

**Cabarrus County  
Bridge No.'s 14 & 19 on US 29  
over Rocky River and Access Road  
Federal Aid Project No. BRSTP-0029(42)  
W.B.S. No. 42265.1.1  
T.I.P. No. B-5123**

CATEGORICAL EXCLUSION

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

7/28/14  
DATE

*for* Richard W. Hancock, PE,  
Manager, Project Development & Environmental Analysis Unit

7-29-14  
DATE

*for* John F. Sullivan, III, Division Administrator  
Federal Highway Administration

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Documentation Prepared in  
Project Development and Environmental Analysis Unit By:

7-28-14

DATE

Natalie Lockhart

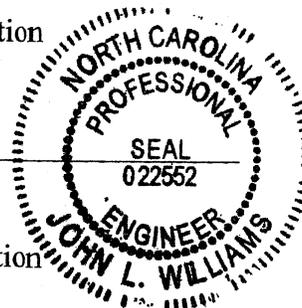
Natalie Lockhart  
Project Planning Engineer  
Bridge Project Development Section

7-28-14

DATE

John L. Williams

John L. Williams, PE  
Project Engineer  
Bridge Project Development Section



## **PROJECT COMMITMENTS:**

**Cabarrus County  
Bridge No's. 14 & 19 on US 29  
Over Rocky River and Access Rd.  
Federal Aid Project No. BRSTP-0029(42)  
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### **Hydraulic 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).

### **Division Construction-FEMA**

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.

### **Roadside Environmental Unit, Division Resident Engineer- Sensitive Watersheds**

Rocky River is listed on the 2012 final 303(d) list by NCDWQ for turbidity and will be subject to all Design Standards in Sensitive Watersheds.

### **Division 10 Construction, Structures Management, Roadway Design Unit-Bicycle and Pedestrian Accommodations**

The City of Concord desires that its roadways are designed to serve bicyclists and pedestrians. With heavy pedestrian traffic due to events held at the Charlotte Motor Speedway, a 10'-5" multi-use path and pedestrian safe rails has been included into the design for each bridge. The City of Concord has participated in several NCDOT projects by funding a portion of the sidewalk through municipal agreement. A cost sharing agreement will be necessary.

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**INTRODUCTION:** Bridge No.'s 14 & 19 is included in the latest approved North Carolina Department of Transportation (NCDOT) Transportation Improvement Program. The location is shown in Figure 1. No substantial environmental impacts are anticipated. The project is classified as a Federal "Categorical Exclusion".

**I. PURPOSE AND NEED STATEMENT**

NCDOT Bridge Management Unit records indicate Bridge No. 14 has a sufficiency rating of 60.28 out of a possible 100 for a new structure. The bridge is considered functionally obsolete due to deck geometry of 3 out of 9 according to Federal Highway Administration (FHWA) standards. Bridge No. 19 has a sufficiency rating of 54.98 out of a possible 100 for a new structure. The bridge is considered functionally obsolete due to deck geometry of 2 out of 9 according to Federal Highway Administration (FHWA) standards. The bridge is also considered structurally deficient due to underclearance rating of 3 out of 9. Both bridges were programmed in 2008 and were eligible for federal funds. Both bridges were structurally deficient. Bridge No. 19 had a sufficiency rating of 37.9. Bridge No. 14 had a sufficiency rating of 48. Bridge No. 19 was selected due to high deficiency points (16.6) compared to the rest of the state. Bridge No. 14 had a low deficiency point rating (1.5) but was selected as a companion project since these are dual bridges that would both need to be replaced within 10 years of each other on a high ADT primary route.

Bridge No.'s 14 & 19 have components of both the concrete superstructure and substructure has experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The posted weight limits on the bridges are not posted. These bridges are approaching the end of its useful life. Replacement of these bridges will result in safer traffic operations.

Bridge No.'s 14 and 19 carry 26,900 vehicles per day with 49,400 vehicles per day projected for the year 2035. The projected volume includes two percent truck-tractor semi-trailer (TTST) and three percent dual-tired vehicles (DT). The posted speed limit is 55 miles per hour in the project area. Eighteen school buses cross Bridge No. 14 daily on their morning and afternoon routes and there are twenty school buses that cross Bridge No. 19 daily on their morning and afternoon routes. The substandard deck width and bridge railing are becoming increasingly unacceptable and replacement of the bridge will result in safer traffic operations.

There were twelve accidents reported in the vicinity of Bridge No.'s 14 & 19 during a recent five-year period. There are two median crossovers within the vicinity of the structures. Six of these crashes occurred at these crossovers.

## **II. EXISTING CONDITIONS**

The project is located within the city limits of Concord approximately 10 miles southeast of Huntersville and 12 miles northeast of Charlotte, with I-85 and I-485 both within three miles of the bridges (see Figure 1). Development in the area is industrial, commercial, and low-density residential in nature.

US 29 (Concord Parkway) is classified as a principal arterial in the Statewide Functional Classification System and it is not a National Highway System Route.

In the vicinity of the bridges, US 29 has two north bound lanes and three south bound lanes, each direction with 27-foot pavement width with 3-foot grass shoulders and 23-foot grass median. The roadway grade is in a sag vertical curve through the project area. Both bridges are on a tangent. The roadway is situated approximately 27.0 to 29.0 feet above the creek bed.

Bridge No. 14 is a four-span bridge in the north bound lane of US 29. There is a pedestrian bridge alongside of Bridge No. 14. It consists of a timber deck on steel I-beams with reinforced concrete girders, caps and timber piles. The existing bridge was constructed in 1951. The overall length of the structure is 209 feet. The clear deck width is 33.0 feet. The weight limit is not posted. Bridge No. 19 is a four-span bridge in the south bound lane of US 29. It consists of reinforced concrete deck and girders with reinforced concrete posts. The existing bridge was constructed in 1938. The overall length of the structure is 210 feet. The clear deck width is 29 feet. The weight limit is not posted.

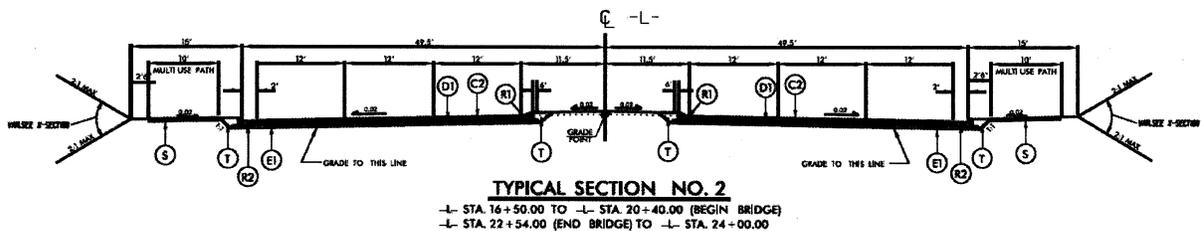
There are no utilities attached to the existing structure, but the City of Concord has a 16" water pipeline with valves on south side of US 29; it is bored under the Rocky River. A local line branches off from the Speedway side of the bridge to follow the parking area service road. City of Concord sanitary sewers: On the Speedway side, a 12" line follows the southbound US 29 lanes to tie into a WSACC (Water and Sewer Authority of Cabarrus County) sewer interceptor. On the Concord side, a 12" line originates north of the private museum, crosses US 29 and follows the southbound lanes to the bridge before diverging to tie into the WSACC line. A pole line is on the south side of US 29 owned by Concord Telephone Company (now Windstream) with power and cable lines attached. A pole line owned by Duke Energy is on north side of US 29. Former MCI, Southern Net and Worldcom (now Verizon) fiber optic cables run along south side of US 29. NCDOT fiber optic line on south side of US 29 for the reversible lane system. On the north side of Rocky River and US 29 there is a 48" WASCC sanitary sewer coming from the new mall at Concord Mills, crossing the creek about 200 feet from the US 29 bridge and heading to a pump station. A second 48" line is in the process of being installed parallel to this one. A 8" steel Public Service Natural Gas along south side of US 29, bored under Rocky River. Utility impacts are anticipated to be high.

### III. ALTERNATIVES

#### A. Project Description

The replacement structures will consist of a bridge approximately 215-foot long. The bridge length is based on preliminary design information and is set by hydraulic requirements. The bridges will be of sufficient width to provide for three 12-foot lanes with 4-foot offsets on the median side of each bridge. There will be a 14-foot outside lane to provide proper alignment for curb and gutter. A 10'-5" multi-use path will be on the outside of each bridge to replace the existing pedestrian accommodations. There are currently only pedestrian accommodations on the east side provided by the pedestrian bridge. There are no pedestrian accommodations on the west side. The roadway grade of the new structure will be approximately the same as the existing grade.

The existing roadway will be widened approximately 29 feet in each direction to provide an additional lane and a 15-foot berm which will accommodate a proposed 10-foot multiuse path. A 10-foot multi-use path is being provided to accommodate for bicycles and pedestrians in accordance with the current NCDOT Design Policy. The existing roadway width along with the proposed widening will result in three 12-foot lanes, curb and gutter, a 15-foot berm, in each direction along with a 23-foot median. This roadway will be designed as a major arterial with a 60 mph design speed.



This section of US 29 is not part of a designated bicycle route nor is it listed in the T.I.P. as needing incidental bicycle accommodations. The City of Concord desires that its roadways are designed to serve bicyclists and pedestrians. The City of Concord has participated in several NCDOT projects by funding a portion of the sidewalk through municipal agreement. A cost sharing agreement will be necessary. It is recommended that the bridge be equipped with 14 ft. wide outside lanes and 5.5 ft. sidewalks on the shoulder side of both bridges as well as pedestrian safe railing. The City of Concord Parks & Recreation Department identifies a greenway corridor at this location, therefore it is recommended that 10 ft. wide graded shelf and 8 ft. of vertical clearance to be included in the design and construction of the new bridge.

## **B. Reasonable and Feasible Alternatives**

Two alternatives for replacing Bridge No.'s 14 & 19 that were studied in detail are described below.

### Alternate 1

Alternate 1 involves replacement of the structures along the existing roadway alignment with traffic being maintained using phased construction. Improvements to the approach roadways will be required for a distance of approximately 495 feet to the west and 515 feet to the east of the new structure. A design exception is not required for this alternative. Traffic will be maintained through phased construction (see Figure 2A).

### Alternate 2/2A (Preferred)

Alternate 2/2A involves replacement of the structures along the existing roadway alignment. A temporary detour structure located north of the existing bridges would serve as an on-site detour. The temporary bridge structure will be approximately 266 feet long. Improvements to the temporary detour approach roadways will be required for a distance of 414 feet west and 530 feet east of the structure. Improvements to the approach roadways will be required for a distance of approximately 520 feet to the west and 415 feet to the east of the structure. A design exception is not required for this alternative.

\*Alternate 2 involves 5-foot sidewalk on Bridge No. 19 and a 10.5-foot multi-use path on Bridge No. 14. Alternate 2A is a modification of Alternate 2 that involves a 10.5 multi-use path on both bridges. Alternate 2A is the preferred alternate because of the multi-use path being incorporated into the design for both bridges (see Figure 2B)

## **C. Alternatives Eliminated From Further Consideration**

The “do-nothing” alternative will eventually necessitate closure of the bridge. This is not acceptable due to the traffic service provided by US 29.

“Rehabilitation” of the old bridge is not practical due to its age and deteriorated condition. Bridge No.'s 14 & 19 have components of both the concrete superstructure and substructure has experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The posted weight limit on the bridge is not posted. The bridge is approaching the end of its useful life. Replacement of the bridge will result in safer traffic operations.

An offsite detour is not feasible due to the amount of traffic on US 29 as well improvements needed to roads on the detour. There are also bridges on the detour that are programmed for replacement so an offsite detour is not preferred. NCDOT Division 10 concurs in these recommendations.

**D. Preferred Alternative**

Bridge No's. 14 & 19 will be replaced at the existing location with a temporary onsite detour north of the existing bridges as shown by Alternative 2A in Figure 2B. Alternate 2A is lower in construction costs and the onsite detour accommodates the volumes of traffic better. NCDOT Division 10 concurs with the selection of Alternative 2A as the preferred alternative.

**IV. ESTIMATED COSTS**

The estimated costs, based on 2013 prices, are as follows:

	Alternative 1	Alternative 2	Alternate 2A Preferred
Structure	\$ 3,062,000	\$ 2,043,000	\$ 2,145,000
Roadway Approaches	1,500,000	1,517,000	1,535,000
Detour Structure and Approaches	- 0 -	681,000	681,000
Structure Removal	200,000	200,000	200,000
Misc. & Mob.	757,000	734,000	749,000
Eng. & Contingencies	881,000	825,000	790,000
Total Construction Cost	\$ 6,400,000	\$ 6,000,000	\$ 6,100,000
Right-of-way Costs	548,000	491,000	491,000
Right-of-way Utility Costs	481,000	535,000	535,000
Total Project Cost	\$ 7,429,000	\$ 7,026,000	\$ 7,126,000

**V. NATURAL ENVIRONMENT**

**Physical Characteristics**

**Water Resources**

Water resources in the study area are part of the Yadkin-Pee Dee River basin (U.S. Geological Survey [USGS] Hydrological Unit 03040105). One stream was identified in the study area (Table 1). The characteristics of this stream are provided in Table 2.

**Table 1. Water resources in the study area.**

Stream Name	Map ID	DWQ Index Number	Best Usage Classification
Rocky River	RR	13-17	C

**Table 2. Physical characteristics of water resources in the study area.**

Map ID	Bank Height (ft)	Bankful Width (ft)	Water Depth (in)	Channel Substrate*	Velocity	Clarity
RR	3	20 – 25	6 – 24	sa, sl, gr	Moderate	Slightly turbid

\*sa=sand, sl=silt, gr=gravel

All surface waters identified within the study corridor limits have been assigned a primary water resource classification of “C”. There are no designated trout waters, anadromous fish waters or Primary Nursery Areas present in the study area.

There are no Outstanding Resource Waters (ORW), High Quality Waters (HQW), Water Supplies (WS-I or WSII) within one mile of the project study area. Rocky River is listed on the 2012 final 303(d) list by NCDWQ for turbidity.

### **Biotic Resources**

Terrestrial communities in the study area may be impacted by project construction as a result of grading and paving of portions of the study area. At this time, decisions regarding the final location and design of the proposed bridge replacement have not been made. Therefore, community data are presented in the context of total coverage of each type with the study area (Table 3). Once a final alignment and preliminary design have been determined, probable impacts to each community type will be calculated.

**Table 3. Coverage of terrestrial communities in the study area.**

<b>Community</b>	<b>Coverage (ac.)</b>
Maintained/Disturbed	9.9
<b>Total</b>	<b>9.9</b>

## **Jurisdictional Topics**

### **Surface Waters and Wetlands**

There are no wetlands within the study area.

### **Permits**

The proposed project has been designated as a Categorical Exclusion (CE) for the purposes of NEPA documentation. As a result, a Nationwide Permit 23 will likely be applicable. 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 construction or rehabilitation. The USACE holds the final discretion as to what permit will be required to authorize project construction.

In addition to the 404 permit, other required authorizations include the corresponding Section 401 Water Quality Certification (WQC) from the NCDWQ. A NCDWQ Section 401 Water Quality General certification for a Categorical Exclusion may be required prior to the issuance of a Section 404 Permit. Other required 401 certifications may include a GC 3688 for temporary construction access and dewatering.

**Federally Protected Species**

As of December 26, 2012 the USFWS lists two federally protected species for Cabarrus County (Table 4). A brief description of each species' habitat requirements follow, along with the Biological Conclusion rendered based on survey results in the study area. Habitat requirements for each species are based on the current best available information as per referenced literature and USFWS correspondence.

**Table 4. Federally protected species listed for Cabarrus County.**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Federal Status</b>	<b>Habitat Present</b>	<b>Biological Conclusion</b>
<i>Lasmigona decorata</i>	Carolina heelsplitter	E	No	No Effect
<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E	Yes	No Effect

E - Endangered

**Schweintiz's sunflower**

**Biological Conclusion: No Effect**

An updated survey of suitable habitat within the study area for Schweintiz's sunflower was conducted on October 3, 2013 by NCDOT biologists. No specimens of Schweintiz's sunflower were observed. A review of the NCNHP records indicates no known occurrence of Schwienitz's sunflower within 1.0 miles of the study area.

**Bald and Golden Eagle Protection Act**

The bald eagle has been delisted from the Endangered Species Act as of August 8, 2007. It is still protected under the Bald and Golden Eagle Protection Act. There are no large water bodies within 1 mile and 660 feet of the project study area, therefore no survey is needed.

**VI. HUMAN ENVIRONMENT**

**Section 106 Compliance Guidelines**

This project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and implemented by the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106, codified at Title 36 CFR Part 800. Section 106 requires Federal agencies to take into account the effect of their undertakings (federally funded, licensed, or permitted) on properties included in or eligible for inclusion in the National Register of Historic Places and afford the Advisory Council a reasonable opportunity to comment on such undertakings.

**Historic Architecture**

NCDOT – Human Environment Unit, under the provisions of a Programmatic Agreement with FHWA, NCDOT, HPO, OSA and the Advisory Council on Historic Preservation (effective July 1, 2009), reviewed the proposed project and determined that no surveys are required (see form dated February 26, 2010).

### **Archaeology**

The Human Environment Section, under the provisions of a Programmatic Agreement with FHWA, NCDOT, HPO, OSA and the Advisory Council on Historic Preservation (effective July 1, 2009), completed field investigations of the proposed project and determined that the likelihood of NRHP eligible archaeological resources within the project's Area of Potential Effects is remote. No additional archaeological investigations are recommended for this project (see form dated April 28, 2010).

### **Community Impacts**

No adverse impact on families or communities is anticipated. Right-of-way acquisition will be limited. No relocatees are expected with implementation of the proposed alternative.

No adverse effect on public facilities or services is expected. The project is not expected to adversely affect social, economic, or religious opportunities in the area.

The project is not in conflict with any plan, existing land use, or zoning regulation. No change in land use is expected to result from the construction of the project.

The Farmland Protection Policy Act requires all federal agencies or their representatives to consider the potential impact to prime farmland of all land acquisition and construction projects. All construction will take place along existing alignment. There are soils classified as prime, unique, or having state or local importance in the vicinity of the project. Therefore, the project will involve the direct conversion of farmland acreage within these classifications. A preliminary screening with the AD 1006 form resulted in a score of 52 points out of 160. A preliminary score of less than 60 cannot result in a notable impact on protected farmland soils.

The project will not have a disproportionately high and adverse human health and environmental effect on any minority or low-income population.

### **Noise & Air Quality**

This project is an air quality neutral project in accordance with 40 CFR 93.126. It is not required to be included in the regional emissions analysis (if applicable) and project level CO or PM2.5 analyses are not required. This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. Therefore, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs. Any burning of vegetation shall be performed in accordance with applicable local laws and regulations of the North Carolina State Implementation Plan (SIP) for air quality compliance with 15 NCAC 2D.0520.

This project will not result in any meaningful changes in traffic volume, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently this effort is exempt from analysis for MSAT's.

Noise levels may increase during project construction; however, these impacts are not expected to be substantial considering the relatively short-term nature of construction noise and the limitation of construction to daytime hours. The transmission loss characteristics of nearby natural elements and man-made structures are believed to be sufficient to moderate the effects of intrusive construction noise.

## **VII. GENERAL ENVIRONMENTAL EFFECTS**

The project is expected to have an overall positive impact. Replacement of an inadequate bridge will result in safer traffic operations.

The bridge replacement will not have an adverse effect on the quality of the human or natural environment with the use of the current North Carolina Department of Transportation standards and specifications.

The proposed project will not require right-of-way acquisition or easement from any land protected under Section 4(f) of the Department of Transportation Act of 1966.

An examination of local, state, and federal regulatory records by the GeoEnvironmental Section revealed one site with a Recognized Environmental Concern (REC) within the project limits. RECs are most commonly underground storage tanks, dry cleaning solvents, landfills and hazardous waste disposal areas. One landfill was identified within the project limits. This site is expected to have high monetary and scheduling impacts. The NCDOT Geotechnical Engineering Unit can provide soil assessments before right of way acquisition. The Charlotte Motor Speedway was historically operated as a landfill and is anticipated to present high geo-environmental impacts to the project.

Cabarrus County is a participant in the National Flood Insurance Program. There are no practical alternatives to crossing the floodplain area. Any shift in alignment will result in an impact area of about the same magnitude. The proposed project is not anticipated to increase the level or extent of upstream flood potential.

The Federal Highways Administration has determined that a U.S. Coast Guard Permit is not required for this project.

## VIII. COORDINATION & AGENCY COMMENTS

NCDOT has sought input from the following agencies as a part of the project development: U.S. Army Corps of Engineers, NC Environmental Protection Agency, NC Department of Environment & Natural Resources, U.S. Fish & Wildlife Service, N.C. Wildlife Resource Commission, N.C. Division of Parks & Recreation, North Carolina State Historic Preservation Office, Cabarrus-Rowan MPO, City of Concord, and Charlotte Motor Speedway.

The **N.C. Wildlife Resource Commission** and **U.S. Fish & Wildlife Service** in standardized letters provided a request that they prefer any replacement structure to be a spanning structure.

**Response:** NCDOT will be replacing the existing structure with a new bridge.

The **Division of Water Resource and the NC Environmental Protection Agency** states Rocky River is Class C; 303 (d) Waters of the State. Rocky River is on the list for impaired use for aquatic life due to turbidity, impaired biological integrity and fecal coliform. EPA recommend that NCDOT should commit to enhanced construction storm water controls to avoid contributing sediment and other sources of turbidity to Rocky River. NCDWQ recommends that the most protective sediment and erosion control BMP's be implemented in accordance with Design Standards in Sensitive Watershed to reduce the risk of nutrient runoff to Rocky River.

**Response:** Designs Standards in Sensitive Watersheds will be implemented during design. Best Management Practices for Protection of Surface Waters will be followed throughout the design and construction of the project. A State Storm water Permit is not anticipated for this project.

The **Charlotte Motor Speedway, the City of Concord, & the Cabarrus-Rowan MPO** requested the bridge replacement support 14 ft. wide outside lanes and 5.5 ft. sidewalks on the shoulder side of both bridges as well as pedestrian safe railing. It was also recommended for a 10 ft. wide graded shelf and 8 ft. of vertical clearance to be included for greenway accommodation.

**Response:** The current designs support three 12 ft. lanes with a 10.5ft. multi-use path and pedestrian safe railing on the bridge to support bicycles and pedestrians and 4 ft. paved shoulders. Since the greenway is not funded the City of Concord agreed to the 10.5 multi-use path to accommodate bicycles and pedestrians. The City of Concord will be expediting the funding for the greenway along Rocky River.

The, **the Army Corps of Engineers** and the **NC Division of Parks & Receptions** had no special concerns for this project.

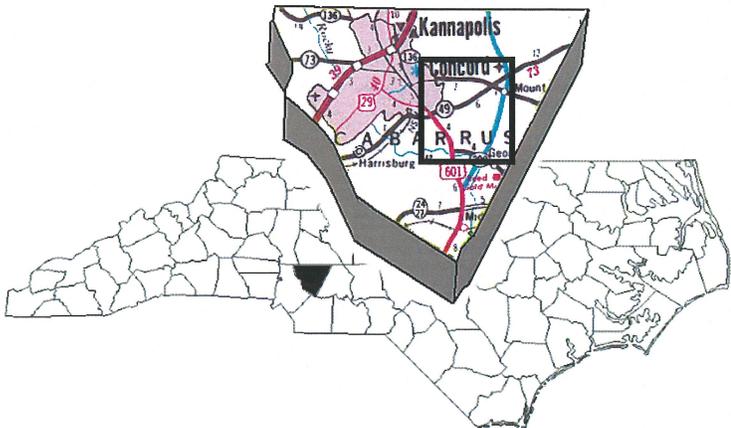
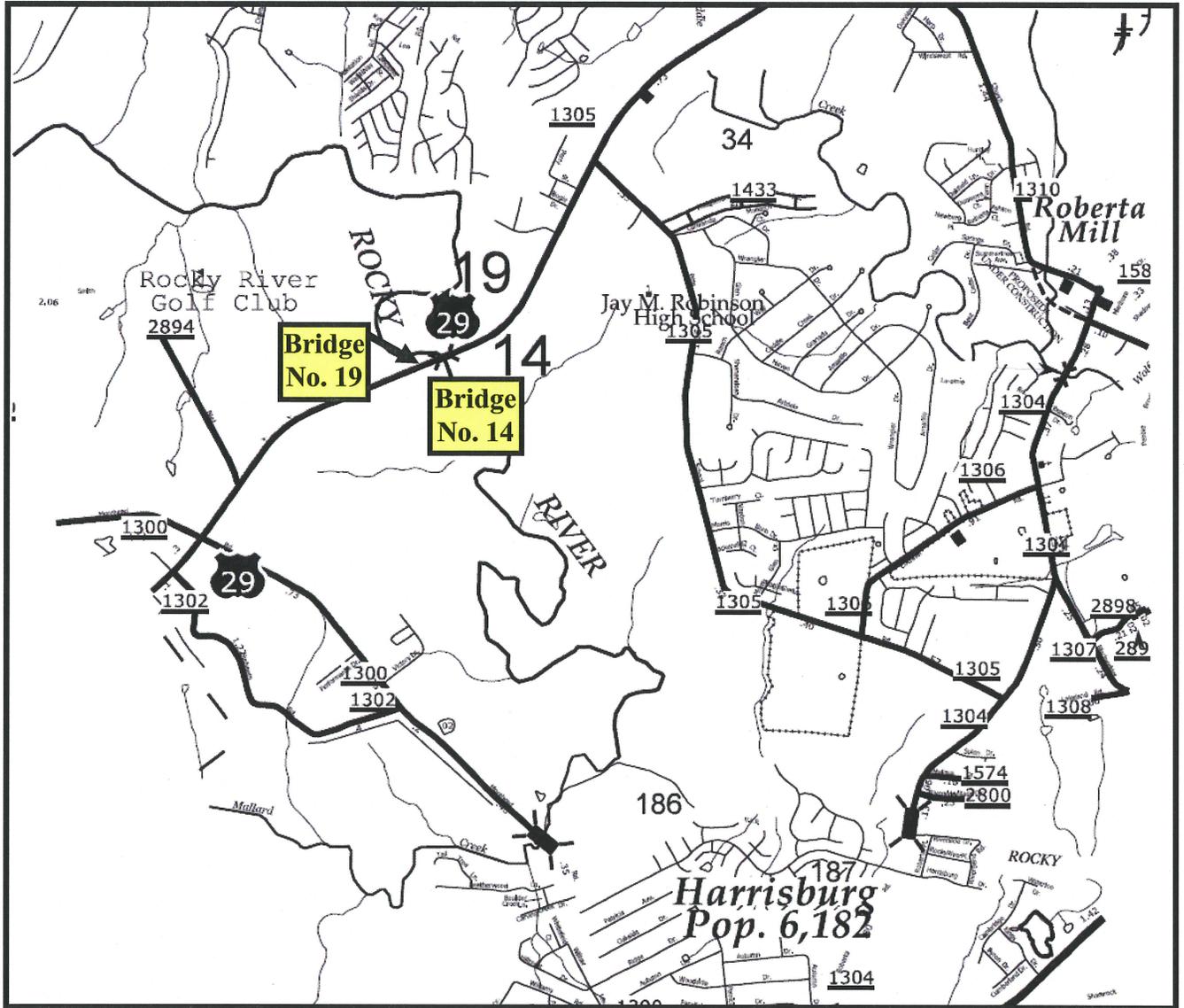
## **IX. PUBLIC INVOLVEMENT**

A newsletter has been sent to all those living along US 29. No comments have been received to date. Based on the lack of responses to the newsletter, a public meeting was not necessary. A Stakeholders meeting was determined necessary. A Stakeholders meeting was held February 27, 2013. A total of 12 people attended the meeting which consisted of NCDOT Engineers, the City of Concord and the Charlotte Motor Speedway. Alternates 2 and 2A were presented at the meeting where the City of Concord and the Charlotte Motor Speedway preferred Alternate 2A.

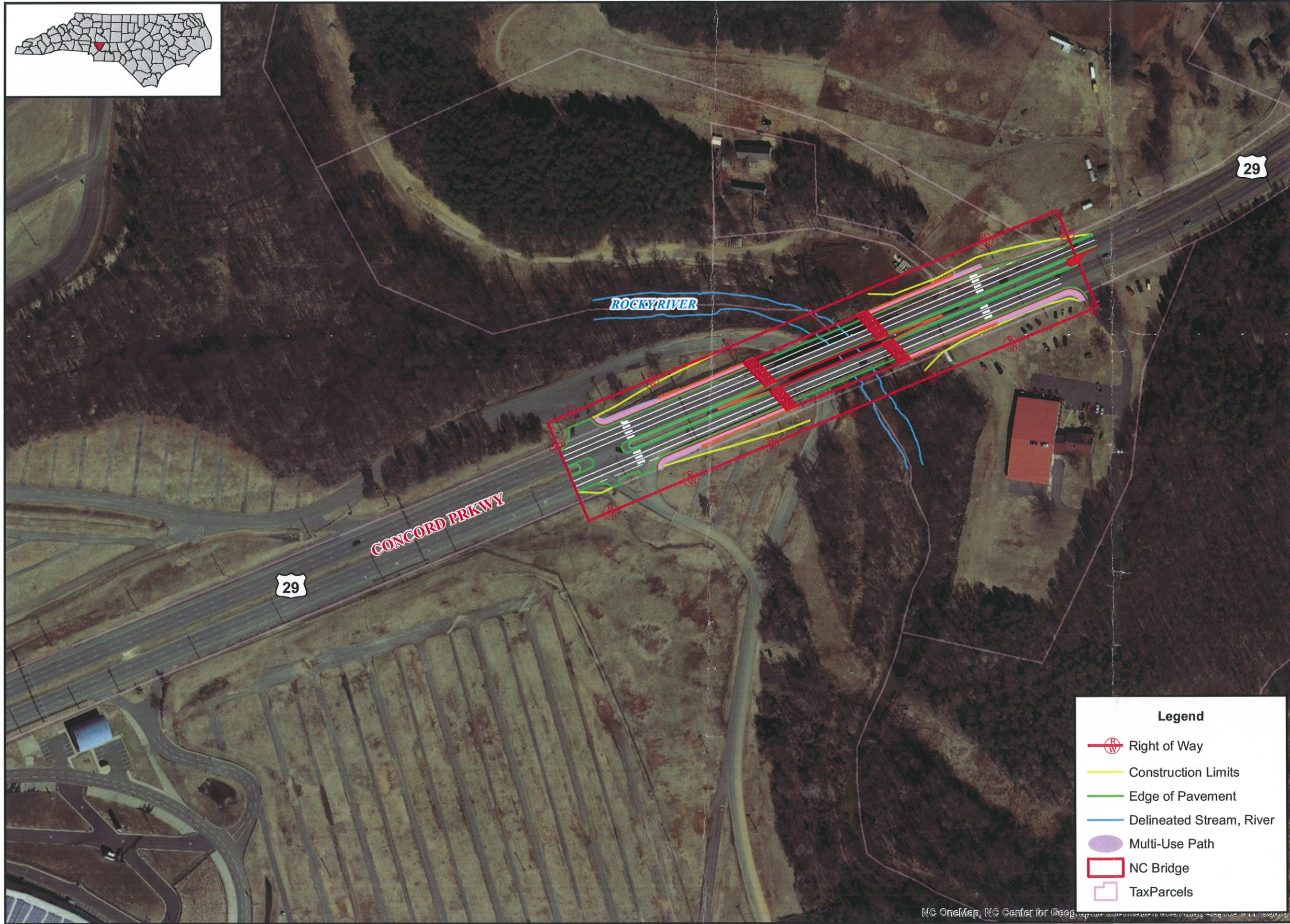
There is not substantial controversy on social, economic, or environmental grounds concerning the project.

## **X. CONCLUSION**

On the basis of the above discussion, it is concluded that no substantial adverse environmental impacts will result from implementation of the project. The project is therefore considered to be a federal "Categorical Exclusion" due to its limited scope and lack of substantial environmental consequences.



	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT &amp; ENVIRONMENTAL ANALYSIS BRANCH</p>
<p align="center"><b>CABARRUS COUNTY REPLACE BRIDGE NO.'S 14 &amp; 19 ON US 29 OVER ROCKY RIVER &amp; ACCESS RD. B-5123</b></p>	
<p align="right">Figure 1</p>	



**Legend**

- Right of Way
- Construction Limits
- Edge of Pavement
- Delineated Stream, River
- Multi-Use Path
- NC Bridge
- TaxParcels

NC OneMap, NC Center for Geog



NORTH CAROLINA DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS UNIT

ALTERNATE 1 : REPLACE AT EXISTING  
USING PHASED CONSTRUCTION  
BRIDGE No. 14 & 19 ON  
US 29 OVER ROCKY RIVER AND  
ACCESS ROAD  
CABARRUS COUNTY  
TIP PROJECT B-5123



County:  
Cabarrus

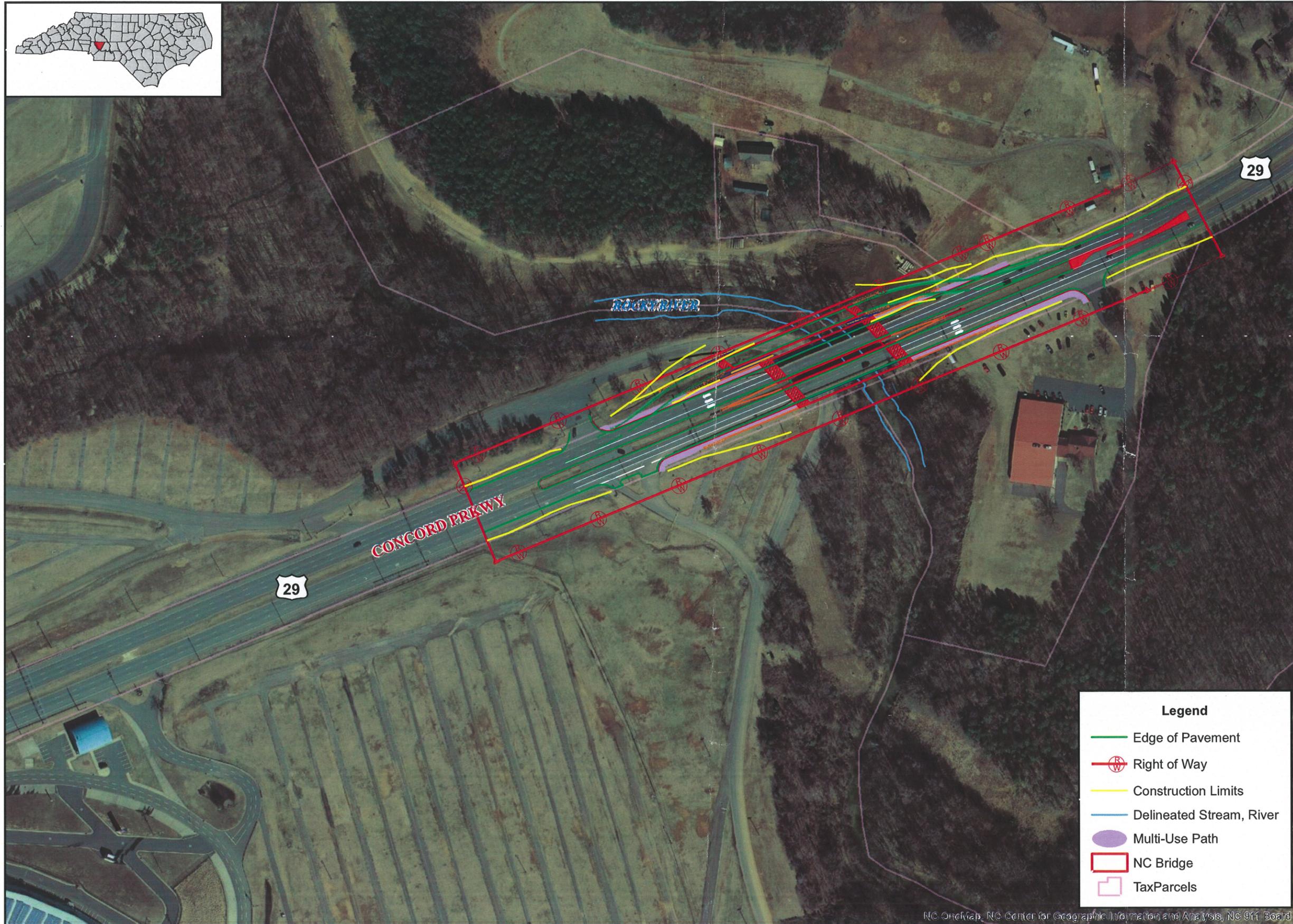
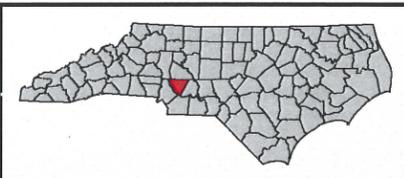
Div: 10      TIP# B-5123

WBS:  
42265.1.1

Date:  
June 2014

**Figure**  
**2a**

By: J.TORTORELLA



By: J.TORTORELLA

NC OneMap, NC Center for Geographic Information and Analysis, NC 911 Board



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS UNIT

ALTERNATE 2 : (PREFERRED) ON-SITE  
DETOUR /MULTI-USE PATH & SIDEWALKS  
BRIDGE No. 14 & 19 ON  
US 29 OVER ROCKY RIVER AND  
ACCESS ROAD  
CABARRUS COUNTY  
TIP PROJECT B-5123



County:  
Cabarrus

Div: 10 TIP# B-5123

WBS:  
42265.1.1

Date:  
June 2014

**Figure  
2b**

**Legend**

- Edge of Pavement
- Right of Way
- Construction Limits
- Delineated Stream, River
- Multi-Use Path
- NC Bridge
- TaxParcels

09-12-0003

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

*Project No:* B-5123 *County:* Cabarrus  
*WBS No:* 42265.1.1 *Document:* CE  
*F.A. No:* BRSTP-29(42) *Funding:*  State  Federal

*Federal (USACE) Permit Required?*  Yes  No *Permit Type:*

*Project Description:* Replace Bridges Nos. 14 and 19 over Rocky River and Access Road on US 29.

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

Review of HPO quad maps, historic designations roster, and indexes was undertaken on February 25, 2010. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects. The CRS also reviewed the Cabarrus County survey publication and no properties recorded in that document appear to be present in the project APE.

*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 Cabarrus County Survey was executed in 1979-1980 and remains valid for the purposes of determining the likelihood of historic resources being present. Furthermore, an aerial map provided by the project engineer, supported by additional photography shows the immediate area to be primarily commercial/industrial, with the Charlotte Motor Speedway complex located just outside the APE. A site near the speedway, titled "Smithfield", is recorded as no longer standing—this is the only site mapped by HPO in the project area.

**SUPPORT DOCUMENTATION**

See attached: Map(s).

**FINDING BY NCDOT CULTURAL RESOURCES PROFESSIONAL**

NO SURVEY REQUIRED

*Penne Sundbeck*

NCDOT Cultural Resources Specialist

*Feb. 26, 2010*

Date

09-12-0003

## NO PREHISTORIC OR HISTORIC PROPERTIES PRESENT FORM

### PROJECT INFORMATION

*Project No:* B-5123                      *County:* Cabarrus  
*WBS No:* 42265.1.1                      *Document:* CE/PCE  
*F.A. No:* BRS1P-29(42)                      *Funding:*     State     Federal

*Federal (USACE) Permit Required?*     Yes     No    *Permit Type:*    Nationwide 23

*Project Description:* NCDOT intends to replace Bridge Nos. 14 and 19 on US 29 (Concord Parkway) over Rocky River and a local access road for the Charlotte Motor Speedway complex. The proposed length of the project is 500 feet (152.4 meters). The proposed ROW is 80 feet wide (slightly over 24 meters). At the time of the archaeological investigations, no design plans were available.

### SUMMARY OF FINDINGS

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

#### Historic Architecture/Landscapes

- There are no National Register-listed or Study Listed properties within the project's area of potential effects.  
 There are no properties less than fifty years old which are considered to meet Criteria Consideration G within the project's area of potential effects.  
 There are no properties within the project's area of potential effects.  
 There are properties over fifty years old within the area of potential effects, but they do not meet the criteria for listing on the National Register.  
 All properties greater than 50 years of age located in the APE have been considered and all compliance for historic architecture with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.

#### Archaeology

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

## SUMMARY OF CULTURAL RESOURCES REVIEW

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

For the purposes of the current investigations, the study area encompasses a corridor roughly 1000 feet long and 100 feet wide (roughly 305 meters long and 30 meters wide). Annexes to this corridor that allow for improvements to adjacent driveways and the access road are also included. The total area is estimated at over 3.44 acres (1.39 hectares). A review of the maps and sites file at OSA was conducted on January 7, 2010. While no archaeological resources were previously recorded in the study corridor, a large number of archaeological sites have been recorded along the uplands overlooking the Rocky River in the vicinity of Bridges 14 and 19. It was decided that a reconnaissance survey should be conducted to determine the potential for intact NRHP-eligible archaeological resources in the project area.

On March 31, 2010, NCDOT archaeologists Scott Halvorsen and Shane C. Petersen conducted a surface inspection of the entire study corridor. This reconnaissance revealed that the portion of the study corridor to the northeast of Bridge No. 19 had previously been severely modified close to Rocky River through the removal of trees and the addition of several feet of fill. The area farther from Rocky River on that side had been logged and leveled for use as an RV park. The portion of the study corridor to the east of Bridge No. 14 had been stripped nearly to bedrock and was being used as an antique automobile museum. To the west of Rocky River, south of Bridge No. 14, significant modification of the landscape appears to have accompanied the construction of the access road that passes under the bridges and additional parking for Charlotte Motor Speedway. The same access road, as well as the easement for US 29, has severely disturbed the portion of the study corridor to the west of Bridge No. 19 and Rocky River.

The likelihood of intact NRHP-eligible archaeological resources within the proposed study corridor is considered to be very remote. No further archaeological investigations are recommended for the replacement of Bridge Nos. 14 & 19 as currently proposed. This project should be considered Section 106 and NCGS 121-12a compliant. If the study area changes, then further review may be required.

## SUPPORT DOCUMENTATION

See attached: Photos of the project area; a project location map; aerial photo; detail of the Harrisburg, NC Quadrangle (1993) 7.5-minute series topographic map; USDA soil survey information for Cabarrus County (from [HTTP://WEBSOILSURVEY.NRCS.USDA.GOV/APP/](http://websoilsurvey.nrcs.usda.gov/app/)).

Signed:



Cultural Resources Specialist, NCDOT

04-26-10

Date