

**PROJECT ENVIRONMENTAL CONSULTATION FORM**

**T.I.P. No. R-2247, U-2579, U-2579A**

**Forsyth County**

**I. General Information**

Consultation Phase: Construction Consultation for R-2247 EB, U-2579 AB, U-2579 Sections D, E, F and U-2579 AA

Project Description: Winston-Salem Northern Beltway  
(From just North of US 158, Reidsville Road to Fisher Branch just South of US 421/I-40 Business)  
WBS No.34839.2.10, FA No. NHF-0918 (93)

Document Type:	DEIS	September 1995
	SDEIS	October 2004
	FEIS	January 2007
	ROD	February 2008

**II. Conclusions**

Since the completion of the above documents, construction and right of way consultations have been completed for different sections.

The above environmental documents have been reevaluated as required by 23 CFR 771. It was determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted below in Section III. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced documents unless noted otherwise herein. Therefore, the original Administrative Action remains valid.

**III. Changes in Proposed Action and Environmental Consequences**

There are no changes in potential environmental effects from those presented in the above documents. Any minor design changes or updated environmental impacts are presented below.

Water resource classifications have not changed since the FEIS was completed. Water resources within the project area are all located within the Yadkin River Basin [US Geological Survey (USGS) Hydrologic Unit 03040101]. The following streams occur within the project study area: Mills Creek, Fivemile Creek, Buffalo Creek, Mill Creek, Ogburn Brach, Trick-Um Creek, Grassy Creek, Rough Fork, and all of their associated unnamed tributaries.

There have been changes to some individual jurisdictional features identified during a Preliminary Jurisdictional assessment (referenced Report, dated January 2016), including inclusion of some features and the removal of other features. The study area for the referenced Preliminary Jurisdictional Determination assessment was larger than the original study area. Neither High Quality Waters (HQW), Water Supplies (WS-I: undeveloped watersheds or WS-II predominately undeveloped watersheds), nor Outstanding Resource Waters (ORW) occur within 1.0 mile of the project study area. No streams within the project study area or within one mile of the project study area are listed on the Final 2014 303(d) list of impaired waters for turbidity and/or sedimentation.

The revisions to the jurisdictional features and the new updated impacts to all sections in this consultation resulted in additional 23204 LF of streams and 9.11 acres of wetland in the study area.

There have been minor changes to the design as follows:

R-2247 EB:

I-74 is a Congressionally Mandated Interstate that is routed along US 52 from Mount Airy to Bethania. In Bethania, I-74 is routed along the Eastern Section of the Winston-Salem Northern Beltway. In order to accomplish routing I-74 along the WSNB, the interchange at US 52 (R-2247EB) had to be revised so that the through move from US 52 goes to the Eastern Section of the WSNB (U-2579). These revisions were documented in the Supplemental Documents that combined both R-2247 and U-2579.

A section of R-2247EB was separated from the project to correct traffic congestion along NC 65 (Bethania-Rural Hall Road). This project (R-2247EC) was a Design-Build project and is under construction.

U-2579 AA:

The temporary pattern for the construction along I-40 will be placed on new location and traffic will be maintained on the existing I-40. The typical section for I-40 was modified to reflect additional widening to the median for another lane to coordinate with some anticipated work along the corridor.

The interchange at Kernersville Road will be converted from a SPUI to a DDI. All these changes are within the study area.

**IV. Federally Protected Species**

As of its most recent update on **July 24, 2015**, the United States Fish and Wildlife Service (USFWS) lists three federally protected species for Forsyth County.

**Federally protected species listed for Forsyth County**

Scientific Name	Common Name	Federal Status	Habit Present	Biological Conclusion
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<i>Glyptemys muhlenbergii</i>	Bog turtle	T(S/A)	No	Not Required
<i>Myotis septentrionalis</i>	Northern long-eared bat	T	Yes	*
<i>Cardamine micranthea</i>	Small-anthered bittercress	E	No	No Effect

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

\*May Affect – NLEB is exempt due to consistency with the 4(d) rule.

#### Northern long-eared bat

The Northern long-eared (*Myotis septentrionalis*) (NLEB) has been assessed. NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule of the ESA for the NELB, USFWS concurrence with this determination is not required. A memo was submitted to USFWS on March 30, 2017, indicating that NCDOT is in compliance with the 4(d) rule for this specie to satisfying Section 7 of the Endangered Species Act (ESA). As the USFWS did not respond within 30 days of notice, NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

The remaining species and their biological conclusions remain valid.

#### **V. List of Environmental Commitments**

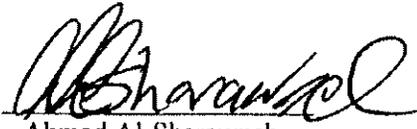
See the attached Project Commitments, Green Sheet, for the environmental commitments developed during the planning and design process of this project.

#### **VI. Coordination**

PDEA Unit personnel have discussed current project proposals with others as follows:

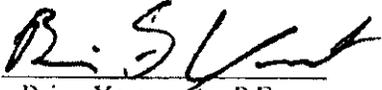
Environmental Specialist	Bill Barrett	Date <u>06-30-17</u>
Roadside Environmental	Mark Staley	Date <u>06-08-17</u>
Hydraulics Unit	Craig Lee	Date <u>06-08-17</u>
Roadway Design	Tatia White	Date <u>06-21-17</u>
Noise & Air Quality	Missy Pair	Date <u>03-28-17</u>
Division Construction Engineer	Right Archer	Date <u>06-26-17</u>
Archaeologist	Caleb Smith	Date <u>06-20-17</u>
Historic Architecture	Mary Pope Furr	Date <u>06-07-17</u>
GeoEnvironmental	Cyrus Parker	Date <u>06-05-17</u>

VII. NCDOT Concurrence



Ahmad Al-Sharawneh  
Project Development Engineer

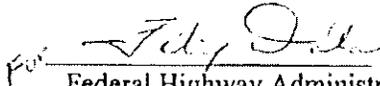
7/7/17  
Date



Brian Yamamoto, P.E.  
Project Development Group Supervisor

7.7.17  
Date

VIII. FHWA CONCURRENCE



Fedy D. Al  
Federal Highway Administrator  
Division Administrator

7-13-17  
Date

## PROJECT COMMITMENTS

**Winston-Salem Northern Beltway  
Forsyth County  
Federal-Aid Project No. NHF-0918 (93)  
WBS No. 34839.2.10  
TIP Project No. R-2247, U-2579**

All commitments developed during the project development and design phase have been incorporated into the design. Current status, changes, or additions to the project commitments as shown in the environmental document for the project are printed in *italic black* font; for the purpose of this consultation, all commitments, which are not pertinent to U-2579 Sections AA, AB, D, E, F and R-2247 EB have been grayed out.

### Project Development, Roadway Design, Division 9:

1. Archaeological site 31FY570\*\*, a historic cemetery, will require avoidance or compliance with North Carolina General Statute, Chapter 70.

*This site is located outside of the Area of Potential Effects (A.P.E.) of these segments, a short distance to the west of R-2247EB.*

2. Temporary construction easements may be needed on the historic Clayton Family Farm property. It has been determined that these temporary easements do not constitute a use under Section 4(f). No permanent right of way will be acquired from the Clayton Family Farm property. All work will be contained in temporary easements, and the encroachment on the property will be minimal. The duration of the temporary encroachment on the Clayton Family Farm property will be shorter than the timeframe for the construction of the project. The land temporarily occupied from the Clayton Family Farm will be fully restored, that is, the Clayton Family Farm property will be returned to a condition that is at least as good as that which existed prior to the project.

*Based on the preliminary plans, temporary easement is required. This commitment will be fulfilled during right of way acquisition and construction.*

3. Eligibility of Site 31FY64 is unknown because archaeologists were denied access to the property. If the site falls within the Preferred Alternative after final design, an assessment would be conducted prior to construction after it is acquired by NCDOT. Currently, the site is adjacent to non-preferred Detailed Study Alternative segment E3.

*This site is located outside of the Area of Potential Effects (A.P.E.) of these*

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**\* Commitments marked by an asterisk (\*) are taken from the Memorandum of Agreement between SHPO, NCDOT, and FHWA regarding addressing the Adverse Effects to historic resources.**

segments, well to the north of U-2579D.

4. A design noise study will be prepared for the selected alternative. The date of public knowledge for noise abatement purposes is the date the Record of Decision (ROD) is signed. Projects let for construction on or after July 13, 2011 shall be reviewed under NCDOT 2011 noise analysis criteria; however, the original date of public knowledge shall remain unchanged.

*Action: The ROD was signed in February 2008. Design Noise Reports based upon preliminary design were completed for U-2579 AB, B & C in 2009. A Revised Design Noise Report based upon final design was completed for U-2579B and approved by FHWA in 2014. A Revised Design Noise Report (DNR) for U-2579C was completed in July 2016 under the 2011 NCDOT Traffic Noise Abatement Policy. An Addendum to the DNR will be prepared in 2017 to reflect additional changes that have occurred during the final design process. The project will not be advertised until the addendum is complete. Revised Design Noise Reports based upon final design of U-2579AA and AB will be completed prior to Project Letting. Design Noise Reports for R-2247EB, U-2579AA, U-2579AB and U-2579D,E&F will be completed during the Final Design Process. All Design Noise Reports are subject to acceptance by NCDOT and FHWA. The original Date of Public Knowledge of February 15, 2008 will remain unchanged for all sections of R-2247 and U-2579.*

*The design noise study for the Project R-2247 portion of the Beltway will include an evaluation of Ronald Reagan High School.*

- \*6. The NCDOT will develop Data Recovery Plans (DRP) for Sites 31FY888, 31FY893\*\*, 31FY901, 31FY902\*\*, 31FY903, 31FY910\*\*, 31FY911 \*\*, 31FY912\*\*, **31FY921, 31FY925\*\***, 31FY944, **31FY1053/1053\*\***, all of which will be affected by the subject project, in consultation with the North Carolina SHPO.

*Sites 31FY921, 31FY925\*\*, and 31FY1053/1053\*\* are located within the A.P.E. of Segments R-2247EB and U-2579D. They will be impacted by the construction, so data recovery plans will be developed and implemented after design is completed and Right-of-Way is acquired.*

- \*7. The NCDOT will ensure that each DRP is implemented after Right-of-Way is acquired or once Right-of-Entry is secured from the property owners and prior to construction activities within the site location as shown in the DRP.

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*Data Recovery Plan will be developed and implemented after design is completed and Right-of-Way is acquired.*

- \*8. As they are developed, each individual DRP will be forwarded for review by the SHPO.

*This commitment will be fulfilled after the completion of the DRP.*

- \*9. Upon completion of each Data Recovery effort, the NCDOT will prepare and forward a Management Summary to the SHPO detailing the results of the Data Recovery field investigations. The Management Summary will contain sufficient information to demonstrate that the field investigation portion of the DRP has been implemented.

*This commitment will be fulfilled after the completion of each data recovery effort.*

- 10. Upon receipt of the Management Summary, the SHPO will respond within ten (10) days to the recommendations contained within the document.

*This commitment will take place after the completion of the DRP.*

- \*11. Upon acceptance of the recommendations contained in the Management Summary, the SHPO will issue the NCDOT documentation that the Data Recovery field investigations have been completed.

*This commitment will be fulfilled after the completion of the DRP.*

- \*12. The analysis and report preparation, detailing Sites 31FY888, 31FY893\*\*, 31FY901, 31FY902\*\*, 31FY903, 31FY910\*\*, 31FY911 \*\*, 31FY912\*\*, **31FY921, 31FY925\*\***, 31FY944, **31FY1053/1053\*\*** will be completed by the NCDOT, or their consultants, within twenty-four (24) months after completion of each site's fieldwork schedule.

*This commitment will be fulfilled after the completion of the DRP.*

### **Roadway Design, Division 9, Right of Way Branch:**

- \*1. In the vicinity of Alexander Hege House, NCDOT in consultation with SHPO will determine the extent of control-of-access fencing, as well as its type, material, and finish. NCDOT will purchase and then install the control-of-access fencing within the NCDOT right-of-way. NCDOT will maintain the control-of-access fencing.

### **Roadway Design, Utility Unit, Division 9, Right of Way Branch, GeoEnvironmental:**

- 1. NCDOT will continue to work with residents of affected communities to develop mitigation strategies for community impacts. The following options will be considered during final design to minimize impacts to communities/subdivisions:

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construction of noise abatement barriers landscaping or vegetative screens based on NCDOT policies and guidelines. These types of options already have been incorporated into the Project R-2247, Project U-2579, and Project U-2579A preliminary engineering designs where practicable, but will be further considered during final design.

*Action: During the final designs, this commitment will be implemented.*

2. During final design for Projects R-2247, U-2579, and U-2579A, all utility providers and railroad operators would be coordinated with to ensure that the proposed design and construction of the project would not substantially disrupt service.

*This is a standard commitment.*

3. The development of this project will be further coordinated with the City of Winston Salem and Forsyth County Parks and Recreation Departments to minimize any conflicts with future parks and greenways planning. Provisions will be considered to maintain the future viability of any impacted proposed greenways.

*Action: Roadway Design coordinated with the city of Winston Salem and avoided any impacts to greenways.*

4. NCDOT will coordinate with the NCDEQ Division of Waste Management regarding sites of concern on this project. Impacted sites will be remediated to the extent necessary to construct the project.

*Action: The GeoEnvironmental Section of the Geotechnical Engineering Unit will coordinate with the Right of Way Branch to provide acquisition recommendations for potentially contaminated parcels. The GeoEnvironmental Section will remove buried fuel tanks and contaminated soil in conflict with the project prior to construction.*

5. NCDOT will consider wildlife crossings where appropriate in the vicinity of stream crossings, which will allow animals to cross under the Beltway.

*Action: No special wildlife crossings are proposed. Opportunities for wildlife to cross exist along streams under bridges and through culverts. Also, small wildlife can use floodplain drains which are provided in the B and C projects.*

6. NCDOT will coordinate with the Town of Kernersville regarding the compatibility of the Beltway design with the proposed Big Mill Farm Road interchange at US 421. This coordination will take place once all relevant design information has been obtained regarding the design of the Big Mill Farm Road interchange.

*Action: Roadway Design coordinated and will continue to coordinate until project completion.*

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7. NCDOT intends to maintain a connection from Northampton Road to Old Walkertown Road. The final design will be developed based on design constraints and cost considerations.

*Action: Current connection will be maintained.*

- \*8. NCDOT will align the Alexander Hege House driveway opposite the new intersection ramp, so property access will be under full traffic control. This will allow NCDOT and the property owner full movement for equipment and trucks.

### **Hydraulics Unit:**

1. 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).

*The Hydraulics Unit will continue to coordinate with the NC Floodplain Mapping Program (FMP) until project completion.*

2. NCDOT will avoid installing bridge bents in creeks to the maximum extent practicable.

*Action: This commitment has been fulfilled and no bridge bents are located in creeks.*

### **Roadside Environmental, Division 9:**

1. During design and construction, efforts will be made to minimize the impact to existing vegetative buffers and natural areas. NCDOT will prepare a post construction landscape design/corridor plan to mitigate construction impacts and integrate enhancements, while remaining sensitive to the environment and to the safety of the traveling public.

*This is standard commitment; post construction plans will be prepared.*

2. NCDOT will incorporate sediment and erosion control measures according to the Design Standards in Sensitive Watersheds for all construction in high quality water (HQW) zones in compliance with 15a NCAC 04B.0124.

*Action: There are no qualifying factors present at this section.*

- \*3 NCDOT will provide tree protection measures along the National Register boundary lines adjoining project construction areas. NCDOT will exercise best management practices to minimize, as practicable, tree trimming and disturbance of existing plantings along the National Register boundary.

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*Action: NCDOT will implement this commitment as described in the concurrence form with SHPO. Properties listed are Alexander Hege House, Samuel Stauber House & Barn John Henry Kapp Farm, Clayton Family Farm Seaver's Gas Station, Hammock Family Farm And John & Charles Fries Day Farm.*

### **Roadway, Hydraulics:**

Generally, 2:1 slopes will be used where possible to minimize culvert length, and NCDOT will shorten culvert lengths where possible and daylight systems between culverts where possible in interchange areas.

*Action: The current plans show side slopes near streams and wetlands are mostly 2:1 to minimize impact.*

### **Right of Way Branch:**

1. NCDOT will work with the property owner of Walker Mobile Home Park off of Bethania-Tobaccoville Road to determine the feasibility of relocating the homes to another area of the parcel.

*This commitment will take place after design is complete and during Right of Way acquisition.*

2. NCDOT will contact the pastor of Mount Pleasant Holiness Church prior to the public hearing and will, if desired, meet with the pastor and members of the church to discuss the impact of Project U-2579 on the church, NCDOT relocation policies, and potential mitigation.

*Action: Since the 2004 SFEIS/SDEIS, NCDOT and consultant staff met with the Pastor and members of Mount Pleasant Holiness Church during the 2005 Public hearings. The church representatives declined to attend an Additional meeting regarding this project or impacts of the Northern Beltway on the church.*

3. NCDOT will contact minority residents of North Oaks subdivision prior to the public hearing and will, if desired, meet with them to discuss the impacts of Project U-2579 on the community, NCDOT relocation policies, and potential mitigation.

*Action: NCDOT and consultant staff met with North Oaks community on November 15, 2004.*

### **Division 9, Construction Unit:**

A pre-construction survey will be done in areas of possible concern regarding structural damage to assess a pre-construction condition.

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*This commitment will be done prior to initiation of construction.*

**Division 9:**

1. During construction for Project U-2579AB, NCDOT will coordinate with the Forsyth County School Board to ensure the safety of those students bicycling and/or walking to Sedge Garden Elementary School. If a portion of school property is needed for a temporary construction easement, that area will be fenced to keep school children out of the construction site. The school property will be restored following construction.

*This commitment will be implemented during construction.*

2. NCDOT will coordinate with local media during the construction of the project to alert the public of traffic restrictions and construction related activities.

*This commitment will be implemented during construction*

3. NCDOT shall not approve any new driveway permits along the property of the historic John Henry Kapp Farm within the right of way for the Preferred Alternative. This condition shall be filed in the NCDOT Division office responsible for driveway permits.

*This commitment will be implemented as described in the concurrence form with SHPO, during construction of the project.*

4. 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.

*This commitment will be fulfilled after the completion of the project.*

**PDEA-NES:**

The biological conclusion for the Northern long-eared bat is Unresolved. Construction authorization will not be requested until ESA compliance is satisfied for the northern long-eared bat.

*Action: NCDOT has determined that the proposed action does not require separate consultation on the grounds, the proposed action is consistent with the final Section 4(d) rule, USFWS concurrence with this determination is not required. A memo was submitted to USFWS on March 30, 2017.*

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