



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

October 31, 2025

MEMORANDUM TO: Becca Gallas, P.E.
Division 5 Engineer

FROM: Alan Shapiro, P.E.
NCTA Chief Engineer

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

DocuSigned by:
Alan Shapiro
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Attached are the modified US Army Corps of Engineers (USACE) Phased Section 404 Individual Permit, NC Division of Water Resources (NCDWR) Section 401 Individual Water Quality Certification, Neuse Riparian Buffer Authorization, and Non-404 Jurisdictional Wetlands and Waters Permit for the construction of the Triangle Expressway Southeast Extension (Complete 540) from NC 55 Bypass in Apex to US 64/264 (I-87) in Knightdale, Wake and Johnston Counties. STIP Nos. R-2721, R-2828, and R-2829. ***The changes are based on the October 28, 2025 request for modification of the permit due to design revisions within the R-2829A project limits along the toe of slope near the bridge end bent over Bushy Branch and the outlet of the box culvert C100. The addition of rock required changes to the approved plans, which in turn altered the proposed impacts to jurisdictional resources. In addition, coordination with Duke Energy, Spectrum, AT&T and MCI/Verizon on utility relocations within the R-2829A project limits has resulted in further plan revisions modifying the proposed impacts to jurisdictional resources.*** Subject to any requisite permit modifications, all environmental permits have been received for the construction of the final design sections of this project.

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

cc: w/o attachment (see website for attachments)
Mr. Ron Davenport, P.E. Contracts Management
Mr. Clarence Coleman, P.E., FHWA
Mrs. Heather Montague, Division 5
Mr. Mark Craig, P.E., Division 5
Mr. Boyd Tharrington, P.E., Deputy Chief Engineer
Mr. Bill Martin, P.E., Programming and TIP
Mr. Timothy Ritacco, Utilities Unit
Mr. Matt Lauffer, P.E., Hydraulics Unit
Mr. David Snoke, P.E., Structures Management Unit
Mr. Mark Staley, Roadside Environmental
Mr. John Jamison, Environmental Policy Unit
Ms. Beth Harmon, NCDMS
Ms. Deanna Riffey, Natural Environment Unit-Environmental Coordination & Permitting

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
TURNPIKE AUTHORITY
1599 MAIL SERVICE CENTER
RALEIGH, NC 27699-1599

Telephone: (919) 707-2700
Fax: (919) 715-5511
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
2501 AERIAL CENTER PARKWAY
SUITE 200
MORRISVILLE, NC 27560

404/401

Permits



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT
RALEIGH FIELD OFFICE
3331 HERITAGE TRADE DRIVE SUITE 105
WAKE FOREST NC 27587

October 31, 2025

Regulatory Program

Alan Shapiro, P.E.
Chief Engineer
North Carolina Turnpike Authority
1599 Mail Service Center
Raleigh, NC 27699-1599

Dear Mr. Shapiro:

Reference the Department of the Army permit issued to the North Carolina Department of Transportation (NCDOT) on October 24, 2019, and subsequently modified, to authorize the discharge of fill material into waters of the United States, for construction of the Triangle Expressway Southeast Extension (Complete 540) from NC 55 Bypass in Apex to US 64/264 (1-87) in Knightdale, Wake and Johnston Counties. Sections included within this permit are R-2721, R-2828, and R-2829.

Also, please reference your October 28, 2025, email, requesting modification of the permit to authorize change of impacts at Permit Sites 3, 5, 9, 12, and 13, for R-2829A. The modifications are necessary for in-field design revisions, including relocation of multiple utilities. The authorized additional impacts for this modification are as described below in Tables 1 & 2 below:

Table 1: Modified R-2829A Wetland Impacts

Site	Permanent Fill (ac)	Mechanized Clearing (ac)	Temporary Fill (ac)	Hand Clearing (ac – non 404)
3 (road)	0.284 (Previously 0.257; Increase of 0.027)	0.071 (Previously 0.098; Decrease of 0.027)		
9 (road)		0.010 (Previously 0; Increase of 0.010)	0 (Previously 0.010; Decrease of 0.010)	
12 (utility)				0.006 (Previously 0; Increase of 0.06)
13 (utility)				0.032 (Previously 0; Increase of 0.032)

Table 2: Modified R-2829A Stream Impacts

Site	Riprap Stabilization to Perennial Stream (linear ft)	Temporary Impact to Perennial Stream (linear ft)
5 (road)	25 (Previously 0. Increase of 25)	71 (Previously 96. Decrease of 25)
12 (utility)		65 (Previously 48. Increase of 17)

Additional compensatory wetland mitigation is proposed for net permanent wetland impact increase of 0.10 acre. No additional stream impacts requiring mitigation are proposed, as the proposed riprap will be countersunk, and while considered permanent fill, is not a permanent loss of function.

The Corps has completed the evaluation of your request and has determined that it is appropriate and reasonable, and that no public notice is required for this modification. Therefore, the permit is modified as requested and as shown on the enclosed R-2829A Mod Permit Drawings, Sheets 10 - 12, 21 - 23, 31 - 32, and 99 - 103 of 103, last revised 10/20/2025; and R-2829A Mod Utility Permit Drawings, Sheets 1 -10 of 11, last revised 10/20/2025, and Sheet 11 of 11, submitted 10/28/2025.

Additional compensatory mitigation of 0.020 acre wetland credits is required, in accordance with the provisions outlined on the attached Compensatory Mitigation Responsibility Transfer Form.

The special conditions for the permit are also enclosed, and have not changed from the revised Special Conditions provided with the December 13, 2024 modification. The revised permit expiration date remains December 31, 2029.

Should you have any questions, contact Mr. Eric Alsmeyer, via email at Eric.C.Alsmeyer@usace.army.mil or by telephone at (919) 817-1570. Please take a moment to complete our customer satisfaction survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Sincerely,



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

Enclosures

cc: Jennifer Harris, NC Turnpike Authority (via ext-jhharris1@ncdot.gov)
Deanna Riffey, NCDOT (via driffey@ncdot.gov)

Revised SPECIAL CONDITIONS

Action ID SAW-2009-02240; Complete 540; TIPS R-2721, R-2828, and R-2829

Note: Special Condition 9 was modified on October 28, 2024, and Special Condition 30 was added on December 12, 2024.

1. **Work Limits:** All work authorized by this permit shall be performed in strict compliance with the attached permit plans submitted on September 12, 2018, and revised on February 8, 2019, which are a part of this permit. The Permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Any modification to the attached permit plans must be approved by the U.S. Army Corps of Engineers (Corps) prior to any active construction in waters or wetlands.

2. **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. In addition, except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.

3. **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 and drawings shall be available at the project site during construction and maintenance of this project.

4. **Preconstruction Meeting:** The Permittee shall conduct an onsite preconstruction meeting between its representatives, the contractor's representatives and the appropriate U.S. Army Corps of Engineers Project Manager prior to undertaking any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all terms and conditions contained within the Department of the Army permit. The Permittee shall schedule the preconstruction meeting for a time frame when the Corps, and NCDWR Project Managers can attend. The Permittee shall invite the Corps, and NCDWR Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to

schedule and participate in the required meeting. The thirty (30) day requirement can be waived with the concurrence of the Corps.

5. Notification of Construction Commencement and Completion: The Permittee shall notify the U.S. Army Corps of Engineers in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

6. 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 Raleigh Regulatory Field Office, Attn: Eric Alsmeyer, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587, or eric.c.alsmeyer@usace.army.mil. The Permittee shall reference the following permit number, SAW-2009-02240, on all submittals.

7. 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.

8. Reporting Violations: Violation of these permit conditions or violation of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act shall be reported to the Corps in writing and by telephone at: 919.554.4884, extension 23, within 24 hours of the Permittee's discovery of the violation.

9. Endangered Species

1) 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, except as authorized by the October 15, 2019 US Fish and Wildlife Service BIOLOGICAL/CONFERENCE OPINION, as modified by the September 30, 2024 ADDENDUM. While accomplishing the authorized work, if the Permittee discovers or observes an injured or dead threatened or endangered species, the U.S. Army Corps of Engineers, Wilmington District Raleigh Field Office, telephone 919.554.4884, extension 23, email to eric.c.alsmeyer@usace.army.mil will be immediately notified to initiate the required Federal coordination.

2) Atlantic Sturgeon: In order to protect the federally-listed Atlantic sturgeon, no temporary causeways or work bridges will block more than 50% of the Neuse River below its ordinary high water mark, and will be removed at the end of the project's construction.

3) DWM Biological Opinion: This Department of the Army permit does not authorize you to take an endangered species, in particular the Dwarf wedgemussel, *Alasmodonta heterodon*. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with “incidental take” provisions with which you must comply). The attached October 15, 2019 US Fish and Wildlife Service BIOLOGICAL/CONFERENCE OPINION, as modified by the September 30, 2024 ADDENDUM (B/CO-A), contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with “incidental take” that is also specified in the B/CO-A. Your authorization under this permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached B/CO-A, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your permit. The U.S. Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its B/CO-A, and with the ESA.

4) NLEB Programmatic Biological Opinion: 11. The Wilmington District, Federal Highway Administration, U.S. Fish and Wildlife Service (USFWS), and the North Carolina Department of Transportation (NCDOT) have conducted programmatic Section 7(a)(2) consultation for the Northern long-eared bat (NLEB) for NCDOT projects located in Divisions 1-8. The result of this programmatic consultation is a Programmatic Biological Opinion (PBO) issued by the USFWS titled, “Programmatic Biological Opinion – Revised, NCDOT Program Effects on the Northern Long-eared Bat in Divisions 1-8”, dated December 15, 2022. This PBO contains agreed upon conservation measures which would minimize take of NLEB. As noted in the PBO, applicability of these conservation measures varies depending on the location of the project. The USFWS has documented that no reasonable and prudent measures, nor terms and conditions, are necessary or appropriate to minimize the amount or extent of incidental take of NLEB caused by the Action; therefore, the incidental take statement does not provide reasonable and prudent measures for this species. Department of the Army (DA) authorization under general permit or standard permit (Individual Permit) is conditional upon the permittee’s compliance with applicable, agreed upon conservation measures of the PBO, which is incorporated by reference in this permit. Failure to comply with the applicable conservation measures, where a take of the NLEB occurs, would constitute an unauthorized take by the permittee, and would also constitute permittee non-compliance with this permit. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO and the ESA. All PBOs can be found on our website at: <https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/>.

5) TCB Programmatic Biological Opinion: The U.S. Fish and Wildlife Service’s (USFWS’s) Programmatic Conference Opinion (PCO) titled “NCDOT Program Effects on the Tricolored Bat in Divisions 1-8”, dated November 20, 2023, contains

mandatory terms and conditions to implement the reasonable and prudent measures that are associated with “incidental take” that are specified in the PCO. Your authorization under this Corps permit is conditional upon your compliance with all the mandatory terms and conditions associated with incidental take of the PCO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the PCO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PCO, and with the ESA.

10. Maintain Flows and Circulation Patterns of Waters: Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters and/or wetlands.

11. Sediment and Erosion Control:

1) 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.

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

3) The Permittee shall remove all sediment and erosion control measures placed in waters and/or wetlands, and shall restore natural grades on those areas, prior to project completion.

4) 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.

12. Clean Fill: The Permittee shall use only clean fill material for this project. The fill material shall be free of items such as trash, construction debris, metal and plastic products, and concrete block with exposed metal 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.

13. 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 Quality at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act shall be followed.

ANADROMOUS FISH / AQUATIC LIFE

14. 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.

15. 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).

COMPENSATORY MITIGATION

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

CULTURAL RESOURCES

17. Historic Properties (MOA): The Permittee shall fully implement the Memorandum of Agreement between the Permittee, the North Carolina State Historic Preservation Officer and the U.S. Army Corps of Engineers, Wilmington District, dated last signed 3/11/2018, which is incorporated herein by reference.

CULVERTS

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 culvert construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a culvert or pipe 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.

20. The Permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, fill pads, 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.

21. Culverts placed within wetlands must be installed in a manner that does not restrict the flows and circulation patterns of waters of the United States. Culverts placed across wetland fills purely for the purposes of equalizing surface water shall not be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.

PONDS

22. Sediment Sluicing: The release of sediments from ponds (sluicing) is not authorized by this permit. The Permittee shall take all measures necessary to control any bottom

sediments that may be sluiced during the drainage of pond(s) on the project site.

UTILITY LINES

23. Temporary Impacts Restoration Measures: 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. In wetland areas where pipeline installation via trenching is authorized, wetland topsoil shall be segregated from the underlying subsoil, and the top 6 to 12 inches of the trench shall be backfilled with topsoil from the trench.

24. Cleared wetland areas shall be re-vegetated with a wetland seed mix or a mix of native woody species. Fescue grass or any invasive species such as *Lespedeza* spp., shall not be used within the wetland areas.

25. Prior to construction within any jurisdictional areas, the Permittee shall correctly install silt fencing (with or without safety fencing) parallel with the utility line corridor, on both sides of the jurisdictional crossing. This barrier is to serve both as an erosion control measure and a visual identifier of the limits of construction within any jurisdictional area. The Permittee shall maintain the fencing, at minimum, until the wetlands have re-vegetated and stabilized.

26. Hydraulic Fracturing (Fracking): When directional boring or horizontal directional drilling (HDD) under waters of the United States, including wetlands, the Permittee shall closely monitor the project for hydraulic fracturing or “fracking” and material from the drilling operation leaching to the surface and into jurisdictional areas. Any discharge from fracking or leaching into waters of the United States, including wetlands, shall be reported to U.S. Army Corps of Engineers, Wilmington District Raleigh Field Office, telephone 919.554.4884, extension 23, email to eric.c.alsmeyer@usace.army.mil within 48 hours. Restoration and/or mitigation may be required as a result of any unintended discharges.

NCDOT STANDARD PERMIT CONDITIONS

27. Phased Permit and Mitigation: This permit only authorizes work on Sections A and B of TIP R-2721. Construction on Sections of TIP, R-2828 and R-2829 shall not commence until all the following occur:

(a) final design has been completed for those sections and submitted to the U.S. Army Corps of Engineers (Corps); (b) the Permittee has minimized impacts to waters and wetlands to the maximum extent practicable and the Corps concurs with this assessment through standard Merger 4B and 4C meetings; (c) any modification to the plans have been approved by the Corps in writing; and (d) a final compensatory mitigation plan for the relevant TIP project has been submitted by the Permittee and approved by the Corps.

28. 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.

29. Borrow and Waste: 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 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 2 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 2. 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.

30. Boater Safety Plan: The permittee shall implement the *NEUSE RIVER & NEUSE RIVER GREENWAY TRAIL USER SAFETY PLAN*, attached, submitted 9/16/2024, which would mitigate the impacts to personal watercraft use of this portion of the Neuse River by providing safety signage, buoys, ring buoys, and designated portage routes during construction of bridge spans over the Neuse.



NEUSE RIVER & NEUSE RIVER GREENWAY TRAIL USER SAFETY PLAN

NC 540 (R-2829B)

Triangle Expressway Southeast Extension

from south of SR 2542 (Rock Quarry
Road) to I-87/US 64/US 264

**SUBMITTED
7/22/2025**

Submitted by

FLATIRON

In partnership with

**ICE of
CAROLINAS, PLLC**



*NC 540 Triangle Expressway Southeast Extension (R-2829B)
from south of SR 2542 (Rock Quarry Road) to I-87 / US 64 / US 264*

Neuse River and Neuse River Greenway Trail Safety Plan

The R-2829B project includes construction activities at, across and above the Neuse River and the existing Neuse River Greenway Trail. This plan provides details of the safety measures to be incorporated into the construction operations to ensure that users of both the Neuse River and the Neuse River Greenway Trail are informed of ongoing construction hazards and are protected from construction activities while passing through the construction area.

General Safety Procedures and Precautions:

Throughout the duration of construction, the Flatiron-Fred Smith JV will have the following measures in place for both the Neuse River and the Neuse River Greenway Trail:

- Flatiron-Fred Smith JV will comply with all Contract and RFP requirements while implementing this safety plan.
- As required per Division One of the NCDOT Standard Specifications Section 108-3, modified by the RFP, Flatiron-Fred Smith JV will provide a Site Specific Safety Plan (SSSP) prior to starting any work. The SSSP with spill control and response plan will be provided to all on-site staff and shall include details on spill prevention and cleanup, marine operations, and emergency/crisis management.
- This plan shall be reviewed annually, at a minimum, by Flatiron-Fred Smith JV and NCDOT to determine if any adjustments need to be made to improve the functionality of the plan or address any changes on-site.
- Regular safety inspections of all equipment will be performed monthly to ensure everything is in proper condition and working order.
- Flatiron-Fred Smith JV will have monitors and/or flaggers to direct river and greenway users away from active or hazardous construction areas and activities.
- Unless work is being performed outside of the allowable public use of the greenway (dawn to dusk), if an overhead operation is ongoing without a greenway trail detour or river user diversion in place, Flatiron-Fred Smith JV will have monitors / flaggers on each side of the construction zone to stop construction work while users pass beneath an overhead operation.

The greenway and river traffic will be shifted to the proposed detour / portage routes when any unprotected overhead work is ongoing in an area. When the new bridge girders are in place, the stay in place decking is installed, and the overhangs with plywood protection are installed, this will prevent materials from falling onto the active portions of the greenway trail or Neuse River.

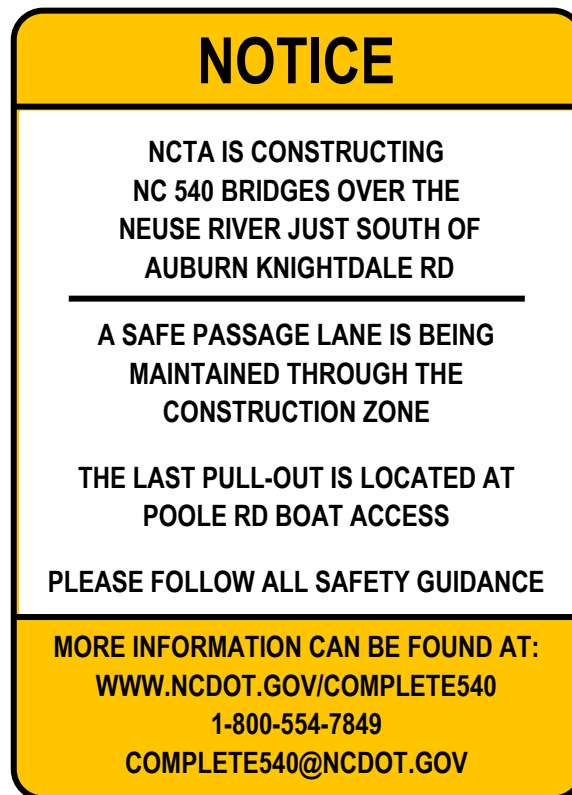
- In the event of a storm being forecast in the area that could result in localized flooding or overtopping the temporary access causeway, Flatiron-Fred Smith JV will remove all materials and equipment in advance of the storm.

Neuse River Specific Safety Precautions:

Paddlers or other users of the Neuse River waterway will be protected from construction operations as follows:

- Advanced warning Signage will be installed and maintained by Flatiron-Fred Smith JV at the following canoe / kayak access points upstream and downstream of the project location:
 - Lower Milburnie Dam (1101 Old Milburnie Rd, Raleigh, NC 27604)
 - Anderson Point Boat Access (20 Anderson Point Drive, Raleigh, NC 27610)
 - Poole Road Boat Access (6501 Poole Rd, Raleigh, NC 27610)
 - Mial Plantation Road Access (near 6008 Mial Plantation Rd, Raleigh, NC 27610)
 - Hwy 42 Boat Launch (2075 NC Highway 42 E, Clayton, NC)
 - Town of Smithfield Boat Ramp (200 N Front St, Smithfield, NC 27577)

The signs will be similar to the image below:



- Ring Buoys will be staged on each side of the river shoreline both immediately upstream and downstream of the construction zone for emergency rescue operations. Each ring

buoy will be equipped with a minimum of 100 feet of rescue line and a throw bag, mounted on a 4x4 timber post.

- Buoys and signage will be installed in the river to direct river users through the safe portion of the waterway (see sketch NEUSE-01).
- The buoys and signage will provide a safe perimeter around the proposed construction access causeway on the northern bank of the river to warn against unauthorized access to the causeway and work area by river users.
- Signage will direct river users if the river passage is open or closed. The passage will be open when it is safe to pass under the proposed bridge construction and there are no overhead activities ongoing. The passage will be closed and require canoe portage when active overhead operations such as bridge girder erection, stay in place form placement or overhang protection installation and removal. A portage route will be cleared and signed to allow for safe portage around the active construction. The portage route will be chosen to minimize the height of the bank to traverse during normal water elevations. In addition, during these closed times, Flatiron-Fred Smith JV will have monitors and flaggers further directing river users of the proper portage route.
- The Flatiron-Fred Smith JV will communicate to NCDOT / NCTA Communications and Marketing Department (CAMD) at least forty-five (45) days in advance of any construction activities that impact use of the Neuse River.

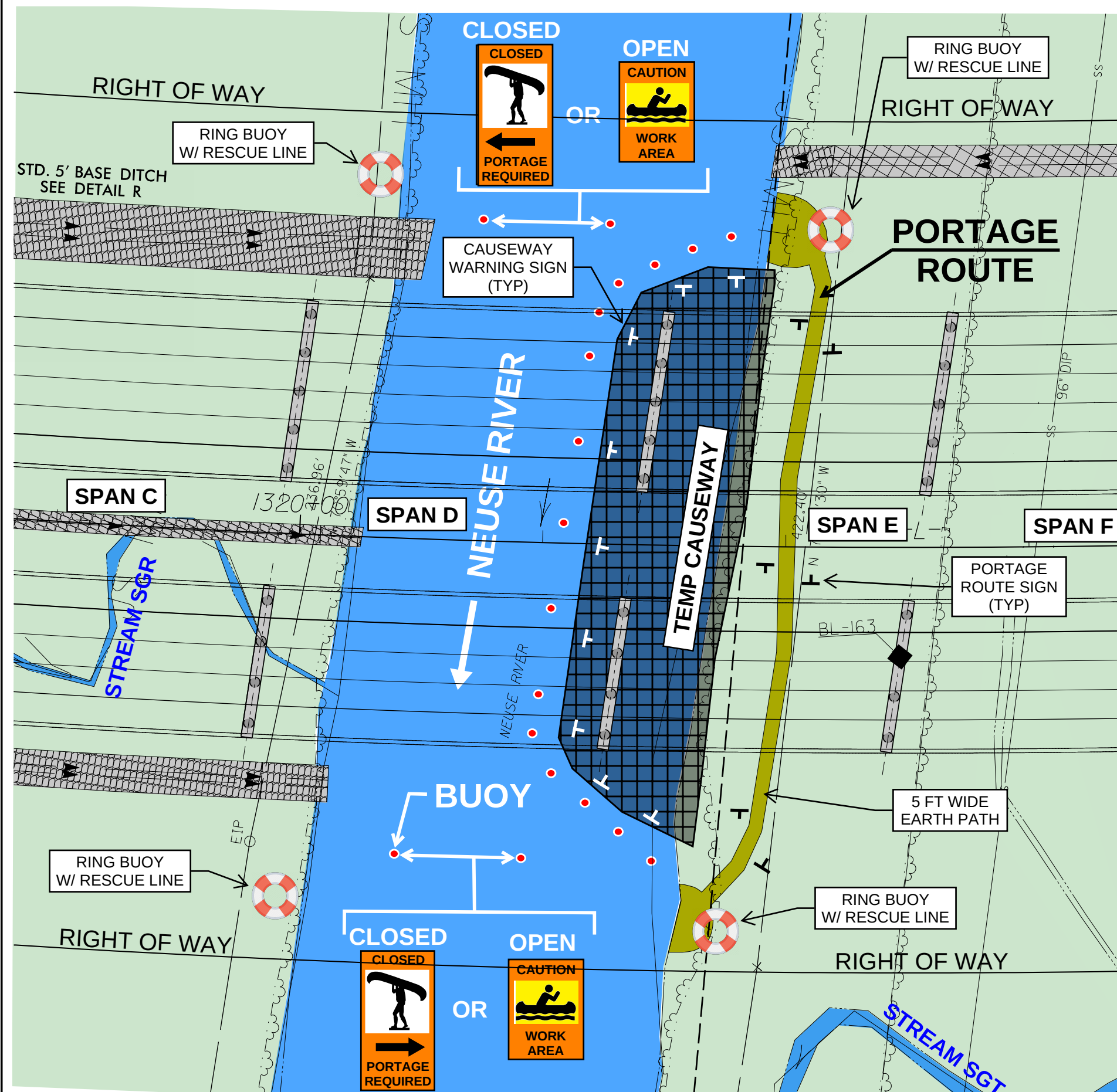
Neuse River Greenway Trail Specific Safety Precautions:

Users of the Neuse River Greenway Trail will be protected from construction operations as follows:

- The Flatiron-Fred Smith JV shall inform NCDOT Division 5 and NCTA at least forty-five (45) days in advance of any construction activities that impact use of the Neuse River Greenway Trail.
- A temporary trail detour route will be constructed and used to divert trail traffic away from active overhead construction activities (see sketches NEUSE-02 through NEUSE-04).
- Prior to beginning construction, orange safety fence will be placed on both sides of the existing greenway trail to keep greenway users on the trail and away from adjacent construction activities and equipment. The limits of the orange safety fence are shown on Figure NEUSE-02 and shall be turned 90 degrees and tied to the nearest tree to “funnel” users between the runs of safety fence. Orange safety fence to be maintained and/or reinstalled at the end of each shift where trail is being used for construction access.
- During the first phase of the bridge construction, trail traffic can be maintained on the existing trail while Bridge Spans C through I are completed. The temporary greenway trail alignment and a portion of the permanent greenway alignment revisions will be constructed during this phase of bridge construction. Paved trail surface to be maintained throughout this phase.

- Once Span C of the bridge is completed, the orange safety fencing will be added to the temporary and permanent trail alignment and greenway trail traffic will be switched to the temporary detour route under completed Span C. Once greenway trail traffic is switched under Span C, construction can commence on Spans A and B as well as the remainder of the permanent greenway alignment revisions.
- Bridge overhang protection removal over the Neuse River Greenway Trail will be done when the trail is closed at night between dusk and dawn.
- With the greenway traffic relocated, the construction of Bridge Spans A and B can be completed and the greenway trail traffic will be shifted to the revised permanent greenway alignment. Orange safety fence is to be placed and maintained along the revised permanent greenway trail for the remainder of the construction contract as well as any portion of the existing trail that remains in use through the construction area.
- The Flatiron-Fred Smith JV shall coordinate installation and removal of greenway protective measures with NCDOT Division 5 and NCTA when crossing the trail. No obstructions that impede the use of the trail shall be left in place after crossing the trail.

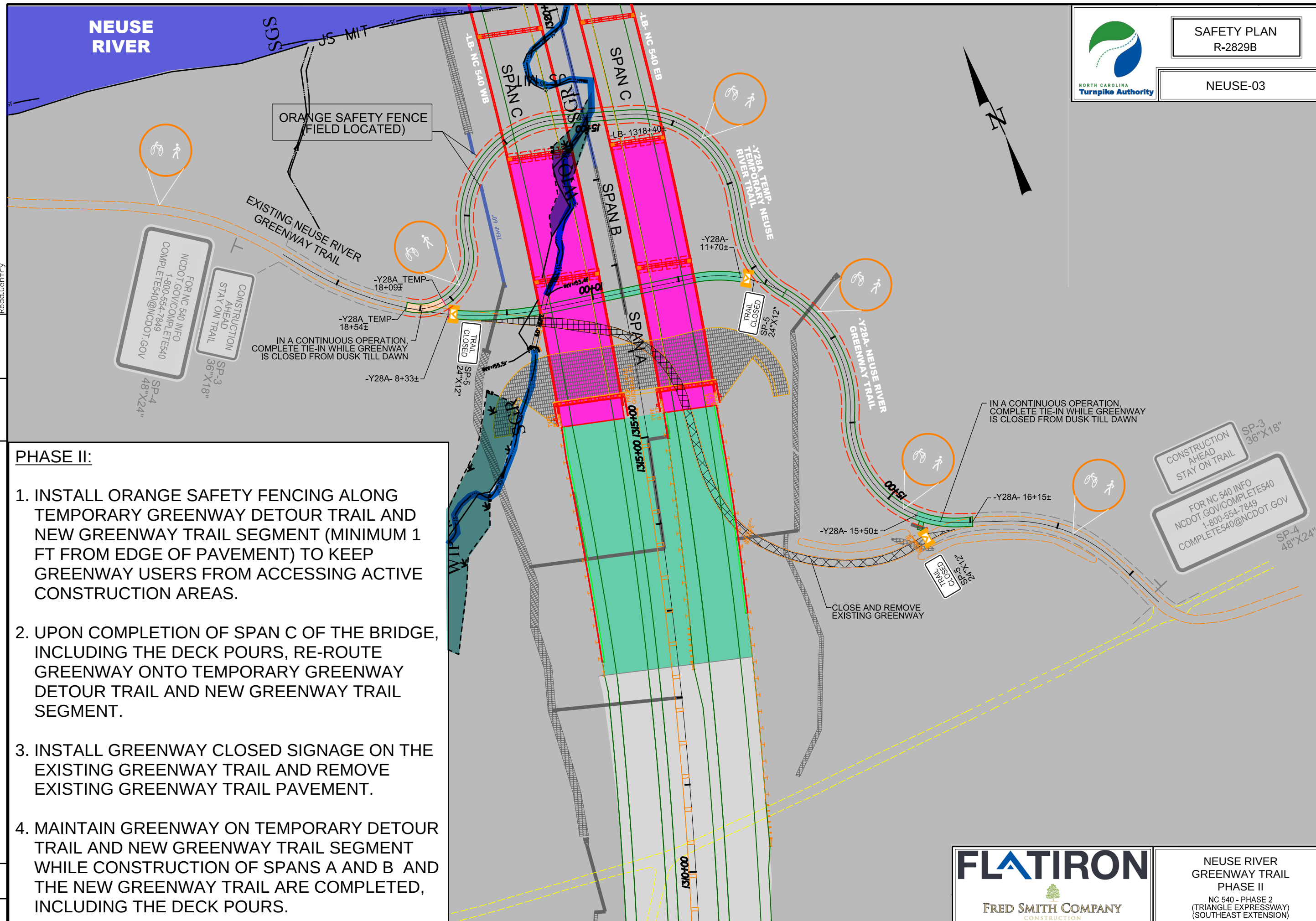
Details of the proposed user routing for both the Neuse River and the Neuse River Greenway Trail are provided on the following Figures NEUSE-01 through NEUSE-04.



NC 540 - PHASE 2
(TRIANGLE EXPRESSWAY)
(SOUTHEAST EXTENSION)

REVISIONS				
NO.	DATE	DESCRIPTION	REVISED BY	CHECKED BY
	6-16-25	Y28 & Y28A NEUSE RIVER GREENWAY TRAIL ALIGNMENTS REVISED	CEO	GMK
	7-21-25	Y28A & Y28A TEMP NEUSE RIVER GREENWAY TRAIL ALIGNMENTS REVISED	KRG	GMK

7/21/2025
c:\bms\ice-eng-pw-01\dms59256\R-2829B TMP 07A AREA 04 PHASE 02.dgn
Read.Gentry



1. INSTALL ORANGE SAFETY FENCING ALONG TEMPORARY GREENWAY DETOUR TRAIL AND NEW GREENWAY TRAIL SEGMENT (MINIMUM 1 FT FROM EDGE OF PAVEMENT) TO KEEP GREENWAY USERS FROM ACCESSING ACTIVE CONSTRUCTION AREAS.
2. UPON COMPLETION OF SPAN C OF THE BRIDGE, INCLUDING THE DECK POURS, RE-ROUTE GREENWAY ONTO TEMPORARY GREENWAY DETOUR TRAIL AND NEW GREENWAY TRAIL SEGMENT.
3. INSTALL GREENWAY CLOSED SIGNAGE ON THE EXISTING GREENWAY TRAIL AND REMOVE EXISTING GREENWAY TRAIL PAVEMENT.
4. MAINTAIN GREENWAY ON TEMPORARY DETOUR TRAIL AND NEW GREENWAY TRAIL SEGMENT WHILE CONSTRUCTION OF SPANS A AND B AND THE NEW GREENWAY TRAIL ARE COMPLETED, INCLUDING THE DECK POURS.



SAFETY PLAN
R-2829B

NEUSE-03



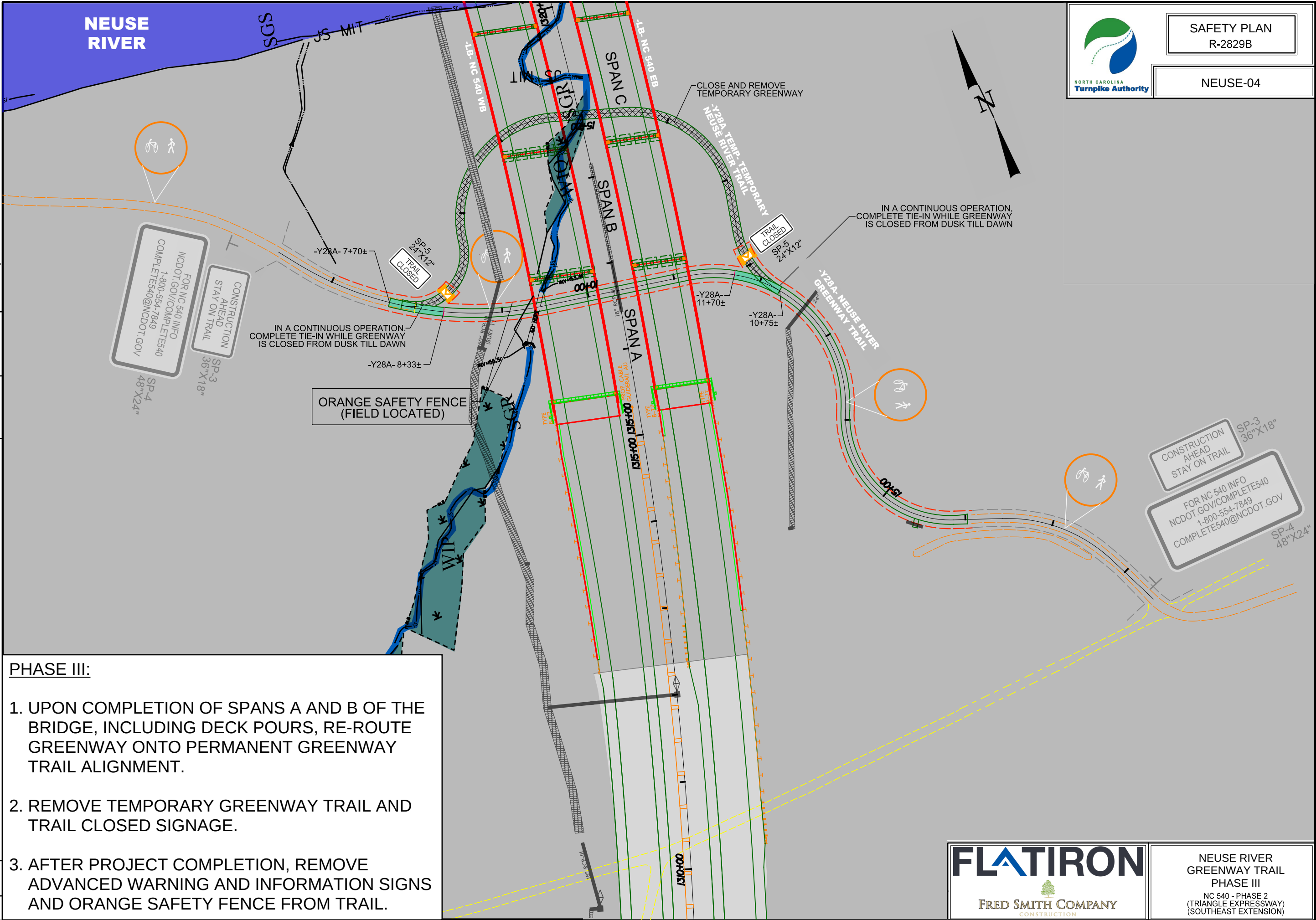
FRED SMITH COMPANY
CONSTRUCTION

NEUSE RIVER
GREENWAY TRAIL
PHASE II

NC 540 - PHASE 2
(TRIANGLE EXPRESSWAY)
(SOUTHEAST EXTENSION)

REVISIONS			
NO.	DATE	DESCRIPTION	
Δ	6-16-25	Y28 & Y28A NEUSE RIVER GREENWAY TRAIL ALIGNMENTS REVISED	CHECKED BY GMK
Δ	7-21-25	Y28A & Y28A TEMP NEUSE RIVER GREENWAY TRAIL ALIGNMENTS REVISED	REVISD BY CEO KRG

7/2/2025
c:\bms\ice-eng-pw-0\dm55256\R-2829B TMP 07B AREA 04 PHASE 03.dgn
ReedGentry





SAFETY PLAN
R-2829B

NEUSE-04



FRED SMITH COMPANY
CONSTRUCTION

NEUSE RIVER
GREENWAY TRAIL
PHASE III
NC 540 - PHASE 2
(TRIANGLE EXPRESSWAY)
(SOUTHEAST EXTENSION)

JOSH STEIN
Governor

D. REID WILSON
Secretary

RICHARD E. ROGERS, JR.
Director



October 29, 2025

Alan Shapiro, P.E., Chief Engineer
North Carolina Turnpike Authority
1578 Mail Service Center
Raleigh, NC 27699
awshapiro@ncdot.gov

Subject: MODIFICATION of 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for Proposed construction of the Triangle Expressway Southeast Extension (NC 540) in Wake County, Federal Aid Project No. 050047, State Project No. 35517.3.TA1, TIP Nos, R-2721, R-2828, & R-2829. (TIP R-2829A for This Modification)
NCDWR Project No. 20181249 version 26.

Dear Mr. Shapiro:

Attached hereto is a copy of Modification to Certification No. 4179 issued to The North Carolina Department of Transportation (NCDOT), Turnpike Authority, originally dated February 15, 2019 and most recent modification dated October 29, 2025

This approval is for the purpose and design described in your application. The plans and specifications for this project are incorporated by reference as part of this Water Quality Certification. If you change your project, you must notify the Division and you may be required to submit a new application package with the appropriate fee. If the property is sold, the new owner must be given a copy of this Certification and is responsible for complying with all conditions. [15A NCAC 02H .0507(d)(2)]. This Certification does not relieve the permittee of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations.

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

Sincerely,

Signed by:

3185423002EA45E...

Faith Hardin, Supervisor
401 & Buffer Transportation Permitting Branch

Attachments

Cc: Eric Alsmeyer, US Corps of Engineers, Raleigh Field Office (Eric.C.Alsmeier@usace.army.mil)
Jennifer Harris, PE, NC Turnpike Authority (ext-jharris1@ncdot.gov)
Deanna Riffey, NCDOT Environmental Analysis (driffey@ncdot.gov)
Nicole Duprey, NC Turnpike Environmental (ext-njduprey@ncdot.gov)
Beth Harmon, NC Division of Mitigation Services (beth.harmon@deq.nc.gov)
File Copy



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1650 Mail Service Center | Raleigh, North Carolina 27699-1650
919.707.9000

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

THIS MODIFIED 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 modification authorizes the NC Turnpike Authority to impact 8,798 acres of jurisdictional wetlands and 10517 linear feet of jurisdictional streams in Wake & Johnston Counties for section **R-2829A** of the Complete 540 project. The project shall be constructed pursuant to the modification application received October 28, 2025. The authorized additional impacts for this modification are as described below:

Modified R-2829A Wetland Impacts in the Neuse River Basin

Site	Permanent Fill (ac)	Mechanized Clearing (ac)	Temporary Fill (ac)	Hand Clearing (ac)
3 (road)	0.284 (Previously 0.257; Increase of 0.027)	0.071 (Previously 0.098; Decrease of 0.027)		
9 (road)		0.010 (Previously 0; Increase of 0.010)	0 (Previously 0.010; Decrease of 0.010)	
12 (utility)				0.006 (Previously 0; Increase of 0.06)
13 (utility)				0.032 (Previously 0; Increase of 0.032)

**Total Permanent Wetland net Revision for R-2829A: +0.027 ac Permanent Fill
-0.017 ac Mechanized Clearing
Total net change: +0.010 ac Mitigable wetland impact.**

Total Temporary Wetland net Revision for R-2829A: -0.01 ac Temporary Fill; +0.092 ac Hand Clearing

Modified R-2829A Stream Impacts in the Neuse River Basin

Site	Riprap Stabilization to Perennial Stream (linear ft)	Temporary Impact to Perennial Stream (linear ft)
5 (road)	25 (Previously 0. Increase of 25)	71 (Previously 96. Decrease of 25)
12 (utility)		65 (Previously 48. Increase of 17)

**Total Stream Net Revision for R-2829A: +25 linear feet Streambank Stabilization.
-8 linear feet Temporary Impact.**

The application provides adequate assurance that the discharge of fill material into the waters of the Neuse 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 modification application received November 14, 2024. 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.

This Water Quality Certification neither grants nor affirms any property right, license, or privilege in any lands or waters, or any right of use in any waters. This Water Quality Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and does not create any prescriptive right or any right of priority regarding any usage of water. This Water Quality Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Water Quality Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded. Upon the presentation of proper credentials, the Division may inspect the property.

Conditions of Certification:

1. Compensatory mitigation for impacts to an additional 0.01 acres of non-riparian 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), and that the DMS has agreed to implement the additional mitigation for the project. DMS has indicated in a letter dated October 27, 2025 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.
2. All conditions in the Water Quality Certification for this project dated December 10, 2024, and all other versions thereof, are still applicable to this approval.

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. 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. Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. 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 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:
Dan Hirschman, 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 29th day of October 2025

DIVISION OF WATER RESOURCES

Signed by:

3185423002EA45E...

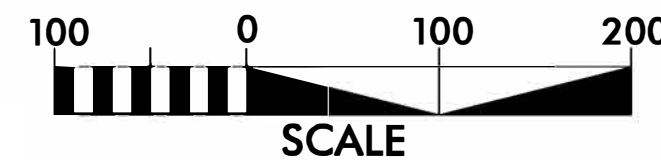
Faith Hardin, Supervisor
401 & Buffer Transportation Permitting Branch

WQC No. 4179



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1650 Mail Service Center | Raleigh, North Carolina 27699-1650
919.707.9000

Permitted Drawings



S	S
TS	TS
HC	HC

SURFACE WATER IMPACTS

TEMPORARY SURFACE WATER IMPACTS

HAND CLEARING (NON-GRUBBING)






TEMPORARY FILL IN WETLAND

MECHANIZED CLEARING (GRUBBING)

WETLAND EXCAVATION

FILL IN WETLAND

DB 19569 PG 1693
DB 19569 PG 1681

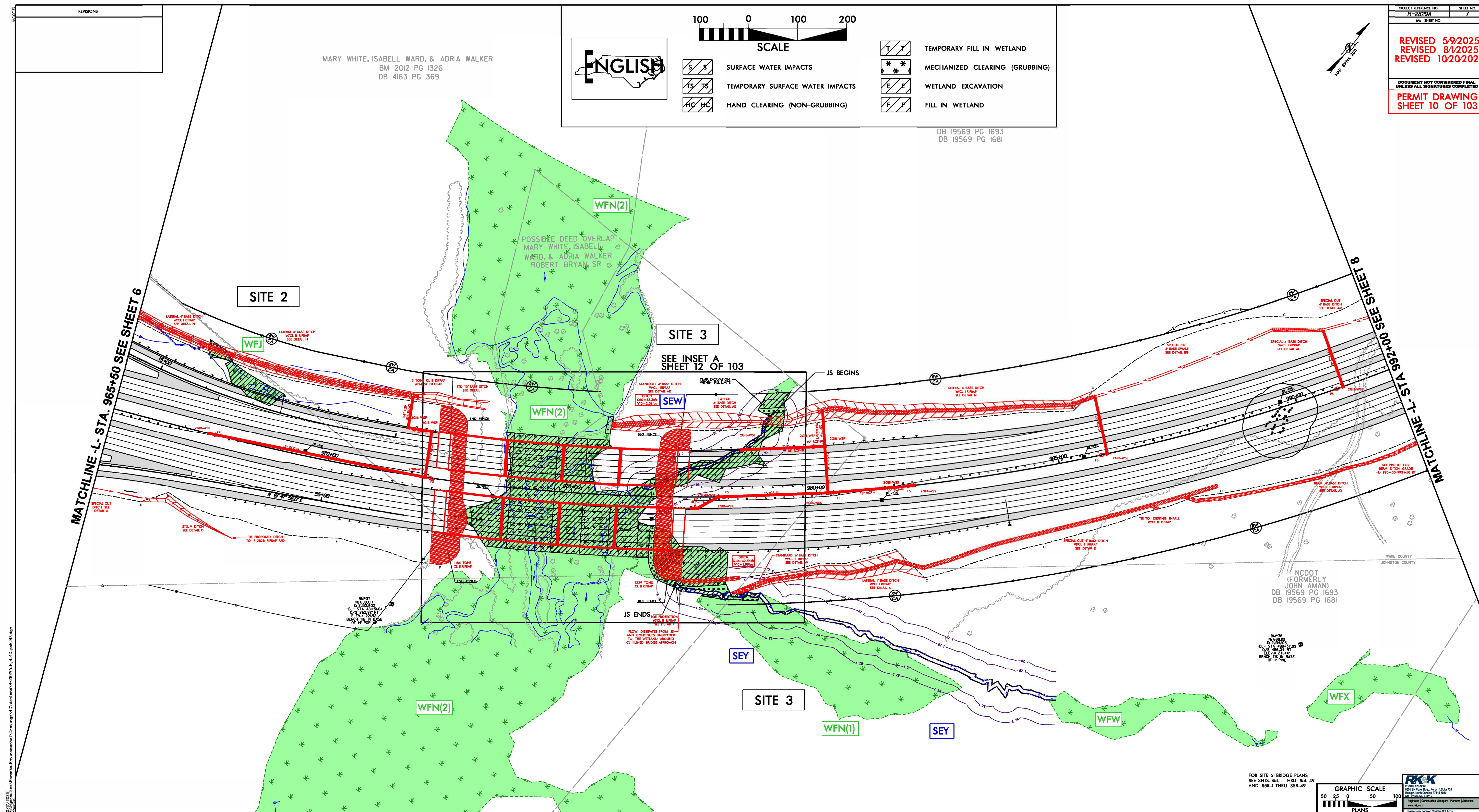


PROJECT REFERENCE NO.	SHEET NO.
R-2829A	7
RWV SHEET NO.	

REVISED 5/9/2025
 REVISED 8/1/2025
 REVISED 10/20/2025

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETE

PERMIT DRAWING
SHEET 10 OF 103





HC HC

SURFACE WATER IMPACTS

TEMPORARY SURFACE WATER IMPACTS

HAND CLEARING (NON-GRUBBING)



A square is divided by two parallel diagonal lines from the top-left to the bottom-right. The letter 'F' is placed in the top-left triangular region and the bottom-right triangular region.

TEMPORARY FILL IN WETLAND

MECHANIZED CLEARING (GRUBBING)

WETLAND EXCAVATION

FILL IN WETLAND

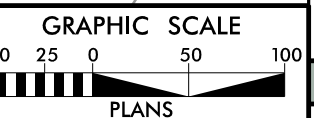
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DB	19569	PG	1681

PROJECT REFERENCE NO.	SHEET NO.
R-2829A	7
RW SHEET NO.	

REVISED 5/9/2025
REVISED 8/1/2025
REVISED 10/20/2025

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLY

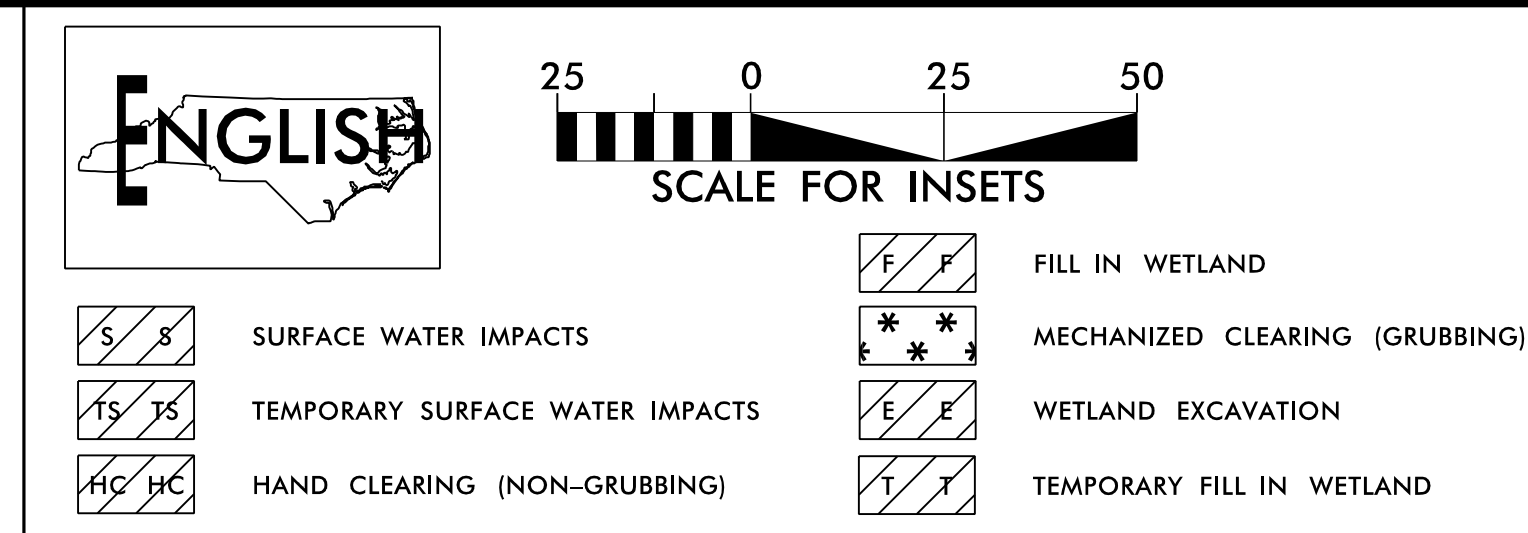
PERMIT DRAWING
SHEET 11 OF 103



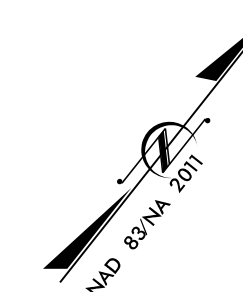
RK&K
P: (815) 876-6500
6611 5th Forks Road, Forum 1 Suite 700
Raleigh, North Carolina 27615-3060
NC License No. Fd112

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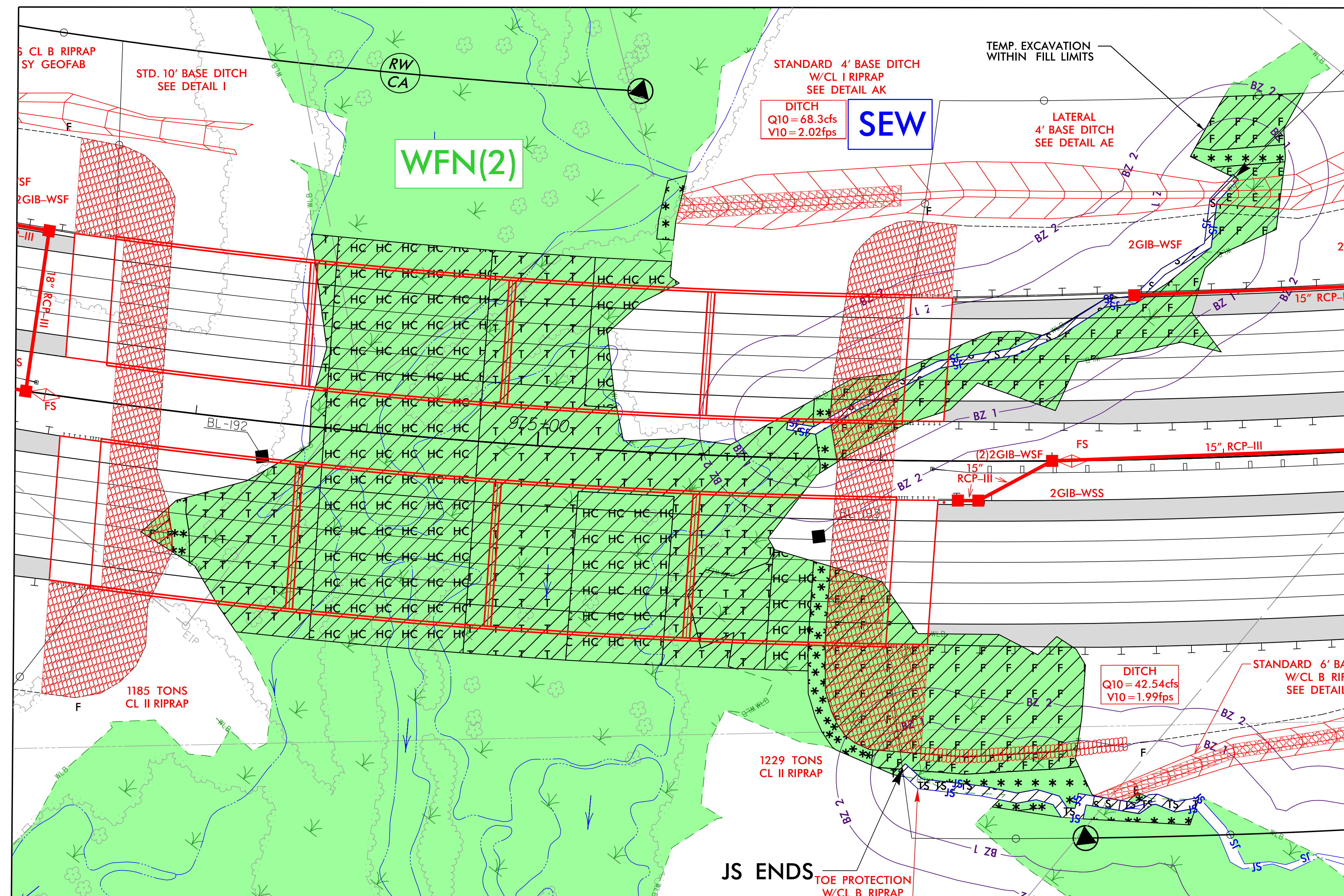
Responsive People | Creative Solutions



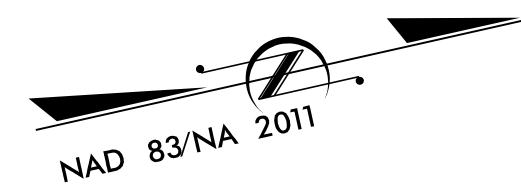
SITE 3



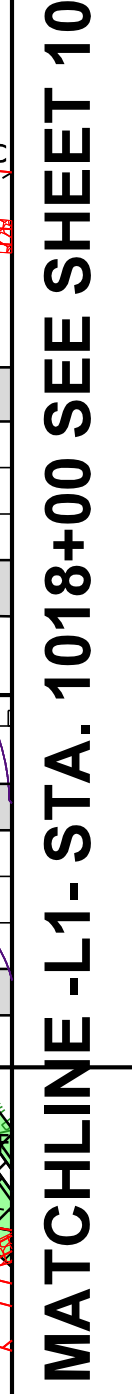
INSET A



PROJECT REFERENCE NO.	SHEET NO.
RW SHEET NO.	
REVISED 5/9/2025 REVISED 8/1/2025 REVISED 10/20/2025	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
PERMIT DRAWING SHEET 12 OF 103	



PROJECT REFERENCE NO.	SHEET NO.
R-2829A	9
R/W SHEET NO.	
REVISED 10/20/2025	
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PERMIT DRAWING SHEET 21 OF 103	



COORDINATE EQUALITY
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-LI- ST Sta. 1006+86.76 AH
(691059.355576, 2134406.728485)

COORDINATE EQUALITY
-L- POT Sta. 1007+09.30 BK=

-LI- ST Sta. 1006+86.76 AH
(691062.705847, 2134410.760568)

NCDOT
(FORMERLY
R. GARLAND BURNETTE)

NCDOT
(FORMERLY
R. GARLAND BURNETTE)

24" CARDINAL GAS PIPELINE
RELOCATED BY OTHERS

SEE INSET B
SHEET 23 OF 103

SITE 7

SFE

SITE 7
CHANNEL CHANGE
SEE DETAIL AR

WFZ

SEE INSET C
SHEET 23 OF 103

SITE 6

SFF

SFG



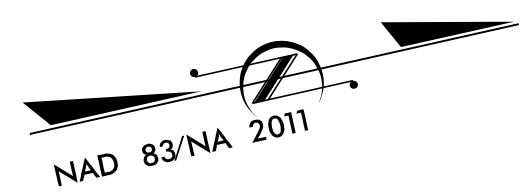
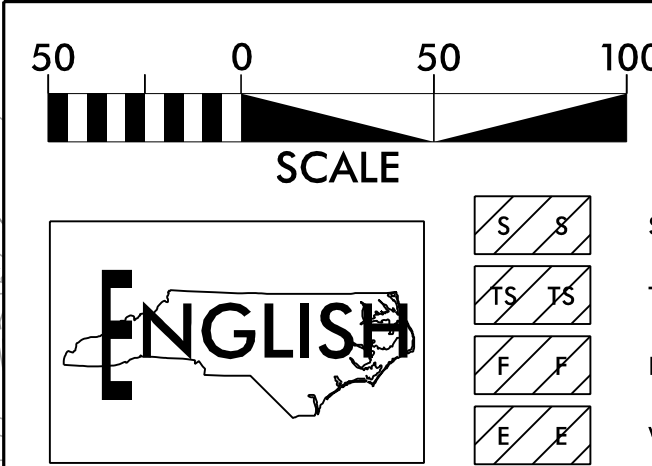
P: (919) 878-9560
8601 Six Forks Road, Forum 1, Suite 700
Raleigh, North Carolina 27615-3960
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JOHN AMAN)
DB 19569 PG 1693
DB 19569 PG 1681

COORDINATE EQUALITY
-L- POT Sta. 1007+09.30 BK=
-LI- ST Sta. 1006+86.76 AH
(691059.355576, 2134406.728485)
COORDINATE EQUALITY
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PROJECT REFERENCE NO.	SHEET NO.
R-2829A	9
RW SHEET NO.	

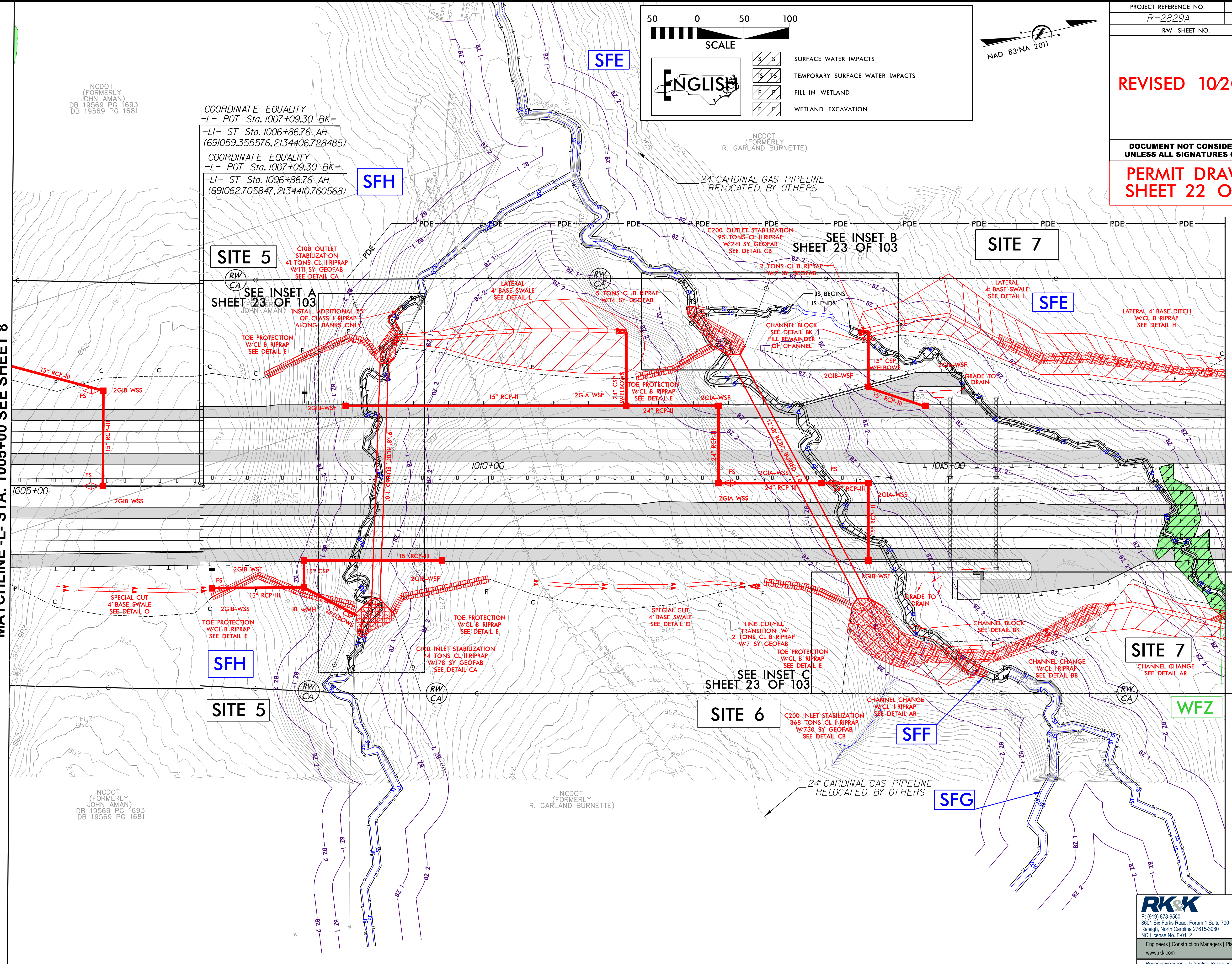
REVISED 10/20/2025

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 22 OF 103

MATCHLINE -L- STA. 1005+00 SEE SHEET 8

MATCHLINE -L1- STA. 1018+00 SEE SHEET 10



NCDOT
(FORMERLY
JOHN AMAN)
DB 19569 PG 1693
DB 19569 PG 1681

NCDOT
(FORMERLY
R. GARLAND BURNETTE)

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8601 Six Forks Road, Forum 1, Suite 700
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8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
RW SHEET NO.	
REVISED 10/20/2025	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
PERMIT DRAWING SHEET 23 OF 103	

25050

SCALE FOR INSET

S

S

TS

TS

F

F

E

E

MECHANIZED CLEARING (GRUBBING)

SURFACE WATER IMPACTS

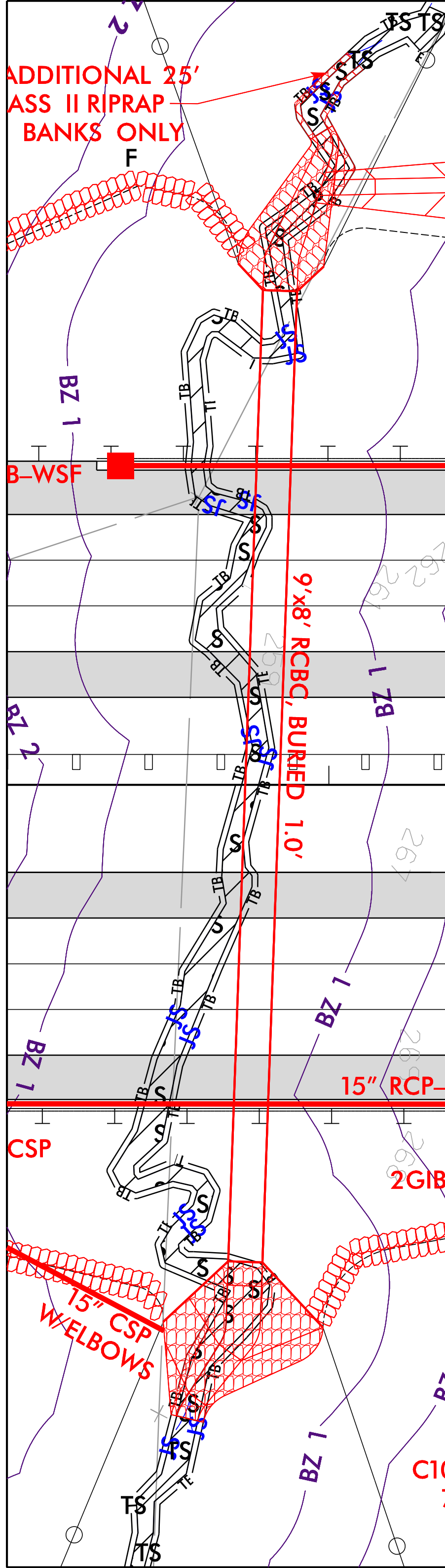
TEMPORARY SURFACE WATER IMPACTS

FILL IN WETLAND

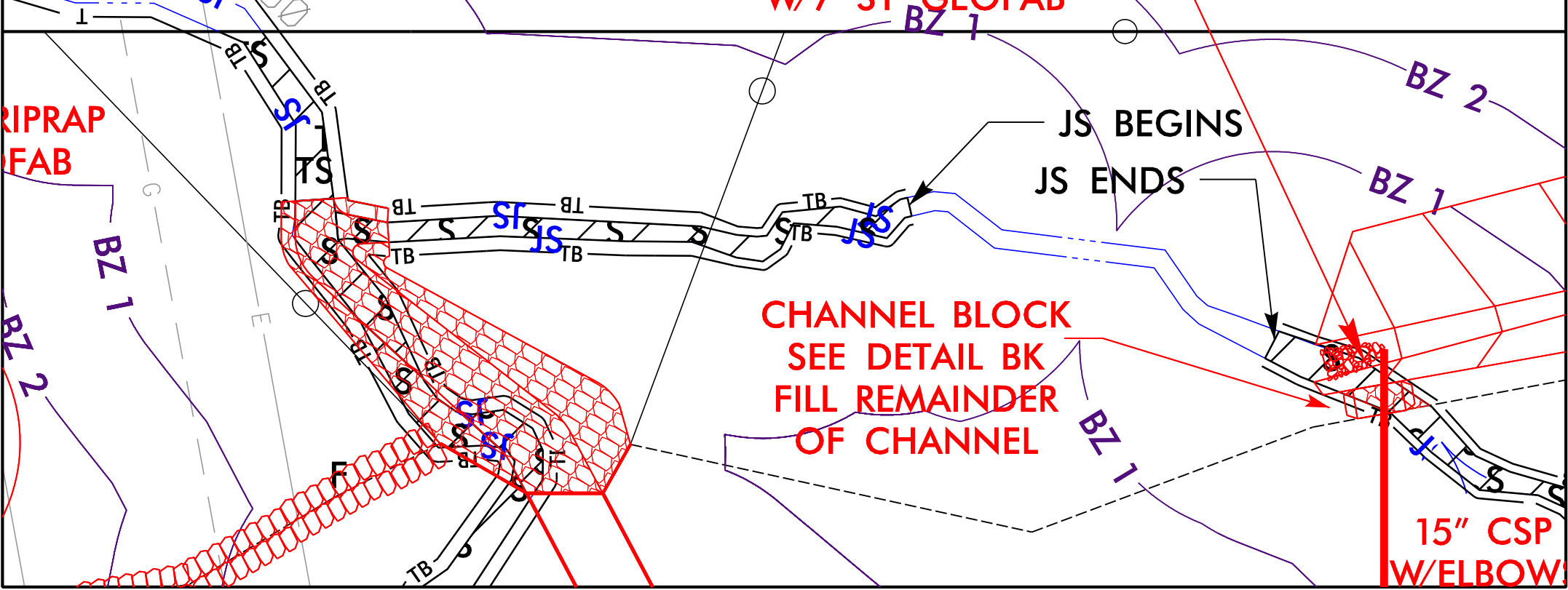
WETLAND EXCAVATION

NAD 83/NA 2011

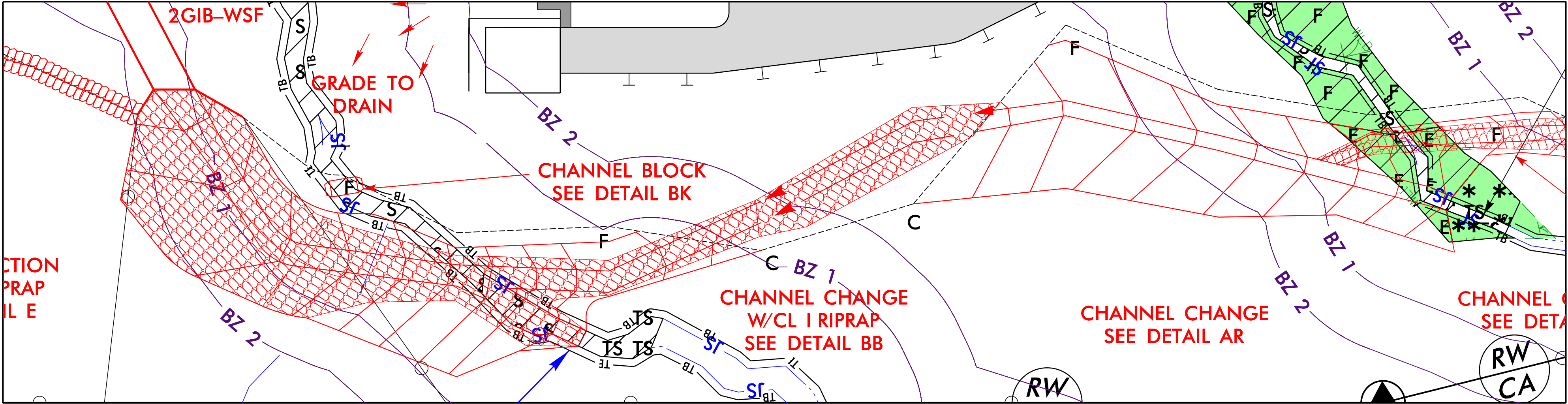
INSET A

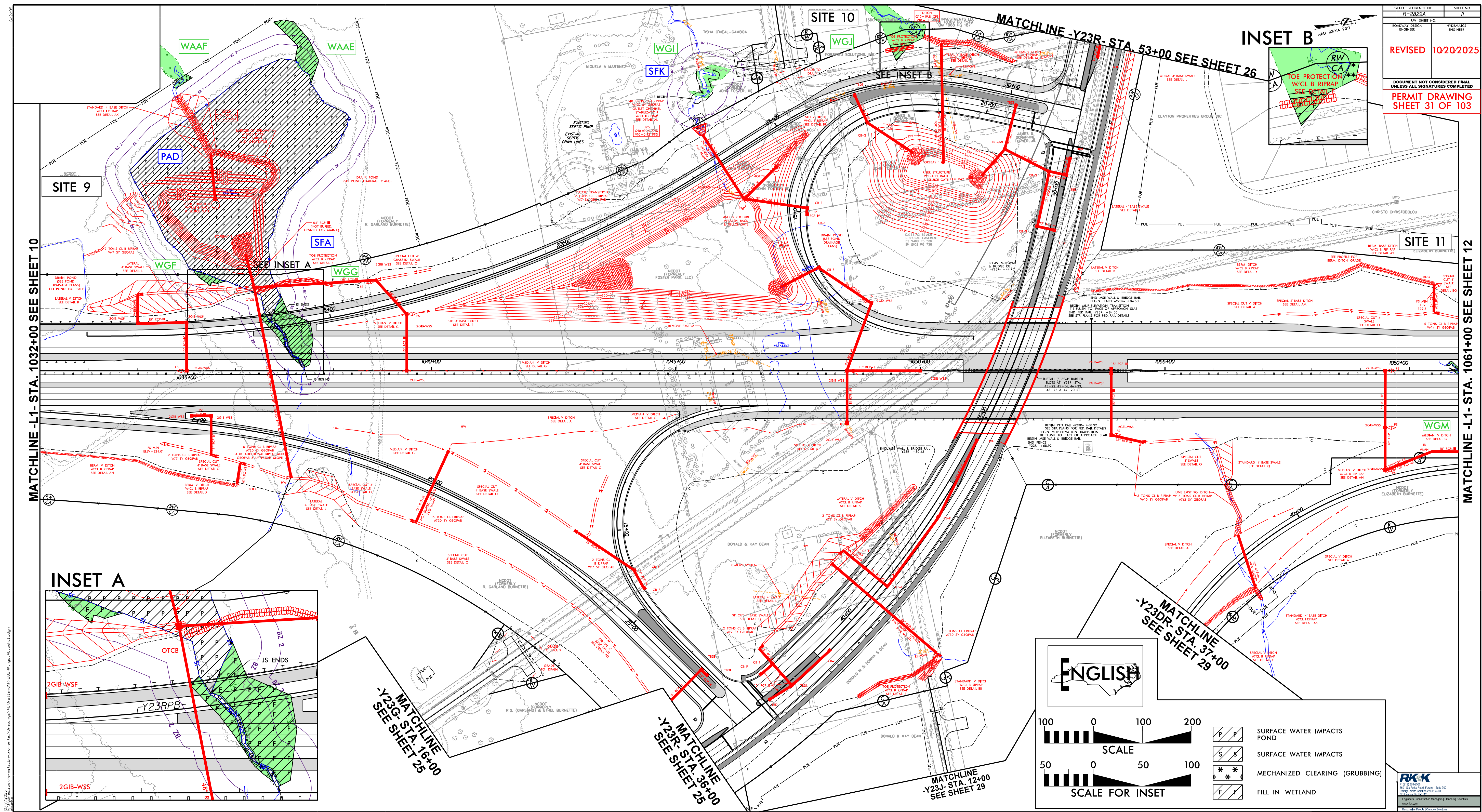


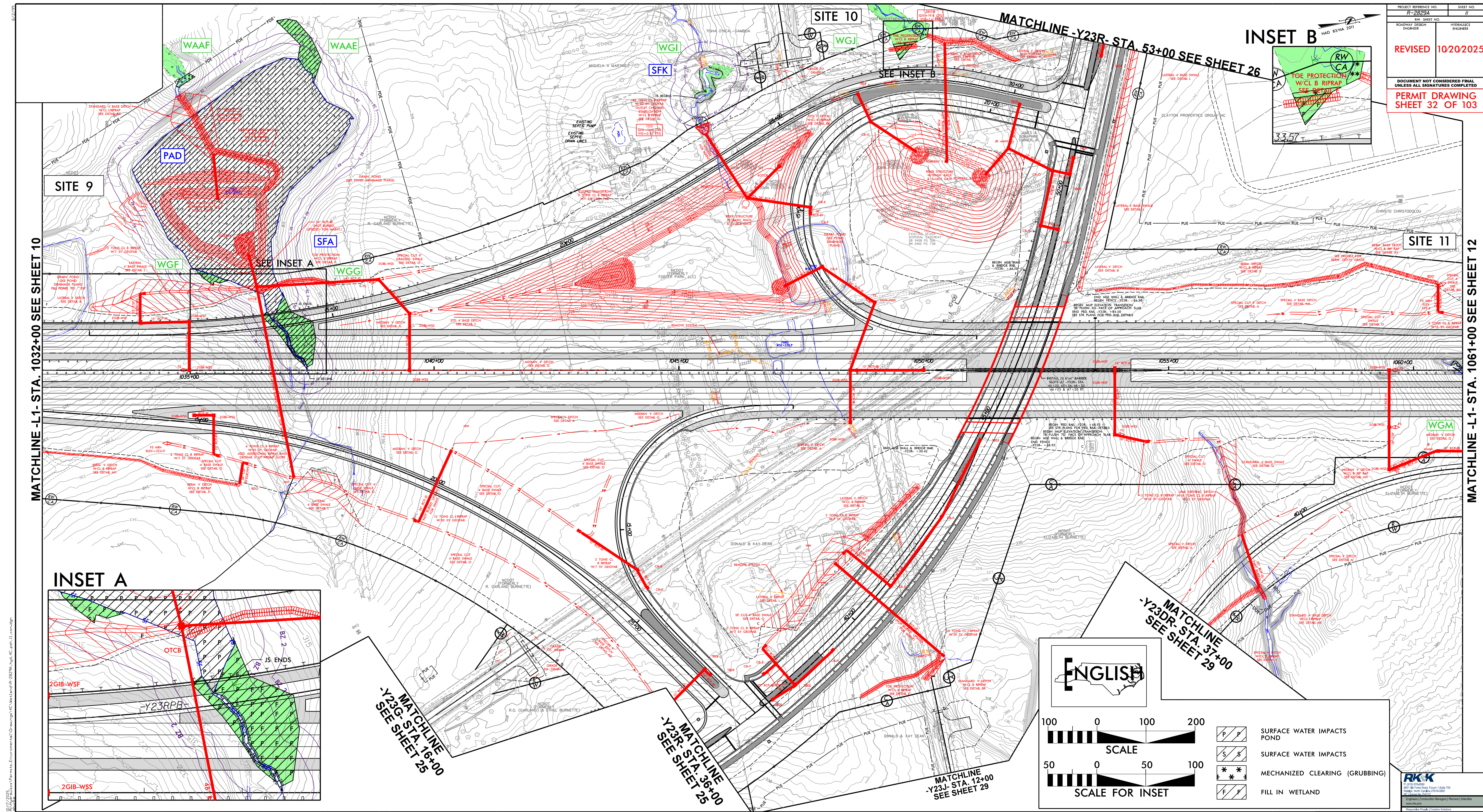
INSET B



INSET C







WETLAND AND SURFACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-Y22RPAFLY_REV- 28+00 - 29+58 LT	Roadway Fill: WFG	0.055									
2	-L- 967+04 - 968+83 LT	Roadway Fill: WFJ	0.098		0.023							
3	-L- 972+77 - 979+44 LT	Bridge: SEW WFN(2)	0.184	0.706	0.018	0.037	0.660	0.031		319		
	-L- 976+61 - 978+80 RT	Roadway Fill: SEY WFN(1)	0.284	0.049	0.001	0.071	0.037	0.002	0.023	15	174	
4	-L- 1001+92 - 1004+65 RT	48" RCP: WFY	0.449			0.034						
5	-L1- 1008+79	9'x8' RCBC, SFH Bank Stabilization						0.042	0.008	384	71	
		Structure Stabilization						0.007		63		
6	-L1- 1013+72	12'x8' RCBC, SFF						0.070	0.009	533	60	
		Structure Stabilization						0.012		86		
7	-L1- 1012+26 LT - 1018+49 RT	Roadway Fill: SFE						0.060	0.002	759	21	
		WFZ	0.113		0.015	0.010						
8	-L1- 1022+67 LT - 1025+03 RT	42" RCP: SFB						0.017		222		
		Structure Stabilization						0.001	0.001	24	10	
		WGD	0.021			0.001						
		WGC	0.013									
		WGB	0.079									
SHEET TOTALS*:			1.296	0.755	0.057	0.153	0.697	0.244	0.043	2430	336	0

*Rounded totals are sum of actual impacts

NOTES:

Site 3: 4 interior bents with 4 @ 3.5' diameter columns per bent= total 154.4sq ft (0.004ac) permanent wetland impact (included above)

Site 3: WFN(1) piece above SEW is a total take in summary above; hatching outside construction impacts is not shown.

Temporary Excavation (~0.01ac) within the permanently impacted wetland footprint limits due to an erosion control clean water diversion channel

Site 7: WFZ is a total take in summary above; hatching outside construction impacts is not shown

Revised 5/9/2025, 8/1/2025, 10/20/2025

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
9/4/2024
Wake County
R-2829A

WETLAND AND SURFACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
9	-L1- 1035+14 - 1037+70 LT	48" RCP: SFA						0.008		124		
		WGF	0.016									
		WGG	0.156									
		WAAE	0.092									
		WAAF				0.010						
	-L1- 1033+83 - 1038+36 LT	PAD						2.695				
10	-Y23RPB- 27+59 - 28+23 LT	Roadway Fill: WGJ	0.013			0.010						
11	-L1- 1060+75 - 1062+35 CL	Roadway Fill: SFD						0.009		71		
		WGM	0.023									
12	-L1- 1062+62 LT - 1063+75 RT	Roadway Fill: SFC						0.038		479		
		Structure Stabilization						0.002	0.001	22	12	
		WGN	0.001			0.005						
13	-L1- 1066+33 - 1067+40 RT	Roadway Fill: WGO	0.028			0.004						
14	-L1- 1084+46 RT - 1086+92 LT	Bank Stabilization: Ditches; SFV (White Oak Creek)						0.017	0.080	70	185	
15	-L1- 1098+69 - 1104+74 LT	8'x7' RCBC, SFR						0.014	0.002	164	19	
		Structure Stabilization						0.001		5		
		WGR	0.760		0.061	0.112						
SHEET TOTALS*:			1.089	0.000	0.061	0.141	0.000	2.784	0.083	935	216	0

*Rounded totals are sum of actual impacts

NOTES:
 Site 15: WGR is a total take in summary above; hatching outside construction impacts is not shown
 Site 15: Temporary Excavation (~0.01ac) shown within the mechanized clearing limits due to an erosion control temporary construction channel

Revised 5/9/2025

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 9/4/2024
 Wake County
 R-2829A

Revised 2018 Feb

SHEET 100 OF 103

WETLAND AND SURFACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
16	-L1- 1110+56 LT - 1116+24 RT	Roadway Fill, 7'x7' RCBC: SFN						0.041		413		
		WGR	1.387			0.088						
		WGT			0.008	0.018						
17	-L1- 1113+08 - 1114+68 RT	Roadway Fill: WGS	0.237			0.009						
18	-L1- 1114+82 LT - 1119+07 RT	Roadway Fill: SFQ						0.048	0.001	571	8	
		Structure Stabilization						0.002		34		
19	-L1- 1124+16 LT - 1126+26 RT	60" RCP: SFS						0.031		445		
		Structure Stabilization						0.003	0.002	21	10	
		WGR	0.202			0.020						
20	-L1- 1137+84 LT - 1142+30 RT	54" RCP/WSP/CAAP: SFT						0.054		757		
		Structure Stabilization						0.004	0.002	47	25	
20A	-Y24R- 36+70 RT	Ditch: WGU(2)				0.001						
21	-L1- 1148+27 LT - 1149+37 RT	Roadway Fill: WGY	0.099									
22	-L1- 1148+75 - 1149+39 RT	Roadway Fill: WGZ	0.059			0.016						
23	-L1- 1151+32 LT - 1154+50 RT	6'x8' RCBC, SGC						0.026	0.002	398	25	
		Structure Stabilization						0.001		20		
		WHB	1.178		0.002	0.061						
SHEET TOTALS*:			3.162	0.000	0.010	0.213	0.000	0.210	0.007	2706	68	0

*Rounded totals are sum of actual impacts

NOTES:

Site 23: Temporary Excavation (~0.032ac) shown within the mechanized clearing limits due to an erosion control temporary construction channel

Revised 5/9/2025

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
9/4/2024
Wake County
R-2829A

WETLAND AND SURFACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
24	-L1- 1159+88 LT - 1162+99 RT	54" CAAP / 60" RCP: SGD						0.034		387		
		Structure Stabilization						0.007	0.003	92	25	
	-L1- 1161+00 - 1161+40 LT	Bank Stabilization						0.010		71		
25	-L1- 1169+38 LT - 1172+22 RT	11'x8' RCBC: SGE						0.036	0.002	443	23	
		Structure Stabilization						0.003	0.002	46	33	
		WHD(1)	0.255		0.015	0.027						
		WHD(2)	0.195		0.009	0.013						
26	-L1- 1171+28 LT - 1178+18 RT	Roadway Fill: SGG						0.084	0.001	723	11	
		Structure Stabilization						0.002		21		
27	-L1- 1174+66 - 1179+63 LT	Roadway Fill: SGF						0.030	0.004	309	40	
		Structure Stabilization						0.003		37		
		WHD(2)	0.108		0.037	0.023						
28	-Y22CR- 13+50 LT - 14+26 RT	2 @ 12'x8' RCBC: SKR						0.036	0.011	117	44	
		Structure Stabilization						0.016		75		
29	-Y23R- 61+16 LT	36" RCP: SFJ						0.008		64		
		Structure Stabilization						0.002	0.001	20	10	
29A	-Y23FR- 11+07 - 12+01 LT	54" RCP: SFJ						0.007	0.001	78	12	
		Structure Stabilization						0.003	0.001	24	10	
		WNM	0.021			0.044						
SHEET TOTALS*:			0.579	0.000	0.061	0.107	0.000	0.281	0.026	2507	208	0

*Rounded totals are sum of actual impacts

NOTES:

Site 25: Temporary Excavation (~0.007ac) shown within the mechanized clearing limits due to an erosion control temporary construction channel

Site 29A: Temporary Excavation (~0.005ac) shown within the mechanized clearing limits due to an erosion control temporary construction channel

Revised 5/9/2025

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
9/4/2024
Wake County
R-2829A

WETLAND AND SURFACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
30	-Y23DR- 23+90 LT - 25+00 RT	42" RCP: SHT						0.011		225		
	-Y23DR- 23+59 - 25+53 LT	PAO						0.792				
31	-Y24R- 19+06 LT - 21+74 RT	5'x6' RCBC Ext / 72" WSP: SFY						0.001		6		
		Structure Stabilization						0.005	0.002	34	10	
		WGW	0.023		0.004	0.019						
		WGV(1)	0.055		0.010	0.021						
32	-Y24R- 34+65 CT	6'x8'9" RCBC Ext / 72" WSP: SGA						0.064	0.001	270	7	
		Structure Stabilization						0.007	0.003	30	12	
33	-Y26R- 18+73 CT	10'x9' RCBC: SGA						0.016	0.001	137	11	
		Structure Stabilization						0.007	0.006	40	37	
		WHD(2)			0.007	0.014						
		WAAK	0.026			0.020						
34	-Y26R- 18+50 LT	10'x9' RCBC: SAAK						0.002	0.001	31	11	
35	-Y26R- 18+35 LT	10'x9' RCBC: SAAL							0.001		10	
36	-Y22RPE_REV- 45+95 - 46+14 RT	Ditch: WFK				0.005						
SHEET TOTALS*:			0.104	0.000	0.021	0.079	0.000	0.905	0.015	773	98	0
PROJECT TOTALS*:			6.230	0.755	0.210	0.693	0.697	4.424	0.174	9351	926	0

*Rounded totals are sum of actual impacts

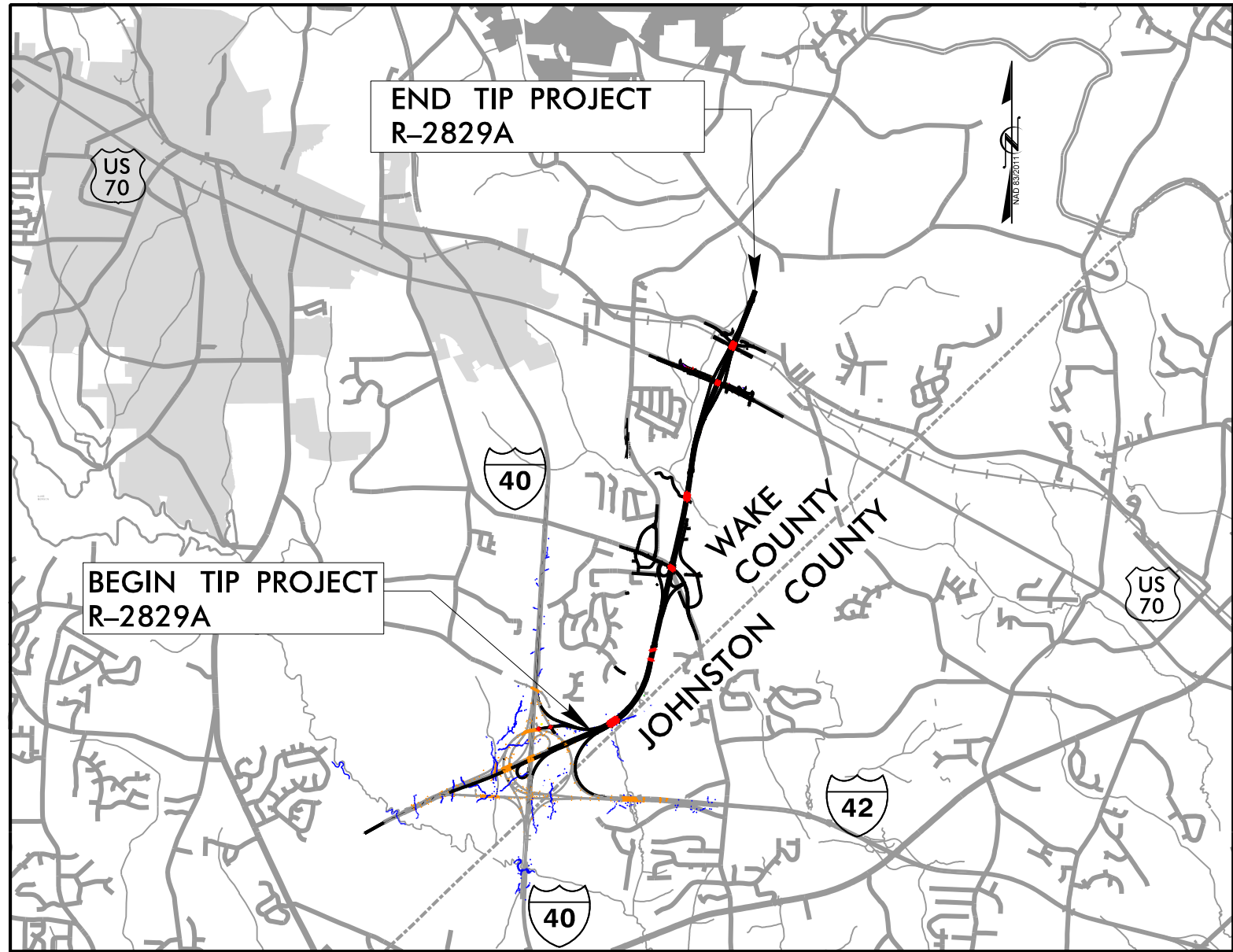
NOTES:

Site 33: Temporary Excavation (~0.001ac) shown within the mechanized clearing limits due to an erosion control temporary construction channel

Revised 5/9/2025, 8/1/2025, **10/20/2025**

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
9/4/2024
Wake County
R-2829A

See Sheet 1A for Index of Sheets, General Notes and List of Standards
See Sheet 1B for Symbolology Sheet



VICINITY MAP (NTS)

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

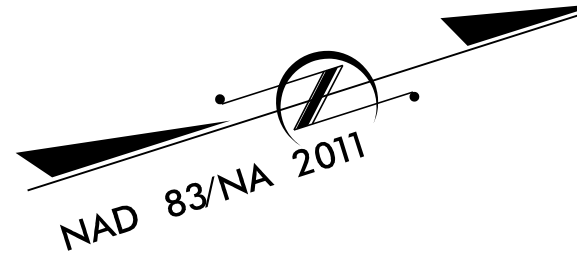
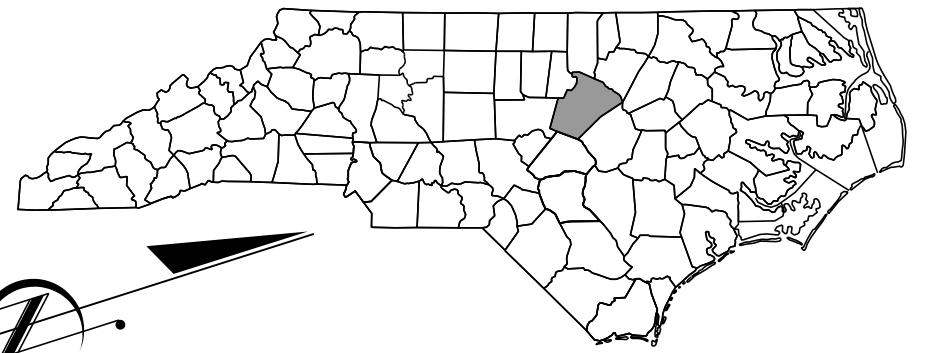
WAKE COUNTY

**LOCATION: TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION
FROM I-40 TO SOUTH OF SR 2542 (ROCK QUARRY RD.)**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, LIGHTING,
SIGNING, ITS, CULVERTS & STRUCTURES**

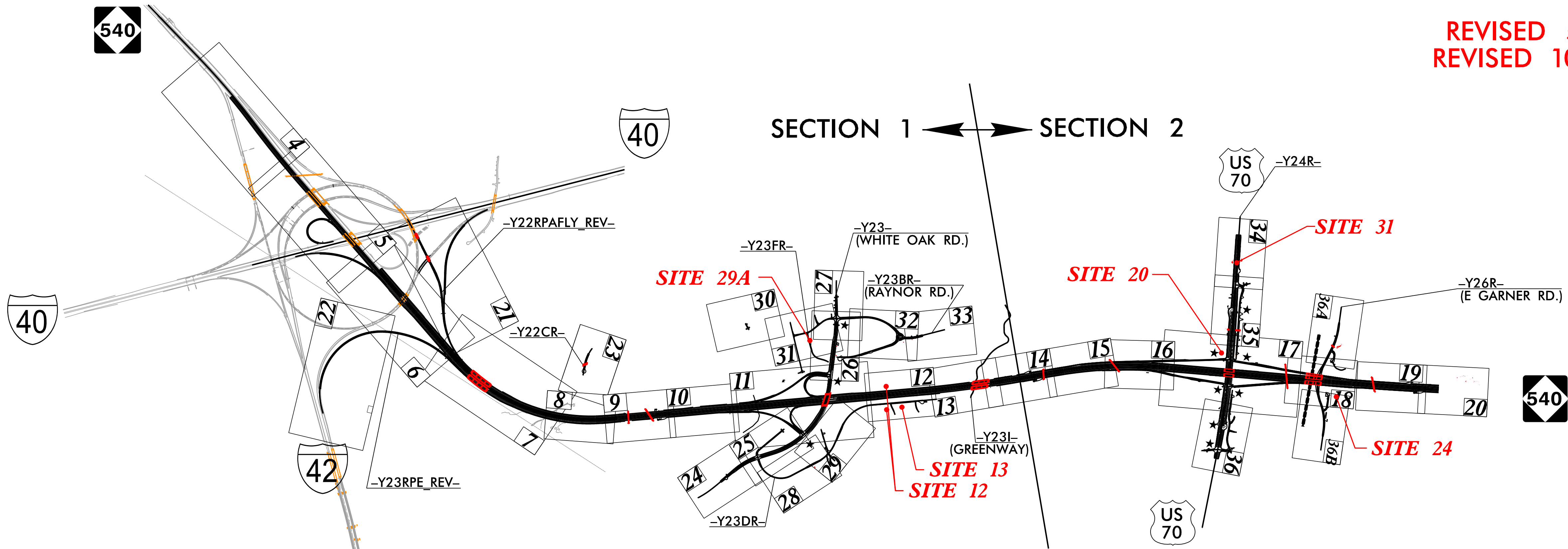
**SAFETEA-LU SECTION 6002
HYDRAULIC DESIGN MEETING PLANS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2829A	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
35517.3.TA1	N/A, 0540047	DESIGN-BUILD	
35517.3.TAGVI	N/A, 0540047	DESIGN-BUILD	
35517.2.TA1	N/A, 0540047	DESIGN-BUILD	



**UTILITY PERMIT DRAWING
SHEET 1 OF 11**

**REVISED 5/9/2025
REVISED 10/20/2025**

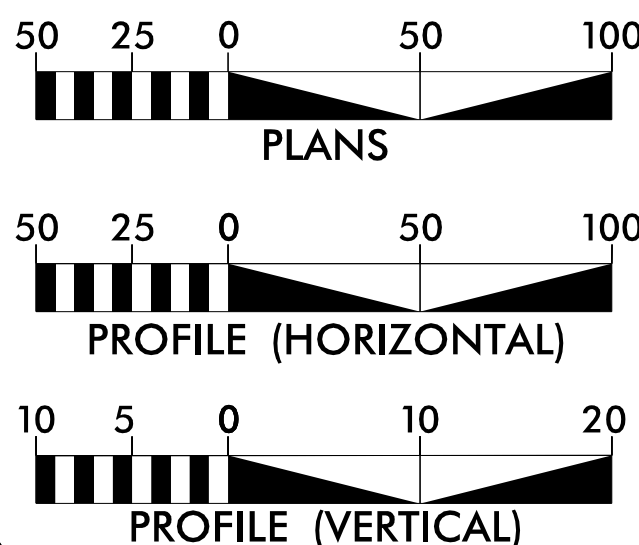


NOTES:
1. THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

★ PROPOSED TRAFFIC SIGNAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2023 = 15,440
ADT 2043 = 22,040
K = 12%
D = 65%
T = 10%
V = 75 MPH

FUNC CLASS: INTERSTATE
* (TTST 4% + DUALS 6%)

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2829A.....3.922 MILES
LENGTH STRUCTURE TIP PROJECT R-2829A.....0.242 MILES
TOTAL LENGTH TIP PROJECT R-2829A.....4.164 MILES

NCTA CONTACT

Ron McCollum, PE
DEPUTY CHIEF ENGINEER for PRECONSTRUCTION
TURNPIKE AUTHORITY

PLANS PREPARED BY:

RK&K RUMMEL KLEPPER & KAHL, LLP
8601 SIX FORKS ROAD, FORUM 1, SUITE 700
RALEIGH, NORTH CAROLINA 27615-3960
NC LICENSE NO. F-0112

FOR NORTH CAROLINA
TURNPIKE AUTHORITY

2018 STANDARD SPECIFICATIONS

LETTING DATE:
October 17, 2023

C. Byron Holden, PE
PROJECT ENGINEER

Anthony A. Houser, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

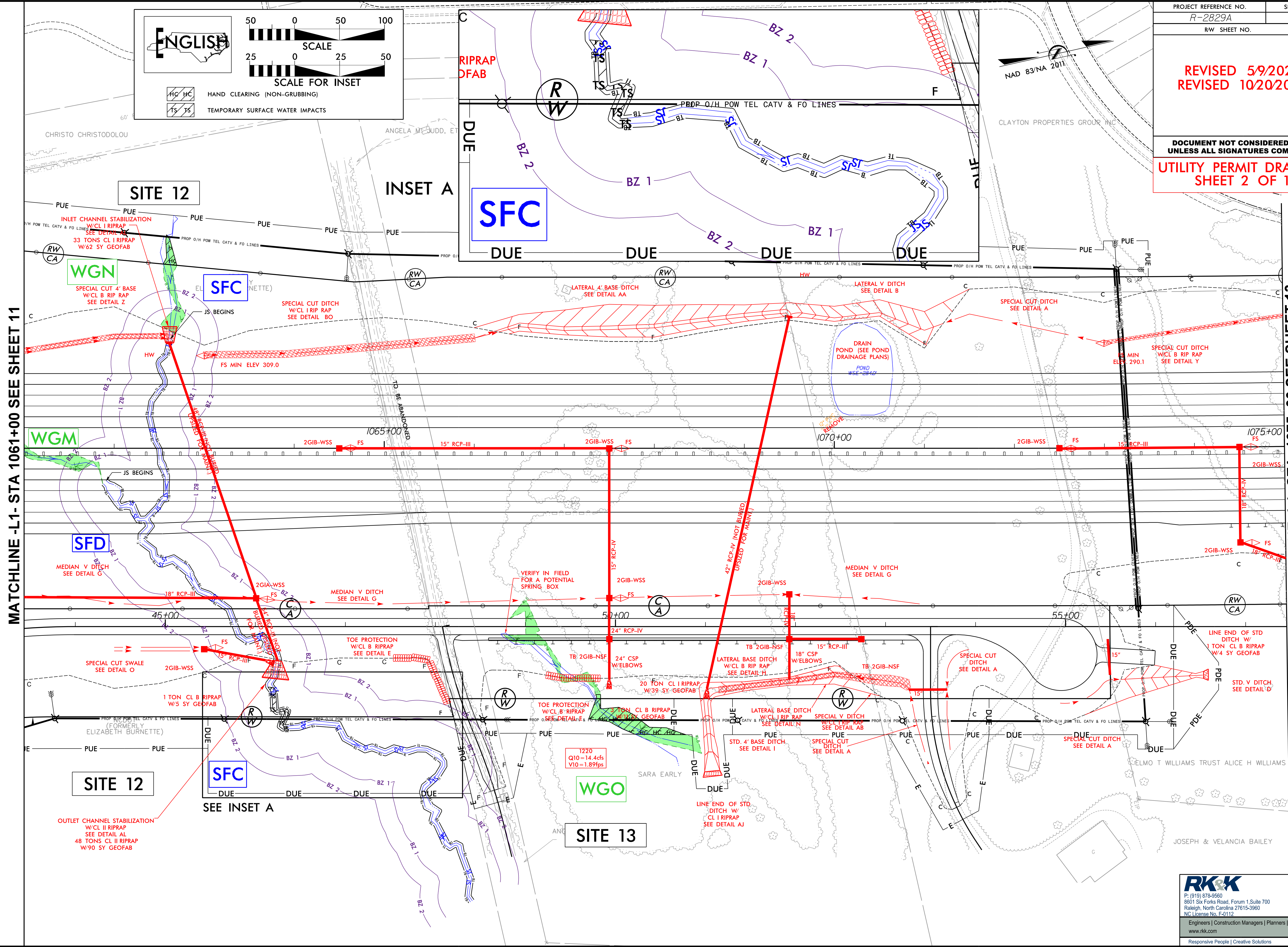
SIGNATURE: _____ P.E.

ROADWAY
DESIGN
ENGINEER

SIGNATURE: _____ P.E.



PROJECT REFERENCE NO.	SHEET NO.
R-2829A	12
RW SHEET NO.	
REVISED 5/9/2025 REVISED 10/20/2025	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
UTILITY PERMIT DRAWING SHEET 2 OF 11	



8/17/99
10/17/2025
R:\Utilities\Permits\Drawings\4C\Utilities\R-2829A_Hyd_4C_wet_psh_12.dgn
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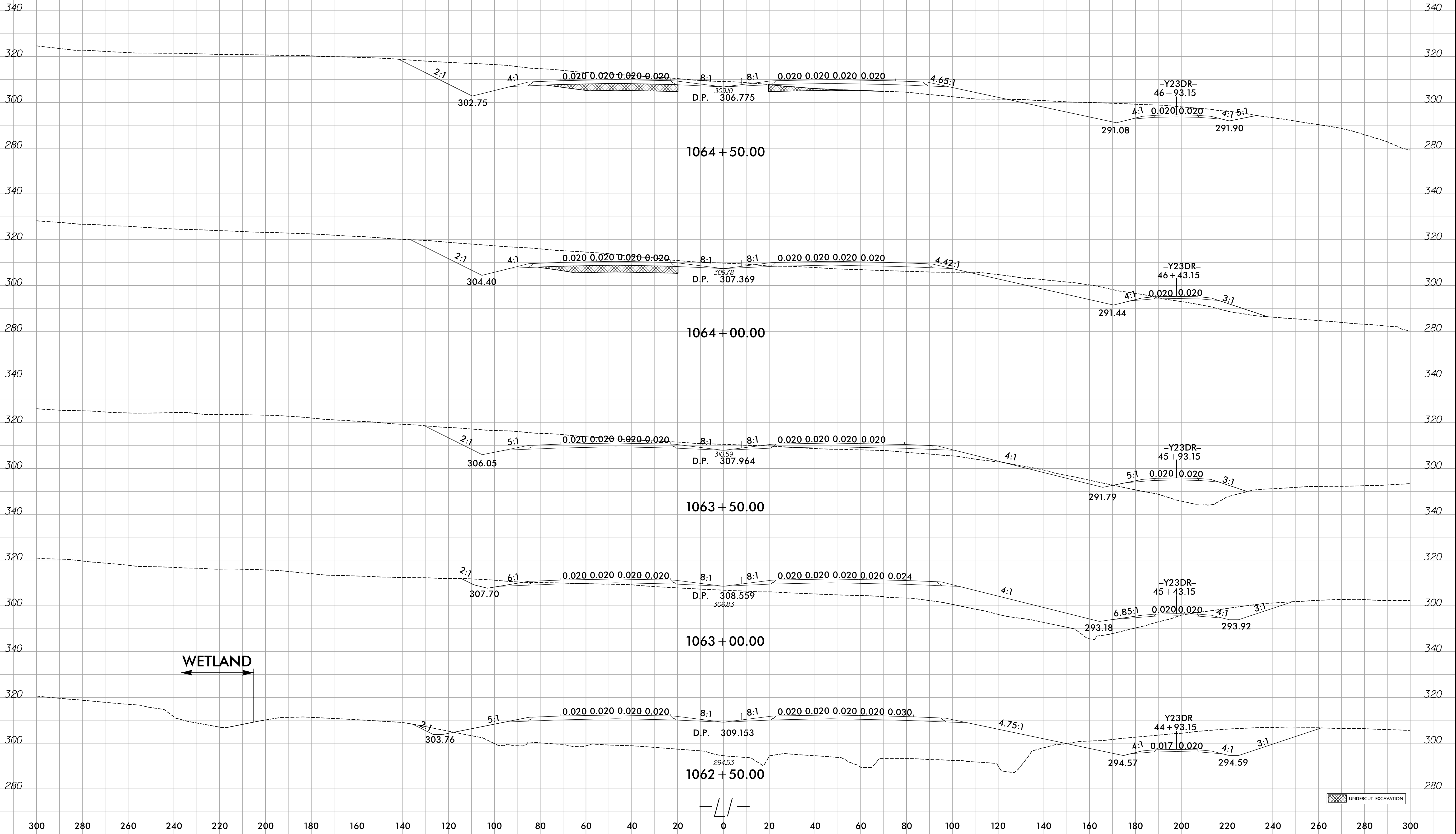
6/23/16

01020	PROJ. REFERENCE NO.	SHEET NO.
	R-2829A	S1 X-79

SITE 12

UTILITY PERMIT DRAWING
SHEET 3 OF 11

REVISED 10/20/2025



10/17/2025
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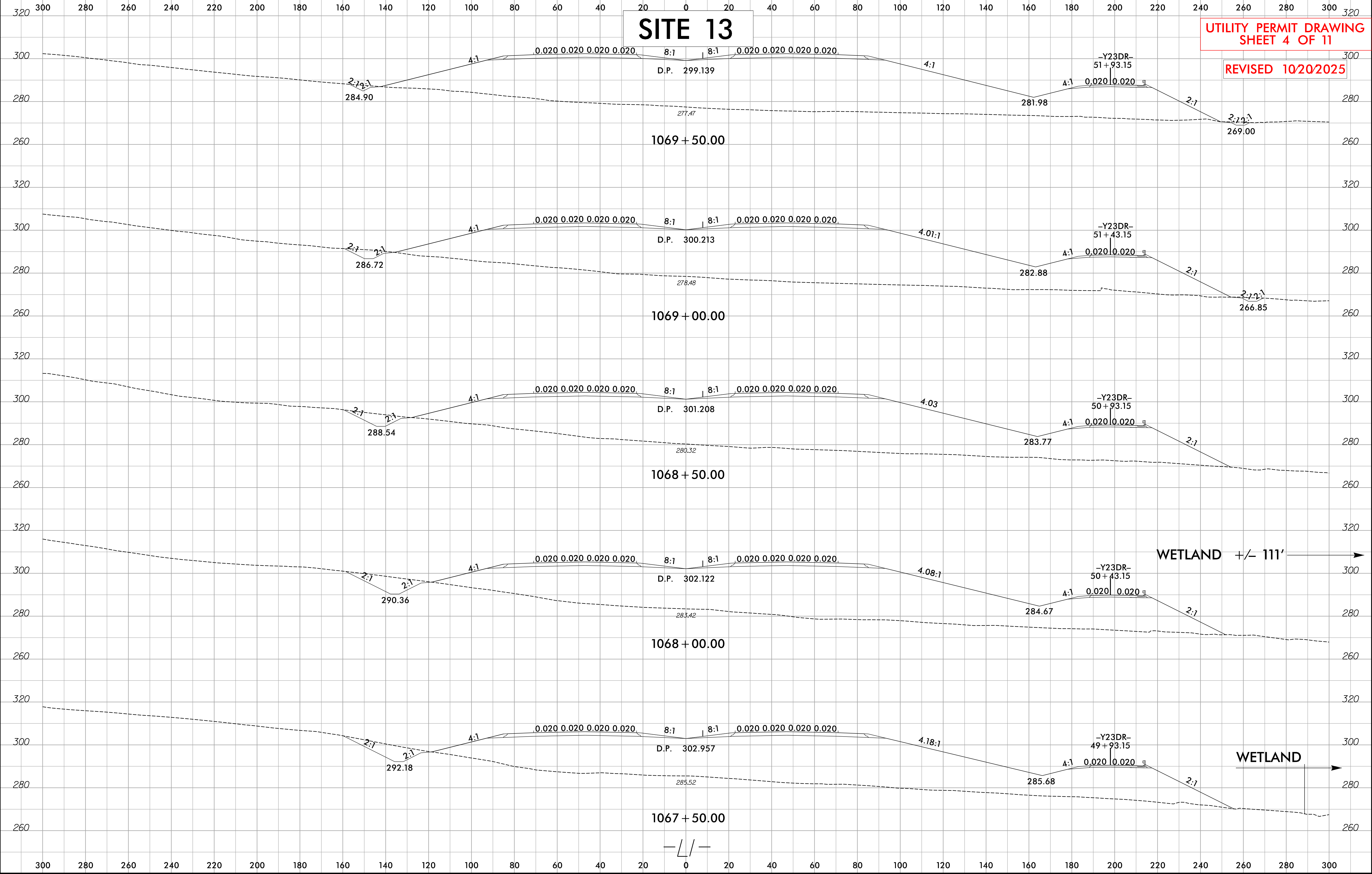
Submitted October 28, 2025

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	R-2829A	S1 X-81

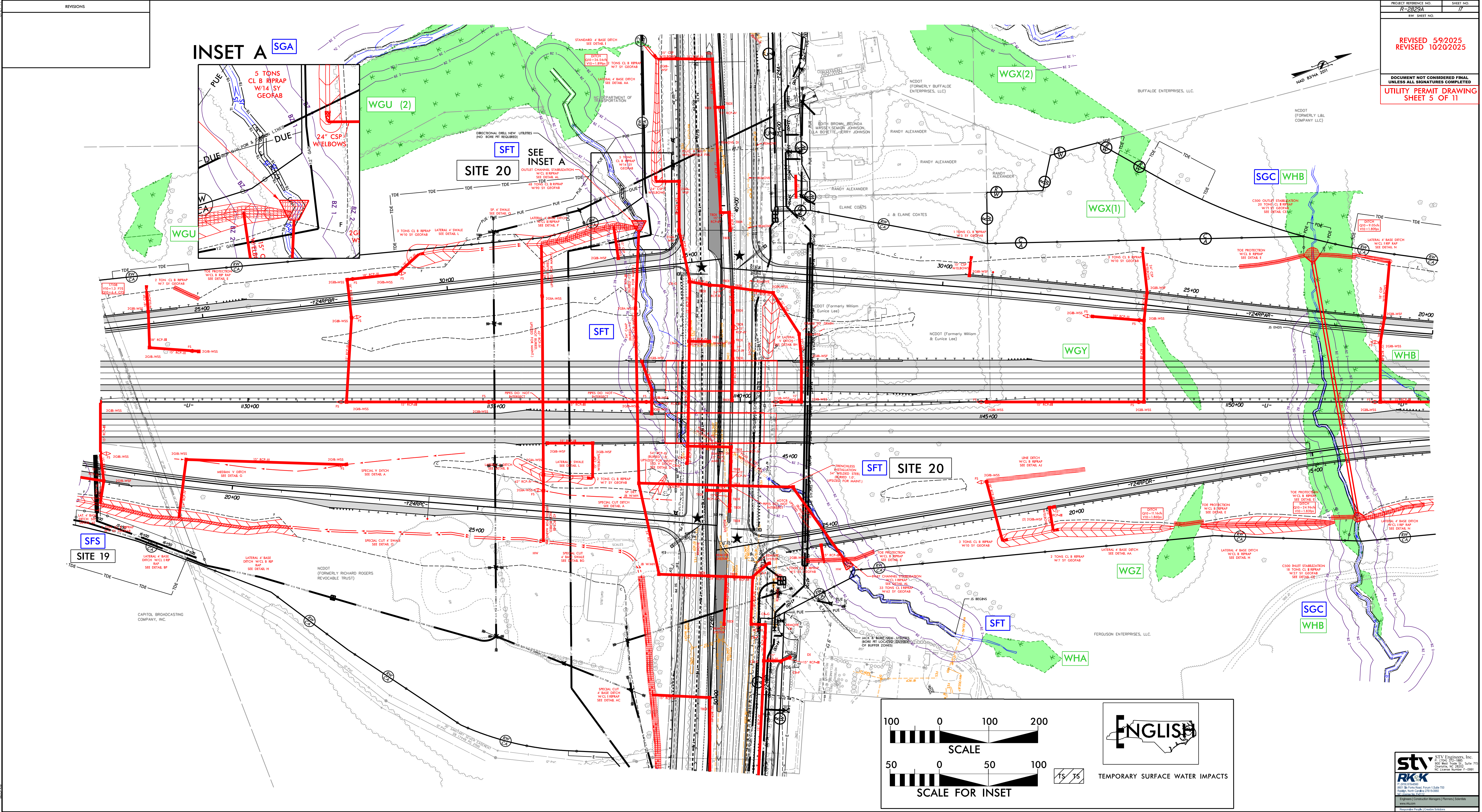
SITE 13

UTILITY PERMIT DRAWING
SHEET 4 OF 11

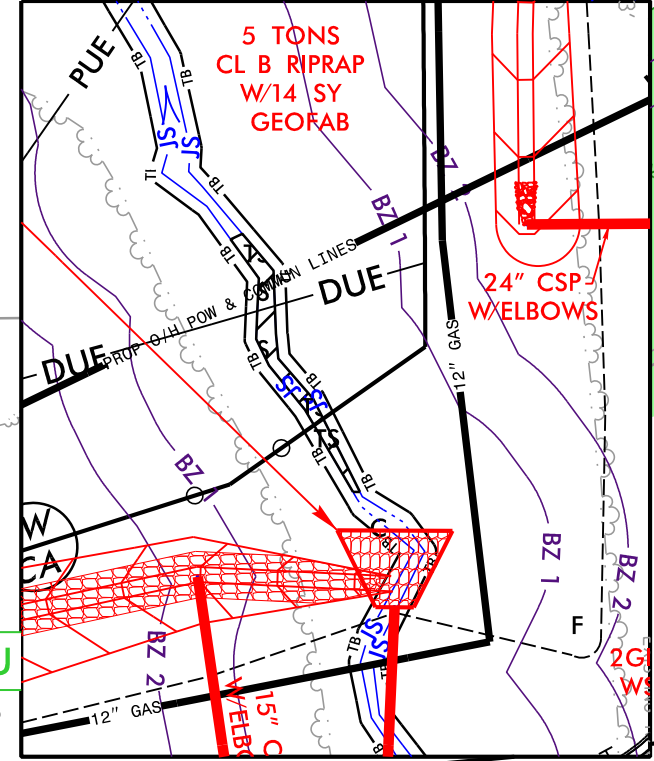
REVISED 10/20/2025



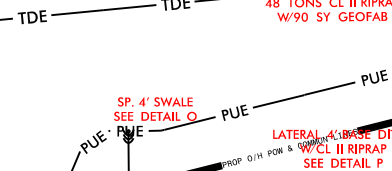
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SHEET NO.	7
REVISED	5/9/2025
REVISED	10/20/2025
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
UTILITY PERMIT DRAWING SHEET 5 OF 11	



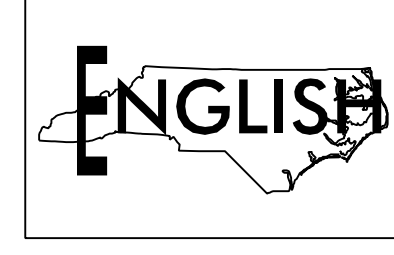
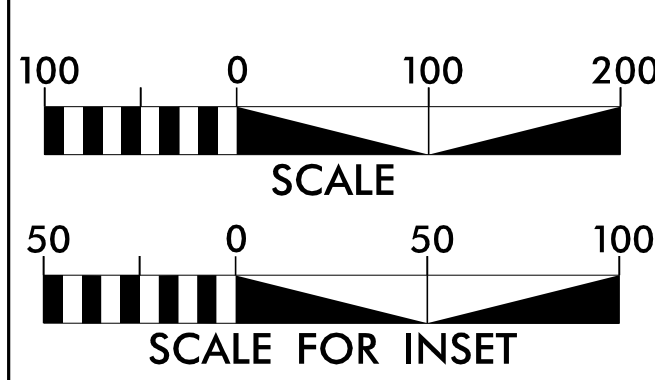
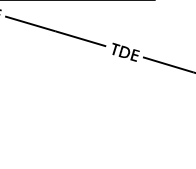
INSET A



SITE 20



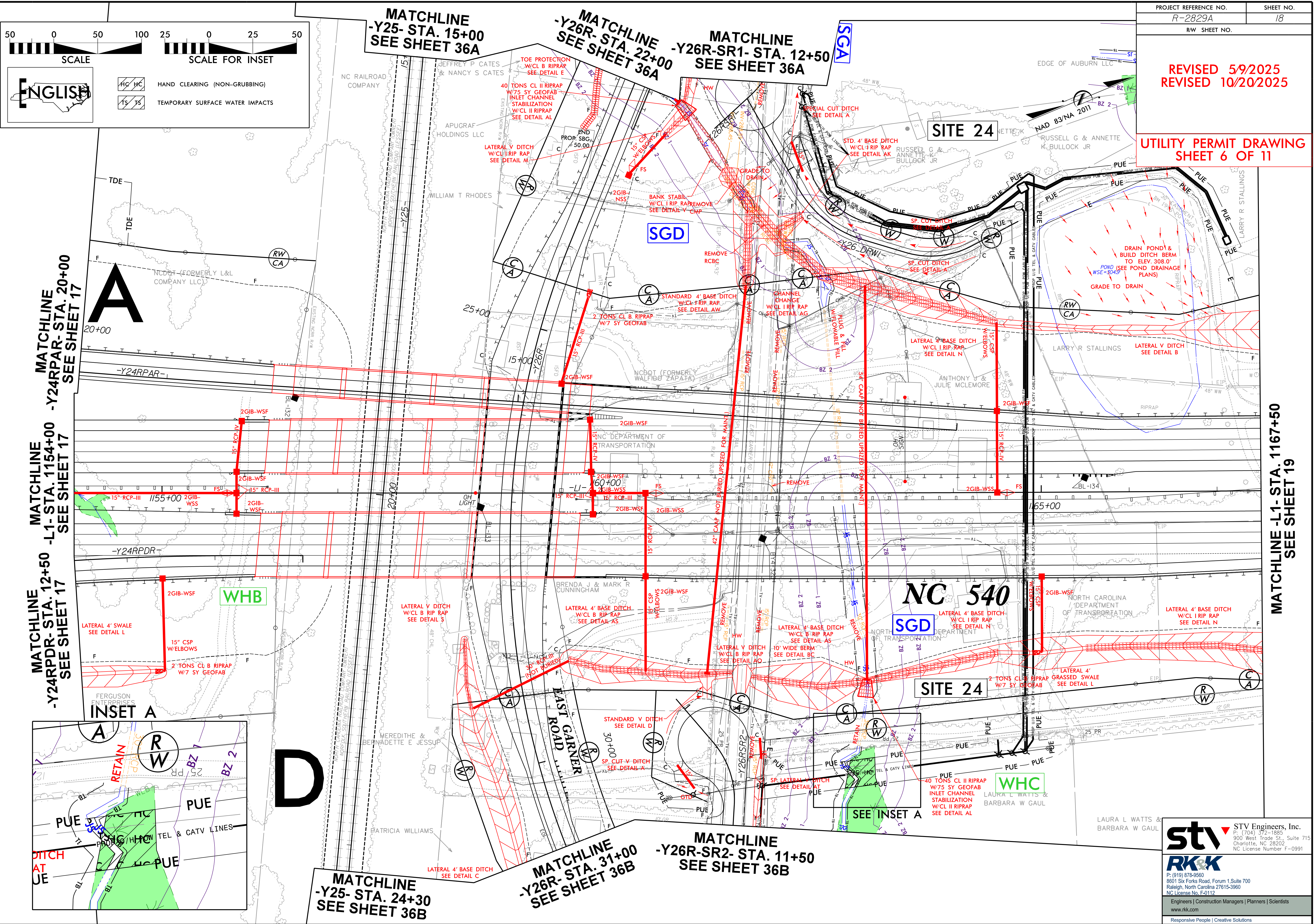
SITE 19



TEMPORARY SURFACE WATER IMPACTS

STV Engineers, Inc.	10000 Highway 100, Suite 100	San Antonio, TX 78217
STV Engineers, Inc.	10000 Highway 100, Suite 100	San Antonio, TX 78217
STV Engineers, Inc.	10000 Highway 100, Suite 100	San Antonio, TX 78217

UTILITY PERMIT DRAWING
SHEET 6 OF 11





STV Engineers, Inc.

P: (704) 372-1865

900 West Trade St., Suite 715
Charlotte, NC 28202

NC License Number F-0991



P: (919) 878-8560

8601 Six Forks Road, Forum 1, Suite 700
Raleigh, North Carolina 27615-3960

NC License No. F-0112

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6/23/16

Submitted October 28, 2025

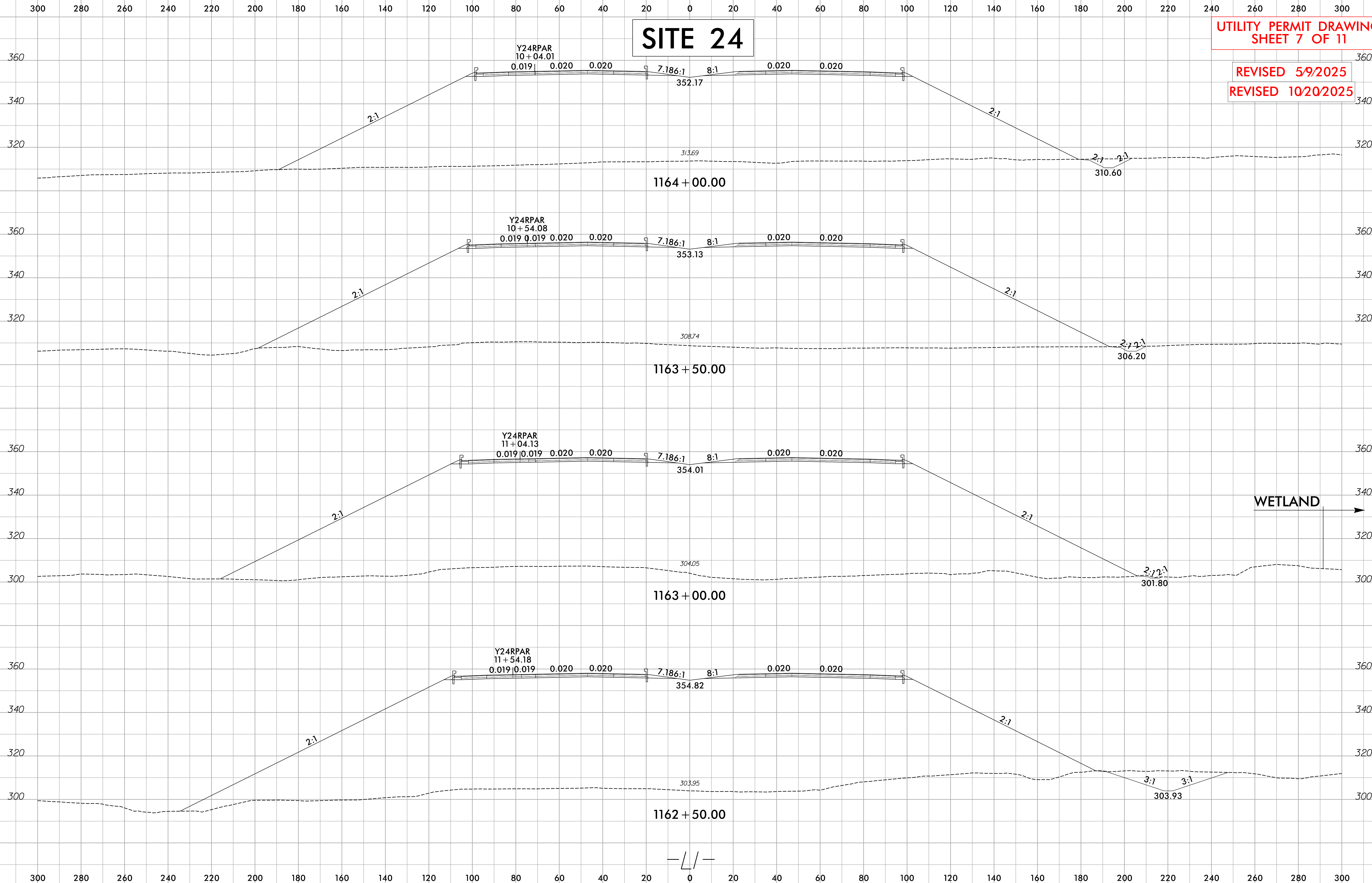
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	R-2829A	S2 X-28

SITE 24

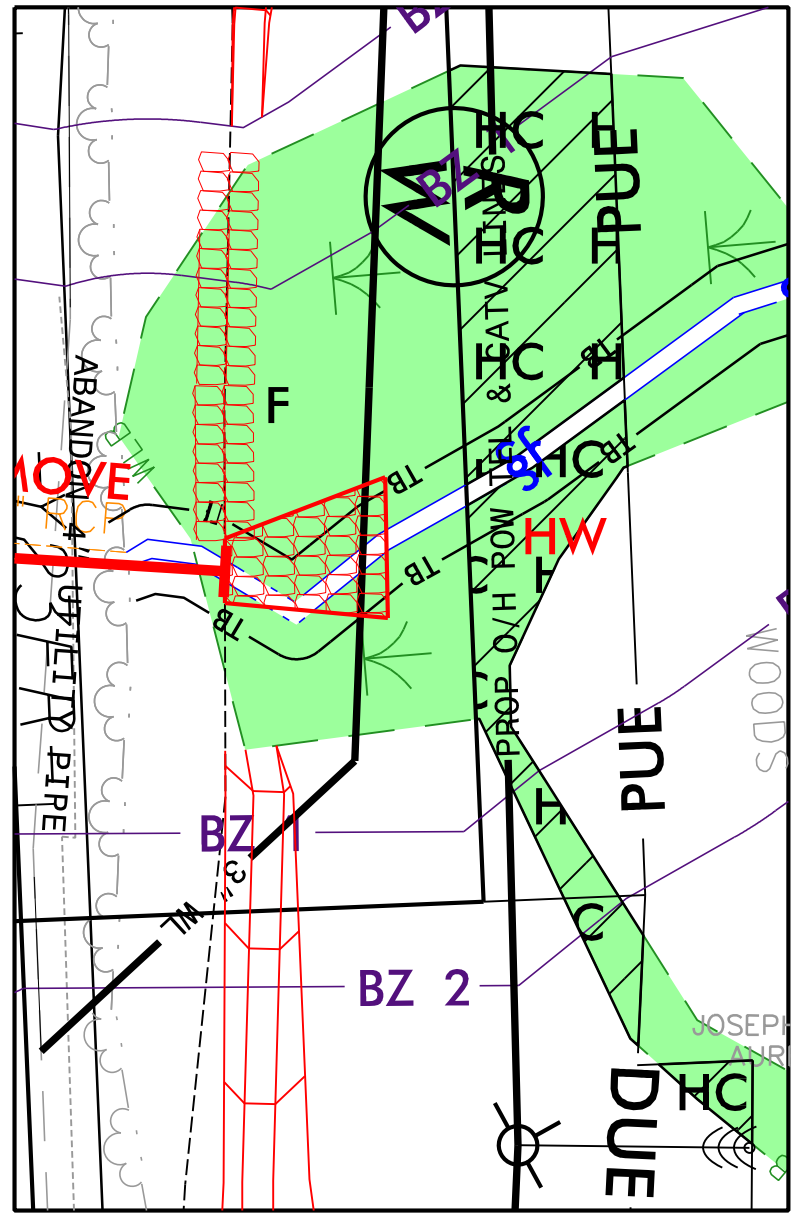
UTILITY PERMIT DRAWING
SHEET 7 OF 11

REVISED 5/9/2025

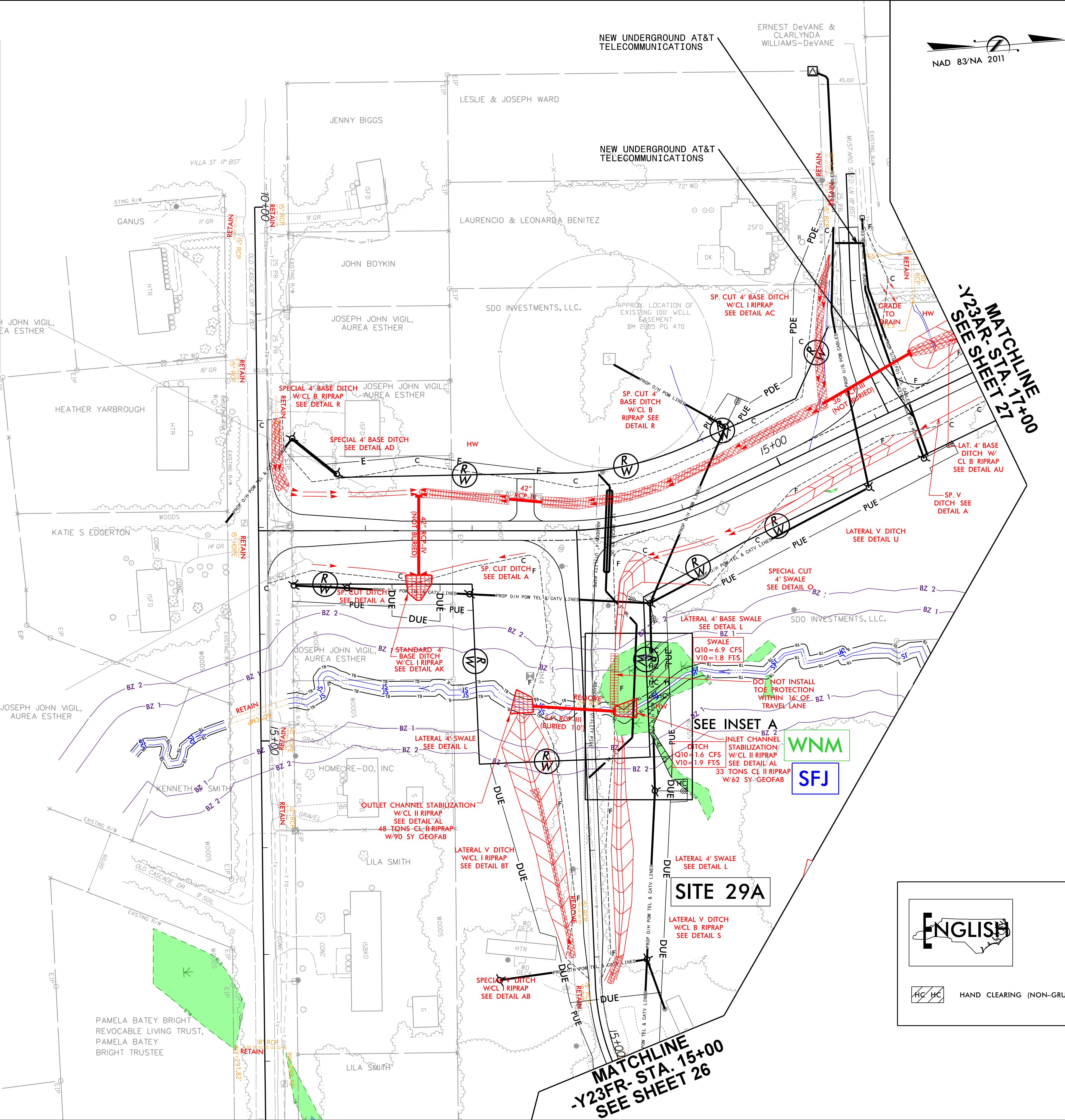
REVISED 10/20/2025

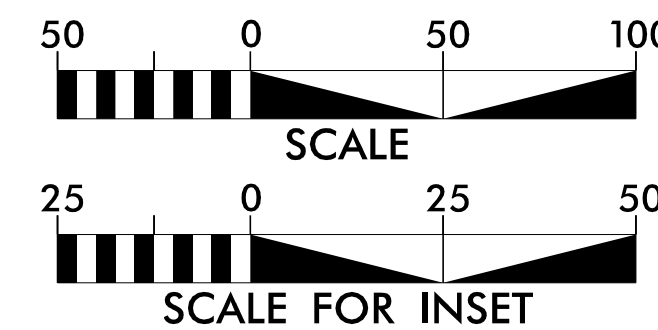


PROJECT REFERENCE NO.	SHEET NO.
R-2829A	31
R/W SHEET NO.	
REVISED 5/9/2025 REVISED 10/20/2025	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
UTILITY PERMIT DRAWING SHEET 8 OF 11	



INSET A





ACG GARNER, LLC

RW SHEET NO.

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

NAD 83/NA 2011

SEE DETAIL E

LINE CUT/FILL
TRANSITION W/
2 TONS CL B RIPR
W/7 SY GEOFAB

SITE 31

WGW

CHRISTOPHER DANIELS

HC	HC
TS	TS

HAND CLEARING (NON-GRUBBING)

TEMPORARY SURFACE WATER IMPACTS

SITE 31

WG

C800 INLET STABILIZATION
58 TONS CL II RIPRAP
W/66 SY GEOFAB
SEE DETAIL CH

SWALE
Q10=12.57cfs
V10=1.97fps

DIRECTIONAL DRILL NEW UTILITY
(NO BORE PIT REQUIRED)

TOE PROTECTION
W/CL B RIPRAP
SEE DETAIL E

LINE CUT/FILL TRANSITION W/
2 TONS CL B RIPRAP
W/7 SY GEOFAB

SEE INSET A

US 70 BUS WB 3' BST

US 70 BUS EB 3' BST

2GIB-WSS

2GIB-WSF

15" RCP-III

15" CSP WELBOWS

EXTEND EXISTING -WSF 5'x6'

REMOVE 60" EXIST 15"

TB JB wMH

PLUG & FILL WFF

JS BEGINS SP DET HW

TOE PROTECTION

2 TONS CL B RIPRAP
W/7 SY GEOFAB

SWALE
Q10=25.43cfs
V10=1.94fps

C800 OUTLET STABILIZATION
51 TONS CL II RIPRAP
W/68 SY GEOFAB
SEE DETAIL CH

SFZ(1)

WG(VI)

SITE 31

WGV(1)

SFY

The logo for stv and R&K is located in the bottom right corner. It features the letters 'stv' in a bold, black, sans-serif font, with the 'v' having a distinctive shape. Below 'stv' is the text 'R&K' in a blue, sans-serif font, with a small grey ampersand between the 'R' and 'K'.

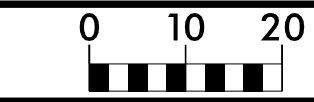
STV Engineers, Inc.
P: (704) 372-1885
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

P: (919) 878-9560
8601 Six Forks Road, Forum 1, Suite 700
Raleigh, North Carolina 27615-3960
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PROJ. REFERENCE NO.
R-2829A

SHEET NO.
S2 X-40

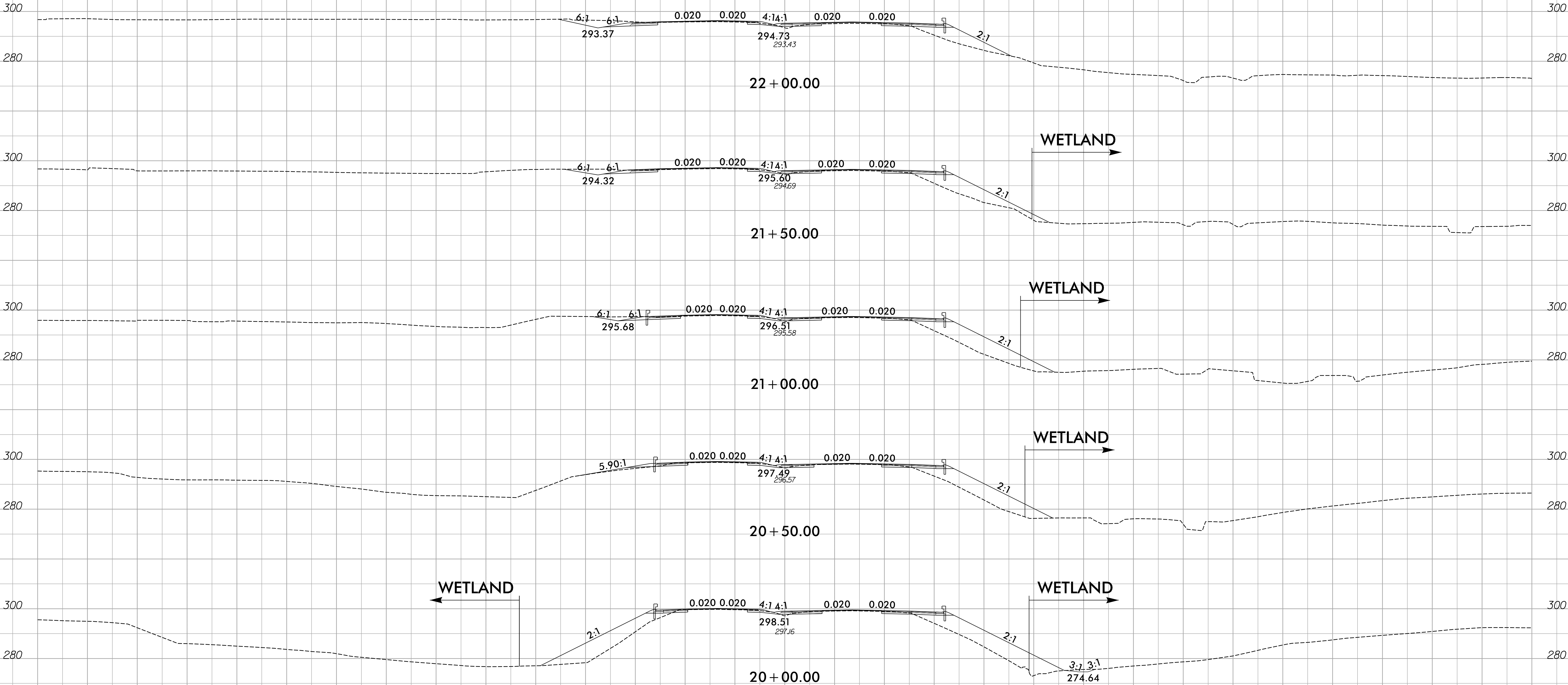
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SITE 31

UTILITY PERMIT DRAWING
SHEET 10 OF 11

REVISED 5/9/2025

REVISED 10/20/2025



-Y24R-

WETLAND AND SURFACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
12	-Y23DR- 46+82 - 47+18 RT	Overhead Power: SFC							0.006		65	
	-L1- 1062+50 - 1062+70 LT	Overhead Power: WGN					0.006					
13	Y23DR- 49+70-50+65 RT	Overhead Power: WGO					0.032					
20	-L1- 1137+51 - 1137+85 LT	Overhead Power, UG Gas & Telephone: SFT							0.006		76	
24	-L1- 1162+71 - 1163+11 RT	Overhead Power: SGD							0.003		36	
		WHC					0.020					
29A	-Y23FR- 11+07 - 12+01 LT	Overhead Power: SFJ, WNM					0.039					
31	-Y24R- 18+90 - 20+18 LT	UG Waterline: WGW					0.034					
	-Y24R-20+37 - 22+10 RT	Overhead Power & Anticipated Utility Line: SFY							0.007		68	
		WGV(1)					0.120					
	-Y24R- 20+25 - 20+38 RT	SFZ(1)							0.002		12	
PROJECT TOTALS*:			0.000	0.000	0.000	0.000	0.251	0.000	0.024	0	257	0

*Rounded totals are sum of actual impacts

NOTES:

Revised 5/9/2025 **Revised 10/20/2025**

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
9/4/2024
Wake County
R-2829A

Mitigation Acceptance Letters

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

Permittee: NCDOT Turnpike Authority
Project Name: Complete 540, R-2829A Mod, Sites 3-5-9-12-13

Action ID: SAW-2009-02240
County: Wake

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Division of Mitigation Services (NCDMS), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that 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: 03020201, Neuse River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
				0.010		

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

Compensatory Mitigation Requirements:

8-digit HUC and Basin: 03020201, Neuse River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
				0.020		

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: NCDMS

Name of Sponsor's Authorized Representative: Beth Harmon

Elizabeth Harmon

10/31/2025

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 required mitigation is additional mitigation required for the subject project.

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



Wilmington District Project Manager Signature

October 31, 2025

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>.