North Carolina Department of Transportation

REEVALUATION OF FONSI

TIP Project R-3826

I. GENERAL INFORMATION

a. Consultation Phase: Reevaluation of Environmental Document (Right of Way Phase)

b. Project Description: NC 125 Williamston Bypass from SR 1182 (East College Road) southwest of Williamston to NC 125 northwest of Williamston, Martin County.

c. State Project: 8.1090501
Federal Project: STP-125(1)

d. Document Type: Environmental Assessment (EA) 4/30/2009
Finding of no Significant Impact (FONSI) 1/05/2011

II. CONCLUSIONS

The above environmental document has been reevaluated as required by 23 CFR 771.129(c) 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

Project Design

Several changes have occurred to the project design since completion of the FONSI. At the time of the FONSI, three lanes (two through lanes with a center turn lane) were proposed for the project from SR 1182 (East College Road) to the CSX Transportation rail line. The design has been changed to provide a three-lane roadway from SR 1182 to north of SR 1420 (McCaskey Road). In addition, four-foot paved shoulders are now proposed for portions of the project with shoulders. Two-foot paved shoulders were proposed previously. These changes in the design did not have any additional environmental impacts compared to the impacts presented in the FONSI.

Right of Way and Access Control

The FONSI incorrectly stated the proposed right of way as 100 feet for the portion of the project from SR 1182 to the CSX rail line (See Page 1 and Figure 2 of the FONSI). The current proposed right of way for the section from SR 1182 to US 64A is 120 feet and 110 feet for portions where right of way is to be acquired between US 64A and the CSX rail

line. From north of the CSX rail line to approximately 450 feet south of SR 1420, the proposed right of way has been reduced from 200 feet to approximately 120 feet. From approximately 450 feet south of SR 1420 to existing NC 125 northeast of Williamston, proposed right of way has been reduced from 200 feet to between 150 and 185 feet. This change was made following completion of final surveys, when it was determined that a narrower right of way would be appropriate for the project.

The changes in the proposed right of way described above will result in less impact to properties surrounding the proposed roadway. These changes were shown at the September 2012 design public hearing.

Rare and Protected Species

Since completion of the FONSI, the federally-protected species list for Martin County has been updated as of October 21, 2014. The Atlantic sturgeon has been added to the list as endangered.

A review of potential habitat for the Atlantic sturgeon within the project study area has occurred. No habitat for the Atlantic sturgeon exists in the project area. The proposed project will have no effect on the Atlantic sturgeon.

Relocation of Residences and Business

The number of relocatees for the project has increased from three to four since completion of the FONSI. Since completion of the FONSI, a home has been built on previously vacant land within the proposed right of way for the project. The home owner was informed of the project and did attend the design public hearing, held on September 11, 2012 at Martin Community College in Williamston. Right of Way Branch staff were present at this hearing to answer questions regarding the right of way acquisition process.

Air Quality

Since completion of the FONSI for the project, the qualitative air quality analysis has been updated. This update was performed due to changes in FHWA's guidance regarding mobile source air toxics (MSATs).

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 has assessed this expansive list in their latest 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) (http://www.epa.gov/iris/). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (http://www.epa.gov/ttn/atw/nata1999/). These are acrolein, benzene, 1,3-butidiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene,

and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules. The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines.

According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles travelled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050.

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 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 (http://pubs.healtheffects.org/view.php?id=282). 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 (www.epa.gov/risk/basicinformation.htm#g) and the HEI (http://pubs.healtheffects.org/getfile.php?u=395) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

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.

The science of mobile source air toxics is still evolving. As the science progresses, FHWA will continue to revise and update their guidance. FHWA is working with stakeholders, EPA and others to better understand the strengths and weaknesses of developing analysis tools and the applicability on the project level decision documentation process.

Traffic Noise

NCDOT's Traffic Noise Abatement Policy was updated in July 13, 2011, following completion of the FONSI. The Traffic Noise Analysis presented in the environmental assessment was completed on April 28, 2004 under the 1996 NCDOT Traffic Noise Abatement Policy and found that noise abatement would not be feasible and reasonable for the proposed project. A review of the 2004 study has been conducted to determine whether changes in abatement criteria found in the 2011 NCDOT Traffic Noise Abatement Policy would lead to different recommendations. The assessment found the previous recommendation that noise abatement would not be feasible and reasonable remains valid under the 2011 policy. No additional traffic noise analysis will be required for this project, unless there are substantial project changes.

IV. LIST OF ENVIRONMENTAL COMMITMENTS

NCDOT will implement all practical measures and procedures to minimize and avoid environmental impacts.

See attached greensheet for list of Project Commitments.

V. COORDINATION

PDEA personnel have discussed current project proposals with others. Please note those coordinated with and the date.

FHWA Engineer:	Ron Lucas	10 – 28 – 2014
Division 1 Construction Engineer	Charles Mebane	10 – 23 – 2014
Roadway Design Project Engineer	Gary Lovering	10 – 23 – 2014
NES Environmental Specialist	John Merrit	10 – 1 – 2014
Traffic Noise & Air Quality Engineer	Bobby Dunn	10 – 13 – 2014

VI. NCDOT CONCURRENCE

Project Planning Engineer, Project Development and Environmental Analysis Unit — Date: 11-6-14

FOR Manager, Project Development and Environmental Analysis Unit — Date: 11/6/14

VII. FHWA CONCURRENCE

for Division Administrator, Federal Highway Administration — Date: 11-6-14

PROJECT COMMITMENTS

NC 125 Williamston Bypass

From SR 1182 (East College Road) southwest of Williamston
to NC 125 northwest of Williamston

Martin County

Federal Aid Project STP-125(1)
WBS Element 34553.1.1
TIP Project **R-3826**

Current status, changes, or additions to the project commitments as shown in the environmental document for the project area printed in italics.

NCDOT Rail Division

Formal approval for the at-grade rail crossing for the proposed bypass will be obtained from CSX Transportation prior to construction of this project. The Slade Street and SR 1410 (Cullipher Road) crossings must be closed prior to CSX Transportation granting formal approval for the proposed at-grade crossing for the bypass.

This commitment will be implemented prior to project construction. Informal agreement has been reached with CSX Transportation regarding the proposed at-grade crossing.

NCDOT Roadway Design/Geotechnical Unit/Division One Construction

Steeper side slopes (3:1) will be used in jurisdictional areas.

Project plans show 3:1 side slopes in jurisdictional areas.

Side slopes steeper than 3:1 will be investigated during project design for the UT 3 stream crossing.

Side slopes steeper than 3:1 were investigated, but were determined not to be feasible at the UT 3 stream crossing.

NCDOT Division Office/Area Traffic Engineer

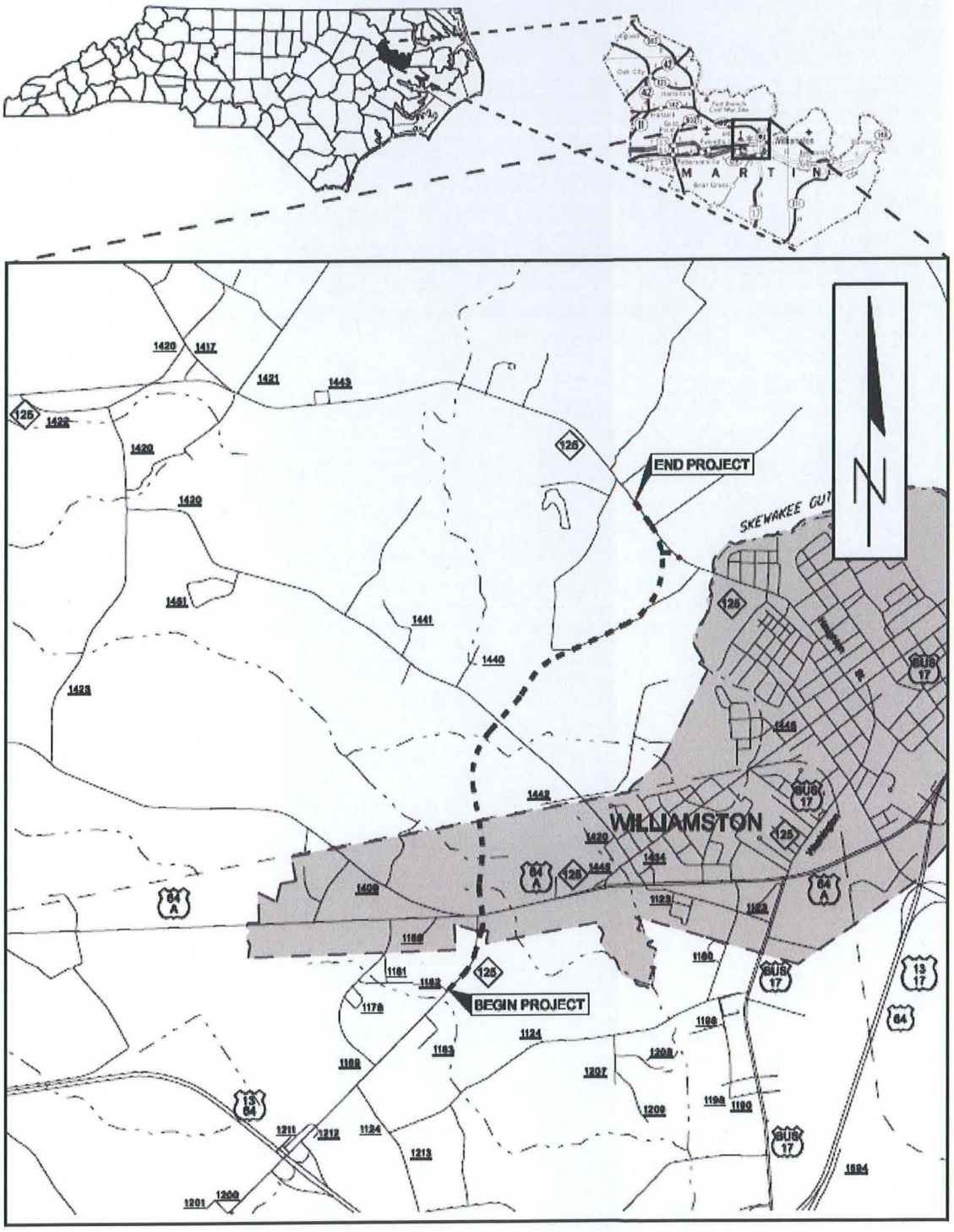
The Area Traffic Engineer will re-evaluate need for a traffic signal at the proposed intersection of the NC 125 Bypass with SR 1420 (McCaskey Road) prior to project construction.

This commitment will be implemented prior to project construction.

NCDOT Location and Surveys Unit

Unmarked graves may exist on property along the east side of existing NC 125 near the northern terminus of the project (Whitley Farm). NCDOT will investigate this area and determine whether or not graves are located within the proposed right of way prior to right of way acquisition.

The presence of unmarked graves along the east side of existing NC 125 near the northern terminus of the project (Whitley Farm) has been investigated. No unmarked graves exist within the existing or proposed right of way.



PROPOSED NC 125 BYPASS

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MILES

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH

NC 125 WILLIAMSTON BYPASS
MARTIN COUNTY
TIP PROJECT R-3826

FIGURE 1