

Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

TIP Project No.	B-4979
WBS Element	39899.1.1
Federal Project No.	N/A

A. Project Description:

The proposed project will replace Yadkin County Bridge No. 980059 on US 21 Business (N. Main Street) over Jonesville Creek. Bridge No. 980059 is 59 feet long. The replacement structure will be a two-span cored slab bridge approximately 120 feet long providing a minimum 39.5-foot clear deck width. The bridge will include two 12-foot lanes and 7.75-foot shoulders, which could accommodate bicyclists. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 180 feet from the northwest end of the new bridge and 270 feet from the southeast end of the new bridge. The approaches will be widened to include a 24-foot pavement width providing two 12-foot lanes. A 4-foot full depth paved shoulder with a 4-foot grassed shoulder will be provided on each side (7-foot grass shoulders where guardrail is included). The roadway will be designed as a Minor Rural Arterial, using regional guidelines, with a 40-mile per hour design speed. Traffic will be detoured off-site during construction (see Figure 1).

B. Description of Need and Purpose:

The North Carolina Department of Transportation (NCDOT) Bridge Management Unit records indicate Bridge No. 980059 has a sufficiency rating of 50.88 out of a possible 100 for a new structure.

Bridge No. 980059 is 59 feet long and has a clear roadway width of 26.25 feet. The bridge is considered functionally obsolete due to a deck geometry appraisal of 3 out of 9 according to Federal Highway Administration (FHWA) standards. Since the bridge was built in 1922 and reconstructed in 1940, deck surface and joints are in critical condition.

Bridge No. 980059 is expected to carry 4,000 vehicles per day (2020) with 4,600 vehicles per day projected for the future (2040). The substandard deck width is becoming increasingly unacceptable and replacement of the bridge will result in safer traffic operations.

Components of both the concrete superstructure and substructure have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The bridge is not currently posted for weight limits. The bridge is approaching the end of its useful life.

C. Categorical Exclusion Action Classification:



TYPE I A

D. Proposed Improvements:

- 28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117(e)(1-6).

E. Special Project Information:

Costs:

The estimated costs based on 2017 prices are as follow:

Right of Way	\$ 195,000
<u>Construction</u>	<u>\$2,000,000</u>
Total	\$2,195,000

Anticipated Permit or Consultation Requirements:

A Section 404 Nationwide Permit (NWP) No. 3 (maintenance) may be required for impacts to "Waters of the United States" resulting from this project. Other permits that may apply include a NWP No. 33 for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge demolition. The US Army Corps of Engineers (USACE) holds the final discretion as to which permit will be required to authorize project construction.

If a Section 404 permit is required, then a Section 401 Water Quality Certification (WQC) from the NC Department of Water Resources (NCDWR) will be needed. Other required 401 certifications may include a GC 3366 for temporary construction access and dewatering.

Design Exceptions:

There are no anticipated design exceptions for this project.

Bridge Demolition:

Bridge No. 980059 is constructed entirely of concrete and steel. It should be possible to remove with no resulting debris in the water based on standard demolition practices.

Alternatives Discussion:

No Build: The no build alternative would result in eventually closing the road, which is unacceptable given the volume of traffic served by US 21 Business (N. Main Street) and its connectivity.

Rehabilitation: Rehabilitation would only provide a temporary solution for this functionally obsolete bridge. Components of both the concrete superstructure and substructure have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The bridge is approaching the end of its useful life.

New Alignment: Given that the alignment for US 21 Business (N. Main Street) is acceptable, a new alignment was not considered as an alternative.

On-Site Detour: An on-site detour was not evaluated due to the presence of an acceptable off-site detour.

Staged Construction: Staged construction was not considered because of the availability of an acceptable off-site detour.

Off-Site Detour (Preferred): Bridge No. 980059 will be replaced on the existing alignment. Traffic will be detoured off-site (see Figure 1) during the construction period. The NCDOT's *Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects* (Guidelines) considers multiple project variables beginning with the additional time traveled by the average road user resulting from the off-site detour. The off-site detour for this project utilizes existing roads which include SR 1386 (Swan Creek Bypass West), SR 1311 (Shaffner Road), and SR 1312 (Haynes Road). The detour for the average user will result in 5 minutes of additional travel time (approximately 3 miles of additional travel). The duration of the construction is expected to be 12 months. The majority of traffic on the road is considered through traffic.

Based on the Guidelines, the criteria above indicate that on the basis of delay alone, the detour is acceptable. Yadkin County Emergency Services along with Yadkin County Schools Transportation have indicated that the detour is acceptable but will result in 1 to 2-minute delays in response time. NCDOT Division 11 has indicated the condition of all roads, bridges and intersections on the offsite detour are acceptable, without improvement, and concurs with the use of the detour. US 21 Business (N. Main Street) is used as a detour route when portions of I-77 are closed. The proposed project detour would accommodate any necessary detours for I-77.

Bicycle and Pedestrian Accommodations:

This portion of US 21 Business (N. Main Street) is not a part of a designated bicycle route nor is a bicycle project along this portion of US 21 Business in the State Transportation Improvement Program. However, in accordance with the Jonesville Comprehensive Pedestrian Plan, the NCDOT Bicycle and Pedestrian Division has requested bicycle lanes on both sides of the bridge. As a result, 8-foot offsets, which include a 4-foot full depth paved shoulder and a minimum handrail height of 42 inches will be included in the project. No temporary bicycle or pedestrian accommodations are required for this project.

Crashes:

Traffic Engineering evaluated a 5-year period (January 1, 2010–December 31, 2014) and identified four accidents, which occurred in the vicinity of the project. One was a non-fatal injury crash and three were property damage only crashes. None of the crashes were associated with the geometry of the bridge or its approach roadways.

Floodplains:

The portion of Jonesville Creek crossed by Bridge No. 980059 has a Federal Emergency Management Agency (FEMA) regulated floodway and floodplain.

GeoEnvironmental:

Two sites may contain or have contained petroleum underground storage tanks (USTs) within the project limits. Arlington Branco Oil Company was located at 270 North Main Street (US 21 Business). Soil samples detected contaminated soil on this property. Approximately 17 cubic yards of impacted soil may be encountered during installation of drainage piping. It is possible that contaminated soil and groundwater will be encountered during construction.

A second parcel, the Ronald D. Hauser Property located at the southeast corner of Bridge No. 980059 was a store that sold gasoline.

Public Involvement:

A landowner notification letter was sent to all property owners affected directly by this project on November 11, 2014. Property owners were invited to comment. No comments have been received to date.

Other Agency Comments:

A start of study letter was sent to agencies on January 23, 2016. The Jonesville Police Department, Yadkin County, the U.S. Coast Guard, the NC Division of Water Quality, the USACE, the Federal Highway Administration, Eastern Band of Cherokee, US Environmental Protection Agency and NC Department of Water Resources have no special concerns for this project.

The Jonesville Town Manager and the Yadkin County Emergency Services Director reported that the project will have a high impact on emergency services if Bridge No. 980059 is closed during construction because the use of a detour route will add to emergency response times. The Director noted that US 21 Bus is the primary route used by both Yadkin EMS and Arlington Fire and Rescue to access over half of the town of Jonesville.

The Yadkin County Schools Transportation Director indicated that if US 21 Bus is closed during construction, the project will have a moderate impact on school transportation.

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"/>
15	Does the project involve hazardous materials and/or landfills?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Other Considerations (continued)</u>		Yes	No
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 type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F

Response to Question 1:

Northern Long-Eared Bat (NLEB)- While there is potential habitat present for the NLEB, this species is exempt due to consistency with the 4(d) rule. Prior to construction, NCDOT will coordinate with the US Fish and Wildlife Service or the USACE to satisfy Section 7 of the Endangered Species Act for the NLEB.

Response to Question 15:

Two sites may contain or have contained petroleum underground storage tanks (USTs) within the project limits. Arlington Branco Oil Company was located at 270 North Main Street (US 21 Business). Soil samples detected contaminated soil on this property. Approximately 17 cubic yards of impacted soil may be encountered during installation of drainage piping. It is possible that contaminated soil and groundwater will be encountered during construction.

A second parcel, the Ronald D. Hauser Property located at the southeast corner of Bridge No. 980059 was a store that sold gasoline.

Response to Question 16:

The portion of Jonesville Creek crossed by Bridge No. 980059 has a regulated floodway. The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of the 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). If required, the Division will submit sealed as-built construction plans to the Hydraulics Unit upon certifying the project was built as shown on construction plans.

H. Project Commitments

**Yadkin County
Bridge No. 980059 on US 21 (N. Main Street) in Jonesville
Over Jonesville Creek
WBS No. 39899.1.1
TIP No. B-4979**

Hydraulic Unit – FEMA Coordination

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

NCDOT Division 11 – FEMA

This project involves construction activities on or adjacent to FEMA-regulated stream(s). If required, 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.

Division 11 Construction, Resident Engineer's Office – Offsite Detour

In order to have time to adequately reroute school busses Yadkin County will be contacted at 336-679-2051 at least one month prior to road closure.

Yadkin County Emergency Services will be contacted at (336) 679-4232 for medical services and (336) 679-4231 for the fire marshal, at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Arlington Fire & Rescue Emergency Services will be contacted at (336) 835-6184 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Contracts Unit - Length of Construction

In order to address specific requests from the School Transportation Director for Yadkin County, NCDOT will set the **minimum** reasonable contract time to reduce the period of road closure.

Geotechnical Unit-Geoenvironmental

The contractor will remove and properly dispose of any contaminated material disturbed during construction. The contractor shall transport all contaminated soil excavated from the project area to a facility licensed to accept contaminated soil. Any contaminated material that is not disturbed by construction will remain in place and undisturbed.

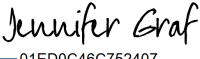
I. Categorical Exclusion Approval

TIP Project No.	<u>B-4979</u>
WBS Element	<u>39899.1.1</u>
Federal Project No.	<u>N/A</u>

Prepared By:

12/12/2019

Date

DocuSigned by:

01ED0C46C752407...

Jennifer Graf, PMP, Sr. Project Manager
CDM Smith

Prepared For:

North Carolina Department of Transportation

Reviewed By:

12/19/2019

Date

DocuSigned by:

8C1643E6874A457

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



Approved

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

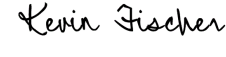


Certified

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

12/12/2019

Date

DocuSigned by:

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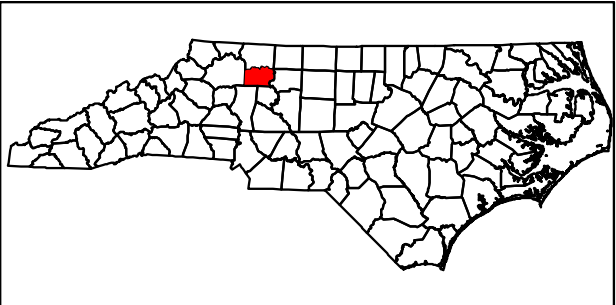
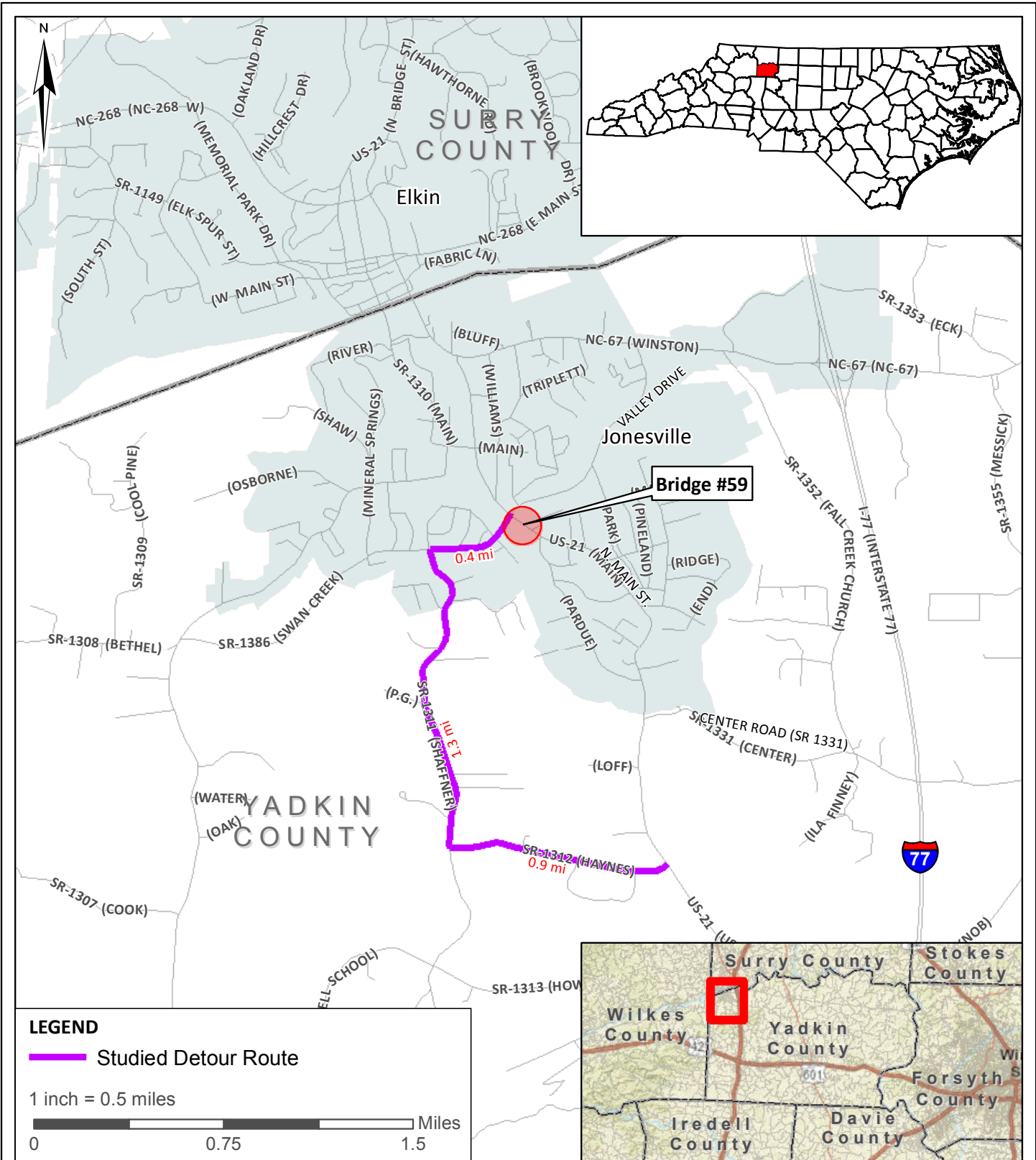
Kevin Fischer, PE, Structures Management Unit
North Carolina Department of Transportation

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

Date

Not Applicable

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



LEGEND

Studied Detour Route

1 inch = 0.5 miles



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

VICINITY MAP

B-4979
 Replace Bridge #59
 on N. Main St. (US 21 Business)
 Over Jonesville Creek in Jonesville

County: **YADKIN**

Div: **11** | **B-4979**

WBS: **39899.1.1**

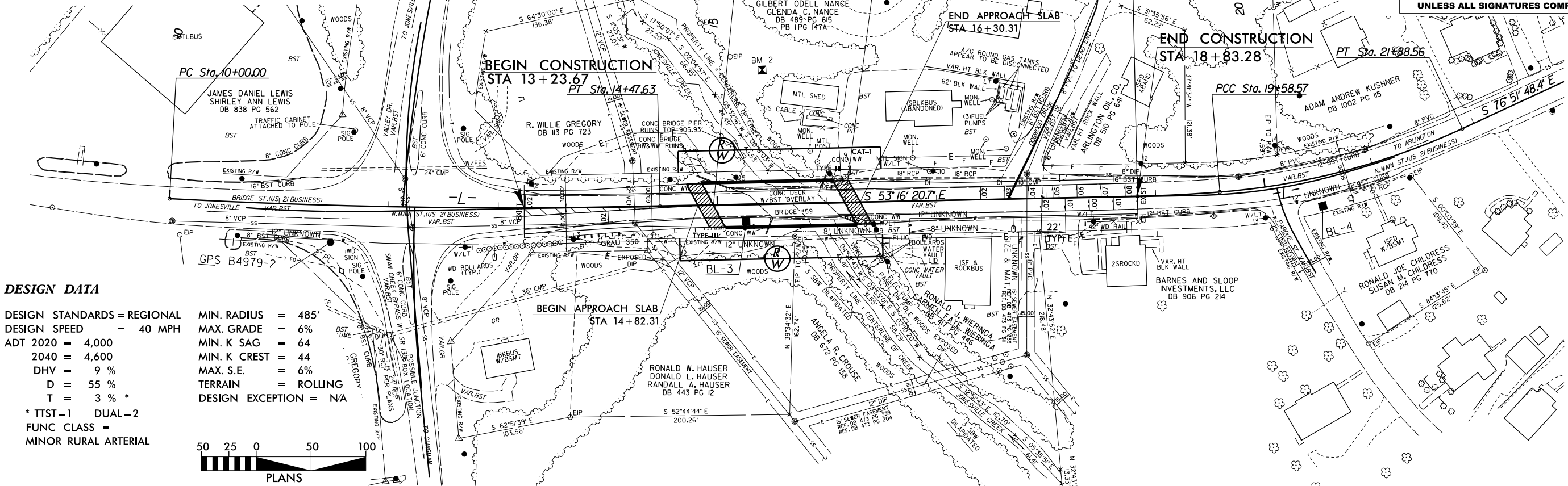
MAY 2017

Figure 1

B-4979, BRIDGE NO. 59 YADKIN COUNTY REPLACE IN PLACE OFFSITE DETOUR

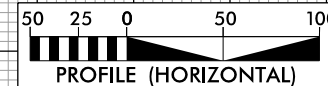
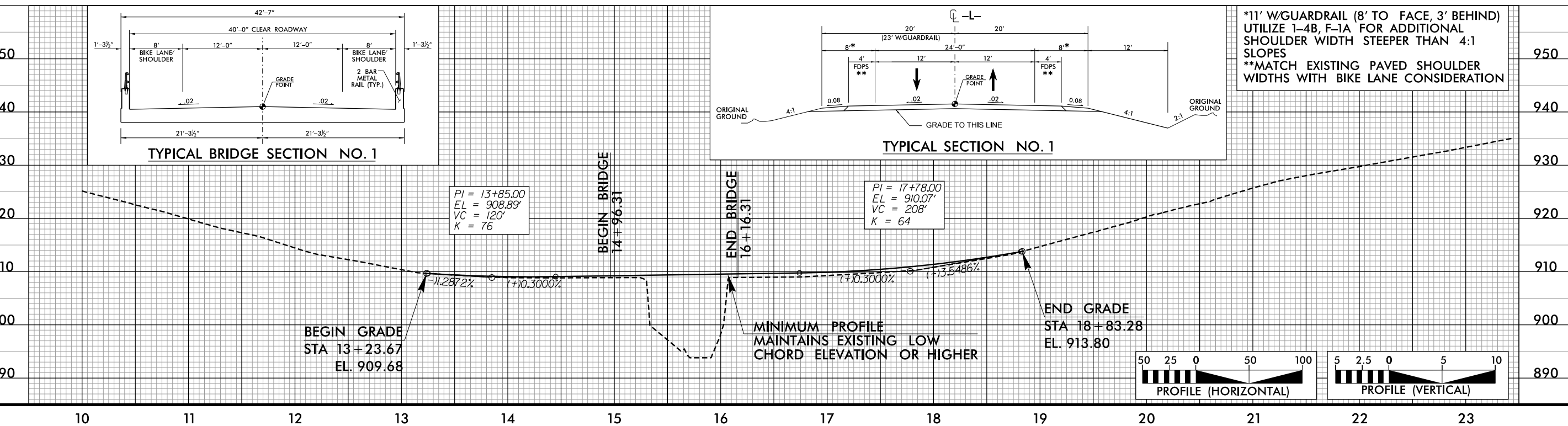
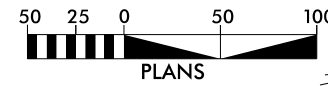
-L-		
PI Sta 12+23.92	PI Sta 19+20.94	PI Sta 20+74.78
$\Delta = 4'16"28.3"(LT)$	$\Delta = 3'19"06.2"(LT)$	$\Delta = 20'16"21.5"(LT)$
$D = 0'57"17.7"$	$D = 4'24"26.5"$	$D = 8'48"53.0"$
$L = 447.63'$	$L = 75.29'$	$L = 229.99'$
$T = 223.92'$	$T = 37.66'$	$T = 116.21'$
$R = 6,000.00'$	$R = 1,300.00'$	$R = 650.00'$

PROJECT REFERENCE NO. B-4979	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR E/W ACQUISITION	
 CDM Smith Inc. 6400 Glenwood Avenue Suite 400 Raleigh, NC 27612-2228 NC CDA No. F-2412	 M Engineering, PLLC 1011 S. School Drive Suite 100 Raleigh, NC 27606 NC CDA No.
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



DESIGN DATA

DESIGN STANDARDS = REGIONAL	MIN. RADIUS = 485'
DESIGN SPEED = 40 MPH	MAX. GRADE = 6%
ADT 2020 = 4,000	MIN. K SAG = 64
2040 = 4,600	MIN. K CREST = 44
DHV = 9 %	MAX. S.E. = 6%
D = 55 %	TERRAIN = ROLLING
T = 3 % *	DESIGN EXCEPTION = N/A
* TTST=1 DUAL=2	
FUNC CLASS =	
MINOR RURAL ARTERIAL	



*11' W/GUARDRAIL (8' TO FACE, 3' BEHIND)
UTILIZE 1-4B, F-1A FOR ADDITIONAL
SHOULDER WIDTH STEEPER THAN 4:1
SLOPES
**MATCH EXISTING PAVED SHOULDER
WIDTHS WITH BIKE LANE CONSIDERATION

REVISIONS

Invalid expression
in Roadway Pro: B4979_Rdy_psh.dgn

15-02-0020



HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

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

PROJECT INFORMATION

Project No:	B-4979	County:	Yadkin
WBS No.:	39899.1.1	Document Type:	PCE or CE
Fed. Aid No:	N/A	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):	NWP
Project Description: Replacement of Bridge No. 59 on US 21 Business (N. Main Street) over Jonesville Creek in Jonesville.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

Description of review activities, results, and conclusions:

Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on February 13, 2015. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects, which is 700' from each end of the bridge and 100' from the centerline each way. East of the bridge is a cluster of building built in the 1930s to 1940s. Directly southeast of the bridge is a one-story store and one-story frame home built in the 1930s; both are built of stone and appear to have been built together (265 and 271 North Main Street). Both structures have undergone numerous material changes including roofing, replacement windows, replacement porches, and chimneys, and have had several additions added. The two structures have lost integrity of design, materials, feeling and association and are not eligible for National Register listing. 270 North Main Street, built 1940, is located directly northeast of the bridge. The one-story concrete block service garage in unremarkable and not eligible for National Register listing. One-story vernacular frame houses in the easternmost portion of the APE are unremarkable and not eligible for NR listing.

West of the bridge are commercial structures from the late 20th Century; they are under 50 years of age. A one-story brick house built in the 1960s (300 South Bridge Street) directly west of the bridge is unremarkable and not eligible for NR listing, and in addition Bridge No. 59, built 1922 and reconstructed in 1940, is not eligible for National Register Listing. There are no National Register listed or eligible properties and no survey is required. If design plans change, additional review will be required.

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

HPO quad maps and GIS information recording NR, SL, LD, DE, and SS properties for the Yadkin County survey, Yadkin County GIS/Tax Information, and Google Maps are considered valid for the purposes of determining the likelihood of historic resources being present. There are no National Register listed or eligible properties within the APE and no survey is required.

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

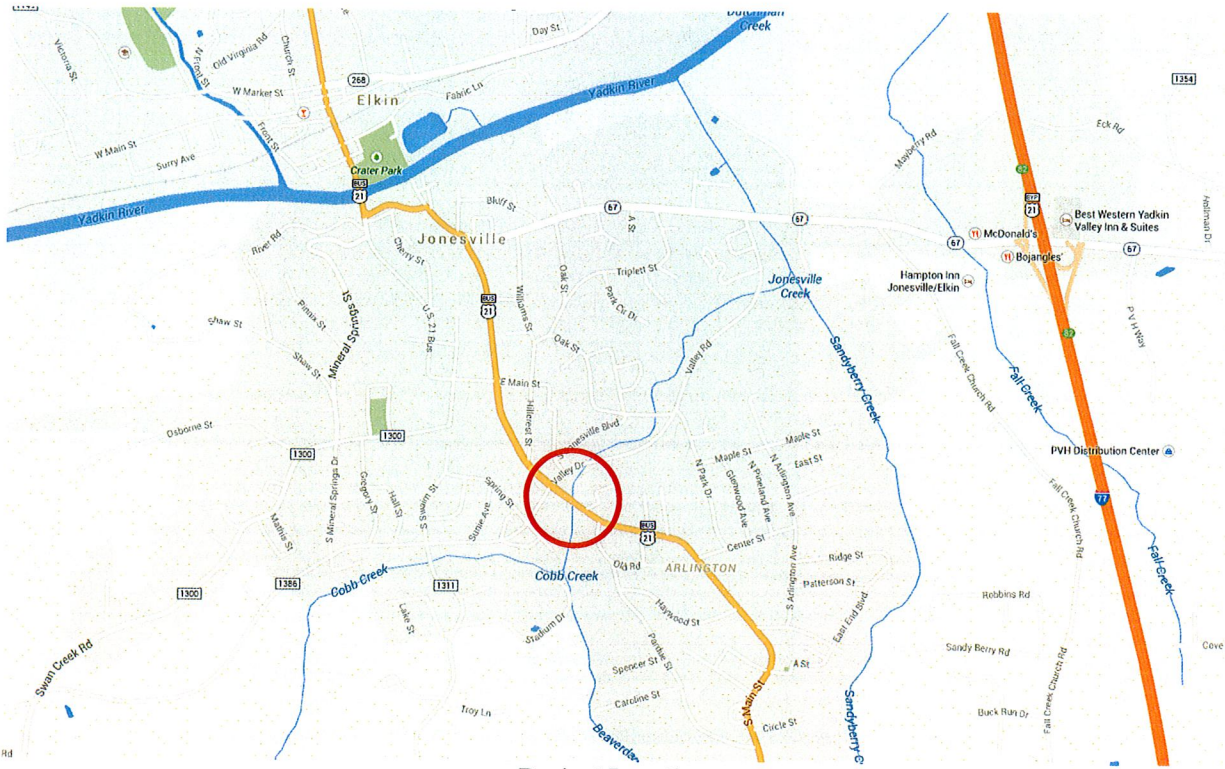
Historic Architecture and Landscapes -- NO SURVEY REQUIRED

Kate Hubbard

2/20/2015

NCDOT Architectural Historian

Date



Project Location.

15-02-0020



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

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



PROJECT INFORMATION

Project No: B-4979 **County:** Yadkin
WBS No: 39899.1.1 **Document:** PCE OR CE
F.A. No: **Funding:** State Federal
Federal Permit Required? Yes No **Permit Type:** Nationwide

Project Description: Replace Bridge 59 on US 21 Business (N. Main St.) over Jonesville Creek in Jonesville. The Area of Potential Effects (A.P.E.) of the project is approximately 549 meters (1,800 ft.) long and 61 meters (200 ft.). This A.P.E. includes an area around the intersection of US 21 Business and Valley Drive to the northwest of the bridge. State-funded; Federal permits required; temporary and/or permanent easements will be required. No design plans provided.

SUMMARY OF CULTURAL RESOURCES REVIEW

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

The review included an examination of topographic map, an aerial photograph, the Yadkin County soil survey, and listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews at the Office of State Archaeology (O.S.A.).

The bridge is oriented approximately northwest to southeast, but is considered north-south for this review.

The topographic map (Elkin South, N.C.) shows the bridge is located in a moderately wide creek valley in a developed area in the town of Jonesville. There are many structures along US 21 Business in the southeast and southwest quadrants. The landform in the southeast quadrant is a ridge side slope. The southwest quadrant is a level floodplain. The landform in the northwest quadrant is a level floodplain between the bridge and Valley Drive, and a drainage valley north of Valley Drive. The landform in the northeast quadrant is floodplain between the bridge and Valley Drive, and a ridge toe to the north of Valley Drive. A big building is located in this quadrant, too.

The aerial photograph shows the land in the southwest quadrant is occupied by structures, driveways and yards. The land in the southeast quadrant is also occupied by structures, driveways and yards. The land in these quadrants has been disturbed by development and has a low potential for archaeological sites. The northeast quadrant between the bridge and Valley Drive is wooded. This section is approximately 60 meters (200 ft.) long. The A.P.E. along the east side of US 13 Business to the north of Valley Drive is occupied by a building and a parking lot. The land along the north side of Valley Drive east of the intersection is occupied by a parking lot and a driveway. The northwest quadrant from the bridge north to the Valley Drive intersection is wooded. This section is approximately 60 meters (200 ft.) long, and does include the edge of an area of cleared land that might be a town park or green space. There is a structure and driveway along the south side of Valley Drive at the intersection. The A.P.E. along US 21 Business to the north of Valley Drive is occupied by a structure and parking lot. The area along the north side of Valley Drive to the west of US 21 Business is a parking lot.

The Yadkin County soil survey shows the soils in the A.P.E. are Congaree fine sandy loam in the

floodplain, and Cecil fine sandy loam (14-25% slopes), eroded, on the uplands to the north and south. Congaree fine sandy loam is a well-drained soil found on floodplains. Cecil fine sandy loam (14-25% slopes), eroded, is a well-drained soil found on uplands. Well drained soils on floodplains have a moderate to high potential for archaeological sites.

A review of information at the O.S.A. shows no previously recorded sites nearby. The A.P.E. is not within any areas that have been previously surveyed for archaeological sites. The A.P.E. is not within any areas that have been reviewed by the State Historic Preservation Office (HPO).

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

The A.P.E. is located in a developed part of the town of Jonesville. Most of the A.P.E. is occupied by structures, parking lots, or driveways and has little potential for archaeological sites. There are two sections of undeveloped floodplain in the A.P.E., but they are very small and could be disturbed roadside areas.

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED

Caleb Smith

4/20/2015

NCDOT ARCHAEOLOGIST II

Date