

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

February 27, 2017

MEMORANDUM TO: Mr. Mark Stafford, P.E.

Division 12 Engineer

FROM: Philip S. Harris, III, P.E., Manager

Natural Environment Section

SUBJECT: Gaston County; I-85 / US 321 Geometric Safety Improvements;

Federal Aid No. IMF-85-1(113)17; WBS 41153.1.1; TIP I-5000.

CAT

Attached are the US Army Corps of Engineers General Permit and N.C. Division of Water Resources (NCDWR) Water Quality Certification. All environmental permits have been received for the construction of this project.

A copy of this permit package will be posted on the NCDOT website at: https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx

Quick Links>Permit Documents> Issued Permits.

cc: w/o attachment (see website for attachments)

Mr. Randy Garris, P.E. State Contract Officer

Ms. Patricia Beam, Division 12 Environmental Officer

Dr. Majed Al-Ghandour, P.E., Programming and TIP

Ms. Brenda Moore, P.E., Roadway Design

Mr. Ron Wilkins, Utilities Unit

Mr. Matt Lauffer, P.E., Hydraulics

Mr. Brian Hanks, P.E., Structure Design

Mr. Mark Staley, Roadside Environmental

Mr. Ron Hancock, P.E., State Roadway Construction Engineer

Mr. Brian Yamamoto, P.E., PDEA Western Section

Ms. Beth Harmon, NC Division of Mitigation Services

Mr. Philp Ayscue, Single Audit Compliance

PROJECT COMMITMENTS

T.I.P Project No. I-5000
I-85 / US 321 Geometric Safety Improvements
Gaston County
Federal Aid Project No. IMF-85-1(113)17
WBS Element 41153.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

PDEA, Roadway Design, Rail, Division 10 and City of Gastonia (Parks and Recreation)

NCDOT will enter a municipal agreement with the City o0f Gastonia Parks and Recreation for the construction, maintenance and other aspects of the Highland Rail Trail, particularly for the CMAQ-funded portion that extends from Rankin Lake Road to Bulb Avenue. Additional coordination is needed to determine the scope of work for the trail improvements.

PDEA, Rail, Roadway Design, NC Attorney General, Division 10 and the City of Gaston ia

Prior to right of way, NCDOT Project Development, NCDOT Rail, NC Attorney General Office and the City of Gastonia, will coordinate with Rail to Trails for the purchase of the portion of the railroad bed impacted as a result to the preferred alternative. NCDOT will compensate the property owner for the removal, relocation and replacement of the trail.

Division 10

Gaston County Schools also expressed a preference for a majority of the construction work to be conducted during the summer months.

NCDOT Hydraulics and Division 10 Construction

NCDOT will coordinate with the NC Floodplain Mapping Program FMP, the delegated state agency for administering FEMA's National Flood Insurance Program, to determine the status of the project with regard to applicability of NCDOT's Memorandum of Agreement with FMP, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

COMMITMENTS FROM PERMITTING

Division 10 Construction / Natural Environment Section

Project Specific Condition #3 / 401 Water Quality Certification: All excavation and/or disposal of material from landfill areas should be handled per the regulations of Division of Waste Management, Solid Waste Section, Pre-Regulatory Landfill Branch. [15A NCAC 02H.0506(b)(3)]

Project Specific Condition #4 / 401 Water Quality Certification: Stream bed material excavated from the stream shall not be returned to any portion of the riparian area due to potential of the exceedance of water quality standards. Stream bed material shall be excavated in the dry for the same reason. Disposal of material from the excavated area should be handled per the regulations of Division of Waste Management, Solid Waste Section, Pre-Regulatory Landfill Branch [15A NCAC 02B. 0201 and .0211]

Project Specific Condition #5 / 401 Water Quality Certification: Any exposure of landfill material in the riparian/streambank area should be brought to the attention of regulatory agencies, Division of Water Resources and Division of Waste Management for assessment and restoration requirements. [15A NCAC 02B. 0201]

Project Specific Condition #6 (and #9) / 401 Water Quality Certification: Any exposure of landfill material in the riparian/streambank area should be brought to the attention of regulatory agencies, Division of Water Resources and Division of Waste Management for assessment and restoration requirements. [15A NCAC 02B. 0201]

Special Condition #2 / 404 USACE Permit: The stream channel (Highland Creek) within the project area between the I-85 culvert extension (Site 1) and the rock check damn downstream of the Rankin Lake Road Bridge (Site 3) shall be visually monitored with photo stations for at least two bankfull flow events occurring in separate calendar years to ensure channel stability post construction.

U.S. ARMY CORPS OF ENGINEERS

WILMINGTON DISTRICT

Action Id. SAW-2010-00033

County: Gaston County

U.S.G.S. Quad: Gaston North, NC-Quad

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee:

NC Dept. of Transportation

Philip Harris

Address:

1598 Mail Service Center

Raleigh, NC, 27699

Telephone Number:

919-707-6103

E-mail:

wabarrett@ncdot.gov

Size (acres)

22.6

Nearest Town Gastonia

South Fork Catawba Watershed; Santee Basin

Nearest Waterway

Highland Creek

River Basin

Latitude: 35.283294

USGS HUC

03050102

Coordinates

Longitude: -81.186768

Location description: This project is located at the interchange of I-85 and US 321 in Gastonia, Gaston County, North Carolina.

Description of projects area and activity: This verification authorizes the permanent impacts of 652 linear feet of perennial stream (335 If loss of water for culverts or channel improvements and 317 If bank stabilization or benching), 396 linear feet of temporary stream impacts and 0.09 acre of permanent wetland impacts associated with the realignment of the I-85/US321 interchange in order to improve traffic and safety.

Applicable Law(s): Section 404 (Clean Water Act, 33 USC 1344)

Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization:

Nationwide/General Permit Number: GP 198200031 NC DOT Bridges, Widening Projects, Interchange

Improvements (authorized 2015)

SEE ATTACHED NWP GENERAL, REGIONAL, AND/OR SPECIAL CONDITIONS

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the enclosed Conditions, your application signed and dated 12/12/2016, and the enclosed plans. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.

This verification will remain valid until the expiration date identified below unless the nationwide authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Resources (telephone 919-807-6300) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management Morehead City, NC, at (252) 808-2808,

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Steve Kichefski at 828-271-7980 x234 or steven.l.kichefski@usace.army.mil.

Corps Regulatory Official: KICHEFSKI.STEVEN.L.1386908539

| Digitally signed by NICHEFSXI.STEVEN.L.1386908539 | Disc. Cul.S. Government, our-DoD, our-PKI, our-USA, on-RCHEFSXISTEVENLL.1386908539 | Disc. Cul.S. Government, our-DoD, our-PKI, our-USA, on-RCHEFSXISTEVENL.1386908539 | Disc. Cul.S. Government, our-DoD, our-PKI, our-USA, our-USA, our

Date: 1/31/2017

Expiration Date of Verification: 3/18/20

SAW-2010-00033

Determination of Jurisdiction:

A.	There are waters, including wetlands, on the above described project area that may be subject to Section 404 of the Clean
	Water Act (CWA) (33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). This preliminary
	determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further
	instruction. Please note, if work is authorized by either a general or nationwide permit, and you wish to request an appeal of an
	approved JD, the appeal must be received by the Corps and the appeal process concluded prior to the commencement of any work in waters of the United States and prior to any work that could alter the hydrology of waters of the United States.
В.	There are Navigable Waters of the United States within the above described project area subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
C.	There are waters , within the above described project area that are subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
D.	The jurisdictional areas within the above described project area have been identified under a previous action. Please reference jurisdictional determination issued <u>Date</u> . Action ID: <u>AID</u> .
	Basis For Determination: See the preliminary jurisdictional determination form dated 1/31/2017.
	Remarks: None.

E. Attention USDA Program Participants

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

F. Appeals Information (This information applies only to approved jurisdiction determinations as indicated in B and C above).

This correspondence constitutes an approved jurisdiction determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers South Atlantic Division Attn: Jason Steele, Review Officer 60 Forsyth Street SW, Room 10M15 Atlanta, Georgia 30303-8801 Phone: (404) 562-5137

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by Not applicable.

It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.

Corps Regulatory Official: KICHEFSKI.STEVEN.L.1386908539

Corps Regulatory Official: Corps Regulatory

Steve Kichefski

Date of JD: 1/31/2017

Expiration Date of JD: Not applicable

SAW-2010-00033

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at http://corpsmapu.usace.army.mil/cm apex/f?p=136:4:0

Copy furnished (via email):

Agent: Division of Water Resources

Ms. Donna Hood

Address: 610 E. Center Ave.

Mooresville, NC 28115

Telephone Number: 704-663-1699

E-mail: **Donna.Hood@ncdenr.gov**

Special Conditions

- 1. In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.
- 2. The stream channel (Highland Creek) within the project area between the I-85 culvert extension (Site 1) and the rock check dam downstream of the Rankin Lake Road Bridge (Site 3) shall be visually monitored with photo stations for at least two bankfull flow events occurring in separate calendar years to ensure channel stability post construction.
- 3. Please be advised that if additional impacts to waters of the U.S., either on this property or on/adjacent to this property and associated with this project/activity, are proposed at a later date, those impacts will be combined with the current impacts to waters of the U.S. and will be reviewed cumulatively. Generally, compensatory mitigation will be required if individual or cumulative (i.e., past and present) losses or degradation of waters of the U.S. are greater than 150 linear feet of perennial or intermittent stream channel and/or 0.1 acre of wetland. Additionally, cumulative impacts that result in the loss or degradation of greater than 300 linear feet of perennial or intermittent* stream channel, and/or 0.5 acre of wetland, will be processed under an Individual Permit. This verification of the use of the Nationwide Permit Program for this project does not imply that this office will necessarily approve any future proposal to impact waters of the U.S. on this property and/or associated with this project/activity.
 - * The District Commander has the ability to waive the 300 linear foot limit for intermittent streams on a case-by-case basis. All requests for waiver must be in writing and shall include rationale for the request.

County: Gaston County	
Permittee: NC Dept. of Transportation, Philip Harris	
Project Name: NCDOT-US321/I85Interchange-I5000-Gas	ton-Div12
Date Verification Issued: <u>1/31/2017</u>	
Project Manager: <u>Steve Kichefski</u>	
Upon completion of the activity authorized by this permit sign this certification and return it to the following address	
US ARMY CORPS OF WILMINGTON DI Attn: Steve Kich Asheville Regulator U.S Army Corps of 151 Patton Avenue, Asheville, North Card Please note that your permitted activity is subject to a comengineers representative. Failure to comply with any term result in the Corps suspending, modifying or revoking the administrative penalty, or initiating other appropriate legal I hereby certify that the work authorized by the above refeaccordance with the terms and condition of the said permitaccordance with the permit conditions.	ISTRICT hefski ry Office Engineers Room 208 plina 28801 upliance inspection by a U. S. Army Corps of us or conditions of this authorization may authorization and/or issuing a Class I al action. Gerenced permit has been completed in it, and required mitigation was completed in
Signature of Permittee	Date

Action ID Number: <u>SAW-2010-00033</u>

	NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL									
Ap	Applicant: NC Dept. of Transportation, Philip Harris File Number: SAW-2010-00033 Date: 1/31/2017									
At	tached is:		See Section below							
	INITIAL PROFFERED PERMIT (Standard Permit or	Letter of permission)	A							
	PROFFERED PERMIT (Standard Permit or Letter of	permission)		В						
	PERMIT DENIAL			С						
	APPROVED JURISDICTIONAL DETERMINATION	V		D						
X	PRELIMINARY JURISDICTIONAL DETERMINAT	TON		E						

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at or http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx or the Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
 signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all
 rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the
 permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
 signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all
 rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the
 permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein,
 you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of
 this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days
 of the date of this notice.
- **C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- **D:** APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the district engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- **E: PRELIMINARY JURISDICTIONAL DETERMINATION**: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS	TO AN INITIAL PROFFERED	PERMIT
REASONS FOR APPEAL OR OBJECTIONS: (Describe y	our reasons for appealing the de-	cision or your objections to an initial
proffered permit in clear concise statements. You may attac	h additional information to this f	orm to clarify where your reasons or
objections are addressed in the administrative record.)		kristin nuotusen viettamatsivait 🛂 – annon hollen kir 💆 Proportiakoa – ataalaheen kotatataan kotan
Sect. 3 Bit. The Reserver and Association and Colored Section Association and Colored Section Association and Colored Section Association Association Association Association Association Association Association Association		
ADDITIONAL INFORMATION: The appeal is limited to a	review of the administrative rec	ord the Corps memorandum for the
record of the appeal conference or meeting, and any supplen		
clarify the administrative record. Neither the appellant nor t		
However, you may provide additional information to clarify		
record.	the location of information that	is already in the administrative
ant published with the control of th	TI CAL	
POINT OF CONTACT FOR QUESTIONS OR INFORMA		**
If you have questions regarding this decision and/or the		ording the appeal process you may
appeal process you may contact:	also contact:	
District Engineer, Wilmington Regulatory Division	Mr. Jason Steele, Administrativ	ve Appeal Review Officer
Attn: Steve Kichefski	CESAD-PDO	
Asheville Regulatory Office	U.S. Army Corps of Engineers	, South Atlantic Division
U.S Army Corps of Engineers	60 Forsyth Street, Room 10M1	5
151 Patton Avenue, Room 208	Atlanta, Georgia 30303-8801	
Asheville, North Carolina 28801	Phone: (404) 562-5137	
	[1 HOHe. (TOT) 302-3137	
	Septimination (1788) 1 Negrober 5 80 90 Hills (1794) (1794)	
RIGHT OF ENTRY: Your signature below grants the right	of entry to Corps of Engineers p	
consultants, to conduct investigations of the project site duri	of entry to Corps of Engineers p ng the course of the appeal proce	ess. You will be provided a 15 day
	of entry to Corps of Engineers p ng the course of the appeal proce	ess. You will be provided a 15 day
consultants, to conduct investigations of the project site duri	of entry to Corps of Engineers p ng the course of the appeal proce	ess. You will be provided a 15 day
consultants, to conduct investigations of the project site duri	of entry to Corps of Engineers p ng the course of the appeal proce y to participate in all site investi	ess. You will be provided a 15 day gations.

For appeals on Initial Proffered Permits send this form to:

District Engineer, Wilmington Regulatory Division, Attn: Steve Kichefski , 69 Darlington Avenue, Wilmington, North Carolina 28403

For Permit denials, Proffered Permits and Approved Jurisdictional Determinations send this form to:

Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Jason Steele, Administrative Appeal Officer, CESAD-PDO, 60 Forsyth Street, Room 10M15, Atlanta, Georgia 30303-8801 Phone: (404) 562-5137

U.S. ARMY CORPS OF ENGINEERS

Wilmington District

Compensatory Mitigation Responsibility Transfer Form

Permittee: NCDOT/ Attn: Philip Harris

Action ID: SAW-2010-00033

Project Name: NCDOT-US321l85Interchange-I5000-Gaston-Div12

County: Gaston

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: 03050102, Catawba River Basin

г					, , , , , , , , , , , , , , , , , , , ,						
	Stream	m Impacts (linea	r feet)	Wetland Impacts (acres)							
	Warm	Warm Cool Cold		Riparian Riverine	Riparian Riverine Riparian Non-Riverine Non-Riparian						
	197			0.09							
											

^{*}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: 03050102, Catawba River Basin.

Stream	Mitigation (credi	ts)	Wetland Mitigation (credits)					
Warm	Warm Cool		Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal		
394	394		0.18					

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:	2 DMS
Name of Sponsor's Authorized Representative:	Both Harmon
Belli Darmon	02/01/2017
Signature of Sponsor's Authorized Representative	Date of Signature

6 B --

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

USACE Project Manager: Steve Kichefski

USACE Field Office: Asheville Regulatory Field Office

US Army Corps of Engineers 151 Patton Avenue, Room 208

Asheville, North Carolina 28801-5006

Email: steven.l.kichefski@usace.army.mil

KICHEFSKI.STEVEN.L 1386908539

Digitally signed by KICHEFSKI.STEVEN.L.1386908539 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=KICHEFSKI.STEVEN.L.1386908539 Date: 2017.01.31 16:38:38 -05'00'

USACE Project Manager Signature

January 31, 2017

Date of Signature

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

Page 2 of 2

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

DEPARTMENT OF THE ARMY Wilmington District, Corps of Engineers 69 Darlington Avenue Wilmington, North Carolina 28403-1343 April 30, 2015

Regional General Permit No. 198200031

Name of Permittee: North Carolina Department of Transportation

Effective Date: <u>April 30, 2015</u> Expiration Date: <u>April 30, 2020</u>

DEPARTMENT OF THE ARMY REGIONAL GENERAL PERMIT

A regional general permit (RGP) to perform work in or affecting navigable waters of the United States and waters of the United States, upon recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403), and Section 404 of the Clean Water Act (33 U.S.C. 1344), is hereby modified and re-issued by authority of the Secretary of the Army by the

District Commander U.S. Army Engineer District, Wilmington Corps of Engineers 69 Darlington Avenue Wilmington, North Carolina 28403-1343

TO AUTHORIZE THE DISCHARGE OF DREDGED OR FILL MATERIAL IN WATERS OF THE UNITED STATES (U.S.), INCLUDING WETLANDS, ASSOCIATED WITH MAINTENANCE, REPAIR, AND CONSTRUCTION PROJECTS CONDUCTED BY THE VARIOUS DIVISIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) INCLUDING THE NCDOT DIVISION OF HIGHWAYS, RAIL, BICYCLE/PEDESTRIAN, ECT.

Activities authorized are:

- a. Construction, maintenance, and repair of bridges, to include work on the approaches, where permanent impacts resulting in a loss of waters of the U.S. will be less than or equal to 500 linear feet (lf) of stream and/or one (1) acre of wetland/non-tidal open water for each single and complete linear project*.
- b. Best-fit widening projects that have undergone interagency review and completed the current interagency Merger Process, which merges the requirements of the National Environmental Policy Act (NEPA) with those found within Section 404 of the Clean Water Act (CWA).

While there is no impact threshold for these widening projects, the Corps has the discretion to require an individual permit if it determines that the proposed impacts will have more than a minimal impact on the aquatic environment or on other environmental factors, or if the project would normally require an Environmental Impact Statement (EIS) under current Federal Highway Administration (FHWA) guidelines. Best-fit projects may include a small amount of new location roadway for components such as interchanges or intersections, provided the new location portion has been concurred upon by the merger team.

- c. Minor widening projects, such as paving and/or widening secondary roads, or interchange improvements, when permanent impacts which result in a loss of waters of the U.S. from installation and/or extension of culverts and/or pipes will be less than or equal to 500 lf of stream and/or one (1) acre of wetland/non-tidal open water for each single and complete linear project.
- d. Stream relocation(s) associated with projects identified in a-c above. Stream relocation lengths are to be evaluated independently and are not included within each respective maximum limit threshold for the authorized actions stated above.

*Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the U.S. (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of this RGP. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Generally, off-site detours are preferred to avoid and minimize impacts to the human and natural environment. However, if an off-site detour is considered impracticable, then an on-site detour may be considered as a necessary component of the actions described above. Impacts from the detour may be considered temporary and may not require compensatory mitigation if the impacted area is restored to its pre-project condition after construction is complete. If the construction of a detour (on-site or off-site) includes standard undercutting methods, removal of all material and backfilling with suitable material is required.

1. Special Conditions.

- a. The applicant must submit a pre-construction notification (PCN) with specified attachments to the District Engineer and receive written verification from the Corps that the proposed work complies with this RGP prior to commencing any activity authorized by this RGP.
- b. If the project will not impact a designated "Area of Environmental Concern" (AEC) in the twenty (20) counties of North Carolina covered by the North Carolina Coastal Area Management Act (CAMA), then a consistency submission is not required. If the project will impact a designated AEC and meets the definition of "development", then the applicant must

obtain the required CAMA permit. Development activities may not commence until a copy of the approved CAMA permit is furnished to the appropriate Wilmington District Regulatory Field Office (Wilmington Field Office – 69 Darlington Avenue, Wilmington, NC 28403 or Washington Field Office – 2407 West 5th Street, Washington, NC 27889).

The twenty (20) CAMA counties in North Carolina include Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hertford, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell, and Washington.

c. Discharges into Waters of the U.S. designated by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are prohibited during the period between February 1 and June 30, without prior written approval from NCDMF, NCWRC, National Marine Fisheries Service (NMFS), and the Corps. Discharges into waters of the U.S. designated by NCDMF as primary nursery areas and discharges into waters of the U.S. designated by NCWRC as primary nursery areas in inland waters shall be coordinated with NCDCM (per existing agreement with NCDMF) and NCWRC prior to being authorized by this RGP. Coordination with NCDCM and NCWRC may result in a required construction moratorium during periods of significant biological productivity or critical life stages.

The applicant should contact:

NC Division of Marine Fisheries 3441 Arendell Street Morehead City, NC 28557 Telephone 252-726-7021 or 800-682-2632 North Carolina Wildlife Resources Commission Habitat Conservation Program Manager 1721 Mail Service Center Raleigh, NC 27699-1721 Telephone (919) 733-7638

- d. This permit does not authorize the use of culverts in areas designated as anadromous fish spawning areas by the NCDMF or the NCWRC.
- e. Waters of the U.S. designated as sturgeon spawning areas are excluded during the period between February 1 and June 30, without prior written approval from NMFS.
- f. If the project is located within the twenty (20) counties of North Carolina designated as coastal counties by CAMA, then all pipe and culvert inverts will be buried at least one foot below normal bed elevation when they are placed within the Public Trust AEC and/or the Estuarine Waters AEC as designated by CAMA. If the project is not located within the twenty (20) counties of North Carolina designated as coastal counties by CAMA, then culvert inverts will be buried at least one foot below the bed of the stream for culverts greater than 48 inches in diameter. Culverts 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The potential for destabilization of the channel and head cutting upstream should be considered in the placement of the culvert. A waiver from the depth specifications in this condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this condition would result in more adverse impacts to the aquatic environment. Culverts placed in wetlands do not have to be buried.

- g. No work shall be authorized by this RGP within the twenty coastal counties, as defined by the NCDCM, without prior consultation with NOAA Fisheries. For each activity reviewed by the Corps where it is determined that the activity may affect Essential Fish Habitat (EFH) for federally managed species, an EFH Assessment shall be prepared by the applicant and forwarded to the Corps and NOAA Fisheries for review and comment prior to authorization of work.
- h. Discharges of dredged or fill material into waters of the U.S., including wetlands, must be minimized or avoided to the maximum extent practicable.
- i. No activity may result in substantial permanent disruption of the movement of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. It is acceptable to use rock vanes at culvert outlets to ensure, enhance, or maintain aquatic passage. Pre-formed scour holes are acceptable when designed for velocity reduction. The width, height, and gradient of a proposed opening should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gauge data, if available. In the absence of such data, bankfull flow can be used as a comparable level. Where adjacent floodplain is available, flows exceeding bank-full should be accommodated by installing culverts at the floodplain elevation, if practicable. If multiple culverts are used, the construction of floodplain benches and/or sills to maintain base flow is required, if practicable.
- j. Upon completion of any work authorized by this RGP, all temporary fills (to include culverts, etc.) will be completely removed from waters of the U.S. and the areas will be restored to preconstruction conditions, to include pre-project elevations and contours, restoring natural hydrology and stream corridors, and reestablishing native vegetation/riparian corridors. This work will be completed within 60 days of completion of project construction. If this timeframe occurs while a required moratorium of this permit is in effect, the temporary fill shall be removed in its entirety within 60 days of the moratorium end date. If vegetation cannot be planted due to the time of the year, all disturbed areas will be seeded with a native mix appropriate for the impacted area, and vegetation will be planted in the fall. A native seed mix may contain non-invasive small grain annuals (e.g. millet and rye grain) to ensure adequate cover while native vegetation becomes established. The PCN must include a restoration plan showing how all temporary fills and structures will be removed and how the area will be restored to preproject conditions.
- k. All activities authorized by this RGP shall, to the extent practicable, be conducted "in the dry", with barriers installed between work areas and aquatic habitat to protect that habitat from sediment, concrete, and other pollutants. Where concrete is utilized, measures will be taken to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with waters of the U.S. until the concrete has cured/hardened. All water in the work area that has been in contact with concrete shall only be returned to waters of the U.S. when it no longer poses a threat to aquatic organisms (concrete is set and cured).
- 1. In cases where new alignment approaches are to be constructed and the existing approach fill in waters of the U.S. is to be abandoned and no longer maintained as a roadway, the

abandoned fill shall be removed and the area will be restored to preexisting wetland/stream conditions and elevations, to include restoring natural hydrology and stream corridors, and reestablishing native vegetation/riparian corridors, to the extent practicable. This activity may qualify as compensatory mitigation credit for the project and will be assessed on a case-by-case basis in accordance with Special Conditions "q" and "r" below. A restoration plan detailing this activity will be required with the submittal of the PCN.

- m. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- n. The project must be implemented and/or conducted so that all reasonable and practicable measures to ensure that equipment, structures, fill pads, and work associated with the project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or shoreline/streambank erosion. During construction, the permittee shall routinely monitor for these effects, cease all work if/when detected, take initial corrective measures to correct actively eroding areas, and notify the Corps immediately. Permanent corrective measures may require additional authorization from the Corps.
- o. All PCNs will describe sedimentation and erosion control structures and measures proposed for placement in waters of the U.S. To the extent practicable, structures and measures should be depicted on maps, surveys or drawings showing location and impacts to jurisdictional wetlands and streams. In addition, appropriate soil and erosion control measures must be established and maintained during construction. All fills, temporary and permanent, must be adequately stabilized at the earliest practicable date to prevent erosion of fill material into adjacent waters or wetlands.
- p. Before discharging dredged or fill material into waters of the U.S. in the twenty-five (25) mountain counties of North Carolina, the applicant will submit a PCN to the NCWRC and the Corps concurrently. The PCN shall summarize alternatives to conducting work in mountain trout waters considered during the planning process, detail why alternatives were or were not selected, and contain a compensatory mitigation plan for all unavoidable adverse impacts to mountain trout waters. For proposals where a bridge is replaced with a culvert, the PCN must also include details of any on-site evaluations that were conducted to determine that installation of a culvert will not adversely affect passage of fish or other aquatic biota at the project site. This information must include factors such as the proposed slope of the culvert and determinations of how the slope will be expected to allow or impede passage, the necessity of baffles and/or sills to ensure passage, design considerations to ensure that expected baseflow will be maintained for passage and that post-construction velocities will not prevent passage, site conditions that will or will not allow proper burial of the culvert, existing structures (e.g., perched culverts, waterfalls, etc.) and/or stream patterns up and downstream of the culvert site that could affect passage and bank stability, and any other considerations regarding passage. The level of detail for this information should be based on site conditions (i.e., culverts on a slope over 3% will most likely

require more information than culverts on a slope that is less than 1%, etc.). Also, in order to evaluate potential impacts, describe bedforms that will be impacted by the proposed culvert – e.g., pools, glides, riffles, etc. The NCWRC will respond both to the proponent and directly to the Corps.

The twenty-five (25) designated trout counties of North Carolina include Alleghany, Caldwell, Watauga, Ashe, Mitchell, Wilkes, Avery, Burke, Stokes, Surry, Buncombe, Henderson, Polk, Cherokee, Jackson, Rutherford, Clay, Macon, Swain, Graham, Madison, Transylvania, Haywood, McDowell, and Yancey.

The applicant may contact NCWRC at:

North Carolina Wildlife Resources Commission Ms. Marla Chambers Western NCDOT Permit Coordinator 206 Charter Street Albemarle, NC 28001 Office: 704-982-9181

- q. Compensatory mitigation will be required for permanent impacts resulting in a loss of waters of the U.S., including wetlands, from culverts/pipes and associated fill. Mitigation will also be required for stream relocation projects. The applicant will attach a proposed mitigation plan to the PCN. Mitigation proposals will be in accordance with currently approved Wilmington District and/or Corps-wide mitigation regulations and guidance. The Corps Project Manager will make the final determination concerning the appropriate amount and type of mitigation.
- r. Stream relocation(s) associated with projects may be authorized under this RGP. As stated above, mitigation will be required for all relocation projects. If the stream relocation is conducted in accordance with the requirements stated below in 1-5, the relocated segment of stream may* be considered toward reducing the amount of compensatory mitigation required. A relocation plan must be submitted with the PCN that addresses all factors required within the current Wilmington District, Corps of Engineers Stream Mitigation Guidelines, which can include, but may not be limited to:
- (1) The relocated stream has pattern, profile, and dimension based on natural channel design. If natural channel design construction is not possible due to site constraints, the relocated stream must have pattern, profile, and dimension similar to, or better than, the existing stream. Note that site constraints do not include those situations where NCDOT chooses not to acquire additional adjacent property that is available for purchase.
- (2) The new stream meets the current buffer requirements as stated in current District stream mitigation guidance. If the required buffer widths cannot be obtained, a project-by-project decision will be completed to determine if additional compensatory mitigation is required.
 - (3) The new location allows the relocated stream to remain stable (e.g., in a

valley vs. on a slope, no bends that will impact stability, etc.).

- (4) There is no loss of channel for any reason (e.g., old channel is 200' and new channel is 150' = 50' channel loss; part of the new channel is put in a culvert; the new channel (sides and bottom) is hardened with concrete, rip rap, etc.).
- (5) The Corps will determine if monitoring and reporting will be required for a specific project and the parameters of any required monitoring and reporting. If monitoring is required, a monitoring plan must be included with the PCN and meet current requirements.

All relocation plans must clearly depict both the existing channel and the proposed (relocated) channel.

* Conducting stream relocation(s) in accordance with 1-5 above may not fully compensate for the impact and may require additional compensatory mitigation. The Corps Project Manager will determine if the proposed amount of mitigation is adequate on a project-by-project basis.

If stream relocation cannot be conducted in accordance with 1-5 above, mitigation at a 2:1 ratio will typically be required unless: (1) the applicant provides a Stream Quality Assessment Worksheet or NCSAM documentation (when available) that supports a different mitigation ratio; (2) the Corps Project Manager determines that the relocated stream, while not in full compliance with 1-5 above, warrants partial mitigation, or; (3) the Corps determines that the existing stream is an excellent quality stream, in which case a 3:1 mitigation ratio may be required. The Corps Project Manager will make the final determination concerning the appropriate amount and type of mitigation.

If the Corps determines that the proposed stream relocation is of such a magnitude that it cannot be authorized by this RGP, an Individual Permit will be required.

- s. The applicant shall sign and return the compliance certificate that is attached to the RGP verification letter.
- t. In the event that any Federal agency maintains an objection or any required State authorization is outstanding, no notice to proceed will be given until objections are resolved and State authorizations are issued.
- u. The Corps may place additional special conditions, limitations, or restrictions on any verification of the use of RGP 31 on a project-by-project basis.

2. General Conditions.

a. Except as authorized by this RGP or any Corps approved modification to this RGP, no excavation, fill or mechanized land-clearing activities shall take place within waters or wetlands, at any time in the construction or maintenance of this project. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

- b. Authorization under this RGP does not obviate the need to obtain other federal, state, or local authorizations.
- c. All work authorized by this RGP must comply with the terms and conditions of the applicable CWA Section 401 Water Quality Certification for this RGP issued by the NCDWR.
- d. The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).
- e. The activities authorized by this RGP must not interfere with the public's right to free navigation on all navigable waters of the U.S. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for a reason other than safety.
- f. The permittee understands and agrees that, if future operations by the U.S. require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.
- g. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the U.S. and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the affected water of the U.S. to its former conditions.
- h. The permittee will allow the Wilmington District Engineer or his representative to inspect the authorized activity at any time deemed necessary to assure that the activity is being performed or maintained in strict accordance with the Special and General Conditions of this permit.
 - i. This RGP does not grant any property rights or exclusive privileges.
 - j. This permit does not authorize any injury to the property or rights of others.
- k. This RGP does not authorize the interference with any existing or proposed federal project.
- 1. In issuing this permit, the Federal Government does not assume any liability for the following:
 - (1) Damages to the permitted project or uses thereof as a result of other permitted

or unpermitted activities or from natural causes.

- (2) Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest.
- (3) Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - (4) Design or construction deficiencies associated with the permitted work.
- (5) Damage claims associated with any future modification, suspension, or revocation of this permit.
- m. Authorization provided by this RGP may be modified, suspended or revoked in whole or in part if the Wilmington District Engineer, acting for the Secretary of the Army, determines that such action is in the best public interest. The term of this RGP shall be five (5) years unless subject to modification, suspension or revocation. Any modification, suspension or revocation of this authorization will not be the basis for any claim for damages against the U.S. Government.
- n. This RGP does not authorize any activity, which the District Engineer determines, after any necessary investigations, will adversely affect:
- (1) Rivers named in Section 3 of the Wild and Scenic Rivers Act (15 U.S.C. 1273), those proposed for inclusion as provided by Sections 4 and 5 of the Act, and wild, scenic and recreational rivers established by state and local entities.
- (2) Sites included in or determined eligible for listing in the National Registry of Natural Landmarks.
- (3) NOAA designated marine sanctuaries, National Estuarine Research Reserves, and coral reefs.
- (4) Submerged Aquatic Vegetation (SAV) as defined by the N.C. Division of Marine Fisheries at 15A NCAC 03I .0101(4)(i)).

o. Endangered Species.

- (1) No activity is authorized under this RGP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under this RGP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
- (2) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees (and when FHWA is the lead federal agency) must provide the district engineer with the appropriate documentation to demonstrate compliance with

those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the RGP activity, or whether additional ESA consultation is necessary.

- (3) Non-federal permittees must submit a PCN to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-federal applicant of the Corps' determination within 45 days of receipt of a complete PCN notification. In cases where the nonfederal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (4) As a result of formal or informal consultation with the U.S. Fish and Wildlife Service (USFWS) or NMFS, the district engineer may add species-specific endangered species conditions to the RGP.
- (5) Authorization of an activity by a RGP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the ESA prohibits any person subject to the jurisdiction of the U.S. to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (6) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.noaa.gov/fisheries.html respectively.
- p. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity.
 - q. For proposed activities the sixteen counties listed below, applicants must provide a

copy of the PCN to the USFWS, 160 Zillicoa Street, Asheville, North Carolina 28801. This PCN must be sent concurrently to the USFWS and the Corps Project Manager for that specific county.

Counties with tributaries that drain to designated critical habitat that require notification to the Asheville USFWS: Avery, Cherokee, Forsyth, Graham, Haywood, Henderson, Jackson, Macon Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

Applicants may contact the appropriate USFWS office listed below or the US Army Corps of Engineers:

US Fish and Wildlife Service Asheville Field Office 160 Zillicoa Street Asheville, NC 28801 Telephone: (828) 258-3939

Asheville USFWS Office counties: All counties west of and including Anson, Stanly, Davidson, Forsyth and Stokes Counties.

US Fish and Wildlife Service Raleigh Field Office Post Office Box 33726 Raleigh, NC 27636-3726 Telephone: (919) 856-4520

Raleigh USFWS Office counties: all counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

- r. Permittees are advised that development activities in or near a floodway may be subject to the National Flood Insurance Program that prohibits any development, including fill, within a floodway that results in any increase in base flood elevations. This RGP does not authorize any activity prohibited by the National Flood Insurance Program.
- s. The permittee must make every reasonable effort to perform the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife and natural environmental values.
- t. All activities authorized by this RGP that involve the use of riprap material for bank stabilization, the following measures shall be applied:
- (1) Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters.
- (2) The placement of riprap shall be limited to the areas depicted on submitted work plan drawings and not be placed in a manner that prevents or impedes fish passage.
 - (3) The riprap material shall be clean and free from loose dirt or any pollutant

except in trace quantities that will not have an adverse environmental effect.

- (4) It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.
- (5) The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.
- (6) A waiver from the specifications in this general condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this condition will result in greater adverse impacts to the aquatic environment.
- u. The permittee must install and maintain, at his expense, any signal lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on authorized facilities. For further information, the permittee should contact the U.S. Coast Guard Marine Safety Office at (910) 772-2191.
- v. The permittee must maintain any structure or work authorized by this permit in good condition and in conformance with the terms and conditions of this permit. The Permittee is not relieved of this requirement if the Permittee abandons the structure or work. Transfer in fee simple of the work authorized by this permit will automatically transfer this permit to the property's new owner, with all of the rights and responsibilities enumerated herein. The permittee must inform any subsequent owner of all activities undertaken under the authority of this permit and provide the subsequent owner with a copy of the terms and conditions of this permit.
- w. At his sole discretion, any time during the processing cycle, the Wilmington District Engineer may determine that this RGP will not be applicable to a specific proposal. In such case, the procedures for processing an individual permit in accordance with 33 CFR 325 will be available.
- x. The activity must comply with applicable FEMA approved state or local floodplain management requirements.
- y. All fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.
 - z. All excavated material will be disposed of in approved upland disposal areas.
 - aa. Historic Properties.
- (1) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places (NRHP), the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

- (2) Federal permittees (or when FHWA is the lead federal agency) should follow their own procedures for complying with the requirements of Section 106 of the NHPA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address Section 106 compliance for this RGP activity, or whether additional Section 106 consultation is necessary.
- (3) Non-federal permittees must submit a PCN to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the NRHP, including previously unidentified properties. For such activities, the PCN must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO), as appropriate, and the NRHP (see 33 CFR 330.4(g)). When reviewing PCNs, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the NHPA. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.
- (4) The district engineer will notify the prospective permittee within 45 days of receipt of a complete PCN whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA Section 106 consultation is required and will occur, the district engineer will notify the non-federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (5) Prospective permittees should be aware that Section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit will relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the

undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

- bb. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the NRHP.
- cc. There will be no unreasonable interference with navigation or the right of the public to riparian access by the existence or use of activities authorized by this RGP.
- dd. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- ee. This RGP will not be applicable to proposed construction when the Wilmington District Engineer determines that the proposed activity will significantly affect the quality of the human environment and determines that an EIS must be prepared.
- ff. Activities which have commenced (i.e. are under construction) or are under contract to commence in reliance upon this general permit will remain authorized provided the activity is completed within twelve months of the date of the general permit's expiration, modification, or revocation. Activities completed under the authorization of this general permit which were in effect at the time the activity was completed continue to be authorized by the general permit.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Colonel, U. S. Army District Commander



MICHAEL S. REGAN
Secretary

S. JAY ZIMMERMAN

Director

January 30, 2017 Gaston County NCDWR Project No. 20161220v.1 I-85/US 321 interchange realign TIP/State Project No. I-5000

APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS

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

Dear Mr. Harris:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of realigning the US 321/I-85 Interchange in Gaston County. This project has very specific challenges because portions of it are either on top of an old landfill or encroach into the landfill with structures. As such, exceptional attention will need to be given to the construction process in those areas. The areas with any type of landfill encroachment should be clearly delineated for construction personnel to see. This site has an active contract with Smith+Gardner Engineering for site assessment and clean-up. Every effort should be made to coordinate with the consultant for site management. Please also follow guidance provided by the Division of Waste Management in the meeting on June 24, 2016. See attached meeting notes.

Stream Impacts in the Catawba River Basin

Site	ite Stabilization Stabili		Stabilization Stabilization Stream		Total Stream Impact (linear ft)	Stream Impact Requiring Mitigation (linear ft)	
1	d Sansa		246	23	269	246	
3		59		136	195	59	
4	10	10			20	10	
5		55	216	10	226	216	
6	23	91	Name in some of the	164	278	91	
7	10	10	6 11 6	Proposed Fifth Res	20	10	
8	10	10		A Decreation	20	10	
9	10	10		Autoritan	20	10	
TOTAL	63	190	462	333	1048	652	

Total Stream Impact for Project: 1048 linear feet. Stream Impacts Considered Improvements (mitigation waived in Merger): 317 Stream Impacts Requiring Mitigation: 335 linear feet

*Part of typical mitigation has been waived due to channel improvements proposed. The existing stream is in terrible condition and bank stabilization, Rankin Lake bridge removal, sediment removal for culvert, et al., will improve stream function and help prevent future degradation.

Wetland Impacts in the Catawba River Basin (riverine)

Site	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)	Impacts Requiring Mitigation (ac)
2	0.09					0.09	0.09
						0.00	0.00
Total	0.09	0.00	0.00	0.00	0.00	0.09	0.09

Total Wetland Impact for Project: 0.09 acres.

The project shall be constructed in accordance with your application dated received December 12, 2016. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number3886. This certification corresponds to the General Permit 198200031 issued by the Corps of Engineers. In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must 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 total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification(s) and any additional conditions listed below.

Condition(s) of Certification:

Project Specific Conditions

- 1. Compensatory mitigation for 335 linear feet of impact to warm streams and 0.09 acres of riverine wetland impacts is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams through the North Carolina Division of Mitigation Service (DMS) (formerly NCEEP), and that the DMS has agreed to implement the mitigation for the project. The DMS has indicated in a letter dated December 5, 2016 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the DMS Mitigation Banking Instrument signed July 28, 2010.
- 2. The NCDOT Division Environmental Officer or Environmental Assistant will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the potential issues with stream and pipe alignment at the permitted site. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 02H.0506(b)(2) and (b)(3)]

- 3. All excavation and/or disposal of material from landfill areas should be handled per the regulations of Division of Waste Management, Solid Waste Section, Pre-Regulatory Landfill Branch. [15A NCAC 02H.0506(b)(3)]
- 4. Stream bed material excavated from the stream shall not be returned to any portion of the riparian area due to potential of the exceedance of water quality standards. Stream bed material shall be excavated in the dry for the same reason. Disposal of material from the area excavated area should be handled per the regulations of Division of Waste Management, Solid Waste Section, Pre-Regulatory Landfill Branch. [15A NCAC 02B .0201 and .0211]
- 5. Any exposure of landfill material in the riparian/streambank area should be brought to the attention of regulatory agencies, Division of Water Resources and Division of Waste Management for assessment and restoration requirements. [15A NCAC 02B .0201]
- 6. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species. [15A NCAC 02H.0506(b)(2)]
- 7. NCDOT shall be in compliance with the NCS00250 issued to the NCDOT, including the applicable requirements of the NCG01000. Please note the extra protections for the sensitive watersheds. [15A NCAC 02H.0506(b)(2)]
- 8. Tall fescue shall not be used in the establishment of temporary or permanent groundcover within riparian areas. For the establishment of permanent herbaceous cover, erosion control matting shall be used in conjunction with an appropriate native seed mix on disturbed soils within the riparian area and on disturbed steep slopes with the following exception. Erosion control matting is not necessary if the area is contained by perimeter erosion control devices such as silt fence, temporary sediment ditches, basins, etc. Matting should be secured in place with staples, stakes, or wherever possible, live stakes of native trees. Erosion control matting placed in riparian areas shall not contain a nylon mesh grid, which can impinge and entrap small animals. For the establishment of temporary groundcover within riparian areas, hydroseeding along with wood or cellulose based hydro mulch applied from a fertilizer- and limestone-free tank is allowable at the appropriate rate in conjunction with the erosion control measures. Discharging hydroseed mixtures and wood or cellulose mulch into surface waters in prohibited. Riparian areas are defined as a distance 25 feet landward from top of stream bank. [15A NCAC 02H.0506(b)(2)]
- 9. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species. [15A NCAC 02H.0506(b)(2)]
- 10. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed. [15A NCAC 02H.0506(b)(2)]
- 11. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage. [15A NCAC 02H.0506(b)(2)]
- 12. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H .0506(b)(3)

General Conditions

- 1. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required. [15A NCAC 02H.0506(b)(2)]
- 2. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
- 3. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
- 4. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
- 5. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
- 6. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
- 7. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]
- 8. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
- 9. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]
- 10. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]
- 11. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
- 12. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]

- 13. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
- 14. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
- 15. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]
- 16. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
- 17. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
- 18. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]
- 19. Native riparian vegetation (ex. Salix nigra, Juncus (spp), Carex (spp), et al.) must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02B.0231(b)(6)]
- 20. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. [15A NCAC 02H.0506(b)(3) and (c)(3)]
- 21. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3]):
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
- 22. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [15A NCAC 02H.0506(b)(3) and (c)(3)]

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. Sam M.Hayes, General Counsel Department of Environmental Quality 1601 Mail Service Center

This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact Donna Hood at (704)682-2839 or donna.hood@ncdenr.gov.

Sincerely,

S. Jay Zimmerman, Director Division of Water Resources

all Compute for

Electronic copy only distribution:

Steve Kichefski, US Army Corps of Engineers, Asheville Field Office
Trish Beam, Division 10 Environmental Officer
Colin Mellor, NC Department of Transportation
Carla Dagnino, NC Department of Transportation
Dr. Cynthia Van Der Wiele, US Environmental Protection Agency
Marella Buncick, US Fish and Wildlife Service
Marla Chambers, NC Wildlife Resources Commission
Donna Hood, NC Division of Water Resources Mooresville Regional Office
File Copy





MICHAEL S. REGAN Secretary

S. JAY ZIMMERMAN

Director

NCDWR Project No.:	County:
Applicant:	
Project Name:	
Date of Issuance of 401 Water Quality Co	ertification:
any subsequent modifications, the applicant Unit, North Carolina Division of Water Res	nin the 401 Water Quality Certification or applicable Buffer Rules, and it is required to return this certificate to the 401 Transportation Permitting sources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This formula, the applicant's authorized agent, or the project engineer. It is not esse.
Applicant's Certification	
was used in the observation of the construct	, hereby state that, to the best of my abilities, due care and diligence tion such that the construction was observed to be built within substantial ality Certification and Buffer Rules, the approved plans and als.
Signature:	Date:
Agent's Certification	
was used in the observation of the construct	, hereby state that, to the best of my abilities, due care and diligence tion such that the construction was observed to be built within substantial ality Certification and Buffer Rules, the approved plans and als.
Signature:	Date:
Engineer's Certification	
Partial Final	
Permittee hereby state that, to the best of m construction such that the construction was	, as a duly registered Professional Engineer in the State of North e (periodically, weekly, full time) the construction of the project for the sy abilities, due care and diligence was used in the observation of the observed to be built within substantial compliance and intent of the 401 es, the approved plans and specifications, and other supporting materials
Signature	Registration No.
Date	



North Carolina Department of Transportation

Highway Stormwater Program STORMWATER MANAGEMENT PLAN



STORMWATER MANAGEMENT PLAN											VT OF TRANSPORT		
(Version 2.03; Released O	october 2015)				FOR NCDOT P	ROJECTS							
WBS Element:		TIP No.:	I-5000		County(ies):	Gaston				Page	1	of	2
				(General Project I	nformation							
WBS Element:				TIP Number:	I-5000		Project	туре:	Roadway Relocation		Date:	11/20/2	2016
NCDOT Contact:		Bill Zerman, P.E.				Contractor / Desig	ner:	Dan Robisi	non, P.E.				
	Address:	NCDOT Hydrauli	CS				Address:	Kimley-Hor	'n				
		1000 Birch Ridge	Road					3001 West	on Parkway				
		Raleigh, NC 276	10					Cary, NC 2	7513				
	Phone:	919-707-6709				1	Phone:	919-677-2	178				
	Email:	bzerman@ncdot.	gov				Email:	dan.robinse	on@kimley-horn.com				
City/Town:			Gas	tonia		County(ies):	Gas	ton					
River Basin(s):		Cata	ıwba			CAMA County?	N	0					
Wetlands within Pro	ject Limits?	Yes											
					Project Desc	ription							
Project Length (lin. n	niles or feet):	0.644	Miles	Surrounding	Land Use:	Urban							
				Proposed Proje	ect				Existing Si	te			
Project Built-Upon A	rea (ac.)		22.6		ac.			19.9	ac.				
Typical Cross Section	on Description:			h concrete barrier					lanes with concrete bar				
		Along US 321: 2'-			dditional concrete	islands and	, ,	lopes. Along	g US 321: 2 @ 12' lanes	s with con	crete island	s and de	dicated
		intersection recor	ntiguration for nev	w ramp terminals.			turn lanes.						
Annual Avg Daily Tra	affic (veh/hr/day):	Design/Future		59,100 Year: 2035			Existing:				Yea		015
General Project Narr									ge 2 of 2 of Stormwater				
(Description of Minin									al stream. Culvert Avoid				
Quality Impacts)			idance (dated April 2012) was used in designing culverts. New location culverts and culvert extensions were designed with sills/floodplain benches to maintain buried culvert boths and promote stable crossings and for roadside ditches entering the stream. Culverts are backfilled with native materials. Where necessary, some storm drain outlets										
			e tied into proposed culverts to prevent erosion of the existing stream. Limiting paved shoulders maximized vegetative conveyance. Incorporating vegetated swales into the nage system throughout the project reduces flow velocity while also promoting natural sedimentation, filtration, and infiltration of stormwater drainage. Planning minimum										
									some treatment before				
			nning phase, the preferred alternative tightened the curvature of Ramp D and removed Ramp DD which lessened the impact to Highland Creek. The existing bridge on his hake Road (Site 3) will be removed and the natural floodplain restored. At Site 5, the stream was daylighted as much as possible which minimized the culvert length and										
		impacts to the str				,		, , , , , , , , , , , , , , , , , , ,	,				3, 3, 1
					Waterbody Inf	ormation							
Surface Water Body	(1):	Lo	ng Creek (Tributa	ary L-8 Unclassifie	ed)	NCDWR Stream In	dex No.:		11-1:	29-16-(4)			
NCDWP Surface Wes	tor Classification to	r Water Body		Primary Classifi	cation:	Class	С						
NCDWR Surface Wat	ter Classification to	r water Body		Supplemental C	lassification:	None							
Other Stream Classif	fication:	No	ne										
Impairments:		biological i											
Aquatic T&E Species	s?	No	Comments:										
NRTR Stream ID:		F13SE5						Buffer Rul	es in Effect:			N/A	
Project Includes Brid	dge Spanning Water		No	Deck Drains Dis	scharge Over Bu	ffer?	N/A		Pads Provided in Buf	fer?		N/A	
Deck Drains Dischar			N/A			the General Project			describe in the General		larrative; if r		in the
	de justification in the			1	-	•	,		General Pr			. ,	
() 55, p. 6416	,			L				1					



North Carolina Department of Transportation

THE OF NORTH CAROLINA TO TRANSPORT

Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS

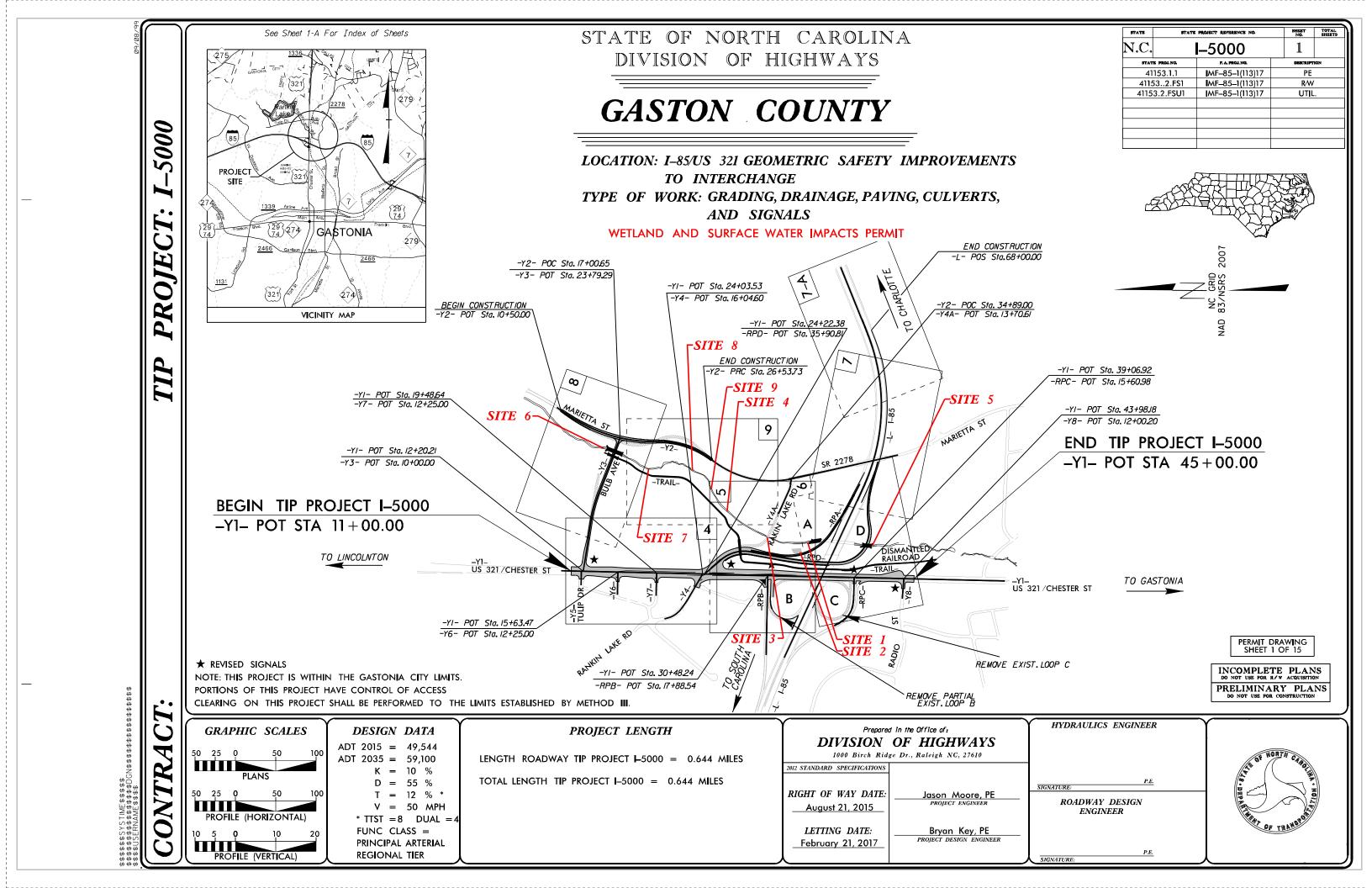
(Version 2.03; Released October 2015)

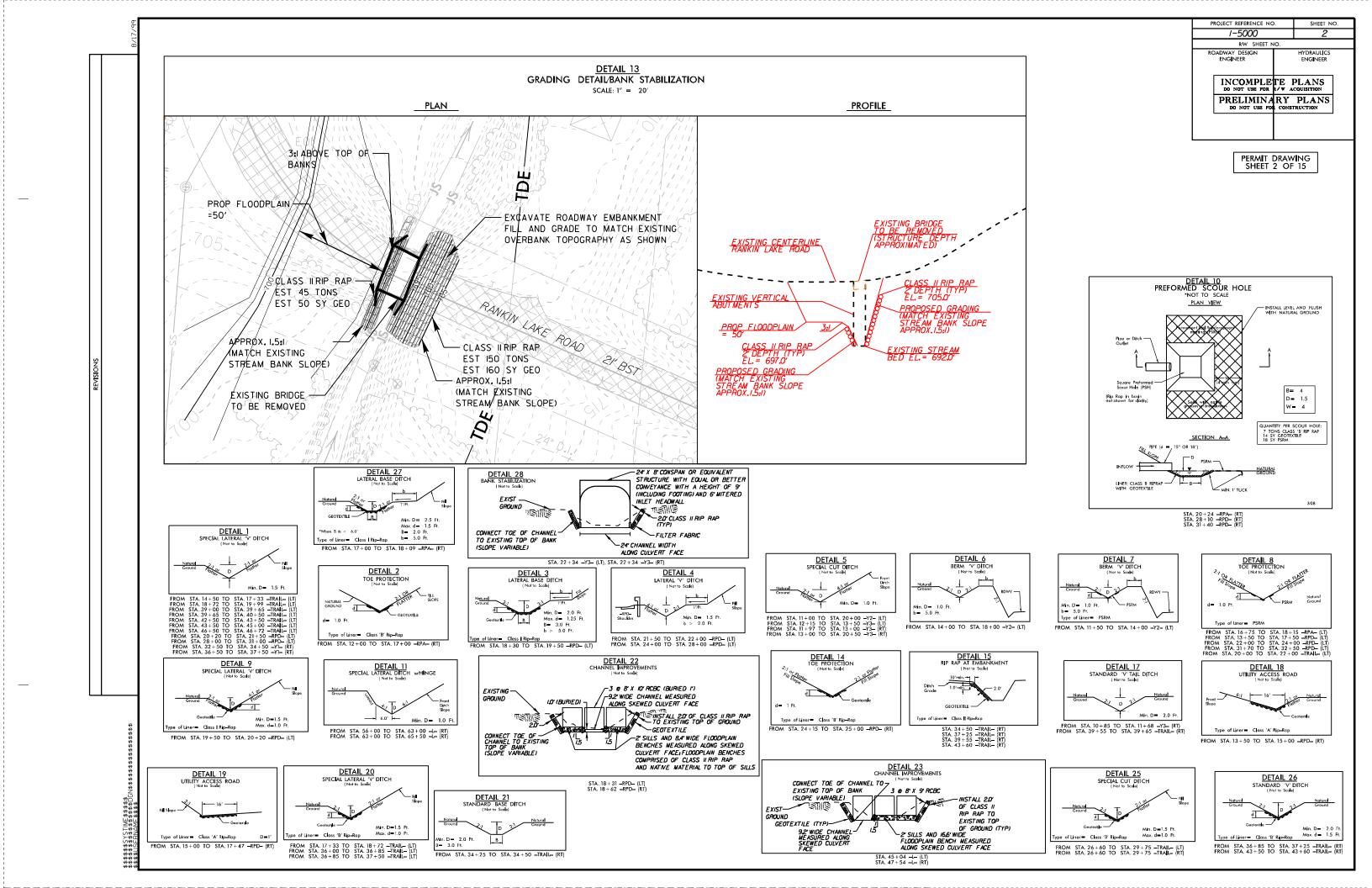
WBS Element: TIP No.: I-5000 County(ies): Gaston Page 2 of 2

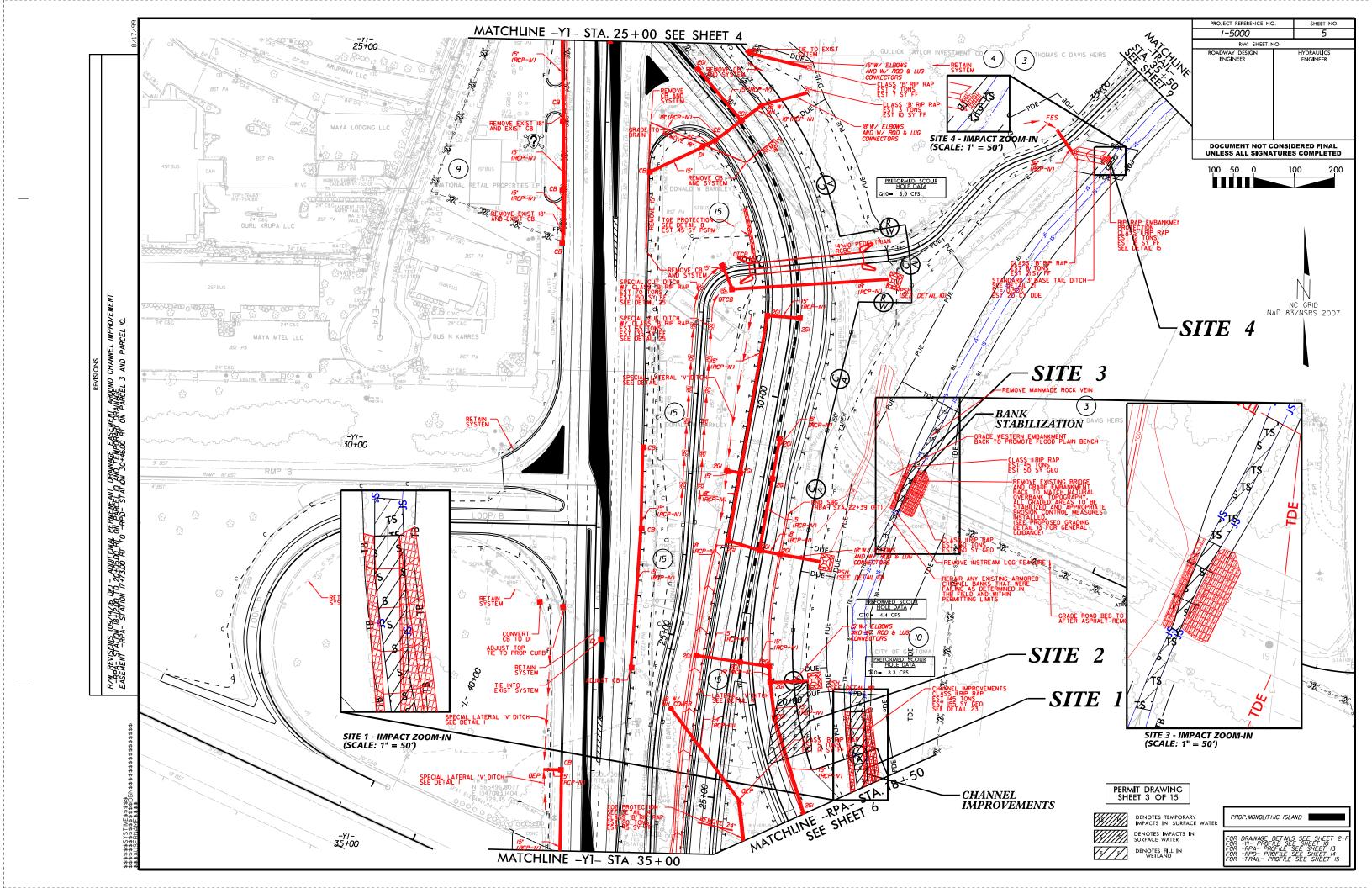
	WB5 Element: TIP No.: 1-5000 County(les): Gaston Page 2 of 2										
			Prefori	ned Scour Holes ar	nd Energy Diss	ipators					
Sheet No.	Station & Coordinates (Road and Non Road Projects)	Surface Water Body	Energy Dissipator Type	Riprap Type	Drainage Area (ac)	Conveyance Structure	Pipe/Structure Dimensions (in)	Q10 (cfs)	V10 (fps)	BMP Associated w/ Buffer Rules?	
5	-RPA- 20+24 (RT) 35.2845242,-81.1869893	(1)Long Creek	PSH	Class 'B'	0.8	Pipe	15	3.3	1.4	N/A	
5	-RPD- 28+10 (RT)	(1)Long Creek	PSH	Class 'B'	1.1	Pipe	18	4.4	1.5	N/A	
5	-RPD- 31+41 (RT)	(1)Long Creek	PSH	Class 'B'	0.9	Pipe	18	3.0	1.3	N/A	
				Additional Co							

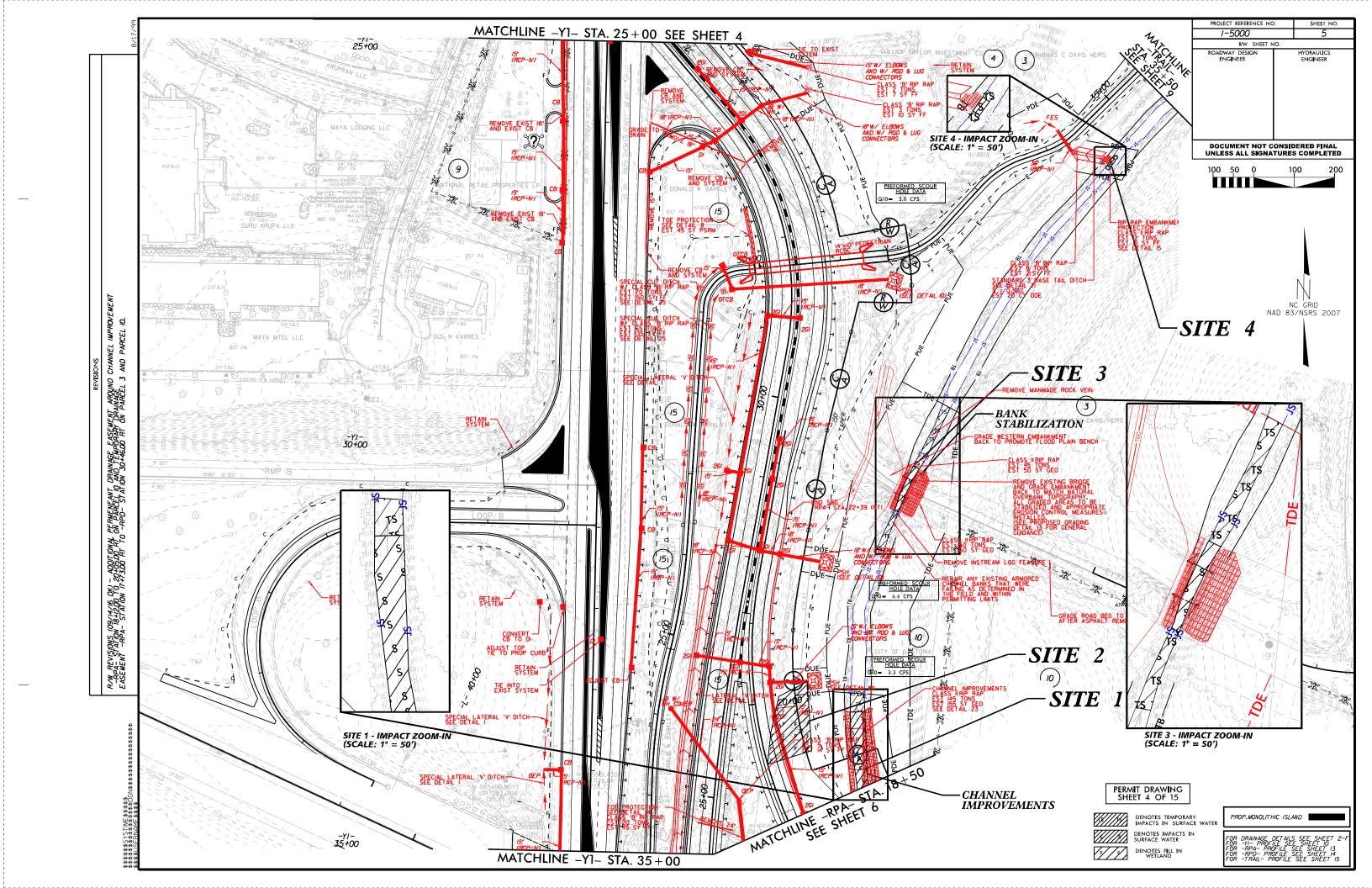
Additional Comments

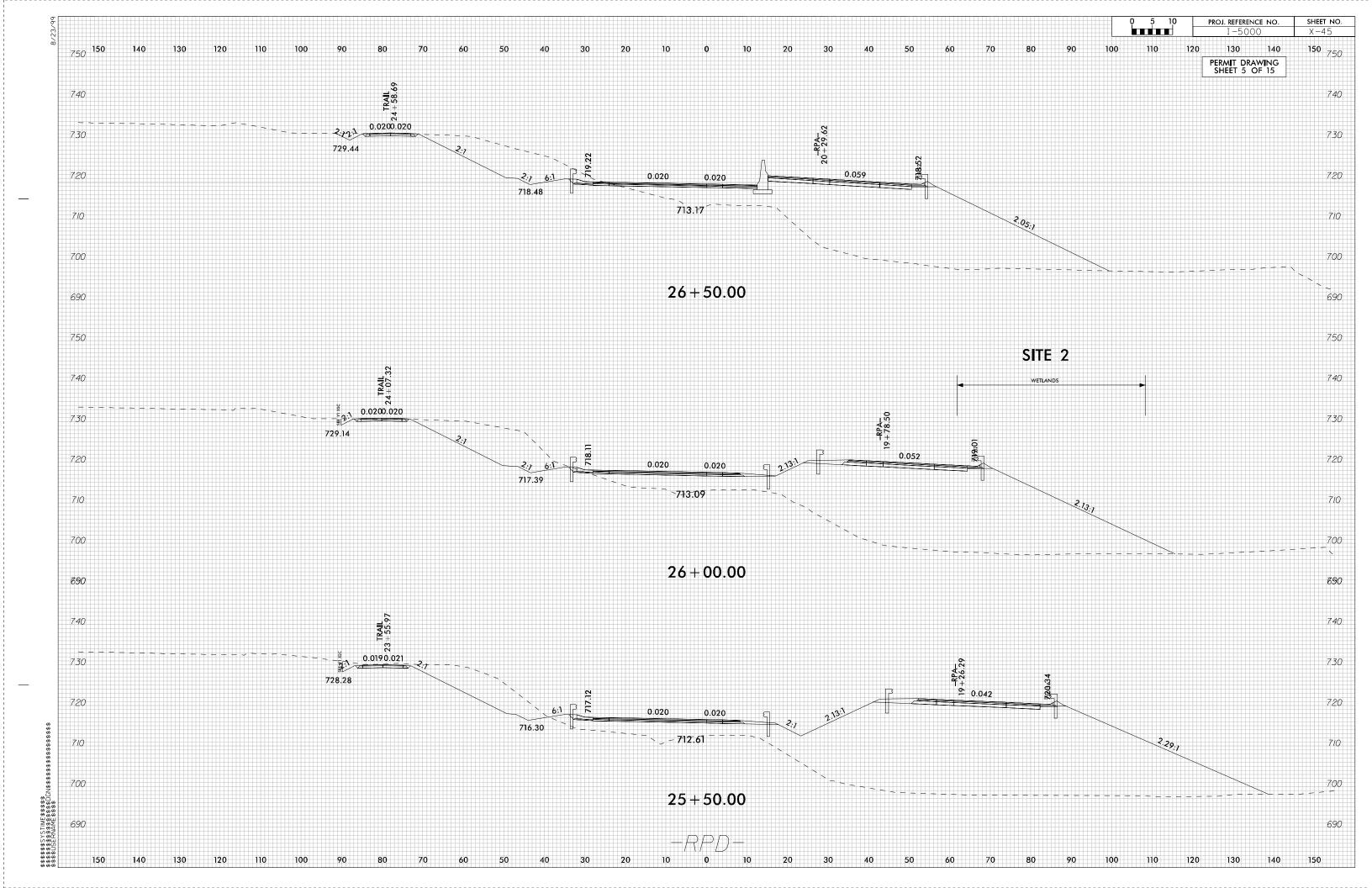
^{*} Refer to the NCDOT Best Management Practices Toolbox (2014), NCDOT Standards, the Federal Highway Administration (FHWA) Hydraulic Engineering Circular No. 14 (HEC-14), Third Edition, Hydraulic Design of Energy Dissipators for Culverts and Channels (July 2006), as applicable, for design guidance and criteria.

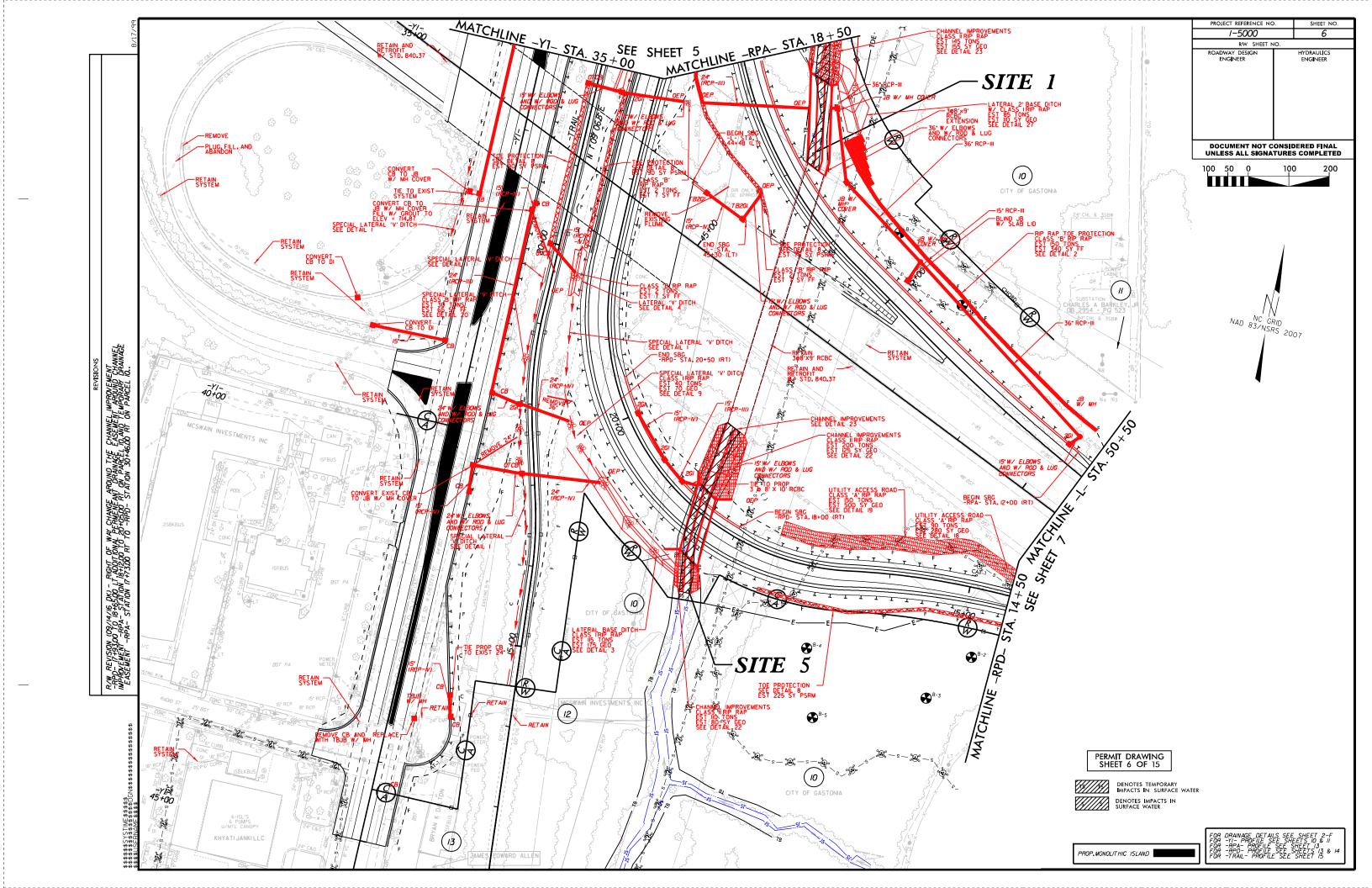


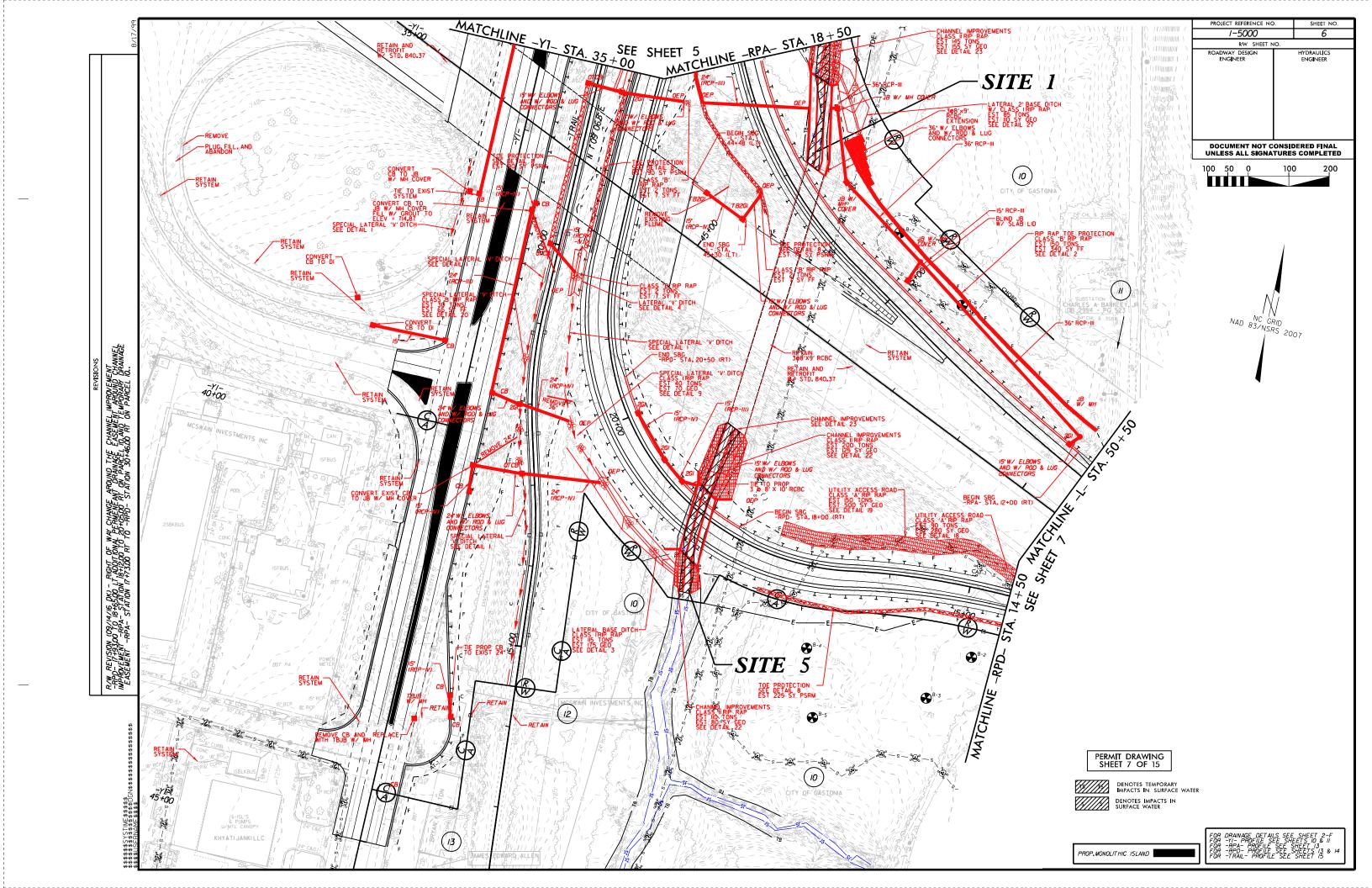












PROJECT REFERENCE NO.

/-5000

RW SHEET NO.

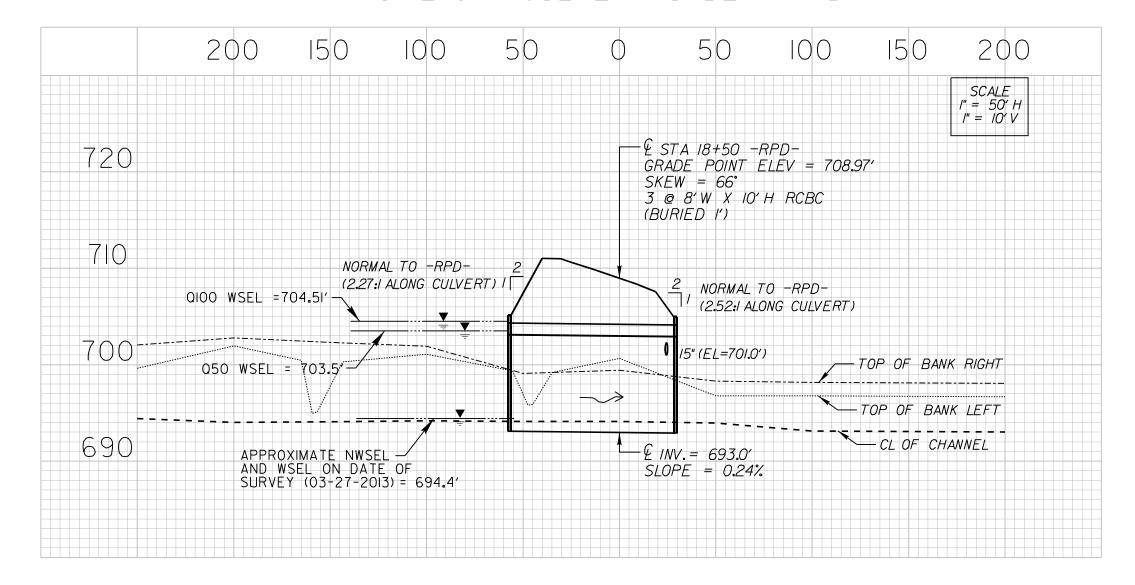
ROADWAY DESIGN
ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING SHEET 8 OF 15

SITE 5 - CULVERT UNDER -RPD-



1-5000 RW SHEET N ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER INCOMPLETE PLANS
DO NOT USE POR NOW ACQUISITION PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION PERMIT DRAWING SHEET 9 OF 15 SITE I - CULVERT EXTENSION 350 300 250 50 150 200 200 150 50 100 100 € STA 46+19 -L--€ STA 16+58 -RPA-GRADE POINT ELEV = 735.15' EXISTING 3 @ 8' X 9' RCBC. SKEW = 51° PROPOSED 3 @ 8' X 9' EXTENSION 740 DOWNSTREAM WITH SILLS AT EXISTING UPSTREAM END AND PROPOSED DOWNSTREAM CULVERT END SCALE |" = 50' H |" = 10' V 730

> TIE TO EXISTING CULVERT -AND BEGIN EXTENSION PARALLEL TO EXISTING

> > PROPOSED -

SEDIMENT

WITHIN

EXISTING

CULVERT

EXCAVATION

SLOPE = 1.10 %

CULVERT

PROJECTED SEDIMENT LEVEL -

AFTER PROPOSED CHANNEL

EXCAVATION AND CULVERT

EXTENSION

QIOO WSEL = 703.98'

Q50 WSEL = 703.1'

REVISIONS

720

710

700

690 APPROXIMATE NWSEL AND WSEL ON DATE OF SURVEY (03-27-2013) = 694.2'

GIN 15° DEFLECTION SLOPE \$ 5 %

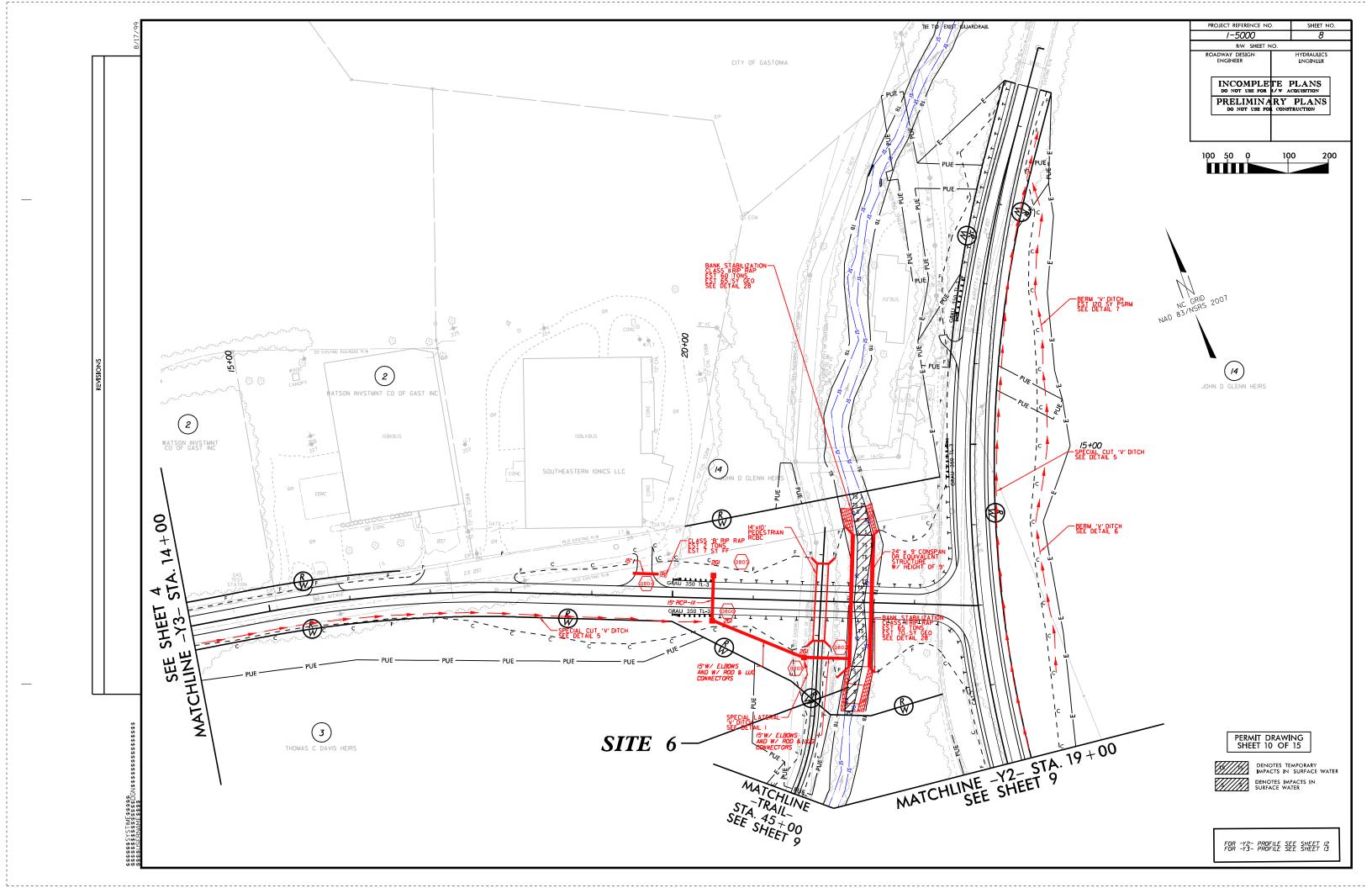
2 NORMAL TO -RPA-

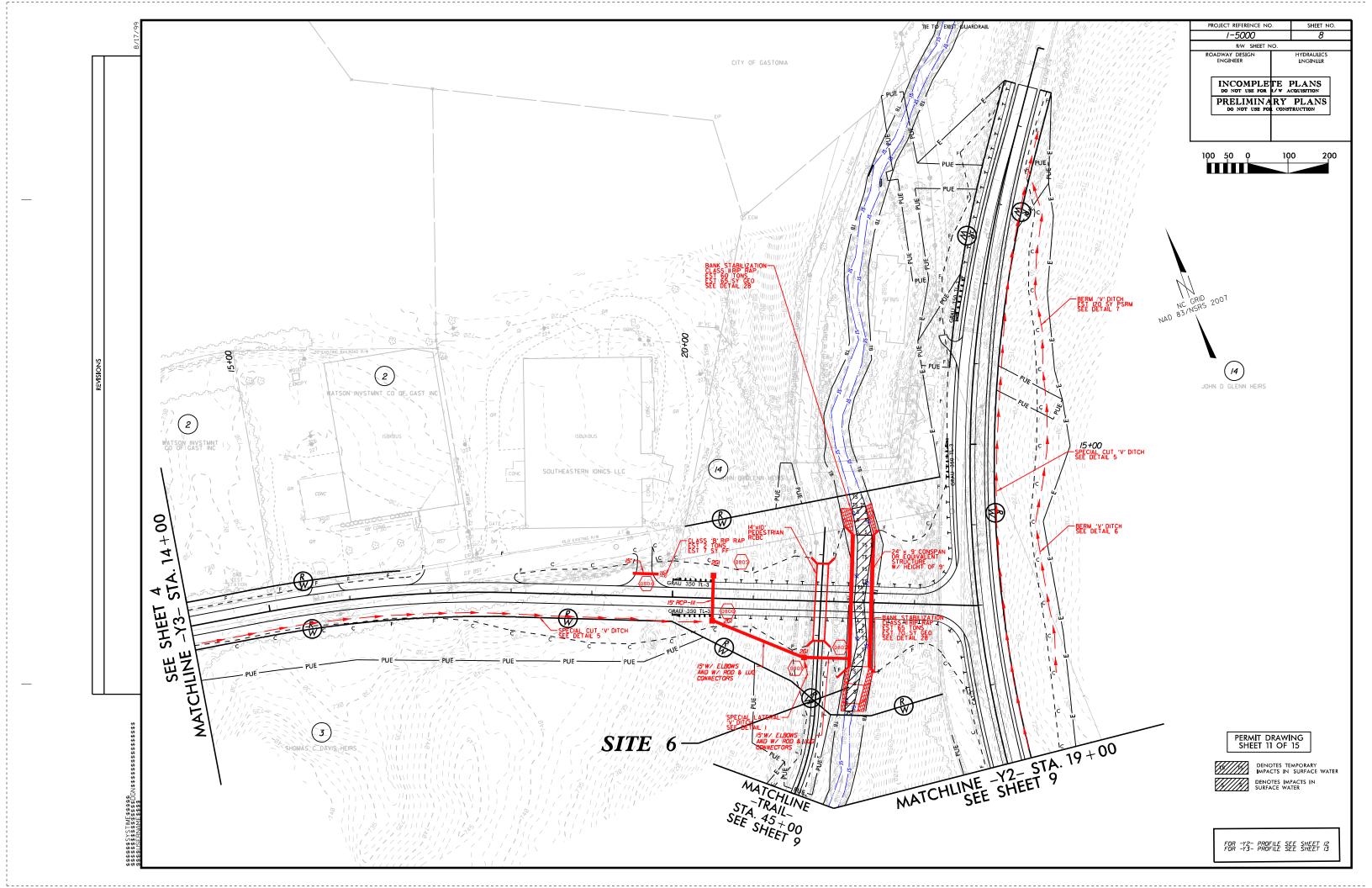
(2.9:1 ALONG CULVERT)

TOP OF BANK RIGHT

TOP OF BANK LEFT

SLOPE = 0.18 % 10' PROPOSED CHANNEL EXCAVATION





PROJECT REFERENCE NO.

/-5000

RW SHEET NO.

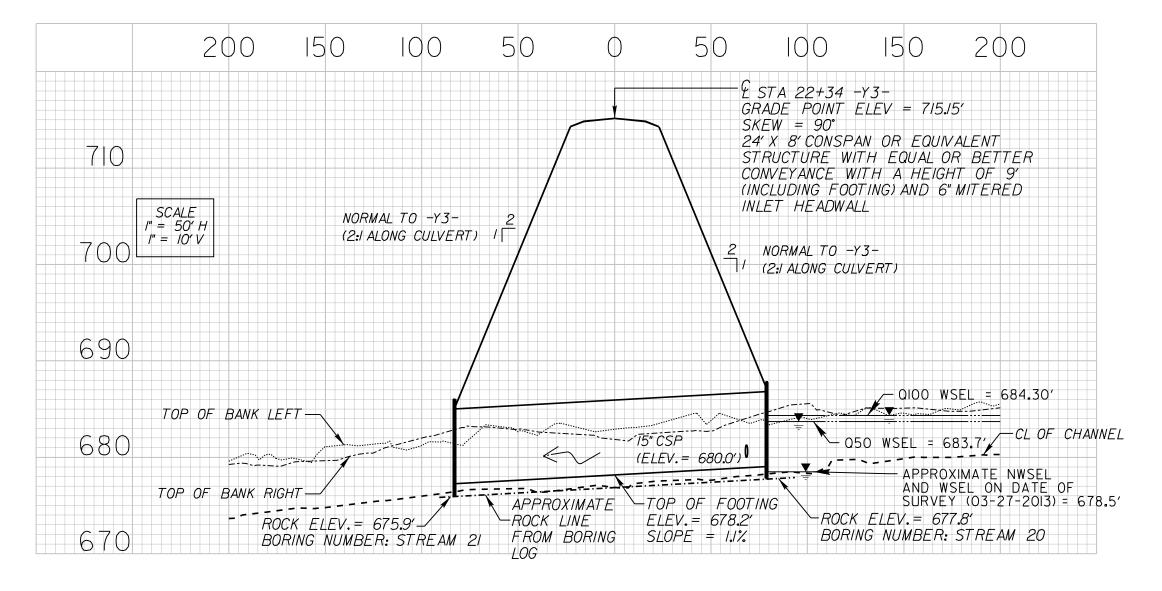
ROADWAY DESIGN HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR K/W ACQUISITION

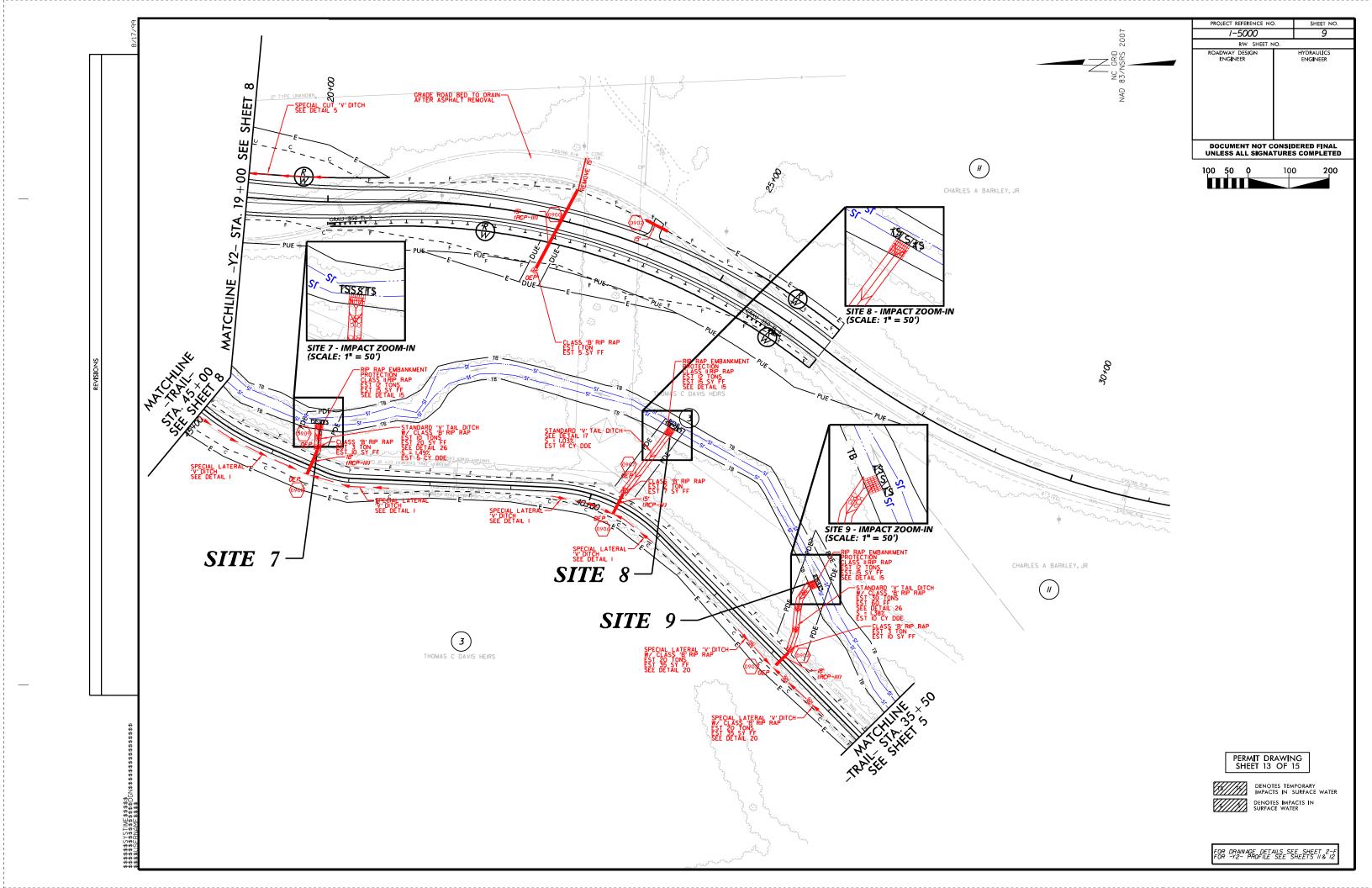
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

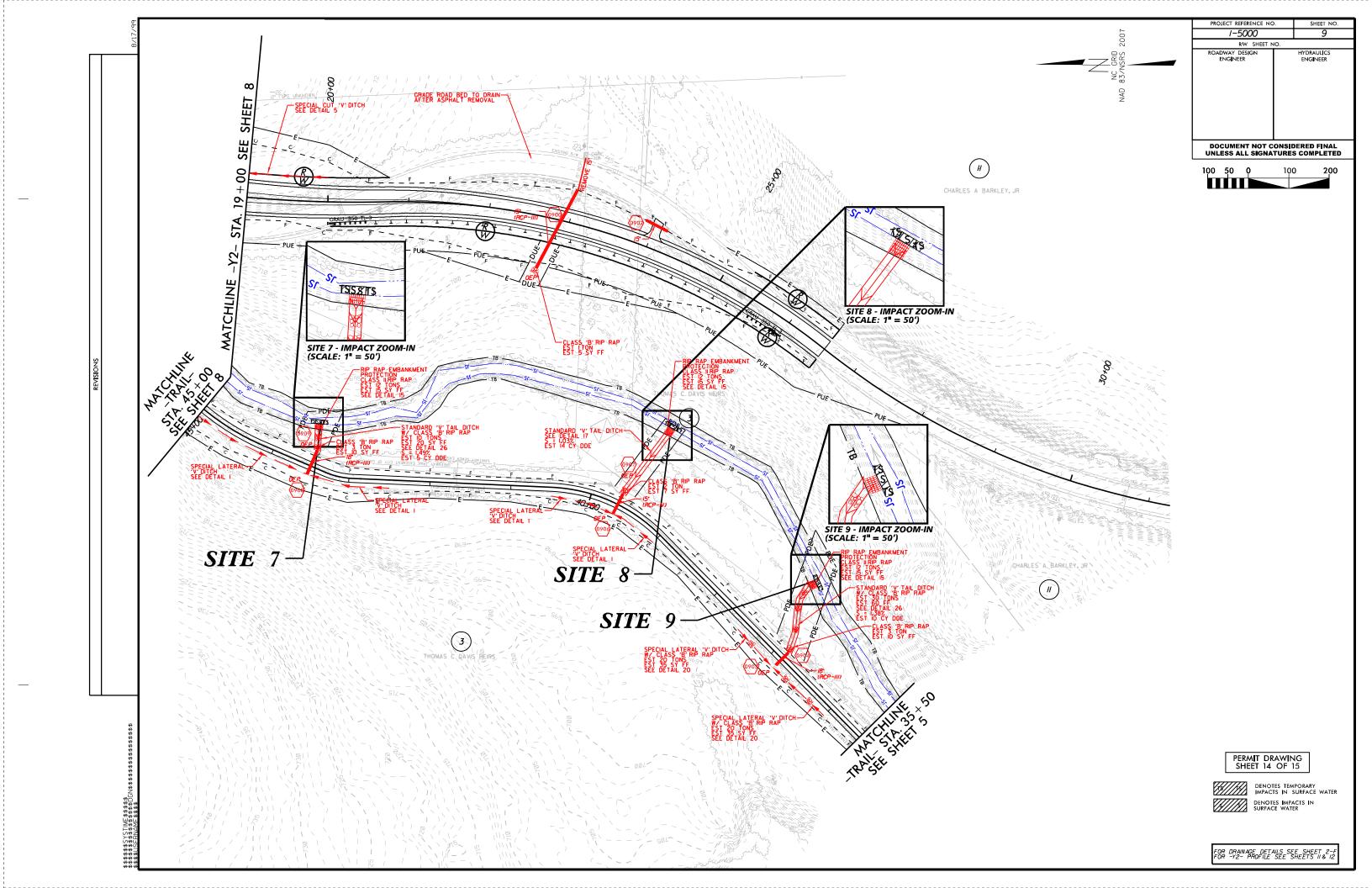
PERMIT DRAWING SHEET 12 OF 15

SITE 6 - CULVERT UNDER -Y3-



\$\$\$\$YYTIME\$\$\$\$\$ \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$DGN\$\$\$\$\$\$\$\$\$





			WETLAND PERMIT IMPACT SUMMAR WETLAND IMPACTS				SURFACE WATER IMPACTS					
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	in	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-RPA- 16+85 to 19+99 (RT)	3 @ 8'x9' RCBC Extension						0.03		108		
1	-RPA- 16+85 to 19+99 (RT)	Channel Improvements						0.05	< 0.01	138	23	
2	-RPA- 19+24 to 20+23 (RT)	Fill Slope	0.09									
3	-RPD- 28+91 (RT)	Bank Stabilization						< 0.01	0.03	59	136	
4	-TRAIL- 34+40 to 34+58 (RT)	Bank Stabilization						< 0.01	< 0.01	10	10	
5	-RPD- 18+50 (CL)	3 @ 8'x10' RCBC						0.03		89		
5	-RPD- 18+50 (CL)	Channel Improvements						0.04	< 0.01	127	10	
6	-Y3- 22+34 (CL)	24' x 8' CONSPAN (or eq.)							0.05		164	
6	-Y3- 22+34 (CL)	Bank Stabilization						0.03	< 0.01	91	23	
7	-TRAIL- 43+52 to 43+73 (RT)	Bank Stabilization						< 0.01	< 0.01	10	10	
8	-TRAIL- 39+47 to 39+61 (RT)	Bank Stabilization						< 0.01	< 0.01	10	10	
9	-TRAIL- 37+11 to 37+32 (RT)	Bank Stabilization						< 0.01	< 0.01	10	10	
TOTALS*:			0.09					0.19	0.10	652	396	

*Rounded totals are sum of actual impacts

NOTES:

22 LF of Existing Bridge Removal at Site 3

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GASTON COUNTY I-5000

SHEET 15 of 15 11/21/2016

Revised 2013 10 24