

APPENDIX A

CONCURRENCE FORMS

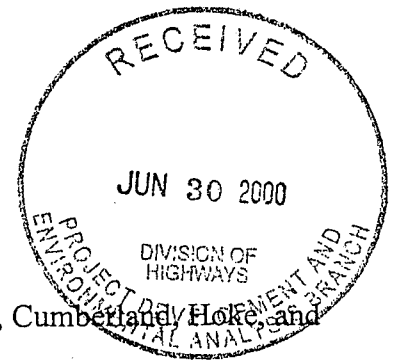
DEPARTMENT OF ARMY, WILMINGTON DISTRICT, CORPS OF ENGINEERS
LETTER OF CONCURRENCE – JUNE 28, 2000

CONCURRENCE POINT NO. 1 – JULY 2000
CONCURRENCE POINT NO. 2 – JULY 2000
CONCURRENCE POINT NO. 3 – OCTOBER 2000
CONCURRENCE POINT NO. 2A – MARCH 16, 2004
CONCURRENCE POINT NO. 4A – MARCH 16, 2004



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

June 28, 2000



IN REPLY REFER TO
Regulatory Division

Action ID No. 199301221 and TIP No. U-2519, Fayetteville Outer Loop, Cumberland, Hoke, and Robeson Counties, North Carolina.

Mr. John Dorney
NCDENR-DWQ
Wetlands Section
1621 Mail Service Center
Raleigh, NC 27699-1621

Mr. Garland Pardue, Field Supervisor
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mrs. Kathy Matthews
Wetlands Section, Region IV
Water Management Division
U.S. Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303

Mr. David Cox, Highway Coordinator
NC Wildlife Resources Commission
1141 I-85 Service Road
Creedmoor, North Carolina 27522

Mrs. Renee Gledhill-Early
State Historic Preservation Office
109 E. Jones Street
Raleigh, North Carolina 27601-2807

Dear Mesdames & Messrs:

This letter is in reference to the proposed project, TIP U-2519, by the North Carolina Department of Transportation (NCDOT) to construct a four-lane, median divided freeway on new location around the City of Fayetteville, from US Highway 401 to I-95 in Cumberland, Hoke, and Robeson Counties, North Carolina.

Shortly following the execution of the Section 404/NEPA Merger Agreement, the Corps of Engineers provided its concurrence on the purpose and need for the subject project in a memorandum dated 2 October 1997, subject: "Integration of the Section 404 and NEPA process-A Team Approach for Transportation Projects in North Carolina". Subsequently, in January 1998 the NCDOT submitted a preliminary DEIS for review. Our comments on this document were provided to the NCDOT in April 1998. By letter dated January 19, 1999, we reaffirmed our earlier concurrence on the purpose and need for the subject project, provided that "freeway on new location" was removed from the purpose and need statement. This letter also provided our concurrence with the alternatives described in the preliminary DEIS provided that the Improve Existing Facilities Alternative is carried forward in the DEIS. This concurrence was contingent upon the understanding that the DEIS will include an analysis of the existing roadways to determine whether or not upgrades to the existing roads would satisfy the purpose and need of the proposed project.

Subsequently, by letter dated May 11, 1999, the NCDOT submitted the DEIS for review followed by several project team meetings held on August 2, 1999 and October 21, 1999. In response to Corps of Engineers comments on the preliminary DEIS, the revised purpose and need statement did not contain "freeway on new location". The purpose of the project team meetings were to discuss the DEIS and to obtain full concurrence on the purpose and need and the alternatives to be carried forward for the proposed project. At the meeting on October 21, 1999, the Corps of Engineers informed NCDOT that eliminating the Upgrade Existing Facilities Alternative from further analysis, as recommended in the DEIS, was contrary to our conditional approval of the DEIS alternatives. Moreover, NCDOT was informed that the analysis of the Upgrade Existing Facilities Alternative was not adequate. In an effort to resolve this issue, a field meeting was held on February 17, 2000 to inspect the proposed Upgrade Existing Facilities Alternative in view of information provided at the previous project team meeting. Based on discussions at the field meeting, the NCDOT agreed to provide additional information, as requested by the Corps of Engineers, on the Upgrade Existing Facilities Alternative. This information was later provided by NCDOT in its letter dated March 16, 2000. The Corps of Engineers has accepted this analysis and concurs with the NCDOT recommendation to eliminate the Upgrade Existing Facilities Alternative from further consideration. On April 6, 2000, the Corps of Engineers issued a public notice on the DEIS and the NCDOT reevaluation of the Upgrade Existing Facilities Alternative.

As you are aware and based on the public notice comments, the project team has not provided full concurrence on the purpose and need and the alternatives to be carried forward for the proposed project. Therefore, in an effort to obtain a final decision on the purpose and need and the alternatives to be carried forward for the proposed project, it is necessary to hold another project team meeting. Prior to this meeting, the NCDOT will be providing responses to your public notice comments. We will then meet to discuss the public notice comments and the NCDOT responses with the intention of obtaining full project team concurrence on purpose and need and the alternatives to be carried forward for the proposed project.

The concurrence meeting of the project team for TIP Project U-2519 is scheduled for 1000 hrs on July 13, 2000 at the Photogrammetry Conference room located at the NCDOT Century Center Complex. It is mandatory that the entire project team attends this meeting. Should you have a scheduling conflict with this date please let me know as soon as possible.

Should you have any questions, please call Mr. David Timpy at the Wilmington Field office at 910-251-4634.

Sincerely,

E. David Franklin
Chief, NCDOT Team

Copies Furnished:

Mr. William D. Gilmore, P.E., Manager
Project Development & Environmental Analysis
1548 Mail Service Center
Raleigh, N.C. 27699-1548 ✓

Mr. Roy Shelton
Federal Highway Administration
310 New Bern Avenue, Room 410
Raleigh, NC 27601-1442

**Section 404/NEPA Merger Project Team Meeting Agreement
Concurrence Pont No. 1 – Purpose and Need**

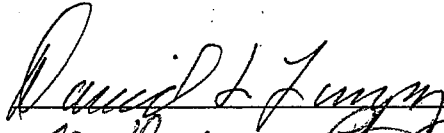
Project No./TIP No./Name/Description:

NCDOT Project No.: 8.2441301, T.I.P. No.: U-2519, FAYETTEVILLE OUTER LOOP, I-95
South of Fayetteville to NC 24-87

Purpose and Need of the Proposed Project: The purpose of the project is to provide an additional transportation corridor on the south, west, and north sides of Fayetteville. The Fayetteville Outer Loop along with the X-2 project and I-95 would form a circumferential transportation facility around the Fayetteville area. See the attached purpose and need document.

The Section 404/NEPA Merger Project Team concurred on the 13th day of July 2000 with the purpose and need for the Fayetteville Outer Loop as stated above and more fully described in the Draft Environmental Impact Statement for the project and Project Team Meeting minutes.

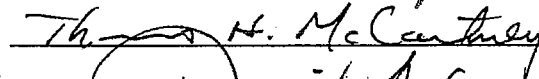
U.S. Army Corps of Engineers



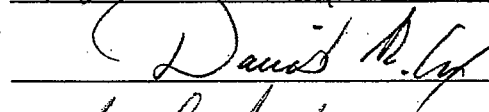
U.S. Environmental Protection Agency



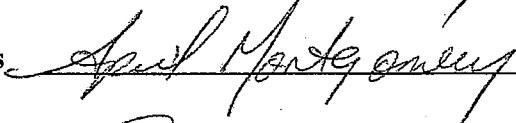
U.S. Fish and Wildlife Services



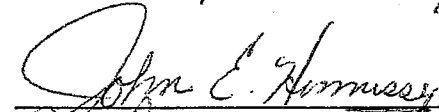
N.C. Wildlife Resources Commission



N.C. Department of Cultural Resources



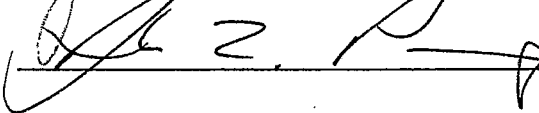
N.C. Department of Environment
and Natural Resources –
Division of Water Quality



Federal Highway Administration



N.C. Department of Transportation



**Section 404/NEPA Merger Project Team Meeting Agreement
Concurrence Pont No. 2
Alternatives to be Studied in Detail in the NEPA Document**

Project No./TIP No./Name/Description:

NCDOT Project No.: 8.2441301, T.I.P. No.: U-2519, FAYETTEVILLE OUTER LOOP, I-95
South of Fayetteville to NC 24-87

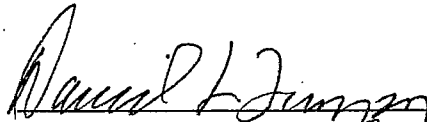
Alternatives to be studied in detail in the NEPA document:

In addition to the No-Build Alternative, the Section 404/NEPA Merger Project Team has concluded that the following thirteen Build Alternates are the alternates to be studied in detail in the NEPA document (Draft Environmental Impact Statement), see the attached narrative and figure:

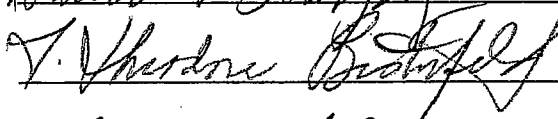
- | | | |
|---------------|---------------|---------------|
| ▪ Alternate B | ▪ Alternate G | ▪ Alternate L |
| ▪ Alternate C | ▪ Alternate H | ▪ Alternate M |
| ▪ Alternate D | ▪ Alternate I | ▪ Alternate N |
| ▪ Alternate E | ▪ Alternate J | |
| ▪ Alternate F | ▪ Alternate K | |

The Section 404/NEPA Merger Project Team concurred on the 31st day of July 2000 with the additional analysis report on the Improve Existing Facilities Alternative and the “alternatives to be studied in detail” in the Draft Environmental Impact Statement for the Fayetteville Outer Loop as named above and described in the Draft Environmental Impact Statement.

U.S. Army Corps of Engineers



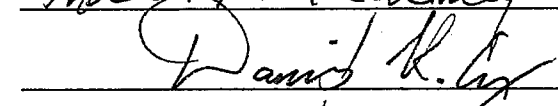
U.S. Environmental Protection Agency



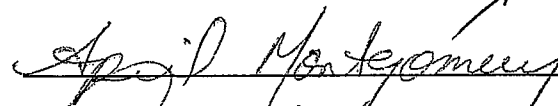
U.S. Fish and Wildlife Services



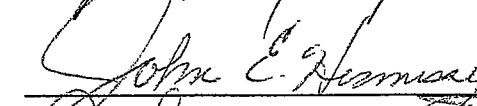
N.C. Wildlife Resources Commission



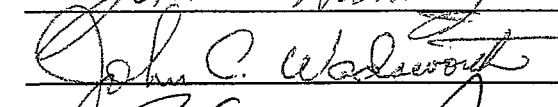
N.C. Department of Cultural Resources



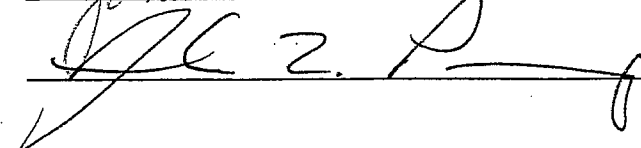
N.C. Department of Environment
and Natural Resources – DWQ



Federal Highway Administration



N.C. Department of Transportation



**Section 404/NEPA Merger Project Team Meeting Agreement
Concurrence Point No. 3
Least Environmentally Damaging Practicable Alternative**

FAYETTEVILLE OUTER LOOP

T.I.P. No.: U-2519

NCDOT Project No.: 8.2441301

Project Description: The Fayetteville Outer Loop consists of constructing a new multi-lane freeway around the southern and western portions of the Fayetteville metropolitan area in Cumberland, Hoke, and Robeson Counties, North Carolina. The project begins in northern Robeson County at an interchange with I-95, continues west through Robeson and Cumberland Counties, turns north through Cumberland and Hoke Counties, turns east along the southern boundary of the Fort Bragg Military Reservation, and ends just west of Ramsey Street (US 401) north of Fayetteville.

The proposed facility is approximately 27 miles (43 kilometers) in length and would be a four-lane divided freeway with full access control. Grade separations or interchanges would be constructed at selected public crossroads. Design elements include a minimum right of way width of 350 feet (110 meters), a depressed median width of either 70 feet (21 meters) or 46 feet (14 meters), and a collector/distributor roadway system between the All American Freeway (SR 1007) and Bragg Boulevard (NC 24).

Least Environmentally Damaging Practicable Alternative: Following review of the detailed studies for the No-Build Alternative and the thirteen reasonable and feasible build alternates presented in the Draft Environmental Impact Statement for the project, the Section 404/NEPA Merger Project Team has concluded that **Alternate D** is the Least Environmentally Damaging Practicable Alternative. Alternate D includes the construction of a four-lane divided freeway on new location along the route described below.

Alternate D:

- Starts at I-95 in Robeson County just south of the Cumberland/Robeson County line and Green Springs Road (SR 1718).
- Runs northwest to an interchange with Leeper Road (SR 1717) then crosses the Cumberland/Robeson County line and the CSX Railroad continuing to an interchange at Lake Upchurch Road (SR 1116).
- Extends north until 0.25 miles (0.40 kilometers) east of Upchurches Pond.
- Heads northwest to an interchange with Camden Road (SR 1003) and turns north crossing King Road (SR 1112) and Stoney Point Road (SR 1100).

- Turns northeast to just south of the Strickland Bridge Road (SR 1140) interchange.
- Extends north to interchange with South Raeford Road (US 401) and continues north between Lake Rim and Reilly Road (SR 1403) to interchanges at Cliffdale Road (SR 1400) and at Morganton Road (SR 1404).
- Travels along the southern boundary of the Fort Bragg Military Reservation to an interchange at Canopy Lane, then crosses Reilly Road (SR 1403) and Yadkin Road (SR 1415) prior to the All-American Freeway (SR 1007) interchange.
- Continues to the east through interchanges at Bragg Boulevard (NC 24) and Murchison Road (NC 87/210) then passes south of Smith Lake to an interchange at McArthur Road (SR 1600).
- Turns northeast and parallels Andrews Road (SR 1611) to an interchange at Ramsey Street (US 401).

The other twelve alternates, including Alternates E, F, G, H, I, J, K, L, M, and N, were eliminated due to their substantial impacts to the human and/or natural environment. In order to systematically review the impacts associated with each alternate, the alternates were compared by grouping the alternates which had the same corridor locations and comparing them to the other corridor locations with common termini. A summary of the evaluation process and the reasons for the elimination of the No-Build Alternative and the twelve build alternates is listed below.

Elimination of the No-Build Alternative:

The No-Build Alternative does not meet the purpose and need for the project. This alternative was retained for evaluation in the Draft Environmental Impact Statement for comparative evaluation purposes. While this alternative would have less disruption to the human and natural environment, a decision for no-action on the project would result in increased congestion on the existing transportation system and inefficient servicing of travel demand in the Fayetteville urban area. Throughout this study there has been little to no public opposition to the proposed improvement. Public sentiment has been directed to a particular alternate for the improvement instead of in support of the No-Build Alternative. Therefore, the No-Build Alternative was eliminated from consideration.

Elimination of Alternates B, F, G, H, and K:

Alternates B, F, G, H, and K directly impact the US Fish & Wildlife Service wildlife refuge and conservation easement area on the former Fumage Farm. The other eight build alternates avoid impacting this wildlife refuge. Comparing the impacts of the alternates and given consideration for Section 4(f) of the US Transportation Act, the Merger Project Team concluded that there are prudent and feasible alternates to avoid the direct impacts of Alternates B, F, G, H, and K on the conservation easement area. Therefore these five alternates were eliminated from further consideration. The remaining eight build alternates included Alternates C, D, E, I, J, L, M, and N.

Elimination of Alternates L, M, and N:

The Shaw-Gillis Historic District is directly impacted by Alternates C, D, E, I, and J. The remaining Alternates L, M, and N avoid this historic resource. In comparing the impacts of these alternates, it was noted that the remaining Section 4(f) impact avoidance Alternates L, M, and N have impacts to both the natural and human environment that are almost always greater than the comparable alternates that impact the historic resource. While these added impacts are not of an extraordinary magnitude, the cumulative effect of these impacts yields these avoidance alternates as imprudent. In addition, following a field visit to the impacted wetland and stream sites, the Project Team concluded that the upstream crossing locations of Alternates L, M, and N would have more substantial impacts to wetlands and streams than comparable wetland and stream crossings associated with Alternates C, D, E, I, and J which impact Shaw-Gillis Historic District. Therefore Alternates L, M, and N were eliminated from further consideration. The remaining five build alternates included Alternates C, D, E, I, and J.

Elimination of Alternates C, I, and J:

During a field review, the Project Team determined that crossing Rockfish Creek and associated wetlands to the east below the dam for Upchurches Pond was a substantially better location than crossing to the west upstream of Upchurches Pond. Based on this factor and other impact factors that were higher for these alternates, the decision was made to eliminate Alternates C and J from further consideration. Alternate I was also eliminated during this field review since it included two crossings of Stewarts Creek and associated wetlands just north of Rockfish Creek. Alternate I also had other impact factors that were higher than the remaining build alternates.

Alternates D and E were retained for additional consideration since they do not cross Stewarts Creek. Alternate D is located parallel to Stewarts Creek and parallel to Rockfish Creek as it passes through Upchurches Pond. Alternate E is removed from Stewarts Creek and Upchurches Pond but does impact a tributary to Little Rockfish Creek that Alternate D avoids.

Elimination of Alternate E:

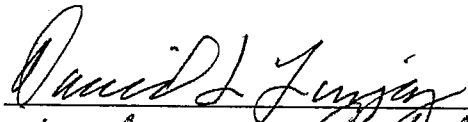
Alternate E was eliminated from further consideration since it has more impacts to the natural environment than Alternate D. Alternate E will impact 12.8 acres more wetlands and 1,320 feet more streams. Alternate E also cost \$944,000 more in wetland and stream mitigation than Alternate D and will have 36 more noise impacts. Therefore Alternate E was eliminated from further consideration and Alternate D remains as the Least Environmentally Damaging Practicable Alternative for the project.

Concurrence Process: The Section 404/NEPA Merger Agreement was signed in May 1997. At that time, progress on this project was well underway since the project began in November 1992. Coordination with the Corps of Engineers and other environmental agencies was an on-going part of the

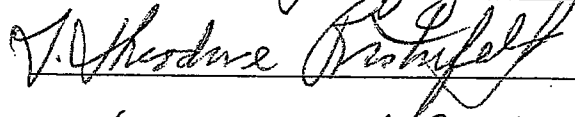
study. The Draft Environmental Impacts Statement was signed and published in March 1999. A Corridor Public Hearing was held on the project on July 13, 1999. There was no public opposition to the concept of a multi-lane freeway on new location for this transportation facility and there was no clear public preference for a particular build alternate. Further coordination with the Section 404/NEPA Merger Project Team was undertaken following the Public Hearing relative to the Least Environmentally Damaging Practicable Alternative. This coordination was through a series of Project Team Meetings at which representatives of the North Carolina Department of Transportation presented comparative evaluations of the detailed study alternatives. A field review meeting was held with the Merger Project Team on September 13, 2000 to review the wetland and stream crossing locations for the build alternates. During this meeting concurrence was reached to eliminate all of the build alternates with the exception of Alternates D and E. A subsequent Project Team meeting was held on October 5, 2000. At this meeting the differences between Alternate D and E were examined in closer detail. The maps and comparative impact tables that were used at these two Team Meetings are included in the project files with the minutes of these meetings.

The Section 404/NEPA Merger Project Team concurred on the 5th day of October 2000 that "Alternate D" is the Least Environmentally Damaging and Practicable Alternative for the Fayetteville Outer Loop.

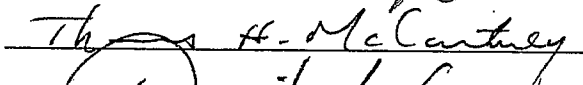
U.S. Army Corps of Engineers



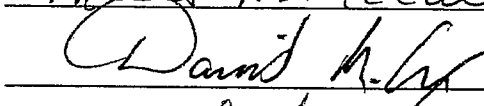
U.S. Environmental Protection Agency



U.S. Fish and Wildlife Services



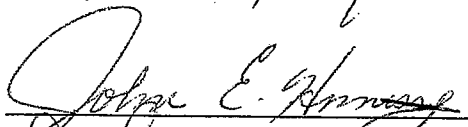
N.C. Wildlife Resources Commission



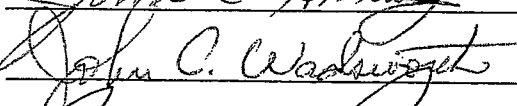
N.C. Department of Cultural Resources



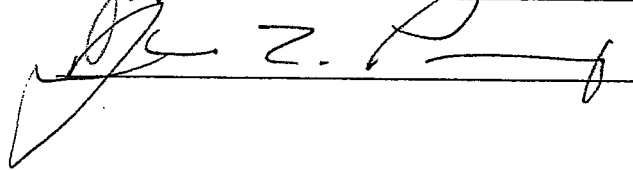
N.C. Department of Environment
and Natural Resources –
Division of Water Quality



Federal Highway Administration



N.C. Department of Transportation



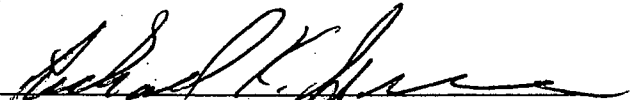
**Section 404/NEPA Merger Project Team Meeting Agreement
Concurrence Point No. 2A –
Bridging Location and Alignment Review**

Project No./TIP No./Name/Description:


FA Project Number: NHF-DPR-0100(001), State Project Number: 8.2441301, WBS Number: 34817.1.2, TIP Project Number: U-2519, FAYETTEVILLE OUTER LOOP, I-95 South of Fayetteville to US 401 (Ramsey Street), Cumberland, Hoke and Robeson Counties, North Carolina

Based on a field meeting with members of the Merger Team on February 9 and 11, 2004, to review wetland and stream crossings of the "least environmental damaging and practicable alternative" and a review of the proposed culvert and bridge recommendations as presented December 17, 2003 and March 16, 2004, the Project Team has concurred on this date of March 16, 2004 with the bridged and culverted locations as shown on the attached.


U.S. Army Corps of Engineers


Richard Spencer


U.S. Environmental Protection Agency


Chris Militscher

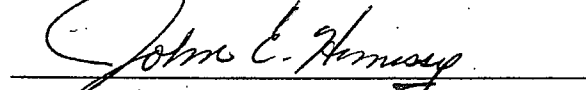
U.S. Fish and Wildlife Service


Gary Jordan

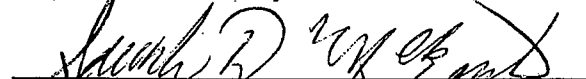
N.C. Wildlife Resources Commission


Travis Wilson


N.C. Department of Environment and
Natural Resources – Division of Water Quality


John Hennessy


N.C. Department of Cultural Resources


Sarah McBride

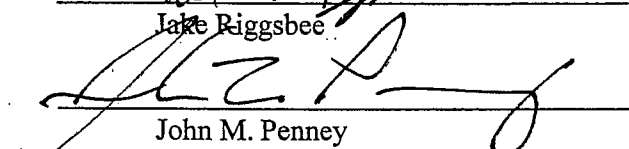
Fayetteville Area MPO


Rick Heicksen

Federal Highway Administration


Jake Riggsbee

N.C. Department of Transportation


John M. Penney

CONCURRENCE POINT NO. 2A

**FAYETTEVILLE OUTER LOOP
I-95 South of Fayetteville to US 401 (Ramsey Street),**

Cumberland, Hoke and Robeson Counties

FA Project Number: NHF-DPR-0100(001)

State Project Number: 8.2441301

T.I.P. Number: U-2519

Project Description: The Fayetteville Outer Loop project is located in the Fayetteville metropolitan area through portions of Cumberland, Hoke, and Robeson Counties, North Carolina. The project is included in the Fayetteville Urban Area Thoroughfare Plan that was adopted in late 1991 and early 1992. The Fayetteville Outer Loop is also an essential part of the Cumberland County adopted Land Use Plan. The study area for this project begins along I-95 in southern Cumberland and northern Robeson Counties, continues west through Cumberland and Robeson Counties, turns north through Cumberland and Hoke Counties, turns east along the southern boundary of the Fort Bragg Military Reservation, and ends just west of Ramsey Street (US 401) north of Fayetteville. The proposed transportation facility is approximately 27 miles (43 kilometers) in length.

Bridging Location and Alignment Review of the Fayetteville Outer Loop: Preliminary Design Plans were provided to the Merger Team members and reviewed at two Merger Meetings. A review of the section of the project south of Cliffdale Road was held on December 17, 2003, and a review of the section project north of Cliffdale Road was held on March 16, 2004. Comments from the December Merger Meeting and two subsequent field meetings were incorporated into the plans provided at the March meeting. As shown on preliminary plans provided at the March 16, 2004, Merger Meeting, bridges will be constructed at the following locations:

South of Cliffdale

Z-61 (stream & wetland)
Z-14 (stream & wetland)
Z-7 (stream & wetland)
Z-6 (stream & wetland)
Z-5 (wetland)

North of Cliffdale

Ba (wetland) L (stream & wetland)
Cg (stream & wetland) D (wetland)
G2a (wetland) 55 (stream & wetland)
G3 (stream & wetland) 54* (stream & wetland)

Notes: *Bridge proposed to provide pedestrian access to a school rather than for wetland/stream protection.

Based on the March 16, 2004, preliminary plans provided to the Merger Team Members, the following provisions requested by the Team Members will be incorporated into the preliminary and right of way plans:

- Site Z-61 bridge will be extended and the retaining wall will be removed.
- Site B Fort Bragg access road will have a box culvert to carry infrequent heavy truck traffic for logging and fire management.
- Site C Fort Bragg patrol road and bridge were eliminated because a patrol road is not needed in this location.
- Site O will not be bridged. Instead, equalizer pipes and a box culvert with wildlife crossing will be used. Mitigation onsite is preferred.
- Site L will include a separate Fort Bragg patrol road bridge.
- Site A will have a double barrel box culvert to meet hydraulic needs and provide for wildlife crossing.
- Site 53 will not be bridged. The required structure, a less than 72 inch pipe, will be used.

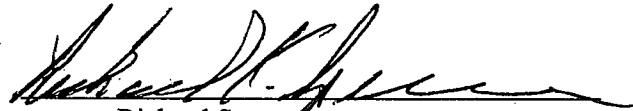
**Section 404/NEPA Merger Project Team Meeting Agreement
Concurrence Point No. 4A –
Avoidance and Minimization**

Project No./TIP No./Name/Description:

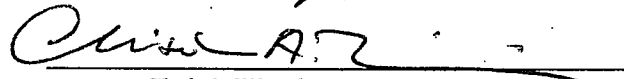
FA Project Number: NHF-DPR-0100(001), State Project Number: 8.2441301, WBS Number: 34817.1.2, TIP Project Number: U-2519, FAYETTEVILLE OUTER LOOP, I-95 South of Fayetteville to US 401 (Ramsey Street), Cumberland, Hoke and Robeson Counties, North Carolina

Based on a field meeting with members of the Merger Team on February 9 and 11, 2004, to review wetland and stream crossings of the "least environmental damaging and practicable alternative" and a review of the proposed culvert and bridge recommendations as presented December 17, 2003 and March 16, 2004, the Project Team has concurred on this date of March 16, 2004 with the bridged and culverted locations as shown on the attached.

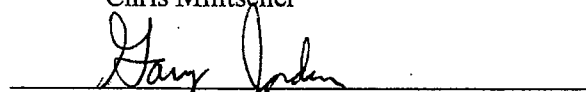
U.S. Army Corps of Engineers


Richard Spencer

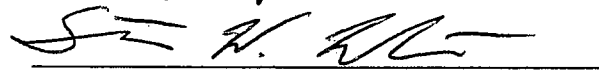
U.S. Environmental Protection Agency


Chris Militscher

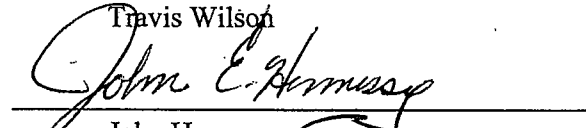
U.S. Fish and Wildlife Service


Gary Jordan

N.C. Wildlife Resources Commission


Travis Wilson

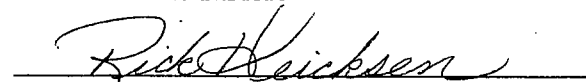
N.C. Department of Environment and
Natural Resources – Division of Water Quality


John Hennessy

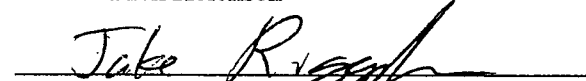
N.C. Department of Cultural Resources


Sarah McBride

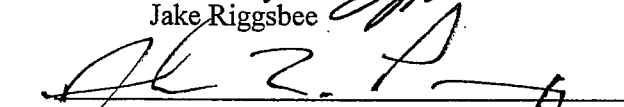
Fayetteville Area MPO


Rick Heicksen

Federal Highway Administration


Jake Riggsbee

N.C. Department of Transportation


John M. Penney

CONCURRENCE POINT NO. 4A

FAYETTEVILLE OUTER LOOP I-95 South of Fayetteville to US 401 (Ramsey Street),

Cumberland, Hoke and Robeson Counties

FA Project Number: NHF-DPR-0100(001)

State Project Number: 8.2441301

T.I.P. Number: U-2519

Project Description: The Fayetteville Outer Loop project is located in the Fayetteville metropolitan area through portions of Cumberland, Hoke, and Robeson Counties, North Carolina. The project is included in the Fayetteville Urban Area Thoroughfare Plan that was adopted in late 1991 and early 1992. The Fayetteville Outer Loop is also an essential part of the Cumberland County adopted Land Use Plan. The study area for this project begins along I-95 in southern Cumberland and northern Robeson Counties, continues west through Cumberland and Robeson Counties, turns north through Cumberland and Hoke Counties, turns east along the southern boundary of the Fort Bragg Military Reservation, and ends just west of Ramsey Street (US 401) north of Fayetteville. The proposed transportation facility is approximately 27 miles (43 kilometers) in length.

Avoidance and Minimization of the Fayetteville Outer Loop: Preliminary Design Plans were provided to the Merger Team members and reviewed at two Merger Meetings and two field reviews. A review of the section of the project south of Cliffdale Road was held on December 17, 2003; and a review of the section of the project north of Cliffdale Road was held on March 16, 2004. Comments from the December Merger Meeting and the two subsequent field meetings were incorporated into the plans provided at the March meeting. These plans included avoidance and minimization measures incorporated throughout project planning and design. Specific measures include:

- Site Z-7.5 – a grade separation was removed to minimize wetland, stream, pond, and archaeology impacts.
- Site Z-6 – the bridge was extended to minimize construction impacts to wetlands and streams.
- Site Z-24 – the alignment was shifted to avoid the meandering of Stream Z-14.
- Site Z-24 – the alignment was shifted to follow an existing road to minimize impacts to wetlands and streams. Also, an offsite detour will be used.
- Sites Z-2 and Z-1 – the alignment was shifted east to minimize impacts to wetlands and streams.

- Site Z-26 – use equalizer pipes perpendicularly across and under the proposed service road to assist in maintaining wetland hydrology between the two pieces of the wetland split by the mainline highway and the service road.
- Site Z-28 – the alignment of the service road was shifted west to minimize impacts to wetlands.
- Site Z-41P – the alignment was revised to avoid the pond.
- Site Z-61 – the proposed retaining wall was removed and the bridge lengthened to minimize impacts to wetlands and streams.
- Site Z-59 – ramp alignments were adjusted to minimize impacts to wetlands, and a service road was relocated to avoid impacts to wetlands.
- Site Z-56 – the alignment was shifted south to minimize impacts to wetlands and streams.
- Site Z-9 – a service road was revised to minimize impacts to wetlands and streams outside of the interchange area.
- Site Z-4 – the design was shifted just south of Cliffdale Road to cross wetland Z-4 as perpendicular as possible and to minimize impacts to wetlands and streams at Sites Z-2 and Z-1.
- Sites B and C – the proposed interchange at Morganton Road was eliminated to minimize impacts to wetlands and streams.
- Sites B and C – the corridor was shifted west to minimize impacts to wetlands.
- Retaining walls were added to avoid the Lake Rim Recreational Area and the Shaw-Gillis Historic District.
- Sites D and A – the corridor was shifted south to minimize impacts to wetlands.
- An existing soil road was used for the relocation of Smith Lake Road to minimize impacts to wetlands and red-cockaded woodpecker habitat.
- The alignment was shifted north to avoid the Keithville Rental Units Property.
- Between Cliffdale Road and Yadkin Road and west of Murchison Road, the median width was reduced from 70 feet to 46 feet to minimize impacts to wetlands, streams, and red-cockaded woodpecker habitat.
- Throughout the corridor, existing alignments and existing Fort Bragg patrol roads/tank trails were used where possible.
- Bridges are proposed at 12 wetland/stream crossings to avoid and minimize impacts to wetlands and streams. An additional bridge, at site 54, is proposed to provide pedestrian access to a school.

Based on the March 16, 2004, preliminary plans provided to the Merger Team Members, the following additional avoidance and minimization measures requested by the Team Members will be incorporated into the preliminary and right of way plans:

- Vegetative screening will be provided at the Keithville Rental Units Property

APPENDIX B

IMPROVE EXISTING FACILITIES ALTERNATIVE

March 2000

IMPROVE EXISTING FACILITIES ALTERNATIVE

Fayetteville Outer Loop Corridor Study

Cumberland, Hoke, and Robeson Counties

Project No. 8.244.1301 (U-2519)

The Improve Existing Facilities Alternative has been addressed throughout the Fayetteville Outer Loop Corridor Study. The Draft Environmental Impact Statement (DEIS) for this project was signed on March 17, 1999 and was circulated for comments. The Improve Existing Facilities Alternative was addressed in this document on pages II-4 through II-7 and on pages II-24 through II-29 as Corridor Segment OG2 for the northern portion of the project between Cliffdale Road (SR 1400) and Ramsey Street (US 401). The Improve Existing Facilities Alternative was also addressed in the Preliminary Alternatives Technical Memorandum for the project that was published in December 1995. Corridor Segment OG2 was developed more fully than the remainder of the Improve Existing Facilities Alternative because of issues related to the endangered Red-cockaded woodpecker and to the suitable managed habitat for the woodpecker associated with the southern portion of the Fort Bragg Military Reservation (commonly referred to as the Fort Bragg Greenbelt).

The US Army Corps of Engineers has requested a more extensive evaluation of the Improve Existing Facilities Alternative for the portion of the project south of Cliffdale Road (SR 1400). This letter summarizes the additional evaluation and provides support for the Department of Transportation's position that the Improve Existing Facilities Alternative, in total or in part, is not a reasonable and feasible solution for this project.

DESCRIPTION OF ALTERNATIVE

Through recent coordination with the Corps of Engineers, the southern portion of the Improve Existing Facilities Alternative has been modified from what is reported in the DEIS. This modification was done to enhance the viability of the alternative. The following is a description of the route for the Improve Existing Facilities Alternative. This route is depicted on the attached Exhibit A.

- Begin along Green Springs Road (SR 1718) in Robeson County and continue to the west on new location through a new interchange with I-95 located south of the Cumberland/Robeson County line and Green Springs Road (SR 1718).
- Continue westward on new location to the at-grade intersection of US 301 and NC 71.
- Follow NC 71 to the west toward Parkton.
- Near the northern Parkton City Limits where NC 71 turns to the south, continue westward on new location crossing an overpass with the CSX Railroad, and continuing to the west side of Parkton.
- West of Parkton, the alignment turns to the northwest and a new at-grade connection to NC 71 is provided to redirect through traffic around Parkton.
- Continue to the northwest joining Davis Bridge Road (SR 1713) at-grade.
- Follow Davis Bridge Road (SR 1713) to the Robeson/Hoke County line and continue on Rockfish Road (SR 1406) in Hoke County.
- At Rockfish Creek, Rockfish Road (SR 1406) turns to the north toward the town of Rockfish.
- Follow Rockfish Road (SR 1406) to just south of the intersection with Barefoot Road (SR 1424) where Rockfish Road (SR 1406) turns to the northwest into Rockfish.

- Continue in a northerly direction on new location passing east of Rockfish, over a grade-separation with the Aberdeen and Rockfish Railroad, and connecting with Gillis Hill Road (SR 1102) at the Hoke/Cumberland County line.
- Follow Gillis Hill Road (SR 1102) in a northerly direction to near the crossing of Little Rockfish Creek.
- Just south of Little Rockfish Creek turn northeasterly on new location to cross Bones Creek, South Raeford Road (US 401), and Raeford Road (SR 3569) before connecting with Reilly Road (SR 1403). In this area the alignment will be located to avoid impacting the Lake Rim Recreational Area and a new Cumberland County Park while minimizing impacts to the Shaw-Gillis Historic District. The alignment joins Reilly Road (SR 1403) north of Raeford Road (SR 3569).
- Follow Reilly Road (SR 1403) northward past Clifffdale Road (SR 1400) to Morganton Road (SR 1404).
- Turn eastward on Morganton Road (SR 1404). From this point on, the Improve Existing Facilities Alternative follows the Fort Bragg Greenbelt avoidance Corridor OG2.
- Turn northward at Bonanza Road (SR 1408) to Santa Fe Drive (SR 1437).
- Turn northeast following Santa Fe Drive (SR 1437) and continue across the existing interchange at All American Freeway (SR 1007) to Bragg Boulevard (NC 24).
- East of Bragg Boulevard, Santa Fe Drive (SR 1437) becomes Shaw Road (SR 1437).
- Continue northeastward along Shaw Road (SR 1437) between Bonnie Doone and Kornbow Lakes.
- East of the lakes, where Shaw Road (SR 1437) turns from eastward to northeastward, continue easterly on new location to align with Shaw Mill Road (SR 1614) at Murchison Road (NC 87/210).
- Follow Shaw Mill Road (SR 1614) to Rosehill Road (SR 1615).
- Turn northward on Rosehill Road (SR 1615) and continue to follow this road to McArthur Road (SR 1600).
- After crossing McArthur Road (SR 1600), follow Stacey Weaver Drive (SR 1615) to Ramsey Street (US 401).
- Turn northward on Ramsey Street (US 401) to just south of Andrews Road (SR 1611) to join the alignment of the Fayetteville Outer Loop Project X-2D.
- Turn eastward on the Fayetteville Outer Loop (X-2D).

The Improve Existing Facilities Alternative follows several different existing streets and roadways in the Fayetteville area. For the most part, all of the existing roads north of South Raeford Road (US 401) are four-lane or five-lane urban streets with curb and gutter and adjacent urban development. South of South Raeford Road (US 401), the existing roads that are utilized in this alternative are typically two-lane rural roads with ditches. The land uses along these two-lane roads are generally rural except near Rockfish and Parkton where more urbanized development exists. Because of these differences, the Improve Existing Facilities Alternative also differs through these areas. Therefore, separate consideration is provided for each of these sections of the alternative.

SEGMENT NORTH OF US 401 (SOUTH RAEFORD ROAD)

The Improve Existing Facilities Alternative north of South Raeford Road (US 401) is located almost exclusively within the urbanized area of Fayetteville. For this reason the typical roadway cross section under consideration is a multi-lane urban street with curb and gutter for drainage. Most of the existing streets that are utilized for this alternative are either a four-

lane or five-lane urban cross section. Conversion of these streets to a higher type roadway facility would not be practical because of the existing development adjacent to the streets.

Improvements to the existing urban roadway facilities to accommodate the Improve Existing Facilities Alternative would include:

- Areas of new location roadway to provide continuous alignment connections such as at Reilly Road and at Shaw Mill Road.
- Widening of any remaining sections of two-lane road to accommodate the improved typical section.
- Intersection widening and traffic signal modifications to accommodate added lanes because of increased traffic and added turning maneuvers.
- Additional travel lanes along existing four-lane and five-lane sections to handle added traffic volumes.

The Improve Existing Facilities Alternative is not a reasonable and feasible transportation alternative for north of South Raeford Road (US 401) for the following reasons:

- **Demand Exceeds Reasonable System Capacity** - Projected travel demand in this section of the Fayetteville Outer Loop ranges from 35,000 to 90,000 vehicles per day depending on the location. The urban arterial typical section proposed for the Improve Existing Facilities Alternative in this area is not capable of handling this level of travel demand, particularly in addition to the current 20,000 to 30,000 vehicles per day using these existing streets. The urban arterial would need to be between 8 and 12 lanes wide to accommodate this level of travel demand and the signalized intersection along the arterial would not operate efficiently.
- **Increased Impacts to Adjacent Development** - Improvements needed to implement this alternative will impact existing development including residential areas, commercial establishments, and community facilities. Relocation impacts associated with this alternative would be greater than those associated with the proposed freeway corridor across Fort Bragg.
- **Drinking Water Supply and Registered Heritage Area Affected** - This alternative would cross the Bonnie Doone Watershed/Kornbow Lake Registered Heritage Area between Bonnie Doone and Kornbow Lakes, which are part of the protected public drinking water supply. The Registered Heritage Area is a Red-cockaded woodpecker foraging habitat.
- **Inefficient Traffic Operations and Movements** - Operationally, the inclusion of right-turns and left-turns for the mainline movements along the alternative reduces the effectiveness of the alignment. These turns would be required at Reilly Road (SR 1403) with Morganton Road (SR 1404), at Morganton Road (SR 1404) with Bonanza Drive (SR 1408), at Shaw Mill Road (SR 1614) with Rosehill Road (SR 1615), at Stacey Weaver Drive (SR 1615) with Ramsey Street (US 401), and at Ramsey Street (US 401) with the Fayetteville Outer Loop (X-2D). Improvements at these intersections to eliminate the need for these turns would be prohibitive and impractical because of the impacts to the developed areas adjacent to these existing intersections.
- **Concurrent Use of Major Arterial** - This alternative would require the concurrent use of about two miles of Ramsey Street (US 401) for both traffic along US 401 and traffic along the alternative. Ramsey Street (US 401) is already serving as a principal urban arterial in the transportation network. Combining it with this alternative would require it to serve two functions. This would result in the creation of a bottleneck in the transportation system.
- **Incompatible with Adopted Plans** - This alternative is not compatible with the adopted Cumberland County Comprehensive Plan or the Fayetteville Area Metropolitan Planning Organization Long Range Transportation Plan.

- **Undesirable Access for Military Deployment Requirements** - The Fort Bragg Military Reservation is not directly served by the Improve Existing Facilities Alternative, and the reduction in the type of roadway facility does not provide the kind of access required for the efficient movement of troops, equipment, and arms in the event of deployment. The possibility of building the Fayetteville Outer Loop Freeway to the All American Freeway (SR 1007) has been suggested as a means of providing free-flow access to Fort Bragg. The Improve Existing Facilities Alternative could then use the All American Freeway (SR 1007) south to Santa Fe Drive (SR1437) to join the remainder of the alternative. However, stopping the Fayetteville Outer Loop Freeway at the All American Freeway (SR 1007) does not provide direct access to the Ammunition Supply Point located on the western portion of the base between Morganton Road (SR 1404) and Cliffdale Road (SR 1400). To reach the Ammunition Supply Point, the freeway could be continued to either Morganton Road (SR 1404) or Cliffdale Road (SR 1400). However neither of these two roads would be the logical terminus for the Fayetteville Outer Loop Freeway, it would be necessary to continue the freeway to the next logical terminus, South Raeford Road (US 401). This would meet Fort Bragg's desire that military deployment have a safe and efficient access for reaching I-95 north of Fayetteville.

For the indicated reasons, the Department of Transportation has determined that the Improve Existing Facilities Alternative between South Raeford Road (US 401 west of Fayetteville) and Ramsey Street (US 401 north of Fayetteville) is not a reasonable and feasible alternative. Therefore, the limits for the Improve Existing Facilities Alternative have been modified as shown in Exhibit B. Separate connections north of the town of Rockfish are provided for this alternative to meet the two freeway corridors under consideration for the Fayetteville Outer Loop.

SEGMENT SOUTH OF US 401 (SOUTH RAEFORD ROAD)

The Improve Existing Facilities Alternative south of South Raeford Road (US 401) is located almost exclusively within rural areas of Cumberland, Hoke, and Robeson Counties. All of the existing roads that are utilized for this alternative are two-lane rural cross sections with parallel drainage ditches. For this reason the typical roadway cross section under consideration is a multi-lane rural roadway with a 46-foot depressed median and drainage ditches. This roadway alternative would have a 60 mile per hour design speed and would likely be posted at 55 miles per hour. In comparison, the freeway options for the Fayetteville Outer Loop have been developed using a 70 mile per hour design speed and would likely be posted at 65 miles per hour.

The NCDOT Roadway Design Manual provides guidelines for widening existing two-lane rural highways. If a barrier wall is not used, the minimum median width is to be 46 feet. This width is to be used only when significant right of way, terrain, or environmental constraints prohibit the use of the desirable 60-foot median width.

The possibility of an urban roadway typical section was suggested during the field review meeting on February 17, 2000. Both a four-lane divided urban typical section and a five-lane urban typical section were discussed to reduce impacts. The utilization of an urban typical section in this area would not be reasonable and would be inappropriate for the conditions in the area. The following reasons support this assertion:

- **Inefficient and Less Safe Traffic Operations** - Design speeds for urban typical sections are limited to 50 miles per hour with posted speed limits of 45 miles per hour. This speed restriction is for the safety of motorists since obstacles such as curbs, signs, and left-turning vehicles are in the safety clear zone. Connecting the free-flow conditions of a freeway with the more restricted conditions of an urban typical section will result in driver frustration and less than desirable operating conditions. Driver safety would be compromised.

- **Inappropriate Application of Design Standards to Surrounding Conditions** - Vehicle operating speeds for a roadway facility vary depending on the roadway conditions and surrounding environment. The presence of immediately adjacent urban development and lateral restrictions such as curbs, utilities, signs, and turning vehicles reduces the operating speed on a facility. In rural areas the lack of these restrictions allows for higher speeds. With equivalent traffic volumes and comparable roadway conditions, operating speeds on a road in a rural setting will generally be higher than on the same type of road in an urban setting. Therefore, utilizing an urban typical section for the Improve Existing Facilities Alternative in the rural setting of Hoke and Robeson Counties will likely result in operating speeds that are in excess of the safe design speed for the roadway. This results in a safety issue for motorists and an operational problem for law enforcement.
- **Incompatible Highway Function in Transportation Network** - Every roadway in the local highway network serves a function and these functions vary depending on the type of roadway. The network is composed of local streets, collector roadways, minor arterial streets, principal arterial roadways, and freeways. During any given trip, highway users will travel on some or all of the functional roadway types. There is a hierarchy within the highway network. In most highway networks, local roads connect to collector streets and these in turn connect to minor arterial streets and so forth to freeways. The Fayetteville Outer Loop has been planned as an element of the Fayetteville highway network as a high type facility. Going from a high level element of the highway network to a lesser type roadway alters the function of the roadway facility and its ability to serve its intended objective in the overall network.
- **More Lengthy Transition Areas are Required** - Connections to and from freeways need to be made through a transition area to allow for the change from the uninterrupted, free-flow conditions of the freeway to the interrupted traffic flow of an arterial roadway, particularly an urban arterial. The length of the transition area should be sufficient to permit the controlled change from freeway operating speeds to that of the arterial roadway. Transitions from a freeway to a rural divided arterial can be made sooner than from a freeway to an urban arterial.
- **Unsound Transportation and Urban Planning (Limited Vision)** - The Fayetteville Outer Loop from I-95 in Robeson County to I-95 at US 13 north of Fayetteville is approximately 39 miles long. Combining this with the 20 miles of I-95 to the east of Fayetteville results in a circumferential transportation facility that is about 59 miles long. The distance from South Raeford Road (US 401) to I-95 in Robeson County is about 14 miles. This represents about 25 percent of the total outer loop. Having 75 percent of the outer loop as a freeway and the remaining 25 percent as an urban arterial is neither reasonable nor sound transportation and urban planning. The use of an urban arterial roadway for a segment of a freeway loop facility has been attempted in other locations. These have typically resulted in congestion, expanded strip commercial development, added air pollution, and an increased number of crashes.

Therefore, the Department of Transportation has determined that an urban typical section for the Improve Existing Facilities Alternative south of South Raeford Road (US 401) is not reasonable and feasible. The appropriate typical section for this alternative in this location will be a rural four-lane divided highway with a 46-foot minimum median width. Improvements to the existing facilities to accomplish this alternative would include:

- Multi-lane roadway on new location to provide connections between existing roads and to avoid urbanized areas such as Rockfish and Parkton.
- Widening of existing two-lane roads to multi-lane highways.
- Grade separations at railroad crossings.
- An interchange at I-95.

- A new connection with NC 71 to the west of Parkton to allow vehicles, particularly trucks, to travel around Parkton instead of through it.

Multiple locations were examined for the Improve Existing Facilities Alternative south of South Raeford Road (US 401). These multiple locations were developed to minimize relocation impacts, to maximize the use of available roadway alignment, and to ensure that all reasonable possibilities had been examined for this alternative. In the coordination meeting on February 17, 2000, agreement was reached to limit the Improve Existing Facilities Alternative to the alignment shown in Exhibit B with separate connections to the two locations for the Fayetteville Outer Loop.

Relocations and Percentage of New Location Roadway

Relocation estimates were prepared for this alternative and compared with the 13 build alternates from the DEIS. The following table depicts this comparison of relocation impacts for the portion of the project south of South Raeford Road (US 401).

Relocation Summary

ALTERNATE	South of South Raeford Road (US 401)		
	Residential	Business	Non-Profit
B	43	0	0
C	129	0	0
D	74	0	1
E	53	0	0
F	46	0	0
G	61	0	1
H	72	0	1
I	85	0	1
J	120	0	0
K	74	1	1
L	87	1	1
M	56	0	0
N	131	1	0
Improve Existing Facilities - connecting to east corridor (Alts B, C, D, E, G, H, I, J)	79	4	0
Improve Existing Facilities - connecting to west corridor (Alts F, K, L, M, N)	91	4	0

In order to have a plausible alternative from an engineering perspective, some new location roadway is needed to avoid relocations or to adequately connect existing roadways. For the Improve Existing Facilities Alternative south of South Raeford Road (US 401) the amount of new location roadway is approximately 43 percent with either the connection to the east or the west corridors of the Fayetteville Outer Loop. This results in about 6 miles of new location roadway out of the total 14-mile length of the project south of South Raeford Road (US 401).

A substantial percentage of the relocations associated with the Improve Existing Facilities Alternative are related to existing and developing subdivisions in Hoke County around Rockfish. All alignments investigated in this area had comparable levels of relocations and all roadway alignments would divide neighborhoods. Additionally, the amount of new location alignment around and north of Rockfish approaches 60 percent of the roadway length.

During the field review of the project area on February 17, 2000, the Corps of Engineers requested that additional alignment options be investigated to merge the Improve Existing

Facilities Alternative into the alignments for the Fayetteville Outer Loop south of Rockfish but north of the crossing of Rockfish Creek. This was investigated and it is possible to connect to Alternates C, H, I, K, L, and N just south of King Road (SR 1425) or connect to Alternates C, J, and N just north of Camden Road (SR 1003). These connections are shown on Exhibit C.

Relocations for the Improve Existing Facilities Alternative with these two connections in comparison to the corresponding Fayetteville Outer Loop Alternates are shown in the following tables. The relocations shown in the tables are only for the portion of the total project that is common to the Improve Existing Facilities Alternative and the corresponding build alternates. The connection to Alternates C and N south of King Road (SR 1425) appears to be the better connection because of reduced relocations and less new location alignment. The connector north of Camden Road (SR 1003) impacts a sizable portion of an existing and developing subdivision. Please note that the Improve Existing Facilities Alternative in Exhibit 3 connects to only six or three of the 13 build alternates for this project. Relocation totals on some of the other build alternates are substantially less than totals for the Improve Existing Facilities Alternative.

Connector South of King Road (SR 1425)	Alternates C & N	Alternates H & K	Alternates I & L	Improve Existing Facilities Alternative
Total Relocations	102	45	58	51
Percentage of New Location	100%	100%	100%	43%
Length	48,163 feet (9.1 miles)	50,653 feet (9.6 miles)	49,381 feet (9.4 miles)	51,600 feet (9.8 miles)

Note: Relocation totals for the other build alternates in this same general area are as follows: Alternates B & F = 32, Alternate D = 57, Alternate E & M = 42, Alternate G = 44, Alternate J = 103

Connector North of Camden Road (SR 1003)	Alternate C, J, and N	Improve Existing Facilities Alternative
Total Relocations	102	79
Percentage of New Location	100%	53%
Length	42,839 feet (8.1 miles)	47,200 feet (8.9 miles)

Note: Relocation totals for the other build alternates in this same general area are as follows: Alternates B & F = 24, Alternate D, I, & L = 57, Alternate E & M = 34, Alternate G, H, & K = 44

Access Control

Access along the Improve Existing Facilities Alternative would be controlled through the driveway and entrance permit procedures of NCDOT in conjunction with the local community. There would be at-grade intersections along with direct access to existing adjacent property. Additional or modified access would be addressed through permit procedures. Comparatively, access on the freeway build alternates would be fully controlled, including interchange areas and connecting roadways. Between the two types of roadway facilities, it is easier to control development along a freeway than it is along an arterial highway. Local land use controls are utilized more in Cumberland County than in Hoke and Robeson Counties. The majority of the Improve Existing Facilities Alternative is in Hoke and Robeson Counties. Greater potential exists for unmanaged growth to occur along the Improve Existing Facilities Alternative than along any of the freeway build alternates.

Therefore, the Department of Transportation has determined that the Improve Existing Facilities Alternative is not a reasonable and feasible transportation alternative for south of South Raeford Road (US 401) for the following reasons:

- **Relocation Impacts Comparable to Freeway Corridors** - Improvements needed to implement this alternative will impact existing development, including residential areas and commercial establishments. Relocation impact totals associated with this alternative would be greater than or equal to those associated with the proposed freeway corridors in the same area south of South Raeford Road (US 401).
- **Increased Relocations and Neighborhood Impacts at Rockfish** - Improvements needed around Rockfish would disrupt and divide existing neighborhoods. Relocation impacts in this area would be greater than or equal to those associated with the proposed freeway corridors.
- **Reducing Limits does not Reduce Comparable Relocation Impacts** - Restricting the Improve Existing Facilities Alternative to the area from south of Rockfish to I-95 does not reduce the relocation totals to a level that is less than that of the proposed freeway corridors.
- **Increased Development with Loss of Access Control** - Lack of full access control along the Improve Existing Facilities Alternative will provide greater opportunity for unmanaged growth and secondary impacts to the human and natural environment. Allowing encroaching development will reduce the useful life of the public investment in this roadway improvement. As adjacent development increases, the highways' ability to carry traffic will be lessened through the loss of the planned roadway reserve capacity.
- **Incompatible with Adopted Plans** - This alternative is not compatible with the adopted Cumberland County Comprehensive Plan or the Fayetteville Area Metropolitan Planning Organization Long Range Transportation Plan.
- **Undesirable Access for Military Requirements** - The Fort Bragg Military Reservation requires redundancy in highway controlled access for the efficient movement of troops, equipment, and arms in the event of deployment. Building the northern portion of the Fayetteville Outer Loop as a freeway to I-95 provides a primary access controlled route. Having the southern portion of the Fayetteville Outer Loop as a freeway would provide Fort Bragg the redundancy that is desired. The Improve Existing Facilities Alternative along all or part of the southern portion of this project would not be in keeping with the military requirements for this transportation facility.
- **Inconsistent with Planned Roadway Function** - The Improve Existing Facilities Alternative would involve constructing approximately 20 to 25 percent of the Fayetteville Outer Loop as a non-freeway facility. This is not in keeping with the function of the planned highway as part of the overall area transportation system.
- **Alignment Location Further Removed from Urban Area** - South of South Raeford Road (US 401), the Improve Existing Facilities Alternative is located further west and south from the Fayetteville urbanized area. The further removed from the urbanized area the road is located, the less the road is able to serve its intended function. Motorists may not elect to utilize the facility because of the travel time associated with getting to the route and with traveling a greater distance. Reducing the function of the roadway from a freeway to a rural arterial will further reduce the attractiveness of the route to the users of the highway network. This will result in increased use of other highways in the area such as those in and around Hope Mills. Increased demand on these facilities will create further transportation operational difficulties, greater air quality impacts, and the potential need for additional roadway improvements.

For the reasons indicated in this analysis, the Department of Transportation has determined that the Improve Existing Facilities Alternative for the Fayetteville Outer Loop, in whole or in part, is not a reasonable and feasible alternative.

APPENDIX C

RELOCATION REPORT

MARCH 2005

EIS RELOCATION REPORT

North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM

E.I.S. CORRIDOR DESIGN

WBS:	34817.1.2	COUNTY	Cumberland	Alternate	1	of	1	Alternate
I.D. NO.:	X-0002C	F.A. PROJECT						
DESCRIPTION OF PROJECT:	Fayetteville Outer Loop							

ESTIMATED DISPLACEDS					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	50	46	96	30	5	21	25	35	10	
Businesses	2	0	2	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE		
Farms	0	0	0	0	Owners		Tenants		For Sale	
Non-Profit	1	0	1	1	0-20M	0	\$ 0-150	1	0-20M	21
					20-40M	0	150-250	1	20-40M	90
					40-70M	12	250-400	44	40-70m	418
					70-100M	37	400-600	0	70-100M	407
					100 UP	1	600 UP	0	100 UP	1,331
					TOTAL	50		46		2,267
										629

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
X		2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
	X	6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? 18-24 Months

REMARKS (Respond by number)									
2. 1 church (Eureka Chapel Baptist Church)									
3. All business services will be available after project.									
4. 1 small crane business (10 employees – 3 minority) 1 small veterinarian business (3 employees – 0 minority)									
6. & 14. MLS, Local Realtors, Newspapers, etc.									
8. As mandated by law.									
11. Cumberland Co.									
12. There is adequate DSS housing available.									

Note: There is at least 1 grave located in the proposed right of way adjacent to McArthur Rd. on the Vonnie Rose McLamb Knight parcel.

<p>_____ Right of Way Agent</p>	<p>3-6-05 Date</p>	<p>_____ Relocation Coordinator</p>	<p>3-7-05 Date</p>
-------------------------------------	------------------------	-----------------------------------------	------------------------

EIS RELOCATION REPORT

**North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM**

E.I.S. CORRIDOR DESIGN

WBS:	34817.1.2	COUNTY	Cumberland	Alternate	1	of	1	Alternate
I.D. NO.:	X-0002B	F.A. PROJECT						
DESCRIPTION OF PROJECT:	Fayetteville Outer Loop							

ESTIMATED DISPLACED					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	3	33	36	16	0	10	15	10	1				
Businesses	2	0	2	1	VALUE OF DWELLING				DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent		
Non-Profit	1	0	1	1	0-20M	20-40M	\$ 0-150	150-250	0-20M	20-40M	\$ 0-150	150-250	
					0	1	0	1	21	90	0	0	
					1	1	0	9	418	21	21	21	
					1	1	23	23	407	165	165	165	
					0	0	0	0	1,331	443	443	443	
					0	0	0	0	2,267	629	629	629	
					TOTAL	3	33	33	2,267	629	629	629	

ANSWER ALL QUESTIONS			REMARKS (Respond by number)							
Yes	No	Explain all "YES" answers.								
	X	1. Will special relocation services be necessary?	2. 1 church (Peace Chapel Church) 3. All business services will be available after project. 4. 1 small construction Co. (10 employees – 3 minority) 1, small auto body shop (5 employees – 3 minority) 6. & 14. MLS, Local Realtors, Newspapers, etc. 8. As mandated by law. 11. Cumberland Co. 12. There is adequate DSS housing available. Note: There is a PWC utility building in the proposed right of way							
X		2. Will schools or churches be affected by displacement?								
X		3. Will business services still be available after project?								
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.								
	X	5. Will relocation cause a housing shortage?								
		6. Source for available housing (list).								
	X	7. Will additional housing programs be needed?								
X		8. Should Last Resort Housing be considered?								
	X	9. Are there large, disabled, elderly, etc. families?								
	X	10. Will public housing be needed for project?								
X		11. Is public housing available?								
X		12. Is it felt there will be adequate DSS housing available during relocation period?								
	X	13. Will there be a problem of housing within financial means?								
X		14. Are suitable business sites available (list source).								
		15. Number months estimated to complete RELOCATION? 18-24 Months								

<p>_____ Right of Way Agent</p>	<p>3-6-05 Date</p>	<p>_____ Relocation Coordinator</p>	<p>3-7-05 Date</p>
-------------------------------------	------------------------	-----------------------------------------	------------------------

EIS RELOCATION REPORT

North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM

E.I.S. CORRIDOR DESIGN

WBS:	34817.1.2	COUNTY	Cumberland	Alternate	1	of	1	Alternate
I.D. NO.:	U-2519 DA	F.A. PROJECT						
DESCRIPTION OF PROJECT:	Fayetteville Outer Loop							

ESTIMATED DISPLACED					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	0	0	0	0	0	0	0	0	0			
Businesses	0	4	4	2	VALUE OF DWELLING DSS DWELLING AVAILABLE							
Farms	0	0	0	0	Owners		Tenants		For Sale For Rent			
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	21	\$ 0-150	0
					20-40M	0	150-250	0	20-40M	90	150-250	0
					40-70M	0	250-400	0	40-70M	418	250-400	21
					70-100M	0	400-600	0	70-100M	407	400-600	165
					100 UP	0	600 UP	0	100 UP	1,331	600 UP	443
					TOTAL	0	0	0	2,267	629		

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? 18-24 Months

REMARKS (Respond by number)			
			3. All business services will be available after project.
			6. & 14. MLS, Local Realtors, Newspapers, etc.
			4. (1) Auto Repair Small Business (2 employees – 1 minority)
			(1) Auto Wheel, Trim, & Upholstery Small Business (2 employees - 1 minority)
			(1) Recycling Small Business (2 employees –1 minority)
			(1) Truck Rental Small Business (4 employees –2 minorities)
			8. As Mandated by Law.
			11. Cumberland Co.
			12. There is adequate DSS housing available.

<p style="text-align: center;">3-4-05 Date</p> <p style="text-align: center;">Right of Way Agent</p>		<p style="text-align: center;">3-7-05 Date</p> <p style="text-align: center;">Relocation Coordinator</p>
----------------------------------------------------------------------------------------------------------	--	--------------------------------------------------------------------------------------------------------------

EIS RELOCATION REPORT

North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM

E.I.S. CORRIDOR DESIGN

WBS:	34817.1.2	COUNTY	Cumberland	Alternate	1	of	1	Alternate
I.D. NO.:	U-2519 CB	F.A. PROJECT						
DESCRIPTION OF PROJECT:		Fayetteville Outer Loop						

ESTIMATED DISPLACEDS					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	0	*20	20	10	0	20	0	0	0	
Businesses	0	0	0	0	VALUE OF DWELLING		DSS DWELLING AVAILABLE			
Farms	0	0	0	0	Owners		Tenants		For Sale	
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	21
					20-40M	0	150-250	0	20-40M	90
					40-70M	0	250-400	20	40-70m	418
					70-100M	0	400-600	0	70-100M	407
					100 UP	0	600 UP	0	100 UP	1,331
					TOTAL	0	20	2,267	629	629

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
	X	2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
	X	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
	X	6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? 18-24 Months

REMARKS (Respond by Number)							
*Of the 20 Tenants, 12 are located on Fort Bragg. Each tenant on Fort Bragg has a housing allowance based on his or her rank.							
The 1SBKBUS located right of Survey Station 990+00, Survey Line L, is owned by the Federal Government.							
There is a gas depot owned by the Federal government located right of Survey Station 987+00, Survey Line L.							
There is a pet cemetery owned by the Federal Government located left of Survey Station 984+00, Survey Line L.							
3. All business services will be available after project.							
8. As Mandated by Law.							
11. Cumberland Co.							
12. There is adequate DSS housing available.							
6. & 14. MLS, Local Realtors, Newspapers, etc.							

<p>_____ Right of Way Agent</p>	<p>3-4-05 Date</p>	<p>_____ Relocation Coordinator</p>	<p>3-7-05 Date</p>
-------------------------------------	------------------------	-----------------------------------------	------------------------

EIS RELOCATION REPORT

North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM

E.I.S. CORRIDOR DESIGN

WBS:	34817.1.2	COUNTY	Cumberland	Alternate	1	of	1	Alternate
I.D. NO.:	U-2519 CA	F.A. PROJECT						
DESCRIPTION OF PROJECT:	Fayetteville Outer Loop							

ESTIMATED DISPLACEES					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	12	0	12	3	0	2	5	5	0				
Businesses	0	0	0	0	VALUE OF DWELLING				DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent		
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	21	\$ 0-150	0	
					20-40M	5	150-250	0	20-40M	90	150-250	0	
					40-70M	5	250-400	0	40-70m	418	250-400	21	
					70-100M	2	400-600	0	70-100M	407	400-600	165	
					100 UP	0	600 UP	0	100 UP	1,331	600 UP	443	
					TOTAL	12		0		2,267		629	

ANSWER ALL QUESTIONS

Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
	X	2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
	X	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
	X	6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? 18-24 Months

REMARKS (Respond by Number)

3. All business services will be available after project.
 6. & 14. MLS, Local Realtors, Newspapers, etc.
 8. As Mandated by Law.
 11. Cumberland Co.
 12. There is adequate DSS housing available.

<p>_____ Right of Way Agent</p>	<p>3-4-05 Date</p>	<p>_____ Relocation Coordinator</p>	<p>3-7-05 Date</p>
-------------------------------------	------------------------	-----------------------------------------	------------------------

EIS RELOCATION REPORT

North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM

E.I.S. CORRIDOR DESIGN

WBS:	34817.1.2	COUNTY	Cumberland	Alternate	1	of	1	Alternate
I.D. NO.:	U-2519 BB	F.A. PROJECT						
DESCRIPTION OF PROJECT:		Fayetteville Outer Loop						

ESTIMATED DISPLACED					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	7	0	7	0	0	1	1	5	0	
Businesses	0	0	0	0	VALUE OF DWELLING					
Farms	0	0	0	0	Owners		Tenants		DSS DWELLING AVAILABLE	
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	21
					20-40M	1	150-250	0	20-40M	90
					40-70M	0	250-400	0	40-70m	418
					70-100M	6	400-600	0	70-100M	407
					100 UP	0	600 UP	0	100 UP	1,331
					TOTAL	7	0	0	2,267	629

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? 18-24 Months

REMARKS (Respond by Number)							
3. All business services will be available after project. 6. & 14. MLS, Local Realtors, Newspapers, etc. 8. As Mandated by Law. 11. Cumberland Co. 12. There is adequate DSS housing available.							

_____ Right of Way Agent	3-4-05 Date	_____ Relocation Coordinator	3-7-05 Date
-----------------------------	----------------	---------------------------------	----------------

EIS RELOCATION REPORT

North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM

E.I.S. CORRIDOR DESIGN

WBS:	34817.1.2	COUNTY	Cumberland	Alternate	1	of	1	Alternate
I.D. NO.:	U-2519 BA	F.A. PROJECT						
DESCRIPTION OF PROJECT:		Fayetteville Outer Loop						

ESTIMATED DISPLACEDS					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	38	6	44	5	0	3	5	34	2	
Businesses	.0	0	0	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE		
Farms	0	0	0	0	Owners		Tenants		For Sale	
Non-Profit	1	0	1	1	0-20M	3	\$ 0-150	0	0-20M	21
					20-40M	6	150-250	1	20-40M	90
					40-70M	15	250-400	4	40-70m	418
					70-100M	12	400-600	1	70-100M	407
					100 UP	2	600 UP	0	100 UP	1,331
					TOTAL	38	6	6	2,267	629

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
X	X	1. Will special relocation services be necessary?
X		2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
	X	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? 18-24 Months

REMARKS (Respond by Number)

2. 1 Church (New Gospel Ministries Church)
 3. All business services will be available after project.
 6. & 14. MLS, Local Realtors, Newspapers, etc.
 8. As Mandated by Law.
 11. Cumberland Co.
 12. There is adequate DSS housing available.

 Right of Way Agent	3-4-05 Date	 Am Simpson Relocation Coordinator	3-7-05 Date
------------------------	----------------	------------------------------------------	----------------

EIS RELOCATION REPORT

North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM

E.I.S. CORRIDOR DESIGN

WBS:	34817.1.2	COUNTY	Cumberland	Alternate	1	of	1	Alternate
I.D. NO.:	U-2519 AB	F.A. PROJECT						
DESCRIPTION OF PROJECT:	Fayetteville Outer Loop							

ESTIMATED DISPLACEDS					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	19	1	20	2	0	5	5	9	1	
Businesses	0	0	0	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE		
Farms	0	0	0	0	Owners		Tenants		For Sale	
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	21
					20-40M	4	150-250	1	20-40M	90
					40-70M	6	250-400	0	40-70m	418
					70-100M	8	400-600	0	70-100M	407
					100 UP	1	600 UP	0	100 UP	1,331
					TOTAL	19	1	2,267	629	629

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
<input type="checkbox"/>	<input type="checkbox"/>	15. Number months estimated to complete RELOCATION? 18-24 Months

REMARKS (Respond by Number)							
3. All business services will be available after project.							
6. & 14. MLS, Local Realtors, Newspapers, etc.							
8. As Mandated by Law.							
11. Cumberland Co.							
12. There is adequate DSS housing available.							

<p style="text-align: center;">3-4-05 Date</p> <p style="text-align: center;">Right of Way Agent</p>		<p style="text-align: center;">3-7-05 Date</p> <p style="text-align: center;">Relocation Coordinator</p>
----------------------------------------------------------------------------------------------------------	--	--------------------------------------------------------------------------------------------------------------

EIS RELOCATION REPORT

North Carolina Department of Transportation
RELOCATION ASSISTANCE PROGRAM

E.I.S. CORRIDOR DESIGN

WBS:	34817.1.2	COUNTY	Cumberland	Alternate	1	of	1	Alternate
I.D. NO.:	U-2519 AA	F.A. PROJECT						
DESCRIPTION OF PROJECT:		Fayetteville Outer Loop						

ESTIMATED DISPLACES					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	10	7	17	3	0	5	6	5	1	
Businesses	0	0	0	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE		
Farms	0	0	0	0	Owners		Tenants		For Sale	
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	21
					20-40M	5	150-250	2	20-40M	90
					40-70M	4	250-400	5	40-70m	418
					70-100M	0	400-600	0	70-100M	407
					100 UP	1	600 UP	0	100 UP	1,331
					TOTAL	10	7	2,267	629	629

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
X		1. Will special relocation services be necessary?
	X	2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
	X	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
	X	6. Source for available housing (list).
X		7. Will additional housing programs be needed?
	X	8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? 18-24 Months

REMARKS (Respond by number)							
3. All business services will be available after project.							
6. & 14. MLS, Local Realtors, Newspapers, etc.							
8. As Mandated by Law.							
11. Cumberland Co.							
12. There is adequate DSS housing available.							

 Right of Way Agent	3-4-05 Date	 Relocation Coordinator	3-7-05 Date
------------------------	----------------	----------------------------	----------------

APPENDIX D

BIOLOGICAL OPINION



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

April 28, 2005

Mr. John F. Sullivan, III P.E.
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
310 New Bern Avenue, Suite 410
Raleigh, NC 27601

FWS Log No: 04-S249

Dear Mr. Sullivan:

This document is the U.S. Fish and Wildlife Service's (Service) biological opinion (BO) based on our review of the proposed construction of the Fayetteville Outer Loop between Interstate 95 and N.C. Highways 24/87 (TIP No. U-2519), located in Cumberland, Hoke and Robeson Counties, North Carolina and its effects on the red-cockaded woodpecker (RCW, *Picoides borealis*) in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Your September 9, 2004 request for formal consultation was received on September 9, 2004.

This biological opinion is based on information provided in the September 7, 2004, Biological Assessment (BA); field investigations, electronic mail, and other published and unpublished sources of information. This biological opinion will consider all clusters identified within the above documents. A complete administrative record of this consultation is on file at our Raleigh Field Office. Currently, the Service has listed six federally endangered and one threatened species within the project area. These include four plants, one butterfly, the RCW and one reptile (American alligator; *Alligator mississippiensis*; threatened due to similarity of appearance). The North Carolina Department of Transportation (NCDOT) submitted a separate BA to address the project's impacts to the five remaining federally endangered species on March 8, 2005. The Service concurred with NCDOT's "no effect" determinations for these species in our March 28, 2005 letter.

Consultation History

March 21, 1994 – Field meeting for the project with the Service, Federal Highway Administration (FHWA), NCDOT and Fort Bragg to discuss RCW issues in Fort Bragg's Green Belt Habitat Management Unit (Green Belt).

June 5, 1996 – Service provides comments stating concerns that project could have significant adverse effects to RCWs

August 23, 1996 – Service receives draft BA for a portion of project – from US 401 to Cliffdale Road

May 14, 1997 – Service receives revised BA and request from FHWA to initiate formal section 7 consultation

June 18, 1997 – Service responds to request for formal consultation with letter requesting additional information and clarification of several points in BA

February 23, 2001 – Service provides NCDOT a list of information needs for an updated BA

June 2001 – Service prepares draft MOU for purchase of Calaway Tract to offset direct losses of RCW clusters

January 30, 2002 – The Service, TNC and NCDOT have all signed MOU for purchase of Calaway Tract

February 2002 – NCDOT acquires Calaway Tract

August 13, 2004 – Service receives draft revised BA

September 9, 2004 – Service receives final BA and request for formal section 7 consultation

September 22, 2004 – Service responds that the formal consultation initiation materials and information are complete

November 1, 2004 meeting with NCDOT, Dr. J. H. Carter III and Associates (JCA), and Fort Bragg staff

November 16, 2004 – Service meets with NCDOT, JCA, The Nature Conservancy and the Sandhills Area Land Trust to discuss conservation measures and reasonable and prudent measures

February 15, 2005 – Service provides NCDOT with a draft Biological Opinion

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

Project Background

The need for a freeway around Fayetteville is based on a combination of transportation demands, social demands, economic considerations and homeland security issues. The local thoroughfare plan includes a new roadway alignment in the project location to accommodate increased travel demand associated with projected growth in western Cumberland County. The freeway will provide access to existing radial routes leading into and out of the Fayetteville urban area and

will improve access to Fort Bragg, the area's largest employer. Fort Bragg officials have indicated a need to link the installation with Interstate 95 south and north of Fayetteville. The freeway will allow the military to easily access Interstate 95 in the event of an emergency deployment and would provide an additional transportation route for the nearly 25,000 soldiers and civilian workers commuting daily to and from Fort Bragg.

The NCDOT first identified requirements for a new highway conduit and an additional Cape Fear River crossing in its 1974 NCDOT Transportation Improvement Program (TIP). The purpose of the project, referred to as X-2 in the 1974 TIP, was to install a new river crossing and provide a more direct access to a proposed major industrial facility near the Town of Wade, in Cumberland County, North Carolina. The facility was never built and the X-2 project did not pass through the preliminary phase.

In 1976, a group of citizens appealed to NCDOT to proceed with the X-2 project to provide a new crossing of the Cape Fear River. Because the new facility would also benefit the military, the N.C. Secretary of Transportation requested that the Commanding General of the Fort Bragg Military Reservation (Fort Bragg) assist in the acquisition of Federal Defense Access Funds to help finance the road. These funds were denied. The X-2 project continued to be included in the TIP and in the late 1980s interest was once again raised in the project. In 1992, a Draft Environmental Impact Statement (DEIS) was published for a part of the X-2 project between the All American Freeway (SR 1007) and I-95 at U.S. Highway 13.

In the late 1980s, the Fayetteville Metropolitan Planning Organization foresaw the need to extend the proposed X-2 roadway from the All American Freeway around the western and southern portions of Cumberland County to complete the high-speed, multi-lane facility around the Fayetteville urban area. This project was identified as the Fayetteville Outer Loop (U-2519). Afterward, NCDOT conducted a preliminary evaluation to determine a potential location for the Outer Loop. This location for the Outer Loop was included in the Fayetteville Urban Area Thoroughfare Plan which was adopted by the City of Fayetteville in October 1991, Cumberland County in November 1991 and NCDOT in January 1992. The Fayetteville Outer Loop is also an essential part of the Cumberland County 2010 Land Use Plan which was adopted in 1996.

In May 1992, the NCDOT held a public hearing for the Fayetteville Outer Loop in accordance with the North Carolina Roadway Corridor Official Map Act. In the fall of 1992, a Roadway Corridor Official Map was adopted and recorded in Cumberland and Robeson counties. The Roadway Corridor Official Map Act protects the right-of-way of a portion of the proposed Fayetteville Outer Loop from development while environmental and engineering studies are completed. The Map Act applied to the portion of the project between I-95 in Robeson County and Cliffdale Road in Cumberland County.

Over the years (1989-1996), several letters authored by Fort Bragg Commanding Generals to the then-Secretary of Transportation and the State's Governor affirmed and reaffirmed Fort Bragg's commitment to the Fayetteville Outer Loop project. The Commanding Generals stressed that the Fayetteville Outer Loop project would be as important to the future of Fort Bragg as it would be to Fayetteville and surrounding communities. They felt that the proposed highway corridor would allow easy access to I-95 in the event of deployment.

Since the terrorist attacks on September 11, 2001, the Department of the Army (DOA) has taken great strides in lessening vulnerability to terrorism and increasing security on Fort Bragg. In a letter dated May 3, 2003, the DOA/Fort Bragg requested that a portion of Bragg Boulevard (N.C. Highway 24) that bisects eastern Fort Bragg be closed to civilian traffic. DOA requested that NCDOT turn over the right-of-way to the DOA. In order to efficiently handle the increase in traffic that would be diverted due to the Bragg Boulevard closure, DOA requested that NCDOT widen Murchison Road (N.C. Highway 210). In addition, DOA requested that the NCDOT design the Fayetteville Outer Loop highway to support three additional access control points (ACPs) and a network of security patrol roads that would parallel the Fayetteville Outer Loop on Fort Bragg property. Right-of-way acquisition for the Fayetteville Outer Loop is scheduled to begin in 2005. Construction would begin in the year 2007.

Project Description

The proposed highway is approximately 27 miles long and would be a four-lane, divided freeway with full access control. Grade separations or interchanges would be constructed at selected public crossroads. Design elements include a maximum right-of-way width of 350 feet, a depressed median width of either 46 feet or 70 feet and a collector/distributor roadway system between All American Freeway and Bragg Boulevard. Median width was minimized along portions of the proposed highway through Fort Bragg to lessen impacts to RCW foraging habitat and wetlands. Actual clearing limits will vary from about 201 to 350 feet (rarely). It is anticipated that the proposed project will be divided into six separate construction projects with right-of-way acquisition for the entire project continuing over four years.

Of the 13 original alternatives evaluated in the 1992 DEIS, Alternate D was selected as the Least Environmentally Damaging Practical Alternative. The U-2519 study corridor extends from just west of Ramsey Street (U.S. Highway 401) to I-95 in Robeson County and is generally 1,000 feet wide, except at the interchanges. Because both the X-2 and U-2519 involved examining corridor locations that would cross Fort Bragg and would be located in Fort Bragg's Green Belt Area and the Northeast Area, NCDOT in consultation with the FHWA decided to separate the X-2 project into two portions for implementation. The eastern portion the X-2 project, between All-American Freeway and U.S. Highway 401, was added to the U-2519 study corridor. The FHWA has determined that the project, as currently proposed, connects logical termini and is of sufficient length to address environmental matters on a broad scope, has independent utility and significance, and is usable and a reasonable expenditure even if no additional transportation improvements in the area are made.

Security patrol roads will be built along the perimeter fence on the Fort Bragg boundary. These dirt roads will also be used for forest management access and for tank movement between Canopy Lane and All American Freeway. The patrol roads will run from Canopy Lane to east of N.C. Highway 210 (Murchison Road). The patrol road/tank trail from Canopy Lane to east of All American Freeway will be 20 feet wide and will be able to accommodate tank traffic. The patrol road east of All American Freeway to N. C. Highway 210 will be 12 feet wide and be able to accommodate Hummer-type vehicles (no tanks). A separate tank trail will run under the All American Freeway and terminate at the railroad depot. Where possible, trails will follow existing trails/clearings or be immediately adjacent to the proposed highway corridor. A fence will separate the NCDOT right-of-way and the Fort Bragg installation boundary.

Three Access Control Points (ACPs) will be built at entrances to Fort Bragg at the intersections of Canopy Road, Gruber Road and Yadkin Road. The Canopy Road and Gruber ACPs will not require additional clearing of the right-of-way. During construction, the Yadkin Road ACP will have a three-lane detour that will traverse an existing cleared area. The existing ACP at Fort Bragg Boulevard/Knox Street will become a truck-only entrance. Impacts from the widening of N.C. Highway 210 will be assessed under a separate Biological Assessment.

To minimize direct impacts associated with the Fayetteville Outer Loop project on RCWs, NCDOT in its September 7, 2004 BA, proposed to establish one new "Conservation Credit" on the Calaway Tract in accordance with Exhibit F (RCW Credit Policy for the NCDOT's Calaway Tract, Hoke County, North Carolina) of the Original Calaway Tract Memorandum of Understanding between the NCDOT, U.S. Fish and Wildlife Service and The Nature Conservancy (MOU; NC TIP Agreement R-3858) to replace the "Project Credit" (Cluster FB 65) that will be temporarily debited in completion of the Fayetteville Outer Loop. Conservation bank procedures discussed in Exhibit F allow NCDOT to debit up to five project credits out of five currently present on Calaway to offset the direct take of Cluster 65. NCDOT will establish a new RCW group (a Compensation Credit) on the Calaway Tract (or other suitable nonfederal property within the Sandhills East recovery population) to restore the pre-project number of RCW groups in the recovery unit.

A Compensation Credit is intended to meet or surpass the loss of the demographic unit (solitary male, breeding pair, etc) from the population. A Compensation Credit would be recognized as such when one new group of equal or superior demographic composition is established and sustained on the Calaway Tract. A new group is considered established if evidence of breeding is detected or if the same potential breeding group remains in the mitigation cluster for six months including a breeding season (April – July). The baseline number of clusters to be managed for perpetuity (in accordance with the Recovery Standard) on the Calaway Tract would increase from five to six. The provisions of the RCW Credit Policy also allow NCDOT to establish a new RCW cluster on another non-federal tract of land, if the above conditions are met and the new cluster can be managed demographically as part of the Sandhills East recovery population.

The Service has described the action area to include a three-mile radius around the NCDOT highway corridor for the portion of the project between Cliffdale Road and U.S. Highway 401 and RCW clusters and their associated territories in the NEA that are outside the three-mile area (See Figure 1). The extent of the action area is based on information contained in the "Neighborhood Analysis" section of the BA for reasons that will be explained and discussed in the "Status of the species within the action area" and "EFFECTS OF THE ACTION" section of this BO.

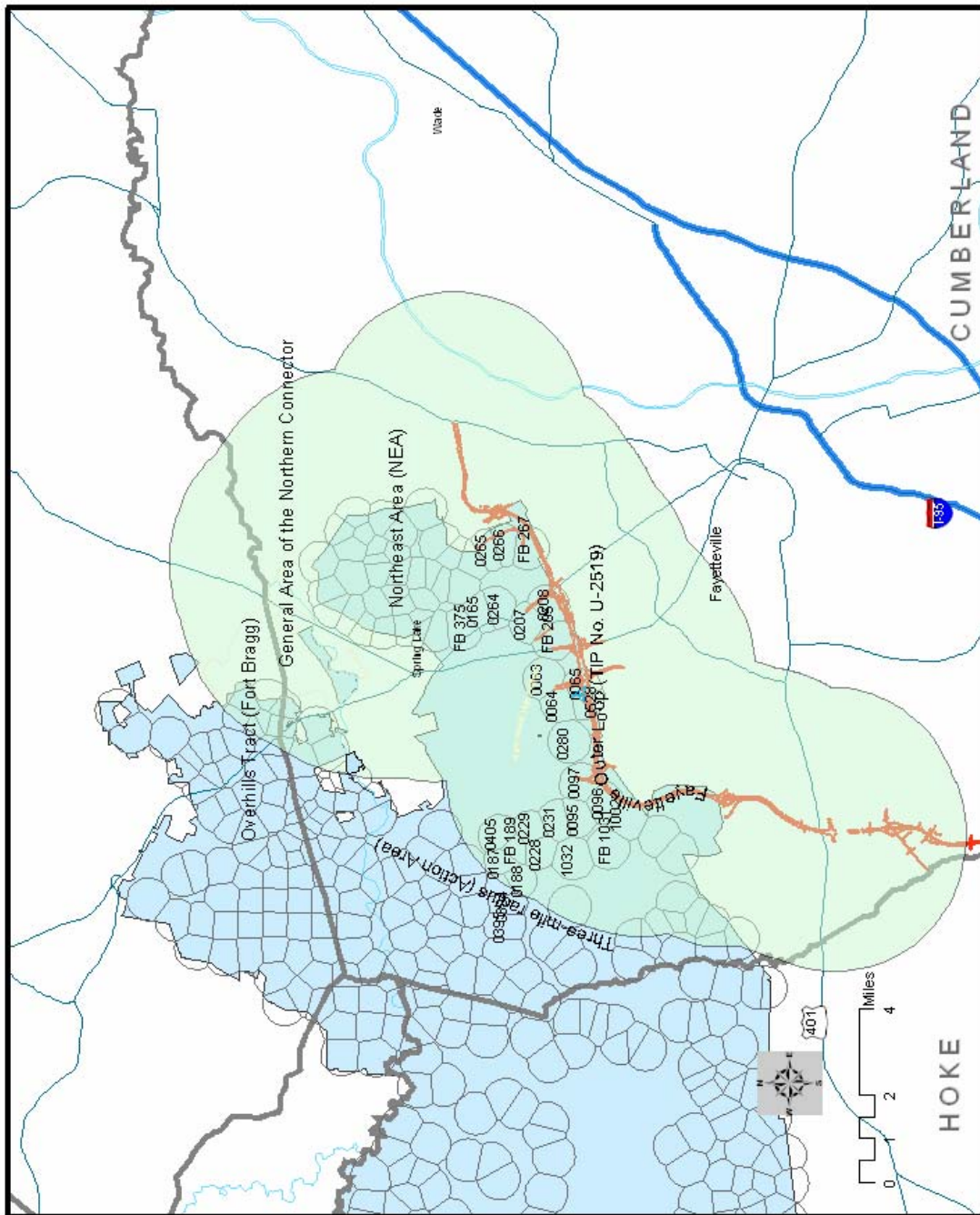


Figure 1. The Action Area defined for the Fayetteville Outer Loop Project.

STATUS OF THE SPECIES

Species description

The RCW is a territorial, non-migratory, cooperative breeding species (Lennartz et al. 1987, Walters et al. 1988) and is the only North American woodpecker that exclusively excavates its roost and nest cavities in living pines. In 1970, the Service listed the RCW as endangered (Federal Register 35:16047), and in 1973, the RCW was provided protection as an endangered species with the passage of the Endangered Species Act. No critical habitat has been designated for the RCW.

Historically, the RCW occupied a wide range throughout old-growth, fire-maintained pine ecosystems of the southern United States. Although still widely distributed, the range of the RCW is now limited and fragmented as a result of past and present human activities (e.g., resource extraction activities and urban development) and natural factors (e.g., hurricanes and pine beetle outbreaks). The remaining RCW populations exist primarily on Federal lands located in the Coastal Plain from North Carolina to Texas, the Piedmont of Georgia and Alabama, the Sandhills of North Carolina and South Carolina, and the interior highlands of Arkansas, Oklahoma, and until recently, Kentucky (Costa and Walker 1995).

Life history

The RCW has an advanced social system that revolves around family groups. A typical RCW group includes one pair of breeding birds, the current year's offspring (if any), and zero to four helpers. Helpers are usually male offspring from previous breeding seasons that assist the breeding pair by incubating eggs, feeding the young, excavating cavities, and defending the territory (Ligon 1970, Lennartz and Harlow 1979, Lennartz et al. 1987, Walters et al. 1988). The RCW nesting season occurs from April to July. Incubation lasts approximately 10 days, and the young fledge 24 to 26 days after hatching. Some juvenile males disperse from their natal territory prior to the next breeding season in an attempt to find vacant territories, or to establish their own (Hooper et al. 1980, Service 2003a). Others may remain and become helpers during subsequent nesting seasons. Most juvenile females disperse after fledging, although some may remain with the group as helpers (Walters et al. 1988). The average dispersal distance of fledgling males and females is about three miles (Walters 1991, Letcher et al. 1998).

Each group of RCWs occupies a discrete territory consisting of its cavity trees, called a cluster, and adjacent foraging habitat (Walters 1990). The RCW requires mature (usually 60 or more years old), live pine trees to excavate its nesting and roosting cavities. The cavity trees are essential to the RCW because they provide shelter and a place to nest and raise young (Ligon 1970). A typical cluster contains between one and 20 cavity trees, and the breeding male usually chooses the most recently excavated natural cavity as the nest tree, or selects cavity trees with higher resin yields (Conner and Rudolph 1989). Such cavity trees may enhance the survival of the nestlings by decreasing the parasite load of nestlings and incubating adults and providing a resin barrier to snake predation.

RCW cluster stands are typically less dense than surrounding stands and may be the least dense stands available (Service 2003a). For clusters, basal areas as low as 40 square feet (ft²)/acre in longleaf stands and from 40 to 60 ft²/acre in shortleaf/loblolly stands are suitable (Conner et al. 1991). Seedtree and shelterwood cuts with excessive pine or hardwood midstory, however, are

not acceptable as nesting habitat. Once established, clusters are often utilized for many consecutive years or even decades (Walters 1990). Hardwood midstory lessens the habitat quality, eventually leading to cavity abandonment when the hardwood midstory reaches cavity height (Conner and O'Halloran 1987, Costa and Escano 1989). Cluster abandonment may also occur as a result of displacement by competing cavity dwellers or stochastic events such as hurricanes (Conner and O'Halloran 1987).

The Recovery Plan for the Red-cockaded Woodpecker, Second Revision (RCW Recovery Plan; Service 2003a) establishes guidelines that if followed, are expected to increase RCW populations. These guidelines, referred to as the Recovery Standard are to be followed by all federal agencies and by all state land administrators for lands that are being managed to support recovery populations. To attain the Recovery Standard, the objective is to manage, at a bare minimum, 120 acres of good quality habitat per cluster. Good quality habitat is defined as having: (1) ≥ 20 ft²/acre basal area of pines ≥ 60 years in age and ≥ 14 in. DBH, (2) between 0-40 ft²/acre basal area of pines 10-14 in. DBH, (3) ≤ 10 ft²/acre basal area of pines < 10 in. DBH, (4) groundcover that is comprised of at least 40% herbaceous, pyrophytic species (5) hardwood midstory is nonexistent or sparse and less than 7 feet in height, (6) canopy hardwoods are either nonexistent or are 10% of canopy trees in longleaf forests or 30% in loblolly/shortleaf forests, (7) all habitat is within 0.5 miles of the cluster center, and (8) foraging habitat should not be separated by more than 200 feet of non-foraging areas. Although not always practicable, 50 % or more of the habitat managed for the recovery standard should be within $\frac{1}{4}$ mile of the cluster epicenter.

RCWs scale and probe bark on the trunks and limbs of living pine trees while foraging for insects. The amount of foraging area used by a group is dependant upon the quality of the habitat and population density. Research indicates that birds generally forage within one-half mile of the cluster (Service 2003a). RCW home ranges may vary seasonally and encompass 60 to 300 acres. Habitat typically consists of open pine and/or pine/hardwood forests. Although in some habitats RCWs will use smaller pine trees as foraging substrate (DeLotelle et al. 1987), they prefer pines greater than 10 inches in dbh (Service 2003a). Groups may forage on pines scattered through hardwood stands, but pure hardwood stands are of little value to the RCW (Conner and O'Halloran 1987). The highest populations of the birds occur on areas with active prescribed burning programs that control hardwoods. Many complex and interrelated factors, such as condition of the understory plant community, annual weather fluctuations, forest type, soils, physiographic province, season of the year, fire frequency and intensity are important in determining foraging habitat quality.

The RCW is territorial and defends its home range from adjacent groups (Hooper et al. 1982, Ligon 1970). Territories tend to be smaller in areas with few hardwoods, presumably because of higher quality habitat. Home range size is related to both habitat and demographic (e.g., group size and population density) variables (Hooper et al. 1982, Lennartz et al. 1987) and has been found to be inversely related to habitat quality (DeLotelle et al. 1987, 1995). Studies by Hardesty et al. (1997) and James et al. (2001) suggested that habitat structure, and not just the quantity of total resources, is an important determinant of home range size, territory quality, and reproductive success. The availability, quantity, and quality of foraging habitat affects RCW cluster status, group size, home range size, and reproductive success (Conner and Rudolph 1991, DeLotelle et al. 1987, 1995, Hardesty et al. 1997). Low-quality foraging habitat and large reductions in available foraging habitat can cause RCWs to abandon clusters, reduce fledging

rates and disrupt social interactions (Conner and Rudolph 1991, DeLotelle et al. 1995, Jackson and Parris 1995).

Population dynamics

According to the RCW Recovery Plan, the recovery of the RCW is directly linked to the viability of discrete populations within selected southeastern states. Populations required for recovery are distributed among 11 recovery units based on physiographic region to ensure the representation of broad geographic and genetic variation in the species. Viable populations within each recovery unit, to the extent allowed by habitat limitations, are essential to recovery of the species as a whole. Until recently, most RCW populations were considered stable at best or declining. RCW population trends since the early 1990's are improving, with an estimated 5,627 active RCW clusters range-wide (Service 2003a). The species can be delisted when five criteria are met that establish a tier of populations within the 11 recovery units that contain sufficient suitable nesting and foraging habitat and are not dependent on the installation of artificial cavities to remain stable.

Long-term viability of an RCW population, in genetic terms, depends on the presence of an adequate number of breeding individuals for the natural processes that increase genetic variability (e.g., mutation and recombination) to offset the natural processes that decrease genetic variability (e.g., genetic drift and inbreeding). Additionally, any prediction of a population's viability should also consider the population's ability to survive population fluctuations due to demographic and environmental fluctuations (Koenig 1988) or natural catastrophes. Reproductive rates, population density, and recolonization rates may influence RCW population variability more than mortality rates, sex ratios, and genetic viability. Therefore, dispersal of adult birds into breeding vacancies is essential for population persistence (Daniels et al. 2000, Schiegg et al. 2002).

Although the relationship between RCW population variability and density is not well understood, recent studies indicate spatial distribution of territories is important in long-term population stability. Conner and Rudolph (1991) found that, in sparse populations, RCW group size and the number of active clusters decreased as fragmentation increased. Hooper and Lennartz (1995) suggested that populations with less than 4.7 active clusters within 1.25 miles on average had critically low densities that inhibited population expansion. Results from a spatially explicit simulation model of RCW population dynamics suggest that population growth rate may depend more on the number and spatial distribution of territories, than on the initial composition of the population (Letcher et al. 1998). Achieving a self-sustaining population required fivefold more territories when territories were randomly spaced than when they were maximally clumped, and populations with as few as 49 territories were stable when those territories were highly aggregated. Populations of more maximally aggregated groups are likely to persist over the short term (i.e., 20 years) (Crowder et al. 1998).

Natural population growth (i.e., without recruitment clusters) occurs at extremely low rates (one to two percent per year) in this species (Walters 1991), and the availability of cavity trees is limiting (Copeyon 1990, Allen 1991). New groups or new territories arise by two processes, pioneering and budding (Hooper 1983). Pioneering is the occupation of vacant habitat by construction of a new cavity tree cluster and is relatively rare. Budding is the splitting of a territory, and the cavity tree cluster within it, into two. Budding is more common than pioneering in RCWs, since the new territory contains cavities from the outset (Service 2003a).

Inactive clusters are important to maintaining extant populations of RCWs and may provide a short-term opportunity to enhance habitat available to RCWs and, thus, increase the number of groups in populations (Doerr et al. 1989). After a territory is abandoned for two or more years, however, it is almost never reoccupied (unless habitat is improved and maintained), typically because cavities are unsuitable due to deterioration or hardwood encroachment (Beckett 1971, Conner and Locke 1982, Copeyon et al. 1991).

However, the technology to create new territories at desired locations exists and management for optimum territory clumping is therefore possible (Letcher et al. 1998). Artificial cavities can be installed in unoccupied habitat that is otherwise suitable (Copeyon 1990, Allen 1991), with subsequent occupancy by dispersing birds, typically subadults (Carrie et al. 1999, Conner et al. 1999). Adding artificial cavities to sites already occupied increases group size (Carrie et al. 1999). Artificial cavities provide additional roosting opportunities for subadult males, encouraging them to remain in their natal clusters and potentially inherit the territory (Carrie et al. 1999). Females may also benefit when additional cavities are provided because they are the most subordinate members of the RCW social group and, therefore, may not always be able to secure adequate roost cavities. RCWs exhibit relatively low adult mortality rates; annual survivorship of breeding males and females is high, ranging from 72 to 84 percent and 51 to 81 percent, respectively (Lennartz and Heckel 1987, Walters et al. 1988, DeLotelle and Epting 1992).

Inducing the formation of RCW groups in restored habitat with artificial cavities is an established and successful technique (Copeyon et al. 1991, Walters et al. 1992, Gaines et al. 1995, Watson et al. 1995). Within two years of restoring habitat and providing artificial cavities at 20 unoccupied territories in the Sandhills of North Carolina, 90 percent of the sites were occupied by RCWs (Copeyon et al. 1991). Translocating RCWs is another method successfully used to establish new groups (Rudolph et al. 1992, Allen et al. 1993, Hess and Costa 1995, Costa and Kennedy 1994, Franzreb 1999). Translocation can include augmenting a solitary-bird group or translocating a pair of subadult RCWs (i.e., unrelated male and female (Costa and Kennedy 1994)). Franzreb (1999) found that 63.2 percent of translocated birds (including adults and juveniles) remained at the release site for at least 30 days and 51.0 percent reproduced.

Status and distribution

The RCW was listed as endangered due to documented declines in local populations and massive reduction in foraging and nesting habitat. The life history of RCWs is closely tied to the occurrence of fire-maintained old growth pine forests that once dominated the southeastern United States. Only three million acres of longleaf pine forest remain of the estimated 60 to 92 million acres once in existence (Frost 1993). Timber clearing for agriculture, short timber rotations and the suppression of fire has reduced the amount and quality of RCW foraging and nesting habitat.

At the time of listing, the total number of individuals had declined to less than 10,000 in widely scattered and isolated populations (Service 2003a). Most RCW populations (regardless of location or land ownership) were considered stable at best, but were more likely declining (Costa 1995). Costa and Escano (1989) documented RCW population declines in at least ten, and perhaps as many as 17, populations on National Forests. James (1995) estimated that the number of active clusters range-wide declined 23 percent between the early 1980s and 1990. Recently,

numerous RCW populations have increased, particularly on Federal lands, as a result of management activities.

Currently, an estimated 14,068 RCWs inhabit 5,627 active clusters across 11 States in the southeast United States. National forests (NF), military installations, and national wildlife refuges (NWR) contain the majority of extant populations and most of the habitat that is potentially suitable for RCWs. Conservation of RCWs as a species will depend on prudent management of habitats on those federal lands. National forests support the majority of the core populations required for delisting of the species, and therefore, have a uniquely important role in the species' recovery. Prior to the 1980s, most populations on national forests were declining, but management efforts during the past decade, especially prescribed burning and cavity management, have stabilized most of those populations and led to increases in some (Service 2003a). Regardless of ownership, few if any populations can be sustained without active management (e.g. prescribed burning, midstory control, appropriate pine thinnings, cavity provisioning, etc.). Colonization of unoccupied habitat would be very slow without application of these activities.

The Service, in response to the apparent range-wide decline of the species on private lands, developed a private lands conservation strategy that has been aggressively implemented, modified as necessary based on new scientific findings, and regularly evaluated to ensure objectives are being achieved. The RCW recovery objectives of the private lands strategy are to increase the acreage of private land habitat being managed for RCWs, maintain or increase the larger existing RCW populations on private lands, rescue RCW groups from private lands that would be lost as a result of demographic and/or genetic uncertainty, foster and develop cooperative partnerships between and among federal, State and private parties responsible for and/or interested in RCW recovery, and increase the size of designated recovery and support populations while pursuing those objectives (Costa 1995). To achieve those strategic objectives, the Service has implemented three types of agreements involving private landowners: Safe Harbor Agreements, Habitat Conservation Plans (HCPs) and "no-take" management plans implemented via Memoranda of Agreement (Costa 1995).

In North Carolina, the largest and most stable RCW populations are on federal lands: Fort Bragg Army Reservation (396 active clusters in 2004; plus 12 active clusters on Camp Mackall), Marine Corps Base, Camp Lejeune (71 active clusters in 2002) and the Croatan National Forest (60 active clusters in 2003). Smaller populations also exist on the Alligator River and Pocosin Lakes NWRs (eight active clusters in 2003) and the Dare County Bombing Range, maintained by the U.S. Air Force (eight active clusters in 2003). At least eight landholdings belonging to the State of North Carolina support RCW populations.

Altogether, seven distinct RCW populations are found in NC. The five small populations of the Croatan National Forest, Marine Corps Base, Camp Lejeune, Holly Shelter Game Lands, Military Ocean Terminal Sunny Point and Alligator River/ Pocosin Lakes NWRs comprise the coastal region. The Sandhills region is composed of two meta-populations: Sandhills East and Sandhills West. In 2004, 629 or approximately eighty percent of North Carolina's RCW clusters were located in the Sandhills region. The Primary Core population of Sandhills East, which includes Fort Bragg, contained 472 of these clusters. The Essential Support population of Sandhills West consisted of 157 clusters. These meta-populations were historically linked, but

are now separated by a gap three to five miles across, and the rates of movement between the two are so low that they are now considered two separate populations (Walters et al. 2001).

The Service is managing an active and successful RCW Safe Harbor program for private landowners in the North Carolina Sandhills, covering all or parts of Cumberland, Harnett, Hoke, Moore, Richmond and Scotland counties. To date, lands that provide habitat supporting 59 baseline groups have been enrolled and the program has assisted in the creation of six new RCW groups. These six groups are not counted toward the regional recovery goal, however they are aiding in the persistence of the species.

RCWs on Fort Bragg and Surrounding Areas

Extensive research has been done on the RCW in the North Carolina Sandhills from 1973 to date (North Carolina State University (NCSU) RCW Research Project, Sandhills Ecological Institute (SEI) and Fort Bragg Endangered Species Branch). RCW groups located on Fort Bragg, Camp Mackall, the Sandhills Game Lands and on adjacent private lands (particularly around Southern Pines and Pinehurst, Moore County), collectively comprise the second largest metapopulation in existence, the long term viability of which is essential to the recovery of this species. The importance of the Sandhills RCW population has resulted in its designation as one of 13 Primary Core Recovery Populations by the Service (Service 2003).

RCWs in the Sandhills are divided into two populations: Sandhills East Primary Core Population (Sandhills East) and Sandhills West Essential Support Population (Sandhills West). Both populations are part of the Sandhills Recovery Unit (Service 2003) and are recognized as distinct populations in the RCW Recovery Plan (Service 2003). The RCW groups on Fort Bragg (exclusive of Camp Mackall), Overhills (now part of Fort Bragg), McCain, the Calaway Tract, the Carver's Creek Tract and Weymouth Woods Sandhills Nature Preserve are part of the larger Sandhills East population. The smaller Sandhills West population consists of RCW groups on Camp Mackall and the Sandhills Game Land. Both Sandhills RCW populations are well below the size (500 active clusters) that is required to be considered "recovered" (Service 2003).

The primary goal of the Fort Bragg Endangered Species Branch is to ensure that endangered species management and the training missions of Fort Bragg are fully integrated and compatible to the maximum extent (Fort Bragg 1997). The Fort Bragg and Camp Mackall Endangered Species Management Plan (ESMP; Fort Bragg 1997) is the principal document that directs the installation's conservation goals for the RCW. The Department of the Army's "Management Guidelines for the red-cockaded woodpecker on Army Installations" (Department of the Army 1996) established the means by which each Army installation is to determine its conservation goals for RCWs on their lands. Two standards are identified: (1) the Installation Regional Recovery Goal (IRRG) and (2) the Mission Compatible Goal (MCG). The IRRG represents the installation's share of the recovery goal within a recovery unit, which may include demographically-connected subpopulations on other federal or nonfederal lands. The MCG is the installation's RCW population objective, based on the installation's capacity to integrate RCW conservation with planned and on-going mission requirements. Both of these goals are established through cooperative efforts between each Army post and their respective Service field offices.

Fort Bragg's MCG is defined as 401 active, protected RCW clusters. The Fort Bragg Endangered Species Branch currently manages 315 baseline active (BLC) RCW clusters and 86 primary recruitment clusters (PRCs) toward this goal. Primary recruitment clusters are designated and managed for the purpose of attracting new RCW breeding groups (Fort Bragg 1997). Training restrictions apply in BLCs and PRCs. All managed clusters in the Green Belt are counted toward the MCG. Fort Bragg's Installation Regional Recovery Goal is set at 482 active clusters. This goal includes 315 BLCs, 86 PRCs and 81 Supplemental Recruitment Clusters (SRCs)(Fort Bragg 1997). A SRC is a cluster designated and managed for the purpose of attracting a new breeding group; however, there are no training restrictions for these clusters and these clusters do not count toward the MCG (Fort Bragg 1997).

The proposed action has the potential to adversely affect the RCW within the proposed project area. The effects of the proposed action on the RCW will be considered further in the remaining sections of this BO. Potential effects include the loss of foraging and nesting habitat related to highway construction activities, loss of cavity trees, habitat fragmentation and harassment in the form of disturbing or interfering with RCWs attempting to nest, forage, roost and immigrate/emigrate within the project action area (see "**Status of the Species within the Action Area,**" below).

ENVIRONMENTAL BASELINE

The Fort Bragg Green Belt was developed as a result of the Installation Materials and Maintenance Division (IMMD) Complex section 7 consultation with the Service in 1992 (Service 1992. Biological Opinion for the proposed construction of the Installation and Materials and Maintenance Division Complex on Fort Bragg, U.S. Fish and Wildlife Service, Atlanta, GA. 24 pp.). The IMMD development was proposed to be built in the main cantonment area (MCA) of Fort Bragg and would impact RCWs located in the area. During this consultation, in part to avoid a jeopardy biological opinion, Fort Bragg agreed to develop a corridor management plan within the MCA. The resulting biological opinion and conservation recommendations included a corridor management plan that became known as the Green Belt Plan. The Green Belt Plan was designed to "...maintain and provide habitat for RCW dispersal/immigration between the Northeast Training Area (NEA) and the main RCW population to the west, provide high quality clusters and cavity trees for establishment and retention of active clusters and provide high quality forage substrate for RCWs" (Fort Bragg 1992). Short-term and long-term objectives included: "...reforestation of non-forested land and conversion of off-site species where needed; fire management, emphasizing growing season burns and prohibition of pine straw harvest; mechanical and chemical hardwood treatments; soil erosion prevention and stabilization; nesting habitat improvements; translocation; additional management in residential areas with landscaping/reforestation opportunities; and measures to be developed to avoid encroachment" (Fort Bragg 1992).

The Green Belt is one of seven Habitat Management Units (HMUs) identified in the 1997 ESMP. Fort Bragg included many of the specific management activities of the Green Belt in the ESMP; however, some recommendations were intentionally not included in the ESMP (e.g., prescribed burning in some areas) because biologists considered them no longer biologically or logistically prudent. The Green Belt Plan identified 20 RCW clusters in the Green Belt and

concluded that by the year 2002 there would be sufficient foraging habitat available for 15 groups of RCWs (Fort Bragg 1992). Impacts associated with the construction of the Fayetteville Outer Loop within the Green Belt were described in the 1997 ESMP in terms of approximate acreage of pine and pine/hardwood stands that may be affected within the HMU (209 acres; Fort Bragg 1997). However, no detailed analysis of the highway's effects on RCW population dynamics (e.g. survivorship of Green Belt RCW groups, creation of recruitment clusters, contiguity of habitat, etc.) pertaining to the Green Belt's role in maintaining the demographic connectivity among Sandhills East's subpopulations was conducted. The Service's December 4, 1997, non-jeopardy biological opinion on the ESMP specifically addressed the strategies by which Fort Bragg would integrate protected species management with the installation's military training mission. Although the December 4, 1997 biological opinion discussed conservation measures outlined in the ESMP for all HMUs including the Green Belt HMU, project level impacts (e.g. the Fayetteville Outer Loop) were not addressed.

Since 1995, the Fort Bragg Endangered Species Branch and the Fort Bragg Natural Resources Division have conducted extensive management efforts including demographic monitoring, provisioning of artificial cavities, translocation of juvenile pairs, timber thinnings and prescribed burning in the Green Belt and have improved RCW foraging and nesting habitat. In 1990, five of 21 RCW clusters within the Green Belt were active. In 2004, 12 RCW clusters within the Green Belt were active and/or contained a breeding group (Fort Bragg, 2004).

Status of the species within the action area (AA)

According to Walters (1990), the average dispersal distance within the Sandhills East and West populations is less than 3.1 miles. It is reasonable to assume that the changes in the demography and distribution of groups affected by the project within three miles of the project corridor would also affect the outermost NEA groups. Where the physical connection between the NEA and the remainder of Fort Bragg's RCW HMUs might decline as a result of development pressure in the Green Belt, the potential for RCW emigration and immigration between Fort Bragg proper (and Overhills) and the NEA should not be discounted. Based on this information, the Service has described the AA for the proposed project to include the highway corridor between Cliffdale Road and U.S. Highway 401, a three-mile radius of the corridor, and a three-mile radius from the outermost RCW foraging partitions within Fort Bragg's NEA HMU (Figure 1). This AA determination is also intended to address the "neighborhood analysis" required in the RCW Recovery Plan. Of the 95 clusters/partitions within the AA (on both federal and nonfederal lands), 51 contain breeding groups, 26 are active (solitary male, captured or non-breeding pair), eight are inactive, four are abandoned clusters and six clusters have not yet been created. Thirteen clusters/partitions within the action area occur on private lands. These are occupied by six breeding groups and two non-breeding groups. One cluster was captured (A cluster that does not support its own group of red-cockaded woodpeckers, but contains active cavity trees in use or kept active by birds from a neighboring cluster; See Glossary of Terms) and four clusters were abandoned (JCA, unpublished data).

Based on information available to the Service, we estimate that the highway project may impact between three and seven percent of RCW territories in the Sandhills East population. The Fayetteville Outer Loop project will cause the loss of RCW foraging habitat in ten RCW territories in the Green Belt (FB 63, 64, 65, 96, 97, 205, 207, 208, 528 and 1002) and three in the NEA (FB 265, 266, 267). The proposed action will occupy 164.87 acres of land within foraging

partitions on Fort Bragg. The quality of habitat, in terms of tree species and stand densities /distribution that will be affected is described in the BA. The effects of the proposed construction will occur within Fort Bragg’s Green Belt, which currently contains all or part of 23 foraging partitions and 21 clusters, twelve of which are active. The NEA contains all or part of 39 RCW territories, about 35 of which are active (Walters et al. 2004). There are nine clusters on private lands adjacent to the NEA that are considered part of the NEA Habitat Management Unit. The majority of effects will occur in the Green Belt, which provides the most readily available suitable and potentially suitable habitat; therefore, the Green Belt is an essential link between the NEA and the rest of the Sandhills East population.

The September 7, 2004 BA provides a description of habitat conditions within the partitions of the clusters that will be directly affected by the proposed highway project. Habitat quantity and quality were assessed based on two standards: the Recovery Standard (RS) and the Standard for Managed Stability (SMS). The foraging habitat analyses performed by the consultant, Dr. J.H. Carter III and Associates (JCA) included collection of hardwood density/ height and ground cover data for the Fort Bragg clusters, both of which are identified in the RCW Recovery Plan as factors in determining RCW habitat suitability. Pine stand quality was separated into categories based on hardwood midstory characteristics. Pine stands may contain the requisite number and distribution of larger pine trees (≥ 14 inches diameter at breast height) but may still be generally unusable by RCWs if midstory conditions are unsuitable. Tables 1 – 3 below characterize both pine and hardwood midstory conditions within the foraging habitat to be affected.

Table 1: Available Acreage Based on Standard for Managed Stability

<i>Cluster Number</i>	<i>Cluster Status</i>	<i>Suitable Acreage¹</i>	<i>Unsuitable Acreage²</i>	<i>Potential Suitable Acreage</i>	<i>Proportion of Potential Suitable Acreage Available</i>
FB 63	Inactive	30.01	231.33	261.34	0.11
FB 64	Active	41.36	91.63	132.99	0.31
FB 65	Breeding	37.70	53.52	91.22	0.41
FB 96	Breeding	116.88	161.93	278.81	0.42
FB 97	Active	22.79	296.36	319.15	0.07
FB 205	Inactive	0.00	165.58	165.58	0.00
FB 207	Inactive	0.00	217.82	217.82	0.00
FB 208	Active	0.00	178.47	178.47	0.00
FB 265	Breeding	14.26	201.09	215.35	0.07
FB 266	Breeding	0.00	218.13	218.13	0.00
FB 267	Breeding	0.00	224.51	224.51	0.00
FB 528	Active	81.86	45.52	127.38	0.64
FB 1002	TBC	2.59	321.19	323.78	0.01

¹ = acreage that meets the guidelines in all criteria (pine basal area, hardwood presence, etc.).

² = acreage that does not meet the guidelines in all criteria, but could be managed to meet requisite standards.

Table 2: Available Acreage Based on Recovery Standard

<i>Cluster Number</i>	<i>Cluster Status</i>	<i>Suitable Acreage¹</i>	<i>Unsuitable Acreage²</i>	<i>Potential Suitable Acreage</i>	<i>Proportion of Potential Suitable Acreage Available</i>
FB 63	Inactive	0.00	261.34	261.34	0.00
FB 64	Active	0.00	132.99	132.99	0.00
FB 65	Breeding	0.00	91.22	91.22	0.00
FB 96	Breeding	0.00	278.81	278.81	0.00
FB 97	Active	0.00	319.15	319.15	0.00
FB 205	Inactive	0.00	165.58	165.58	0.00
FB 207	Inactive	0.00	217.82	217.82	0.00
FB 208	Active	0.00	178.47	178.47	0.00
FB 265	Breeding	31.58	183.77	215.35	0.15
FB 266	Breeding	13.44	204.69	218.13	0.06
FB 267	Breeding	0.00	224.51	224.51	0.00
FB 528	Active	0.00	127.38	127.38	0.00
FB 1002	TBC	0.00	323.78	323.78	0.00

¹ = acreage that meets the guidelines in all criteria (pine basal area, hardwood presence, etc.).

² = acreage that does not meet the guidelines in all criteria but could be managed to meet requisite standards.

Table 3: Description of General Habitat Conditions (JCA 2004)

<i>Cluster Number</i>	<i>Habitat Description</i>
FB 63	“The partition did not meet the minimum foraging habitat guidelines required by the SMS pre- or post-project due to a moderately dense to dense hardwood midstory that was tall.” / “Under the RSG, the partition had no suitable foraging habitat available and does not meet the minimum foraging habitat requirements. This is a result of a moderately dense to dense hardwood midstory that was tall in 6 of the partitions 7 forest stands.”
FB 64	“The partition did not meet the minimum foraging habitat guidelines required by the SMS due to a moderately dense to dense hardwood midstory that was tall.” / “Under the RSG, the partition had no suitable foraging habitat available and does not meet the minimum foraging habitat requirements...” “This was the result of a moderately dense to dense hardwood midstory that was tall and a basal area for pines <10” DBH that was greater than the minimum 10 ft ² per acre required by the RS.”
FB 65	“Pre-project and post-project [basal area] and acreage totals for FB Cluster 65 did not meet the minimum foraging habitat guidelines for either the SMS or the RSG. This was the result of a moderately dense to dense hardwood midstory that was tall. In addition, pre-project, the All American Freeway

Table 3: Description of General Habitat Conditions (JCA 2004)

<i>Cluster Number</i>	<i>Habitat Description</i>
FB 65 (continued)	causes a gap of > 200 feet between the eastern and western portions of the partition, making the eastern half of the partition non-contiguous. The partition has insufficient potentially suitable habitat to meet the SMS and/or RSG.”
FB 96	“Both pre- and post-project foraging habitat totals meet the minimum foraging guidelines required by the SMS.” /“Under the RS, the partition has no suitable foraging habitat requirements. This was a result of a moderately dense to dense hardwood midstory that was tall. In addition, eight of the 13 forest stands have the required number of pines ≥ 14 ” DBH per acre, however, these pine are not 60 years of age or older.”
FB 97	The partition did not meet SMS requirements due to “a moderately dense to dense hardwood midstory that was tall and a pine [basal area] that was either below the minimum 40 ft ² or above 70 ft ² for trees ≥ 10 ” DBH.”
FB 205	“The partition did not meet SMS (or RSG) guidelines because of a moderately dense to dense hardwood midstory that was tall and sparse pine [basal area] throughout the partition.”
FB 207	“Under both the SMS and RSG, the partition had no suitable foraging habitat and did not meet minimum foraging habitat requirements. The partition had a moderately dense to dense hardwood midstory that was tall and a sparse pine [basal area] across 7 of 9 forest stands. Also the partition had a low number of pines ≥ 14 ” DBH and a high number of pines <10” DBH.”
FB 208	“When evaluating the forested habitat under both the SMS and the RS, the partition had no suitable habitat and does not meet the minimum foraging habitat requirements. The partition had a moderately dense to dense hardwood midstory that was tall, a sparse pine [basal area] across three of five forest stands and a high [basal area] for pines, 10” DBH. Also the partition had a low number of pines ≥ 14 ” dbh and a high number of pines < 10” inches DBH, as well as a sparse pine [basal area] in four of the partition’s five forest stands.”
FB 265	“Pre-project and post-project BA and acreage totals for FB Cluster 265 do not meet the minimum foraging habitat guidelines for suitable habitat required for either the SMS or the RSG (Service 2003a) (Table 5, 6 and 36). However, there is sufficient potentially suitable acreage, if managed, to meet the SMS and/or RSG (Table 5, 6 and 36) (Service 2003a).
FB 266	“Pre-project and post-project BA and acreage totals for FB Cluster 266 did not meet the minimum foraging habitat guidelines for suitable habitat required for either the SMS or the RSG (Service 2003a) (Table 5, 6 and 36). This was a result of a moderately dense to dense hardwood midstory that was

Table 3: Description of General Habitat Conditions (JCA 2004)

<i>Cluster Number</i>	<i>Habitat Description</i>
FB 266 (continued)	tall and a pine BA that was below the minimum 40 sq. ft. per acre. However, there is sufficient potentially suitable acreage, if managed, to meet the SMS and/or RSG (Table 5, 6 and 36) (Service 2003a).”
FB 267	“Under both the SMS and RSG, the partition had no suitable foraging habitat and does not meet the minimum foraging habitat requirements. The partition had a moderately dense to dense hardwood midstory that was tall and a sparse pine basal area in five of its seven stands.”
FB 528	“Although the pre-project foraging habitat totals meet the minimum guidelines required by the SMS, post project foraging habitat totals do not meet the SMS guidelines. This was a result of a moderately dense to dense hardwood midstory that was tall, and a high pine [basal area] and number of trees per acre for pines < 10” DBH.”
FB 1002	“Pre- and post-project foraging habitat totals for FB cluster 1002 do not meet the minimum foraging habitat guidelines required by either the SMS or the RS. This is largely due in part to a moderately dense to dense hardwood midstory that was tall throughout the partition, and according to the RS, high pine [basal area] and number of trees per acre for pines <10” DBH.”

Factors affecting species environment in the action area

The Green Belt is located south of and adjacent to the Main Cantonment Area of Fort Bragg. The Main Cantonment Area contains most of the infrastructure supporting the installation’s military readiness mission. Some facilities and range maintenance activities are contained within the Green Belt, including access control points, tenant command headquarters, and storage shelters/buildings. Fort Bragg and the Service’s Raleigh Field Office have conducted at least 20 informal consultations (requests for concurrence with “not likely to adversely affect” determinations) on installation construction projects within the Fayetteville Outer Loop AA since December 2000. Thirteen involved impacts to single group territories, two were located in more than one foraging partition and five of these projects were constructed outside of identified foraging partitions. Most of these projects involved minor losses to timber and were outside of a 1/4 –mile radius of the epicenter of clusters Fort Bragg has identified as those the installation proposes to manage for sustaining the eastern part of the Sandhills East population. Correspondence addressing these projects is on file at the Service’s Raleigh Field Office.

The informal consultations document the coordination between Fort Bragg’s environmental planners and action sponsors during project design to minimize impacts of these construction projects on forest resources considered valuable to RCW conservation. Despite efforts to retain standing timber and replant appropriate pine species where possible, the Service and Fort Bragg recognize the need to more intensively consider the impacts infrastructural growth is having on RCW population fitness in the Green Belt and NEA Habitat Management Units. Concurrently

with the rendering of this Biological Opinion, the Service is working with Fort Bragg to develop a BA entitled “Biological Assessment for Fort Bragg’s Future Years Development Program (FYDP) in the Green Belt Area, Fort Bragg Military Reservation, North Carolina,” (Fort Bragg 2004). The construction projects addressed in Fort Bragg’s BA represent federal activities that are reasonably certain to occur within and adjacent to the Green Belt contemporaneously with the proposed Fayetteville Outer Loop project. The FYDP will affect 16 RCW territories in addition to the same 13 territories as the Fayetteville Outer Loop (29 clusters/partitions). The impacts associated with the FYDP will be considered part of the Environmental Baseline for this project. A thorough description of the location and background of the Green Belt is contained in Fort Bragg’s Draft BA.

The following is excerpted from the 2004 Fort Bragg Draft BA and underscores the importance of the Green Belt in maintaining the RCW clusters in the NEA as part of the Sandhills East population:

“In 2004 Walters et al. submitted a report to the Service and to the FB Endangered Species Branch (ESB) that attempted to quantify the frequency of significant RCW dispersal movements between and among the North Carolina Sandhill populations. RCW dispersal events between the NEA, Overhills, western FB and the remaining central portion of FB were analyzed using dispersal data through 2002. Only dispersal events in which the dispersing bird achieved breeding status in its new group were considered. In the early 1990s there was evidence suggesting the NEA RCW groups were at risk of being isolated from the rest of the FB population, but the results of this study show between three and four RCW immigrants per generation moved into the NEA from other portions of FB and five to seven NEA RCWs per generation immigrated into other portions of FB in more recent years. It is reasonable to expect that some of these movements were through the Green Belt. The observed rates appear to be sufficient to minimize the loss of genetic variability between the NEA and the rest of FB, thereby supporting the NEA as part of the Sandhills East population. Data in the Walters report also suggest the NEA and Overhills clusters are demographically linked to the rest of the Sandhills East population, although we do not have enough data to determine the extent of interactions of RCWs on Overhills with the rest of the FB population.

The NEA groups (n=35) (Walters et al. 2004) and adjacent private lands (n=9 active clusters, JCA unpublished) are “physically” connected to the rest of the FB population by the Green Belt. The NEA is otherwise isolated physically from the remainder of the FB population by highly developed areas up to approximately 4.3 miles wide (Walters et al. 2004). The Green Belt is fragmented, but may provide a mechanism for dispersal between the NEA and the main RCW population to the west by providing established RCW groups on the landscape, and suitable forage and dispersal habitat throughout the corridor, facilitating effective demographic and genetic linkage.”

In summary, the primary factors affecting the species environment in the AA are the landscape role of the Green Belt in maintaining the connectivity of the Sandhills East population, the efforts by Fort Bragg to manage and maintain that corridor, and the development pressures on the corridor. These factors have implications for RCWs within the Green Belt as well as for the survival and recovery of the Sandhills East population, which will be analyzed in the next section of the Biological Opinion.

EFFECTS OF THE ACTION

Factors to be considered

The September 7, 2004 BA (JCA 2004) identifies four cavity trees that will be removed from FB 65 in creating the highway corridor. Eight cavity trees in three managed clusters (FB 208, 267 and 528) on Fort Bragg will stand within 200 feet of the proposed highway project or patrol roads created on the installation. Three RCW cavity trees within two clusters on private lands (CC 10 and 17) will be removed, and one cavity tree on private land will be within 200 feet of the proposed project area (CC 17). The proposed highway corridor passes within the ¼-mile radius of the center of clusters FB 65, 97, 205, 208, 267 and 528. Table 4 shows the distance from the highway project's clearing limits to the geometric centers of the clusters directly affected.

Table 4: Distance from cluster epicenters to project clearing limits

<i>Cluster Number</i>	<i>Cluster Status</i>	<i>Distance (in feet)</i>
FB 528	Active	183
FB 65	Breeding	235
FB 267	Breeding	420
FB 97	Active	580
FB 205	Inactive	1,000
FB 265	Breeding	1,020
FB 208	Active	1,025
FB 207	Inactive	1,385
FB 266	Breeding	1,460
FB 96	Breeding	1,460
FB 63	Inactive	1,660
FB 64	Active	1,750
FB 1002	To be created	1,850

The RCW is the only federally listed species that will be addressed in this biological opinion and is, therefore, the only species considered in this analysis. The effects analysis considers various construction and roadway use impacts on individual RCWs and their foraging habitat, the ability of Fort Bragg to meet its RCW recovery goals, and various landscape-level impacts on RCW habitat and demographics. Effects on RCWs that could result in take in the form of harm and harassment from timber clearing and road construction on RCWs include loss of currently suitable nesting and foraging habitat. Effects on RCWs that could result in take in the form of harm and harassment from roadway use include degradation of potential and currently suitable nesting and foraging habitat. Effects on RCWs that could result in take in the form of harassment from both timber clearing/construction and roadway operation include disturbance resulting in behavioral modifications that cause increased mortality or reduced reproductive output and demographic disturbance due to habitat fragmentation causing potential dispersal impediments. Not all actions associated with the proposed project are expected to adversely affect RCWs; each action was evaluated to determine if impacts to RCWs would be reasonably certain to occur, either by affecting roosting, breeding and/or dispersal activities, or by significantly reducing foraging habitat. In addition, the conservation measure (debiting and crediting of the conservation bank on the Calaway Tract) offered by NCDOT in the BA for the

proposed project is part of the agency's action and, therefore, impacts resolved or minimized by this action were assessed. Changes in the ability to meet long-term and short-term recovery goals were based on examination of current population density and pre- and post-project habitat capabilities and are summarized at the end of the section **Species' response to the proposed action.**

Analyses for the effects of the action

Direct effects

The Fayetteville Outer Loop project will occupy 356.6 acres of land on Fort Bragg. Approximately 164.87 acres are contained within RCW foraging partitions that the installation is attempting to manage for RCW recovery. About 144.3 acres of forested habitat and 5,914.53 square feet of basal area for pine stems ≥ 10 inches DBH within nine active territories will be removed. Based on the SMS evaluation performed by JCA, about 23 acres of suitable habitat will be removed as will 141.8 acres of currently unsuitable, potential habitat. The distribution of foraging habitat to be removed among the affected clusters is contained in Tables 5 through 7.

Table 5. Foraging habitat removals associated with the Fayetteville Outer Loop - Standard for Managed Stability

<i>Cluster Number</i>	<i>Suitable Acreage</i> ¹	<i>Suitable Basal Area</i> ¹	<i>Unsuitable Acreage</i> ²	<i>Unsuitable Basal Area</i> ²
FB 63	0.00	0.00	0.22	11.93
FB 64	1.76	112.64	0.16	8.93
FB 65	5.52	353.28	23.83	1,048.41
FB 96	0.00	0.00	20.95	662.44
FB 97	0.00	0.00	13.39	437.41
FB 205	0.00	0.00	6.48	174.34
FB 207	0.00	0.00	1.82	50.08
FB 208	0.00	0.00	30.94	877.48
FB 265	0.00	0.00	0.20	2.54
FB 266	0.00	0.00	0.84	18.31
FB 267	0.00	0.00	23.37	826.35
FB 528	15.75	1,050.62	7.59	516.12
FB 1002	0.00	0.00	12.05	478.01

¹ = acreage/basal area that meets the guidelines in all criteria (pine basal area, hardwood presence, etc.).

² = acreage/basal area that does not meet the guidelines in all criteria, but could be managed to meet requisite standards.

Table 6. Foraging habitat removals associated with the Fayetteville Outer Loop - Recovery Standard

<i>Cluster Number</i>	<i>Unsuitable, Potential Foraging Habitat Acreage</i>	<i>Potentially Suitable Pine Basal Area to be removed</i>
FB 63	0.22	11.93
FB 64	1.92	121.57
FB 65	29.35	1,401.69
FB 96	20.95	662.44
FB 97	13.39	437.41
FB 205	6.48	174.34
FB 207	1.82	50.08
FB 208	30.94	877.48
FB 265	0.20	2.54
FB 266	0.84	18.31
FB 267	23.37	826.35
FB 528	23.34	1,566.74
FB 1002	12.05	478.01

Table 7. Proportion of total foraging habitat removed by the Fayetteville Outer Loop—Both Standards

<i>Cluster Number</i>	<i>Proportion Acreage lost</i>	<i>Proportion Basal Area lost</i>
FB 63	0.00	0.00
FB 64	0.01	0.01
FB 65	0.32	0.30
FB 96	0.08	0.05
FB 97	0.04	0.03
FB 205	0.04	0.05
FB 207	0.01	0.01
FB 208	0.17	0.18
FB 265	0.00	0.00
FB 266	0.00	0.00
FB 267	0.10	0.10
FB 528	0.18	0.20
FB 1002	0.04	0.04

Based on the information contained in the BA, less than one percent of suitable and unsuitable foraging habitat acreage would be subtracted from the partitions supporting clusters 63, 64, 207, 265 and 266. Approximately four percent of manageable acreage would be removed from clusters 97, 205 and 1002. Clusters 96 would lose about eight percent; 267, about ten percent; 208 about 17%; and 528, about 18% of their respective foraging partitions. Cluster 65 would

lose approximately 30% of the partition being managed by Fort Bragg to support resident RCW groups. All clusters (except Cluster FB 65) will retain at least the minimum amount of foraging habitat that, if managed sufficiently, would support RCW groups in accordance with the SMS (Table 8). The acreage that would remain available for the management of Cluster 65 is about 62 acres which is 13.1 acres below the amount of territory needed for maintaining an active group. Cluster 65 would also lose four cavity trees. In the 2004 breeding season, two of those four had active cavities and two contained inactive starts. One of the active trees, tree number 10972 was the 2004 nest tree.

Table 8. Post Project Figures – Standard for Managed Stability

<i>Cluster Number</i>	<i>Potential Suitable Acreage</i>	<i>Potential Suitable Basal Area</i>
FB 63	261.12	13,180.79
FB 64	131.07	8,452.88
FB 65	61.87	3,337.15
FB 96	257.86	13,403.91
FB 97	305.76	16,370.19
FB 205	159.10	3,576.64
FB 207	216.00	6,978.59
FB 208	147.53	3,914.50
FB 265	215.15	9,208.90
FB 266	217.29	7,733.27
FB 267	201.14	7,376.91
FB 528	104.04	6,299.62
FB 1002	311.73	12,677.12

The recovery standard requires that each cluster has approximately 120 acres (or more) of good quality habitat. Good quality habitat is further defined as having (1) ≥ 20 ft²/acre basal area of pines ≥ 60 years in age and ≥ 14 in. DBH, (2) between 0-40 ft²/acre basal area of pines 10-14 in. DBH, (3) ≤ 10 ft²/acre basal area of pines < 10 in. DBH, (4) 40% of groundcover is herbaceous and pyrophytic, (5) hardwood midstory is nonexistent or sparse and less than 7 feet in height, (6) canopy hardwoods are either nonexistent or are $\leq 10\%$ of canopy trees in longleaf forests or $\leq 30\%$ in loblolly/shortleaf forests, (7) all habitat is within 0.5 miles of cluster center and (8) no acreage counted as foraging habitat should be separated by more than 200 feet of non-foraging areas. The Fayetteville Outer Loop foraging habitat analyses showed that none of the 13 clusters affected by loss of foraging habitat due to the proposed action met the recovery standard before timber clearing. All but two of the 13 clusters would retain 120 acres or more of habitat that could be managed for the recovery standard (See FB 65 and FB 528 in Table 9 below).

Table 9. Post Project Figures – Recovery Standard

<i>Cluster Number</i>	<i>Potential Suitable Acreage</i>	<i>Potential Suitable Basal Area</i>
FB 63	261.12	13,180.79
FB 64	131.07	8,452.88
FB 65	61.87	3,337.15
FB 96	257.86	13,403.91
FB 97	305.76	16,370.19
FB 205	159.10	3,576.64
FB 207	216.00	6,978.59
FB 208	147.53	3,914.50
FB 265	215.15	9,208.90
FB 266	217.29	7,733.27
FB 267	201.14	7,376.91
FB 528	104.04	6,299.62
FB 1002	311.73	12,677.12

Direct effects of timber removal and highway construction that will remove foraging and nesting habitat for RCWs are (1) disturbing foraging birds by reducing their resources (i.e., home range size increases as foraging resources decrease), (2) reduction of nesting success of RCWs by incubation disruption and nestling provisioning rates (i.e., adults travel further to obtain food for nestlings), (3) reduction in group size, and ultimately, (4) cluster abandonment as resources fall below a critical threshold (dependent on habitat quality, density of adjacent clusters, and demographic variables) (DeLotelle and Epting 1992, Hardesty et al. 1997, Service 1985, Service 2003a). Thirteen clusters (FB 63, 64, 65, 96, 97, 205, 207, 208, 265, 266, 267, 528, and 1002) will be directly affected by the proposed highway project. At a minimum, all of these will experience some loss in foraging habitat substrate. Clusters FB 65, 97, 205, 208, 265, 267 and 528 will lose foraging habitat within ¼ mile of their cluster epicenters. The ¼-mile radius polygon is where Service guidelines recommend foraging habitat should be managed to support at least 50% of all substrate available to each resident group. Two clusters (FB 65 and 528) will lose acreage below Recovery Standard Guidelines, considerably diminishing their ability to function as part of the Sandhills East population unit. Enough foraging substrate will be removed from Cluster 65’s foraging partition to further deplete foraging habitat below the Standard for Managed Stability. Four cavity trees, including the nest tree for the 2004 breeding season will be removed from Cluster 65’s cavity tree aggregation. The combination of the later two effects will cause complete, direct take of Cluster 65. To account for the taking of Cluster 65, NCDOT will debit one “project credit” from the Calaway Tract conservation bank, established in Hoke County, on the southwestern edge of Fort Bragg. The process by which debits and credits are administered in the conservation bank is outlined in Exhibit F of the Memorandum of Understanding, executed among the Service, The Nature Conservancy and the NCDOT concerning the future preservation and management of the “Calaway Tract” in Hoke County. The Calaway Tract serves NCDOT as an RCW conservation bank and contains up to five project credits that may be directly debited to offset the loss of groups in the Sandhills East population, based on review of demographic effects of the population by the Service. For each RCW group that is “taken” by a NCDOT project within the Sandhills East population unit, one

Calaway Tract Project Credit will be temporarily debited until one new, demographically equivalent group is established on the Calaway Tract.

Indirect effects

Earth moving and road construction can cause RCW cavity tree mortality due to sediment loads on cavity tree roots, further degrading RCW habitat. However, the loss due to sediment loads as compared to loss of acreage due to clearing for the project footprint is minimal and the detrimental effects of sediment loading on cavity tree roots is not expected to be immediately evident. Indirect effects may result from noise, restriction of necessary habitat management activities and habitat fragmentation. Noise disturbance could result in behavioral modifications that cause disturbance of behavior or reduced reproductive output. We expect the effects from noise to be minimal.

Habitat fragmentation can impede dispersal and complicate habitat management for the RCW and further contribute to interference with normal behavioral or demographic processes such as attainment of sufficient group sizes, survivorship of recruitment, and dispersal. Loss of habitat that reduces reproductive output and inhibits dispersal in the Green Belt can be expected to further isolate clusters in the NEA. Isolating groups existing in the NEA (35 active clusters) will force this subpopulation to behave more independently from the larger Sandhills East population, making it more vulnerable to problems commonly associated with smaller populations such as environmental stochasticity, catastrophic events, genetic drift and inbreeding. Demographic separation of NEA clusters from the other Fort Bragg Habitat Management Units would also inhibit/prolong cooperative efforts among Fort Bragg, the Army Environmental Center, The Nature Conservancy and the Service to recover the Sandhills East primary core population.

The North Carolina Sandhills Conservation Partnership's (NCSCP) RCW Recovery Working Group, comprised of scientists and agency representatives most knowledgeable of the Sandhills RCW populations identified the properties between Fort Bragg's Overhills Tract and the NEA as the most likely geographical area where long term RCW conservation could be exercised that could maintain demographic connectivity between NEA and the other habitat management units. The properties comprising this conservation area are referred to as the Northern Corridor. The RCW Recovery Working Group's determination of the importance of the Northern Corridor to RCW conservation has been adopted by the NCSCP. Of the three options presented in the BA for offsetting/minimizing the highway project's deleterious effects of habitat fragmentation on the RCW, minimization option 1 was identified as having the greatest potential for ensuring long-term demographic connectivity between the main Sandhills East population unit and the NEA. Option 1 would enroll NCDOT's financial support in the cooperative efforts currently being made by member organizations of the NCSCP to protect and conserve, by way of fee title or purchase of conservation easements, properties within the Northern Corridor. The Service believes that NCDOT's efforts to assist the NCSCP in establishing the Northern Corridor (See figure 2 below), as a means of minimizing the Fayetteville Outer Loop's impacts to the RCW groups in the action area, are appropriate for the scale of the project's detrimental impacts

Indirect effects associated with the project stem primarily from timber removal that reduces potential foraging and nesting habitat between clusters in the Green Belt and the NEA. Resource reduction may increase competition for remaining RCW habitat which may in turn affect group sizes and nesting success of groups within the action area. Immigration and emigration of RCWs

within the NEA population may decline. These effects may not be noticeable in the short term, but may be more evident in the years following completion of the Fayetteville Outer Loop. Additional information supporting the necessity to pursue RCW conservation in the Northern Corridor is contained in the “**Species Response to the Proposed Action**” section below.

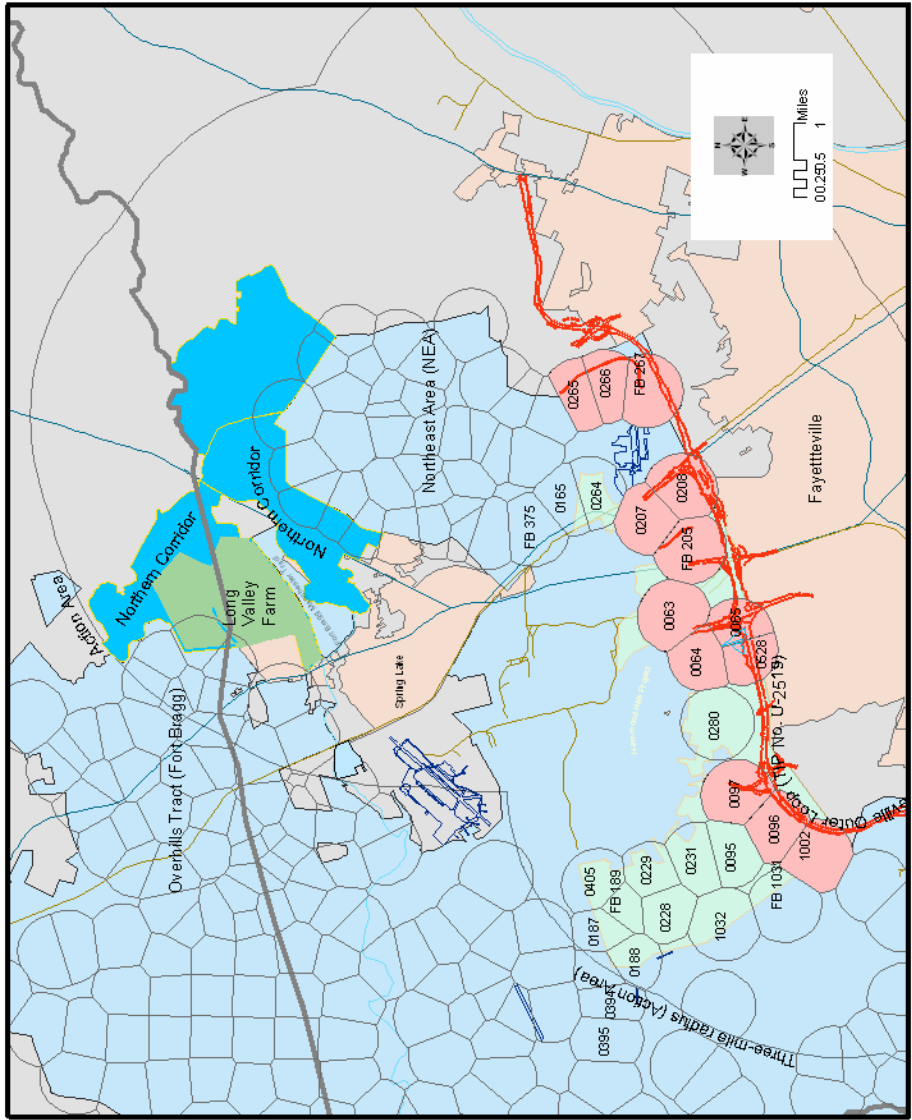


Figure 2. Location of high priority RCW conservation lands in the Northern Corridor

Figure 2. Location of high priority RCW conservation lands in the Northern Corridor.

Species Response to the Proposed Action

The AA contains 95 clusters and associated foraging partitions (in whole and/or in part) within Fort Bragg’s eastern Habitat Management Units, including the Northern Tier, Impact Area, Green Belt and NEA habitat management units. Of these, 51 contain breeding groups, 26 are active (occupied by solitary males or non-breeding pairs or captured by neighboring groups),

eight are inactive, four are abandoned and six have not been created. Ten clusters (clusters 63, 64, 65, 96, 97, 205, 207, 208, 528 and 1002) in the Green Belt Habitat Management Unit and three clusters (265, 266 and 267) in the NEA will be directly affected by loss of foraging/nesting habitat. Clusters and interstitial foraging/nesting habitat in the Green Belt are currently the only direct connection to clusters in the NEA outside of the project area (n=38) (approximately 35 active clusters; Walters et al. 2004).

Loss of an active territory (cluster abandonment) complicates RCW conservation and recovery efforts at the neighborhood level by reducing group densities. While helpers contribute to stabilizing population demographics in RCWs, dispersal behavior is spatially restricted and long-distance dispersal is uncommon (Daniels 1997, Daniels et al. 2000). This makes RCWs particularly vulnerable to demographic stochasticity from isolation of territories. Low density appears to affect small populations (≤ 25 groups) to a greater degree than large, although loss of isolated groups is a problem even in large populations (Conner and Rudolph 1991, Beyer et al. 1996), especially if the fragmentation is within 0.5 miles of the impacted cluster.

Groups adjacent to clusters with reduced foraging habitat can experience an indirect effect from timber removal due to increased intraspecies competition as resources within the neighborhood of clusters are reduced. Reduction of resources and increased competition can result in decreased nesting success of these clusters as resources for reproduction are re-allocated for territory defense. Clusters 65, 97, 208, 265, 267 and 528 are located within 0.25 miles of the proposed Fayetteville Outer Loop. Cluster abandonment (cluster 65) may lead to an inability to maintain an aggregation of clusters at the recommended density (e.g., 4.7 active clusters within 1.25 miles) and indirectly impact demography as clusters within 0.50 miles of the highway corridor get increasingly isolated (Conner and Rudolph 1991, Hooper and Lennartz 1995). The foraging habitat remaining post-project within the partition for cluster 65 may eventually be captured by the breeding group occupying cluster 528. With the projected loss of cluster 65, the density of active clusters directly affected by the Fayetteville Outer Loop will be reduced from an average of 2.7 active clusters per 1.25-mile radius to 2.4 active clusters per 1.25-mile radius. If demographic connectivity between the main Sandhills East subpopulation and Fort Bragg's NEA Habitat Management Unit is not maintained, and dispersals are hindered from landscape alterations resulting in demographic disruption, the ability to recover will be compromised, as this species does not readily establish new territories (Hooper 1983, Service 2003a).

Conservation implemented in the Northern Corridor will strengthen the demographic and genetic health of the Sandhills East primary core population by securing an additional connection between Fort Bragg's main habitat management units and the NEA, supplementing the contribution of nesting/foraging habitat being conserved in the Green Belt. The Green Belt is currently considered the primary conduit for demographic/genetic exchange between these two population units. However, there is potential for a wider, more robust distribution of suitable habitat in the Northern Corridor and the possibility exists for the Northern Corridor to supersede the Green Belt for ensuring long term recovery of the Sandhills East population unit in the future. This is not to say that the maintenance and management of the Green Belt will cease to be important. The Green Belt will remain an important link between the NEA and the rest of Sandhills East; particularly, while habitat is being protected and restored in the Northern Corridor. However, the effects of this project together with those proposed by Fort Bragg are such that we can no longer rely on the Green Belt as the only corridor to assure long term RCW conservation.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, Tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

The RCW Recovery Working Group of the NCSCP identified the lands comprising the gap between the Fort Bragg Overhills Tract and the NEA HMU (the Northern Corridor) as some of the most valuable areas on which to focus land acquisition and management for effectively conserving the Sandhills East recovery population (Walters et al. 2001). The NCSCP has been working to acquire properties and conservation easements in the Northern Corridor and has met with some success (e.g., the recent acquisition of the Long Valley Farm in Cumberland County, North Carolina). Lands within the Northern Corridor are also being purchased for development. One 63-acre tract within this area was recently purchased (March 2005) and the owner is requesting to have it rezoned to allow construction of multifamily apartments.

The effects of future development within the Northern Corridor, in conjunction with the conservation of strategically positioned tracts being sought in this area would be difficult to fully quantify in the scope of this biological opinion. The purchase and rezoning of the single 63-acre tract is not expected to obviate the Northern Corridor's potential for significantly contributing to conservation of the Sandhills East population. The Service believes that continued efforts to conserve land within the Northern Corridor for providing suitable foraging habitat for RCWs will meaningfully contribute to maintaining the demographic connection between the NEA HMU and the greater Sandhills East population.

CONCLUSION

After reviewing the current status of the RCW, the environmental baseline for the action area, the effects of the proposed Fayetteville Outer Loop project, the effects of the minimization measures offered in the BA and the cumulative effects, it is the Service's biological opinion that the Fayetteville Outer Loop, as proposed, is not likely to jeopardize the continued existence of the RCW. No critical habitat has been designated for the RCW, therefore none will be affected. One RCW cluster (FB 65) will be immediately subject to "take" due to direct impacts of the project. That "take" will be accounted for through the debiting/crediting process for the Calaway Tract. The indirect harmful effects of the highway project will have more profound consequences to RCW persistence and recovery in the Sandhills East primary core population. These effects will be offset in the long term by cooperative efforts between NCDOT and other members of the NCSCP to strengthen and secure a demographic link for the RCW within the Northern Corridor.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulations pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly

impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, carrying out an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to, and not intended as part of, the agency action is not considered to be a prohibited taking under the Act, provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary, and must be undertaken by the NCDOT so that they become binding conditions of any grant or permit issued to the NCDOT, as appropriate for the exemption in section 7(o)(2) to apply. The NCDOT has a continuing duty to regulate the activity covered by this incidental take statement. If the NCDOT (1) fails to assume and implement the terms and conditions or (2) fails to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permits or grant documents, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the NCDOT must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement. [50 CFR §402.14(1)(3)]

AMOUNT OR EXTENT OF TAKE ANTICIPATED

Construction of the Fayetteville Outer Loop will remove 144.3 acres of suitable and potentially suitable foraging habitat from nine active RCW territories, resulting in the cutting of 5,914.5 square feet of pines ≥10 inches DBH. The amount of acreage and basal area per cluster to be removed is listed in Table 10 below.

Table 10. Acreage and basal area removals from active foraging partitions directly affected by the Fayetteville Outer Loop

Cluster Number	Manageable acreage	Basal area of pines ≥10 inches DBH (ft ²)
FB 64	1.92	121.57
FB 65	29.35	1,401.69
FB 96	20.95	662.44
FB 97	13.39	437.41
FB 208	30.94	877.48
FB 265	0.20	2.54
FB 266	0.84	18.31
FB 267	23.37	826.35
FB 528	23.34	1,566.74

The Service anticipates that take of one group of RCWs will occur as a result of (1) cavity tree removal and (2) impacts to foraging habitat within a 1/2-mile radius of the cluster, associated with the construction of the Fayetteville Outer Loop. Four cavity trees, 29.35 acres and 1,401.7 ft² of pine basal area will be removed from the foraging habitat directly supporting the group occupying cluster 65 as a result of this project. The project will reduce the acreage of suitable foraging habitat available to cluster 65 below the SMS by about 13.1 acres.

The Service recognizes that some of the effects of the action on RCWs, when evaluated one cluster at a time, would not rise to the level of take based on effects to individual clusters and groups. However, the combined effects of habitat loss within the affected territories associated

with the project may have impacts that affect the function of the Green Belt HMU to demographically connect the NEA with the greater Sandhills East RCW population. The primary effects of this take are the diminished ability for demographic exchange of an undetermined number of individual RCWs between the NEA and Green Belt HMUs and the remainder of HMUs comprising the greater Sandhills East Primary Core Recovery Population, and the reduced potential for all-male groups and solitary males occupying territories in these HMUs to be naturally augmented by unrelated, breeding-age females. This take may result from one or more of the following: (1) harm due to loss of foraging habitat from timber clearing for road construction including loss of foraging habitat due to intraspecies competition, (2) harassment from the initial disturbance from construction, (3) harm from the diminished potential to use prescribed burning to maintain ecological functions in foraging habitat, (4) harassment from demographic isolation of clusters within 0.5 miles of the highway corridor due to the inability to aggregate clusters at a recommended density (i.e., a minimum of 4.7 active clusters within 1.25 miles), and (5) harassment from disrupted dispersal due to habitat fragmentation caused by the project footprint.

EFFECT OF THE TAKE

In the accompanying biological opinion, the Service determined that the above-estimated level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize the impacts of incidental take of RCWs.

(1) NCDOT will work with the members of the NCSCP, with a reasonable effort, to acquire one piece of property in accordance with NCDOT and the Federal Highway Administration (FHWA) policies and procedures for property acquisition, in the area identified as the Northern Corridor (Figure 3). The identified property will contain approximately 75 acres of habitat that does or can support a southern yellow pine-dominated overstory and can be reasonably managed to create/maintain foraging habitat for the RCW.

(2) NCDOT will coordinate with Fort Bragg and the Service to establish and implement the best strategy for minimizing direct impacts of tree clearing and highway construction to Cluster FB 65, its resident RCW group and residual foraging and nesting habitat.

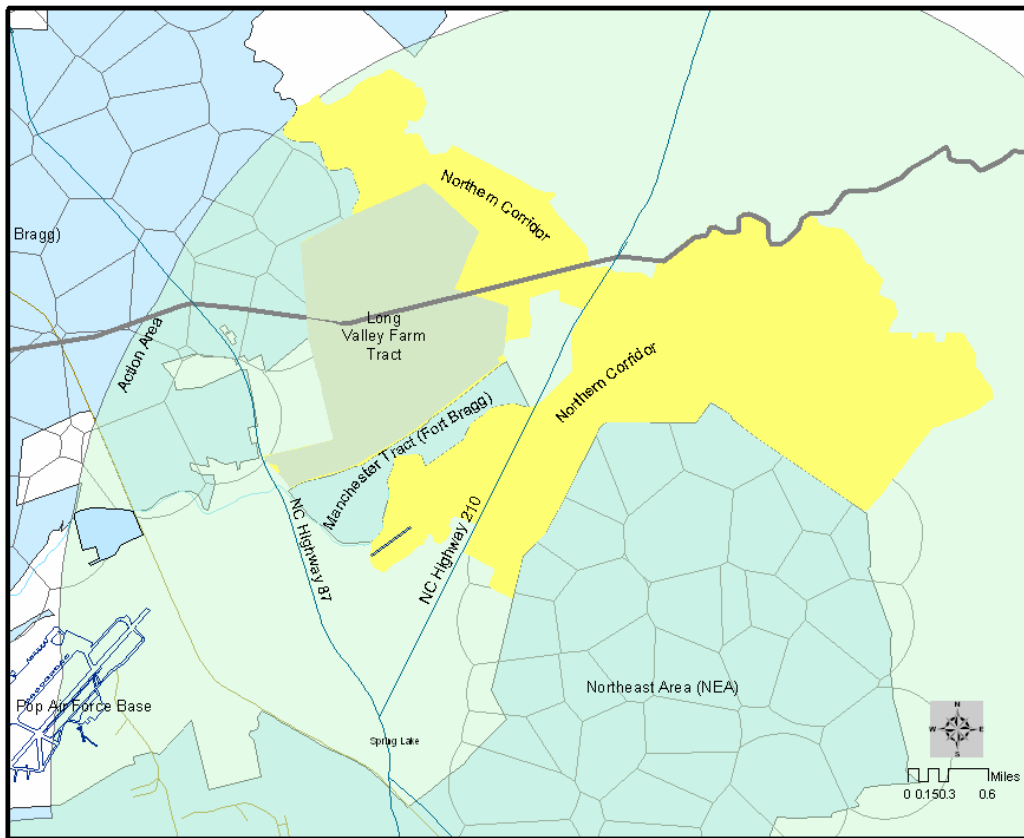


Figure 3: Northern Corridor Extent: Cumberland and Harnett Counties, North Carolina

Figure 3: Northern Corridor Extent, Cumberland and Harnett counties, North Carolina

TERMS AND CONDITIONS

In order to be exempt from prohibitions of section 9 of the Act, the NCDOT must comply with the following terms and conditions, which implement the reasonable and prudent measures, described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

(1) [RPM (1)] Upon acquisition of the conservation property, NCDOT will identify the entity or entities responsible for owning and managing the property and secure an agreement from the entity (or entities) that the property will be managed in accordance with a RCW conservation plan approved by the Service and the NCSCP. (NCDOT's obligations will not extend beyond the acquisition of the property, NCDOT's receipt of assurances from the responsible third party that the property will be managed in accordance with standards set by the NCSCP for RCW conservation, and subsequent transferal to the third party; it is not anticipated that the cost of NCDOT's obligation would exceed \$ 1.0 million).

(2) [RPM (1)] If the property is not acquired and transferred to a responsible third party at least six months prior to initiation of construction, then NCDOT, NCSCP and the Service will meet to determine an appropriate alternative that reasonably supports the objective of establishing the Northern Corridor as a demographic linkage between RCW subpopulations in the Sandhills East

primary core population (Overhills HMU) and NEA. In any case, conservation actions to fulfill this reasonable and prudent measure must occur prior to construction.

(3) [RPM (2)] Where NCDOT is able to program the timing of tree clearing and highway construction within the project area, NCDOT will, in the early stages of the planning process, schedule meetings with Fort Bragg's Directorate of Public Works and the Service to determine:

A. The best time to conduct tree clearing and/or construction activities in a manner that minimizes impacts to cluster 65 and its associated RCW group.

B. Determine the time and location where artificial cavities will be created to minimize the loss of RCWs associated with project activities.

C. Establish protective measures for trees selected and/or used to provision cavities for conserving RCWs associated with the Fayetteville Outer Loop project.

Upon locating a dead, injured, or sick individual of an endangered or threatened species, initial notification must be made to the Clemson Field Office. Additional notification must be made to the Raleigh, North Carolina Fish and Wildlife Ecological Services Field Office. Care should be taken in handling sick or injured individuals and in the preservation of specimens in the best possible state for later analysis of cause of death or injury. All procedural and reporting requirements as outlined in the Service's region-wide biological opinion on monitoring and management (Service 2003b) will be followed.

These reasonable and prudent measures, together with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. The Service believes that no more than one RCW group will be incidentally taken. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided. The Federal agency must immediately provide an explanation of the causes of the taking, and review with the Service the need for possible modification of the reasonable and prudent measures.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on a listed species or critical habitat, to help implement recovery plans, or to develop information. We recommend implementation of the following conservation recommendations:

(1) Coordinate/cooperate with Fort Bragg to address hardwood midstory and pine stand management issues identified in the September 7, 2004 BA where pine overstory is otherwise represented by suitable size/age classes.

(2) Fund a radio telemetry study to better understand dispersal events within the Green Belt, NEA and Overhills habitat management units on Fort Bragg Military Reservations and other appropriate RCW population units in the North Carolina Sandhills. This would assist in determining the best strategic locations for provisioning artificial clusters to encourage growth of subpopulations to meet recovery goals for the Sandhills East primary core population.

(3) Success of the Northern Corridor as a means of maintaining a demographic connection between the NEA HMU and the rest of the Sandhills primary core population would be enhanced if the gap between RCW territories in the southeast edge of the Overhills HMU and northwest NEA HMU were to close. Natural population growth for the RCW in the absence of strategically placed recruitment clusters occurs at a very low rate. By the creation and occupation of recruitment clusters in suitable foraging and nesting habitat occurring immediately adjacent to occupied RCW territories on the peripheries of these two population elements, recovery of the Sandhills East primary core population might be greatly advanced. Based on this assessment, a suitable conservation recommendation would then be to establish at least one new occupied RCW territory, adjacent to a baseline territory on either the southeast edge of the Overhills HMU and northwest NEA HMU, within the area identified as the Northern Corridor.

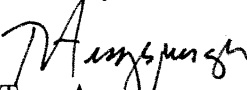
REINITIATION NOTICE

This concludes formal consultation on the action outlined in the September 7, 2004, request. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary NCDOT involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species not considered in this opinion; or, (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operation causing such take must cease pending reinitiation of consultation. Because the likelihood of establishment of new groups or cavity trees increases over time, the Service strongly recommends that the NCDOT conduct an RCW survey within the year of start of construction for the Fayetteville Outer Loop. New groups or cavity trees that may be impacted by the proposed project represent new effects of the action not considered in this opinion, and would require reinitiation of consultation.

For this biological opinion the incidental take would be exceeded when the take exceeds one RCW group, which is what has been exempted from the prohibition of section 9 by this opinion. The duration of this biological opinion is from date of signature to five years after construction is complete.

The Service greatly appreciates the cooperation of the NCDOT during this consultation. We have assigned our log number Service ID# 04-S249 to this consultation; please refer to it in any future correspondence concerning this project. If you or your staff have any questions concerning this BO, please contact Mr. John Hammond of the Raleigh Field Office at (919) 856.4520 extension 28, or via email at john_hammond@fws.gov.

Sincerely,


Tom Augspurger
Acting Field Supervisor

cc: FWS, Atlanta, GA (ES/TE)
Ralph Costa, FWS, Clemson, SC
Pete Campbell, FWS, Southern Pines, NC
Greg Thorpe, NCDOT Raleigh
Richard Spencer, USACE, Wilmington, NC
Travis Wilson, NCWRC, Creedmore
Chris Militscher, USEPA, Raleigh, NC
Beth Barnes, NCDWQ, Raleigh, NC

LITERATURE CITED

- Allen, D. H., K. E. Franzreb, and R. F. Escano. 1993. Efficacy of translocation strategies for red-cockaded woodpeckers. *Wildlife Society Bulletin* 21:155-159.
- Allen, D. H. 1991. Constructing artificial red-cockaded woodpecker cavities. USDA Forest Service General Technical Report SE-73.
- Beckett, T. 1971. A summary of red-cockaded woodpecker observations in South Carolina. Pp. 87-95 in R. L. Thompson, ed. *Ecology and management of the red-cockaded woodpecker*. U.S. Bureau of Sport Fishing and Wildlife and Tall Timbers Research Station, Tallahassee, FL.
- Beyer, D. E., R. Costa, R. G. Hooper, and C. A. Hess. 1996. Habitat quality and reproduction of red-cockaded woodpecker groups in Florida. *Journal of Wildlife Management* 60:826-835.
- Carrie, N. R., R. N. Conner, D. C. Rudolph, and D. K. Carrie. 1999. Reintroduction and postrelease movements of red-cockaded woodpecker groups in eastern Texas. *Journal of Wildlife Management* 63:824-832.

- Conner, R. N., D. C. Rudolph, R. R. Schaefer, D. Saenz, and C. E. Schackelford. 1999. Relationships among red-cockaded woodpecker group density, nestling provisioning rates, and habitat. *Wilson Bulletin* 111:494-498.
- Conner, R. N. and D. C. Rudolph. 1991. Forest habitat loss, fragmentation, and red-cockaded Woodpecker populations. *Wilson Bulletin* 103:446-457.
- Conner, R. N. and D. C. Rudolph. 1989. Red-cockaded woodpecker colony status and trends on the Angelina, Davy Crockett and Sabine National Forests. U.S. Department of Agriculture Forest Service Research Paper SO-250.
- Conner, R. N. and K. A. O'Halloran. 1987. Cavity-tree selection by red-cockaded woodpeckers as related to growth dynamics of southern pines. *Wilson Bulletin* 99:398-412.
- Conner, R. N. and B. A. Locke. 1982. Fungi and red-cockaded woodpecker cavity trees. *Wilson Bulletin* 94:64-70.
- Copeyon, C. K., J. R. Walters, and J. H. Carter III. 1991. Induction of red-cockaded woodpecker group formation by artificial cavity construction. *Journal of Wildlife Management* 55:549-556.
- Copeyon, C. K. 1990. A technique for constructing cavities for the red-cockaded woodpecker. *Wildlife Society Bulletin* 18:303-311.
- Costa, R. 1995. Red-cockaded woodpecker recovery and private lands: a conservation strategy responsive to the issues. Pp. 67-74 *in* D. L. Kulhavy, R. G. Hooper, and R. Costa, eds. Red-cockaded woodpecker: recovery, ecology and management. Center for Applied Studies in Forestry, Stephen F. Austin State University, Nacogdoches, TX.
- Costa, R. and J. Walker. 1995. Red-cockaded woodpecker. Pp. 86-89 *in* E. T. LaRoe, G. S. Farris, C. E. Puckett, and others, eds. Our living resources: a report to the nation on The distribution, abundance, and health of U.S. plants, animals and ecosystems. U. S. National Biological Survey, Washington, D. C.
- Costa, R. and E. Kennedy. 1994. Red-cockaded translocations 1989-1994: state of our knowledge. Pp. 74-81 *in* Proceedings of the American Zoo and Aquarium Association. Zoo Atlanta, Atlanta, GA.
- Costa, R. and R. Escano. 1989. Red-cockaded woodpecker: status and management in the southern region in 1986. US Forest Service Technical Publication R8-TP12.
- Crowder, L. B., J. A. Priddy, and J. R. Walters. 1998. Demographic isolation of red-cockaded woodpecker groups: a model analysis. Service Project Final Report. Duke University Marine Laboratory, Beaufort, NC, and Virginia Polytechnic Institute and State University, Blacksburg, VA.

- Daniels, S. J., J. A. Priddy, and J. R. Walters. 2000. Inbreeding in small populations of red-cockaded woodpeckers: insights from a spatially-explicit individual-based model. Pp. 129-147 in Young, A. G. and G. M. Clarke, eds. Genetics, demography and viability of fragmented populations. Cambridge University Press, London, UK.
- Daniels, S. J. 1997. Female dispersal and inbreeding in the red-cockaded woodpecker. M.Sc. thesis, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- DeLotelle, R. S., R. J. Epting, and G. Demuth. 1995. A 12-year study of red-cockaded woodpeckers in central Florida. Pp. 259-269 in D. L. Kulhavy, R. G. Hooper, and R. Costa, eds. Red-cockaded woodpecker: recovery, ecology and management. Center for Applied Studies in Forestry, Stephen F. Austin State University, Nacogdoches, TX.
- DeLotelle, R. S. and R. J. Epting. 1992. Reproduction of the red-cockaded woodpecker in central Florida. *Wilson Bulletin* 104:285-294.
- DeLotelle, R. S., R. J. Epting, and J. R. Newman. 1987. Habitat use and territory characteristics of red-cockaded woodpeckers in central Florida. *Wilson Bulletin* 99:202-217.
- Dr. J.H. Carter III and Associates, Inc. 2004. Red-cockaded Woodpecker Biological Assessment for the Fayetteville Outer Loop (U-2519, including X-2 West), Cumberland, Hoke and Robeson Counties, North Carolina. Report prepared for N.C. Depart. of Transportation.
- Doerr, P. D., J. R. Walters, and J. H. Carter III. 1989. Reoccupation of abandoned clusters of cavity trees (colonies) by red-cockaded woodpeckers. *Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies* 43:326-336.
- Franzreb, K. E. 1999. Factors that influence translocation success in the red-cockaded woodpecker. *Wilson Bulletin* 111:38-45.
- Frost, C. C. 1993. Four centuries of changing landscape patterns in the longleaf pine ecosystem. Pp. 17-44 in S. M. Hermann, ed. *The longleaf pine ecosystem: ecology, restoration, and management*. Tall Timbers Fire Ecology Conference Proceedings No. 18. Tall Timbers Research Station, Tallahassee, FL.
- Gaines, G. D., K. E. Franzreb, D. H. Allen, K. S. Laves and W. L. Jarvis. 1995. Red-cockaded woodpecker management on the Savannah River Site: a management/research success story. Pp. 81-88 in D. L. Kulhavy, R. G. Hooper, and R. Costa, eds. Red-cockaded woodpecker: recovery, ecology and management. Center for Applied Studies in Forestry, Stephen F. Austin State University, Nacogdoches, TX.
- Hardesty, J. L., K. E. Gault, and F. P. Percival. 1997. Ecological correlates of red-cockaded woodpecker (*Picoides borealis*) foraging preference, habitat use, and home range size in northwest Florida (Eglin Air Force Base). Final Report Research Work Order 99, Florida Cooperative Fish and Wildlife Research Unit, University of Florida, Gainesville, FL.

- Hess, C. A., and R. Costa. 1995. Augmentation from the Apalachicola National Forest: the development of a new management technique. Pp. 385-388 in D. L. Kulhavy, R. G. Hooper, and R. Costa, eds. Red-cockaded woodpecker: recovery, ecology and management. Center for Applied Studies in Forestry, Stephen F. Austin State University, Nacogdoches, TX.
- Hooper, R. G. and M. R. Lennartz. 1995. Short-term response of a high density red-cockaded woodpecker population to loss of foraging habitat. Pp. 283-289 in D. L. Kulhavy, R. G. Hooper, and R. Costa, eds. Red-cockaded woodpecker: recovery, ecology and management. Center for Applied Studies in Forestry, Stephen F. Austin State University, Nacogdoches, TX.
- Hooper, R. G. 1983. Colony formation by red-cockaded woodpeckers: hypotheses and management implications. Pp. 72-77 in D. A. Wood, ed. Red-cockaded woodpecker symposium II. Florida Game and Fresh Water Fish Commission, Tallahassee, FL.
- Hooper, R. G., L. J. Niles, R. F. Harlow, and G. W. Wood. 1982. Home ranges of red-cockaded woodpeckers in coastal South Carolina. *Auk* 99:675-682.
- Hooper, R. G., A. F. Robinson, Jr., and J. A. Jackson. 1980. The red-cockaded woodpecker: notes on life history and management. USDA Forest Service General Report SA-GR-9.
- Jackson, J. A. and S. D. Parris. 1995. The ecology of red-cockaded woodpeckers associated with construction and use of a multi-purpose range complex at Fort Polk, Louisiana. Pp. 277-282 in D. L. Kulhavy, R. G. Hooper, and R. Costa, eds. Red-cockaded woodpecker: recovery, ecology and management. Center for Applied Studies in Forestry, Stephen F. Austin State University, Nacogdoches, TX.
- James, F. C., C. A. Hess, and B. C. Kicklighter. 2001. Ecosystem management and the niche gestalt of the red-cockaded woodpecker in longleaf pine forests. *Ecological Applications* 7:854-870.
- James, F. C. 1995. The status of the red-cockaded woodpecker in 1990 and the prospect for recovery. Pp. 439-451 in D. L. Kulhavy, R. G. Hooper, and R. Costa, eds. Red-cockaded woodpecker: recovery, ecology and management. Center for Applied Studies in Forestry, Stephen F. Austin State University, Nacogdoches, TX.
- Koenig, W. D. 1988. On determination of viable population size in birds and mammals. *Wildlife Society Bulletin* 16:230-234.
- Lennartz, M. R. and D. G. Heckel. 1987. Population dynamics of a red-cockaded woodpecker population in Georgia Piedmont loblolly pine habitat. Pp. 48-55 in R. R. Odom, K. A. Riddleberger, and J. C. Ozier, eds. Proceedings of the third southeast nongame and endangered wildlife symposium. Georgia Department of Natural Resources, Game and Fish Division, Atlanta, GA.

- Lennartz, M. R., R. G. Hooper, and R. F. Harlow. 1987. Sociality and cooperative breeding of red-cockaded woodpeckers (*Picoides borealis*). *Behavioural Ecology and Sociobiology* 20:77-88.
- Lennartz, M. R. and R. F. Harlow. 1979. The role of parent and helper red-cockaded woodpeckers at the nest. *Wilson Bulletin* 91:331-335.
- Letcher, B. H., J. A. Priddy, J. R. Walters, and L. B. Crowder. 1998. An individual-based, spatially explicit simulation model of the population dynamics of the endangered red-cockaded woodpecker. *Biological Conservation* 86:1-14.
- Ligon, J. D. 1970. Behavior and breeding biology of the red-cockaded woodpecker. *Auk* 87:255-278.
- Rudolph, D. C., R. N. Conner, D. K. Carrie, and R. R. Schaefer. 1992. Experimental reintroduction of red-cockaded woodpeckers. *Auk* 109:914-916.
- Schiegg, K., J. R. Walters, and J. A. Priddy. 2002. The consequences of disrupted dispersal in fragmented red-cockaded woodpecker *Picoides borealis* populations. *Journal of Animal Ecology* 71:710-721.
- U.S. Department of the Army. 1996. Revised management guidelines for the red-cockaded woodpecker on army installations. U.S. Department of the Army, Washington, DC.
- U.S. Department of the Army, Fort Bragg. 2004. Draft Biological Assessment for Fort Bragg's Future Years Defense Program in the Green Belt Area. Fort Bragg Military Installation, North Carolina.
- U.S. Department of Army, Fort Bragg. 1997. Fort Bragg and Camp Mackall endangered species management plan. Fort Bragg, N.C.
- U.S. Department of the Army, Fort Bragg. 1992. Proposal for the Fort Bragg Green Belt plan. Prepared for U.S. Fish and Wildlife Service, Atlanta, Georgia.
- U.S. Fish and Wildlife Service. 2003a. Recovery plan for the red-cockaded woodpecker (*Picoides borealis*): second revision. U. S. Fish and Wildlife Service, Atlanta, GA.
- U.S. Fish and Wildlife Service. 2003b. Biological opinion on all section 10(a)(1)(A) management, monitoring and research permits issued to all private, state and federal agencies and individuals involved with management, conservation and recovery of the red-cockaded woodpecker throughout the range of the species. U.S. Fish and Wildlife Service, Atlanta, GA.
- U.S. Fish and Wildlife Service. 1997. Biological opinion for the Fort Bragg and Camp Mackall Endangered Species Management Plan. U.S. Fish and Wildlife Service, Asheville, N.C. 36 pp.

- U.S. Fish and Wildlife Service. 1992. Biological opinion for the proposed construction of the Installation Materials and Maintenance Division Complex on Fort Bragg. U.S. Fish and Wildlife Service, Atlanta, GA. 24 pp.
- U.S. Fish and Wildlife Service. 1985. Red-cockaded woodpecker recovery plan. U.S. Fish and Wildlife Service. Southeast Region, Atlanta, GA.
- Walters, J.R., K. Sadler, S.J. Daniels, J.H. Carter, K. Scheigg, G. Pasinelli, and P.D. Doerr. 2004. Demographic Connections within the Sandhills Red-cockaded Woodpecker Population. Project Final Report (Draft).
- Walters, J.R., K. Sadler, S. J. Daniels, J. H. Carter III, K. Scheigg, G. Pasinelli and P. D. Doerr. 2004. Significant dispersal movements of red-cockaded woodpeckers on Fort Bragg and other areas within the North Carolina Sandhills. Prepared for Fort Bragg Endangered Species Branch. 20 pp.
- Walters, J.R., J.H. Carter III, P.D. Doerr, B. Beck, T. Myers, J. S. Hammond. 2001. Draft report from the RCW Recovery Working Group, North Carolina Sandhills Conservation Partnership.
- Walters, J. R., C. K. Copeyon, and J. H. Carter III. 1992. Test of the ecological basis of cooperative breeding in red-cockaded woodpeckers. *Auk* 109:90-97.
- Walters, J. R. 1991. Application of ecological principles to the management of endangered species: the case of the red-cockaded woodpecker. *Annual Review of Ecology and Systematics* 22:505-523.
- Walters, J. R. 1990. Red-cockaded woodpeckers: a 'primitive' cooperative breeder. Pp. 69-101 *in* P. B. Stacey and W. D. Koenig, eds. *Cooperative breeding in birds*. Cambridge University Press, London, UK.
- Walters, J. R., P. D. Doerr, and J. H. Carter III. 1988. The cooperative breeding system of the red-cockaded woodpecker. *Ethology* 78:275-305.
- Watson, J. C., R. G. Hooper, D. L. Carlson, W. E. Taylor, and T. C. Milling. 1995. Restoration of the red-cockaded woodpecker population on the Francis Marion National Forest: three years post-Hugo. Pp. 172-182 *in* D. L. Kulhavy, R. G. Hooper, and R. Costa, eds. *Red-cockaded woodpecker: recovery, ecology and management*. Center for Applied Studies in Forestry, Stephen F. Austin State University, Nacogdoches, TX.

Glossary of Terms

Active cavity	A completed cavity or start exhibiting fresh pine resin associated with cavity maintenance, cavity construction, or resin well excavation by red-cockaded woodpeckers.
Active cavity tree	Any tree containing one or more active cavities.
Active cluster	A cluster containing one or more active cavity trees.
Augmentation	Increasing the size of a population by translocating individuals between populations.
Basal area	The area of a horizontal cross section of a tree's stem, generally measured at breast height.
Breeding dispersal	Movement of individuals between consecutive breeding locations.
Budding	One of two processes of new group formation in red-cockaded woodpeckers (see also pioneering), referring to the splitting of one territory into two.
Canopy	The uppermost layer of foliage in a forest or forest stand.
Captured cluster	A cluster that does not support its own group of red-cockaded woodpeckers, but contains active cavity trees in use or kept active by birds from a neighboring cluster.
Clearcut	An area in which all trees have been removed in one cutting.
Cluster	The aggregation of cavity trees previously and currently used and defended by a group of woodpeckers, or this same aggregation of cavity trees <i>and</i> a 61 m (200 ft) wide buffer of continuous forest. Here, the second definition is used. For management purposes, the minimum area encompassing the cluster is 4 ha (10 ac). Use of the term "cluster" is preferred over colony because colony implies more than one nest (as in colonial breeder).
Cluster, active	See active cluster.
Cluster, captured	See captured cluster.
Coastal Plain	In the United States, an ecoregion or physiographic province located near the Atlantic Ocean or Gulf of Mexico.

Glossary of Terms

Cooperative breeding	A breeding system in which one or more adults assist a breeding pair in rearing of young. These extra adults, called helpers, delay their own dispersal and reproduction and are generally related to the offspring of the breeding pair.
Dispersal	Movement of individuals from natal to first breeding location (natal dispersal), or between consecutive breeding locations (breeding dispersal).
Ecoregion	A system of classification based on physiography.
Effective population size	The size of the ideal, hypothetical population in which all individuals mate randomly and all contribute equally to reproduction. Variation in reproductive success and other processes in a real population affect how many genes are conserved in subsequent generations. The concept of effective population size is used to control for the effects of such processes when discussing genetic conservation.
Environmental stochasticity	Random changes in environmental conditions and their effects on populations.
Even-aged management	A silvicultural method designed primarily for timber production, in which all trees in a stand are of one age/size class. The forest is regulated by developing equal areas in each age/size class.
Extirpation	Loss of a population or all populations within a specified region.
Flatwoods	Mesic pine communities on the Gulf and Atlantic Coastal Plains with a well-developed woody shrub or midstory layer.
Floater	An adult bird not associated with a breeding group.
Forb	A herbaceous plant that has broad leaves; not a grass.
Fragmentation	Habitat loss that results in isolated patches of remaining habitat.
Gene flow	The movement of genetic material among populations or within a population.
Genetic drift	Random sampling of genetic resources within a population from one generation to the next. In populations of finite size, this sampling will always result in loss of variation. In populations of large size, such loss may be offset by new variation arising through mutation.

Glossary of Terms

Genetic stochasticity	Random changes in gene frequencies.
Group	The social unit in red-cockaded woodpeckers, consisting of a breeding pair with one or more helpers, a breeding pair without helpers, or a solitary male.
Habitat selection	Use of a resource above what is expected based on the availability of that resource.
Heartwood	The inner, un-living, inactive core of a tree.
Helper	An adult that delays its own reproduction to assist in the rearing of another breeding pair's young. Typically, helpers are related to the breeding pairs that they assist.
Herbs	Grasses and forbs.
Herbaceous	Non-woody.
Heterozygosity	Genetic diversity within an individual or population, as measured by the proportion of loci containing two different alleles.
Home range	The area supporting the daily activities of an animal, generally throughout the year.
Homozygosity	Genetic similarity within an individual or population, as measured by the proportion of loci containing two identical alleles.
Immigration	Movement of one or more individuals into a population.
Inbreeding	Mating between relatives.
Inbreeding depression	Loss of fitness due to the increase in homozygosity that results from inbreeding.
Increasing population trend, recommended rate of	Five percent increase in active clusters from one year to the next.
Kleptoparasitism	Theft by one species of resources procured by another species, resulting in positive effects for the parasite and negative effects for the species being parasitized. Generally this term is applied to theft of food, but has recently been expanded to include theft of spatial resources.

Glossary of Terms

Local adaptation	Traits conferring higher fitness in a local environment.
Metapopulation	A set of interacting populations.
Midstory	A layer of foliage intermediate in height between canopy and groundcover, litter layer, or soil surface.
Mission Compatible Goal	A military installation's known capacity to integrate RCW management with on-going/planned mission requirements, determined in consultation with the Service.
Mitigation	Reduction of negative impacts.
Mutation	A heritable change in a DNA molecule.
Natal dispersal	Movement of individuals from their place of birth to their first breeding location.
Partition	The geographic area, potentially extending out to a one half-mile radius from the center of a cluster, in which habitat is managed to support an RCW group. A partition boundary will not reach out to a half-mile where it abuts the partition of another cluster with an epicenter less than one mile from the first cluster.
Pioneering	One of two processes of new group formation in red-cockaded woodpeckers (see also budding), by which a group colonizes previously unoccupied areas. Because of the difficulty of cavity excavation, this process occurs at very low frequencies.
Plate	On a cavity tree, the area surrounding the cavity entrance where bark has been removed by red-cockaded woodpeckers. Newly completed cavities may not exhibit a well-developed plate.
Pocosin	A wetland dominated by a dense cover of evergreen and deciduous shrubs.
Population	A group of individuals of the same species occupying a given area. Methods of specifying such an area may differ according to purpose. A common specification is the area within which gene flow is sufficient to avoid genetic differentiation.
Population augmentation	Translocation between populations to increase population size.
Population dynamics	Properties of a population such as trend and regulation of population

Glossary of Terms

	size.
Population trend	See increasing population trend, decreasing population trend, and stable population trend.
Potential breeding group	An adult female and adult male that occupy the same cluster, whether or not they are accompanied by a helper, attempt to nest, or successfully fledge young.
Predation	The acquisition of food by killing and eating another organism.
Prescribed burning	Fire applied to the landscape to meet specific management objectives.
Primary cavity nester	Species that nest in cavities they created.
Primary core population	A population identified in recovery criteria that will hold at least 350 potential breeding groups at the time of and after delisting. Defined by biological boundaries.
Recovery	Species viability.
Recovery population	One of a set of populations designated as necessary for the recovery of the species.
Recovery Standard	A set of guidelines to direct forest management within foraging partitions for the conservation and recovery of the RCW. Implementing these guidelines should not only ensure that RCW populations remain stable but should result in increased population viability.
Recovery unit	One of a set of geographical areas, delineated according to ecoregions, that likely represent broad-scale geographic and genetic variation in red-cockaded woodpeckers. Viable populations in each recovery unit, to the fullest extent that available habitat allows, are considered essential to the recovery of the species.
Recruitment	The addition of individuals into a breeding population through reproduction and/or immigration and attainment of a breeding position.
Recruitment cluster	A cluster of artificial cavities in suitable nesting habitat, located close to existing groups.
Regeneration	A silvicultural method of simultaneously harvesting and establishing reproduction in a stand of trees.

Glossary of Terms

Regulation	A process of implementing silvicultural techniques to establish equal areas of tree size classes, to sustain a given level of timber production over time.
Reintroduction	Translocation of individuals from a captive or wild population to previously occupied, but currently unoccupied habitat.
Resinosis	A process through which injured sapwood in a pine tree becomes saturated with hardened resin, reducing and eventually preventing loss of resin.
Resin well	A wound in a pine tree's cambium, created and maintained by red-cockaded woodpeckers, for the purpose of resin production.
Restrictors	Metal plates used to prevent or repair enlargement of cavity entrances.
Rotation	In even-aged management of forests, the number of years between regeneration events.
Sandhills	Xeric and sub-xeric longleaf pine communities on deep sandy soils. Also, the ecoregion encompassing the Fall-line Sandhills communities, between the mid- and south-Atlantic Coastal Plains and Piedmont.
Sapwood	The outer, active layer of tissue in a tree, lying just inside the cambium.
Savanna	A mesic and seasonally wet pine community, often transitional between xeric pine systems and wetlands, characterized by diverse grass and forb groundcovers.
Secondary cavity nester	Species that inhabit cavities they did not create.
Secondary core population	A population identified in recovery criteria that will hold at least 250 potential breeding groups at the time of and after delisting. Defined by biological boundaries.
Seed-tree	A method of timber regeneration in which most trees in a site are cut, and tree seedlings become established under remnant large trees. Remnant large trees are retained at lower densities than under the shelterwood method.
Selection cutting	A method of timber regeneration in which single trees or patches of trees (0.8 ha or less, 2 ac or less) are cut.

Glossary of Terms

Shelterwood	A method of timber regeneration in which many, but not all trees in a site are cut, and tree seedlings become established under remnant large trees. Remnant large trees are retained at higher densities than under the seed-tree method.
Silviculture	The theory and practice of controlling the establishment, composition, structure, and growth of forests to achieve management objectives. Silviculture was developed primarily for the purpose of timber production, but can be used for other purposes including biological conservation.
Snag	A standing, dead tree.
Solitary male	An unpaired male that is the sole resident of a cluster.
Stable population	A population that exhibits neither an increasing or decreasing population trend.
Stand	A silvicultural term for an area of trees that is or has been treated as a single management unit.
Standard for Managed Stability	Guidelines for forest management that will result in the conservation of the bare minimum foraging and nesting resources required for sustaining an active cluster. Adherence to these guidelines would prevent a direct “take” of RCWs (as defined by section 9 of the ESA), but does not address the long term sustenance and recovery of RCW populations.
Start	An incomplete cavity.
Strategic recruitment	Placement of recruitment clusters in locations strategically chosen to enhance the spatial arrangement of breeding groups. Breeding groups aggregated in space rather than isolated are beneficial to population dynamics and viability.
Stochasticity	Random events.
Support population	All known populations not designated as a primary or secondary core are designated support populations. Support populations (other than essential supports) are defined by ownership rather than biological boundaries. There are three classifications for support populations: 1. Essential support populations are those populations, identified in recovery criteria, that represent unique or important habitat types that cannot support a larger, core population. They are located on federal and state lands and two private properties. 2. Significant support populations are populations, not identified in recovery criteria, that

Glossary of Terms

	<p>contain and/or have a population goal of 10 or more active clusters. They are located on federal and state lands and on private lands enrolled in agreements with the U.S. Fish and Wildlife Service. 3. Important support populations are populations, not identified in recovery criteria, that contain and have a population goal of less than 10 active clusters. They are located on federal and state lands and on private lands enrolled in agreements with the U.S. Fish and Wildlife Service.</p>
Take	<p>As defined by the Endangered Species Act, take means to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (Section 3.18 of the Act). Habitat destruction and alteration are considered forms of take, following a Supreme Court ruling on this issue (Sweet Home vs. Babbitt).</p>
Taxonomy	<p>Hierarchical classification system for all life forms.</p>
Territory	<p>A region within an animal’s home range that is defended from conspecifics.</p>
Thinning	<p>A silvicultural treatment removing some trees in a stand to reduce tree density.</p>
Translocation	<p>The artificial movement of wild organisms between or within populations to achieve management objectives. Originally, translocation referred to the movement of animals from captive to wild populations, but the term has been expanded to include movements (by artificial means) within and between wild populations.</p>
Two-aged management	<p>A silvicultural method designed primarily for timber production, in which trees of two age/size classes are present in the same stand. The forest is regulated by developing equal areas in each age/size class.</p>
Uneven-aged management	<p>A silvicultural method designed primarily for timber production, in which trees of at least three age classes are present in the same stand. Stands are regulated by size class structure or volume.</p>
Viability	<p>The ability of a population or species to persist over time.</p>

APPENDIX E

**NC STATE HISTORIC PRESERVATION
OFFICE CORRESPONDENCE
&
MEMORANDUM OF AGREEMENT FOR
ARCHAEOLOGICAL RESOURCES**

Federal Aid # DPR-0100(201) TIP # 4-2519 County CUMBERLAND/ROBESON/HOKE

CONCURRENCE FORM
FOR
ASSESSMENT OF EFFECTS

Brief Project Description

FAYETTEVILLE OUTER LOOP FROM I-95 IN ROBESON COUNTY TO EAST OF NC 24 (BRACC
BLVD.) IN CUMBERLAND COUNTY

On OCTOBER 16, 1997, representatives of the

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

reviewed the subject project and agreed

there are no effects on the National Register-listed property within the project's area of potential effect and listed on the reverse.

there are no effects on the National Register-eligible properties located within the project's area of potential effect and listed on the reverse.

there is an effect on the National Register-listed property/properties within the project's area of potential effect. The property-properties and the effect(s) are listed on the reverse.

there is an effect on the National Register-eligible property/properties within the project's area of potential effect. The property/properties and effect(s) are listed on the reverse.

Signed:

Clay Gifford
Representative, NCDOT, Historic Architectural Resources Section

10/16/97
Date

Wendy S. Natige
FHWA, for the Division Administrator, or other Federal Agency

10/20/97
Date

Debra K. Bevin
Representative, SHPO

10/16/97
Date

David Wood, Deputy
State Historic Preservation Officer

10/23/97
Date

(over)

Federal Aid # DRR-0100(301) TIP # 4-2519 County CUMBERLAND/ROBESON/HOKE

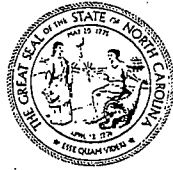
Properties within area of potential effect for which there is no effect. Indicate if property is National Register-listed (NR) or determined eligible (DE).

~~BRENA~~ VISTA (DE) -

Properties within area of potential effect for which there is an effect. Indicate property status (NR or DE) and describe effect.

Reason(s) why effect is not adverse (if applicable).

Initialed: NCDOT g FHWA WJ SHPO WB



North Carolina Department of Cultural Resources

James B. Hunt Jr., Governor
Betty Ray McCain, Secretary

January 6, 1998

Division of Archives and History
Jeffrey J. Crow, Director

Nicholas L. Graf
Division Administrator
Federal Highway Administration
Department of Transportation
310 New Bern Avenue
Raleigh, N.C. 27601-1442

Re: Historic Structures Survey Report for Fayetteville
Outer Loop, Cumberland, Robeson, and Hoke
Counties, U-2519, Federal Aid No. DPR-
0100(001), State Project 8.2441301, ER 98-
8141

Dear Mr. Graf:

Thank you for your letter of December 4, 1997, transmitting the historic structures survey report by Mattson, Alexander & Associates, concerning the above project.

The following properties were previously determined eligible for listing in the National Register of Historic Places:

Buena Vista

Keithville Rental Units (CD 201)

Shaw-Gillis House

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

Shaw-Gillis Historic District, north and south sides of US 401, Fenix vicinity, Cumberland County. This historic district includes the Shaw-Gillis House, a property determined eligible for the National Register in 1981, and the William John Gillis House No. 2, two Gillis properties that were historically part of one farm. The district is eligible under Criterion C for architecture.

William John Gillis House No. 1, east side of SR 1102, 0.2 mile north of junction with SR 1100, Fenix vicinity, Cumberland County. This Gillis House is eligible under Criterion C as a well-preserved example of turn of the century, rural domestic architecture in Cumberland County.



(former) Wood's Store, east side of SR 1406, south of junction with Aberdeen and Rockfish Railroad, Hoke County. This 1920s store and filling station illustrate the type of commercial buildings erected in the region and throughout rural America after the First World War to serve rural communities as well as a growing automobile-oriented trade. It is eligible under Criterion A for commerce and Criterion C for design.

McInnis House, east side of SR 1102, 0.02 mile south of junction with SR 1100, Rockfish vicinity, Cumberland County. This house is an extremely rare surviving example of nineteenth-century rural domestic architecture in Cumberland County, and is eligible under Criterion C. Although the dwelling has been partially remodeled, it retains important elements of its original style.

The following properties were determined not eligible for listing in the National Register of Historic Places:

Gillis Cotton Gin Complex. Although surviving early twentieth-century cotton gin buildings are rare in the region, the Gillis complex no longer retains sufficient integrity for National Register eligibility.

Rockfish Community Center. The community center was moved in the 1970s and no longer retains sufficient integrity for National Register eligibility.

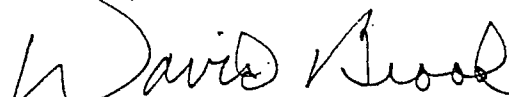
School. This school building is vacant and highly deteriorated, and lacks special historic or architectural significance.

The report meets our office's guidelines and those of the Secretary of the Interior.

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

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

Sincerely,



David Brook
Deputy State Historic Preservation Officer

DB:slw

cc: ✓ H. F. Vick
B. Church
Mattson, Alexander and Associates, Inc.

Federal Aid # DPR-0100(001) TIP # U-2519 County Cumberland, Robeson, Hoke

CONCURRENCE FORM
FOR
ASSESSMENT OF EFFECTS

Brief Project Description

Fayetteville Outer Loop

On January 15, 1998, representatives of the

- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- North Carolina State Historic Preservation Office (SHPO)
- Other H. Lochner

reviewed the subject project and agreed

there are no effects on the National Register-listed property within the project's area of potential effect and listed on the reverse.

there are no effects on the National Register-eligible properties located within the project's area of potential effect and listed on the reverse.

there is an effect on the National Register-listed property/properties within the project's area of potential effect. The property-properties and the effect(s) are listed on the reverse.

there is an effect on the National Register-eligible property/properties within the project's area of potential effect. The property/properties and effect(s) are listed on the reverse.

Signed:

Mary Pope 1.15.1998
Representative, NCDOT, Historic Architectural Resources Section Date

Wendy E. Astaire 1/26/98
FHWA, for the Division Administrator, or other Federal Agency Date

Debra K. Berrin 1/15/98
Representative, SHPO Date

David Wood 1/28/98
State Historic Preservation Officer Deputy SHPO Date

(over)

Federal Aid # DPR-0100(001) TIP # U-2519 County Cumberland, Robeson, H.

Properties within area of potential effect for which there is no effect. Indicate if property is National Register-listed (NR) or determined eligible (DE).

- ① Wood's Store (DE) - no effect
- ② William John Gillis No.1 - (DE) no effect
- ③ McInnis House (DE) - no effect

Properties within area of potential effect for which there is an effect. Indicate property status (NR or DE) and describe effect.

- ① Shaw Gillis Historic District (DE) - Conditional No Adverse Effect contingent on review of road closure plan for Raeford Rd. & review of landscape plan ~~for~~ along US 401 and proposed ~~other~~ Outer Loop Corridor

Reason(s) why effect is not adverse (if applicable).

Initialed: NCDOT MPJ FHWA WY SHPO WV



North Carolina Department of Cultural Resources
State Historic Preservation Office

Peter B. Sandbeck, Administrator

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

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

March 18, 2005

MEMORANDUM

TO: Gregory Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch
NCDOT Division of Highways

FROM: Peter B. Sandbeck *PBS for Peter Sandbeck*

SUBJECT: Supplement Architectural Resources Survey Report, Fayetteville Outer Loop Corridor Study, U-2519, Cumberland, Robeson, and Hoke Counties, CH 93-0570

Thank you for your letter of February 18, 2005, transmitting the supplemental survey report for the above project by Frances P. Alexander of Mattson, Alexander and Associates, Inc.

For purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the following properties were previously determined eligible and remain eligible for the National Register of Historic Places:

- ◆ Buena Vista, (D.O.E. 1991), 5948 Bragg Boulevard, Fayetteville, Cumberland County. The property's historic boundaries correspond to the present tax parcel that has not changed since 1991.
- ◆ Stryker Golf Course, (D.O.E. 2000), Fort Bragg, west side of Bragg Boulevard from Knox Street to Gruber Road, Fayetteville, Cumberland County. The property's historic boundaries correspond to the 2000 determination of eligibility report, described as follows:
Stryker Golf Course is bounded on the east by NC 24/87, Bragg Boulevard. It is bounded on the north by Gruber Road, and on the west and south by Knox Street. These streets form natural boundaries for the golf course.

For purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the following properties are not eligible for the National Register of Historic Places:

- ◆ Military Housing, 700-800 blocks of Reilly Road, Fayetteville, Cumberland County. This series of detached frame dwellings have been moved to their present site and have undergone numerous alterations. The properties no longer retain sufficient integrity to be eligible for the National Register.

ADMINISTRATION
RESTORATION
SURVEY & PLANNING

Location
507 N. Blount Street, Raleigh NC
515 N. Blount Street, Raleigh NC
515 N. Blount Street, Raleigh, NC

Mailing Address
4617 Mail Service Center, Raleigh NC 27699-4617
4617 Mail Service Center, Raleigh NC 27699-4617
4617 Mail Service Center, Raleigh NC 27699-4617

Telephone/Fax
(919)733-4763/733-8653
(919)733-6547/715-4801
(919)733-6545/715-4801

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

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT

bc: Southern/McBride
County

Federal Aid # DPR-0100(001)

TIP # U-2519

County: Cumberland

CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS

Project Description: Fayetteville Outer Loop

On 9/27/2004, representatives of the

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

Reviewed the subject project and agreed

- There are no effects on the National Register-listed property/properties located within the project's area of potential effect and listed on the reverse.
- There are no effects on the National Register-eligible property/properties located within the project's area of potential effect and listed on the reverse.
- There is an effect on the National Register-listed property/properties located within the project's area of potential effect. The property/properties and the effect(s) are listed on the reverse.
- There is an effect on the National Register-eligible property/properties located within the project's area of potential effect. The property/properties and effect(s) are listed on the reverse.

Signed:

Mary Pope Dec. 22, 2004
Representative, NCDOT Date

R. H. A. 11/11/05
FHWA, for the Division Administrator, or other Federal Agency Date

Andrea D. [Signature] 12/23/04
Representative, HPO Date

Renee Medkiss-Early 12-23-04
State Historic Preservation Officer Date

Federal Aid # **DPR-0100(001)**

TIP # **U-2519**

County: **Cumberland**

Properties within the area of potential effect for which there is no effect. Indicate if property is National Register-listed (NR) or determined eligible (DE).

Woods Store (DE)

William John Gillis House No. 1 (DE)

McInnis House (DE)

Properties within the area of potential effect for which there is an effect. Indicate property status (NR or DE) and describe the effect.

Buena Vista (DE): No Adverse Effect

Keithville Rental Unit (DE): No Adverse Effect with Environmental Commitments

Shaw-Gillis Historic District (DE): No Adverse Effect with Environmental Commitments

Reason(s) why the effect is not adverse (if applicable).

Buena Vista: NCDOT will stay within existing ROW (which is the historic boundary of the property). Some shrubs may be removed, but they are within NCDOT's existing ROW.

Keithville Rental Units: NCDOT shall install landscaping on slope to serve as a visual screen as specified in the March 16, 2004 Merger Meeting for this project.

Shaw-Gillis Historic District: NCDOT shall allow the property owner to retain the access point on US 401, NCDOT shall paint the exterior of the Shaw-Gillis House after construction is completed, NCDOT shall install landscaping along the district's boundary adjacent to the new outerloop to serve as a visual barrier between the house and the new facility, and NCDOT shall upgrade the intersection of Raeford and Riley Roads but will shift the new T-intersection away from a direct alignment with the Shaw-Gillis House as much as possible.

Initialed:

NCDOT MPH

FHWA RHA

HPO SDM

CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS

Project Description: Fayetteville Outer Loop

On 3/29/2005, representatives of the

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

Reviewed the subject project and agreed

- There are no effects on the National Register-listed property/properties located within the project's area of potential effect and listed on the reverse.
- There are no effects on the National Register-eligible property/properties located within the project's area of potential effect and listed on the reverse.
- There is an effect on the National Register-listed property/properties located within the project's area of potential effect. The property/properties and the effect(s) are listed on the reverse.
- There is an effect on the National Register-eligible property/properties located within the project's area of potential effect. The property/properties and effect(s) are listed on the reverse.

Signed:

Mary Pope 3/29/2005
Representative, NCDOT Date

[Signature] 5.2.05
FHWA, for the Division Administrator, or other Federal Agency Date

[Signature] 3/29/05
Representative, HPO Date

Renee Bedhill-Easley 3/29/05
State Historic Preservation Officer Date

Federal Aid # **DPR-0100(001)**

TIP # **U-2519**

County: **Cumberland**

Properties within the area of potential effect for which there is no effect. Indicate if property is National Register-listed (NR) or determined eligible (DE).

Stryker Golf Course (DE) - no effect.

Properties within the area of potential effect for which there is an effect. Indicate property status (NR or DE) and describe the effect.

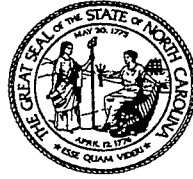
Reason(s) why the effect is not adverse (if applicable).

Initialed:

NCDOT MPJ

FHWA TJA

HPO SDM



**North Carolina Department of Cultural Resources
State Historic Preservation Office**

Peter B. Sandbeck, Administrator

Michael F. Easley, Governor
and History
Lisbeth C. Evans, Secretary
Resources
Jeffrey J. Crow, Deputy Secretary
Director

Office of Archives
Division of Historical
David Brook,

October 29, 2004

MEMORANDUM

TO: Gregory Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch
NCDOT Division of Highways

FROM: Peter B. Sandbeck *PBS for Peter Sandbeck*

SUBJECT: North Reilley Road Houses in the Fayetteville Outer Loop Expansion Corridors,
TIP U-2519, Cumberland County, ER 93-0570

Following the September 27, 2004, Eligibility and Effects meeting, we obtained additional information on houses on North Reilley Road, located just outside of the Fort Bragg Military Reservation boundaries. These houses are privately owned, therefore the World War II Temporary Buildings Programmatic Memorandum of Agreement entered into by the Department of Defense, the Advisory Council on Historic Preservation, and the National Council of Historic Preservation Officers does not apply.

These houses appear to be potentially eligible for the National Register of Historic Places for their association with World War II mobilization and development at Fort Bragg and in Fayetteville. We recommend a Department of Transportation architectural historian evaluate structures in the expanded area of potential effect and report the findings to us.

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

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above referenced tracking number.

	Location	Mailing Address	Telephone/Fax
ADMINISTRATION	507 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-4763/733-8653
RESTORATION	515 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6547/715-4801
SURVEY & PLANNING	515 N. Blount Street, Raleigh, NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6545/715-4801

MEMORANDUM OF AGREEMENT

**Recovery of Significant Information from
Archaeological Sites 31CD64, 31CD65, 31CD871, 31CD874, 31CD882, 31CD962,
31CD965, 31CD967/967**, 31CD976**, and 31RB485
TIP U-2519, Proposed Corridor for the Western Fayetteville Outer Loop
State Project No. 8.2441301
Federal Aid Project No. NHF-DPR-0100(001)**

CUMBERLAND AND ROBESON COUNTIES, NORTH CAROLINA

Whereas, in accordance with 36 CFR Part 800, the North Carolina Department of Transportation (hereafter NCDOT) acknowledges and accepts the advice and conditions outlined in the Advisory Council on Historic Preservation's (hereafter Council) "Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites," published in the Federal Register (FR Doc. 99-12055) on May 17, 1999; and

Whereas, the consulting parties agree that the recovery of significant information from the archaeological sites listed above may be done in accordance with the published guidance; and

Whereas, the consulting parties agree that it is in the public interest to expend funds for the recovery of significant information from these archaeological sites to mitigate the adverse effects of the project; and

Whereas, the consulting parties concur, to the best of their knowledge and belief, that no Native American Tribes or Native Hawaiian organizations attach religious or cultural importance to the affected property, and that no objections from such groups have been raised to the work proposed; and

Whereas, to the best of our knowledge and belief, no human remains, associated or unassociated funerary objects or sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001), are expected to be encountered in the archaeological work;

Now, therefore, the NCDOT shall ensure that the following terms and conditions will be implemented in a timely manner and with adequate resources in compliance with the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470).

STIPULATIONS

1. The NCDOT will develop Data Recovery Plans (hereafter DRPs) for Sites 31CD874, 31CD882, 31CD962, 31CD965, and 31RB485, all of which will be affected by the subject project, in consultation with the North Carolina State Historic Preservation Office (hereafter HPO).

2. The NCDOT will develop DRPs for Sites 31CD64, 31CD65, and 31CD871, all of which will be affected by the subject project, in consultation with both the HPO and the Fort Bragg Cultural Resources Program (hereafter FBCRP).
3. Since Site 31CD976** (Barefoot Cemetery) will need to be relocated, the NCDOT will develop an appropriate mitigation plan in consultation with the Office of State Archaeology in accordance with NC GS 65 or NC GS 70(3).
4. If it is determined by ongoing analyses that the historic cemetery component of Site 31CD967/967** will be affected by the subject project, the NCDOT will develop an appropriate mitigation plan in consultation with the Office of State Archaeology in accordance with NC GS 65 or NC GS 70(3).
5. 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.
6. As they are developed, each individual DRP will be forwarded for review by the HPO and, if applicable, FBCRP.
7. Upon completion of each Data Recovery effort, the NCDOT will prepare and forward a Management Summary to the HPO and, if applicable, FBCRP, 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.
8. Upon receipt of the Management Summary, the HPO and, if applicable, FBCRP will respond within ten (10) days to the recommendations contained within the document.
9. Upon acceptance of the recommendations contained in the Management Summary, the HPO and, if applicable, FBCRP will issue the NCDOT documentation that the Data Recovery field investigations have been completed.
10. The analysis and report preparation, detailing Sites 31CD64, 31CD65, 31CD871, 31CD874, 31CD882, 31CD962, 31CD965, 31CD967/967** (if applicable), 31CD976** (if applicable), and 31RB485 will be completed by the NCDOT, or their consultants, within twelve (12) months after completion of each site's fieldwork schedule.

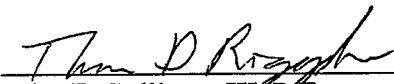
OTHER TERMS AND CONDITIONS

Modification, amendment, or termination of this agreement as necessary shall be accomplished by the signatories in the same manner as the original agreement. Disputes regarding the completion of the terms of this agreement shall be resolved by the

signatories. If the signatories cannot agree regarding a dispute, any one of the signatories may request the participation of the Council to assist in resolving the dispute.

This agreement shall be null and void if its terms are not carried out within five (5) years from the date of its execution, unless the signatories agree in writing to an extension for carrying out its terms.

Federal Highway Administration:



for John F. Sullivan, III, P.E.
Division Administrator

Date: 4/6/05


State Historic Preservation Office:



Jeffrey J. Crow
Director

Date: 4/12/05

North Carolina Department of Transportation:



Carl B. Goode, P.E.
Manager, Office of Human Environment

Date: 04/05/05

APPENDIX F

NEWSLETTERS

NEWSLETTER NO. 4 – JUNE 1999
NEWSLETTER NO. 5 – DECEMBER 1999
NEWSLETTER NO. 6 – NOVEMBER 2000
NEWSLETTER NO. 7 – NOVEMBER 2002
NEWSLETTER NO. 8 – MAY 2004

NEWSLETTER

June, 1999

TIP No. U-2519

State Project No. 8.2441301

Issue No. 4

This newsletter is the fourth in a series published by the North Carolina Department of Transportation (NCDOT) to inform the public about the proposed Fayetteville Outer Loop (TIP No. U-2519). The Draft Environmental Impact Statement (DEIS) has been completed and is available along with the Corridor Public Hearing Map for public review. This newsletter provides information on locations where the DEIS and Corridor Public Hearing Map can be reviewed and announces the Pre-Hearing Workshop and the Corridor Public Hearing for the project.

BUILD ALTERNATES

Thirteen build alternates, labeled B through N, are being considered for the Fayetteville Outer Loop (TIP No. U-2519). The map on the next page depicts the general location of the thirteen build alternates. All of the alternates begin at a new interchange with I-95 in Robeson County. Each alternate follows a unique route around the southern and western sections of the Fayetteville area. All of the alternates combine into a single corridor north of Cliffdale Road (SR 1400) on the Fort Bragg Military Reservation. All build alternates follow this single corridor to the end of the project, west of US 401 (Ramsey Street). At this location, this project connects to the northern portion of the Fayetteville Outer Loop (TIP No. X-2).

The corridors are typically 1,000 feet wide, which are much wider than the actual right of way (350 feet) proposed for the roadway. The final location of the roadway within the corridors will not be determined until the design phase. The new facility will be a controlled-access freeway on new location with access being limited to interchanges.

Alternate B is the closest alignment to Fayetteville and is approximately 27 miles long. Alternate N is the furthest alignment from Fayetteville and is approximately 30 miles long. The remaining alternates are located between Alternates B and N. Alternate A was eliminated from consideration several years ago.

DEIS AVAILABLE FOR REVIEW

NCDOT recently released the DEIS for public review. Copies of the document are available for citizens to read and study at the following locations in Cumberland, Hoke, and Robeson Counties:

- ▶ NCDOT Division 6 Office at 558 Gillespie Street in Fayetteville.
- ▶ NCDOT District Office at 872 NC 711 Highway in Lumberton.
- ▶ Fayetteville Area Metropolitan Planning Organization at 130 Gillespie Street in Fayetteville.
- ▶ Cumberland County Library - Main Office at 300 Maiden Lane in Fayetteville.
- ▶ Cumberland County Library - Cliffdale Branch at 6882 Cliffdale Road in Fayetteville.
- ▶ Cumberland County Library - North Regional Branch at 855 McArthur Road in Fayetteville.
- ▶ Cumberland County Library - Hope Mills Branch at 3411 Golfview Road in Hope Mills.
- ▶ Hoke County Library at 334 North Main Street in Raeford.
- ▶ Robeson County Library at 321 West Broad Street in St. Pauls.

HEARING MAP AVAILABLE

The Corridor Public Hearing Map is available for public review at the two NCDOT offices listed above and at the Fayetteville Area Metropolitan Planning Organization. The Hearing Map shows the corridor locations for the thirteen build alternates under consideration. These alternates are shown on an aerial photograph depicting existing streets, schools, subdivisions, and other local landmarks. This map will also be available for public review at both the Pre-Hearing Workshop and at the Corridor Public Hearing.

PRE-HEARING WORKSHOP AND CORRIDOR PUBLIC HEARING

Following public review of the DEIS, a Pre-Hearing Workshop will be held to discuss the results of the DEIS, provide the public an opportunity to understand more fully the planning process, and prepare for the Corridor Public Hearing. The Pre-Hearing Workshop will be conducted in an informal manner similar to the previous Citizens Informational Workshops. Citizens can attend the workshop at their convenience between 4:00 and 6:00 in the afternoon.

Citizens will have the opportunity to officially comment on the project at the Corridor Public Hearing. Written and verbal comments will be received by NCDOT at the

hearing. Citizens will also have two weeks following the hearing to submit written comments for inclusion in the official Public Hearing transcript. The Corridor Public Hearing will begin at 7:00 p.m.

Pre-Hearing Workshop - 4 to 6 p.m.

Tuesday, July 13th - 71st High School
Auditorium - Raeford Road (US 401)

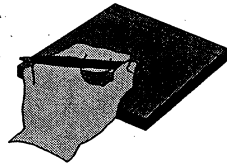
Corridor Public Hearing - 7:00 p.m.

Tuesday, July 13th - 71st High School
Auditorium - Raeford Road (US 401)

FOR MORE INFORMATION

Write:

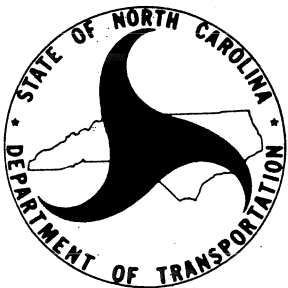
Mr. J. A. Bissett, P.E.
NC Department of Transportation
Project Development and
Environmental Analysis Branch
P.O. Box 25201
Raleigh, NC 27611



Call:

Fayetteville Outer Loop
Corridor Study Hotline
(Toll Free)

1-800-554-7849



Fayetteville Outer Loop
Corridor Study Newsletter

P.O. Box 30923
Raleigh, NC 27622

NEWSLETTER

December, 1999

TIP No. U-2519

State Project No. 8.2441301

Issue No. 5

This newsletter is the fifth in a series published by the North Carolina Department of Transportation (NCDOT) to inform the public about the proposed Fayetteville Outer Loop (TIP No. U-2519). It provides information on comments received at the Corridor Public Hearing in July 1999 and an update on the alternate selection process.

PUBLIC HEARING HELD

The North Carolina Department of Transportation (NCDOT) held a Corridor Public Hearing on July 13th at 71st High School in Fayetteville. The hearing began at 7 p.m., and approximately 400 to 450 people attended.

The hearing gave citizens an opportunity to comment on the project. Carl Goode, NCDOT Public Hearing Officer, gave an overview of the project and numerous citizens made comments or asked questions. Written comments were also submitted following the hearing. Based on these comments, there was no consensus on an alternate. There was support or opposition for most of the 13 build alternates being considered. The final evaluation of the build alternates will be made based on the comments received from the hearing and the DEIS.

OUTER LOOP DECISION DELAYED FOR ADDITIONAL STUDIES

It was announced at the hearing that a decision on the selected alternate would be made approximately three months following the hearing. However, the selection of an alternate has been delayed pending the outcome of additional studies requested by the US Army Corps of Engineers (USACOE).

NCDOT initiated project studies under the National Environmental Policy Act (NEPA) over seven years ago after transportation planning goals were established by the Fayetteville Metropolitan Planning Organization and the Cumberland County Planning Commission. These

local goals envisioned a freeway around Fayetteville to accommodate the transportation demands, economic development, and social growth occurring in the area. The freeway was included on the adopted Fayetteville Urban Area Thoroughfare Plan in late 1991.

Following coordination with environmental agencies, the scope of the project was redefined as a circumferential transportation "facility" around Fayetteville not just a freeway.

Based on this modification and further coordination with the USACOE, the NCDOT agreed to review a smaller, arterial type transportation "facility" using the existing roadways for the portion south of US 401 (Raeford Road). The results of this review will be included in the Improve Existing Facilities Alternative of the environmental document.

From now on, the NEPA process will follow new guidelines identified in a 1997 agreement between the NCDOT, FHWA, and USACOE. This agreement merges the National Environmental Policy Act and the 404 Water Quality Permit Requirements to make the permitting process more efficient, with fewer delays.

ALTERNATE SELECTION PROCESS

Listed below are the tasks required to select the Alternate for the Fayetteville Outer Loop. The "✓" indicates the completed tasks and the "▶" indicates task to be completed.

- ✓Public Hearing.
- ✓Receive Comments on DEIS and from Public Hearing from citizens and agencies.
- ✓Interagency Coordination – Review of Alternates.
- ▶Complete Additional Studies for the Improve Existing Facilities Alternative requested by the U.S. Army Corps of Engineers.

- ▶ Interagency Coordination Meeting and Field Review.
- ▶ Identify the Least Environmentally Damaging Practicable Alternate.
- ▶ Announce Selected Alternate in Newsletter and through News Media.

FOR MORE INFORMATION

Call:

Fayetteville Outer Loop
Corridor Study Hotline
(Toll Free)

1-800-554-7849



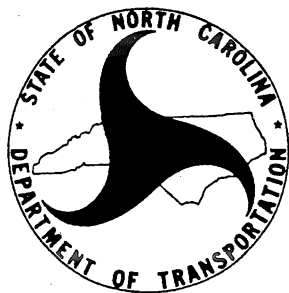
ADDITIONAL STUDIES FOR THE IMPROVE EXISTING FACILITIES ALTERNATIVE

NCDOT is providing additional studies for the Improve Existing Facilities Alternative to the review agencies. As discussed in the DEIS, the Improve Existing Facilities Alternative includes modifying, expanding, and/or reconstructing existing roads into a roadway facility that will meet future transportation demands.

Additional studies will evaluate the feasibility of upgrading existing roadways in the southern portion of the project to an "arterial" type facility. Both types, the freeway and arterial, include constructing a four-lane roadway. However, the minimum right of way required for the arterial would be approximately 100 feet less than the freeway.

The arterial is being evaluated to determine the feasibility of providing a minimal roadway facility along existing roads with fewer impacts. If this arterial concept is considered feasible, it will be evaluated with 13 other feasible build alternates to determine the least environmentally damaging and practicable alternative for the highway.

Information currently is being acquired for these additional studies. A decision on the preferred alternate tentatively is scheduled in Spring of 2000.



Fayetteville Outer Loop
Corridor Study Newsletter

P.O. Box 30923
Raleigh, NC 27622

NEWSLETTER

November, 2000

TIP No. U-2519

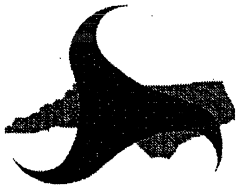
State Project No. 8.2441301

Issue No. 6

This newsletter is the sixth in a series published by the North Carolina Department of Transportation (NCDOT) to inform the public about the proposed Fayetteville Outer Loop (TIP No. U-2519). Since the last newsletter, the additional studies requested by the US Army Corps of Engineers were completed and a final corridor location for the highway was selected. This newsletter provides information concerning the corridor selected and the remaining tasks to be completed prior to construction.

NCDOT COMPLETES ADDITIONAL STUDIES FOR CORPS OF ENGINEERS

In March 2000, The North Carolina Department of Transportation (NCDOT) completed the additional studies requested by the US Army Corps of Engineers. Based on these studies, the Corps of Engineers and other environmental review agencies agreed that the Improve Existing Facilities Alternative is not feasible.



On April 6, 2000, a Public Notice from the Corps of Engineers was distributed to persons on the project mailing list. This notice was sent to initiate the federal permit process and to solicit public comment. Several citizens responded by telephone to the Corps of Engineers and seven written public comments were received.

A Corridor Public Hearing was also held on July 13, 1999, and approximately 400 to 450 people attended. Numerous citizens asked questions and made comments at the hearing and others submitted written comments.

Following the receipt of all public comments from the Corridor Public Hearing and the Corps' Public Notice about the Improve Existing Facilities Alternative not being a viable alternative, the thirteen build alternates were evaluated.

PREFERRED ALTERNATIVE SELECTED

David McCoy, the Secretary of Transportation, recently announced the selection of Alternate D as the Preferred Alternative for the Fayetteville Outer Loop. This alternate was studied in detail in the Draft Environmental Impact Statement that was published in March 1999. The thirteen build alternates, with the Preferred Alternate highlighted, are shown on the map inserted in this newsletter.

Alternate D was selected as the Preferred Alternative because it:

- Avoids the wildlife refuge on the US Fish and Wildlife Service Conservation Easement located in the vicinity of Brisson Road (SR 1177) and Parkton Road (SR 1118),
- Avoids Stewarts Creek,
- Crosses Rockfish Creek east of Upchurches Pond to avoid the high quality wetlands located west of Upchurches Pond, and
- Impacts less wetlands and streams.

Alternate D was also preferred by the US Army Corps of Engineers, NC Wildlife Resources Commission, and the NC Division of Water Quality because it provides more opportunities to avoid and minimize impacts to streams and wetlands.

The exact location of the roadway within the Alternate D Corridor will be determined during the design phase. The corridor is generally 1,000 feet wide, except at interchanges. This is much wider than what is needed to construct the roadway. The actual right of way required for the roadway will be a minimum of 350 feet wide, except at interchanges. The widths of the corridor and right of way are increased at the interchanges to allow for ramp construction. The Outer Loop will be a four-lane roadway with a grass median. Access along the roadway will be prohibited except at interchanges, which will be located at major road crossings.

THIRTEEN BUILD ALTERNATES EVALUATED

A systematic evaluation of the thirteen build alternates was performed prior to the selection of Alternate D as the Preferred Corridor. This evaluation was documented in the Draft Environmental Impact Statement.



This evaluation was reviewed by the Project Team which consist of representatives from the NC Division of Water Quality, NC Wildlife Resources Commission, NC State Historic Preservation Office, US Fish and Wildlife Service, US Environmental Protection Agency, US Army Corps of Engineers, Federal Highway Administration, NC Department of Transportation, and the Fayetteville Metropolitan Planning Organization. The Project Team evaluated comments received from the public as well as impacts to both the human and natural environment. The table inserted in this newsletter shows the categories evaluated and

the environmental impacts associated with each of the thirteen build alternates.

Impacts to federally protected properties such as parks, wildlife refuges, and historic properties located along the project were evaluated. Eight alternates, Alternates C, D, E, I, J, L, M, and N, avoid a US Fish and Wildlife Service wildlife refuge located near Brisson Road (SR 1177) and Parkton Road (SR 1118) and were considered feasible and prudent alternatives. Therefore, Alternates B, F, G, H, and K that impact the wildlife refuge were eliminated from selection.

Impacts to the Shaw-Gillis Historic District located along Raeford Road (SR 3569) near Reilly Road (SR 1403) were also evaluated. Alternates L, M, and N avoid impacting this historic property. These three alternates are not considered prudent because they have other impacts (such as, relocations, hazardous material sites, ect.) that are greater corridor wide. Therefore, Alternates L, M, and N were eliminated.

In reviewing the Alternates C, D, E, I, and J, the Project Team preferred the project crossing at Rockfish Creek east of Upchurches Pond instead of west. The wetland area west of Upchurches Pond was higher quality than the wetland to the east. Therefore, Alternates C and J were eliminated. Alternate I was eliminated since it had two crossings of Stewarts Creek.

The remaining two Alternates D and E were compared and Alternate D was selected as the "least environmentally damaging practicable alternative" (LEDPA). Alternate D had less impacts to wetlands when compared to Alternate E. Alternate D provides more opportunities to avoid and minimize impacts to the streams and wetlands.

The Corridor Selection Committee recommended Alternate D, which was approved by the NCDOT State Highway Administrator and the Deputy Secretary for Transportation. The Secretary of Transportation then reviewed all information on the project and approved Alternate D as the Preferred Alternate.

PLANNING PROCESS

The planning process is currently in the last of the six phases as indicated below.

PHASE 1

Data Collection

1st Citizens Informational Workshop

Inventory of Planning Issues

Document Community Concerns

Transportation Needs Study

PHASE 2

Alternatives Identification

Initial Field Studies

Corridor Refinement

2nd Citizens Informational Workshop

Selection of Corridors for Detailed Study

PHASE 3

Engineering Studies

Detailed Field Studies

Environmental Analysis

Technical Reports

PHASE 4

Draft Environmental Impact Statement (DEIS)

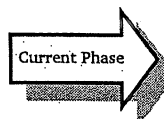
Public Hearing

PHASE 5

Review Comments on the DEIS

Review Public Hearing Transcript

Selection of Preferred Alternative



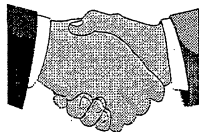
PHASE 6

Final Environmental Impact Statement (FEIS)

Record of Decision

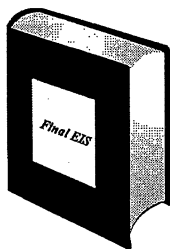
GRATITUDE FROM NCDOT

The NCDOT extends its gratitude to the public, local agencies, state agencies, and federal agencies for their cooperation and valuable input during the planning process for this project. NCDOT realizes this project has undergone many studies and evaluations since the Roadway Corridor Official Map was recorded in 1992.



FINAL EIS BEING DEVELOPED

Now that the corridor has been selected, the Final Environmental Impact Statement (FEIS) will be developed to document the selection process and decisions made for the project. Prior to completion of the FEIS, a plan for mitigating impacts to wetlands will be developed and reviewed by the Corps of Engineers and other resource agencies. Permits for this project will not be issued until after the FEIS has been completed and comments received.



The FEIS, like the Draft EIS will be made available to the public for review. Following approval of the FEIS, a newsletter will be mailed to give information on where the FEIS may be viewed. Following receipt of the comments a Record of Decision will be published in the Federal Register.

ROADWAY CORRIDOR OFFICIAL MAP ACT

The *Roadway Corridor Official Map* recorded in 1992 is located along Alternate B on the map inserted in this newsletter. The regulations imposed by the *Roadway Corridor Official Map* are still in force along this location but will be amended by officials following a Public Hearing. In the meantime, NCDOT will be working with local officials to release the protected properties located on the *Roadway Corridor Official Map* but not within the Preferred Alternative D.



ENTIRE OUTER LOOP CONSTRUCTION PHASING

The Fayetteville Outer Loop is composed of two projects: U-2519 and X-2. The entire Outer Loop project extends from I-95 north of Parkton-Tobemory Road (SR 1723) in Robeson County to the I-95 interchange with US 13 north of Fayetteville in Cumberland County. When combined with existing I-95 a complete Outer Loop around Fayetteville will be formed. Construction on the Outer Loop will be scheduled in phases. The phases include constructing separate sections of the highway starting north with the X-2 project at US 13 and extending southward.

Each Outer Loop project (X-2 and U-2519) has a different schedule based on the NCDOT Transportation Improvement Program 2002-2008 (TIP). It is anticipated that construction will begin on some sections after 2008. These sections do not have funds allotted and are referred to as "post year" project segments.

Currently, the X-2 project from US 13 to just west of Ramsey Street (US 401) is under construction. This section of the Outer Loop is scheduled for completion by the Summer of 2003. The section just west of Ramsey Street (US 401) to Bragg Boulevard (NC 24/87) is scheduled for right of way purchases to begin in the Summer of 2002 and construction to start in the Summer of 2004.

The section from Bragg Boulevard (NC 24/87) to Raeford Road (US 401) is scheduled for right of purchases to begin in the Summer of 2004 and construction to start in the Summer of 2006. From Raeford Road (US 401) to I-95 in Robeson County, the Fayetteville Outer Loop is currently identified in the TIP as a "post year project."

FAYETTEVILLE OUTER LOOP SCHEDULE

Complete FEIS:	October 2001
Publish Record of Decision:	February 2002
Purchasing Right of Way:	June 2002-2004
Construction:	June 2004-2006

Note: Right of way and Construction dates are for section of project from Raeford Road (US 401) to Ramsey Street (US 401). The remaining part of the project is a "post year TIP project."

WHAT COMES NEXT

Now that a corridor location has been selected, the following tasks remain:

- Develop preliminary design plans within the Alternate D Corridor,
- Perform detailed wetland, stream, and archaeological studies,
- Develop mitigation plans for unavoidable impacts to wetlands and streams,
- Complete the Final Environmental Impact Statement,
- Publish Newsletter No. 7, and
- Publish the Record of Decision.

Following the publication of the Record of Decision in the Federal Register, final design plans will be prepared and presented to the public for comments. The final stages of the project will include:

- Advertising and conducting the Design Public Hearing,
- Negotiating and purchasing right of way, and
- Constructing the roadway.



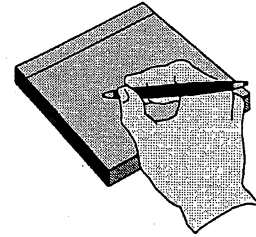
Fayetteville Outer Loop
Corridor Study Newsletter

P.O. Box 30923
Raleigh, NC 27622

FOR MORE INFORMATION

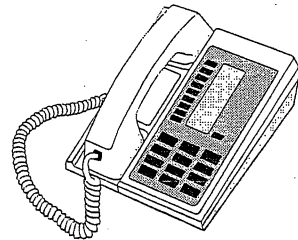
Write:

North Carolina Department of Transportation
Fayetteville Outer Loop Corridor Study
P.O. Box 30923
Raleigh, NC 27622



Call:

Fayetteville Outer Loop
Corridor Study Hotline (Toll Free)
1-800-554-7849



NEWSLETTER

NOVEMBER 2002

TIP NO. U-2519

STATE PROJECT NO. 8.2441301

ISSUE NO. 7



This newsletter is the seventh in a series published by the North Carolina Department of Transportation (NCDOT) to inform the public about the proposed Fayetteville Outer Loop (TIP No. U-2519). Since the last

newsletter, the studies to locate the wetland and stream boundaries, plant and animal species, as well as archaeological sites, were completed. This newsletter provides information concerning the status of the project and who to contact with questions or comments.

NCDOT COMPLETES ENVIRONMENTAL STUDIES

The archaeological surveys for the Preferred Alternative (Alternate D) were completed in May 2002. These surveys revealed eighteen sites that are potentially eligible for nomination to the National Register of Historic Places. The archaeological survey report is currently under review by the State Historic Preservation Office (SHPO). Based on their preliminary report, six (6) potentially eligible sites could be impacted by the project.



Studies were also conducted to locate the protected, threatened, and endangered animal and plant species in the project area. The protected species for Cumberland County include the endangered Red-cockaded woodpecker, which is known to inhabit the Fort Bragg Military Reservation.

The wetland surveys, which include location and type of wetlands and streams, were completed in December 2001. Locating the environmental resources (archaeological sites, endangered species, wetlands and streams) ensures that impacts to these important resources can be avoided or minimized during the preliminary design process. Potential mitigation sites for some of the wetland areas and streams that may be disturbed by construction of the Fayetteville Outer Loop are being investigated.

PRELIMINARY DESIGN PLANS IN PROGRESS

Preliminary design for the Fayetteville Outer Loop is in progress. Although a Preferred Alternative (Alternate D) was selected, there are no official roadway design plans. All current design plans are strictly preliminary and should not be considered the final location of the roadway. The 1000 foot corridor for Alternate D is the only official location approved by NCDOT at this time (see map insert). Any questions concerning the project should be directed to the North Carolina Department of Transportation. Contact phone numbers and addresses are listed on the last page of this newsletter.



NCDOT AND FORT BRAGG COORDINATE ACCESS PLANS

Fort Bragg Military Reservation is implementing additional restriction measures in order to help tighten security in and around the base. These measures include limited access to the base by civilians and base personnel.



Because of these access changes, interchange configurations at Fort Bragg could be redesigned to accommodate rerouted traffic and allow efficient access to the military reservation. NCDOT is working closely with Fort Bragg to ensure security concerns are being addressed in the preliminary design stages.

PROJECT HOTLINE

1-800-554-7849

A toll free number for the public to discuss issues and concerns about the Fayetteville Outer Loop Corridor Study is available during normal business hours.



PROJECT CONTACTS

Fayetteville Outer Loop
Corridor Study Newsletter
c/o
H.W. Lochner, Inc.
P. O. Box 30923
Raleigh, NC 27622
1-800-554-7849

Michael Penney, P.E.
North Carolina Department of Transportation
Project Development and Environmental
Analysis Branch
1548 Mail Service Center
Raleigh, NC 27699-1548
Email: mpenney@dot.state.nc.us

Tracey Conrad Pittman, P.E.
North Carolina Department of Transportation
Highway Division 6
Post Office Box 1150
Fayetteville, NC 28302
Email: tpittman@dot.state.nc.us

Gina Lane
Fayetteville Area Metropolitan Planning
Organization
130 Gillespie Street
Fayetteville, NC 28301
Email: glane@co.cumberland.nc.us



**Fayetteville Outer Loop Corridor Study
Newsletter
P.O. Box 30923
Raleigh, NC 27622**

Fayetteville Outer Loop Corridor Study

NEWSLETTER

May 2004

TIP NO. U-2519

STATE PROJECT NO. 8.2441301

ISSUE NO. 8



This newsletter is the eighth in a series published by the North Carolina Department of Transportation (NCDOT) to inform the public about the proposed Fayetteville Outer Loop (TIP No. U-2519 and X-0002). Since the last newsletter preliminary designs for the roadway were completed. This newsletter provides information on the status of the project, upcoming opportunities for public involvement, and who to contact with questions or comments.

NCDOT to Host Citizens Informational Workshops in Fayetteville

NCDOT will host a series of Citizens Informational Workshops in Fayetteville in June 2004 to provide the public an opportunity to comment on the preliminary road plans for the Fayetteville Outer Loop. In addition, information will be provided on the project status, impacts of proposed facility to the human and natural environments, and project schedule. The dates, locations, and times of these workshops are noted to the right.

Each workshop will be an open house/drop in format. No formal presentation(s) will be made. The preliminary road plans and maps show-

ing the proposed location of the Outer Loop will be displayed. The NCDOT and study team members will be present to hear your ideas and concerns and answer your questions.

In accordance with the Americans with Disabilities Act, NCDOT will provide auxiliary

aids and services for disabled persons who wish to participate in the workshop. Anyone requiring special services, please contact Michael Penney at the address and phone number listed under Project Contacts as early as possible so that arrangements can be made.

Upcoming Workshops

Date	Location	Time(s)
June 14	71st High School 6764 Raeford Road	4:00pm-8:00pm
June 15	College Lakes Elementary School 4963 Rosehill Road	10:00am-1:00pm and 4:00pm-8:00pm
June 17	Jack Britt High School 7403 Rockfish Road	4:00pm-8:00pm

Project Contacts

Fayetteville Outer Loop
Corridor Study Newsletter
P.O. Box 30923
Raleigh, NC 27622
1-800-554-7849

Michael Penney, P.E.
NCDOT
Project Development & Environmental
Analysis Branch
1548 Mail Service Center
Raleigh, NC 27699-1548
Email: mpenney@dot.state.nc.us

Tracey Conrad Pittman, P.E.
NCDOT
Highway Division 6
P.O. Box 1150
Fayetteville, NC 28302
Email: tpittman@dot.state.nc.us

NCDOT Completes Preliminary Designs for Outer Loop

Preliminary road plans for the Fayetteville Outer Loop are complete. The NCDOT, in coordination with federal and state environmental regulatory and resource agencies, local officials, and Fort Bragg, developed preliminary plans for the new road. The proposed facility is approximately 27.5 miles in length, extending from I-95 at US 13 in Robeson County to just west of Ramsey Street (US 401) in Cumberland County. The Fayetteville Outer Loop will be a four-lane divided freeway with full access control. Grade separa-

tions or interchanges will be constructed at major crossroads.

Throughout the preliminary design process, impacts to the natural and human environments were minimized to the fullest extent practicable. Also, the NCDOT coordinated with Fort Bragg to limit access to the base and meet heightened security standards.

The preliminary road plans will be displayed at the June 2004 Citizens Informational Workshops.



The Fayetteville Outer Loop will be a four-lane divided freeway with full access control.

Study Corridor Expanded

To accommodate design challenges and provide for access/service roads, the corridor was expanded slightly in a few locations. The expanded corridor will be presented at the workshops.

Mark Your Calendars for One of These Workshops

Citizens Informational Workshops will be held in the project area during the week of June 14, 2004. The same information will be presented at each of the four workshops, which have been located throughout the study area for your convenience. Each workshop will be an open house/drop in format. No formal presentations will be made.

Workshop #1

Where: 71st High School
6764 Raeford Road
Date: **Monday, June 14, 2004**
Time: 4:00 p.m. to 8:00 p.m.

Workshop #2

Where: College Lake Elementary
4963 Rosehill Road
Date: **Tuesday, June 15, 2004**
Time: 10:00 a.m. to 1:00 p.m.

Workshop #3

Where: College Lake Elementary
4963 Rosehill Road
Date: **Tuesday, June 15, 2004**
Time: 4:00 p.m. to 8:00 p.m.

Workshop #4

Where: Jack Britt High School
7403 Rockfish Road
Date: **Thursday, June 17, 2004**
Time: 4:00 p.m. to 8:00 p.m.

*Can't make it to a workshop?
Call us with comments:*

TOLL-FREE HOTLINE

1-800-554-7849

(8:00 a.m. - 5:00 p.m. weekdays)

Study Corridor Expanded

To accommodate design challenges and provide for access/service roads, the corridor was expanded slightly in a few locations. The expanded corridor will be presented at the workshops.

Project Schedule

- Citizens Informational Workshops
June 2004
- Preliminary Design Refinement
Summer 2004
- Final Environmental Document
Winter 2004
- Design Public Hearing
Spring 2005
- Record of Decision
Spring 2005
- Right-of-Way (Northern Sections)
Fall 2005
- Construction (Northern Sections)
Summer 2007



Fayetteville Outer Loop Corridor Study
Newsletter
P.O. Box 30923
Raleigh, NC 27622

APPENDIX G

CORRIDOR PUBLIC HEARING TRANSCRIPT

JULY 13, 1999

1 OFFICIAL PUBLIC HEARING TRANSCRIPT
2 Corridor Public Hearing
3 Fayetteville Outer Loop From I-95 to US 401, Ramsey Street
4 Robeson, Hoke, and Cumberland Counties
5 71st High School
6 July 13, 1999
7 U-2519
8
9

10 Good evening ladies and gentlemen. I would like to welcome you to this
11 evening's Corridor Public Hearing for this Project U-2519, which is the
12 Fayetteville Outer Loop from I-95, in Robeson County, up to US 401 or Ramsey
13 Street, in Cumberland County. My name is Carl Goode. I am the Manager of
14 the Citizens Participation Unit, and I will be your moderator for this evening's
15 public hearing.

16
17 First of all, I would like to apologize for the lighting. This is all the lights we could
18 get to come on. It is all that the school could get to come on. So we will have to
19 make do with what we have. It is not ideal, I will admit. But again, it is all we
20 could come up with. We went out and bought some spotlights so we could see
21 the map a little bit better. We will just, like I say, make do as best we can.

22
23 Before I continue, I would like to introduce to you some other individuals with us
24 this evening. They are representing various functions within the Department of
25 Transportation, all of who either have or will have a role to play in this project.
26 First of all, I would like to introduce our Board of Transportation Member, from
27 the Cumberland County area, Mr. Lyndo Tippett. He is over here. Thank you,
28 Sir. We have our Division Engineer, from Division Six out of Fayetteville,
29 Mr. Terry Gibson. With him, we have the Division Construction Engineer, Tracey
30 Pittman. We have our District Engineer, from the area, Mr. Bob Nelson. From
31 our Right of Way Department, we have our Division Negotiator, Mr. Pate Hodges
32 and, with him, Mr. Len Carter. From our Project Development and
33 Environmental Analysis Branch, we have Mr. Jay Bissett, Jay is over here,
34 Ms. Nancy Campanella, and Mr. Bryan Kluchar. From our Roadway Design Unit,
35 we have Mr. Dewayne Sykes and Mr. Bill Bunting. From our Design Services
36 Unit, we have Ms. Cathy Houser and Mr. Jim McMillan. From the Federal
37 Highway Administration, we have Mr. John Schrohenloher. He is in the back.
38 From our private engineering firm, H. W. Lockner, Inc., we have Mr. Roy Bruce
39 and Mr. Steve Browdy.

40
41 If you would, please turn to your handout. There is some information in there
42 that I would like to go through with you. Okay, this project is one of several
43 projects, in the area, that combined will form a western outer loop around
44 Fayetteville. In conjunction with I-95, it will form a complete circumferential route
45 around the Fayetteville area. The Fayetteville Outer Loop will improve the
46 accessibility in the Fayetteville area, the Fort Bragg Military Reservation, provide
47 direct access from I-95 to many areas west of Fayetteville, including the military

48 reservation, and would reduce congestion on many of the existing roadways in
49 the area.

50

51 Now tonight's hearing is one step in our process, during the development of a
52 project like this. It is an opportunity for you, the general public, to provide input
53 into the planning process. We are at the corridor selection stage of the project,
54 right now, and that is we are presenting corridors. These are a thousand feet
55 wide corridors, one of which will ultimately be the location of the roadway. We
56 are asking for input from the general public into helping us select a corridor. This
57 is the next step in the over-all process, in the environmental process, is the
58 corridor selection and for the route that the project will ultimately be in. Again
59 these are thousand feet corridors. The ultimate roadway right of way will be
60 about three hundred and fifty (350) feet. So these are much wider than the
61 actual roadway will be. We encourage you to participate in this process. We
62 just had a little informal session, where many of you came by and ask questions
63 and received some information. This is the formal proceedings here. This is
64 being recorded, and it is the official public hearing for the corridor selection
65 process for this project. We encourage you to participate in a couple of ways.
66 First of all, you will be given the opportunity to speak here tonight for the record
67 and for the recording. This recording will be transcribed, and we will have a
68 written document for the proceedings here tonight. You also may submit written
69 comments. There is a comment sheet attached to your handout, on which you
70 can submit these comments. We will take these comments for say here fifteen
71 (15 days), but I think we will take them up to thirty (30) days minimum to try to
72 give you time to submit written comments. Those comments written in will be
73 considered the same as if they were spoken here tonight. All of them will be
74 reviewed and considered. We will meet in a few weeks, after the comment
75 period is over with. We will sit down and go over each and every comment and
76 try to incorporate or include all those that are feasible in the project as a whole.
77 The comments received, as a part of the hearing process, are one element that
78 we use for corridor selection. There are many others, including environmental
79 impacts, costs, safety, service to traffic, impacts to humans in terms of number of
80 relocations and a number of factors that are all combined and looked at and all
81 make up a part of the decision making process. The Post Hearing Meeting,
82 again, will be held to review these comments. That will produce a set of notes.
83 The minutes of that meeting will be available, and you can request those. We
84 will be glad to send you a copy. After that is done, the staff will make a corridor
85 recommendation to upper management. There is a committee who will meet
86 and go over all the details, all the recommendations and ultimately it will go to
87 the Secretary for sign off on the corridor selection.

88

89 Now this is a Federal-aid Highway Project. That is 80% of the funding is from
90 the Federal Highway and 20% is from the State of North Carolina. The
91 procedure that we go through with that is listed there.

92

93 There is some other information there regarding the project need. This project
94 has been in the works for many years. We did have another corridor hearing
95 back in 1992, where we did what we call a corridor protection and that is based

96 on preliminary environmental information. We developed a corridor, based on
97 1987 state law, that we could protect a right of way for. Again that was held in
98 1992, the result of that is a protected corridor, in which building permits are being
99 denied by the local counties. That is done to preserve an area, to prevent as
100 many buildings, homes or whatever as possible, from being built in an area
101 which we anticipate to build a road. In that way, we don't have to buy them later.
102 Now as a part of the Environmental Impact Statement, a part of the process, we
103 are required by law to develop reasonable and feasible alternatives. We have to
104 do that as a part of that process and what we have here tonight are those
105 reasonable and feasible alternatives, based on several years of study and the
106 Draft Environmental Impact Statement. We have possibly thirteen (13) different
107 alternatives. Some of them run concurrently in some spots. Basically there are
108 two (2) corridors with a number of crossovers between them, but using all the
109 possible combinations, there are thirteen (13) possible combinations.

110
111 The project is twenty seven (27) miles long. It is proposed to be a (4) four-lane
112 freeway. A freeway would mean that it is a control of access. The only
113 accesses to the facility would be at interchanges. There would be no driveways,
114 and it would be a fenced off road, similar to an interstate highway.

115
116 I have a tentative schedule on the back. It is already incorrect. In order to
117 prepare for these hearings, I have to work up my handouts several weeks in
118 advance in order to get them printed out and have them available when I need
119 them. The Board of Transportation met last Friday and adopted a new
120 Transportation Improvement Program, which changed these dates somewhat. I
121 don't have the exact dates right now, but I think you can add about a year to all
122 of those dates on there. Instead of November of 2000, 2001. The portion from
123 Cliffdale Road over to Ramsey Street is funded during those periods. The rest of
124 the project, south of there, is what we call post year and the Transportation
125 Improvement Program and that is after, well 2007 now. These are subject to
126 change. Again the environmental process is a long time-consuming process. It
127 is for us, and we understand it is for you; but there are federal laws and
128 requirements that we have to go through and it takes a long time to get there.

129
130 At this time, I want to go to the map and briefly go through the project. Again
131 these are corridors, and they are yellow here. I realize that in the back of the
132 room they may be difficult to see, but we have several other copies out in the
133 lobby. These are thousand feet corridors. As I said earlier, the ultimate roadway
134 is about three hundred and fifty (350) feet, and we can maneuver the roadway
135 within these corridors so that we can miss as many homes, as many
136 environmental areas, sensitive areas, and things as possible. That is the reason
137 for the width. The interchange areas, proposed interchanges, they are a little bit
138 wider of course because interchanges are wider. The project starts here at I-95
139 just into Robeson County. We have all these corridors labeled by segments, and
140 there are thirteen (13) different letters. I am going to try to forego that and just
141 say the East Corridor and West Corridor and try to make it easier for me and
142 easier for you all to understand. The Western Corridor goes out into Hoke
143 County. All of them have an interchange here at I-95. We also have an

144 interchange here at Leeper Road or Parkton Road over on this end. This one
145 heads west on Old Plank Road. We are proposing an interchange there and
146 then it goes back in a northerly direction. Here we cross Camden Road, we
147 come on up past King Road here, then we get over into, further west into, Hoke
148 County and it continues on up to Raeford Road there. We have crossovers
149 here, we have crossovers here, and there at Raeford Road it picks up, comes
150 back across near Cliffdale Road, an interchange here at Rim Road, it comes up
151 to Cliffdale again right here. At this point, we go back to a single corridor.
152 Everything follows the single corridor, most of which is across the Fort Bragg
153 Reservation. So we maintain just the one (1) corridor here. We go here to Riley
154 Road with an interchange. The All American Freeway - we have a freeway to
155 freeway interchange, which means that at this time that is what we are looking at
156 which means that since All American is a freeway this will be a freeway. The
157 interchange will just be between these two (2) roads and it won't be local access
158 there. There will be an interchange at Bragg Boulevard, it would come up to
159 NC 87 Mercason Road here, an interchange there, and then come up with an
160 interchange at McArthur. Then it goes North and East and ties in just west of
161 Ramsey Street here. Ramsey Street over to I-95 is a part of the X-2 project.
162 That project we have completed the hearings on and we are also buying right of
163 way on part of it and soon it will be under construction. This was originally part
164 of the X-2 project. We broke it out of that and put it into this project, primarily
165 because we had a lot of red cock headed woodpeckers through this area. Those
166 are endangered species. We had a lot of work and consultation with the wildlife
167 people, and we knew it was going to take a long time. So we went ahead and
168 broke this out and just made X-2 project back here and added this to this project.

169
170 Going back, we have the Eastern Corridor, Alternative B is the corridor that is
171 under the corridor protection, that we did back in 1992. You can still follow that
172 through and on up. We do have a crossover right here, then an interchange at
173 Old Plank. This Eastern Corridor, we have an interchange here with Parkton
174 Road. We again go north. Camden Road is an interchange. There is a
175 crossover here with an interchange at Camden Road. Again we head north and
176 we go back here to a conglomeration where several corridors and crossovers
177 comes together, right in this area at Strickland. There, of course, we will have an
178 interchange, but there is a crossover that comes through here, there is a
179 crossover comes there, there is a crossover that comes there and ties into this.
180 So the interchange could be at any area there depending upon the selection of
181 the corridor. And again, this goes up to Raeford Road and picks up over here, of
182 course east of the other one, and then comes back to Cliffdale at an interchange
183 and again follows the same corridor to the rest of the project all the way through.
184 You have a picture, there in your handout, that you can see the various corridors
185 in there.

186
187 On the next sheet, it is a little small but we have others outside, but it does give
188 you the areas where the interchanges are and where the great separations are.
189 The great separations would be bridges, either over or the facility will be over the
190 crossroads to keep those crossroads open.

191

192 The next sheet shows you the comparative summaries of all the impacts for the
193 various corridors. There are thirteen (13) of them, B through N and it gives you
194 the length, the relocations, the costs, the wetland impacts, streams, farmland,
195 noise impacts, air quality and all of the basic environmental impacts that we have
196 to consider. All of these also play a role in the corridor selection process. Many
197 of these require permits from environmental agencies that we have to get and so
198 we have to meet their criteria along with the cost and along with the public input.

199

200 The next sheet shows what we call a typical section and that is just as if you cut
201 a slice out of the road, turn it on its side and look at it. That is sort of what it
202 would look like. Again you see, it is a (4) four-lane divided facility. The median
203 part of it would be seventy (70) feet wide, part of it would be forty six (46) feet
204 wide, depending upon the environmental impacts, wetlands and so on. That is
205 what we propose at this time.

206

207 Then again on the final sheet is a comment sheet with my name and my
208 address, and you may submit written comments as part of this process as well
209 as those spoken.

210

211 I do need to go through a few right of way procedures with you. This will not
212 occur until later, after we do have the design. We will come back, roughly
213 eighteen (18) months or so, somewhere in that time period, with what we call a
214 Design Public Hearing. At that hearing, we will show the actual footprint and the
215 right of way required for the project. That will be a while down the road, but there
216 will be another public hearing involved in this process. The right of way will come
217 after that, when we start purchasing right of way. But I do need to go over some
218 of the procedures now. Once the route is selected and approved and the design
219 is completed, the right of way will be staked on the ground. The effected
220 property owners will be contacted by a right of way agent. This agent will contact
221 you if there is right of way to be required from your property. He will also contact
222 you if you are a relocatee, that is if your home will be relocated as a part of the
223 project. This same person will contact you for both procedures. He will explain
224 the plans to you, he will explain exactly how you will be effected. He will inform
225 you of your rights. He will ask you about your property to try and gather as much
226 information as he can about it, so they can determine the compensation for your
227 property. Once they get this information, they will make, using either their own
228 professional appraisers or hiring local fee appraisers, will make a appraisal of
229 your property based on the highest and best use of the property at the current
230 market value at the time of the appraisal, not tax value, but the current market
231 value. During this process, the Department of Transportation must treat all
232 owners and tenants equally, must fully explain an owner's rights, must pay just
233 compensation in exchange for property rights, must furnish relocation advisory
234 assistance if that is required and must initiate any legal action if a settlement
235 cannot be reach. In addition, if you are a relocatee, he will advise you on
236 location of comparable housing in the area if that is required. He will explain all
237 the relocation procedures, will provide any moving aid possible at the time, in
238 addition to the compensation for the value of the property and the dwelling.
239 There are additional payments that are available if you qualify for such things as

240 moving expenses, additional value of a comparable home, additional or rises in
241 interest rates, closing costs, and other incidental items associated with the
242 moving process.

243
244 Now I did give you the opportunity to sign up as you came in to register to speak
245 for tonight's public hearing. I would like to go through that list first and once we
246 finish that list, we will open the floor up for anyone else who would like to make
247 comments as well. I would like for you to use one of our microphones. First of
248 all so our tape recorder can hear you and secondly so everyone else in here can
249 hear you. There are a couple of ground rules that we like to go by in these
250 proceedings. Number 1, this is not a public debate, as far as we are concerned.
251 We are not here to argue with you or to debate with you. I can't out debate all of
252 you, probably can't out debate any one of you, but I know I can't out debate the
253 whole crowd and that is not the purpose anyway. Our purpose is to gather
254 comments from you relative to the project. We will try to answer any questions
255 that we can. There are a number of us here and if from among all of us if we
256 can't answer your questions, we will try to get you the answer as quickly as
257 possible. Secondly, we ask that you not debate among yourselves. I know there
258 are several corridors here and everybody probably doesn't want it near him,
259 wants it somewhere else. But arguing among your selves is also not a part of
260 our process. It is not the purpose of being here tonight. So we ask that you give
261 everyone speaking the same opportunity to speak as you would like to have if
262 you were doing the speaking. So if we follow these, we should have a fairly
263 decent hearing and hopefully we can get the comments that we really need for
264 the selection process. Our first speaker is Sandra Larrimore.

265
266 Ms. Sandra Larrimore: Basically I don't know how many folks
267 here live outside of housing developments or what ever, but there are several
268 people who are going to lose farm land and going to lose a way of life. When
269 they go, when the appraisers go to look at this thing about pricing our land and
270 all, are they going when they suggest other housing, will we be receiving enough
271 money to maintain our life style? Those of us who have farms and have horses
272 and all? We are not going to just need a just a lot, a house. We are going to
273 need acreage for those animals. We are also going to have stress, and we are
274 going to elevated costs. A lot of these things have been built over twenty (20)
275 some, thirty (30) some, forty (40) some years. Those of us that our properties
276 divided are going to have to have it resurveyed. Is the state going to pay for all
277 of this?

278
279 Moderator: Okay. I will get a right of way person –
280 Pate if you would, I will get you to address this.

281
282 Mr. Pate Hodges: We would basically have to look at each
283 individual's property when the appraisal was made and try to make a
284 determination then. Survey - that would be your choice whether you wanted to
285 resurvey your property. It is not necessarily, you don't necessarily have to do
286 that. I really couldn't tell you about your particular property until we actually saw
287 it and knew more about it. When that particular time comes, our agents will meet

288 with you and explain the process to you. Hopefully we would make you equal to
289 what you were before the project came. That is our intent.

290

291 Ms. Sandra Larrimore: I am also curious as to why most of the
292 corridors you have here are all in Cumberland County. As a taxpayer in the state
293 and the country, I don't understand why it is more advantageous for most of the
294 corridors to be in Cumberland County, when we have got a neighboring county,
295 Hoke County, that is not as heavily developed and where this road would benefit
296 them a little bit more than it would over here in Cumberland County, at bringing
297 in industry and other things.

298

299 Moderator: Okay. One of the purposes of a
300 roadway of this sort, we try to get as much bang for the buck, I guess, as
301 possible. A roadway of this sort is to serve traffic and right now this is an area
302 that has the most traffic and would be most served by this roadway. So that is
303 one of the criterion for placing a roadway such as this. You look at local traffic
304 and trying to serve that as well. If you move it too far out, nobody is going to go
305 out there to use it. Also if you move it too far out, there is nothing there to serve
306 what is in there, you would end up building two (2) facilities instead of one. You
307 try to hit where the most traffic is and where it is anticipated. These are
308 designed for twenty (20) years, excuse me, twenty (20) years in advance.

309

310 Ms. Sandra Larrimore: So basically this road is being designed
311 for Fayetteville and the Cumberland County area growth? I went down to the
312 library and I noticed that some of the studies in their books also broke down to
313 the economic levels of the people in the corridor.

314

315 Moderator: Uh-huh.

316

317 Ms. Sandra Larrimore: Why would a person's, family's
318 economic income be important as to this road?

319

320 Moderator: Okay a person's economic income is
321 not important, per say, to the road. What is required is a part of a Presidential
322 Executive Order is that we have to guarantee or we have to provide
323 documentation that it is not effecting lower income or minority groups in greater
324 proportion than it is in any other group. It is called environmental justice and it is
325 an executive order. We have to demonstrate that we are not impacting
326 disproportionately low income or minority groups. That is not why it is there. We
327 put it to try to avoid that, rather than aiming for that.

328

329 Ms. Sandra Larrimore: When was the last time someone
330 actually went out in the area of the corridors to see what kind of development
331 had been made? Because these maps are from 1996 and there has been a lot
332 of building in those areas in the last three (3) years.

333

334 Moderator: We know that. The document here has
335 relocation reports and they were done last fall.

336
337 Ms. Sandra Larrimore: Last fall?
338
339 Moderator: End of last year.
340
341 Ms. Sandra Larrimore: Well, we still have a great deal of
342 building that is going on in that area, especially out in our area in the Stony Porm
343 area.
344
345 Moderator: Okay.
346
347 Ms. Sandra Larrimore: Will another study of these be done
348 before it is finalized?
349
350 Moderator: We will come back with another hearing.
351 Once we have the corridor, we will have additional mapping, and we will have
352 additional relocation reports.
353
354 Ms. Sandra Larrimore: Well those are the basic questions that I
355 have at this time. You said that there would be another meeting before this thing
356 is finalized for the public?
357
358 Moderator: Well there will be another meeting after
359 we select a corridor. We will have the actual design on it. There will only be
360 one. The next time we come out there will be just one roadway and that will be
361 the actual right of way.
362
363 Ms. Sandra Larrimore: Okay. Thank you.
364
365 Moderator: Thank you. Okay. *(Pause)* Sorry about
366 that. Pete Leslie.
367
368 Mr. Pete Leslie: Mr. Goode, my property was effected by
369 the first Corridor B Act in 1992 - to keep any building or being issued any building
370 permits within the corridor act that effects my property. My question or one of
371 the questions to you is, would the alternatives routes selected shown on this map
372 here, why wasn't the Corridor's Act acted upon them, to keep building from going
373 in some of these areas that has been heavily built?
374
375 Moderator: Okay, I am not sure I understand your,
376 let me see if I understand what you are saying. Why were the other corridors not
377 protected as well?
378
379 Mr. Pete Leslie: The Corridor B was protected by the
380 Corridors Act in 1992?
381
382 Moderator: Right.
383

384 Mr. Pete Leslie: Why wasn't the alternatives selected
385 routes, are they protected by the corridors act too?

386
387 Moderator: No Sir.

388
389 Mr. Pete Leslie: Why?

390
391 Moderator: Okay, for one reason, at that time we
392 didn't have these other corridors identified. The other reason is the law only
393 allows us to protect one corridor.

394
395 Mr. Pete Leslie: But now the A Corridor, through
396 Raconda, is not on here but was originally one of the alternative routes.

397
398 Moderator: Well at one time, we had probably thirty
399 (30) or forty (40). We start out with a wide area and we look at all that are
400 possible corridors. We start to eliminate them as we find that they have some
401 flaw in them, some problems, from environmental stand points, impacts to
402 humans, cause for various other things. We eliminate them and we get down to
403 what we call the most reasonable and feasible alternatives and that is what we
404 have here tonight. This has been reduced from a number of corridors.

405
406 Mr. Pete Leslie: Well I am glad that we are at this point,
407 almost seven (7) years later, you know, on this corridor. One of the other, a
408 couple of other questions I would like to ask. You did answer a couple of my
409 questions, but with the public hearing to go on record, you did say that you would
410 start purchasing right of way which effects my property in the year 2002. Is that
411 correct?

412
413 Moderator: I said, based on our current schedule,
414 which is subject to change.

415
416 Mr. Pete Leslie: So that sort of, so that leaves me to go
417 back to think that we are back to where we were in 1992. That we don't know
418 whether you are going to purchase what ever, or it may be 2010, or I might never
419 see it in my life time. One other thing I would like to ask you is, at the workshop,
420 I know everybody ask the same question. When and of course I know it has
421 been changed now from the reading here from fifteen (15) days to thirty (30)
422 days about you going over everybody's view and opinion on which corridors
423 should be effected. So if I go back thirty (30) days from today and after that
424 decision is made. How long will it be before a permanent decision is made on
425 which way we are going or the state is going?

426
427 Moderator: We should know something in about
428 three (3) months.

429
430 Mr. Pete Leslie: Well, we are getting somewhere, Sir. I
431 do appreciate it, but I am still at a lose, with the cost of the road going up over.

432 the past seven (7) years from the original estimate, to why we couldn't protect
433 the alternative routes by the Corridors Act to save money for the state. Thank
434 you.

435
436 Moderator: Thank you. Mr. John Williams. John
437 Williams. Is he here? Okay. Come right ahead.

438
439 Mr. John Williams: Good afternoon. The portion I am trying
440 to understand is - I looked at the map here and I see an Alternate FKLMN, in
441 which you are going to have to make a choice between that alternate and
442 Alternate B through J. Am I correct on that?

443
444 Moderator: Yes, Sir.

445
446 Mr. John Williams: Now, if Alternate FKLMN, right there,
447 you have lots of homes and a school, whereas this Alternate B through J is
448 running through an area where there is government protected land since 1992.
449 So you don't have that many homes there, is that correct?

450
451 Moderator: Well, there is not as many as there
452 would have been had we not protected it.

453
454 Mr. John Williams: So

455
456 Moderator: That, that is the lowest, I think, in terms
457 of relocations - Corridor B.

458
459 Mr. John Williams: So, say if this had been government
460 protected land since 1992, it would, you know, it would just seem to me that if
461 you didn't - you pick that choice which was shorter and cost the government less
462 money, you have been wasting our time in protecting it. I was just throwing it up,
463 but me looking at these two (2) choices, you know, it would seem that it would
464 effect less people if it went through B through J. That is all I have to say.

465
466 Moderator: Okay. Thank you, Sir. John Jernigan.
467 Is Mr. Jernigan here? Marco Candler.

468
469 Mr. Marco Candler: Hello. My name is Marco Candler. I
470 didn't come here tonight planning to speak at all. So I don't have anything
471 planned, but I have been here for about two (2) hours listening to people talk
472 about the different routes. It seems to me like one of the biggest factors that I
473 have heard people talk about was whether or not to go this direction, right here,
474 or this direction. This one goes by E. E. Miller and comes around King's Mill into
475 Raeford Road right there. Now my property, that I own, really neither one of
476 those would really effect it very much. So I am not really speaking for myself or
477 for my property. None of these routes, after being here tonight, is really going to
478 effect me very much. But as a taxpayer, after looking at the figures, I notice that
479 if this route is taken, no matter what you do, if you take that route, it is going to

480 add about thirty (30) million dollars to the project. There is only one other
481 alternative, in which would have added only twenty (20) million to the project, but
482 that one, I don't see how they come up with that figure. I don't know where the
483 ten (10) million dollars came, got lost at. But anyway, personally, after listening
484 to everyone talk, most everyone seems to prefer this route, from what I heard
485 and I agree with that. The other thing is that the 1992 Corridor Protection
486 protected this route, right here, so that the corridor could go there. So there is
487 not very many houses in here, and it would probably disturb fewer people in the
488 long run to go that route. The other thing I heard people talk about the most, I
489 think more than any of it is make a decision and just be done with it. Most
490 people are just anxious that something be decided and that was it. One more
491 thing. I did hear someone say that there is not much difference in the price
492 between these corridors. I think the most expensive one is about three hundred
493 and eighty (380) million. The cheapest one was about three hundred and fifty
494 (350) million, but that thirty (30) million dollars to me is quite a bit of money and it
495 is something to think about. Thank you.

496
497 Moderator: Thank you, Mr. Candler. Let's see, is
498 this Baalam McLean?

499
500 Mr. Baalam McLean: Good evening everybody. My concern
501 is and I know it is others concern, when I am talking about mine. This west side
502 here is really not my concern, neither is the east side, but this side here that I
503 hear too much about coming up through here crossing Upchurch Pond and
504 turning over toward Camden Road that I live right in there and that is where my
505 home is. Then with a three hundred and fifty (350) feet, as you all already
506 proposed, it took part of my land; but now you are saying you want a thousand
507 feet, which would take my house. I need somewhere to stay. Looks like you all
508 could stay with the proposal you have spent money on, if it is chose this away,
509 and not winding up and take my house. Thank you.

510
511 Moderator: Thank you, Mr. McLean. John
512 Simmons.

513
514 Mr. John Simmons: Alright, I have got a couple of questions.
515 When was, you said the corridors were protected in 1992?

516
517 Moderator: Yes, Sir.

518
519 Mr. John Simmons: Okay, that was the eastern most
520 corridor?

521
522 Moderator: Corridor B.

523
524 Mr. John Simmons: That is the eastern most?

525
526 Moderator: For the most part, yes Sir.

527

528 Mr. John Simmons: Okay, when were the other corridors
529 finalized? What year was that?
530
531 Unidentified Male: *(Inaudible) Did not come to*
532 *microphone.*
533
534 Moderator: Okay. Like I said, they were – we had a
535 public workshop in this facility in July of 1993 and that is when they were first
536 shown.
537
538 Mr. John Simmons: Okay and we also had a Disclosure Act,
539 I believe, you said of 1987.
540
541 Moderator: Okay, 1987 was the law that the
542 General Assembly passed which allowed us to protect that corridor.
543
544 Mr. John Simmons: Alright, is there not a disclosure act that
545 if you are buying in that area that information suppose to be disclosed to you?
546
547 Moderator: Okay. You are getting into other realms
548 of real estate areas, things like that, and I don't know what all the laws are. They
549 are different in different areas and I don't know what they are here.
550
551 Mr. John Simmons: Well my question is, if we, I am in the
552 Waldo's Beach area I see almost all my neighbors in there and that housing area
553 is less than five (5) years old ...
554
555 Moderator: Uh huh.
556
557 Mr. John Simmons: and we are right on the edge of the
558 Protected Corridor of 1992 and we were, none of us were informed of that
559 decision. I mean what recourse do we have as homeowners that you have got
560 two (2) routes going through our property, one in our front yard, the other going
561 right through the whole yard? What recourse do we have as homeowners to file
562 a compliant over that? I mean we were, none of us were informed.
563
564 Moderator: Okay. You are asking the wrong person
565 to that.
566
567 Mr. John Simmons: Okay, if that is the answer, who do we
568 ask?
569
570 Moderator: Well I would think you would have to
571 talk to your local real estate board to begin with.
572
573 Mr. John Simmons: Alright there's a - I have talked to most
574 of my neighbors and like I say we live in Waldo's Beach area and there are two
575 (2) alternate routes there. I think the majority of us agree that we don't want it as

576 our front yard. If we had to choose between the two, and I feel like both of them
577 are more suitable than the farther western route, that we would probably want it
578 to go through the house.

579
580 Moderator: Okay.

581
582 Mr. John Simmons: I mean I would want it, I don't believe
583 anyone would want it in their front yard, so you might as well take the whole yard.
584 *(Applause)*

585
586 Moderator: Okay, I understand that.

587
588 Mr. John Simmons: That is about all I have got. I just don't
589 want to be in your chair man.

590
591 Moderator: Okay. Thank you, Sir. Plato Williams,
592 Jr.

593
594 Unidentified Male: *(Inaudible) Did not come to*
595 *microphone.*

596
597 Moderator: Okay, thank you, Sir. Okay, do we have
598 another Williams? C is the middle initial. I am not sure what the first name is.
599 Okay.

600
601 Unidentified Male: *(Inaudible) Did not come to*
602 *microphone.*

603
604 Moderator: Good. Mabel Williams. Okay.

605
606 Ms. Mabel Williams: Now, I am not real sure if it meant to be
607 sort of hasty in the explanations because when you say things like, we are going
608 to have a corridor here, and over there, and then it is going to come on Ramsey
609 Street. Well for example Ramsey Street is quite long. So we don't have clear
610 vision, as at least I do not, and I don't think a lot of other people do. I think
611 maybe in the age of vision and technology, your job would be made much easier
612 if you could video some of these common known landmarks, where the major
613 corridors are proposed and then we could have a visual instead of just an oral
614 presentation. It could be presented. We could have it supplemented with the
615 video and we would have a clearer vision of what is being proposed. Another
616 thing that I think would improve a whole lot of peoples understanding and
617 appreciation for even being better able to work with the State Highway
618 Commission is if we had what for a lack of a better term would be a public
619 defender's office for the home owners. You know when you have a complaint
620 with you all, then we have got to go to you to resolve it. It has been my
621 experience in knowing some other people in the other areas that when the
622 proposals are mentioned for your properties then you are always are going back
623 to the same people that offer you a settlement in the first place. We need

624 someone, and you know, we all pay taxes so you could have a knowledgeable
625 real estate attorney, or a knowledgeable real estate board for the people other
626 than just the highway that would help a lot. That way you would have an
627 advocate for the people, not just the highway commission. Maybe we would
628 have a better equalization in the cost that is paid for property not so much as the
629 rich getting richer and the poor getting poorer and those who have valid
630 complaints. Again these crossovers are going to be one at McArthur Road, in
631 one at Ramsey, and over here, and over there, and it is not really quite clear
632 from where you are seated out here. It just looks like a big glob. So if we had
633 some common landmarks that would be visual on a video I think it would
634 enhance the presentation tremendously. (Pause) Also in acquiring housing for
635 the people who lose their housing, it has also been my knowledge of people to
636 have experienced to be directed to areas of dilapidated, unequal housing. Some
637 with windows already worn out, the electric system, the plumbing system, or
638 whatever and attempt to unload it on unsuspecting victims. If we had somebody
639 that would really work for the people and that isn't meant in any disrespect to the
640 highway commissioners or people on those boards or anything like that. But a
641 people oriented group that looked out for the people is what we need, rather than
642 looking out for the highway department. Thank you very much.

643
644 Moderator: Thank you, Ma'am. I appreciate the
645 suggestions. We are working on some ways to change the presentations. There
646 is some technology there, there is some that still is being developed, but we are
647 looking at some ways and we got some things underway. It is not quite ready
648 yet. I thank you. Our right of way people do try to work for the people. They
649 work for the taxpayers of the state and they try to be fair to everybody, not only
650 to the homeowners but to the other people across the state as well who are
651 paying those taxes. So they do make an effort to do that and they try to work for
652 everybody, but thank you for those suggestions. That concludes the list of those
653 who had signed up before the hearing to speak. I would like to open up the floor
654 to anyone else who has any comments relative to this project. Yes, Sir.

655
656 Mr. Russ Condor: Good evening. I am Russ Condor and I
657 live in the King's Mel Housing Development. It is my understanding that this is
658 going to be the last public meeting until the DOT or the Highway Commission
659 makes the final selection out of one of these alternates.

660
661 Moderator: Yes, Sir.

662
663 Mr. Russ condor: Okay. That is going to be approximately
664 three (3) months from now?

665
666 Moderator: Yes, Sir.

667
668 Mr. Russ Condor: Now being in the military, I have done
669 some planning and I know that three (3) months out that the Highway
670 Department has a pretty good idea now on what they deem as the best route, I
671 would assume, out of these alternates here. They should know by now what

672 route that they think is going to be the most feasible route that is going to be
673 coming through here. That is what I project - that they should have, by now,
674 have a likely choice. I appreciate, you know, that you did invite the homeowners
675 and landowners here for this, I call it a, last gasp. I mean, we have been here for
676 two (2) or three (3) hours and other than what we have said here today and what
677 may be mailed in to you, I really don't see what impact we are going to have on
678 your decision making process of which corridor you are going to select, because
679 every corridor here is impacting some family in some way. So what are we doing
680 or what are we not doing here that is going to make an impact on you to make a
681 selection on one of these routes? That is all that I have to say. (Applause)

682
683 Moderator: Okay. First of all, there are a lot of
684 factors involved in making this decision beyond DOT preferences, or desires, or
685 whatever. There are still a lot of comments from environmental agencies that we
686 have to receive and that plays a big role in the selection process. This project
687 was started, the studies back in 1992 and 1993 and has been going on ever
688 since. We have had several workshops and meetings here during that time
689 period. The public comments do make a lot of impact on the project, but it is one
690 of several different things that we have to look at. The purpose here tonight is to
691 gather comments to help us to make that selection. We actually want to get as
692 many as we can and we appreciate them as much as we can. They do help us
693 in that process. Do we have others? Yes Sir, right here.

694
695 Unidentified Male: I don't need a microphone, I speak, talk
696 pretty loudly. There is a section of Corridor B, in this section right here. The
697 section of Corridor B that is in the Lands Down West area, there is a new
698 development in that area that is probably going to be forty five (45) houses to the
699 tune of about five (5) million dollar worth of property in that area. But what I don't
700 understand is this Corridor Protection Act? Was that suppose to be
701 implemented for the whole section of the Corridor B?

702
703 Moderator: No. The corridor protection was done
704 when we had the hearing then, we showed the actual right of way that we
705 anticipated for that roadway and that is what is protected. This is a wider
706 corridor than that was.

707
708 Unidentified Male: Okay so the location, the houses that
709 are in the Lands Down West area are going to be totally over ran by corridor B.
710 Is this five (5) million dollars worth of relocation at the fair-market value, is that
711 part of the thirty five (35) millions dollars worth of proposal for the building of the
712 construction?

713
714 Moderator: First of all, if you are in that yellow
715 corridor, it does not necessarily mean that you will be taken by the project, but
716 secondly, to answer your second question, if they are proposing to be taken,
717 they will be included in the right of way cost.

718
719 Unidentified Male: The right of way cost for relocation?

720
721 Moderator: Right.
722
723 Unidentified Male: Okay. Thank you.
724
725 Moderator: The gentleman over here.
726
727 Res Pittman: My name is Res Pittman and basically
728 what I want to ask is about this particular area here. I live there. Is that going to
729 be negotiable or is that a done deal? Is that in stone?
730
731 Moderator: Okay. That particular area there is a
732 single corridor, so there is really not a selection to make. Again the entire
733 corridor won't be required for the project, only about a third of that portion is and
734 as to whether you are included in that or not, we don't know at this time. That
735 has not been totally finalized.
736
737 Mr. Res Pittman: Okay, when it was originally proposed,
738 the surveyors came through and a lot that I own behind my house was right in
739 the corridor they said, so apparently this is going to be
740
741 Moderator: Yeah. That is part of the previous
742 project, the other project over there, the X-2 project. There were three (3)
743 corridors on that project as well, and we had selected a corridor a number of
744 years ago on that. I don't think there has been any surveyors on this project yet.
745 They have been on X-2, the previous project, over there and so that project is set
746
747
748 Mr. Res Pittman: That is set?
749
750 Moderator: from 401, the interchange at 401
751 back to I-95 at US 13 is set.
752
753 Mr. Res Pittman: I gathered that. So there isn't anything
754 to really discuss?
755
756 Moderator: We are actually buying right of way on
757 that now.
758
759 Mr. Res Pittman: Is that right?
760
761 Moderator: Yes, Sir.
762
763 Mr. Res Pittman: Okay, thanks.
764
765 Moderator: Thank you. Let see we had - you and
766 then we will get that one back there.
767

768 Unidentified Male: Sir, I own a twelve (12) acre piece of
769 land from Parkton Road, no from the railroad right here all the way to Blacks
770 Bridge Road. Okay. Now that is in Corridor B and a bunch of other ones. Okay.
771 It has been protected since 1992, since I have owned the land. I bought the land
772 in 1991 and it has been protected since 1992. Okay. All I am worried about,
773 okay, is when we will draw? It is like buy it and take it all. I don't really mind. I
774 live in Onslow County, I don't live in this area anymore and this portion right here
775 or Corridor B is supposedly the cheapest way. I work for a living and I am a
776 taxpayer and that is the cheapest way. So it will be the cheapest way for the
777 taxpayers. Okay, I am sorry for everybody that lives on that way. But when they
778 did the Corridor in 1992 in my opinion you should have went that way and like
779 making all these extra corridors, paying all the people, it is a waste of taxpayers'
780 money and it didn't need to be done. That is just my opinion. Thank you, Sir.
781
782 Moderator: Okay. Unfortunately, it is federal law.
783
784 Unidentified Male: Thank you very much, Sir.
785
786 Moderator: We had one back here.
787
788 Ms. Debbie Renard: Good evening. My name is Debbie
789 Renard. I live out on the Brawley Road area. I have a couple of questions.
790 Have any traffic studies been done to see what we would alleviate by putting this
791 in?
792
793 Moderator: Traffic studies?
794
795 Ms. Debbie Renard: Yes, Sir.
796
797 Moderator: Yes Ma'am, there are a number of traffic
798 studies, all documented in here.
799
800 Ms. Debbie Renard: When were they done? I am new to this
801 area, but I know I haven't seen any ticket counters out by my way, to count how
802 many trucks, cars, etc.
803
804 Moderator: Okay. I don't know when were the latest
805 ones.
806
807 Unidentified Male: *(Inaudible) Did not come to*
808 *microphone.*
809
810 Moderator: I know.
811
812 Ms. Debbie Renard: There are no machine counts?
813
814 Moderator: Generally, there are standard counts,
815 being that are being made constantly, but for an overall area like this, not only

816 here but nationwide, traffic projections and things like that are based on overall
817 community model of traffic where they take an actual counts, develop a
818 computer model based on land use, projected growth, things like that working
819 with the local communities, what they propose to be built out there, what type of
820 zoning it is and everything. The computer model does the projections. They
821 actually run that based on current time and go out and check it against actual
822 traffic counts to verify the model and then the projections are made from that.

823
824 Ms. Debbie Renard: Will you be doing traffic counts?

825
826 Moderator: Well, again we have got traffic counts
827 for all these areas, all these roadway now.

828
829 Ms. Debbie Renard: That is just a projection based off
830 models though so you don't know

831
832 Moderator: We have got current counts as well and
833 them projections.

834
835 Ms. Debbie Renard: So you don't know how much it will
836 alleviate off of Hope Mills Road by putting this in? Through that area?

837
838 Moderator: Off the top of my head, I don't. We can
839 go in here and try to figure that out.

840
841 Ms. Debbie Renard: Okay. At the next meeting are you
842 going to be notifying anybody that seems to be in some of these gray areas? I
843 guess I would have preferred to see some overheads that could have been laid
844 top so that people that are not experienced in reading these maps could have
845 had a better projection if their properties is really affected or not. I happen to be
846 in one of these gray zones. Am I, aren't I?

847
848 Moderator: Okay at the next hearing, there will be a
849 map and it will have the properties identified on it

850
851 Ms. Debbie Renard: It will have the plots identified?

852
853 Moderator: Yes Ma'am.

854
855 Ms. Debbie Renard: Okay. That is all I have. Thank you.

856
857 Moderator: Okay. Thank you. Yes, Sir. Okay.

858
859 Unidentified Male: All that money we saved on Corridor B,
860 Route B, I want to help you spend some of it. Now you got noise with out sound
861 barriers, you are on top. You have got 399. Now that is one reason we ain't
862 spending that much money on Corridor B. So, don't let the bottom figure
863 deceive you there on this figure. You have got to go through all this thing. Now

864 you mentioned while ago we don't want to get too far out with this corridor. I just
865 ask the question, out from where? I am serious now. You said we don't want to
866 get too far out

867
868 Moderator: We don't want to get too far from the
869 population centers.

870
871 Unidentified Male: Now where is the population centers?

872
873 Moderator: Okay. Well, obviously Fayetteville is a
874 population center, you would think.

875
876 Unidentified Male: Well now, wait a minute now. If we are
877 talking about downtown Fayetteville, it is as dead as a door nail. You know what
878 (*inaudible*).

879
880 Moderator: Well I mean

881
882 (*Applause*)

883
884 Unidentified Male: I am not up here trying to be funny, but I
885 hear this thing we don't want to get too far out. Listen 80% of this money comes
886 from the federal government. Hoke County in the steps is the red headed step
887 child. They have got two hundred and fifty (250) government quarters right over
888 there at Rockfish to go to Fort Bragg daily. Why should they drive over here to
889 get on it? The I-95 trucks coming in from the south going to Fort Bragg with a
890 piece of armor on it, why should it come to Hope Mills to get on it? It don't make
891 sense folks. If you would use a route here where you got the outer route, and I
892 am suggesting this, and I would love to see some figures where you have got all
893 of this farmland here, yet you are interrupting more houses out there. Why skirt
894 housing developments now when the growth, you know and I know, is westward
895 in Cumberland County. Fort Bragg has got it the other way. Cape Fear River
896 has got it the other. Let me suggest something to you. Go down to the mapping
897 department, pull the maps on any of these corridors and especially Corridor B,
898 see who owns the land and when they bought it. You are going to get your eyes
899 opened, now I am telling you. See who owns it and when they bought it. They
900 had these pictures in 1986, aerial views and they give people time enough to buy
901 property. I ask you again to go down and check it. See who owns it and when
902 they bought. We are not trying to do away with the road, but we would like to
903 have the road where it will do the most good and not satisfy your big, big political
904 contributors. It is just that simple. We have been paving under the influence too
905 long. (*Applause*) That is what we need to do and I appreciate, I appreciate your
906 time.

907
908 Moderator: Thank you, Sir. Yes Sir.

909
910 Mr. Jimmy Schaffer: I guess that will be hard to follow. I
911 don't have any material like yours Sir, but first thing I would like to say to you, Sir

912 and Mr. Hodges. My name is Jimmy Schaffer. I live on Grimes Road and I know
913 you know who I am, because we have probably talked twenty (20) or thirty (30)
914 times in the last two (2) years. I would like to direct this comment at everybody
915 here from the DOT. I am all for progress, gentleman, but not at taxpayers'
916 expense, not for any taxpayer, not me, not anyone else who has spoken or
917 anybody else who is involved in this. But the thing that I can't abide is an
918 unnecessary bureaucracy and a bunch of political fence straddling. So I will
919 make you guys a deal. If you answer me honestly and answer these people
920 honestly and I will be as polite as I know how to be. Okay. Every thing that I
921 have heard tonight, every answer that I have heard, given tonight sounds like it
922 was rehearsed prior to the drive down here. I live in Corridor B and I would just
923 like to say you can have it. You can come for my house tomorrow, but you better
924 take all of it. Because if you do what your agent showed me before and you take
925 part of my property, and you try to divert my driveway, and devalue my house to
926 a ridiculous extent, then we are going to have problems. So take it or like the
927 man with twelve (12) acres said take it or go somewhere else. I know, I know
928 that the fifth (5th) amendment of the constitution says that you can take my
929 property if I am justly compensated, but I think you idea of just compensation
930 and mine are two different things. (Applause) The second thing I would like to
931 say or ask, actually Sir, you mentioned that Corridor B is partly protected in
932 1992. Mr. Hodges, can you tell me where that ended? How far Corridor B from
933 Cliffdale South how much of that was protected in 1992? If all of it wasn't? Here
934 is what I am getting at. I will make the story short. My house was built in late
935 1992. It is smack dab in the middle of Corridor B. So were the houses to my left
936 and to my right and you have purchased three (3) of those and they were built
937 after 1992. I don't, like I said, he said what I wanted to say. We had a similar
938 discussion not long ago on Hope Mills, but if you folks looks at who owns this
939 land, who buys it, who develops it, who sells the houses, pockets the money and
940 then gets paid again by right of way agents when the road comes through. It will
941 blow your mind. The third thing I would like to say is a little bit about what the
942 other gentleman mentioned with Lands Down West. Lands Down was built,
943 starting in, I think, 1994, 1995. Lands Down West is forty five (45) houses, still
944 under construction and Gates Forge has just expanded and they all are smack
945 dab right in the middle of Corridor B. The last questions I have, Sir, I am military
946 and I don't mean to segregate the military and the other folks here around
947 Fayetteville, but what I want to know is this. If I PCS, or I retire or I just want to
948 move because I am an American and I want to sell my house. I have talked to
949 three (3) real estate agents. They have all told me the odds of me selling that
950 house with your Corridors A – Z that remain up in the air are slim and none and
951 slim is out of town. So what I want to know is, are you going to buy my house
952 and every other house in Corridor B if the military PCS or retires you or if one of
953 these folks decides to move because we can't sell it until you decide something
954 and pay for it? (Applause)

955
956 Moderator:

957 Okay, each property would be
958 looked at on an individual basis. It depends upon how much of the property is
959 taken. If it is your home and you are moving, you can certainly apply for
959 advanced acquisition based on the hardship case and if you meet

960
961 Mr. Jimmy Schaffer: Well Sir, until there is a corridor
962 approved, everybody here is a hardship case. No one here wants the road like
963 you want the road. Alright which is why I say, if you take the house, take the
964 house, take everybody's house, don't take pieces here and there and give folks
965 some bogus compensation for a third of the property or losing a well house and
966 devalue a 100 thousand dollar house and think that you can just give the guy a
967 chuck a change and he has got something he can't live in because of the noise
968 and he can't sell. I am going to sit down now. Mr. Hodges, I would just like to
969 say Sir, it is nice to see you and remember me if you don't take my entire house,
970 remember me. *(Applause)*

971
972 Moderator: Are there others? Yes, Sir.

973
974 Mr. Ted Chapel: I am Ted Chapel and Corridor B
975 does effect me or will effect me if that is the final decision. The thing that
976 concerns me some is that in 1992 that was established as a protected corridor.
977 The other corridors, at that time, were not in existence, I believe you said. All of
978 a sudden, they are here. As someone said earlier, Reconda corridor has been
979 eliminated. It is amazing. I have some concerns with the new alternate corridor
980 even though B is the one that I am in. Where the corridor crosses Cliffdale
981 Road, I attended a meeting not too long ago where Cliffdale was going to be
982 widened to five (5) lane possibly or a four (4) lane with a median with relocation
983 around the Fort Bragg property. With the interchange here, it looks as though
984 Cliffdale Road and the Alternate, should the Northern Alternate be chosen,
985 would be one in the same for a while. I have had the privilege of working with
986 DOT representatives for some almost thirty (30) years and I commend you
987 people for what you do. My hat is off to you. I don't want your job, because it is
988 a tough one. But I think this group, I can speak for myself, as someone said
989 earlier, be honest with us. Now if I understand correctly, the federal government
990 says you have to have alternate routes. Is that right Sir?

991
992 Moderator: Yes Sir.

993
994 Mr. Ted Chapel: The alternate route that we have
995 here, unless I am really off in directions, goes almost through E. E. Miller School.
996 In 1993, we were in the meeting in the cafeteria and there was an alternate going
997 that same way and I made a comment to one of your engineers. What about the
998 school? The answer was, what school? So I pointed out the school and said,
999 for information purposes, being that I work with the school system, we are getting
1000 ready to mirror that school with the Bill Heafner School just across the road.
1001 Knowing the concerns of DOT, we certainly want to be concerned with noise
1002 pollution. Now on these new maps, I see, with this corridor, that there is another
1003 school being built that is not here. I am assuming and hope that you people
1004 knew about it. There is a new school being built on Hope Loop. I think what I
1005 am leading to is, if we are going to have Corridor B and we are going to put an
1006 alternate out here, don't blow a smoke screen and say we may go this way,
1007 knowing that there are three (3) schools, a lot of houses being built that have

1008 been built, because that was not a protected corridor. I don't want to lose my
1009 house I am just like everybody else. But if I have got to, come on, take the
1010 house and just say Ted, here it is, we are going to settle with you and you go on
1011 your way. I think that would be beneficial to a lot of people. This is a
1012 tremendous task and I too stand ready for progress. Mr. Taylor. I know Gene
1013 very well. I know where he lives and I know what he is talking about there. Right
1014 across from where he lives is the Jack Brenner High School. It is being built and
1015 that wasn't being built when we met in 1992, 1993. Matter of fact, the school is
1016 not to be completed until August of 2000. So those things, you know the longer
1017 we wait to make these moves and again you are half stringed with a lack of
1018 money. It is amazing that we are not in the western part of the state and get
1019 some of this money, but anyway, that happens too. So I am saying, once we get
1020 these reports in, you have had time file, let's get on with the program and say
1021 yea, nea or let's scrap it and do something else. Thank you, Sir. *(Applause)*

1022
1023 Moderator: Thank you. Do we have other
1024 comments for the record? *(Pause)* If not, we will be around as long as any of
1025 you have any individual questions. We have maps out in the lobby. We have
1026 maps down here and we will be glad to address any questions you have. Thank
1027 you very much for your attendance.

1028
1029
1030
1031
1032
1033
1034
1035
1036
1037

C. B. Goode, Jr., PE
Moderator
Citizens Participation Unit

1038 CBG,jr.:plt
1039 July 20, 1999

APPENDIX H

CITIZENS INFORMATIONAL WORKSHOPS/ SMALL GROUP MEETINGS

DOCUMENTATION FORM
FAYETTEVILLE OUTER LOOP CORRIDOR STUDY
T.I.P. I.D. No.: U-2519
NCDOT Project No.: 8.2441301

Fayetteville Outer Loop Citizens Informational Workshops

Date: June 14, 15, and 17

Type of Contact: Meeting

Subject: Citizens Informational Workshops

Summary:

A series of public workshops were held in Fayetteville the week of June 14, 2004. Each workshop was an open house/drop in format. Citizens were greeted by a representative of the project team, who assisted in locating the citizen's area of interest and directing him to the appropriate section of mapping within the workshop room. Citizens were asked to sign in and provided with a handout describing the workshop and containing information on the project schedule and planning process, as well as NCDOT/H.W. Lochner contact information. Citizens were free to view mapping of the preliminary design and ask questions of project team members. In addition, comments were collected by project team members and recorded on a half-size set of plan sheets. Requests for individual map sheets, or portions of sheets, were taken at each workshop.

The workshop room and mapping was divided into four areas. The areas were based roughly on TIP project sections. Area 1 included U-2519AA and U-2519 AB and extended roughly from I-95 in Robeson County to Camden Road in Cumberland County. Area 2 included U-2519BA, U-2519BB, and U-2519CA and extended from Camden Road to Cliffdale Road. Area 3 included U-2519CB and U-2519DA and extended from Cliffdale Road to Yadkin Road. Area 4 included X-0002B and X-0002C and extended from Yadkin Road to US 401.

Local Officials Meeting

A meeting was held on June 14, 2004 from 10:00 am to 1:00 pm at 71st High School in Fayetteville for Local Officials to view the Citizens Informational Workshops Maps. Representatives from H.W. Lochner, NCDOT-Project Development and Environmental Analysis, NCDOT-Design Services, NCDOT-Office of Human Environment, and NCDOT-Division 6 were present. The meeting was open house/drop-in format. Three local officials and the Secretary of Transportation, Lyndo Tippet, attended. Each official was given a tour of the mapping and given the opportunity to comment on the preliminary design. Two requests were received:

- The Robeson County Manager requested mapping of the preliminary design in Robeson County (sheets 1 – 3 of 21).
- Hoke County officials requested reevaluation of a potential interchange at King Road, which is the nearest point on the Outer Loop to Hoke County.

Citizens Informational Workshop #1

The first workshop was on June 14, 2004 at 71st High School on Raeford Road from 4:00pm to 8:00pm. 247 people attended and 16 written comments were placed in the comment box. The following comments and questions were received:

- One resident felt that the small town feeling of Fayetteville is being lost.
- The maps show a proposed noise barrier adjacent to the Cottonade subdivision. Out of what materials will the wall be constructed and what is the elevation of the barrier above ground level?
- Two residents expressed concern about the noise level after construction is completed and potential increase in crime due to additional traffic.
- Several people commented that the mapping does not contain up-to-date property owner information.
- One person noted that White Horse Court cul-de-sac, off of Lake Upchurch Road, is not shown on the map.
- One resident expressed concern about property value and eye sore traffic.
- One comment requested that the length of noise barrier adjacent to Cottonade Island subdivision be reevaluated and extended to protect entire neighborhood.
- One resident expressed that the Outer Loop is a good thing as it provides access to I-95 and will reduce travel times around Fayetteville and traffic on local streets.
- A property owner asked about access to his property and the Colonial Drive Apartments.
- One person expressed concern with the proposed restricted access at the Reilly Road-Canopy Lane interchange.

In addition to the comments received on comment sheets, comments were recorded directly onto maps at the workshop. These comments included:

- Several comments related to out-of-date mapping and changed property owners.
- A comment that no access is provided to properties west of the Outer Loop on sheet 2.
- A comment that new development exists near the Strickland Bridge Road interchange that is not shown on the maps.
- A comment that no access is provided to several parcels on sheet 5.
- A note that additional right of way impacts could result to properties along Reilly Road/Canopy Lane depending on the location of the Access Control Plaza.

Eight requests were received for property maps showing the relation of the proposed Outer Loop on individual properties. Where possible, a color map was provided to the property owner.

Citizens Informational Workshops #2 and #3

Two workshops were held on June 15, 2004 at College Lakes Elementary School: the first from 10:00am to 1:00pm and the second from 4:00pm to 8:00pm. 171 people attended the morning session, and 223 people attended the evening session. In total, 27 written comments were deposited in the comment box and included the following comments and questions:

- Two people commented that it would be helpful if the maps were posted on the internet.

- One resident expressed concern about potential noise in the area of the Kings Grant subdivision and noted that he hoped noise barriers would be constructed in that area.
- Two people commented that they are in favor of the Outer Loop because it will allow for faster travel around Fayetteville.
- One resident expressed concern about the noise and pollution the project will cause near the Cottonade subdivision and requested that physical barriers be installed to prevent pedestrians from “wandering” into the neighborhood.
- One person requested a copy of the cultural resource report for the project.
- One person asked about access in and out of the College Lakes area via Chesapeake Road.
- One person made a general comment about noise and additional traffic as a result of the project.
- One person noted that they would like an interchange at Morganton Road.
- Residents along Reilly Road just outside of Fort Bragg stated that they would like trees and vegetation along the road be preserved to maintain a buffer for noise.
- Six residents requested that access to Chesapeake Road from McArthur Road be closed, as Chesapeake Road is used to cut through a residential area.

Comments recorded on maps at the workshop included:

- Several comments related to out-of-date mapping and changed property owners.
- A comment to evaluate the possibility of using a retaining wall along the Bullard Trailer Sales Property (sheet 11) to minimize impacts to apartments.
- A comment that there may be a cemetery in the vicinity of the proposed McArthur Road/Outer Loop interchange.
- A comment that no access is provided to properties north of the Outer Loop and west of US 401 (sheet 15).
- A note to check on the ownership of Keithville Drive and review the design and location of the road.
- A comment that the Outer Loop should be shifted to the south to avoid Fort Bragg and reduce security concerns.
- A comment that no access is provided to the CP&L property on sheet 13.

In addition, nine requests were received for property maps.

Citizens Informational Workshop #4

The final workshop was held at Jack Britt High School on Rockfish Road on June 17, 2004 from 4:00pm to 8:00pm. 457 people attended the workshop and left 10 written comments. The following comments were made:

- One person expressed concern about noise and noted that they felt a noise barrier was needed near the Porter Place and Windsong subdivisions.
- One person noted that they would like noise barriers adjacent to the Cottonade subdivision.
- One person said they would be glad to see the project completed, as it will allow for faster travel and less traffic around Fayetteville.
- One person expressed general concerns regarding noise and privacy.

Comments recorded on maps at the workshop included:

- Several comments related to out-of-date mapping and changed property owners.
- A note to tighten the –y-line at Old Plank Road to minimize residential impacts.
- A potential wetland mitigation site is located on Green Springs Road.
- A cell tower is located south of I-95 and west of Canady Road and should be shown on the mapping.

40 requests were made for property mapping.

Following the workshops, additional comments were received via mail, phone, and email. These comments included:

- Three comments expressing concern that Farm Circle Road will be closed at Camden Road, leaving only one outlet for the Mill Creek Farms subdivision.
- Two comments expressed general concern over the proximity of property to the Outer Loop and the effect on property values.

In addition, five written map requests have been received.

DOCUMENTATION FORM
FAYETTEVILLE OUTER LOOP CORRIDOR STUDY
T.I.P. I.D. No.: U-2519
NCDOT Project No.: 34817.1.2

A meeting was held on September 24, 2004 at the NCDOT Division 6 conference room to present a possible alignment shift in the Outer Loop at Old Plank Road and look at access issues. The following people attended the meeting:

Edith Fitzgerald
Joyce Riggans
Michael Penney, NCDOT-PDEA
Tracey Conrad Pittman, NCDOT-Division 6
Lea Abbott, New South Associates
Scott Halvorsen, New South Associates
Christina Shumate, H.W. Lochner, Inc.
Brian Eason, H.W. Lochner, Inc.

Following introductions, Michael Penney briefly described the purpose of the meeting: to discuss a shift in the alignment of the Outer Loop to avoid a potentially historic graveyard on Ms. Edith Fitzgerald's property. He noted that New South Associates would be performing archeological investigations beginning on Monday, September 27, 2004 to determine what level of preservation is recommended for the graveyard. Ms. Fitzgerald and Mrs. Riggans provided contact information to New South Associates. Ms. Fitzgerald can be reached via phone at 910.875.5574, and Mrs. Riggans can be contacted at 910.866.5760 or 910.425.6126.

Michael presented the revised alignment, noting that we have moved the Outer Loop west approximately 200 feet and have removed an access road from the Patterson property. Michael explained that by law if the Outer Loop cuts off a parcel then new access must be provided. The plan was revised so that access to Ms. Fitzgerald's cut off parcel is provided through another of her parcels, one that is vacant. Ms. Fitzgerald pointed out that the property shown as vacant on the mapping now contains a trailer home and requested that the access be moved to another vacant property. Michael agreed that this could be done.

Mrs. Riggans asked about impacts to her property. Michael explained that an interchange is proposed for the Outer Loop with a realigned Old Plank Road/ Black Bridge Road. This interchange would be located generally behind the Patterson property, and NCDOT would have to acquire a small portion of the property (approximately 2.3 acres).

Mrs. Riggans and Ms. Fitzgerald asked about the service road opposite Ms. Fitzgerald's property on Lake Upchurch Road. This service road provides access to parcels south of Lake Upchurch Road that would be cut off by the Outer Loop. The plans show a small amount of right of way associated with this service road impacting the front yards of parcels owned by Ms. Fitzgerald along Lake Upchurch Road. Michael explained that the plans are showing a "worst case" scenario and that right of way may not be required from her properties. The final design of service roads will be done during right of way negotiations and after final survey data is obtained. Mrs. Riggans asked about how properties are valued for right of way acquisition. Michael explained that a fair market appraisal would be done and other similar properties that have recently sold would be researched. He noted that this appraised value is generally higher than the tax appraisal value.

Mrs. Riggans noted that Charles Lilly owns a 1-acre lot that was carved out of her property and asked about the impact to his parcel. Michael said that it would be taken. She also noted that the property line is missing from the rear of her property, separating her property from that of Vista Jackson. Michael said that NCDOT is currently updating property information and that this would be corrected before the public hearing.

Ms. Fitzgerald noted that the new plan appeared to impact a "mausoleum" on Old Plank Road. Michael noted that this is the Jackson family cemetery, with two interments. These graves would have to be relocated.

Ms. Fitzgerald described the location of the graveyard on her property. The archaeological report identifies the site as site number 31CD967 "Chris Chaney 1907." The site was named for a grave stone found in the area during archaeological work. The grave stone was labeled "Chris Chaney 1907." Lea Abbott and Scott Halvorsen noted that New South Associates would be onsite Monday to begin looking at the potential graveyard. Lea added that if signs of a graveyard were found, New South Associates would likely call in a local graveyard expert to consult. Lea anticipates that they will know something definitive within 2-3 weeks. Michael noted that if the graveyard is historic, then the alignment shift as presented would be used to avoid the graveyard. He stressed, however, that if the graveyard is not determined to be historically significant, the alignment shift would not be done. Other design revisions, such as service road changes, could be done. He promised to provide copies of the final design plans to Ms. Fitzgerald and Mrs. Riggans.

APPENDIX I

COMMENTS ON THE DEIS

- JUNE 13, 2000 – DEPARTMENT OF THE ARMY, WILMINGTON DISTRICT, CORPS OF ENGINEERS
- SEPTEMBER 7, 1999 – US ENVIRONMENTAL PROTECTION AGENCY
- AUGUST 13, 1999 – US DEPARTMENT OF INTERIOR, FISH AND WILDLIFE SERVICE, ROANOKE RIVER NATIONAL WILDLIFE REFUGE
- AUGUST 9, 1999 – US DEPARTMENT OF INTERIOR
- JULY 19, 1999 – DEPARTMENT OF THE ARMY, FORT BRAGG PUBLIC WORKS BUSINESS CENTER
- MAY 28, 1999 – FEDERAL ENERGY REGULATORY COMMISSION
- SEPTEMBER 28, 1999 – NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
- SEPTEMBER 23, 1999 – NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY
- JULY 14, 1999 – NC DEPARTMENT OF CULTURAL RESOURCES
- JULY 13, 1999 – NC WILDLIFE RESOURCES COMMISSION
- JULY 6, 1999 – NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF PARKS AND RECREATION
- JUNE 29, 1999 – NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF FOREST RESOURCES
- SEPTEMBER 23, 1999 – MR. MARSH SMITH
- AUGUST 17, 1999 – MR. MARSH SMITH



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS

P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

June 13, 2000

IN REPLY REFER TO

Planning Services Section

Mr. William D. Gilmore, P.E., Manager
Project Development and Environmental Branch
North Carolina Division of Highways
Post Office Box 25201
Raleigh, North Carolina 27611-5201

Dear Mr. Gilmore:

This is in response to your letter of May 11, 1999, requesting comments on the "Federal Draft Environmental Impact Statement for Fayetteville Outer Loop Corridor Study, Cumberland, Hoke, and Robeson Counties, North Carolina, Federal Aid No. DPR-0100(001) and DPR-0100(002), NCDOT Project No. 8.2441301 and 8.T441302, TIP ID No. U-2519 and X-2" (Regulatory Division Action I.D. No. 199301221). Our response has been delayed due to resolution of issues regarding the improved existing facilities alternative.

Our comments involve impacts to flood plains and jurisdictional resources that include waters, wetlands, and U.S. Army Corps of Engineers projects. The proposed roadway improvements would not cross any Corps constructed flood control or navigation project. Enclosed are our comments on the other issues.

We appreciate the opportunity to comment on this project. If we can be of further assistance, please contact us.

Sincerely,

for
W. Coleman Long
Chief, Planning and
Environmental Branch

Enclosure

U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT, COMMENTS ON:

"Federal Draft Environmental Impact Statement for Fayetteville Outer Loop Corridor Study, Cumberland, Hoke, and Robeson Counties, North Carolina, Federal Aid No. DPR-0100(001) and DPR-0100(002), NCDOT Project No. 8.2441301 and 8.T441302, TIP ID No. U-2519 and X-2" (Regulatory Division Action I.D. No. 199301221)

1. FLOOD PLAINS: POC - Mr. Bobby L. Willis, Planning Services Section, at (910) 251-4728

We commented previously on this project by letter dated February 16, 1993, a copy of which is contained in Appendix D of the Federal Draft Environmental Impact Statement (DEIS). We have no additional comments at this time except to commend your agency's decision to coordinate with the Federal Emergency Management Agency and local officials during design of the project. This discussion relative to flood plain impacts is contained on pages IV-55 through IV-57 of the DEIS.

2. WATERS AND WETLANDS: POC - Mr. Dave Timpy, Wilmington Field Office, Regulatory Division, at (910) 251-4634

References: (1) your letter dated May 11, 1999, requesting comments on the DEIS for the above referenced project; (2) permit application submitted by the North Carolina Department of Transportation (NCDOT) in its letter dated June 25, 1999; and (3) NCDOT's letter dated March 16, 2000, providing supplemental information on the Upgrade Existing Facilities Alternative. Additional references: our letter, dated April 29, 1998, that provided comments on the Preliminary Draft EIS and the NCDOT letter dated September 1, 1998, which responded to those comments.

According to the DEIS, your agency proposes to construct a four-lane, median divided freeway on a new location around the city of Fayetteville, from US Highway 401 to I-95, Cumberland, Hoke, and Robeson Counties, North Carolina.

Our comments on the DEIS are provided below:

a. Page I-1, Project Purpose and Need. By letter dated January 19, 1999, we concurred with the purpose and need and the alternatives to be carried forward in the DEIS for the project provided that the DEIS includes an analysis of the Upgrade Existing Facilities Alternative. The DEIS analysis of the Upgrade Existing Facilities Alternative is not adequate. However, this analysis was supplemented by NCDOT in its letter dated March 16, 2000. We concur with NCDOT's supplemental analysis of the Upgrade Existing Facilities Alternative and its recommendations to eliminate this alternative from further analysis. The final EIS (FEIS) should include the supplemental analysis of the Upgrade Existing Facilities Alternative.

2. WATERS AND WETLANDS: (Continued)

b. Page I-1, Project Purpose and Need. It is stated that Fort Bragg officials have "indicated a need" to link the military reservation to I-95 South and that the project would provide an additional transportation route for approximately 25,000 soldiers and civilians that commute to Fort Bragg daily. According to NCDOT in its letter of September 1, 1998, this information was taken from General Luck's letter dated March 12, 1993. This letter should be referenced in the FEIS and a copy included in the Appendix. In addition, the FEIS should include an updated letter from Fort Bragg indicating its support for this project.

②

c. Page I-22, Future Capacity on Local Roadways. The DEIS states that all roads in the Fayetteville Urban Area could not be analyzed for future capacity but that in many cases, the level of service of area roads would improve one letter grade with the Fayetteville Outer Loop in place. The FEIS should explain why all roads in the Fayetteville Urban Area could not be analyzed for future capacity.

③

d. Page II-4, Improve Existing Facilities Alternative. All TIP projects in the vicinity of the proposed project should be listed in the FEIS. In response to our comments on the Preliminary DEIS, the DEIS includes TIP U-2810 but does not include U-2809, proposed widening/improvements of Legion Road from Cameron Road to Owen Drive. All TIP projects in the project area should be shown on Exhibit 1-5 and Exhibit II-6 of the FEIS.

④

e. Page II-39, Capacity Analysis and Level of Service. The DEIS provides projected traffic capacity data for the DEIS alternatives to year 2020. However, this information is not provided for Alternate CJ on Exhibit II-7. The FEIS should include this information on Exhibit II-7 for Alternate CJ.

⑤

f. Page II-8, Design Criteria and Typical Sections. The reduction of median widths is an important component of minimization of wetland impacts. NCDOT should consider a maximum width of 46 feet for medians along each wetland site. Project segments where this cannot be achieved should be specified and reasons should be provided for any proposed median wider than 46 feet.

⑥

g. Page IV-26, Air Quality Impacts. The DEIS states that carbon monoxide projections were assessed against the National Ambient Air Quality Standards to determine to extent of impact the proposed project would have on air quality in the project area but does not indicate the findings. The results of this determination should be provided in this FEIS. Additionally, NCDOT's letter of September 1, 1998, states that Fayetteville is an air quality attainment area and a Clean Air Act conformity determination is not required. The FEIS should also provide this information.

⑦

2. WATERS AND WETLANDS: (Continued)

h. Page IV-76, Wetland Impacts. Wetland impacts provided in Table IV-14 are based on the "proposed project conceptual right-of-way". Our earlier comments on the preliminary DEIS requested clarification how these impacts were determined. Although this was clarified in your letter of September 1, 1999, this clarification should be provided in the FEIS. (8)

i. Page IV-82, Delineated Wetlands. The FEIS should state when the Corps of Engineer's verified NCDOT's wetland delineations. Please be advised that unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of our determination. (9)

j. Page IV-94, Table IV-16. Total wetland impacts in this table are misleading due to combining "Determined" wetland impacts with "Delineated" wetland impacts. The comparison of total wetland impacts for each of the DEIS alternatives are based on different methodologies. Selection of the least environmentally damaging practical alternative must be based on comparable wetland impacts data. (10)

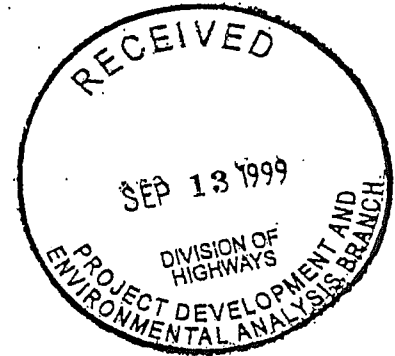
k. Page IV-96, Wetland Mitigation. As stated in our comments on the Preliminary DEIS, an acceptable mitigation plan is one that provides for the full replacement of wetland functions impacted by the project. This project has the potential to impact a significant amount of Coastal Plain Small Stream Swamp and Streamhead Pocoson wetland communities. The use of borrow pits or culverts to impound water upstream of the project as a method of compensatory mitigation is unacceptable. In addition, based on the information provided to date, it is unlikely that either the Dowd Dairy Farm mitigation site or the Barra Farm Mitigation site will provide acceptable riparian wetland mitigation needed to offset project wetland impacts. It is recommended that NCDOT continue its search for a riparian wetland mitigation site located in the same river basin that will provide acceptable and full replacement of wetland functions impacted by this project. In summary, we are concerned that the magnitude and type of wetland impacts of the proposed project and the inability of NCDOT to find appropriate mitigation may have the potential to delay our permit decision on this proposed project. (11)

If you have any questions related to DA permits, they should be addressed to Mr. Timpy.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61. FORSYTH STREET
ATLANTA, GEORGIA 30303-8960



September 7, 1999

4EAD/OEA

Mr. William D. Gilmore, P.E.
Manager, Project Development and Environmental Analysis Branch
Division of Highways
North Carolina Department of Transportation
P.O. Box 25201
Raleigh, NC 27611

Subject: Fayetteville Outer Loop Corridor Study, Cumberland, Hoke and Robeson Counties, NC - T.I.P. No. 2519 and X2 - Draft Environmental Impact Statement
CEQ NO. 990240; FHW-E40779-NC

Dear Mr. Gilmore:

The Environmental Protection Agency, Region 4 (EPA) has reviewed the subject Draft EIS in accordance with Section 102(2)(C) of the National Environmental Policy Act, and Section 309 of the Clean Air Act. We have the following comments on the proposed highway project which would be approximately 27 miles in length, and would be a four-lane divided freeway with full control of access.

PURPOSE AND NEED

1. Comparison of average daily traffic data for 1997 with the projected design year (2020) no-build average daily traffic data shows many roads carrying two to three times present traffic. Fort Bragg, presently with 40,000 personnel stationed there and Pope AFB, are clearly the "economic engines" for the area but there are no statements about increases in base personnel or operations. The document provides no basis for the projections either relative to military or civilian industrial expansion. If facilitating military troop and materials movements are primary purposes of the project, the best documentation of this would be the massive build-up and deployment for the Gulf War in 1990-91. Data from that experience would define the mix and level of use of road, rail and air for military operations in the Fayetteville area. ①

2. It is stated that the proposed facility is being planned to a minimum Level of Service (LOS) D. This appears to be rather marginal service and it leads to the question whether ②

a further expansion of the proposed 4-lane facility within the planning period is envisioned? EPA recalls that an LOS C has been the minimum for other freeways.

3. If it is assumed the X-2 portion of this project will proceed to construction, then the desired expressway connection to I-95 for Fort Bragg will nearly be accomplished. That project provides a new crossing of the Cape Fear River and terminates at US 401. To complete this expressway connection to I-95, it is appropriate to consider improvements to roads already entering the military reservation for connection to the western terminus of X-2.

4. It is shown in Table 1-2 that the outer loop would improve only 8 of 32 existing roadway segments analyzed. Meaningful improvements in congestion relief, therefore, would result to 25% of the present roadways even assuming that some of those roadways would be expanded to 4-lanes by the design year. The cost-effectiveness of the project at some point may come into question.

ALTERNATIVES

1. EPA finds it interesting that TIP No. U-2912 (Owen Drive) has been omitted from the list of roadway improvements for the project area on page II-5. This project involves the completion of a multi-lane corridor from Fort Bragg to I-95. We recognize that recent permitting attempts have been met with objections from the resource agencies. However, if the project is still proposed in some form, it should be included in the list of projects on Page II-5, and considered in the Improve Existing Facilities Alternative. It appears that improvements to Owen Drive and Wilkes Road and connection to NC 87 would accomplish the Army's desired access to I-95, but without full control of access on all segments.

2. EPA agrees with the suggestion that provision of park/ride facilities would have a positive effect on future transit options. As the state's fourth most populous county, this will be increasingly important. Therefore, park/ride facilities need to be included into the Roadway Design Criteria, Table II-1, and should be a part of each build alternative at least to the extent that designs are drafted to accommodate later addition.

3. There has been extensive interagency coordination regarding the potential impact of the project on the Red-cockaded woodpecker (RCW). Most of this coordination has been about the portion of the project between All-American Blvd. and the connection to the X-2 project at US 401. Other segments to the southwest contain identified colonies, too. The

③

④

⑤

⑥

⑦

establishment of the Green Belt restoration area within and along the Fort Bragg Reservation boundary is a component of an Endangered Species Management Plan (ESMP) resulting from earlier expansions to base operations. It was for this reason that two outer loop corridor alternatives (OG1 and OG2) were defined to avoid the Green Belt RCW restoration area. While this document evaluated these options, the two Green Belt avoidance corridors have been dropped from further consideration. It is EPA's opinion that the Green Belt should be held inviolate and that a concerted effort is still necessary either to make one of these OG alternatives suitable or continue to search for additional alternatives for this portion of the project area or another freeway connection for Fort Bragg.

4. It is important to note that improvements to existing roads are planned to result in a loop route within the project study area. While this would not have control of access, it would provide similar function to the outer loop but at reduced travel efficiencies.

⑧

AFFECTED ENVIRONMENT

1. Natural areas and wildlife conservation areas are identified for the study area. A notable omission from this inventory is the Green Belt that has been designated for RCW habitat restoration on Fort Bragg Reservation. Certainly, this area should have equal standing for habitat conservation as do the natural areas and conservation areas located on Figure III-6. In chapter IV Exhibit IV-5, which locates the RCW clusters, does not define the geographic limits of the Green Belt. Has RCW "critical habitat" been defined within the project area?

⑨

ENVIRONMENTAL CONSEQUENCES

1. Secondary Development

In Chapter I where the project's purpose and need are defined, it is stated that 5 future suburban activity centers will develop along the outer loop corridor and 5 existing centers will continue to develop. These are all at proposed interchanges. EPA believes that these future centers will result because of the highway project and the present centers may ultimately be larger because of an outer loop. The environmental impacts from this induced development all along the proposed corridor have not been addressed satisfactorily.

⑩

2. Endangered Species

At present, this project has a "may affect" biological opinion relative to the RCW. On page IV-1 land use compatibility is discussed. It is stated that placement of the outer loop within the Green Belt is consistent with the ESMP for the base. While the highway may be compatible with the mission of the base, intuitively it is inconsistent with the RCW recovery plan. It is not clear whether this is consistent with the requirements of the Endangered Species Act.

11

3. Social Impacts

The potential impacts of the project involve splitting of neighborhoods, and household and business relocations. Relocation impacts are high and would range from 224 to 326. The document indicates that only one alternative has been found feasible but that northeast segment from Cliffdale Road to the eastern terminus would still bisect 6 communities. The Eureka Springs neighborhood located east of McArthur Road would be separated from their neighborhood church.

While the DEIS addresses environmental justice (EJ), it does so merely by disclosing the racial and low income percentages of each census tract traversed by the alternatives. It is important to define whether there is a disproportionate relocation impact, noise impact and community bisection to minority and low income households compared to the county and state demographics. Doing this would help to determine if there are potential EJ issues. This is not possible with the present information.

12

4. Noise Impacts

The DEIS indicates that the alternatives would result in adverse noise impacts to 323 to 459 properties. After the allowable reasonable and feasible mitigation factor is applied, those properties that still would experience substantial impacts would decrease to 98 to 175 properties depending on the alternative. Mitigation would therefore be the responsibility of the owners of these properties. The final document should make this clear. Also, it is stated on page IV-37 that "...horizontal shifts in alignment are not reasonable or feasible from a planning and design standpoint" to minimize the noise impacts because the alignment has been selected to minimize costs and environmental impacts. This is troubling since it infers that the impacts to sensitive noise receptors or other impacts to natural resources cannot be lessened at this stage but will be considered only during final design.

13

14

5. Wetland Impacts

There are numerous wetland sites identified within the alternative corridors particularly south from Cliffdale Road. EPA is concerned about the acreage of wetland impacts for the different alternatives (over 140 acres for right-of-way for each alternative). According to the site descriptions in the EIS, most of the wetlands in jeopardy are medium to high-quality bottomland hardwood forest and streamhead pocosin. We understand that additional avoidance and minimization measures will be undertaken in the final design of the roadway, including establishment of narrow median widths and steep side slopes. EPA strongly recommends that the NCDOT also consider bridging of the larger and/or higher quality wetland systems in order to further minimize impacts.

(15)

On Page IV-97, the EIS states that Beaver Creek would be enhanced by the removal of vegetation such as Arrow arum, Pickerel weed, and Golden club, which help "to accelerate eutrophication of the system." The EIS goes on to state: "retarding the spread of this floating vegetation may improve the wetland system." EPA notes that all three species listed are rooted, not floating aquatic vegetation. In addition, these three aquatic plants are native, beneficial species which provide important habitat and food sources, along with water quality improvement from uptake of nutrients or other pollutants. It is likely that the vegetation has "choked" the creek in response to eutrophication, but these species do not contribute to eutrophication. Rather, they help to ameliorate it. EPA would not favor removal of this vegetation as "enhancement."

(16)

On Page IV-98 of the EIS, on-site mitigation is proposed which includes the installation of culverts to create ponding along the road. It is also suggested that these areas could be used for storm water treatment to meet requirements of an NPDES permit. However, wetland systems constructed for the treatment of wastewater or other water have the primary purpose of water treatment and are not waters of the U.S. Therefore, constructed wetland systems, including storm water retention and detention areas, should not be used as mitigation or mitigation banks. Otherwise, EPA Region 4 believes that these scenarios represent a net loss in the long term, based on a lack of regulatory control and overall impacts to aquatic resources.

(17)

Further, the vast majority of the wetlands to be impacted are either bottomland hardwoods or wet hardwood/pine forests. EPA believes that the proposed mitigation should include in-kind creation or restoration of similar wetland types, rather than open water ponds or herbaceous storm water systems. Because as many as 14 interchanges are possible with some proximal to wetlands and surface waters, it is appropriate for each proposed interchange to be evaluated for the potential direct and secondary developmental impacts.

(18)

Deleting or shifting certain interchanges could further reduce adverse impacts.

The first paragraph on Page IV-98 goes on to state that using culverts along the road and within the medians to create hydrology would be "preferable than impacting adjacent, undisturbed, functioning vegetation communities in order to mitigate the impacts of the proposed project." EPA does not believe this statement is appropriate. We believe that undisturbed, functioning vegetation communities of considerable quality should not be allowed to be impacted for mitigation purposes. However, EPA does not consider culverting an intermittent stream appropriate mitigation for any of the impacts discussed in this document. Rather, the culverting of a natural stream should be considered an impact which must be mitigated.

6. Water Resources

It is stated that all of the larger impoundments except for Old Bennetts Mill Pond on the military reservation, will be avoided. Depending on alternative, it is indicated that there could be an additional 6 small ponds lost to filling. While these could be old farm ponds or degraded due to receipt of polluted runoff, they could be serving as important aquatic habitat and critical to wildlife. There should be more accounting of the loss of function.

Several important creek systems would be impacted, most notably the Rockfish, Cross and Cold Camp Creek systems. With 5 to 6 linear miles of stream to be directly impacted depending on the alternative, and the undefined impact secondary impacts, it is important to reduce these impacts by avoidance and to provide some assurances that encroachment and highway runoff would not exacerbate the losses. When considered cumulatively with the impacts of other associated Fayetteville area roadway improvements, this amount of impact is of considerable concern to EPA. Documentation of the requirements and effectiveness of the respective county construction setback ordinances is important and would be helpful.

SUMMARY

The outer loop would result in substantial impacts to both natural and man-made communities. Residential relocations, project noise and community disruptions will require a great deal of mitigation. Similarly, the probable impacts to surface waters and wetlands within the project are extensive. EPA believes it is appropriate to examine the incremental impacts of interchanges to determine whether each is worth the environmental costs.

EPA is unable to identify a preference for any one of the 13 alternatives at this time. That decision should await further analyses, as EPA is requesting, and details about impacts minimization to surface streams and wetlands, and conclusion of the Section 7 endangered species consultation.

The project is rated EO (Environmental Objection), meaning EPA has identified significant environmental impacts that should be avoided and minimized in order to adequately protect the environment. The impacts to water and wetland resources are significant, particularly the expected stream modifications and loss of bottomland hardwoods. The adequacy of the document is rated "2" (insufficient information) because the probable secondary (induced) impacts have not been fully assessed. Additionally, the Environmental Justice analysis is insufficient. Further substantiation of the need for this project is also appropriate.

EPA is willing to assist in resolving the concerns raised in this review as a participant in the interagency team. Thank you for providing the opportunity to review the Draft EIS. Mr. Ted Bisterfeld on my staff will serve as the primary contact regarding our comments, and can be reached at 404/562-9621.

Sincerely,



Heinz J. Mueller
Chief, Office of Environmental Assessment

cc: Roy Shelton, FHWA, Raleigh
John Hefner, USFWS, Raleigh
Melba McGee, NCDENR



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Roanoke River National Wildlife Refuge
P.O. Box 430/204 S. Queen Street
Windsor, North Carolina 27983
252-794-5326/monica_miller@fws.gov

August 13, 1999

Mr. David McCoy, Secretary
NC Department of Transportation
PO Box 25201
Raleigh, North Carolina 27611

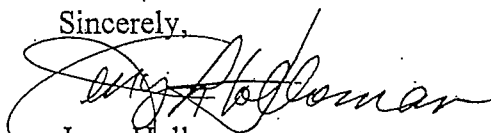
Dear Mr. McCoy:

On June 16, 1999, the Roanoke River National Wildlife Refuge (NWR) staff was informed of the proposed plans for the Fayetteville Outer Loop project in Cumberland county (Project number 8.2441301 and 8.T441302). This was the first information I received about the project. Apparently some project coordination with the US Fish and Wildlife Service took place in 1997. The conservation easement located in the project area is administered by the staff of the Roanoke River NWR. As easement manager I am concerned that refuge staff were not expeditiously informed of plans with implications for a unit of the National Wildlife Refuge system.

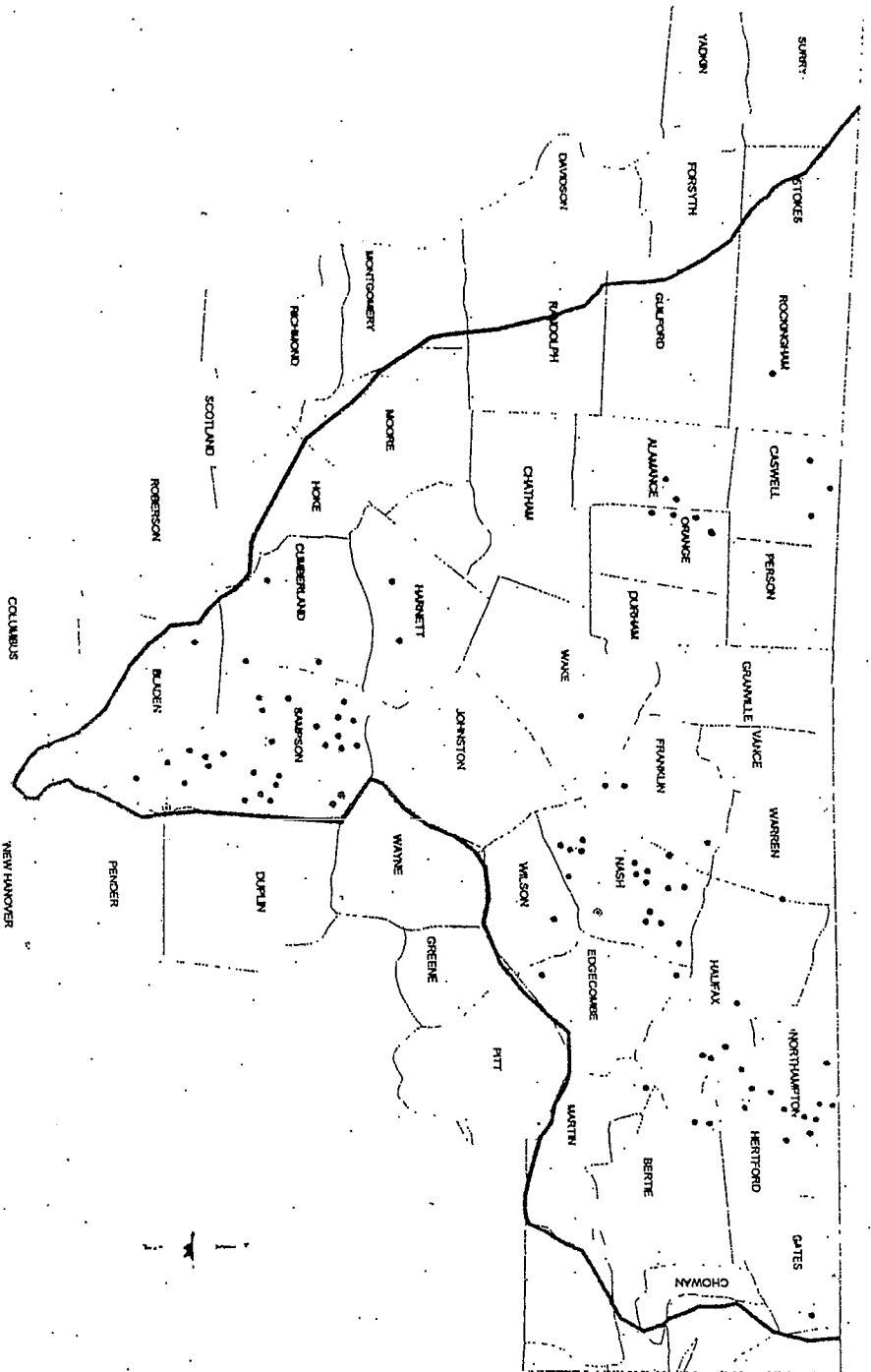
According to the information received the property is owned by the US Department of Agriculture, Farmers Home Administration. That is not correct. This property has been sold to Carl Hodges of Durham. My comments related to NCDOT's DEIS and potential impacts to a unit of the National Wildlife Refuge System were forwarded to our Raleigh, North Carolina field office for inclusion in the Service reply. ①

I am very concerned about the future of this easement. Please copy my office with future correspondence concerning this project's potential impacts to the Service's wetland easement and any other proposed projects that involve lands or easements of the Roanoke River National Wildlife Refuge. Enclosed is a map of Refuge administered wetland easements for your planning needs.

Sincerely,


Jerry Holloman

ROANOKE RIVER NWR FmHA EASEMENTS



• Conservation Easements
□ FmHA Fee Title

Roanoke River NWR
December 1996

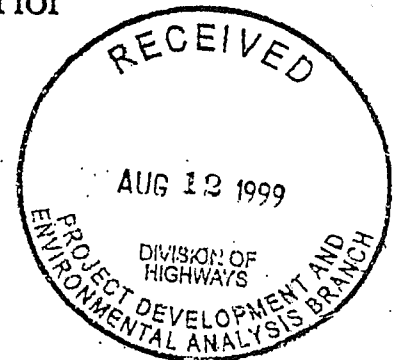


United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

ER-99/426

AUG 9 1999



Mr. Nicholas L. Graf
Division Administrator
Federal Highway Administration
310 New Bern Avenue, Suite 410
Raleigh, North Carolina 27601

Dear Mr. Graf:

This is in response to the request for the Department of the Interior's comments on the Draft Environmental Impact Statement (DEIS)/Section 4(f) Evaluation for the Fayetteville Outer Loop Corridor Study, Cumberland, Hoke, and Rebeson Counties, North Carolina.

SECTION 4(f) EVALUATION COMMENTS

Historic Resources

We recommend continued cooperation and coordination with the State Historic Preservation Officer in order to prepare a Memorandum of Agreement (MOA) which should include measures to avoid and/or minimize harm to the Shaw-Gillis Historic District and other historic resources which may be affected by the proposed project, in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. A signed copy of the MOA should be included in the Final Section 4(f) Evaluation. ①

Conservation Easement

The potential impacts of the proposed project on the Conservation Easement were discussed with the manager of the Roanoke River National Wildlife Refuge, Windsor, North Carolina, the administrator of the Easement. The U. S. Fish and Wildlife Service (FWS) advises that the refuge staff was not aware of the proposed plans for the Fayetteville Outer Loop project until June 16, 1999, and the FWS is concerned that they are not expeditiously informed of the plans with implications for a unit of the National Wildlife Refuge System. We believe that the North Carolina Department of Transportation (NCDOT) should rethink any alternative that locates the proposed road through the Conservation Easement which was secured to preserve and maintain the wetland and floodplain area, and to protect and enhance plant and animal habitat, and populations. It would be difficult to achieve management goals if a road or interchange was built on all, or any part of the easement. The FWS recommends Alternative D, E, I, L, M until it merges with Alternative B, F, G, H, K. This would avoid and preserve the Conservation Easement for its intended purpose. In addition, Exhibit III-7 shows that less of the water resources in proximity to the Easement would be disturbed if the road started with Alternative D, E, I, L, M and then merged with B, F, G, H, K. ②

The DEIS is in error in stating, on pages V-21 and V-22, that the property is owned by the Farmers Home Administration of the United States Department of Agriculture. The property has been sold to Mr. Carl Hodges of Durham, North Carolina. Both the Refuge Manager and Mr. Hodges request to be provided with any future correspondence concerning this project. ③

ENVIRONMENTAL STATEMENT COMMENTS

In a letter dated February 9, 1998, the FWS provided comments on the Preliminary DEIS for this project. At that time, concern was expressed that the Purpose and Need Section was too vague and limited the range of possible solutions to anticipated future population growth, and subsequent increased traffic volume, to the extent that the only conclusion would be that a new freeway is the answer. The FWS recommended the DEIS omit any reference to benefits to be derived from a new freeway. While this has been done, the Purpose and Need Section now incorporates general references to congressionally approved highway systems and strategic highway corridors. In addition, the document cites a need to link Fort Bragg to I-95 both north and south of Fayetteville. However, the X-2 project will provide a short, direct, four-lane freeway between I-95 and US 401, just east of the base, and only a small segment of roadway would be necessary to complete a direct route from Fort Bragg to I-95. In addition, there are at least four existing I-95 interchanges that already provide short, direct, general access to the city. Thus, it would seem unnecessary to build a second, much longer, connection to I-95 for military purposes. We suggest this purpose be omitted from the final EIS (FEIS). (4)

If the military wishes to have a second outlet to I-95 south of Fayetteville then, as an alternative to the present proposal, consideration should be given to extending the All-American Freeway along existing roads to I-95 at either the Snowhill Road or Peach Farm Road interchanges. This alternative would provide quicker, shorter access to I-95. It would still give access to south, southwest, and west side areas of the city while connecting the west side of the city to out-lying areas further to the west and southwest via interchanges at selected and improved existing highways. (5)

Specific Comments

Previous correspondence indicated that the FWS did not feel that the Mass Transit Alternative was fully explored. While an expanded discussion of this alternative has been presented (pgs. II-1 to II-4), it still does not, as the FWS suggested, provide a comparison of the benefits that would be derived from an expenditure on mass transit of an amount equal to that which would be spent on any one of the proposed build alternatives. Table II-8 indicates that alternative costs range from \$350-380 million. (6)

Table I-1 presents traffic growth trends (as average annual daily traffic [AADT]) between 1987 and 1995 at 21 locations within the proposed construction corridors. The table also compares changes in Level of Service (LOS) over the 8-year period. The LOS is a concept that attempts to quantify, albeit subjectively, traffic flow characteristics and signalized intersection characteristics on a scale from A to F, with A being ideal and F worst case. In eleven cases there was no change, i.e. the LOS stayed the same, either A or B. In one case the LOS went from A to C, in three cases the LOS went from B to C, in 3 cases the LOS went from C to D, and in one case the LOS went from C to E (the second worst traffic condition). This 8-year trend is not exactly overwhelming evidence of a compelling need for a new freeway to address current traffic flow conditions on existing roads. In addition, Table I-2 shows LOS predictions at 32 locations in the year 2020, comparing a "No-Build" alternative with a "Build" alternative. Again, there is very little improvement of the build over the no-build. At several locations, the LOS is F (the worst case) with the no-build alternative, and the LOS stays F even with the build alternative. At another location the LOS goes from F to E which is virtually no improvement. If LOS in 2020 with a build alternative is compared to 1995 LOS's from Table I-1 at equivalent locations, the projected build LOS in 2020 is, in some cases worse, stays the same in others, or shows only marginal improvement over the time span. Again, this traffic data is not strong supporting evidence for the need for a new freeway. (7)

Table S-1 shows the projected wetland and stream impacts for each of the 13 build alternatives. These range from 145 acres to 195 acres, and from 26,455 linear feet to 32,715 linear feet respectively. While we believe that the document presents a thorough description of the wetland and stream impacts that can be expected from the implementation of a build alternative, these impacts, by any measure, are substantial. The discussion of mitigation on pages IV-96 and 97 is limited to discussing creation, enhancement, and restoration in general terms, (i.e. that which "might be", or "could be", or "may be" done). Before entertaining specific mitigation proposals there needs to be a much more thorough discussion, beyond the one paragraph on page IV-97, of avoidance and minimization steps that can be taken to alleviate as much impact as possible, regardless of the alternative chosen. Then a detailed mitigation plan for the selected alternative should be incorporated into the FEIS. (8)

ENDANGED SPECIES ACT COMMENTS

The DEIS, pages IV-98 to IV-106, presents a detailed discussion of the eight federally-protected species in the project area. The FWS concurs with the "No Effect" determinations for the American chaffseed (*Schwalbea americana*), Michaux's sumac (*Rhus michauxii*), pondberry (*Lindera melissifolia*), rough-leaved loosestrife (*Lysimachia asperulaefolia*), small whorled pogonia (*Isotria medeoloides*), Saint Francis, satyr butterfly (*Neonympha mitchelli francisci*), and American alligator (*Alligator mississippiensis*).

We note the lengthy discussion of potential project-related impacts on the red-cockaded woodpecker (*Picoides borealis*)(RCW) which includes a synopsis of the extensive coordination that has taken place between the NCDOT, Federal Highway Administration, Fort Bragg, and the FWS. The FWS concurs with the biological determination of "May Effect" for this species, and reminds NCDOT of the need for initiating timely formal consultation on the RCW. The FWS continues to petition the NCDOT to look further at alternative corridors that lie south of, and outside of, the Green Belt that was established at Fort Bragg for the purpose of maintaining viable populations of the RCW. ⑨

In summary, the FWS remains concerned that: (1) the Purpose and Need for the proposed project is not supported by the information and data provided, (2) the proposed project will adversely impact large amounts of wetland and stream habitat valuable to fish and wildlife resources, and (3) the project may unnecessarily impact a unit of the National Wildlife Refuge System. In order to mitigate for expected wetland habitat losses the FWS will insist on the use of all feasible design and construction techniques, and the implementation of a comprehensive plan of compensatory mitigation for all unavoidable wetland losses.

SUMMARY COMMENTS

The Department of the Interior may provide you with further comments on the Section 4(f) aspects of this project upon the circulation of the FEIS for public review and comment.

We appreciate the opportunity to provide these comments.

Sincerely,



Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc:

✓ Mr. William D. Glimore, P.E., Manager
Project Development and Environmental Analysis
North Carolina Department of Transportation
P.O. Box 25201
Raleigh, North Carolina 27611



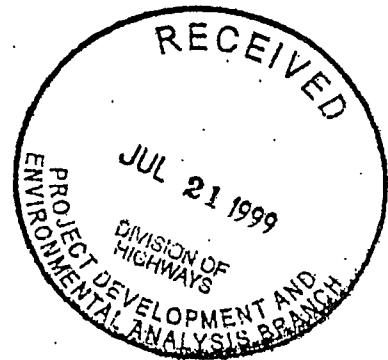
DEPARTMENT OF THE ARMY
HEADQUARTERS, XVIII AIRBORNE CORPS AND FORT BRAGG
FORT BRAGG, NORTH CAROLINA 28307-5000

July 19, 1999

REPLY TO
ATTENTION OF:

Public Works Business Center

Mr. William D. Gilmore, P.E., Manager
Project Development and Environmental
Analysis Branch
North Carolina Division of Highways
P.O. Box 25201
Raleigh, North Carolina 27611



Dear Mr. Gilmore:

This is in response to your letter dated May 17, 1999. Enclosed are the comments on the Federal Draft Environmental Impact Statement for the Fayetteville Outer Loop Corridor Study.

Please contact Ms. Kathy Haught at (910) 396-5300/6761 if we can be of further assistance.

Sincerely,

Robert L. Shirron
Robert L. Shirron
Colonel, U.S. Army
Director of Public Works
Business Center

Enclosures

**ENVIRONMENTAL/NATURAL RESOURCES DIVISION
DESIGN REVIEW COMMENTS**

Date: 7 Jun 99		Page 1 of 1	
<input checked="" type="checkbox"/> CMD <input type="checkbox"/> RPPT <input type="checkbox"/> ENRD Project Manager		Reviewer Kathryn Haught	
Project: Fayetteville Outer Loop EIS		Project Number U-2519/X-2	
Location: Green Belt, FBNC			
Type of Action : <input type="checkbox"/> Work Order <input type="checkbox"/> Concept (35%) <input checked="" type="checkbox"/> Prelim (DRAFT) <input type="checkbox"/> Final ___%		<input type="checkbox"/> Erosion/Soils <input type="checkbox"/> Endangered Species <input type="checkbox"/> Wetlands <input type="checkbox"/> Cultural Resources <input type="checkbox"/> Environmental <input type="checkbox"/> Natural Resources <input type="checkbox"/> Wildlife	
Item No.	Drawing No. or Par. No.	COMMENTS	REVIEW ACTION
1	General	What are the plans for relocation of the Fort Bragg pet cemetery? We note that mitigation for this cemetery is included; please coordinate with this office for an alternate site.	
2	General	We do not have plans for relocation of the ammunition bunkers that will be affected by US13. Request that you include the relocation in your cost estimate.	

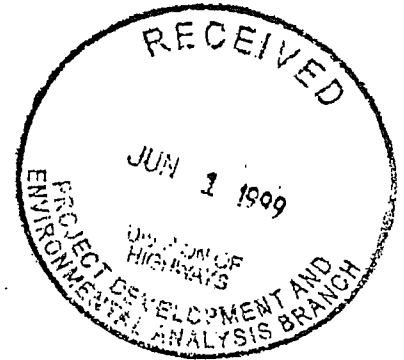
①
②

**ENVIRONMENTAL/NATURAL RESOURCES DIVISION
DESIGN REVIEW COMMENTS**

Date: 7 Jun 99		Page 1 of 1	
<input checked="" type="checkbox"/> CMD <input type="checkbox"/> RPPT <input type="checkbox"/> ENRD Project Manager		Reviewer Erich Hoffman	
Project: Fayetteville Outer Loop EIS		Project Number U-2519/X-2	
Location: Green Belt, FBNC			
Type of Action : <input type="checkbox"/> Work Order <input type="checkbox"/> Concept (35%) <input checked="" type="checkbox"/> Prelim (DRAFT) <input type="checkbox"/> Final ___%		<input type="checkbox"/> Erosion/Soils <input checked="" type="checkbox"/> Endangered Species <input type="checkbox"/> Wetlands <input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Environmental <input type="checkbox"/> Natural Resources <input type="checkbox"/> Wildlife
Item No.	Drawing No. or Par. No.	COMMENTS	REVIEW ACTION
1	General	The lead agency's (presumably NCDOT) Section 7 consultation with the USFWS must be completed prior to the signing of the final EIS.	
2	General	We concur with the biological determination of a "may effect" for the RCW.	
3	General	Request a post-project analysis of the impact on the future viability of active clusters 65, 208, and 267. The loss of pine basal area and pine stems \geq 10-inch DBH is significant and may likely cause cluster abandonment. In addition, the future reactivation of clusters 63 and 205 is in jeopardy due either to deficient forage post-project or to fragmentation effects.	
4	General	Request a post-project analysis of the impact on the future viability of the Green Belt Corridor. Indirectly the presence of the Outer Loop will likely interfere with prescribed burning activities inside the Greenbelt which in turn will hinder land managers' ability to adequately maintain and restore suitable and potential RCW habitat.	
5	General	If not already done, recommend mitigation measures be developed to offset the adverse impacts to RCW clusters in, and adjacent to, the Green Belt corridor.	

③
④
⑤
⑥

FEDERAL ENERGY REGULATORY COMMISSION
ATLANTA REGIONAL OFFICE
Parkridge 85 North Building
3125 Presidential Parkway - Suite 300
Atlanta, Georgia 30340
(770) 452-3800



MAY 28 1999

Mr. William D. Gilmore, P.E.
Manager, Project Development
and Environmental Analysis Branch
N.C. Division of Highways
P.O. Box 25201
Raleigh, North Carolina 27611

Dear Mr. Gilmore:

This acknowledges your letter dated May 11, 1999, soliciting comments on the Federal Draft Environmental Impact Statement for the Fayetteville Outer Loop Corridor Study. It appears that the project will not impact hydroelectric developments under the jurisdiction of the Federal Energy Regulatory Commission. Therefore, we have no comment.

Sincerely,

A handwritten signature in cursive script that reads "Jerrold W. Gotzmer".

Jerrold W. Gotzmer, P.E.
Director

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES



JAMES B. HUNT JR.
GOVERNOR

WAYNE McDEVITT
SECRETARY

MEMORANDUM

TO: Chrys Baggett
State Clearinghouse

FROM: Melba McGee *W*
Project Review Coordinator

RE: 99-0710 DEIS Fayetteville Outer Loop, Cumberland,
Robeson and Hoke Counties

DATE: September 28, 1999

The Department of Environment, and Natural Resources has reviewed the draft environmental impact statement for the proposed project.

Several areas need further clarification as noted in the attached comments. We ask that the Department of Transportation work with our agencies to assure that these concerns are adequately addressed in the final document. Addressing these comments during the review process will avoid delays at the permit phase.

Thank you for the opportunity to comment on this project.

Attachments

RECEIVED

SEP 28 1999

N.C. STATE CLEARINGHOUSE

State of North Carolina
Department of Environment and Natural Resources

Reviewing Office: Fayetteville RO

INTERGOVERNMENTAL REVIEW – PROJECT COMMENTS

Project Number: 99-0710 Due Date: 7-5-99

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 checked="" 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, 2Q.0300, 2H.0600)	N/A	60 days
<input checked="" type="checkbox"/> Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900		
<input type="checkbox"/> Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 2D.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-733-0820.	N/A	60 days (90 days)
<input type="checkbox"/> Complex Source Permit required under 15 A NCAC 2D.0800		
<input checked="" 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 Sect.) At least 30 days before beginning activity. A fee of \$30 for the first acre and \$2000 for each additional acre or part must accompany the plan.		20 days (30 days)
<input type="checkbox"/> The Sedimentation Pollution control Act of 1973 must be addressed with respect to the referenced Local Ordinance.		(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 burn 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 or 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 based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property.	15-20 days (N/A)
<input checked="" 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 monuments need to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687, Raleigh, NC 27611		
<input type="checkbox"/> Abandonment of any wells, if required must be in accordance with Title 15A, Subchapter 2C.0100.		
<input 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)
<p>* Other comments (attach additional pages as necessary, being certain to cite comment authority)</p> <p>Significant secondary impacts should be anticipated, i.e., wetland fill, stormwater impacts and sewer line construction. (Ken Averitte, DWQ, Fayetteville Regional Office)</p>		

REGIONAL OFFICES

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

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Asheville Regional Office
59 Woodfin Place
Asheville, NC 28801
(704) 251-6208 | <input type="checkbox"/> Fayetteville Regional Office
Suite 714 Wachovia Building
Fayetteville, NC 28301
(919) 486-1541 |
| <input type="checkbox"/> Mooresville Regional Office
919 North Main Street, P.O. Box 950
Mooresville, NC 28115
(704) 663-1699 | <input type="checkbox"/> Raleigh Regional Office
3800 Barrett Drive, Suite 101
Raleigh, NC 27609
(919) 571-4700 |
| <input type="checkbox"/> Washington Regional Office
943 Washington Square Mall
Washington, NC 27889
919) 946-6481 | <input type="checkbox"/> Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, NC 28405
(919) 395-3900 |
| <input type="checkbox"/> Winston-Salem Regional Office
585 Waughtown St.
Winston-Salem, NC 27107
(910) 771-4600 | |

State of North Carolina
Department of Environment
and Natural Resources
Division of Water Quality



James B. Hunt, Jr., Governor
Wayne McDevitt, Secretary
Kerr T. Stevens, Director

September 23, 1999

MEMORANDUM

To: Melba McGee
Through: John Dorney
From: John Hennessy
Subject: Comments on the EA for the Fayetteville Outer Loop, Federal Aid Project No. DPR-0100(001) and DPR-0100(002), State Project No. 8.2441301 and 8.T441302, TIP Project No. U-2519, DENR Project Number 99E-0710.

This office has reviewed the referenced document. The Division of Water Quality (DWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. Since a preferred alternative has not yet been selected, the project will result in impacts to an undetermined acreage of jurisdictional wetlands and streams. The DWQ offers the following comments based on review of the aforementioned document:

- A) Review of the Purpose and Need discussion reveals a series of arguments, none of which individually represents a compelling argument for the construction of the project. The traffic analysis indicates that a need for the project probably does exist for the northern portion of the project. However, the need for the project at the southern portion of the project is less obvious. ①
- B) The traffic data presented in the document fails to consider the X-2 project presently under construction. New traffic analyses need to be presented that show the effects of X-2 on the projected traffic patterns for this project. ②
- C) The document indicates that the project is needed to provide emergency access from Fort Bragg to I-95 for periods of national emergency. The DWQ agrees completely with the premise that Fort Bragg requires emergency access to I-95. However, the new X-2 project (presently under construction) will provide the required access. Moreover, the distance to I-95 using X-2 is much shorter than that provided by U-2519. If U-2519 is required for a second emergency access to I-95, then a detailed assessment and discussion on the reasons for the need should be included in the document. ③
- D) On page I-7, the document indicates that a corridor for the project was previously selected and protected by the DOT. However, the DWQ was never involved in the selection of said corridor, and as such, is not bound to approve the selected corridor. Analysis of the growth patterns subsequent to the selection and protection of the corridor indicate that development has occurred along and immediately adjacent to the selected corridor. This seems very clear evidence that construction of this project will, and has already, resulted in significant secondary and cumulative ④
⑤

impacts. The document needs to calculate the impacts that have resulted from the project since the protected corridor was placed on the map to date, as well as those anticipated in the future (DOT can assume full build out for the calculations of future conditions).

- E) Removal of the Improve Existing Alternative is justified by citing the alternative's failure to meet the project's purpose and need. No other analysis is presented justifying the alternative's exclusion. The document argues that the project purpose is to construct a circumferential loop around Fayetteville. The document then states the Upgrade Existing Alternative does not meet the project Purpose and Need because it fails to provide for a circumferential loop. Given this criteria, the project's purpose and need definition precludes any alternative that involves an upgrade of existing facilities. Therefore, it is logical to conclude that the project's purpose and need statement necessitates a "new location" facility. Thus, the purpose and need statement should be changed to identify the project's purpose as to construct a new location facility and there by avoid this otherwise circular argument. If DOT is unwilling to acknowledge that the project's purpose is to construct a new location facility, then the document needs to consider other alternatives that combine use of existing facilities with new location segments to complete the project. Appropriate "Avoidance and Minimization" cannot truly occur unless the use of existing facilities, in whole or part, are considered in the alternative development and analysis stage. Existing SR roads that could be used, in whole or part, to meet the project purpose include but are not necessarily limited to: 1) SR 1007 (All American Freeway), 2) SR 1007, 3) NC 59, and 4) SR 1403. Failure to assess the "Upgrade Existing Alternatives" as reasonable and feasible is in violation of both the NFPA and SEPA. Moreover, each alternative, prior to its exclusion must be assessed to the same level of detail as the others. An alternative must "stand or fall" based on its relative benefits and costs comparative to the other alternatives and their respective benefits and costs. Failure to proceed with this form of analysis is disingenuous at best; or a purposeful circumvention of the NEPA/SEPA, at worst. (6)
- F) Among the build alternatives, the DWQ is concerned that the DOT's preselection of a corridor, and subsequent protection of said corridor, will preclude our ability to select among equal alternatives and, there by, avoid and minimize impacts to natural resources in an appropriate manner. (7)
- G) At present there has been no detailed wetland delineation or stream assessments for the area south of Cliffdale Road. Due to the very large quantity of wetlands and streams being impacted with this project, more data about the nature of the resources being impacted in this area prior to the selection of a preferred alternative. (8)
- H) 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. Based on the impacts described in the document, wetland mitigation will be required for this project. Should the impacts to jurisdictional wetlands exceed 1.0 acres, mitigation may be required in accordance with NCDWQ Wetland Rules (15A NCAC 2H.0506 (h)(2)). (9)
- I) In accordance with the NCDWQ Wetlands Rules (15A NCAC 2H.0506(b)(6)), mitigation will be required for impacts of greater than 150 linear feet to any single perennial stream. The mitigation plan should be designed to replace appropriate lost functions and values. In accordance with the NCDWQ Wetlands Rules (15A NCAC 2H.0506 (h)(3)), the Wetland Restoration Program may be available for use as stream mitigation. (10)
- J) Where streams must be crossed, the DWQ 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, DOT should not install the bridge bents in the creek, to the maximum extent practicable. (11)

- K) Sediment and erosion control measures should not be placed in wetlands. (13)
- L) Borrow/waste areas should avoid wetlands to the maximum extent practicable. Impacts to wetlands in borrow/waste areas could precipitate compensatory mitigation. (14)
- M) The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater should not be permitted to discharge directly into the creek. Instead, stormwater should be designed to drain to a properly designed stormwater detention facility/apparatus. (15)
- N) There should be a discussion on mitigation plans for unavoidable impacts. If mitigation is required, it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. While the NCDWQ realizes that this may not always be practical, it should be noted that for projects requiring mitigation, appropriate mitigation plans will be required in conjunction with the issuance of a 401 Water Quality Certification. (16)
- O) For the proposed crossing located upstream of the water intakes for the City of Fayetteville, the DWQ requests that permanent hazardous spill catch basins be installed. (17)
- P) Please replace all references to DEM in the document with DWQ. It is a minor matter, but it has been several years since the name change. (18)
- Q) Based on the information presented in the document, the magnitude of impacts to wetlands and streams will require an Individual 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 NCDWQ. 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. (19)

The NCDWQ appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact John Hennessy at (919) 733-5694.

cc: Dave Timpy, Corps of Engineers
Tom McCartney, USFWS
David Cox, NCWRC
Ken Averitte, NCDWQ Regional Office
Central Files
Personal Files



North Carolina Department of Cultural Resources

James B. Hunt Jr., Governor
Betty Ray McCain, Secretary

Division of Archives and History
Jeffrey J. Crow, Director

July 14, 1999

MEMORANDUM

TO: William D. Gilmore, P.E., Manager
Project Development and Environmental Analysis Branch
Division of Highways
Department of Transportation

FROM: David Brook *David Brook*
Deputy State Historic Preservation Officer

SUBJECT: Proposed Fayetteville Outer Loop corridor
study, Federal Aid DPR-0100(001) and
(002), State Project 8.2441301 and
8.T441302, TIP U-2519 and X-2, 93-E-
4220-0570, 99-E-4220-0710

We have received information concerning the above project from the State Clearinghouse.

We acknowledge the intention of the North Carolina Department of Transportation to conduct an intensive archaeological survey of the preferred alternative once it has been selected (page III-26). We look forward to further consultation and review of the survey results. Please keep us advised concerning selection of the preferred alternative.] ①

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

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

DB:slw

cc: ✓ State Clearinghouse
Nicholas Graf
Thomas Padgett





☒ North Carolina Wildlife Resources Commission ☒

512 N. Salisbury Street, Raleigh, North Carolina 27604-1188, 919-733-3391
Charles R. Fullwood, Executive Director

MEMORANDUM

TO: Melba McGee
Office of Legislative and Intergovernmental Affairs, DENR

FROM: David Cox, Highway Project Coordinator
Habitat Conservation Program *David Cox*

DATE: July 13, 1999

SUBJECT: North Carolina Department of Transportation (NCDOT) Draft Environmental Impact Statement (DEIS) for the Fayetteville Outer Loop, Cumberland, Hoke, and Robeson counties, North Carolina. TIP No. U-2519 and X-2, SCH Project No. 99-F-0710.

Staff biologists with the N. C. Wildlife Resources Commission have reviewed the subject DEIS and are familiar with habitat values in the project area. The purpose of this review was to assess project impacts to fish and wildlife resources. Our comments are provided in accordance with certain provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

NCDOT proposes to construct a new multi-lane freeway around the city of Fayetteville. The proposed facility would be a four-lane, median divided freeway with full control of access. The project length is approximately 27 miles, all on new location. A range of alternative alignments are under consideration, which meet the stated project purpose and need to varying degrees. Adverse effects on wildlife and fishery resources vary with each alternative.

We have reviewed the DEIS for this project and have found the document adequately describes the environmental impacts of each build alternative. In a project of this scope, we feel that a NCDOT must clearly show that impacts to wetlands and important wildlife and fishery habitat have been minimized to the maximum extent possible. The document goes to great lengths to show that social and cultural resource impacts have been avoided. It does not show avoidance or minimization of wetland impacts, high quality natural areas, or endangered wildlife

July 13, 1999

habitat. In absence of an alternative that minimizes impacts to natural resources, we will be unable to concur with a selected alternative.

We concur that the Draft Environmental Impact Statement sufficiently describes the expected impacts of each alternative on the natural and human environment. Since this project is subject to the NEPA/404 Merger Agreement, we recommend that NCDOT begin to compile information regarding efforts to minimize impacts to natural resources. If this information is unavailable, it is unlikely that we will support an alternative as the Least Damaging Practicable Alternative.

①

Thank you for the opportunity to comment on this DEIS. If we can be of any further assistance please call me at (919) 528-9886.

cc: Tom McCartney, U.S. Fish and Wildlife Service, Raleigh
John Hennessey, DWQ, Raleigh
Dave Timpy, USACOE, Washington
Steve Hall, Natural Heritage Program, DPR

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF PARKS AND RECREATION

July 6, 1999



JAMES B. HUNT JR.
GOVERNOR

WAYNE McDEVITT
SECRETARY

DR. PHILIP K. MCKNELLY
DIRECTOR

MEMORANDUM

TO: Melba McGee

FROM: Stephen Hall *SH*

SUBJECT: Corridor Study - Fayetteville Outer Loop

REFERENCE: 99-0710

Portions of two Registered Natural Heritage Areas, the Keith Natural Heritage Area and the Bonnie Doone Lake Natural Heritage Area, appear to be located within the project corridor, as shown in Exhibit III-6. In identifying the extent of impacts to these areas (p. IV-49), only the impacts to the Keith Natural Heritage Area are mentioned, however, despite the fact that Exhibit III-6 seems to show even greater potential impacts to the Bonnie Doone Lake Natural Heritage Area. We request that this be clarified. We would also like to see a serious effort be made in designing the actual right-of-way limits to avoid these natural areas as much as possible. We would like to see a commitment be made by DOT in this regard.

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF FOREST RESOURCES

2411 Old US 70 West
Clayton, NC 27520
June 29, 1999



JAMES B. HUNT JR.
GOVERNOR

WAYNE McDEVITT
SECRETARY

STANFORD M. ADAMS
DIRECTOR

MEMORANDUM

TO: Melba McGee, Office of Legislative Affairs
FROM: Bill Pickens, NC Division Forest Resources *Bill*
SUBJECT: DOT DEIS for the Fayetteville Outer Loop Corridor
PROJECT #: 99-0710 and TIP # U-2519 & X-2

The North Carolina Division of Forest Resources has reviewed the referenced DEIS and offers the following comments concerning impacts to woodlands.

1. The proposed alternatives would result in a significant loss of forested land and the subsequent loss of habitat and timber resource. Impact to forest lands range from 735 acres (Alternate C) to 868 acres (Alternate K).
2. The amount of acres impacted by timber type or communities for the alternatives have been combined. Because of this it is impossible to evaluate the impact to forest resources the project will have. Because a detailed survey was not done we must base our support for an Alternative on the least number of forested acres impacted. This does not allow for impact evaluation based on timber value, unique or unusual habitat, or threatened ecosystems and ignores social impacts. ①
3. Based on the information provided we favor Alternatives C or J since they impact the least forested and wetland areas.
4. The environmental commitments and mitigation efforts discussed in the DEIS largely ignored the significant loss of forest resources. We feel that mitigation for this loss should include efforts to avoid high value timber stands and longleaf ecosystems during final alignment as well as provisions to utilize timber products removed during ROW clearing rather than be wasted by burning or other means of disposal. ②

We appreciate the opportunity to comment on the proposed project, and encourage its impact on forest resources be considered during the planning process.

cc: Warren Boyette



CUNNINGHAM, DEDMOND, PETERSEN & SMITH

ATTORNEYS AND COUNSELORS AT LAW
225 NORTH BENNETT STREET
SOUTHERN PINES, NORTH CAROLINA 28387

BRUCE T. CUNNINGHAM, JR.
RICHARD E. DEDMOND
ANN C. PETERSEN
MARSH SMITH

(910) 695-0800

MAILING ADDRESS
P.O. BOX 1468
SOUTHERN PINES, NC 28388
FAX NO. (910) 695-0903

September 23, 1999

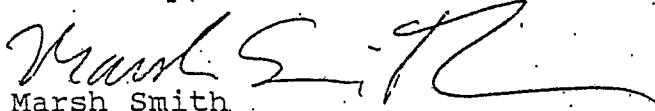
State Clearinghouse
N.C. Dep't of Administration
116 W. Jones St.
Room 5106 of the Administration Building
Raleigh, NC 27603-8003.

RE: Proposed Fayetteville Outer Loop Corridor Study in
Cumberland, Hoke and Robeson Counties

To Whom it May Concern:

Regarding Environmental Bulletin's solicitation of comments on the above identified NCDOT project, I would offer the attached comments, and I ask that they be addressed and made part of the administrative record.

Sincerely,


Marsh Smith

enclosure

cc:

Richard Franck, President, NCATR (w/ encl.)

1 by-pass of Vass and Cameron, the benefit/cost analysis used a freeway design with grade separated intersections to evaluate the benefits, but used at grade intersections to evaluate the cost, thus skewing the benefit cost analysis in favor of building the road.

6. In any safety analysis the projected accidents on the new road must be added to the projected accidents on the old road. Unless, of course, NCDOT plans to entirely eliminate the old road's use as a road. Further, the EIS should take into account that auto travel is inherently unsafe when compared to train and bus travel in any purported "safety analysis". If NCDOT really has safety concerns, it should seek to reduce automobile and truck traffic.
7. It is well known among unbiased traffic experts that each additional lane mile of highway generates additional traffic that would not otherwise be generated. Therefore, the analysis of the no-build alternative should assume substantially less traffic to handle than the build alternative due to this induced traffic growth effect of additional lane miles. And the analyses of the TSM (transportation systems management) and spot improvement alternatives should show more than the no-build but not as much as the proposed new 4-lane.
8. In addition to evaluating the no-build alternative, the EIS must evaluate the spot improvement alternative. The spot improvement alternative must include such things as turn out lanes for slow vehicles, redesign of intersections to improve sight distances, a car and van pool database, alternative transportation modes (including rail, buses, and bicycles), purchasing conservation easements in rural areas to reduce the tendency of highways to attract commercial and residential growth (thus lessening their ability to handle through traffic), and any other devices, design practices, or programs to reduce traffic, in addition to those already mentioned. Neither the spot improvement alternative nor the TSM alternative should be cursorily eliminated from consideration because of NCDOT's notion that state law requires a 4-lane. If state law requires a 4-lane, that doesn't obviate the requirement for an EIS as provided by both State (North Carolina Environmental Policy Act) and federal (National Environmental Policy Act) law.
9. The EIS should address public transportation alternatives (separately and in conjunction with TSM and spot improvement alternatives), and such should include rail and bus. Such an evaluation should include using public school buses during off hours assist with public transportation needs. This should eliminate the over-used excuse that rural areas don't have sufficient population density to justify public transit's initial capital outlay. Recall that the lead EIS agency need not have control over an alternative for the EIS to evaluate it.
10. Freight by rail as a viable alternative to the long distance trucks that increasingly clog our highways must be thoroughly examined as a "corridor wide" alternative for this transportation corridor. This could best be done in a programmatic EIS.
11. The EIS should thoroughly examine the consequences to the rail industry along the corridor occasioned by government subsidized truck competition in the form of a publicly funded expanded highway.

12. As already mentioned, secondary growth effects are substantial and real consequences from highway construction. In addition to examining those consequences along the entire corridor, those consequences must be examined in detail for the corridor and the region. To the extent that the expanded highway encourages suburbanization of these private land. This cost -- to farming, forestry and recreational activities such as fishing, hiking and hunting -- must be factored into the project's total cost when analyzing benefits and costs. It should be noted that using rail based freight and transit alternatives will drastically reduce these potential impacts.
13. The EIS must analyze the effects on county and municipal net tax revenue in light of the probable induced growth impacts of the highway expansion. Many studies have documented that growth in areas outside of existing town centers tends to cause a county government to have to spend more in services than it realizes from increased property tax revenues. Studies have shown this to be true for counties, towns, and townships in South Carolina, Virginia, and a multitude of New England States. It will likely also prove true for this county. Therefore, the EIS needs to analyze the project's effect on net tax revenue for the county based on projected induced growth impacts, projected increases in property tax revenues, and projected increases in governmental service obligations.
14. Next, in the FEIS and EIS documents for the US 1 by-pass of Vass and Cameron the NCDOT and FHWA falsely represented that the local governments of Vass and Cameron supported the proposed routes of the projected by-pass. Neither Vass nor Cameron's officials supported that route in any documents that I have been able to find. In fact, Cameron passed a resolution in March of 1996, opposing the by-pass. I trust that this EIS will not misrepresent any local government's positions.
15. Any watershed that lies within the area will likely be affected by induced growth from this highway expansion. Thorough analysis of the likely deleterious effects on the watershed and the costs thereof must be undertaken in the EIS.
16. NCDOT must search for state-listed species that are not also on the federal lists as threatened or endangered, as these are the very type of impacts that need to be addressed under either NCEPA or NEPA. ①
17. NCDOT didn't do an EIS for the Highway Trust Fund Act, when it was before our Legislature in 1989, so it needs to do one now -- better late than never. ②
18. It is my understanding that the project will adversely affect numerous RCW colonies, this is unacceptable for a mere transportation project -- especially an unneeded one that will exacerbate existing problems. ③
19. The Tyrrell County RCW "mitigation" site has a different sub-population of RCWs and is unsuitable "mitigation" for the unacceptable losses occasioned by this project.
20. NCDOT should prepare an analysis of a "pedestrian friendly" four-lane for any communities ④

bisected or by-passed by this project, as NCDOT did for Hwy 321 near Blowing Rock.

21. Don't select the "preferred alternative" and then use the EIS as a post-hoc rationalization of the choice; use the EIS as a decision-making tool.
22. Use accurate, and **current**, air pollution modelling to gauge the effects of this ill-advised road, and any modelling should be based on accurate traffic projection, including induced traffic, paying particular attention to the worst-case and not assuming the best case (as NCDOT is wont to do).

5

Thank you for your attention to these matters. Unless I hear otherwise from you, I will assume that the EIS will thoroughly discuss each and every point raised in this letter and arrive at an objective and reasoned conclusion.

CUNNINGHAM, DEDMOND, PETERSEN & SMITH

ATTORNEYS AND COUNSELORS AT LAW
225 NORTH BENNETT STREET
SOUTHERN PINES, NORTH CAROLINA 28387

BRUCE T. CUNNINGHAM, JR.
RICHARD E. DEDMOND
ANN C. PETERSEN
MARSH SMITH

(910) 695-0800

MAILING ADDRESS
P.O. BOX 1468
SOUTHERN PINES, NC 28388
FAX NO. (910) 695-0903

August 17, 1999

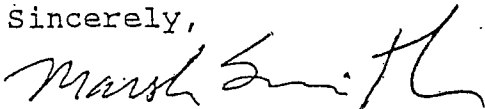
State Clearinghouse
N.C. Dep't of Administration
116 W. Jones St.
Room 5106 of the Administration Building
Raleigh, NC 27603-8003

RE: SCH # 99E42200710, TIP # unknown;
NEPA DEIS for Proposed Fayetteville Outer
Loop Corridor Study

To Whom it May Concern:

Regarding Environmental Bulletin's solicitation of comments on the above identified NCDOT project, I would offer the attached comments, and I ask that they be addressed and made part of the administrative record.

Sincerely,



Marsh Smith

enclosure

cc:

Richard Franck, President, NCATR (w/ encl.)

EIS COMMENTS FOR FAYETTEVILLE OUTER LOOP

1. The North Carolina Department of Transportation (NCDOT), the Federal Highway Administration (FHWA), and others often tout the economic benefits of highway construction, but an objective study of such projects' economic effects remains undone in North Carolina. Studies in other states have indicated little, no, or, even, negative benefits. The EIS needs to include such an objective study. ①

2. The EIS must thoroughly and exhaustively address secondary impacts -- something that EISs for other highways have not come close to doing. Particularly, the EIS must pay attention to the fact that, if substantial economic growth benefits are claimed, then secondary impacts -- e.g., an increase in the "footprint" of suburban sprawl, more traffic, etc. -- cannot be claimed to be too hard to predict for thorough EIS evaluation. Evidence of harmful secondary impacts abounds. NCDOT should be well aware of the recent need to by-pass North Wilkesboro's 421 by-pass -- a by-pass of the by-pass. This happened because secondary growth impacts choked the old by-pass with traffic. NCDOT should not claim in the EIS that limited access will solve the problem experienced in North Wilkesboro, and elsewhere, since limited access roads also induce growth and the associated traffic will produce limited access roads' trafficability as well. I believe that Judge Earl Britt made similar points to NCDOT in Mullin v. Skinner (the Sunset Beach bridge case); hopefully, NCDOT will take Judge Britt's comments to heart in this EIS. ②

As you know, Mullin involved FHWA and NCDOT being ordered to prepare an EIS that they had previously refused to prepare. Let this letter serve as notice that a misleading, inadequate or severely flawed EIS is at least as bad as no EIS at all.... and so is an EIS that serves only as a post hoc rationalization for a foregone conclusion.

3. Evaluations of Average Daily Traffic (ADT) in the base year should be based on ADTs published by NCDOT for the county ADT map in the base year, when the data is available for the measurement points. In the past, highway expansion projects the EISs have used ADTs substantially higher those shown by NCDOT's county ADT maps (e.g., R-210, the US1 by-pass of Vass and Cameron). ③

4. Programmatic EISs need to be done for both the entire highway corridor and other highway projects in the region in addition to the presently proposed site specific EIS for this particular expansion project. In Kleppe v. Sierra Club the U.S. Supreme Court pointed out that when several proposals will have synergistic or cumulative impact, their environmental consequences must be considered together. In the FEIS for the US 1 by-pass of Vass & Cameron, NCDOT flatly refused to consider cumulative impacts when asked by the EPA. ④

Programmatic EIS must be done for the corridor and for the region.

5. At least, evaluate the entire loop, not just a part of it.] ⑤
6. Next, in any benefit/cost analysis the benefits should be derived from the same type of projected road construction design from which the cost are derived. For example, in the US 1 by-pass of Vass and Cameron, the benefit/cost analysis used a freeway design with grade separated intersections to evaluate the benefits, but used at grade intersections to evaluate the cost, thus skewing the benefit cost analysis in favor of building the road.] ⑥
7. In any safety analysis the projected accidents on the new road must be added to the projected accidents on the old road. Unless, of course, NCDOT plans to entirely eliminate the old road's use as a road. Further, the EIS should take into account that auto travel is inherently unsafe when compared to train and bus travel in any purported "safety analysis". If NCDOT really has safety concerns, it should seek to reduce automobile and truck traffic.] ⑦
8. It is well known among unbiased traffic experts that each additional lane mile of highway generates additional traffic that would not otherwise be generated. Therefore, the analysis of the no-build alternative should assume substantially less traffic to handle than the build alternative due to this induced traffic growth effect of additional lane miles. And the analyses of the TSM (transportation systems management) and spot improvement alternatives should show more than the no-build but not as much as the proposed new 4-lane.] ⑧
9. In addition to evaluating the no-build alternative, the EIS must evaluate the spot improvement alternative. The spot improvement alternative must include such things as turn out lanes for slow vehicles, redesign of intersections to improve sight distances, a car and van pool database, alternative transportation modes (including rail, buses, and bicycles), purchasing conservation easements in rural areas to reduce the tendency of highways to attract commercial and residential growth (thus lessening their ability to handle through traffic), and any other devices, design practices, or programs to reduce traffic, in addition to those already mentioned. Neither the spot improvement alternative nor the TSM alternative should be cursorily eliminated from consideration because of NCDOT's notion that state law requires a 4-lane. If state law requires a 4-lane, that doesn't obviate the requirement for an EIS as provided by both State (North Carolina Environmental Policy Act) and federal (National Environmental Policy Act) law.] ⑩
10. The EIS should address public transportation alternatives] ⑪

(separately and in conjunction with TSM and spot improvement alternatives), and such should include rail and bus. Such an evaluation should include using public school buses during off hours assist with public transportation needs. This should eliminate the over-used excuse that rural areas don't have sufficient population density to justify public transit's initial capital outlay. Recall that the lead EIS agency need not have control over an alternative for the EIS to evaluate it.

11. Freight by rail as a viable alternative to the long distance trucks that increasingly clog our highways must be thoroughly examined as a "corridor wide" alternative for this transportation corridor. This could best be done in a programmatic EIS. (12)
12. The EIS should thoroughly examine the consequences to the rail industry along the corridor occasioned by government subsidized truck competition in the form of a publicly funded expanded highway. (13)
13. As already mentioned, secondary growth effects are substantial and real consequences from highway construction. In addition to examining those consequences along the entire corridor, those consequences must be examined in detail for the corridor and the region. To the extent that the expanded highway encourages suburbanization of these private land -- to farming, forestry and recreational activities such as fishing, hiking and hunting -- must be factored into the project's total cost when analyzing benefits and costs. It should be noted that using rail based freight and transit alternatives will drastically reduce these potential impacts. (14)
14. The EIS must analyze the effects on county and municipal net tax revenue in light of the probable induced growth impacts of the highway expansion. Many studies have documented that growth in areas outside of existing town centers tends to cause a county government to have to spend more in services than it realizes from increased property tax revenues. Studies have shown this to be true for counties, towns, and townships in South Carolina, Virginia, and a multitude of New England States. It will likely also prove true for this county. Therefore, the EIS needs to analyze the project's effect on net tax revenue for the county based on projected induced growth impacts, projected increases in property tax revenues, and projected increases in governmental service obligations. (15)
15. Next, in the FEIS and EIS documents for the US 1 by-pass of Vass and Cameron the NCDOT and FHWA falsely represented that the local governments of Vass and Cameron supported the proposed routes of the projected by-pass. Neither Vass nor Cameron's officials supported that route in any documents that I have been able to find. In fact, Cameron passed a

resolution in March of 1996, opposing the by-pass. I trust that this EIS will not misrepresent any local government's positions.] (16)

16. Any watershed that lies within the area will likely be affected by induced growth from this highway expansion. Thorough analysis of the likely deleterious effects on the watershed and the costs thereof must be undertaken in the EIS.] (17)

17. Don't select a "preferred alternative" and then use the EIS to rationalize the choice; use the EIS as the decision making tool it's supposed to be.] (18)

18. Don't analyze this project separately from other segments of the loop, or from other projects tying into the loop.] (19)

Thank you for your attention to these matters. Unless I hear otherwise from you, I will assume that the EIS will thoroughly discuss each and every point raised in this letter and arrive at an objective and reasoned conclusion.

APPENDIX J

FORT BRAGG CORRESPONDENCE

DEPARTMENT OF THE ARMY
HEADQUARTERS, XVIII AIRBORNE CORPS AND FORT BRAGG
FORT BRAGG, NORTH CAROLINA 28307-5000



REPLY TO
ATTENTION OF:

March 12, 1993

Directorate of Engineering and Housing

Honorable James B. Hunt, Jr.
Governor of North Carolina
Raleigh, North Carolina 27603-8003

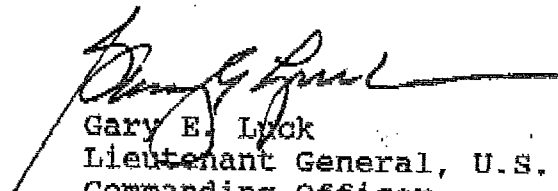
Dear Governor Hunt:

I am very pleased that the U.S. 13/Outer Loop Road project is included in the North Carolina Department of Transportation's 1993-1999 Transportation Improvement Program. U.S. 13 is a critical highway project for Fort Bragg as well as the local region. As you are aware, the Fayetteville/Fort Bragg area is the fourth largest metropolitan area in the state.

Approximately one-third of the right-of-way needed for the project would be on Fort Bragg land. Department of the Army has conceptually approved outgranting the property to the State of North Carolina. As is true of all Fort Bragg projects, there are environmental and endangered species issues that must be addressed.

I ask for your support to ensure that the U.S. 13/Outer Loop and the Spring Lake Loop remain high priority projects. The highways will allow us easy access to Interstate 95 in the event of a deployment. They are critical to easing the growing traffic congestion facing the nearly 25,000 soldiers and civilian workers who commute to and from Fort Bragg daily as well as the growing retiree population. These projects are key pieces of a plan to provide excellent regional transportation access to our \$250 million medical center scheduled to be completed by 1998.

Sincerely,


Gary E. Luck
Lieutenant General, U.S. Army
Commanding Officer

Copies Furnished:

Honorable Sam Hunt, Secretary, NCDOT, Raleigh, NC
Honorable William Richardson, NC State House of Representatives,
Raleigh, NC
Mr. Thomas Bacote, Chairman, Cumberland County Board of
Commissioners, Fayetteville, NC
Honorable J. L. Dawkins, Mayor, City of Fayetteville,
Fayetteville, NC



DEPARTMENT OF THE ARMY
HEADQUARTERS, XVIII AIRBORNE CORPS AND FORT BRAGG
FORT BRAGG, NORTH CAROLINA 28307-5000

14 JAN 1994



REPLY TO
ATTENTION OF:

Directorate of Public Works
and Environment

Mr. H. Franklin Vick
Manager, Planning and Environmental Branch
North Carolina Department of Transportation
PO Box 25201
Raleigh, North Carolina 27611

Dear Mr. Vick:

We have been working closely with Cumberland County and North Carolina Department of Transportation planners since April 1989 on possible corridors for US13 through Fort Bragg. After a thorough analysis by my staff, the only feasible location on Fort Bragg for constructing the multi-lane, divided highway with controlled access is as shown on the enclosure.

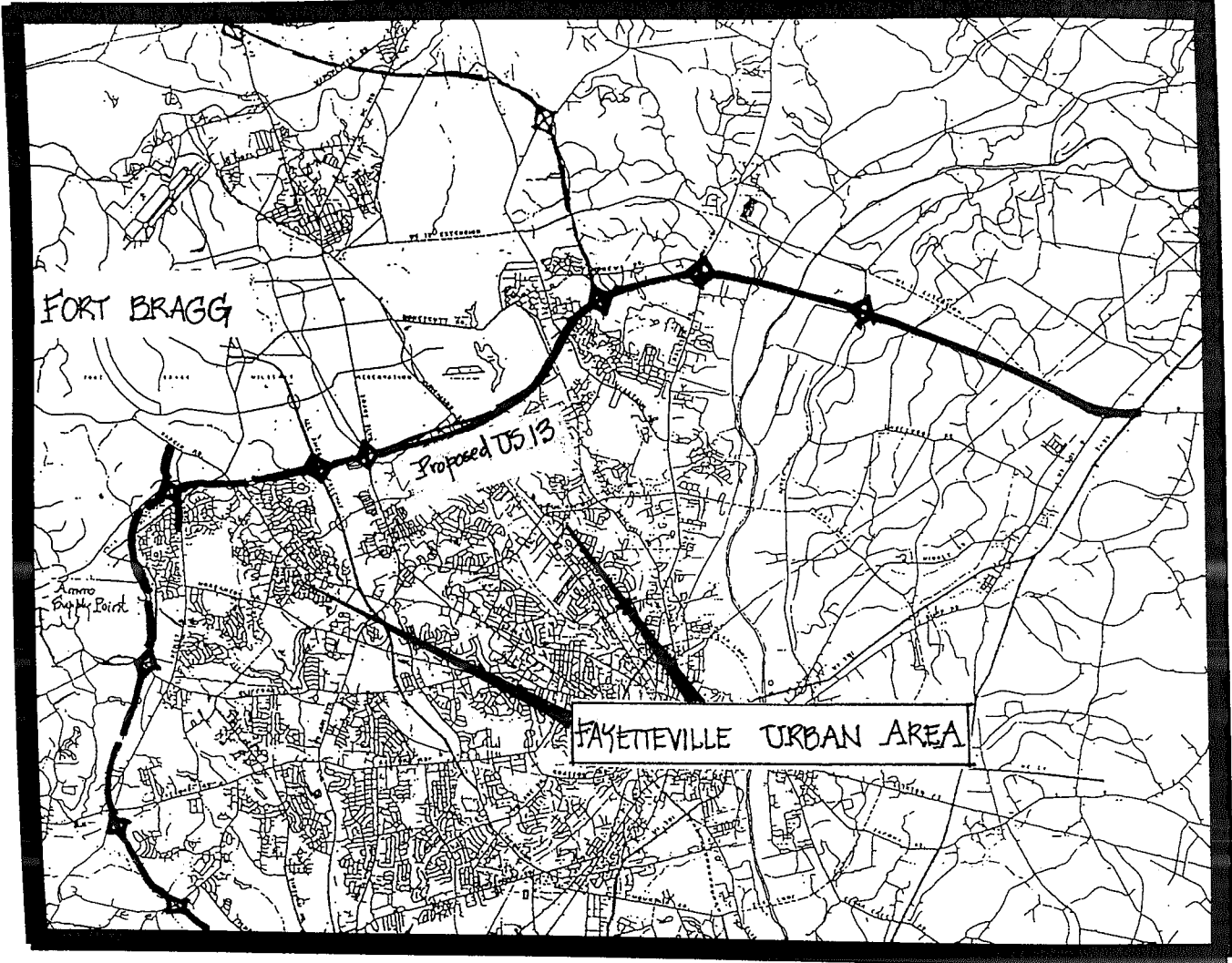
A careful study of aerial photographs of Fort Bragg clearly indicates that the only viable alternative is to construct US13 hugging Fort Bragg's southern boundary just to the north of Fayetteville's high density urban area. Alternatives more interior to Fort Bragg would subdivide the Green Belt, create a strong barrier separating communities on the installation, and bring large volumes of traffic into the heart of Main Post which could put the installation at serious jeopardy during times of national crisis when security is essential. Furthermore, a workable alignment for a controlled access highway in the interior of Fort Bragg's built-up area simply does not exist.

We look forward to working with you and your staff in the near future as we strive to resolve the environmental issues and make US13 a reality.

Sincerely,

R. M. Danielson
Colonel, U.S. Army
Director of Public Works
and Environment

Enclosure



FORT BRAGG

Proposed US 13

Ammo Supply Point

FAYETTEVILLE URBAN AREA



DEPARTMENT OF THE ARMY

HEADQUARTERS, XVIII AIRBORNE CORPS AND FORT BRAGG
FORT BRAGG, NORTH CAROLINA 28310

MAY 20 2002

REPLY TO
ATTENTION OF:

May 3, 2002

Public Works Business Center

Honorable Lyndo Tippet
Secretary
North Carolina Department of Transportation
No. 1 South Wilmington Street
Raleigh, North Carolina 27611

Dear Mr. Tippet:

We need your help in adjusting several critical North Carolina Department of Transportation road projects to help protect our soldiers and their families. Bragg Boulevard, NC Highway 24/87, bisects the Fort Bragg urban area. This highway is much too close to a large number of our military families and soldiers making them very vulnerable to terrorist attacks. To correct the problem, we recommend the following:

a. Widen Murchison Road, NC Highway 210, from 4 to 6 lanes. Currently there is a project on the books to widen Bragg Boulevard to 6 lanes. We are asking that these dollars be shifted to widen Murchison Road.

b. Accelerate construction of the portion of US 13 between Bragg Boulevard and Murchison Road.

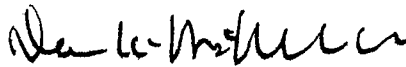
Once the Murchison Road widening is complete and construction is complete on US 13 between Bragg Boulevard and Murchison Road, we ask that North Carolina give us back the right of way on Bragg Boulevard for the portions on Fort Bragg. At that time, we would limit movement of thru traffic on Bragg Boulevard. It would continue to be used by Army civilians and soldiers. Murchison Road would be used to route thru traffic from Fayetteville to points north of Fort Bragg.

In addition to these changes on Bragg Boulevard, we also request you relook the design of US 13 to accommodate our other force protection needs, to include the following: design to support security checkpoints at proposed Canopy Lane interchange (Enclosure 1), design to support the security plaza currently

planned for construction vicinity Gruber Road near the All American interchange (Enclosure 2), design to support the Bragg Boulevard interchange to accommodate a security checkpoint just south of the intersection of Bragg Boulevard and Knox Street (Enclosure 3), and design of the Murchison Road interchange to efficiently handle the additional thru traffic that would be diverted from Bragg Boulevard to Murchison Road.

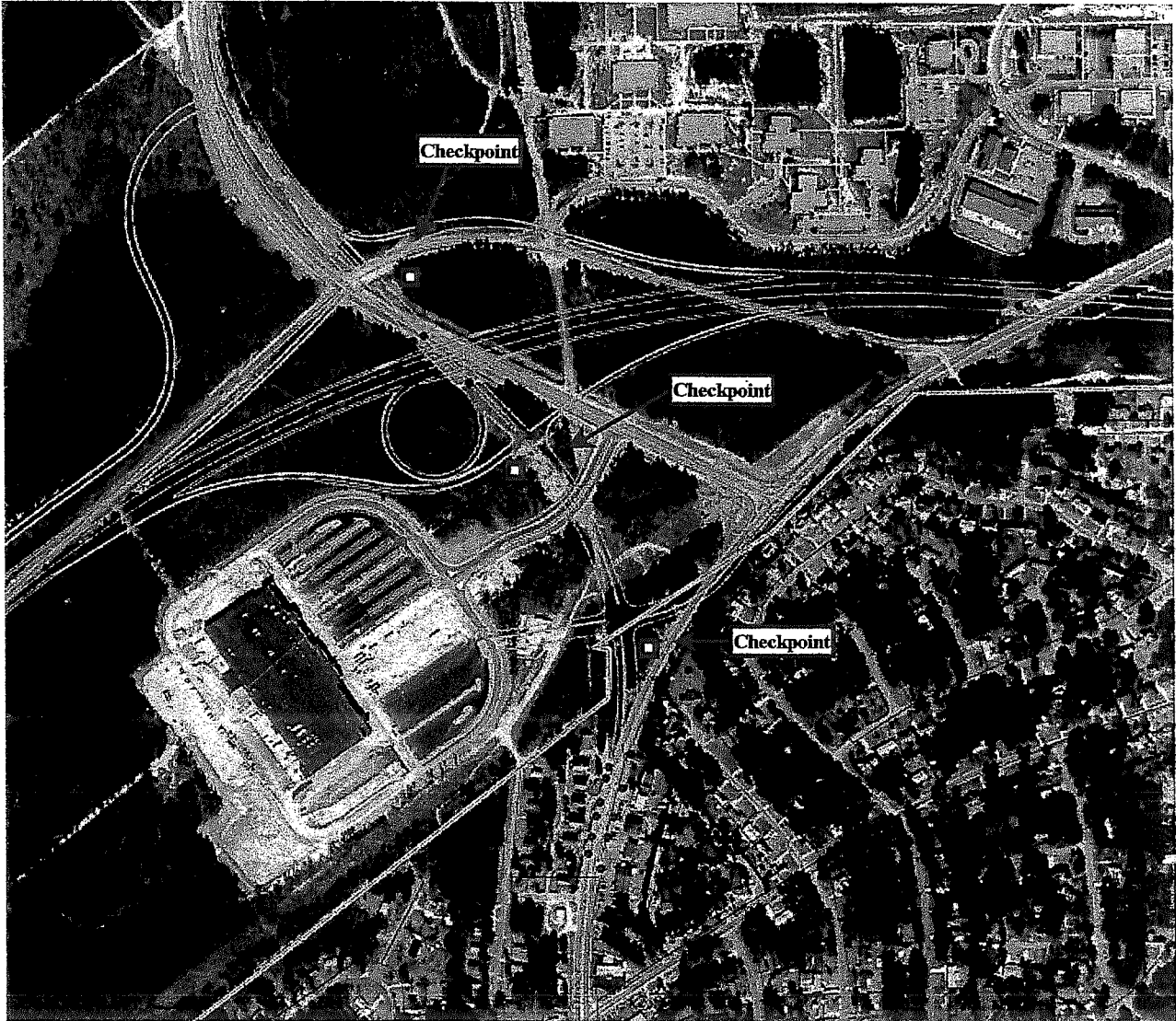
Thank you for your assistance on these critical issues that will provide additional security for our soldiers and their families. We remain strongly committed to the US 13 project.

Sincerely,

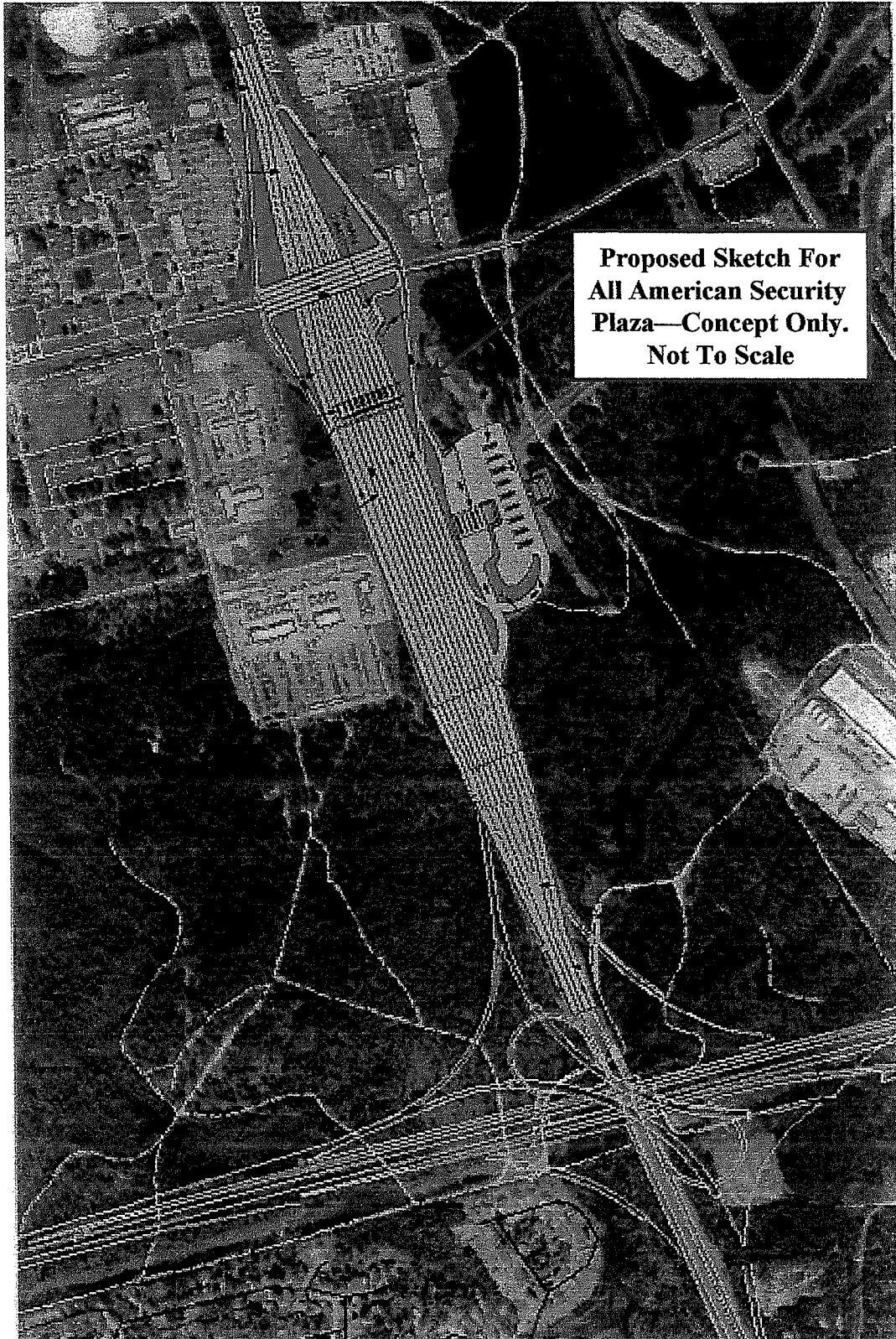


Dan K. McNeill
Lieutenant General, U.S. Army
Commanding Officer

Enclosures

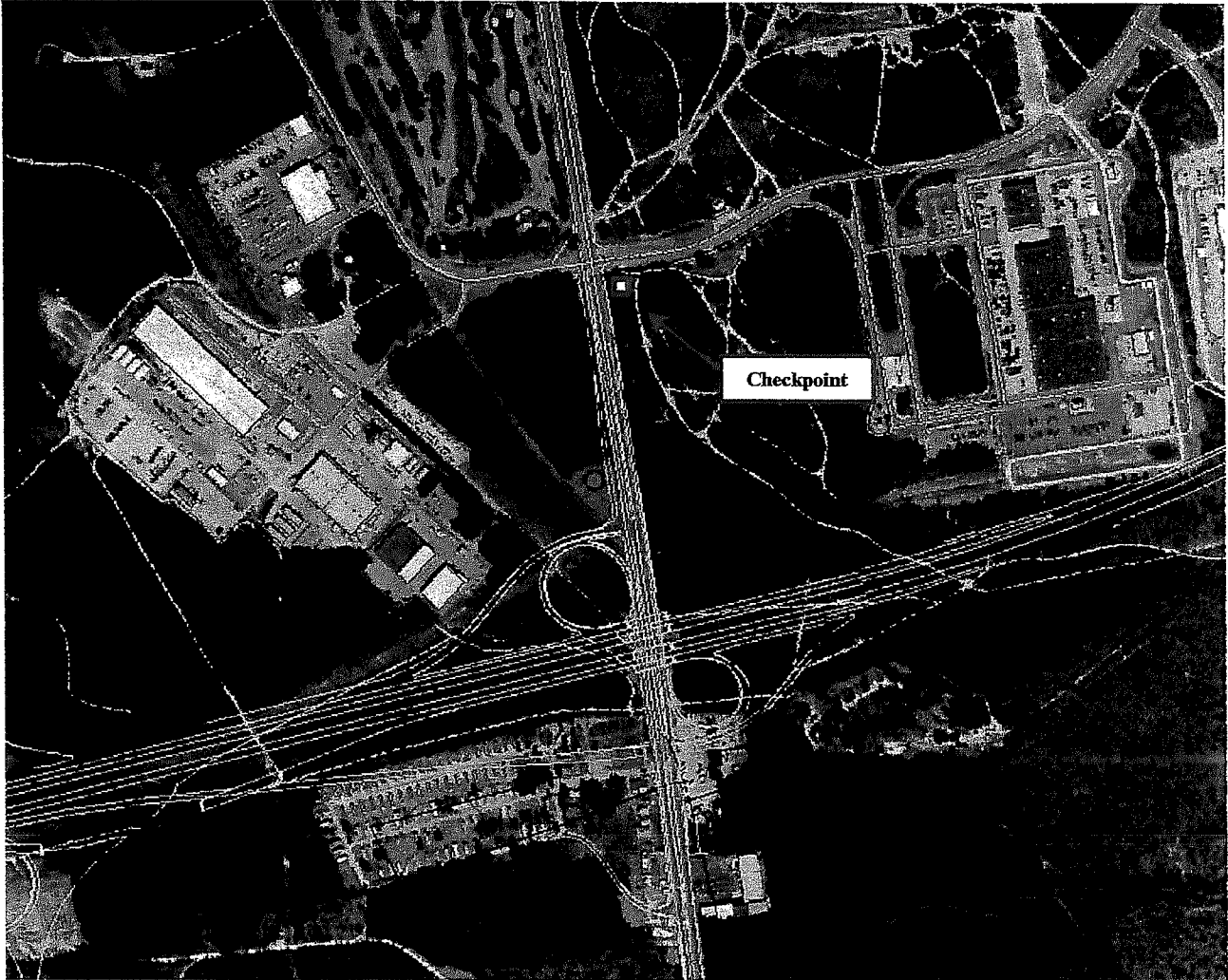


Canopy Lane Interchange



**Proposed Sketch For
All American Security
Plaza—Concept Only.
Not To Scale**

All American Interchange



Bragg Boulevard Interchange

APPENDIX K

PREFERRED ALTERNATIVE SELECTION

OCTOBER 26, 2000



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT JR.
GOVERNOR

October 26, 2000

DAVID MCCOY
SECRETARY

MEMORANDUM TO:

Mr. David McCoy
Secretary of Transportation

Mr. David King
Deputy Secretary of Transportation

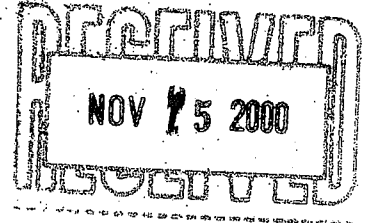
Mr. Len A. Sanderson, PE
State Highway Administrator

FROM:

R. Len Hill, PE *R. Len Hill*
Deputy Highway Administrator – Preconstruction
Corridor Selection Committee

SUBJECT:

FAYETTEVILLE OUTER LOOP, from I-95 South of Fayetteville to
NC 24-87, Cumberland, Hoke and Robeson Counties,
State Project Number 8.2441301, T.I.P. Number U-2519




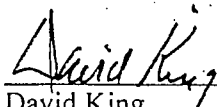
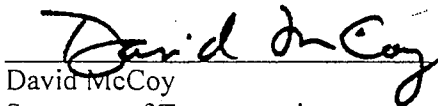
In April 1991, the North Carolina Department of Transportation (NCDOT) published a preliminary environmental screening for the Fayetteville Outer Loop. Later that year, NCDOT published a preliminary engineering evaluation for two alternates on the Fayetteville Outer Loop. In May 1992, NCDOT held a Roadway Corridor Official Map Public Hearing for the portion of the Fayetteville Outer Loop between I-95 in Robeson County to Cliffdale Road in Cumberland County. NCDOT held the Post Hearing meeting for the Roadway Corridor Official Map and decided to move forward with recording the map in Cumberland and Robeson Counties in August 1992. In October 1992, NCDOT recorded a protected corridor in Cumberland and Robeson Counties.

The Federal Highway Administration (FHWA) approved the DEIS for the subject project on March 17, 1999. The approved DEIS evaluated five basic alternatives: the No-Build alternative, the Transportation System Management alternative, the Mass Transit alternative, the Improve Existing alternative, and Build alternative. The Build alternative consisted of 13 corridors south of Fort Bragg, west of the City of Fayetteville and west and south of the Town of Hope Mills. Following preliminary evaluations, the Transportation System Management, the Mass Transit, and Improve Existing alternatives were eliminated from further consideration. Only the Build alternative met the requirements of the project. Under the Build alternative, there were 13 alternates labeled B through N; each was evaluated in detail in the DEIS. Alternate E of the DEIS most closely corresponds to the protected corridor. The approved DEIS was distributed to federal and state environmental resource and regulatory agencies and to the general public on May 11, 1999. On July 13, 1999, a Pre-Hearing Workshop was held in the afternoon followed by a formal Corridor Public Hearing later that evening. Representatives from several neighborhoods voiced opposition to Alternates B and E. The Post Corridor Hearing meeting was held on September 27, 1999 and included representatives from the Fayetteville MPO, FHWA, and the NCDOT. Alternate E (the 1992 protected corridor) was recommended as the preferred corridor at this meeting.

The NCDOT submitted a Section 404-NEPA Merger process application for a Department of the Army Permit for the discharge of dredge or fill material into area waters and adjacent wetlands on June 25, 1999. The U. S. Army Corps of Engineers issued a public notice soliciting public comment on the detailed study alternatives presented in the DEIS and at the Corridor Public Hearing. Two "Environmental Project Team" meetings were held to determine a "least environmentally damaging practicable alternative" (LEDPA) for the project. The first was an on-site field meeting on September 13, 2000 in Fayetteville with the second on October 5, 2000 at the NCDOT Transportation Building in Raleigh. Attending were representatives from the U. S. Army Corps of Engineers, U. S. Environmental Protection Agency, Federal Highway Administration, N. C. Department of Transportation, N. C. Department of Environment and Natural Resources – Division of Water Quality, Wildlife Resources Commission, and State Historic Preservation Office. The result of the on-site field meeting was the deletion of 11 alternatives (B, C, F, G, H, I, J, K, L, M and N) leaving two (alternates D and E) to select from. The "Environmental Project Team" selected **Alternate D** as the LEDPA on October 5, 2000. On September 20, 2000, the Fayetteville MPO was briefed regarding the remaining alternates (D and E) with the Transportation Advisory Committee (TAC) voting unanimously to recommend Alternate E as their preferred; however, the TAC stated that Alternate D would be acceptable.

Based on the selection of **Alternate D** as the LEDPA by the Environmental Project Team and with the concurrence of the NCDOT staff and the Fayetteville MPO, the Corridor Selection Committee endorses Alternate D as the preferred alternative. Attached is a figure showing the reasonable and feasible alternatives and a summary of impacts for each alternate. Your concurrence of **Alternate D** as the preferred alternative is requested. If you have questions or need additional information, please let me know.

NOTE: Portions of the 1992 protected corridor that is no longer a part of the Preferred Alternative (Alternate D) will need to be repealed.

Approved:		<u>10-27-00</u>
	Len A. Sanderson	Date
	State Highway Administrator	
		<u>11-1-00</u>
	David King	Date
	Deputy Secretary of Transportation	
		<u>11-3-00</u>
	David McCoy	Date
	Secretary of Transportation	

Attachment

cc: Lyndo Tippet, Member, Board of Transportation
Bill Gilmore, PE
Debbie Barbour, PE
Terry Gibson, PE