NEPA/Section 404 Merger Informational Meeting

Proposed US 17 Hampstead Bypass
Pender County

State Project 40191.1.2
NCDOT STIP Project R-3300
Corps Action ID 2007 1386

June 16, 2016 at 10:15 a.m.

North Carolina Department of Transportation

Structure Design Conference Room C
NCDOT Century Center Building A
1000 Birch Ridge Drive, Raleigh, NC 27610

NEPA/Section 404 Merger Informational Meeting

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US Army Corps of Engineers
Wilmington District

June 16, 2016

Meeting Agenda

1. Sign-in and Introductions
2. Purpose of Meeting
3. Overview & Project Status
4. R-3300 Service Road 14
5. Discussion

Purpose of Today's Meeting

The purpose of today's meeting is to present potential design revisions developed in an effort to minimize wetland impacts associated with US 17 Hampstead Bypass (STIP Project R-3300) Service Road (SR) 14. NCDOT's goal is to obtain NEPA/Section 404 merger team concurrence on avoidance and minimization (CP 4A) for US 17 Hampstead Bypass.

Project Description

The proposed US 17 Hampstead Bypass will extend from the existing US 17 Wilmington Bypass in New Hanover County to existing US 17 north of Hampstead in Pender County. Project development studies for the proposed US 17 Hampstead Bypass have also included the proposed SR 1409 (Military Cutoff Road) extension (STIP Project U-4751). The two projects would form a continuous roadway, extending from US 17 Business (Market Street) in Wilmington to existing US 17 north of Hampstead. Environmental documents prepared have covered both projects.

Project Status

A State Record of Decision covering both the proposed Military Cutoff Road Extension and the proposed US 17 Hampstead Bypass was signed on September 30, 2014. Federal draft, supplemental and final environmental impact statements were previously prepared for the projects.

Background

Concurrence Points 1 through 3 addressed both Projects U-4751 and R-3300 together. Concurrence Point 4A (avoidance and minimization) for the two projects was addressed separately. NCDOT originally discussed and the merger team concurred on avoidance and minimization for the two projects prior to NCDOT determining service road locations. After service road locations had been determined, the merger team requested service roads be included in the discussion of avoidance and minimization measures.

A NEPA/Section 404 merger informational meeting was held on January 22, 2014 to discuss proposed service road locations for US 17 Hampstead Bypass and Military Cutoff Road Extension. The merger team agreed on the locations of, as well as avoidance and minimization measures for, the two proposed service roads for Military Cutoff Road Extension and a revised concurrence form was signed on April 23, 2014. The merger team also agreed upon avoidance and minimization measures for SR6 for the US 17 Hampstead Bypass, but did not agree on the locations of all of the proposed service roads for the Bypass.

At the January 22, 2014 informational meeting, the Corps of Engineers and Division of Water Resources requested additional information regarding how wetland impacts associated with R-3300 SR14 could be minimized. Additional information was provided following the meeting, but no agreement was reached on Concurrence Point 4A. Agreement on avoidance and minimization measures for SR 14 is the outstanding issue regarding concurrence on CP 4A for the proposed bypass.

US 17 Hampstead Bypass Service Road 14

SR14 begins in the northeast quadrant of the Hoover Road overpass over proposed US 17 Hampstead Bypass. From Hoover Road it extends east, running parallel to the US 17 Hampstead Bypass right-of-way. SR14 provides access to four parcels that would otherwise be landlocked as a result of the proposed bypass. It would also provide access to a power line easement and a cell tower to the north of the bypass in this area.

The original concept for SR 14 as presented in the U-4751/R-3300 FEIS ended in a wetland area. This concept has been modified so that SR 14 now ends in an upland. SR14 is approximately 1.4 miles long and would impact 8.73 acres of wetlands (see attached figure titled Service Road Study Opt. #14). With this design, SR14 would reduce project costs by approximately $7.7 million.

To minimize wetland impacts, a concept to shorten SR14 by approximately 2,610 feet and terminate it in an upland area has been developed. However, an additional service road extending from the intersection of Jenkins Road and St. Johns Church Road would be required to provide access to the Jamestown Pender LP property. The Jenkins Road extension would bridge US 17 Hampstead Bypass and end in an upland area on the Jamestown Pender LP property. This alternative SR14 design is shown on the attached figure titled Service Road #14 ALT Sheet 2 of 2. This option would reduce SR14 wetland impacts by approximately 4.11 acres. Construction costs would increase by approximately $2.75 million. An impact summary for the current and proposed SR14 designs is shown in Table 1.

Due to the substantial increase in construction costs associated with the shortened SR 14 design, NCDOT does not recommend shortening SR 14 and constructing a second service road to the four otherwise landlocked parcels by extending Jenkins Road.

Table 1. Summary of Impacts for Service Road 14 Options

Feature[1]	**Current SR14**	**SR14/SR17 (Jenkins Rd. Ext.)**
Length (miles)	1.4	1.2
Delineated Wetland Impacts (acres)	8.73	4.62
Delineated Stream Impacts (linear feet)	0	0
Forest (acres)	14.26	14.54
High Quality Waters Watershed (HQW, ORW, WS Protected or Critical Areas) (acres)	0.00	0.00
Construction Cost (in millions)	$2.45	$5.20
Total Savings or Cost Deficit (in millions)	-$7.734	-$4.984

[1]Impact calculations are based on preliminary design slope stake limits plus an additional 25 feet.

Service road slope stakes plus 25 feet boundaries clipped to mainline proposed ROW file to avoid overlap when calculating impacts (where applicable).

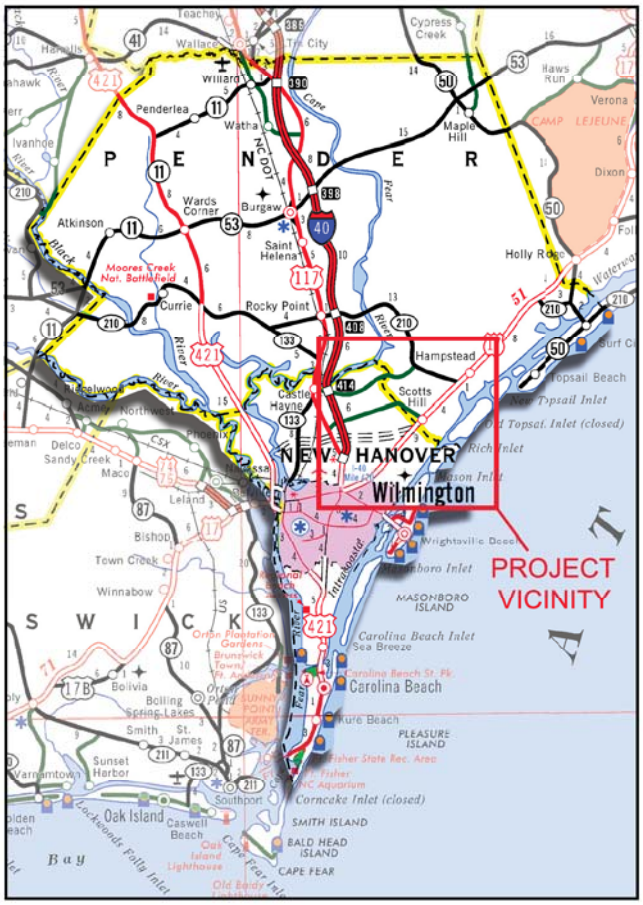
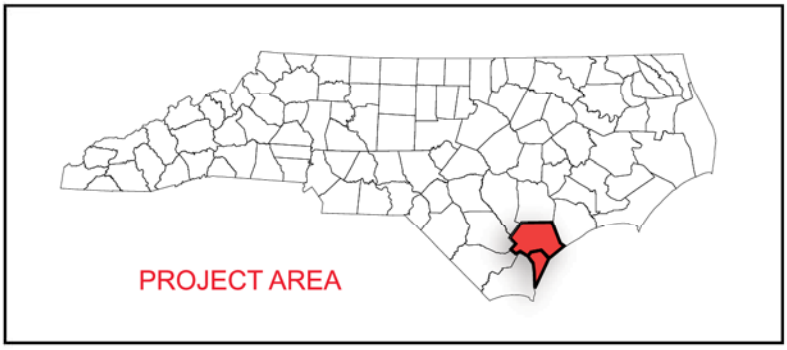


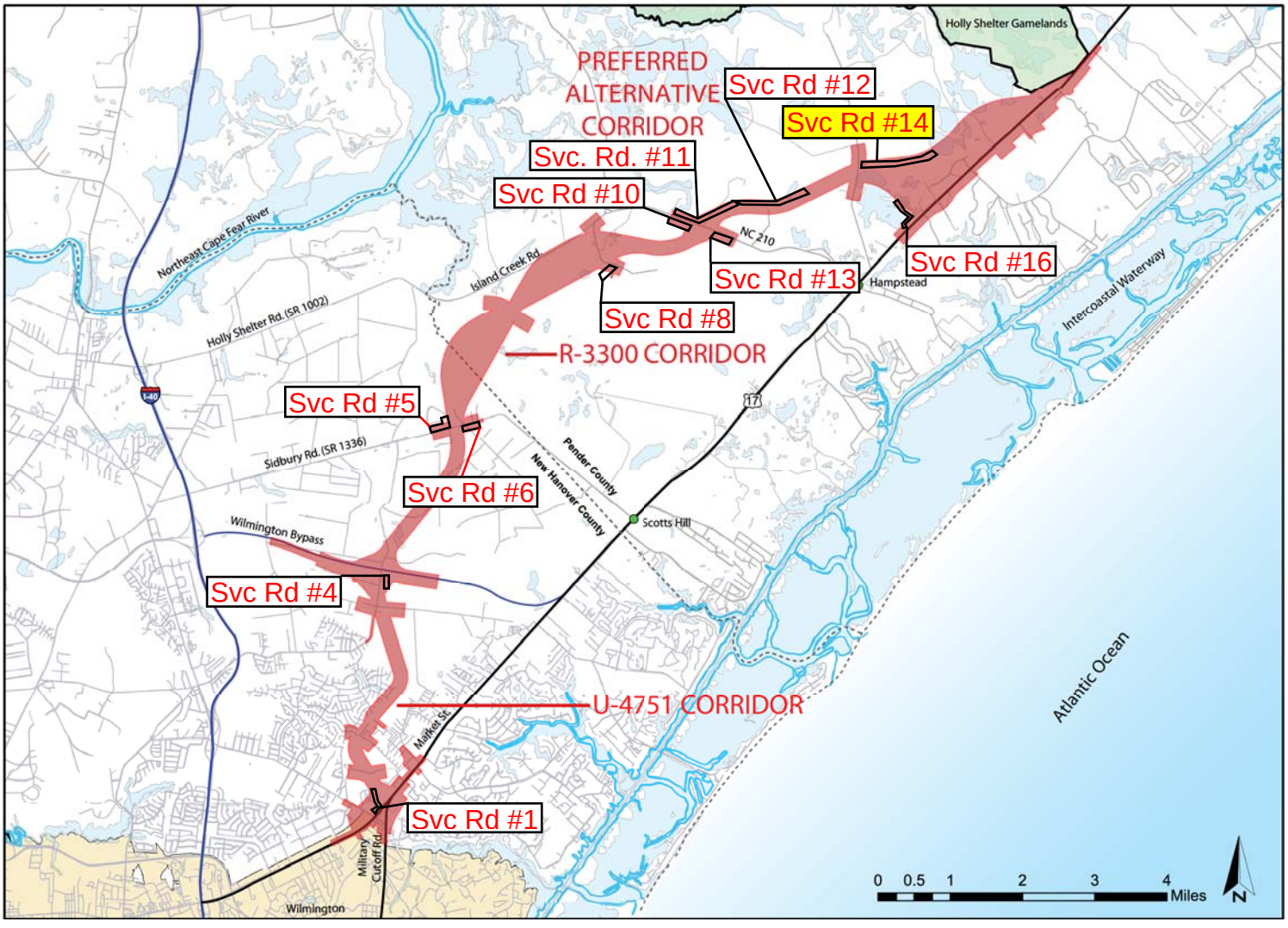
Figure 1

PROJECT VICINITY

US 17 Corridor Study
NCDOT TIP Nos. U-4751 and R-3300
New Hanover and Pender Counties

North Carolina
Department of Transportation





R-3300

SERVICE ROAD #14 ALT
SHEET 1 OF 2

-SR14-	-Y15-
PI Sta 16+73.12	PI Sta 79+84.88
Δ = 11° 36' 35.4" (RT)	Δ = 13° 51' 52.7" (RT)
D = 6° 11' 14.8"	D = 5° 24' 18.9"
L = 187.64'	L = 256.50'
T = 94.14'	T = 128.88'
R = 926.00'	R = 1,060.00'
PI Sta 23+57.39	PI Sta 94+35.53
Δ = 24° 23' 07.5" (LT)	Δ = 8° 37' 16.2" (RT)
D = 6° 11' 14.8"	D = 0° 59' 34.8"
L = 394.11'	L = 868.20'
T = 200.08'	T = 434.92'
R = 926.00'	R = 5,770.00'
PI Sta 37+78.96	
Δ = 43° 24' 21.1" (LT)	
D = 6° 11' 14.8"	
L = 701.51'	
T = 368.56'	
R = 926.00'	
PI Sta 49+11.68	
Δ = 64° 04' 34.9" (RT)	
D = 4° 28' 59.7"	
L = 1,429.24'	
T = 799.71'	
R = 1,278.00'	

LEGEND

- FILL
- TRANSITION
- CUT
- CORRIDOR

200' 0 200'
SCALE

FUNCTIONAL PLANS
DO NOT USE FOR CONSTRUCTION

PLANS PREPARED BY:
CALYX™
ENGINEERS + CONSULTANTS
Formerly Mulkey Engineers & Consultants
6750 TRYON ROAD
CARY, NC 27518
phone: 919.851.1912
CALYXengineers.com
NC License # F-1333

NAD 83

BRYANT ERNEST DEVON JR ET AL
WACHOVIA BANK OF NC
SPILLER MARY SANDERS TRUSTEE
BROWN TOM ET AL
GAINES RACHEL P
DAVIS PETER R ET AL
GAINES GEORGE ROBERT ET AL
NADEAU MICHAEL G
NADEAU MICHAEL G ET AL
NESTER JOHN WET AL
BROWN ELAINE SPILLER
RAMBEAUT DANNY MILTON ET AL
NADEAU MICHAEL ET AL
-SR14-
-Y15-
MATCHLINE SEE SHEET 2

R-3300

SERVICE ROAD #14 ALT1
SHEET 2 OF 2

-SR14-

PI Sta 49+11.68
Δ = 64° 04' 34.9" (RT)
D = 4° 28' 59.7"
L = 1,429.24'
T = 799.71'
R = 1,278.00'

PI Sta 62+40.25
Δ = 45° 46' 53.7" (LT)
D = 5° 21' 11.7"
L = 854.91'
T = 451.78'
R = 1,070.00'

PI Sta 73+35.36
Δ = 14° 59' 16.1" (LT)
D = 1° 05' 21.4"
L = 1,375.94'
T = 691.92'
R = 5,260.00'

PI Sta 84+99.30
Δ = 21° 34' 11.0" (LT)
D = 5° 43' 46.5"
L = 376.46'
T = 190.49'
R = 1,000.00'

LEGEND

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200' 0 200'
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NAD 83

MATCHLINE SEE SHEET 1

EDGEHILL PROPERTIES LLC
BLANTON RANDY L ET AL
JAMESTOWN PENDEN LP
PENDER CNTY BOARD OF EDU
DAVIS PETER R ET AL
CAROLINA POWER & LIGHT COMPANY
MARSHALL CHARLES L ET AL
PORTER LORETTA ET AL
SHEPARD AMOS ET AL
JAMESTOWN PENDEN RESIDENTIAL LP
JOHNSON RUDOLPH ET AL
NIXON ETHEL
NIXON ENOCH JR ET AL
NIXON WILLIAM T
UNKNOWN

R-3300

SERVICE ROAD #14 ALT
SHEET 2 OF 2

-SR14-	-Y17-
PI Sta 49+11.68	PI Sta 25+77.47
Δ = 64° 04' 34.9" (RT)	Δ = 59° 33' 31.5" (RT)
D = 4° 28' 59.7"	D = 4° 46' 28.7"
L = 1,429.24'	L = 1,247.40'
T = 799.71'	T = 686.67'
R = 1,278.00'	R = 1,200.00'

PI Sta 62+40.25
Δ = 45° 46' 53.7" (LT)
D = 5° 21' 17.7"
L = 854.91'
T = 451.78'
R = 1,070.00'

PI Sta 68+96.92
Δ = 5° 31' 04.2" (LT)
D = 1° 05' 21.4"
L = 506.56'
T = 253.48'
R = 5,260.00'

MATCHLINE SEE SHEET 1

LEGEND

- FILL
- TRANSITION
- CUT
- CORRIDOR

200' 0 200'
SCALE

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Section 404/NEPA Interagency Agreement
Concurrence Point No. 4a
Avoidance and Minimization

Project Title and Project Numbers:

Proposed US 17 Hampstead Bypass, New Hanover and Pender Counties, TIP No. R-3300, State Project No. 40191.1.2, Corps Action ID 2007 1386

LEDPA/Recommended Alternative:

US 17 Hampstead Bypass Alternative E-H

Avoidance and Minimization:

US 17 Hampstead Bypass Alternative E-H minimizes impacts to resources. However, it is not feasible for the proposed project to completely avoid impacts to the Waters of the US and still meet the purpose and need of the project. The following avoidance and minimization efforts have been incorporated into the proposed project:

Section 404 Avoidance and Minimization Measures

- 3:1 slopes are proposed in wetland areas and adjacent to streams.
- US 17 Hampstead Bypass was realigned between Station 443+00 and Station 529+00 as it approaches and crosses Harrison Creek Road. Wetland impacts were reduced by 4.77 acres. Impacts to streams were reduced by 5.93 linear feet.
- US 17 Hampstead Bypass was realigned in the vicinity of the NC 210 interchange between Station 553+00 and Station 601+00. Wetland impacts were reduced by 0.78 acre and stream impacts were reduced by 258 linear feet.
- US 17 Hampstead Bypass was realigned in the vicinity of Holiday Drive between Station 650+00 and Station 714+00. Wetland impacts were reduced by 7.99 acres. However, the shift results in additional impacts to streams of 332 linear feet.

Additional Avoidance and Minimization

Red-cockaded Woodpecker

Prior to Concurrence Point 3, the proposed northern US 17 Hampstead Bypass interchange was moved from its location north of the Topsail School Complex to south of the schools to minimize impacts to red-cockaded woodpecker (RCW) foraging habitat. At the corridor public hearing, the public was opposed to the interchange location south of the schools because it limited thru-traffic on existing US 17 north of the schools. In response, a new local interchange is proposed north of the Topsail Schools Complex (Option 6TR). This additional interchange uses a reduced design to avoid affecting RCW foraging habitat. If RCW foraging habitat ceases to exist at the northern interchange at the time NCDOT applies for authorization from the Corps of Engineers to construct the project, the Department will revisit the original interchange design, known as Alternative E-H ORIG. As currently described,

Alternative E-H ORIG would further minimize wetland impacts compared to Alternative 6TR, which is NCDOT's preferred.

Water Quality and Erosion Control

- Old Topsail Creek and Nixons Creek are designated as Commercial Shellfishing, High Quality Waters (SA; HQW) by the North Carolina Division of Water Quality. Tributaries of these streams (NSA, NSF, NDITCH1 and ZTRIB1) are designated SA; HQW due to the classification of their receiving waters. Design Standards in Sensitive Watersheds will be implemented for NSA, NSF, NDITCH1 and ZTRIB1 during project construction.

Community Impacts and Relocations

- In response to public input and concerns over lack of access, an interchange has been added north of the Topsail Schools Complex to maintain access along existing US 17 (Option 6TR). This interchange will provide the access requested by the public. It uses reduced design criteria to minimize impacts to RCW habitat and the Topsail Schools Complex, and avoid a Pender County water tower. If RCW foraging habitat ceases to exist at the northern interchange at the time NCDOT applies for authorization from the Corps of Engineers to construct the project, the Department will revisit the original interchange design, known as Alternative E-H ORIG. As currently described, Alternative E-H ORIG would further minimize wetland impacts compared to Alternative 6TR, which is NCDOT's preferred.
- Control of access was reduced along the west side of existing US 17 near the project's northern terminus to minimize impacts to a business and a church. It is expected that design modifications will result in three fewer residential relocations, four fewer business relocations and one less non-profit relocation overall.

The project team has concurred on the Avoidance and Minimization for the proposed project as listed above.

Name	Agency	Date
DocuSigned by: Brad Shaver 66772C09D03340B...	USACE	06/10/2013
ABSTAIN	USEPA	5/15/13
DocuSigned by: Gary Jordan 501BAD677C42452...	USFWS	06/11/2013
DocuSigned by: Fritz Rohde 7D10D31C923E4AC...	NMF	06/11/2013
DocuSigned by: Steve Sollod D233D46D7248414...	NCDCM	06/13/2013
DocuSigned by: Renee Gledhill-Earley AC28D78C939246E...	NCSHPO	06/11/2013
DocuSigned by: Anne Deaton A4DFC086EECE412...	NCDMF	06/10/2013
DocuSigned by: Mason Herndon E795F316CA9F438...	NCDWQ	06/10/2013
DocuSigned by: Travis W. Wilson 31585D0B682E436...	NCWRC	06/11/2013
DocuSigned by: Kim Gillespie E9AA3A8EE2574FE...	NCDOT	06/07/2013
	WMPO	6/13/13
Project is within Wilmington MPO area, Cape Fear RPO does not need to sign. Cape Fear RPO		

Revised Form - Supersedes Form Signed on June 13, 2013

Section 404/NEPA Interagency Agreement

Concurrence Point No. 4a
Avoidance and Minimization

Project Title and Project Numbers:

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Service Roads

- Service Road 6 (SR6) will be realigned to intersect with Farm Road at a T-intersection. The revised alignment will reduce wetland impacts for SR6 from approximately 0.14 acre to 0.02 acre and reduce forest impacts from approximately 1.03 acres to 0.66 acre.

The project team has concurred on the Avoidance and Minimization for the proposed project as listed above. This Concurrence Point 4A form supersedes the Concurrence Point 4A form for TIP No. R-3300 signed on June 13, 2013.

NAME	AGENCY	DATE
	USACE	
	USEPA	
	USFWS	
	NMF	
	NCDCM	
	NCSHPO	
	NCDMF	
	NCDWR	
	NCWRC	
	NCDOT	
	WMPO	