

## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR JAMES H. TROGDON, III Secretary

March 29, 2017

U. S. Army Corps of Engineers Regulatory Field Office 2407 West 5<sup>th</sup> Street Washington, NC 27889

- Attention: Mr. Tom Steffens NCDOT Coordinator
- Subject: Application for Section 404 Nationwide Permit 23 and Neuse River Riparian Buffer Authorization for replacement of Bridge No. 32 over Hannah Creek on SR 1185 (Joyner Bridge Road), Johnston County, Federal Aid Project No. BRZ-1185(2), TIP No. B-4770.

Debit \$240.00 from WBS Element No. 38542.1.1

Dear Sir,

The North Carolina Department of Transportation (NCDOT) proposes to replace existing Bridge No. 32. Bridge No. 32 is a 150-foot bridge to be replaced with a 165-foot bridge on existing alignment. The new bridge will include two 10-foot lanes in each direction and 4-foot shoulders on each side. Traffic will be detoured offsite.

Please find enclosed the Pre-Construction Notification (PCN) form, United States Fish and Wildlife concurrence letter, North Carolina Division of Mitigation Services acceptance letter, stormwater management plan, permit drawings, and roadway design plans for the above referenced project. A Programmatic Categorical Exclusion (PCE) was completed for this project on February 29, 2016, and distributed shortly thereafter. Additional copies are available at the NCDOT website: <u>https://connect.ncdot.gov/resources/Environmental/</u>

The proposed let date for the project is August 15, 2017 with a review date of June 27, 2017.

## **Regulatory Approvals**

<u>Section 404 Permit:</u> All aspects of this project are being processed by the Federal Highway Administration as a "Categorical Exclusion" in accordance with 23 CFR 771.115(b). The NCDOT requests that the project be authorized by a NW 23 for bridge construction.

*Telephone:* (919) 707-6000 *Fax:* (919) 212-5785 *Customer Service:* 1-877-368-4968

*Location:* 1020 BIRCH RIDGE DRIVE RALEIGH, NC 27699

Website: www.ncdot.gov

<u>Section 401 Permit:</u> We anticipate 401 General Certification number 4093 and a Neuse Riparian Buffer Authorization will apply to this project. NCDOT is requesting written concurrence from the North Carolina Department of Environmental Quality, Division of Water Resources.

A copy of this permit application and its distribution list will be posted at the NCDOT website at https://connect.ncdot.gov/resources/Environmental/. Should you have any questions regarding this information, please contact Deanna Riffey at (919) 707-6151 or driffey@ncdot.gov

Sincerely,

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<sup>501</sup> Philip S. Harris III, P.E., C.P.M., Manager Natural Environment Section

cc: NCDOT Permit Application Standard Distribution List



|     | Pre-Construction Notification (PCN) Form   |                              |                                     |                   |                   |  |
|-----|--|------------------------------|-------------------------------------|-------------------|-------------------|--|
| Α.  | Applicant Information  |                              |                                     |                   |                   |  |
| 1.  | Processing   |                              |                                     |                   |                   |  |
| 1a. | Type(s) of approval sought from Corps:   | the                          | Section 404 Permit Sect             | ion 10 Permit     |                   |  |
| 1b. | Specify Nationwide Permit (NWP   | ) number: 2                  | 23 or General Permit (GP) number    | er:               |                   |  |
| 1c. | Has the NWP or GP number bee   | en verified b                | by the Corps?                       | 🗌 Yes             | 🖾 No              |  |
| 1d. | Type(s) of approval sought from  | the DWQ (                    | (check all that apply):             | 1                 |                   |  |
|     | A01 Water Quality Certification  | n – Regula                   | ar 🗌 Non-404 Jurisdiction           | al General Permi  | t                 |  |
|     | 401 Water Quality Certificatio   | on – Expres                  | s 🛛 Riparian Buffer Author          | orization         |                   |  |
| 1e. | I.e. Is this notification solely for the record<br>because written approval is not required?       For the record only for DWQ 401<br>Certification:       For the record only for DWQ 401   |                              |                                     |                   |                   |  |
| 1f. | If. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.       Image: Second se |                              |                                     |                   |                   |  |
| 1g. | 1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h Selow.  |                              |                                     |                   | 🖾 No              |  |
| 1h. | Is the project located within a NC   | DCM Area                     | a of Environmental Concern (AEC)?   | 🗌 Yes             | 🖾 No              |  |
| 2.  | Project Information  |                              |                                     |                   |                   |  |
| 2a. | Name of project:   | Replacen                     | nent of Bridge 32 on SR 1185 (Joyne | er Bridge Road) o | over Hannah Creek |  |
| 2b. | County:  | Johnston                     |                                     |                   |                   |  |
| 2c. | Nearest municipality / town:   | Newton G                     | Grove                               |                   |                   |  |
|     | Subdivision name:  | not applic                   | cable                               |                   |                   |  |
| 2e. | NCDOT only, T.I.P. or state project no:  | B-4770                       |                                     |                   |                   |  |
| 3.  | Owner Information  | T                            |                                     |                   |                   |  |
| За. | Name(s) on Recorded Deed:  | North Car                    | rolina Department of Transportation |                   |                   |  |
|     | Deed Book and Page No.   | not applic                   | cable                               |                   |                   |  |
| 3c. | Responsible Party (for LLC if applicable):   | / (for LLC if not applicable |                                     |                   |                   |  |
| 3d. | Street address:  | 1598 Mail Service Center     |                                     |                   |                   |  |
| 3e. | City, state, zip:  | Raleigh, NC 27699-1598       |                                     |                   |                   |  |
| 3f. | Telephone no.:   | (919) 707                    | 7-6151                              |                   |                   |  |
| 3g. | Fax no.:   | (919) 212                    | 2-5785                              |                   |                   |  |
| 3h. | Email address:   | driffey@n                    | ncdot.gov                           |                   |                   |  |

| 4. Applicant Information (if diff     | Applicant Information (if different from owner) |  |  |  |  |
|---------------------------------------|---|--|--|--|--|
| 4a. Applicant is:                     | Agent Other, specify:                           |  |  |  |  |
| 4b. Name:                             | not applicable                                  |  |  |  |  |
| 4c. Business name<br>(if applicable): |   |  |  |  |  |
| 4d. Street address:                   |   |  |  |  |  |
| 4e. City, state, zip:                 |   |  |  |  |  |
| 4f. Telephone no.:                    |   |  |  |  |  |
| 4g. Fax no.:                          |   |  |  |  |  |
| 4h. Email address:                    |   |  |  |  |  |
| 5. Agent/Consultant Informatio        | n (if applicable)                               |  |  |  |  |
| 5a. Name:                             | not applicable                                  |  |  |  |  |
| 5b. Business name (if applicable):    |   |  |  |  |  |
| 5c. Street address:                   |   |  |  |  |  |
| 5d. City, state, zip:                 |   |  |  |  |  |
| 5e. Telephone no.:                    |   |  |  |  |  |
| 5f. Fax no.:                          |   |  |  |  |  |
| 5g. Email address:                    |   |  |  |  |  |

| В.  | B. Project Information and Prior Project History  |  |  |  |  |  |  |
|-----|---|--|--|--|--|--|--|
| 1.  | Property Identification   |  |  |  |  |  |  |
| 1a. | Property identification no. (tax PIN or parcel ID):   | not applicable   |  |  |  |  |  |
| 1b. | Site coordinates (in decimal degrees):  | Latitude: 35.387319 Longitude: - 78.338661<br>(DD.DDDDDD) (-DD.DDDDDD) |  |  |  |  |  |
| 1c. | Property size:  | 4.73 acres   |  |  |  |  |  |
| 2.  | Surface Waters  |  |  |  |  |  |  |
| 2a. | Name of nearest body of water (stream, river, etc.) to proposed project:  | Hannah Creek   |  |  |  |  |  |
| 2b. | Water Quality Classification of nearest receiving water:  | C; NSW   |  |  |  |  |  |
| 2c. | River basin:  | Neuse  |  |  |  |  |  |
| 3.  | Project Description   |  |  |  |  |  |  |
| За. | Describe the existing conditions on the site and the general lar application:   |  |  |  |  |  |  |
|     | Land use within the vicinity is agriculture and large timber tract  | •  |  |  |  |  |  |
| 3b. | List the total estimated acreage of all existing wetlands on the 2.3 acres  | property:  |  |  |  |  |  |
| 3c. | List the total estimated linear feet of all existing streams (interm 250 linear feet  | nittent and perennial) on the property:                                |  |  |  |  |  |
| 3d. | Explain the purpose of the proposed project:<br>Bridge 32 is considered structurally deficient and is functionally  | y obsolete due to structure and substructure conditions.               |  |  |  |  |  |
| 3e. | Describe the overall project in detail, including the type of equi  | •  |  |  |  |  |  |
|     | The project involves replacement of existing Bridge No. 32, a will have 10-foot travel lanes in each direction with 3-foot shou same alignment as the existing bridge. Traffic will be detoured dozers, and cranes will be used.                      | ulders on each side. The new bridge will be placed on the              |  |  |  |  |  |
| 4.  | Jurisdictional Determinations   |  |  |  |  |  |  |
| 4a. | Have jurisdictional wetland or stream determinations by the<br>Corps or State been requested or obtained for this property /<br>project (including all prior phases) in the past?<br>Comments: JD packages were sent to USACE in May and<br>July 2013 | 🛛 Yes 🗌 No 📄 Unknown   |  |  |  |  |  |
| 4b. | If the Corps made the jurisdictional determination, what type of determination was made?  | Preliminary Final  |  |  |  |  |  |
| 4c. | If yes, who delineated the jurisdictional areas?<br>Name (if known):  | Agency/Consultant Company: Calyx (Mulkey)<br>Other:                    |  |  |  |  |  |
| 4d. | If yes, list the dates of the Corps jurisdictional determinations of  | or State determinations and attach documentation.                      |  |  |  |  |  |
| 5.  | Project History   |  |  |  |  |  |  |
| 5a. | Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?  | 🗌 Yes 🛛 No 🗌 Unknown   |  |  |  |  |  |
| 5b. | If yes, explain in detail according to "help file" instructions.  |  |  |  |  |  |  |
| 6.  | Future Project Plans  |  |  |  |  |  |  |
| 6a. | Is this a phased project?   | ☐ Yes  |  |  |  |  |  |
| 6b. | If yes, explain.  |  |  |  |  |  |  |

| C. Proposed Impacts Inventory                 |  |                                       |                       |                                 |                  |        |                             |  |  |
|---|--|---------------------------------------|-----------------------|---------------------------------|------------------|--------|-----------------------------|--|--|
| 1. Impacts Summary                            |  |                                       |                       |                                 |                  |        |                             |  |  |
| 1a. Which sections                            | 1a. Which sections were completed below for your project (check all that apply): |                                       |                       |                                 |                  |        |                             |  |  |
| ⊠ Wetlands                                    | ⊠ Wetlands ⊠ Streams - tributaries ⊠ Buffers                                     |                                       |                       |                                 |                  |        |                             |  |  |
| Open Waters                                   | s 🗌 I  | Pond Construction                     |                       |                                 |                  |        |                             |  |  |
| 2. Wetland Impac                              |  |                                       |                       |                                 |                  |        |                             |  |  |
|   |  | on the site, then complete the        |                       |                                 | rea impac        |        |                             |  |  |
| 2a.<br>Wetland impact                         | 2b.  | 2c.                                   | 2d.                   | 2e.                             |                  | 2f.    |                             |  |  |
| number –<br>Permanent (P) or<br>Temporary (T) | Type of impact   | Type of wetland<br>(if known)         | Forested              | Type of jurisc                  | liction          | Ar     | ea of impact<br>(acres)     |  |  |
| Site 2/3 🛛 P 🗌 T                              | Fill   | Bottomland Hardwood For               | res 🛛 Yes             | Corp                            |                  |        | 0.02                        |  |  |
| Site 2/3 🛛 P 🗌 T                              | Excavation   | Bottomland Hardwood For               | es 🛛 Yes              | Corp                            |                  |        | 0.02                        |  |  |
| Site 1-4 🛛 P 🗌 T                              | Mechanized<br>Clearing   | Bottomland Hardwood For               | es 🛛 Yes              | Corp                            |                  |        | 0.11                        |  |  |
| Site 2/3 🗌 P 🖾 T                              | Fill   | Bottomland Hardwood For               | es 🛛 Yes              | Corp                            |                  |        | 0.01                        |  |  |
| Site 2 🗌 P 🗌 T                                |  | Choose One                            | Yes No                | '                               |                  |        |                             |  |  |
| Site 3 🗌 P 🗌 T                                |  | Choose One                            | Yes No                |                                 |                  |        |                             |  |  |
| Site 4 🗌 P 🗌 T                                |  | Choose One                            | Yes No                | Corps                           |                  |        |                             |  |  |
| Site 5 🗌 P 🗌 T                                |  | Choose One                            | Yes No                | Corp                            |                  |        |                             |  |  |
| Site 6 🗌 P 🗌 T                                |  | Choose One                            | Yes No                | Corps                           |                  |        |                             |  |  |
| Site 7 🗌 P 🗌 T                                |  | Choose One                            | Yes No                | Corp                            |                  |        |                             |  |  |
|   |  |                                       | 2g.                   | Total wetland in                | mpacts           |        | .15 ac Perm<br>.01 ac Temp  |  |  |
| 2h. Comments: The                             | re will be 0.15 ac o   | of hand clearing and <0.01 a          | ic of fill due to     | bents in wetlands               | s.               |        |                             |  |  |
| 3. Stream Impacts                             |  |                                       |                       |                                 |                  |        |                             |  |  |
| question for all strea                        |  | ream impacts (including tem           | porary impacts        | s) proposed on th               | e site, the      | en coi | mplete this                 |  |  |
| 3a.   | 3b.  | 3c.                                   | 3d.                   | 3e.                             | 3f.              |        | 3g.                         |  |  |
| Stream impact<br>number -                     | Type of impact   | Stream name                           | Perennial<br>(PER) or | Type of<br>jurisdiction         | Averag<br>strear |        | Impact length (linear feet) |  |  |
| Permanent (P) or                              |  |                                       | intermittent          | (Corps - 404,                   | width            | ۱      | (,                          |  |  |
| Temporary (T)                                 |  |                                       | (INT)?                | 10<br>DWQ – non-<br>404, other) | (feet            | )      |                             |  |  |
| Site 1 🗌 P 🗌 T                                |  |                                       | PER INT               |                                 |                  |        |                             |  |  |
| Site 2 🗌 P 🗌 T                                |  |                                       |                       | Corps                           |                  |        |                             |  |  |
|   | 1  | · · · · · · · · · · · · · · · · · · · |                       | I stream and tribu              | utary impa       | acts   | 0 ft Perm<br>0 ft Temp      |  |  |
| 3i. Comments: There                           | e will be <0.01 ac   | of fill due to bents in surface       | waters                |                                 |                  |        |                             |  |  |

| 4. Open V | Nater I | mpacts |
|-----------|---------|--------|
|-----------|---------|--------|

| If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below. |               |                     |         |                         |             |                |          |            |              |                   |
|---|---------------|---------------------|---------|-------------------------|-------------|----------------|----------|------------|--------------|-------------------|
| 4a.   |               | 4b.                 | 4c.     |                         |             |                | 4d.      |            | 4e.          |                   |
| Open w  |               | Name of             |         |                         |             |                |          |            |              |                   |
| impact nu   |               | waterbody           |         | Type of impact          |             |                | erbody   | Area of im | pact (acres) |                   |
| Permaner<br>Tempora   |               | (if applicable)     |         |                         |             |                |          | ype        |              |                   |
| 01    F   |               |                     |         |                         |             |                |          |            |              |                   |
|   |               |                     |         |                         |             |                |          |            |              |                   |
| O3 ∏ F  |               |                     |         |                         |             |                |          |            |              |                   |
|   |               |                     |         |                         |             |                |          |            |              |                   |
|   |               |                     |         |                         |             | 46 Total anany |          |            | X Per        | manent            |
|   |               |                     |         |                         |             | 4f. Total open | water II | npacts     | X Ter        | mporary           |
| 4g. Comm  | 4g. Comments: |                     |         |                         |             |                |          |            |              |                   |
| 5. Pond or Lake Construction  |               |                     |         |                         |             |                |          |            |              |                   |
|   |               | struction proposed, |         | nplete                  | the chart b | elow.          |          |            |              | 1                 |
| 5a.   | 5b.           |                     | 5c.     |                         |             |                | 5d.      |            |              | 5e.               |
| Pond ID   | Pro           | Proposed use or     |         | Wetland Impacts (acres) |             |                | St       |            |              | Upland<br>(acres) |
| number  | pur           | pose of pond        | Flooded |                         |             |                | Flo      |            |              |                   |
|   |               |                     |         |                         | Filled      | Excavated      | ode<br>d | Filled     | Excavated    | Flooded           |
| P1  |               |                     |         |                         |             |                |          |            |              |                   |
| P2  |               |                     |         |                         |             |                |          |            |              |                   |
|   |               | 5f. Total           |         |                         |             |                |          |            |              |                   |
| 5g. Comm  | ents:         |                     |         |                         |             | •<br>•         |          |            |              |                   |
| 5h. Is a dam high hazard permit required?   |               |                     |         | ΠY                      | es          | □ No If ye     | es, perr | nit ID no  | :            |                   |
| 5i. Expected pond surface area (acres):   |               |                     |         |                         |             |                |          |            |              |                   |
| 5j. Size c  | of pond w     | atershed (acres):   |         |                         |             |                |          |            |              |                   |
| 5k. Metho   | d of con      | struction:          |         |                         |             |                |          |            |              |                   |

| 6. Buffer Impacts (for DWQ)  |                   |                  |                                   |                                |                                |  |  |  |
|--|-------------------|------------------|-----------------------------------|--------------------------------|--------------------------------|--|--|--|
| If project will impact a protected riparian buffer, then complete the chart below. If yes, then individually list all buffer impacts below. If any impacts require mitigation, then you <b>MUST</b> fill out Section D of this form. |                   |                  |                                   |                                |                                |  |  |  |
| 6а.  |                   |                  | 🛛 Neuse                           | Tar-Pamlico                    | Other:                         |  |  |  |
| Project is in which pro  | tected basin?     |                  | Catawba                           | Randleman                      | _                              |  |  |  |
| 6b.  | 6c.               | 6d.              | 6e.                               | 6f.                            | 6g.                            |  |  |  |
| Buffer impact<br>number –<br>Permanent (P) or<br>Temporary (T)   | Reason for impact | Stream name      | Buffer<br>mitigation<br>required? | Zone 1 impact<br>(square feet) | Zone 2 impact<br>(square feet) |  |  |  |
| В1 🛛 Р 🗌 Т   | Bridge            | Hannah           | □ Yes<br>⊠ No                     | 2,784                          | 767                            |  |  |  |
| B2 🛛 P 🗌 T   | Bridge            | Hannah           | ☐ Yes<br>⊠ No                     | 4,186                          | 1,344                          |  |  |  |
| ВЗ 🗌 Р 🗌 Т   | B3 🗌 P 🗌 T        |                  |                                   |                                |                                |  |  |  |
|  |                   | 6h. <b>Total</b> | buffer impacts                    | 6,970                          | 2,111                          |  |  |  |
| 6i. Comments:  |                   |                  |                                   |                                |                                |  |  |  |

| D.  | D. Impact Justification and Mitigation   |                          |  |  |  |  |  |
|-----|--|--------------------------|--|--|--|--|--|
| 1.  | 1. Avoidance and Minimization  |                          |  |  |  |  |  |
| 1a. | Specifically describe measures taken to avoid or minimize  | the proposed impacts i   | n designing project.                     |  |  |  |  |
|     | Replace in place was incorporated to minimize water resources impacts along with lengthening the bridge. Roadway drainage sheet flows over grassed slopes before entering wetlands. Other than no build the minimal effects to the wetlands and stream on this project is unavoidable. |                          |  |  |  |  |  |
| 1b. | . Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques.  |                          |  |  |  |  |  |
|     | NCDOT Best Management Practices for Construction and Anadromous Fish Moratorium from February 15 <sup>th</sup> to June 3   |                          | will be employed. Also, there will be an |  |  |  |  |
| 2.  | Compensatory Mitigation for Impacts to Waters of the   | U.S. or Waters of the    | State                                    |  |  |  |  |
| 2a. | a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?  |                          |  |  |  |  |  |
| 2b. | If yes, mitigation is required by (check all that apply):  |                          | rps                                      |  |  |  |  |
| 2c. | 2c. If yes, which mitigation option will be used for this project?       □ Mitigation bank         □ Mitigation bank       □ Payment to in-lieu fee program         □ Permittee Responsible Mitigation   |                          |  |  |  |  |  |
| 3.  | Complete if Using a Mitigation Bank  |                          |  |  |  |  |  |
| За. | Name of Mitigation Bank: not applicable  |                          |  |  |  |  |  |
| 3b. | Credits Purchased (attach receipt and letter)  | Туре                     | Quantity                                 |  |  |  |  |
| 3c. | Comments:  |                          |  |  |  |  |  |
| 4.  | Complete if Making a Payment to In-lieu Fee Program  |                          |  |  |  |  |  |
| 4a. | Approval letter from in-lieu fee program is attached.  | 🛛 Yes                    |  |  |  |  |  |
| 4b. | Stream mitigation requested:   | 0                        |  |  |  |  |  |
| 4c. | If using stream mitigation, stream temperature:  | 🖾 warm 🗌 co              | ol 🗌 cold                                |  |  |  |  |
| 4d. | Buffer mitigation requested (DWQ only):  | square feet              |  |  |  |  |  |
| 4e. | Riparian wetland mitigation requested:   | 0.15 acres               |  |  |  |  |  |
| 4f. | f. Non-riparian wetland mitigation requested: acres  |                          |  |  |  |  |  |
| 4g. | Coastal (tidal) wetland mitigation requested:  | acres                    |  |  |  |  |  |
| 4h. | Comments:  |                          |  |  |  |  |  |
| 5.  | Complete if Using a Permittee Responsible Mitigation R   | Plan                     |  |  |  |  |  |
| 5a. | If using a permittee responsible mitigation plan, provide a c  | description of the propo | sed mitigation plan.                     |  |  |  |  |

| 6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ  |                          |                                      |                      |   |  |  |  |  |
|---|--------------------------|--------------------------------------|----------------------|---|--|--|--|--|
| 6a. Will the project result in an impact within a protected riparian buffer that requires Section Yes No buffer mitigation?   |                          |                                      |                      |   |  |  |  |  |
| 6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.  |                          |                                      |                      |   |  |  |  |  |
| Zone  | 6c.<br>Reason for impact | 6d.<br>Total impact<br>(square feet) | Multiplier           | 6e.<br>Required mitigation<br>(square feet) |  |  |  |  |
| Zone 1  |                          |                                      | 3 (2 for Catawba)    |   |  |  |  |  |
| Zone 2  |                          |                                      | 1.5                  |   |  |  |  |  |
|   |                          | 6f. Total buffer                     | mitigation required: |   |  |  |  |  |
| 6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund). |                          |                                      |                      |   |  |  |  |  |
| 6h. Commer  | nts:                     |                                      |                      |   |  |  |  |  |

| E. Stormwater Management and Diffuse Flow Plan (required by DWQ)  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| 1. Diffuse Flow Plan  |  |  |  |  |  |  |
| 1a. Does the project include or is it adjacent to protected riparian buffers identified<br>within one of the NC Riparian Buffer Protection Rules? | 🗆 Yes 🛛 No   |  |  |  |  |  |
| 1b. If yes, then is a diffuse flow plan included? If not, explain why.<br>Comments:   | 🗌 Yes 🗌 No   |  |  |  |  |  |
| 2. Stormwater Management Plan   |  |  |  |  |  |  |
| 2a. What is the overall percent imperviousness of this project?   | N/A  |  |  |  |  |  |
| 2b. Does this project require a Stormwater Management Plan?   | 🛛 Yes 🗌 No   |  |  |  |  |  |
| 2c. If this project DOES NOT require a Stormwater Management Plan, explain why:   |  |  |  |  |  |  |
| 2d. If this project DOES require a Stormwater Management Plan, then provide a brief, na See attached permit drawings.                             | arrative description of the plan:  |  |  |  |  |  |
| 2e. Who will be responsible for the review of the Stormwater Management Plan?   | <ul> <li>Certified Local Government</li> <li>DWQ Stormwater Program</li> <li>DWQ 401 Unit</li> </ul>         |  |  |  |  |  |
| 3. Certified Local Government Stormwater Review   |  |  |  |  |  |  |
| 3a. In which local government's jurisdiction is this project?   | not applicable   |  |  |  |  |  |
| 3b. Which of the following locally-implemented stormwater management programs apply (check all that apply):                                       | Phase II NSW USMP Water Supply Watershed Other:  |  |  |  |  |  |
| 3c. Has the approved Stormwater Management Plan with proof of approval been attached?   | □ Yes □ No N/A   |  |  |  |  |  |
| 4. DWQ Stormwater Program Review  |  |  |  |  |  |  |
| 4a. Which of the following state-implemented stormwater management programs apply (check all that apply):   | <ul> <li>Coastal counties</li> <li>HQW</li> <li>ORW</li> <li>Session Law 2006-246</li> <li>Other:</li> </ul> |  |  |  |  |  |
| 4b. Has the approved Stormwater Management Plan with proof of approval been attached?   | ☐ Yes ☐ No N/A   |  |  |  |  |  |
| 5. DWQ 401 Unit Stormwater Review   |  |  |  |  |  |  |
| 5a. Does the Stormwater Management Plan meet the appropriate requirements?  | Yes No N/A   |  |  |  |  |  |
| 5b. Have all of the 401 Unit submittal requirements been met?   | ☐ Yes ☐ No N/A   |  |  |  |  |  |

| F.  | F. Supplementary Information   |                      |                    |  |  |  |
|-----|--|----------------------|--------------------|--|--|--|
| 1.  | Environmental Documentation (DWQ Requirement)  |                      |                    |  |  |  |
| 1a. | Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?   | ⊠ Yes                | 🗌 No               |  |  |  |
| 1b. | If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?                           | 🛛 Yes                | 🗌 No               |  |  |  |
| 1c. | If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.)<br>Comments:   | ⊠ Yes                | 🗌 No               |  |  |  |
|     |  |                      |                    |  |  |  |
| 2.  | Violations (DWQ Requirement)   |                      |                    |  |  |  |
| 2a. | Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?   | 🗌 Yes                | 🛛 No               |  |  |  |
| 2b. | Is this an after-the-fact permit application?  | 🗌 Yes                | 🖂 No               |  |  |  |
| 2c. | If you answered "yes" to one or both of the above questions, provide an explanation of   | of the violation(s): |                    |  |  |  |
| 3.  | Cumulative Impacts (DWQ Requirement)   |                      |                    |  |  |  |
| 3a. | Will this project (based on past and reasonably anticipated future impacts) result in  | 🗌 Yes                |                    |  |  |  |
|     | additional development, which could impact nearby downstream water quality?  | 🖾 No                 |                    |  |  |  |
| 3b. | If you answered "yes" to the above, submit a qualitative or quantitative cumulative impost recent DWQ policy. If you answered "no," provide a short narrative description.   | oact analysis in a   | ccordance with the |  |  |  |
|     | Due to the minimal transportation impact resulting from the bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary. |                      |                    |  |  |  |
| 4.  | Sewage Disposal (DWQ Requirement)  |                      |                    |  |  |  |
| 4a. | Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge between the proposed project, or available capacity of the subject facility.   | arge) of wastewat    | er generated from  |  |  |  |

| 5.   | . Endangered Species and Designated Critical Habitat (Corps Requirement)  |   |                           |            |  |  |  |
|------|---|---|---------------------------|------------|--|--|--|
| 5a.  | Will this project occur in or near an an habitat?   | ea with federally protected species or  | 🖂 Yes                     | □ No       |  |  |  |
| 5b.  | Have you checked with the USFWS c impacts?  | oncerning Endangered Species Act  | 🖂 Yes                     | □ No       |  |  |  |
| 5c.  | If yes, indicate the USFWS Field Offic  | Raleigh   |                           |            |  |  |  |
| 5d.  | 5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical<br>Habitat?   |   |                           |            |  |  |  |
|      | USFWS county list and NCNHP datab   | base along with field surveys.  |                           |            |  |  |  |
|      | Surveys last conducted for Michaux's sumac on October 19, 2016. Habitat is present, but no Michaux's sumac were found during survey. Biological conclusion is No Effect. Habitat was not found in the study area for red-cockaded woodpecker. Biological conclusion is No Effect. Habitat for dwarf wedgemussel and Tar spinymussel was found in study area. Surveys were done October 4, 216, but no dwarf wedgemussels or Tar spinymussels were found. Biological conclusion is May Affect, Not Likely to Adversely Affect. See attached USFWS concurrence.   |   |                           |            |  |  |  |
| 6.   | Essential Fish Habitat (Corps Requ  | irement)  |                           |            |  |  |  |
| 6a.  | Will this project occur in or near an are   | ea designated as essential fish habitat?  | 🗌 Yes                     | 🛛 No       |  |  |  |
| 6b.  | What data sources did you use to det  | ermine whether your site would impact E   | ssential Fish Habitat?    |            |  |  |  |
|      | NMFS County Index   |   |                           |            |  |  |  |
| 7.   | Historic or Prehistoric Cultural Res  | ources (Corps Requirement)  |                           |            |  |  |  |
| 7a.  | Will this project occur in or near an argovernments have designated as hav<br>status (e.g., National Historic Trust de<br>North Carolina history and archaeolog   | ing historic or cultural preservation<br>signation or properties significant in | 🗌 Yes                     | No No      |  |  |  |
| 7b.  | What data sources did you use to det  | ermine whether your site would impact hi  | storic or archeological r | resources? |  |  |  |
|      | NEPA Documentation  |   |                           |            |  |  |  |
| 8. I | Flood Zone Designation (Corps Requ  | uirement)   |                           |            |  |  |  |
| 8a.  | Will this project occur in a FEMA-desig   | gnated 100-year floodplain?   | 🖂 Yes                     | 🗌 No       |  |  |  |
| 8b.  | 8b. If yes, explain how project meets FEMA requirements: NCDOT Hydraulics Unit coordination with FEMA   |   |                           |            |  |  |  |
| 8c.  | 8c. What source(s) did you use to make the floodplain determination? FEMA Maps  |   |                           |            |  |  |  |
|      | Philip S. Harris III, P.E., C.P.M.<br>sof Applicant/Agent's Printed Name<br>Colin Mellor Distribution of Distributic of Distributic of Distribution of Distribution of Distributi |   |                           |            |  |  |  |



March 20, 2017

Mr. Philip S. Harris, III, P.E., CPM Project Development and Environmental Analysis Unit North Carolina Department of Transportation 1598 Mail Service Center Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

Subject: Mitigation Acceptance Letter:

B-4770, Replace Bridge 32 over Hannah Creek on SR 1185, Johnston County

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the compensatory wetland mitigation for the subject project. Based on the information supplied by you on March 17, 2017, the impacts are located in CU 03020201 of the Neuse River basin in the Northern Inner Coastal Plain (NICP) Eco-Region, and are as follows:

| Neuse                |      | Stream |      |          | Wetlands         |                  | Buffer | (Sq. Ft.) |
|----------------------|------|--------|------|----------|------------------|------------------|--------|-----------|
| 03020201<br>NICP     | Cold | Cool   | Warm | Riparian | Non-<br>Riparian | Coastal<br>Marsh | Zone 1 | Zone 2    |
| Impacts (feet/acres) | 0    | 0      | 0    | 0.15     | 0                | 0                | 0      | 0         |

\*Some of the stream and/or wetland impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

This mitigation acceptance letter replaces the mitigation acceptance letter issued on December 20, 2016. DMS commits to implementing sufficient compensatory wetland mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS.

If you have any questions or need additional information, please contact Beth Harmon at 919-707-8420.

Sincerely James B. Stanfill

James B. Stanfill Gredit Management Supervisor

cc: Mr. Tom Steffens, USACE – Washington Regulatory Field Office Ms. Amy Chapman, NCDWR File: B-4770 Revised



State of North Carolina | Environmental Quality 217 West Jones Street | 1601 Mail Service Center | Raleigh, North Carolina 27699-1601 919 707 8600



## **United States Department of the Interior**

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

January 9, 2017

Philip S. Harris III, P.E, C.P.M North Carolina Department of Transportation PDEA – Natural Environment Section 1598 Mail Service Center Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

This letter is in response to your letter of December 20, 2016 which provided the U.S. Fish and Wildlife Service (Service) with the biological conclusion of the North Carolina Department of Transportation (NCDOT) that the replacement of Bridge No. 32 on SR 1185 over Hannah Creek in Johnston County (TIP No. B-4770) may affect, but is not likely to adversely affect the federally endangered dwarf wedgemussel (*Alasmidonta heterodon*) and Tar River spinymussel (*Elliptio steinstansana*). In addition, NCDOT has determined that the project will have no effect on the federally endangered red-cockaded woodpecker (*Picoides borealis*) and Michaux's sumac (*Rhus michauxii*). The following response is provided in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

According to information provided, a mussel survey was conducted at the project site on October 4, 2016. The survey extended 100 meters upstream and 400 meters downstream of SR 1185. Neither of the federally listed mussel species was found, and habitat quality for the two species was only marginally suitable. Only a single mussel specimen was observed during the survey, of the common species *Elliptio complanata*.

Based on the mussel survey results and the lack of good habitat, the Service concurs with your conclusion that the proposed bridge replacement may affect, but is not likely to adversely affect the dwarf wedgemussel and Tar River spinymussel. We also concur that the project will have no effect on the red-cockaded woodpecker (due to lack of habitat) and Michaux's sumac (due to no specimens being observed during an October 19, 2016 survey. We believe that the requirements of Section 7(a)(2) of the ESA have been satisfied. We remind you that obligations under Section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered in this review; (2) this action is subsequently modified in a manner that was not considered in this review; or (3) a new species is listed or critical habitat determined that may be affected by this identified action.

The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520 (Ext. 32).

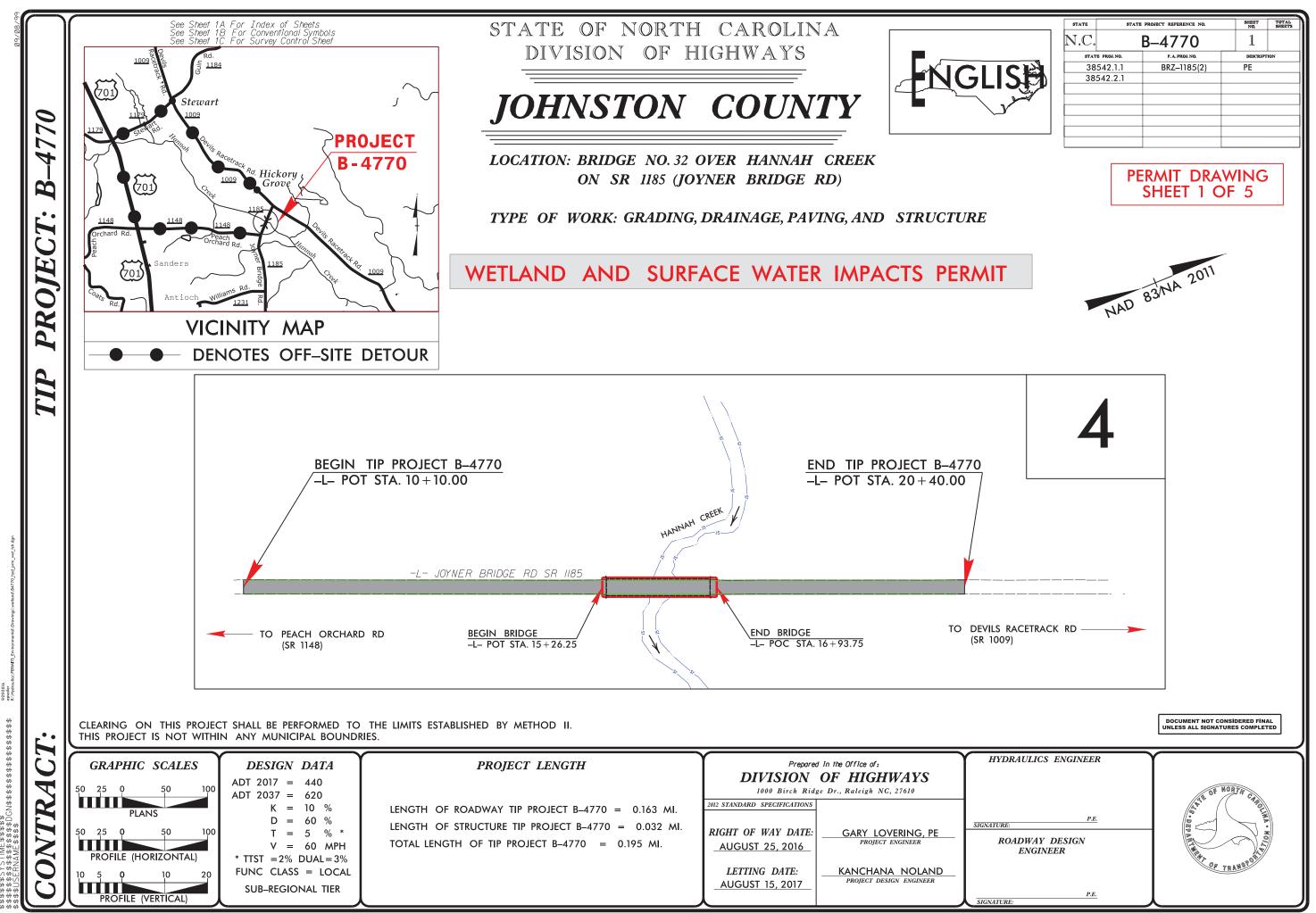
Sincerely,

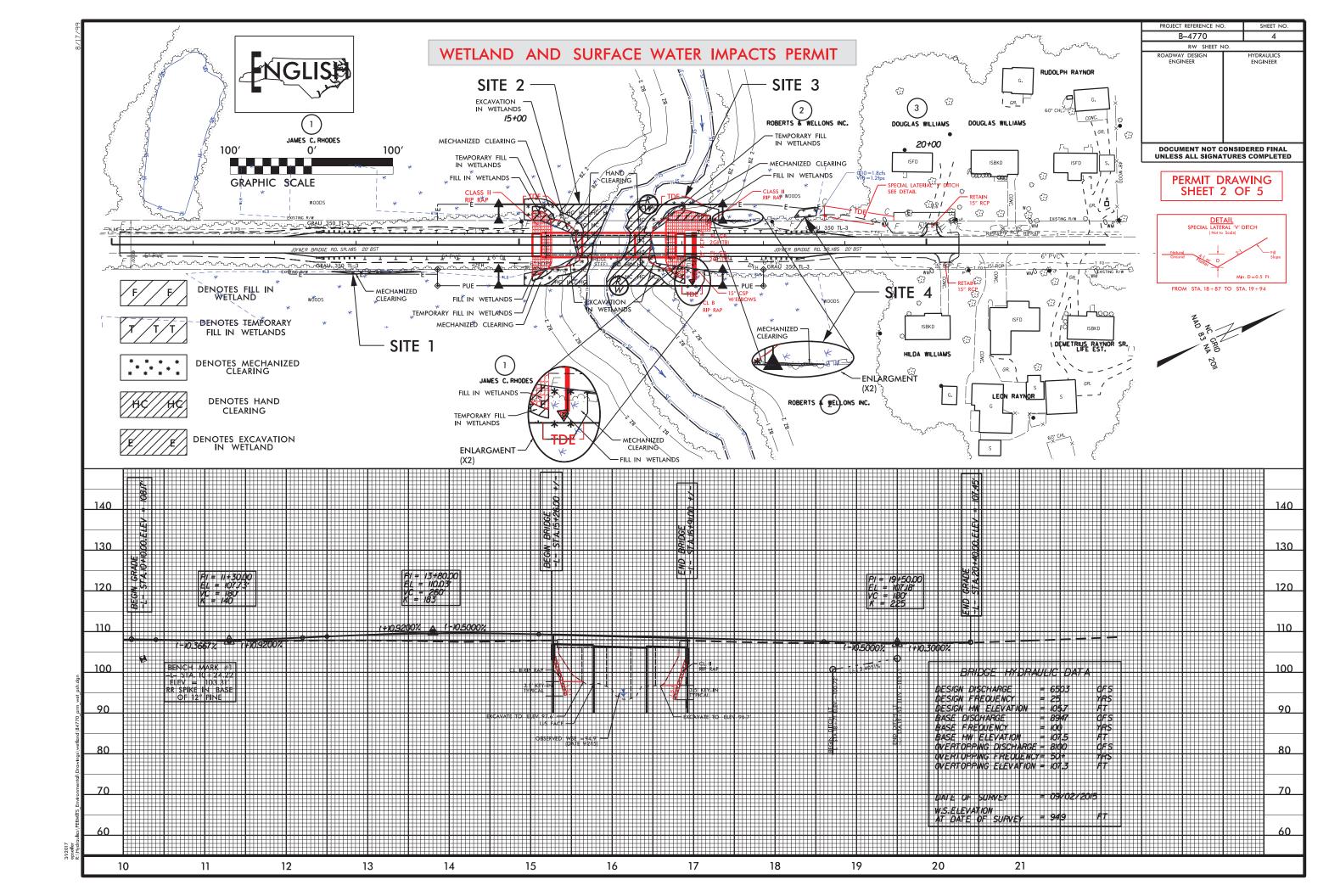
Harry Jordan for Pete Benjamin Field Supervisor

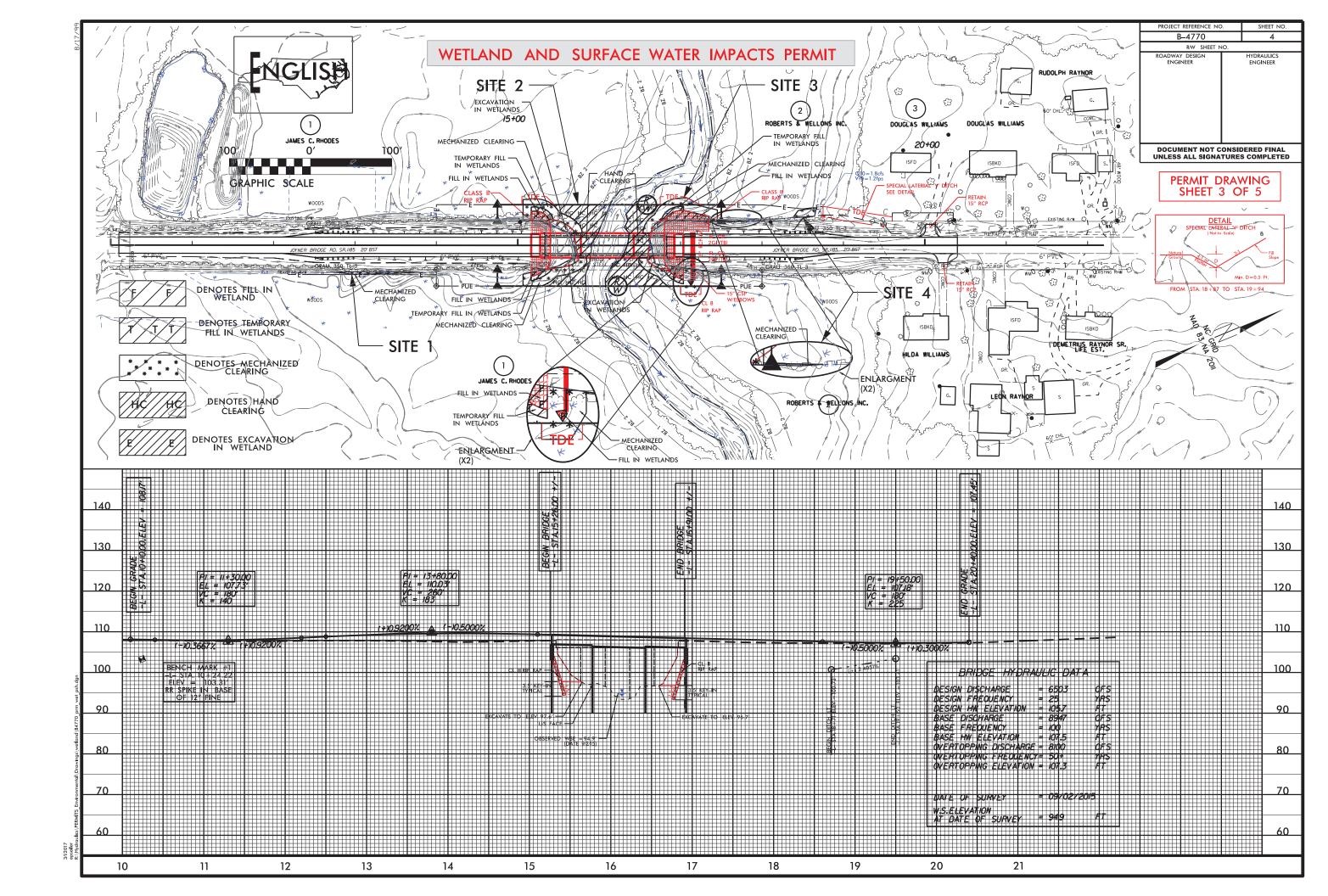
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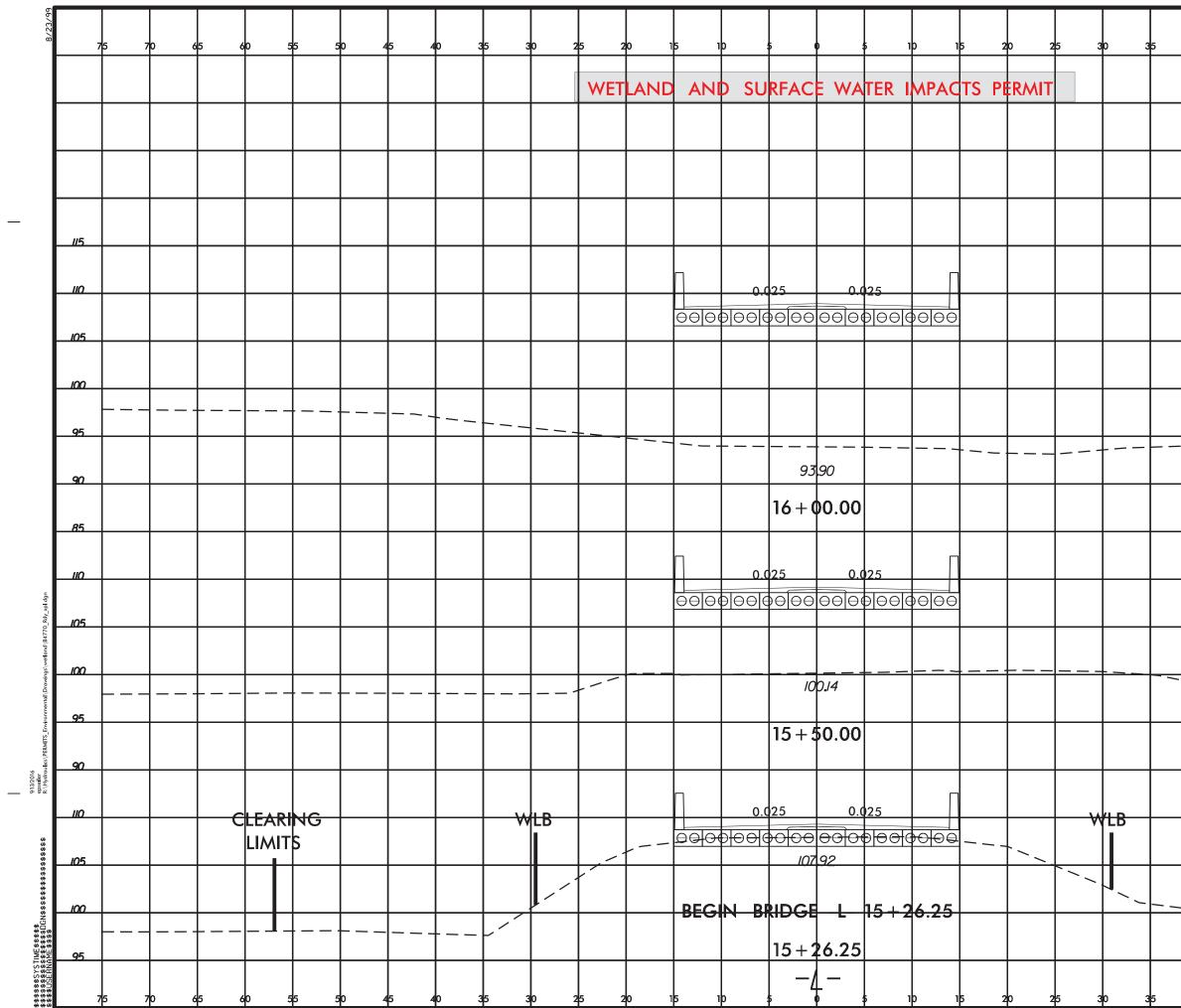
Deanna Riffey, NCDOT, Raleigh, NC Tom Steffens, USACE, Washington, NC Travis Wilson, NCWRC, Creedmoor, NC

| (Version 2.06; Released WBS Element:   |  | TIP No.:  | B-4770  | Highway St<br>STORMWATEF<br>FOR NO<br>County(   | eartment of Transportation<br>ormwater Program<br>MANAGEMENT PLAN<br>CDOT PROJECTS<br>es): Johnston                    | on   |  | Page             | 1                                   | of 1                              |
|--|--|---|---|---|--|--|--|------------------|-------------------------------------|-----------------------------------|
|  |  |   |   | General Pr  | oject Information  |  |  |                  |                                     |                                   |
| WBS Element:   |  | 38542.1.1   |   | TIP Number: B-4770  |  | Project  |  | ement Da         | ate:                                | 8/22/2016                         |
| NCDOT Contact:   |  | Paul Atkinson, PE   |   |   | Contractor / Desig   |  | Erik Seiler  |                  |                                     |                                   |
|  | Address:   | NCDOT   |   |   |  | Address:   | NCDOT  |                  |                                     |                                   |
|  |  | 1590 Mail Service   | Center  |   |  |  | 1590 Mail Service Center   |                  |                                     |                                   |
|  |  | Raleigh, NC 27699   | 9-1590  |   |  |  | Raleigh, NC 27699-1590   |                  |                                     |                                   |
|  | Phone:   | (919) 707-6707  |   |   |  | Phone:   | (919) 707-6757   |                  |                                     |                                   |
|  | Email:   | patkinson@ncdot.g   | gov   |   |  | Email:   | epseiler@ncdot.gov   |                  |                                     |                                   |
| City/Town:   |  |   |   |   | County(ies):   | Johns  | ston   |                  |                                     |                                   |
| River Basin(s):  |  | Neus  | se  |   | CAMA County?   | No   | )  |                  |                                     |                                   |
| Wetlands within Pro  | ject Limits?   | Yes   |   |   |  |  |  |                  |                                     |                                   |
|  |  | -   |   |   | Description  |  |  |                  |                                     |                                   |
| Project Length (lin. r   | miles or feet):  | 0.195 n   | niles   | Surrounding Land Use  |  | 1  |  |                  |                                     |                                   |
|  |  |   |   | Proposed Project  |  |  | Exis   | ting Site        |                                     |                                   |
| Project Built-Upon A<br>Typical Cross Section  |  |   |   | ac.<br>RAVEL LANES IN EACH DIR  |  | DOADWAN  | AVING TWO 10' TRAVEL L   | ac.              | DECTION                             |                                   |
|  |  | OUTSIDE GRASS   | SHOULDER.   | TOTAL PAVEMENT WIDTH I  | S 20'.   | VARIABLE (2<br>20'.  | '-6') OUTSIDE GRASS SHC  | OULDER . TOTAL F | PAVEMEN                             | r width is                        |
|  |  |   |   |   |  |  |  |                  |                                     |                                   |
| Annual Avg Daily Tra<br>General Project Narr<br>(Description of Minir  | rative:  | PROJECT HAS A   | OF BRIDGE 32<br>STORM DRAIN   | 618<br>OVER HANNAH CREEK. TH<br>VAGE SYSTEM COLLECTION  | G BRIDGE DISCHARGE V   | WHICH WILL E   | E DISSIPATED BY A RIP R  | RAP PAD AT THE F | PIPE OUTL                           | ET LOCATED                        |
| General Project Nari   | rative:  | REPLACEMENT O   | OF BRIDGE 32<br>STORM DRAIN   | OVER HANNAH CREEK. TH   | E RECOMMENDED STR  | UCTURE IS 1@<br>WHICH WILL E   | ᡚ50' 21"CS, 1@65' 24"CS,<br>E DISSIPATED BY A RIP R                            | RAP PAD AT THE F | 'H 4' DEEP<br>PIPE OUTL             | CAP. THIS<br>ET LOCATED           |
| General Project Narr<br>(Description of Minir<br>Quality Impacts)  | rative:<br>mization of Water   | REPLACEMENT O<br>PROJECT HAS A<br>AT TOE OF FILL.   | OF BRIDGE 32<br>STORM DRAIN<br>ROADWAY DR   | OVER HANNAH CREEK. TH<br>VAGE SYSTEM COLLECTIN<br>AINAGE SHEET FLOWS OV   | E RECOMMENDED STR<br>B BRIDGE DISCHARGE V<br>ER GRASSED SLOPES I   | UCTURE IS 1 (<br>WHICH WILL E<br>BEFORE ENTI                                     | ᡚ50' 21"CS, 1@65' 24"CS,<br>E DISSIPATED BY A RIP R                            | RAP PAD AT THE F | 'H 4' DEEP<br>PIPE OUTL             | CAP. THIS<br>ET LOCATED           |
| General Project Narı<br>(Description of Minir<br>Quality Impacts)  | rative:<br>mization of Water   | REPLACEMENT O<br>PROJECT HAS A<br>AT TOE OF FILL.   | OF BRIDGE 32<br>STORM DRAIN<br>ROADWAY DR   | OVER HANNAH CREEK. TH<br>VAGE SYSTEM COLLECTIN<br>AINAGE SHEET FLOWS OV<br>Waterbo  | E RECOMMENDED STR<br>B BRIDGE DISCHARGE V<br>ER GRASSED SLOPES I<br>NCDWR Stream In                                    | UCTURE IS 1 (<br>WHICH WILL E<br>BEFORE ENTI<br>BEFORE ENTI                      | ᡚ50' 21"CS, 1@65' 24"CS,<br>E DISSIPATED BY A RIP R                            | RAP PAD AT THE F | 'H 4' DEEP<br>PIPE OUTL             | CAP. THIS<br>ET LOCATED           |
| General Project Narr<br>(Description of Minir<br>Quality Impacts)<br>Surface Water Body  | rative:<br>mization of Water   | REPLACEMENT (<br>PROJECT HAS A<br>AT TOE OF FILL.<br>BRIDGE.                                    | OF BRIDGE 32<br>STORM DRAIN<br>ROADWAY DR   | OVER HANNAH CREEK. TH<br>VAGE SYSTEM COLLECTIN<br>AINAGE SHEET FLOWS OV   | E RECOMMENDED STR<br>BRIDGE DISCHARGE V<br>ER GRASSED SLOPES I<br>NCDWR Stream In<br>Class                             | DCTURE IS 1<br>WHICH WILL E<br>BEFORE ENTI<br>BEFORE ENTI                        | ᡚ50' 21"CS, 1@65' 24"CS,<br>E DISSIPATED BY A RIP R                            | RAP PAD AT THE F | 'H 4' DEEP<br>PIPE OUTL             | CAP. THIS<br>ET LOCATED           |
| General Project Narr<br>(Description of Minir<br>Quality Impacts)<br>Surface Water Body<br>NCDWR Surface Wa  | rative:<br>mization of Water<br>(1):<br>ter Classification fo  | REPLACEMENT (<br>PROJECT HAS A<br>AT TOE OF FILL.<br>BRIDGE.                                    | DF BRIDGE 32<br>STORM DRAIN<br>ROADWAY DF   | OVER HANNAH CREEK. TH<br>VAGE SYSTEM COLLECTIN<br>AINAGE SHEET FLOWS OV<br>Materbo<br>Control of the Creek  | E RECOMMENDED STR<br>BRIDGE DISCHARGE V<br>ER GRASSED SLOPES I<br>NCDWR Stream In<br>Class                             | DCTURE IS 1<br>WHICH WILL E<br>BEFORE ENTI<br>BEFORE ENTI                        | ᡚ50' 21"CS, 1@65' 24"CS,<br>E DISSIPATED BY A RIP R                            | RAP PAD AT THE F | 'H 4' DEEP<br>PIPE OUTL             | CAP. THIS<br>ET LOCATED           |
| General Project Narr<br>(Description of Minir<br>Quality Impacts)<br>Surface Water Body<br>NCDWR Surface Wa<br>Other Stream Classi   | rative:<br>mization of Water<br>(1):<br>ter Classification fo  | REPLACEMENT (<br>PROJECT HAS A<br>AT TOE OF FILL.<br>BRIDGE.                                    | DF BRIDGE 32<br>STORM DRAIN<br>ROADWAY DF<br>Hanna                                  | OVER HANNAH CREEK. TH<br>VAGE SYSTEM COLLECTIN<br>AINAGE SHEET FLOWS OV<br>Materbo<br>Control of the Creek  | E RECOMMENDED STR<br>BRIDGE DISCHARGE V<br>ER GRASSED SLOPES I<br>NCDWR Stream In<br>Class                             | DCTURE IS 1<br>WHICH WILL E<br>BEFORE ENTI<br>BEFORE ENTI                        | ᡚ50' 21"CS, 1@65' 24"CS,<br>E DISSIPATED BY A RIP R                            | RAP PAD AT THE F | 'H 4' DEEP<br>PIPE OUTL             | CAP. THIS<br>ET LOCATED           |
| General Project Narr<br>(Description of Minir<br>Quality Impacts)<br>Surface Water Body<br>NCDWR Surface Wa<br>Other Stream Classi<br>Impairments:   | rative:<br>mization of Water<br>(1):<br>ter Classification fo<br>fication:                             | REPLACEMENT (<br>PROJECT HAS A<br>AT TOE OF FILL.<br>BRIDGE.                                    | DF BRIDGE 32<br>STORM DRAIN<br>ROADWAY DF<br>Hanna                                  | Waterbo   | E RECOMMENDED STR<br>BRIDGE DISCHARGE V<br>ER GRASSED SLOPES I<br>NCDWR Stream In<br>Class                             | DCTURE IS 1<br>WHICH WILL E<br>BEFORE ENTI<br>BEFORE ENTI                        | ᡚ50' 21"CS, 1@65' 24"CS,<br>E DISSIPATED BY A RIP R                            | RAP PAD AT THE F | 'H 4' DEEP<br>PIPE OUTL             | CAP. THIS<br>ET LOCATED           |
| General Project Narr<br>(Description of Minir<br>Quality Impacts)<br>Surface Water Body<br>NCDWR Surface Wa<br>Other Stream Classi<br>Impairments:<br>Aquatic T&E Species                    | rative:<br>mization of Water<br>(1):<br>ter Classification fo<br>fication:                             | REPLACEMENT (<br>PROJECT HAS A<br>AT TOE OF FILL.<br>BRIDGE.<br>r Water Body                    | DF BRIDGE 32<br>STORM DRAIN<br>ROADWAY DF<br>Hanna                                  | Waterbo   | E RECOMMENDED STR<br>BRIDGE DISCHARGE V<br>ER GRASSED SLOPES I<br>NCDWR Stream In<br>Class                             | Idex No.:<br>C<br>Vaters (NSW)   | ᡚ50' 21"CS, 1@65' 24"CS,<br>E DISSIPATED BY A RIP R                            | RAP PAD AT THE F | H 4' DEEP<br>PIPE OUTL<br>DRAINS ON | CAP. THIS<br>ET LOCATED<br>I THIS |
| General Project Narr<br>(Description of Minir<br>Quality Impacts)<br>Surface Water Body<br>NCDWR Surface Wa<br>Other Stream Classi<br>Impairments:<br>Aquatic T&E Species<br>NRTR Stream ID: | rative:<br>mization of Water<br>(1):<br>ter Classification fo<br>fication:<br>s?                       | REPLACEMENT O<br>PROJECT HAS A<br>AT TOE OF FILL.<br>BRIDGE.<br>r Water Body<br>Non<br>Non      | DF BRIDGE 32<br>STORM DRAIN<br>ROADWAY DF<br>Hanna                                  | Waterbo   | E RECOMMENDED STR<br>BRIDGE DISCHARGE V<br>ER GRASSED SLOPES I<br>NCDWR Stream In<br>Class<br>On: Nutrient Sensitive V | DCTURE IS 1 (<br>WHICH WILL E<br>BEFORE ENTI<br>BEFORE ENTI<br>C<br>Naters (NSW) | 250' 21"CS, 1@65' 24"CS, 1<br>E DISSIPATED BY A RIP R<br>ERING WETLANDS. THERI | 27-52-6          |                                     | CAP. THIS<br>ET LOCATED           |
| General Project Narr<br>(Description of Minir<br>Quality Impacts)<br>Surface Water Body<br>NCDWR Surface Wa<br>Other Stream Classi<br>Impairments:<br>Aquatic T&E Species                    | rative:<br>mization of Water<br>(1):<br>ter Classification fo<br>fication:<br>s?<br>dge Spanning Water | REPLACEMENT O<br>PROJECT HAS A<br>AT TOE OF FILL.<br>BRIDGE.<br>r Water Body<br>Non<br>No<br>No | DF BRIDGE 32<br>STORM DRAIN<br>ROADWAY DF<br>Hanna<br>Hanna<br>Ie<br>Ie<br>Comments | Waterbo         Waterbo         ANAGE SYSTEM COLLECTING         AINAGE SHEET FLOWS ON         AINAGE SHEET FLOWS ON         In Creek         Primary Classification:         Supplemental Classification:         Supplemental Classification:         Deck Drains Discharge ON | E RECOMMENDED STR<br>BRIDGE DISCHARGE V<br>ER GRASSED SLOPES I<br>NCDWR Stream In<br>Class<br>On: Nutrient Sensitive V | INO  | 250' 21"CS, 1@65' 24"CS, 1<br>E DISSIPATED BY A RIP R<br>ERING WETLANDS. THERI | 27-52-6          | H 4' DEEP<br>PIPE OUTL<br>DRAINS ON | CAP. THIS<br>ET LOCATED<br>I THIS |









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|   |     |             |             |      |      |                    |             |         | 105               |
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|   |     |             |             |      |      |                    |             |         |                   |
|   |     |             |             |      |      |                    |             |         | 90                |
|   |     | CLEA<br>LIM | <u>RING</u> | )    |      |                    |             |         | 110               |
|   |     |             |             |      |      |                    |             |         | 105               |
|   |     |             |             | · :  |      |                    |             |         | _100              |
|   |     |             |             |      | <br> | -                  |             | _       | 95                |
| 4 | 04  | 55          | 05          | 5 έ  | 0    | 65                 | 70          | 75      |                   |

|             |                                   |                          |  | WE                                   | TLAND IMPA | CTS   |  |                                    | SURFA                          | CE WATER IN   | IPACTS  |                                  |
|-------------|-----------------------------------|--------------------------|--|--------------------------------------|------------|---|--|------------------------------------|--------------------------------|---|---|----------------------------------|
| Site<br>No. | Station<br>(From/To)              | Structure<br>Size / Type | Permanent<br>Fill In<br>Wetlands<br>(ac) | Temp.<br>Fill In<br>Wetlands<br>(ac) | in         | Mechanized<br>Clearing<br>in Wetlands<br>(ac) | Hand<br>Clearing<br>in<br>Wetlands<br>(ac) | Permanent<br>SW<br>impacts<br>(ac) | Temp.<br>SW<br>impacts<br>(ac) | Existing<br>Channel<br>Impacts<br>Permanent<br>(ft) | Existing<br>Channel<br>Impacts<br>Temp.<br>(ft) | Natura<br>Strea<br>Desig<br>(ft) |
| 1           | -L- STA 12+69 TO<br>-L- STA 13+80 | ROADWAY                  |  |                                      |            | < 0.01  |  |                                    |                                |   |   |                                  |
| 2           | -L- STA 15+06<br>-L- STA 16+14    | BRIDGE                   | < 0.01                                   | < 0.01                               | 0.01       | 0.04  | 0.07                                       |                                    |                                |   |   |                                  |
| 3           | -L- STA 16+07 TO<br>-L- STA 17+45 | BRIDGE                   | 0.02                                     | < 0.01                               | < 0.01     | 0.06  | 0.08                                       |                                    |                                |   |   |                                  |
| 4           | -L- STA 17+45 TO<br>-L- STA 17+82 | ROADWAY                  |  |                                      |            | < 0.01  |  |                                    |                                |   |   |                                  |
|             | -L- STA 18+37 TO<br>-L- STA 18+67 | ROADWAY                  |  |                                      |            | < 0.01  |  |                                    |                                |   |   |                                  |
|             |                                   |                          |  |                                      |            |   |  |                                    |                                |   |   |                                  |
| TALS*:      |                                   |                          | 0.02                                     | 0.01                                 | 0.02       | 0.11  | 0.15                                       |                                    |                                | 0   | 0   | 0                                |

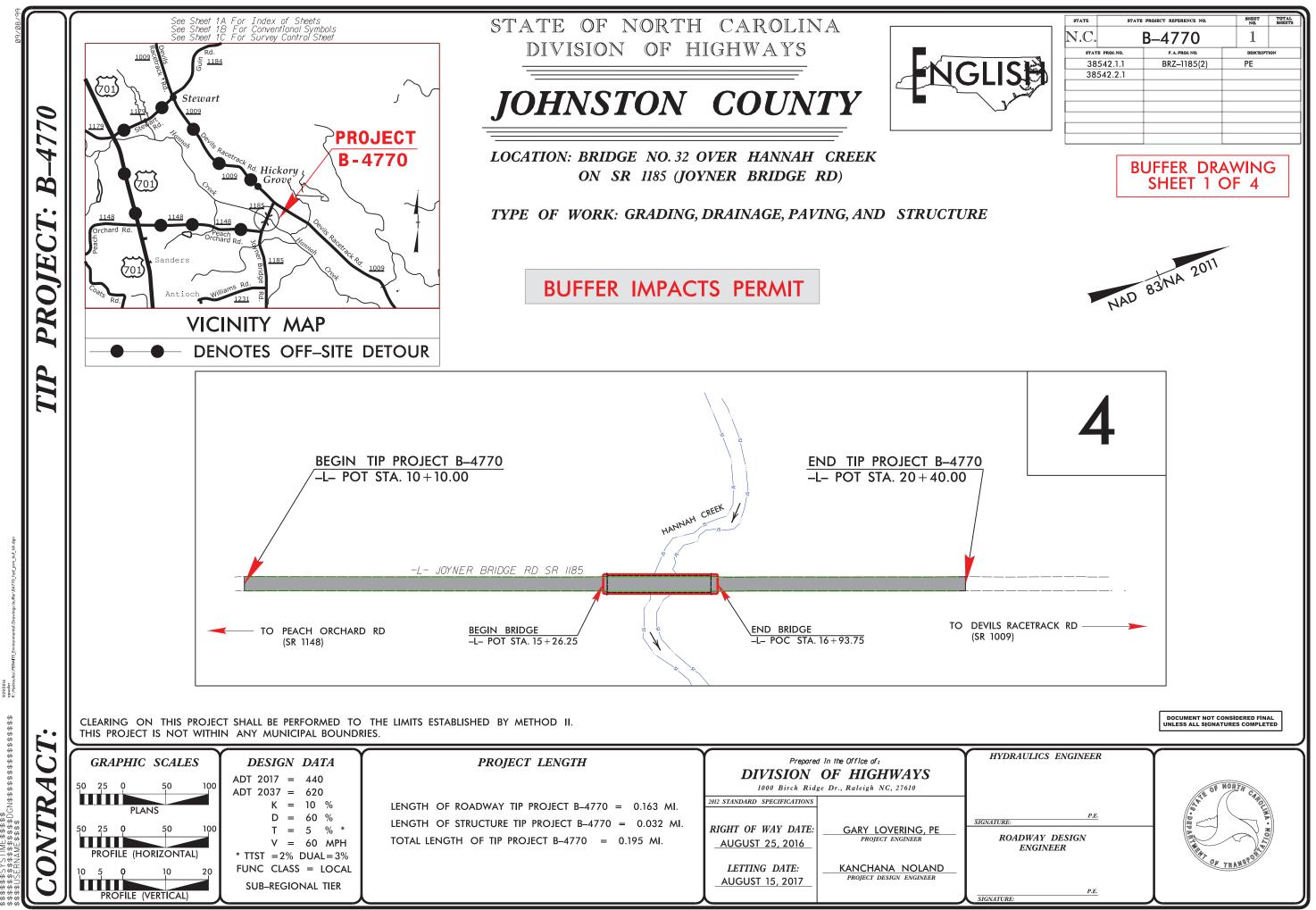
NOTES:

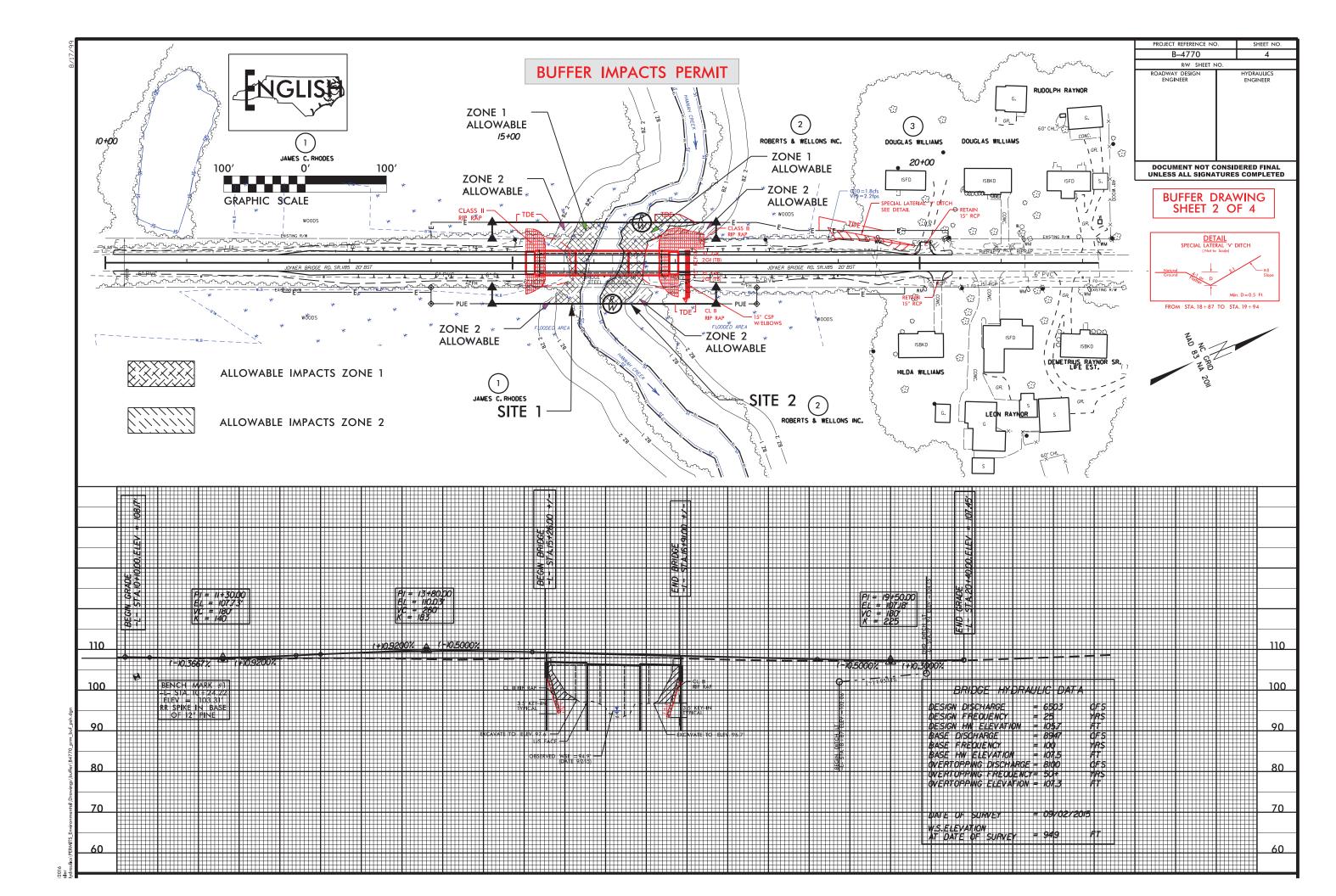
Bridge:

Permanent impacts due to bents in wetlands: 28 sf (<0.01 acres)

SHEET

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|          |                          |                      | BU               | FFER   |                    | CTS S                        | UMM                          | ARY                         |                              |                              |            |
|----------|--------------------------|----------------------|------------------|--------|--------------------|------------------------------|------------------------------|-----------------------------|------------------------------|------------------------------|------------|
|          |                          |                      |                  |        |                    |                              | IMPAC1                       | Г                           |                              |                              |            |
|          |                          |                      |                  | TYPE   |                    | AL                           | LOWABI                       | LE                          |                              | MITIGABL                     | _E         |
| SITE NO. | STRUCTURE SIZE /<br>TYPE | STATION<br>(FROM/TO) | ROAD<br>CROSSING | BRIDGE | PARALLEL<br>IMPACT | ZONE 1<br>(ft <sup>2</sup> ) | ZONE 2<br>(ft <sup>2</sup> ) | TOTAL<br>(ft <sup>2</sup> ) | ZONE 1<br>(ft <sup>2</sup> ) | ZONE 2<br>(ft <sup>2</sup> ) | TOT<br>(ft |
| 1        | BRIDGE                   | -L- STA. 15+34 TO    |                  | x      |                    | 2784                         | 767                          | 3551                        |                              |                              |            |
|          |                          | -L- STA. 16+14       |                  |        |                    |                              |                              |                             |                              |                              |            |
| 2        | BRIDGE                   | -L- STA. 16+07 TO    |                  | x      |                    | 4186                         | 1344                         | 5530                        |                              |                              |            |
|          |                          | -L- STA. 17+62       |                  |        |                    |                              |                              |                             |                              |                              |            |
|          |                          |                      |                  |        |                    |                              |                              |                             |                              |                              |            |
|          |                          |                      |                  |        |                    |                              |                              |                             |                              |                              |            |
|          |                          |                      |                  |        |                    |                              |                              |                             |                              |                              |            |
|          |                          |                      |                  |        |                    |                              |                              |                             |                              |                              |            |
|          |                          |                      |                  |        |                    |                              |                              |                             |                              |                              |            |
|          |                          |                      |                  |        |                    |                              |                              |                             |                              |                              |            |
|          |                          |                      |                  |        |                    |                              |                              |                             |                              |                              |            |
|          |                          |                      |                  |        |                    |                              |                              |                             |                              |                              |            |
|          |                          |                      |                  |        |                    |                              |                              |                             |                              |                              |            |
| TOTAL:   |                          |                      | 1                | I      |                    | 6970                         | 2111                         | 9081                        | 0.0                          | 0.0                          | 0.         |

N.C. DEPT DIVISION OF HIGHWAYS

|   | BUF<br>REPLAC                | FER<br>EMENT                 |
|---|------------------------------|------------------------------|
| L | ZONE 1<br>(ft <sup>2</sup> ) | ZONE 2<br>(ft <sup>2</sup> ) |
|   |                              |                              |
|   |                              |                              |
|   |                              |                              |
|   |                              |                              |
|   |                              |                              |
|   |                              |                              |
|   |                              |                              |
|   |                              |                              |
|   |                              |                              |

JOHNSTON COUNTY

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|          |                      | WETLA                                |                              |  |
|----------|----------------------|--------------------------------------|------------------------------|--|
| SITE NO. | STATION<br>(FROM/TO) | BUFF<br>ZONE 1<br>(ft <sup>2</sup> ) | ZONE 2<br>(ft <sup>2</sup> ) |  |
| 1        | -L- STA. 15+34 TO    | 2784                                 | 767                          |  |
|          | -L- STA. 16+14       |                                      |                              |  |
| 2        | -L- STA. 16+07 TO    | 4051                                 | 1344                         |  |
|          | -L- STA. 17+62       |                                      |                              |  |
|          |                      |                                      |                              |  |
|          |                      |                                      |                              |  |
|          |                      |                                      |                              |  |
|          |                      |                                      |                              |  |
|          |                      |                                      |                              |  |
|          |                      |                                      |                              |  |
|          |                      |                                      |                              |  |
|          |                      |                                      |                              |  |
| OTAL:    | <br>                 | 6835                                 | 2111                         |  |

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Rev. Jan 2009