

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PAT MCCRORY GOVERNOR ANTHONY J. TATA SECRETARY

February 6, 2014

Addendum No. 2

Contract No.:

C 203433

TIP No.:

I-5110, R-2413A & R-2413B

County:

Guilford

Project Description:

TIP Nos.: I-5110, R-2413A and R-2413B (Guilford County)

Future I-73 from the existing Joseph M. Bryan Boulevard (SR 2085) / Airport Parkway interchange to south of US 220 near the Haw River

RE:

Addendum No. 2 to Final RFP

March 27, 2014 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals with Addendum No. 1 dated January 14, 2014 recently furnished to you on the above project. We have since incorporated changes and have attached a copy of Addendum No. 2. Please note that all revisions have been highlighted in gray and are as follows:

On the COVER SHEET, change the WBS No. 42345.3.S2 to 42345.3.2. Please mark through the WBS No. shown on the January 14, 2014 Final Request for Proposals with Addendum No. 1 (Labeled) and insert the new WBS No. This correction must be done in ink and initialed and dated by your Team's primary contractor (reference the attached example). The corrected Final RFP with Addendum Number 1 must be used to submit the Price Proposal for return to this office.

The first, second, and third pages of the *Table of Contents* have been revised. Please void the first, second, and third pages in your proposal and staple the revised first, second, and third pages thereto.

Page Nos. 3, 4, 6, 49 and 123 of the *Project Special Provisions* have been revised. Please void Page Nos. 3, 4, 6, 49 and 123 in your proposal and staple the revised Page Nos. 3, 4, 6, 49 and 123 thereto.

MAILING ADDRESS: NC DEPARTMENT OF TRANSPORTATION CONTRACT STANDARDS AND DEVELOPMENT UNIT 1591 MAIL SERVICE CENTER RALEIGH NC 27699-1591 TELEPHONE: 919-707-6900 FAX: 919-250-4119

WEBSITE: WWW.NCDOT.GOV

LOCATION: CENTURY CENTER COMPLEX ENTRANCE B-2 1020 BIRCH RIDGE DRIVE RALEIGH NC TIP I-5110, R-2413A & R-2413B Addendum No. 2 to Final RFP Page 2

Page Nos. 158 and 161 of the *Structures Scope of Work* have been revised. Please void Page Nos. 158 and 161 in your proposal and staple the revised Page Nos. 158 and 161 thereto.

Page No. 203 of the *Utilities Scope of Work* has been revised. Please void Page No. 203 in your proposal and staple the revised Page No. 203 thereto.

Page Nos. 260 and 263 of the 401 Water Quality Certification have been revised. Please void Page Nos. 260 and 263 in your proposal and staple the revised Page Nos. 260 and 263 thereto.

Page Nos. 267A - 267L, signed *USACE 404 Permit* have been added. Please staple Page Nos. 267A - 267L behind Page No. 267 thereto.

Page Nos. 311 - 313, 320 - 322, 346 - 347, 361 - 364 and 379 of the 404 *Permit Drawings* have been revised. Please void Page Nos. 311 - 313, 320 - 322, 346 - 347, 361 - 364 and 379 in your proposal and staple the revised Page Nos. 311 - 313, 320 - 322, 346 - 347, 361 - 364 and 379 thereto.

Page Nos. 333A - 333C of the 404 *Permit Drawings* have been added. Please staple Page Nos. 33A - 333C behind Page No. 333 thereto.

The *Itemized Proposal Sheet* has been revised. Please void the *Itemized Proposal Sheet* in your proposal and staple the revised *Itemized Proposal Sheet* thereto.

The Fuel Usage Factor Chart and Estimate of Quantities for Taxiway Bridge has been revised. Please void the Fuel Usage Factor Chart and Estimate of Quantities for Taxiway Bridge in your proposal and staple the revised Fuel Usage Factor Chart and Estimate of Quantities for Taxiway Bridge thereto.

If you have any questions or need additional information, I can be reached by telephone at (919) 707-6900.

Sincerely

R.A. Garris, PE

State Contract Officer

RAG/kbc

cc: Mr. Mike Mills, PE

Mr. Victor Barbour, PE

Mr. Rodger Rochelle, PE

Ms. Teresa Bruton, PE

Mr. Lonnie Brooks, PE

File

-- STATE OF NORTH CAROLINA--DEPARTMENT OF TRANSPORTATION RALEIGH, N.C.

FINAL REQUEST FOR PROPOSALS DESIGN-BUILD PROJECT

TIP I-5110, R-2413A & R-2413B

January 14, 2014
Includes Addendum No. 1 Dated January 14, 2014



(1) DEV 5 D. . . .

DATE AND TIME OF TECHNICAL AND PRICE PROPOSAL SUBMISSION: March 10, 2014 BY 4:00 PM

DATE AND TIME OF PRICE PROPOSAL OPENING: March 27, 2014 AT 2:00 PM

CONTRACT ID:

C 203433

ABC XX XXXX

WBS ELEMENT NOS. 42345.3.FS1, 42345.3.S2, and 34429.3.S8

FEDERAL-AID NO. NHF-0073(25)

COUNTY:

Guilford

ROUTE NOS.

Joseph M. Bryan Boulevard / US 220 / NC 68 (Future I-73)

MILES:

9.4

LOCATION:

Future I-73 from the existing Joseph M. Bryan Boulevard (SR 2085) / Airport Parkway

interchange to south of US 220 near the Haw River.

TYPE OF WORK:

DESIGN-BUILD AS SPECIFIED IN THE SCOPE OF WORK

CONTAINED IN THE REQUEST FOR PROPOSALS

NOTICE:

ALL PROPOSERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE PROPOSER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. PROPOSERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOT WITHSTANDING THESE LIMITATIONS ON BIDDING, THE PROPOSER WHO IS AWARDED ANY PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING, REGARDLESS OF FUNDING SOURCES.

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Itemized Proposal Sheet (TAN SHEET)

Fuel Usage Factor Chart and Estimate of Quantities for I-5110

Fuel Usage Factor Chart and Estimate of Quantities for R-2413A&B

Fuel Usage Factor Chart and Estimate of Quantities for Taxiway Bridge

Listing of DBE Subcontractors

Execution of Bid, Non-Collusion Affidavit, Debarment Certification and Gift Ban Certification Signature Sheet

Project Special Provisions

Liquidated Damages for Intermediate Contract Time #6 for road closure of (SR 2085) Joseph M. Bryan Blvd to NC 68 to complete the tie-in between existing and proposed SR 2085 extension to NC 68 are \$2,000.00 per calendar day or any portion thereof.

Liquidated Damages for Intermediate Contract Time #7 for the road closure time restrictions for certain construction operations on I-85 / I-73 / US 421 Southbound Lanes are \$2500.00 per 15-minute period or any portion thereof.

Reference the ITS Scope of Work for more information on the following time restriction and liquidated damages:

Liquidated Damages for Intermediate Contract Time #8 for failure to repair a damaged fiber optic communication cables and restore communication within 48 hours are \$500.00 per 48-hour period or any portion thereof.

Reference the Erosion and Sedimentation Control Scope of Work for additional information and additional Liquidated Damages:

The Design-Build Team will be eligible for an incentive in the amount of \$100,000.00 if construction operations have been performed in accordance with all environmental regulations and the Specifications, and the Design-Build Team does not receive any violations (ICA, CICA, NOV and / or C&D) at any time during project construction.

The Design-Build Team's first NOV or C&D violation shall result in the forfeiture of the entire \$100,000 incentive noted above or the remaining portion thereof. If \$25,000 is not available in the \$100,000 incentive noted above, the first NOV or C&D violation shall result in the forfeiture of the remaining portion plus Liquidated Damages in the amount necessary to equal \$25,000 when added to the remaining portion of the incentive. All subsequent NOV and C&D violations shall result in Liquidated Damages in the amount of \$25,000 per violation.

Each ICA and CICA violation shall result in a \$12,500 reduction from the monies remaining in the incentive. If monies are not available in the \$100,000 incentive noted above, each ICA and CICA violation shall result in Liquidated Damages in the amount of \$12,500 per violation.

FUNDING DIFFERENTIATION

The Itemized Proposal Sheet and the Cover sheet of this Request for Proposals identify three separate wbs elements each with a corresponding lump sum line item in the Itemized Proposal Sheet. The wbs elements and the work associated with each are as noted below;

- 34429.3.S8 All work required by this contract to complete the design and construction of R-2413A and R-2413B.
- 42345.3.FS1 All work required by this contract to complete the design and construction of I-5110 which includes the design of the taxiway bridge and expressly excludes the construction of the taxiway bridge.

42345.3.2 All work required by this contract to complete the construction of the taxiway bridge.

A separate Table of Quantities and Schedule of Values will be required for each of these three line items and funding wbs elements (Reference the Division One Standard Special Provision found elsewhere in this RFP).

Project Special Provisions

In the event that the lump sum price bid for Construction Taxiway Bridge exceeds a threshold based on PTAA available funds, the Department, at the request of the Piedmont Triad Airport Authority, may elect to remove this work from the contract. Such election will occur after award of the contract but within 60 days of the opening of Price Proposals. Therefore, the election to remove or include the Construction Taxiway Bridge work as part of this contract will have no bearing on the evaluation and determination of the Design-Build Team with the lowest Adjusted Price. In the event that this work is removed from this contract, with the exception of the design cost for the taxiway bridge, no additional contract time or adjustment to the other line items in the Itemized Proposal Sheet will be made due to deletion of this work from the contract. In this event, no work shall be performed on the I-5110 project until all permits for I-5110 are obtained.

PAYOUT SCHEDULE

(II-16-09) DB1 G13

No later than 12:00 o'clock noon on the sixth day after the opening of the Price Proposal, the responsive proposer with the lowest adjusted price shall submit a proposed Anticipated Monthly Payout Schedule to the office of the State Contract Officer. The information shall be submitted in a sealed package with the outer wrapping clearly marked "Anticipated Monthly Payout Schedule" along with the Design-Build Team name and the contract number. The Anticipated Monthly Payout Schedule will be used by the Department to establish the monthly funding levels for this project. The Anticipated Monthly Payout Schedule shall parallel, and agree with, the project schedule the Design-Build Team submits as a part of their Technical Proposal. The schedule shall include a monthly percentage breakdown (in terms of the total contract amount percentages) of the work anticipated to be completed. The schedule shall begin with the Date of Availability and end with the Actual Completion Date proposed by the Design-Build Team. If the Payout Schedule is not submitted as stated herein, the Technical and Price Proposals will be considered irregular by the Department, and the bid may be rejected.

Submit updates of the Anticipated Monthly Payout Schedule on March 15, June 15, September 15, and December 15 of each calendar year until project acceptance. Submit the all updates to the Resident Engineer with a copy to the State Construction Engineer at 1 South Wilmington St, 1543 Mail Service Center, Raleigh, NC 27699-1543.

MOBILIZATION

(9-1-11) DB1 G15A

Revise the 2012 Standard Specifications for Roads and Structures as follows:

Page 8-1, Subarticle 800-2, MEASUREMENT AND PAYMENT

Delete this subarticle in its entirety and replace with the following:

800-2 MEASUREMENT AND PAYMENT

5 percent of the "Total Amount of Bid for Entire Project" shall be considered the lump sum amount for Mobilization. Partial payments for Mobilization will be made beginning with the first partial pay estimate paid on the contract. Payment will be made at the rate of 50 percent of the lump sum amount calculated for Mobilization. The remaining 50 percent will be paid with the second partial payment.

in the *Fuel Usage Factor Chart and Estimate of Quantities* sheets. Only those items of work which are specifically noted in the Fuel Usage Factor Chart will be subject to fuel price adjustments. Fuel price adjustments will not apply to changes in these quantities resulting from a supplemental agreement.

Submittal The submittal shall be signed and dated by an officer of the Design-Build Team. The information shall be copied and submitted in a separate sealed package with the outer wrapping clearly marked "Fuel Price Adjustment" and shall be delivered at the same time and location as the Technical and Price Proposal. The original shall be submitted in the Price Proposal.

Trade Secret Information submitted on the *Fuel Usage Factor Chart and Estimate of Quantities* sheets will be considered "Trade Secret" in accordance with the requirements of G.S. 66-152(3) until such time as the Price Proposal is opened.

(B) Base Index Price

The Design-Build Team's Estimate of Quantities will be used on the various partial payment estimates to determine fuel price adjustments. The Design-Build Team shall submit a payment request for quantities of work completed based on the work completed for that estimate period. The quantities requested for partial payment shall be reflective of the work actually accomplished for the specified period. The Design-Build Team shall certify that the quantities are reasonable for the specified period. The base index price for DIESEL #2 FUEL is \$3.1476 per gallon.

(C) Opt Out of Fuel Price Adjustment

If the Design-Build Team elects not to pursue reimbursement for Fuel Price Adjustments for the lump sum items on the Itemized Proposal Sheet, a quantity of zero shall be entered for all quantities in the Fuel Usage Factor Chart and Estimate of Quantities and the declination box shall be checked on all three Fuel Usage Factor Chart and Estimate of Quantities sheets. Failure to complete all of these forms will mean that the Design-Build Team is declining the Fuel Price Adjustments for the project.

(D) Change Option

The proposer will not be permitted to change the option after the Price Proposal and the copy of the Fuel Usage Factor Chart and Estimate of Quantities sheets are submitted.

(E) Failure to Submit

Failure to submit all three of the *completed Fuel Usage Factor Chart and Estimate of Quantities* sheets in a separate sealed package and in the Price Proposal will result in the Technical and Price Proposal being considered irregular by the Department and the Technical and Price Proposal may be rejected.

Submittals for Review During Construction

The Design-Build Team shall submit the unconfined compressive strength test results for review and acceptance.

PRICE ADJUSTMENTS FOR ASPHALT BINDER

(9-1-11)

DB6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2012 Standard Specifications for Roads and Structures.

When it is determined that the monthly selling price of asphalt binder on the first business day of the calendar month during which the last day of the partial payment period occurs varies either upward or downward from the Base Price Index, the partial payment for that period will be adjusted. The partial payment will be adjusted by adding the difference (+ or -) of the base price index subtracted from the monthly selling price multiplied by the total theoretical quantity of asphalt binder authorized for use in the plant mix placed during the partial payment period involved.

The base price index for asphalt binder for plant mix is \$559.29 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **February 1, 2014.**

PRICE ADJUSTMENTS - ASPHALT CONCRETE PLANT MIX

(9-1-11) (Rev. 3-13-13)

DB6 R26

Revise the 2012 Standard Specifications for Roads and Structures as follows:

Page 6-18, Article 609-11 and Page 6-35, Article 610-14

Add the following paragraph before the first paragraph:

The "Asphalt Price" used to calculate any price adjustments set forth in this section shall be \$40 per theoretical ton. This price shall apply for all mix types.

DYNAMIC MESSAGE SIGN (DMS)

(07-24-13)

DB08-04

I. General Requirements

Conform to these Project Special Provisions, plans developed by the Design-Build Team, and the 2012 Standard Specifications for Roads and Structures.

DMSs used on the State Highway System shall be preapproved on the current NCDOT ITS & Signals 2012 Qualified Products List (QPL) by the date of installation. DMSs not preapproved will not be allowed for use on the project. To ensure compatibility with the existing DMS

C 203433 (I-5110, R-2413A & R-2413B)

GEOTEXTILE FOR PAVEMENT STABILIZATION

(2-4-14)

Description

Furnish and place geotextile for pavement stabilization in accordance with the Geotechnical Engineering Scope of Work found elsewhere in this RFP. Geotextile for pavement stabilization may be required to prevent pavement cracking and provide separation between the subgrade and pavement section at locations shown in the plans developed by the Design-Build Team and as directed by the Engineer.

Materials

Refer to Division 10 of the 2012 Standard Specifications for Roads and Structures.

Item	Section
Geotextiles	1056

Provide Type 5 geotextile for geotextile for pavement stabilization that meets the following requirements:

GEOTEXTILE FOR PAVEMENT STABILIZAT	TION REQUIREM	1ENTS
Property	Requirement (MARV ^A)	Test Method
Tensile Strength @ 5% Strain (MD & CD ^A)	1,900 lb/ft	ASTM D4595
Ultimate Tensile Strength (MD & CD ^A)	4,800 lb/ft	ASTM D4595
Melting Point	300° F	ASTM D276

A. Define "minimum average roll value" (MARV), "machine direction" (MD) and "cross-machine direction" (CD) in accordance with ASTM D4439.

Sampling

For the top half of all embankments, the Design-Build Team shall take soil samples of the embankment material as it is constructed. The Design-Build Team shall sample the embankment in three-foot thick zones at a minimum frequency of one sample per 1,000 feet, per each lane, for classification tests. For the aforementioned tests, a lane shall be considered 28 feet wide in one direction for sampling purposes. Additional samples shall be taken to ensure that all the predominant soil types, limits of distribution of these soils and different site conditions have been represented. For embankments less than 1,000 feet in length a minimum of one sample shall be required per three-foot thickness of embankment. The sample in the top most three-foot zone (after the project has been graded to within two inches of final sub-grade elevation) may also serve as the sample for the lime or cement mix design test if it also meets the testing requirements in the *Cement and Lime Stabilization of Sub-Grade soils* Project Special Provision found elsewhere in this RFP.

In lieu of testing the embankment material the Design-Build Team shall provide geotextile for pavement stabilization that meets the requirements in the table above for all embankments that are a minimum of ten feet in height (as measured vertically from the toe of the embankment to the elevation of outer edge of pavement) and 200 feet in length.

Submittals for Review and Approval Prior to Construction

The Design-Build Team shall adhere to the following submittal guidelines:

- Submit all laboratory test results for review to the Geotechnical Engineering Unit Geopavement Section within five days of completion.
- Submit a sketch in plan view showing areas of the project to be stabilized by geotextile for payement stabilization.

Structures Scope of Work

STRUCTURES SCOPE OF WORK (1-29-14)

Project Details

The Design-Build Team shall be responsible for all structures necessary to complete the project, including at the following locations:

- Taxiway Bridge over -L-
- Dual Bridges on -L- over NC 68 and re-aligned Pleasant Ridge Road (SR 2133)
- Flyover Bridge over -L- and NC 68
- Dual Bridges on -L- over NC 68 between Edgefield Road and Leabourne Road
- Bridge on Ramp RP1B over re-aligned Pleasant Ridge Rd.
- Grade separation bridge(s) at Alcorn Road (SR 2269) and -L-
- Grade separation bridge(s) at Bunch Road (SR 2128) and -L-
- Dual Bridges on -L- over Reedy Fork Creek
- Grade separation bridge(s) at Brookbank Road (SR 2127) and -L-
- Grade separation bridge(s) at Oak Ridge Road (NC 150) and -L-
- Grade separation bridge(s) at Deboe Road (SR 2155) and -L-
- All reinforced concrete box culverts required by the Design-Build Team's design
- Pedestrian Culverts (two locations)
- All retaining walls as required by the Design-Build Team's design

Department-Provided Sealed Structural Drawings

The Department will provide sealed structural drawings for the structures at the following locations:

- Dual Bridges on -L- over Reedy Fork Creek
- Six reinforced concrete box culverts (including two pedestrian culverts)

** NOTE ** Deleted bullet on anticipated date of sealed structural drawings

In the event the Design-Build Team chooses to modify the sealed structural plans provided by the Department, adherence to all guidelines / requirements stated, or included by reference, in this Request for Proposals shall be required. The Design-Build Team may redesign the dual bridges on -L- over Reedy Fork Creek to reduce the 12-foot median rail offsets to six feet, provided the aforementioned guidelines / requirements are adhered to, included but not limited to hydraulic spread and sight distance requirements. (The bridge rail offsets will not be required to exceed 12 feet to accommodate sight distance requirements.)

For the dual bridges on I-73 over Reedy Fork Creek, the vertical and horizontal clearances provided for the required natural surface / stabilized trail on each creek bank shall be equal to or greater than the height and width provided on the sealed structural plans provided by the Department. The aforementioned vertical clearances shall be measured from the existing natural ground surface.

For all provided sealed plans, the Design-Build Team is encouraged to construct according to these plans. The Design-Build Team may choose to modify these designs. In such case, the Design-Build Team shall assume full responsibility for the design of that work item and submit signed and sealed plans for Department review and approval. Intentions to do so must also be clearly noted in the Technical Proposal. Submittals for such design changes will be required to follow the Design-Build Submittal Guidelines as expected for other current Design-Build projects. No additional compensation will be provided and no extension of contract time will be granted due to the Design-Build Team's election to modify the sealed plans provided by the Department.

requiring any future design exceptions, except as allowed by the Roadway Scope of Work found elsewhere in this RFP. All bridges over NC 68 shall be designed to accommodate a future six through-lane section, with turn lanes, under the bridge without requiring any future design exceptions.

A live load rating chart for proposed girders shall be included with the highway bridge plans and shall state design assumptions and methodology used in the load rating calculations. The load rating shall be in accordance with the NCDOT Structures Management Unit Manual (including policy memos) and AASHTO's Manual for Bridge Evaluation.

The following will not be permitted on the project:

- Cored slab, box beam, fracture critical, cast-in-place deck slab and integral deck/girder bridges
- Precast barrier rails
- Empirical method for deck design.
- Precast Culverts
- Interior pile bents for grade separations.
- Monotube or cantilever DMS (if required on project) support structures.
- Attachment of sign structures to bridges.
- Bridge attachments (e.g. ITS conduit, waterlines) in the overhang of bridge structures
- Casting of conduit in the bridge deck or barrier rail for roadway bridges

General

The Design-Build Team's primary design firm shall be on the Highway Design Branch list of firms qualified for structure design and maintain an office in North Carolina.

Design shall be in accordance with the latest edition of the AASHTO LRFD Bridge Design Specifications (with exceptions noted in the NCDOT Structures Management Unit Manual), NCDOT LRFD Driven Pile Foundation Design Policy, NCDOT Structures Management Unit Manual (including policy memos) and NCDOT Bridge Policy Manual except as noted otherwise elsewhere in this RFP.

Reinforced concrete box culvert designs shall be in accordance with the latest edition of the AASHTO *LRFD Bridge Design Specifications*.

Construction and materials shall be in accordance with 2012 NCDOT Standard Specifications for Roads and Structures, NCDOT Structures Management Unit Project Special Provisions and NCDOT Structures Management Unit Standard Drawings.

Alternate designs, details or construction practices (such as those employed by other states, but not standard practice in NC) are subject to Department review and approval, and will be evaluated on a case by case basis.

Utilities Coordination Scope of Work

to remain within the vehicle recovery area)

Guilford County

• For safety and future maintenance, the Design-Build Team shall place a bollard over all existing water valves that are approved by the NCDOT and City of Greensboro to remain within the existing and / or proposed right of way. (Existing water valves will not be allowed

The Design-Build Team shall retain the existing fencing around the tank property site and provide access to the water tower during construction.

If the Design-Build Team's design and / or construction requires the relocation of existing water or sewer facilities, designs shall be coordinated with the NCDOT Utility Unit. All costs associated with the design and construction for relocation of these existing water and / or sewer facilities shall be the responsibility of the Design-Build Team and shall be included in the lump sum bid for the project. The Design-Build Team shall develop designs; prepare all plans for needed agreements and permits; submit permits directly to the agencies and obtain approval from the agencies. The Design-Build Team shall be responsible for all permit fees.

Designs shall be coordinated with the NCDOT Utility Unit. The Design-Build Team shall be responsible for submitting five (5) sets of 11 x 17 utility construction drawings to the State Utility Agent, via the Transportation Program Management Director, for further handling. Each set shall include a title sheet, plan sheets, profiles and special provisions if required. Once approved by the State Utility Agent, the plans, with the appropriate agreement, will be sent out to the City of Greensboro for their review and approval. The City of Greensboro will require any water and /or sewer relocations to be permitted prior to construction.

The relocation of all water and sewer facilities shall be done in accordance with the NCDOT policies and the latest City of Greensboro water and sewer design requirements / specifications. In the event of conflicting design parameters in the requirements noted above, the proposed design shall adhere to the most conservative values. The Design-Build Team may obtain the design requirements / specifications from the website noted below:

http://www.greensboro-nc.gov

Unless otherwise permitted by the City of Greensboro, all water tie-in work that requires interruption of service to and from the water tower shall be completed during the fall and winter and performed during a 4-hour period to start no earlier than 10:00 p.m. on any given night. However, the Design-Build Team shall coordinate the timing of such work with the City of Greensboro a minimum of two weeks prior to beginning the work.

The Design-Build Team shall anticipate that the construction permit issued by the City of Greensboro for any work that interrupts service to and from the water tower will contain conditions that reflect the following:

- Liquidated damages for not completing the work within a given 4-hour period; and
- A reserved right for the City to perform any work necessary to restore service to and from the water tower in the event that the Design-Build Team exceeds the 4-hour period and a provision for the Design-Build Team's reimbursement of all costs incurred by the City of Greensboro to perform such work.

If an interruption in any major (12 inch diameter or larger) water line service is caused by an unanticipated problem during construction and the Design-Build Team cannot fix the problem promptly, they will be required to alert the City of Greensboro for assistance. The Design-Build Team shall assume that any construction permit for major water line service work issued by the



North Carolina Department of Environment and Natural Resources

Division of Water Resources Water Quality Programs Thomas A. Reeder Director

John E. Skvarla, III Secretary

February 3, 2014

Mr. Richard W. Hancock, P.E., Manager Project Development and Environmental Analysis North Carolina Department of Transportation 1598 Mail Service Center Raleigh, North Carolina, 27699-1598

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with

ADDITIONAL CONDITIONS for Proposed new location facility from SR 2011 (Edgefield Road) to the

Haw River at US 220 in Guilford County, WBS Element No. 34429.1.1. TIP No. R-2413AB.

NCDWR Project No. 20130517 v.2- Modification

Dear Mr. Hancock:

Pat McCrory

Governor

Attached hereto is a copy of Certification No. 3971issued to The North Carolina Department of Transportation (NCDOT) dated February 3, 2014. This certification replaces the one issued October 28, 2013.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Thomas A. Reeder

Attachments

cc: Andy Williams, US Army Corps of Engineers, Raleigh Field Office (electronic copy only)
Jerry Parker, PE, Division 7 Engineer (electronic copy only)
Chris Militscher, Environmental Protection Agency (electronic copy only)
Travis Wilson, NC Wildlife Resources Commission (electronic copy only)
Jason Elliott, NCDOT, Roadside Environmental Unit (electronic copy only)
Beth Harmon, Ecosystem Enhancement Program (electronic copy only)
Amy Euliss, DWR Winston Salem Regional Office (electronic copy only)

File Copy

Transportation and Permitting Unit 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Location: 512 N. Salisbury St. Raleigh, North Carolina 27604 Phone: 919-807-6300 \ FAX: 919-807-6488 Internet: www.ncwaterquality.org North Carolina Naturally

given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

- Any modifications to this 401 Water Quality Certification that propose additional stream impacts or
 increased impervious surface requiring additional stormwater management may be subject the Jordan Water
 Supply Nutrient Strategy (15A NCAC02B .0267). The NCDOT shall coordinate with the NCDWR prior to
 submitting a modification request to determine the applicability of the Jordan Water Supply Nutrient
 Strategy. This condition does not apply to major modifications for additional sections of the project that
 were covered under the Finding of No Significant Impact or approved in the Avoidance and Minimization
 stage of the project.
- The NCDOT Division Environmental Officer or Environmental Assistant will conduct a pre-construction
 meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the
 potential issues with stream and pipe alignment at the permitted site. NCDWR staff shall be invited to the
 pre-construction meeting.
- 3. Channel relocations shall be completed and stabilized, and approved on site by NCDWR staff, prior to diverting water into the new channel. Stream banks shall be matted with coir-fiber matting. Vegetation used for bank stabilization shall be limited to native riparian vegetation, and should include establishment of a vegetated buffer on both sides of the relocated channel to the maximum extent practical. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested. Once the stream has been turned into the new channel, it may be necessary to relocate stranded fish to the new channel to prevent fish kills.
- Compensatory mitigation for impacts to 8171 linear feet of streams for the R-2413A project and 3594 for the R-2413B project at a replacement ratio of 1:1 is required. Compensatory mitigation for impacts to jurisdictional streams shall be provided by onsite stream relocations of 2,180 linear feet of stream for the R-2413A project and 765 linear feet of stream for the R-2413B project. The onsite stream relocation shall be constructed in accordance with the design submitted in your application dated received July 19, 2013, August 23, 2013. All on-site mitigation sites shall be protected in perpetuity by a conservation easement or through NCDOT fee simple acquisition and recorded in the NCDOT Natural Environment Unit mitigation geodatabase. Please be reminded that as-builts for the completed streams shall be submitted to the North Carolina Division of Water Resources 401 Wetlands Unit with the as-builts for the rest of the project. If the parameters of this condition are not met, then the permittee shall supply additional stream mitigation for the 2,180 linear feet of impacts. All channel relocations will be constructed in a dry work area, will be completed and stabilized, and must be approved on site by NCDWR staff, prior to diverting water into the new channel. Whenever possible, channel relocations shall be allowed to stabilize for an entire growing season. All stream relocations shall have a 50-foot wide native wooded buffer planted on both sides of the stream unless otherwise authorized by this Certification. A transitional phase incorporating rolled erosion control product (RECP) and appropriate temporary ground cover is allowable.
- The stream mitigation site shall be monitored annually for five years or until success criteria are satisfied.
 Monitoring protocols shall follow the Monitoring Level I outlined in the Stream Mitigation Guidelines,
 April 2003.
- 6. Compensatory mitigation for 8171 linear feet of impact to streams for the R-2413A project and 3594 linear feet of impact to streams for the R-2413B project is required. We understand that you have chosen to perform compensatory mitigation for impacts to 5,991 linear feet of streams for the R-2413A project and 2829 linear feet of streams for the R-2413B project through the North Carolina Ecosystem Enhancement Program (EEP), and that the EEP has agreed to implement the mitigation for the project. EEP has indicated in a letter dated September 24, 2013 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the EEP Mitigation Banking Instrument signed July 28, 2010.
- 7. Compensatory mitigation for impacts to 3.33 acres for the R-2413A project and 2.15 acres for the R-2413B project (riparian) wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands through the North Carolina Ecosystem Enhancement Program (EEP), and that the EEP has agreed to implement the mitigation for the project. EEP has indicated in a letter dated

DEPARTMENT OF THE ARMY PERMIT

Permittee: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION - ATTN: MR. RICHARD HANCOCK

Permit No: <u>SAW-2013-00557</u>

Issuing Office: <u>USAED, WILMINGTON</u>

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of the office acting under the authority of the commanding officer.

You are authorized to perform work in the accordance with the terms and conditions specified below.

Project Description: The project, identified as R-2413A&B, consists of the construction of a 7.8 mile, four-lane divided facility on new location. R-2413A&B begins at SR 2011 (Edgefield Road) and extends to the Haw River at US 220 in Summerfield, Guilford County, North Carolina. Total permanent impacts for the construction of this project are 12,912 linear feet of jurisdictional stream channel, 5.47 acres of adjacent wetlands and 0.6 acre of jurisdictional open waters. Total temporary impacts for the construction of this project are 1,151 linear feet of jurisdictional stream channel and 0.18 acre of adjacent wetlands. All impacts are within the Cape Fear River basin (Hydrologic Categorical Unit 03030002).

In order to compensate for impacts associated with this permit, mitigation shall be provided through on-site mitigation as described in the July 18, 2013 mitigation plan, including the revisions provided on January 15, 2014 and in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

Project Location: The project, identified as R-2413A&B begins at SR 2011 (Edgefield Road) and extends to the Haw River at US 220 in Summerfield, Guilford County, North Carolina. Segment A starts at SR 2011 (Edgefield Road) and extends to SR 2127 (Brookbank Road) and Segment B starts at SR 2127 and extends to the Haw River at US 220. Coordinates (in decimal degrees) for the site are 36.1775° N, -79.9350° W (NAD83/WGS84). The site contains a portion Reedy Fork, four (4) unnamed tributaries to Brush Creek, thirty-one (31) unnamed tributaries to Reedy Fork and seven (7) unnamed tributaries to the Haw River and fourteen (14) adjacent wetland areas in the Cape Fear River Basin (8-Digit Cataloging Unit 03030002).

Permit Conditions:

General Conditions:

- 1. The time Limit for completing the work authorized ends on <u>December 31, 2019.</u> If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
- 2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Conditions 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

ENG Form 1721, Nov 86

EDITIONS OF SEP 82 IS OBSOLETE.

(33 DFR 325 (Appendix A))

- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site eligible for listing in the National Register of Historic Places.
- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
- 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

*SEE ATTACHED SPECIAL CONDITIONS

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - () Section 10 of the Rivers and Harbors Act of 1899 (33 U.S. C. 403).
 - (X) Section 404 of the clean Water Act (33 U.S.C. 1344)
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United states in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

- 4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was mad in reliance on the information you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.
 - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measure by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE) NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION

O1 27 2014
(DATE)

ATTN: MR. RICHARD HANCOCK

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Qn (DISTRICT Commander) STEVEN A. BAKER, COLONEL 28 Jan 2014 (DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(Transferee) (Date)

WORK LIMITS

- 1. CONSTRUCTION PLANS: All work authorized by this permit must be performed in strict compliance with the attached plans for R-2413A&B dated May 16, 2013 (for R-2413A, sheets 44-46, 53-55, 66A-66C and 80 were revised on July 1, 2013, sheet 81 was revised on July 16, 2013 and for R-2413B sheets 13-16 and sheet 31 were revised July 1, 2013), which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.
- **2.UNAUTHORIZED DREDGE OR FILL:** Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.
- 3. MAINTAIN CIRCULATION AND FLOW OF WATERS: Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.
- **4. DEVIATION FROM PERMITTED PLANS:** Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, or shall any activities take place that cause the degradation of waters or wetlands. There shall be no excavation from, waste disposal into, or degradation of, jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and fill activities connected with this project. In addition, except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.
- **5. PRECONSTRUCTION MEETING:** The permittee shall schedule and attend a preconstruction meeting between its representatives, the contractors representatives, and the Corps of Engineers, Raleigh Field Office, NCDOT Regulatory Project Manager, prior

to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all the terms and conditions contained with this Department of Army Permit. The permittee shall provide the USACE, Raleigh Field Office, NCDOT Project Manager, with a copy of the final permit plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The permittee shall schedule the preconstruction meeting for a time frame when the USACE, NCDCM, and NCDWQ Project Managers can attend. The permittee shall invite the Corps, NCDCM, and NCDWQ Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedules and participate in the required meeting.

RELATED LAWS

6. WATER CONTAMINATION: All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

PROJECT MAINTENANCE

7. NOTIFICATION OF CONSTRUCTION COMMENCEMENT AND

COMPLETION: The permittee shall advise the Corps in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

- **8.** CLEAN FILL: Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act.
- **9. PERMIT DISTRIBUTION:** The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the

construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.

- 10. SILT-FENCING: The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).
- 11. PERMIT REVOCATION: The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.
- **12. EROSION CONTROL MEASURES IN WETLANDS:** The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.

ENFORCEMENT

- 13. REPORTING ADDRESS: All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Raleigh Regulatory Field Office, Attn: Mr. Andrew Williams, 3331 Heritage Trade Drive, Wake Forest, NC 27587, and by telephone at: 919-554-4884 extension 26. The Permittee shall reference the following permit number, SAW-2001-21125, on all submittals.
- **14. REPORTING VIOLATIONS OF THE CLEAN WATER ACT AND RIVERS AND HARBORS ACT:** Violation of these conditions or violation of Section 404 of the Clean Water Act of Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permitee's discovery of the violation.

15. COMPLIANCE INSPECTION: A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in an administrative financial penalty and/or directive to cease work until the problem is resolved to the satisfaction of the Corps.

16. CULVERTS:

- A. Unless otherwise requested in the applicant's application and depicted on the approved work plans, culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter and less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain existing channel slope. The bottom of the culvert must be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions. Destabilizing the channel and head cutting upstream should be considered in the placement of the culvert.
- B. Measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed opening should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gauge data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

17. SEDIMENT EROSION CONTROL:

- A. During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of non-erodible materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.
- B. No fill or excavation impacts for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless the impacts are included on the plan drawings and specifically authorized by this permit.

- C. The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades on those areas, prior to project completion.
- D. The permittee shall use appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" to assure compliance with the appropriate turbidity water quality standard. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standards. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4). Adequate sedimentation and erosion control measures must be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures must be inspected and maintained regularly, especially following rainfall events. All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.
- **18. TEMPORARY FILLS:** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

19. BORROW AND WASTE:

A. To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands.

- B. All jurisdictional wetland delineations on borrow and waste areas shall be verified by the Corps of Engineers and shown on the approved reclamation plans. The permittee shall ensure that all such areas comply with the Special Condition 4 of this permit and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This documentation will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with Special Condition 4. All information will be available to the Corps of Engineers upon request. The permittee shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.
- **20. MITIGATION:** In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

A. In Lieu Fee: In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

B. Permittee Responsible Mitigation:

- 1. The Permittee shall fully implement the compensatory mitigation plan, entitled, R-2413A&B, Plan for On-Site Mitigation, dated (revised) July 1, 2013 for the unavoidable impacts to 3,080 linear feet of streams. Activities prescribed by this plan shall be initiated prior to, or concurrently with, commencement of any construction activities within jurisdictional areas authorized by this permit. The permittee shall (re-establish, rehabilitate, enhance, establish) 2,945 linear feet of streams in accordance with the plan with the following conditions:
 - a) The permittee, NCDOT, is the party responsible for the implementation, performance and long term management of the compensatory mitigation project.
 - b) Any changes or modifications to your mitigation plan shall be approved by the Corps.

- c) The permittee shall maintain the entire mitigation site in its natural condition, as altered by the work in the mitigation plan, in perpetuity. Prohibited activities within the mitigation site specifically include, but are not limited to: Filling; grading; excavating; earth movement of any kind; construction of roads, walkways, buildings, signs, or any other structure; any activity that may alter the drainage patterns on the property; the destruction, cutting, removal, mowing, or other alteration of vegetation on the property; disposal or storage of any garbage, trash, debris or other waste material; graze or water animals, or use for any agricultural or horticultural purpose; or any other activity which would result in the property being adversely impacted or destroyed, except as specifically authorized by this permit.
- d) All mitigation areas shall be monitored for a minimum of 5 years or until deemed successful by the Corps in accordance with the monitoring requirements included in the mitigation plan.
- 2. Remedial Mitigation Plan: If the compensatory mitigation fails to meet the performance standards 5 years after completion of the compensatory mitigation objectives, the compensatory mitigation will be deemed unsuccessful. Within 60 days of notification by the Corps that the compensatory mitigation is unsuccessful, the Permittee shall submit to the Corps an alternate compensatory mitigation proposal to fully offset the functional loss that occurred as a result of the project. The alternate compensatory mitigation proposal may be required to include additional mitigation to compensate for the temporal loss of wetland function associated with the unsuccessful compensatory mitigation activities. The Corps reserves the right to fully evaluate, amend, and approve or reject the alternate compensatory mitigation proposal. Within 120 days of Corps approval, the Permittee will complete the alternate compensatory mitigation proposal.
- 3. Mitigation Release: The Permittee's responsibility to complete the required compensatory mitigation, as set forth in the Compensatory Mitigation Special Condition of this permit will not be considered fulfilled until mitigation success has been demonstrated and written verification has been provided by the Corps. A mitigation area which has been released will no longer require monitoring or reporting by the Permittee; however the Permittee, Successors and subsequent Transferees remain perpetually responsible to ensure that the mitigation area(s) remain in a condition appropriate to offset the authorized impacts in accordance with the approved mitigation and monitoring plan and the general and special conditions of this permit.

U.S. ARMY CORPS OF ENGINEERS

Wilmington District

Compensatory Mitigation Responsibility Transfer Form

Permittee: North Carolina Department of Transportation

Project Name: NCDOT/R-2413A&B/Division 7

Action ID: SAW-2013-00557

County: Guilford

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Ecosystem Enhancement Program (NCEEP), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

Instructions to Sponsor: The Sponsor must verify that the mitigation requirements (credits) shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated bank ledger to the Permittee, the USACE Project Manager, and the Wilmington District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements:

Permitted Impacts Requiring Mitigation*
8-digit HUC and Basin: 03030002, Cape Fear River Basin

Stream	m Impacts (lir	near feet) 🧪		Wetland Impacts (ad	cres)	
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
9,594				5.47		

^{*}If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements:

8-digit HUC and Basin: 03030002, Cape Fear River Basin

Stream	Mitigation (credi	ts)		Wetland Mitigation (credits)	
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
18,340				10.94		

Mitigation Site Debited: NCEEP

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCEEP, list NCEEP. If the NCEEP acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor

Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCEEP), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Name of Sponsor's Authorized Representative:		
Signature of Sponsor's Authorized Representative		
	Date of Signature	

USACE Wilmington District Compensatory Mitigation Responsibility Transfer Form, Page 2

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the
 Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains
 responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the USACE Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions: Additional on site mitigation is also required. See permit conditions.

This form is not valid unless signed below by the USACE Project Manager and by the Mitigation Sponsor on Page 1. *Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the USACE Project Manager at the address below, and 3) the Wilmington District Mitigation Office, Attn: Todd Tugwell, 11405 Falls of Neuse Road, Wake Forest, NC 27587 (email: todd.tugwell@usace.army.mil).* Questions regarding this form or any of the permit conditions may be directed to the USACE Project Manager below.

USACE Project Manager:

Andy Williams

USACE Field Office:

Raleigh Regulatory Field Office US Army Corps of Engineers

3331 Heritage Trade Drive, Suite 105 Wake Forest, North Carolina 27587

Email: Andrew.e.williams2@usace.army.mil

USACE Project Manager Signature

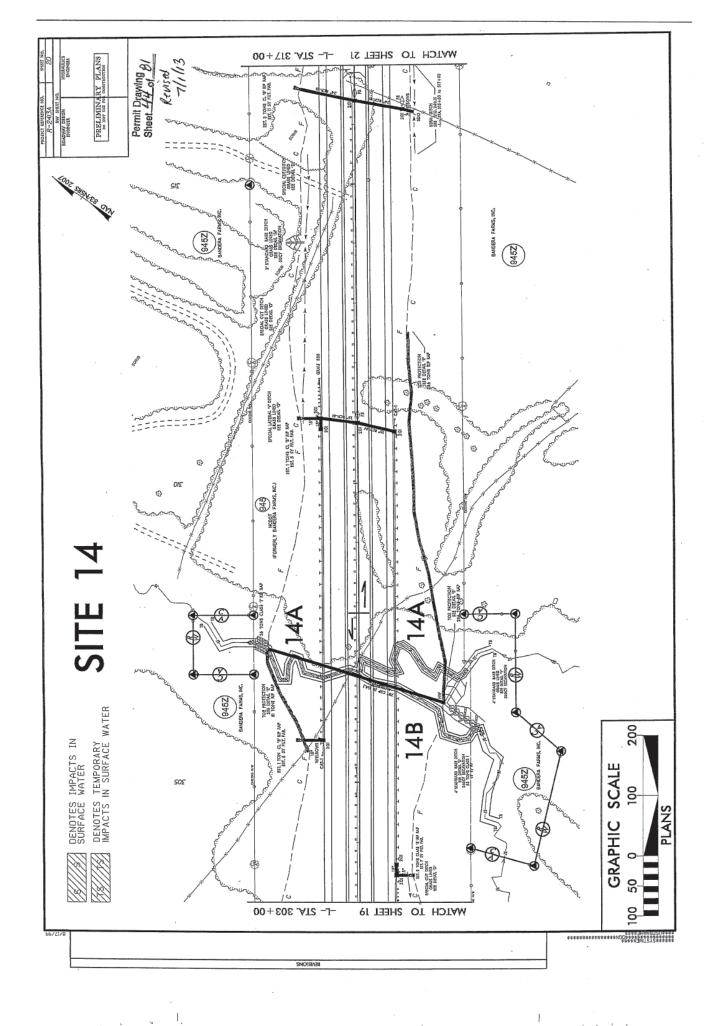
January 23, 2014

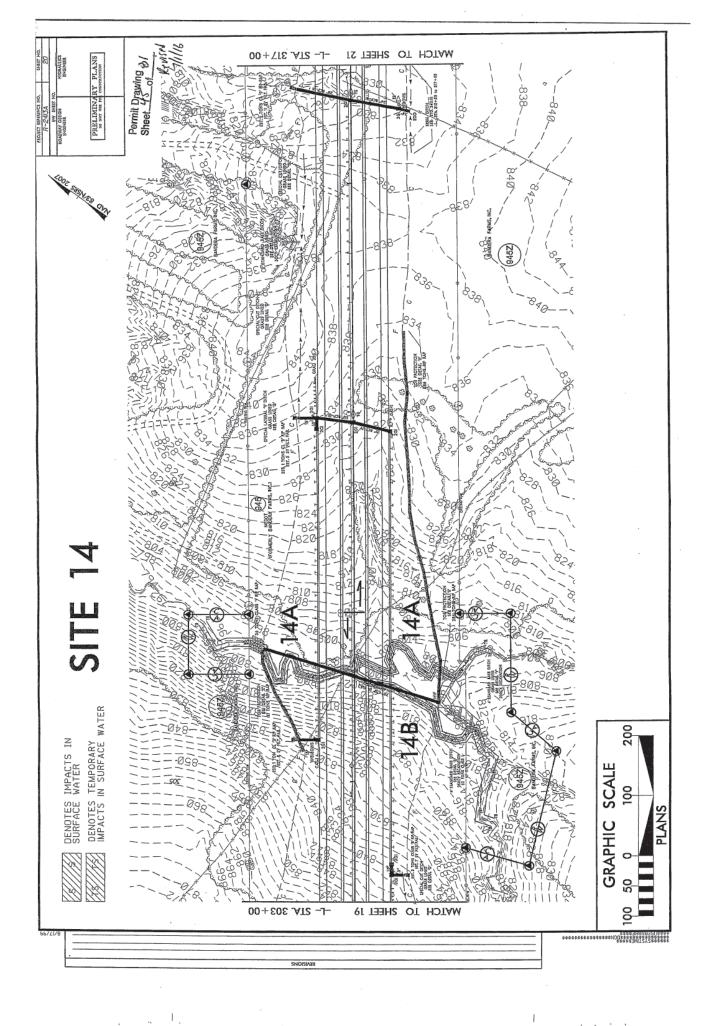
Date of Signature

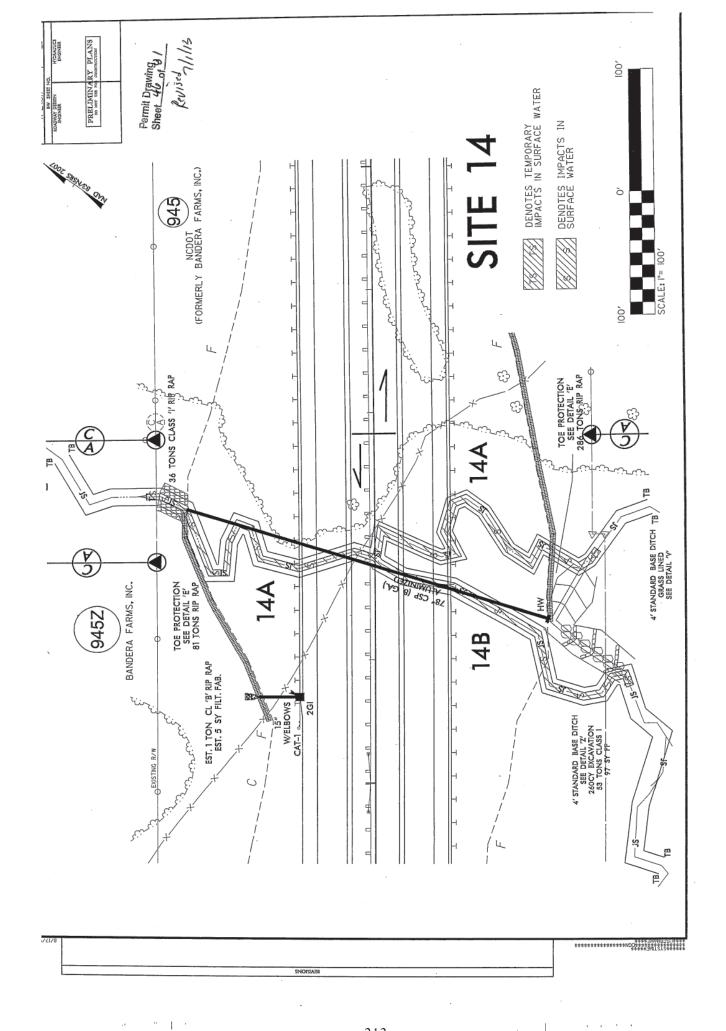
Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at http://ribits.usace.army.mil.

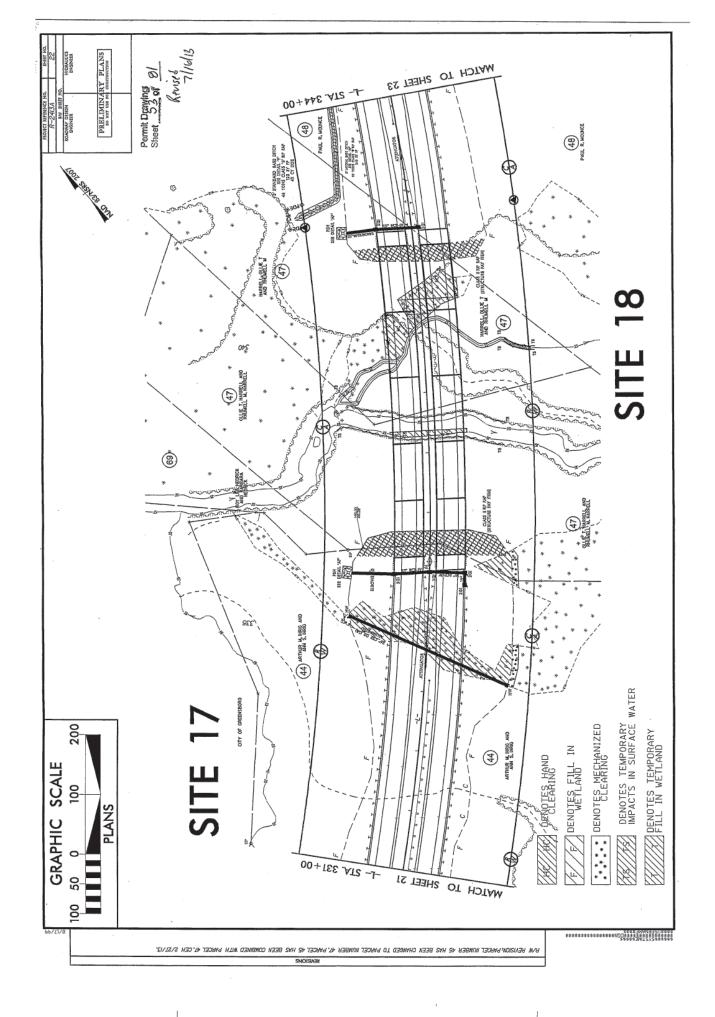
Page 2 of 2

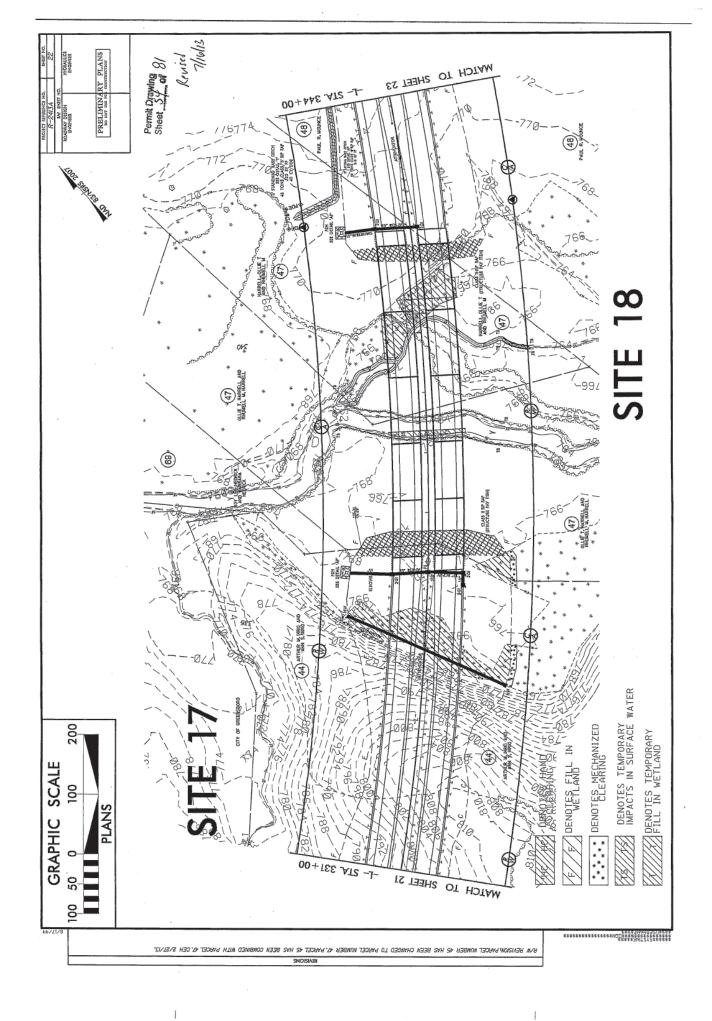
The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at http://regulatory.usacesurvey.com/ to complete the survey online.

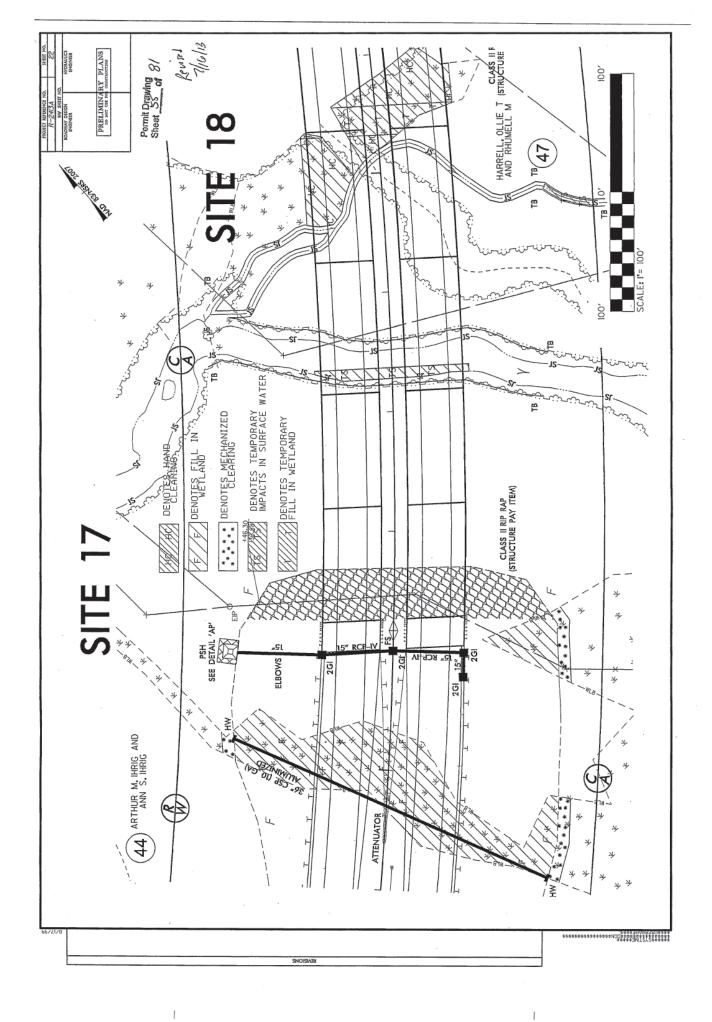


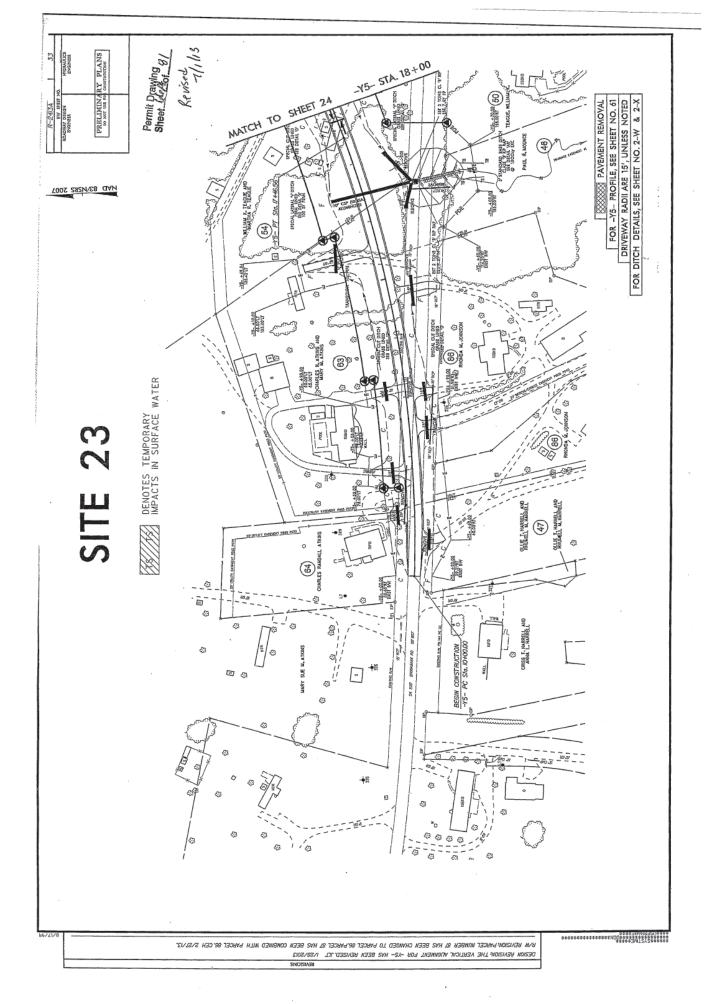






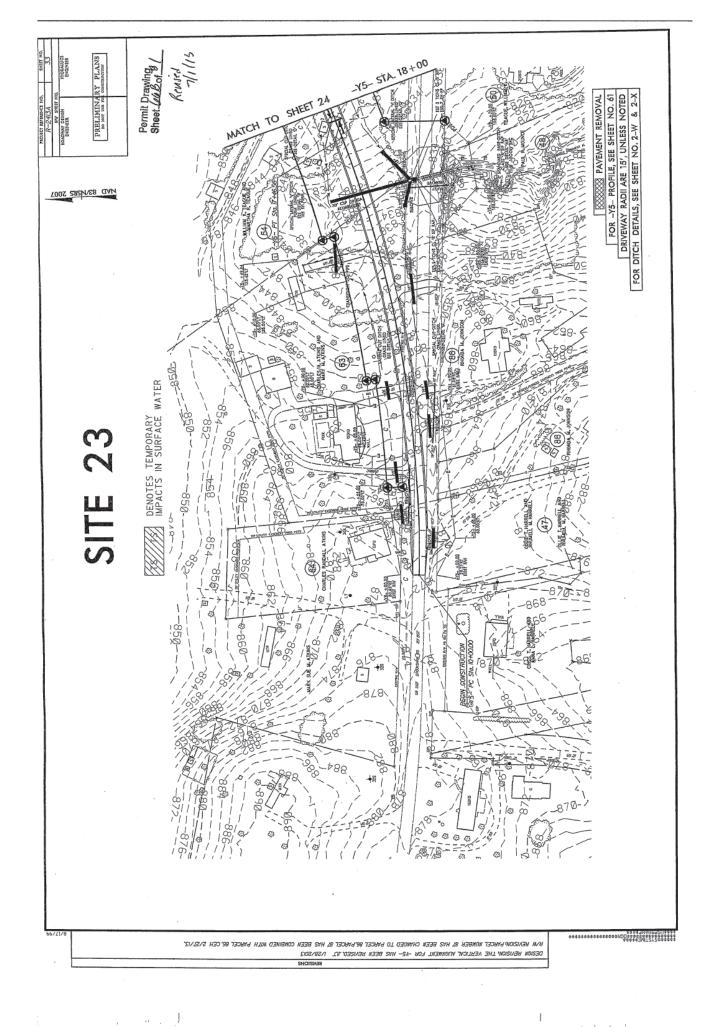


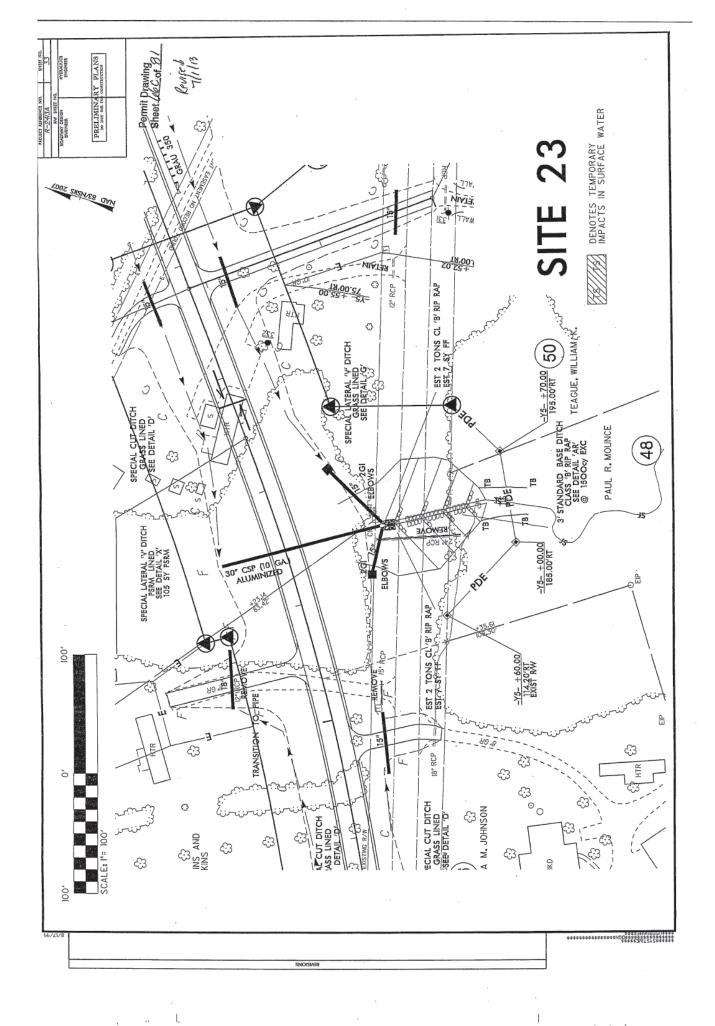




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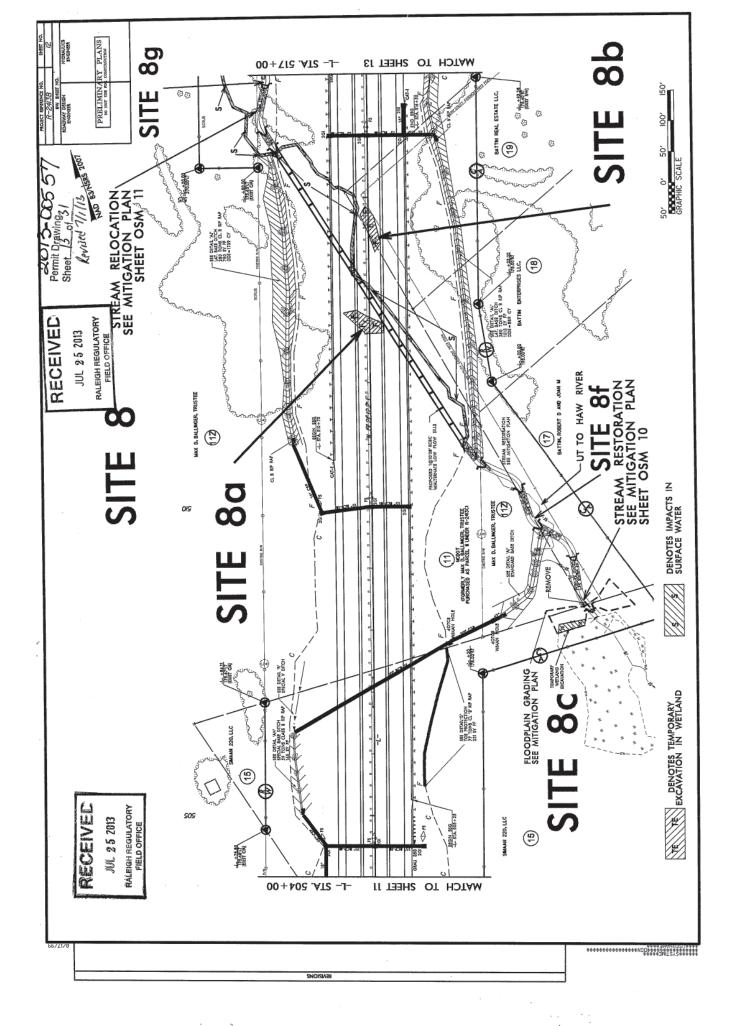


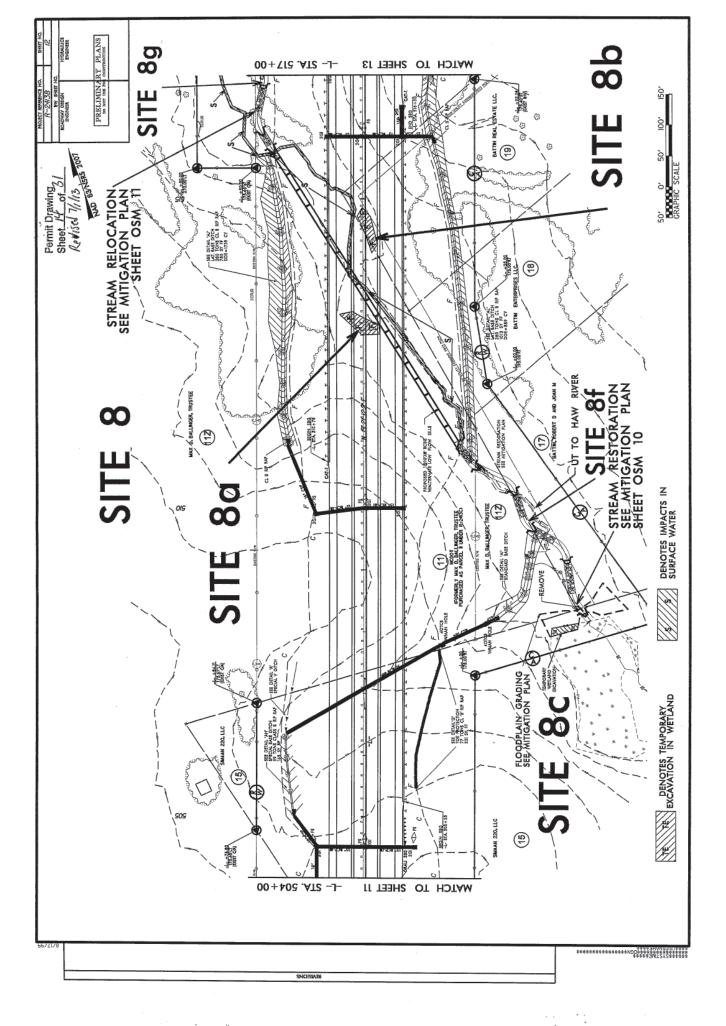
Site No.			,	WET	WETLAND IMPACTS	STS		MPACTS	SURFACE WATER IMPACTS		PACTS	
No.	Station	Structure	Permanent Fill In	Temp. Fill In	Excavation	Excavation Mechanized in Clearing	Hand Clearing in	Permanent SW	Temp.	Existing Channel Impacts	Existing Channel Impacts	Natural Stream
12	(From/To)	Size / Type	Wetlands (ac)	Wetlands (ac)	Wetlands (ac)	in Wetlands (ac)	Wetlands (ac)	impacts (ac)	impacts (ac)	Permanent (ft)	Temp. (ft)	Design (ft)
-0,5	269+50 -L-	72" CSP										
Za.								0.03		299		1163*
12b.								0.01		131		
13 2	277+00 to 281+00 -L-	54" RCP								-		
13a.								0.04	<0.01	525	10	977*
13b.								0.01		106		
14	307+00 -I -	78" CSD										
149								0.07		551	20	
14b.								0.02		258	10	
		Bank Stabilization								25		
\dashv												
+	322+50 to 326+00 -L-	54" CSP	300					700	2000	170	77	
Da.		Rank Stabilization	10.0					5.5	0.00	202	F	
15b.								<0.01		46		
\neg	327+50 to 329+50 -L-	72" CSP										
16a.			0.15					0.02	<0.01	342	59	
		Bank Stabilization						5		202		
100								0.00		S		
SUBTOTALS	ILS:		0.16					0.21	0.03	2,869	110	2,140
			-									
*	* See Plan for On-Site Mitigation	Aitigation							NC DE	NC DEPARTMENT OF TRANSPORTATION	TRANSPOR	PATION
										DIVISION OF HIGHWAYS GUILFORD	HIGHWAYS	
									۵	COUNTY WBS - 34429.1.1	NIY I (R-2413A)	æ.
ATN Revised 3/31/05									SHEET	SHEET 80 O 81		7/1/2013

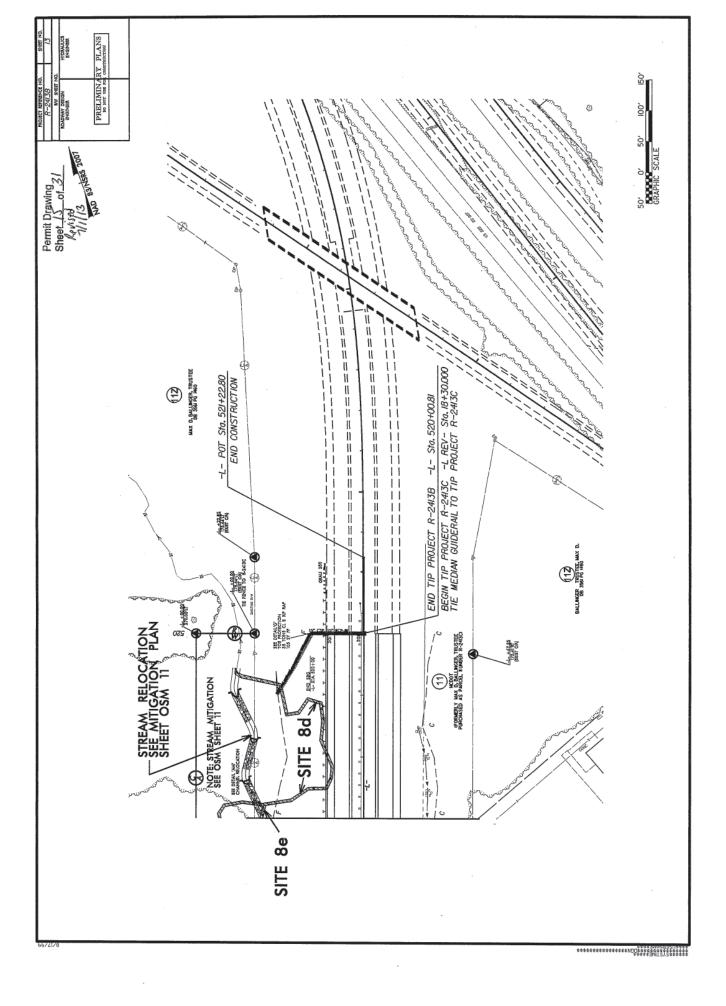
	Natural Stream Design	£					250*			250	2,390	IION	7/16/2013
PACTS	<u>50 € 0</u>	£	172	84			262	55	12	+	922	RANSPORTA IIGHWAYS RD Y (R-2413A)	7/1
ARY SURFACE WATER IMPACTS	Existing Channel Impacts Permanent	Œ		507	240		288	256		1,460	6006	NC DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS GULLFORD COUNTY WES - 34429.1.1 (R-2413A)	1
ARY SURFACE	Temp. SW impacts	(ac)	0.03	<.01			60.0	د.01	10.>	0.15	0.31	NC DEPA D	SHEET 81 OF 81
ст ѕимм	Permanent SW impacts	(ac)		0.03	0.02		0.06	0.02		0.14	1.45		SE
MIT IMPA	Hand Clearing in Wetlands	(ac)	0.13							0.13	0.13		
WETLAND PERMIT IMPACT SUMMARY	Mechanized Clearing in Wetlands	0.03				.	0.13			0.13	0.19		
WETLAND IMPACTS	Excavation Mechanized in Clearing Wetlands in Wetlands in Wetlands	(op)								<0.01			
WET	Temp. Fill In Wetlands	(an)	0.04							0.04	0.04		
	Permanent Fill In Wetlands	0.35			0.11		2.11			2.57	200		
	Structure Size / Type	36ª CSP	Bridge	60" RCP	36" CSP	1 @ 12' X 12' RCBC	Road Fill	48" CSP Bank Stabilization	30" CSP/PDE			tigation	
	Station (From/To)	334+00 to 336+50 -L-	338+00 to 340+50 -L-	348+00 to 353+00 -L-	17+50 to 19+00 -Y4-	29+00 to 36+00 -Y5-		24+50 -Y1C-	16+50-Y1C-	ALS:		See Flan for On-Site Mitigation	
	Site No.	17 3	18	6	50		21a.	22	83	SUBTOTALS:	*	ATN Revised 2034/05	Housed down

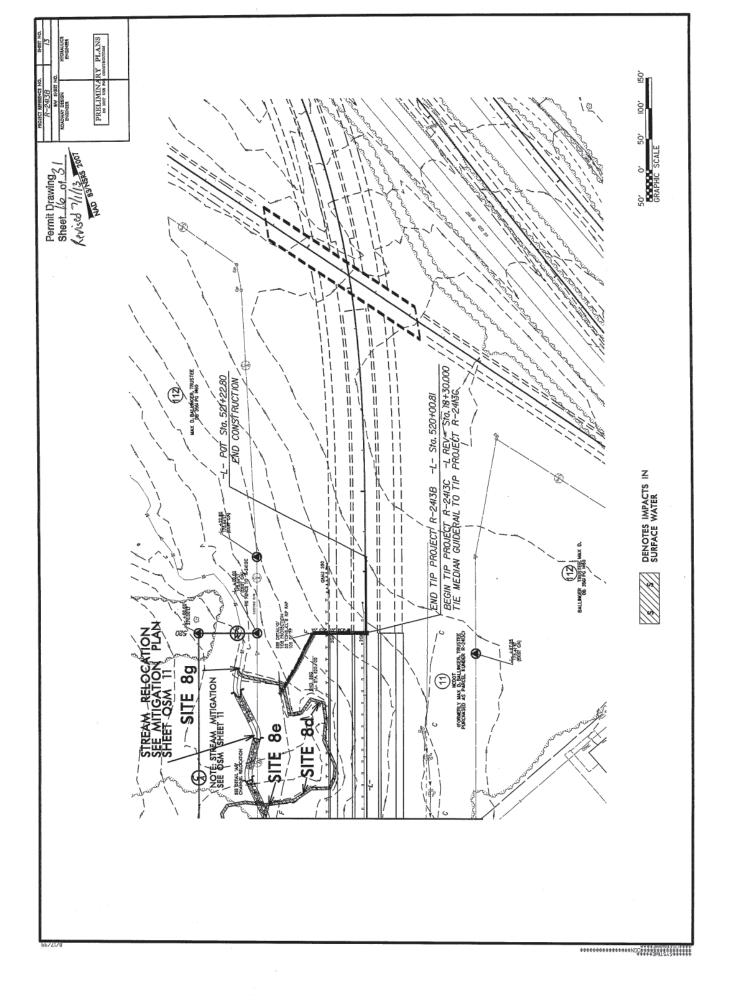
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					ACAM CHAN IT	WETLAN	D PERMIT	WETLAND PERMIT IMPACT SUMMARY	MARY	יר יאירי	U.F.O.V.O.	
				WE	WELLAND IMPACTS	CIS			SURFAC	SURFACE WATER IMPACTS	ACIO	
			Permanent	Temp.	Temp. Excavation	Mechanized	Hand Clearing	Permanent	Temp.	Existing Channel	Existing Channel	Natural
Site No.	Station (From/To)	Structure Size / Type	Fill In Wetlands	Fill In Wetlands	in Wetlands	Clearing in Wetlands	in Wetlands	SW impacts	SW impacts	Impacts Permanent	Impacts Temp.	Stream Design
٥	1 00+612	, s × 20, C	(ac)	(ac)	(ac)	(40)	(ac)	(40)	(90)	(11)	(11)	(11)
0	213400 -L-	20 0 0 0 0						000		2		
8a		Roadway Fill	0.02									
89		Roadway Fill	0.03									
80		Flood Plain Exc.			0.01							
8f	508+20 to 511+00 -L- Rt.	Stream Restoration										373
pg P8	517+25 to 519+11 -L- Lt.	Roadway Fill						0.03		464		
89	515+75 to 519+43 -L- Lt.	Stream Relocation								253		392
8e	516+94 to 517+23 -L- Rt.	Roadway Fill						<0.01		29		
	and the state of t											
BTO	SUBTOTALS:	A POMADO POR LA COLOR DE LA CO	0.05		0.01			0.09		1391		765
TOTALS	Ŋ.		1 02		20.0	0.03		77.0	0.0%	3810	197	765

NC DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

NOTES:

GUILFORD COUNTY
WBS - 34429.1.1 (R-2413B)

SHEET 31 OF 3

County: Guilford

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
		R	OADWAY ITEMS			
0001	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM CONSTRUCTION TAXIWAY BRIDGE	Lump Sum	L.S.	
0002	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM DESIGN AND CONSTRUCTION I-5110	Lump Sum	L.S.	
0003	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM DESIGN AND CONSTRUCTION R-2413A & R-2413B	Lump Sum	L.S.	
0932/	Jan30/Q3.0/D2700000/E	:3	Total Amount Of Bid F	or Entire Project :		

Description of Work

Fuel Usage Factor Diesel #2

Guilford County

Estimate of Quantities

FUEL USAGE FACTOR CHART AND ESTIMATE OF QUANTITIES FOR TAXIWAY BRIDGE

Units

Structural Concrete (Cast-in-Place Only)	Gal / CY	0.98	CY
The above quantities represent a reasonable estimate of the total quantities anticipated, for each item, as pertaining to fuel price adjustments, and is representative of the design proposed in the Technical Proposal submitted under separate cover. Or			
☐ The Design-Build Team elects not to pursue reimbursement for Fuel Price Adjustments on this project.			
The information submitted on this sheet is claimed as a "Trade Secret" in accordance with the requirements of G.S. 66-152(3) until such time as the Price Proposal is opened.			
Signature, Title		Dated	
Print Name, Title			

(Submit a copy of this sheet in a separate sealed package with the outer wrapping clearly marked "Fuel Price Adjustment" and deliver with the Technical and Price Proposal.)