

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

Project No.	BR-0123
WBS Element	48832.1.1
Federal Project No.	N/A

A. Project Description:

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 850318 on SR 1319 (Abe Mayes Road) over Unnamed Tributary (UT) of South Fork Mitchell River in Surry County in Division 11 (Refer to Figure 1).

Built in 1960, Bridge No. 850318 has a 15-foot travel lane that is one lane with two-way travel. The bridge is approximately 26 feet in length and has a timber floor on I-beams construction. Bridge No. 850318 has a posted Single Vehicle weight limit of 23 tons and a Truck Tractor Semitrailer weight limit of 31 tons. Abe Mayes Road is an unpaved two-lane road approximately 18 feet wide. The existing right of way along Abe Mayes Road is 18 feet. The bridge approach ties into the intersection with SR 1318 (Oscar Calloway Road) and minor construction along Oscar Calloway Road is proposed. Oscar Calloway Road is unpaved and has two 10-foot travel lanes with an existing right of way of 25 feet. The project is scheduled for Right of Way (ROW) in August 2019 and Let in April 2020. Minor ROW acquisition is anticipated.

The project proposes replacing the existing two-lane bridge structure with an approximately 33-foot wide structure with two 10-foot travel lanes and 4-foot 11-inch paved shoulders. The proposed bridge would be approximately 37 feet in length and the proposed right of way is 80 feet. The total length of the project is approximately 162 feet. The proposed design along Oscar Calloway Road includes two 10-foot travel lanes with shoulders and guardrails. The proposed right of way along Oscar Calloway Road ranges from approximately 45 feet to 65 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. Abe Mayes Road is classified as a Rural, Local Route with a 25-mile per hour design speed.

B. Description of Need and Purpose:

The replacement of Bridge No. 850318 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. 850318 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 3.5 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. 850318 has a sufficiency rating of 84.86 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: A Nationwide Permit (NWP) No. 3- Maintenance and/or NWP No.14- Linear Transportation Projects 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 corresponding Section 401 Water Quality Certification (WQC) from the NC Department of Environmental Quality- Division of Water Resources (NC DEQ- DWR) is needed.

Floodplain: Unnamed Tributary (UT) of South Fork Mitchell River, which crosses under Bridge No. 850318, is in a FEMA Zone AE Floodplain. The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), regarding 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 05/03/2019. On 03/25/2019, NCDOT completed a *No Survey Required Form* for Historic Architecture and Landscapes.

Agricultural Land Use: Based on the site visit (04/17/2019), aerial imagery, and local planner input, it appears there is agricultural land use surrounding the project study area, primarily hay production and poultry houses. Farming operations in the vicinity of the bridge may be affected temporarily during construction by losing direct access and by using the approximately 3.5-mile detour route. Continued coordination should occur through the NCDOT right of way acquisition

process 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, dated July 2018, are as follows:

Utility*	\$	13,000
R/W*	\$	13,000
Const.*	\$	325,000
Total	\$	351,000

*Source: NCDOT Connect GREATER Rural Bridge Program- Bridges Budget Sources and Uses, Accessed June 11, 2019. <https://connect.ncdot.gov/resources/GREATER-Rural-Bridge-Program/Documents/05%20NCDOT%20Bridges%20Budget%20Sources%20and%20Uses.xlsx>

Estimated Traffic:

Average Daily Traffic (ADT) 2015	290 vehicles per day (vpd)
ADT 2040	580 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. 850318 on Abe Mayes Road.

Pedestrian and Bicycle Accommodations: There are no existing bike and pedestrian facilities on Bridge No. 850318 along Abe Mayes Road.

Design Exceptions: There are no anticipated design exceptions for this project.

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 Abe Mayes Road was not considered due to the acceptable offsite detour route which allows for the proposed bridge to be constructed in place.

Replace Bridge in Place with Offsite Detour (Preferred Alternative) – The bridge will be replaced in place. The detour route is approximately 3.5 miles long and follows SR 1320 (Wolfe Road), SR 1301 (Union Hill Road), and SR 1318 (Oscar Calloway Road).

Agency Comments: Input forms were sent to the Surry County Emergency Services Director, Surry County Planning and Zoning Planning Director, and the Surry County Schools Director of Transportation in February of 2019.

The Surry County Planning and Zoning Planning Director noted agricultural activities present in the vicinity of the project and that these activities were typical of all rural areas of the county. A moderate level of impact was noted from Surry County Planning and Zoning Planning Director if the bridge was closed for up to a year. The Surry County Schools Director of Transportation noted a bus crossing the bridge about once a week, but no buses crossing the bridge daily. A low level of impact was noted from the Surry County Schools Director of Transportation if the bridge was closed for up to a year. No response was received from the Surry County Emergency Services Director after multiple contact attempts.

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)**, **NC Division of Parks and Recreation (NC DPR)**, and the **Catawba Indian Nation Tribal Historic Preservation Office (THPO)** in May and June of 2019. Start of Study notification were also sent to NCDOT Division 11 and NCDOT Preconstruction contacts provided by NCDOT Structure Management Unit (SMU) 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 *Helianthus schweinitzii* (Schweinitz's sunflower), assessing habitat for *Isotria medeoloides* (Small whorled pogonia), and recommend winter tree clearing for NLEB.

The **NC Department of Environmental Quality- Division of Water Resources** provided general project comments but did not state any project specific comments. The general comments regarded the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox*, sediment and erosion control, structure type, wetland and stream impacts, and 401 Water Quality Certification. 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 Wildlife Resources Commission** and **Catawba Indian Nation THPO** at this time.

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 stated 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 or (919) 707-6442." No comments have been received to date.

Prior to ROW acquisition, 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 & 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)? Not Applicable	<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 checked="" type="checkbox"/>	<input 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: 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.

Response to Question 8: A Natural Resources Technical Report (NRTR) was completed in May of 2019 for this project and provided a biological conclusion of “**Unresolved**” for *Helianthus schweinitzii* (Schweinitz’s sunflower) and *Isotria medeoloides* (Small whorled pogonia). Suitable habitats are present in the study area for both species and surveys will be performed by Three Oaks Engineering during the USFWS Optimal Survey Windows. The Survey Window for *Helianthus schweinitzii* (Schweinitz’s sunflower) and *Isotria medeoloides* (Small whorled pogonia) is late August thru October and mid-May thru early July, respectively. A field visit and survey will be conducted for both species during the survey windows prior to ROW and Construction. This is noted in the greensheet/project commitments.

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), regarding 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 26 - Voluntary Agricultural District (VAD) Property: The northwest and southwest quadrants of the bridge lie within a Surry County VAD property. The project would require less than approximately 0.10 acres of right of way from the VAD parcel. If during the right-of-way acquisition process, the VAD property holder refuses settlement, prior to pursuing condemnation, the Division 11 Right of Way Agent must contact Environmental Analysis Unit to coordinate with the Surry County VAD Board to schedule a public meeting. The Surry County VAD ordinance provides that no state or local public agency or governmental unit may formally initiate any action to condemn any interest in qualifying farmland within a Surry County VAD until such agency or unit has requested the advisory board to hold a public hearing on the proposed condemnation. The Surry County VAD Program is administered by The Surry Soil and Water Conservation District. Farmland and livestock were observed in the vicinity of the project on the field visit in April 2019. This is noted in the greensheet/project commitments.

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 estimated right of way, based on the preliminary plans. The Prime and Important Farmland Soil found within the footprint are designated as all areas are Prime Farmland (CsA).

A Natural Resource Conservation Service (NRCS) Farmland Conversion Impact Rating has been completed for this project and a total score of 58 out of 160 points was calculated for the BR-0123 project site. Since the total of the points assigned in part VI of the NRCS Farmlands Conversion Form AD-1006 for BR-0123 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. Categorical Exclusion Approval

Project No.	<u>BR-0123</u>
WBS Element	<u>48832.1.1</u>
Federal Project No.	<u>N/A</u>

Prepared By: DocuSigned by:
Elizabeth Scott
 7/31/2019
 Date Elizabeth Scott, EI, STV Engineers Inc.

Prepared For: North Carolina Department of Transportation

Reviewed By: DocuSigned by:
Philip S. Harris, III
 8/1/2019
 Date 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.

8/6/2019
 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.

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

I. Project Commitments

**Surry County
Bridge No. 850318 on SR 1319 (Abe Mayes Road)
over UT of South Fork Mitchell River
WBS No. 48832.1.1
Project No. BR-0123**

**NCDOT Hydraulics Unit
FEMA Coordination**

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), regarding 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
Unresolved Biological Conclusion**

Surveys will be conducted for *Helianthus schweinitzii* (Schweinitz's sunflower) and *Isotria medeoloides* (Small whorled pogonia) prior to project construction.

**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 11
Agricultural Land Use**

Farming operations in the vicinity of the bridge may be affected temporarily during construction by losing direct access and by using the approximately 3.5-mile detour route. Continued coordination should occur through right of way with the owners of the agricultural lands that are temporarily impacted by the off-site detour.

**NCDOT - Division 11
Voluntary Agricultural District (VAD) Property**

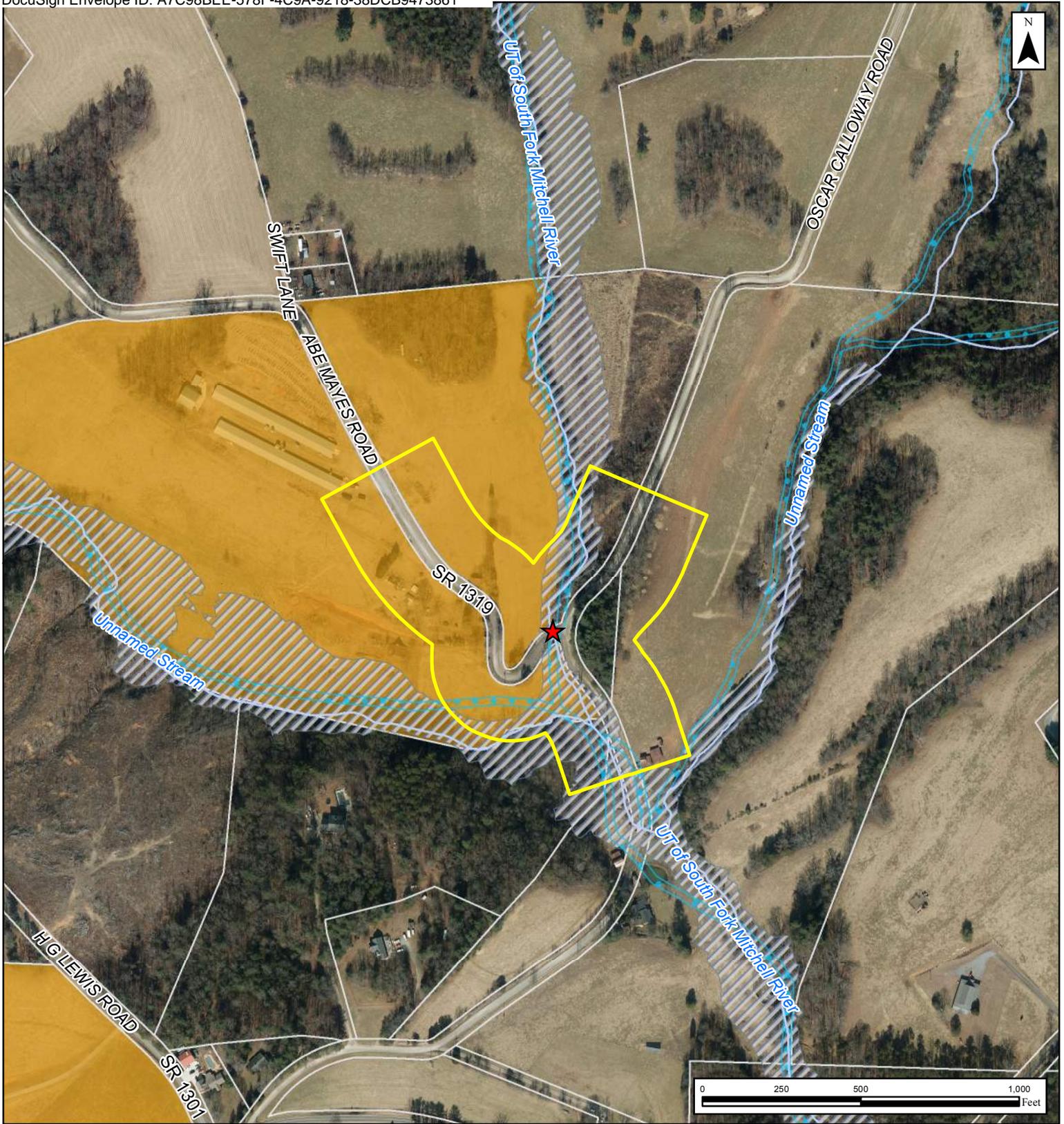
The northwest and southwest quadrants of the bridge lie within a Surry County VAD property. The project would require less than approximately 0.10 acres of right of way from the VAD parcel. If during the right-of-way acquisition process, the VAD property holder refuses settlement, prior to pursuing condemnation, the NCDOT Right of Way Agent must contact Environmental Analysis Unit to coordinate with the Surry County VAD Board to schedule a public meeting. The Surry County VAD ordinance provides that no state or local public agency or governmental unit may formally initiate any action to condemn any interest in qualifying farmland within a Surry County VAD until such agency or unit has requested the advisory board to hold a public hearing on the

proposed condemnation. The Surry County VAD Program is administered by The Surry Soil and Water Conservation District.

NCDOT Division 11

Continued Coordination for Schools and Emergency Services

NCDOT should coordinate with Surry County Schools (Rodney Hardy, 336-386-8762) and Surry County Emergency Services (John Shelton, 336-783-9000) at least one month prior to construction.



Legend

- ★ Bridge No. 318 over UT of S. Fork Mitchell River
- Project Study Area
- Stream
- ▨ Floodplain
- ▭ NWI Wetland
- ▭ Parcel
- ▭ Voluntary Agricultural District (VAD)

Surry County, NC



Sources: Surry County GIS Department, NC One Map & Google Earth

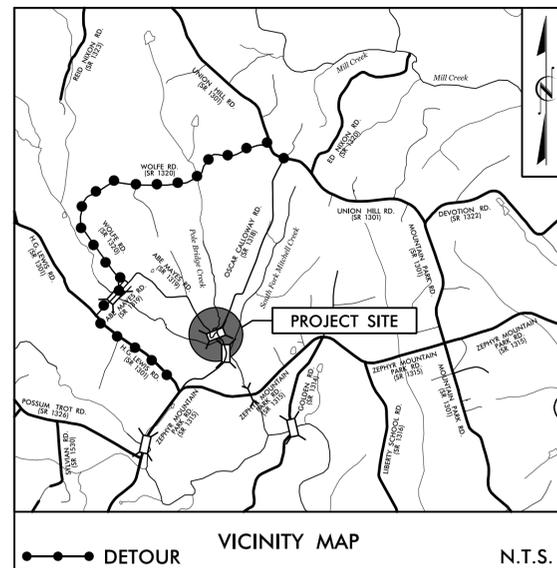
BR-0123
Bridge No. 318
Replacement Project
over UT of South Fork
Mitchell River
Surry County
NCDOT Division 11

June 2019

Figure 1

TIP PROJECT: BR-0123

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



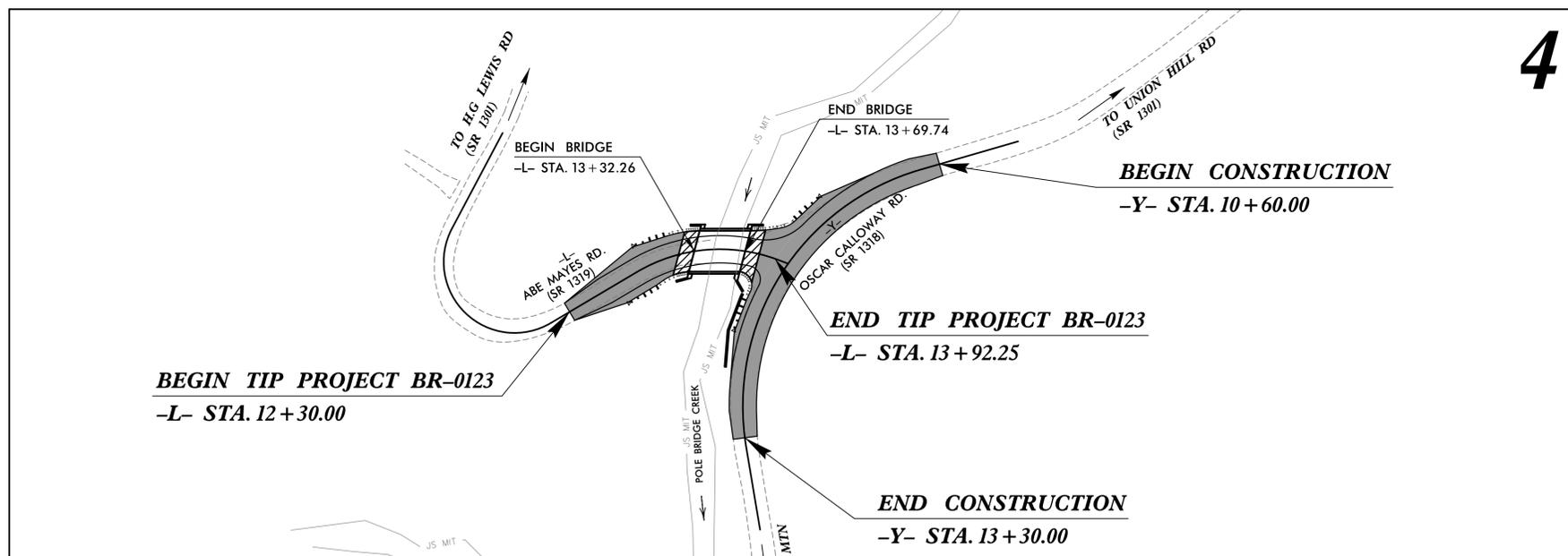
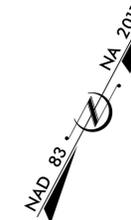
PRELIMINARY PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

**LOCATION: BRIDGE #318 OVER POLE BRIDGE CREEK
ON SR 1319 (ABE MAYES RD)**
TYPE OF WORK: GRADING, DRAINAGE, PAVING, & STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0123	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67123.1.1		P.E.	

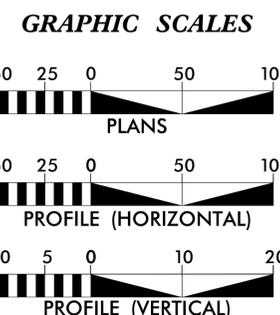


4

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 2015 =	290
ADT 2040 =	N /A
DHV =	N/A
D =	N/A
T =	N /A
V =	25 MPH

FUNC. CLASSIFICATION:
LOCAL
SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT BR-0123 =	0.024 MILES
LENGTH OF STRUCTURE TIP PROJECT BR-0123 =	0.007 MILES
TOTAL LENGTH OF TIP PROJECT BR-0123 =	0.031 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 15, 2019	NIKKI T. HONEYCUTT, PE PROJECT ENGINEER
LETTING DATE: APRIL 17, 2020	BHUPESH R. JOSHI, EIT PROJECT DESIGNER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

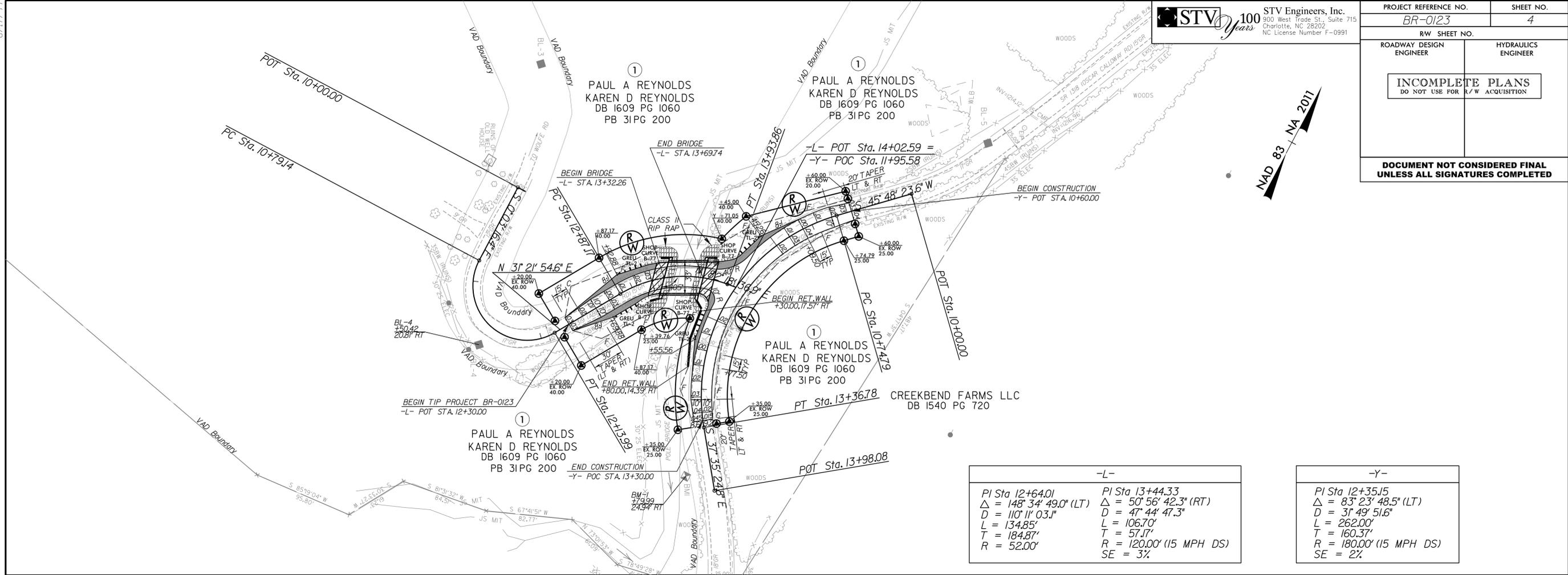
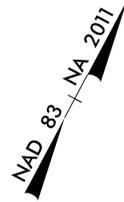
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



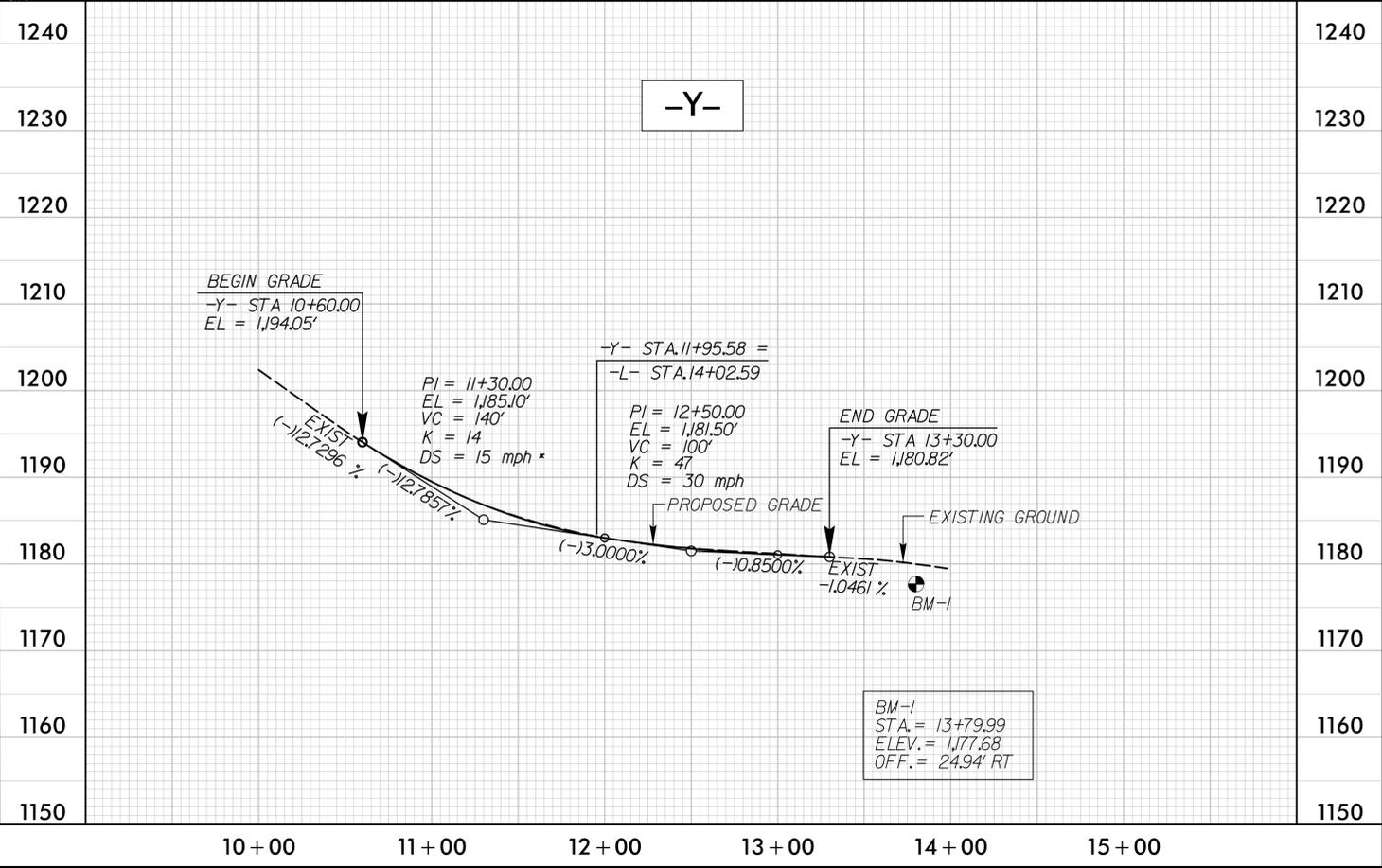
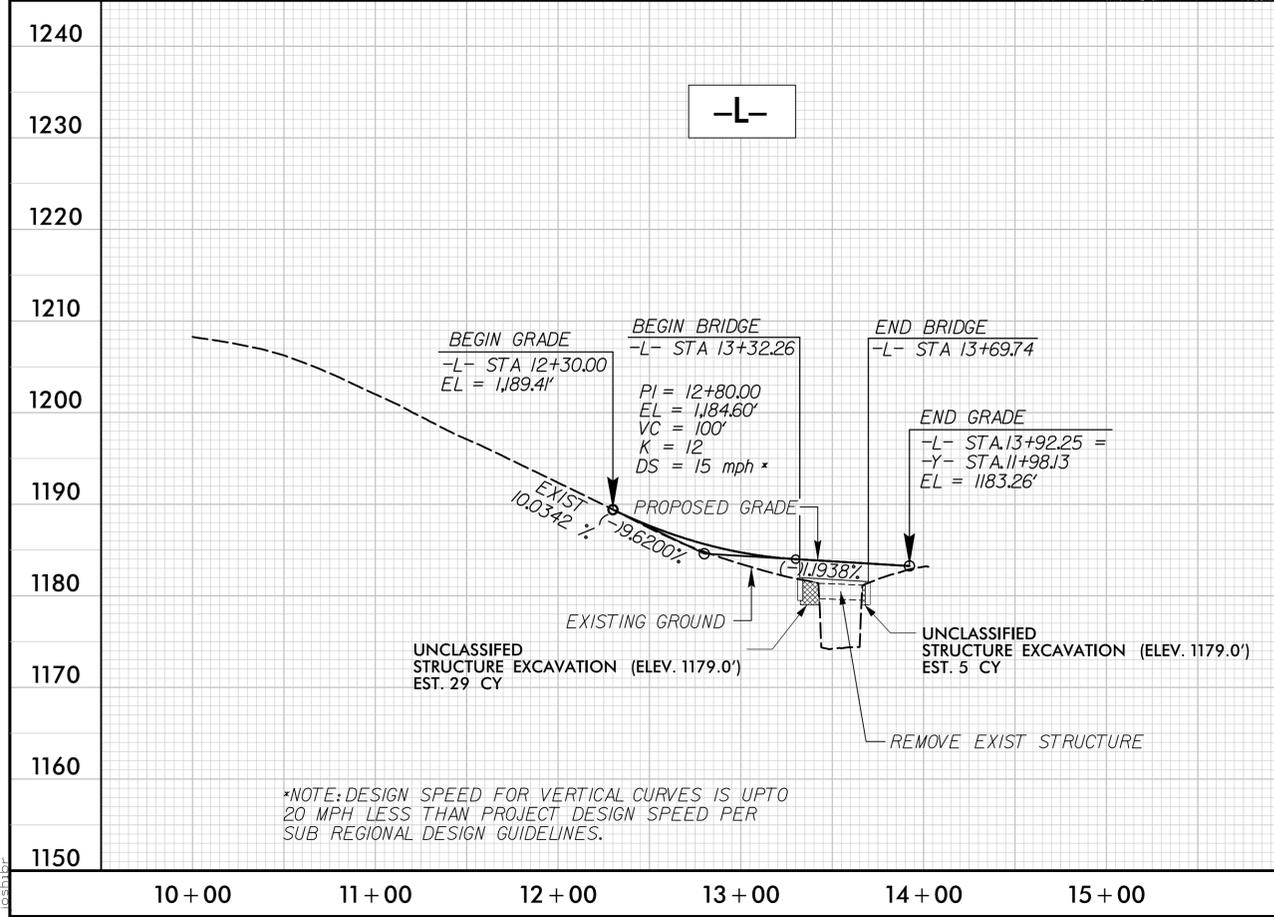
8/17/19

PROJECT REFERENCE NO. BR-0123		SHEET NO. 4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION </div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



-L-		-Y-	
PI Sta 12+64.01	$\Delta = 148' 34'' 49.0''$ (LT)	PI Sta 13+44.33	$\Delta = 50' 56'' 42.3''$ (RT)
D = 110' 11' 03.1"	L = 134.85'	D = 47' 44' 47.3"	L = 106.70'
T = 184.87'	R = 52.00'	T = 57.17'	R = 120.00' (15 MPH DS)
		SE = 3%	

-Y-	
PI Sta 12+35.15	$\Delta = 83' 23'' 48.5''$ (LT)
D = 31' 49' 51.6"	L = 262.00'
T = 160.37'	R = 180.00' (15 MPH DS)
	SE = 2%



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

BM-1
 STA. = 13+79.99
 ELEV. = 1,177.68
 OFF. = 24.94' RT

F:\2019\Projects\BR-0123\BR-0123_rdy_psh04.dgn
 10/10/19



**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

Project No: BR-0123 *County:* Surry
WBS No: 67123 *Document:* Federal Categorical Exclusion
F.A. No: *Funding:* State Federal
Federal Permit Required? Yes No *Permit Type:* USACE

Project Description:

Replace Bridge 318 on SR 1319 (Abe Mayes Rd.) over an unnamed tributary to the South Fork Mitchell River in Surry County. The Area of Potential Effects (A.P.E.) is approximately 526 meters (1,725 ft.) long and 122 meters (400 ft.) wide. The A.P.E. includes land along SR 1319 (Abe Mayes Rd.) and SR 1318 (Oscar Calloway Rd.). The project is State-funded and will require Federal permits. Easements will be required.

SUMMARY OF ARCHAEOLOGICAL FINDINGS

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

- There are no National Register listed ARCHAEOLOGICAL SITES 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 initial review included an examination of topographic maps, the Surry County soil survey, an aerial photograph, and information about previously recorded archaeological sites, previous archaeological surveys, and environmental reviews at the North Carolina Office of State Archaeology (OSA) in Raleigh. The A.P.E. includes land along both SR 1319 and SR 1318. SR 1319 at the bridge is oriented approximately east-west. SR 1319 curves to the north a short distance west of the bridge. SR 1319 intersects with SR 1318 a short distance east of the bridge. SR 1318 is oriented approximately north-south.

The topographic maps (Roaring Gap and Thurmond) show the landforms in the A.P.E. include ridge toes overlooking two streams (South Fork Mitchell River and unnamed tributary), and level floodplain along both streams. Level ridge toes overlooking streams can have a moderate to high potential for archaeological sites, depending upon the distance from and elevation above the stream. Level, well-drained floodplains have a moderate to high potential for prehistoric archaeological sites.

The aerial photograph shows the land use in the A.P.E. is a mix of wooded and cleared. The cleared land appears to be agricultural fields or pasture. There are a couple of buildings in the A.P.E. (farm buildings?). There appears to be an automobile junk yard on the east side of SR 1319 at the north end of the A.P.E.

The information at the OSA shows there are no previously recorded archaeological sites within or adjacent to the A.P.E. The A.P.E. is not within any areas that have been previously surveyed for archaeological sites. A project located along SR 1318 within the A.P.E. has been reviewed by the State Historic Preservation Office (HPO) (ER 04-2801). The project was improvements to SR 1318, and no archaeological survey was recommended.

The review recommended survey of the level, well-drained landforms adjacent to streams within the A.P.E. on 10/26/2018. A reconnaissance of the project was conducted on 10/29/2018. The reconnaissance found that only one part of the A.P.E. included a landform with potential for archaeological sites.

The northwest quadrant of the A.P.E. includes land along the north side of SR 1319 and the west side of the tributary stream. The landform in the northwest quadrant is a sloped ridge. The western part of the quadrant is a ridge top, and the eastern part is a slope down from the ridge to the tributary stream. The land in this quadrant is currently used as a hay field or pasture. There are several farm buildings located along SR 1319 on the ridge.

The northeast quadrant includes land along the west and east sides of SR 1318 to the north of the SR 1319 intersection. The landform along the west side of SR 1318 is a narrow strip of land between the road and the tributary. The land is sloped from the road down to the narrow floodplain along the creek. The floodplain appears to be an unstable landform that is prone to flooding. The landform along the east side of SR 1318 is a slope up to the east. Both sides of SR 1318 are wooded.

The southeast quadrant includes the land along the west and east sides of SR 1318 south of the SR 1319 intersection. The landform along the west side of SR 1318 is a narrow strip between the road and the tributary. The tributary joins the South Fork Mitchell River near the south end of the A.P.E. The landform along the east side of SR 1318 is a slope uphill to the east. The land along the east side of the road is a mix of wooded and hay field/pasture.

The southwest quadrant includes the land along the south side of SR 1319 west of the bridge. The landform in the southwest quadrant is a sloped ridge along the south and west sides of SR 1319, and a narrow strip of floodplain along the west side of the tributary, and the north and south sides of the South Fork. The land along SR 1319 in the west half of the quadrant is a ridge top.

The survey focused on the floodplain located along the west side of the tributary and the north side of the South Fork. This land is currently used as a hay field or pasture. The narrow floodplain is located at the base of a ridge that slopes up to the north. The floodplain on the south side of the South Fork is wooded, indicating that it may be unsuitable for hay field or pasture (due to poor drainage?). (The Surry County soil survey indicates that the soil on both sides of the river is Colvard and Suches soils [0-3% slopes], occasionally flooded, a well-drained soil found on levees in floodplains.)

The archaeological survey consisted of the excavation of three shovel tests (STs) along the west side of the tributary and the north side of the South Fork. None of the STs contained any artifacts. No STs were excavated on the south side of the South Fork. ST 1 was placed approximately 20 meters (66 ft.) south of the bridge and 10 meters (33 ft.) west of the tributary. The soil consisted of 45 centimeters (18 in.) of brown silty loam and silty clay with a heavy gravel content. ST 2 was placed approximately 30 meters (100 ft.) south of ST 1, 5 meters (16 ft.) west of the tributary, and 20 meters (66 ft.) north of the South Fork. The soil consisted of 65 centimeters (26 in.) of brown silty clay loam with very little rock content. ST 3 was placed approximately 30 meters (100 ft.) west of ST 2 and 10 meters (33 ft.) north of the South Fork. The soil consisted of 25 centimeters (10 in.) of brown silty loam with a heavy gravel content. The floodplain to the west of ST 3 was a very narrow strip because the ridge toe extends almost to the South Fork, so no more STs were excavated.

In conclusion, the archaeological survey of the A.P.E. did not identify any archaeological sites. Most of the land in the A.P.E. has a low potential for archaeological sites. No further work is recommended for this project.

SUPPORT DOCUMENTATION

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

Other:

Signed:

CALEB SMITH

5/3/2019

NCDOT ARCHAEOLOGIST

Date

18-09-0085



HISTORIC ARCHITECTURE AND LANDSCAPES NO HISTORIC PROPERTIES PRESENT OR AFFECTED 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.:	BR-0123	County:	Surry
WBS No.:	67123.1.1	Document Type:	CE
Fed. Aid No.:		Funding:	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal
Federal Permit(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Permit Type(s):	USACE
<u>Project Description:</u> Replace Bridge No. 318 on SR 1319 over UT to South Fork Mitchell River			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

- 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.
- There are no historic properties present or affected by this project. (Attach any notes or documents as needed.)

Date of field visit: March 18, 2019

Description of review activities, results, and conclusions:

Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on October 18, 2019. Based on this review there are no NR, DE, LL, SL, or SS in the Area of Potential Effects (APE). There are two clusters of farm buildings in the vicinity of the bridge. These structures do not rise to the level of architectural integrity of significance to warrant further evaluation for National Register eligibility. No historic properties will be affected by this project.

SUPPORT DOCUMENTATION

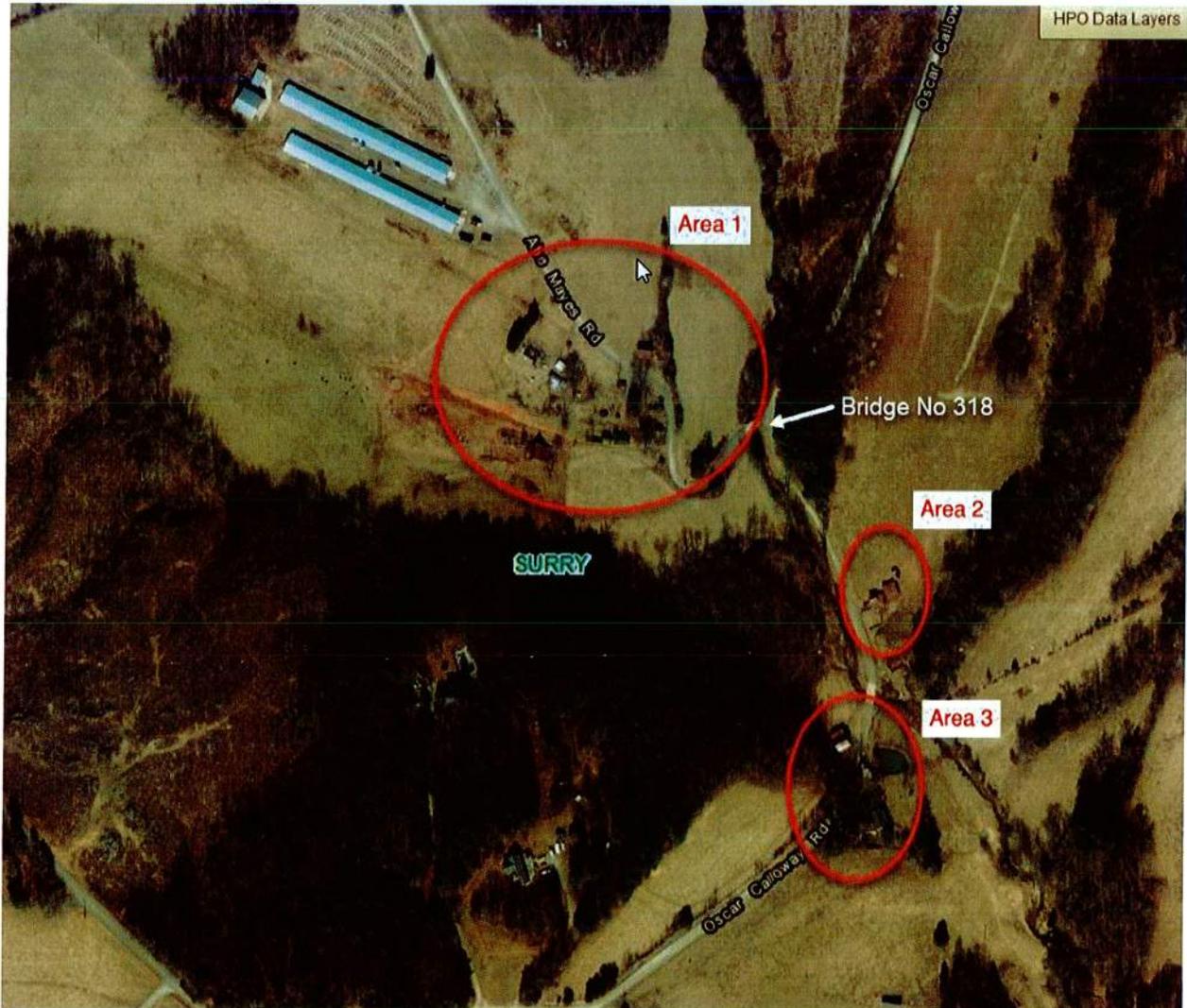
- Map(s) Previous Survey Info. Photos Correspondence Design Plans

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes – NO HISTORIC PROPERTIES PRESENT OF AFFECTED

Shelby Reap
NCDOT Architectural Historian

March 25, 2019
Date





STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

Date: July 1, 2019

MEMORANDUM TO: File

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

SUBJECT: **NRCS Farmland Conversion Impact Rating Bridge No. 850318 on SR 1319
(Abe Mayes Road) over Unnamed Tributary (UT) of South Fork Mitchell
River
Surry County, NC**

WBS 67123.1.1, STIP Project No. BR-0123

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-0123 consistent with FPPA.

Project Description

BR-0123 proposes to replace Bridge No. 850318 on SR 1319 (Abe Mayes Road) over Unnamed Tributary (UT) of South Fork Mitchell River in Surry County.

Applicability

Project BR-0123 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 and farmlands of statewide importance are found within the project area
- The land is not in water storage or used for national defense purposes

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
Project Development and Environmental Analysis
1000 Birch Ridge Drive
1548 Mail Service Center
Raleigh, NC 27699-1548

Telephone: 919-707-6000
Fax: (919) 250-4224
Website: www.ncdot.gov

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 prime farmlands if drained located in the vicinity of the project. A project footprint was created to include a 25-foot buffer from estimated right of way. 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 100 percent 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; approximately 100 percent borders on land in non-urban use.
3. Percent of Site Being Farmed: 1 out of 20 points. Estimated using aerial photography, approximately 5 percent of the project footprint site is being farmed.
4. Protection Provided by State and Local Government: 3 out of 20 points. A small portion of the project footprint site is designated as a Voluntary Agriculture District (VAD), but minimal impacts are anticipated.
5. Distance from Urban Built-up Area: 15 out of 15 points. Determined using aerial photography; residential development is not within 10,560 feet of the project site.
6. Distance to Urban Support Services: 10 out of 15 points. County water and sewer maps indicate services exist within ½ mile of the site. Some support services exist within 3 miles of the project footprint site.
7. Size of Present Farm Unit Compared to Average: 2 out of 10 points. The farm unit is more than 60 percent below the average size farm unit in Surry County (101 acres).
8. Creation of Non-farmable Farmland: 0 out of 10 points. The project will have minimal implications on remaining farmable land.
9. Availability of Farm Support Services: 0 out of 5 points. No required services are available in the project footprint site.
10. On-Farm Investments: 2 out of 20 points. Some on-farm investments including waterways were identified using aerial imagery in the project footprint site.
11. Effects of Conversion on Farm Support Services: 0 out of 10 points. No significant reduction in demand for support services is expected to 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 for AD-1006 for BR-0123 is 58.

Summary

Because the total of the points assigned in part VI of the NRCS for AD-1006 for BR-0123 is more than 60 and therefore the total points of the NRCS Farmlands Conversion Form AD-1006 is less than 160, impacts to FPPA soils is anticipated and mitigation for farmland loss is required for the project in accordance with FPPA.

Sources

US Census. Census of Agriculture. 2012. County Data. North Carolina. Surry County. Accessed 6/25/2019.

(https://www.nass.usda.gov/Publications/AgCensus/2012/Online_Resources/County_Profiles/North_Carolina/cp37171.pdf)

Surry County. GIS and Mapping. www.gis.surryinfo.net. Accessed 6/25/2019.

(www.gis.surryinfo.net)

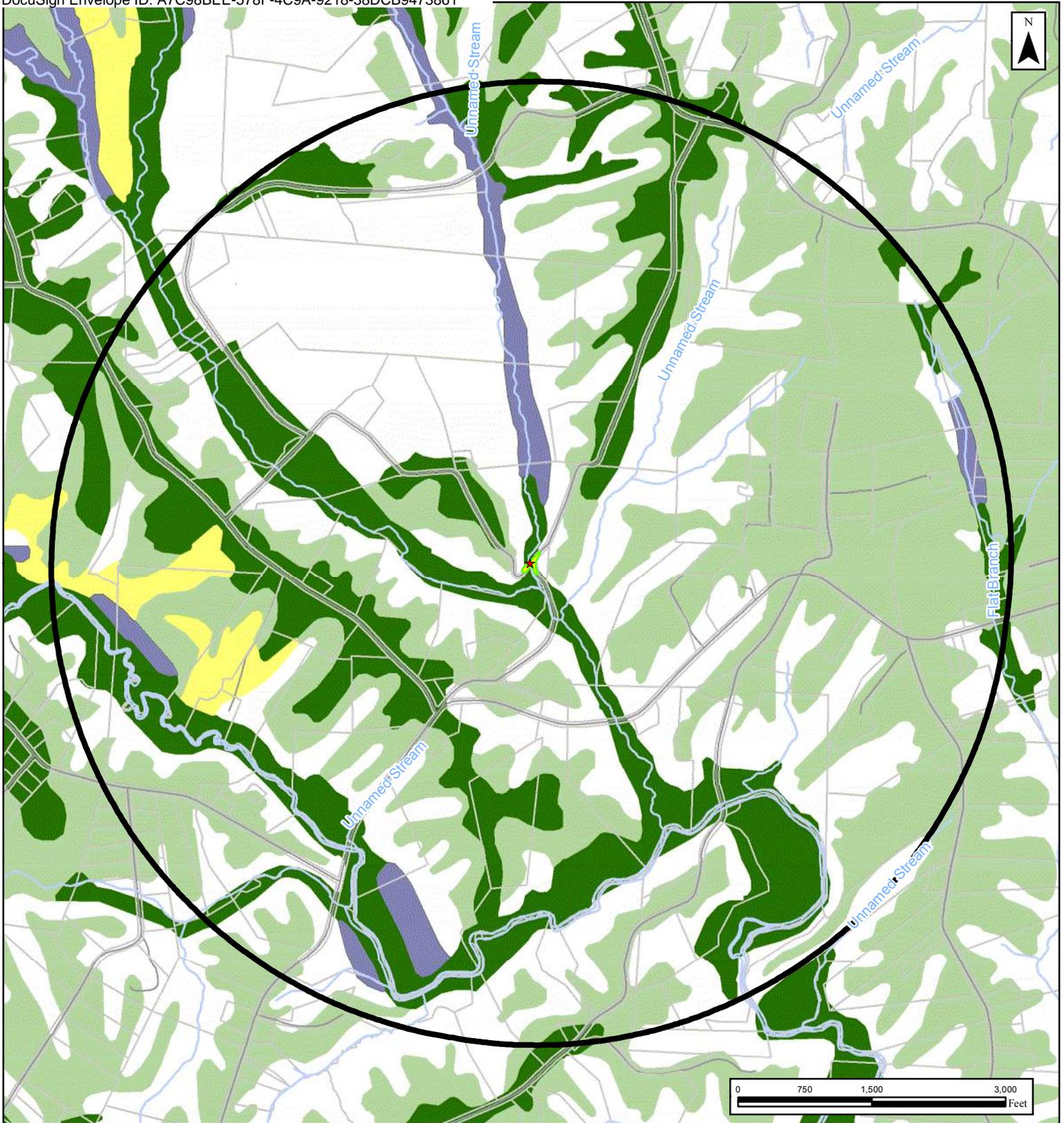
Legal Information Institute. Section 658.5- Criteria. Accessed 6/3/2019.

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

Attachments

NRCS Farmland figure

Cc: Harrison Marshall and Herman Huang, NCDOT Community Studies



Legend

- ★ Bridge No. 318 over UT of S. Fork Mitchell River
- Project Footprint
- ▭ 1-mile Buffer
- Roads
- Parcels
- Streams
- All areas are prime farmland
- Farmland of local importance
- Farmland of statewide importance
- Prime farmland if drained

Surry County, NC



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

BR-0123
Bridge No. 318
Replacement Project
over UT of South Fork
Mitchell River
Surry County
NCDOT Division 11
July 2019

NRCS Farmland Figure