



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

January 8, 2021

MEMORANDUM TO: Mr. Joey Hopkins, P.E.
Division 5 Engineer

FROM: Rodger Rochelle, P.E. DocuSigned by:
Rodger Rochelle
2CF80ADB9B414F0...
NCTA Chief Engineer

SUBJECT: Triangle Expressway Southeast Extension (Complete 540) from NC 55 Bypass in Apex to US 64/264 (I-87) in Knightdale, Wake and Johnston Counties; Federal Aid No. STP-0540(19), STP-0540(20), and STP-0540(21); WBS Nos. 37673.1.TA1, 35516.1.TA1, and 35517.1.TA1; STIP Project Nos. R-2721, R-2828, and R-2829

Attached are the modified US Army Corps of Engineers (USACE) Phased Section 404 Individual Permit, NC Division of Water Resources (NCDWR) Section 401 Individual Water Quality Certification, Neuse Riparian Buffer Authorization, and Non-404 Jurisdictional Wetlands and Waters Permit for the construction of the Triangle Expressway Southeast Extension (Complete 540) from NC 55 Bypass in Apex to US 64/264 (I-87) in Knightdale, Wake and Johnston Counties. STIP Nos. R-2721, R-2828, and R-2829. **Changes are based on the December 15, 2020 letter requesting modification of the permit to authorize impact changes due to construction method revisions for Permit Site 7 within Section R-2721B.** Subject to any requisite permit modifications, all environmental permits have been received for the construction of the final design sections of this project.

A copy of this permit package is posted on the NCDOT website at:
<https://xfer.services.ncdot.gov/pdea/PermIssued>

cc: w/o attachment (see website for attachments)
Mr. Ron Davenport, P.E. Contracts Management
Mr. Clarence Coleman, P.E., FHWA
Mrs. Heather Montague, Division 5
Mr. Mark Craig, P.E., Division 5
Mr. Boyd Tharrington, P.E., State Construction Engineer
Mr. Corey McLamb, P.E., Division 4
Mr. Dennis Jernigan, P.E., NCTA
Dr. Majed Al-Ghandour, P.E., Programming and TIP
Mr. Todd Lapham, Utilities Unit
Mr. Stephen Morgan, P.E., Hydraulics Unit
Mr. Brian Hanks, P.E., Structures Management Unit
Mr. Mark Staley, Roadside Environmental
Mr. Derrick Weaver, P.E., Environmental Policy Unit
Ms. Beth Harmon, NCDMS

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
TURNPIKE AUTHORITY
1578 MAIL SERVICE CENTER
RALEIGH, NC 27699-1578

Telephone: (919) 707-2700
Fax: (919) 715-5511
Customer Service: 1-877-368-4968

Website: ncdot.gov

Location:
1 SOUTH WILMINGTON STREET
RALEIGH, NC 27601

PROJECT COMMITMENTS

Complete 540 – Triangle Expressway Southeast Extension Wake and Johnston Counties, North Carolina

STIP Project Nos. R-2721, R-2828, and R-2829
State Project Nos. 6.401078, 6.401079, and 6.401080
Federal Aid Project Nos. STP-0540(19), STP-0540(20), and STP-0540(21)
WBS Nos. 37673.1.TA2, 35516.1.TA2, and 35517.1.TA1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Item	Responsible Party	Resource	Project Commitment	Project Stage / Status	Applicable STIP Project
1	Environmental Analysis Unit, NCTA	Historic Architectural Resources	NCDOT will coordinate with the NC State Historic Preservation Office and the property owner(s) relative to potential retaining wall design to eliminate the need for permanent easement or right-of-way from the Panther Branch School.	Completed	R-2828
2	Environmental Analysis Unit, NCTA	Archaeological Resources	NCDOT will conduct an archaeological survey of the Preferred Alternative and will coordinate the results with the NC State Historic Preservation Office and the NC Office of State Archaeology.	Completed	R-2721, R-2828, and R-2829
3	Environmental Analysis Unit, NCTA	Archaeological Resources	NCDOT will establish a Memorandum of Agreement with the NC State Historic Preservation Office in order to take into account the project's effect on archaeological resources.	Completed	R-2828
4	Environmental Analysis Unit, NCTA	Archaeological Resources	NCDOT will coordinate with the NC Office of State Archaeology relative to data recovery of materials in the one site determined eligible for the National Register of Historic Places based on the information contained at the site.	Final Design and Construction	R-2828
5	NCTA	Community Resources & Section 4(f)	NCDOT will coordinate with the Town of Cary relative to a potential Section 4(f) de minimis use finding for the Middle Creek School Park.	Completed	R-2721
6	NCTA	Community Resources & Section 4(f)	NCDOT will coordinate with the City of Raleigh relative to a potential Section 4(f) de minimis use finding for the Neuse River Trail.	Completed	R-2829
7	Division 5, NCTA	Recreation Facility	During construction, NCDOT will accommodate trail users along the Neuse River Trail through the project construction zone.	Final Design and Construction	R-2829
8	Environmental Analysis Unit, NCTA	Noise	NCDOT will prepare Design Noise Reports for the Selected Alternative during final design. All feasible and reasonable noise abatement measures will be constructed.	Final Design and Construction	R-2721, R-2828, and R-2829

Item	Responsible Party	Resource	Project Commitment	Project Stage / Status	Applicable STIP Project
9	Hydraulics Unit, NCTA	Storm water Management	NCDOT will utilize Design Standards in Sensitive Watersheds in the Swift Creek and in the Lower Middle Creek watersheds.	Construction and *Final Design	R-2721, R-2828, and R-2829*
10	Environmental Analysis Unit, NCTA	Migratory Birds	NCDOT will comply with requirements set forth in the Migratory Bird Treaty Act (MBTA) of 1918. <i>On December 22, 2017, after further analysis of the text, history, and purpose of the MBTA, the US Department of Interior issued Opinion M-37050. Opinion M-37050 permanently withdraws and replaces Opinion M-37041. Opinion 37050 concludes that the MBTA applies to only affirmative actions that have as their purpose to reduce migratory birds by taking or killing of migratory birds, their eggs, or their nest.</i>	Construction	R-2721, R-2828, and R-2829
11	Hydraulics Unit, NCTA	Major Drainage Structures	NCDOT will perform a more detailed hydrologic and hydraulic analysis for each major drainage crossing for the Selected Alternative.	Final Design	R-2721, R-2828, and R-2829
12	Utilities Unit, NCTA	Utilities	NCDOT will coordinate with the appropriate utility owners during design of the Selected Alternative for all utility conflicts, including means to avoid or minimize impacts to utilities.	Final Design	R-2721, R-2828, and R-2829
13	Environmental Analysis Unit, NCTA	Indirect Effects & Cumulative Impacts	NCDOT will prepare a quantitative assessment for indirect and cumulative effects and impacts for the Selected Alternative.	Completed	R-2721, R-2828, and R-2829
14	Environmental Analysis Unit, NCTA	Protected Species	NCDOT will carry out all activities for which it has been assigned responsibility in the Biological Assessment of Potential Impacts to Federally Listed Species (December 2017) and the USFWS Biological Opinion (April 2018) and as amended.	Construction and *Final Design	R-2721, R-2828, and R-2829*
15	Environmental Analysis Unit, NCTA	Protected Species	NCDOT will carry out all activities for which it has been assigned responsibility in the Biological Assessment for Atlantic Sturgeon Critical Habitat (December 2017) and the NMFS concurrence letter (May 2018).	Final Design and Construction	R-2829
16	Environmental Analysis Unit, Division 5, NCTA	Protected Species	FHWA and NCDOT will update the 2017 Biological Assessment and coordinate with USFWS in accordance with ESA Section 7 for the Neuse River Waterdog, Carolina Madtom, Atlantic Pigtoe, and Atlantic Pigtoe Critical Habitats.	Completed	R-2721, R-2828, and R-2829
17	Environmental Analysis Unit, Division 5, NCTA	Protected Species	NCDOT will carry out all activities for which it has been assigned responsibility in the Revised Biological Assessment of Potential Impacts to Federally Listed Species (July 2019) and the USFWS Revised Biological/Conference Opinion (October 2019).	Construction and *Final Design	R-2721, R-2828, and R-2829*

COMMITMENTS FROM PERMITTING

Item	Responsible Party	Commitment Source	Project Commitment	Project Stage / Status	Applicable STIP Project
18	Division 5, NCTA	Recreation Facility	During construction, NCDOT will accommodate trail users along the Woodcreek Trail through the project construction zone.	Construction	R-2721A
19	Division 5, NCTA	404 Permit Condition 2	NCDOT will protect the Atlantic Sturgeon by not blocking greater than 50% of the Neuse River below the ordinary high-water mark with temporary causeways or work bridges. All causeways and work bridges will be removed at the end of the project.	Construction	R-2829
20	Environmental Analysis Unit, Division 5, NCTA	404 Permit Condition 3	NCDOT will comply with the attached USFWS Biological Opinion-Revised (USFWS BO), dated October 15, 2019.	Construction and *Final Design	R-2721, R-2828, and R-2829*
21	Division 5, NCTA	404 Permit Condition 3 (Attachment: USFWS Biological Opinion (BO) Section 2.4)	NCDOT will invite representatives of the USFWS NCWRC, and other agency personnel to preconstruction meetings prior to incurring impacts in jurisdictional features, as well as to preconstruction meetings associated with installation of structures within 0.25 mile of the Swift Creek crossing.	Construction	R-2828
22	Division 5, NCTA	404 Permit Condition 3 (Attachment: USFWS BO Section 2.4)	NCDOT will not allow any part of the bridging structure for Swift Creek to be within 10 feet of the top of bank on either side of the channel. No permanent structures or temporary structures will be placed in Swift Creek. All permanent and temporary structures will be installed and designed to maintain stability of the stream banks of Swift Creek.	Construction	R-2828
23	Roadside Environmental Unit, Division 5, NCTA	404 Permit Condition 3 (Attachment: USFWS BO Section 2.4)	NCDOT will require construction of two permanent hazardous spill basins (HSBs) at the crossing of Swift Creek. Road runoff from approximately 1.3 miles of road facility will be directed to the HSBs prior to discharge into Swift Creek or Swift Creek tributaries. The HSBs will be designed to contain a spill from a typical tanker truck. NCDOT will implement their standard protocols for upkeep and use of these HSBs.	Construction	R-2828

Item	Responsible Party	Commitment Source	Project Commitment	Project Stage / Status	Applicable STIP Project
24	Environmental Analysis Unit, Division 5, NCTA	404 Permit Condition 3 (Attachment: USFWS BO Sections: 2.4, 8.2 & 8.3)	NCDOT will conduct a preconstruction survey (just prior to construction) at the Swift Creek crossing and remove mussels from a defined salvage area and relocate them to appropriate habitat within Swift Creek outside of the salvage area (relocation site) or if deemed appropriate, after coordination with the USFWS and NCWRC, Dwarf Wedgemussel and Yellow Lance individuals may be taken into captivity to use as brood stock for propagation efforts. The preconstruction survey will be incorporated into a Mussel Relocation Plan, which will identify the salvage area and relocation site, and be developed in coordination with USFWS/NCWRC.	Construction	R-2828
25	Environmental Analysis Unit, Division 5, NCTA	404 Permit Condition 3 (Attachment: USFWS BO Sections: 2.4, 8.2 & 8.3)	NCDOT will provide funding to Wake County and NCWRC, after receiving the Section 404 Permit, to be utilized for the retrofit and upgrade of the existing research facility in the A.E. Finley Center, at the Historic Yates Mill County Park for the purpose of research and propagation of aquatic species.	Final Design	R-2721, R-2828, and R-2829
26	Division 5, NCTA	404 Permit Condition 3 (Attachment: USFWS BO Section 8.4)	NCDOT will monitor the Action area for evidence of sediment loss. The USFWS will be contacted if project related sedimentation is occurring beyond 400 meters from the Action area.	Construction	R-2828
27	Environmental Analysis Unit, Division 5, NCTA	404 Permit Condition 17	NCDOT will implement the Memorandum of Agreement (MOA) between the USACE and SHPO dated March 11, 2018 and adhere to the specific Stipulations provided in the MOA attachment.	Final Design and Construction	R-2721, R-2828, and R-2829
28	Roadside Environmental Unit, Division 5, NCTA	404 Permit Condition 23	NCDOT will segregate topsoil (6-12") in wetland areas where pipelines will be installed via trenching. The topsoil will be used to backfill the trench.	Construction	R-2828
29	Environmental Analysis Unit, Division 5, NCTA	404 Permit Condition 27	NCDOT will only complete construction activities on TIPs R-2721A and B under the Section 404 Permit dated October 24, 2019 and R-2828 dated February 3, 2020. No work will commence for TIP R-2829 without further USACE coordination.	Construction	R-2721, R-2828, and R-2829
30	Division 5, NCTA	National Marine Fisheries Service Consultation (Page 3)	NCDOT will stop in-water construction activities if a sturgeon is spotted within 50 feet of operations. (See Attached NMFS Consultation)	Construction	R-2829
31	Division 5, NCTA	National Marine Fisheries Service Consultation (Page 3)	NCDOT will observe an in-water work moratorium of February 15-October 31. This includes installation/removal of causeways and temporary bridges. This will cover the WRC moratorium of February 15-September 30.	Construction	R-2829

Item	Responsible Party	Commitment Source	Project Commitment	Project Stage / Status	Applicable STIP Project
32	Division 5, NCTA	National Marine Fisheries Service Consultation (Page 4)	NCDOT will not blast within 50 feet of the Neuse River.	Construction	R-2829
33	Division 5, NCTA	National Marine Fisheries Service Consultation (Page 4)	NCDOT will adhere to shoreline stabilization Project Design Criteria (PDCs) when installing new bridges and piers.	Construction	R-2829
34	Division 5, NCTA	National Marine Fisheries Service Consultation (Attachment 1)	NCDOT will follow the PDCs outlined in Attachment 1 of the NMFS Consultation	Construction	R-2829



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

January 07, 2021

Regulatory Division

Action ID No. SAW-2009-02240; Complete 540; TIP R-2721B

Mr. Rodger Rochelle, PE
 Chief Engineer, North Carolina Turnpike Authority
 North Carolina Department of Transportation (NCDOT)
 1578 Mail Service Center
 Raleigh, North Carolina 27699-1578

Dear Mr. Rochelle:

Reference the Department of the Army permit issued to the North Carolina Department of Transportation (NCDOT) on October 24, 2019, and subsequently modified on February 4, 2020, to authorize the discharge of fill material into waters of the United States, for construction of the Triangle Expressway Southeast Extension (Complete 540) from NC 55 Bypass in Apex to US 64/264 (I-87) in Knightdale, Wake and Johnston Counties. Sections included within this permit are R-2721, R-2828, and R-2829. At this time, only STIPs R-2721A&B and R-2828 are authorized for construction; STIP R-2829 has not yet been through final design, has not completely minimized impacts to waters and wetlands, nor has a final compensatory mitigation plan.

Also, please reference your December 15, 2020 letter, requesting modification of the permit to authorize impact changes due to construction method design revisions for Permit Site 7 within Section R-2721B, as indicated in Revised Table 3, below.

Revised Table 3. R-2721B Jurisdictional Resources Impacts

Impact Type	Riparian Wetland Temp./ Perm. (ac)	Non-Riparian Wetland Temp./ Perm. (ac)	Isolated Wetlands (ac)	Ponds (ac)	Isolated Ponds (ac)	Stream (lf)			Riparian Buffer (sq. ft.) Zone 1/2
						Perm.	Temp.	Bank Stab. / Culvert Stab.	
Neuse River Basin (HUC 03020201)	1.34/ 12.45	0.0	2.42	14.04	1.52	8,898	555	282/ 839	777,724/ 466,623

Bolded impact amounts represent a change from the 404 (SAE-2009-02240) issued on February 7, 2020 (modified April 29, 2020) and 401 WQC (4179) issued January 30, 2020 (modified April 23, 2020 and June 1, 2020).

The Corps has completed the evaluation of your request and has determined that it is appropriate and reasonable, and no public notice is required for this modification. Therefore, the permit is modified as requested and as shown on the enclosed revised Permit Drawings, Sheets 20, 20A, 68, 69, & 69A of 69, labeled "PERMIT DRAWING PACKAGE LAST REVISED ON 12/08/20."

The modified final design for R-2721B will have permanent impacts to 12.45 acres of wetlands and 7,982 linear feet of streams that require compensatory mitigation; therefore, the relevant Compensatory Mitigation Responsibility Transfer Form referenced in Special Condition 16 has been modified, and it is attached.

Special Conditions 1 and 16 are modified as follows:

1. Work Limits: All work authorized by this permit shall be performed in strict compliance with the revised permit drawing packages (R-2721A revised on February 21, 2020, R-2721B revised on December 11, 2020, R-2721B Utility Impacts revised in February, 2020, R-2828 revised on February 24, 2020, R-2828 Utility Impacts revised on February 22, 2020), and R-2721B Permit Drawings, Sheets 20, 20A, 68, 69, & 69A of 69, last revised on December 8, 2020, which are a part of this permit. The Permittee shall ensure that the construction design plans for this project do not deviate from the permit plans referenced in this authorization. Any modification to the referenced permit plans must be approved by the U.S. Army Corps of Engineers (Corps) prior to any active construction in waters or wetlands.

16. 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 Forms. The requirements of these forms, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit.

All other conditions of the permit, including the permit expiration date of December 31, 2024, remain applicable. Should you have any questions, contact Mr. Eric Alsmeyer, via email at Eric.C.Alsmeier@usace.army.mil or by telephone at (919) 554-4884, extension 23.

FOR THE COMMANDER

 Date: 2021.01.07
11:19:10 -05'00'

Monte Matthews
Lead Project Manager
Wilmington District

Enclosures

Electronic Copies Furnished with Enclosures:

Ms. Amy Chapman, NC Div. of Water Resources amy.chapman@ncdenr.gov

Ms. Beth Harmon, NC Div. of Mitigation Services beth.harmon@ncdenr.gov

U.S. ARMY CORPS OF ENGINEERS
Wilmington District
Compensatory Mitigation Responsibility Transfer Form

Permittee: NCDOT

Action ID: SAW-2009-02240

Project Name: TIP R-2721B; Complete I-540_Neuse01 (Mod 03)

County: Wake

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 Division of Mitigation Services (NCDMS), 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:** 03020201, Neuse River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
3,991				12.45		

*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:** 03020201, Neuse River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
7,982				24.90		

Mitigation Site Debited: NCDMS

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS 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 NCDMS), 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.

Mitigation Sponsor Name: _____

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:

This form replaces the form for R-2721B, Neuse 01, signed by the USACE on February 4, 2020.

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, 3331 Heritage Trade Drive, Suite 105, 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: Eric Alsmeyer
USACE Field Office: Raleigh Regulatory Field Office
US Army Corps of Engineers
3331 Heritage Trade Drive, Suite 105
Wake Forest, NC 27587
Email: eric.c.alsmeyer@usace.army.mil

 Eric Alsmeyer 2021.01.05 15:14:39 -05'00'

USACE Project Manager Signature

January 5, 2021

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>.



ROY COOPER

Governor

MICHAEL S. REGAN

Secretary

S. DANIEL SMITH

Director

December 29, 2020

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

Subject: MODIFICATION of 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act, NEUSE BUFFER RULES, and ISOLATED WETLANDS PERMIT Pursuant to IWGP100000 with ADDITIONAL CONDITIONS for Proposed construction of the Triangle Expressway Southeast Extension (NC 540) in Wake & Johnston Counties, Federal Aid Project No. STP-0540(19-21), State Project No. 37673.1.TA2, TIP Nos, R-2721, R-2828, & R-2829.
NCDWR Project No. 20181249 version 5

Dear Mr. Harris:

Attached hereto is a copy of the Modification to Certification No. 4179 issued to The North Carolina Department of Transportation (NCDOT) originally dated February 15, 2019, modified January 30, 2020, April 20, 2020, June 1, 2020, and December 29, 2020.

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

Sincerely,

DocuSigned by:

Amy Chapman

S. Daniel Smith, Director
Division of Water Resources

Attachments

Electronic copy only distribution:

Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office
Heather Montague, Division 5 Environmental Officer
Deanna Riffey, NC Department of Transportation
Beth Harmon, Division of Mitigation Services
File Copy



MODIFICATION of 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act, NEUSE BUFFER RULES, and ISOLATED WETLANDS PERMIT Pursuant to IWGP100000 with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500 and 15A NCAC 2B.0233 and ISOLATED WETLANDS PERMIT Pursuant to IWGP100000. This certification version authorizes the NCDOT to impact 55.27 acres of wetlands, 40045 linear feet of jurisdictional streams and 4309400 square feet of protected riparian buffers in Wake & Johnston Counties. The project shall be constructed pursuant to the permit modification request received December 18, 2020. **The revised authorized impacts are as described below:**

R-2721B Site 7 Revised Wetland Impacts

Site 7 R-2721B	Permanent Fill (ac)	Temporary Fill (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)
Previously Permitted	0.20	0.46	0.03	0.55
<u>Revised</u> Now	0.12	0.74	0.02	0.46
+/- Change	- 0.08	+ 0.28	- 0.01	- 0.09

The application provides adequate assurance that the discharge of fill material into the waters of the Cape Fear and Neuse River Basins in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your modification dated May 12, 2020. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be 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). Additional buffer impacts may require compensatory mitigation as described in 15A NCAC 2B.0233. 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.

Conditions of Certification:

1. All conditions in the 401 Water Quality Certifications for this project, originally dated February 15, 2019, and most recently revised June 1, 2020, still apply.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 permit.

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:


Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919) 431-3000, Facsimile: (919) 431-3100

A copy of the petition must also be served on DEQ as follows:

Mr. Bill F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center

This the 29th Day of December, 2020

DIVISION OF WATER RESOURCES

DocuSigned by:

S. Daniel Smith, Director

WQC No. 4179

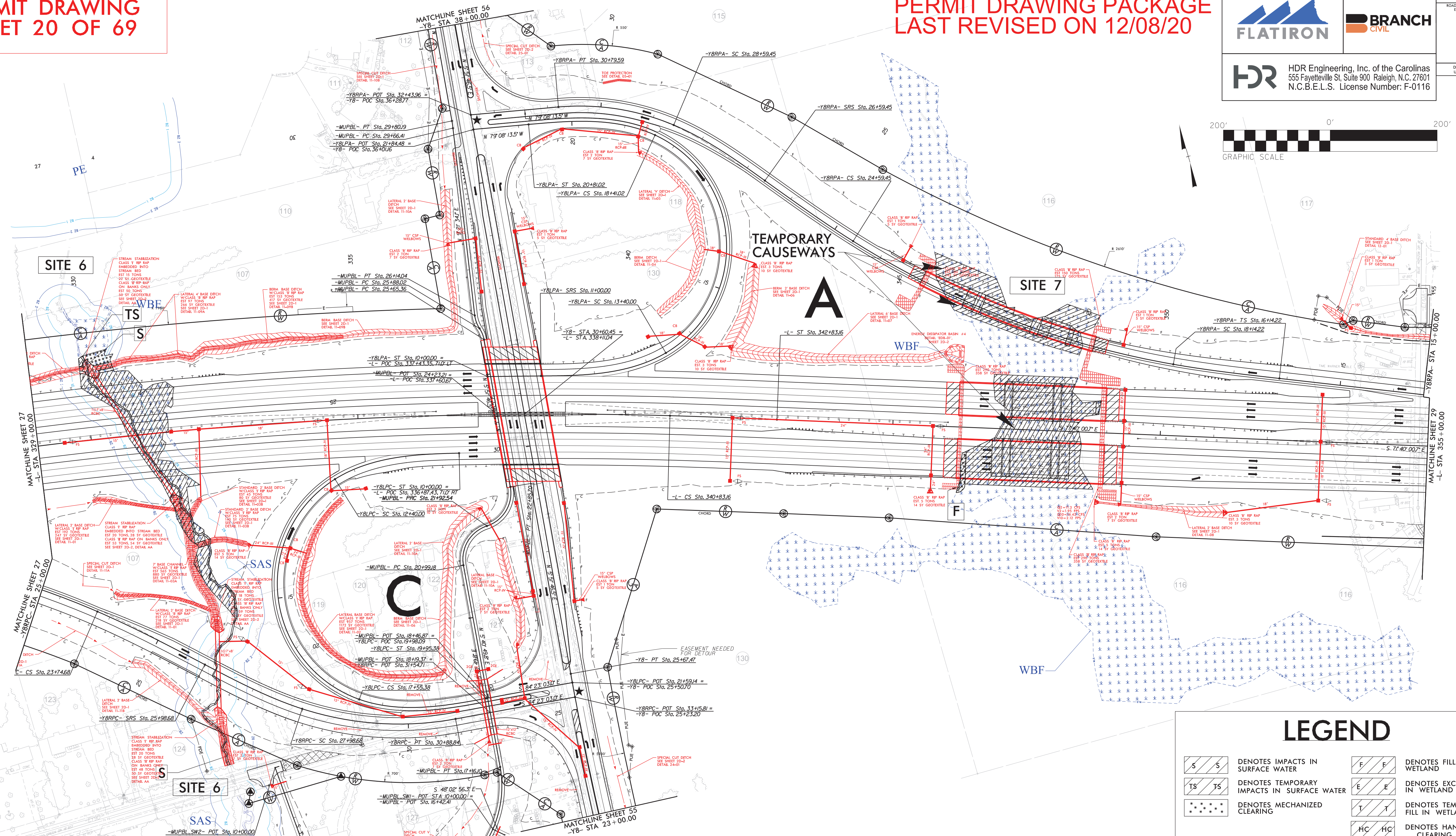
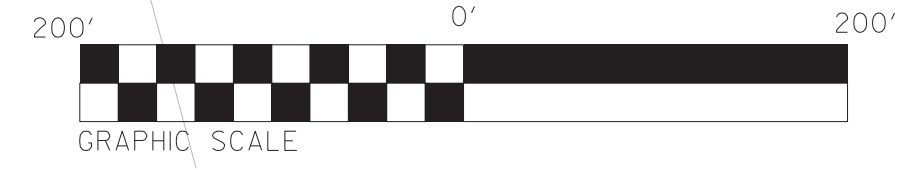
PERMIT DRAWING
SHEET 20 OF 69

PERMIT DRAWING PACKAGE
LAST REVISED ON 12/08/20



HDR Engineering, Inc. of the Carolinas
555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

PROJECT REFERENCE NO.	SHEET NO.
B-2721	28
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



LEGEND

	DENOTES IMPACTS IN SURFACE WATER		DENOTES FILL IN WETLAND
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER		DENOTES EXCAVATION IN WETLAND
	DENOTES MECHANIZED CLEARING		DENOTES TEMPORARY FILL IN WETLAND
			DENOTES HAND CLEARING

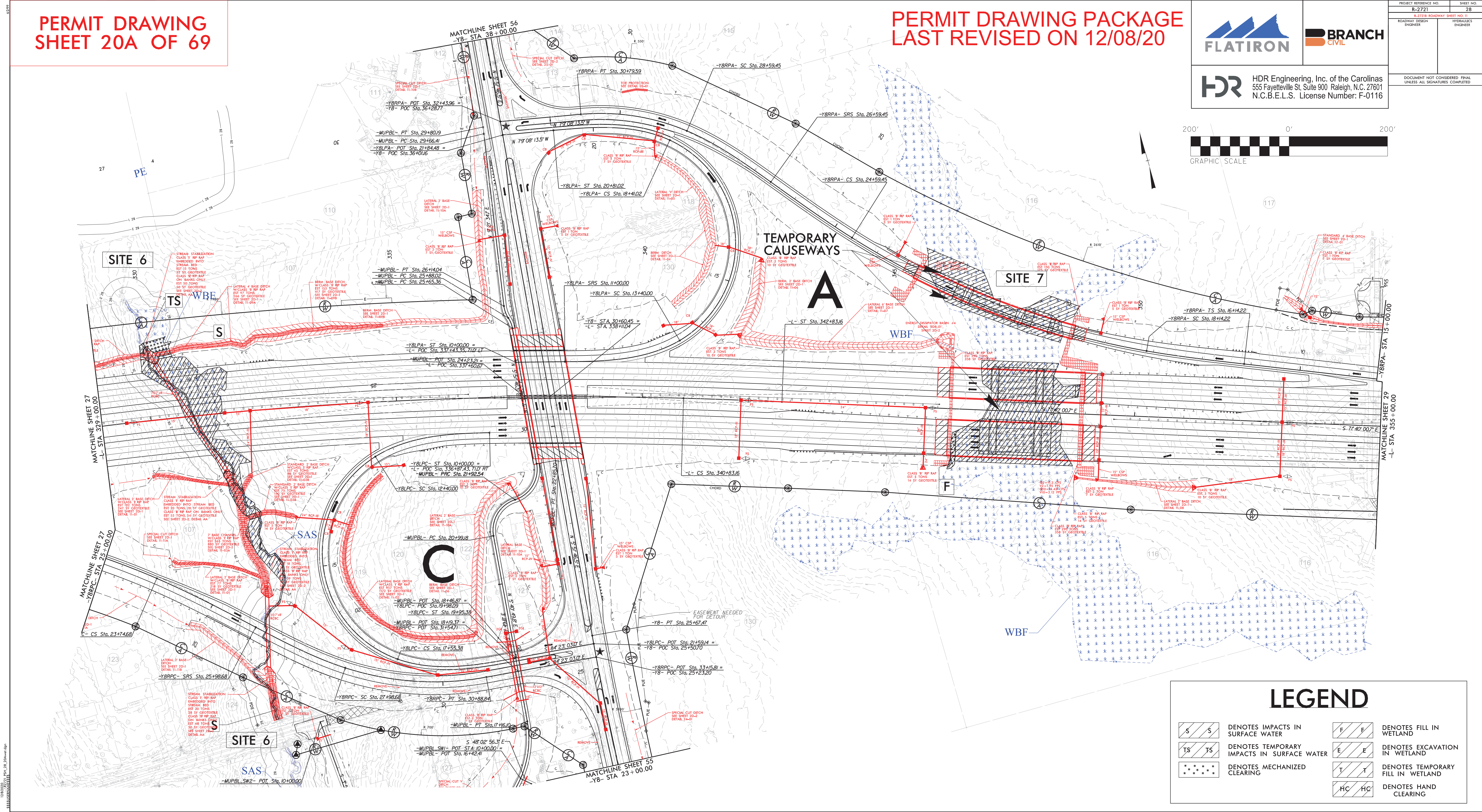
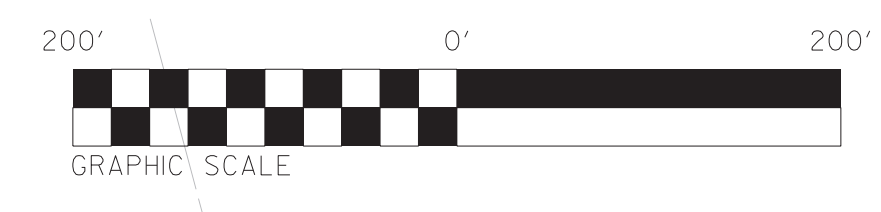
**PERMIT DRAWING
SHEET 20A OF 69**

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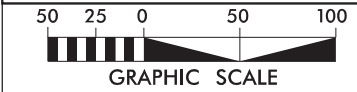
LEGEND

	DENOTES IMPACTS IN SURFACE WATER		DENOTES FILL IN WETLAND
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER		DENOTES EXCAVATION IN WETLAND
	DENOTES MECHANIZED CLEARING		DENOTES TEMPORARY FILL IN WETLAND
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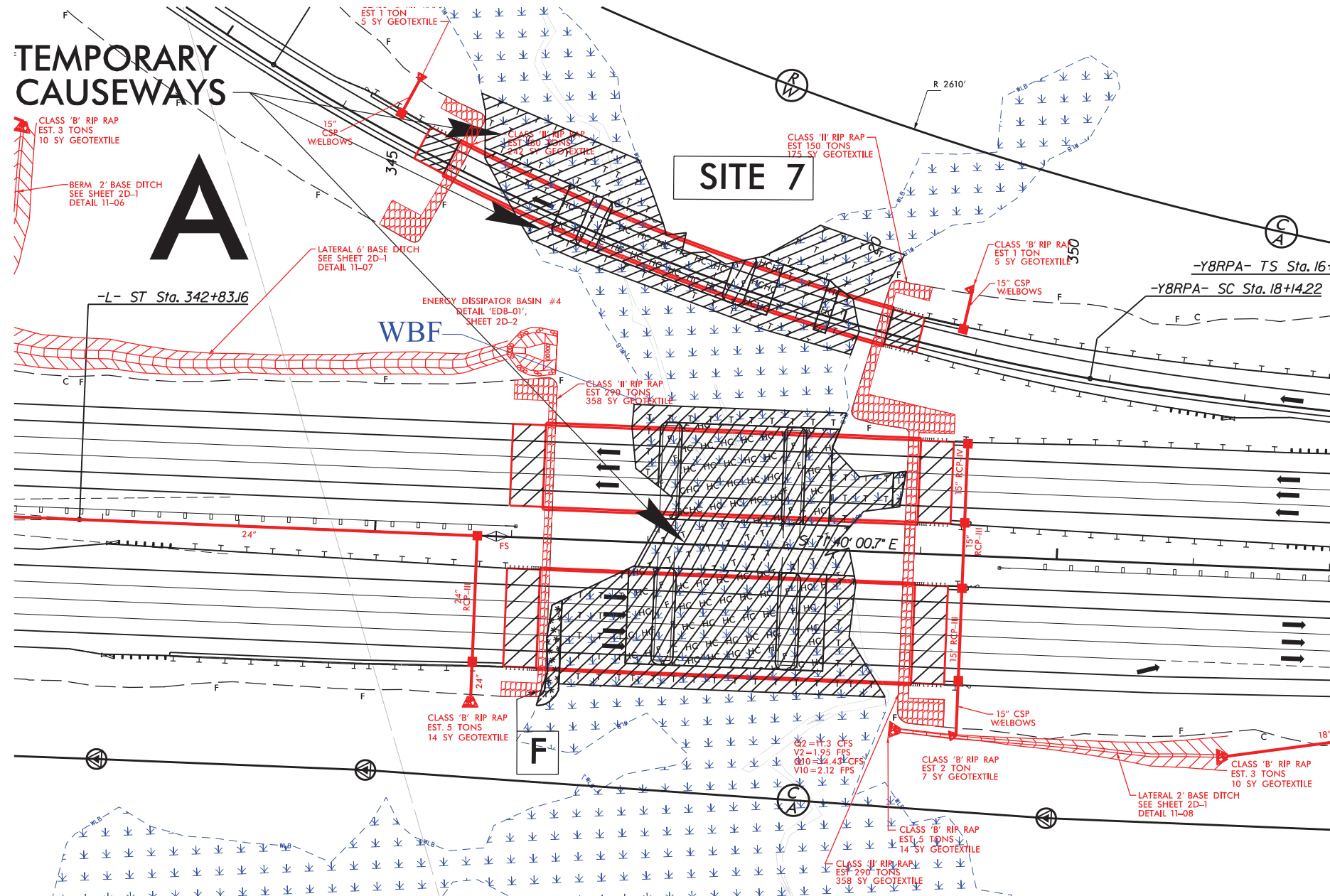
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PROJECT REFERENCE NO. 8-2721	SHEET NO. 28
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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LEGEND

	DENOTES IMPACTS IN SURFACE WATER		DENOTES FILL IN WETLAND
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER		DENOTES TEMPORARY FILL IN WETLAND
	DENOTES MECHANIZED CLEARING		DENOTES HAND CLEARING

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WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS					
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (Pond) (ac)	Permanent SW impacts (Stream) (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	244+00-L-/248+00-L-	3@8'x10' RCBC						0.08			302		
	244+00-L-/248+00-L-	FILL	1.42		< 0.01	0.12							
	244+00-L-/248+00-L-	BANK STABILIZATION						< 0.01	0.01		50	36	
	244+00-L-/248+00-L-	CULVERT STABILIZATION						0.02			69		
2	279+00-L-/280+22-L-	FILL	0.86			0.15		0.95	0.03	< 0.01	398	11	
3	281+00 -L-/283+00-L-	2@7'X7' RCBC							0.04		285		
	281+00 -L-/283+00-L-	FILL								0.01		46	
	281+00 -L-/283+00-L-	CULVERT STABILIZATION							0.01		96		
4	313+00-L-/317+00-L-	FILL	0.19		0.01	0.04			0.01		107	14	
5	322+00-L-/325+00-L-	1@6'X8' RCBC							0.05		458	52	
	322+00-L-/325+00-L-	FILL	1.04			0.26							
	322+00-L-/325+00-L-	CULVERT STABILIZATION							0.01		57		
6	330+00-L-/332+00-L-	1@6'X8' RCBC (1)	0.41		0.03	0.03			0.02		284	10	
	330+00-L-/332+00-L-	1@6'X8' RCBC (2)							0.02		244		
	330+00-L-/332+00-L-	FILL	0.08		0.04				0.02		311		
	330+00-L-/332+00-L-	CULVERT STABILIZATION							0.01		113		
7	346+00-L-/349+00-L-, 21+00-Y8RPA-/25+00-Y8RPA-	BRIDGES	0.12	0.74		0.02	0.46						
8	365+00-L-/366+50-L-	FILL	0.23	< 0.01	< 0.01	0.03			< 0.01		105		
9	366+50-L-/13+50 -Y10A-	1@6'X8' RCBC	0.01			0.26			0.01		237	37	
	366+50-L-/13+50 -Y10A-	66" RCP	0.05		< 0.01				< 0.01		105		
	366+50-L-/13+50 -Y10A-	FILL			< 0.01				0.01		204		
	366+50-L-/13+50 -Y10A-	CULVERT STABILIZATION							0.01		115		
10++	380+00 -L-/383+00-L-	42" RCP						1.52					
TOTALS* THIS SHEET:			4.42	0.74	0.10	0.90	0.46	2.47	0.35	0.02	3540	205	
TOTALS* ENTIRE R-2721B:			8.38	0.74	4.71	1.77	0.46	15.56	0.84	0.05	8898	540	

*Rounded totals are sum of actual impacts.

NOTES:

++Site includes only isolated resources.

Sites containing temporary excavation listed below are included in the mechanized clearing impacts:

Site 2 = .007ac ; Site 5 = .03ac ; Site 6 = .003ac

Site 9 = .006ac ; Site 14 = .007ac, Grand Total = .053ac Temp Excavation

PERMIT DRAWING PACKAGE LAST REVISED ON 12/08/20

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DECEMBER 2020
WAKE COUNTY
TIP R-2721B
STATE PROJ. # 6.401078

WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS					
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (Pond) (ac)	Permanent SW impacts (Stream) (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
11	386+00-L-/391+00-L-	48" RCP						4.43	0.04	< 0.01	404	60	
	386+00-L-/391+00-L-	FILL							< 0.01	< 0.01	20		
12	384+50-L-/387+00-L-	FILL	0.86		0.04	0.17			0.01	< 0.01	157	46	
13++	408+00-L-/411+00-L-	FILL	0.21		0.06								
14	412+00-L-/416+00-L-	FILL	0.31		0.06	0.09			0.03	< 0.01	413	28	
15	414+50-L-/415+50-L-	1@7'X8' RCBC						2.30	< 0.01		142		
16	420+00-L-/425+00-L-	42" RCP	0.74		0.03	0.37			0.04	< 0.01	315	13	
	420+00-L-/425+00-L-	FILL							< 0.01		64		
	420+00-L-/425+00-L-												
17	437+00-L-/30+00-Y13A-	2@7'X7'RCBC	0.48			0.10			< 0.01	< 0.01		46	
	437+00-L-/30+00-Y13A-	FILL							< 0.01		170		
	437+00-L-/30+00-Y13A-	BANK STABILIZATION							0.02		216		
	437+00-L-/30+00-Y13A-	CULVERT STABILIZATION							0.05		163		
18	459+50-L-/463+50-L-	2@7'X8'RCBC	0.18					6.36	0.02		116		
	459+50-L-/463+50-L-	CULVERT STABILIZATION							< 0.01		75		
19++	15+00-Y13LPC-	EXCAVATION			2.15								
20	478+00-L-/488+00-L-	FILL	0.62		2.25	0.05			0.07	0.01	830	60	
21	490+00-L-	2@6'X8'RCBC	0.40			0.09			0.08	< 0.01	977	34	
	490+00-L-	FILL							0.02		233		
	490+00-L-	CULVERT STABILIZATION							0.02		151		
22	495+00-L-	1 @ 6'X8' RCBC	0.14		< 0.01				0.03	< 0.01	490	13	
	495+00-L-	FILL							0.01		257		
	495+00-L-												
23	65+30-Y13-	FILL							< 0.01	< 0.01	9	11	
24	10+00-Y13B-	15" RCP							< 0.01	< 0.01	1	17	
	10+00-Y13B-	FILL							< 0.01		13		
TOTALS* THIS SHEET:			3.93	0	4.61	0.87	0	13.09	0.47	0.03	5216	328	
TOTALS* ENTIRE R-2721B:			8.38	0.74	4.71	1.77	0.46	15.56	0.84	0.05	8898	540	

*Rounded totals are sum of actual impacts.

NOTES:

++Site includes only isolated resources.

Sites containing temporary excavation listed below are included in the mechanized clearing impacts:

Site 2 = .007ac ; Site 5 = .03ac ; Site 6 = .003ac

Site 9 = .006ac ; Site 14 = .007ac, Grand Total = .053ac Temp Excavation

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NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DECEMBER 2020
WAKE COUNTY
TIP R-2721B
STATE PROJ. # 6.401078

WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS					
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (Pond) (ac)	Permanent SW impacts (Stream) (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
25	15+00-Y13A-	36" RCP	0.03					0.01	< 0.01		115	6	
	15+00-Y13A-	FILL						< 0.01			11		
	15+00-Y13A-	BANK STABILIZATION						< 0.01			16		
26++	10+00-Y13A-	FILL											
TOTALS* THIS SHEET:			0.03	0	0	0	0	0	0.02	0.00	142	6	
TOTALS*	ENTIRE R-2721B:		8.38	0.74	4.71	1.77	0.46	15.56	0.84	0.05	8898	540	

*Rounded totals are sum of actual impacts.

NOTES:
 ++Site not impacted in final design

PERMIT DRAWING PACKAGE LAST REVISED ON 12/08/20

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 DECEMBER 2020
 WAKE COUNTY
 TIP R-2721B
 STATE PROJ. # 6.401078
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