

Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

STIP Project No.	B-5653
WBS Element	45608.1.1
Federal Project No.	N/A

A. Project Description:

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 14 on NC 133 over Turkey Creek in Pender County. The project is located in southcentral Pender County in a coastal region of North Carolina. The community of Castle Hayne is located approximately two miles to the southeast of the bridge (see Figure 1). The replacement structure will be constructed in the same location as the existing bridge. It will be approximately 100 feet long providing a minimum 40-foot clear roadway width. The bridge will include two 12-foot lanes and 8-foot shoulders, which will accommodate 5-foot wide bicycle lanes. The bridge length is based on preliminary design information and is set by hydraulic requirements. Right of way acquisition and construction are scheduled for state fiscal years 2019 and 2020, respectively.

Project construction will extend approximately 620 feet from the north end of the new bridge and 580 feet from the south end of the new bridge. The approaches will provide two 12-foot lanes and 8-foot shoulders, which will accommodate 5-foot wide bicycle lanes. The roadway will be designed as a Minor Collector with a 60-mile per hour design speed.

B. Description of Need and Purpose:

The purpose of the proposed project is to replace a functionally obsolete bridge. Bridge No. 14 was built in 1920 and reconstructed in 1956. The bridge is 51 feet long with an approximately 28-foot clear roadway width. The bridge is a two-span structure that consists of a reinforced concrete slab with asphalt wearing surface. It has reinforced concrete abutments with timber piles and reinforced concrete interior pile bent with timber piles. NCDOT Bridge Management Unit records as of June 26, 2017 indicate Bridge No. 14 has a sufficiency rating of 58.67 out of a possible 100 for a new structure. Bridge No. 14 is considered functionally obsolete due to a deck geometry rating of 2 out of 9.

Components of the concrete substructure and superstructure have experienced increased degree of deterioration that can no longer be addressed by maintenance activities. NC 133 at Bridge No. 14 has an Average Annual Daily Traffic (AADT) volume of 7,400 vehicles per day (vpd) for the year 2020 and future traffic of 9,900 AADT for the year 2040. The substandard deck width and bridge railing is becoming increasingly unacceptable and replacement of the bridge will result in safer traffic operations.

C. Categorical Exclusion Action Classification:



TYPE I A

D. Proposed Improvements:

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 23 CFR 771.117(e)(1-6).

E. Special Project Information:

Costs:

The estimated 2019 costs are:

Right of Way - \$46,479

Utilities - \$147,000

Construction - \$3,150,000

Total - \$3,343,479

Anticipated Permit or Consultation Requirements:

The US Army Corps of Engineers (USACE) Section 404 Nationwide Permits (NWP) 23 and 33 will likely be applicable. The USACE holds the final discretion as to which permit will be required to authorize project construction. If a Section 404 permit is required, then a Section 401 Water Quality Certification (WQC) from the NC Department of Water Resources (NCDWR) will be needed.

Pender County is under the jurisdiction of the Coastal Area Management Act (CAMA). A CAMA permit from the North Carolina Division of Coastal Management (NCDCM) will be required for impacts to Turkey Creek.

Design Exceptions:

There are no anticipated design exceptions for this project.

Bridge Demolition:

Bridge No. 14 should be possible to remove with no resulting debris in the water based on standard demolition practices.

Alternatives Discussion:

No Build: The no build alternative would result in eventually closing the bridge as its condition continues to deteriorate.

Rehabilitation: Rehabilitation would only provide a temporary solution for this functionally obsolete bridge. The bridge was reconstructed in 1956 and is functionally obsolete which would constitute effectively replacing the bridge.

On-Site Detour (Preferred): A temporary on-site detour was chosen as the preferred alternative to replace Bridge No. 14. During construction of the new bridge, the roadway will be open to traffic using a two-lane temporary detour bridge just north of the existing bridge.

Off-Site Detour: Bridge No. 14 will be replaced on the existing alignment. An off-site detour was deemed not acceptable due to the closest detour being approximately nine miles long, and follows NC 133, Cheshire Road (SR 1426), NC 210, Casha Road (SR 1429), Railroad Street (SR 1422), Sawdust Road (SR 1419), and US 117. A nine-mile detour would have a

negative impact on school transportation to the Cape Fear Elementary and Middle Schools located within 1-mile of the bridge.

Bicycle and Pedestrian Accommodations:

The bridge will include two 12-foot lanes and 8-foot shoulders, which will accommodate 5-foot wide bicycle lanes. The 8-foot wide shoulders will also accommodate pedestrians from the surrounding residential subdivisions.

The Wilmington Urban Area Metropolitan Planning Organization (WMPO) requested the inclusion of bicycle and pedestrian facilities in the design of the new bridge. The NCDOT Division of Bicycle and Pedestrian Transportation noted that there are identified needs for bicycle facilities on this corridor of NC-133 according to the WMPO Comprehensive Transportation Plan (CTP). There are also proposals for US 117 in the WMPO and Pender County CTP's. These CTP's, and their connections to Wilmington's bicycle plan, create a full network proposal for the region and our Division supports the request for the bicycle improvement on the bridge replacement to advance that network build. Standard 5-foot bicycle lanes are recommended. The width accommodating a future bicycle lane may be installed / striped in the short term as a paved shoulder.

Public Involvement:

A landowner notification letter was mailed on February 3, 2017, to property owners within the project study area. The letter informed citizens of field personnel that would be conducting surveys for the project. There were no public comments in response to these letters.

Other Agency Comments:

Pender County Schools noted that the project would have a high impact on the county school buses if the bridge were to be closed during construction. The Pender County Schools Transportation Director reported that 37 buses use Bridge No. 14, making 148 trips each school day. Two schools on a shared campus are located on NC 133, one-half mile north of Bridge No. 14.

The WMPO requested the inclusion of bicycle and pedestrian facilities in the design of the new bridge. The WMPO stated that Bridge No. 14 is located along a route that serves as a collector for multiple residential subdivisions in an area that is experiencing moderate residential development. It is also located within 1-mile of Cape Fear Elementary and Middle Schools and will need to accommodate school children walking and biking from the surrounding residential subdivisions. The need for bicycle and pedestrian facilities along this corridor is also in the WMPO Comprehensive Transportation adopted on January 27, 2016.

F. Project Impact Criteria Checklists:

<u>Type I & II - Ground Disturbing Actions</u>				
<u>FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA</u>				
If any of questions 1-7 are marked "yes" then the CE will require FHWA approval.			Yes	No
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"/>	
If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.				
<u>Other Considerations</u>			Yes	No
8	Does the project result in a finding of "may affect not likely to adversely affect" for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9	Is the project located in anadromous fish spawning waters?	<input checked="" type="checkbox"/>	<input 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"/>	
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Other Considerations (continued)</u>		Yes	No
15	Does the project involve hazardous materials and/or 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 checked="" type="checkbox"/>	<input 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), 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 checked="" type="checkbox"/>	<input 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

Response to Question 1:

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), 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 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 five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Pender County, where TIP B-5653 is located.

Response to Question 9: According to the North Carolina Wildlife Resources Commission (NCWRC), Turkey Creek is designated as an Anadromous Fish Spawning Area.

Response to Question 16: The bridge is a two-span structure with a pier placed in the creek. The project will decrease the base floodplain elevation of Turkey Creek.

Response to Question 30: A preliminary screening of farmland conversion impacts was completed and a total score of 62 out of 160 points was calculated for the project site, which exceeds the 60-point threshold established by Natural Resources Conservation Service.

H. Project Commitments

Pender County
Bridge No. 14 over Turkey Creek on NC 133
WBS No. 45608.1.1.
TIP No. B-5653

Hydraulic Unit – FEMA Coordination

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine status of the project with regard to the 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).

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 Division 3 – Public Outreach

Spanish-speaking populations requiring language assistance are located within the project study area. The NCDOT Project Planning Engineer should consult with NCDOT Public Involvement to determine appropriate measures for public outreach during construction to satisfy the requirements of Executive Order 12898.

NCDOT Division 3 – Construction Moratorium

NC Wildlife Resources Commission's standard stream crossing guidelines for anadromous fish passage should be followed. This includes an in-water work moratorium for Turkey Creek from February 15th to June 30th of any year.

NCDOT Division 3 – Farmland

Coordination with the Natural Resources Conservation Service (NRCS) should be conducted for farmland impacts in accordance with the instructions shown on the Farmland Impact Rating Form (www.nrcs.usda.gov) prior to let.

Community Coordination

NCDOT will contact Pender County Schools at (910) 259-2187 at least one month prior to construction to coordinate construction activities with school transportation schedules.

Pender County Emergency Services will be contacted at (910) 259-0891 at least one month prior to construction to make the necessary temporary reassignments to primary response units.

I. Categorical Exclusion Approval

STIP Project No.	<u>B-5653</u>
WBS Element	<u>45608.1.1</u>
Federal Project No.	<u>N/A</u>

Prepared By:

8/23/2019

Date

DocuSigned by:

Michael Stafford

Michael Stafford, Transportation Planner, CDM Smith

Prepared For:

North Carolina Department of Transportation

Reviewed By:

8/23/2019

Date

DocuSigned by:

Phillip Harris

Philip S. Harris III, PE, CPM- Environmental Analysis Unit Head
North Carolina Department of Transportation



Approved

If all of the threshold questions (1 through 7) of Section F are answered "no," NCDOT approves this Categorical Exclusion.



Certified

If any of the threshold questions (1 through 7) of Section F are answered "yes," NCDOT certifies this Categorical Exclusion.

8/23/2019

Date

DocuSigned by:

Kevin Fischer

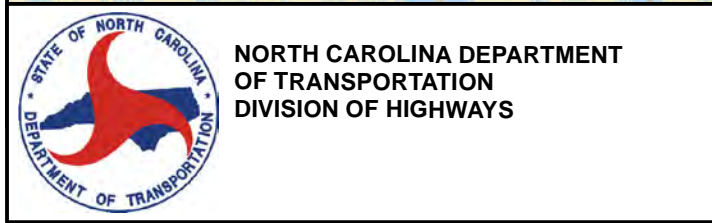
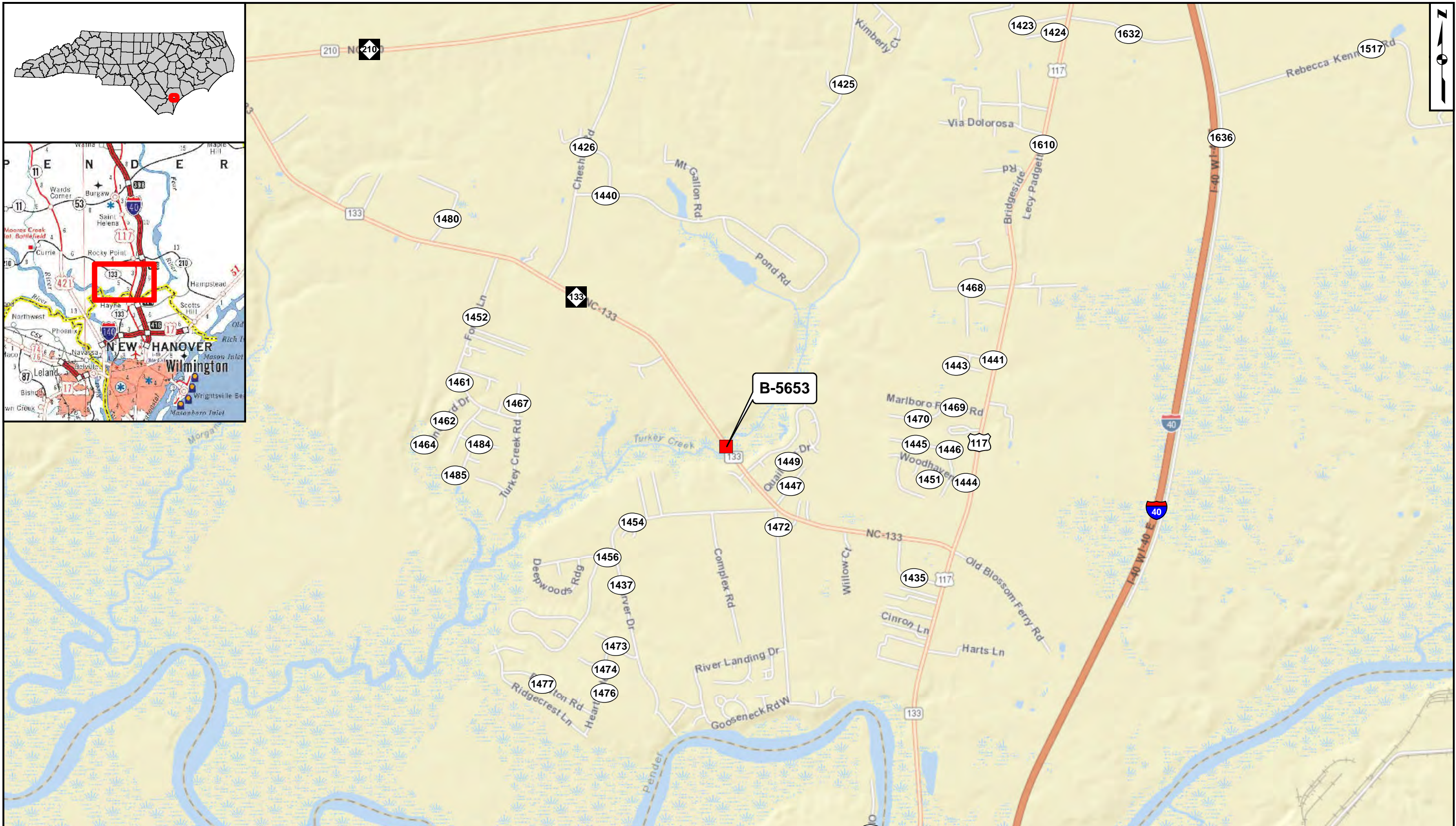
Kevin Fischer, PE, Structures Management Unit
North Carolina Department of Transportation

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

Date

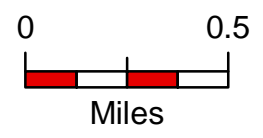
Not Applicable

John F. Sullivan, III, PE, Division Administrator
Federal Highway Administration



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS

VICINITY MAP
Replace Bridge No. 14 on NC 133
over Turkey Creek in Pender County
 TIP Project B-5653



Div: 3	TIP# B-5653
Date: DECEMBER 2015	

Figure
1

PROJECT REFERENCE NO. <i>B-5653</i>	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
CDM Smith Inc. 3400 Greenwood Avenue Suite 400 Raleigh, NC 27612-3228 NC COA No. P-1255	SUNGATE DESIGN GROUP, P.A. 110 JONES FARMWAY ROAD RALEIGH, NORTH CAROLINA 27609 NC COA No. C-0880
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

B-5653, BRIDGE NO. 14 PENDER COUNTY REPLACE IN PLACE ONSITE DETOUR

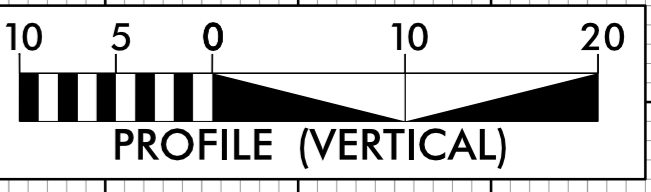
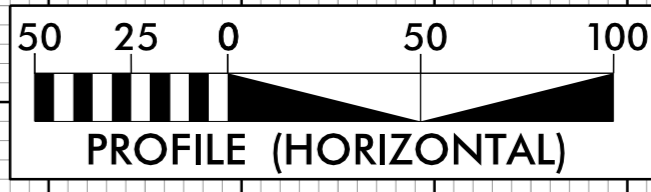
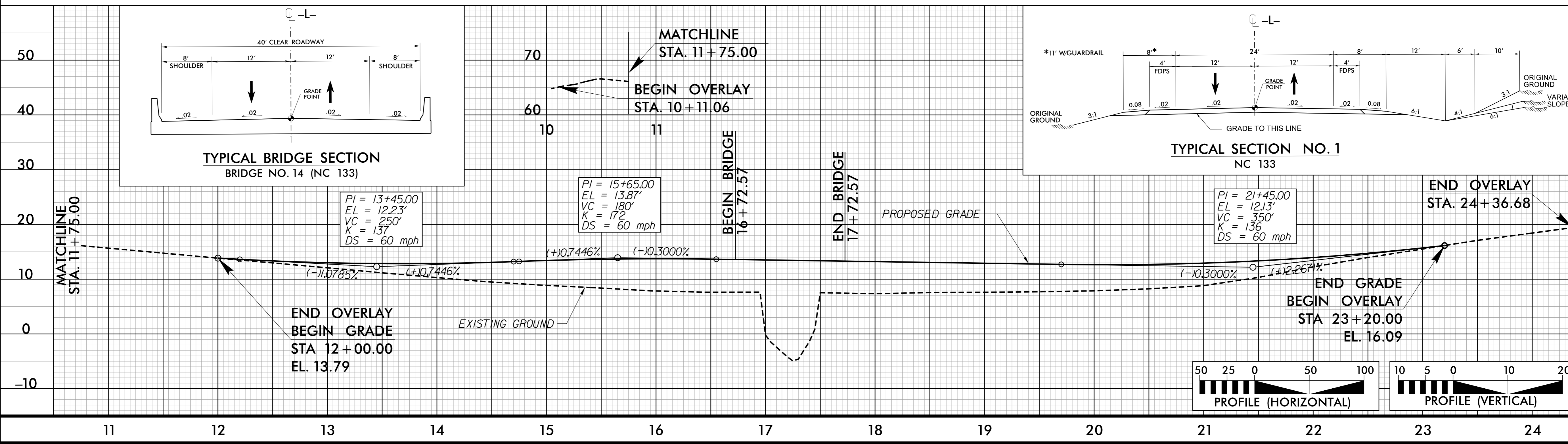
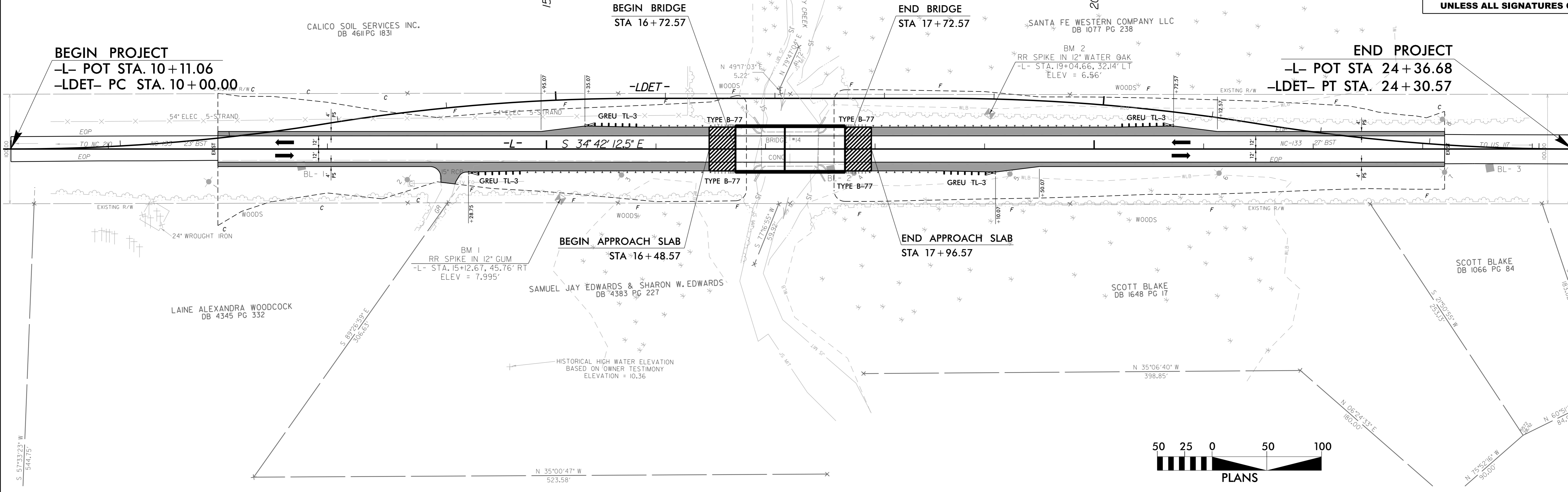
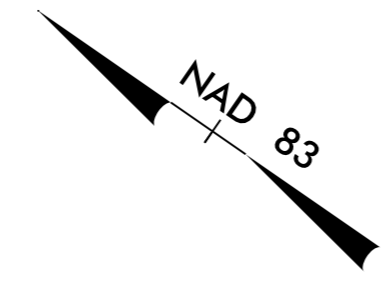
DESIGN DATA

DESIGN STANDARDS = REGIONAL
 DESIGN SPEED = 60 MPH
 ADT 2020 = 7,400
 2040 = 9,900
 DHV = 9%
 D = 65%
 T = 7%

MIN. RADIUS = 1330'
 MAX. GRADE = 5%
 MIN. K SAG = 136
 MIN. K CREST = 151
 MAX. S.E. = 6%
 TERRAIN = LEVEL
 DESIGN EXCEPTION = N/A

* TTST=1% DUAL=6%
 FUNC CLASS =
 MINOR RURAL COLLECTOR

8/17/19



REVISIONS

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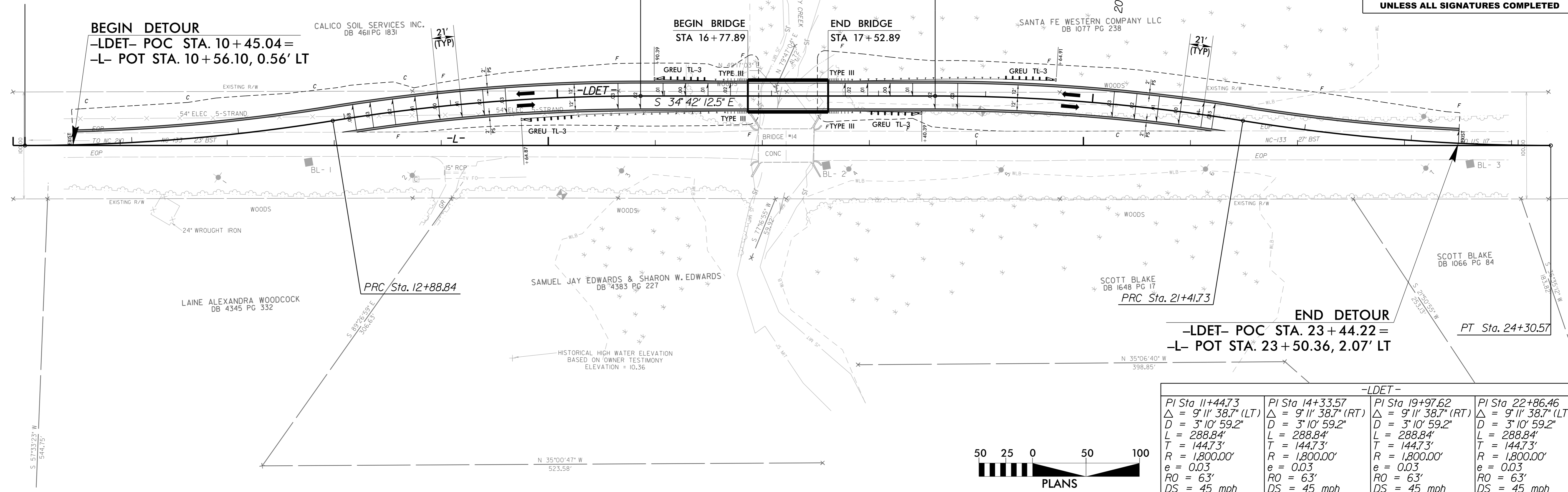
PROJECT REFERENCE NO. B-5653		SHEET NO. 5	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
CDM Smith Inc. 3400 Greenwood Avenue Suite 400 Raleigh, NC 27612-3228 NC COA No. P-1255		SUNGATE DESIGN GROUP, P.A. 115 JONES FARMWAY ROAD RALEIGH, NORTH CAROLINA 27610 NC COA No. C-0880	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

B-5653, BRIDGE NO. 14 PENDER COUNTY REPLACE IN PLACE ONSITE DETOUR

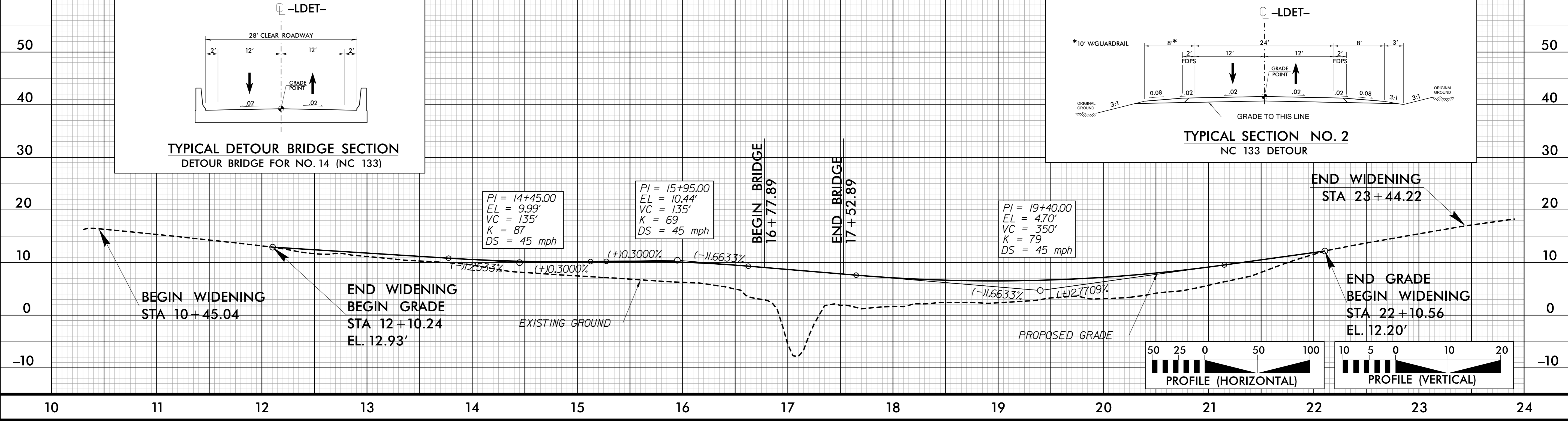
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 DESIGN SPEED = 45 MPH
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 2040 = N/A
 DHV = 9%
 D = 65%
 T = 7%
 * TTST=1% DUAL=6%
 FUNC CLASS =
 MINOR RURAL COLLECTOR

MIN. RADIUS = 711'
 MAX. GRADE = 9%
 MIN. K SAG = 61
 MIN. K CREST = 61
 MAX. S.E. = 4%
 TERRAIN = LEVEL
 DESIGN EXCEPTION = N/A



-LDET-			
PI Sta 11+44.73 Δ = 9' 11" 38.7" (LT) D = 3' 10" 59.2" L = 288.84' T = 144.73' R = 1,800.00' e = 0.03 RO = 63' DS = 45 mph	PI Sta 14+33.57 Δ = 9' 11" 38.7" (RT) D = 3' 10" 59.2" L = 288.84' T = 144.73' R = 1,800.00' e = 0.03 RO = 63' DS = 45 mph	PI Sta 19+97.62 Δ = 9' 11" 38.7" (RT) D = 3' 10" 59.2" L = 288.84' T = 144.73' R = 1,800.00' e = 0.03 RO = 63' DS = 45 mph	PI Sta 22+86.46 Δ = 9' 11" 38.7" (LT) D = 3' 10" 59.2" L = 288.84' T = 144.73' R = 1,800.00' e = 0.03 RO = 63' DS = 45 mph



REVISIONS

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DATE: 11/10/2010 10:00 AM

16-01-0016



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

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



PROJECT INFORMATION

Project No: **B-5653, Br No 14** *County:* **Pender**
WBS No: **45608.1.1** *Document:* **C E / M C C**
F.A. No: *Funding:* State Federal

Federal Permit Required? Yes No *Permit Type:* **usace**

Project Description: NCDOT proposes to replace Bridge No. 14 on US 133 over Turkey Creek in Pender County near the Rocky Point community. The proposed replacement will be in place on the same alignment, however an onsite temporary detour is proposed immediately east of the existing bridge during construction. Based on recent design plans, the project length is about 0.265 miles (1400 feet). The ROW will be expanded to a width of 100 feet from 60 feet (about 25 feet on the north side of SR 1403, 15 feet south side). The construction generally will maintain the existing ROW on the west side of US 133, with little exception for a cut on the north side of the project. The detour requires temporary expansion into an agricultural field east of the roadway. For purposes of this review, the archaeological Area of Potential Effects (APE) is the entire length of the project and will include cut and fill lines, and any necessary construction easements. This is a state funded undertaking that will require USACE permitting, therefore Section 106 of the National Historic Preservation Act applies for archaeological review.

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

The bridge to be replaced is in a rural setting. USGS mapping (Rocky Point) and aerial photography was studied (see Figures 1 and 2). Bing streetview tools were available at this location and used, showing wooded, swampy terrain near the bridge and to the south. The north half begins to rise, with driveways, embankments and cut/fill areas within the APE. A large, industrial agricultural field occupies the northeastern quadrant where a portion of the temporary on site detour will be constructed. This area appears to have plowing and disking activities that create deep furrows as can often be seen in aerial photography. Because of the deeper disturbances to the soil and potential archaeological context, that area is considered to have a low probability for intact, significant archaeological resources. The southern APE crosses low, swampy terrain from the bridge to its endpoint where the roadbed is built up around the surrounding lowlands. There are no structures adjacent to the APE.

While no cemeteries are present on USGS mapping or internal GIS resources (data layer created by NCDOT archaeologist Paul J. Mohler), a cemetery is present immediately adjacent to the northwestern APE. Included on design mapping, the Benjamin C. Moore cemetery is characterized by seven marked graves within a low iron fence (also on the design mapping). During a reconnaissance in May 2019, grave markers appeared only within the boundary of the iron fence. There were no other obvious burials, depressions or stones observed other than the formally marked remains noted and described as the Benjamin Moore cemetery on Find A Grave and the 1972 Pender County North Carolina Gravestone Records Volume III (Leora Hiatt McEachern). The 1840-1850s cemetery is in average condition for its age and context. Flora was not strongly indicative of a cemetery as there was no periwinkle, daffodils or cedars present. A short distance outside of the APE, the iron fence is about 20 feet west from the top of the US 133 embankment near the existing and held ROW line. Project design proposes a new cut south of the cemetery about 50 feet away to taper in with the landform as it lowers towards the creek and partially overlaps a previous large

16-01-0016

cut area that is very clear on LIDAR mapping. The cemetery will be added to an inventory of known cemeteries. See Figures 3 and 4 for details of the avoidance.

Further west away from the APE, several formal markers are arranged in a shallow arch following the tree line of a clearing. It is not known if these markers, which generally face west rather than the traditional east facing, represent actual burials, memorials for cremations or have another explanation. Known as the Fink cemetery, the death dates range from 1972 to 2006 on ten markers. These stones will not be affected by the undertaking. The cemetery will be added to an inventory of known cemeteries.

No recorded archaeological sites are present at or within the APE according to research conducted at the Office of State Archaeology. Few systematic surveys have been conducted in the nearby area though one archaeological review for a cell tower occurred which overlaps the southern APE and did not result and recommendation for archaeological survey (ER CT 13-1084). Much further to the south, a series of archaeological sites are present on the north bank of the Cape Fear River, but these are on different topographic settings and strongly associated with a large river.

A review of historic maps was conducted. Little of interest was noted at the project APE location. The road appears in a similar location and alignment in 1920s soils mapping of the county. No structures were represented at that time.

Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

The bridge replacement for a small existing structure will be constructed in place on the same alignment using an on-site detour. New impacts to undisturbed soils are minor on this replace in place project over Gideon Swamp, save a little of 300 feet of expanded ROW for fill at the margins of the bridge. Much of the APE has already been modified by the construction associated with the previous bridge and roadway. The swamp through which the project crosses is considered undesirable terrain for habitation and is not favorable for the presence of intact, significant archaeological sites where impacts are likely to be the greatest. There are no known archaeological resources present within the APE. For archaeological review, this federally permitted undertaking should be considered compliant with Section 106.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Photocopy of County Survey Notes Other:

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED



NCDOT ARCHAEOLOGIST

5/17/2019

Date

16-01-0016



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-5653	County:	Pender
WBS No.:	45608.1.1	Document Type:	SMC
Fed. Aid No:		Funding:	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal
Federal Permit(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Permit Type(s):	NWP
<u>Project Description:</u> Replace Bridge No. 14 on NC 133 over Turkey Creek			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<u>Description of review activities, results, and conclusions:</u> Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on January 13, 2016. Based on this review there are no NR, DE, LL, SL, or SS in the Area of Potential Effects (APE). The Pender County tax data was utilized to check for structures greater than 50 years of age. There is one standing structures in the APE over 50 years of age. Located at 1485 Hwy 133, at the northern-most edge of the APE, the house was built in 1940. Google StreetView indicates that the structure does not possess the architectural integrity or distinction to meet the criteria for National Register listing either individually or as a historic district. No survey is required.
<u>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:</u> Using HPO GIS website and county tax data provides reliable information regarding the structures in the APE. These combined utilities 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

Shelby Reap

NCDOT Architectural Historian

Jan 13, 2016

Date