

## Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

Project No.	BR-0114
WBS Element	48823.1.1
Federal Project No.	

**A. Project Description:**

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 480165 on SR 1601 (Branton Road) over Rocky Creek in Iredell County (Refer to Figure 1).

Built in 1965, Bridge No. 480165 has two 10-foot to 11-foot travel lanes, is approximately 90 feet in length, with timber deck on I-beams construction. Bridge No. 480165 has a posted Single Vehicle weight limit of 21 tons and a Truck Tractor Semitrailer weight limit of 24 tons. The existing right of way along Branton Road is 22 feet. The project is scheduled for Right of Way (ROW) in August 2019 and Let in March 2020. Minor ROW acquisition is anticipated.

The project proposes replacing the existing two-lane bridge with an approximately 30-foot wide structure with two 10-foot travel lanes with 3-foot 11-inch paved shoulders. The proposed bridge would be approximately 102 feet in length and the proposed right of way varies from 40 feet to 90 feet. The total length of the project is approximately 740 feet. The proposed bridge will not be posted and will be designed to meet the legal load rating. The bridge replacement would be constructed in place using an off-site detour and includes structural and geometric improvements. The roadway is classified as a Local Route with a 55-mile per hour design speed with a sag vertical curve (K value) design exception that will result in a speed limit reduction in the area of the bridge.

**B. Description of Need and Purpose:**

The replacement of Bridge No. 480165 is part of the *Growing Rural Economy and Agriculture through Transportation and Technology Enhancement or Replacement in North Carolina (GREATTER-NC)* Project under the United States Department of Transportation’s 2018 Better Utilizing Investments to Leverage Development (BUILD) Grant program. The purpose of the grant and this bridge replacement project is to provide transportation infrastructure to support economic development and improve physical and digital connectivity in rural communities in North Carolina. The posted weight restriction on Bridge No. 460165 prohibits large or heavy vehicles, typically used in transporting agricultural and manufactured products, from using the bridge. Vehicles above the posted weight must detour approximately 3.75 miles to avoid the bridge. Replacing the existing bridge will eliminate posted weight limits by providing a safe crossing for all legal loads and will make accommodations for broadband installation in order to support economic competitiveness.

NCDOT Structures Management Unit records indicate Bridge No. 480165 has a sufficiency

rating of 69.92 out of a possible 100 and has a posted weight limit. The proposed project will be designed to meet the legal load rating.

**C. Categorical Exclusion Action Classification:**

- TYPE I A
- TYPE I B
- TYPE II A
- TYPE II B

**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:**

**Anticipated Permit or Consultation Requirements:** As a result, a Nationwide Permit (NWP) No. 3- Maintenance, NWP No.14- Linear Transportation Projects, and/or NWP No. 23- Approved Categorical Exclusion will likely be applicable. The US Army Corps of Engineers (USACE) holds the final discretion as to what permit will be required to authorize project construction. A Section 404 permit is required and a Section 401 Water Quality Certification (WQC) from the NC Department of Environmental Quality- Division of Water Resources (NC DEQ- DWR) is needed.

**Floodplain:** Rocky Creek, which crosses under Bridge No. 480165, is in a FEMA Zone AE Floodplain. The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) 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 is noted in the greensheet/project commitments.

**Historic and Archaeological Resources:** In compliance with NCDOT'S Programmatic Agreement with the State Historic Preservation office, a *No National Register of Historic Places Eligible or Listed Archaeological Sites Present Form* for Archaeological Resources was completed by NCDOT on 03/11/2019; and on 10/29/2018, NCDOT completed a *No Survey Required Form* for Historic Architecture and Landscapes.

**Agricultural Land Use:** Based on the site visit, aerial imagery, and local planner input, it appears there is agricultural land use surrounding the project study area, primarily hay production. Continued coordination should occur through right of way with the owners of the agricultural lands that are temporarily impacted by the off-site detour. This is noted in the greensheet/project commitments.

**Environmental Commitments:** Greensheet/Project commitments are located at the end of the checklist.

**Estimated Costs (Pending):** The estimated costs are as follows:

Utility*	\$	60,000
R/W**	\$	30,000
Const.*	\$	1,500,000
<b>Total</b>	<b>\$</b>	<b>1,590,000</b>

Source:

\* NCDOT Connect GREATER Rural Bridge Program- Bridges Budget Sources and Uses, Accessed June 3, 2019.

<https://connect.ncdot.gov/resources/GREATER-Rural-Bridge-Program/Documents/05%20NCDOT%20Bridges%20Budget%20Sources%20and%20Uses.xlsx>

\*\* (NCDOT Cost Estimate and EIS Relocation Report, June 2019)

### **Estimated Traffic:**

Average Daily Traffic (ADT) 2016	430 vehicles per day (vpd)
ADT 2040	960 vpd

**Crashes:** NCDOT's Safety Planning Group completed a planning level query of bridge crash counts from 1/1/2013 to 12/31/2017. Over the five-year study period, zero crashes were reported within a 500 feet distance of Bridge No. 480165 on Branton Road.

**Pedestrian and Bicycle Accommodations:** There are no existing bike and pedestrian facilities on Bridge No. 480165 along Branton Road. However, NC 2 - Mountains to Sea bicycle route crosses the project study area along SR 1598 (Linney's Mill Road). NC 2 - Mountains to Sea bicycle route bisects the state west to east, starting in Murphy, NC and ending in Manteo, NC.

**Design Exceptions:** A design exception is required for the sag vertical curve (K value) due to the existing sag at the bridge and the steepness of the roadway between the bridge and Linney's Mill Road. This will result in a speed limit reduction in the area of the bridge.

### **Alternative Analysis:**

**No Build –** The no build alternative would not meet the requirements of the GREATER-NC Project, and thus is not a viable option.

**Rehabilitation –** Rehabilitation would not meet the requirements of the GREATER-NC Project, and thus is not a viable option.

**Onsite Detour –** An offsite detour was determined acceptable.

**New Alignment –** A new alignment option for Branton Road is not preferred due to the utilities on the eastern realignment option, and the large cut that would be required in the rocky hillside for the western realignment option.

**Replace Bridge in Place with Offsite Detour (Preferred Alternative) –** The detour route is approximately 3.75 miles long and follows SR 1447 (Pilgrim Church Road), SR 1600/SR 1449 (Fox Mountain Road), SR 1595 (Coolbrook Road), and SR 1598 (Linney's Mill Road). NCDOT Project No. BR-0115 proposes the replacement of Bridge No. 480166 on SR 1595 (Coolbrook

Road) over Rocky Creek and is located along the detour route. This is a posted bridge with a Single Vehicle weight limit of 24 tons and a Truck Tractor Semitrailer weight limit of 30 tons. This would require constructing BR-0115 first since it is on the detour route and is posted. This is noted in the greensheet/project commitments.

**Agency Comments:** Input forms were sent to the Iredell County EMS Director, Iredell County Planning and Development Planning Director, and the Iredell-Statesville Schools Director of Transportation in February of 2019. At the request of the Iredell County EMS Director, additional EMS input forms were sent to Iredell County Rescue Squad Chief, Alexander County Emergency Services, and the Central Fire Department in May of 2019.

The Iredell-Statesville Schools Director of Transportation did not note any school buses crossing the bridge daily and stated there would be no impact to the Iredell-Statesville School System if the bridge was closed for up to a year. A low level of impact was noted from the Iredell County Planning and Development Planning Director if the bridge was closed for up to a year. The Planning Director also described the area as a rural farming community. The Iredell County EMS Director stated a high level of impact if the bridge was closed for up to a year since it would create significant difficulty in response to the residents beyond the bridge and might require EMS response from Alexander County. Coordination between Iredell County EMS, Alexander County EMS, and NCDOT should occur, as mutual aid may be required during construction. This is noted in the greensheet/project commitments.

Agency Start of Study notifications were sent to the **US Army Corps of Engineers (USACE)**, **US Fish and Wildlife Service (USFWS)**, **NC Department of Environmental Quality-Division of Water Resources (NC DEQ- DWR)**, **NC Wildlife Resources Commission (NC WRC)**, **Federal Highway Administration (FHWA)**, and **NC Division of Parks and Recreation (NC DPR)** in May of 2019. Start of Study notifications were also sent to NCDOT Division 12 and NCDOT Preconstruction contacts in May 2019.

The **US Fish and Wildlife Service (USFWS)** provided general comments regarding general recommendations for replacing structures that cross rivers and streams, erosion and sediment control, Northern Long-eared Bats (NLEB), and migratory birds. The project specific comments provided by USFWS include surveying for *Hexastylis naniflora* (Dwarf-flowered heartleaf) and recommend winter tree clearing for NLEB.

**Response:** A Natural Resources Technical Report (NRTR) was completed in May of 2019 for this project and provided a biological conclusion of “**No Effect**” for *Hexastylis naniflora* (Dwarf-flowered heartleaf) based on surveys performed on April 2, 2019 by Three Oaks Engineering. A Section 7 Survey Results for the Northern Long-eared Bat Memorandum was provided by NCDOT Biological Surveys Group on June 3, 2019 that covers the following conservation commitments for NCDOT:

- 1) No alterations of a known hibernacula entrance or interior environment if it impairs an essential behavioral pattern, including sheltering northern long-eared bats (January 1 through December 31);
- 2) No tree removal within a 0.25-mile radius of a known hibernacula (January 1 through December 31); and
- 3) No cutting or destroying a known, occupied maternity roost tree, or any other trees within a 150-foot radius from the known, occupied maternity tree during the period from June 1 through and including July 31.

The **US Army Corps of Engineers and NC Division of Parks and Recreation** had no specific concerns for the project. No responses were received from the **NC Department of Environmental Quality- Division of Water Resources** and **NC Wildlife Resources Commission**.

**Public Involvement:** A landowner notification letter was sent on 2/7/2019 to all property owners affected directly by this project to inform them of representatives being present on their property. The letter indicated the following, "Please note that if the U.S. Army Corps of Engineers has already issued a Jurisdictional Determination on your property confirming the presence of streams and/or wetlands, or if you have general questions or comments about the project, contact David Stutts at [dstutts@ncdot.gov](mailto:dstutts@ncdot.gov) or (919) 707-6442. No comments have been received to date.

Prior to ROW, newsletters will be sent out by NCDOT to the properties affected by the project to inform them of the project and the offsite detour. This is noted in the greensheet/project commitments.

#### **F. Project Impact Criteria Checklists:**

<u>Type I &amp; 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 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"/>
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)? <b>Not Applicable</b>	<input type="checkbox"/>	<input 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 16:** 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.

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).

#### **Response to Question 30 - Prime and Important Farmland Soils:**

Prime and Important Farmland Soils as defined by the Farmland Protection Policy Act (FPPA) are located within the project study area. A project footprint for the Prime and Important Farmland Soils assessment was created to include a 25-foot buffer from the slope stakes. The Prime and Important Farmland Soil found within the footprint are designated as all areas are Farmland of Statewide Importance (BnD) and Prime Farmland if drained and either protected from flooding or not frequently flooded during the growing season (CsA).

A Natural Resource Conservation Service (NRCS) Farmland Conversion Impact Rating has been completed for this project and a total score of 48 out of 160 points was calculated for the BR-0114 project site. Since the total of the points assigned in part VI of the NRCS Farmlands Conversion Form AD-1006 for BR-0114 is less than 60 and therefore the total points of the NRCS Farmlands Conversion Form AD-1006 is less than 160, no mitigation for farmland loss is required for the project in accordance with FPPA.

## H. Project Commitments

**Iredell County**  
**Bridge No. 480165 on SR 1601 (Branton Road) over Rocky Creek**  
**WBS No. 48823.1.1**  
**Project No. BR-0114**

### **NCDOT Hydraulics 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).

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 Structures Management Unit Northern Long-Eared Bat (NLEB)**

NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule, codified at 50 C.F.R. § 17.40(o) and effective February 16, 2016. NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

### **NCDOT Structures Management Unit Public Involvement Newsletter**

Prior to ROW, newsletters will be sent out on behalf of NCDOT to the properties affected by the project to inform them of the project and the offsite detour.

### **NCDOT Division 12 Off-site Detour**

The detour route is approximately 3.75 miles long and follows SR 1447 (Pilgrim Church Road), SR 1600/SR 1449 (Fox Mountain Road), SR 1595 (Coolbrook Road), and SR 1598 (Linney's Mill Road). Bridge No. 480166, which is part of project No. BR-0115, is located along the detour route on SR 1595 (Coolbrook) and is a posted bridge. BR-0115 should be constructed prior to BR-0114.

### **NCDOT Division 12 Emergency Management Services**

BR-0114 is located near the Iredell and Alexander county line and the off-site detour route crosses in to Alexander County. NCDOT should coordinate with Iredell County EMS (Phone No. (704) 878-3025) and Alexander County EMS (Phone No. (828) 632-9336), as mutual aid may be required during construction.



**NCDOT Division 12**  
**Agricultural Land Use**

Continued coordination should occur through right of way with the owners of the agricultural lands that are temporarily impacted by the off-site detour.

**I. Categorical Exclusion Approval**

Project No. BR-0114

WBS Element 48823.1.1

Federal Project No. \_\_\_\_\_

**Prepared By:**

7/10/2019

Date

DocuSigned by:

*Elizabeth Scott*

Elizabeth Scott, EI, STV Engineers Inc.

**Prepared For:**

North Carolina Department of Transportation

**Reviewed By:**

7/22/2019

Date

DocuSigned by:

*Phil Harris*

Philip S. Harris, III, PE, Environmental Analysis Unit  
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.

7/30/2019

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

09/08/19

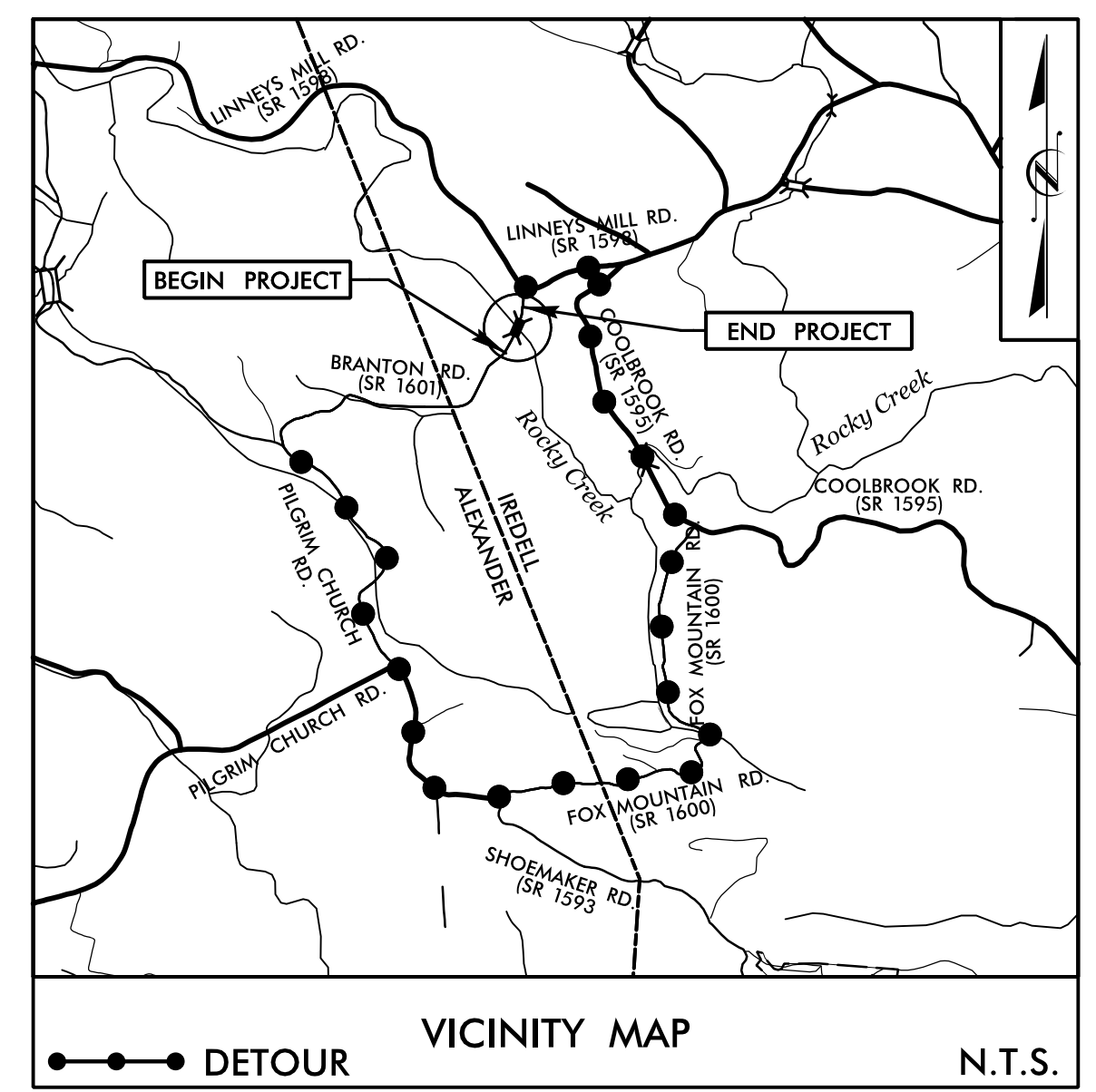
See Sheet 1A For Index of Sheets  
See Sheet 1B For Standard Symbology Sheet

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**IREDELL COUNTY**

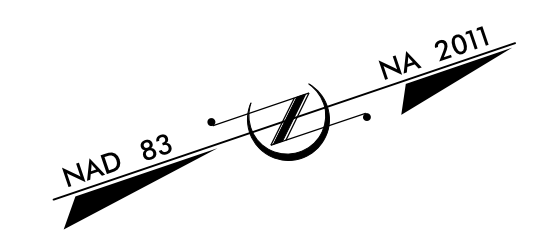
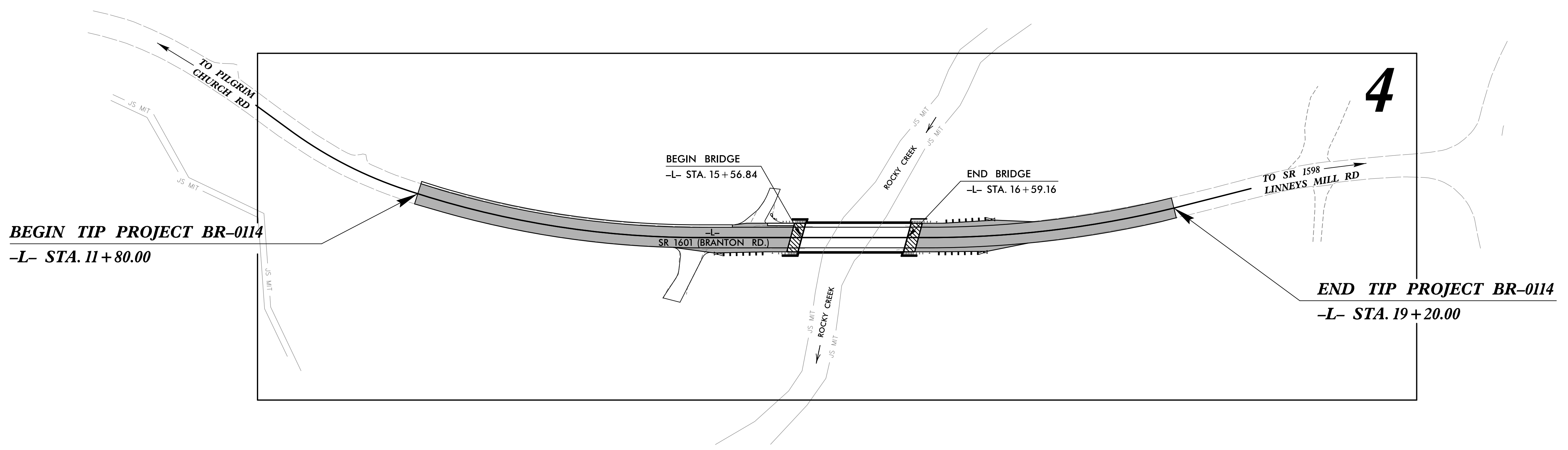
**LOCATION: BRIDGE #165 OVER ROCKY CREEK  
ON SR 1601 (BRANTON RD)**  
**TYPE OF WORK: GRADING, DRAINAGE, PAVING, & STRUCTURE**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	<b>BR-0114</b>	<b>1</b>	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67114.1.1		P.E.	



PRELIMINARY PLANS

**TIP PROJECT: BR-0114**



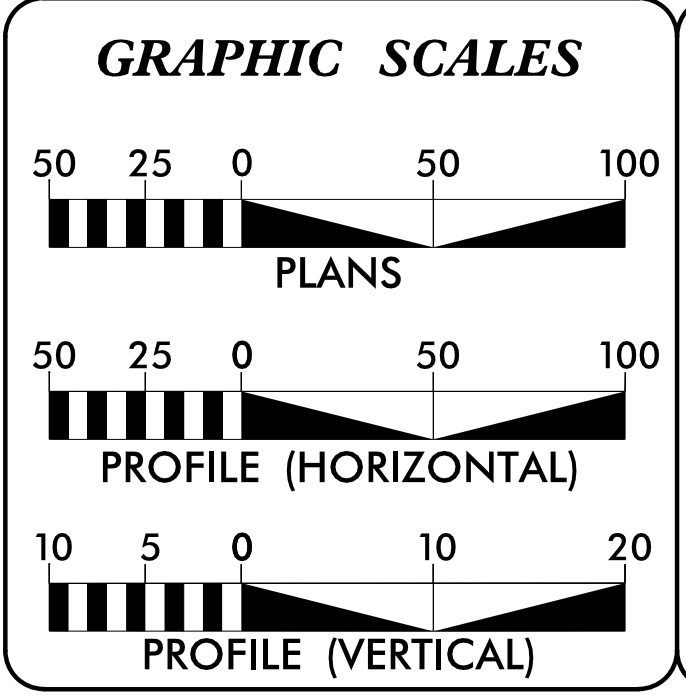
DESIGN EXCEPTION REQUIRED FOR K VALUE & NIGHTTIME VERTICAL SSD.

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD \_\_\_\_\_.

INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**CONTRACT:**



**DESIGN DATA**

ADT 2014 =	430
ADT 2040 =	N / A
DHV =	N / A
D =	N / A
T =	N / A
V =	55 MPH

**FUNC. CLASSIFICATION:**  
LOCAL  
SUB-REGIONAL TIER

**PROJECT LENGTH**

LENGTH OF ROADWAY TIP PROJECT BR-0114 =	0.121 MILES
LENGTH OF STRUCTURE TIP PROJECT BR-0114 =	0.019 MILES
TOTAL LENGTH OF TIP PROJECT BR-0114 =	0.140 MILES

NCDOT CONTACT: **TIERRE PETERSON, PE**  
Structures Management Unit

PLANS PREPARED FOR THE NCDOT BY:

**STV** 100 Years  
STV Engineers, Inc.  
900 West Trade St., Suite 715  
Charlotte, NC 28202  
NC License Number F-0991

2018 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: AUGUST 1, 2019	<b>NIKKI T. HONEYCUTT, PE</b> PROJECT ENGINEER
LETTING DATE: APRIL 21, 2020	<b>BHUPESH R. JOSHI, EIT</b> PROJECT DESIGNER

**HYDRAULICS ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

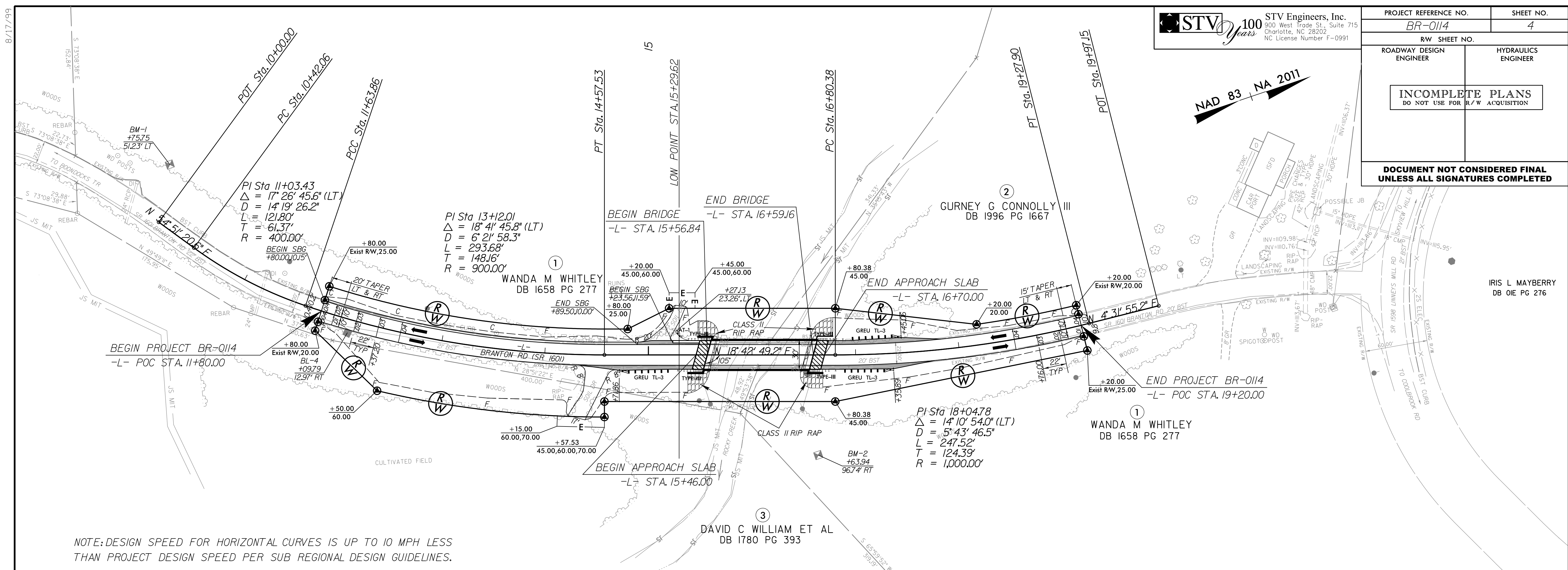
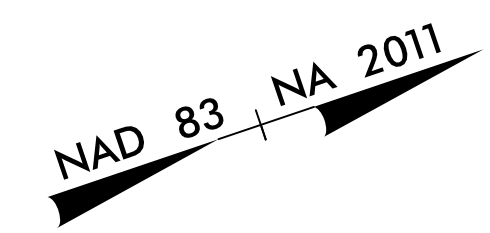
**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

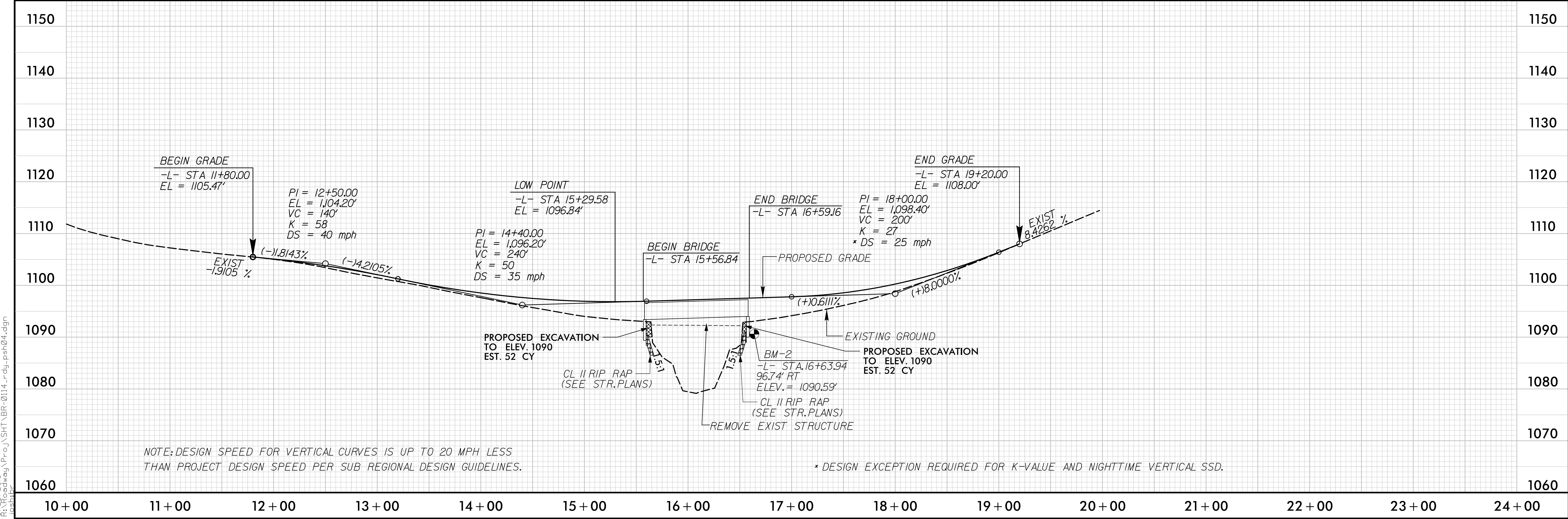


6/25/2019 R:\Roadway\Proj\SHIT\BR-0114\_rdy\_psh01\_tsh.dgn joshibr

PROJECT REFERENCE NO. <b>BR-0114</b>	SHEET NO. <b>4</b>
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED	



NOTE: DESIGN SPEED FOR HORIZONTAL CURVES IS UP TO 10 MPH LESS THAN PROJECT DESIGN SPEED PER SUB REGIONAL DESIGN GUIDELINES.











NOTE: DESIGN SPEED FOR VERTICAL CURVES IS UP TO 20 MPH LESS THAN PROJECT DESIGN SPEED PER SUB REGIONAL DESIGN GUIDELINES.

8/17/19  
 S:\Projects\2019\Projects\BR-0114\rdy\_psh04.dgn

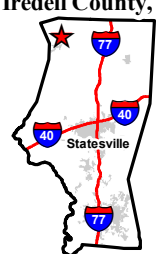




**Legend**

-  Bridge No. 165 over Rocky Creek
-  Project Study Area
-  Stream
-  NWI Wetland
-  Floodplain
-  Parcel
-  NCDOT Bike Route
-  Church
-  Historic Site

**Iredell County, NC**



Sources: Iredell County GIS Department, NC One Map, NC HPO GIS Portal, & Google Earth

**BR-0114**  
**Bridge No. 165**  
**Replacement Project**  
**over Rocky Creek**  
**Iredell County**  
**NCDOT Division 12**

---

May 2019

---

**Figure 1**



**NO NATIONAL REGISTER OF HISTORIC PLACES  
ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES  
PRESENT 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

<i>Project No:</i>	<b>BR-0114 (STRUCTURE 480165)</b>	<i>County:</i>	<b>Iredell</b>
<i>WBS No:</i>	<b>67114.1.1</b>	<i>Document:</i>	<b>Federal CE</b>
<i>F.A. No:</i>	<b>N/A</b>	<i>Funding:</i>	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal

*Federal Permit Required?*      Yes      No     *Permit Type:*     **USACE (not specified)**

**Project Description:** NCDOT's Division 12 proposes to replace Bridge No. 165 on Branton Road (SR 1601) over Rocky Creek in Iredell County. Bridge No. 165 was built in 1965 and has been selected to be replaced. Since there is no planned change to the existing cross-section, Bridge No. 165 will presumably be replaced in place. Since Preliminary Design Plans have not been developed, a Study Area has been generated in order to facilitate environmental planning purposes at this stage. The Study Area will be centered on the bridge location and measure about 400 feet wide (200 feet off centerline) by about 1,500 feet long, encompassing about 14.4 acres, inclusive of all existing roadways and any modern development.

## SUMMARY OF ARCHAEOLOGICAL FINDINGS

### INTRODUCTION

On behalf of NCDOT, Louis Berger completed an intensive archaeological survey and evaluation in association with the proposed replacement of Bridge No. 165 on Branton Road (SR 1601) over Rocky Creek in Iredell County (Figure 1). The purpose of this archaeological investigation was to identify and evaluate the eligibility of any archaeological sites in the Study Area for inclusion in the NRHP through the application of 36 CFR Part 60.4 criterion {a-d}. Evaluation of archaeological sites typically consists of establishing site integrity; integrity is defined by the National Park Service (NPS) as "The ability of a property to convey its significance" (Little et al. 2000; Shrimpton and Andrus 1991). In the case of archaeological resources evaluated under 36 CFR Part 60.4 criterion {a-d}, characteristics that convey significance include location, design, materials, and association.

For the purposes of this survey, the Study Area was considered to be the Area of Potential Effects (APE). The Study Area was centered on the bridge location and measured about 400 feet wide (200 feet off centerline) by about 1,500 feet long, encompassing about 14.4 acres, inclusive of all existing roadways and any modern development (Figure 2). Within the APE, four (4) discrete survey areas (2a to 2d) were delineated based on a review of historic mapping, topography and soil types, visual inspection, previous surveys, and locations of recent development/construction.

A total of 3.79 acres was tested through the excavation of 19 shovel test pits (STPs). A total of 10.61 acres was not tested due to the presence of roadways, ditching related to roadway drainage, steep slope, or saturated soils and/or standing water.

## BACKGROUND RESEARCH

An NCDOT archaeologist conducted a map review and site file search at the North Carolina Office of State Archeology (OSA) on September 19, 2018. In addition, topographic maps, historic maps (NCMaps website), USDA soil survey maps, and aerial photographs were utilized and inspected to gauge environmental factors that may have contributed to historic or prehistoric settlement within the project limits, and to assess the level of modern, slope, agricultural, hydrological, and other erosive-type disturbances within and surrounding the Study Area. Additional review of land deeds, parcel searches, and historic maps was conducted by a Louis Berger SOI qualified archaeologist. The following background combines the results of both the Louis Berger and NCDOT records reviews.

No previous archaeological surveys have included the Study Area. The Office of State Archaeology (OSA) has not reviewed any projects within the vicinity of the Study Area for environmental compliance so inferring anything meaningful from previously reviewed projects was not possible. Within five (5) miles of the Study Area, NCDOT's Archaeology Group has reviewed at least four (4) transportation-related projects for environmental compliance under the Programmatic Agreement (PA) with the State Historic Preservation Office (NC- HPO), none of which is located within one (1) mile of the proposed project. An archaeological survey was recommended for two (2) of those projects, both of which were bridge replacement projects in Wilkes County, and because a review of OSA's site files showed that very few archaeological investigations have been carried out in this region of the state, they determined that further work was needed throughout the area in order to better understand settlement patterns in that section of the state before any firm conclusions can be drawn on site predictability. Only one (1) archaeological site (31WK269) was documented as a result of those surveys. The site was located on a remnant levee and consisted of a single piece of lithic debitage. It was recommended not eligible for listing in the NRHP.

Review of the North Carolina State Historic Preservation Office HPOWEB GIS Service (<http://gis.ncdcr.gov/hpweb/>) indicated there are no known historic architectural resources located within or adjacent to the Study Area for which intact archaeological deposits would be anticipated within the footprint of the proposed project.

The Study Area consists of a mixed wooded/ agricultural rural setting in the western Piedmont of North Carolina and is composed primarily of three (3) soil types (Braddock-Clifford complex, 8-15% slopes [BnD], Evard-Cowee complex, 25-60% slopes, stony [EvF], and Ronda-Comus complex, 0-5% slopes, occasionally flooded [RxB]). Although portions of the Study Area consist of poorly drained soils or sloping topography, sections of well-drained and relatively level terrain are present and are considered to have a medium to high probability for archaeological deposits.

## RESULTS OF THE FIELD INVESTIGATION

### A. Visual Reconnaissance Survey

The visual reconnaissance of the Study Area showed that it consists of slope greater than 20 percent at several locations. There was also moderate to extensive disturbance from utilities throughout. Two houses were on levelled land and had manicured lawns.

### B. Results of the Phase I Archaeological Testing

Four (4) discrete survey areas were tested within the Study Area. This was part of a larger survey project which consisted of four locales in Gaston, Catawba, and Iredell Counties. As such, the project area for Bridge No. 165 was recorded as Area 2.

Area 2 was located in Iredell County near Rocky Creek. There were four discrete survey areas (2a to 2d) within the Study Area (Figure 3). The survey areas were located on the east and west sides of Branton Road and north of the Branton Road/Linney's Mill Road (SR 1598) intersection, in floodplain and low ridge environmental settings.

### **1. Survey Area 2a**

Survey Area 2a was situated in an open grassy area, possibly pasture or a fallow field, on the east side of SR 1601 (Branton Road), in the southeast quadrant of the bridge over Rocky Creek (Figure 4). It was bounded to the south by a small unnamed creek, to the east by the edge of the Study Area, to the west by slope up to the roadway (SR 1601), and to the north by Rocky Creek. The majority of the survey area had standing water (Photos 1 and 2).

A total of five shovel tests (STPs A-1 to A-5) was excavated in places where the ground was not inundated. Stratigraphy generally consisted of a brown silt loam topsoil (A1-horizon) that averaged 9 cm deep above a reddish brown silt loam soil (A2-horizon) that averaged 30 cm deep. That sat above a yellowish red sandy subsoil (B-horizon). STPs A-1 and A-4 contained hydric soils, and STPs A-2 through A-5 encountered water in the shovel test. Depth to water ranged from 35 cm below surface to 65 cm below surface. No artifacts were found during the testing of this survey area.

Directly across SR 1601 from Survey Area 2a there was a collapsed wooden shed-like structure with metal roof (Photos 3 and 4). The area around the shed was littered with modern debris (and roadside trash) and large brush piles. The structure was built almost against the steep slope that led to an upper ridge to the west/southwest. Between the structure and the road, there was disturbance from cutting and ditching related to the road construction. A review of historic aerial photographs, maps, and parcel records did not produce information on the date of the structure. However, it is on property that was once part of a larger twentieth century farmstead (discussed in more detail below with Survey Area 2b) and was in all likelihood a secondary structure related to that farm. Given the slope, disturbance, and the amount of modern debris, no shovel testing was done around the structure.

### **2. Survey Area 2b**

On the east side of SR 1601 (Branton Road), Survey Area 2b extended south from the intersection of SR 1601 (Branton Road) and SR 1598 (Linney's Mill Road) to Rocky Creek (Figure 5). On the north side of a driveway there was extensive disturbance from utility installation, cutting/grading, and slope (from east to west; Photos 5 and 6). The house on the property was built in 1940 and to the south (downslope) of the house there was an abandoned tobacco barn (Photos 7 and 8). The barn measured about fifteen feet square and was a log structure with a concrete block foundation and sheet metal roof. Deed research showed that the Mayberry Family has owned the land since the mid-1800s. The house and tobacco barn are both visible on the 1964 aerial photo (HistoricAerials). The 1964 image is the earliest found showing the barn but it likely predates that time. The ruins noted across from Survey Area 2a were probably once part of the larger farmstead.

Five shovel tests were dug in Survey Area 2b; STP B-4 was skipped because of the sloping topography. STPs B-1 to B-3 were dug in the level yard area just west of the house. The area sloped to the south (>20 percent slope) past STP B-3 down to the level terrace above the creek where the tobacco barn is located. Two shovel tests (B-5 and B-6) were dug on the east and west sides of the old barn in an attempt to locate artifacts that might indicate a period of use. Stratigraphy on the ridge and the terrace generally consisted of a reddish brown silt loam to silty clay loam topsoil (A-horizon) that ranged from 11 to 30 cm thick above a red clay loam to silty clay loam subsoil (B-horizon). No artifacts were found as a result of the testing. Modern glass was found in Shovel Test B-1, which was adjacent to the modern driveway.



### 3. Survey Area 2c

Survey Area 2c was located on the west side of SR 1601 (Branton Road) on the north bank of Rocky Creek (see Figure 5). Currently, there is a house with a manicured yard just outside the northern extent of the survey area. Prior to that house being built in 2002, there was a structure (possible barn/garage) at this location that may have been associated with the Mayberry Family property mentioned above. The east side of the survey area was bounded by the roadway, the west side by the edge of the Study Area, and the south by the bank of Rocky Creek. The terrace sloped down from the house southward to Rocky Creek (Photo 9).

Four shovel tests were excavated on the lower terrace, which was a grassy field. Stratigraphy generally consisted of a dark brown to dark yellowish brown sandy loam plowzone (Ap1-horizon) that ranged from 25 to 48 cm deep above a very dark gray sandy loam soil (A2-horizon) that suggested the area retains water. The A2-horizon ranged from 20 to 40 cm deep. That sat above a dark yellowish brown fine sandy loam subsoil (B-horizon). No artifacts were found as a result of the testing of this survey area.

### 4. Survey Area 2d

Survey Area 2d was located in an agricultural field on ridge slope about 230 meters north of Rocky Creek (Figure 6). The ridge sloped from north to south towards SR 1598 (Linney's Mill Road). Three shovel tests (D-1 to D-3) were dug on the upper, most level portion of the ridge. STP D-4 was placed on the side of the slope in a near level area to compare the soils with those upslope (Photo 10). Stratigraphy generally consisted of reddish brown clay loam plowzone (Ap-horizon) that ranged from 10 to 20 cm deep above a red clay loam subsoil (B-horizon). STP D-4 had a much-deflated topsoil that was only 4 cm thick. This indicates fairly intensive slopewash downslope. No artifacts were found as a result of the testing of this survey area.

## DISCUSSION

As a result of the survey, no newly identified archaeological sites were documented within the Study Area. A total of 3.79 acres was tested through the excavation of 18 shovel test pits (STPs). A total of 10.61 acres was not tested due to the presence of roadways, ditching related to roadway drainage, steep slope, or saturated soils and/or standing water.

Based on the results, no additional archaeological work is recommended in conjunction with the proposed bridge project. If the project scope changes to include areas beyond the Study Area or if design plans change prior to construction, further archaeological investigation will be necessary.

## REFERENCES

Iredell County, Register of Deeds

Accessed online at <https://www.co.iredell.nc.us/533/Register-of-Deeds>, February 2019.

Nationwide Environmental Title Research, LLC [NETR]

2018 Historic Aerials. NETR, Tempe, Arizona. Accessed online October 2018, at NETR Online, <https://www.netronline.com/>.

North Carolina State Historic Preservation Office [NCSHPO]

2017 HPOWEB, GIS Web Service. Maps supplemented with aerial photography, county tax parcel layers, and other information. Accessed at <http://gis.ncdcr.gov/hpoweb/>.

## Office of State Archaeology [OSA]

2017 *Archaeological Investigation Standards and Guidelines for Background Research, Field Methodologies, Technical Reports, and Curation (December 2017)*. Division of Archives and History, North Carolina Department of Cultural Resources, Raleigh.

## Shrimpton, Rebecca H. and Patrick W. Andrus

1991 *How to Apply the National Criteria for Evaluation*. United States Department of the Interior, National Park Service, Interagency Resources Division, Washington, D.C. Accessed online October 5, 2016, at <<http://www.nps.gov/nr/publications/bulletins/nrb15/>>.

## Townsend J.J., J.H. Sprinkle, and J. Knoer

1993 National Register Bulletin 36: Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts. United States Department of the Interior, National Park Service, Interagency Resources Division, Washington, D.C.

## National Resources Conservation Service (NRCS)

2018 Natural Resources Conservation Service, United States Department of Agriculture Web Soil Survey. Electronic document, <http://websoilsurvey.nrcs.usda.gov/>, accessed January 2018.

## United States Geological Survey (USGS)

2000 Gilreath, North Carolina 7.5' quadrangle (1: 24 000).

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

- There are no National Register listed or eligible ARCHAEOLOGICAL SITES present within the project's area of potential effects. (Attach any notes or documents as needed)
- No subsurface archaeological investigations were 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.

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

The Louis Berger Group conducted these investigations on behalf of NCDOT's Archaeology Group under the guidelines of the department's Programmatic Agreement (PA) with the State Historic Preservation Office (NC-HPO). As a result of the survey, no newly identified archaeological sites were documented within the Study Area. No additional archaeological work is recommended for this location.

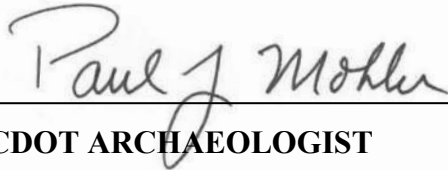
I concur with these findings. It is recommended that the proposed project be allowed to proceed without concern for impacts to significant archaeological resources. Additional fieldwork within the Study Area is unlikely to provide any significant or substantial amounts of archaeological data. Therefore, it is recommended that additional archaeological work should not be required. Based on the recommendation put forth (see above), a finding of "No NRHP-Eligible or -Listed Archaeological Sites Present" is

considered appropriate for the proposed project. However, should the description of this project or designs plans change prior to construction, then additional consultation regarding archaeology may be required. If archaeological materials are uncovered during project activities, then such resources will be dealt with according to the procedures set forth for “unanticipated discoveries,” to include notification of NCDOT’s Archaeology Group.

**SUPPORT DOCUMENTATION**

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

Signed:

  
NCDOT ARCHAEOLOGIST

March 11, 2019

**Date**

18-09-0090



## 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

<b>Project No:</b>	U-5703	<b>County:</b>	Iredell
<b>WBS No.:</b>	50129.1.3	<b>Document Type:</b>	MCC
<b>Fed. Aid No:</b>		<b>Funding:</b>	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Permit Type(s):</b>	none
<b>Project Description:</b> Realign US 74 (James Hamilton Rd) to intersect with SR 1514 (Rocky River Rd) at Myers Rd.			

### SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<p><b><u>Description of review activities, results, and conclusions:</u></b> Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on October 29, 2018. Based on this review there are no NR, DE, LL, SL or SS in the Area of Potential Effects (APE). There is one structure over 50 years of age, however it does not have level of significance or architectural integrity to warrant further evaluation due to the evident multiple additions. No Survey is required at this time.</p> <p><b><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></b> 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.</p>
---

### 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

10/29/2018  
Date

# REQUEST FOR R/W COST ESTIMATE / RELOCATION EIS

**COST ESTIMATE REQUEST**

**RELOCATION EIS REPORT**

NEW REQUEST:

UPDATE REQUEST:

REVISION REQUEST:

Update to \_\_\_\_\_ Estimate

Revision to \_\_\_\_\_ Estimate

Revision No.: \_\_\_\_\_

DATE RECEIVED: 05/06/19

DATE ASSIGNED: 05/09/19

# of Alternates Requested: \_\_\_\_\_

**DATE DUE: 05/31/19**

<b>TIP No.:</b> BR-0114	<b>DESCRIPTION:</b> Replace bridge # 165 on SR 1601 over Rocky Creek
-------------------------	--

**WBS ELEMENT:** 67114.1.1    **COUNTY:** Iredell    **DIV:** 12    **APPRAISAL OFFICE:** 4

**REQUESTOR:** Kevin Bailey & Michelle Lopez    **DEPT:** STV Engineers

**TYPE OF PLANS:** HEARING MAPS  | LOCATION MAP  | AERIAL  | VICINITY  | PRELIMINARY  | CONCEPTUAL

.....  
 \*\* Based on past project historical data, the land and damage figures have been adjusted to include condemnation and administrative increases that occur during settlement of all parcels. \*\*  
 .....

**APPRAISER:** Richard Pegg    **COMPLETED:** 05/23/19    **# of Alternates Completed:** 1

<b>TYPE OF ACCESS:</b>	NONE: <input type="checkbox"/>	LIMITED: <input type="checkbox"/>
	PARTIAL: <input type="checkbox"/>	FULL: <input type="checkbox"/>
<b>ESTIMATED NO. OF PARCELS:</b>	<b>4</b>	
<b>RESIDENTIAL RELOCATEES:</b>	-	\$ -
<b>BUSINESS RELOCATEES:</b>	-	\$ -
<b>GRAVES:</b>	-	\$ -
<b>CHURCH / NON – PROFIT:</b>	-	\$ -
<b>MISC:</b>	-	\$ -
<b>SIGNS:</b>	-	\$ -
<b>LAND, IMPROVEMENTS, &amp; DAMAGES:</b>	<b>\$ 9,375</b>	
<b>ACQUISITION:</b>	<b>\$ 20,000</b>	
<b>TOTAL ESTIMATED R/W COST:</b>	<b>\$ 29,375</b>	

**\*\* THIS IS A COST ESTIMATE AND NOT TO BE USED AS AN APPRAISAL \*\***

**NOTES:** \_\_\_\_\_

# EIS RELOCATION REPORT

**North Carolina Department of Transportation  
RELOCATION ASSISTANCE PROGRAM**

E.I.S.     CORRIDOR     DESIGN

**WBS ELEMENT:** 67114.1.1    **COUNTY** Iredell    **Alternate** 1 of 1 **Alternate**

**T.I.P. No.:** BR-0114

**DESCRIPTION OF PROJECT:** Replace bridge # 165 on SR 1601 over Rocky Creek

ESTIMATED DISPLACEDS					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	0	0	0	0	0	0	0	0	0				
Businesses	0	0	0	0	VALUE OF DWELLING				DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent		
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	0	\$ 0-150	0	
<b>ANSWER ALL QUESTIONS</b>					20-40M	0	150-250	0	20-40M	0	150-250	0	
Yes	No	<i>Explain all "YES" answers.</i>											
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?											
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?											
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.											
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?											
		6. Source for available housing (list).											
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?											
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?											
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?											
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).											
		15. Number months estimated to complete RELOCATION? <b>N/A</b>											

**REMARKS (Respond by number)**

No residential or business relocatees. No signs or billboards on the project.  
 #3 Business services will still be available  
 #8 As required by law  
 #11 Public housing is available  
 #12 There is adequate DSS housing in the area  
 #6 & 14 MLS, Newspaper, Realtor.com

*Richard W. Pegg*

05/23/2019

Right of Way Agent

Date

*Richard W. Pegg*

Relocation Coordinator

06/03/2019

Date



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

Date: June 3, 2019

MEMORANDUM TO: File

From: Michelle Lopez, Transportation Planner, STV Engineers, Inc

SUBJECT: **NRCS Farmland Conversion Impact Rating Bridge No. 165 on SR 1601 (Branton Road) over Rocky Creek Iredell County, NC**

WBS 47114.1.1, Project No. BR-0114

The Farmland Protection Policy Act of 1981 (7 CFR Part 658) (FPPA) requires an assessment of the potential impacts of land acquisition and construction activities in prime, unique, and local or statewide importance as defined by the US Natural Resource Conservation Service (NRCS). This memo is to document the completion and results of the NRCS Farmland Conservation Impact Rating process for Project BR-0114 consistent with FPPA.

### **Project Description**

BR-0114 proposes to replace Bridge No. 165 on SR 1601 (Branton Road) over Rocky Creek in Iredell County. The project proposes replacing the existing bridge with an approximately 30-foot wide structure with two 10-foot travel lanes. The proposed bridge would be approximately 102 feet in length and the proposed right of way varies from 40 feet to 90 feet. The total length of the project is approximately 740 feet.

### **Applicability**

Project BR-0114 is subject to the provisions of FPPA for the following reasons:

- It is a federally funded project.
- It is not within a municipality, urbanized area, or urban built-up area.
- Prime farmlands of statewide importance are found within the project area.
- The land is not in water storage or used for national defense purposes.

### **NRCS Farmland Figure**

In accordance with guidance provided by NCDOT Community Studies, the farmland figure was created to display the project location and a one-mile buffer over a layer displaying prime farmland, farmland of statewide importance, and Farmland of Local Importance in the vicinity of the project. A project footprint was created to include a 25-foot buffer from the slope stakes. The NRCS farmland figure is attached to this memo.

### **Completion of Part VI of the NRCS Form AD-1006**

Part VI (Site Assessment Criteria) of the NRCS Form AD-1006 was completed for this project. Points allotted for each criterium and reasoning are provided below.

1. Area in Non-urban Use: 15 out of 15 points. Estimated using aerial photography; approximately 95% of the land within the 1-mile buffer is non-urban.
2. Perimeter in Non-urban Use: 10 out of 10 points. Estimated using aerial photography; more than approximately 90% borders on land in non-urban use.
3. Percent of Site Being Farmed: 3 out of 20 points. Estimated using aerial photography; approximately 30% of the site is being farmed.
4. Protection Provided by State and Local Government: 0 out of 20 points. The site is not designated as a Voluntary Agriculture District (VAD) or Enhanced Voluntary Agriculture District (EVAD).
5. Distance from Urban Built-up Area: 10 out of 15 points. Determined using aerial photography; site is within 1.5 mile of Central Fire Department and Barker's Grove Baptist Church.
6. Distance to Urban Support Services: 0 out of 15 points. Services exist within ½ mile of the project site.
7. Size of Present Farm Unit Compared to Average: 0 out of 10 points. The farm units are more than 50% below the average size farm unit in Iredell County (127 acres).
8. Creation of Non-farmable Farmland: 0 out of 10 points. This project will have no implications on remaining farmable land.
9. Availability of Farm Support Services: 0 out of 5 points. No farm support services were identified within the site.
10. On-Farm Investments: 10 out of 20 points. Some on-farm investments including barns, storage buildings, and waterways were identified using aerial imagery.
11. Effects of Conversion on Farm Support Services: 0 out of 10 points. No significant reduction in demand for farm support services would occur as a result from the project.
12. Compatibility with Existing Agricultural Use: 0 out of 10 points. The project is compatible with existing agricultural use.

### **Result of Site Assessment Criteria**

The sum of the points assigned in part VI of the NRCS form AD-1006 for BR-0114 is **48**.

### **Summary**

Because the total of the points assigned in part VI of the NRCS form AD-1006 for BR-0114 is less than 60 and therefore the total points of the NRCS Farmlands Conversion Form AD-1006 is less than 160, no mitigation for farmland loss is required for the project in accordance with FPPA.



**Sources**

US Census. Census of Agriculture. 2012. County Data. North Carolina. Iredell County. Accessed 6/3/2019.

([https://www.nass.usda.gov/Publications/AgCensus/2012/Online\\_Resources/County\\_Profiles/North\\_Carolina/cp37097.pdf](https://www.nass.usda.gov/Publications/AgCensus/2012/Online_Resources/County_Profiles/North_Carolina/cp37097.pdf))

Iredell County. GIS Mapping. ConnectGIS Web Hosting. Iredell County, NC. Accessed 6/3/2019.

(<https://iredell.connectgis.com/Map.aspx>)

Legal Information Institute. Section 658.5- Criteria. Accessed 6/3/2019.

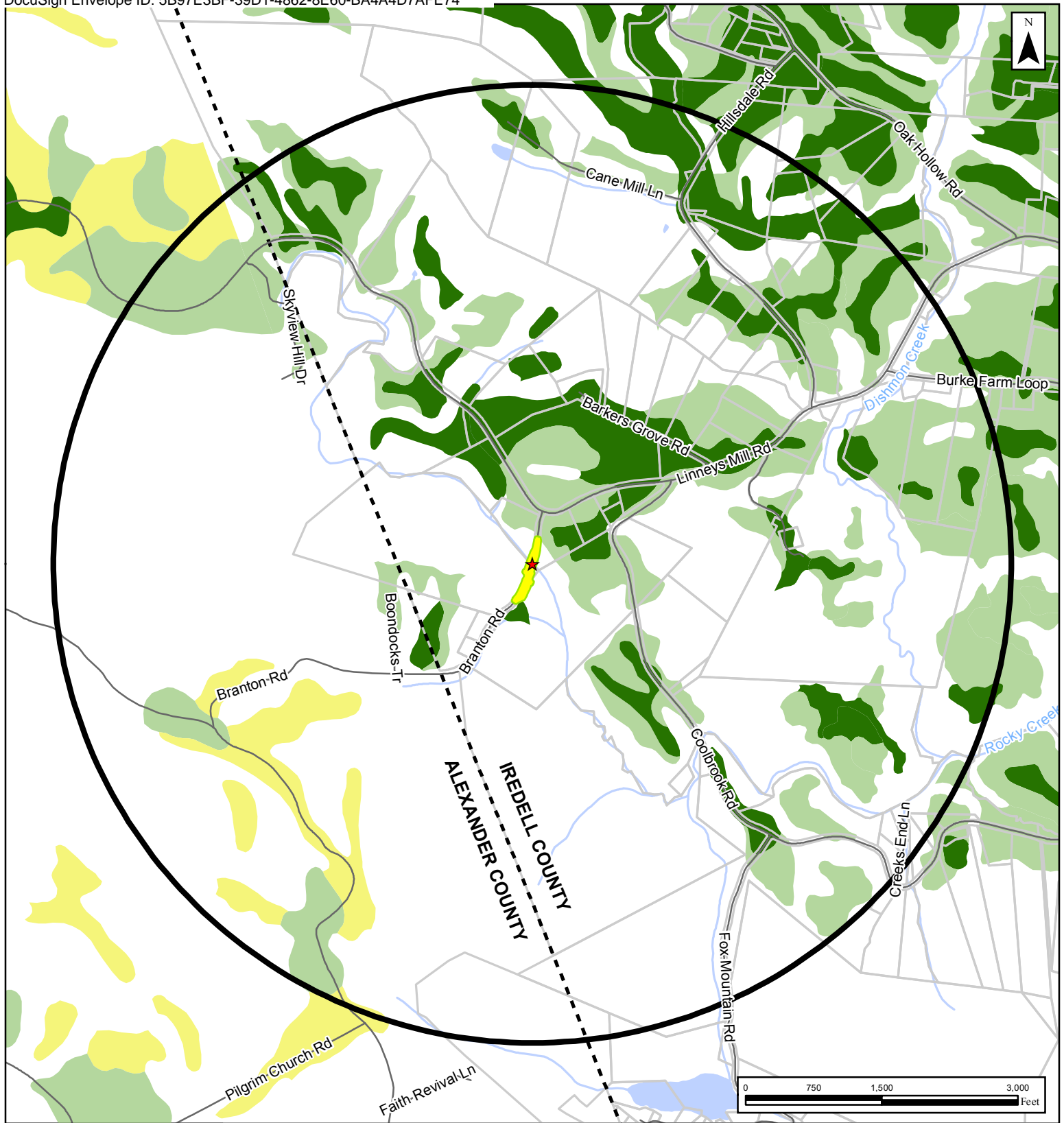
(<https://www.law.cornell.edu/cfr/text/7/658.5>)

Attachments

NRCS Farmland figure

Cc: Harrison Marshall and Herman Huang, NCDOT Community Studies

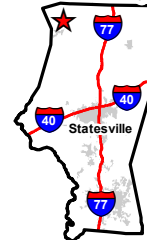
DRAFT



**Legend**

- ★ Bridge No. 165 over Rocky Creek
- Project Footprint
- 1-mile Buffer
- Countyline
- Roads
- Parcels
- Streams
- Prime Farmland
- Farmland of Statewide Importance
- Farmland of Local Importance

**Iredell County, NC**



Sources: Iredell County GIS Department, USDA/NRCS Soil Survey Center, NC One Map, & Google Earth

**BR-0114**  
**Bridge No. 165**  
**Replacement Project**  
**over Rocky Creek**  
**Iredell County**  
**NCDOT Division 12**

June 2019

**NRCS Farmland Figure**