



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

August 28, 2025

MEMORANDUM TO: Division Environmental and Construction Units

FROM: *mat* Michael A. Turchy, ECAP Group Leader
Environmental Analysis Unit

SUBJECT: Environmental Permits for the proposed new interchange on I-26 (future exit 35) and roadway extension, Buncombe County, Division 13,
TIP: HE-0001B.

After the permit acquisition for this project, the project was divided into two sections for constructability purposes.

The B Section only includes sites 5, 6, and 7, however the entire permit package has been included.

Please find enclosed the following permits for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Individual Permit (dated 8/11/2023) Modification (dated 3/4/2025)	December 31, 2028
NC Division of Water Resources Section 401 Water Quality Certification	Certification No. 5958 (dated 6/15/2023) Modification (dated 3/3/2025)	December 31, 2028

Work is authorized by the above referenced permit provided it is accomplished in strict accordance with the permitted plans.

The Environmental Coordination and Permitting Group or the Division Environmental Office must be consulted if any deviation from the permit(s) is required.

The General Conditions and Certifications for Nationwide and Regional Permits can be referenced at:
https://xfer.services.ncdot.gov/pdea/PermIssued/_General_Conditions_and_Certifications/



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

August 11, 2023

Regulatory Division

Action ID SAW-2021-0535, STIP Project No. HE-0001

North Carolina Department of Transportation (NCDOT)
Environmental Coordination and Permitting
Mr. Michael A. Turchy, Group Leader
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Turchy:

In accordance with your written request of April 17, 2023, additional information submitted after the original request, and the ensuing administrative record, enclosed is a Department of the Army permit to discharge fill material into streams and wetlands to construct the STIP HE-0001 project. Construction of this project will permanently impact 981 linear feet (lf) of streams and 0.103 acre of wetlands, and temporarily impact 190 lf of streams along and adjacent to I-26 in Buncombe County, North Carolina.

Any deviation in the authorized work will likely require modification of this permit. If a change in the authorized work is necessary, you should promptly submit revised plans to the Corps showing the proposed changes. You may not undertake the proposed changes until the Corps notifies you that your permit has been modified.

Carefully read your permit. The general and special conditions are important. Your failure to comply with these conditions could result in a violation of Federal law. Certain significant general conditions require that:

- a. You must complete construction before December 31, 2028.
- b. You must notify this office in advance as to when you intend to commence and complete work.
- c. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

You should address all questions regarding this authorization to Ms. Lori Beckwith of the WRDA/Transportation Permitting Branch at Loretta.A.Beckwith@usace.army.mil or (828) 271-7980, ext. 4223.

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our website at <https://regulatory.ops.usace.army.mil/customer-service-survey/> and completing the survey on-line. We value your comments and appreciate your taking the time to complete a survey each time you interact with our office.

FOR THE CHIEF, REGULATORY DIVISION



2023.08.11
13:47:37 -04'00'

Monte Matthews
Branch Chief, WRDA/Transportation
Wilmington District

Enclosures

Copies Furnished electronically (with enclosures):

Chief, Source Data Unit
NOAA/National Ocean Service
Attn: Sharon Tear N/CS261
1315 East-West Hwy., Rm 7316
Silver Spring, Maryland 20910-3282

Copies Furnished electronically (with special conditions):

Ms. Janet Mizzi
U.S. Fish and Wildlife Service
Asheville Ecological Service Field Office
160 Zillicoa Street
Asheville, North Carolina 28801-1082

Mr. Fritz Rohde
Habitat Conservation Division – Atlantic Branch
101 Pivers Island Road
Beaufort, North Carolina 28516

Mr. Todd Bowers
Oceans, Wetlands and Streams Protection Branch
Wetlands and Streams Regulatory Section
U.S. Environmental Protection Agency – Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8931

Mr. Jonathan Howell
Division Coastal Management
N.C. Department of Environment
and Natural Resources
400 Commerce Avenue
Morehead City, North Carolina 28557

Dr. Pace Wilber
Habitat Conservation Division – Atlantic Branch
NOAA Fisheries Service
219 Fort Johnston Road
Charleston, South Carolina 29412

DEPARTMENT OF THE ARMY PERMIT

Permittee **NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**
ATTN: MR. MICHAEL A. TURCHY, ECAP GROUP LEADER

Permit No. **SAW-2021-01535, STIP Project No. HE-0001**

Issuing Office **CESAW-RG-D**

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

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

Project Description: NCDOT will discharge fill material into waters of the United States associated with the construction of a new interchange on Interstate 26 (I-26) to provide access to I-26 and improve east-west connectivity within the project vicinity to accommodate current and planned growth in Buncombe County, North Carolina under STIP Project No. HE-0001. As part of this project, NCDOT will also construct a 2-lane roadway that will connect the new interchange to East Frederick Law Olmsted Way, which connects to NC 191 (Brevard Road). Construction of the project will permanently impact 981 linear feet (lf) of streams and 0.103 acre of wetland, and temporarily impact 190 lf of streams.

Project Location: The project is along and adjacent to I-26 in Buncombe County, North Carolina. It is located approximately 6 miles south of Asheville, north of the Blue Ridge Parkway, and south of the French Broad River bridge over I-26. Exit 33 is approximately 3 miles north of the project area and Exit 37 is approximately 2 miles south of the project area. Center coordinates for the project are 35.50378, -82.57796.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **December 31, 2028.** If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit,

Special Conditions:

SEE ATTACHED SPECIAL CONDITIONS

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

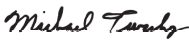
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

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

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

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

DocuSigned by:

 3CFF2BCE59604C1

11-August-2023

(PERMITTEE) **NC DEPARTMENT OF TRANSPORTATION**
ATTN: MR. MICHAEL A. TURCHY

(DATE)

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



2023.08.11 13:55:43 -04'00'

FOR
 (DISTRICT COMMANDER) **BRAD A. MORGAN, COLONEL**

(DATE)

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

(TRANSFEREE)

(DATE)

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HE-0001, BUNCOMBE COUNTY

WORK LIMITS

- 1) All work authorized by this permit shall be performed in strict compliance with the permit plans titled, "Wetland and Surface Water Impacts Permit, HE-0001", permit drawing sheets 1-19. Sheets 1, 4, 5, 8, 9 are dated 5-2-2023 and Sheets 2, 3, 6, 7, 10-19 are dated 4-18-2023; these plans are now part of this permit. The Permittee shall ensure that the construction design plans for this project do not deviate from the approved permit plans. Any modification to the approved permit plans must be approved by the U.S. Army Corps of Engineers prior to any active construction in waters or wetlands.
- 2) The Permittee shall comply with all Project Commitments (Green Sheets) in the document titled, "Project Commitments, I-26 Exit 35, Construct New Interchange, T.I.P Number: HE-0001, Buncombe, Federal Aid Number: WBS: 49742.1.2."
- 3) Unauthorized Dredge and/or Fill: Except as authorized by this permit or any U.S. Army Corps of Engineers approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, or shall any activities take place that cause the degradation of waters or wetlands. There shall be no excavation from, waste disposal into, or degradation of, jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and waste activities connected with this project.
- 4) Maintain Flows and Circulation Patterns of Waters: Except as specified in the approved permit plans referenced above, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands, or to reduce the reach of waters or wetlands.
- 5) Permit Distribution: The Permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, drawings and attachments shall be available at the project site during the construction and maintenance of this project.

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NOTIFICATIONS

6) Pre-Construction Meeting: The Permittee shall schedule a pre-construction meeting between their representatives, the contractor, and the U.S. Army Corps of Engineers, Wilmington District, Asheville Regulatory Field Office, NCDOT Regulatory Project Manager (Division 13), prior to any work in jurisdictional waters of the U.S. to ensure that there is a mutual understanding of all terms and conditions contained in this DA permit. The permittee shall provide the NCDOT Regulatory Project Manager with a copy of the final plans prior to the pre-construction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The Permittee shall schedule the pre-construction meeting for a time when the U.S. Army Corps of Engineers and the North Carolina Division of Water Resources (NCDWR) Project Managers can attend.

7) Notification of Construction Commencement and Completion: The Permittee shall advise the U.S. Army Corps of Engineers in writing at least two (2) weeks prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

8) Reporting Address: All reports, documentation, and correspondence required by the conditions of this permit shall be submitted to the following: U.S. Army Corps of Engineers, Wilmington District Asheville Regulatory Field Office, Attn: Lori Beckwith, 151 Patton Ave., Room 208, Asheville, NC 28801-5006, or by email to loretta.a.beckwith@usace.army.mil . The Permittee shall reference the following permit number on all submittals: SAW-2021-01535, STIP Project No. HE-0001.

9) Reporting Violations: Violation of these permit conditions or violation of Section 404 of the Clean Water Act shall be reported to the U.S. Army Corps of Engineers by email to loretta.a.beckwith@usace.army.mil and by telephone at: 828-230-0483, or 828-271-7980 (Asheville Office general number), within 24 hours of the Permittee's discovery of the violation.

10) Permit Revocation: The Permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

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RELATED LAWS

11) Clean Fill: The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, construction debris, metal and plastic products, and concrete block with exposed reinforcement bars. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source.

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

13) Endangered Species Act: The Permittee shall implement all necessary measures to ensure the authorized activity does not kill, injure, capture, harass, or otherwise harm any federally-listed threatened or endangered species. While accomplishing the authorized work, if the Permittee discovers or observes an injured or dead threatened or endangered species, the Permittee shall immediately notify the U.S. Army Corps of Engineers, Wilmington District, Asheville Field Office, Attn: Lori Beckwith (Corps Project Manager for NCDOT Division 13) at loretta.a.beckwith@usace.army.mil or at 828-230-0483 so that the required Federal coordination can occur.

14) Endangered Species Act: The Permittee shall comply with all conservation measures detailed in the attached concurrence letter from the U.S. Fish and Wildlife Service dated July 22, 2022.

15) National Historic Preservation Act: The Permittee shall abide by all environmental commitments (#1-7) listed on the attached form titled, "Historic Architecture and Landscapes Assessment of Effects Form", signed on July 14, 2022.

AQUATIC LIFE/CULVERTS

16) Prohibitions on Concrete: The Permittee shall take measures necessary to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with any water in or entering into waters of the United States. Water inside coffer dams or casings that has been in contact with concrete shall only be returned to waters of the United States when it no longer poses a threat to aquatic organisms (concrete is set and cured).

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17) Aquatic Life Movement: No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area. All discharges of dredged or fill material within waters of the United States shall be designed and constructed to maintain low flows to sustain the movement of aquatic species.

18) Unless otherwise requested in the application and depicted on the approved permit plans, culverts greater than 48 inches in diameter shall be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter and less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain existing channel slope. The bottom of the culvert shall be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions. Culverts shall be designed and constructed in a manner that minimizes destabilization and head cutting.

19) Measures shall be included in the construction/installation of culverts that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed opening shall 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.

SEDIMENT AND EROSION CONTROL

20) During the clearing phase of the project, heavy equipment shall not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of non-erodible materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

21) No fill or excavation impacts for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless the impacts are included on the approved plan drawings and specifically authorized by this permit. This includes, but is not limited to, sediment control fences and other barriers intended to catch sediment losses.

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22) The Permittee shall use appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" to ensure compliance with the appropriate turbidity water quality standard. Erosion and sediment control practices shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to ensure compliance with the appropriate turbidity water quality standards. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project shall remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A, Article 4). Adequate sedimentation and erosion control measures shall be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures shall be inspected and maintained regularly, especially following rainfall events. All fill material shall be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

23) The Permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, work, and operations associated with this project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or stream bank erosion. The Permittee shall routinely monitor for these effects, cease all work when detected, take initial corrective measures to correct actively eroding areas, and notify this office immediately. Permanent corrective measures may require additional authorization by the U.S. Army Corps of Engineers.

24) The Permittee shall ensure that all excavation and/or construction areas in waters of the U.S. are temporarily dewatered during work.

25) Temporary Fills: Within thirty (30) days of the date of completing the authorized work, the Permittee shall remove all temporary fills in waters of the United States and restore the affected areas to pre-construction contours and elevations. The affected areas shall be re-vegetated with native, non-invasive vegetation as necessary to minimize erosion and ensure site stability.

BORROW AND WASTE

26) To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent waters and wetlands, except as authorized by this permit, the Permittee shall require its contractors and/or agents to identify all areas to be used as borrow and/or waste sites associated with this project. The Permittee shall

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provide the U.S. Army Corps of Engineers with appropriate maps indicating the locations of proposed borrow and/or waste sites as soon as such information is available. The Permittee shall submit to the Corps site-specific information needed to ensure that borrow and/or waste sites comply with all applicable Federal requirements, to include compliance with the Endangered Species Act and the National Historic Preservation Act, such as surveys or correspondence with agencies (e.g., the USFWS, the NC HPO, etc.). The required information shall also include the location of all aquatic features, if any, out to a distance of 400 feet beyond the nearest boundary of the site. The Permittee shall not approve any borrow and/or waste sites before receiving written confirmation from the Corps that the proposed site meets all Federal requirements, whether or not waters of the U.S., including wetlands, are located in the proposed borrow and/or waste site. All delineations of aquatic sites on borrow and/or waste sites shall be verified by the U.S. Army Corps of Engineers and shown on the approved reclamation plans. The Permittee shall ensure that all borrow and/or waste sites comply with Special Condition #3 of this permit. Additionally, the Permittee shall produce and maintain documentation of all borrow and waste sites associated with this project. This documentation will include data regarding soils, vegetation, hydrology, any delineation(s) of aquatic sites, and any jurisdictional determinations made by the Corps to clearly demonstrate compliance with Special Condition #3. All information will be available to the U.S. Army Corps of Engineers upon request. The Permittee shall require its contractors to complete and execute reclamation plans for each borrow and/or waste site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the U.S. Army Corps of Engineers within 30 days of the completion of the reclamation work.

COMPENSATORY MITIGATION

27) 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 two (2) Compensatory Mitigation Responsibility Transfer Forms. The requirements of these forms, including any special conditions listed on these forms, are hereby incorporated as special conditions of this permit.

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

Permittee: North Carolina Department of Transportation
Project Name: STIP Project No. HE-0001

Action ID: SAW-2021-01535
County: Buncombe

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 Wilmington District 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 verifies that the mitigation requirements (credits) shown below have been released and are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether 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 ledger to the Permittee, the Project Manager who issued the permit, the Bank Project Manager, and the 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: 06010105, French Broad River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
	981					

*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: 06010105, French Broad River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
	1,450					

Mitigation Site Debited: **Dead Oak Mitigation Site , part of the RES French Broad 05 Umbrella mitigation bank**
(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 Wilmington District, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name: _____

Name of Sponsor's Authorized Representative: _____

Signature of Sponsor's Authorized Representative

Date of Signature

**USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2**

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the District 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 District 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. When NCDMS provides mitigation 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 NCDMS must be provided to the District within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the District 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 District 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 District, the Sponsor must obtain case-by-case approval from the District 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 District administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed below by the District 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 District Project Manager at the address below, 3) the Bank Manager listed in RIBITS, and 4) the Wilmington District Mitigation Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587 (or by email to SAWMIT@usace.army.mil).***

Questions regarding this form or any of the permit conditions may be directed to the District Mitigation Office.

USACE Project Manager: Lori Beckwith
USACE Field Office: Asheville Regulatory Field Office
US Army Corps of Engineers
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

Email: loretta.a.beckwith@usace.army.mil

Loretta A. Beckwith Digitally signed by Loretta A. Beckwith
Date: 2023.08.10 19:49:23 -04'00'

Wilmington District Project Manager Signature

August 10, 2023

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>.

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

Permittee: North Carolina Department of Transportation
Project Name: STIP Project No. HE-0001

Action ID: SAW-2021-01535
County: Buncombe

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 Wilmington District 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 verifies that the mitigation requirements (credits) shown below have been released and are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether 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 ledger to the Permittee, the Project Manager who issued the permit, the Bank Project Manager, and the 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: 06010105, French Broad River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
				0.103		

*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: 06010105, French Broad River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
				0.206		

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 Wilmington District, 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: NCDEQ - DMS

Name of Sponsor's Authorized Representative: Beth Harmon

Elizabeth Harmon

Signature of Sponsor's Authorized Representative

08/24/2023

Date of Signature

**USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2**

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the District 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 District 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. When NCDMS provides mitigation 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 NCDMS must be provided to the District within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the District 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 District 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 District, the Sponsor must obtain case-by-case approval from the District 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 District administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed below by the District 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 District Project Manager at the address below, 3) the Bank Manager listed in RIBITS, and 4) the Wilmington District Mitigation Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587 (or by email to SAWMIT@usace.army.mil).***

Questions regarding this form or any of the permit conditions may be directed to the District Mitigation Office.

USACE Project Manager: Lori Beckwith
USACE Field Office: Asheville Regulatory Field Office
US Army Corps of Engineers
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

Email: loretta.a.beckwith@usace.army.mil

Loretta A. Beckwith Digitally signed by Loretta A. Beckwith
Date: 2023.08.10 19:54:08 -04'00'

Wilmington District Project Manager Signature

August 10, 2023

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>.



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

March 4, 2025

Regulatory Division

Action ID: SAW-2021-01535, STIP Project No. HE-0001

North Carolina Department of Transportation
Attn: Mr. Michael A. Turchy
Environmental Coordination and Permitting Group Leader
1598 Mail Service Center
Raleigh, North Carolina 27699-1598
Sent Via Email: maturchy@ncdot.gov

Dear Mr. Turchy:

I refer to your permit modification request dated February 5, 2025, for authorization to temporarily impact additional waters of the U.S. for construction of STIP Project No. HE-0001 in Buncombe County, North Carolina.

As background, the U.S. Army Corps of Engineers (USACE) issued a Department of the Army Individual Permit (IP) to the North Carolina Department of Transportation (NCDOT) for the HE-0001 project on August 11, 2023, under file number SAW-2021-01535. This permit authorized permanent impacts to 981 linear feet (lf) of stream and 0.103 acre of wetland, and temporary impacts to 190 lf of stream, to construct a new interchange on Interstate 26 (I-26). The purpose of this project is to provide access to I-26 and improve east-west connectivity within the project vicinity to accommodate current and planned growth in Buncombe County.

NCDOT has now requested authorization of an additional 295 lf of temporary stream impacts for dewatering and maintenance of soil and erosion control devices on this project. These additional temporary impacts are requested because NCDOT has concerns that the temporary stream impacts already authorized do not provide enough room for the pump around or the diversion channel option for dewatering. Additionally, these additional temporary impacts would allow flexibility to use the best diversion method, as appropriate, as well as to allow for improved maintenance of the diversion.

Your permit modification request dated February 5, 2025, was coordinated with the U.S. Fish and Wildlife Service (Service), the U.S. Environmental Protection Agency (EPA), the N.C. Division of Water Resources (NCDWR), and the N.C. Wildlife Resources Commission (NCWRC). NCDWR issued a modification to the Section 401 Water Quality Certification (WQC) for this project on March 3, 2025. The USACE then coordinated the modified 401 WQC with the EPA. We did not receive any objections to authorizing the additional temporary impacts.

The USACE has also reviewed NCDOT's modification request and has no objections. As such, NCDOT is authorized to temporarily impact an additional 295 lf of stream for dewatering and maintenance of soil and erosion control devices on the HE-0001 project, conditioned on compliance with the general and special conditions of the original permit issued on August 11, 2023, and with the following additional conditions:

1. This work shall be conducted in accordance with the enclosed plans titled, "WETLAND AND SURFACE WAER IMPACTS PERMIT", Permit Drawing Sheets 1-5, dated February 4, 2025.
2. This work shall be conducted in accordance with the requirements of the enclosed modified 401 WQC.
3. As requested by NCWRC, the following condition will apply to this work:
Temporarily impacted channels will be restored to their pre-impacted dimensions and the banks stabilized with coir matting prior to returning the streamflow into the dewatered channels and new pipes. Reforestation shall occur in the first appropriate planting window.

This expiration date of the USACE authorization for this project remains unchanged and is December 31, 2028.

If you have any questions, please contact Lori Beckwith, Regulatory Project Manager, WRDA/Transportation Permitting Branch at loretta.a.beckwith@usace.army.mil or at 828-230-0483.

Sincerely,

A handwritten signature in black ink that reads "M. Scott Jones". The signature is written in a cursive, flowing style.

M. Scott Jones, PWS
WRDA / Transportation Branch Chief
USACE, Wilmington District

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

RICHARD E. ROGERS, JR.

Director



June 15, 2023

Mr. Michael Turchy
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1598

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with
ADDITIONAL CONDITIONS for the proposed new interchange on I-26 (Future Exit 35) in Buncombe
County.
NCDWR Project No. 20230518

Dear Mr. Turchy:

Attached hereto is a copy of Certification No. 005958 issued to the North Carolina Department of Transportation
(NCDOT) dated June 15, 2023.

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

Sincerely,

DocuSigned by:

Richard E. Rogers, Jr., Director
Division of Water Resources

Electronic copy only distribution:

Lori Beckwith, US Army Corps of Engineers Asheville Regulatory Field Office
Roger Bryan, NC Department of Transportation
Amanetta Somerville, Environmental Protection Agency
Dave McHenry, NC Wildlife Resources Commission
Holland Youngman, US Fish and Wildlife Service

File Copy



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-1617
919.707.9000

401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact 1,171 linear feet of jurisdictional streams and 0.103 acre of wetlands in Buncombe County. The project shall be constructed pursuant to the application dated received April 18, 2023. The authorized impacts are as described below:

Stream Impacts in the French Broad River Basin

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
S1			512	73	585	512
S2			50	16	66	
S3			160	40	200	
S4			114	45	159	
S5			145	16	161	
TOTAL			981	190	1171	512

Total Stream Impact for Project: 981 linear feet of permanent and 190 linear feet of temporary.

Wetland Impacts in the French Broad River Basin

Site	Permanent Fill (ac)	Temporary Fill (ac)	Excavation (ac)	Mechanized Clearing (ac)	Total Wetland Impact (ac)	Wetland Impacts Requiring Mitigation (ac)
W1	0.010			0.010	0.020	0.020
W2	0.016			0.030	0.046	0.046
W3	0.010				0.010	0.010
W4				0.020	0.020	0.020
W5			0.007		0.007	0.007
TOTAL	0.036	0.000	0.007	0.060	0.103	0.103

Total Wetland Impact for Project: 0.103 acre of permanent.

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

This approval is only valid for the purpose and design that you submitted in your application dated received April 18, 2023. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed 0.1 acre or 300 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (c) (2) and (4).

For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you



should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge, and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Conditions of Certification:

Project Specific Conditions

1. 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)]
2. Compensatory mitigation for 512 linear feet of impact to streams is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams through the RES French Broad 05 Umbrella Mitigation Bank. [15A NCAC 02H .0506 (c)]
3. Compensatory mitigation for impacts to 0.103 riverine wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands through the North Carolina Division of Mitigation Services (DMS) (formerly NCEEP), and that the DMS has agreed to implement the mitigation for the project. DMS has indicated in a letter dated April 13, 2023 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with DMS's Mitigation Banking Instrument signed July 28, 2010.

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 hydro seeders 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 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 Permittee 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 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.0506(b)(2)]
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)]

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

This approval and its conditions are final and binding unless contested [G.S. 143-215.5]. Please be aware that impacting waters without first applying for and securing the issuance of a 401 Water Quality Certification violates Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000.



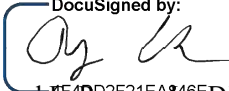
A party filing a Petition must serve a copy of the Petition on:

William F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

If the party filing the Petition is not the permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S 150B-23(a).

This the 15th day of June 2023

DIVISION OF WATER RESOURCES

DocuSigned by:

Richard E. Rogers, Jr., Director

WQC No. 005958



JOSH STEIN
Governor

D. REID WILSON
Secretary

RICHARD E. ROGERS, JR.
Director



NORTH CAROLINA
Environmental Quality

March 3, 2025

Mr. Michael Turchy
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Subject: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for the proposed new interchange to I-26 (Future Exit 35) in Buncombe County. WBS No. 49472.1.2, TIP: HE-0001
NCDWR Project No. 20230518 v.2

Dear Mr. Turchy:

Attached hereto is a modification of Individual Certification No. 005958 issued to The North Carolina Department of Transportation (NCDOT) dated June 15, 2023.

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

Sincerely,

Signed by:

Susan Locklear

375CAE2BB9F540C...
Richard E. Rogers, Jr., Director
Division of Water Resources

Electronic copy only distribution:

Lori Beckwith, US Army Corps of Engineers, Asheville Field Office
Mike Sanderson Division 13 Environmental Officer
Amanetta Somerville, US Environmental Protection Agency
Holland Youngman, US Fish and Wildlife Service
Dave McHenry, NC Wildlife Resources Commission
File Copy



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-1617
919.707.9000

Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact an additional, 295 linear feet of jurisdictional streams in Buncombe County. The project shall be constructed pursuant to the modification dated received February 10, 2025. The authorized impacts are as described below:

Stream Impacts in the French Broad River Basin

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear feet)	Stream Impacts Requiring Mitigation (linear ft)
Original approved impacts at Sites 3, 4, 5	0	0	419	101	520	419
New additional impacts with this approval at Sites 3, 4, 5	0	0	0	295	295	0
TOTAL:	0	0	419	396	815	419

Total Stream Impact for (Site/Modification): 0 linear feet of permanent and 396 linear feet of temporary.

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

This approval is only valid for the purpose and design that you submitted in your modified application received February 10, 2025. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated June 15, 2023, still apply except where superseded by this certification. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

1. This modification is applicable only to the additional proposed activities. All of the authorized activities and conditions of certification associated with the original Water Quality Certification dated June 15, 2023, and subsequent modifications dated February 10, 2025, still apply except where superseded by this certification.
2. Temporarily impacted streams will be restored to their preconstruction dimensions and the stream banks matted with coir-fiber matting. Water shall not be released into the restored channels until the stream banks



are stabilized. Vegetation used for bank stabilization shall be limited to native riparian vegetation and should include establishment of a vegetated buffer on both sides of the temporarily impacted channel to the maximum extent practical. Reforestation shall occur in the first appropriate planting window. [15A NCAC 02H.0506(b)(2) and 15A NCAC 02H .0506(b)(3)]

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

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

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

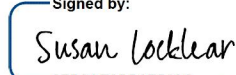
Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919) 431-3000, Facsimile: (919) 431-3100

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

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

This the 3rd day of March 2025

Signed by:



375CAE2BB9F540C
Richard E. Rogers, Jr., Director
Division of Water Resources

WQC No. 005958



Revised
5/4/2023

		North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS					
(Version 3.00; Released August 2021)							
WBS Element: 49742.3		TIP/Proj No: HE-0001		County(ies): Buncombe		Page 1 of 5	
General Project Information							
WBS Element: 49742.3		TIP Number: HE-0001		Project Type: Other		Date: 4/6/2023	
NCDOT Contact:		Brendan Merithew, PE		Contractor / Designer:		Rick Tipton, PE	
Address:		NCDOT Division 13 55 Orange Street Asheville, NC 28801		Address:		Gannett Fleming One Glenwood Avenue, Suite 900 Raleigh, NC 27603	
Phone:				Phone:			
Email:				Email:			
City/Town:		Biltmore Park, NC		County(ies):		Buncombe	
River Basin(s):		French Broad		CAMA County?		No	
Wetlands within Project Limits?		Yes					
Project Description							
Project Length (lin. miles or feet):		1.016 mi		Surrounding Land Use:		Wooded, Commercial/Residential	
		Proposed Project		Existing Site			
Project Built-Upon Area (ac.):		9.0 ac.		3.6 ac.			
Typical Cross Section Description:		Widening: 8-lane, divided with concrete median barrier. Widen paved shoulder on LT side with roadside ditches. New Location: Ramps - 1 lane w/ paved shoulder. Y line - 2 lane, divided with concrete median barrier. Paved shoulders and roadside ditches.		8-lane, divided with concrete median barrier. Paved shoulders with roadside ditches.			
Annual Avg Daily Traffic (veh/hr/day):		Design/Future: 113700		Year: 2045		Existing: 89900	
						Year: 2023	
General Project Narrative: (Description of Minimization of Water Quality Impacts)		The purpose of this project is to construct a new Diverging Diamond Interchange at Exit 35 on I-26 with a new location Y-line from the interchange to a roundabout on East Frederick Law Olmsted Way. The project will be broken into two sections for construction. The first section will consist of the proposed Y-line from the interchange to the roundabout on East Frederick Law Olmsted Way. This portion of the project is new location and can be constructed in one continuous phase. The interchange will be constructed inside the currently active TIP Project I-4700. During Phase IA of construction for I-4700, the Eastbound lanes along I-26 are shifted to the inside so that the outer two lanes and shoulder can be reconstructed. Ideally, Ramps A and B as well as end bent two would be constructed first to minimize impacts to traffic. End bent one would be better suited for construction during Phase IB of I-4700 as the traffic will be shifted into the outer two lanes. During Phase II of construction for I-4700, the Westbound lanes of I-26 are shifted adjacent to EB traffic. Ramps C and D can be constructed during this period. Jurisdictional features including wetlands, and streams are all present within the project limits. The proposed drainage system for this project will primarily tie to the existing network proposed by the I-4700 project. Retaining walls are currently under design to reduce impacts along the corridor of this project. Preliminary analysis using NCDOT SELDM catalog determined most outlets required minimum measures. Where the SELDM catalog suggested using the BMP Toolbox, the areas were reevaluated in the design phase for requirements at the outlets. Attached is a SELDOM vs Design document explaining in further detail.					

Revised
5/4/2023

		North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS			
Version 3.00; Released August 2021					
WBS Element: 49742.3		TIP/Proj No.: HE-0001		County(ies): Buncombe Page 2 of 5	
General Project Information					
Waterbody Information					
Surface Water Body (1):		FBR		NCDWR Stream Index No.: 6-(54.75)	
NCDWR Surface Water Classification for Water Body		Primary Classification: Class B			
		Supplemental Classification: None			
Other Stream Classification:		None			
Impairments:		None			
Aquatic T&E Species?		Yes		Comments: FBR is occupied by the endangered Appalachian elktoe habitat.	
NRTR Stream ID:		FBR		Buffer Rules in Effect: N/A	
Project Includes Bridge Spanning Water Body?		No		Deck Drains Discharge Over Buffer? N/A	
Deck Drains Discharge Over Water Body?		N/A		Dissipator Pads Provided in Buffer? N/A	
(If yes, provide justification in the General Project Narrative)		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
Surface Water Body (2):					
Surface Water Body (2):		UT to FBR (SA)		NCDWR Stream Index No.: N/A	
NCDWR Surface Water Classification for Water Body		Primary Classification: Class B			
		Supplemental Classification: None			
Other Stream Classification:		None			
Impairments:		None			
Aquatic T&E Species?		No		Comments: No listed species in waterbody; however, receiving body, FBR, is occupied app. elktoe habitat.	
NRTR Stream ID:		S(A-O)		Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		No		Deck Drains Discharge Over Buffer? N/A	
Deck Drains Discharge Over Water Body?		N/A		Dissipator Pads Provided in Buffer? N/A	
(If yes, provide justification in the General Project Narrative)		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
Surface Water Body (3):					
Surface Water Body (3):		UT to FBR (SD)		NCDWR Stream Index No.: N/A	
NCDWR Surface Water Classification for Water Body		Primary Classification: Class B			
		Supplemental Classification: None			
Other Stream Classification:		None			
Impairments:		None			
Aquatic T&E Species?		No		Comments: No listed species in waterbody; however, receiving body, FBR, is occupied app. elktoe habitat.	
NRTR Stream ID:		SD(X-Z)		Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		No		Deck Drains Discharge Over Buffer? N/A	
Deck Drains Discharge Over Water Body?		N/A		Dissipator Pads Provided in Buffer? N/A	
(If yes, provide justification in the General Project Narrative)		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
WBS Element: 49742.3		TIP No.: HE-0001		County(ies): Buncombe Page 3 of 5	
Additional Waterbody Information					
Surface Water Body (4):		UT to FBR SE		NCDWR Stream Index No.: N/A	
NCDWR Surface Water Classification for Water Body		Primary Classification: Class B			
		Supplemental Classification: None			
Other Stream Classification:		None			
Impairments:		None			
Aquatic T&E Species?		No		Comments: No listed species in waterbody; however, receiving body, FBR, is occupied app. elktoe habitat.	
NRTR Stream ID:		SE(Q-W)		Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		No		Deck Drains Discharge Over Buffer? N/A	
Deck Drains Discharge Over Water Body?		N/A		Dissipator Pads Provided in Buffer? N/A	
(If yes, provide justification in the General Project Narrative)		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
Surface Water Body (5):					
Surface Water Body (5):		UT to FBR (SDX)		NCDWR Stream Index No.: N/A	
NCDWR Surface Water Classification for Water Body		Primary Classification: Class B			
		Supplemental Classification: None			
Other Stream Classification:		None			
Impairments:		None			
Aquatic T&E Species?		Yes		Comments: No listed species in waterbody; however, receiving body, FBR, is occupied app. elktoe habitat.	
NRTR Stream ID:		SDX		Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		No		Deck Drains Discharge Over Buffer? N/A	
Deck Drains Discharge Over Water Body?		N/A		Dissipator Pads Provided in Buffer? N/A	
(If yes, provide justification in the General Project Narrative)		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	

Revised
5/4/2023



**Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS**

STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.00; Released August 2021)

Page 4 of 5

Swale

[illegible]

Additional Comments

Note: Rp D swale (slopes average 3:1)

Lateral Grassed Swales from Sta 26+50 to Sta 27+00 -Y- Lt and from Sta 38+50 to Sta 39+00 -Y- Rt. met the criteria except for the V2. They were still incorporated into the design to provide treatment to the maximum extend practicable.

Revised
5/4/2023



North Carolina Department of Transportation

**Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS**

(Version 3.00; Released August 2021)

WBS Element:

TIP/Proj No.: HE-0001

County(ies): Buncombe

Page 5 of 5

Preformed Scour Holes and Energy Dissipators

[illegible]

Additional Comments

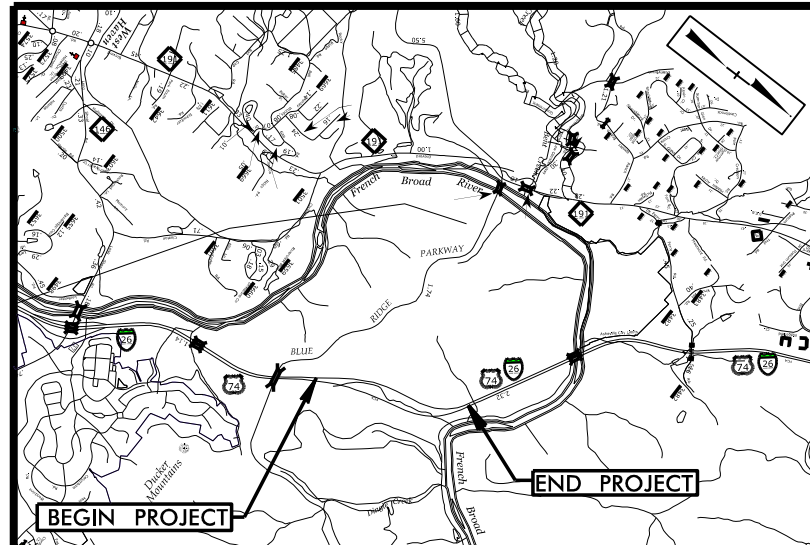
ALL SCD'S MEET THE DESIGN CRITERIA FOR THE BMP TOOLBOX.

* 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.

TIP PROJECT: HE-0001

CONTRACT:

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols



VICINITY MAP
(NOT TO SCALE)

30% ROADWAY PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

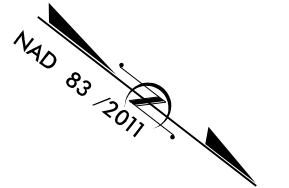
BUNCOMBE COUNTY

LOCATION: NEW I-26 DIVERGING DIAMOND INTERCHANGE (EXIT 35)
AND ACCESS ROAD CONNECTING TO NC 191 (BREVARD RD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURE, SIGNALS, AND
RETAINING WALLS

Revised
May 2, 2023

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HE-0001	1	15
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
XXXXXXXX	XXXXXX	PE	



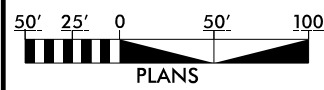
BEGIN TIP PROJECT HE-0001
-WBL- STA. 1086 + 17.11

END TIP PROJECT HE-0001
-L- STA. 1138 + 79.12

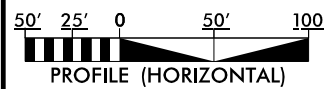
DRAINAGE IN RED IS PART OF HE-0001
DRAINAGE IN GREEN BEING BUILT UNDER I-4700
ALL OTHER DRAINAGE IS EXISTING

NOTES:
THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

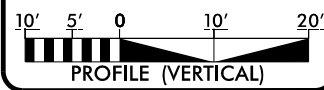
GRAPHIC SCALES



PLANS



PROFILE (HORIZONTAL)



PROFILE (VERTICAL)

DESIGN DATA

ADT 2021 = 9,100
ADT 2046 = 18,600
K = 10 %
D = 55 %
V = 75 MPH
* TTST = 1% DUAL 4%
FUNC CLASS = INTERSTATE

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT HE-0001 = 2.033 Miles
LENGTH STRUCTURES = 0.019 Miles
TOTAL LENGTH TIP PROJECT HE-0001 = 2.052 Miles

NCDOT CONTACT: MCCRAY COATES, PE
DIVISION 13 PROJECT MANAGER

Prepared for the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
2022

LETTING DATE:

RICK TIPTON, PE
PROJECT ENGINEER

ANGEL B. PRIDGEN, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

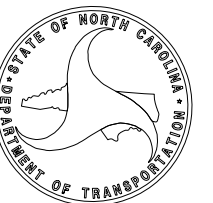
SIGNATURE: P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: P.E.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

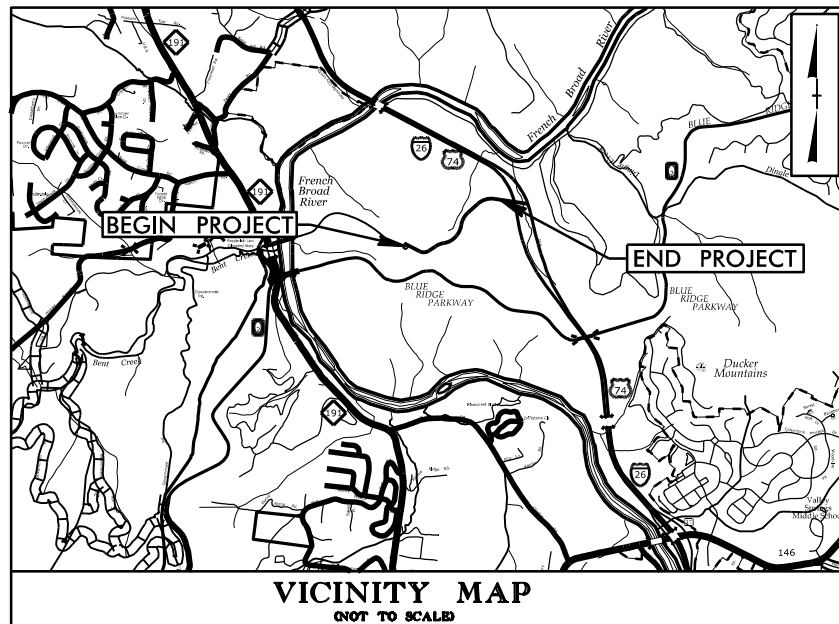
PLANS PREPARED BY:
Gannett Fleming
Excellence Delivered As Promised
One Glenwood Avenue
Suite 300
Fayetteville, NC 27515
(919) 420-7440
NC Lic. No. P-6070



TIP PROJECT: HE-0001B

CONTRACT:

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols



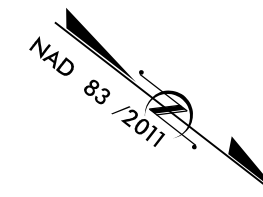
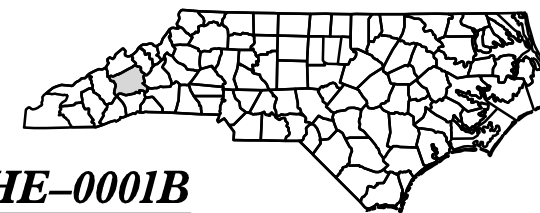
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BUNCOMBE COUNTY

LOCATION: ACCESS ROAD CONNECTING FROM I-26
TO NC 191 (BREVARD RD)

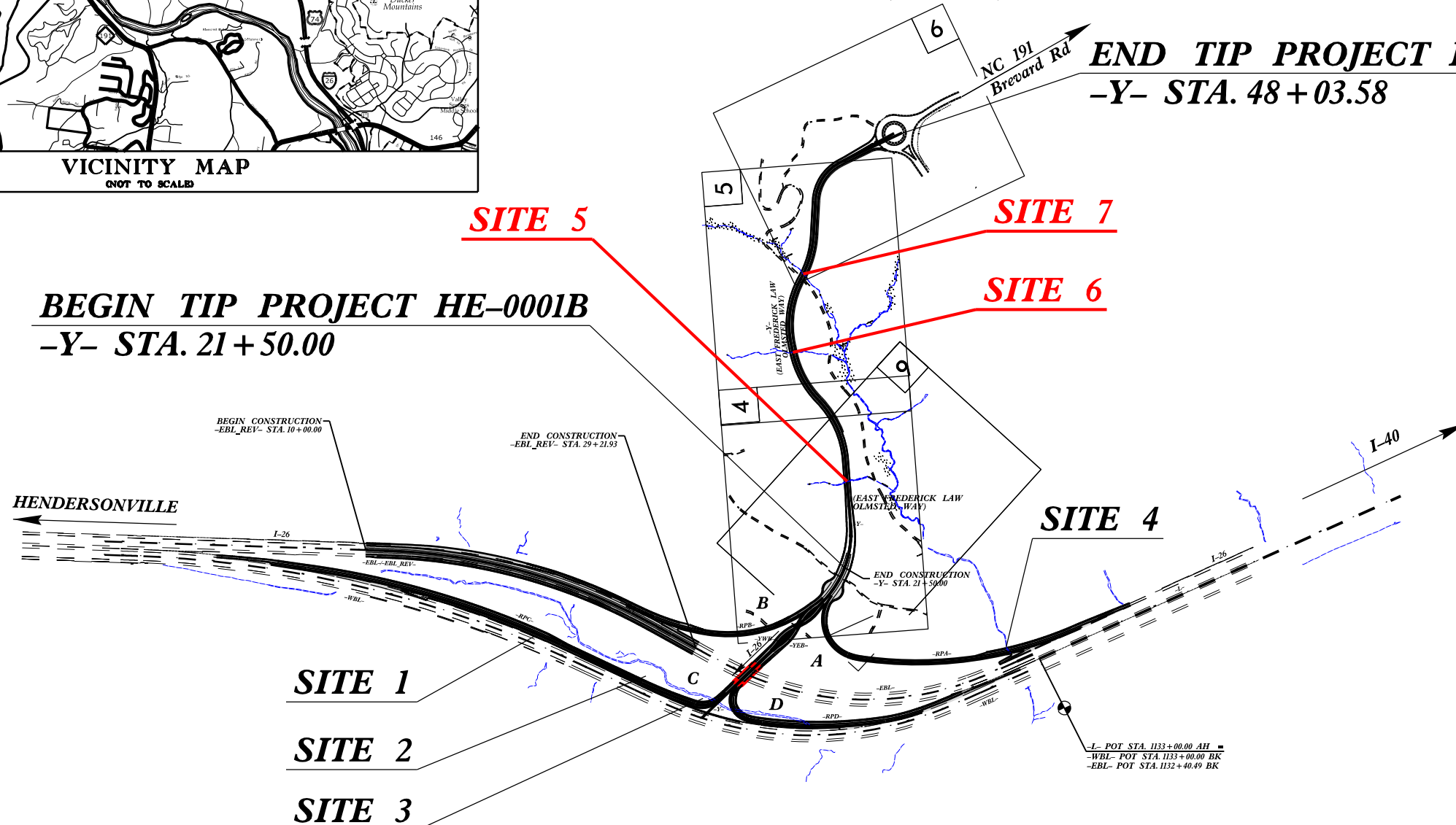
TYPE OF WORK: GRADING, PAVING, AND DRAINAGE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HE-0001B	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
49742.1.2		PE	
49742.2.2		UTILITIES	
49742.3.2		CONSTRUCTION	
49742.4.2		MITIGATION	



END TIP PROJECT HE-0001B
-Y- STA. 48 + 03.58

BEGIN TIP PROJECT HE-0001B
-Y- STA. 21 + 50.00



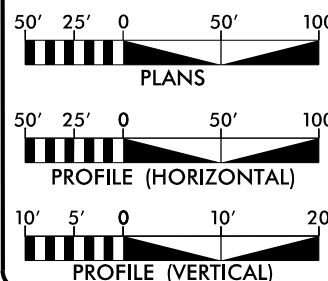
February 4, 2025
Modification

PERMIT DRAWING
SHEET 1 OF 5

NOTES:
THIS IS A PARTIAL CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS SHOWN ON THE PLANS

WETLAND AND SURFACE WATER IMPACTS PERMIT

GRAPHIC SCALES



DESIGN DATA

ADT 2023 = 9,890
ADT 2043 = 17,810
K = 9%
D = 55%
T = 5%
V = 40 MPH
* TTST = 1% DUAL = 4%
FUNC CLASS = MINOR ARTERIAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT HE-0001B = 0.503 Miles
TOTAL LENGTH TIP PROJECT HE-0001B = 0.503 Miles

NCDOT CONTACT: **BRENDAN W. MERITHEW, PE**
DIVISION 13 PROJECT MANAGER

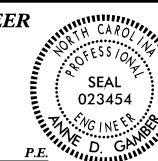
Prepared for the North Carolina Department of Transportation
In the Office of:



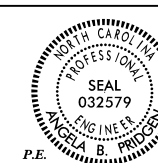
2018 STANDARD SPECIFICATIONS
RIGHT OF WAY DATE:
AUGUST 20, 2024
LETTING DATE:
JANUARY 21, 2025

RICKY A. TIPTON, PE
PROJECT ENGINEER
ANGELA B. PRIDGEN, PE
PROJECT DESIGN ENGINEER

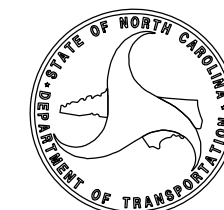
HYDRAULICS ENGINEER



SIGNATURE:
ROADWAY DESIGN ENGINEER



SIGNATURE:



PROJECT REFERENCE NO.	SHEET NO.
HE-0001A	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 2 OF 19
4-18-2023

NO STREAM IMPACTS



-WBL- (EXISTING I-4700 ALIGNMENT) PI Sta 1093+37.38 $\Delta = 22^{\circ}08'01.8''$ (RT) $D = 0^{\circ}55'00.2''$ $L = 2414.43'$ $T = 1222.45'$ $R = 6250.00'$	-RPC- PI Sta 11+00.24 $\Delta = 1^{\circ}08'55.1''$ (LT) $D = 0^{\circ}34'22.6''$ $L = 200.47'$ $T = 100.24'$ $R = 10,000.00'$ $SE = 02$ $RO = 24'$ $DS = 65$ MPH	PI Sta 19+38.58 $\Delta = 17^{\circ}25'49.5''$ (RT) $D = 1^{\circ}11'23.8''$ $L = 1464.81'$ $T = 738.11'$ $R = 4815.00'$ $SE = 03$ $RO = 24'$ $DS = 55$ MPH
-EBL- (EXISTING I-4700 ALIGNMENT) PIs Sta 1095+87.72 $\Theta_s = 2^{\circ}31'12.0''$ $L_s = 252.00'$ $LT = 168.02'$ $ST = 84.02'$	PI Sta 1102+31.31 $\Delta = 22^{\circ}06'20.5''$ (RT) $D = 2^{\circ}00'00.0''$ $L = 1105.29'$ $T = 559.60'$ $R = 2864.79'$	

BILTMORE FARMS, INC.
DB 1222 PG 645

BILTMORE FARMS, INC.
DB 1222 PG 645

-RPC- PC Sta. 10+00.00=
-WBL- POC Sta. 1088+16.28, 24' LT

-RPC- PRC Sta. 12+00.47

BEGIN TIP PROJECT HE-0001A
BEGIN CONSTRUCTION
-WBL- POC STA. 1085+16.28

BILTMORE FARMS, INC.
DB 1222 PG 645

BILTMORE FARMS, INC.
DB 1222 PG 645

MATCHLINE SHEET 5
-RPC- STA 20+00.00

FOR -RPC- PROFILE SEE SHEET 10

PROJECT REFERENCE NO.	SHEET NO.
HE-0001A	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	

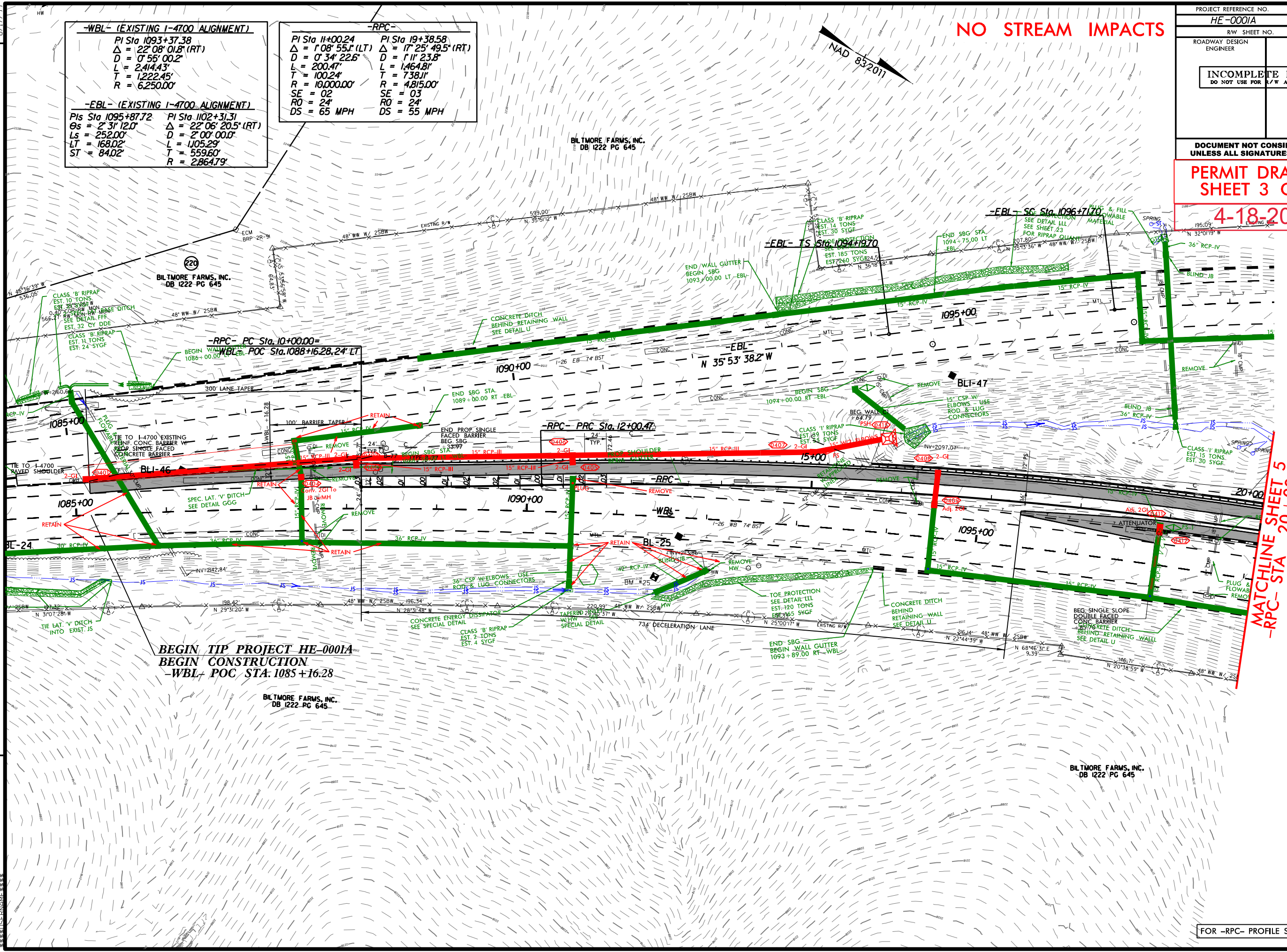
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 3 OF 19
4-18-2023

NO STREAM IMPACTS



-WBL- (EXISTING I-4700 ALIGNMENT) PI Sta 1093+37.38 Δ = 22° 08' 01.8" (RT) D = 0° 56' 00.2" L = 2414.43' T = 1222.45' R = 6250.00'	-RPC- PI Sta 11+00.24 Δ = 1° 08' 55.1" (LT) D = 0° 34' 22.6" L = 200.47' T = 100.24' R = 10000.00' SE = 02 RO = 24' DS = 65 MPH	-RPC- PI Sta 19+38.58 Δ = 17° 25' 49.5" (RT) D = 1° 11' 23.8" L = 1464.81' T = 738.11' R = 4815.00' SE = 03 RO = 24' DS = 55 MPH
-EBL- (EXISTING I-4700 ALIGNMENT) PIs Sta 1095+87.72 PI Sta 1102+31.31 Θs = 2° 31' 12.0" Δ = 22° 06' 20.5" (RT) Ls = 252.00' D = 2° 00' 00.0" LT = 168.02' L = 1105.29' ST = 84.02' T = 559.60' R = 2864.79'		



BEGIN TIP PROJECT HE-0001A
BEGIN CONSTRUCTION
-WBL- POC STA. 1085+16.28

MATCHLINE SHEET 5
-RPC- STA 20+00.00

FOR -RPC- PROFILE SEE SHEET 10

8/17/99

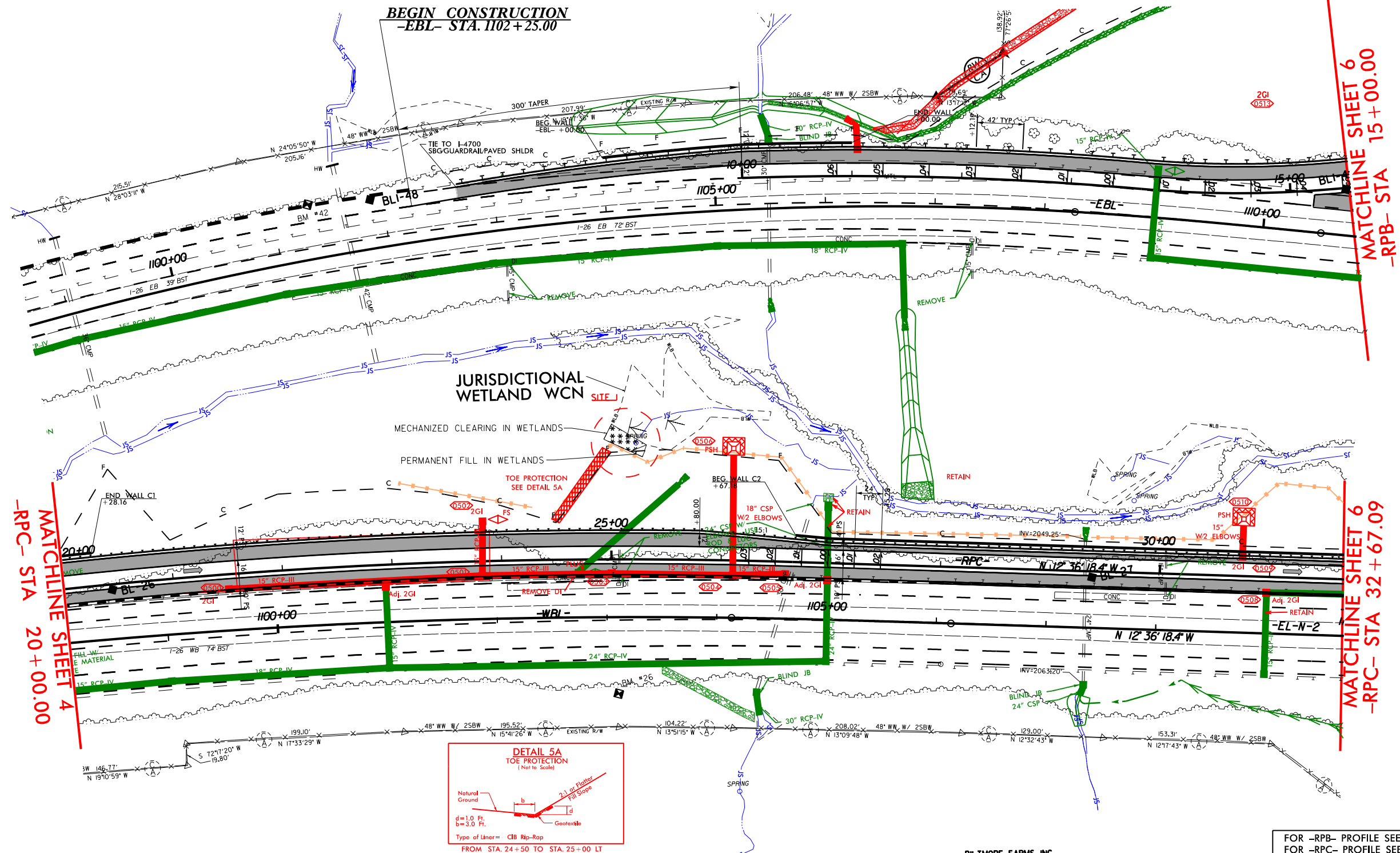
WETLAND AND SURFACE WATER IMPACTS PERMIT

PROJECT REFERENCE NO.	SHEET NO.
HE-0001A	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 4 OF 19

Revised
May 02, 2023

LEGEND	
	TEMPORARY FILL IN WETLAND
	MECHANIZED CLEARING (GRUBBING)
	SAFETY FENCE



FOR -RPB- PROFILE SEE R/W SHEET 12
FOR -RPC- PROFILE SEE R/W SHEET 13

WETLAND AND SURFACE WATER IMPACTS PERMIT

PROJECT REFERENCE NO.	SHEET NO.
HE-0001A	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	

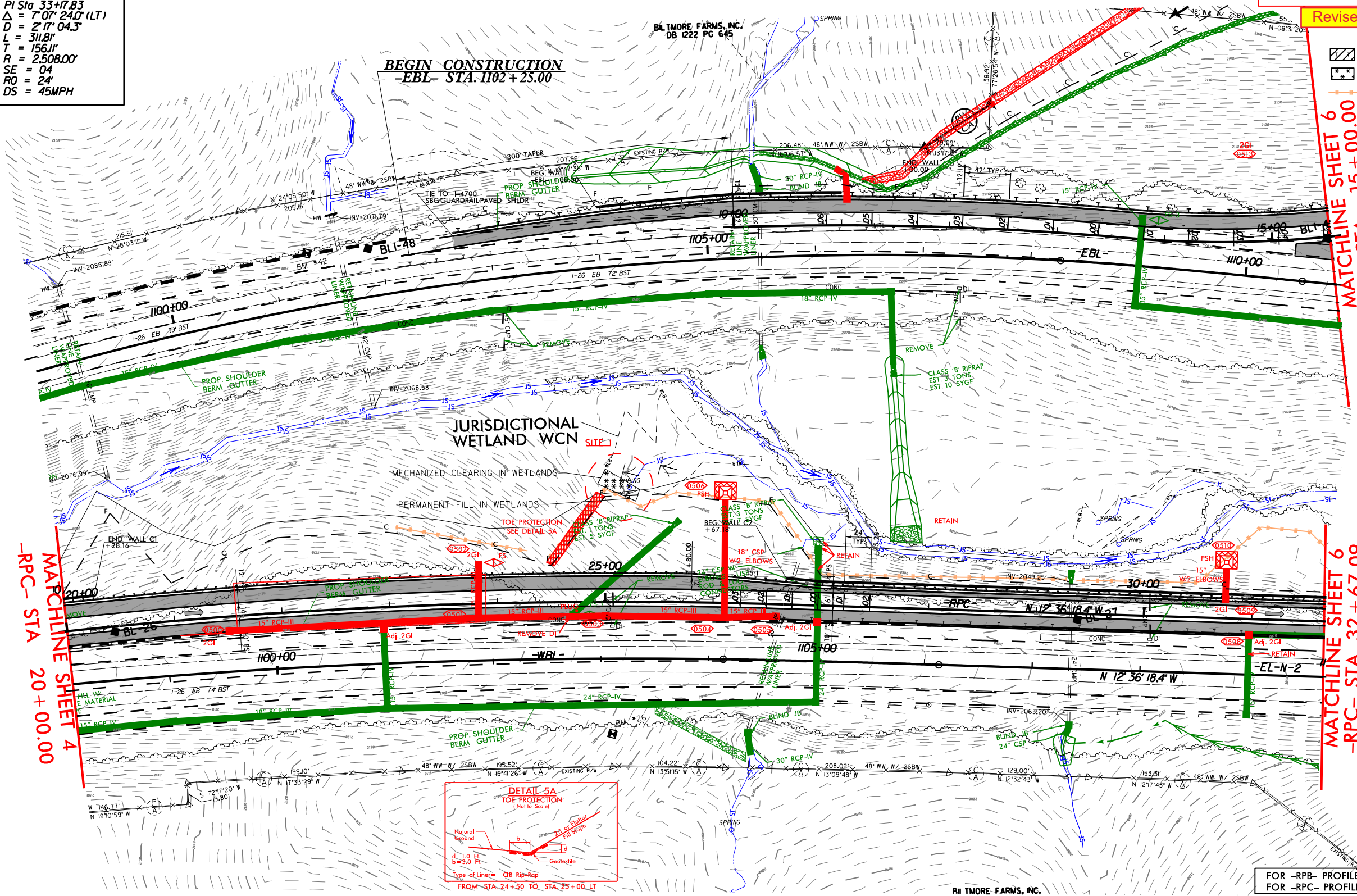
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 5 OF 19

Revised May 02, 2023

LEGEND	
	TEMPORARY FILL IN WETLAND
	MECHANIZED CLEARING (GRUBBING)
	SAFETY FENCE

-EBL- (EXISTING I-4700 ALIGNMENT)	
PI Sta 1102+31.31 $\Delta = 22^{\circ} 06' 20.5"$ (RT) $D = 2^{\circ} 00' 00.0"$ $L = 1,055.29'$ $T = 559.60'$ $R = 2,864.79'$	PIs Sta 1108+61.00 $\Theta_s = 2^{\circ} 31' 11.3"$ $L_s = 251.98'$ $LT = 168.00'$ $ST = 84.01'$
-WBL2- (EXISTING I-4700 ALIGNMENT)	
PI Sta 1093+37.38 $\Delta = 22^{\circ} 08' 01.8"$ (RT) $D = 0^{\circ} 55' 00.2"$ $L = 2,414.43'$ $T = 1,222.45'$ $R = 6,250.00'$	PIs Sta 1105+71.35 $\Theta_s = 0^{\circ} 34' 39.0"$ $L_s = 125.99'$ $LT = 83.99'$ $ST = 42.00'$
-RPB-	
PI Sta 11+82.29 $\Delta = 6^{\circ} 57' 16.5"$ (RT) $D = 1^{\circ} 54' 35.5"$ $L = 364.14'$ $T = 182.29'$ $R = 3,000.00'$ $SE = 06'$ $RO = 168'$ $DS = 55MPH$	PI Sta 18+11.83 $\Delta = 48^{\circ} 14' 06.0"$ (RT) $D = 5^{\circ} 43' 46.5"$ $L = 841.86'$ $T = 447.69'$ $R = 1,000.00'$ $SE = 04'$ $RO = 48'$ $DS = 55MPH$
-RPC-	
PI Sta 19+38.58 $\Delta = 17^{\circ} 25' 49.5"$ (RT) $D = 1^{\circ} 11' 23.8"$ $L = 1,464.81'$ $T = 738.11'$ $R = 4,815.00'$ $SE = 03'$ $RO = 24'$ $DS = 55MPH$	PI Sta 33+17.83 $\Delta = 7^{\circ} 07' 24.0"$ (LT) $D = 2^{\circ} 17' 04.3"$ $L = 311.81'$ $T = 156.11'$ $R = 2,508.00'$ $SE = 04'$ $RO = 24'$ $DS = 45MPH$



MATCHLINE SHEET 4
-RPC- STA 20+00.00

MATCHLINE SHEET 6
-RPC- STA 15+00.00

MATCHLINE SHEET 6
-RPC- STA 32+67.09

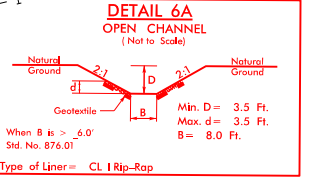
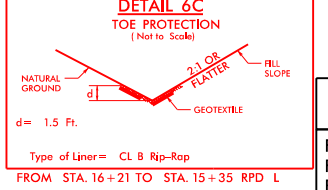
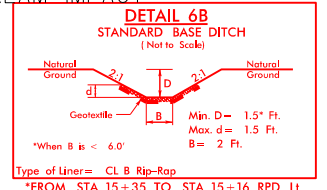
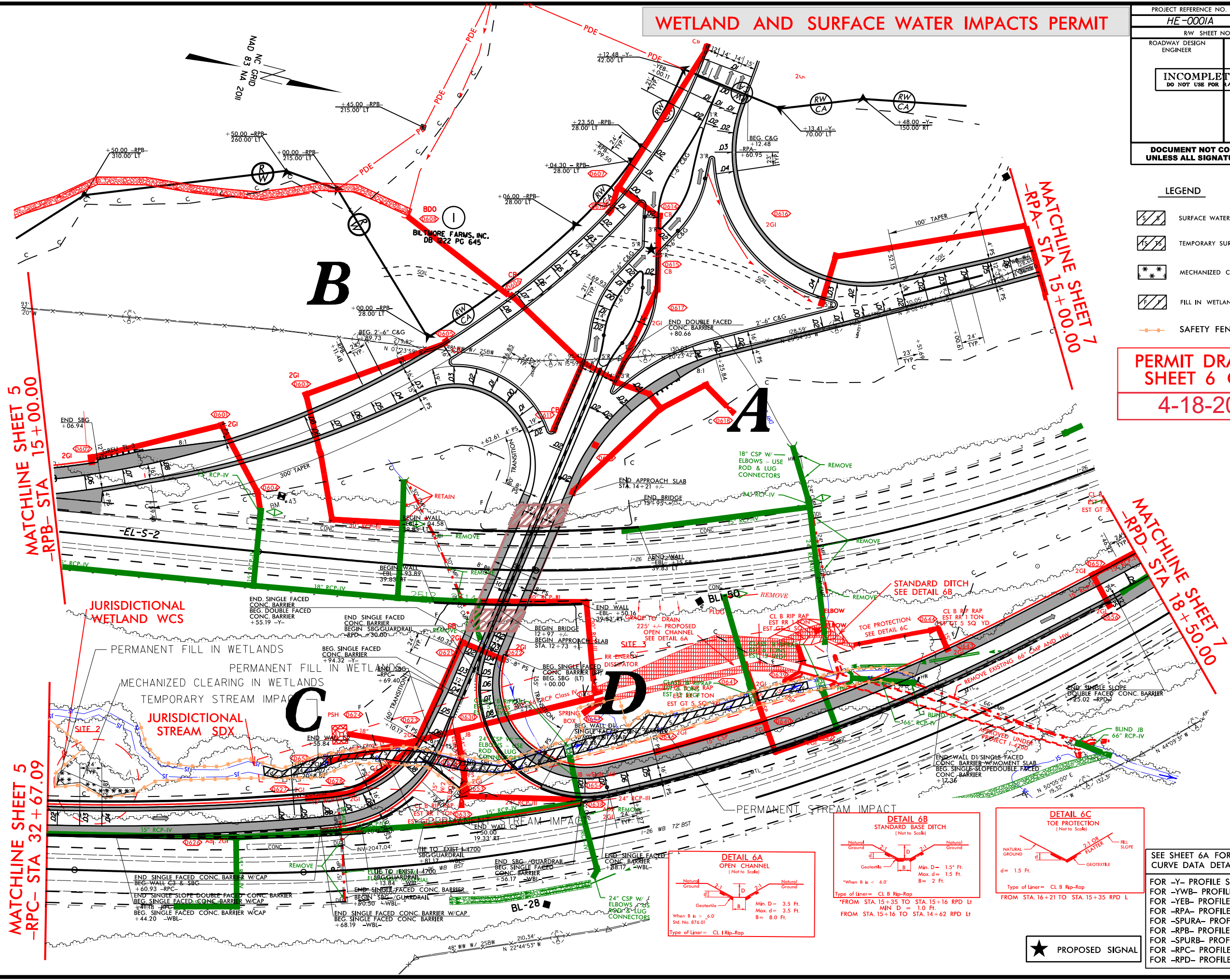
FOR -RPB- PROFILE SEE R/W SHEET 12
FOR -RPC- PROFILE SEE R/W SHEET 13

WETLAND AND SURFACE WATER IMPACTS PERMIT

PROJECT REFERENCE NO.	SHEET NO.
HE-0001A	6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

- LEGEND
- SURFACE WATER IMPACTS
 - TEMPORARY SURFACE WATER IMPACTS
 - MECHANIZED CLEARING (GRUBBING)
 - FILL IN WETLAND
 - SAFETY FENCE

PERMIT DRAWING
SHEET 6 OF 19
4-18-2023



SEE SHEET 6A FOR INTERCHANGE
CURVE DATA (RDY SHEETS)

FOR -Y- PROFILE SEE SHEET 9
FOR -YWB- PROFILE SEE SHEET 10
FOR -RPA- PROFILE SEE SHEET 11-12
FOR -SPUR- PROFILE SEE SHEET 12
FOR -RPB- PROFILE SEE SHEET 12
FOR -SPURB- PROFILE SEE SHEET 12
FOR -RPD- PROFILE SEE SHEET 14

★ PROPOSED SIGNAL

Legend for wetland mapping symbols:

- SURFACE WATER IMPACTS
- TEMPORARY SURFACE WATER IMPACTS
- MECHANIZED CLEARING (GRUBBING)
- FILL IN WETLAND
- SAFETY FENCE

MATCHLINE SHEET 5
15 + 00.00

MATCHLINE SHEET 5
-RPC- STA 32 + 67.09

MATCHLINE SHEET 15 + 00.00
-RPA- STA

MATCHLINE SHEET 7
-RPD- STA 18+50.00

FOR -Y- PROFILE SEE SHEET 9
FOR -YWB- PROFILE SEE SHEET 10
FOR -YEB- PROFILE SEE SHEET 10
FOR -RPA- PROFILE SEE SHEET 11-12
FOR -SPURA- PROFILE SEE SHEET 12
FOR -RPB- PROFILE SEE SHEET 12
FOR -SPURB- PROFILE SEE SHEET 12
FOR -RPC- PROFILE SEE SHEET 13
FOR -RPD- PROFILE SEE SHEET 14

PROPOSED SIGNAL

WETLAND AND SURFACE WATER IMPACTS PERMIT

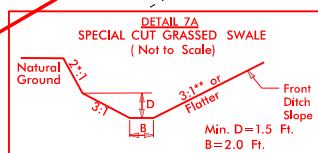
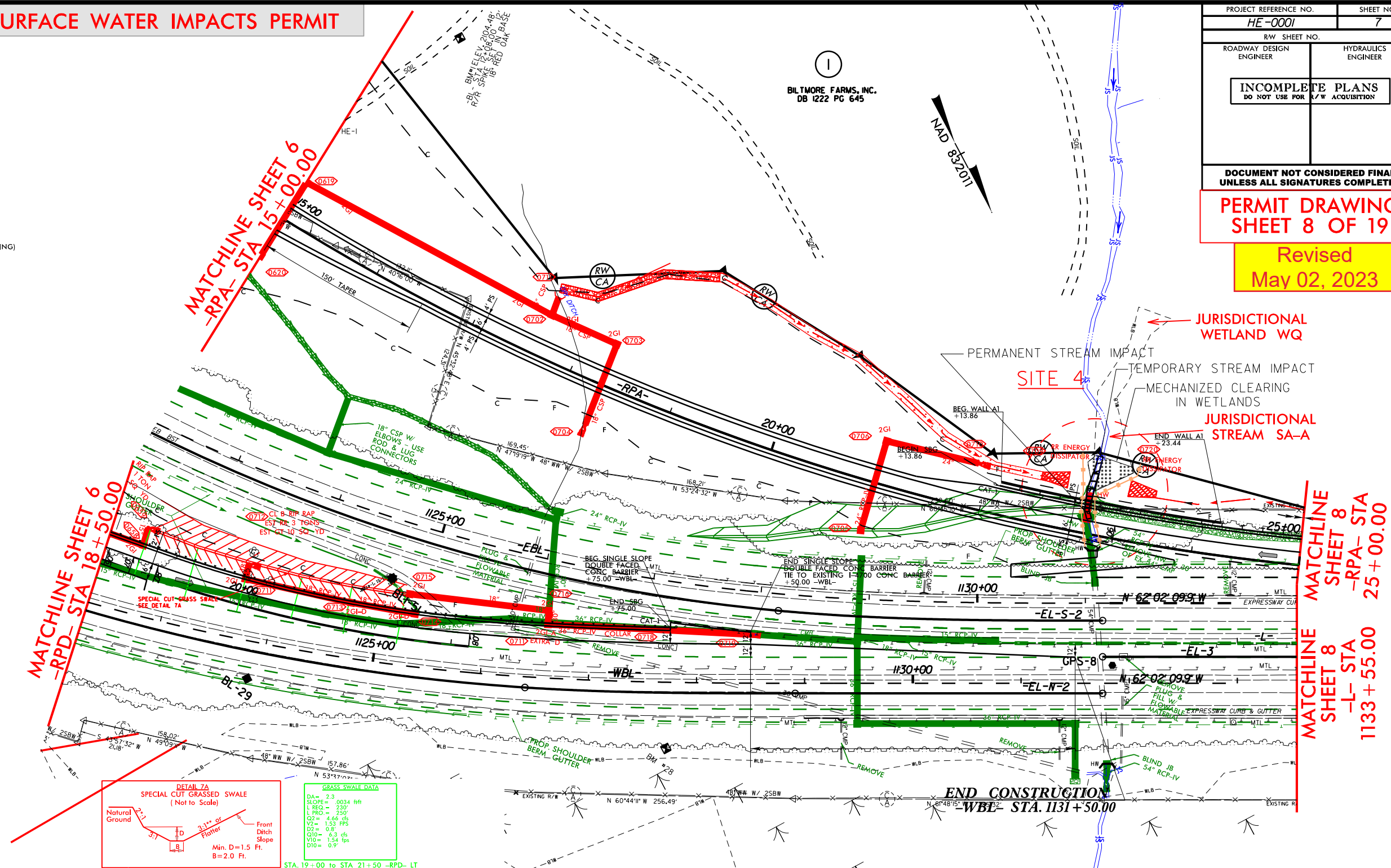
PROJECT REFERENCE NO.	SHEET NO.
HE-0001	7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING
SHEET 8 OF 19**

Revised
May 02, 2023

- LEGEND**
- SURFACE WATER IMPACTS
 - MECHANIZED CLEARING (GRUBBING)
 - SAFETY FENCE



GRASS SWALE DATA

DA = 2.3
SLOPE = .0034 H/H
REQ = 230'
L PRO = 230'
Q2 = 4.66 cfs
V2 = 1.93 FPS
D2 = 0.8'
Q10 = 6.2 cfs
V10 = 1.54 FPS
D10 = 0.9'

FROM STA. 19+00 TO STA. 21+50 -RPD- LT
 * Back slope var. at STA. 21+00
 to tie to existing ditch
 **3:1 use since depth is < 6'

-EBL- (EXISTING I-4700 ALIGNMENT)	
PI Sta 1122+20.40	Pis Sta 1128+98.34
$\Delta = 41' 31" 40.7" (LT)$	$\Theta_s = 5' 52" 46.8"$
D = 3' 30' 00.0"	Ls = 335.98'
L = 1186.51'	LT = 224.11'
T = 620.67'	ST = 112.11'
R = 1,637.02'	

-WBL- (EXISTING I-4700 ALIGNMENT)	
PI Sta 1119+62.02	Pis Sta 1127+02.89
$\Delta = 39' 21" 04.6" (LT)$	$\Theta_s = 5' 02" 22.9"$
D = 3' 00' 00.0"	Ls = 335.98'
L = 1,311.71'	LT = 224.08'
T = 682.91'	ST = 112.08'
R = 1,909.86'	

-RPA-	-RPD-
PI Sta 21+00.43	PI Sta 20+68.18
$\Delta = 33' 23' 24.2" (LT)$	$\Delta = 14' 14' 37.8" (LT)$
D = 2' 36' 15.7"	D = 4' 46' 28.7"
L = 1,282.09'	L = 298.32'
T = 659.82'	T = 149.93'
R = 2,200.00'	R = 1,200.00'
SE = 06	SE = 05
RO = 96	RO = 120'
DS = 55MPH	DS = 55MPH

FOR -RPA- PROFILE SEE RDY SHEET 16-17
 FOR -RPD- PROFILE SEE RDY SHEET 19

WETLAND AND SURFACE WATER IMPACTS PERMIT

PROJECT REFERENCE NO.	SHEET NO.
HE-0001	7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 9 OF 19

Revised
May 02, 2023

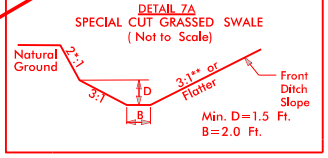
- LEGEND
- SURFACE WATER IMPACTS
 - MECHANIZED CLEARING (GRUBBING)
 - SAFETY FENCE

MATCHLINE SHEET 6
-RPA- STA 15+00.00

MATCHLINE SHEET 6
-RPD- STA 18+50.00

MATCHLINE SHEET 8
-RPA- STA 25+00.00

MATCHLINE SHEET 8
-L- STA 1133+55.00



GRASS SWALE DATA

DA=	2.3
SLOPE=	.0034 H/H
REG=	230
L PRO=	230'
Q2=	4.66 cfs
V2=	1.93 fps
D2=	0.8'
Q10=	6.2 cfs
V10=	1.54 fps
D10=	0.9'

FROM STA. 19+00 TO STA. 21+50 -RPD- LT
* Back slope var. at STA. 21+00
to tie to existing ditch
**3:1 use since depth is < 6'

-EBL- (EXISTING I-4700 ALIGNMENT)

PI Sta 1122+20.40	Pis Sta 1128+98.34
$\Delta = 41^{\circ} 31' 40.7"$ (LT)	$\Theta_s = 5^{\circ} 52' 46.8"$
D = 3' 30" 00.0"	Ls = 335.98'
L = 1186.51'	LT = 224.11'
T = 620.67'	ST = 112.11'
R = 1,637.02'	

-WBL- (EXISTING I-4700 ALIGNMENT)

PI Sta 1119+62.02	Pis Sta 1127+02.89
$\Delta = 39^{\circ} 21' 04.6"$ (LT)	$\Theta_s = 5^{\circ} 02' 22.9"$
D = 3' 00" 00.0"	Ls = 335.98'
L = 1,311.71'	LT = 224.08'
T = 682.91'	ST = 112.08'
R = 1,909.86'	

-RPA-	-RPD-
PI Sta 21+00.43	PI Sta 20+68.18
$\Delta = 33^{\circ} 23' 24.2"$ (LT)	$\Delta = 14^{\circ} 14' 37.8"$ (LT)
D = 2' 36' 15.7"	D = 4' 46' 28.7"
L = 1,282.09'	L = 298.32'
T = 659.82'	T = 149.93'
R = 2,200.00'	R = 1,200.00'
SE = 06	SE = 05
RO = 96	RO = 120'
DS = 55MPH	DS = 55MPH

FOR -RPA- PROFILE SEE RDY SHEET 16-17
FOR -RPD- PROFILE SEE RDY SHEET 19

8/17/99

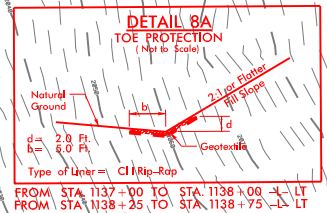
PROJECT REFERENCE NO.	SHEET NO.
HE-0001	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 9 OF 19

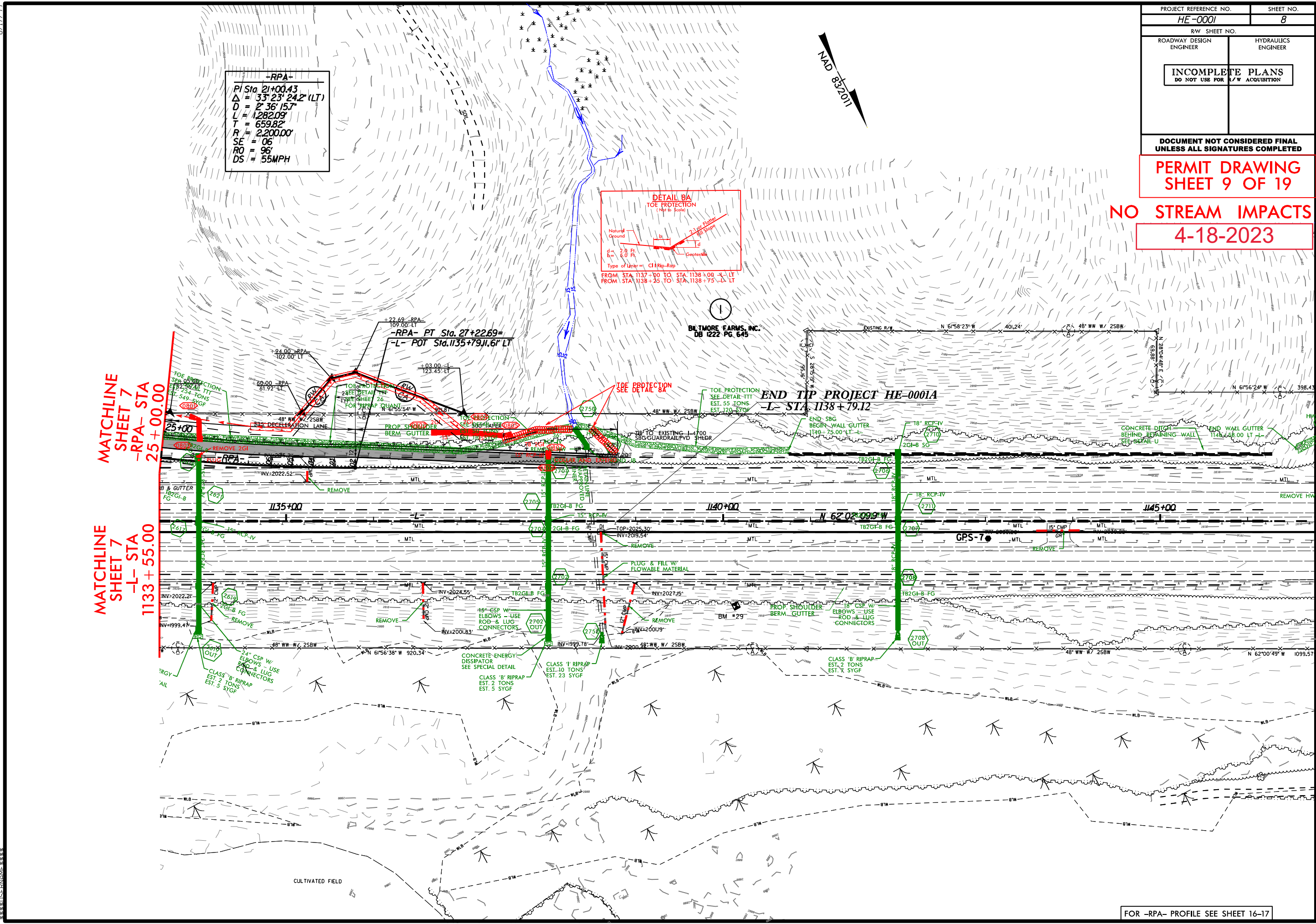
NO STREAM IMPACTS
4-18-2023

-RPA-
PI Sta. 21+00.43
 $\Delta = 33^{\circ}23'24.2"$ (LT)
D = 2' 36" 15.7"
L = 1282.09'
T = 659.82'
R = 2200.00'
SE = 06
RO = 96
DS = 55MPH



MATCHLINE
SHEET 7
-RPA- STA
25+00.00

MATCHLINE
SHEET 7
-L- STA
1133+55.00



FOR -RPA- PROFILE SEE SHEET 16-17

WETLAND AND SURFACE WATER IMPACTS PERMIT

LEGEND



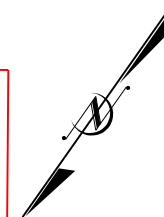
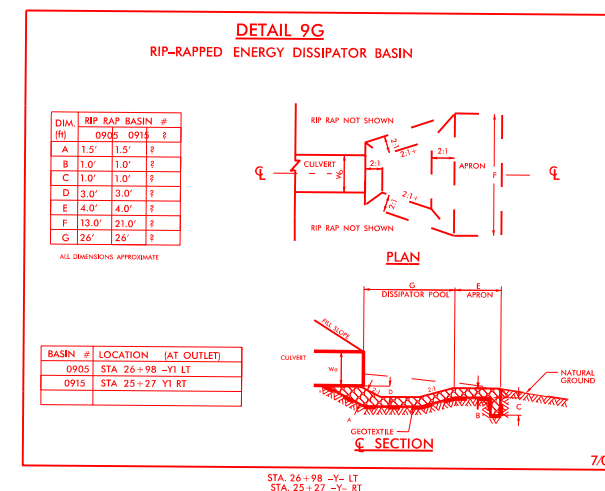
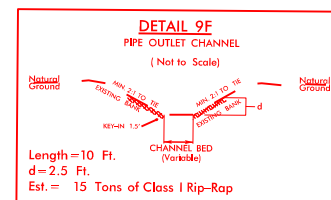
SURFACE WATER IMPACTS



TEMPORARY SURFACE WATER IMPACTS



SAFETY FENCE



PROJECT REFERENCE NO.	SHEET NO
HE-0001B	9

R/W SHEET NO.

ROADWAY DESIGN	HYDRAULICS
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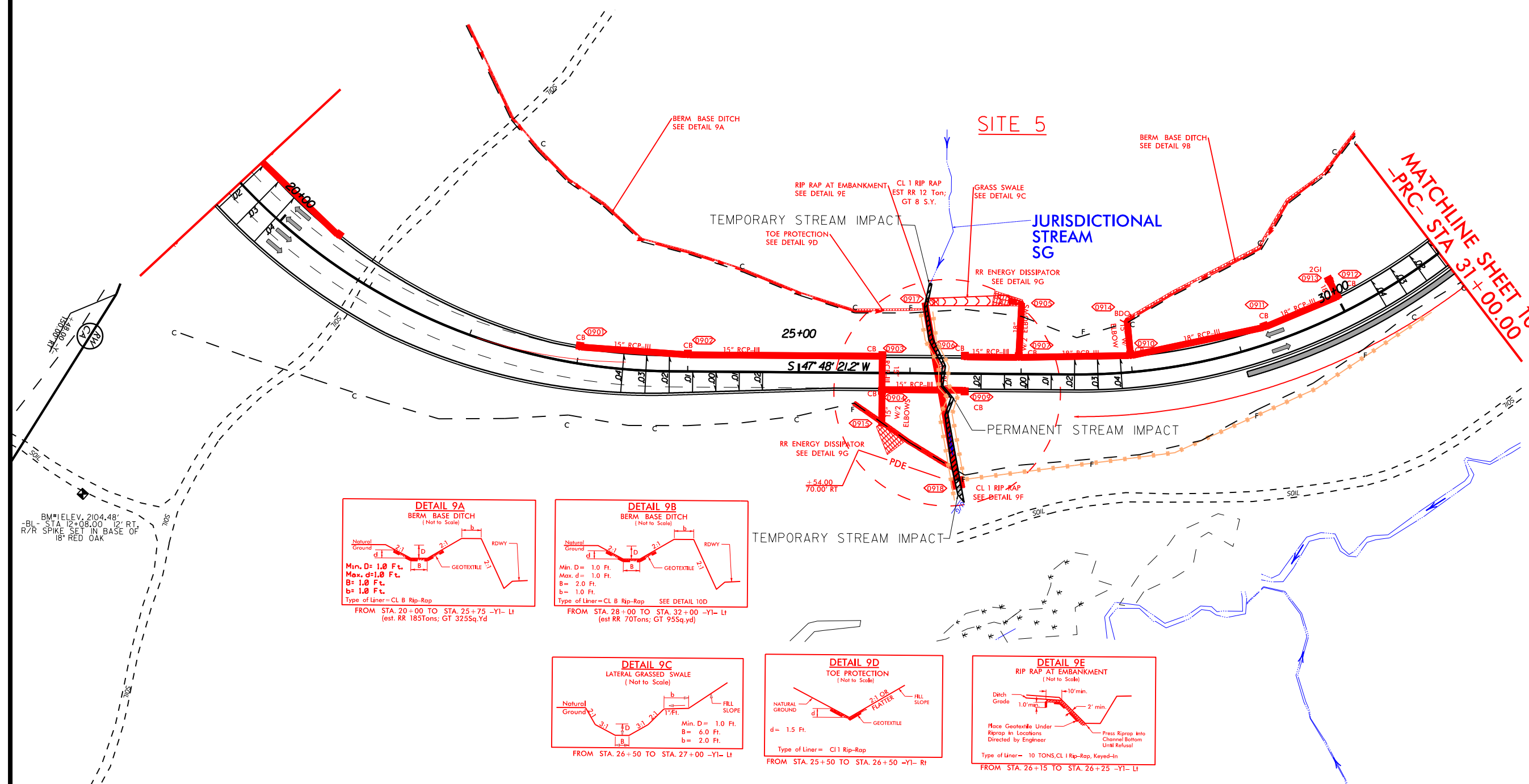
ENGINEER ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETE**

PERMIT DRAWING
SHEET 12 OF 19

4-18-2023



WETLAND AND SURFACE WATER IMPACTS PERMIT

LEGEND



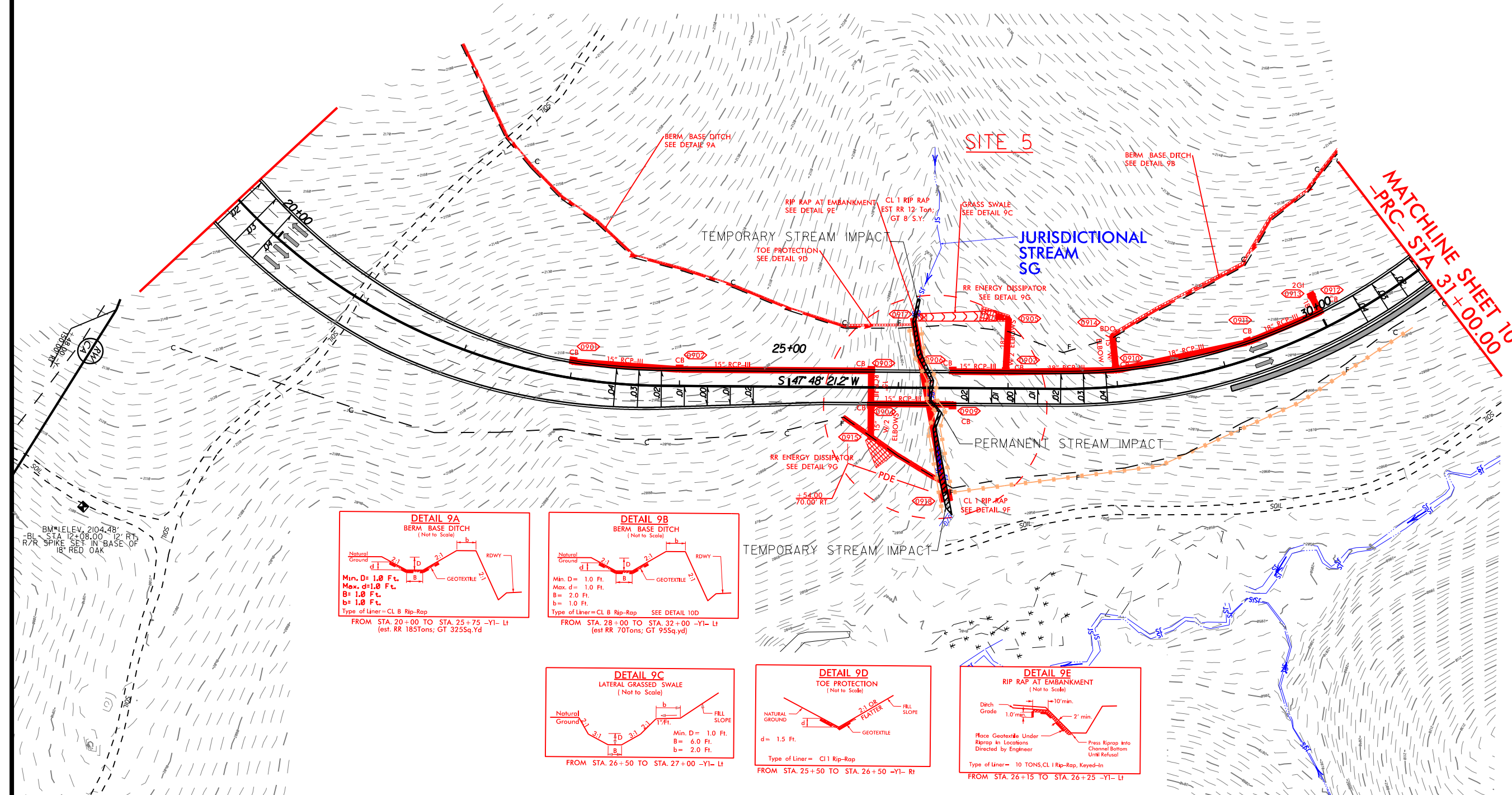
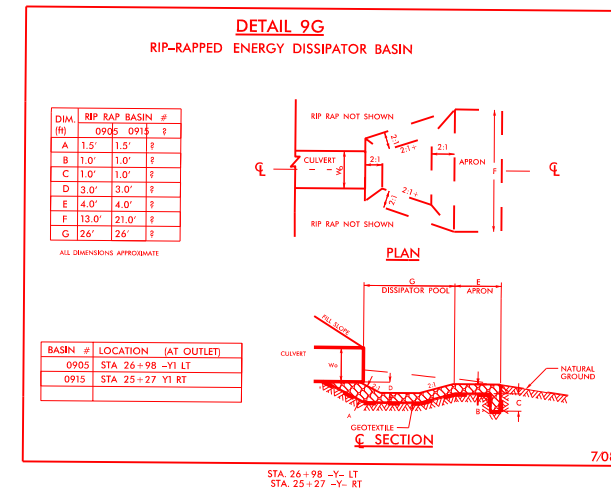
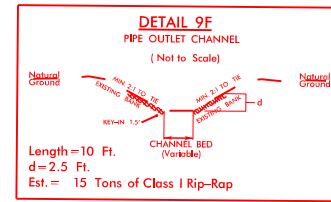
SURFACE WATER IMPACTS



TEMPORARY SURFACE WATER IMPACTS



SAFETY FENCE



2/4/2025



EXISTING TEMPORARY SURFACE WATER IMPACTS



NEW TEMPORARY SURFACE WATER IMPACTS



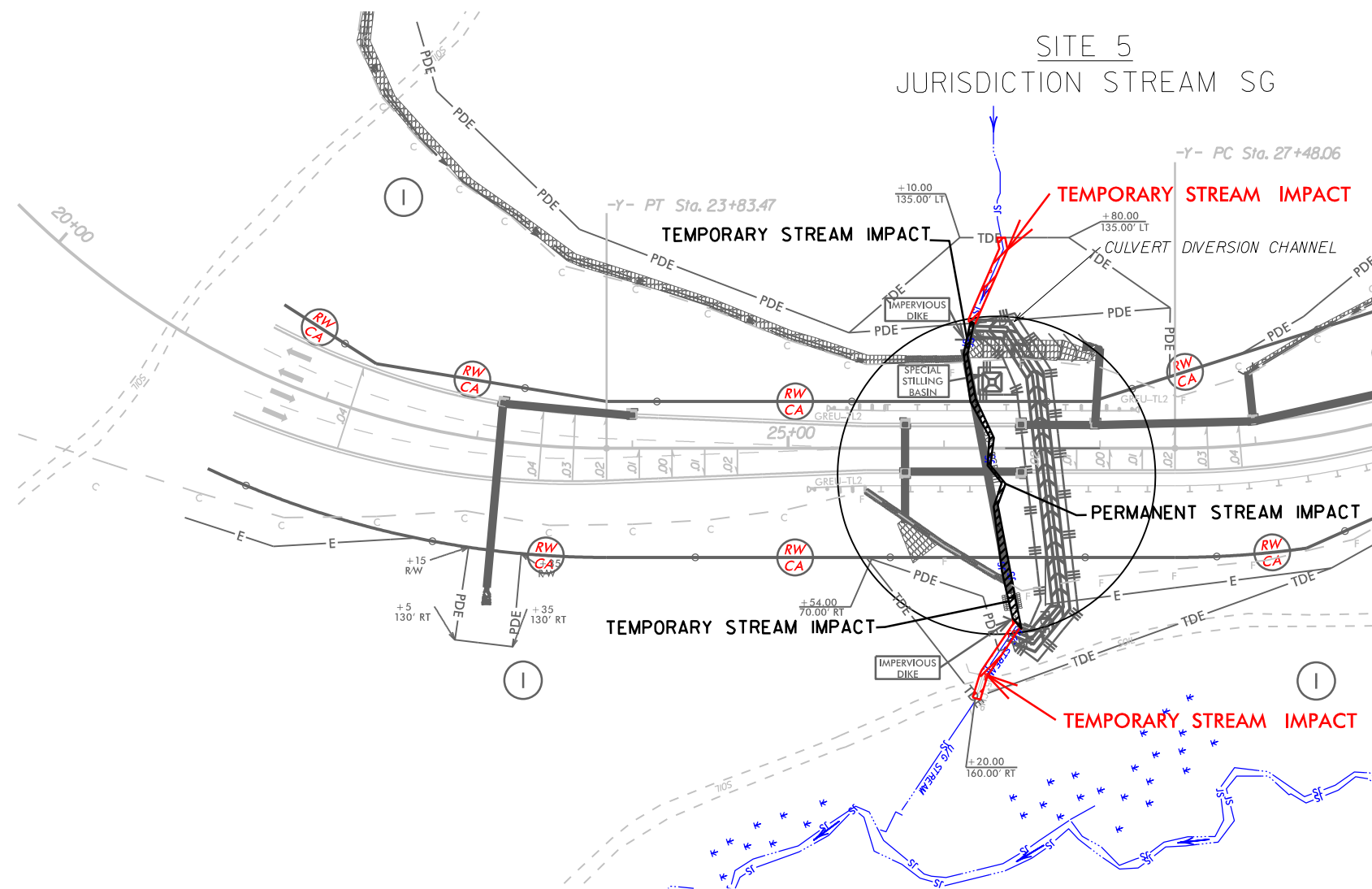
EXISTING SURFACE WATER IMPACTS



10000	PROJECT REFERENCE NO.		SHEET NO.	
	HE-0001B		2	
	R/W SHEET NO.			

CULVERT CONSTRUCTION SEQUENCE STA. 26+50 -Y-

1. BEGIN CULVERT CONSTRUCTION PRIOR TO ROADWAY FILL.
2. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED.
3. CONSTRUCT CULVERT DIVERSION CHANNEL (3 FT BASE, 2.5 FT DEEP, 2:1 SIDE SLOPES). INSTALL IMPERVIOUS DIKE A FOR ONE SIDE OF THE CHANNEL.
4. INSTALL IMPERVIOUS DIKES B AND C, DIVERTING FLOW INTO TEMPORARY CHANNEL.
5. DEWATER WORK AREA, CONSTRUCT PROPOSED CULVERT AND INLET/OUTLET CHANNEL IMPROVEMENTS IN THE DRY.
6. REMOVE IMPERVIOUS DIKES B AND C, ALLOWING FLOW THROUGH NEWLY CONSTRUCTED CULVERT.
7. REMOVE IMPERVIOUS DIKE A AND CULVERT DIVERSION CHANNEL.
8. FINISH INLET/OUTLET IMPROVEMENTS.
7. REMOVE SPECIAL STILLING BASIN(S) AND COMPLETE ROADWAY.



WETLAND AND SURFACE WATER IMPACTS PERMIT

LEGEND

- SURFACE WATER IMPACTS
- TEMPORARY SURFACE WATER IMPACTS
- MECHANIZED CLEARING (GRUBBING)
- SAFETY FENCE

TEMPORARY STREAM IMPACT

PERMANENT STREAM IMPACT

SITE 6

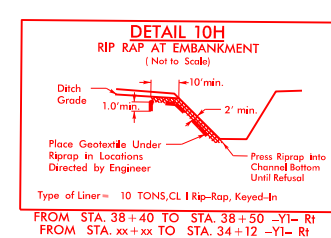
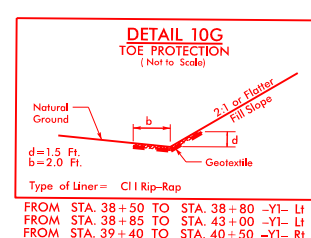
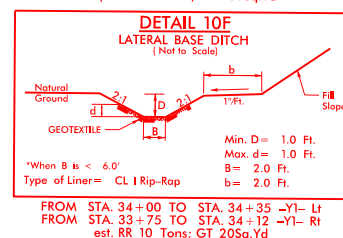
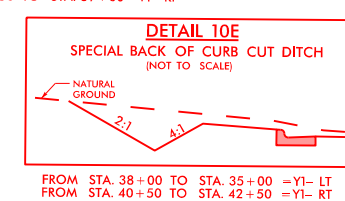
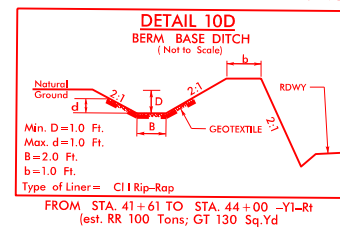
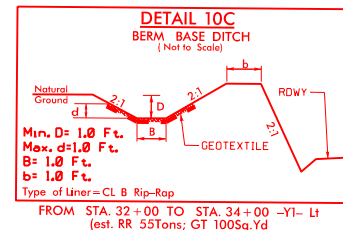
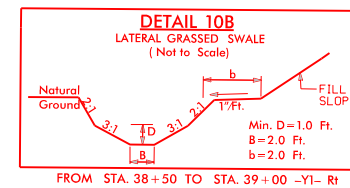
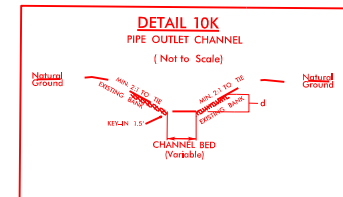
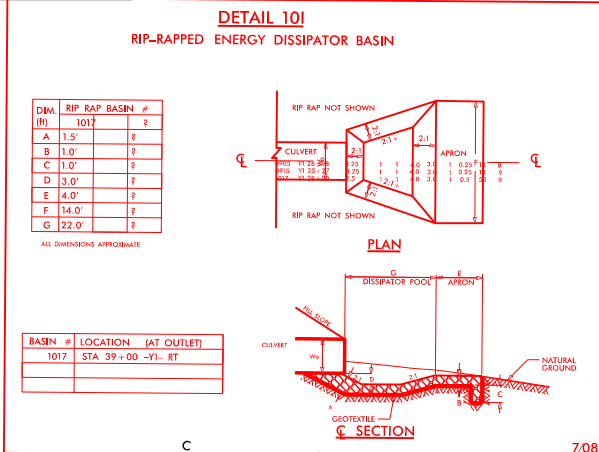
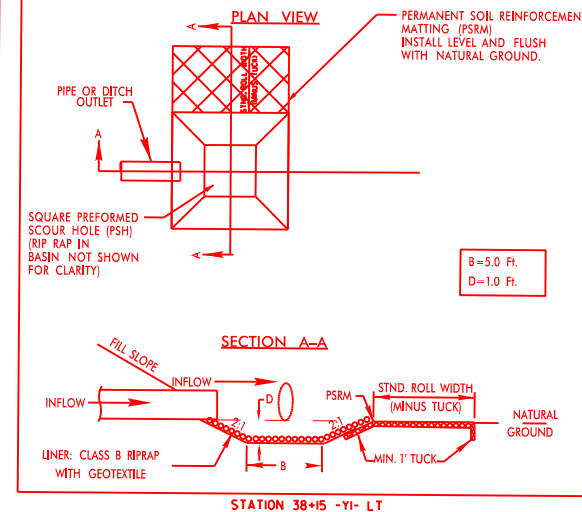
JURISDICTIONAL
STREAM
SE

TEMPORARY STREAM IMPACT

SITE 7

JURISDICTIONAL
STREAM
SA

DETAIL 10J PREFORMED SCOUR HOLE



PROJECT REFERENCE NO. HE-000IB	SHEET NO. 10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 14 OF 19
4-18-2023

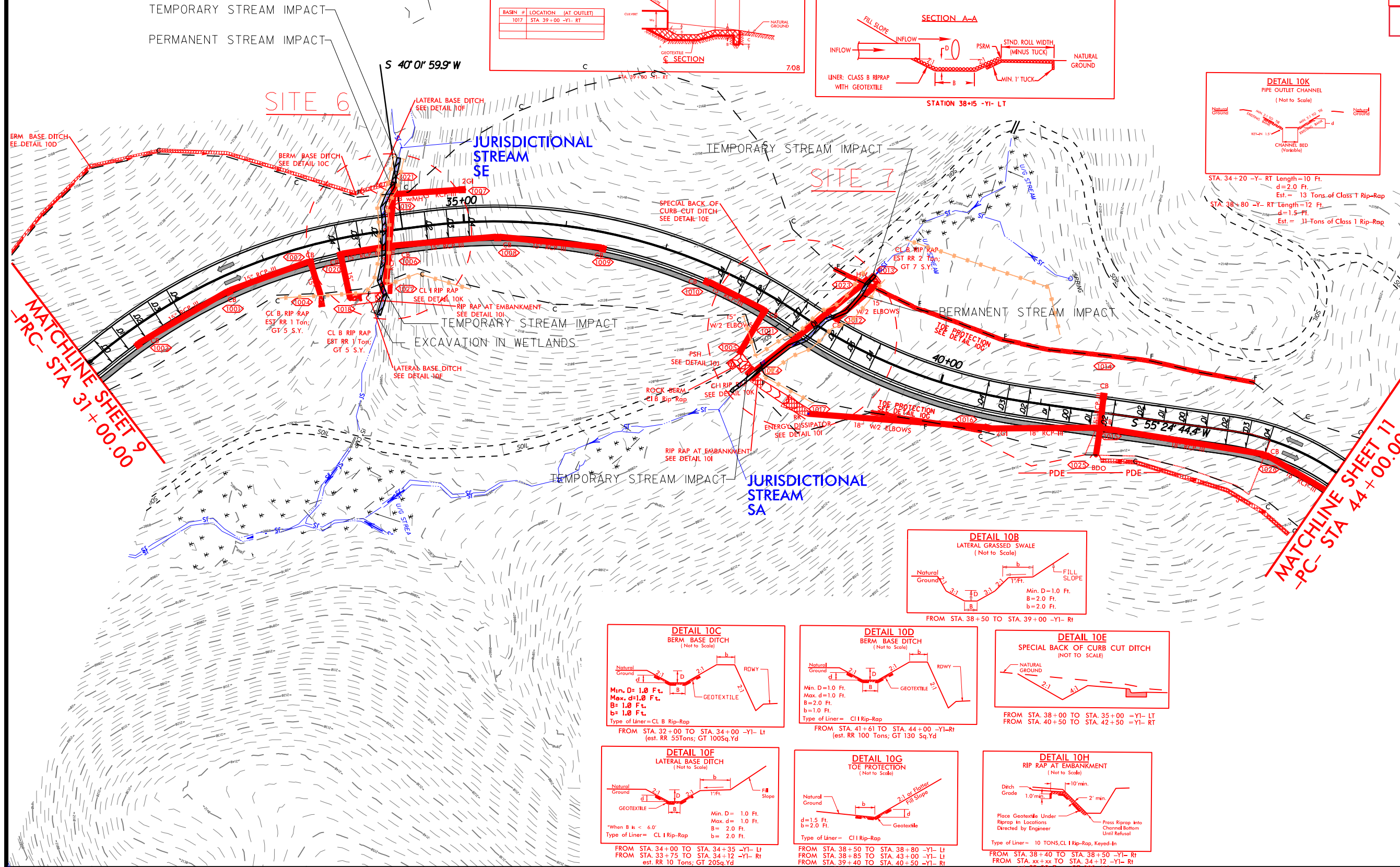
WETLAND AND SURFACE WATER IMPACTS PERMIT

LEGEND

- SURFACE WATER IMPACTS
- TEMPORARY SURFACE WATER IMPACTS
- MECHANIZED CLEARING (GRUBBING)
- SAFETY FENCE

PROJECT REFERENCE NO.	SHEET NO.
HE-0001B	10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 15 OF 19
4-18-2023



8/17/19

8/17/19

PERMIT DRAWING
SHEET 3 OF 5

2/4/2025

- TS

WS

EXISTING TEMPORARY SURFACE WATER IMPACTS
- TS

WS

NEW TEMPORARY SURFACE WATER IMPACTS
- S

B

EXISTING SURFACE WATER IMPACTS
- E

E

EXISTING WETLAND EXCAVATION

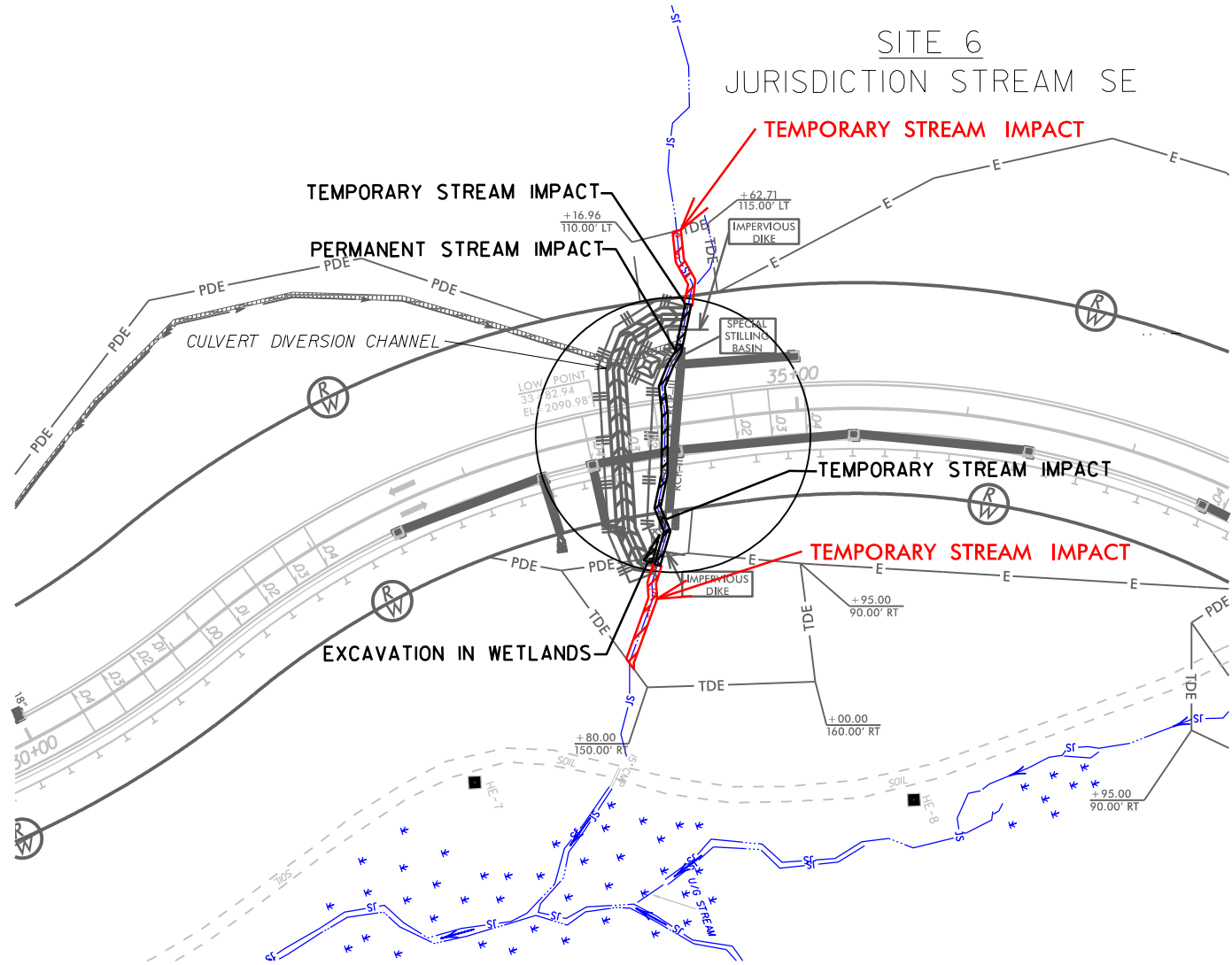
GANNETT
FLEMING

One Glenwood Avenue
Suite 101
Raleigh, NC 27608
919-479-7440
NC Lic. No. P-42791

PROJECT REFERENCE NO.	SHEET NO.
HE-0001B	3
RW SHEET NO.	

CULVERT CONSTRUCTION SEQUENCE STA. 34+50 -Y-

1. BEGIN CULVERT CONSTRUCTION PRIOR TO ROADWAY FILL.
2. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED.
3. CONSTRUCT CULVERT DIVERSION CHANNEL (3 FT BASE, 2.5 FT DEEP, 2:1 SIDE SLOPES). INSTALL IMPERVIOUS DIKE A FOR ONE SIDE OF THE CHANNEL.
4. INSTALL IMPERVIOUS DIKES B AND C, DIVERTING FLOW INTO TEMPORARY CHANNEL.
5. DEWATER WORK AREA, CONSTRUCT PROPOSED CULVERT AND INLET/OUTLET CHANNEL IMPROVMENTS IN THE DRY.
6. REMOVE IMPERVIOUS DIKES B AND C, ALLOWING FLOW THROUGH NEWLY CONSTRUCTED CULVERT.
7. REMOVE IMPERVIOUS DIKE A AND CULVERT DIVERSION CHANNEL.
8. FINISH INLET/OUTLET IMPROVEMENTS.
9. REMOVE SPECIAL STILLING BASIN(S) AND COMPLETE ROADWAY.



ALL PROPOSED DRAINAGE STRUCTURES ARE CATCH BASINS UNLESS OTHERWISE NOTED

ALL PROPOSED PIPES ARE 15" RCP-CL III UNLESS OTHERWISE NOTED

FOR -Y- PROFILE SEE SHEET 8

8/17/99

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
HE-0001B	4
RW SHEET NO.	

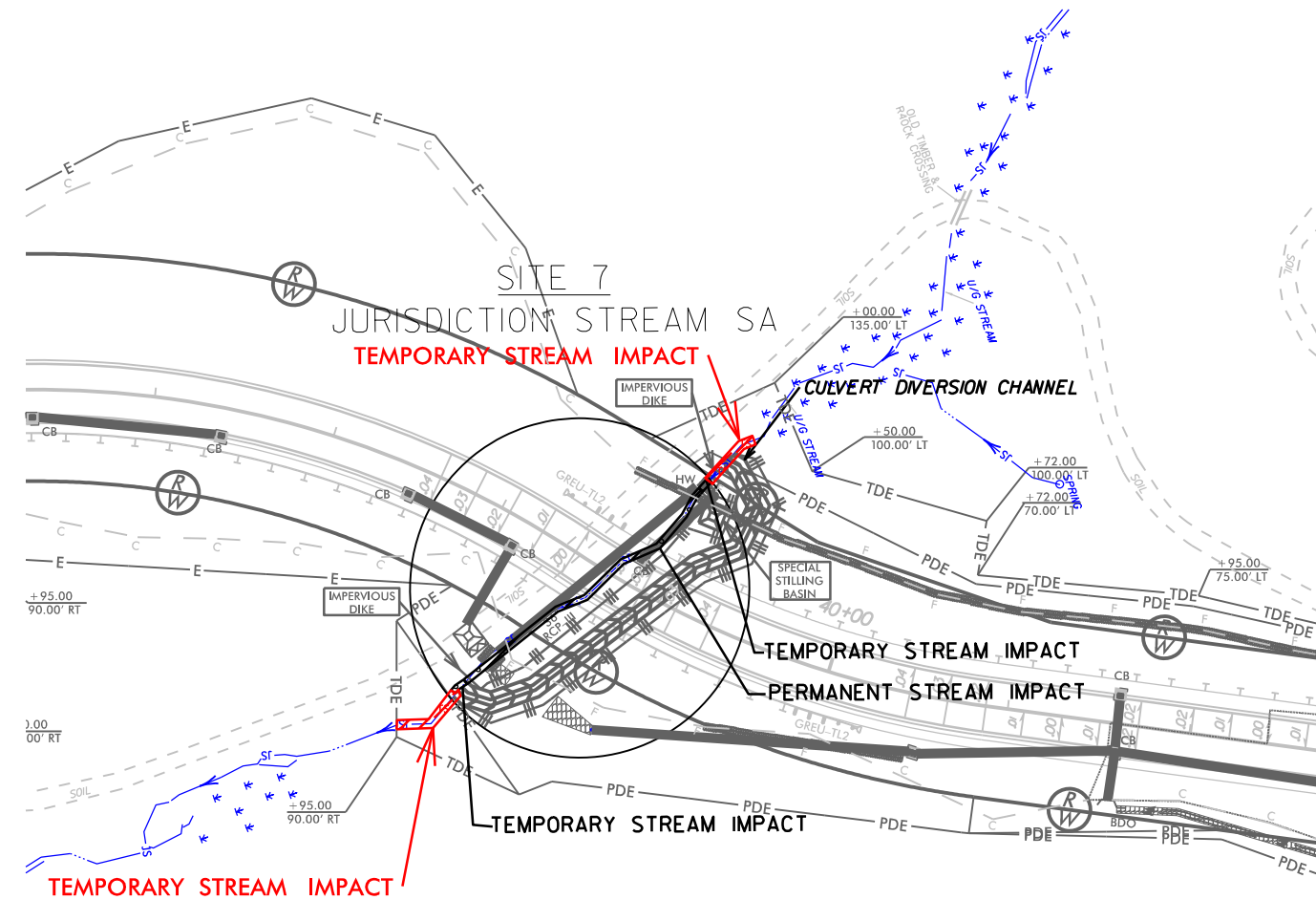
PERMIT DRAWING
SHEET 4 OF 5

2/4/2025

-  EXISTING TEMPORARY SURFACE WATER IMPACTS
-  NEW TEMPORARY SURFACE WATER IMPACTS
-  EXISTING SURFACE WATER IMPACTS

CULVERT CONSTRUCTION SEQUENCE STA. 39+00 -Y-

1. BEGIN CULVERT CONSTRUCTION PRIOR TO ROADWAY FILL.
2. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED.
3. CONSTRUCT CULVERT DIVERSION CHANNEL (3 FT BASE, 2.5 FT DEEP, 2:1 SIDE SLOPES). INSTALL IMPERVIOUS DIKE A FOR ONE SIDE OF THE CHANNEL.
4. INSTALL IMPERVIOUS DIKES B AND C, DIVERTING FLOW INTO THE TEMPORARY CHANNEL.
5. DEWATER WORK AREA, CONSTRUCT PROPOSED CULVERT AND INLET/OUTLET CHANNEL IMPROVEMENTS IN THE DRY.
6. REMOVE IMPERVIOUS DIKES B AND C, ALLOWING FLOW THROUGH NEWLY CONSTRUCTED CULVERT.
7. REMOVE IMPERVIOUS DIKE A AND CULVERT DIVERSION CHANNEL.
8. FINISH INLET/OUTLET IMPROVEMENTS.
9. REMOVE SPECIAL STILLING BASIN(S) AND COMPLETE ROADWAY.



-Y-
PI Sta 44+33.13
 $\Delta = 61' 21" 23.2' (RT)$
 $D = 22' 55" 05.9'$
 $L = 267.72'$
 $T = 148.31'$
 $R = 250.00'$
 $SE = 04$
 $RO = 42'$
 $DS = 30MPH$

WETLAND AND SURFACE WATER IMPACTS PERMIT

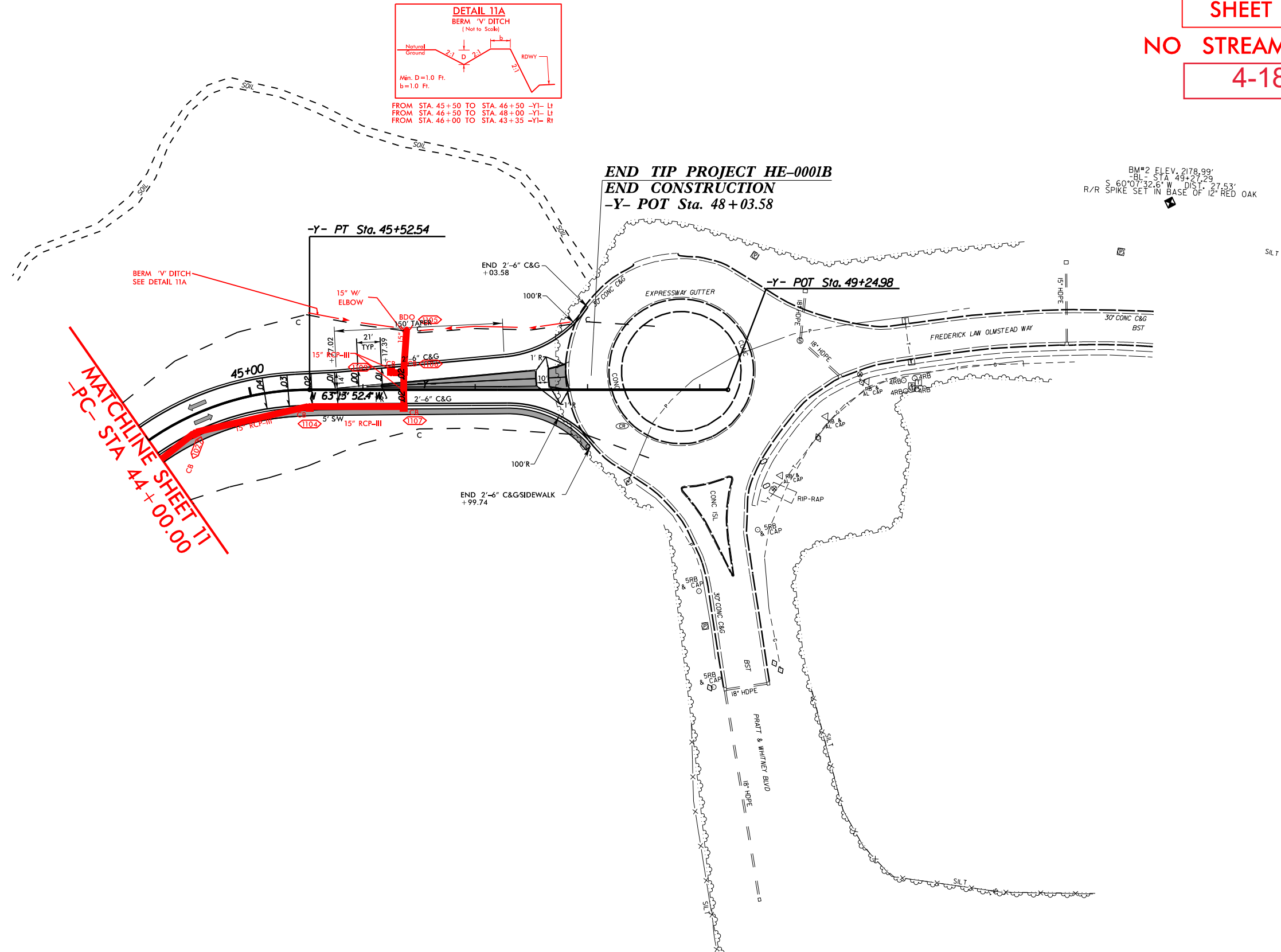


PROJECT REFERENCE NO.	SHEET NO.
HE-0001B	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 16 OF 19

NO STREAM IMPACTS

4-18-2023



PERMIT DRAWING
SHEET 17 OF 19

8/17/95

REVISIONS

PERMIT DRAWING

SHEET 19 OF 19

4-18-2023

PROJECT REFERENCE NO.	SHEET NO.
HE-0001	15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

