North Carolina Department of Transportation
PROJECT ENVIRONMENTAL CONSULTATION FORM

TIP Projects U-2519AA & AB

I. GENERAL INFORMATION

Consultation Phase	Right of Way/Construction
Project Description	Proposed Fayetteville Outer Loop, from south of SR 1003 (Camden Road) to I-95 south of Fayetteville Robeson and Cumberland Counties
State Project:	34817.1.S5 (U-2519AA) 34817.1.S6 (U-2519AB)
Federal Project:	N/A (U-2519AA) NHP-1118(11) (U-2519AB)
Document Type:	Record of Decision January 19, 2006

II. CONCLUSIONS

The above environmental document has 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 document(s) unless noted otherwise herein. Therefore, the original Administration Action remains valid.

III. CHANGES IN PROPOSED ACTION AND ENVIRONMENTAL CONSEQUENCES

Proposed I-95/Fayetteville Outer Loop Interchange

An interchange justification report was prepared for the proposed interchange with I-95 in August 2016. In a memo dated October 25, 2016, FHWA stated the interchange was acceptable for engineering and operation and that final approval may be given provided the scope and design of the proposed project is consistent with the interchange access request and the approved environmental document. Final approval of the new interchange will be requested following completion of this consultation.

Traffic Forecast/Traffic Capacity Analysis

The traffic forecast for the portion of the proposed Fayetteville Outer Loop from I-95 to south of SR 1400 (Cliffdale Road) (Projects U-2519AA, AB, BA, BB and CA) was updated in June 2015. The design year for the new forecast is 2040, the design year of the forecast presented in the FEIS was 2025. The currently predicted 2040 traffic

volumes are higher than the previous 2025 forecast. Traffic volumes along the proposed Fayetteville Outer Loop within the limits of Projects U-2519AA and AB, from I-95 to south of SR 1003 (Camden Road), are expected to range between 26,500 and 33,100 vehicles per day in the year 2040.

Traffic capacity analyses have been updated for the project based on the June 2015 forecast. In the year 2040, the proposed four-lane freeway is expected to operate at level of service B.

The updated capacity analysis recommends roundabouts, instead of the stop-sign controlled intersections shown on the public hearing map, at the following locations:

U-2519AA

- NC 71 and US 301 intersection
- NC 71 and SR 1118 (Leeper Road) intersection

U-2519AB

- SR 1116 (Old Plank Road) and the proposed Outer Loop interchange ramps
- SR 1116 (Old Plank Road) and SR 1115 (Black Bridge Road) realignment intersection
- SR 1118 (Parkton Road) and the proposed Outer Loop interchange ramps

The current design plans show a roundabout at the NC 71 and US 301 intersection and at the SR 1116 (Old Plank Road) and SR 1115 (Old Black Bridge Road) realignment intersection.

The other locations where roundabout configurations have been recommended may be included in the final design plans that will be completed prior to construction. It is not anticipated the addition of roundabouts will result in additional environmental impacts.

Design

The following changes have occurred in the project design since the preparation of the public hearing map and the signing of the record of decision in 2006. Unless otherwise discussed below, these changes did not result in additional impacts to natural or cultural resources.

I-95/Proposed Outer Loop Interchange

Construction limits for the project on I-95 have been reduced from the limits shown on the public hearing map by approximately 200 feet south of and approximately 250 feet north of the proposed Outer Loop interchange.

The proposed flyover ramp from northbound I-95 onto northbound I-295 and the realignment of SR 1578 (Buckhorn Road) east of I-95 has been shifted closer to I-95. This shift has reduced the amount of right of way required on the east side of I-95 at the proposed Outer Loop interchange and may avoid at least two homes that would have been relocated by the previous design.

SR 1718 (Green Springs Road)

Construction limits have also been extended approximately 400 feet further west on SR 1718 (Green Springs Road) west of the I-95 crossing.

US 301/NC 71

A roundabout is now proposed at the intersection of US 301 with relocated NC 71/SR 1902 (Everett Road). Proposed right of way at this intersection has been reduced, which may avoid relocating one home.

Proposed right of way along relocated NC 71 has been reduced from 130 feet to 65 feet. Proposed right of way along the proposed connector between existing NC 71 and relocated NC 71 has been reduced from 100 feet to 60 feet.

The location of the proposed cul-de-sac to be constructed on existing NC 71 just north of the proposed relocation of NC 71 has been extended approximately 100 feet to the west to connect to an existing driveway.

A cul-de-sac is proposed on existing SR 1902 (Everett Road) approximately 120 feet to the east of its existing intersection with US 301. Everett Road was to be dead-ended near this location, but a cul-de-sac was not shown on the public hearing map. This design change will reduce the amount of right of way required along Everett Road in this area.

Temporary easements instead of permanent right of way will be obtained for the proposed temporary detour for construction of the bridge to carry US 301 over the proposed Outer Loop.

SR 1117 (Brisson Road)

Right of way and control of access shown on the public hearing map along both sides of existing SR 1117 (Brisson Road) at the proposed I-295 crossing is no longer proposed.

Service Roads

The proposed service road and cul-de-sac from SR 1116 (Lake Upchurch Road) located immediately west of the proposed Outer Loop has been extended approximately 800 feet south to provide access to properties that have been split by the proposed project.

The proposed service road connecting Garrison Drive with SR 1116 (Lake Upchurch Road) on the west side of the proposed Outer Loop has been shifted closer to the proposed Outer Loop.

SR 1116 (Old Plank Road)/SR 1115 (Black Bridge Road)

Shared through/right turn lanes are now proposed on the proposed connector between SR 1116 (Old Plank Road) and SR 1115 (Black Bridge Road) at the proposed Outer Loop interchange ramps. The hearing map showed exclusive right turn lanes at these intersections.

The proposed alignment of the Old Plank Road/Black Bridge Road Connector west of the proposed interchange with the proposed Outer Loop has been shifted approximately 50 feet to the south from what was shown on the public hearing map. Proposed right of way for the connector has been reduced from 200 feet to 140 feet west of the proposed Outer Loop and 160 feet east of the proposed Outer Loop.

A roundabout, instead of a stop sign-controlled intersection, is proposed at the intersection of the Old Plank Road connector and realigned SR 1115 (Black Bridge Road). The proposed right of way at this intersection has been widened to accommodate the roundabout and its approaches. This wider right of way will not affect any homes or businesses.

SR 1115 (Black Bridge Road) has been realigned slightly to avoid impacts to a proposed new subdivision.

SR 1118 (Parkton Road)

A temporary easement will be required for the proposed temporary detour for construction of the bridge to carry SR 1118 (Parkton Road) over the proposed Outer Loop.

Proposed right of way along SR 1118 (Parkton Road) east of the proposed Outer Loop interchange has been reduced from 200 feet to approximately 130 feet.

The following changes are expected to be included in the final design. These changes are not reflected in current design plans, but environmental surveys have been conducted in the area of these potential changes:

> Realign SR 1120 (Natural View Drive) approximately 20 feet south of its existing intersection with SR 1118 (Parkton Road) to correct an existing skewed intersection.
>
> Realign SR 1717 (Leeper Road) and its intersection with NC 71 (Fayetteville Road) approximately 400 feet east of the existing intersection to correct a skew. A roundabout is proposed at the new intersection. The proposed improvements resulted from coordination with the Town of Parkton to address their concerns about truck traffic on US 301. Truck traffic will be routed to

access the proposed Fayetteville Outer Loop via the proposed interchange at SR 1716 (Parkton Road) north of Leeper Road.

From the proposed NC 71 roundabout to the proposed SR 1120 (Natural View Drive) intersection improvements, SR 1717 (Leeper Road)/SR 1118 (Parkton Road) will be improved to include 12-foot lanes with a minimum eight-foot shoulders (five-foot paved).

Protected Species

As of December 26, 2012, there have been no additions to the list of federally-protected species for Robeson and Cumberland Counties since completion of the record of decision.

Although not specifically listed for Robeson or Cumberland Counties, the northern long-eared bat (*Myotis septentrionalis*) has been added to the list of federally-protected threatened and endangered species since completion of the record of decision. The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with FHWA, the US Army Corps of Engineers and NCDOT for the northern long-eared bat in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for the northern long-eared bat for the NCDOT program is "May Affect, Likely to Adversely Affect". The PBO provides incidental take coverage for the northern long-eared bat and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Robeson and Cumberland Counties.

The biological conclusions for the other species listed in Robeson and Cumberland Counties have not changed since the record of decision was approved. Protected species surveys were last updated on August 14, 2017.

Traffic Noise

No noise walls were shown on the 2006 design public hearing map for Projects U-2519AA and U-2519AB.

A design noise report will be prepared by the Design-Build Team during final design for the project. Noise abatement will be considered for impacted receptors that existed or had building permits issued prior to the Date of Public Knowledge for the project (January 19, 2006). NCDOT will be responsible for balloting the property owners/residents of all benefited receptors. The Design-Build Team will be responsible for incorporating any feasible and reasonable noise barriers into the final project design.

Air Quality

The summary below regarding mobile source air toxics (MSAT) is consistent with FHWA's *Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents* dated October 18, 2016.

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA assessed this expansive list in its rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS). In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 2011 National Air Toxics Assessment (NATA). These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority MSAT, the list is subject to change and may be adjusted in consideration of future EPA rules.

According to EPA, the latest model MOVES2014 is a major revision to MOVES2010 and improves upon it in many respects. MOVES2014 includes new data, new emissions standards, and new functional improvements and features. It incorporates substantial new data for emissions, fleet, and activity developed since the release of MOVES2010. These new emissions data are for light- and heavy- duty vehicles, exhaust and evaporative emissions, and fuel effects. MOVES2014 also adds updated vehicle sales, population, age distribution, and vehicle miles travelled (VMT) data.

MOVES2014 incorporates the effects of three new Federal emissions standard rules not included in MOVES2010. These new standards are all expected to impact MSAT emissions and include Tier 3 emissions and fuel standards starting in 2017 (79 FR 60344), heavy-duty greenhouse gas regulations that phase in during model years 2014-2018 (79 FR 60344), and the second phase of light duty greenhouse gas regulations that phase in during model years 2017-2025 (79 FR 60344). Since the release of MOVES2014, EPA has released MOVES2014a. In the November 2015 MOVES2014a Questions and Answers Guide, EPA states that for on-road emissions, MOVES2014a adds new options requested by users for the input of local VMT, includes minor updates to the default fuel tables, and corrects an error in MOVES2014 brake wear emissions. The change in brake wear emissions results in small decreases in PM emissions, while emissions for other criteria pollutants remain essentially the same as MOVES2014.

Using EPA's MOVES2014a model, FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period.

Diesel PM is the dominant component of MSAT emissions, making up 50 to 70 percent of all priority MSAT pollutants by mass, depending on calendar year. Users of MOVES2014a will notice some differences in emissions compared with MOVES2010b. MOVES2014a is based on updated data on some emissions and pollutant processes compared to MOVES2010b, and also reflects the latest Federal emissions standards in place at the time of its release. In addition, MOVES2014a emissions forecasts are based

on lower VMT projections than MOVES2010b, consistent with recent trends suggesting reduced nationwide VMT growth compared to historical trends.

Incomplete or Unavailable Information for Project Specific MSAT Health Impact Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects". Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are: cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI. As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA states that with respect to diesel engine exhaust, "[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (https://www.epa.gov/iris)."

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two-step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

For the selected alternative in the record of decision, the amount of mobile source air toxics (MSAT) emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. MSAT emissions will likely be lower than present levels in the design year as a result of the Environmental Protection Agency's (EPA) national control programs that are projected to reduce annual MSAT emissions by over 90 percent from 2010 to 2050.

Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in virtually all locations.

Under the selected alternative there may be localized areas where VMT would increase, and other areas where VMT would decrease. Therefore, it is possible that localized increases and decreases in MSAT emissions may occur. The localized increases in MSAT emissions would likely be most pronounced along the new roadway sections that would be built between I-95 and Camden Road. However, even if these increases do occur, they too will be substantially reduced in the future due to implementation of EPA's vehicle and fuel regulations.

The project is located in Cumberland and Robeson Counties. Both counties have been determined to comply with the National Ambient Air Quality Standards. This project is not anticipated to create any adverse effects on the air quality of this attainment area. This evaluation completes the assessment requirements for air quality of the 1990 Clean Air Act Amendments and the NEPA process, and no additional reports are necessary.

Cultural Resources

Since the completion of the record of decision, additional work is now proposed outside of the earlier area of potential effects. This work involves realigning SR 1717 (Leeper Road) to intersect with NC 71 (Fayetteville Road) approximately 400 feet east of the existing intersection.

Historic Architectural Resources

A NCDOT Architectural Historian surveyed the extended area of potential effects on August 31, 2017 and found no National Register-eligible properties in this area.

Archaeological Resources

In order to maintain methodological consistency throughout the overall Fayetteville Outer Loop corridor, the NCDOT Archaeology Group, or one of its consultants, will conduct archaeological investigations of the proposed survey limits for the proposed Leeper Road realignment prior to any construction activities within this section of the project. No project-related construction activities, including but not limited to geotechnical investigations and/or utility relocations, shall commence within the proposed survey limits for the proposed Leeper Road realignment until the Department is notified field investigations have been completed and consultation with and review by the Office of State Archaeology has occurred. If archaeological resources recommended as eligible for the National Register of Historic Places are discovered and cannot be avoided, then the Department, in consultation with the State Historic Preservation Office,

will develop an archaeological data recovery plan in order to mitigate any adverse impact(s) to the eligible archaeological resource(s).

IV. LIST OF ENVIRONMENTAL COMMITMENTS

NCDOT will implement all practical measures and procedures to minimize and avoid environmental impacts. See attached list of environmental commitments.

V. COORDINATION

Project Management personnel have discussed current project proposals with others as follows:

Design Engineer:	Kanchana Noland	8/8/17 Date
FHWA Engineer:	Ron Lucas	9/13/17 Date
NES Environmental Specialist:	Tyler Stanton	9/28/17 Date

VI. NCDOT CONCURRENCE

DocuSigned by:
08B0E38DDF8141B...

Project Manager — 9/28/2017 | 4:01 PM EDT — Date

VII. FHWA CONCURRENCE

DocuSigned by:
Ronald G. Lucas, Jr.
BBCF736AA18A4FF...

FOR Federal Highway Administration Division Administrator — 9/28/2017 | 4:17 PM EDT — Date

PROJECT COMMITMENTS

FAYETTEVILLE OUTER LOOP

From I-95 to South of SR 1003 (Camden Road)
Robeson and Cumberland Counties
Federal Aid Project: No F/A Number (U-2519AA), NHP-1118(11), (U-2519AB)
WBS Element: 34817.1.S5 (U-2519AA), 34817.S6 (U-2519AB)
TIP Projects: U-2519AA and AB

Commitments Developed through Project Development and Design

Only special project commitments applicable to Projects U-2519AA and AB are listed below. Standard NCDOT practices and special commitments not applicable to Projects U-2519AA and AB are not included on this list. The complete list of project commitments for the entire proposed Fayetteville Outer Loop can be found in the record of decision.

Current status, changes, or additions to the project commitments as shown in the record of decision are printed in *italics*.

Environmental Analysis Unit/Roadway Design/Design-Build Team

Sound barriers corresponding to the preferred alternate will be investigated in more detail in the design study phase of the project.

A design noise report will be prepared by the Design-Build Team during final design for Projects U-2519AA and AB. No noise barriers were previously recommended for these projects. NCDOT will be responsible for balloting the property owners/residents of all benefited receptors The Design-Build Team will be responsible for incorporating any feasible and reasonable noise barriers into the final project design.

Hydraulics/Design Build Team

~~For floodway encroachments, the North Carolina Department of Transportation will coordinate with the community and with the Federal Emergency Management Agency during the design phase of the project.~~

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine whether the Memorandum of Agreement between NCDOT and FMP is applicable or if approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR) will be required for this project.

This project will involve construction activities on or adjacent to FEMA-regulated streams. Therefore, NCDOT Division Six shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structures and roadway embankment located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

The Design-Build Team will be responsible for coordinating the implementation of this commitment.

Geotechnical Design / Design-Build Team

When the final proposed centerline is established and right of way determined, a hazardous materials site assessment will be performed to the degree necessary to determine levels of contamination at any potential hazardous materials sites along the preferred alternate. The assessment will be made prior to right of way acquisition. Resolution of problems associated with contamination will be coordinated with appropriate agencies.

The Design-Build Team will be responsible for addressing this commitment prior to right of way acquisition.

Roadside Environmental/Roadway Design

Measures to minimize visual impacts will be taken into consideration during design of the roadway. Overall, visual impacts may be mitigated through a variety of actions such as alignment modifications during design, landscaping, screening, embankments, and selective clearing of natural materials.

This commitment was implemented during design.

Environmental Analysis Unit/Design-Build Team

If a build alternate is selected as the Preferred Alternative, a detailed archaeological survey of the preferred corridor will be conducted. This survey will be coordinated with the State Historic Preservation Office.

*Projects U-2519AA & AB will affect portions of two National Register of Historic Places eligible archaeological sites. Project U-2519AA will impact a portion of Site 31RB485. Project U-2519AB will impact a portion of Site 31CD967/967**. Archaeological investigations will be conducted at both archaeological sites by NCDOT's Archaeology Group, or one of its consultants, after the Design-Build Team has completed the right of way acquisition for the parcels, or confirmed that additional right of way acquisition is not required, including but not limited to acquiring the proposed right of way, as well as necessary easements to access the archaeological sites.*

The Design-Build Team shall notify the NCDOT Design-Build Unit, in writing, once the right of way and access easements have been obtained for each site or confirmed that additional right of way and/or access easements are not required.

*The Department will require eight weeks from the date of written notification to complete the Data Recovery field investigation for site 31CD967/967** and five weeks from the date of written notification to complete the Data Recovery field investigation for site 31RB485. No project related construction activities, including but not limited to*

geotechnical investigations and / or utility relocations, shall commence on the individual parcels containing the archaeological sites until the Department notifies the Design-Build Team that the Data Recovery field investigations for that parcel are complete.

Environmental Analysis Unit

Several systematic surveys of all potentially suitable habitats for American chaffseed, Michaux's sumac, Pondberry, Rough-leaved Loosestrife, and the Saint Francis' Satyr Butterfly were conducted by biologists from May 2001 through August 2004. No individuals of the species were observed during the surveys. A re-survey will be conducted one year prior to construction, during the appropriate survey window, within the project limits to determine if any members of these species are present.

Updated surveys for Projects U-2519BA and BB were conducted on August 14, 2017.

Roadway Design

A capacity analysis for an updated design year using 2030 traffic volumes will be prepared and utilized in the design of the Final Plans.

The traffic forecast for the portion of the proposed Fayetteville Outer Loop from I-95 to south of SR 1400 (Cliffdale Road) (Projects U-2519AA, AB, BA, BB and CA) was updated in June 2015. The design year for the new forecast is 2040. The June 2015 forecast will be used for design of Projects U-2519AA and U-2519BA.

Commitments Developed through Permitting

Environmental Analysis Unit/Design-Build Team

The permittee shall continue coordination of design for U-2519 Sections AA, AB, BA, BB, CA and CB through the NEPA/Section 404 Merger 01 Process – Concurrence points 2A, 4B and 4C. The final design shall incorporate appropriate avoidance, minimization and mitigation of aquatic resource impacts to the fullest extent practicable. The applicant shall not commence any work within waters of the United States within U-2519 Sections AA, AB, BA, BB, CA and CB until after the submittal of a modified permit application with final design plans reflecting the appropriate avoidance, minimization and mitigation within these sections and has received final approval from Wilmington District Corps of Engineers.

Concurrence point 4B and 4C meetings for Projects U-2519AA and U-2519AB will be the responsibility of the Design-Build Team and will be held after the projects have been awarded to the Team.

Division 6 Construction/Design-Build Team

At locations where ponds will be drained, proper measures will be taken to drain the pond with limited impact to upstream and downstream channel stability as well as to native aquatic species. Proper measures will be taken to avoid sediment release and/or sediment accumulation downstream as a result of pond draining. If typical pond draining techniques will create significant disturbance to native aquatic species, additional measures such as collection and relocation may be necessary to prevent a significant fish kill. NCDOT shall consult with NC Wildlife Resources staff to determine if there are any sensitive species, and the most appropriate measures to limit impacts to these species. The permittee shall observe any natural channel re-establishment, or utilize natural channel construction techniques, to ensure that the jurisdictional stream channel above and below the drained pond remain stable, and that no additional impacts occur within the natural stream channel as a result of draining the pond.

The Design-Build Team will be responsible for implementing this commitment during construction.