

Fayetteville
Replace Bridge Number 116
On NC 24-210 (Rowan Street)
Over CSX, Norfolk Southern Railroads and Hillsboro Street
and Intersection Improvements
Cumberland County
Federal-Aid Project BRNHS-0024(24)
State Project 8.1444501
WBS Element 33727.1.1
TIP Project B-4490

ADMINISTRATIVE ACTION

ENVIRONMENTAL ASSESSMENT

U. S. Department of Transportation
Federal Highway Administration
And
N. C. Department of Transportation
Division of Highways

Submitted pursuant to 42 U. S. C. 4332(2)(C)



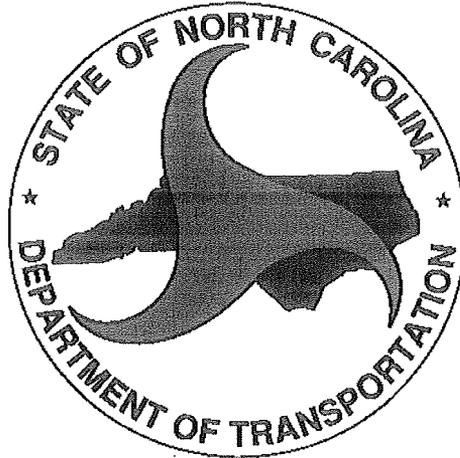
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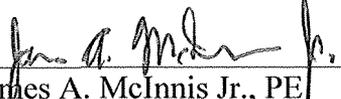
ENVIRONMENTAL ASSESSMENT



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PROJECT COMMITMENTS

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NCDOT Hydraulics Unit

A floodway revision may be required for the proposed crossing of the Cross Creek floodway. NCDOT will coordinate with the Federal Emergency Management Agency (FEMA) and local authorities during final design of the project for approval of the floodway revision and to adhere to applicable floodplain ordinances. (see Section V-G)

NCDOT Roadway Design Unit

To minimize impacts to the National Register-eligible (former) Shearer Texaco Service Station, the proposed alignment of Bragg Boulevard has been shifted to avoid impacts to the property. No right of way or easements will be required from this property.

NCDOT Roadway Design/Structure Design Units

Five-foot sidewalks and 42-inch rails are proposed on both sides of the new bridges in order to accommodate pedestrians. Fourteen-foot wide outside travel lanes are proposed on Rowan Street in order to accommodate bicyclists.

To minimize impacts to the National Register-eligible Orange, Chatham, and Moore Streets Historic District, a retaining wall with a maximum height of 10 feet is proposed on the north side of relocated NC 24-210 (Rowan Street) between Chatham Street and the proposed new bridge.

NCDOT Roadway Design/Structure Design Units/Fayetteville Area MPO

NCDOT, the Fayetteville Area Metropolitan Planning Organization (FAMPO) and the City of Fayetteville have discussed constructing a pedestrian culvert to carry the proposed Little Cross Creek Trail under relocated Rowan Street as part of the subject project. The culvert would be funded by FAMPO. It is expected FAMPO will provide a formal request to NCDOT for this pedestrian culvert prior to completion of the final environmental document for this project.

NCDOT Roadside Environmental Unit

In order to minimize effects to the National Register-eligible Orange, Chatham, and Moore Streets historic district, landscaping will be provided near the proposed retaining wall at the corner of Rowan Street and Chatham Street.

NCDOT Project Development and Environment Analysis Unit

Prior to completion of the final environmental document, a special meeting will be held for the minority-owned and occupied business owners expected to be relocated to allow them the opportunity to review and comment on the project.

The final determination regarding a *de minimis* impact finding for Festival Park will be made prior to completion of the final environmental document.

NCDOT Project Development and Environmental Analysis Unit/City of Fayetteville/ Fayetteville Area MPO

On October 14, 2011 the City of Fayetteville requested additional items be included as part of this project. The Department will coordinate with the City to ensure the items requested are addressed and included as part of the final environmental document (See Appendix A).

SUMMARY

Environmental Assessment
Prepared by the
Project Development and Environmental Analysis Unit
of the
North Carolina Department of Transportation

1. Type of Action

This is a Federal Highway Administration Action, Environmental Assessment.

2. Description of Action

The project involves replacing existing Bridge Number 116 on NC 24-210 (Rowan Street) to the north of its current location and reconfiguring the intersections of SR 3147 (West Rowan Street) with NC 24/SR 3828 (Bragg Boulevard), and NC 210 (Murchison Road) with SR 3147 (West Rowan Street) at NC 24-210 (Rowan Street) into a single, signalized intersection (see Figure 1).

3. Summary of Purpose and Need

The purpose of the proposed project is to replace Bridge Number 116 on NC 24-210 (Rowan Street) and to relocate existing Rowan Street in support of the Fayetteville *Northwest Gateway Plan* and the proposed North Carolina Veterans Park.

The proposed project is intended to address the following needs:

- NCDOT Bridge Maintenance Unit records indicate Bridge Number 116 has a sufficiency rating of 7 out of a possible 100. The bridge is considered structurally deficient and therefore eligible for FHWA's Highway Bridge Replacement and Rehabilitation Program.
- Without reconfiguring the intersections of NC 24 (Rowan Street), Bragg Boulevard, NC 210 (Murchison Road) and West Rowan Street the level of service is expected to range from E to F in the design year (2030). (see Figure II-1)
- In 2007, the City of Fayetteville approved the Northwest Gateway downtown redevelopment plan. Portions of existing NC 24-210 (Rowan Street) right of way is within the proposed limits of the North Carolina Veterans Park. Relocating the bridge to the north and reconfiguring the existing intersections would allow this right of way to be reused for the park. (see Sec II-B-2-c)

4. Alternatives Considered

Preliminary alternatives investigated for the proposed project included the “No-build” alternative and replace the existing bridge along with intersection improvements. Two preliminary intersection alternatives were studied, a signalized intersection alternative and a roundabout alternative at NC 24-210 (Rowan Street), NC 210 (Murchison Road), NC 24/SR 3828 (Bragg Boulevard), and SR 3147 (West Rowan Street). Of these preliminary alternatives, only replacement of the existing bridge along with signalized intersection improvements was studied in detail.

A capacity analysis was conducted for a dual lane roundabout alternative and was removed from further consideration because the dual lane roundabout would only operate at an acceptable level of service until 2015. In the design year (2030), a dual-lane roundabout with dual-lane approaches and bypass lanes would operate at level of service F. In comparison, the proposed signalized intersection will operate at level of service D in the design year.

5. Summary of Environmental Effects

Table S1 presents a comparison of the current project alternatives.

Table S1. Summary of Environmental Impacts		
Project Length (miles)		0.6
Relocations	Residential	0
	Business	13
	Total Relocations	13
Minority/Low Income Populations - Disproportionate Impacts*		No
Historic Properties (adverse effect)		No
Community Facilities Impacted**		None
Section 4(f) Impacts		No
Noise Impacts (impacted properties)		10
Wetlands (acres)		0
Streams (linear feet)		861
Floodplain (acres)		11.78
Forested Area (acres)		1.93
Federally Protected Species		No effect
Cost	Right of Way Cost	\$12,125,000
	Utilities Cost	\$858,850
	Construction Cost	\$23,400,000
	Total Cost	\$36,383,850

* Impacts defined as disproportionate adverse impacts to minority or low income populations (Section V-D-3).

**Impacts to schools, parks, churches, fire stations, cemeteries, etc.

6. Permits Required

Based on anticipated impacts to jurisdictional surface waters and wetlands, the project will likely require an Individual Section 404 Permit from the US Army Corps of Engineers. Other permits that may apply include a Nationwide 33 Permit for temporary construction activities. The US Army Corps of Engineers will determine which permit will be required.

Additionally, a North Carolina Division of Water Quality General Section 401 Water Quality Certification will be required prior to issuance of the Section 404 Nationwide Permit. Other Section 401 permits that may be required include a GC 3688 for temporary construction, access and dewatering.

A floodway revision may be required for the proposed crossing of the Cross Creek floodway. NCDOT will coordinate with the Federal Emergency Management Agency (FEMA) and local authorities during final design of the project for approval of the floodway revision and to adhere to applicable floodplain ordinances. (see Section V-G)

7. Coordination

The following federal, state and local officials were consulted regarding this project:

US Department of the Army – Corps of Engineers
US Environmental Protection Agency
NC Wildlife Resources Commission
NC Department of Administration – State Clearinghouse
NC Department of Cultural Resources – State Historic Preservation Office
NC Department of Environment and Natural Resources – DENR
DENR – NC Natural Heritage Program
DENR – NC Division of Water Quality
NC Department of Public Instruction – School Planning
NC Division of Parks & Recreation
Fayetteville Area Metropolitan Planning Organization (FAMPO)
Mid-Carolina Rural Planning Organization
City of Fayetteville

8. Contact Information

The following persons may be contacted for additional information concerning this proposal and statement:

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I. DESCRIPTION OF PROPOSED ACTION

A. General Description

The proposed project involves the replacement of Bridge Number 116, which carries NC 24-210 (Rowan Street) over the CSX Railroad, Norfolk Southern Railroad and Hillsboro Street in downtown Fayetteville. The project also involves reconfiguring the Rowan Street intersections with Bragg Boulevard and Murchison Road into a single signalized intersection.

B. Historical Resume and Project Status

TIP Project B-4490 was initially programmed in the 2002-2008 North Carolina State Transportation Improvement Program (STIP) as a bridge replacement project. Project development studies for the project began in 2003.

In 2007, the City of Fayetteville requested that Bridge Number 116 be replaced north of its current location and that the intersections of Rowan Street with Bragg Boulevard and Murchison Road be reconfigured into either a roundabout or a single signalized intersection. This configuration for Rowan Street is depicted on the City's *Northwest Gateway Plan* (see Section II-B-2-c and Figure 8A). The City would like to use the existing Rowan Street right of way between the railroad tracks and Bragg Boulevard for the second phase of the North Carolina Veterans Park (see Section V-D-4 and Figure 9). Relocating the bridge to the north and reconfiguring the existing intersections would allow this right of way to be reused for the park.

The project is included in the approved 2012-2018 STIP and is scheduled for right of way acquisition and construction in federal fiscal years 2014 and 2016, respectively.

C. Cost Estimates

The cost estimate for the project included in the 2012-2018 STIP is \$24,300,000. Of this total, \$2,200,000 is estimated for right of way acquisition and \$22,100,000 is estimated for construction.

The latest cost estimate for the recommended alternative for the project is presented below.

Table 1. Project Cost Estimate	
Right of Way Acquisition (Including Utility Relocation)	\$12,983,850
Construction	\$23,400,000
Total	\$36,383,850

II. PURPOSE AND NEED FOR PROJECT

A. Project Purpose

The purpose of the proposed project is to replace Bridge Number 116 on NC 24-210 (Rowan Street) and to relocate existing Rowan Street in support of the Fayetteville Northwest Gateway Plan and the proposed North Carolina Veterans Park.

B. Need for Project

Bridge Number 116 carries NC 24-210 (Rowan Street) over railroad tracks and Hillsboro Street north of downtown Fayetteville. The bridge was built in 1956. The proposed project will address the following needs:

- NCDOT Bridge Maintenance Unit records indicate Bridge Number 116 has a sufficiency rating of 7 out of a possible 100. The bridge is considered structurally deficient and therefore eligible for FHWA's Highway Bridge Replacement and Rehabilitation Program.
- Without reconfiguring the intersections of NC 24 (Rowan Street), Bragg Boulevard, NC 210 (Murchison Road) and West Rowan Street the level of service is expected to range from E to F in the design year (2030). (see Figure II-1)
- In 2007, the City of Fayetteville approved the Northwest Gateway downtown redevelopment plan. Portions of existing NC 24-210 (Rowan Street) right of way is within the proposed limits of the North Carolina Veterans Park. Relocating the bridge to the north and reconfiguring the existing intersections would allow this right of way to be reused for the park. (see Sec II-B-2-c)

1. Description of Existing Conditions

a. Route Classification

NC 24-210 (Rowan Street), NC 24 (Bragg Boulevard) and NC 210 (Murchison Road) are classified as urban principal arterials in the North Carolina Functional Classification System.

NC 24 in the project area is designated as a Strategic Highway Corridor. The corridor vision for NC 24 in the project area is a “Boulevard.” Parts of NC 210 in the project area are classified as a Major Thoroughfare in the 2009 FAMPO Comprehensive Transportation Plan (see Figure 6).

b. Physical Description of Existing Facility

(1) Roadway Typical Section

NC 24-210 is signed Grove Street and is a seven-lane roadway with curb and gutter east of Ray Avenue, with three through lanes in each direction and a center turn lane. West of Ray Avenue, NC 24-210 is signed Rowan Street and tapers down to a four-lane curb and gutter section with two through lanes in each direction. Rowan Street ends at a signalized intersection with Bragg Boulevard. Sidewalks exist on both sides of Rowan Street in the project area.

North of Rowan Street, NC 24 is routed along Bragg Boulevard, which is a four-lane undivided roadway with curb and gutter. South of Rowan Street, Bragg Boulevard is designated SR 3828, and consists of a four-lane section with curb and gutter and sidewalks on both sides in the project area. The sidewalk on the western side of Bragg Boulevard through the project area is a part of the Freedom Trail (see Section V-D-4).

NC 210 (Murchison Road) in the project area is a four-lane undivided roadway with curb and gutter and sidewalks on both sides.

West Rowan Street is a four-lane undivided roadway with curb and gutter in the project area. No sidewalks exist on either side of West Rowan Street between Bragg Boulevard and Murchison Road. Sidewalks exist on the south side of West Rowan Street between Murchison Road and Raleigh Street.

(2) Horizontal and Vertical Alignment

The horizontal and vertical alignment of NC 24-210 (Rowan Street) in the project area is generally acceptable.

(3) Right of Way and Access Control

Existing right of way widths along the various streets in the project area vary. Table 2 below presents existing right of way widths for streets in the project area. No control of access exists along any of the streets in the project area.

Table 2. Existing Roadway Right of Way				
Street	NC 24-210 (Rowan St.)	NC 24 (Bragg Blvd.)	NC 210 (Murchison Rd.)	W. Rowan St.
Right of Way Width (feet)	100	130	80	50

(4) Speed Limit

The existing posted speed limits on roadways in the project area are shown on Table 3 below.

Table 3. Existing Roadway Speed Limits					
Street	NC 24-210 (Rowan St.)	NC 24 (Bragg Blvd.) (N. of Rowan St.)	Bragg Blvd. (S. of Rowan St.)	NC 210 (Murchison Rd.)	W. Rowan St.
Speed Limit	35 MPH	45 MPH	35 MPH	35 MPH	35 MPH

(5) Intersections

All intersections along existing Rowan Street are at-grade with the exception of Hillsboro Street and Murchison Road. A one-way ramp connects westbound Rowan Street with Murchison Road and West Rowan Street. The ramp terminus at West Rowan Street and Murchison Road is signalized. A one-way ramp also connects southbound Hillsboro Street with eastbound Rowan Street. These ramps carry NC 210 traffic between Murchison Road and Rowan Street. Five of the six intersections in the project area are signalized.

(6) Railroad Crossings

Existing Bridge Number 116 carries NC 24-210 (Rowan Street) over existing CSX and Norfolk Southern Railway tracks. The Norfolk Southern Railway track carries approximately four trains a day. Of the two existing CSX tracks, one carries upwards of 30 trains per day, including six daily Amtrak trains. The other track is a spur line and is used for military equipment transport.

(7) Structures

Bridge Number 116 carries NC 24-210 (Rowan Street) over railroad tracks and Hillsboro Street. The bridge is 637 feet long with a clear roadway width of approximately 56 feet. The bridge was built in 1956. The bridge is considered structurally deficient and has a sufficiency rating of 7 out of 100.

A triple barrel 12-foot by 9-foot box culvert conveys Cross Creek under existing NC 24-210 (Rowan Street).

(8) Bicycle and Pedestrian Facilities/Greenways

Sidewalks exist along most of the roadways in the project area. In the project area, sidewalks exist along both sides of NC 24-210 (Rowan Street). Sidewalks exist along both sides of Bragg Boulevard in the project area. The Freedom Trail is located along the west side of Bragg Boulevard through the project area (See Section V-D-4 and Figure 8A). Sidewalks exist along both sides of NC 210 (Murchison Road) in the project area. Sidewalks exist on the south side of West Rowan Street between Murchison Road and Raleigh Street.

Little Cross Creek Trail is a greenway proposed to be built by the Fayetteville Area Metropolitan Planning Organization (FAMPO) along Cross Creek in the project area.

(9) Utilities

Existing utilities in the project area include buried and aerial telephone lines, fiber-optic lines, aerial power lines, a water line, storm and sanitary sewer lines, a gas line, and an aerial cable TV line. Overhead lighting exists along roadways in the project area. Street lights are attached to existing Bridge Number 116.

c. School Bus Data

Seventeen school buses travel existing NC 24-210 (Rowan Street) and NC 24 (Bragg Boulevard) in the project area twice daily.

d. Traffic Carrying Capacity

(1) Traffic Volumes Without Project

Current (2007) traffic volumes along existing NC 24-210 in the project area vary from 19,500 to 29,800 vehicles per day (see Figure 3A). In the year 2030, without the proposed project, it is expected that traffic volumes along existing NC 24-210 in the project area will range from 31,700 to 44,500 vehicles per day (see Figure 3B).

(2) Levels of Service Without Project

The effectiveness of a roadway to service traffic demand is measured in terms of level of service (LOS). Level of service is a qualitative measure describing the ability of a facility to carry traffic and how individual users perceive traffic conditions. It is based on factors of speed, travel time, comfort, maneuverability, interruptions, convenience and safety. Levels of Service range from “A” to “F”, with “A” representing free flow (ideal conditions), and “F” representing forced or breakdown flow (undesirable condition).

A transportation facility is considered to be operating at capacity when it is just able to accommodate the traffic demand. Once the traffic demand exceeds the facility’s capacity (LOS E), excessive delays occur.

Four signalized intersections were analyzed in the project study area without the proposed project. Three of the four signalized intersections analyzed currently operate at level of service D. The remaining signalized intersection, NC 24-210 (Rowan Street) at NC 24 (Bragg Boulevard), currently operates at level of service E.

Without the proposed project, level of service for the four signalized intersections analyzed within the project study area is expected to be between D and F in the design year (2030).

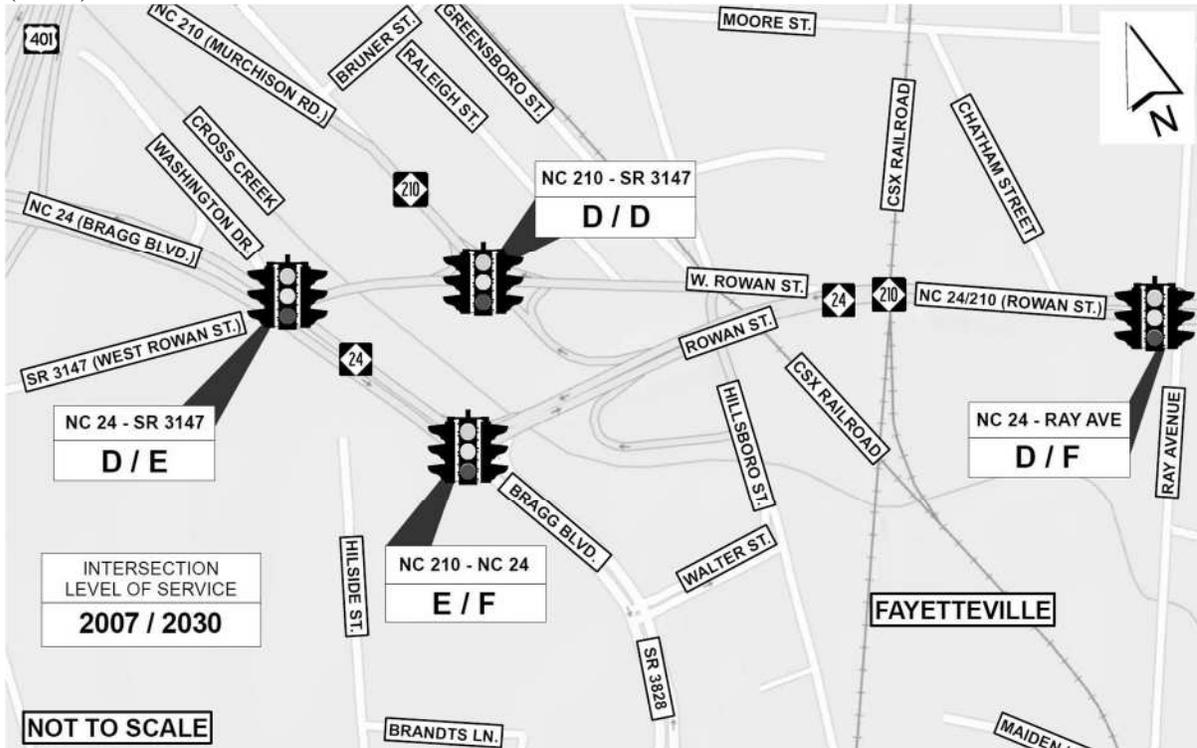


Figure II-1: Signalized intersection Level of Service without Project

e. Accident Data

Accident rates for NC 24-210 were obtained for the time period between July 1, 2004 and June 30, 2006. Table 2 below compares the accident rates for NC 24-210 with the 2004-2006 statewide accident rates over the same time period for urban NC routes and the critical rate.

Table 4. Accident Rate Comparison		
	Total Accident Rate (ACC/100MVM)	Fatal Accident Rate (ACC/100MVM)
NC 24-210 (Rowan St.)	446.61	0.0
2004-2006 Statewide 4-Lane Undivided NC Routes	432.95	1.23
Critical Rate*	513.07	7.93

ACC/100MVM – Accidents per 100 million vehicle miles

* The critical rate is a statistically derived number that can be used to identify high accident roadway segments.

From July 1, 2004 to June 30, 2006, 87 accidents were reported along NC 24-210 (Rowan Street) from SR 3950 (Ramsey Street) to Bragg Boulevard in the project area. A majority of the crashes involved angle/sideswipe crashes (37%) and rear-end/stop crashes (29%).

An intersection crash analysis was also performed for the same time period for all intersections in the study area. Table 5 below presents the number of accidents, severity and crash rate for the intersections in the project area. One fatal accident was reported at the intersection of Bragg Boulevard and Hay Street in downtown Fayetteville. Most of the accidents involved rear-end/stop and angle crashes. An intersection with a severity less than 6.0 is considered low.

Table 5. Intersection Accident Summary			
Location	Number of Crashes	Severity	Accident Rate (ACC/100MVM)
Bragg Boulevard at NC 24	53	4.25	95.16
Bragg Boulevard at SR 3147 (W. Rowan Street)	69	4.11	154.87
Hillsboro Street at SR 3147 (W. Rowan Street)	4	2.85	28.45
Murchison Road at Rowan Street	21	3.82	92.00
Bragg Boulevard at Hay Street	69	5.34	154.87

ACC/100MVM – Accidents per 100 million vehicle miles traveled

f. Airports

No airports or other aviation facilities exist in the vicinity of the project.

g. Other Highway Projects in the Area

There are several projects within Cumberland County and they are:

- **B-4090** – Replace bridge No. 125 on NC 24/210 over Cross Creek. Right of way is in progress and construction is scheduled for fiscal year 2012.
- **B-4949** – Replace bridge No. 61 on I-95B/US 301 over Cross Creek. Right of way is in progress and construction is scheduled for fiscal year 2012.
- **B-4091** – Replace bridge No. 85 on I-95B/US 301 over SR 1738, SR 1741 and Cape Fear River. Right of way is in progress and construction is scheduled for fiscal year 2012.
- **U-3423** – Widen NC 24/87 (Bragg Blvd) to six lanes from US 401 bypass to North of SR 1437 (Santa Fe Drive/Shaw Road). Project is currently under construction.
- **U-4900** – Widen NC 210/87 (Murchison Road) to additional lanes from US 401 bypass to Bernadine Street. Right of way is scheduled for fiscal year 2019 and construction is currently unfunded.
- **P-4901A** – Addition of connection track to CSX rail line in Fayetteville. This new track will be south of Bridge Number 116. The proposed new bridges will accommodate this track. Construction is scheduled to begin in fiscal year 2012.

2. Transportation and Land Use Plans

a. Local Thoroughfare Plans

The proposed project is shown as a grade separation in the current Comprehensive Transportation Plan (CTP) approved working map by the Fayetteville Area Metropolitan Planning Organization (FAMPO) (see Figure 6).

b. Metropolitan Transportation Improvement Program

The proposed project is included on the Fayetteville Area Metropolitan Planning Organization's Metropolitan Transportation Improvement Program. The Fayetteville Area MPO has allocated \$4,400,000 of its direct attributable funding for this project.

c. Land Use Plans

The *Cumberland County 2010 Land Use Plan*, adopted in December 1996, serves as a guide for the revitalization of existing development and as a framework for future development within Cumberland County. The plan recognizes that quality development increases property values, increases the tax base, attracts new economic development, and that a public/private partnership is essential for continued growth. The plan also addresses the visual appearance and image of entrance corridors/gateways to municipalities within the County and provides standards to enhance their visual appearance. Bragg Boulevard (NC 24) and Murchison Road (NC 210) are both listed as Designated Entrance Corridors for

the City of Fayetteville in the plan. The plan also recognizes the increased need for open space and recreational areas.

The *Draft 2030 Growth Vision Plan* is a new comprehensive planning initiative for Cumberland County and its municipalities and is currently under review for adoption. One of the many policies contained in the Draft 2030 Plan is the focus on a balanced transportation system made up of a network of roads, mass transit services, sidewalks, trails, and bicycling facilities to help reduce automobile dependency and traffic congestion. The Draft 2030 Plan also focuses on the expansion of parks and recreation facilities.

The *Fayetteville Renaissance Plan*, developed in 2002, is the City of Fayetteville's long term vision for the future of downtown Fayetteville. The Renaissance Plan seeks to rediscover the urban attributes of successful cities and towns. The plan focuses on quality of life issues for its citizens and emphasizes the importance of respecting the rich history and heritage of the city. Design strategies set forth in the plan serve to guide future development and investment in the city core.

The *Fayetteville Renaissance Plan Implementation Projects* study was completed in October 2003. The purpose of this study was to revitalize downtown and to take projects identified in the *Renaissance Plan* and prepare them for implementation. The ultimate goal of this study is to strengthen the economic position of downtown which involves a three-pronged approach:

- 1) Construct new housing in the downtown and to the east of downtown;
- 2) Help downtown retail to achieve greater diversity and success, and;
- 3) Create an anchor of attraction and activities that will bring people downtown.

One of the issues identified in this study, is the lack of a clear entry point that would signal arrival into the downtown area. The study also urges the city to prepare a strategy for improving the interaction of multimodal transportation elements within the city.

The *Northwest Gateway Plan* is the City of Fayetteville's long term vision for the area surrounding the convergence of Bragg Boulevard, Rowan Street, and Murchison Road. This area surrounds the site of the NC Veterans Park. The plan depicts Rowan Street, Bragg Boulevard and Murchison Road all intersecting at a roundabout. Rowan Street and the new bridge are shown on the plan north of their current location. A portion of the North Carolina Veterans Park is shown on the plan within the existing Rowan Street right of way.

The proposed North Carolina Veterans Park is intended to honor the state's veterans from all branches of service, but it is also intended to serve as a catalyst for surrounding private development and link the Gateway area to the downtown. The design for the proposed park also fills in missing links between other downtown attractions such as Festival Park, Cross Creek Linear Park, Freedom Memorial Park, Martin Luther King Jr. Park and Freedom Trail (see Figure 8A and 8B).

The first phase of the park is open, and is located north of and adjacent to the existing Airborne and Special Operations Museum. The second phase of the park is intended to utilize NCDOT right of way now occupied by Rowan Street and Bridge Number 116.

C. Benefits of Proposed Project

1. Local Plans

The proposed realignment of NC 24-210 (Rowan Street) to the north and reconfiguration of the existing intersections will support local plans to redevelop existing NCDOT right of way into the second phase of the North Carolina Veterans Park.

2. Traffic Volumes With Project

With the proposed project, traffic volumes along NC 24-210 (Rowan Street) are expected to vary from 30,400 to 44,500 vehicles per day in the design year 2030 (see Figure 3B).

3. Levels of Service With Project

In the design year (2030), the reconfigured intersection of Rowan Street, Bragg Boulevard and Murchison Road will operate at a level of service of D or better. This single signalized intersection will replace four of the five signalized intersections in the project area. No improvements are proposed to the existing intersection of Rowan Street with Ray Avenue.

4. Safety

The proposed project may potentially reduce certain types of crashes, such as rear end collisions and frontal impact crashes by providing a less congested, more free flowing alternative to the current facility. The reconfiguration of Rowan Street, Bragg Boulevard and Murchison Road will redirect traffic and reduce redundant turning movements for through traffic and may reduce the incidence of certain types of crashes.

III. ALTERNATIVES STUDIED

A. Preliminary Study Alternatives

Several alternatives were considered for the subject project. Initially, alternatives were considered which included replacing only the bridge in place. Replacing the existing bridge in place would require detouring traffic onto adjacent facilities. This additional traffic would increase congestion and delay on surrounding roadways. Also, Bridge Number 116 provides the only grade separated railroad crossing in the area. Detouring traffic onto other roadways would mean additional traffic at nearby at-grade railroad crossings, which would result in additional traffic delay and increase the potential for accidents at these crossings.

As discussed in Section I-B, in 2007, the City of Fayetteville requested that Bridge Number 116 be replaced north of its current location and that the intersections of Rowan Street with Bragg Boulevard and Murchison Road be reconfigured into either a roundabout or a single signalized intersection.

Roundabout Alternative

Fayetteville's Northwest Gateway Plan shows a roundabout at the proposed intersection of Rowan Street with Bragg Boulevard and Murchison Road. Traffic capacity analyses were performed for a two-lane roundabout at this intersection. It was found that a roundabout would operate at level of service F in the design year (2030). The roundabout would only operate at an acceptable level of service until the year 2015. Therefore, a roundabout was not recommended for the proposed intersection.

Signalized Intersection Alternative

A traffic signal at the proposed NC 24-210 (Rowan Street) intersection with NC 24 (Bragg Boulevard) and NC 210 (Murchison Road) will operate at level of service D in the design year (2030). A traffic signal is recommended at the proposed intersection.

B. No-Build Alternative

The no-build alternative would avoid the environmental impacts anticipated to occur as a result of the proposed project, but would not meet the purpose and need of the project. If the no-build alternative was selected, Bridge Number 116 would eventually have to be closed to traffic.

C. Build Alternative

The build alternative includes the replacement of existing Bridge Number 116 and reconfiguration of the intersection of NC 24-210 (Rowan Street) with NC 24-87 (Bragg Boulevard) and the intersection of Rowan Street with NC 210 (Murchison Road) into a single signalized intersection. To accommodate reconfiguration of the Rowan Street and Bragg Boulevard intersection, work will be required on portions of NC 210 (Murchison Road), SR 3147 (West Rowan Street) and Washington Street in the project area. A new culvert will be required to convey Cross Creek under realigned NC 24-210 (Rowan Street).

IV. PROPOSED IMPROVEMENTS

A. Roadway Cross-section and Alignment

A six-lane typical section (three through lanes and a concrete median) is proposed along NC 24-210 (Rowan Street) from NC 24 (Bragg Boulevard) to Ray Avenue. Two twelve-foot lanes and an outside fourteen-foot lane with curb and gutter will be provided. Five-foot sidewalks will be provided on both sides of Rowan Street. Proposed typical sections are shown on Figure 4.

B. Right of Way and Access Control

Approximately 100 to 120 feet of right of way will be required. No control of access is proposed.

C. Speed Limit

The proposed speed limit on SR 24-210 (Rowan Street) is 35 MPH. The proposed speed limit on NC 24/SR 3828 (Bragg Boulevard) is 35 MPH. The actual speed limit(s) for the project will be determined during final design.

D. Design Speed

A 40 MPH design speed is proposed for the project. This is consistent with the anticipated 35 MPH posted speed limit for proposed NC 24-210 (Rowan Street) and NC 24/SR 3828 (Bragg Boulevard).

E. Anticipated Design Exceptions

It is anticipated no design exceptions will be required for the project.

F. Intersections/Interchanges

A traffic signal is proposed for the intersection of NC 24-210 (Rowan Street) with NC 24 (Bragg Boulevard) and NC 210 (Murchison Road).

G. Service Roads

It is not expected service roads will be required for the project.

H. Railroad Crossings

The proposed bridges will cross tracks owned by CSX and the Norfolk Southern Railway (NS). The NS track carries approximately four trains per day with train speeds averaging 10 miles per hour at the project location. CSX owns and operates two tracks crossed by the existing Bridge Number 116. One of the two CSX tracks carries over 30 trains per day including six daily Amtrak trains. The other CSX track is used to transport military equipment in and out of Fort Bragg. Norfolk Southern uses this CSX track, as well.

As mentioned in Section II-B-1-g, a NCDOT rail project will add a new connection track south of existing Bridge Number 116. The project, P-4901A, is expected to connect two separate rail lines which provide service to Fort Bragg Military Base, Fuquay-Varina, Rocky Mount, and Florence, South Carolina.

I. Structures

Two bridges and a culvert are proposed to be constructed as a part of the project.

The two proposed bridges to carry Rowan Street over the railroad tracks will have a clear roadway width of 76 feet and will be approximately 125 and 158 feet long. Five-foot six-inch sidewalks and 42-inch barrier rails are proposed on both sides of both bridges in order to accommodate pedestrians.

Plans for the proposed second phase of the North Carolina Veterans Park show Hillsboro Street ending north of relocated Rowan Street. Therefore, the westernmost proposed new bridge will not accommodate Hillsboro Street.

A proposed four barrel 12-foot by 6-foot reinforced concrete box culvert measuring approximately 800 feet long will carry Cross Creek under the proposed intersection of NC 24-210 (Rowan Street) with NC 24 (Bragg Boulevard).

It is expected the Fayetteville Area Metropolitan Planning Organization will request a pedestrian culvert be constructed as part of this project to carry the proposed Little Cross Creek Trail under relocated Rowan Street (see Section IV-J). This culvert would be funded by the Fayetteville Area MPO.

J. Bicycle and Pedestrian Facilities/Greenways

Pedestrian and bicycle accommodations are proposed to be constructed as part of this project. Existing sidewalks on either side of Rowan Street, Bragg Boulevard, Murchison Road and West Rowan Street which are disturbed by the project will be replaced. Five-foot sidewalks and 42-inch rails are proposed on both sides of the new bridges in order to accommodate pedestrians. Fourteen-foot wide outside travel lanes are proposed on Rowan Street in order to accommodate bicyclists.

The Freedom Trail follows Bragg Boulevard through the project area. Little Cross Creek Trail is a greenway proposed to be built by the Fayetteville Area Metropolitan Planning Organization (FAMPO) along Cross Creek in the project area. FAMPO, the City of Fayetteville and NCDOT have coordinated regarding the Freedom Trail and Little Cross Creek Trail.

NCDOT, FAMPO and the City of Fayetteville have discussed constructing a pedestrian culvert to carry the Little Cross Creek Trail under relocated Rowan Street as part of the this project. The culvert would be funded by FAMPO. It is expected FAMPO will provide a formal request to NCDOT for this pedestrian culvert prior to completion of the final environmental document for this project.

K. Utilities

The project is expected to have a medium to high level of utility impacts. Utilities along the project will be relocated prior to construction. Care will be taken to prevent damage to water lines and fiber-optic cables in the area.

L. Landscaping

Landscaping will be provided near the proposed retaining wall at the corner of Rowan Street and Chatham Street (Section V-B-1-b). Disturbed areas along the project will be reseeded with grass.

M. Noise Barriers

No noise barriers are proposed along the project (see Section V-H-3).

N. Work Zone, Traffic Control and Construction Phasing

The proposed project involves replacing existing Bridge Number 116. The existing structure will be utilized to maintain traffic (vehicular and pedestrian) on-site while the new structures are constructed. Traffic will be shifted onto the new structures before the old structure is removed. Temporary detours may be necessary to construct portions of the structure. Care will be taken to maintain pedestrian and bicycle access.

The existing bridge will be removed once traffic has been shifted to the proposed new structures. The project will also involve removal of an existing culvert carrying Cross Creek under Rowan Street. Existing structures will be removed in accordance with NCDOT's Best Management Practices (BMP) for bridge demolition and removal.

V. ENVIRONMENTAL EFFECTS OF PROPOSED ACTION

A. Natural Resources

1. Biotic Resources

a. Terrestrial Communities

There are three distinct terrestrial communities located in the study area. Due to the disturbed nature of much of this area, the terrestrial communities only correspond to the classifications described by Schafale and Weakley (1990) in two areas. Animals observed during field investigations are denoted with an asterisk (*).

Small Basin Wetland

The small basin wetland community is found where water draining from steep railroad grades collects, creating a wetland. This community only covers less than one percent of the study area. Dominant canopy and sapling species include hackberry, tree-of-heaven, and cherry laurel, with Chinese privet in the shrub layer. The herbaceous and vine layer is relatively sparse, primarily made up of green arrow arum, trumpet creeper and poison ivy.

Mixed Hardwood Forest

Mixed hardwood forests are found in pockets of land not already converted to residential or commercial development. The mixed hardwood forest community covers approximately 11 percent of the project study area. Dominant canopy and sapling species include hackberry, winged elm, pecan, sweetgum, red maple, red mulberry, willow oak, tree-of-heaven, and loblolly pine along the margins. The primary shrub layer consists of Chinese privet and cherry laurel as well as some of the canopy species. The almost non-existent herbaceous layer consists of a robust vine layer and includes species such as summer grape, climbing hempweed, sweet autumn clematis, saw greenbrier and Virginia creeper.

Maintained/Disturbed

Maintained/Disturbed land encompasses various habitats that have recently been or currently are being impacted by human disturbance and make up approximately 89 percent of the project study area. These disturbances may include parking lots, residential and commercial developments, and maintained open fields and lawns.

Within the study area species identified in the maintained/disturbed community include numerous ornamental species, fescue, ryegrass, Chinese privet, Eastern baccharis, goldenrod, aster, and kudzu. Common tree species identified include sycamore, bald cypress, southern catalpa, hackberry, and mimosa.

Terrestrial Wildlife

Faunal species are highly adaptive and are likely to occur within the biotic communities previously discussed. Maintained roadside and residential communities adjacent to forested tracts provide support for early successional species. Forested areas identified provide forage and cover for wildlife dependent on mature forests with mast producing hardwoods and is likely to meet the nutritional and shelter needs of a variety of wildlife species.

The project study area is likely to contain the eastern cottontail rabbit, gray fox, raccoon, and the Virginia opossum. Reptiles expected in this area include eastern box turtle, rat snake, yellowbelly slider, black racer, six-lined racerunner, and green anole. Bird species expected to occur in the study area include mourning dove*, northern mockingbird*, Carolina chickadee*, northern cardinal*, killdeer*, and Carolina wren*. No game species, predatory birds, or scavengers were observed in the project study area.

b. Aquatic Communities

The study area contains two modified perennial streams. Fish species likely to occur in this system include redear sunfish, bluegill, American eel, redbreast sunfish, mosquitofish*, and the largemouth bass. Amphibians expected in the study area include bullfrog and southern toad.

c. Summary of Anticipated Effects

Due to the urban nature of this proposed project it is unlikely substantial impacts to biological functions will occur. Any construction-related activities in or near these resources have the potential to impact biological functions.

Terrestrial Effects

The communities likely to be affected by the project are presented below.

Community	Project Effects (Acres)
Small Basin Wetland	0
Mixed Hardwood Forest	1.93
Maintained/Disturbed	8.18
Totals	10.11

In general, the project would likely cause the following impacts to terrestrial communities:

- Direct loss of terrestrial habitats through land clearing, excavation, or fill.
- Wildlife habitat fragmentation.
- Riparian zone and stream buffer reductions/habitat corridor loss.
- Loss of food sources.

Effects on Aquatic Communities

Impacts to the aquatic communities are likely to result from the physical disturbance of aquatic habitats (e.g., substrate and water quality) and watersheds. These impacts are likely to be greatest at stream crossings. Disturbance of aquatic habitats has a detrimental effect on aquatic community composition by reducing species diversity and the overall quality of aquatic habitats. Physical alterations to aquatic habitats can result in the following impacts to aquatic communities:

- Inhibition of plant growth.
- Clogging of feeding structures of filter feeding organisms and gills of fish.
- Burial of benthic organisms.
- Algal blooms resulting from increased nutrient concentrations, which deplete dissolved oxygen supplies.
- Loss of benthic macroinvertebrates through scouring resulting from an increased sediment load.
- Increased water temperatures due to removal of riparian canopy.

2. Waters Resources

a. Streams, Rivers and Impoundments

Water resources within the study area are located in the Cape Fear River Basin (USGS Hydrologic Unit 03030004, NCDWQ Subbasin 03-06-15). Two streams are present in the study area. One of these, Cross Creek, is named. The other stream in the project area is an unnamed perennial tributary to Cross Creek.

Streams have been assigned a best usage classification by the NC Division of Water Quality that reflects water quality conditions and potential resource usage. Unclassified tributaries carry the same best usage classification as the classified stream to which they are tributaries. The classification for Cross Creek, NCDWQ Index No. 18-27-(3), is Class C from its source to the Cape Fear River.

Class C waters are protected for secondary recreation, fishing, wildlife, fish and aquatic life propagation and survival, agriculture and other uses suitable for Class C. There are no High Quality Waters (HQW), Primary Nursery Areas or designated anadromous fish waters present within one mile of the study area.

b. Water Quality Monitoring Data

The NC Division of Water Quality Basin wide Monitoring Program is part of an ongoing ambient water quality monitoring program that addresses long-term trends in water quality. The program monitors ambient water quality by sampling at fixed sites for selected benthic macroinvertebrate organisms, which are sensitive to water quality conditions.

There is one benthic monitoring station on Cross Creek within approximately one mile downstream of the project area. At this monitoring station, the stream was rated 'Fair' in 2008.

A portion of Cross Creek within the project study area is listed on the 2010 Clean Water Act Section 303(d) list as impaired waters for aquatic life, due to the fair bio-classification it received in 2008. However, Cross Creek itself is not listed as impaired due to sedimentation or turbidity, nor does it drain into any Section 303(d) waters within one mile of the study area that are listed for sedimentation or turbidity.

Point source dischargers located throughout North Carolina are regulated through the National Pollutant Discharge Elimination System (NPDES) program. There are no permitted discharges to streams in the project area. To a smaller extent, residential runoff through roadside drainage ditches or lawn management may also introduce pollutants.

c. Summary of Anticipated Effects

Short-term impacts to water quality, such as sedimentation and turbidity, may result from construction-related activities. Temporary construction impacts due to erosion and sedimentation will be minimized through the use of Best Management Practices (BMPs). The contractor will be required to follow contract specifications pertaining to erosion control measures. These include the use of dikes, berms, silt basins, and other measures to control runoff. Disturbed sites will be revegetated with herbaceous cover after construction to help reduce runoff and lessen sediment loadings. Direct discharges into streams will be avoided, whenever possible. Runoff effluent will be permitted to filter through roadside vegetation, whenever possible, in order to remove possible contaminants and to decrease runoff velocities.

Stream	Project Effect (feet)
Cross Creek	800
SA	61
SB	0

3. Waters of the United States

Surface waters and wetlands fall under the broad category of “Waters of the United States”, as defined in Section 33 of the Code of Federal Regulations (CFR) Part 328.3. Any action that proposes to dredge or place fill material into surface waters or wetlands falls under the jurisdiction of the US Army Corps of Engineers under Section 404 of the Clean Water Act (33 U.S.C. 1344).

a. Wetlands

There is one jurisdictional wetland within the study area. Wetlands in the study area are within the Cape Fear River Basin (USGS Hydrologic Unit 03030004). The jurisdictional wetland is shown in Figure 5 and is described below in Table 8.

Table 8. Jurisdictional Wetlands Within Project Area			
Wetland ID	NC WAM Wetland Type	Wetland Classification	DWQ Wetland Rating
WA	Small Basin Wetland	Non-riparian	17

b. Summary of Anticipated Effects

The proposed project will not affect any wetlands identified in the study area. Wetland WA is outside of the proposed project limits and will not be impacted as a result of this project.

c. Avoidance, Minimization and Mitigation

Final decisions regarding wetland and stream mitigation requirements will be made by the US Army Corps of Engineers and the NC Division of Water Quality. On-site mitigation will be used as much as possible. The Ecosystem Enhancement Program (EEP) will be used for remaining mitigation requirements beyond what can be satisfied by on-site mitigation.

d. Anticipated Permit Requirements

In accordance with provisions of Section 404 of the Clean Water Act, a permit will be required from the US Army Corps of Engineers for the discharge of dredged or fill material into “Waters of the United States”.

Due to expected project impacts on jurisdictional streams, an individual Section 404 permit will likely be required. Other permits that may apply include a NWP 33 for temporary construction activities such as stream dewatering or work bridges. The US Army Corps of Engineers holds the final discretion as to what permit(s) will be required prior to project construction.

In addition to the 404 permit, other required permits include the corresponding Section 401 Water Quality Certification (WQC) from the NCDWQ. A NCDWQ Section 401 Major Water Quality certification for a linear transportation project (GC 3627) may be required prior to the issuance of a Section 404 Permit. Other required 401 certifications may include a GC 3688 permit for temporary construction access and dewatering.

4. Rare and Protected Species

a. Federally-Protected Species

Plants and animals with Federal classifications of Endangered (E), Threatened (T), Proposed Endangered (PE), and Proposed Threatened (PT) are protected under the provisions of Sections 7 and 9 of the Endangered Species Act, as amended. As of September 22, 2010, the US Fish and Wildlife Service lists seven federally-protected species for Cumberland County.

Table 9. Federally-Protected Species in Cumberland County				
Common Name	Scientific Name	Status	Potential Habitat	Project Effect
American Alligator	<i>Alligator mississippiensis</i>	T(S/A)	No	No Effect
Red-cockaded woodpecker	<i>Picoides borealis</i>	E	No	No Effect
Saint Francis' satyr butterfly	<i>Neonympha mitchellii francisci</i>	E	No	No Effect
Pondberry	<i>Lindera melissifolia</i>	E	No	No Effect
Rough-leaved loosestrife	<i>Lysimachia asperulaefolia</i>	E	No	No Effect
Michaux's sumac	<i>Rhus michauxii</i>	E	No	No Effect
American Chaffseed	<i>Schwalbea Americana</i>	E	No	No Effect

T(S/A) – Threatened due to similarity of appearance

No habitat for any federally-protected species occurs in the project area. Therefore, it is expected the project will have no effect on any federally-protected species.

The bald eagle was declared recovered, and removed (de-listed) from the Federal List of Threatened and Endangered Species effective August 8, 2007. The bald eagle remains federally-protected under the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668-668d). The Eagle Act prohibits take of bald and golden eagles and provides a statutory definition of "take" that includes "disturb".

No habitat for the bald eagle exists in the project area. Therefore, it is expected the project will have no effect on the bald eagle.

5. Soils

Cumberland County lies in the coastal plain physiographic region of North Carolina. Flat to gently sloping topography characterize the area. Elevations in the study area range from 100 to 140 feet above mean sea level.

Soil mapping units are based on the Natural Resource Conservation Service soil survey for Cumberland County (USDA, 1984) and are generally characterized as mixed with sand and loam. Soils in the study area are shown on Table 10.

Table 10. Soils in Project Area			
ID	Full Name	Slopes	Hydric
BdD	Blaney-Urban land complex	8 to 15	Non-hydric
FcB	Faceville-Urban land complex	0 to 6	Non-hydric
Ru	Roanoke-Urban land complex	N/A	Hydric
Ur	Urban land	N/A	Non-hydric
WgB	Wagram-Urban land complex	0 to 8	Non-hydric
WnB	Wickham-Urban land complex	1 to 6	Hydric*

*Soils which are primarily non-hydric, but which contain hydric inclusions

B. Cultural Resources

The proposed project is subject to 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 as 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 to afford the Advisory Council a reasonable opportunity to comment on such undertakings.

1. Historic Architectural Resources

A field survey of the area of potential effects (APE) was conducted to identify architectural resources that might be affected by the project. All resources over fifty years of age within the APE were evaluated according to National Register of Historic Places eligibility criteria. Field survey findings, documentary research, and eligibility assessments were presented in a technical report from which the following summaries are drawn.

a. Historic Properties

One resource within the project study area is listed on the National Register of Historic Places (NRHP). The Haymount Historic District and Haymount Historic District Boundary Increase have been listed on the NRHP since 1983 and 2007, respectively. Another district, the Orange, Chatham, and Moore Streets Historic District, has been determined eligible for listing on the NRHP. Two individual properties in the project study area were determined eligible for listing on the National Register as well. These properties are the Lions Civic Center and the (former) Shearer Texaco Service Station.

HAYMOUNT HISTORIC DISTRICT

The Haymount Historic District is situated about one mile west of downtown Fayetteville. Development of the primarily residential area began in the early nineteenth century. The district contains forty-one properties. Nearly a century and a half of domestic architectural design is represented in the district today. The Haymount Historic District was listed on the National Register in 1983 under Criteria A (event), B (person) and C (design/construction) for its significance to the development of the city and association with several individuals of local prominence, as well as its architectural distinction. It is one of Fayetteville's oldest, most intact and cohesive residential neighborhoods. Seven properties within the district are within the project study area and the boundary extends north east to just outside of proposed intersection improvements to SR 3828 (Bragg Boulevard) approaching NC 24-210 (Rowan Street).

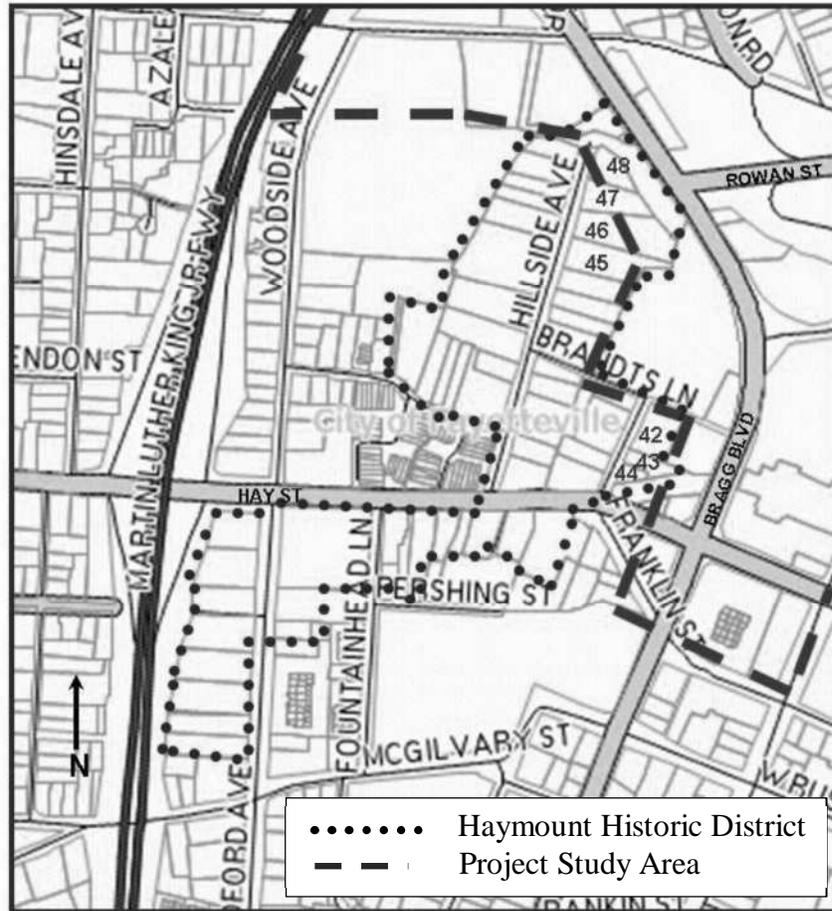


Figure V-1 National Register Boundary for Haymount Historic District

ORANGE, CHATHAM, AND MOORE STREETS HISTORIC DISTRICT

The Orange, Chatham, and Moore Streets Historic District is an approximately 100 acre site bounded by existing right of way along SR 3950 (Ramsey Street), Cumberland Street, NC 24-210 (Rowan Street) and Hillsboro Street just north of downtown Fayetteville. Eight properties in the district are within a portion of the study area and three of eight are within the proposed right of way. The district has been identified as eligible for the National Register under Criterion A (event) and C (design/construction). It illustrates the evolution of southern urban areas during the Jim Crow decades around 1900, and recognizes an important city neighborhood that developed around Fayetteville's first African-American public school (1912) and the St. Joseph's Episcopal Church (1896).

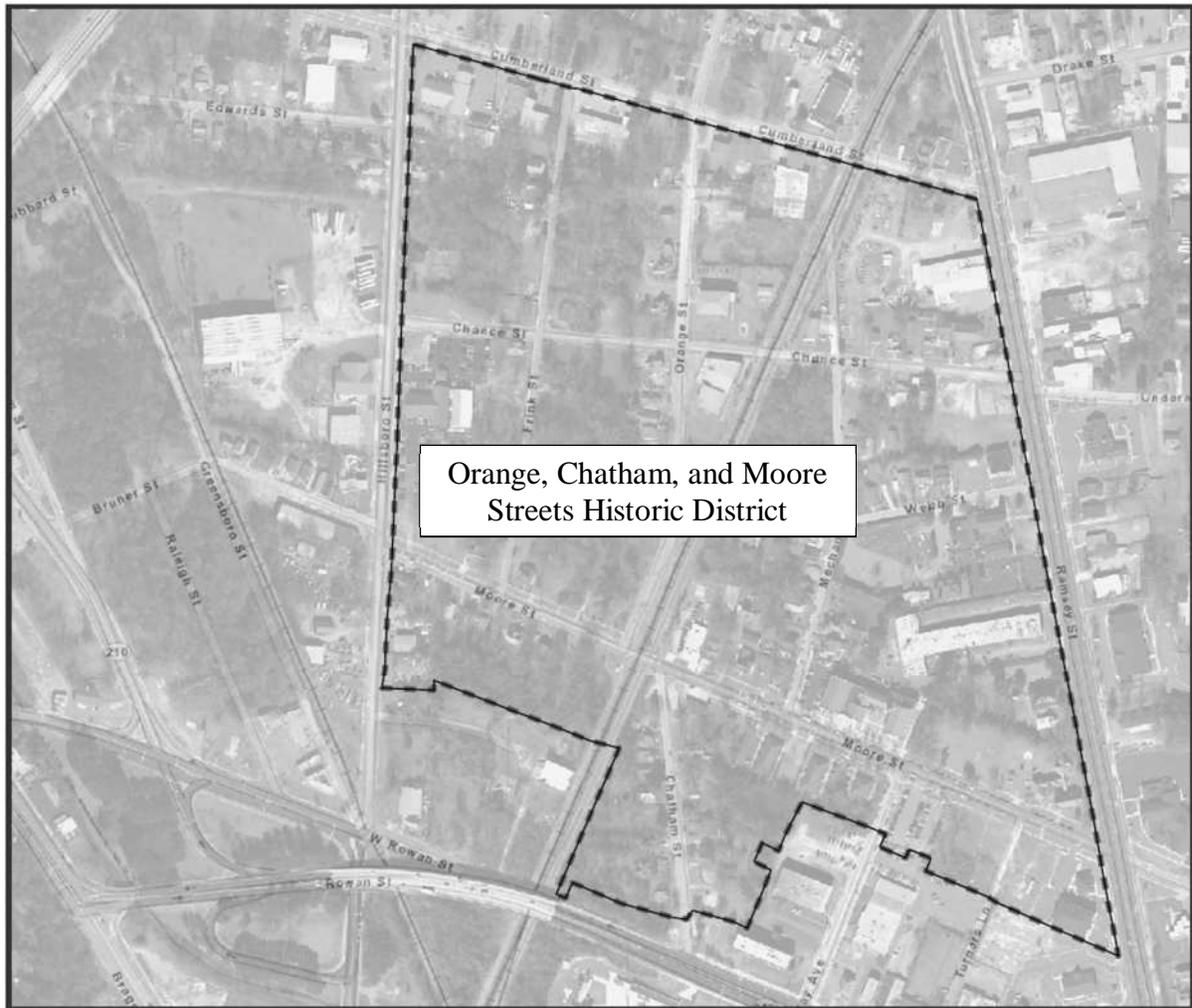


Figure V-2 Proposed National Register Boundary for Orange, Chatham and Moore Streets Historic District

LIONS CIVIC CENTER

The Lions Civic Center is located on the south side of SR 3147 (West Rowan Street) east of Woodside Avenue on the western edge of the project study area. The property includes the Civic Center, built in 1955, and the Rowan Park on approximately 12 acres. The Lions Civic Center is a two-story, asymmetrical, concrete building clad in red brick. The building played an active role in the development of the City of Fayetteville in the mid-twentieth century by providing the opportunity for many civic clubs to meet and organize. The property is eligible for the National Register under Criterion C (design/construction) for its architecture. The Lions Civic Center and accompanying Rowan Park are within the study area but outside of the project limits. The National Register-eligible boundary for the property is shown on Figure V-3 below.



Figure V-3 Proposed National Register Boundary for Lions Civic Center and Rowan Park

FORMER SHEARER TEXACO SERVICE STATION

The (former) Shearer Texaco Service Station sits adjacent to existing right of way along SR 3147 (West Rowan Street) and NC 24 (Bragg Boulevard) and is bounded to the east by Cross Creek. The building is an example of the influential Streamline Moderne service stations designed by American architect and industrial designer Walter Dorwin Teague for Texaco Oil Company. Constructed in the 1940s, the Shearer Texaco Service Station was initially run by John L. Shearer until the 1960s when it changed names and operated as a service station under other brands until the mid-1970s.

The property is eligible for the National Register under Criterion A (event) and C (design and construction) in the areas of commerce, transportation, and architecture. It is a significant example of a now increasingly rare building type and illustrates the practice of corporate branding through architecture in the mid-twentieth century. The property encompasses approximately 0.35 acres and is within the study area. The National Register-eligible boundary for the property is shown on Figure V-4.



Figure V-4 Proposed National Register Boundary for (former) Shearer Texaco Station

b. Project Effects

The Haymount Historic District is adjacent to SR 3828 (Bragg Boulevard) and will not be impacted by the realignment and relocation of the intersection of NC 24 (Bragg Boulevard) and NC 24-210 (Rowan Street). No right of way will be required from the Haymount Historic District. The State Historic Preservation Office concurred that the proposed project will have no effect on the Haymount Historic District.

The Orange, Chatham, and Moore Streets Historic District is within the proposed project limits. To minimize impacts to the district, retaining walls were considered on the north side of existing Rowan Street at the southern edge of the historic district. Two retaining wall options, a 10-foot and a 28-foot high structure, were considered to minimize fill in the district. Right of way would be required from the historic district with either height wall.

The State Historic Preservation Office concurred that the project would have no adverse effect on the historic district with either a 10-foot or 28-foot high retaining wall. As a condition of the 'no adverse effect' determination for the Orange, Chatham, and Moore Streets District, NCDOT was asked to investigate the city sign ordinance to insure a billboard could not be erected on vacant property within the eligible boundary. City officials informed NCDOT staff that the city sign ordinance would prohibit constructing a new sign in this area.

Due to the aesthetic appearance and cost associated with a 28-foot retaining wall, a 10-foot retaining wall is proposed. Landscaping will be provided at the corner of Rowan and Chatham Streets to ease the transition from the wall into the historic district.

The Lions Civic Center is located on SR 3147 (West Rowan Street) and is just west of the current project limits. No right of way or easements from the Civic Center property will be required. The State Historic Preservation Office concurred the project will have no effect on the Lions Civic Center.

The former Shearer Texaco Service Station is located on the southeast corner of existing NC 24 (Bragg Boulevard) and West Rowan Street. The proposed alignment of Bragg Boulevard has been shifted to avoid the service station. No right of way or easements will be required from the former Shearer Texaco Service Station property. The State Historic Preservation Office concurred the project will have no adverse effect on this property.

Project effects on historic properties are shown on Table 11 below.

Table 11. Project Effects on Historic Resources	
Historic Resource	Project Effect
Haymount HD (NR)	No Effect
OCM Streets HD (DOE, SL)	No Adverse Effect
Lions Civic Center and Rowan Park (DOE)	No Effect
Shearer Texaco Service Station (DOE, SL)	No Adverse Effect

The State Historic Preservation Office concurred with these findings on August 9, 2010. The related correspondence and concurrence forms are included in Appendix A.

2. Archaeological Resources

The State Historic Preservation Office has reviewed the project for archaeological resources. In a letter dated June 17, 2008, the State Historic Preservation Office stated that no known archaeological sites exist within the project study area and recommended no archaeological survey be conducted for the project. A copy of the State Historic Preservation Office’s letter is included in Appendix A.

C. Section 4(f)/6(f) Resources

Section 4(f) of the US Department of Transportation (USDOT) Act of 1966, as amended, specifies that publicly owned land from a public park, recreation area, wildlife and waterfowl refuge, and all historic sites of national, state, and local significance may be used for federal projects only if there is no feasible and prudent alternative to the use of such land and the project includes all possible planning to minimize harm to 4(f) lands resulting from such use.

Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFTEA-LU) amended existing Section 4(f) legislation to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This revision provides that if a transportation use of Section 4(f) property results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete.

Four historic properties or districts within the study area are eligible for or listed on the National Register of Historic Places. The proposed project will require the use of land from one eligible district, the Orange, Chatham, and Moore Streets Historic District.

The State Historic Preservation Office concurred the proposed project will have “no adverse effect” on the historic district.

The proposed use of land from the Orange, Chatham, and Moore Streets Historic District is considered a *de minimis* impact because the project will have “no adverse effect” on the historic property. Under Section 6009(a) of SAFTEA-LU, Section 4(f) does not apply in this case, because this project will have a *de minimis* impact on the historic property. The State Historic Preservation Office has concurred with this *de minimis* finding under Section 4(f) (See concurrence form in Appendix A of this document).

Festival Park, a City owned park, is within the project study area. A temporary construction easement is proposed within a portion of Festival Park. No adverse effect to park property is anticipated. The City of Fayetteville’s Parks and Recreation Director has reviewed the project and is in agreement with the temporary construction easement which will be used to construct a sidewalk along a portion of the project adjacent to Festival Park. In an email dated October 21, 2011 and memorandum dated November 17, 2011, the Parks and Recreation Director and the Interim Director for Engineering and Infrastructure agreed the proposed project will not adversely affect any activities features or attributes of Festival Park. A copy of the email and memorandum are included in Appendix A. The proposed temporary use of land from Festival Park is considered a *de minimis* impact.

The public will be afforded an opportunity to review and comment on the project’s effects on Festival Park at the public hearing to be held for this project following distribution of this environmental assessment (see Section VI-C). Under Section 6009(a) of SAFTEA-LU, FHWA anticipates Section 4(f) does not apply in this case, because this project will have a *de minimis* impact on the park. The final determination regarding a *de minimis* impact finding for Festival Park will be made prior to completion of the final environmental document.

Additional Section 4(f) resources in the project area are the North Carolina Veterans Park, Freedom Memorial Park, the Freedom Trail and Rowan Street Park. All of these resources are outside the project limits. No impacts are expected to these Section 4(f) resources in the project study area.

Section 6(f) of the Land and Water Conservation Fund Act of 1965 stipulates that property acquired or developed with the assistance of the Fund may not be converted to a use other than public recreation unless suitable replacement property is provided. No properties acquired or developed with the assistance of the Land and Water Conservation Fund exist in the project area.

D. Social Effects

1. Neighborhoods/Communities

The project study area is within the municipal boundary of the City of Fayetteville. The project study area comprises a mix of commercial development in the eastern and southern portions and residential development in the northern and western portions.

A portion of Hillsboro Street in the project study area between existing West Rowan Street and Hay Avenue is expected to be closed as part of the planned North Carolina Veterans Park and *Northwest Gateway Plan* (See Sec II-B-II-c). Access for businesses and residents in the project area will be reduced. However, Bruner Street and Murchison Road will provide access for business and residents that use Hillsboro Street. Additionally, the FAMPO proposed pedestrian culvert under relocated Rowan Street for the Little Cross Creek Trail will provide pedestrian connectivity for pedestrians and bicyclists currently using Hillsboro Street (See Section IV-J).

The proposed project is expected to increase mobility and will not limit access to existing communities and will promote safer traffic movements in the project area.

2. Relocation of Residences and Businesses

The proposed project will require the relocation of businesses. All relocations will be carried out in accordance with Federal and State laws and regulations. NCDOT’s Relocation Assistance Program will be utilized to assist in finding replacement property for those relocated by the project. Table 12 below presents the anticipated number of homes and businesses which would be relocated by the proposed project. Appendix B includes information on NCDOT’s relocation assistance program, as well as the relocation report for the project.

Table 12. Homes and Businesses to be Relocated	
Homes	Businesses
0	13(10)

Numbers in parenthesis () indicate minority-owned homes or businesses

Thirteen businesses are expected to be relocated as a result of this project. Twelve of thirteen businesses to be relocated are identified as tenants. Relocation assistance will be provided to all businesses to be relocated. The relocation of businesses is not expected to cause an adverse impact to the community because suitable business sites are available in the

area. No housing or property shortages are expected and no schools or churches will be relocated by this project.

3. Minority/Low-Income Populations

Executive Order 12898 requires each federal agency, to the greatest extent allowed by law, to administer and implement its programs, policies and activities that affect human health or the environment so as to identify and avoid “disproportionately high and adverse” effects on minority and low-income populations.

The project study area includes a higher percentage of minorities than the county average. Approximately 72.3 percent of the study area population is minority, compared with 45.1 percent for Cumberland County. Approximately 10 of 13 businesses to be relocated by the project alternatives are minority-owned or occupied. No residential relocations are anticipated as a result of this project.

The percentage of low-income households in the project area is approximately 38.2 percent, which is higher than Cumberland County’s percentage of 12.8 percent.

A citizens informational workshop was held for the project on November 23, 2009 (see Section VI-A). This workshop was advertised in local newspapers and newsletters announcing the workshop were mailed to area property owners.

Prior to completion of the final environmental document, a special meeting will be held for the minority-owned and occupied business owners expected to be relocated to allow them the opportunity to review and comment on the project.

The project study area has a higher low-income and minority population than the county average (72.3 percent compared to 45.1 percent). Through the public involvement program, coordination with local officials, and accommodation of local development plans the public has been kept informed of the proposed project. This project is being implemented in accordance with Executive Order 12898.

4. Public Facilities

There are a number of existing and planned public facilities within the project study area. Existing public facilities include Festival Park, the Airborne and Special Operations Museum, the Freedom Memorial Park and Trail and the North Carolina Veterans Park. Planned public facilities in the project study area include the second phase of the North Carolina Veterans Park and the Little Cross Creek Trail.

Festival Park opened to the public in 2007. It is an outdoor entertainment complex located between existing CSX and NS railroad tracks servicing the Train Depot and adjacent to NC 24-210 (Rowan Street) just south of the proposed project. The park is considered a Section 4(f) resource, although temporary construction easements will be obtained from the park, the Parks and Recreation Director has agreed this will not adversely affect the operation of the park. The project will have a *de minimis* impact on the park and no further Section

4(f) evaluation is required (see Section V-C). The final determination regarding a *de minimis* impact finding for Festival Park will be made prior to completion of the final environmental document.

A portion of the land for Festival Park was obtained by the City of Fayetteville from the Army through the Federal Lands to Parks Program. Although temporary construction easements will be required from a portion of Festival Park, no easements will be required from park property obtained through the Federal Lands to Parks Program.

The Airborne and Special Operations Museum (ASOM) is located in the southern edge of the project study area. It is part of the U.S. Army Museum System and is a museum honoring airborne and special operations history and organization. No impacts to ASOM are anticipated as a result of this project.

Freedom Memorial Park and Trail is part of the greater *Northwest Gateway Plan* adopted by the City to improve the visual, physical, transportation, and social connections between downtown and the surrounding Fayetteville area. The park is in the southwest corner of the study area and the trail is located on the west side of Bragg Boulevard in the project area. No impacts to either resource are expected as a result of this project.

North Carolina Veterans Park honors the state's veterans from all branches of service. A portion of the park south of the project limits was opened on July 4, 2011. The second phase of the park will utilize a portion of the current right of way for NC 24-210 (Rowan Street) after the roadway and bridge are relocated during replacement of Bridge Number 116 and intersection improvements planned as part of this project.

Lions Civic Center is adjacent to Rowan Street Park just west of the proposed project limits on West Rowan Street within the project study area. The Lions Civic Center and adjacent Rowan Street Park property is eligible for the National Register of Historic Places (see Section V-B-1). Rowan Street Park is just outside the project study area and includes a 12 acre lot with trails, benches, picnic tables, and a playground. No impacts to the park or civic center are expected as a result of this project.

The Little Cross Creek Trail is a proposed multi-use trail that is expected to connect existing greenway trails between Cross Creek in the project study area. The trail is still being developed by the Fayetteville Area Metropolitan Planning Organization (FAMPO).

NCDOT has coordinated with the City of Fayetteville and FAMPO regarding Freedom Memorial Park and Trail, the North Carolina Veterans Park and the Little Cross Creek Trail. This coordination will continue as project development for the subject project continues. NCDOT, FAMPO and the City have discussed constructing a pedestrian culvert to carry the Little Cross Creek Trail under relocated Rowan Street as part of the subject project. The culvert would be funded by FAMPO. It is expected FAMPO will provide a formal request to NCDOT for this pedestrian culvert prior to completion of the final environmental document for this project.

5. Economic Effects

It is expected that the project improvements in mobility and access will have an overall positive effect on local businesses. The only exception would be the businesses currently located on Hillsboro Street north of Rowan Street. The visibility of these businesses will be greatly decreased due to the permanent closing of Hillsboro Street by construction of the second phase of the North Carolina Veterans Park. Impacts as a result of the permanent closing of Hillsboro Street are not expected to be high since access will still be provided.

E. Land Use

1. Existing Land Use and Zoning

Land use in the study area consists of a combination of residential, commercial, industrial, institutional and open space.

2. Future Land Use

Expected growth areas in the project area are near Fort Bragg Military Base northwest of Fayetteville and along Bragg Boulevard. Land adjacent to the project area is expected to be developed for public and private use. Redevelopment of the land existing Rowan Street occupies for the North Carolina Veterans Park will have a positive impact on the area surrounding the proposed project.

3. Project Compatibility with Local Plans

The proposed project is compatible with local land use plans and the jointly adopted Fayetteville Area Metropolitan Planning Organization's 2035 Long Range Transportation Plan and will implement part of the *Northwest Gateway Plan* adopted by the City of Fayetteville. The proposed project is consistent with the *Northwest Gateway Plan* in that it proposes to realign the intersections of Bragg Boulevard and Murchison Road with Rowan Street as part of the project to improve access to the downtown and surrounding areas and attractions. In addition to the benefits from this project and the other components of the *Northwest Gateway Plan* that will accrue to the greater Fayetteville area, the nearby communities will also potentially benefit in the future from expanded and improved park and recreational facilities as the plan is implemented.

F. Indirect/Cumulative Effects

The Council of Environmental Quality (CEQ) regulations (CFR Regulations, Title 40, Section 1502.16) require a discussion of both the direct and indirect effects of the proposed action. Direct effects are those effects that are caused by the action and occur at the same time and place. Indirect or secondary effects are those effects, "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." A cumulative effect is defined as the "impact on the environment which results from the incremental impact of the proposed action when added to other past, present, and

reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."

The Future Land Use Study Area (FLUSA) for this project is the area that could be affected as a result of the proposed project and encompasses all areas potentially subject to increased development pressure as a result of the proposed project. The FLUSA occurs entirely within the municipal limits of Fayetteville, with a western boundary following US 401 and NC 87 (also known as Martin Luther King Jr. Freeway, a major roadway). Blounts Creek forms the southern and eastern FLUSA boundary through downtown, and ends at the US 401/Ramsey Street interchange to the north.

Based upon the results of the analysis and the Indirect and Cumulative Effects Screening Matrix, there is a low to moderate concern for indirect and cumulative effects as a result of this project.

As a bridge replacement project with some intersection realignment the scope for the project was rated as low-medium. The realignment of the Rowan Street/Bragg Boulevard and Rowan/Murchison Street intersections and the closure of the southern end of Hillsboro Street will result in a slight change to travel patterns, access and property exposure.

Because few indirect impacts are anticipated, the cumulative effect of this project, when considered in the context of other past, present and future actions, and the resulting impact on the notable human and natural features, should be minimal. Therefore, contribution of the project to cumulative impacts resulting from current and planned development patterns is expected to be minimal.

Qualitative analyses of the probable development patterns in the FLUSA suggests that the proposed project will have little to no effect on future stormwater runoff or water quality in the watersheds encompassed by the project.

Indirect and cumulative effects are described in more detail in the *B-4490 Indirect and Cumulative Effects Screening Report*. No additional indirect and cumulative effects studies are recommended.

G. Flood Hazard Evaluation

The City of Fayetteville and Cumberland County are both participants in the National Flood Insurance Program. A detailed flood study was performed for Cross Creek. The proposed project will traverse Cross Creek within the detailed study area. The Cross Creek crossing will likely require a flood insurance rate map modification or revision. Figure 5 shows the location of 100-Year floodplains in the project area.

NCDOT will coordinate with the Federal Emergency Management Agency (FEMA) and local authorities during the design phase of the project for approval of a flood insurance rate map revision and to insure compliance with applicable floodplain ordinances. It is anticipated the proposed project will not have a substantial effect on the existing floodplain or on the associated flood hazards.

H. Traffic Noise Analysis

In accordance with Title 23 Code of Federal Regulations Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (Title 23 CFR 772), each Type I highway project must be analyzed for predicted traffic noise impacts. Type I projects are proposed federal or federal-aid highway projects for construction of a highway on new location or improvements to an existing highway which significantly changes the horizontal or vertical alignment or increases the vehicle capacity. Traffic noise impacts are determined from the current procedures for the abatement of highway traffic noise and construction noise found in Title 23 CFR 772, which also includes provisions for traffic noise abatement measures. When traffic noise impacts are predicted, examination and evaluation of alternative noise abatement measures must be considered for reducing or eliminating these impacts. A copy of the unabridged version of the full technical report entitled Traffic Noise Analysis can be viewed at the NCDOT Century Center, 1000 Birch Ridge Drive, Raleigh.

1. Traffic Noise Impacts and Noise Contours

The maximum number of receptors predicted to be impacted by future traffic noise is 10 and are shown in Table 13 below. The table includes those receptors expected to experience traffic noise impacts by either approaching or exceeding the FHWA Noise Abatement Criteria or by a substantial increase in exterior noise levels.

Table 13. Predicted Traffic Noise Impacts*				
Alternative	Traffic Noise Impacts			
	Residential	Churches/Schools	Businesses	Total
Build	1	0	9	10
No-Build	1	0	7	8

*Per TNM[®]2.5 and in accordance with 23 CFR Part 772

The maximum extent of the 72 and 67 dBA predicted noise level contours measured from the center of the proposed roadway are 96 feet and 232 feet, respectively.

2. Noise Abatement Alternatives

Measures for reducing or eliminating traffic noise impacts were considered for all impacted receptors. Noise abatement measures evaluated include highway alignment changes, traffic system management measures, buffer acquisition, vegetative barriers, land use control and noise barriers.

For each of these measures, benefits versus costs, engineering feasibility, effectiveness and practicability, land use issues and other factors were considered. Noise abatement measures are evaluated based upon their feasibility, which involves the combination of acoustical and engineering factors, and reasonableness, which involves consideration of social, economic, and environmental factors. Noise abatement is considered reasonable if it does not exceed maximum allowable quantities or costs for abatement. Abatement is feasible if it can be provided without any adverse impacts and it provides

prescribed minimum levels of noise reduction. Noise abatement mitigation measures do not meet the preliminary feasibility and reasonableness criteria for this project and are not recommended.

Traffic System Management Measures

Traffic system management measures are not considered viable for noise abatement due to the negative impact they would have on the capacity of the proposed roadway.

Highway Alignment Changes

Substantially changing the highway alignment to minimize noise impacts is not considered to be a viable option for this project due to engineering and/or environmental factors.

Buffer Acquisition

Costs to acquire buffer zones for impacted receptors will exceed the NCDOT abatement cost threshold. Therefore, this abatement measure is unreasonable.

Noise Barriers

Noise barriers include two basic types: earthen berms and noise walls. These structures act to diffract, absorb and reflect highway traffic noise. For this project, noise barriers and earthen berms are not viable abatement measures because those required to provide the needed noise level reductions will exceed the maximum allowable base quantities for materials, as detailed in the NCDOT Traffic Noise Abatement Policy.

This project does not provide control of access, meaning that commercial establishments and residences will have direct access connections to the proposed project, and all roadway intersections will be at-grade. Businesses, churches and other related establishments require accessibility and high visibility. Noise barriers do not allow uncontrolled access, easy accessibility or high visibility, and would therefore not be acceptable abatement measures for this project.

3. Summary

Based on this preliminary study, traffic noise abatement is not recommended and no noise abatement measures are proposed. This evaluation completes the highway traffic noise requirements of Title 23 CFR Part 772. No additional noise analysis will be performed for this project unless warranted by a substantial change in the project scope, vehicle capacity or alignment.

In accordance with NCDOT Traffic Noise Abatement Policy, the Federal/State governments are not responsible for providing noise abatement measures for new development for which building permits are issued after the Date of Public Knowledge. The Date of Public Knowledge of the proposed highway project will be the approval date of the

final environmental document, which is likely to be a Finding of No Significant Impact (FONSI). For development occurring after this date, local governing bodies are responsible for insuring noise compatible designs are utilized along the proposed facility.

I. Air Quality Analysis

Air pollution originates from various sources. Emissions from industry and internal combustion engines are the most prevalent sources. The impact resulting from highway construction ranges from intensifying existing air pollution problems to improving the ambient air quality.

1. Project Air Quality Effects

National Ambient Air Quality Standards (NAAQS) are set for carbon monoxide (CO), nitrogen oxide (NO), ozone (O₃), lead (Pb), particulate matter (PM) and sulfur dioxide (SO₂). The main pollutants from transportation sources are carbon monoxide, ozone and particulate matter.

The project is located in Cumberland County, which has been determined to be in compliance with NAAQS. 40 CFR parts 51 and 93 are not applicable because the project is located in an attainment area. This project is not anticipated to create any adverse effects on the air quality of this attainment area. This project is an air quality neutral project and a project level CO and PM_{2.5} analysis is not required.

2. Mobile Source Air Toxics

Mobile source air toxics (MSATs) are a subset of the 188 air toxics defined by the Clean Air Act. MSATs are compounds emitted by highway vehicles and non-road equipment.

This document includes a basic analysis of the likely MSAT emission impacts of this project. However, project specific health effects of the emission changes associated with the project alternatives cannot be predicted with available technical tools.

Evaluating the environmental and health impacts from MSAT's on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevent a more complete determination of the MSAT health impacts of the proposed project. Research into the health impacts of MSATs is ongoing.

For both Build and No Build alternatives, the amount of MSATs emitted is proportional to the vehicle miles traveled (VMT), assuming other variables such as fleet mix are the same for each alternative. Regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs

that are projected to reduce annual MSAT emissions by 72 percent from 1999 to 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in virtually all locations. Consequently, higher levels of MSAT are not expected from the Build Alternative compared to the No Build Alternative.

A copy of the unabridged version of the full air quality technical report entitled Air Quality Analysis can be viewed at the NCDOT Century Center, 1000 Birch Ridge Drive, Raleigh.

3. Construction Air Quality Effects

During construction of the proposed project, all materials resulting from clearing and grubbing, demolition or other operations will be removed from the project, burned or otherwise disposed of by the contractor. Any burning will be performed in accordance with applicable local laws and ordinances and regulations of the North Carolina State Implementation Plan (SIP) for air quality in compliance with 15 NCAC 2D.0520. Care will be taken to insure burning will be performed at the greatest distance practical from dwellings and not when atmospheric conditions are such as to create a hazard to the public. Burning will be performed under constant surveillance. Measures will also be taken to reduce the dust generated by construction when the control of dust is necessary for the protection and comfort of motorists or area residents.

J. Hazardous Materials

Based on a field reconnaissance survey and database review of the project area, no landfill sites exist in the project study area.

Fifteen underground storage tanks (UST) and nine other sites were identified within the proposed project study area. Additionally, there is the possibility unregulated USTs may exist within the proposed right of way limits. If a site with unregulated USTs or landfills is identified, a preliminary site assessment will be performed prior to right of way acquisition. The sites were all identified as low risk sites and are not expected to have an impact on the proposed project.

VI. COMMENTS AND COORDINATION

A. Citizens Informational Workshop

A citizens informational workshop was held on November 23, 2009, at the Airborne and Special Operations Museum in Fayetteville to obtain comments and suggestions about the project from the public. Approximately 48 citizens attended this meeting, not including NCDOT representatives. This meeting was advertised through local newspapers and flyers were sent to property owners and citizens in the project area.

An aerial map of the study area with the preliminary alignment of the proposed project was presented at the workshop. The majority of those attending supported the project. Some citizens expressed concerns about project effects on their property, but agreed with the need for the project. A few citizens opposed the project entirely.

B. Local Officials Meeting

A local officials meeting was held prior to the citizens informational workshop. Participants at the meeting included elected officials and staff from the City of Fayetteville, the Public Works Commission of Fayetteville, members of the Chamber of Commerce, representatives from the Fayetteville Area Metropolitan Planning Organization (FAMPO), NCDOT Staff from Division 6, the Roadway Design Unit, and the Project Development and Environmental Analysis Unit.

C. Public Hearing

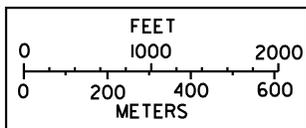
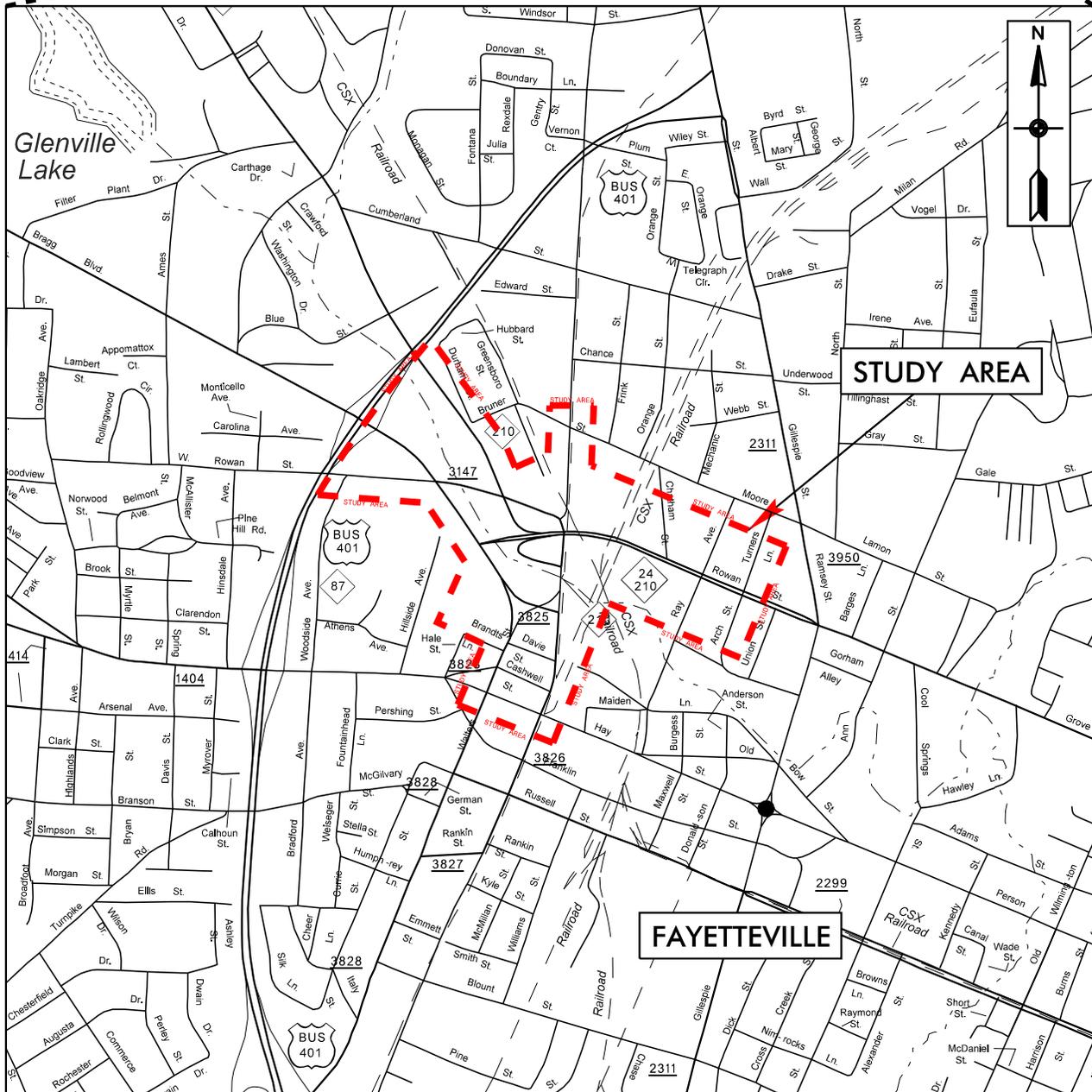
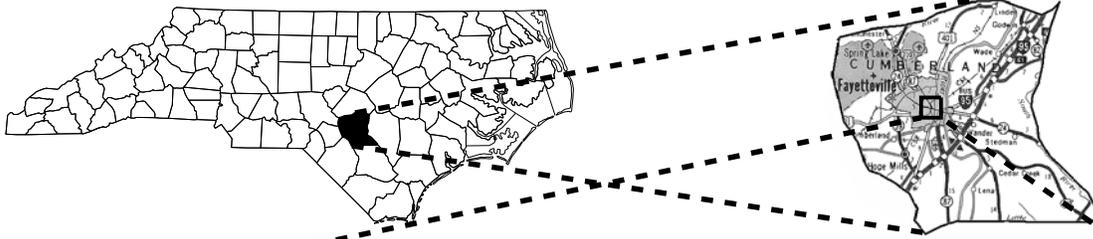
A public hearing for this project will be held following approval of this document and prior to right of way acquisition. The proposed project design will be presented to the public for their comments at the hearing. Citizen comments will be taken into consideration as project design continues.

D. Agency Coordination

NCDOT has coordinated with appropriate federal, state and local agencies throughout the project development study. Comments on the project have been requested from the agencies listed below. An asterisk designates an agency from which comments were received. Copies of the comments received are included in Appendix A.

- *US Department of the Army – Corps of Engineers
- *US Environmental Protection Agency
- NC Wildlife Resources Commission
- *NC Department of Administration – State Clearinghouse
- *NC Department of Cultural Resources – State Historic Preservation Office
- *NC Department of Environment and Natural Resources – DENR
- *DENR – NC Natural Heritage Program
- *DENR – NC Division of Water Quality
- NC Department of Public Instruction – School Planning

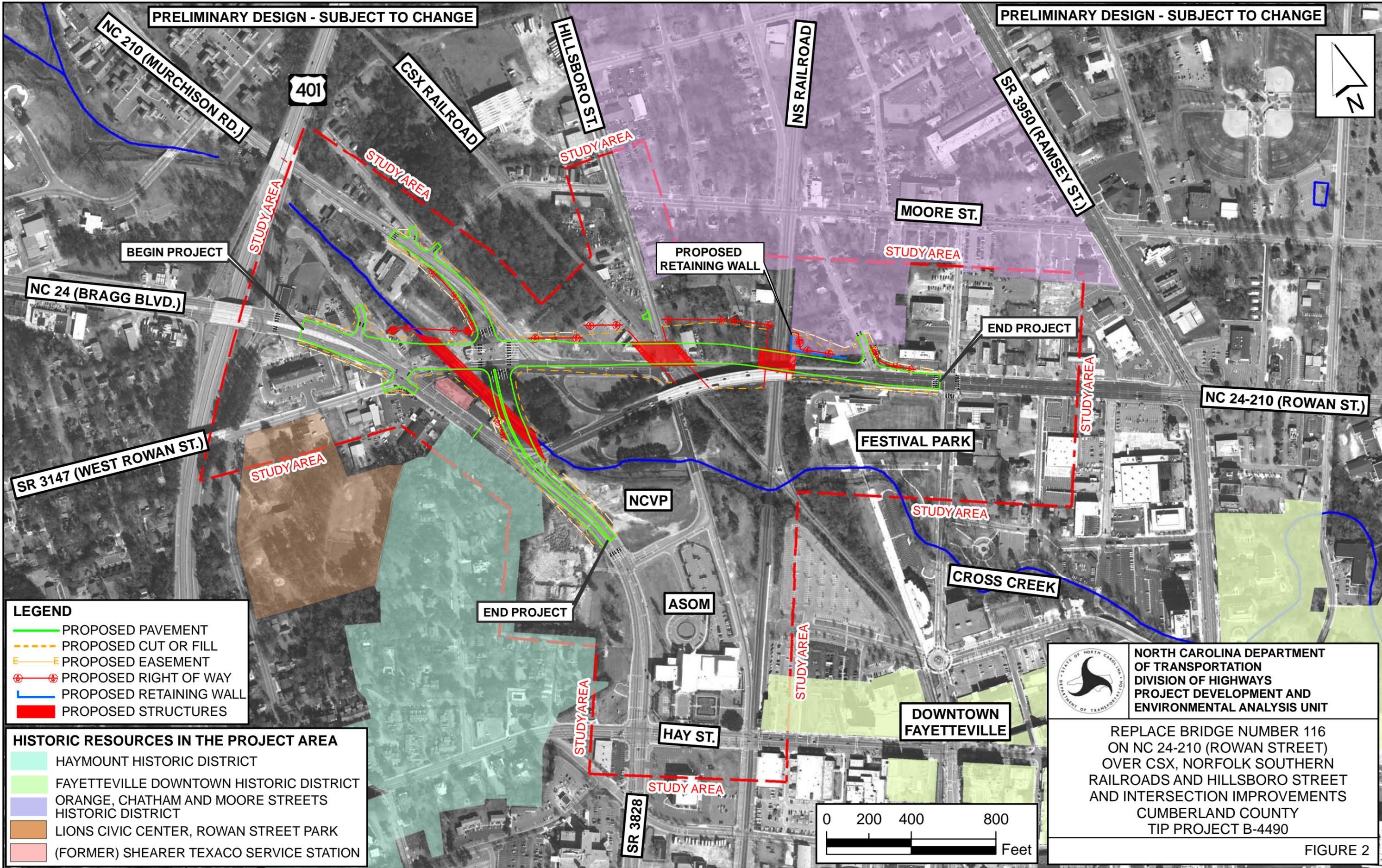
NC Division of Parks & Recreation
Fayetteville Area Metropolitan Planning Organization (FAMPO)
Mid-Carolina Rural Planning Organization
*City of Fayetteville



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

FAYETTEVILLE
REPLACE BRIDGE NUMBER 116 ON NC 24-210
(ROWAN STREET) OVER CSX, NORFOLK
SOUTHERN RAILROADS AND HILLSBORO STREET
AND INTERSECTION IMPROVEMENTS
CUMBERLAND COUNTY
TIP PROJECT B-4490

FIGURE 1



LEGEND

- PROPOSED PAVEMENT
- - - PROPOSED CUT OR FILL
- E E PROPOSED EASEMENT
- ⊕ ⊕ PROPOSED RIGHT OF WAY
- PROPOSED RETAINING WALL
- PROPOSED STRUCTURES

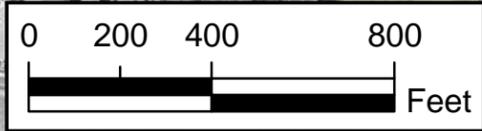
HISTORIC RESOURCES IN THE PROJECT AREA

- HAYMOUNT HISTORIC DISTRICT
- FAYETTEVILLE DOWNTOWN HISTORIC DISTRICT
- ORANGE, CHATHAM AND MOORE STREETS HISTORIC DISTRICT
- LIONS CIVIC CENTER, ROWAN STREET PARK
- (FORMER) SHEARER TEXACO SERVICE STATION


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

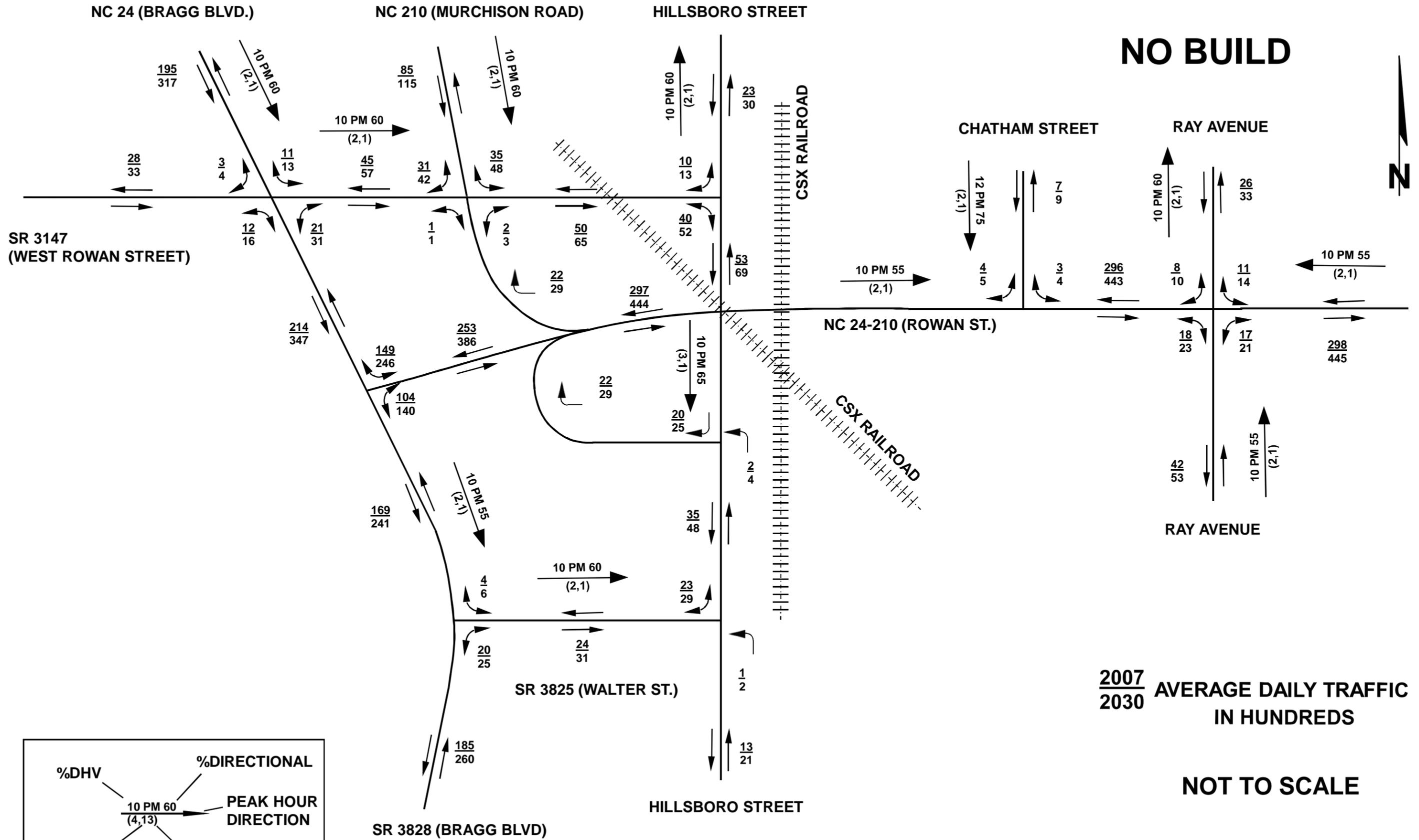
REPLACE BRIDGE NUMBER 116
 ON NC 24-210 (ROWAN STREET)
 OVER CSX, NORFOLK SOUTHERN
 RAILROADS AND HILLSBORO STREET
 AND INTERSECTION IMPROVEMENTS
 CUMBERLAND COUNTY
 TIP PROJECT B-4490

FIGURE 2



TIP PROJECT B-4490

NO BUILD



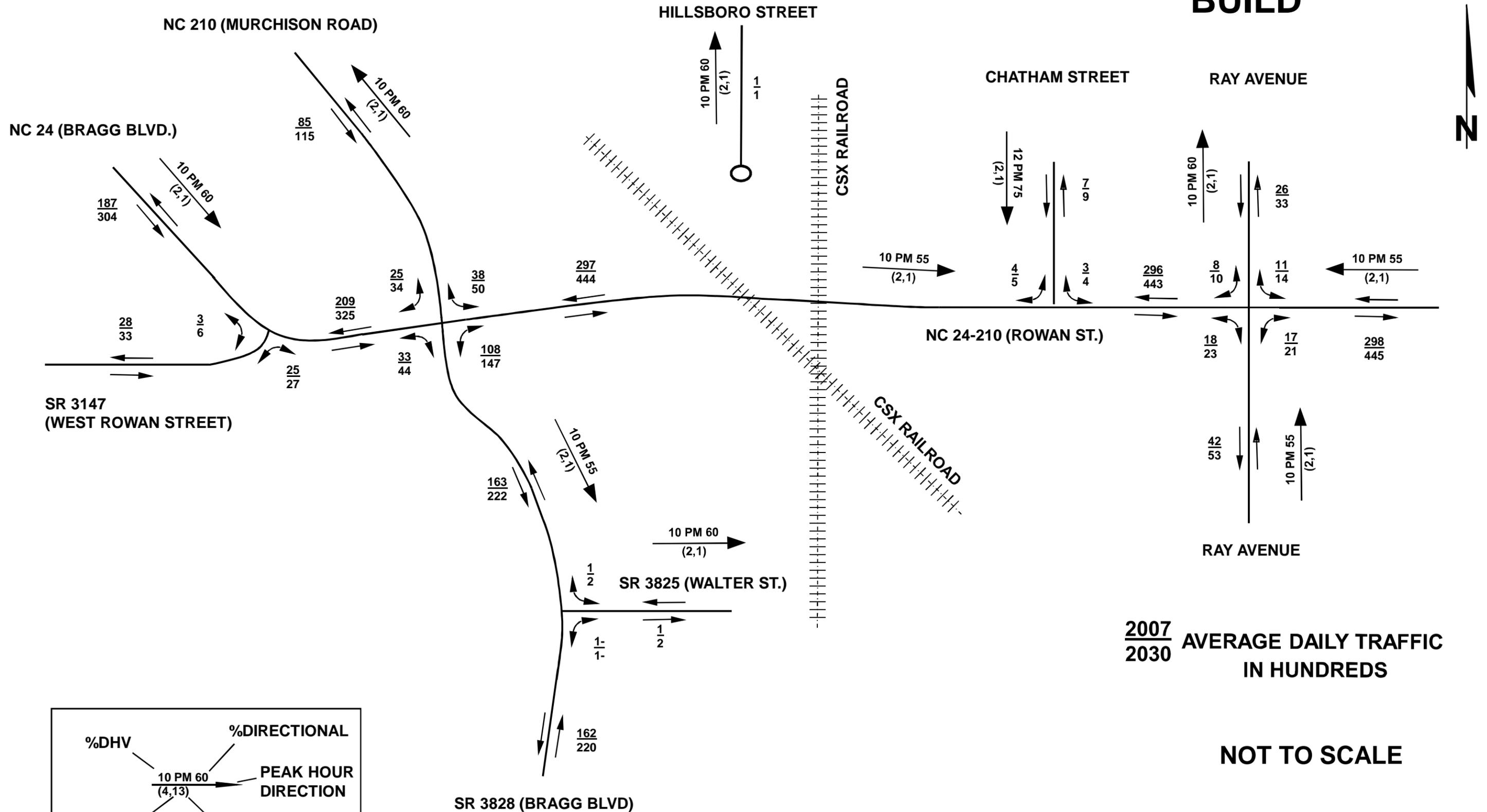
**2007
2030** AVERAGE DAILY TRAFFIC
IN HUNDREDS

NOT TO SCALE

FIGURE 3A

TIP PROJECT B-4490

BUILD



2007
2030 AVERAGE DAILY TRAFFIC
IN HUNDREDS

NOT TO SCALE

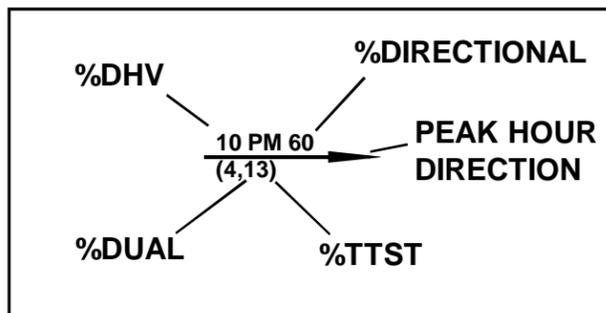
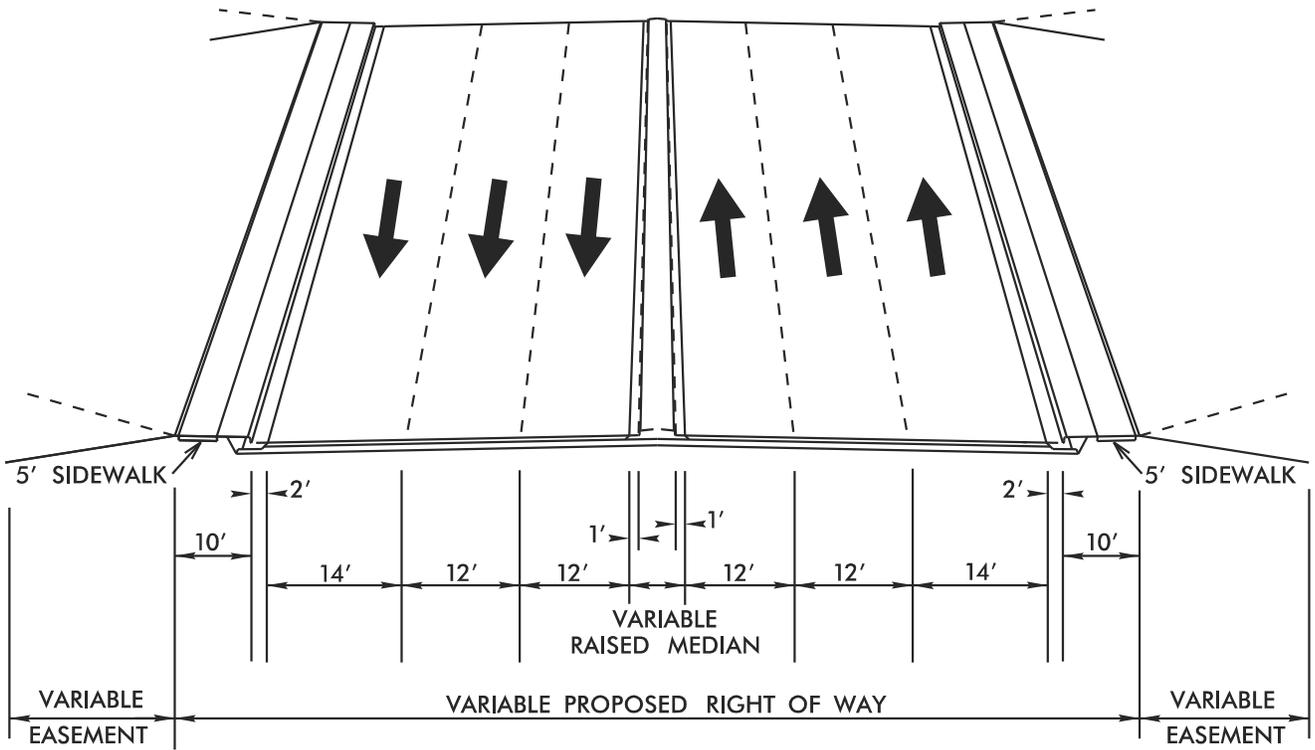


FIGURE 3B

TIP PROJECT B-4490

PROPOSED TYPICAL SECTION (NC 24-210 ROWAN STREET)



NOT TO SCALE

PROPOSED BRIDGE TYPICAL SECTION

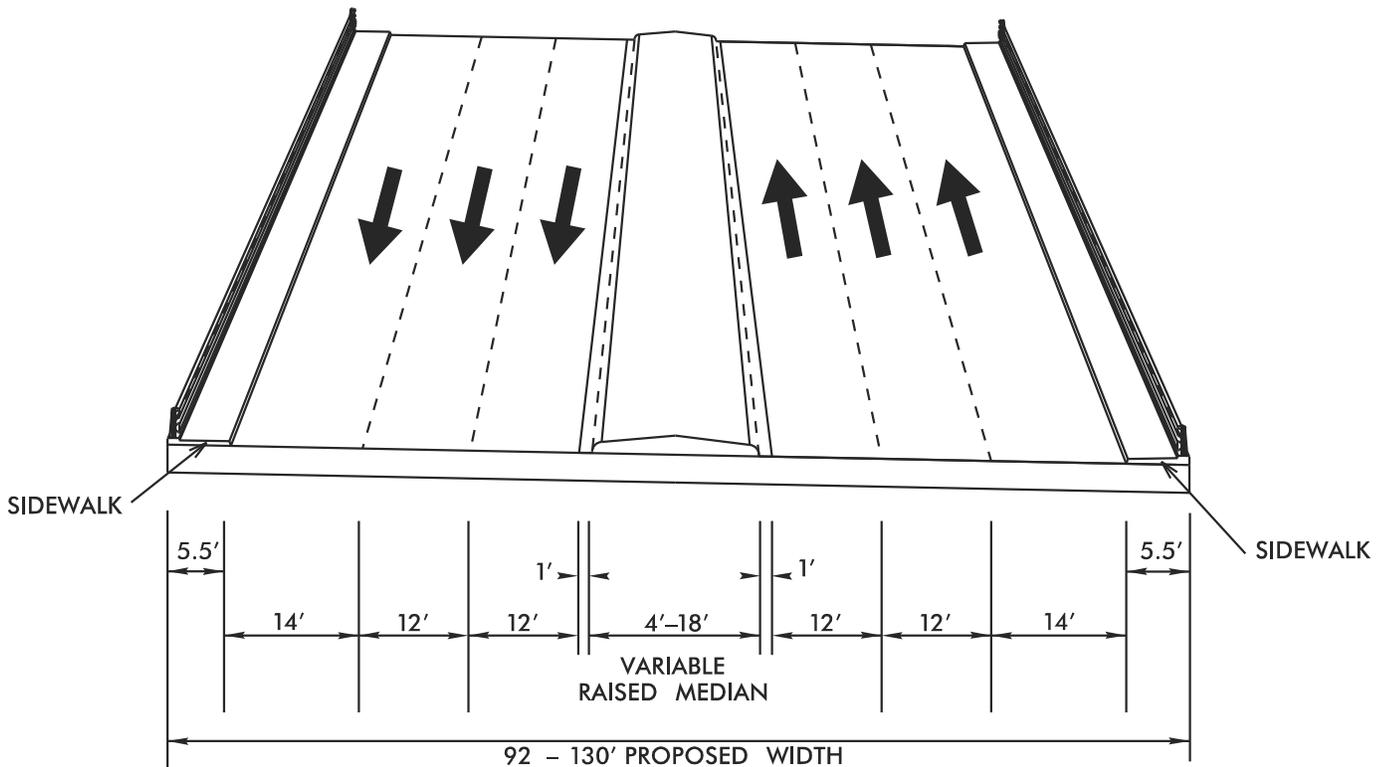
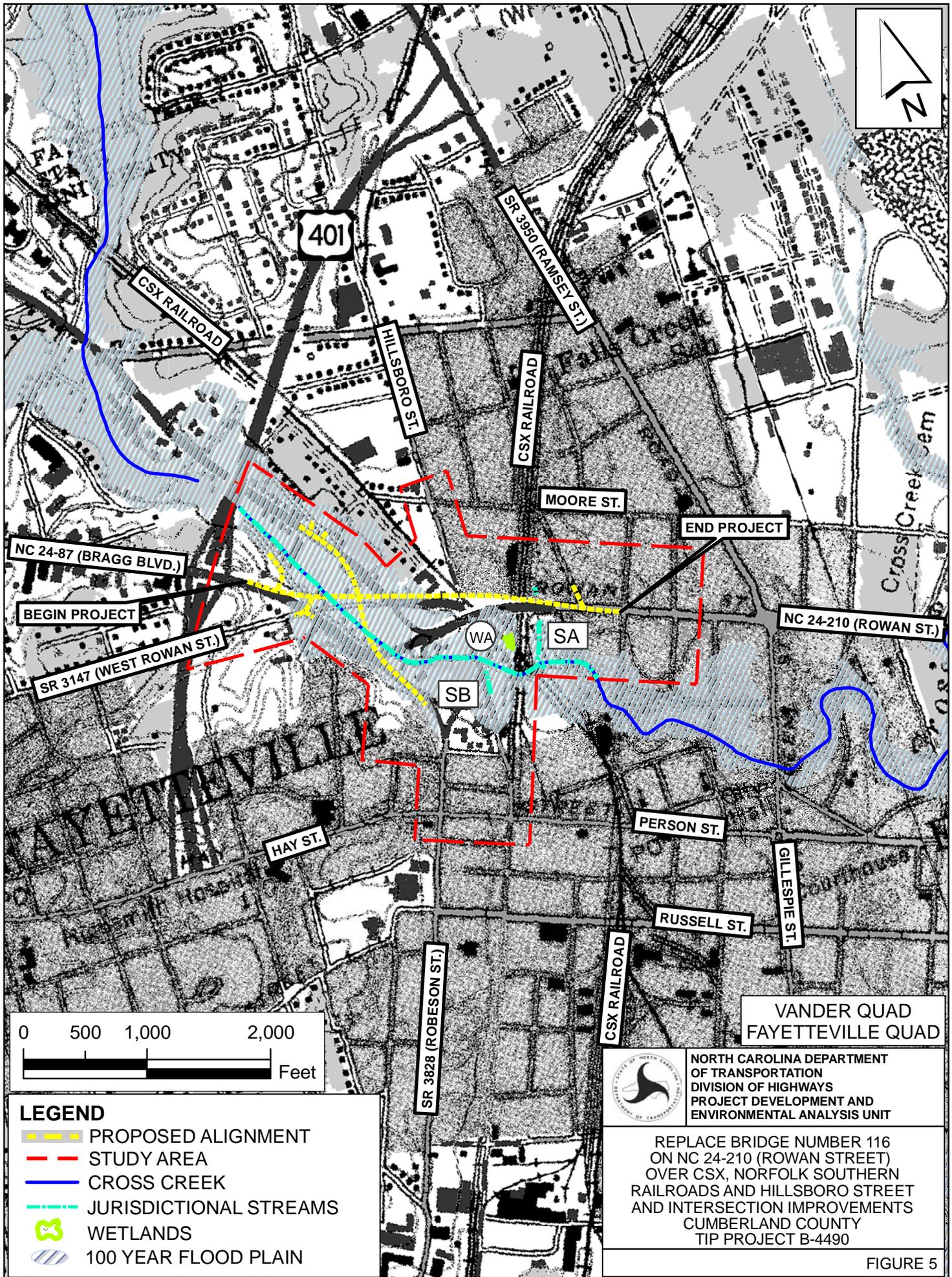
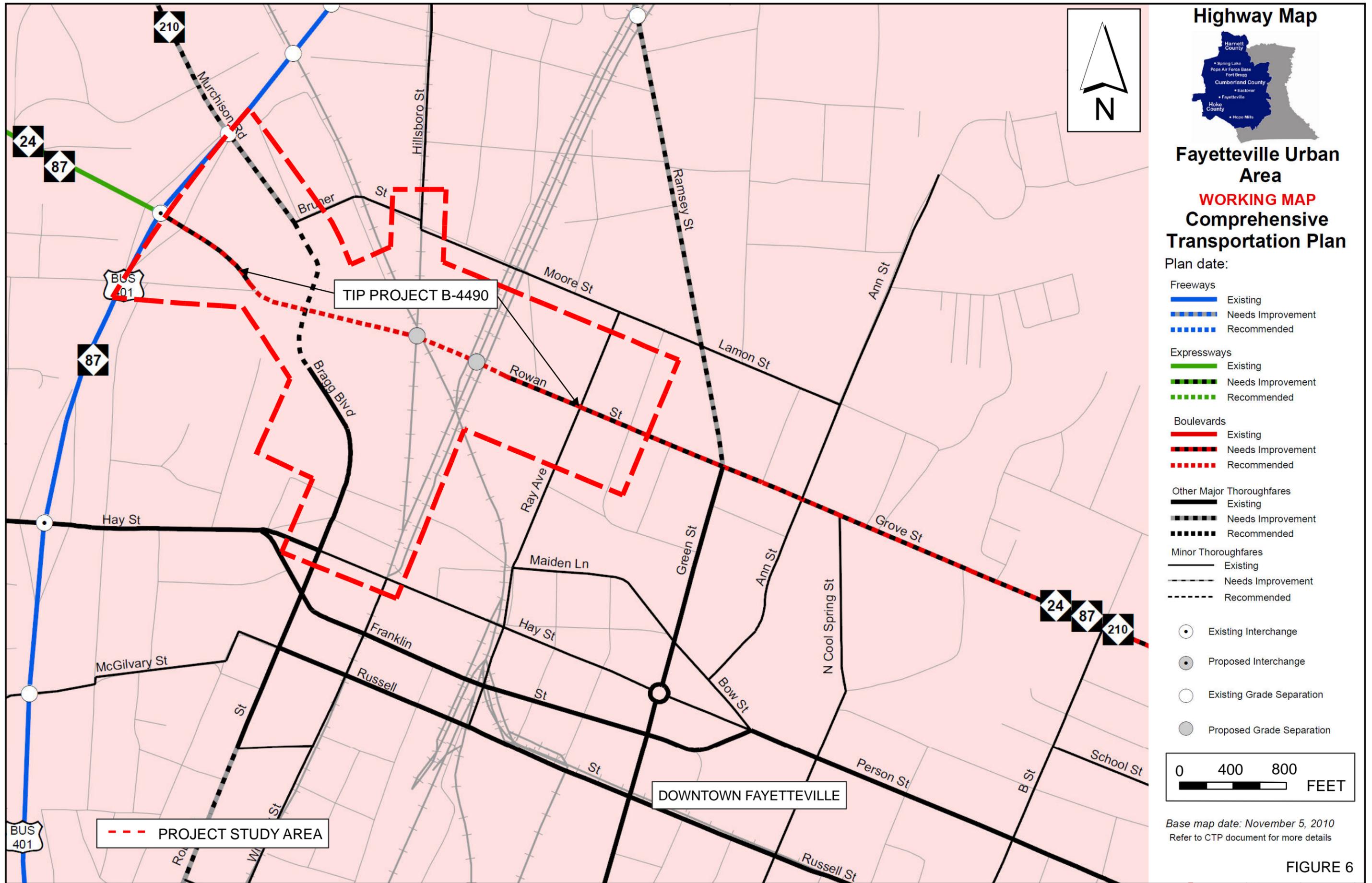


FIGURE 4





Highway Map



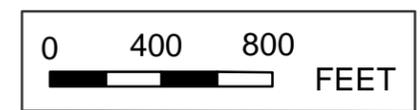
Fayetteville Urban Area

WORKING MAP Comprehensive Transportation Plan

Plan date:

- Freeways**
 - Existing
 - - - Needs Improvement
 - · · Recommended
- Expressways**
 - Existing
 - - - Needs Improvement
 - · · Recommended
- Boulevards**
 - Existing
 - - - Needs Improvement
 - · · Recommended
- Other Major Thoroughfares**
 - Existing
 - - - Needs Improvement
 - · · Recommended
- Minor Thoroughfares**
 - Existing
 - - - Needs Improvement
 - · · Recommended

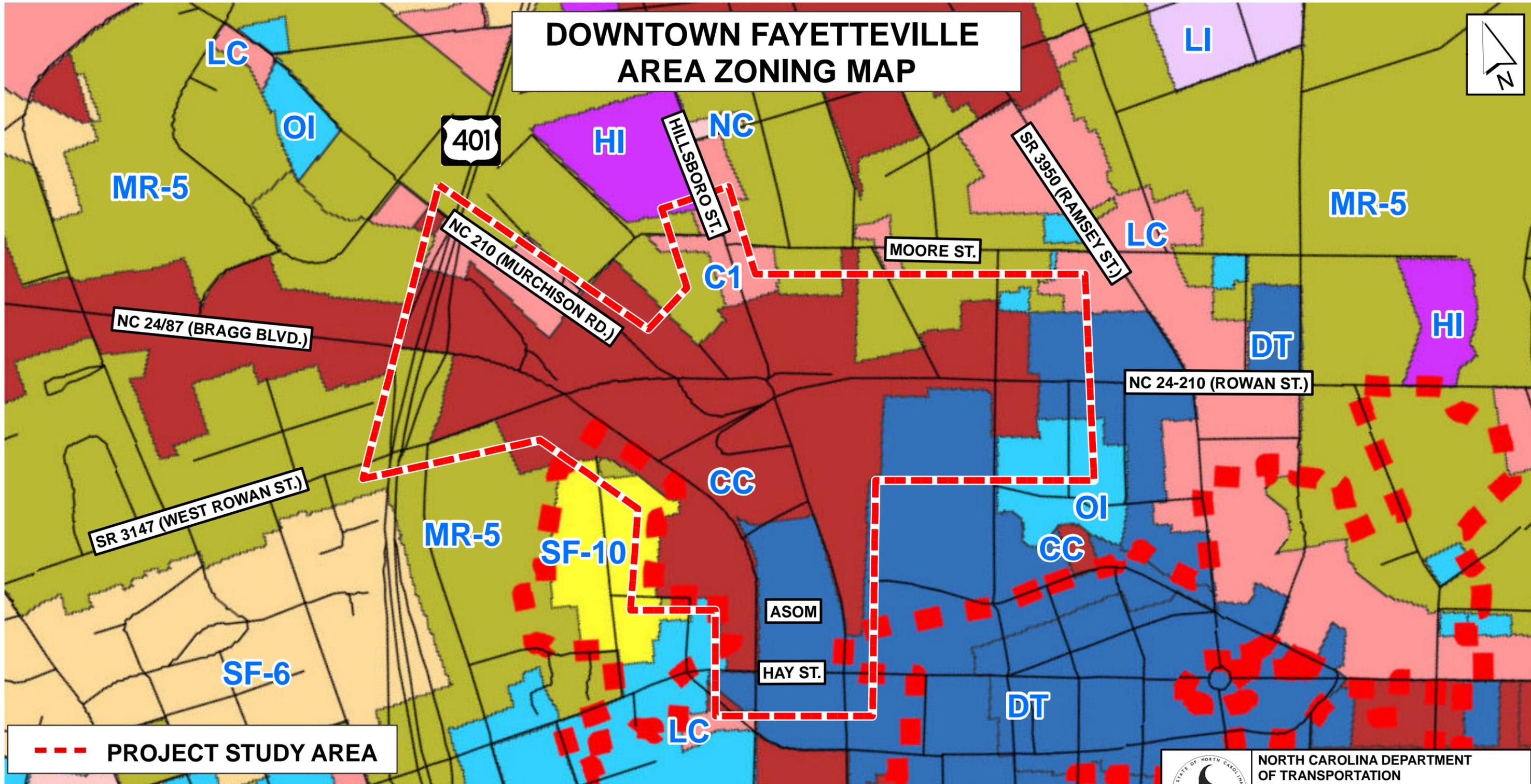
- Existing Interchange
- Proposed Interchange
- Existing Grade Separation
- Proposed Grade Separation



Base map date: November 5, 2010
Refer to CTP document for more details

FIGURE 6

DOWNTOWN FAYETTEVILLE AREA ZONING MAP



--- PROJECT STUDY AREA

LEGEND

Streets	AR	CD	M/A	MU	PND	SF-15
APO	AR-MHO	DT	M2/Conditional	MU/Conditional	R5/Conditional	SF-15-MHO
HAO	C1/Conditional	HI	MHO	NC	R6/Conditional	SF-6
HLO	C3/Conditional	LC	MR-5	OI	SF-10	SF-6-MHO
HLO	CC	LI	MR-5-MHO	P2/Conditional	SF-10-MHO	County
City Limits						

*MHO is a Manufactured Housing Overlay District

Map Updated: 7/1/2011

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

REPLACE BRIDGE NUMBER 116 ON NC 24-210 (ROWAN STREET) OVER CSX, NORFOLK SOUTHERN RAILROADS AND HILLSBORO STREET AND INTERSECTION IMPROVEMENTS CUMBERLAND COUNTY TIP PROJECT B-4490

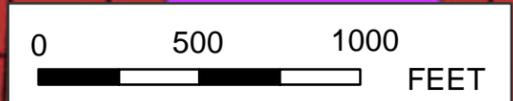


FIGURE 7

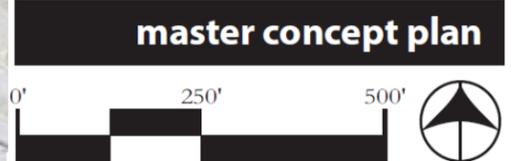
FAYETTEVILLE NORTHWEST GATEWAY MASTER PLAN



TIP PROJECT B-4490

FREEDOM TRAIL

401



master concept plan

FIGURE 8A

created: 1/31/08

FAYETTEVILLE NORTHWEST GATEWAY MASTER PLAN



6 linear park pathway extension to connect martin luther king park with mazarick park & glenville lake to the north, and veterans park to the south

5 former school site and surrounding area provide opportunity to better connect fsu to bragg blvd. with a variety of potential uses to be explored with the murchison rd. corridor plan

4 murchison, bragg, & rowan realigned to intersect and create clear gateway and connections between fsu, the downtown, and bragg
preferred design is a roundabout for enhanced gateway appearance, but depending on projected traffic volumes, a traditional intersection may be required as an alternate

3 roundabout creates opportunity for highly visible, significant commercial development

2 create mixed-use rowan commons development with heart of rowan park preserved, enhanced, and connected to veterans park, linear park, and downtown, flanked by new housing & commercial development

1 freedom memorial park connected to veterans park and rowan park

7 potential extension of linear park pathway to fsu campus

8 new murchison rd. connection increases access and visibility to area north of rowan st. that is out of the floodway and can accommodate relocated businesses and other public and private uses that link fsu and downtown to be studied further as part of murchison rd. corridor plan

9 cross creek rerouted and reconfigured to reduce / eliminate flooding on murchison rd.

10 road realignment unlocks new land to create larger veterans park parcel

11 new rowan st. bridge realigned to the north to keep existing bridge intact until reconstruction is complete

12 freedom memorial park and asom connected to veterans park

13 linear park pathway extended under railroad trestle to connect veterans park to additional parking, festival park, and downtown

14 create multifamily infill housing as transition to existing neighborhood and to increase downtown living opportunities

15 hotel site redevelopment with street level retail and restaurant uses to extend downtown core to asom / veterans park

TIP PROJECT B-4490

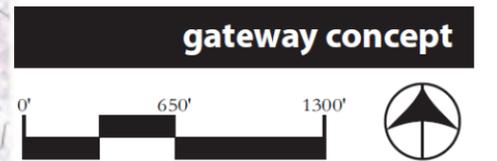


FIGURE 8B

NORTH CAROLINA VETERANS PARK



FREEDOM MEMORIAL PARK

FREEDOM TRAIL

TIP PROJECT B-4490

MASTER PLAN LEGEND

- A1** CAMPUS CONNECTOR
- A2** PARK ENTRY
- B1** THE VISITOR CENTER
- B2** THE COMMUNITY LAWN
- B3** THE STORY GARDEN
- C1** STORY PLAZA / "COMMUNITY"
- C2** STORY PLAZA / "SERVICE"
- C3** STORY PLAZA "REFLECTION"
- C4** VETERAN'S COLOR GARDEN
- C5** CAMARADERIE PLAZA



CONCEPTUAL DESIGN FOR ILLUSTRATIVE PURPOSES ONLY AND SUBJECT TO CHANGE

NOT TO SCALE

CONCEPTUAL DESIGN FOR ILLUSTRATIVE PURPOSES ONLY AND SUBJECT TO CHANGE

FIGURE 9

APPENDIX A

COMMENTS RECEIVED

[THIS PAGE INTENTIONALLY LEFT BLANK]



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

September 17, 2009

Regulatory Division

Dr. Gregory J. Thorpe, PhD, Manager
North Carolina Department of Transportation (NCDOT)
Project Development and Environmental Analysis Branch
1548 Mail Service Center
Raleigh, North Carolina, 27699-1548

Dear Dr. Thorpe:

Reference is made to the letters received during the month of August, 2009, requesting an evaluation of potential environmental impacts regarding the following North Carolina Department of Transportation (NCDOT) bridge replacement projects:

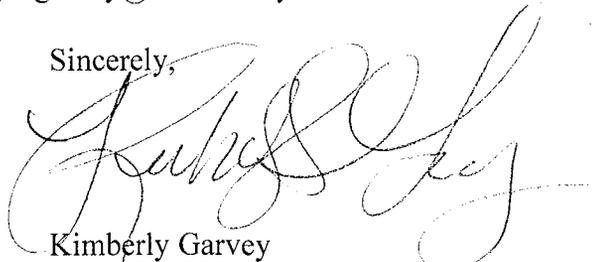
TIP #	Corps Action ID Number	Project Name	NCDOT Contact
B-4480	SAW-2009-01692	Bridge No. 275 & 278 on SR 1824 (Water Tank Road) over Livingston Creek	Natalie Lockhart
B-4481	SAW-2009-01693	Bridge No. 279 on SR 1831 (Swimming Hole Road) over Livingston Creek	Natalie Lockhart
B-4490	SAW-2009-01703	Bridge No. 116 over Cross Creek, CSX Railroad, Norfolk-Southern Railroad, Hillsboro Street and intersection improvements with Bragg Boulevard and Murchison Road	Jameelah El-Amin
B-4639	SAW-2009-01695	Bridge No. 17 on US 15-401 (McColl Road) over Gum Swamp	Christy Wright Huff
B-4730	SAW-2009-01702	Bridge No. 108 on SR 1549 (Castle Rock Farm Road) over Terrells Creek	Christy Wright Huff
B-4780	SAW-2009-01696	Bridge No. 22 on SR 1111 (Lilly's Bridge Road) over Richland Creek	Christy Wright Huff
B-4799	SAW-2009-01694	Bride No. 37 on SR 1311 (Bescher Chapel Road) over Jackson Creek	Christy Wright Huff
B-4816	SAW-2009-01698	Bridge No. 65 on US 15-501 (Aberdeen Road) over Juniper Creek	Christy Wright Huff
B-4950	SAW-2009-01691	Bridge No. 171 & 172 on SR 1851 (Faircloth Bridge Road) over South River	Natalie Lockhart
B-4967	SAW-2009-01701	Bridge No. 8 on SR 1203/SR 1412 (Turnpike Road) over Drowning Creek	Christy Wright Huff
B-5128	SAW-2009-01699	Bridge No. 58 on SR 1404 (Fuller Mill Road North) over unnamed tributary	Christy Wright Huff
B-5164	SAW-2009-01700	Bridge No. 178 on SR 1484 (Ritter Road) over Buffalo Creek	Christy Wright Huff

We have reviewed the subject documents and determined that, based upon a review of the information provided and available maps, the construction of these projects are likely to impact streams and/or wetlands within the work corridor. Please be aware that impacts associated with the discharge of fill into jurisdictional waters of the United States are subject to our regulatory authority pursuant to Section 404 of the Clean Water Act. Any discharge of excavated or fill material into waters of the United States and/or any adjacent wetlands would require Department of the Army (DA) permit authorization. The type of DA authorization required (i.e., general or individual permit) will be determined by the location, type, and extent of jurisdictional area impacted by the project, and by the project design and construction limits.

Until additional data is furnished which details the extent of the construction limits of the proposed project, and an onsite inspection is completed with regard to determinations of the presence of jurisdictional waters in the project area, we are unable to verify that the project will not have jurisdictional impacts, or to provide specific comments concerning DA permit requirements or a recommendation of alternatives. To assist you with determining permitting requirements, we recommend that you perform a detailed delineation of the streams and/or wetlands present on the project site. When this information becomes available, it should be forwarded to our office for review and comment, as well as a determination of DA permit eligibility.

Should you have any further questions related to DA permits for this project, please contact me at (910) 251-4482 or kimberly.l.garvey@usace.army.mil.

Sincerely,



Kimberly Garvey
Regulatory Project Manager
Wilmington Regulatory Field Office

Copies Furnished

Ms. Natalie Lockhart
North Carolina Department of Transportation (NCDOT)
Project Development and Environmental Analysis Branch
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Ms. Christy Wright Huff
North Carolina Department of Transportation (NCDOT)
Project Development and Environmental Analysis Branch
1548 Mail Service Center
Raleigh, North Carolina, 27699-1548

Ms. Jameelah El-Amin ✓
North Carolina Department of Transportation (NCDOT)
Project Development and Environmental Analysis Branch
1548 Mail Service Center
Raleigh, North Carolina, 27699-1548

Mr. James Rerko
North Carolina Department of Transportation (NCDOT)
Division 6 Office
PO Box 1150
Fayetteville, NC 28302

Mr. Art King,
North Carolina Department of Transportation (NCDOT)
Division 8 Office
PO Box 1067
Aberdeen, NC 28315

Mr. Ken Averitte
Division of Water Quality
North Carolina Department of
Environment and Natural Resources
225 Green Street, Suite 714
Fayetteville, NC 28301-5043

Ms. Polly Lespinasse
Division of Water Quality
N.C. Department of Environment
and Natural Resources
3800 Barrett Drive
Raleigh, North Carolina 27609

Ms. Kathy Matthews
U.S. Environmental Protection Agency
109 T.W. Alexander Drive
Durham, NC 27711
Mail code: E143-04

El-Amin, Jameelah M

From: Matthews.Kathy@epamail.epa.gov
Sent: Friday, September 04, 2009 9:47 AM
To: El-Amin, Jameelah M
Subject: Re: comments on scoping letter for Bridge No. 116 (B-4490)

Jameelah, I also meant to mention that I am the EPA contact for bridge replacement projects. In the future, please forward all requests for comments on bridge replacements to me at the address below (or email, if you prefer). Thanks,

Kathy Matthews
USEPA - Region 4 Wetlands & Marine Reg. Section
109 T.W. Alexander Dr.
Durham, NC 27711
MAIL CODE: E143-04

phone 919-541-3062
cell 919-619-7319

From: Kathy Matthews/RTP/USEPA/US
To: jelamin@ncdot.gov
Cc: kimberly.l.garvey@usace.army.mil, Polly.Lespinasse@ncdenr.gov, Brian.Wrenn@ncdenr.gov
Date: 09/04/2009 09:45 AM
Subject: comments on scoping letter for Bridge No. 116 (B-4490)

Jameelah,

I have reviewed the scoping letter, vicinity map, and aerial photograph for B-4490 (replacement of Bridge No. 116) in Fayetteville, NC. This bridge spans the CSX Railroad, Norfolk-Southern Railroad, Hillsboro Street, and also Sandy Run Creek. I have the following comments for your consideration:

1. In general, for all bridge replacements, EPA prefers structures that span the waterbody. Efforts should be made if possible to also span or avoid any wetlands or other aquatic resources in the project area.
2. EPA also generally prefers the replacement of a bridge in the same location, either with road closure and off-site detour, or staged construction. If a temporary on-site detour is required, it should be designed to avoid impacts to wetlands or other aquatic resources.
3. Bridge supports should not be placed in the stream, if possible.
4. Bridge deck drains should not discharge directly into the stream, and stormwater should be pre-treated prior to discharge to a stream or wetland.
5. Impacts to Festival Park and Sandy Run Creek should be avoided or minimized to the extent practicable.

Thank you for the opportunity to comment on this project. Please contact me with any questions or comments. Have a good

weekend,

Kathy Matthews
USEPA - Region 4 Wetlands & Marine Reg. Section
109 T.W. Alexander Dr.
Durham, NC 27711
MAIL CODE: E143-04

phone 919-541-3062
cell 919-619-7319

El-Amin, Jameelah M

From: State Clearinghouse
Sent: Tuesday, August 18, 2009 5:10 PM
To: Thorpe, Gregory J; El-Amin, Jameelah M; Stafford, Janice
Subject: Bridge No. 116 replacement, TIP No. B-4490

This is to notify you that the N.C. State Environmental Review Clearinghouse has received the **SCOPING; Bridge No. 116 replacement, TIP No. B-4490**. This project has been assigned **State Clearinghouse File # 10-E-4220-0070**. This number should be used in all inquiries to or correspondence with this office.

Copies of the environmental document are being sent to various governmental organizations for review and comment. In addition, notification of the availability of the document will appear on the *North Carolina Environmental Bulletin* at <http://www.doa.nc.gov/clearing/ebulletin.aspx>

The review of this project should be completed on **10/09/2009**. After the review has concluded, the comments and signoff letter will be emailed to the email address used for this message. If you have an alternate email, please email it to me at valerie.w.mcmillan@doa.nc.gov.

Should you have any questions, please call me at (919) 807-2425.

Thank you.

Valerie W. McMillan
Director, State Environmental Review Clearinghouse
Department of Administration
(919) 807-2324 Phone
(919) 733-9571 Fax
valerie.w.mcmillan@doa.nc.gov

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law (NCGS 132) and may be disclosed to third parties.

Federal Aid #: **BRNHS-0024(24)**

TIP#: **B-4490**

County: **Cumberland**

CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS

Project Description: Replace Bridge No. 116 on NC 24 (Rowan Street) over the CSX and Norfolk Southern Railroads and Hillsboro Street

On **August 9, 2011** representatives of the

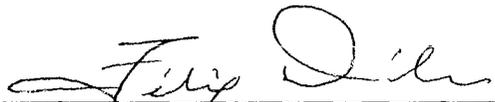
- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- North Carolina State Historic Preservation Office (HPO)
- Other

Reviewed the subject project and agreed on the effects findings listed within the table on the reverse of this signature page.

Signed:



Representative, NCDOT 9 August 2011
Date



FHWA, for the Division Administrator, or other Federal Agency 8-9-11
Date

Representative, HPO Date



State Historic Preservation Officer 8-9-11
Date

Federal Aid #: BRNHS-0024(24)

TIP#: B-4490

County: Cumberland

Property and Status	Alternative	Effect Finding	Reasons
Lions Civic Center and Rowan Park (DOE)		NO EFFECT	NO CONSTRUCTION IN VICINITY
Shearer Texaco Service Station (DOE, SL)		NO ADVERSE	PROJECT WILL NOT ENCRONCH ON PROPERTY, ACCESS RETAINED, NO ROW ACQUISITION
Orange, Chatham, and Moore Streets Historic District (DOE, SL)	NO WALL 10' WALL 28' WALL	ADVERSE NO ADVERSE NO ADVERSE	TCE & FILL, SLOPE ENCRONCH ON BUILDING; PROXIMITY OF BRIDGE MINIMIZES FILL, SCREEN DISTRICT FROM BRIDGE MUST ADDRESS SIGN-ORNANCE FOR FUTURE USE OF PROP. AS CONDITION*
Haymount Historic District (NR)		NO EFFECT	PROJECT WILL NOT ENCRONCH ON PROPERTY, ACCESS RETAINED, NO ROW ACQUISITION
			* WALL TO BE ROCK-FACED (PATTERNED FORMWORK) CORNER OF ROWAN AND CHATHAM STREETS TO BE LANDSCAPED RSE 11/1/11, DP 11-1-11 VE 11-1-11

Initialed: NCDOT VEP FHWA AD HPO RSE

✓ FHWA Intends to use the SHPO's concurrence as a basis for a "de minimis" finding for the following properties, pursuant to Section 4(f):
ORANGE, CHATHAM, MOORE STREETS HD



North Carolina Department of Cultural Resources

State Historic Preservation Office

Claudia Brown, Acting Administrator

Beverly Eaves Perdue, Governor
Linda A. Carlisle, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

July 7, 2011

MEMORANDUM

TO: Mary Pope Furr
Office of Human Environment
NCDOT Division of Highways

FROM: Claudia Brown *PSB for Claudia Brown*

SUBJECT: Revised Boundary for Orange, Chatham, Moore Streets Historic District, Fayetteville, B-4490,
Cumberland County, CH 09-2080

Vanessa Patrick, as of this date, provided us a map of the revised boundary for the Orange, Chatham, Moore Streets Historic District, which we had agreed was eligible for listing in the National Register of Historic Places, but for which there were outstanding questions about the southern boundary and the condition of the houses on Chatham Street closest to Rowan Street. In addition to our accepting the revised boundary that eliminates a portion of the property on which a 1973 banking facility is located, we better understand the character and setting of the area from the pictures that you provided earlier. We appreciate your extra efforts to clarify the nature and character of the subject eligible district and its boundary.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Vanessa Patrick, NCDOT
Donnie Brew, FHWA



North Carolina Department of Cultural Resources
State Historic Preservation Office
Claudia Brown, Acting Administrator

Beverly Eaves Perdue, Governor
Linda A. Carlisle, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

April 8, 2011

MEMORANDUM

TO: Vanessa Patrick
Architectural Historian
NCDOT, PDEA, HEU

FROM: Claudia Brown

SUBJECT: Historic Architectural Resources Final Identification and Evaluation, Replacement of Bridge 116 on NC 24, Fayetteville, B-4490, Cumberland County, CH 09-2080

Thank you for your memorandum of March 24, 2011, concerning the above project.

For the purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the **Lions Civic Center** (CD 1051, Property #1) is eligible for listing in the National Register of Historic Places under Criterion C for architecture. The revised boundary, included in your memorandum as an addendum, appears appropriate.

We appreciate your second look at the **Dudley W. Townsend House** (CD 0377, Property #38). Although the massing of the original house remains intact, the loss of integrity is to such a degree that we believe the house is not eligible for the National Register.

Thank you for the clarification about the following four surveyed properties outside of the Area of Potential Effect: the **Mansard Roof House** (CD 0002, Property #40, listed in the National Register), the **Atlantic Coastline (ACL) Railroad Station** (CD 0168, Property #41, listed in the National Register), **302 and 304 Mason Street** (CD 1161, Property #37), and **216 Arch Street** (CD 1162, Property #39). We will add this memorandum to the survey report file so that in the future it is clear that a determination of eligibility was not necessary for these four properties as part of this project.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above-referenced tracking number.



North Carolina Department of Cultural Resources
State Historic Preservation Office

Peter B. Sandbeck, Administrator

Beverly Eaves Perdue, Governor
Linda A. Carlisle, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

March 10, 2011

MEMORANDUM

TO: Mary Pope Furr
Office of Human Environment
NCDOT Division of Highways

FROM: Claudia Brown *PBF for Claudia Brown*

SUBJECT: Historic Architectural Resources Final Identification and Evaluation, Replacement of Bridge 116 on NC 24, Fayetteville, B-4490, Cumberland County, CH 09-2080

We are in receipt of Vanessa Patrick's letter of February 17, 2011, transmitting the above report.

For purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the following property is listed in the National Register of Historic Places under the criteria cited and remains eligible:

- ◆ **Haymount Historic District** (CD 0179, National Register since 1983, containing CD 1163-1169, Properties #42-48) and the **Haymount Historic District Boundary Increase** (CD 0969, National Register since 2007): Criterion A for its association with the history and development of Fayetteville, Criterion B for its association with prominent local figures, and Criterion C for architecture;

For purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the following properties are eligible for listing in the National Register of Historic Places under the criteria cited:

- ◆ **Lions Civic Center** (CD 1051, Property #1): Criterion C for architecture;
- ◆ **Shearer Texaco Service Station** (CD 0637, Property #4): Criterion A for its association with the branding of roadside service stations and Criterion C for architecture; and,
- ◆ **Orange, Chatham, and Moore Street Historic District** (CD 0677, Study List since 2001, containing: CD 0677, Property #20; CD 1150, Property #25; CD 1151, Property #26; CD 1152, Property #27; CD 1153, Property #28; CD 1154, Property #29; CD 1155, Property #30; and CD 1156, Property #31): Criterion A for its association with the history and development of Fayetteville and Criterion C for architecture and urban design.

The proposed boundaries for the Shearer Texaco Service Station; and the Orange, Chatham, and Moore Street Historic District appear appropriate.

Additional justification is needed for the proposed boundaries of the Lions Civic Center. From the report, the history and setting of the Civic Center and the surrounding Rowan Park appear strongly linked. Page 20 of the reports identifies the Civic Center and Rowan Park together as “community spaces,” and page 23 states that the Civic Center “was designed to take advantage of its location north of Rowan Park.” Is the 1.2-acre proposed boundary the land leased to the Lions Club by the city? Otherwise, it seems there is a stronger case to be made for a boundary that either includes just the Civic Center building, or one that includes Rowan Park as well.

Based on current information, we concur that the following properties are *not eligible* for listing in the National Register:

- **College Park Houses** (CD 1132, Property #9); and,
- **460 West Rowan Street House** (CD 1144, Property #19).

Based upon the survey report, we are unable to concur with the finding regarding the **Dudley W. Townsend House** (CD 0377, Property #38, Study List since 2001). The bulky, hipped-roof, two-story addition has compromised the house’s design, and the modern government office building, parking structure, and vacant lots have compromised the setting and feeling. The house’s design is quite plain, lacking the intricate details common to the Queen Anne Style. Thus, we contend that the argument for its eligibility under Criterion C is unsubstantiated.

The following four properties are listed in Appendix B as “properties determined not eligible for the National Register.” Each is located outside of the Area of Potential Effect (APE) and were not fully studied during the course of this survey:

- **302/304 Mason Street** (CD 1161, Property #37);
- **216 Arch Street** (CD 1162, Property #39);
- **Mansard Roof House** (CD 0002, Property #40); and,
- **Atlantic Coastline (ACL) Railroad Station** (CD 0168, Property #41).

Two of these properties, the Mansard Roof House and the Atlantic Coastline Railroad Station, have each been listed in the National Register since 1973 and 1983 respectively. Since these properties are outside of the APE, the survey does not need to evaluate (or re-evaluate) these properties. However, the report should clarify their National Register listing.

We concur that the remaining 25 properties inventoried and included in Appendix B of the survey report (excluding Properties #37, 39, 40 and 41) are *not eligible* for listing in the National Register, barring additional information to the contrary.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation’s Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above-referenced tracking number.

cc: Bruce Daws, Fayetteville Historic Resources Commission, bdaws@ci.fay.nc.us
Vanessa Patrick, NCDOT, vepatrick@ncdot.gov

CONCURRENCE FORM FOR PROPERTIES NOT ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES

Project Description: Replace Bridge No. 116 and realign Rowan Street, Murchison Road, and Bragg Boulevard as part of NC Veterans' Park Plan.

On **September 15, 2010** representatives of the

- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- North Carolina State Historic Preservation Office (HPO)
- Other

Reviewed the subject project at historic architectural resources photograph review session/consultation and

All parties present agreed

- There are no properties over fifty years old within the project's Area of Potential Effects (APE).
- There are no properties less than fifty years old which are considered to meet Criteria Consideration G within the project's APE.
- There are properties over fifty years old within the project's APE, but based on the historical information available and the photographs of each property, the properties identified as 2, 3, 5, 6, 7, 8, 10-18, 21, 24, 32-33, 35-36, 49 are considered not eligible for the National Register and no further evaluation of them is necessary. Photographs of these properties are attached.
- There are no National Register-listed or Study, Listed properties within the project's APE. (#37, 40 outside APE)
- All properties greater than 50 years of age located in the APE have been considered at this consultation, and based upon the above concurrence, 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.
- More information is requested on properties 1, 4, 9, 19, 20, 25-31, 34, 38, 42-48

Signed:

Vanessa E. Patrick
Representative, NCDOT

9-15-10
Date

FHWA, for the Division Administrator, or other Federal Agency

Date

Representative, HPO

Date

Renee Bledhill-Easley
State Historic Preservation Officer

9-15-10
Date

If a survey report is prepared, a final copy of this form and the attached list will be included.



RECEIVED
Division of Highways

JUN 24 2008

Preconstruction
Project Development and
Environmental Analysis Branch

North Carolina Department of Cultural Resources
State Historic Preservation Office

Peter B. Sandbeck, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

June 17, 2008

MEMORANDUM

TO: Tracy Walter
Project Development and Environmental Analysis Branch
NC Department of Transportation

FROM: Peter Sandbeck *PSS for Peter Sandbeck*

SUBJECT: Bridge 16 on NC 24/87/210 over CSX RR, NS RR, & Hillsboro Street, B-4490,
Cumberland County, ER 08-1309

Thank you for your letter of June 3, 2008, concerning the above project.

There are no known archaeological sites within the proposed project area. Based on our knowledge of the area, it is unlikely that any archaeological resources that may be eligible for inclusion in the National Register of Historic Places will be affected by the project. We, therefore, recommend that no archaeological investigation be conducted in connection with this project.

We have conducted a search of our maps and files and have located the following structures of historical or architectural importance within the general area of the project:

- ◆ CD 179, the Haymount Historic District is adjacent to the project area.

We recommend that a Department of Transportation architectural historian evaluate this district and report the findings to us.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above-referenced tracking number.

cc: Mary Pope Furr, NCDOT
Matt Wilkerson, NCDOT



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

August 28, 2009

MEMORANDUM

TO: Gregory J. Thorpe, DOT Project Development and Environmental Analysis

FROM: ^{NZ} Harry LeGrand, Natural Heritage Program

SUBJECT: Start of Study – Proposed Bridge No. 116 Replacement; Fayetteville, Cumberland County

REFERENCE: Federal Aid Project No. BRNHS-0024(24), WBS Element 33727.1.1, TIP Project No. B-4490

The Natural Heritage Program has no record of rare species, significant natural communities, significant natural heritage areas, or conservation/managed areas at the site nor within 0.10-mile of the project area. Although our maps do not show records of such natural heritage elements in the project area, it does not necessarily mean that they are not present. It may simply mean that the area has not been surveyed. The use of Natural Heritage Program data should not be substituted for actual field surveys, particularly if the project area contains suitable habitat for rare species, significant natural communities, or priority natural areas.

Please do not hesitate to contact me at 919-715-8697 if you have questions or need further information.

RECEIVED
Division of Highways

SEP 01 2009

Division of Environment and Natural Resources



North Carolina Department of Environment and Natural Resources

Division of Water Quality
Coleen H. Sullins
Director

Beverly Eaves Perdue
Governor

AUG 31 2009
Dee Freeman
Secretary

August 27, 2009

MEMORANDUM

TO: Melba McGee, Environmental Coordinator, NCDENR

FROM: Rob Ridings, NC Division of Water Quality, Transportation Permitting Unit

SUBJECT: **Scoping Review of NCDOT's Proposed Bridge Replacement Project: B-4490 (Cumberland County)**

In reply to your correspondence dated received August 21, 2009 in which you requested comments for the above referenced project, the NC Division of Water Quality offers the following comments:

Project-Specific Comments

1. Little Cross Creek is class C; waters of the State. Little Cross Creek is on the 303(d) list for impaired use for aquatic life. DWQ is very concerned with sediment and erosion impacts that could result from this project. DWQ recommends that the most protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to Little Cross Creek. DWQ requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NC DWQ *Stormwater Best Management Practices*.
2. Any anticipated bank stabilization associated with the bridge replacement and/or culvert installations or extensions should be addressed in the Categorical Exclusion (CE) document. It is understood that final designs are not determined at the time the CE is developed. However, the CE should discuss the potential for bank stabilization necessary due to culvert installation. An adequate bank stabilization amount should also be applied for in the permit application, to prevent the need of a later permit modification.
3. Any anticipated dewatering or access structures necessary for construction of bridges should be addressed in the CE. It is understood that final designs are not determined at the time the CE is developed. However, the CE should discuss the potential for dewatering and access measures necessary due to bridge construction. Also, An adequate amount of bank stabilization should also be applied for in the permit application, to prevent the need of a future permit modification.

General Comments Regarding Bridge Replacement Projects

1. DWQ is very concerned with sediment and erosion impacts that could result from this project. NC DOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that would reduce the impacts.

Transportation and Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
Location: 2321 Crabtree Blvd., Raleigh, North Carolina 27604
Phone: 919-733-1786 \ FAX: 919-733-6893
Internet: <http://h2o.enr.state.nc.us/ncwetlands/>

One
North Carolina
Naturally

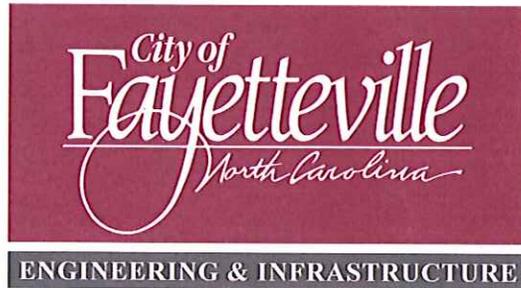
2. If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3687/Nationwide Permit No. 6 for Survey Activities.
3. If a bridge is being replaced with a hydraulic conveyance other than another bridge, DWQ believes the use of a Nationwide Permit may be required. Please contact the US Army Corp of Engineers to determine the required permit(s).
4. If the old bridge is removed, no discharge of bridge material into surface waters is allowed unless otherwise authorized by the US ACOE. Strict adherence to the Corps of Engineers guidelines for bridge demolition will be a condition of the 401 Water Quality Certification.
5. Whenever possible, the DWQ prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the stream banks and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges allow for human and wildlife passage beneath the structure, do not block fish passage and do not block navigation by canoeists and boaters.
6. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of NC DWQ *Stormwater Best Management Practices*.
7. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
8. Bridge supports (bents) shall not be placed in the stream when possible.
9. If temporary access roads or detours are constructed, the site shall be graded to its preconstruction contours and elevations. Disturbed areas shall be seeded or mulched to stabilize the soil and appropriate native woody species shall be planted. When using temporary structures the area shall be cleared but not grubbed. Clearing the area with chain saws, mowers, bush-hogs, or other mechanized equipment and leaving the stumps and root mat intact allows the area to re-vegetate naturally and minimizes soil disturbance.
10. Sediment and erosion control measures sufficient to protect water resources must be implemented and maintained in accordance with the most recent version of North Carolina Sediment and Erosion Control Planning and Design Manual and the most recent version of NCS000250.
11. All work in or adjacent to stream waters shall be conducted in a dry work area unless otherwise approved by NC DWQ. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
12. Heavy equipment shall be operated from the bank rather than in stream channels in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into streams. This equipment shall be inspected daily and maintained to prevent contamination of surface waters from leaking fuels, lubricants, hydraulic fluids, or other toxic materials.
13. In most cases, the DWQ prefers the replacement of the existing structure at the same location with road closure. If road closure is not feasible, a temporary detour shall be designed and located to avoid wetland impacts, minimize the need for clearing and to avoid destabilizing stream banks. If the structure will be on a new alignment, the old structure shall be removed and the approach fills removed from the 100-year floodplain. Approach fills shall be removed and restored to the natural ground elevation. The area shall be stabilized with grass and planted with native tree species. Tall fescue shall not be used in riparian areas.

General Comments if Replacing the Bridge with a Culvert

1. Placement of culverts and other structures in waters, streams, and wetlands shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by DWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NC DWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.
2. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel shall be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.
3. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures shall be properly designed, sized and installed.

Thank you for requesting our input at this time. The DOT is reminded that issuance of a 401 Water Quality Certification requires that appropriate measures be instituted to ensure that water quality standards are met and designated uses are not degraded or lost. If you have any questions or require additional information, please contact Rob Ridings at 919-733-9817.

cc: Richard Spencer, US Army Corps of Engineers, Wilmington Field Office
Jim Rerko, Division 6 Environmental Officer
Ken Averitte, DWQ Fayetteville Regional Office
Greg Thorpe, NCDOT PDEA
Jameelah El-Amin, NCDOT PDEA
File Copy



Memorandum

To: Jay McInnis, PE, NCDOT-PDEA

From: Rusty Thompson, PE, City of Fayetteville

A handwritten signature in black ink, appearing to read 'Rusty Thompson', is written over the 'From:' line.

Subject: Rowan Street Bridge Replacement

Date: November 17, 2011

Additional Documentation

Plans for the project to replace the Rowan Street Bridge show a construction easement on the City of Fayetteville's Festival Park property. Festival Park is located at the corner of Rowan Street and Ray Avenue and adjacent to this project. Festival Park is a park and is owned and operated by the City of Fayetteville's Parks and Recreation Department. I am writing to inform you that the proposed easement will not adversely affect any activities, features, or attributes of Festival Park.

If we can provide additional information, please advise.

cc: Doug Hewett
Craig Hampton
Mike Gibson
Neil Perry
Kecia Parker
Tracey Pittman

McInnis, Jay

From: Michael Gibson <MGibson@ci.fay.nc.us>
Sent: Friday, October 21, 2011 12:37 PM
To: McInnis, Jay
Cc: Neil Perry; Rusty Thompson
Subject: RE: Project Design at

Jay,

I've reviewed the project Design and per our discussion the easement shown for bridge project (B-4490) will have no adverse affect to Festival Park.

-----Original Message-----

From: McInnis, Jay [mailto:jmcinnis@ncdot.gov]
Sent: Friday, October 21, 2011 10:47 AM
To: Michael Gibson
Cc: Neil Perry
Subject: Project Design at

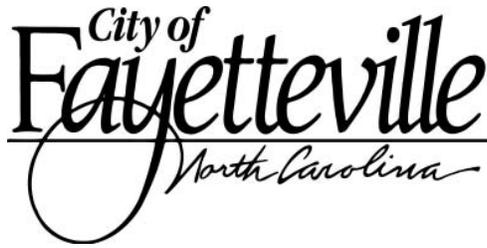
Michael,

Here's a pdf showing the design of our Rowan Street bridge near Festival Park. Let me know if you have any questions.

Thanks,

Jay McInnis
Project Engineer
NCDOT-PDEA

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.



MEMORANDUM

TO: Jay McInnis, PE, Project Development Group Supervisor
FROM: Rusty Thompson, PE, PTOE, Engineering & Infrastructure Director
DATE: October 14, 2011
SUBJECT: B-4490 Comments

This is in response to our previous meeting for review of the Rowan Street bridge project. The City was advised to coordinate a meeting with FAMPO and PWC to provide a summary of items to be included in the project. Our combined requests are as follows:

LED lighting for the entire project

The NCVP and Bragg Boulevard are illuminated with energy efficient, white LED street lighting thus we seek continuity in lighting for the entirety of B4490. PWC can provide the light poles and fixtures currently used on Bragg Boulevard. Our PWC contact is Marc Tunstall.

Demolition of existing site

Current plans show demolition extending into the NCVP through Hillsboro Street. The City requests that the demolition stop at the loop ramp going towards the existing park and only the asphalt be removed in the area of the Phase 2 of NCVP. (see attached map)

Landscaping and Irrigation

Revise all concrete islands to greenscaped islands. Concrete Brick Colored pavers are the preferred treatment where islands are too narrow for use of concrete. At the new intersection of Bragg and Murchison, the city requests the corners be landscaped. (see attached map)

Traffic signals

The City requests the metal pole and mast arms be powder coated black. In addition, expand the project limits to upgrade Ray at Rowan to wider, powder coated black metal poles and mast arms. Both signals should have pedestrian accommodations with high visibility markings. FAMPO requests that the bridge and approach slabs be widened 4.5 feet (see attached design). The western leg of Bragg Blvd. should also include a pedestrian refuge median.

Additional items

FAMPO is completing the underground pedestrian tunnel from the Cross Creek trail to the park with Stewart Engineering. See attached plans and estimate.

We propose an undisturbed zone for tree protection for Phase 2 of the NCVP. (see attached)

Lastly, would it be possible to accelerate the utility funding? This would accomplish a couple of goals: The plans for Phase 2 of NCVP could begin and PWC would have ample time to clear any transmission lines well before the project is let.

Cc: Doug Hewett
Rick Heicksen,
Greg Burns,
Neil Perry,
Marc Tunstall,
Craig Hampton
Giselle Rodriguez

APPENDIX B

**DIVISION OF HIGHWAYS RELOCATION PROGRAM/
RELOCATION REPORTS**

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DIVISION OF HIGHWAYS RELOCATION PROGRAMS

It is the policy of NCDOT to ensure comparable replacement housing will be available prior to construction of state and federally-assisted projects. Furthermore, the North Carolina Board of Transportation has the following three programs to minimize the inconvenience of relocation:

- Relocation Assistance
- Relocation Moving Payments
- Relocation Replacement Housing Payments or Rent Supplement

As part of the Relocation Assistance Program, experienced NCDOT staff will be available to assist displacees with information such as availability and prices of homes, apartments, or businesses for sale or rent and financing or other housing programs. The Relocation Moving Payments Program provides for payment of actual moving expenses encountered in relocation. Where displacement will force an owner or tenant to purchase or rent property of higher cost or to lose a favorable financing arrangement (in case of ownership), the Relocation Replacement Housing Payments or Rent Supplement Program will compensate up to \$22,500 to owners who are eligible and qualify and up to \$5,250 to tenants who are eligible and qualify.

The relocation program for the proposed action will be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), and/or the North Carolina Relocation Assistance Act (GS-133-5 through 133-18). The program is designed to provide assistance to displaced persons in relocating to a replacement site in which to live or do business. At least one relocation officer is assigned to each highway project for this purpose.

The relocation officer will determine the needs of displaced families, individuals, businesses, non-profit organizations and farm operations for relocation assistance advisory services without regard to race, color, religion, sex, or national origin. The NCDOT will schedule its work to allow ample time, prior to displacement, for negotiations and possession of replacement housing which meets decent, safe and sanitary standards. The displacees are given at least a 90-day written notice after NCDOT offers comparable replacement housing. Relocation of displaced persons will be offered in areas not generally less desirable in regard to public utilities and commercial facilities. Rent and sale prices of replacement property will be within the financial means of the families and individuals displaced and will be reasonably accessible to their places of employment. The relocation officer will also assist owners of displaced businesses, non-profit organizations and farm operations in searching for and moving to replacement property.

All tenant and owner residential occupants who may be displaced will receive an explanation regarding all available options, such as (1) purchase of replacement housing, (2) rental of replacement housing, either private or public, or (3) moving existing owner-occupant housing to another site (if possible). The relocation officer will also supply information concerning other state and federal programs offering assistance to displaced

persons and will provide other advisory services as needed in order to minimize hardships to displaced persons in adjusting to a new location.

The Moving Expense Payments Program is designed to compensate the displacee for the costs of moving personal property from homes, businesses, non-profit organizations and farm operations acquired for a highway project. Under the Replacement Program for Owners, NCDOT will participate in reasonable incidental purchase payments for replacement dwellings such as attorney's fees, surveys, appraisals, and other closing costs and, if applicable, make a payment for any increased interest expenses for replacement dwellings. Reimbursement to owner-occupants for replacement housing payments, increased interest payments and incidental purchase expenses may not exceed \$22,500 (combined total), except under the Last Resort Housing provision.

A displaced tenant may be eligible to receive a payment, not to exceed \$5,250, to rent a replacement dwelling or to make a down payment, including incidental expenses, on the purchase of a replacement dwelling. The down payment is based upon what the state determines is required when the rent supplement exceeds \$5,250.

It is a policy of the State that no person will be displaced by NCDOT's state or federally-assisted construction projects unless and until comparable replacement housing has been offered or provided for each displacee within a reasonable period of time prior to displacement. No relocation payment received will be considered as income for the purposes of the Internal Revenue Code of 1954 or for the purposes of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act or any other federal law.

Last Resort Housing is a program used when comparable replacement housing is not available, or when it is unavailable within the displacee's financial means, and the replacement payment exceeds the federal/state legal limitation. The purpose of the program is to allow broad latitude in methods of implementation by the state so that decent, safe and sanitary replacement housing can be provided. It is not believed this program will be necessary on the project, since there appear to be adequate opportunities for relocation within the area.

EIS RELOCATION REPORT

REVISED

North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM

E.I.S. CORRIDOR DESIGN

WBS ELEMENT:	33727.1.1	COUNTY	CUMBERLAND	Alternate	1	of	1	Alternate
T.I.P. No.:	B-4490							
DESCRIPTION OF PROJECT:	Replace Bridge No. 116 on NC 24 / 210							

ESTIMATED DISPLACEDS					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	0	0	0	0	0	0	0	0	0			
Businesses	1	12	13	10	VALUE OF DWELLING		DSS DWELLING AVAILABLE					
Farms	0	0	0	0	Owners	Tenants	For Sale	For Rent				
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	0	\$ 0-150	0

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
X		1. Will special relocation services be necessary?
	X	2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
	X	6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
	X	8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
	X	11. Is public housing available?
N/A	N/A	12. Is it felt there will be adequate DSS housing available during relocation period?
N/A	N/A	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? 24 MONTHS

VALUE OF DWELLING				DSS DWELLING AVAILABLE			
Owners		Tenants		For Sale		For Rent	
20-40M	0	150-250	0	20-40M	0	150-250	0
40-70M	0	250-400	0	40-70M	0	250-400	0
70-100M	0	400-600	0	70-100M	0	400-600	0
100 UP	0	600 UP	0	100 UP	0	600 UP	0
TOTAL	0	0	0	0	0	0	0

REMARKS (Respond by number)

4: Various Specialty Moves for Businesses

3: Perhaps by various other vendors if not from displaced businesses

4: (2) Automotive repair – 6 employees
(1) Auto Detail 8 employees (1) Barber Shop

3 employees (1) Restaurant 6 employees (2) Night Clubs
12 employees (1) Cabinet Shop 3 employees (1) Computer Repair 1 employee (1) Print Shop 2 employees (1) Photo Studio 2 employees (1) Other / Unknown 2 employees
(1) Temporary Employment Agency 2 employees

See Addendum for business names.

14: MLS, Classifieds in Newspaper

 Tracy M. Clark Division Right of Way Agent	09 27 2011 Date	 Relocation Coordinator	9/30/11 Date
--	--------------------	--	-----------------

WBS ELEMENT: 33727.1.1
TIP NO.: B-4490
COUNTY: Cumberland
DESCRIPTION: Replace Bridge No. 116 on NC 24 / 210.

ADDENDUM TO EIS RELOCATION REPORT (REVISED)

NAMES OF DISPLACED BUSINESSES:

- 1) Vick's Drive In (Restaurant)
- 2) Trojan Labor (assumed to be a temporary employment agency)
- 3) Unknown (between Godwin's Beauty Center & Illusions Night club in strip center on Rowan behind Vick's Drive In)
- 4) Illusions Night Club
- 5) Godwin Beauty Center / Barber Shop
- 6) Pedro's Auto Body Repair
- 7) Chief's 25 Plus (night club)
- 8) Aaron's Tire & Auto
- 9) Creative Cabinet Solutions
- 10) American Printing & Embroidery
- 11) Planet Fresh Studios
- 12) Computer Repair (next to Planet fresh Studios)
- 13) Tires to Top Auto Detailing