

Replacement of Bridge Nos. 227 & 213 on Capital Boulevard (US 70/US 401/NC 50)  
At Peace Street and Wade Avenue (US 70/NC 50) and Revise the Interchanges  
Wake County

WBS No. 42263.1.1

Federal-Aid Project BRNHS-0070(119)/BRSTP-0070(149)

TIP Project B-5121/B-5317

**FINDING OF NO SIGNIFICANT IMPACT**

**U.S. Department of Transportation  
Federal Highway Administration  
And  
North Carolina Department of Transportation  
Division of Highways**

Submitted pursuant to the National Environmental Policy Act 42 U.S.C. 4332(2)(c)

APPROVED:

9/29/14  
Date

*FOR*   
Richard W. Hancock, Manager  
Project Development and Environmental Analysis  
North Carolina Department of Transportation

9/29/14  
Date

  
John F. Sullivan III, P.E., Division Administrator  
Federal Highway Administration

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Document Prepared  
in the Project Development and Environmental Analysis Branch  
with Kimley-Horn and Associates, Inc.

September 2014

9/29/14

Date



Ahmad Al-Sharawneh, Project Planning Engineer  
Project Development and Environmental Analysis  
North Carolina Department of Transportation

9/29/14

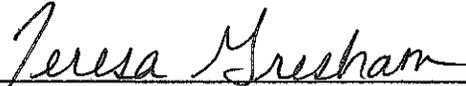
Date



FOR Derrick Weaver, P.E., Project Engineer  
Project Development and Environmental Analysis  
North Carolina Department of Transportation

9/29/14

Date



Teresa Gresham, P.E., Project Manager  
Kimley-Horn and Associates, Inc.



## **PROJECT COMMITMENTS**

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All commitments developed during the project development and design phase are listed below.

### **North Carolina Department of Transportation (NCDOT) Transportation Program Management:**

NCDOT will coordinate with the City of Raleigh to prepare a Memorandum of Agreement. The MOA will include a list of betterments that will be paid for by the City.

### **NCDOT Geotechnical Unit:**

A geotechnical report will be prepared for the B-5121/B-5317 study area during final design. Impacts to potential hazardous material sites will be determined at that time.

### **NCDOT Hydraulics Unit:**

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

### **NCDOT Division 5:**

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

### **NCDOT Project Development and Environmental Analysis Unit & Division 5:**

If it is determined that a utility relocation will be required within the Raleigh & Gaston Railroad historic boundary, NCDOT will coordinate further with the Historic Preservation Office (HPO).

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## 1.0 Type of Action

This Finding of No Significant Impact (FONSI) is a Federal Highway Administration (FHWA) administrative action.

The North Carolina Department of Transportation (NCDOT) and FHWA have determined that the preferred alternatives (Alternative P-5 and W-Base) for this project will not have significant adverse impacts on the human or natural environments. This FONSI is based on the Environmental Assessment (EA), which was independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. After the EA was distributed, NCDOT announced and held a public hearing on April 22, 2014. Citizen comments were recorded and considered (see **Section 7.3**) prior to final decisions being made. The EA was approved by the FHWA on December 30, 2013 and provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required.

## 2.0 Description of Proposed Action

The North Carolina Department of Transportation (NCDOT) proposes to replace the bridges and revise the interchanges at two adjacent interchanges on Capital Boulevard (US 70/US 401/NC 50) approximately 0.7 mile apart: Bridge No. 227 at Capital Boulevard/Peace Street (Project B-5121) and Bridge No. 213 at Capital Boulevard/Wade Avenue (US 70/NC 50) (Project B-5317). The proposed projects are included in the NCDOT current *2012-2020 State Transportation Improvement Program (STIP)* (September 2014) and are programmed for right of way acquisition beginning in Fiscal Year (FY) 2015 and construction beginning in FY 2016. **Figure 1** shows the project vicinity. The primary purpose of Project B-5121/B-5317 is to replace Bridge Nos. 227 and 213 in a timely manner since they are nearing the end of their design lives. Another desirable outcome is to improve the geometry of the interchanges.

Both bridges are deteriorating due to the age of the superstructure and substructure components. Bridge No. 227 carrying Capital Boulevard over Peace Street (Project B-5121) is a half-cloverleaf interchange built in 1948 with a Federal sufficiency rating of 43.9 out of a possible 100 (as of October 2013). Bridge No. 213 carrying Wade Avenue over Capital Boulevard (Project B-5317) is a trumpet interchange built in 1954 with a Federal sufficiency rating of 27.75 out of a possible 100 (as of November 2013). Both bridges are classified as “structurally deficient” due to age. Due to the cost and potential safety concerns of continuing to maintain the current bridges, the FHWA and NCDOT have identified a need to replace Bridge Nos. 227 and 213 through the FHWA Highway Bridge Program (HBP).

The geometry of the current interchanges is less than desirable. Potential improvements to the geometry may include increasing the radii of the interchange loops and ramps, lengthening the acceleration and deceleration lanes, lengthening the weave sections, improving grades on the ramps and loops, and increasing turn bay storage lengths.

**Table 1** summarizes the estimated costs for the Project B-5121/B-5317 preferred alternatives.

**Table 1. Cost Estimate**

Item	P5 (B-5121)	W-Base (B-5317)
Construction	\$15,200,000	\$6,000,000
Right of Way	\$19,116,000	\$347,000
Utilities	\$8,270,000	\$1,966,000
<b>Total Project Cost</b>	<b>\$42,586,000</b>	<b>\$8,313,000</b>

The City of Raleigh has agreed to pay for the difference between Alternative P-Base and Alternative P5. The current estimated cost of Alternative P-Base is \$31,776,000. Therefore, the City's estimated cost is \$10,810,000.

**Table 2. STIP Cost Estimate (Current 2012-2020 STIP, September 2014)**

Item	P5 (B-5121)		W-Base (B-5317)	
	Funded FY 2012 - 2020	Unfunded (Future Years)	Funded FY 2012 - 2020	Unfunded (Future Years)
Construction	\$11,900,000	\$3,500,000	\$11,900,000	\$9,700,000
Right of Way	\$9,900,000	\$7,800,000	\$300,000	\$4,500,000
Utilities	\$4,300,000	\$0	\$1,541,000	\$3,094,000
<b>Total Project Cost</b>	<b>\$26,100,000</b>	<b>\$11,300,000</b>	<b>\$13,741,000</b>	<b>\$17,294,000</b>

### 3.0 Alternatives Considered

Between the beginning of the project and selection of alternatives to carry forward for detailed study, a total of ten alternatives were developed at the Peace Street interchange, and nine alternatives were developed at the Wade Avenue interchange.

Three conceptual options for the Peace Street interchange and four conceptual options for the Wade Avenue interchange were presented at the September 2011 public meeting. Following the meeting, functional designs of all seven alternatives were developed for the purpose of estimating preliminary costs and impacts. Several new alternatives were proposed based on

input from the public and to minimize impacts to historic resources and businesses. Two alternatives for the Peace Street interchange and four alternatives for the Wade Avenue interchange were shown at the second public meeting in October 2012.

Following the public meeting comment period and a meeting with the State Historic Preservation Office in January 2013, three new alternatives were considered and five were eliminated. Preliminary designs were developed for the following four detailed study alternatives, which were presented at the November 2013 public meeting:

#### Peace Street Interchange

- **Alternative P-Base** – half cloverleaf
- **Alternative P5** – square loop/ramps

#### Wade Avenue Interchange

- **Alternative W-Base** – trumpet
- **Alternative W2c** – diamond/trumpet

The same four alternatives were shown at the public hearing in April 2014, with Alternatives P5 and W-Base presented as “recommended alternatives.”

Based on the available funding, which is designated for bridge replacements, NCDOT will pay for the two base alternatives (P-Base and W-Base). At the Peace Street interchange, the City of Raleigh prefers Alternative P5, and will provide funding for the differential between Alternative P-Base and P5. NCDOT does not object to selecting Alternative P5, and therefore recommends Alternative P5. At the Wade Avenue interchange, only the bridge replacement funds are available, and therefore NCDOT recommends Alternative W-Base.

## **4.0 Selected Alternatives**

FHWA chooses Alternatives P-5 and W-Base as its Selected Alternatives for TIP Project B-5121/B-5317 (**Figure 2**). Alternatives P-5 and W-Base have been determined to meet the purpose of the project without significant adverse impacts to the human or natural environments.

## **5.0 Summary of Project Impacts**

This section presents a description of the impacts of the Selected Alternatives (Alternatives P5 and W-Base). Impacts for the Selected Alternatives are summarized in **Table 2**.

**Table 3. Summary of Impacts for Selected Alternatives**

Topic	Potential Impact	
	Alternative P5 (B-5121)	Alternative W-Base (B-5317)
Length (miles)	0.3 miles	0.3 miles
Railroad Crossings <sup>1</sup>	0	0
Wetland Impacts (acres)	0	0
100-Year Floodplain Crossings	2.0 acres affected; no FEMA coordination anticipated	0.2 acres; no FEMA coordination anticipated
Stream Impacts (linear feet)	Extend existing culvert for Pigeon House Branch by 46 linear feet	No impact
Riparian Buffer Impacts (square feet)	2,639	0
Water Supply Watersheds	0	0
Federal Listed Species <sup>2</sup>	No effect	No effect
Historic Properties Affected	No Adverse Effect – Raleigh Cotton Mill Raleigh & Gaston Railroad	No Effect
Archaeological Sites Affected	No effect	No effect
Section 4(f) Resources <sup>3</sup>	<i>De minimis</i> impact – Raleigh Cotton Mill and Raleigh & Gaston Railroad	No effect
Residential Relocations	0	0
Business Relocations	12	1
Institutional Relocations	0	0
Total Relocations	12	1
Schools Affected	0	0
Recreation Areas and Parks Affected	0	0
Churches Affected	0	0
Cemeteries Affected	0	0
Environmental Justice Impacts	No disproportionately high and adverse impacts to minority or low-income populations	No disproportionately high and adverse impacts to minority or low-income populations
Wildlife Refuges or Gamelands	0	0
Forest Impacts (acres)	0	0
Air Quality Impacts <sup>4</sup>	None	None
Noise Impacts	1 impacted receptor	1 impacted receptor
Hazardous Waste Sites <sup>5</sup>	13	15

<sup>1</sup> No existing railroads cross this project. The Southeast High Speed Rail project proposes to cross Capital Boulevard between Wade Avenue and Peace Street.

<sup>2</sup> None of the three federally-listed species in Wake County have been documented within one mile of (nor has critical habitat been designated in) the project area. This project is anticipated to have no effect on the red-cockaded woodpecker, Michaux's sumac, and dwarf wedgemussel.

<sup>3</sup> *De minimis* finding by FHWA for impacts to the historic resources.

<sup>4</sup> The project is located in Wake County, which is within the Raleigh-Durham-Chapel Hill maintenance area for ozone and the Raleigh Durham nonattainment area for carbon monoxide (CO). A microscale air quality analysis was performed for CO; none of the identified receptors experienced an exceedance of the standards. The project was determined to have low potential for MSAT effects.

<sup>5</sup> Twenty-eight potential underground storage tanks are located in the project area. Actual impacts will be determined during final design.

### **Natural Resources**

There are no anticipated impacts to wetlands. Alternative P5 will extend an existing culvert for Pigeon House Branch by 46 linear feet. The selected alternatives are not anticipated to affect any federally protected species or federal species of concern.

The majority of the study area is comprised of maintained/disturbed communities. A small mixed hardwood forest is located in the northeastern quadrant of the study area near Wade Avenue. Terrestrial communities in the study area may be impacted by project construction as a result of clearing, grading, and paving of portions of the study area. All impacts to terrestrial communities will be to maintained/disturbed areas. Minimal impacts are anticipated to aquatic communities.

### **Cultural Resources**

FHWA, in consultation with the Historic Preservation Office (HPO), determined that the selected alternatives will have No Adverse Effect with commitments on the Raleigh Cotton Mill, and the Seaboard Air Line Turntable and Raleigh & Gaston Railroad. The selected alternatives will have No Effect on the Noland Plumbing Company Building. Although there are four archaeological sites within the study area, there are no known archaeological sites within the Area of Potential Effects (APE). The selected alternatives will have No Effect on Sites 31WA491, 31WA492, 31WA527, and 31WA1448. A letter from HPO (March 2014) is in Appendix A.

A small portion of the construction of Alternative P5 is within the Raleigh & Gaston Railroad boundary, along Peace Street east of Capital Boulevard and along Capital Boulevard south of Peace Street. Alternative P-Base would have the same encroachment into the historic boundary. If, during final design, it is determined that a utility relocation will be required within the historic resource boundary, NCDOT will coordinate further with HPO.

### **Section 4(f)/6(f) Resources**

The selected alternatives will require the use of land from the Raleigh & Gaston Railroad and the Raleigh Cotton Mill, both listed on the National Register of Historic Places. The HPO concurred the selected alternatives will have “no adverse effect” on both historic resources. The use of land from the historic resources is therefore considered to have a *de minimis* impact under Section 6009(a) of SAFTEA-LU, as a result of the “no adverse effect” determination. Therefore, a Section 4(f) evaluation is not required for the use of land from the historic resources. The signed concurrence form for assessment of effects is included in **Appendix A**.

The selected alternatives will not impact any resources protected by Section 6(f) of the Land and Water Conservation Fund Act.

### **Social Effects**

The selected alternatives will relocate a total of 13 businesses. There will not be any residential relocations. There are not anticipated to be disproportionately high and adverse impacts to minority or low-income residents or business owners as a result of the selected alternative. The selected alternatives will not affect existing recreational facilities, schools, churches, or other community facilities. Benefits and burdens from the project will be equitably shared among all populations.

The City of Raleigh Police Department, Wake County Sheriff's Department, and Wake County Emergency Medical Services (EMS) and Fire Department use Capital Boulevard as a primary patrol route and to respond to calls. The selected alternatives will leave Capital Boulevard, Wade Avenue, and Peace Street open to traffic during most of construction, which will help minimize short-term increases in response time during construction.

### **Economic Effects**

Alternative W-Base will require one business relocation, but will retain existing traffic and development patterns.

Most relocations required as part of Alternative P5 are located within the southwest quadrant of the interchange. The land that remains in the "square loop" will consist of regularly shaped blocks suitable for redevelopment, and driveways will be permitted onto the on/off ramp in the southwest quadrant (comprised of portions of Johnson Street, Harrington Street, and the proposed extension of Harrington Street to connect to Peace Street). According to the City, impacting businesses in these two quadrants will not have an overall effect on the greater downtown business district.

### **Land Use**

The City's *2030 Comprehensive Plan* and *Capital Boulevard Corridor Study* envision Capital Boulevard and West Street as a multiuse corridor with commercial, office, and some residential areas. The *Capital Boulevard Corridor Study* supports a square loop design for the Capital Boulevard/Peace Street interchange, a diamond design for the Capital Boulevard/Wade Avenue interchange, and extending West Street over Wade Avenue.

Alternative P5 is consistent with the *Capital Boulevard Corridor Study*. Although Alternative W-Base does not provide the envisioned diamond interchange, the proposed trumpet interchange will allow the City to extend West Street over Wade Avenue, and is in all other ways consistent with the plan. The City supports Alternatives W-Base and P5.

The pace and intensity of redevelopment in the southwest quadrant of the Peace Street interchange may increase as a result of building Alternative P5 due to the urban “street” nature of the square loop, which will allow some driveway access to properties within the loop.

### **Indirect and Cumulative Effects**

The selected alternatives are expected to have minor indirect effects on land use decisions in the vicinity. Alternative W-Base will result in no change in travel patterns, exposure, or travel time. Alternative P5 will increase access and exposure to new properties, but may slightly increase travel time for drivers using this interchange. Driveway access will be limited to one driveway per parcel, and access from Capital Boulevard and the interchange ramps may be restricted. The selected alternatives are not expected to create a new land use or transportation node.

Local planners expect most of the land within the vicinity to redevelop regardless of this project, but the pace of redevelopment will likely be quicker with Alternative P5, and the type of development at the Peace Street interchange is likely to mixed-use rather than the existing commercial land uses.

No long-term cumulative effects are expected. Negligible short-term cumulative effects are anticipated on travel time during construction, while portions of the existing interchanges are closed and traffic is detoured. Local planners expect that Alternative W-Base will have a negligible impact on the pace and type of development. Alternative P5 is likely to increase the pace of development at the interchanges, and may result in minor cumulative effects. Direct natural environmental impacts by NCDOT projects will be addressed by avoidance, minimization, or mitigation, consistent with programmatic agreements with the natural resource agencies during the Permitting process. All developments will be required to follow local, state, and federal guidelines and permitting regulations.

### **Flood Hazard Evaluation**

The three major drainage crossings along the project (Pigeon House Branch under Capital Boulevard, Pigeon House Branch under Wade Avenue, and Pigeon House Branch under Peace Street) are located within a FEMA regulated study area.

The selected alternatives are likely to create an encroachment on the existing floodplain and floodway. Since both the culvert extension and bridge replacements are in a FEMA regulated floodway (FIRM Map Number 3720170400J, Panel Number 1704) a Memorandum of Agreement (MOA) or a Conditional Letter of Map Revision (CLOMR) will be required. Floodplain crossings will be designed to minimize the floodplain encroachments as much as possible. In National Flood Insurance Program (NFIP) flood hazard areas, the final hydraulic design should strive for a no-rise condition in the 100-year base flood elevation.

### **Traffic Noise Analysis**

One residential noise impact (the green space at the Cotton Mill condominiums) and one business noise impact (the entrance to a recording studio) are anticipated for the selected alternatives. Temporary noise impacts during construction are also expected. However, traffic noise abatement is not recommended and no noise abatement measures are proposed.

### **Air Quality Analysis**

The project is located in Wake County, which is within the Raleigh-Durham maintenance area for carbon monoxide (CO) and within the Raleigh Durham nonattainment area for carbon monoxide (CO), as defined by the EPA. A microscale air quality analysis was performed for CO; none of the identified receptors experienced an exceedance of the standards. This project was determined to have low potential for Mobile Source Air Toxic (MSAT) effects. Temporary degradation of the air quality in the project area may result due to dust and exhaust from construction equipment. During construction the contractor will monitor dust conditions and implement appropriate dust control measures as are deemed necessary.

### **Hazardous Materials**

The study area contains 28 potential leaking underground storage tank (LUST) sites, one potentially hazardous waste site, 22 underground storage tank (UST) sites, and ten Resource Conservation and Recovery Act (RCRA) generators. Several of the sites within the study area are on multiple lists. A geotechnical report will be prepared for the full B-5121/B-5317 study area at a later phase in the project. Impacts to potential hazardous material sites will be determined at that time.

### **Infrastructure and Utilities**

The selected alternatives will likely require relocation of underground natural gas, water, sanitary sewer, and telephone lines. It also will require relocation of above ground power lines. Some above ground power lines may be converted to underground, which will be paid for by the City of Raleigh. Final designs and the work zone phasing plan will accommodate the City of Raleigh's request to maintain water service at all times.

### **Construction Impacts**

Reduced carrying capacity on Capital Boulevard during construction may result in a temporary increase in emergency response time, but no long-term impacts are anticipated. Temporary impacts on businesses along the corridor are likely, including noise and air quality impacts.

## 6.0 Permit Clarification

A list of permits that may be required is provided below.

- **Section 404 (Impacts to “Waters of the United States”)** – Impacts to “Waters of the United States” come under the jurisdiction of the US Corps of Engineers (USACE). Discharges of dredge or fill material into jurisdictional wetlands, streams, or open waters associated with the construction of the bridge or other roadway improvements will require a Section 404 permit from USACE. General Permit (GP) 198200031, Nationwide Permit (NWP) 14, or NWP 3 may cover the impacts to the jurisdictional wetlands and open waters within the project study area. Since the project impacts are not expected to exceed the NWP permit thresholds (300 linear feet of stream impact and 0.5-acre cumulative wetland impact), an Individual Section 404 permit is not anticipated.
- **Section 401 General Water Quality Certification** – A Section 401 General Water Quality Certification will be required for any activity that may result in a discharge into “Waters of the United States” or for which an issuance of a federal permit is required. The issuance of a required Section 401 certification is a prerequisite to the issuance of a Section 404 permit. A North Carolina Division of Water Resources (NCDWR) Water Quality Certification would be required with a USACE Nationwide Permit (NWP) 14, NWP 3, or General Permit (GP) 198200031. Written authorization would be required if a USACE NWP 14 or GP 198200031 is used. Since the project impacts are not expected to exceed the NWP impact thresholds, an Individual Section 401 Water Quality Certification will not be required.
- **State Stormwater Permit**
- **Approval from DENR Public Water Supply Plan Review Section**
- **Neuse River Buffer Authorization**

Final determination of permit applicability lies with the USACE and NCDWR. After completion of final design, NCDOT will coordinate with the regulatory agencies to obtain the necessary permits.

## 7.0 Coordination and Comments

The following section provides a summary of the agency coordination and public involvement efforts that took place after approval of the EA in December 2013.

### 7.1 Circulation of the Environmental Assessment

The EA for this project was approved by the NCDOT and FHWA in December 2013. Copies of the approved EA were circulated to the following federal, state, and local agencies for review and

comments. Written comments were received from agencies noted with an asterisk (\*). Comments are listed in **Section 7.2**, and copies of these letters are included in **Appendix A**.

### **Federal Agencies**

- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (USEPA)
- U.S. Department of Interior, Fish and Wildlife Service (USFWS)

### **State Agencies**

- \* N.C. Department of Administration – State Clearinghouse
- N.C. Department of Cultural Resources – Division of Historical Resources (NCDCCR – HPO)
- \* N.C. Department of Environmental and Natural Resources (NCDENR)
- \* NCDENR - Division of Water Resources (NCDWR)
- \* NCDENR - Division of Waste Management
- \* N.C. Division of Emergency Management – Floodplain Management Program
- \* N.C. Department of Agriculture

### **Local Agencies**

- \* City of Raleigh
- Capital Area Metropolitan Planning Organization (CAMPO)
- Wake County

The EA and the public hearing maps were available for public review at the following locations:

- NCDOT District Office, 4009 District Drive, Raleigh
- NCDOT Division 5 Office, 2612 N. Duke Street, Durham
- City of Raleigh Transportation Planning Division, One Exchange Plaza, 219 Fayetteville Street, Suite 727
- Project website: <http://www.ncdot.gov/projects/CapitalBlvdBridges>
- Public Meetings website: [www.ncdot.gov/projects/publicmeetings](http://www.ncdot.gov/projects/publicmeetings)

## **7.2 Agency Comments Received on the Environmental Assessment**

Project specific agency comments regarding the contents of the Environmental Assessment are as follows. Agency comment letters are in **Appendix A**.

- **NC Department of Environment and Natural Resources – Division of Water Resources (March 6, 2014)**
  - Two streams are found in the project study area: Pigeon House Branch and Williamson Branch. These streams are both C; NSW waters of the State. The NCDWR is very concerned with sediment and erosion impacts that could result from this

project. The NCDWR recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to these waters. The NCDWR requests that road design plans provide treatment of the storm water runoff through BMPs as detailed in the most recent version of NCDWR's *Stormwater Best Management Practices*.

- This project is located in the Neuse River Basin and in certain areas the work appears to be close to Pigeon House Creek. The project will need to secure appropriate 404 permits, 401 Certificate, Buffer authorizations, and comply as appropriate with NCDOT's existing individually issued NPDES stormwater permit.

**Response:** The selected alternatives extend existing culverts for Pigeon House Branch by 46 linear feet, and the project may need a buffer permit. NCDOT will continue to avoid or minimize impacts to the greatest extent practicable during final design. Design Standards for Sensitive Watersheds will be implemented during project construction.

- **NC Department of Environment and Natural Resources – Division of Waste Management (March 6, 2014)**

- Three potentially hazardous material sites have been identified by the Superfund Section within a 0.5-mile radius of the Capital Boulevard/Wade Avenue interchange, and seven sites have been identified within a 0.5-mile radius of the Capital Boulevard/Peace Street interchange. Because the sites are open cases it is advised that when final project configurations are selected, the files for environmental contamination sites in close proximity to the proposed projects be reviewed to ensure that potential health and safety issues are understood.
- The Solid Waste Section knows of no situations in the community which would affect this project.
- There are numerous groundwater monitoring wells from various DENR programs in this area. These wells need to be located and abandoned in accordance with 15A NCAC 2C.0100.
- Please notify the UST section if petroleum-contaminated soil or water is encountered. Please submit copies of groundwater monitoring well records to the UST section as the wells may be related to current or historic UST section pollution incidents.

**Response:** Additional hazardous material surveys will be performed during final design.

### 7.3 Pre-Hearing Open House and Combined Public Hearing

In accordance with 23 USC 128, the North Carolina Department of Transportation certifies that a public hearing for the subject project has been held, and the social, economic, and environmental impacts, consistency with local community planning and goals and objectives, and comments from individuals have been considered in the selection of the Recommended Alternatives for the project.

The Public Hearing was an informal open house held from 4 to 7 p.m. on April 22, 2014 at the Duke Energy Center for the Performing Arts in Raleigh. Public hearing maps for the detailed study alternatives were placed on easels on both sides of the room. One map showed Alternatives P5 and W-Base, and was labeled "Recommended Alternatives." A second map showed Alternatives P-Base and W2c.

A total of 53 citizens attended the meeting. Written comments were received from 17 citizens and the City of Raleigh. All verbal comments from the public hearing and written comments following the public hearing are included in **Appendix B**. Four of the citizen comments supported the recommended alternatives, and thirteen requested minor design changes to minimize impacts. The City of Raleigh letter expressed support for the recommended alternatives, and listed several topics for further discussion during final design.

### 7.4 Additional Project Coordination

NCDOT has continued coordinating with the City of Raleigh. The City Council has signed a resolution committing to funding the difference in cost between Alternative P-Base and Alternative P5. The resolution is in **Appendix A**. A letter from City staff supporting the recommended alternatives is in **Appendix B**.

## 8.0 Changes Since the Environmental Assessment

### 8.1 Design Speed

Section IV.D of the EA states that the design speed on Capital Boulevard will remain 50 mph from north of Wade Avenue to north of Peace Street, and will be reduced to 40 mph through the Capital Boulevard/Peace Street interchange. Following recent discussions with the City, the design speed for the project has been reduced to 40 mph. Therefore, the text in Sections IV.C and IV.D should be changed to the following (**bold** text denotes changes):

*Page 20 (Section IV.C)* – The posted speed limit on Capital Boulevard **along the entire project corridor** will be reduced to 35 mph. The speed limits on Peace Street and Wade Avenue will remain 35 mph.

Page 20 (Section IV.D) – The design speed on Capital Boulevard **will be** 40 mph through the entire project corridor.

## 8.2 Design and Cost Estimates

Since the EA, the preliminary designs have been modified as follows:

- The median has been extended farther north through the Wade Avenue interchange. This will create a consistent typical section along Capital Boulevard between the Peace Street and Wade Avenue interchanges. The median width matches the proposed width in the *Capital Boulevard Corridor Study*, and will provide sufficient width for a future Southeast High Speed Rail bridge pier.
- At the time of the EA, the wider outside lanes on Peace Street between the ramp termini were proposed to be unstriped. Since that time, striping has been added.
- At the time of the EA, 14-foot sidewalks were planned along Peace Street. Since that time, the sidewalks have been narrowed to six feet in some areas to minimize impacts to adjacent businesses.
- At the time of the EA, sidewalks were planned on both sides of Capital Boulevard over Peace Street. Since that time, a sidewalk will only be on the west side of Capital Boulevard on the bridge. The sidewalk on the east side will instead follow the off- and on-ramps, which provides a slightly shorter route for pedestrians.
- At the time of the EA, right of way along the west side of Capital Boulevard between Dortch Street and Peace Street was at the bottom of the slope. Since that time, it has been revised to be at the back of the sidewalk instead.
- At the time of the EA, Capital Boulevard was not affected as part of Alternative W-Base. Since that time, the median has been widened on Capital Boulevard through the Wade Avenue interchange, to create a continuous median from north of Wade Avenue to south of Peace Street.
- At the time of the EA, no change of access was proposed on Capital Boulevard, and no control of access was proposed along Peace Street or Wade Avenue. Since that time, partial control of access is proposed along Capital Boulevard, which will limit driveways to no more than one per property. In addition, some areas around the interchanges will have full control of access. Some driveway access will be allowed along the “square loop” ramps in the southwest quadrant of the Peace Street interchange.

- At the time of the EA, the existing culvert under Peace Street was proposed to be extended by 24 linear feet. Since that time, the culvert extension has been increased to a total of 46 linear feet to minimize impacts on the existing driveway north of the culvert.

Updated construction and right of way cost estimates have been prepared for the current preliminary designs, as listed in **Table 1**.

### **8.3 Bridge Inspection Report**

An updated bridge inspection report has been completed for Bridge No. 213 (Wade Avenue interchange). Current bridge inspection reports for both interchanges are included in **Appendix C**. This information will update the following sections in the EA (**bold** text denotes change):

*Page S-1 (Executive Summary Section B, Second paragraph)* – Bridge No. 213 carrying Wade Avenue over Capital Boulevard (Project B-5317) is a trumpet interchange built in 1954 with a Federal sufficiency rating of **27.75** out of a possible 100 (as of **November 2013**).

*Page 3 (Section II.B, First paragraph)* – Bridge No. 213 carrying Wade Avenue over Capital Boulevard (Project B-5317) is a trumpet interchange built in 1954 with a Federal sufficiency rating of **27.75** out of a possible 100 (as of **November 2013**).

*Page 5 (Section II.B.1.b.5, Second paragraph)* – Bridge No. 213 (Wade Avenue interchange) was inspected in **November 2013**. The bridge is classified as “structurally deficient” due to deterioration. The deck has been assessed a condition rating of 5 (“fair”), and the superstructure and substructure are rated as 4 (“poor”). The bridge is currently posted at 23 tons for Single Vehicle Truck and 27 tons for Truck Tractors with Semi-Trailers.

### **8.4 Northern Long-Eared Bat**

A US Fish and Wildlife Service (USFWS) proposal for listing the Northern Long-eared Bat (*Myotis septentrionalis*) as an Endangered species was published in the Federal Register in October 2013. The listing will become effective on or before April, 2015. Furthermore, this species is included in USFWS’s current list of protected species for Wake County. NCDOT is working closely with the USFWS to understand how this proposed listing may impact NCDOT projects. NCDOT will continue to coordinate appropriately with USFWS to determine if this project will incur potential effects to the Northern long-eared bat, and how to address these potential effects, if necessary.

## 9.0 Revisions to the Environmental Assessment

### 9.1 Sidewalks

The EA states that sidewalks on Peace Street are separated from travel lanes by a narrow grass strip, which references the existing conditions within the Capital Boulevard/Peace Street interchange. Additional text has been added to provide information about Peace Street adjacent to the interchange, which has a slightly different typical section.

The following text should be added as shown below (**bold** text denotes changes).

*Page 6 (Section II.B.1.b.6, First paragraph)* – Revise the paragraph: On Capital Boulevard, 6-foot wide sidewalks are adjacent to travel lanes in both directions, including along the ramps at the Peace Street interchange. **Sidewalks on both sides of Wade Avenue leading up to and through the Capital Boulevard interchange are separated from travel lanes by a narrow grass strip. Sidewalks on both sides of Peace Street are separated from travel lanes by a narrow grass strip through the interchange, and are immediately adjacent to the back of curb in the sections east and west of the ramp termini.**

### 9.2 Railroad Labels

Section IV.H of the EA states that the CSX Railroad is parallel with Capital Boulevard on the west side and that the Norfolk Southern Railroad is parallel with Capital Boulevard on the east side. However, this should be reversed. Therefore, the text in Section IV.H should be changed to the following (**bold** text denotes changes):

*Page 22 (Section IV.H, First paragraph)* – No existing railroads cross this project. The **Norfolk Southern** Railroad is parallel with Capital Boulevard on the west side, and has a bridge over Wade Avenue at the western terminus of the Capital Boulevard/Wade Avenue interchange design. The **CSX** Railroad is parallel with Capital Boulevard on the east side, and has a bridge over Capital Boulevard approximately 0.4 mile south of Peace Street. **The CSX Railroad also crosses Peace Street approximately 500 feet east of Capital Boulevard.**

### 9.3 Buffer Impacts

Sections V.A.2.c and V.A.2.e of the EA state that no impacts are anticipated to streams or stream buffers. However, as stated in Section V.A.2.d, the preferred alternative at Peace Street (Alternative P5) will extend an existing culvert for Pigeon House Branch. In the EA, the design proposed extending the culvert by 24 linear feet. (Since that time, the culvert extension has been increased to a total of 46 linear feet.) This stream is in the Neuse River Basin, and subject

to buffer rule protection. Therefore, the following changes should be made (**bold** text denotes changes):

*Page 27 (Section V.A.2.c)* – Streamside riparian zones within the study area are protected under provisions of the Neuse River Buffer Rules administered by NCDWQ. Both streams in the study area are subject to the buffer rule protection, **and are required to maintain 50-foot wide riparian buffers. The 50-foot wide buffer is comprised of two zones. Zone 1 extends 30 feet landward from the top of the bank and this buffer is to remain essentially undisturbed. Zone 2 begins at the end of Zone 1 and extends an additional 20 feet landward. Zone 2 is to be vegetated, but certain limited uses are allowed within this zone.**

*Page 27 (Section V.A.2.d)* – There are no anticipated impacts to wetlands. Alternative P-Base will extend existing culverts for Pigeon House Branch by 20 linear feet. Alternative P5 will extend existing culverts for Pigeon House Branch by **46** linear feet. Alternative W2c will extend existing culverts for Pigeon House Branch by 34 linear feet. **Riparian buffer impacts for detailed study alternatives are summarized below:**

- **Alternative P-Base: 3,048 sf total buffer impacts (1,531 sf Zone 1 + 1,517 sf Zone 2)**
- **Alternative P5: 2,639 sf total buffer impacts (1,565 sf Zone 1 + 1,074 sf Zone 2)**
- **Alternative W2c: 15,577 sf total buffer impacts (9,348 sf Zone 1 + 6,229 sf Zone 2)**

*Page 28 (Section V.A.2.e, first paragraph)* – Pigeon House Branch and Williamson Branch are subject to Neuse River Buffer Rules. Therefore, Design Standards for Sensitive Watersheds will be implemented during project construction. NCDOT will continue to avoid or minimize impacts to the greatest extent practicable during final design. **A buffer permit may be required.**

## **10.0 Wetlands Finding**

In accordance with 33 CFR 328.3(b) and 23 CFR 777, one jurisdictional wetland was identified and delineated within the project study area (**Figure 3**). The wetland included the presence of hydrophytic vegetation, the presence of hydric soils, and evidence of wetland hydrology. Jurisdictional verification of the wetlands and streams was approved on December 12, 2011 by the US Army Corps of Engineers. The selected alternatives will not impact any wetlands, and no mitigation is required.

## **11.0 Floodplain Finding**

The three major drainage crossings along the project (Pigeon House Branch under Capital Boulevard, Pigeon House Branch under Wade Avenue, and Pigeon House Branch under Peace Street) are located within a regulated FEMA study area.

Based on portions of the proposed roadway widening, realignment, culvert extensions, and proposed bridge occurring in a FEMA floodway, this project is likely to create an encroachment on the existing floodplain and floodway. Since both the culvert extension and bridge replacements are in a FEMA regulated floodway (FIRM Map Number 3720170400J, Panel Number 1704) a Memorandum of Agreement (MOA) or a Conditional Letter of Map Revision (CLOMR) will be required. Floodplain crossings will be designed to minimize the floodplain encroachments as much as possible. In NFIP flood hazard areas, the final hydraulic design should strive for a no-rise condition in the 100-year base flood elevation.

## **12.0 Basis for Finding of No Significant Impact**

The EA documents a study of the impacts of the proposed project. Based upon the EA and on comments received from federal, state, local agencies and the general public, it is the finding of the FHWA that this project will not have a significant adverse impact upon the human or natural environment. No significant impacts to natural, social, ecological, cultural, economic, or scenic resources are expected. The proposed project is consistent with local plans. The project has been extensively coordinated with federal, state, and local agencies. In view of this evaluation, it has been determined that a Finding of No Significant Impact (FONSI) is applicable for this project. Therefore, neither an Environmental Impact Statement nor further environmental analysis is required.

The following individuals can be contacted for additional information on the proposed project:

**Richard W. Hancock, P.E.**

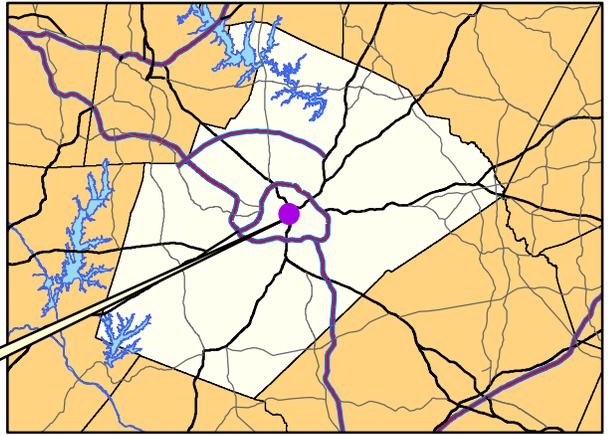
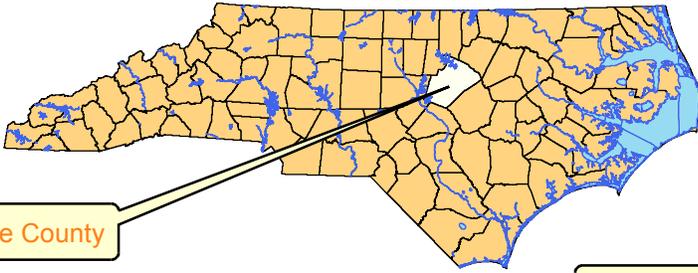
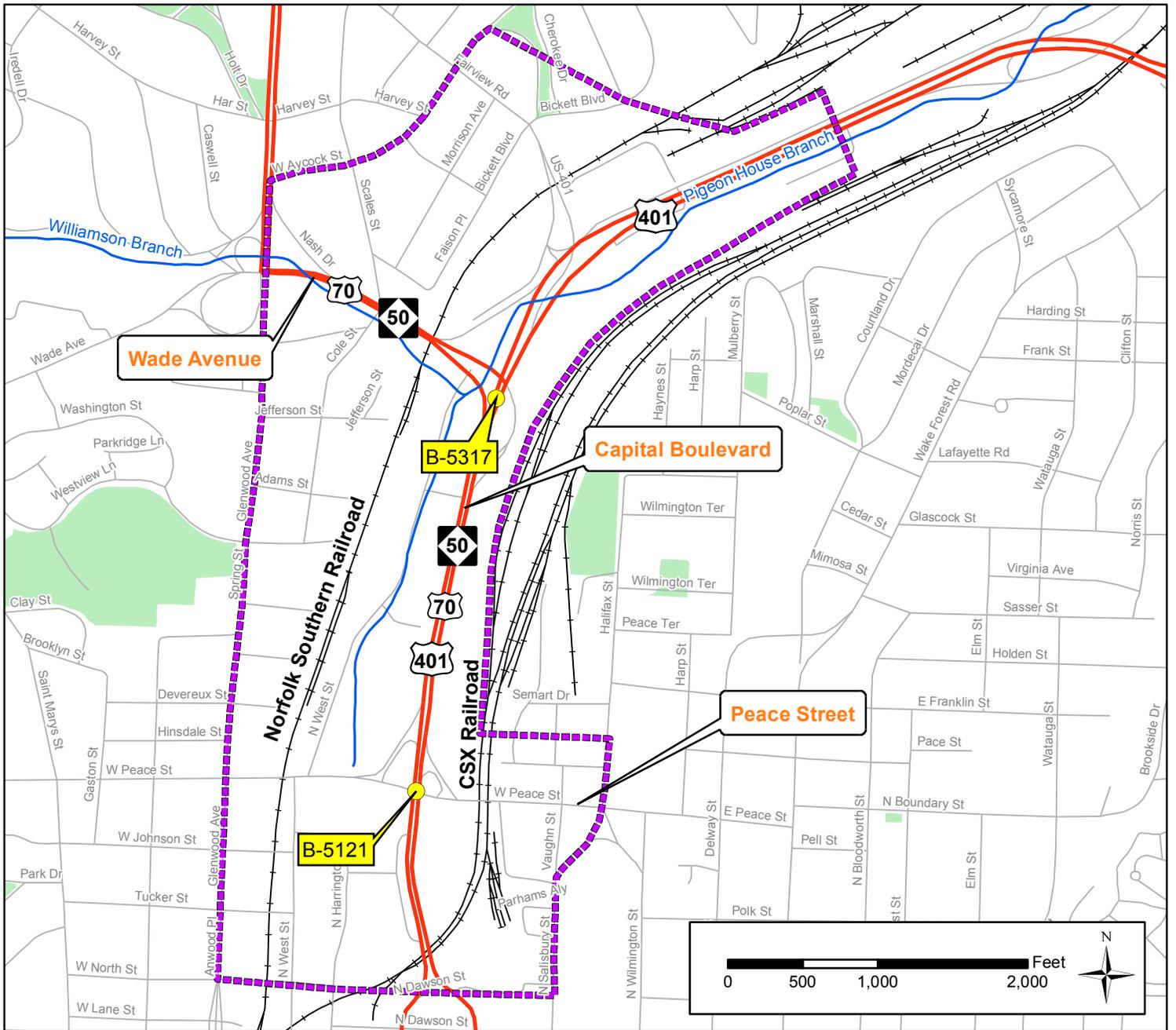
Manager  
Project Development and Environmental Analysis  
North Carolina Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548  
Telephone: (919) 707-6000

**John F. Sullivan III, P.E.**

Division Administrator  
Federal Highway Administration  
310 New Bern Avenue, Suite 410  
Raleigh, North Carolina 27601  
Telephone: (919) 856-4346

# FIGURES

- 1 Vicinity Map
- 2 Selected Alternatives
- 3 Environmental Features





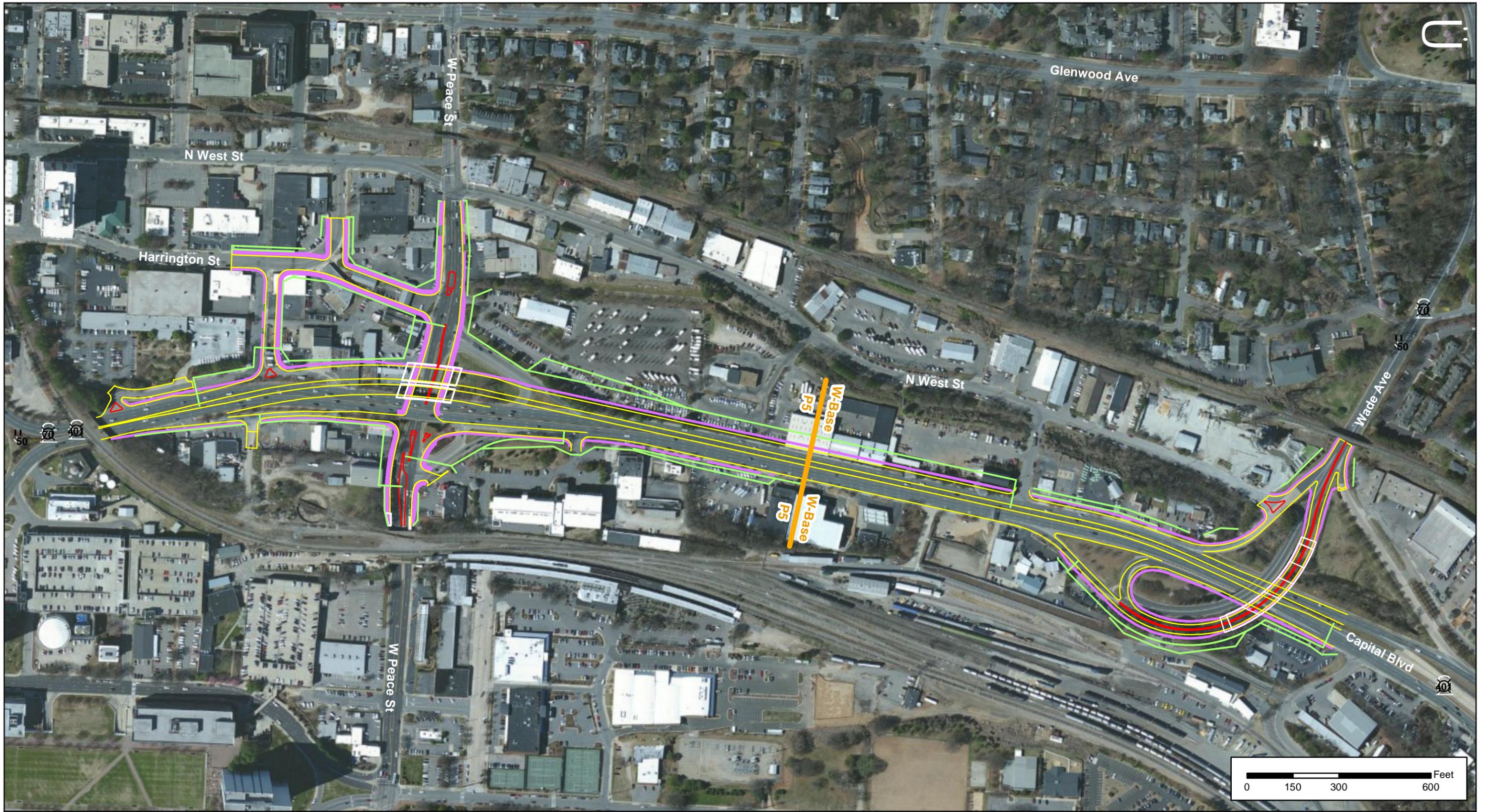
**NORTH CAROLINA  
DEPARTMENT  
OF  
TRANSPORTATION**

**Legend**

- Study Area
- Streams
- Interstates NCDOT
- US Highways
- Streets
- Proposed Bridges to be Replaced
- Railroads
- Wake County
- Public Open Areas

**Figure 1  
Vicinity Map**

TIP Projects B-5121 & B-5317  
Capital Boulevard Bridge Replacements  
City of Raleigh, Wake County



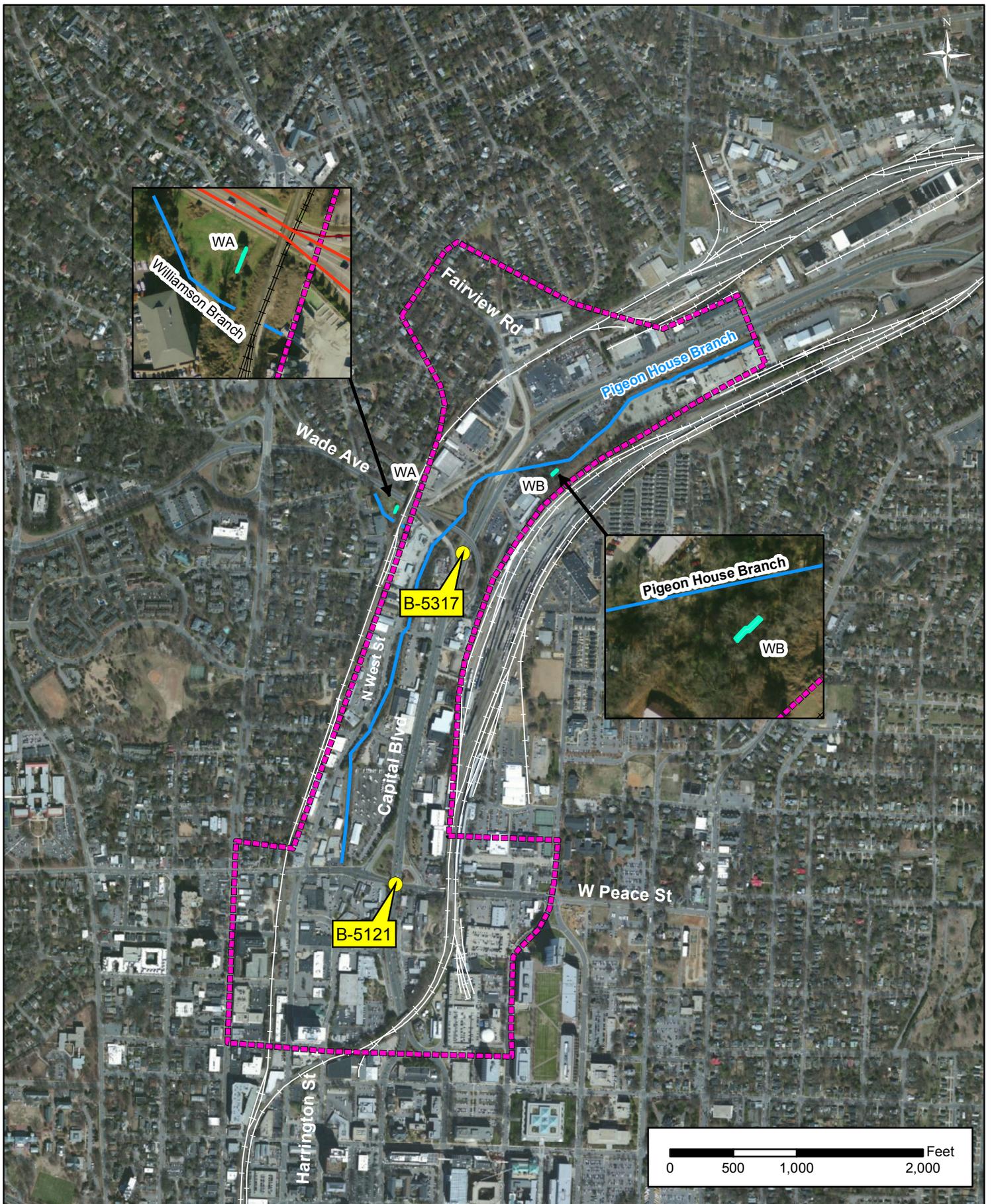
NORTH CAROLINA  
DEPARTMENT  
OF  
TRANSPORTATION

**Legend**

- Proposed Sidewalk
- Proposed Roadway Bridge
- Proposed Edge of Travel
- Proposed Concrete Island
- Proposed Right of Way

**Figure 2**  
**Selected Alternatives**

TIP Projects B-5121 & B-5317  
Capital Boulevard Bridge Replacements  
City of Raleigh, Wake County



NORTH CAROLINA  
DEPARTMENT  
OF  
TRANSPORTATION

**Legend**

-  Environmental Study Area
-  Wetlands
-  Streams
-  Proposed Bridges to be Replaced

**Figure 3**  
**Environmental Features**

TIP Projects B-5121 & B-5317  
Capital Boulevard Bridge Replacements  
City of Raleigh, Wake County

# **APPENDIX A**

## **AGENCY COMMENTS**

N.C. Department of Environment and Natural Resources (March 14, 2014)

N.C. Division of Emergency Management (February 25, 2014)

N.C. Department of Agriculture (February 27, 2014)

N.C. Department of Cultural Resources – State Historic Preservation Office Effects Form (June 25, 2014)

City of Raleigh City Council Resolution (July 1, 2014)



North Carolina  
Department of Administration

Pat McCrory, Governor

Bill Daughtridge, Jr., Secretary

March 14, 2014

Mr. Ahmad Al-Sharawneh  
NCDOT  
Project Development & Environmental Analysis Branch  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

**Re: SCH File # 14-E-4220-0337; EA; Proposed project is for the replacement of bridges at Peace Street and Wade Avenue on Capital Blvd. and revise the interchanges. TIP B-5121, B-5317**

Dear Mr. Al-Sharawneh:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

A handwritten signature in black ink that reads "Crystal Best".

Crystal Best

State Environmental Review Clearinghouse

Attachments

cc: Region J

*Mailing Address:*  
1301 Mail Service Center  
Raleigh, NC 27699-1301

*Telephone: (919)807-2425*  
Fax (919)733-9571  
State Courier #51-01-00  
*e-mail state.clearinghouse@doa.nc.gov*

*Location Address:*  
116 West Jones Street  
Raleigh, North Carolina



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

John E. Skvarla, III  
Secretary

MEMORANDUM

TO: Crystal Best  
State Clearinghouse

FROM: Lyn Hardison *LH*  
Division of Environmental Assistance and Customer Service  
Permit Assistance & Project Review Coordinator

RE: 14-0337  
Environmental Assessment – Proposed project is for the replacement of bridges at  
Peace Street and Wade Avenue on Capital Blvd. and revise the interchanges  
TIP No. B-5121, B-5317  
Wake County

Date: March 14, 2014

The Department of Environment and Natural Resources has completed its review of the proposal for the referenced project. Based on the information provided, our agencies have identified permits that may be required and offered some recommendations. The comments are attached for the applicant's consideration.

The Department agencies will continue to be available to assist the applicant through the environmental review and permitting processes.

Thank you for the opportunity to respond.

Attachments



North Carolina Department of Environment and Natural Resources

Division of Water Resources

Water Quality Programs

Thomas A. Reeder

Director

Pat McCrory  
Governor

John E. Skvarla, III  
Secretary

March 6, 2014

**MEMORANDUM**

To: Lyn Hardison, Environmental Coordinator, Office of Legislative and Intergovernmental Affairs

From: Rob Ridings, Division of Water Resources, Transportation Permitting Unit *RR*

Subject: Comments on the Environmental Assessment for proposed replacement of Bridges 227 & 213 at US 401 & 70 Interchanges, Wake County, Federal Aid Project No. BRNHS-0070(119) & BRSTP-0070(149), State Project No. 42263.1.1, TIP #B-5121 & B-5317, State Clearinghouse Project No. 14-0337.

This office has reviewed the referenced document received February 27, 2014. The NC Division of Water Resources (NCDWR) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the project as presented may result in impacts to jurisdictional wetlands, streams and/or buffers. The NCDWR offers the following comments based on review of the aforementioned document:

**Project Specific Comments: (if applicable)**

1. Two streams are found in the project study area: Pigeon House Branch and Williamson Branch. These streams are both C; NSW waters of the State. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDWR recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to these waters. The NCDWR requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWR's *Stormwater Best Management Practices*.
2. Pigeon House Branch is on the 303(d) list of impaired waters. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDWR recommends that the most protective sediment and erosion control BMPs be implemented in accordance with *Design Standards in Sensitive Watersheds* (15A NCAC 04B .0124) to reduce the risk of further impairment to Pigeon House Branch. The NCDWR requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWR *Stormwater Best Management Practices*.

Transportation and Permitting Unit  
1650 Mail Service Center, Raleigh, North Carolina 27699-1650  
Location: 512 N Salisbury St. Raleigh, North Carolina 27604  
Phone: 919-807-6300 \ FAX: 919-733-1290  
Internet: [www.ncwaterquality.org](http://www.ncwaterquality.org)

One  
North Carolina  
*Naturally*

3. This project is within the Neuse River Basin. Riparian buffer impacts shall be avoided and minimized to the greatest extent possible pursuant to 15A NCAC 2B.0233. New development activities located in the protected 50-foot wide riparian areas within the basin shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B.0233. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, including use of the NC Ecosystem Enhancement Program, must be provided to the NCDWR prior to approval of the Water Quality Certification. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, including use of the NC Ecosystem Enhancement Program, must be provided to the NCDWR prior to approval of the Water Quality Certification.

**General Comments:**

1. The environmental document should provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.
2. Environmental impact statement alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives shall include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of the NCDWR's *Stormwater Best Management Practices Manual*, July 2007, such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.
3. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506[h]), mitigation will be required for impacts of greater than 1 acre to wetlands. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as wetland mitigation.
4. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506[h]), mitigation will be required for impacts of greater than 150 linear feet to any single stream. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as stream mitigation.
5. Future documentation, including the 401 Water Quality Certification Application, shall continue to include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.
6. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDOT 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.

7. An analysis of cumulative and secondary impacts anticipated as a result of this project is required. The type and detail of analysis shall conform to the NC Division of Water Resources Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.
8. The NCDOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, and rip rap to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.
9. Where streams must be crossed, the NCDWR prefers bridges be used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, the NCDOT should not install the bridge bents in the creek, to the maximum extent practicable.
10. Whenever possible, the NCDWR prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the streambanks and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges shall allow for human and wildlife passage beneath the structure. Fish passage and navigation by canoeists and boaters shall not be blocked. Bridge supports (bents) should not be placed in the stream when possible.
11. 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 NCDWR's *Stormwater Best Management Practices*.
12. Sediment and erosion control measures should not be placed in wetlands or streams.
13. Borrow/waste areas should avoid wetlands to the maximum extent practical. Impacts to wetlands in borrow/waste areas will need to be presented in the 401 Water Quality Certification and could precipitate compensatory mitigation.
14. The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater shall not be permitted to discharge directly into streams or surface waters.
15. Based on the information presented in the document, the magnitude of impacts to wetlands and streams may require Nationwide (NW) Permit application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from the NCDWR. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.
16. 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.

17. 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.
18. Unless otherwise authorized, placement of culverts and other structures in waters and streams shall be placed 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 downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by the NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required.
19. 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, floodplain benches, and/or sills may be required where appropriate. Widening the stream channel should 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.
20. If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3883/Nationwide Permit No. 6 for Survey Activities.
21. 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.
22. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of the 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.
23. While the use of National Wetland Inventory (NWI) maps, NC Coastal Region Evaluation of Wetland Significance (NC-CREWS) maps and soil survey maps are useful tools, their inherent inaccuracies require that qualified personnel perform onsite wetland delineations prior to permit approval.
24. Heavy equipment should 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.

25. 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 should be properly designed, sized and installed.
26. Riparian vegetation (native trees and shrubs) shall be preserved to the maximum extent possible. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

The NCDWR appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact Rob Ridings at 919-707-8786.

cc: Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office  
Chris Murray, Division 5 Environmental Officer  
File Copy



North Carolina Department of Environment and Natural Resources

Division of Waste Management

Dexter R. Matthews

Director

John E. Skvarla, III

Secretary

Pat McCrory  
Governor

March 6, 2014

To: Dexter Matthews, Director  
Division of Waste Management

Through: Mike Williford, Head, Compliance Branch  
Hazardous Waste Section

A handwritten signature in black ink, appearing to read "MW", is written over the text of the "Through" field.

From: Jenny Patterson, Eastern Region Supervisor, Compliance Branch  
Hazardous Waste Section

A handwritten signature in black ink, appearing to read "Jenny Patterson", is written over the text of the "From" field.

Subject: Hazardous Waste Section Comments on Proposed Bridge Replacement and Interchange Revision  
(Wake County)  
Project Number: 14-0337

The Hazardous Waste Section (HWS) has reviewed the subject Environmental Assessment (EA) from DOT for the proposed replacement of bridges at Peace Street and Wade Avenue on Capital Blvd. in Raleigh, NC.

Any hazardous waste generated from the demolition, construction, maintenance, operation and/or remediation (e.g. excavated soil) from the proposed projects must be managed in accordance with the North Carolina Hazardous Waste Rules. The demolition, construction, maintenance, operation and remediation activities conducted will most likely generate a solid waste, and the facility must determine if the waste is a hazardous waste. If an individual project site generates >220 pounds of hazardous waste in a calendar month, the Hazardous Waste Section must be notified, and the site must comply with the small quantity generator requirements. If the individual project site generates > 2200 pounds of hazardous waste in a calendar month, the HWS must be notified, and the facility must comply with the large quantity generator requirements.

There are some hazardous waste generators in close proximity to the proposed project, but it is unclear whether they would be affected by the proposed project.

The HWS has no objection to the proposed project. However, this opinion does not, in any way, preclude the possibility of historical waste management activities at this site that may have contributed to contamination unknown to this office.

Should any questions arise, please contact me at 336-767-0031.



North Carolina Department of Environment and Natural Resources  
Division of Waste Management

Pat McCrory  
Governor

Dexter R. Matthews  
Director

John E. Skvarla, III  
Secretary

Date: March 3, 2014

To: Dexter Matthews, Director, Division of Waste Management

Through: Jim Bateson, Superfund Section Chief 

From: Pete Doorn, Special Remediation Branch Head 

Subj: SEPA Project #14-0337 Proposed Capital Boulevard Bridge Replacement Projects, Wake County

A review of the proximity of the Proposed Capital Boulevard Bridge Replacement Projects to CERCLIS and other sites under the jurisdiction of the Superfund Section has been completed. This proposed project involves replacement and interchange revisions at the Capital Boulevard/Wade Avenue interchange (Project B-5317), and the Capital Boulevard/Peace Street interchange (Project B-5121) (see attached Figure 1).

Due to the large number of sites in the area of the projects, this review identified sites within a 0.5-mile radius of the footprint of the projects. Three sites were identified within a 0.5-mile radius of the Capital Blvd/Wade Avenue interchange (Project B-5317), and seven sites were identified within a 0.5-mile radius of the Capital Blvd/Peace Street as listed below and shown on the attached maps. Because these sites are open cases it is advised that when final project configurations are selected, the files for environmental contamination sites in close proximity to the proposed projects be reviewed to ensure that potential health and safety issues are understood. Files for the sites listed below can be accessed by following the "Superfund File Records" link on the Superfund Section website: <http://portal.ncdenr.org/web/wm/sf>.

Please contact me at 919.707.8369 if you have any questions.

Site Name	ID #	Program	Estimated Distance	Dir. from SEPA Proj.	Status
<b>Capital Blvd/Wade Avenue interchange (Project B-5317)</b>					
Complete Auto Center	NONCD0002821	IHSB	0.0* mi	-	Site is on the Inactive Hazardous Sites Inventory; it is an open case
Pilot Mills	01002-97-02	BF	0.1 mi	E	Site has a Brownfields Agreement
Old Raleigh #2	NONCD0000685	PRLF	0.5 mi	ENE	Site is on the Pre-Regulatory Landfill inventory; it is an open case
Site Name	ID #	Program	Estimated Distance	Dir. from SEPA Proj.	Status

1646 Mail Service Center, Raleigh, North Carolina 27699-1646  
Phone: 919-707-8200 \ Internet: <http://portal.ncdenr.org/web/wm>

Capital Blvd/Peace Street interchange (Project B-5121)					
Rollins Economy Cleaners	DC920048	DSCA	0.0* mi	-	Site is certified in the DSCA Program; it is an open case
Flints Laundry & Dry Cleaners	DC920046	DSCA	0.2 mi	E	Site is certified in the DSCA Program; it is an open case
Medlin-Davis Drycleaners	NONCD0002615	IHSB	0.25 mi	SE	Site is on the Inactive Hazardous Sites Inventory; it is an open case
Glenwood Avenue	NONCD0001780	IHSB	0.25 mi	W	Site is on the Inactive Hazardous Sites Inventory; it is an open case
Rogers Realty Property	NONCD0002416	IHSB	0.4 mi	SW	Site is on the Inactive Hazardous Sites Inventory; it is an open case
Raleigh TTA – SE Parcel	NONCD0001123	IHSB	0.5 mi	SW	Site is on the Inactive Hazardous Sites Inventory; it is an open case
Raleigh TTA – Dillon Parcel A	NONCD0001125	IHSB	0.5 mi	SW	Site is on the Inactive Hazardous Sites Inventory; it is an open case

Cc: Jim Bateson

**Map 1: Superfund Sites Identified within 0.5-Mile Radius of SEPA Project #14-0337, Proposed Capital Boulevard I Wake County, NC.**

*Note: Site locations are estimated based on the best available information.*



**Map 2: Superfund Sites Identified within 0.5-Mile Radius of SEPA Project #14-0337, Proposed Capital Boulevard I Wake County, NC.**

*Note: Site locations are estimated based on the best available information.*





North Carolina Department of Environment and Natural Resources  
Division of Waste Management

Pat McCrory  
Governor

Dexter R. Matthews  
Director

John E. Skvarla, III  
Secretary

**MEMORANDUM**

TO: Kathleen Lance, Administrative Assistant  
Division of Waste Management

FROM: Dennis Shackelford, Eastern District Supervisor *DSF*  
Solid Waste Section

DATE: March 6, 2014

SUBJECT: SEPA Review - Project #14-0337, Wake County, North Carolina  
Replacement of bridges at Peace Street and Wade Avenue on Capital Blvd

---

The Solid Waste Section has reviewed the proposed project is for the replacement of bridges at Peace Street and Wade Avenue on Capital Blvd and has seen no adverse impact on the surrounding community and likewise knows of no situations in the community, which would affect this project.

During construction, the Department of Transportation should make every feasible effort to minimize the generation of waste, to recycle materials for which viable markets exist, and to use recycled products and materials in the development of this project where suitable. Any waste generated by this project that cannot be beneficially reused or recycled must be disposed of at a solid waste management facility permitted by the Division. The Division strongly recommends that the Department of Transportation require all Contractors to provide proof of proper disposal for all waste generated, from this project, in the form of waste disposal tickets. The eight Permitted Facilities in Wake County are as follows: 9226-CDLF-2001, 9227-TRANSFER-2012, 9228-CDLF-2001, 9229T-TRANSFER-2009, 9230-CDLF-2000, 9231-CDLF-2012, 9234-TRANSFER-2012 and 9237T-TRANSFER-2010.

Questions regarding solid waste management should be directed to Ms. Shawn McKee, Environmental Senior Specialist, Solid Waste Section, at (919-707-8284).

cc: Michael Scott, Solid Waste Section Chief  
Jason Watkins, Western District Supervisor  
Shawn McKee, Environmental Senior Specialist

## Department of Environment and Natural Resources Project Review Form

Project Number: 14-0337

County: Wake

Date Received: 02/24/2014

**Due Date: 3/10/2014**

**Project Description:** Environmental Assessment - Proposed project is for the replacement of bridges at Peace Street and Wade Avenue on Capital Blvd. and revise the interchanges. TIP B-5121, B-5317

This Project is being reviewed as indicated below:

Regional Office	Regional Office Area	In-House Review	
<input type="checkbox"/> Asheville	<input checked="" type="checkbox"/> Air <i>Doc Sample</i>	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Coastal Management
<input type="checkbox"/> Fayetteville	<input checked="" type="checkbox"/> DWR-Surface Water	<input checked="" type="checkbox"/> Parks & Recreation	<input type="checkbox"/> DCM-Marine Fisheries
<input type="checkbox"/> Mooresville	<input checked="" type="checkbox"/> DWR-Aquifer	<input checked="" type="checkbox"/> Waste Mgmt	<input type="checkbox"/> Military Affairs
<input checked="" type="checkbox"/> Raleigh	<input checked="" type="checkbox"/> DEMLR (LQ & SW)	<input type="checkbox"/> Water Resources Mgmt	<input type="checkbox"/> DMF-Shellfish Sanitation
<input type="checkbox"/> Washington	<input checked="" type="checkbox"/> UST <i>MCD</i>	<input checked="" type="checkbox"/> DWR-Public Water	<input type="checkbox"/> Wildlife
<input type="checkbox"/> Wilmington	<input checked="" type="checkbox"/> DWR-Public Water	<input type="checkbox"/> DWR-Water Quality Program	<input checked="" type="checkbox"/> Wildlife - DOT T Wilson
<input type="checkbox"/> Winston-Salem	<i>MCD 03/03/14</i>	<input checked="" type="checkbox"/> DWR-Transportation Unit	

<b>Manager Sign-Off/Region:</b> <i>Jane S. Childers (For) CR</i>	<b>Date:</b> <i>3/10/14</i>	<b>In-House Reviewer/Agency:</b>
---	--------------------------------	----------------------------------

Response (check all applicable)

No objection to project as proposed.
  No Comment

Insufficient information to complete review
  Other (specify or attach comments)

If you have any questions, please contact:  
**Lyn Hardison at [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov) or (252) 948-3842**  
**943 Washington Square Mall Washington NC 27889**  
**Courier No. 16-04-01**

*FEB 26 2014*

INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

Project Number 14-0337 Due Date: \_\_\_\_\_

After review of this project it has been determined that the ENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/>	NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Pre-application technical conference usually necessary	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
<input type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100 thru 2Q.0300)	Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113).	90 days
<input type="checkbox"/>	Permit to construct & operate Transportation Facility as per 15 A NCAC (2D.0800, 2Q.0601)	Application must be submitted at least 90 days prior to construction or modification of the source.	90 days
<input checked="" type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900		
<input checked="" type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-707-5950.	N/A	60 days (90 days)
<input type="checkbox"/>	Complex Source Permit required under 15 A NCAC 2D.0800		
<input type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (Land Quality Section) At least 30 days before beginning activity. A fee of \$65 for the first acre or any part of an acre. An express review option is available with additional fees.		20 days (30 days)
<input checked="" type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable stormwater conveyances and outlets. <i>ADDRESSED IN THE REGIONAL PERMITTING PLANS AND ENR. WHILE SITE IS GENERAL</i>		(30 days)
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with ENR Bond amount varies with type mine and number of acres of affected land. Any are mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	North Carolina Burning permit	On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/>	Special Ground Clearance Burning Permit - 22 counties in coastal N.C. with organic soils	On-site inspection by N.C. Division Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual bum is planned."	1 day (N/A)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to ENR approved plans. May also require permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)

PERMITS		SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with ENR running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to ENR rules and regulations.	10 days N/A
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with ENR at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days N/A
<input type="checkbox"/>	State Lakes Construction Permit	Application fee is charged based on structure size. Must include descriptions & drawings of structure & proof of ownership of riparian property.	15-20 days N/A
<input type="checkbox"/>	401 Water Quality Certification	N/A	60 days (130 days)
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 fee must accompany application	55 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$50.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/>	Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, NC 27611		
<input checked="" type="checkbox"/>	Abandonment of any wells, if required must be in accordance with Title 15A, Subchapter 2C.0100.		
<input checked="" type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input type="checkbox"/>	Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.		45 days (N/A)
<input type="checkbox"/>	Tar Pamilco or Neuse Riparian Buffer Rules required.		
<input type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq. Plans and specifications should be submitted to 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. All public water supply systems must comply with state and federal drinking water monitoring requirements. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<input checked="" type="checkbox"/>	If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/Public Water Supply Section at 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. For more information, contact the Public Water Supply Section, (919) 707-9100.		30 days
<p>* Other comments (attach additional pages as necessary, being certain to cite comment authority)</p> <p><i>There are numerous groundwater monitoring wells from various DENR programs in this area. These wells need to be located and abandoned in accordance with 15A NCAC 2C .0100.</i></p> <p><i>UST: PLEASE NOTIFY THE UST SECTION IF PETROLEUM-CONTAMINATED SOIL OR WATER IS ENCOUNTERED. PLEASE SUBMIT COPIES OF GROUNDWATER MONITORING WELL RECORDS TO THE UST SECTION AS THE WELLS MAY BE RELATED TO CURRENT OR HISTORIC UST SECTION POLLUTION INCIDENTS.-94.</i></p>			

#### REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

**Asheville Regional Office**  
2090 US Highway 70  
Swannanoa, NC 28778  
(828) 296-4500

**Mooresville Regional Office**  
610 East Center Avenue, Suite 301  
Mooresville, NC 28115  
(704) 663-1699

**Wilmington Regional Office**  
127 Cardinal Drive Extension  
Wilmington, NC 28405  
(910) 796-7215

**Fayetteville Regional Office**  
225 North Green Street, Suite 714  
Fayetteville, NC 28301-5043  
(910) 433-3300

**Raleigh Regional Office**  
3800 Barrett Drive, Suite 101  
Raleigh, NC 27609  
(919) 791-4200

**Winston-Salem Regional Office**  
585 Waughtown Street  
Winston-Salem, NC 27107  
(336) 771-5000

**Washington Regional Office**  
943 Washington Square Mall  
Washington, NC 27889  
(252) 946-6481



North Carolina Department of Environment and Natural Resources  
Division of Water Resources  
Water Quality Programs  
Thomas A. Reeder  
Director

Pat McCrory  
Governor

John E. Skvarla, III  
Secretary

March 10, 2014

**MEMORANDUM**

**TO:** Lyn Hardison, Environmental Assistance Coordinator  
Department of Environment and Natural Resources

**FROM:** Jackie Roddy, P.E., SEPA Review Coordinator

**SUBJECT:** Environmental Assessment - Peace Street & Wade Avenue Bridge and Interchange Project  
DENR#14-0337

Thank you for providing the Division of Water Resources (DWR) an opportunity to provide comments regarding the proposed project for the replacement of bridges at Peace Street and Wade Avenue on Capital Blvd. and revision of the interchanges. in Wake Co.

DWR has no objection to the proposed project, but offer the following comments from Danny Smith of the DWR Raleigh Regional Office:

1. The project is located in the Neuse Basin and in certain areas the work appears to be close to Pigeon House Creek. The project will need to secure appropriate 404 permits, 401 Certs. , Buffer authorization, and comply as appropriate with NCDOT's existing individually issued NPDES stormwater permit.

If you have any questions about this comment, please contact me at (919) 807-6442 or [jackie.rodny@ncdenr.gov](mailto:jackie.rodny@ncdenr.gov).  
Thank you.

NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

COUNTY: WAKE

F02: HIGHWAYS AND ROADS

STATE NUMBER: 14-E-4220-0337

DATE RECEIVED: 02/11/2014

AGENCY RESPONSE: 03/10/2014

REVIEW CLOSED: 03/13/2014

MS CARRIE ATKINSON  
CLEARINGHOUSE COORDINATOR  
DEPT OF TRANSPORTATION  
STATEWIDE PLANNING - MSC #1554  
RALEIGH NC

REVIEW DISTRIBUTION

CC&PS - DIV OF EMERGENCY MANAGEMENT  
DENR LEGISLATIVE AFFAIRS  
DEPT OF AGRICULTURE  
DEPT OF CULTURAL RESOURCES  
DEPT OF TRANSPORTATION  
TRIANGLE J COG

PROJECT INFORMATION

APPLICANT: NCDOT  
TYPE: National Environmental Policy Act  
Environmental Assessment

DESC: Proposed project is for the replacement of bridges at Peace Street and Wade Avenue on Capital Blvd. and revise the interchanges. TIP B-5121, B-5317

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.



AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:  NO COMMENT  COMMENTS ATTACHED

SIGNED BY: \_\_\_\_\_

*Repaal*

DATE: 03/06/14



NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

COUNTY: WAKE

F02: HIGHWAYS AND ROADS

STATE NUMBER: 14-E-4220-0337  
DATE RECEIVED: 02/11/2014  
AGENCY RESPONSE: 03/10/2014  
REVIEW CLOSED: 03/13/2014

MS CAROLYN PENNY  
CLEARINGHOUSE COORDINATOR  
CC&PS - DIV OF EMERGENCY MANAGEMENT  
FLOODPLAIN MANAGEMENT PROGRAM  
MSC # 4719  
RALEIGH NC

REVIEW DISTRIBUTION

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DENR LEGISLATIVE AFFAIRS  
DEPT OF AGRICULTURE  
DEPT OF CULTURAL RESOURCES  
DEPT OF TRANSPORTATION  
TRIANGLE J COG

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RECEIVED  
FEB 25 2014  
N.C. Department of Administration



AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:  NO COMMENT  COMMENTS ATTACHED

SIGNED BY: John D. Burkhalter

DATE: 25 Feb 2014

MOA addressed in scoping document

NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

SCR-10-958

COUNTY: WAKE

F02: HIGHWAYS AND ROADS

STATE NUMBER: 14-E-4220-0337

DATE RECEIVED: 02/11/2014

AGENCY RESPONSE: 03/10/2014

REVIEW CLOSED: 03/13/2014

MS ELIZABETH HEATH  
CLEARINGHOUSE COORDINATOR  
DEPT OF AGRICULTURE  
1001 MSC - AGRICULTURE BLDG  
RALEIGH NC

**REVIEW DISTRIBUTION**

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DENR LEGISLATIVE AFFAIRS  
DEPT OF AGRICULTURE  
DEPT OF CULTURAL RESOURCES  
DEPT OF TRANSPORTATION  
TRIANGLE J COG

**PROJECT INFORMATION**

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If additional review time is needed, please contact this office at (919)807-2425.



AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:  NO COMMENT  COMMENTS ATTACHED

SIGNED BY:

Keith Larsen

DATE:

2/27/14

Federal Aid # BRNHS-00701(119) & BRNHS-0070(149) TIP#: B-5121&B-5317 County: Wake

CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS

Project Description: Replace Bridge Nos. 227&213 on US 70 over Peace St and Wade Ave in Raleigh.

On June 24, 2014, representatives of the

- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- North Carolina State Historic Preservation Office (HPO)
- Other United States Army Corps of Engineers (USACE)

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

Signed:

Shelby Reap 6/25/14  
Representative, NCDOT Date

[Signature] 6-25-14  
FHWA, for the Division Administrator, or other Federal Agency Date

\_\_\_\_\_  
Representative, HPO Date

Renee Hedrick-Garley 6.25.14  
State Historic Preservation Officer Date

\*This is a third effects form which serves as an amendment to the effects form signed by all parties on Dec. 20, 2013 and reflects the preferred alternatives known as Alt P5 and W Base.

Federal Aid # BRNHS-00701(119) & BRNHS-0070(149)

TIP#: B-5121&B-5317

County: Wake

Property and Status	Alternative	Effect Finding	Reasons
Raleigh Cotton Mill (WA 3919) DOE, LL	Alt P5	No Adverse Effect	Moves Capital Blvd. away from property; Access will be maintained by creating a new access point from off ramp
	Base W	No Effect	
Seaboard Air Line Turntable and Raleigh & Gaston Railroad HD and Roundhouse Site (WA 7383) DOE	Alt P5	No Adverse Effect	Minor ROW take on Peace St for sidewalk tie-ins. De minimis.
	Base W	No Effect	
Noland Plumbing Company (WA 7126) DOE	Alt P5	No Effect	
	Base W	No Effect	

Initialed: NCDOT SLR FHWA DB HPO PSE

FHWA intends to use SHPO's concurrence as a basis of a "de minimis" finding for the following properties, pursuant to Section 4(f):

**RESOLUTION NO. 2014 – 934**

**A RESOLUTION OF THE RALEIGH CITY COUNCIL  
SUPPORTING IMPROVEMENTS TO CAPITAL BOULEVARD**

**WHEREAS**, Capital Boulevard is a gateway corridor that provides access and mobility into downtown Raleigh; and,

**WHEREAS**, Capital Boulevard is maintained by the North Carolina Department of Transportation (NCDOT) as US 401, US 70, and NC 50; and,

**WHEREAS**, the City of Raleigh developed the Capital Boulevard Corridor Plan to develop a strategy for improving the corridor from Lane Street to I-440; and,

**WHEREAS**, NCDOT maintains bridges along Capital Boulevard at Peace Street and at Wade Avenue that have been determined to be both structurally deficient and functionally obsolete by NCDOT; and,

**WHEREAS**, the Capital Boulevard Corridor Plan proposed major reinvestments and reconfigurations of the existing interchanges at Peace Street and at Wade Avenue for the purpose of improving the character of the corridor and improving multimodal accessibility; and,

**WHEREAS**, NCDOT has worked cooperatively and proactively with the City and the public to explore the implementation of the City's corridor plan in conjunction with the planned replacement of these bridges under Transportation Improvement Program (TIP) Projects B-5121 and B-5317; and,

**WHEREAS**, NCDOT has presented multiple design alternatives at each location to the public and to the Raleigh City Council; and,

**WHEREAS**, Alternate P-5 is generally consistent with the Capital Boulevard Corridor Plan by extending and realigning Harrington Street and removing the existing loops, and it facilitates the City's plans to restore Pigeon House Branch and Devereaux Meadow Park; and,

**WHEREAS**, although Alternate W-Base at Wade Avenue is not completely consistent with the Capital Boulevard Corridor Plan, it provides improvements to the existing interchange configuration in a cost-effective manner; and,

**WHEREAS**, the Raleigh City Council is committed to partnering with NCDOT to improve the function, appearance, and safety of Capital Boulevard for our residents, our property owners, and our visitors.

**NOW, THEREFORE BE IT RESOLVED** that the City of Raleigh formally endorses the construction of Alternate P-5 at Peace Street and Alternate W-Base at Wade Avenue.

**BE IT FURTHER RESOLVED** that the City of Raleigh commits to providing funding towards the implementation of Alternate P-5 and for other betterments and upgrades requested by the City in association with the construction of these alternatives.

**BE IT FURTHER RESOLVED** that the City of Raleigh urges the North Carolina Department of Transportation to explore additional options to enhance the appearance of these bridges as gateways into downtown Raleigh.

**Adopted:** July 1, 2014

**Distribution:** Transportation Planning – Lamb  
Transcription Services – Taylor

**APPENDIX B**

**PUBLIC COMMENT SUMMARY**

# COMMENT SHEET

B-5121/B-5317 – Public Hearing  
April 22, 2014  
Capital Boulevard Bridge Replacement Project

NAME: Ryan King + Camya Badr

ADDRESS: 614 Capital Blvd #228 Raleigh NC 27603

EMAIL: ryan.mitchell.king@gmail.com

**COMMENTS and/or QUESTIONS:**

~~I am~~ We are greatly in favor of the  
Recommended Alternatives. As a resident of  
the Cotton Mill, the Alternative for Peace St  
will greatly increase the walkability/accessibility  
to Glenwood as well as make the entrance to  
our home much safer with the dedicated lane.

Comments may be mailed, faxed or emailed by May 23, 2014 to:

Mr. Jamille Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-5785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

**Original Requestor Information: Anonymous**

Comment History

**Tracking Number:** VXDHFUYYQP

**Unit Name:**

CapBridges

**Sent By:** Drew S

**Date/Time:** 5/4/2014 5:37:37 PM

**Comment:**

I favor the Alternative P5 since it will increase walkability and redevelopment potential in this underutilized area of downtown. I live nearby and it is currently an unpleasant area for walking and bicycling. If funding is a reason for selecting P-Base, then perhaps Tax Increment Financing could be used to capture some of the redevelopment opportunities created from removing the interchanges under the P5 scenario, thus reducing the project cost if those funds are earmarked towards paying for the project.

**Sent By:** Drew S

**Original Requestor Information****Name:** Charles Phaneuf**Phone:** (919)524-5663**Email:** [charles@cerental.com](mailto:charles@cerental.com)

Comment History

**Tracking Number:** M6EPYUEC3B**Unit Name:**

CapBridges

**Sent By:** Charles Phaneuf**Date/Time:** 4/29/2014 7:55:40 AM**Comment:**

I own the property at 801 N. West St. I favor the Peace Street P-base and Wade Avenue W-base options. How can I direct my vote/choice/preference to the data collection effort on this project?

**Original Requestor Information****Name:** Jeff Grimes**Phone:** (919)301-1977**Email:** [grimes@alumni.duke.edu](mailto:grimes@alumni.duke.edu)

Comment History

**Tracking Number:** 5LTI1XU626**Unit Name:**

CapBridges

**Sent By:** Jeff Grimes**Date/Time:** 4/16/2014 11:10:47 PM**Comment:**

Dear Mr. Al-Sharawneh: I will not be able to attend the public hearing scheduled for April 22 for the Capital Boulevard Bridge Replacement Projects, but please accept this public comment. I live in the Glenwood-Brooklyn neighborhood of Raleigh and the effect of this project on my neighborhood is of significant interest to me. I support the Alternative P5 over the existing configuration of the Capital Blvd/Peace Street interchange. However, my greatest concern is that this project incorporates a design that will improve safety for pedestrians who walk on Peace Street. I walk every day on Peace Street to get to work and often to get to other neighborhoods or commercial areas such as Seaboard. I can attest that this stretch of Peace Street is not safe for pedestrians. On several occasions, I have been nearly hit by cars or had cars driving dangerously close to me. Unfortunately, I see very little consideration in the Environmental Assessment of the pedestrian perspective. In fact, page 6 of your environmental assessment incorrectly states that, "Sidewalks on both sides of Wade Avenue and Peace Street are separated from travel lanes by a narrow grass strip." The south side of Peace Street has a section between the Capital Blvd Bridge and the Railroad Bridge that has no separation from the travel lanes. What I would most like to see in the design of the Capital Blvd bridge replacement is signaled crosswalks across the redesigned Capital Blvd. onramps/offramps. Currently, no crosswalks exist across any of the onramps or offramps, and I have personally witnessed many instances in which those turning onto an onramp do not see pedestrians. A signaled crosswalk, when activated, would ensure that pedestrians have a safe window of time to cross. Currently, none exists and it is a very dangerous situation. This type of signal currently exists on the offramp from Wade Avenue onto Glenwood Avenue and it should exist as part of the plan for the new Capital Blvd/Peace interchange. The growth of commercial business along Peace Street and nearby is only going to continue. Failing to incorporate a design that protects pedestrians would be irresponsible and put people's safety at risk. Sincerely, Jeff Grimes 504 Cleveland St. Raleigh, NC 27605

# COMMENT SHEET

**B-5121/B-5317 – Public Hearing**  
**April 22, 2014**  
Capital Boulevard Bridge Replacement Project

**NAME:** Frank Scalia

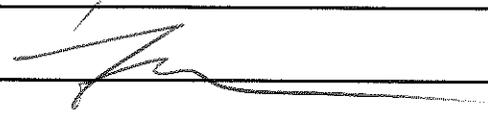
**ADDRESS:** 614 Capital Blvd #205

**EMAIL:** Frank@FES2.com

**COMMENTS and/or QUESTIONS:**

I support the two recommended solutions.

When doing Final, please review the tree line in front of the Cotton Mill to see if there is a way to save or plant new along the on ramp.

Thanks  


**Comments may be mailed, faxed or emailed by May 23, 2014 to:**

Mr. Jamille Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-5785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

# COMMENT SHEET

B-5121/B-5317 – Public Hearing

April 22, 2014

Capital Boulevard Bridge Replacement Project

NAME: LAURA SWANSON

ADDRESS: 614 Capital Blvd.

EMAIL: \_\_\_\_\_

## COMMENTS and/or QUESTIONS:

Please try to maintain the tree  
line on Capital right in front of  
the Cotton Mill - Helps a lot with  
noise & beauty —

I love the two lane merge <sup>lanes</sup> from  
Peace to Capital.

Comments may be mailed, faxed or emailed by May 23, 2014 to:

Mr. Jamille Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-5785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

# COMMENT SHEET

B-5121/B-5317 – Public Hearing

April 22, 2014

Capital Boulevard Bridge Replacement Project

NAME: Paul Hickman - Fairway Outdoor Advertising

ADDRESS: 508 Capital Blvd / 506 Capital Blvd.

EMAIL: paul.hickman@fairwayoutdoor.com

## COMMENTS and/or QUESTIONS:

With the P5 plan Fairway would request  
currently two items for consideration.

1. Driveway entrance(s) off of Johnston  
Street into the 506/508 Capital Property.

2. The North right of way boundary line  
to be slightly adjusted to allow the  
largest warehouse to remain in the  
Northeast corner of the property  
aka 508 Capital Blvd.

We look forward to meeting Teresa  
Gresham of Kimley Horne in the coming months.

Please let us know if you have any questions.

Comments may be mailed, faxed or emailed by May 23, 2014 to:

Mr. Jamille Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-5785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

Thanks,  
  
Fairway  
General Manager

# COMMENT SHEET

B-5121/B-5317 – Public Hearing

April 22, 2014

Capital Boulevard Bridge Replacement Project

NAME: Tom Gerow, Jr

ADDRESS: CHATFIELD CT, CARY

EMAIL: one4ster @ att.net

## COMMENTS and/or QUESTIONS:

① Prefer Peace St. P-Base instead. This is a major interchange with lots of out-of-town traffic (college, state office visitors). The recommended P5 design is not normal and will be confusing. ~~It is a major~~ <sup>Regardless</sup> need to look at removing traffic signal @ West + Peace -- make that a RIGHT ONLY exit of West onto Peace in each direction. West St is mainly local traffic, and the locals can navigate other routes to get where they're going (Glenwood, Johnson, etc). Keep current design of Peace interchange + remove West St. signal will keep traffic flowing on this main artery.

Comments may be mailed, faxed or emailed by May 23, 2014 to:

Mr. Jamille Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-5785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

② Agree with selecting W-Base for Wade Ave. Keep traffic flowing.

# COMMENT SHEET

B-5121/B-5317 – Public Hearing

April 22, 2014

Capital Boulevard Bridge Replacement Project

NAME: Delmer King

ADDRESS: 517 Capital Blvd Ral NC 27603

EMAIL: nchitcher@bellsouth.net

**COMMENTS and/or QUESTIONS:**

Please move bridge site on Capital mov to  
the east and repair it as it sits.

Build a retaining wall to protect my business  
and property, RALEIGH HITCH.

Ask for my help in solving my problem  
or I will GO OUT OF BUSINESS  
and have a REAL FINANCIAL CRISIS.

Make sure I have access to the property!

Comments may be mailed, faxed or emailed by May 23, 2014 to:

Mr. Jammille Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-5785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

Project Number TIP B-5121 (Peace Street)

May 23<sup>rd</sup>, 2014

Ahmad Al-Sharawneh, [aalsharawneh@ncdot.gov](mailto:aalsharawneh@ncdot.gov)

Tony Houser, [thouser@ncdot.gov](mailto:thouser@ncdot.gov)

Gentlemen:

I am writing in response to the most recent proposed Bridge Replacement project as noted above. This currently planned project is incorporating our property at 312 W. Johnson St.. We currently have (2) businesses in our building that are in a (3 more) year's lease agreement with us (Hester & Hester). We do not have plans to sell this property, and are dissatisfied with the design choice that will disrupt our livelihood & the businesses that operate out of this property that we have owned for quite some time now.

We, (my Brother & I) were told the specific reasoning for the encroachment was due to the grade level that would create difficulty on the Wake County facility that is across the street from us in being able to access their facility at the north end of their building, thus moving the road north to accommodate the county facility. Would an optional consideration be; to incorporate the Gorrell property at the corner adjacent to the Wake County facility for access purposes, thereby leaving the Johnson St. roadway in place, as is?

We realize the City of Raleigh has redevelopment plans in their quest with this particular P-5 design and deem a better, more useful plan of current land owner's properties. We disagree and would like to continue our history & future involvement in the redevelopment process without being displaced.

We realize you are the professionals at what you do in respect to design projects that involve roads, bridges, and properties associated with them. We may have to succumb to what will be a project that affects us, but are hoping that all options for we landowners are considered in the process.

Respectfully,

Reece Hester  
Hester & Hester  
312 W. Johnson St.  
Raleigh, NC 27603  
919 818 2579

**Margaret M. Davis**  
**5809 Chelsea Place**  
**Raleigh, NC 27612**  
**(home) 919-782-7890**  
**(Cell) 919-971-8241**

Reference: Capital Blvd. and Peace St. interchange P-5 and W Base,  
STIP Project No. B5121/B-5317

May 20, 2014

North Carolina Department of Transportation  
Attn: Mr. Jammie Robbins  
1598 Mail Service Center  
Raleigh, NC 27699-1598

Dear Mr. Robbins:

After attending the two public hearings at the Duke Energy Center in Raleigh, last of which was in April of 2014, on the Capital Boulevard Bridge Replacement Project several concerns were brought to my attention. My brother, Louis H. Mann, and I are the owners of the property located at 421 W. Peace Street. Peace Camera has operated a retail store in this location for approximately 20 years.

The large plans that were available showed that the extra wide sidewalks proposed in the presentation on April 22, 2014 would reduce our existing number of parking spaces by 42%. Currently there are only 12 parking spaces with waste and recycling bins at the back of the lot. These are required by the City of Raleigh. The plan appears to reduce the number of usable parking spaces to seven. These spaces must accommodate employees and customers, and as you are well aware, there is no on-street parking available. Due to the very limited amount of parking, any reduction in the number of spaces is unacceptable.

However, directly across the street the proposed plan does not include the extra wide sidewalks, leaving much larger parking lots without any apparent reduction in the number of spaces. Anderson Sanitary Maintenance Products located at 418 W. Peace Street and Flyth Cyclery located at 424 W. Peace Street both have much larger lots, each with more parking spaces, and yet the proposal appears to leave their parking unaffected.

We respectfully ask that the width of the sidewalks be reconsidered. We believe the consequences of reduced parking availability would be detrimental to Peace Camera's business operation as well as any successor business in this location. The plans do not address adding additional parking, rather they take vital spaces for the successful operation of a business.

The Department's attention to our concerns is appreciated.

Respectfully,



Margaret Mann Davis  
Co-owner

5/12/14

My name is Todd A. Jenkins, and I am sole owner and operator of Peace Camera at 421 West Peace St. Being a lifelong Raleigh resident, and a downtown business owner for twenty years, I have close ties to the city and downtown. The address on my birth certificate is 616 Glenwood Avenue in 1964.

Peace Camera does 2.5 million dollars in revenue annually. We collect over \$10,000 per month in sales tax, employ 13 people, and pay \$1500 for a business license each year. Peace Camera is a well established and viable downtown business.

It has come to my attention, that part of the Peace Street/Capital Blvd. Bridge project, so called Alternative P5, would widen the road or sidewalk in front of Peace Camera. We have 13 very valuable parking spaces now. This useless widening would possibly take up to five of them, and put the sidewalk right outside of our front door. This is totally unnecessary and invasive, not to mention disruptive to a busy store that often has a packed parking lot, and customers parking elsewhere, just to shop.

I, and many others, do not believe this whole project is for the improvement of the area, as much as to drive existing tenants out by inconveniencing them to the point where they can't do business. Then of course, like on Hillsborough St, and at Cameron Village, shady developers swoop in and soon its bye bye Sadlacks, and The Brewery, Finches restaurant, Rollins cleaners, and hello high rise "Multi Use" condo monstrosity.

I fully expect this to happen in this area eventually, but I won't go down without a fight. Peace Camera has close ties to many media outlets, The N&O, The Independent Weekly, WRAL, WTVD, News 14, WSHA. The word will get out, whether it helps or not.

Thank You,  
Todd A. Jenkins  
Owner, Peace Camera LLC  
todd@peacecamera.com

## COMMENT SHEET

**B-5121/B-5317 – Public Hearing**

**April 22, 2014**

**Capital Boulevard Bridge Replacement Project**

**NAME:** James M. BRUSSO

**ADDRESS:** 1020 W. Peace St # 6-2, Raleigh, NC 27605

**EMAIL:** Brusso.James@yahoo.com

**COMMENTS and/or QUESTIONS:**

I work at Peace Camera  
on Peace St between Capital Blvd and Glenwood  
Avenue. The bridge replacement project could effect  
me in a profound way since the camera store is  
in direct line of the proposed construction. I'm not  
entirely sure but it sounds like our store might be  
knocked down or at the very least the construction would  
spell much less business in our store and as a result  
less job security for me. Thanks, Jim Brusso

**Comments may be mailed, faxed or emailed by May 23, 2014 to:**

Mr. Jamille Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-5785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

## COMMENT SHEET

B-5121/B-5317 -- Public Hearing

April 22, 2014

Capital Boulevard Bridge Replacement Project

NAME: Gregory Wiggs

ADDRESS: 8641 Puddle Wheel Dr. Raleigh NC 27615

EMAIL: gregory@gregorywiggs.com

### COMMENTS and/or QUESTIONS:

This project will take parking spaces away from our business. Widening the sidewalk serves no purpose. The most the sidewalk gets used is at lunchtime for government employees to walk from downtown to Glenwood Ave area restaurants at lunch. I can tell you the sidewalk is always able to accommodate the pedestrian traffic. We are already concerned about how the bridge project and road access will effect our local business. The Hillsborough street project hurt many businesses and put a few out of business. Losing parking spaces when we only have a dozen spaces will hurt us. Parking is already at a premium in the area. Curb parking was gone away

Comments may be mailed, faxed or emailed by May 23, 2014 to: with on West St. Recently.

Mr. Jamille Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-5785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

Thank you.

Gregory Wiggs

# COMMENT SHEET

B-5121/B-5317 - Public Hearing  
April 22, 2014  
Capital Boulevard Bridge Replacement Project

NAME: Tim SHELLEY

ADDRESS: 1275 TEAKWOOD PLACE

EMAIL: tshelley31@gmail.com

**COMMENTS and/or QUESTIONS:**

THE WIDENING OF PEACE ST. NEAR THE CAPITAL  
BLVD. BRIDGE IS A PISS POOR IDEA. BESIDES  
THE CONSTRUCTION OF THE PROJECT AND THE COMMERCIAL  
TRUCK TRAFFIC, OUR CUSTOMERS WILL BE DISCOURAGED  
TO COME TO OUR STORE. MOST ALREADY DEAD WINDING  
DOWN TOWN ANYWAY. THE WIDENING OF PEACE STREET  
WILL REMOVE 5 OF THE 13 PARKING SPACES WE HAVE  
FOR OUR LOCATION. WE ARE NOT TOO KEEN ON HAVING TRAFFIC  
JUST A FEW FEET FROM OUR DOOR.

Comments may be mailed, faxed or emailed by May 23, 2014 to:

Mr. Jamille Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-5785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

# COMMENT SHEET

B-5121/B-5317 - Public Hearing  
April 22, 2014  
Capital Boulevard Bridge Replacement Project

NAME: Bendon J Edwards

ADDRESS: 2804 Isabella Dr. Raleigh NC

EMAIL: BJEphotography@gmail.com

COMMENTS and/or QUESTIONS: 421 West Peace St,  
I do not believe it is a good idea to ~~move~~ have parking lot  
at Peace St. In the two years I've seen our parking be full almost  
once a day and constantly on busy days. Read Camera  
is a place for photographers across North Carolina. The  
proposed plan may put us out of business which  
would remove a person for many people to visit  
 Raleigh. Please reconsider the proposed plan.

Comments may be mailed, faxed or emailed by May 23, 2014 to:

Mr. Jamile Robbins  
NCDOT - Human Environment Section  
1598 Mail Service Center  
Raleigh, NC 27699-1598  
Phone: (919) 707-6085  
Fax: (919) 212-6785  
Email: [PublicInvolvement1@ncdot.gov](mailto:PublicInvolvement1@ncdot.gov)

D. 15.  
**MAY 23 2014**  
Preconstruction  
Project Development and  
Environmental Analysis Branch



*City of Raleigh*  
*North Carolina*

June 5, 2014

Derrick G. Weaver, PE  
North Carolina Department of Transportation  
Project Development Branch – Central Region  
1548 Mail Service Center  
Raleigh, NC, 27699-1548

SUBJECT: Capital Boulevard Bridge Replacements (B-5121 & B-5317)

Dear Mr. Weaver:

Thank you once again for the opportunity to provide feedback regarding your bridge replacement projects along Capital Boulevard at Peace Street and at Wade Avenue (TIP Projects B-2151 and B-5317). We greatly appreciate the partnership that NCDOT has demonstrated in working through these projects with us. We also appreciate the willingness of NCDOT staff and the design team to help us develop and explore the alternatives.

We recently reviewed these projects internally with City staff and with our City Council relative to City's goals, policies, adopted plans, and funding availability. The current design concepts and associated funding levels were presented to the Raleigh City Council on February 18, 2014, and the scenario utilizing Alternate P5 at Peace Street and W-Base at Wade Avenue was favorably received. The Council did not object to staff's funding proposal to fund the required differential for Alternate P5. Based on our staff discussions and public reviews of the project, we would now like to start working out many of the design details we feel are needed to make these projects successful. There are several specific items we wish to see included in the final plans for the project.

Retaining walls and access control: we wish to request the inclusion of retaining walls in the final project design wherever possible. Our goal in pursuing this "enhanced" design is to encourage significant redevelopment of all adjacent property in this urban context. Using retaining walls will promote a smaller right-of-way footprint and retain more private property than typical grassy slopes, especially within an urban setting like this. The exception to this will be for the land adjacent to the proposed Devereaux Meadow Park.

We would suggest that the use of retaining walls would automatically negate the need for the use of Control of Access (C/A) acquisition with the project, thus resulting in a cost savings. We would prefer to not apply any C/A with the project, especially if the application of

such resulted in the use of NCDOT's standard fencing, which we feel is inappropriate in this context. We are also concerned that C/A would inadvertently restrict pedestrian access to adjacent properties within the project scope. The current plans also illustrate a very wide right-of-way along the south side of Peace Street in the southwest quadrant of the project; we would request that NCDOT only acquire the right-of-way needed to install the sidewalk.

**Sidewalk infrastructure:** sidewalks along Capital Boulevard need to be offset and widened as much as practicable to improve the pedestrian experience in this area. Sidewalks across the bridge also need to be wide, as narrow sidewalks directly adjacent to high-volume traffic is very unpleasant. Along all of the other surface streets included in the project, any sidewalks should be widened to satisfy the City's minimum 14-foot width standards, scored with a 2x2 grid pattern. The use of brick banding may also be considered. We also request that NCDOT include tree pits for street trees along all of these streets per our standards.

**Lighting:** lighting along Capital Boulevard should be reevaluated, as much of the existing lighting will be directly impacted by the project construction. New lighting along Capital Boulevard should provide a minimum luminosity of 0.8 foot candles (fc) with a uniformity of 4:1 per NCDOT's lighting standards. Lighting on the other streets within the project should provide a minimum luminosity of 1.2 foot candles (fc) with a 4:1 uniformity. We would like the opportunity to work with NCDOT on the fixture selection on this project prior to selection and installation.

**Bicycle infrastructure:** the City received multiple requests during the project development to include cycling facilities along Peace Street as part of the project improvements. While the current project design includes a wider footprint through the interchange area, it would be preferred to go ahead and add bike lanes through project limits along Peace Street. If NCDOT has concerns about promoting cycling without more connectivity, the addition of the edgelines with the project would help lay the groundwork for improving conditions for cycling, and the bike lane icons and signage could be added at a later date.

**Transit:** this area is currently served by three transit routes (#2 Falls of Neuse, #12 Method, and the R-Line Downtown Circulator). Placement of transit stops and shelters should be coordinated with our transit staff and incorporated into the project design. The wide sidewalk design we are requesting should be sufficient to accommodate the placement of shelters within the right-of-way.

**Landscaping:** Capital Boulevard was the subject of a significant landscaping effort in the 1970's. Many of the plants the City installed have since matured, however much of this work along the west side of the street will be removed with these improvements. Efforts need to be made to restore elements of this landscaping as part of this work. Along the surface streets, the use of 14-foot sidewalks will afford the opportunity to install street trees. In consulting with the City Arborist, the use of Hornbeams (*Carpinus carolinana*), Blackgum (*Nyssa sylvatica*), and Carolina Silverbell (*Halesia tetraptera*) are recommended for installation in this area. Any landscaping installations must be coordinated diligently with the proposed streetlighting plan for the project. We would also like to evaluate the opportunity to add landscaping within any of the median areas proposed with the project, both along Capital Boulevard and for any channelized islands along the surface streets.

Greenway and stream improvements: two key elements of the City's Capital Boulevard Corridor Plan are the remediation of Pigeon House Creek and the construction of a greenway linking downtown to the Crabtree Creek Greenway Corridor. The City will be initiating a stream restoration project for this area, which will be coordinated with your project. It is likely we will address the greenway need with this stream restoration from Peace Street to Dortch Street through the City's property. We would ask the project work include a wide sidewalk along Capital Boulevard north of Dortch Street that to facilitate the greenway connection northward. We would also ask that the existing pedestrian crossing of the eastbound Wade Avenue ramp be shifted further to the west to improve sight distance and crossing safety. From this crossing, we would like to offset the greenway/sidewalk from its current location directly adjacent to Capital Boulevard and meander it as needed under the new bridge and across the southbound Capital Boulevard ramp. Offsetting the sidewalk in this manner will likely require the installation of pedestrian-scale lighting, which we are also recommending.

Impacts to City Property: the project as proposed will have a heavy impact on property and facilities owned and operated by the City along West Street. The City is in the process of shifting some of these operations to a new facility outside of downtown, the timing of which should coincide with the right-of-way acquisition schedule for this project. The City wishes to be fairly compensated by NCDOT for the impact to our property by this project and to apply the value of this acquisition to the City's cost participation in the project.

Bridge design: it is our understanding that the Governor's Office has identified the Peace Street Bridge as a candidate for enhancement. We wholeheartedly support this initiative, and would suggest similar consideration for the Wade Avenue Bridge given its gateway aspect into downtown and the fact it is more visible to people entering the City on Capital Boulevard than the Peace Street Bridge. We are not prepared to recommend specific design elements or artistic treatments for these bridges at this time, but we would like to begin coordination and exploration of the design possibilities that may be available. We would also like to express a preference for vertical abutments for the Peace Street Bridge and to avoid the use of sloped end bents.

Thank you again for the Department's continued efforts to work with us on these projects. If you have additional questions about this item, please call me at (919) 996-2161 or email me at [eric.lamb@raleighnc.gov](mailto:eric.lamb@raleighnc.gov).

Sincerely,



Eric J. Lamb, PE  
Transportation Planning Manager

Cc: Ken Bowers, AICP – Interim Planning Director  
Wally Bowman, PE – Division 5 Engineer  
Teresa Gresham, PE – Kimley-Horn & Associates

**APPENDIX C**

**BRIDGE INSPECTION REPORTS**



NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 BRIDGE MANAGEMENT UNIT

ATTENTION

PROMPT ACTION ISSUED

# BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY WAKE BRIDGE NUMBER 910213 INSPECTION CYCLE 2 YRS  
US-70 / WADE AVE US-401 / CAPITAL BLVD  
 ROUTE US70 ACROSS US401 M.P. 0

0.3 OF A MILE EAST OF SR-1793

LOCATION 0.3 MI.E. SR1793

SUPERSTRUCTURE REINFORCED CONCRETE DECK GIRDERS

SUBSTRUCTURE E.BTS&INT.BTS:2,3 & 5 RC CAP ON H-PILES;INT.BTS:RCP&B  
1 @ 49' ; 1 @ 47'6 ; 1 @ 45'6 ; 1 @ 36' ; 1 @ 42' ; 1 @ 40'6

SPANS 1@49';1@47'6;1@45'6;1@36';1@42';1@40'6

LONGITUDE 78° 38' 26.98" LATITUDE 35° 47' 44.90"

INSPECTION DATE 11/25/2013 PRESENT CONDITION POOR

PRESENT POSTING SV 23 TTST 27 PROPOSED POSTING \_\_\_\_\_

OTHER SIGNS PRESENT 2 DELINEATORS



LOOKING EAST

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>No</u>

SIGN NOTICE ISSUED FOR	NUMBERED REQUIRED
<u>No</u> WEIGHT LIMIT	_____
<u>No</u> DELINEATORS	_____
<u>No</u> NARROW BRIDGE	_____
<u>No</u> ONE LANE BRIDGE	_____
<u>No</u> LOW CLEARANCE	_____

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	910213		SUFFICIENCY RATING =	27.75
(8) STRUCTURE NUMBER(FEDERAL)		000000001830213		STATUS =	Structurally Deficient
(5) INVENTORY ROUTE (ON/UNDER) - ON		21000700			
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1		CLASSIFICATION	
(3) COUNTY CODE 183	(4) PLACE CODE	55000		(112)NBIS BRIDGE SYSTEM -	YES
(6) FEATURE INTERSECTED - US401				(104)HIGHWAY SYSTEM	Is on the NHS 1
(7) FACILITY CARRIED US70				(26) FUNCTIONAL CLASS -	Other Principal Arterial 14
(9) LOCATION 0.3 M.I.E. SR1793				(100)STRAHNET HIGHWAY -	Not a STRAHNET Route 0
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure N
(16)LAT 35° 47' 44.90"	(17)LONG	78° 38' 26.98"		(102)DIRECTION OF TRAFFIC -	2-way Traffic 2
(98)BORDER BRIDGE STATE CODE	PCT SHARE			(103)TEMPORARY STRUCTURE -	
(99)BORDER BRIDGE STRUCTURE NO				(110)DESIGNATED NATIONAL NETWORK -	On the National Network 1
				(20) TOLL	On Free Road 3
				(31) MAINTAIN -	State Highway Agency 01
				(22) OWNER -	State Highway Agency 01
				(37) HISTORICAL SIGNIFICANCE -	Not Eligible 5
STRUCTURE TYPE AND MATERIAL				CONDITION	
(43) STRUCTURE TYPE MAIN: Concrete				(58) DECK	5
TYPE - Tee Beam	CODE	104		(59) SUPERSTRUCTURE	4
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE	4
TYPE -	CODE	000		(61) CHANNEL & CHANNEL PROTECTION	7
(45) NUMBER OF SPANS IN MAIN UNIT		6		(62) CULVERTS	N
(46) NUMBER OF APPROACH SPANS				LOAD RATING AND POSTING	
(107)DECK STRUCTURE TYPE - 1	CODE			(31) DESIGN LOAD	H 15 2
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(63) OPERATING RATING METHOD -	Load Factor 1
(A) TYPE OF WEARING SURFACE -	CODE			(64) OPERATING RATING -	HS-16 29
(B) TYPE OF MEMBRANE -	CODE			(65) INVENTORY RATING METHOD -	Load Factor 1
(C) TYPE OF DECK PROTECTION -	CODE			(66) INVENTORY RATING -	HS-9 17
				(70) BRIDGE POSTING -	Posting Required 2
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED	P
				DESCRIPTION -	Posted for Load
AGE AND SERVICE				APPRAISAL	
(27) YEAR BUILT		1954		(67) STRUCTURAL EVALUATION	3
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY	4
(42) TYPE OF SERVICE : ON - Highway - Pedestrian				(69) UNDERCLEARANCES,VERTI & HORIZ	3
UNDER - Highway - Waterway	CODE	56		(71) WATERWAY ADEQUACY	7
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE		0		(72) APPROACH ROADWAY ALIGNMENT	6
(29) AVERAGE DAILY TRAFFIC		27000		(36) TRAFFIC SAFETY FEATURES	0111
(30) YEAR OF ADT 2011	(109) TRUCK ADT PCT	12%		(113)SCOUR CRITICAL BRIDGES	8
(19) BYPASS OR DETOUR LENGTH		2 MI		PROPOSED IMPROVEMENTS	
GEOMETRIC DATA				(75) TYPE OF WORK -	CODE
(48) LENGTH OF MAXIMUM SPAN		48 FT		(76) LENGTH OF STRUCTURE IMPROVEMENT	
(49) STRUCTURE LENGTH		261 FT		(94) BRIDGE IMPROVEMENT COST	
(50)CURB OR SIDEWALK: LEFT 3.308315 FT RIGHT 3.30815 FT				(95) ROADWAY IMPROVEMENT COST	
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		34.1667 FT		(96) TOTAL PROJECT COST	
(52) DECK WIDTH OUT TO OUT		42.25 FT		(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		33 FT		(114)FUTURE ADT 54000	(115) YEAR FUTURE ADT 2025
(33) BRIDGE MEDIAN - No Median	CODE	2		INSPECTIONS	
(34) SKEW 23°	(35) STRUCTURE FLARED	0		(90) INSPECTION DATE	11/25/2013
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT		(92) CRITICAL FEATURE INSPECTION :	(93) CFI DATE
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		34.1667 FT		A) FRACTURE CRIT DETAIL -	NO A)
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT		B) UNDERWATER INSP -	NO B)
(54) MIN VERT UNDERCLEAR REF Highway		15.833 FT		C) OTHER SPECIAL INSP	NO C)
(55) MIN LAT UNDERCLEAR RT REF Highway		1 FT		SCOUR	
(56) MIN LAT UNDERCLEAR LT REF -		1 FT			
NAVIGATION DATA					
(38) NAVIGATION CONTROL - No Navigational Control	CODE	0			
(111)PIER PROTECTION -	CODE				
(39) NAVIGATION VERTICAL CLEARANCE		0			
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR	FT				
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT			

Structure No: 910213

County: WAKE

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Nuner of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1							
													Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway Designator	Direction of Traffic	Highway System of Route
	6	5	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
4	US401S	21004010	14.92		0			12	2	27000	2011	34.75	H	14.83	2.00	2.00	9	0	1	1
5	US401N	27004010															9			
6	US401N	27004010	15.92		0			12	1	13500	2011	17.75	H	15.83	1.00	1.00	9	0	1	1

Note 1: Items 54, 55, and 56 are not reported FHWA under route data points but are collected for each under route to determine the minimum value for Underclearance Appraisal Item 69. The under route that generates the lowest Underclearance Appraisal value will be reported on the Facility Carried record.

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 01/06/2014

COUNTY : WAKE DIVISION : 5 DISTRICT : 1 STRUCTURE NUMBER : 910213 LENGTH : 261 FEET

ROUTE CARRIED : US70 FEATURE INTERSECTED : US401

LOCATED : 0.3 MI.E. SR1793 BRIDGE NAME : CITY : RALEIGH

FUNC. CLASS : 14 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 27000 2011 RAIL TYPE : LT 201 RT 201

BUILT : 1954 BY : SHC PROJ : 4863 FED.AID PROJ : U-694(3) DESIGN LOAD : H 15

REHAB : BY : PROJ : ALIGNMENT : RT. SKEW : 67 LANES : ON 2 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 33 FT WATER DEPTH : 1 FT

SUPERSTRUCTURE : REINFORCED CONCRETE DECK GIRDERS

SUBSTRUCTURE : E.BTS&INT.BTS:2,3 & 5 RC CAP ON H-PILES;INT.BTS:RCP&B

SPANS : 1@49';1@47'6";1@45'6";1@36';1@42';1@40'6"

BEAMS OR GIRDERS : 6 LNS.1'6X2'4.5 REINF.CONC.DECK GIRDERS @ 7'6"CENTERS

FLOOR : 7RC/3.75 AWS ENCROACHMENT : DECK (OUT TO OUT) : 42.25 FT

CLEAR ROADWAY : 34.1667 FT BETWEEN RAILS : 40.333 FT SIDEWALK OR CURB : LT 3.30815 FT RT 3.30815 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-9 OPE.RTG. : HS-16 CONTR.MEMBER : Ext RCDG A G1 POSTED : SV 22 TTST 26 DATE 01/06/2014

SYSTEM : Primary U.S. Route GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
4	US401S	14.9170	14.8330	34.75	2	2
6	US401N	15.9160	15.8330	17.75	1	1

Note: All measurements are in feet.

REMARKS :

# BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection  
 BRIDGE NO. 910213 COUNTY WAKE ROUTE US70 OVER US401  
 STRUCTURE TYPE REINFORCED CONCRETE DECK GIRDERS  
 ROUTE ORIENTATION W - E SPANS 1@49';1@47'6";1@45'6";1@36';1@42';1@40'6"

EVALUATION CODES: CRITICAL (C, 0 - 3); POOR (P, 4); FAIR (F, 5, 6); GOOD (G, 7 - 9)

INSPECTION ITEM				ITEM 61		
DECK ITEMS		GRADES				
1. WEARING SURFACE		F		45. CHANNEL & CHANNEL PROT.	a. WATERWAY	G
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58		6 F			b. ALIGNMENT	G
a. CONCRETE		6 F			c. SCOUR	G
b. TIMBER					d. SLOPE PROT., RIP-RAP, DIKES, ETC.	
c. STEEL PLANK				50. APPROACH ROADWAY CONDITION		G
d. OPEN GRID				51. APPROACH SLABS		
3. RAILING		F		52. PAINT SYSTEM CODE		
a. CONCRETE				53. UTILITIES		
b. TIMBER				54. RESPONSE TO LIVE LOAD		G
c. ALUMINUM				55. ESTIMATED REMAINING LIFE		3
d. STEEL						
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS		F		60. REGULATORY SIGN NOTICE ISSUED		NO
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)		F		61. PROMPT-ACTION NOTICE ISSUED		YES
6. DECK EXP JTS. OR DEVICES. NO. OF EACH		a. STEEL PL OR FINGER		62. PRESENTLY POSTED		YES
b. MISC PREFAB				63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)		6
c. COMPRESSION SEAL				64. TOTAL SNOOPER INSP. TIME (HRS)		0
d. STANDARD JOINTS		5 F		65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)		0
e. OPEN JOINTS						
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)		G		70. SI&A GENERAL CONDITION RATINGS		
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59				a. DECK	ITEM 58	5
10. LONGITUDINAL BEAMS OR GIRDERS		P		b. SUPERSTRUCTURE	ITEM 59	4
11. LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE	ITEM 60	4
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S		F		d. CHANNEL & CHANNEL PROT.	ITEM 61	7
13. END DIAP'S, CURTAIN WALLS, & CONN'S		P		71. SI&A FIELD APPRAISAL RATINGS		
14. FLOOR BEAMS AND CONNECTIONS				a. WATERWAY ADAQUACY		7
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)		P		b. APPR. RDWY. ALIGNMENT		6
16. DRAINAGE SYSTEM (ON STRUCTURE)		F				
17. MOVABLE SPAN MACHINERY				72. FIELD SCOUR EVALUATION		G
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)				USE OF INSP. ACCESSIBILITY EQUIPMENT		
35. TIM SUB STR.		a. ABUT. & INT. BENT CAPS & RISERS		SNOOPER (CODE S, 4, OR N)		HRS NO
b. PILES, POST, SILLS, & BRACING				LADDER		NO
c. BULKHEADS, WING'S, & TIE BACKS				BUCKET TRUCK		NO
36. CONC SUB STR.		a. ABUT. & INT. BENT CAPS		BOAT		NO
b. ABUT. & BENT COL'S BREASTWALLS		P		OTHER		NO
c. ABUT. & INT. BENT PILES		P				
d. BACKWALLS, WING'S, RETAIN. WALLS		F				
e. ABUT. & BENT FOOTINGS & SILLS						
37. STEEL SUB STR.		a. ABUT. & INT. BENT CAPS & RISERS		SPECIAL INSPECTION REQUESTED FOR		
b. PILES, BRACING, AND BULKHEADS						
38. FOUNDATION PILES TYPE MATERIAL				NOTE		
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)		F				
40. FENDER SYSTEMS				80. INSPECTED BY:		<i>Richard J. Brown</i>
41. DRIFT		G		81. REVIEWED BY:		



NC DEPARTMENT OF TRANSPORTATION ATTENTION  
 DIVISION OF HIGHWAYS  
 BRIDGE MANAGEMENT UNIT

# BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY WAKE BRIDGE NUMBER 910227 INSPECTION CYCLE 2 YRS  
 ROUTE US70 ACROSS PEACE ST. M.P. 0

0.2 OF A MILE NORTH OF SR-1513

LOCATION 0.2 MI N SR 1513

SUPERSTRUCTURE RC DECK ON CONT I-BEAMS

SUBSTRUCTURE EBTS:RC CAP/H-PILES @8'6";IBTS:RCP&B/PILE FTGS.

1 @ 42'6" ; 1 @ 52' ; 1 @ 42'6" CONT.

SPANS 1@42'6";1@52";1@42'6" CONT.

LONGITUDE 78° 38' 34.51" LATITUDE 35° 47' 18.15"

INSPECTION DATE 10/23/2013 PRESENT CONDITION FAIR

PRESENT POSTING N NOT POSTED PROPOSED POSTING \_\_\_\_\_

OTHER SIGNS PRESENT \_\_\_\_\_



LOOKING NORTH

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>No</u>

SIGN NOTICE ISSUED FOR	NUMBERED REQUIRED
<u>No</u> WEIGHT LIMIT	_____
<u>No</u> DELINEATORS	_____
<u>No</u> NARROW BRIDGE	_____
<u>No</u> ONE LANE BRIDGE	_____
<u>No</u> LOW CLEARANCE	_____

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	910227		SUFFICIENCY RATING =			43.92
(8) STRUCTURE NUMBER(FEDERAL)		000000001830227		STATUS =	Structurally Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		21000700					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1					
(3) COUNTY CODE	183	(4) PLACE CODE	55000	(112)NBIS BRIDGE SYSTEM -			YES
(6) FEATURE INTERSECTED -	PEACE ST.			(104)HIGHWAY SYSTEM	Is not on NHS		0
(7) FACILITY CARRIED	US70			(26) FUNCTIONAL CLASS -	Arterial - Other		12
(9) LOCATION	0.2 MI N SR 1513			(100)STRAHNET HIGHWAY -	Not a STRAHNET Route		0
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure		N
(16)LAT	35° 47' 18.15"	(17)LONG	78° 38' 34.51"	(102)DIRECTION OF TRAFFIC -	2-way Traffic		2
(98)BORDER BRIDGE STATE CODE		PCT SHARE		(103)TEMPORARY STRUCTURE -			
(99)BORDER BRIDGE STRUCTURE NO				(110)DESIGNATED NATIONAL NETWORK -	On the National Network		1
				(20) TOLL	On Free Road		3
				(31) MAINTAIN -	State Highway Agency		01
				(22) OWNER -	State Highway Agency		01
				(37) HISTORICAL SIGNIFICANCE -	Not Eligible		5
STRUCTURE TYPE AND MATERIAL				CONDITION			
(43) STRUCTURE TYPE MAIN:	Steel Continuous			(58) DECK			4
TYPE -	Stringer Mutlibeam or Girder	CODE	402	(59) SUPERSTRUCTURE			5
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE			5
TYPE -		CODE	000	(61) CHANNEL & CHANNEL PROTECTION			N
(45) NUMBER OF SPANS IN MAIN UNIT			3	(62) CULVERTS			N
(46) NUMBER OF APPROACH SPANS				LOAD RATING AND POSTING			
(107)DECK STRUCTURE TYPE -	1	CODE		(31) DESIGN LOAD	H 15		2
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(63) OPERATING RATING METHOD -	Load Factor		1
(A) TYPE OF WEARING SURFACE -		CODE		(64) OPERATING RATING -	HS-28		50
(B) TYPE OF MEMBRANE -		CODE		(65) INVENTORY RATING METHOD -	Load Factor		1
(C) TYPE OF DECK PROTECTION -		CODE		(66) INVENTORY RATING -	HS-17		30
				(70) BRIDGE POSTING -	No Posting Required		5
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED			A
				DESCRIPTION -	Open, No Restriction		
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT			1948	(67) STRUCTURAL EVALUATION			5
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY			2
(42) TYPE OF SERVICE : ON -	Highway - Pedestrian			(69) UNDERCLEARANCES,VERTI & HORIZ			3
UNDER - Highway		CODE	51	(71) WATERWAY ADEQUACY			N
(28) LANES: ON STRUCTURE	6 UNDER STRUCTURE		4	(72) APPROACH ROADWAY ALIGNMENT			8
(29) AVERAGE DAILY TRAFFIC			42000	(36) TRAFFIC SAFETY FEATURES			0000
(30) YEAR OF ADT	2011	(109) TRUCK ADT PCT	12%	(113)SCOUR CRITICAL BRIDGES			N
(19) BYPASS OR DETOUR LENGTH			3 MI	PROPOSED IMPROVEMENTS			
GEOMETRIC DATA				(75) TYPE OF WORK -			CODE
(48) LENGTH OF MAXIMUM SPAN			51 FT	(76) LENGTH OF STRUCTURE IMPROVEMENT			
(49) STRUCTURE LENGTH			137 FT	(94) BRIDGE IMPROVEMENT COST			
(50)CURB OR SIDEWALK: LEFT	5 FT RIGHT		5 FT	(95) ROADWAY IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			68.25 FT	(96) TOTAL PROJECT COST			
(52) DECK WIDTH OUT TO OUT			81.25 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			66 FT	(114)FUTURE ADT	84000	(115) YEAR FUTURE ADT	2025
(33) BRIDGE MEDIAN -	No Median	CODE	2	INSPECTIONS			
(34) SKEW	12°	(35) STRUCTURE FLARED	0	(90) INSPECTION DATE			10/23/2013
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT	(92) CRITICAL FEATURE INSPECTION :			(93) CFI DATE
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			33.125 FT	A) FRACTURE CRIT DETAIL -	NO		A)
(53) MIN VERT CLEAR OVER BRIDGE RDWY			999.9 FT	B) UNDERWATER INSP -	NO		B)
(54) MIN VERT UNDERCLEAR REF	Highway		14.2 FT	C) OTHER SPECIAL INSP	NO		C)
(55) MIN LAT UNDERCLEAR RT REF	Highway		2.5 FT	SCOUR			
(56) MIN LAT UNDERCLEAR LT REF -			0 FT	NAVIGATION DATA			
(38) NAVIGATION CONTROL -	Not Applicable	CODE	N	(99) NAVIGATION VERTICAL CLEARANCE			0
(111)PIER PROTECTION -		CODE		(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR			FT
(39) NAVIGATION VERTICAL CLEARANCE			0	(40) NAVIGATION HORIZONTAL CLEARANCE			0 FT
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR			FT				
(40) NAVIGATION HORIZONTAL CLEARANCE			0 FT				

Structure No: 910227

County: WAKE

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Nuner of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1							
													Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway Designator	Direction of Traffic	Highway System of Route
	6	5	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
2	PEACE ST	5000000	14.3		0			19	4	18000	2011	42.7	H	14.2	2.5		9	0	2	0

Note 1: Items 54, 55, and 56 are not reported FHWA under route data points but are collected for each under route to determine the minimum value for Underclearance Appraisal Item 69. The under route that generates the lowest Underclearance Appraisal value will be reported on the Facility Carried record.

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 11/14/2013

COUNTY : WAKE DIVISION : 5 DISTRICT : 1 STRUCTURE NUMBER : 910227 LENGTH : 137 FEET

ROUTE CARRIED : US70 FEATURE INTERSECTED : PEACE ST.

LOCATED : 0.2 MI N SR 1513 BRIDGE NAME : CITY : RALEIGH

FUNC. CLASS : 12 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 42000 2011 RAIL TYPE : LT 311 RT 311

BUILT : 1948 BY : DOH PROJ : 4858 FED.AID PROJ : U-694(1) DESIGN LOAD : H 15

REHAB : BY : PROJ : ALIGNMENT : TAN. SKEW : 102 LANES : ON 6 UNDER 4

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 0 FT WATER DEPTH : 0 FT

SUPERSTRUCTURE : RC DECK ON CONT I-BEAMS

SUBSTRUCTURE : EBTS:RC CAP/H-PILES @8'6";IBTS:RCP&B/PILE FTGS.

SPANS : 1@42'6";1@52';1@42'6 CONT.

BEAMS OR GIRDERS : 10 LINES VAR.CONT I-BEAMS @ 8'3 CTS.

FLOOR : 7 RC/5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 81.25 FT

CLEAR ROADWAY : 68.25 FT BETWEEN RAILS : 78.25 FT SIDEWALK OR CURB : LT 5 FT RT 5 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-17 OPE.RTG. : HS-28 CONTR.MEMBER : Cont I-Bms Int POSTED : SV TTST DATE 04/23/2009

SYSTEM : Primary U.S. Route GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
2	PEACE ST	14.30	14.20	42.70	0	2.50

Note: All measurements are in feet.

REMARKS :

# BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection  
 BRIDGE NO. 910227 COUNTY WAKE ROUTE US70 OVER PEACE ST.  
 STRUCTURE TYPE RC DECK ON CONT I-BEAMS  
 ROUTE ORIENTATION S - N SPANS 1@42'6";1@52';1@42'6 CONT.

EVALUATION CODES: CRITICAL (C, 0 - 3); POOR (P, 4); FAIR (F, 5, 6); GOOD (G, 7 - 9)

INSPECTION ITEM				ITEM 61				
DECK ITEMS			GRADES					
1. WEARING SURFACE			F	45. CHANNEL & CHANNEL PROT.	a. WATERWAY			
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58			P		b. ALIGNMENT			
a. CONCRETE			3		c. SCOUR			
b. TIMBER					d. SLOPE PROT., RIP-RAP, DIKES, ETC.			
c. STEEL PLANK					50. APPROACH ROADWAY CONDITION			F
d. OPEN GRID				51. APPROACH SLABS				
3. RAILING			F	52. PAINT SYSTEM			V	F
a. CONCRETE				53. UTILITIES				
b. TIMBER				54. RESPONSE TO LIVE LOAD			G	
c. ALUMINUM				55. ESTIMATED REMAINING LIFE			4	
d. STEEL								
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			F					
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)			F	60. REGULATORY SIGN NOTICE ISSUED			NO	
6. DECK EXP JTS. OR DEVICES. NO. OF EACH				61. PROMPT-ACTION NOTICE ISSUED			YES	
a. STEEL PL OR FINGER				62. PRESENTLY POSTED			NO	
b. MISC PREFAB				63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			6	
c. COMPRESSION SEAL				64. TOTAL SNOOPER INSP. TIME (HRS)			0	
d. STANDARD JOINTS			2	F	65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)			0
e. OPEN JOINTS								
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)			F					
				70. SI&A GENERAL CONDITION RATINGS				
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59				a. DECK		ITEM 58	4	
10. LONGITUDINAL BEAMS OR GIRDERS			P	b. SUPERSTRUCTURE		ITEM 59	5	
11. LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE		ITEM 60	5	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S			F	d. CHANNEL & CHANNEL PROT.		ITEM 61		
13. END DIAP'S, CURTAIN WALLS, & CONN'S			F					
14. FLOOR BEAMS AND CONNECTIONS				71. SI&A FIELD APPRAISAL RATINGS				
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)			F	a. WATERWAY ADAQUACY				
16. DRAINAGE SYSTEM (ON STRUCTURE)				b. APPR. RDWY. ALIGNMENT			8	
17. MOVABLE SPAN MACHINERY								
				72. FIELD SCOUR EVALUATION			N	
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)								
35. TIM SUB STR.				USE OF INSP. ACCESSIBILITY EQUIPMENT				
a. ABUT. & INT. BENT CAPS & RISERS				SNOOPER (CODE S, 4, OR N)		HRS	NO	
b. PILES, POST, SILLS, & BRACING				LADDER			NO	
c. BULKHEADS, WING'S, & TIE BACKS				BUCKET TRUCK			NO	
36. CONC SUB STR.				BOAT			NO	
a. ABUT. & INT. BENT CAPS			F	OTHER			NO	
b. ABUT. & BENT COL'S BREASTWALLS			F					
c. ABUT. & INT. BENT PILES								
d. BACKWALLS, WING'S, RETAIN. WALLS			P					
e. ABUT. & BENT FOOTINGS & SILLS								
37. STEEL SUB STR.				SPECIAL INSPECTION REQUESTED FOR				
a. ABUT. & INT. BENT CAPS & RISERS								
b. PILES, BRACING, AND BULKHEADS								
38. FOUNDATION PILES TYPE MATERIAL				NOTE				
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)			G					
40. FENDER SYSTEMS				80. INSPECTED BY:		<i>Richard R. Stinson</i>		
41. DRIFT				81. REVIEWED BY:				