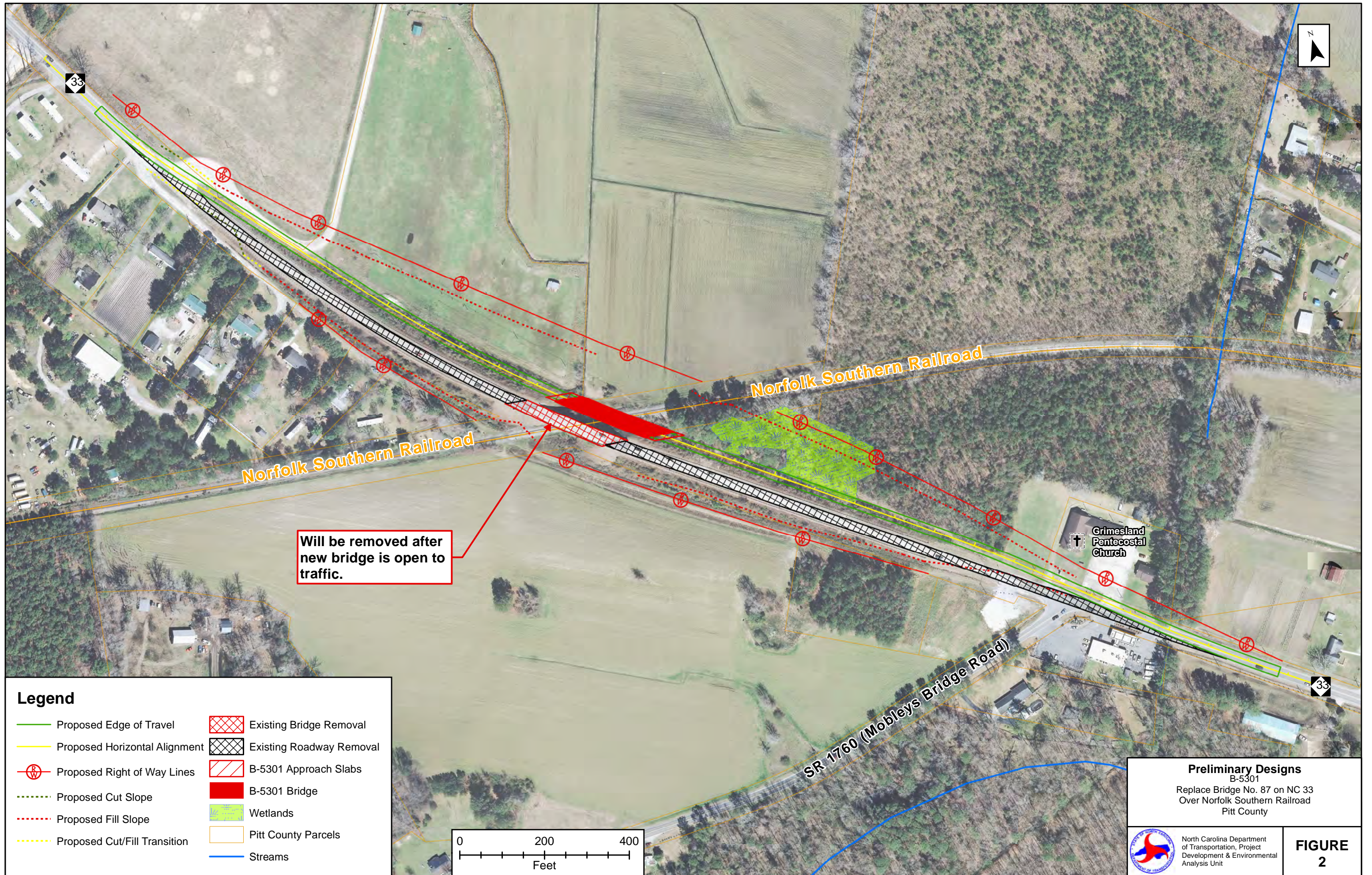
- B-5301
- ~ Streams



**Vicinity Map**  
 B-5301  
 Replace Bridge No. 87 on  
 NC 33 over NS Railroad  
 Pitt County

North Carolina Department  
 of Transportation, Project  
 Development & Environmental  
 Analysis Unit

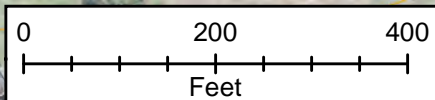
**FIGURE**  
**1**



**Legend**

- Proposed Edge of Travel
- Proposed Horizontal Alignment
- ⊗ Proposed Right of Way Lines
- - - Proposed Cut Slope
- · - · Proposed Fill Slope
- · - · Proposed Cut/Fill Transition
- ⊗ Existing Bridge Removal
- ⊗ Existing Roadway Removal
- ▨ B-5301 Approach Slabs
- B-5301 Bridge
- Wetlands
- ▭ Pitt County Parcels
- Streams

Will be removed after new bridge is open to traffic.



**Preliminary Designs**  
 B-5301  
 Replace Bridge No. 87 on NC 33  
 Over Norfolk Southern Railroad  
 Pitt County



**FIGURE**  
 2

12-01-0007

**NO SURVEY REQUIRED FORM****PROJECT INFORMATION**

Project No: B-5301

County: Pitt

WBS No: 46015.1.1

Document:

CE/PCE

F.A. No: BRSTP-0033(13)

Funding:

 State FederalFederal (USACE) Permit Required?  Yes  No Permit Type:

Project Description: Replace Bridge No. 87 over Norfolk Southern Railroad on NC 33.

**SUMMARY OF CULTURAL RESOURCES REVIEW***Brief description of review activities, results of review, and conclusions:*

Review of HPO quad maps, historic designations roster, and indexes was undertaken on 1/24/2012. Based on this review, there are no existing NR properties in the Area of Potential Effects. Map check revealed a previous survey conducted along the route of NC 33 (Seibel 2005).

*Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:* A previous survey on the north side of NC 33, including the bridge over the railroad, found no cultural evidence in the project vicinity. The earlier survey was for a proposed natural gas pipeline and fiber optic cable. No further work is warranted.

**SUPPORT DOCUMENTATION**

See attached: Map(s), Previous Survey Info

Seibel, Scott

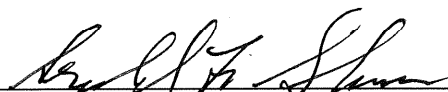
2005 Archaeological Survey of the proposed Eastern North Carolina Natural Gas pipeline. Report on file, Office of State Archaeology.

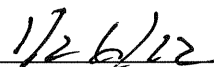
**FINDING BY NCDOT CULTURAL RESOURCES PROFESSIONAL NO SURVEY REQUIRED**

ARCHAEOLOGY

HISTORIC ARCHITECTURE

(CIRCLE ONE)

  
 NCDOT Cultural Resources Specialist

  
 Date

(HA)12-01-0007

**NO PREHISTORIC OR HISTORIC PROPERTIES  
PRESENT/AFFECTED FORM**

**PROJECT INFORMATION**

Project No: **B-5301** County: **Pitt**  
WBS No: **46015.1.1** Document:  
F.A. No: **BRSTP-0033(13)** Funding: State **X** Federal  
**Not specified in review**  
Federal (USACE) Permit Required? **X** Yes  No Permit Type: **request**  
Project Description: **Replace Bridge No. 87 on NC 33 over Norfolk Southern Railroad (no off-site detour specified in review request).**

**SUMMARY OF FINDINGS**

*The North Carolina Department of Transportation (NCDOT) reviewed the subject project and determined:*

## Historic Architecture/Landscapes

There are no National Register-listed or Study Listed properties within the project's area of potential effects.

There are no properties less than fifty years old which are considered to meet Criteria Consideration G within the project's area of potential effects.

- There are no properties within the project's area of potential effects.  
 There are properties over fifty years old within the area of potential effects, but they do not meet the criteria for listing on the National Register.  
 All properties greater than 50 years of age located in the APE have been considered and all compliance for historic architecture with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.  
**X** There are no historic properties present or **affected** by this project. (*Attach any notes or documents as needed*)

## Archaeology

- There are no National Register-listed or Study Listed properties within the project's area of potential effects.  
 No subsurface archaeological investigations are required for this project.  
 Subsurface investigations did not reveal the presence of any archaeological resources.  
 Subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the National Register.  
 All identified Archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.  
There are no historic properties present or affected by this project. (*Attach any notes or documents as needed*)

## SUMMARY OF CULTURAL RESOURCES REVIEW


*Brief description of review activities, results of review, and conclusions:* HPOWeb reviewed on 8 February 2012 and yielded no NR, SL, DE, SS or LD properties in the Area of Potential Effects (APE). The APE is centered on existing Bridge No. 87 and extends 150 feet from the existing NC 33 centerline (NE-SW) and 800 feet from the center either end of the existing bridge (SE-NW) to encompass proposed construction activities. Pitt County current GIS mapping, aerial photography, and tax information (viewed 8 February 2012) indicates predominantly cultivated and wooded parcels, as well as late-twentieth and early-twenty-first-century development to the NW and NE of the existing bridge in the APE. The APE intersects a large parcel to the SW of the existing bridge containing a circa-1900 house. The house stands approximately 1000 feet south of the bridge, with two roads and cultivated fields intervening, and is well beyond possible project impact. Google Maps "Street View" (viewed 8 February 2012) conveys the absence of critical architectural resources in the APE. The county architectural survey and related publication do not record any significant structural or landscape resources in the APE (Scott Power, *The Historic Architecture of Pitt County, North Carolina*, Greenville: Pitt County Historical Society, 1991). Constructed in 1938, Bridge No. 87 is a five-span, 212-foot-long, reinforced concrete, tee beam bridge not eligible for the National Register according to the NCDOT Historic Bridge Survey as it is not historically, architecturally, or technologically significant. The APE does not contain properties listed in the National Register of Historic Places. A finding of "no historic properties affected" will satisfy both GS 121-12(a) and Section 106 compliance requirements.

**Should any design elements, including detour improvements, of the project change, please notify NCDOT Historic Architecture as additional review may be necessary.**

## SUPPORT DOCUMENTATION

See attached: **Location map**

Signed:

  
\_\_\_\_\_  
Cultural Resources Specialist, NCDOT

  
\_\_\_\_\_  
Date