




STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

May 9, 2022

MEMORANDUM TO: Division Environmental and Construction Units

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

SUBJECT: Environmental Permits for the Replacement of Bridge 91 over Tar River
on NC 581 in Nash County, Division 4, **TIP: B-5947.**

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	Regional General Permit 50	May 25, 2025
NC Division of Water Resources Section 401 Water Quality Certification	General Certification No. 4135 [RGP50]	May 25, 2025
NC Division of Water Resources Buffer Certification	Tar River Riparian Buffer Certification	November 22, 2026

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/

PROJECT COMMITMENTS

T.I.P. Project No B-5947
Replacement of Bridge No. 91 over Tar River
On NC 581
Nash County
Federal Aid Project No. 0581032
WBS Element 45983.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

NCDOT Hydraulic Unit – FEMA Coordination

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

NCDOT Division Four Construction, Resident Engineer's Office -FEMA

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

NCDOT Hydraulic Unit – Buffer Rules

The Tar-Pamlico River Basin Rule applies to this project.

NCDOT Environmental Analysis Unit – Section 7

Section 7 will need to be resolved for the Yellow lance mussel and the Tar River spiny mussel prior to permitting and construction.

Due to this project occurring within an Identified Stream Reach for all the listed aquatic species, biological conclusions of May Affect, Likely to Adversely Affect were rendered. To satisfy Section 7, NCDOT has made payment to the NC Nongame Aquatic Species Fund for both freshwater mussels and Neuse River waterdog/Carolina madtom as detailed in the Programmatic Biological Opinions (PBOs) for the species. Adherence to the construction conditions detailed in the PBOs will be adhered to.

COMMITMENTS FROM PERMITTING

NCDOT Division 4 Construction

USACE General Permit 50 Special Condition 21

NAVIGATION

- a.) The authorized structure and associated activity must not interfere with the public's right to free navigation on all navigable waters of the United States. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for reasons other than safety.
- b.) Temporary work bridge shall be illuminated at night with blinking yellow lights as well as reflective signage posted on the upstream/downstream/left/right channel opening for public navigation safety.

**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

Action Id. **SAW-2018-02174** County: **Nash County** U.S.G.S. Quad: **Spring Hope**

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: **Philip Harris III**
North Carolina Department of Transportation
Address: **1598 Mail Service Center**
Raleigh NC, 27699
Telephone Number: *********

Size (acres) **10 Ac** Nearest Town **Rocky Mount**

Nearest Waterway **Tar River** River Basin **Pamlico**

USGS HUC **03020101**

Coordinates Latitude: **35.8819970713154**; Longitude: **-78.0894041061402**

Location description: **Bridge No. 91 on NC 581 over the Tar River, south of Spring Hope, NC**

Description of projects area and activity: Applicant proposes to replace structurally deficient and functionally obsolete bridge on new alignment adjacent to existing structure.

Applicable Law: ☒ Section 404 (Clean Water Act, 33 USC 1344);
☐ Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number and/or Nationwide Permit Number: **GP 50 - NCDOT - Bridge, Road Widening and Interchanges**

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

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application and attached information dated November 19, 2021, and April 14, 2022. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.


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

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

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

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

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact **Thomas Steffens at (910) 251-4615 or Thomas.A.Steffens@usace.army.mil.**

Corps Regulatory Official:  Date: 2022.04.14 15:27:29 -04'00' Date: **April 14, 2022**
Expiration Date of Verification: **May 25, 2025**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our Customer Satisfaction Survey, located online at <https://regulatory.ops.usace.army.mil/customer-service-survey/>

Copy furnished:

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICTAction Id. SAW-2018-02174County: Nash County

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Property Owner/Applicant: North Carolina Department of TransportationPhilip Harris IIIAddress: 1598 Mail Service CenterRaleigh, NC, 27699

Telephone Number:

**Size (acres) 10 acNearest Town Rocky MountNearest Waterway Tar RiverRiver Basin PamlicoUSGS HUC 03020101Coordinates Latitude: 35.8819970713154; Longitude: -78.0894041061402Location description: Bridge No. 91 on NC 581 over the Tar River, south of Spring Hope, NCIndicate Which of the Following Apply:A. Preliminary Determination

X There appear to be waters, including wetlands, on the above described property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). The waters, including wetlands, have been delineated, and the delineation has been verified by the Corps to be sufficiently accurate and reliable. Therefore this preliminary jurisdiction determination may be used in the permit evaluation process, including determining compensatory mitigation. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further instruction.

— There appear to be waters, including wetlands, on the above described property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). The waters, including wetlands, have been delineated, and the delineation has been verified by the Corps to be sufficiently accurate and reliable. Therefore this preliminary jurisdiction determination may be used in the permit evaluation process, including determining compensatory mitigation. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further instruction.

- There appear to be waters, including wetlands, on the above described property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). However, since the waters, including wetlands, have not been properly delineated, this preliminary jurisdiction determination may not be used in the permit evaluation process. Without a verified wetland delineation, this preliminary determination is merely an effective presumption of CWA/RHA jurisdiction over all of the waters, including wetlands, at the project area, which is not sufficiently accurate and reliable to support an enforceable permit decision. We recommend that you have the waters of the U.S., including wetlands, on your property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.

B. Approved Determination

- There are Navigable Waters of the United States within the above described property subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

- There are waters of the U.S., including wetlands, on the above described property subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

— We recommend you have the waters of the U.S., including wetlands, on your property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.

— The waters of the U.S., including wetlands, on your property have been delineated and the delineation has been verified by the Corps. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, unless there is a change in law or our published regulations, may be relied upon for a period not to exceed five years from the date of this notification.

— The waters of the U.S., including wetlands, have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on _____. Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

- There are no waters of the U.S., to include wetlands, present on the above described property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

- The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Morehead City, NC, at (252) 808-2808 to determine their requirements.

Placement of dredged or fill material within waters of the US, including wetlands, without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). Placement of dredged or fill material, construction or placement of structures, or work within navigable waters of the United States without a Department of the Army permit may constitute a violation of Sections 9 and/or 10 of the Rivers and Harbors Act (33 USC § 401 and/or 403). If you have any questions regarding this determination and/or the Corps regulatory program, please contact **Thomas Steffens at (910) 251-4615 or Thomas.A.Steffens@usace.army.mil**.

C. Basis For Determination: N/A. An Approved JD has not been completed.

D. Remarks: **See the preliminary jurisdictional determination form dated **

E. Attention USDA Program Participants

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

F. Appeals Information for Approved Jurisdiction Determinations (as indicated in Section B. above)

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

US Army Corps of Engineers
South Atlantic Division
Attn: Mr. Philip A. Shannin
Administrative Appeal Review Officer
60 Forsyth Street SW, Floor M9
Atlanta, Georgia 30303-8803

AND

PHILIP.A.SHANNIN@USACE.ARMY.MIL

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **.

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

Corps Regulatory Official: _____

Monte
Matthews

Date: 2022.04.14 15:27:52 -04'00'

Date of JD: **April 14, 2022**

Expiration Date: ****5 years if AJD**N/A if PJD**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our Customer Satisfaction Survey, located online at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Copy Furnished:

SPECIAL CONDITIONS

1. **CONSTRUCTION PLANS:** All work authorized by this permit must be performed in strict compliance with the attached plans dated April 14, 2022, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

(a) **BRIDGE DEMOLITION:** Bridge 91 demolition plans will be provided to the Corps of Engineers as soon as they are available. The bridge demolition plans will become a part of this permit and subject to, but not limited to, to any of the conditions that follow. The demolition plans, and any potential modification to them, must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

(b) **TEMPORARY WORK TRESTLES:** Temporary work trestles will be removed in their entirety. In cases where the work trestle components are unrecoverable, all unrecoverable trestle components must be cut off at minus 1 foot below the existing substrate elevation. This condition is only applicable after notification/consultation with the appropriate agencies and only after all other methods of removal have been attempted/explored.

2. **UNAUTHORIZED DREDGE OR FILL:** Except as authorized by this permit or any USACE 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. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

3. **MAINTAIN CIRCULATION AND FLOW 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 or wetlands.

4. **DEVIATION FROM PERMITTED PLANS:** Except as authorized by this permit or any USACE 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 fill 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.

5. **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 to borrow material or to dispose of dredged, fill or waste material. The permittee shall provide the Corps of Engineers with appropriate maps indicating the locations of proposed borrow or waste sites as soon as such information is available. The permittee will coordinate with the Corps of Engineers before approving any borrow or waste sites that are

within 400 feet of any stream or wetland. All jurisdictional wetland delineations on borrow and waste areas shall be verified by the Corps of Engineers and shown on the approved reclamation plans. The permittee shall ensure that all such areas comply with Special Condition 4 of this permit and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This documentation will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with Special Condition 4. All information will be available to the Corps of Engineers upon request. The permittee shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.

6. PRECONSTRUCTION MEETING: The permittee shall schedule and attend a preconstruction meeting between its representatives, the contractors' representatives, and the Corps of Engineers, Washington Regulatory Field Office, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all the terms and conditions contained with this Department of Army Permit. The permittee shall provide the USACE, Washington Regulatory Field Office, NCDOT Project Manager, with a copy of the final permit plans at least two weeks prior to the preconstruction 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 preconstruction meeting for a time frame when the USACE, 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 schedules and participate in the required meeting.

7. SEDIMENTATION/EROSION CONTROL PLAN:

- a.) During the clearing phase of the project, heavy equipment must 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.
- b.) 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.
- c.) The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades on those areas, prior to project completion.
- d.) 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 assure compliance with the appropriate turbidity water quality standard. Adequate sedimentation and erosion control measures must be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures must be inspected and maintained regularly, especially following rainfall events. All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

8. WATER CONTAMINATION: All mechanized equipment will 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 will be followed.

9. ENDANGERED SPECIES ACT:

- a.) Threatened and 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 U.S. Army Corps of Engineers, Wilmington District, Washington Regulatory Field Office, Attn: Thomas Steffens at 910-251-4615, or thomas.a.steffens@usace.army.mil will be immediately notified to initiate the required Federal coordination.
- b.) The U.S. Fish and Wildlife Service's (USFWS's) Programmatic Biological Opinion (PBO) titled, "NCDOT Program Effects on the Northern Long-eared Bat in Divisions 1-8", dated November 6, 2020, contains agreed upon conservation measures for the NLEB. Your authorization under this Department of the Army permit is conditional upon your compliance with all agreed upon conservation measures in the PBO, which are incorporated by reference in this permit. Failure to comply with these conservation measures would constitute noncompliance with your Department of the Army permit. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO, and with the ESA.
- c.) The U.S. Fish and Wildlife Service's (USFWS's) Programmatic Conference Opinion (PCO) titled "Bridge and Culvert Replacements/Repair/Rehabilitation Effects on Carolina Madtom and Neuse River Waterdog In NCDOT Divisions 2, 4, 5, and 7" dated May 6, 2020, 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.
- d.) Due to this project occurring within an Identified Stream Reach for all the listed aquatic species, biological conclusions of May Affect, Likely to Adversely Affect were rendered. To satisfy Section 7, NCDOT will make payment to the NC Nongame Aquatic Species Fund for both freshwater mussels and Neuse River waterdog/Carolina madtom as detailed in the Programmatic Biological Opinions (PBOs) for the species. Adherence to the construction conditions detailed in the PBOs will be adhered to.

10. NOTIFICATION OF CONSTRUCTION COMMENCEMENT AND COMPLETION: The permittee shall advise the Corps in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

- a.) Prior to construction within any jurisdictional areas, the permittee must correctly install silt fencing (with or without safety fencing) parallel with the construction 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 must maintain the fencing, at minimum, until the wetlands have re-vegetated and stabilized.

11. CLEAN FILL: Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used. Soils used for fill shall not be

contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act.

12. 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, shall be available at the project site during construction and maintenance of this project.

13. SILT-FENCING: The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

14. 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.

15. EROSION CONTROL MEASURES IN WETLANDS: The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.

16. TEMPORARY DISCHARGES: Temporary discharge of excavated or fill material into wetlands and waters of the United States will be for the absolute minimum period of time necessary to accomplish the work. All authorized temporary wetland, stream, and tributary impacts and returned to pre-disturbance grade and contour, and re-vegetated where appropriate.

17. REPORTING ADDRESS: All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Washington Regulatory Field Office, c/o Mr. Thomas Steffens 2407 West 5th Street, Washington, North Carolina 27889, and by telephone at: 910-251-4615. The Permittee shall reference the following permit number, SAW-2018-01119 on all submittals.

18. REPORTING VIOLATIONS OF THE CLEAN WATER ACT AND RIVERS AND HARBORS ACT: Violation of these conditions or violation of Section 404 of the Clean Water Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the discovery of the violation.

19. COMPLIANCE INSPECTION: A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in an administrative financial penalty and/or directive to cease work until the problem is resolved to the satisfaction of the Corps.

20. CONCRETE CONDITION: The permittee shall take measures 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).

21. NAVIGATION

a.) The authorized structure and associated activity must not interfere with the public's right to free navigation on all navigable waters of the United States. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for reasons other than safety.

b.) Temporary work bridge shall be illuminated at night with blinking yellow lights as well as reflective signage posted on the upstream/downstream/left/right channel opening for public navigation safety.

NOTE: All utility work performed under a non-reporting Nationwide Permit 57 (NWP 57 – Electric Utility Lines) associated with this project is subject to all applicable terms and conditions of the NWP 57 and Wilmington District Regional Conditions.

Failure to institute and carry out the details of special conditions 1-21, may result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with TIP No. B-5947, or such other remedy as the District Engineer or his authorized representatives may seek



No written Nationwide Permit 57 is required for this project.

Action ID Number: SAW-2018-02174

County: Nash County

Permittee: Philip Harris III
North Carolina Department of Transportation

Project Name: NCDOT B-5947 NC581 BR91 Nash Div4

Date Verification Issued: April 14, 2022

Project Manager: Thomas Steffens

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
Attn: Thomas Steffens
Washington Regulatory Field Office
2407 West 5th Street
Washington, North Carolina
27889

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the Corps suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

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

Permittee: NCDOT
Project Name: B-5947 Bridge 91 Div 4

Action ID: SAW-2018-02174
County: Nash

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: 03020101, Tar-Pamlico River Basin**

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
			.62			

*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: 03020101, Tar-Pamlico River Basin**

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
			1.24			

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

Beth Harmon

Signature of Sponsor's Authorized Representative

04/14/2022

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: Thomas Steffens
USACE Field Office: Washington Regulatory Field Office
US Army Corps of Engineers
2407 West Fifth Street
Washington, NC 27889
Email: thomas.a.steffens@usace.army.mil

Wilmington District Project Manager Signature

April 14, 2022

Date of Signature

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

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

S. DANIEL SMITH

Director

NORTH CAROLINA
Environmental Quality

November 22, 2021

DWR #20210958

Nash County

Mr. Philip S. Harris, III, P.E., CPM
Environmental Analysis Unit Head
1598 Mail Service Center
Raleigh, NC 27699-1598

Subject: APPROVAL OF 401 WATER QUALITY CERTIFICATION WITH ADDITIONAL CONDITIONS

NCDOT: Bridge 91 over Tar River on NC 581, TIP# B-5947, Nash County

Dear Mr. Harris:

You have our approval for the impacts listed below for the purpose described in your application dated received by the Division of Water Resources (Division) November 18, 2021. These impacts are covered by the Water Quality General Certification Number 4135 and the conditions listed below. This certification is associated with the use of General Permit 50 once it is issued to you by the U.S. Army Corps of Engineers. Please note that you should get any other federal, state or local permits before proceeding with your project, including those required by (but not limited to) Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations.

The Division has determined that the proposed project will comply with water quality requirements provided that you adhere to the conditions listed in the General Certification and to the additional conditions below.

The following proposed impacts are hereby approved. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b)]

Wetland Impacts in the Tar-Pamlico River Basin

Site	Permanent Fill (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
Total	0.51	0.11	0.01	0.63

Total Wetland Impact for Project: 0.63 acres.**Open Water (River) Impacts in the Tar-Pamlico River Basin**

Site	Permanent Fill in Open Waters (ac)	Temporary Fill in Open Waters (ac)	Total Fill in Open Waters (ac)
Total	0.01	0.09	0.10

Total Open Water Impact for Project: 0.10 acres.

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

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 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)].

If you are unable to comply with any of the conditions of the attached Water Quality General Certification or with the additional conditions below, you must notify the DWR Transportation Permitting Branch within 24 hours (or the next business day if a weekend or holiday) from the time the permittee becomes aware of the circumstances.

The permittee shall report to the Division of Water Resources any noncompliance with, and/or any violation of, stream or wetland standards [15A NCAC 02B .0200] including but not limited to sediment impacts to streams or wetlands. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the permittee became aware of the non-compliance circumstances.

Additional Conditions:

1. Compensatory mitigation for impacts to 0.62 acres of 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 mitigation for the project. DMS has indicated in a letter dated October 22, 2021 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. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species. [15A NCAC 02H .0506(b)(2)]
3. As a condition of this 401 Water Quality Certification, the bridge demolition and construction must be accomplished in strict compliance with the most recent version of NCDOT's Best Management Practices for Construction and Maintenance Activities. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
4. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS0000250, please refer to the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual for approved measures. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
5. Bridge piles and bents shall be constructed using driven piles (hammer or vibratory) or drilled shaft construction methods. More specifically, jetting or other methods of pile driving are prohibited without prior written approval from the NCDWR first. [15A NCAC 02H.0506(b)(2)]
6. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H .0506(b)(3)]



7. A turbidity curtain will be installed in the stream if driving or drilling activities occur within the stream channel, on the stream bank, or within 5 feet of the top of bank, or during the removal of bents from an old bridge. This condition can be waived with prior approval from the NCDWR. [15A NCAC 02H .0506(b)(3)]
8. All bridge construction shall be performed from the existing bridge, temporary work bridges, temporary causeways, or floating or sunken barges. If work conditions require barges, they shall be floated into position and then sunk. The barges shall not be sunk and then dragged into position. Under no circumstances should barges be dragged along the bottom of the surface water. [15A NCAC 02H .0506(b)(3)]
9. The permittee will need to adhere to all appropriate in-water work moratoria (including the use of pile driving or vibration techniques) prescribed by the US Fish and Wildlife Service, the NC Wildlife Resources Commission, or the National Marine Fisheries Service, as applicable. [15A NCAC 2H.0506(b)(2) & 15A NCAC 4B.0125]
10. Pipes and culverts used exclusively to maintain equilibrium in wetlands, where aquatic life passage is not a concern, shall not be buried. These pipes shall be installed at natural ground elevation. [15A NCAC 2H.0506(b)]
11. 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]
12. 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)]
13. 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)]
14. 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)]
15. 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)]
16. 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)]
17. 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)]



18. 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)]

19. 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)]

20. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]

21. 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]

22. 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)]

23. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]

24. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, 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]

25. 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.

26. 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)]

27. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]

28. 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)]

29. 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.

30. Sediment and erosion control measures shall not be placed in wetlands or surface waters, or within 5 feet of the top of bank, without prior approval from DWR. [15A NCAC 02H.0506(b)(3) and (c)(3)]

31. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0200]

32. Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*.

All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971. [15A NCAC 02H.0506(b)(3) and (c)(3); GC 4135]




This approval and its conditions are final and binding unless contested. [G.S. 143-215.5] Please be aware that by having impacted waters without first applying for and securing the issuance of a 401 Water Quality Certification, you have violated 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. One (1) copy of the Petition must also be served to the North Carolina Department of Environmental Quality:

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

This letter completes the review of the Division under section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Rob Ridings at 919-707-8786 or rob.ridings@ncdenr.gov if you have any questions or concerns.

Sincerely,

DocuSigned by:

9C9886312DCD474...

S. Daniel Smith, Director
Division of Water Resources

CC:

Tom Steffens, USACE Washington Regulatory Field Office
Byron Bateman, NCDOT Division 4 Environmental Officer
Chris Rivenbark, NC Department of Transportation
Beth Harmon, Division of Mitigation Services
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

NCDWR Project No.: _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, **or** the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____

Date _____



ROY COOPER

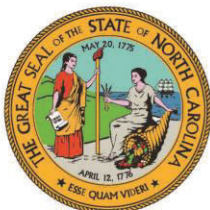
Governor

ELIZABETH S. BISER

Secretary

S. DANIEL SMITH

Director

NORTH CAROLINA
Environmental Quality

November 22, 2021

DWR #20210958

Nash County

Mr. Philip S. Harris, III, P.E., CPM
Environmental Analysis Unit Head
1598 Mail Service Center
Raleigh, NC 27699-1598

Subject: APPROVAL of TAR-PAMLICO RIPARIAN BUFFER IMPACTS WITH ADDITIONAL CONDITIONS

NCDOT: Bridge 91 over Tar River on NC 581, TIP# B-5947, Nash County

Dear Mr. Harris:

You have our approval for the impacts listed below for the purpose described in your application dated received by the Division of Water Resources (Division) November 18, 2021. These impacts are covered by the Tar-Pamlico Buffer Rules and the conditions listed below. Please note that you should get any other federal, state or local permits before proceeding with your project, including those required by (but not limited to) Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations.

The following impacts are hereby approved, provided that all of the Conditions listed below and all of the conditions of the Tar-Pamlico Buffer Rules are met. No other impacts are approved, including incidental impacts. [15A NCAC 02B.0611(b)(2)]

Tar-Pamlico Riparian Buffer Impacts

Site	Zone 1 Impact (sq ft)	Zone 2 Impact (sq ft)
Total	8889	6270

Total Buffer Impact for Project: 15159 square feet.

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 Authorization Certificate. If you change your project, you must notify the Division and you may be required to submit a new application package. If the property is sold, the new owner must be given a copy of this Authorization Certificate and is responsible for complying with all conditions. [15A NCAC 02B.0611(b)(2)]



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

If you are unable to comply with any of the conditions below, you must notify the DWR Transportation Permitting Branch within 24 hours (or the next business day if a weekend or holiday) from the time the permittee becomes aware of the circumstances.

The permittee shall report to the Division of Water Resources any noncompliance with the conditions of this Authorization Certificate and/or any violation of state regulated riparian buffer rules [15A NCAC 02B.0734]. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the applicant became aware of the circumstances.

Additional Conditions:

1. All stormwater runoff shall be directed as sheetflow through stream buffers at non-erosive velocities, unless otherwise approved by this certification. [15A NCAC 02B.0734]
2. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular NCDOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated with native woody species before the next growing season following completion of construction. [15A NCAC 02B.0734]
3. Pursuant to 15A NCAC 02B.0734, sediment and erosion control devices shall not be placed in Zone 1 of any Tar Buffer without prior approval by the NCDWR. At this time, the NCDWR has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.
4. Native riparian vegetation (i.e. trees and shrubs native to the geographic region) 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.0734]

This approval and its conditions are final and binding unless contested. [G.S. 143-215.5]

This Authorization Certificate 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. One (1) copy of the Petition must also be served to the North Carolina Department of Environmental Quality:

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

This Authorization shall expire five (5) years from the date of this letter.



This letter completes the review of the Division under the Tar-Pamlico Riparian Buffer Rules as described in 15A NCAC 02B.0734. Please contact Rob Ridings at 919-707-8786 or rob.ridings@ncdenr.gov if you have any questions or concerns.

Sincerely,

DocuSigned by:
Amy Chapman
9C9886312DCD474...

S. Daniel Smith, Director
Division of Water Resources

CC:

Tom Steffens, USACE Washington Regulatory Field Office
Byron Bateman, NCDOT Division 4 Environmental Officer
Chris Rivenbark, NC Department of Transportation
Beth Harmon, Division of Mitigation Services
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

Revised Mussel Programmatic Biological Opinion summary of *Conservation Measures (Section 2.5)*, *RPM 2 of the Reasonable and Prudent Measures (Section 9.2)*, as well as *T&C 2 of the Terms and Conditions (Section 9.3)*.



Design Standards in Sensitive Watersheds will be incorporated into the plans. Design Standards in Sensitive Watersheds are erosion control measures that exceed the standard BMPs (e.g. measures are designed to provide protection from runoff of 25-year storm event).

Environmentally Sensitive Areas shall also be designated and defined as a 50-foot buffer zone on both sides of the stream measured from top of streambank. Within *Environmentally Sensitive Areas* the following shall apply:

- The contractor may perform clearing operations but not grubbing operations until immediately prior to beginning grading operations.
- Once grading operations begin in identified *Environmentally Sensitive Areas*, work shall progress in a continuous manner until complete.
- Erosion control devices shall be installed immediately following the clearing operation.
- Seeding and mulching shall be performed on the areas disturbed by construction immediately following final grade establishment.
- Seeding and mulching shall be done in stages on cut and fill slopes that are greater than 20 feet in height measured along the slope or greater than two acres in area, whichever is less.
- No heavy equipment will be placed in the streams.
- BMPs for bridge demolition and removal will be implemented (NCDOT 2003, NCDOT 2014a, or newer).
- Bridges will be removed from the top down, first removing the asphalt with containment measures in place to prevent asphalt from dropping into the stream. The method of containment will be proposed by the contractor and approved by the project engineer. This will be followed by removal of the decking, girders, and finally the piles/shafts/columns.
- No new bents will be placed in the channel (unless justification is provided and then accepted by the Service).
- Existing abutments will be completely removed unless removal would result in destabilization of banks or increase adverse effects to listed mussels.
- Deck drains will not be allowed to discharge directly into the stream.
- Special sediment control fence (NCDOT Standard No. 1606.01) or a combination of special sediment control fence and standard silt fence will be installed between the top of the stream bank and bridge embankment. Once the disturbed areas of the project draining to these areas have been stabilized, the special sediment control fence and/or silt fence and all built up sediment adjacent to these devices will be removed to natural ground and stabilized with a native grass mix.
- All appropriate sedimentation and erosion control measures, throughout the project limits, will be cleaned out when half full to ensure proper function of the measures.
- Coir fiber matting or clean riprap (underlain with geotextile) will be installed on the footprint of unclassified structure excavation near the streambanks.
- Embankment construction and grading shall be managed in such a manner as to prevent surface runoff/drainage from discharging untreated into the riparian buffer. All interim surfaces will be graded to drain to temporary erosion control devices. Temporary berms, ditches, etc. will be incorporated, as necessary, to treat runoff before discharging into the riparian buffer (as specified in NCDOT BMP manuals).
- Utility relocations necessitated by bridge or culvert replacements must minimize sedimentation effects to mussels and their habitat. Unless technically unfeasible, NCDOT must require utility relocations through streams to utilize directional (horizontal) boring instead of open trench cut.

- Report Number of Automatic Concurrences. Although Project Submittal Forms are not required for MA-NLAA conclusions, NCDOT must annually, via email, provide a total number of projects (cumulatively) with such conclusions that utilize the automatic advance concurrence for one or more of the species addressed in this BO/CO as described in Section 3.
- Erosion Control Measures Failure. In the event of any visible sediment loss from any individual project site, a review of turbidity levels will be made upstream and downstream 400 meters (0.25 mile) to determine if sedimentation effects are occurring beyond 400 meters downstream. If visual observation of turbidity levels downstream appear to be elevated beyond upstream observations, the project inspector will contact the Division Environmental Officer. If determined that project-related sedimentation is occurring beyond 400 meters, the Service must be contacted immediately to discuss potential remediation.

The full PBO can be found here: [Programmatic Biological Opinion Bridge and Culvert Replacement/Repairs/Rehabilitations in Eastern North Carolina, NCDOT Divisions 1-8](#)


 <div style="text-align: center;"> North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS </div> 									
(Version 2.08; Released April 2018)									
WBS Element:		TIP No.:		County(ies):		Page 1 of 1			
General Project Information									
WBS Element:		45983.1.1		TIP Number:		B-5947		Project Type: Bridge Replacement	
NCDOT Contact:		Chad Coggins		Contractor / Designer:		Wetherill Engineering, Inc. / Harinder Singh, PE			
		Address:				Address:			
		Highway Division 4 509 Ward Blvd., PO Box 3165 Wilson, NC 27895				1223 Jones Franklin Rd. Raleigh, NC 27606			
		Phone: 252-237-6164				Phone: 919-851-8077			
		Email: ccoggins@ncdot.gov				Email: hsingh@wetherilleng.com			
City/Town:		N/A		County(ies):		Nash			
River Basin(s):		Tar-Pamlico		CAMA County?		No			
Wetlands within Project Limits?		Yes							
Project Description									
Project Length (lin. miles or feet):		0.47		Surrounding Land Use:		Rural, Wooded			
		Proposed Project		Existing Site					
Project Built-Upon Area (ac.)		1.5 ac.		1.1 ac.					
Typical Cross Section Description:		The proposed section consists of two 12' width lanes. Paved shoulders on bridge approach a variable from 5.0' to 7.5'.				Existing road consists of two 12' lanes with variable width grass shoulders.			
Annual Avg Daily Traffic (veh/hr/day):		Design/Future: 6300		Year: 2040		Existing: 5300		Year: 2021	
General Project Narrative: (Description of Minimization of Water Quality Impacts)		The proposed bridge is a 330' (1@100', 1@145', 1@85) Prestressed Concrete Girder bridge with 4' deep caps. This bridge will be on a new alignment located 45' upstream from the existing alignment. The deck drains on the proposed bridge will not discharge directly over the stream and will be outside the buffer zones. The existing interior bents will be removed/cut off at mud line and a work bridge will be needed to construction of the proposed bridge.							
Waterbody Information									
Surface Water Body (1):		Tar River		NCDWR Stream Index No.:		28-(24.7)			
NCDWR Surface Water Classification for Water Body		Primary Classification:		Water Supply V (WS-V)					
		Supplemental Classification:		Nutrient Sensitive Waters (NSW)					
Other Stream Classification:		None							
Impairments:		None							
Aquatic T&E Species?		No		Comments:					
NRTR Stream ID:						Buffer Rules in Effect:		Tar-Pamlico	
Project Includes Bridge Spanning Water Body?		Yes		Deck Drains Discharge Over Buffer?		No		Dissipator Pads Provided in Buffer?	
				(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)			
Deck Drains Discharge Over Water Body?		No							
				(If yes, provide justification in the General Project Narrative)					

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols
See Sheet RW02C-1 TO RW02C-2 For Survey Control Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PERMIT DRAWING
SHEET 1 OF 12

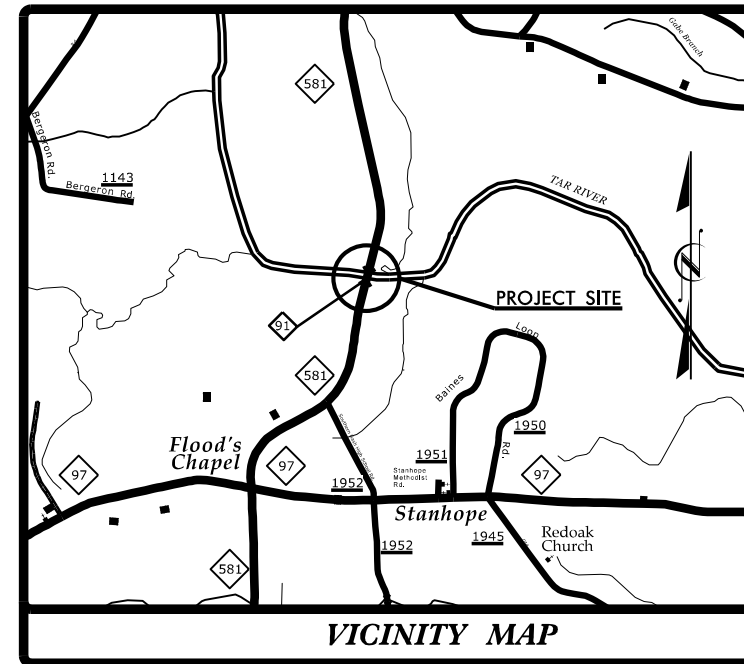
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5947	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
45983.1.1		PE	
45983.2.1		ROW, UTIL.	



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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

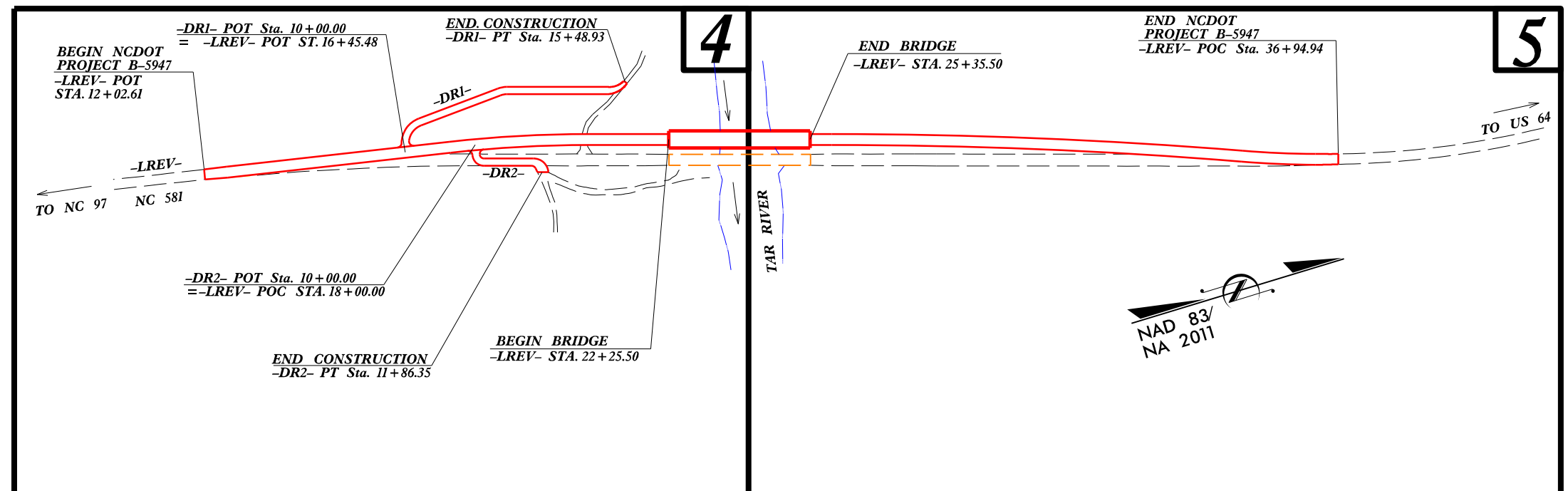
BRIDGE #630091



LOCATION: BRIDGE NO. 630091 OVER TAR RIVER
ON NC 581

TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE

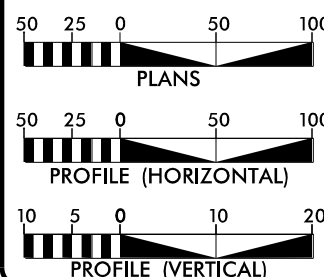
WETLAND AND SURFACE WATER IMPACTS PERMIT



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD .
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2020 = 5,300
ADT 2040 = 6,300
K = 10 %
D = 55 %
T = 5 % *
V = 60 MPH
* (TTST = 1% +
DUAL = 4%)
FUNC CLASS =
MAJOR COLLECTOR
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY PROJECT B-5947 = 0.413 MILES
LENGTH STRUCTURE PROJECT B-5947 = 0.059 MILES
TOTAL LENGTH PROJECT B-5947 = 0.472 MILES

NCDOT CONTACT: DAVID STUTTS, PE
PROJECT ENGINEER - PEF/PROGRAM MGT.

Prepared for:
DIVISION OF HIGHWAYS
STRUCTURES MANAGEMENT UNIT
1000 BIRCH RIDGE DRIVE RALEIGH NC, 27610

2018 STANDARD SPECIFICATIONS
RIGHT OF WAY DATE:
DECEMBER 23, 2019

LETTING DATE:
DECEMBER 22, 2020

EDWARD G. WETHERILL, PE
PROJECT ENGINEER

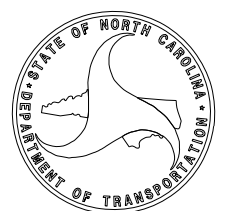
GREG S. PURVIS, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: P.E.



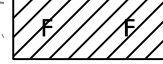
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PROJECT B-5947
-LREV- POT
STA. 11+23.00



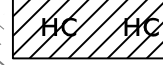
DENOTES MECHANIZED
CLEARING



DENOTES TEMPORARY
IMPACTS IN SURFACE WATER



DENOTES FILL IN
WETLAND




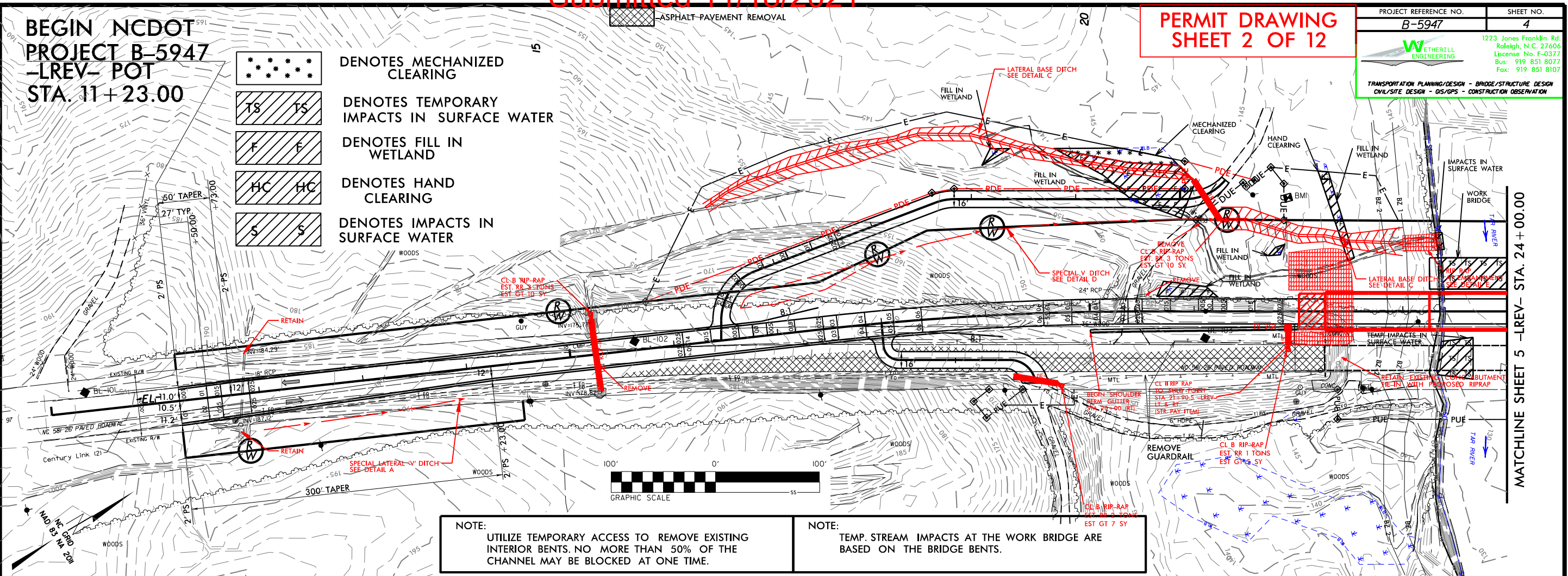
DENOTES HAND
CLEARING



DENOTES IMPACTS IN
SURFACE WATER

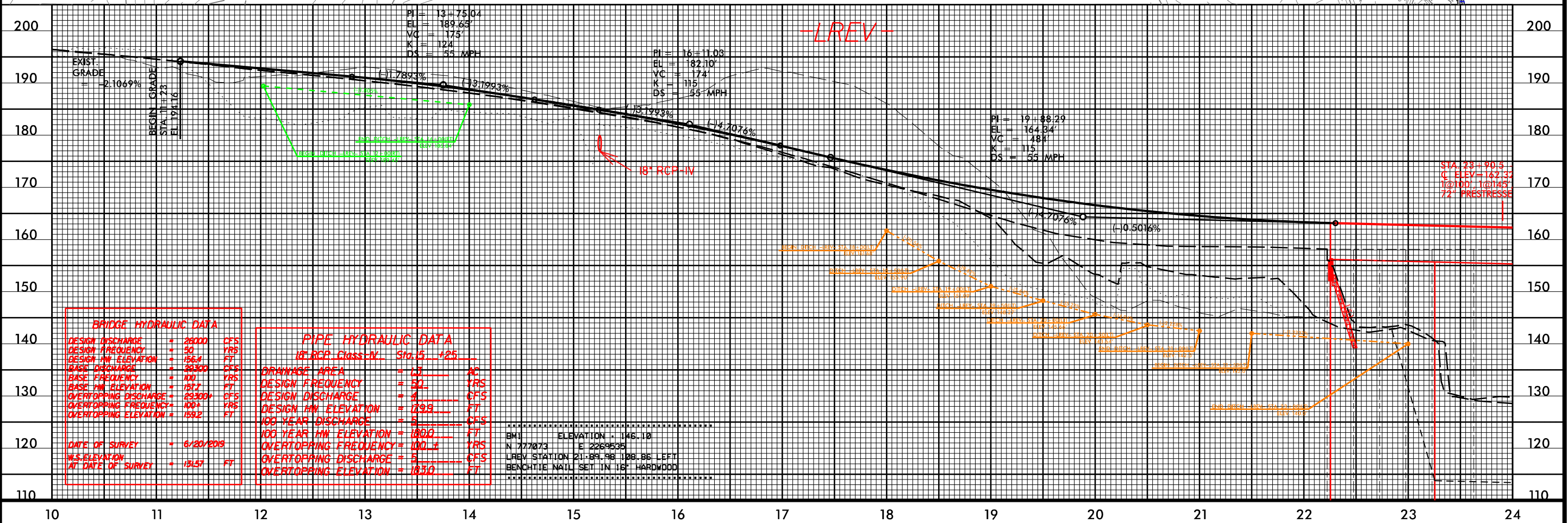
PERMIT DRAWING
SHEET 2 OF 12

PROJECT REFERENCE NO.	SHEET NO.
B-5947	4
 1223 Jones Franklin Rd. Raleigh, N.C. 27606 License No. F-0377 Bus: 919 851 8077 Fax: 919 851 8107	
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION	



NOTE:
UTILIZE TEMPORARY ACCESS TO REMOVE EXISTING
INTERIOR BENTS. NO MORE THAN 50% OF THE
CHANNEL MAY BE BLOCKED AT ONE TIME.

NOTE:
TEMP. STREAM IMPACTS AT THE WORK BRIDGE ARE
BASED ON THE BRIDGE BENTS.



BEGIN NCDOT
PROJECT B-5947
-LREV- POT
STA. 11+23.00

- ***** DENOTES MECHANIZED CLEARING
- TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- F F DENOTES FILL IN WETLAND
- HC HC DENOTES HAND CLEARING
- S S DENOTES IMPACTS IN SURFACE WATER

ASPHALT PAVEMENT REMOVAL

PERMIT DRAWING
SHEET 3 OF 12

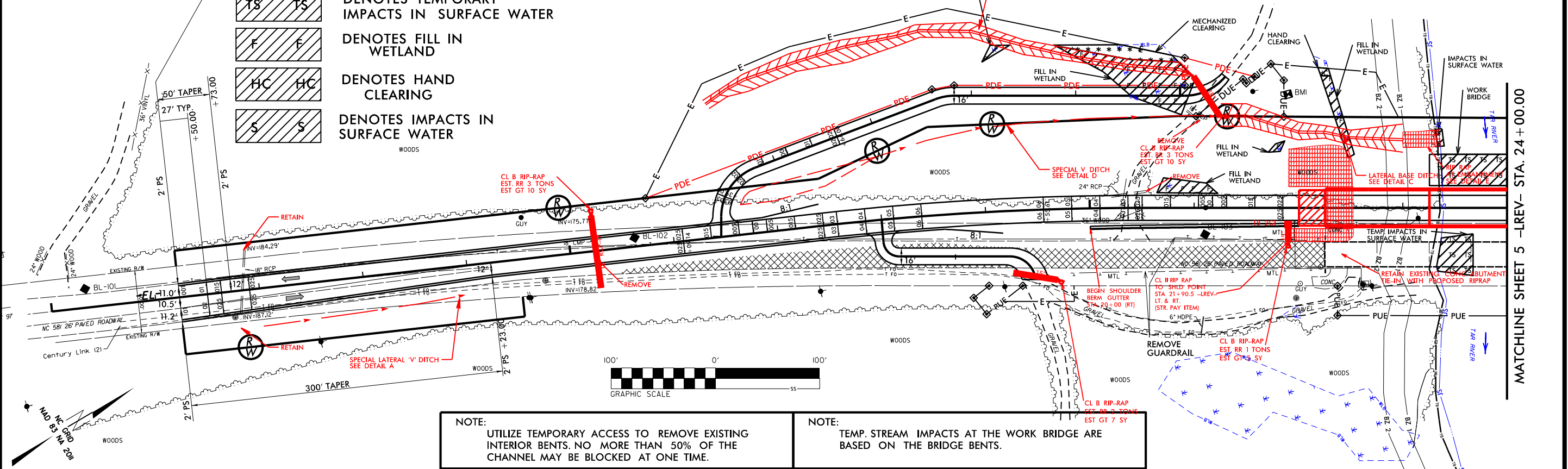
PROJECT REFERENCE NO.
B-5947

SHEET NO.
4

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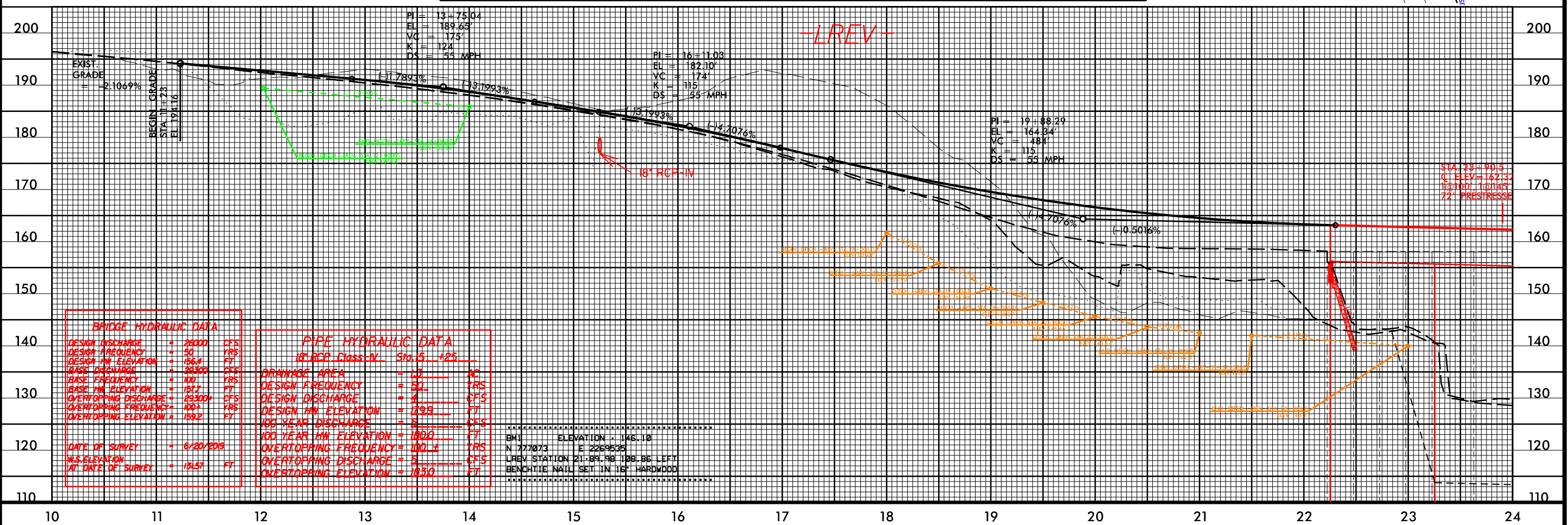
WETHERILL
ENGINEERING

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
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NOTE:
UTILIZE TEMPORARY ACCESS TO REMOVE EXISTING
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NOTE:
TEMP. STREAM IMPACTS AT THE WORK BRIDGE ARE
BASED ON THE BRIDGE BENTS.



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE = 28000 CFS

DESIGN FREQUENCY = 50 YRS

DESIGN HW ELEVATION = 156.4 FT

BASE DISCHARGE = 20300 CFS

BASE FREQ. = 100 YRS

BASE HW ELEVATION = 151.1 FT

OVERTOPPING DISCHARGE = 20300 CFS

OVERTOPPING FREQUENCY = 100 YRS

OVERTOPPING ELEVATION = 159.2 FT

PIPE HYDRAULIC DATA

18' RCP Class IV, 910.15, 125

DRAINAGE AREA = 1.3 AC

DESIGN FREQUENCY = 50 YRS

DESIGN DISCHARGE = 4 CFS

DESIGN HW ELEVATION = 129.5 FT

100 YEAR DISCHARGE = 5 CFS

100 YEAR HW ELEVATION = 130.0 FT

OVERTOPPING FREQUENCY = 100 YRS

OVERTOPPING DISCHARGE = 5 CFS

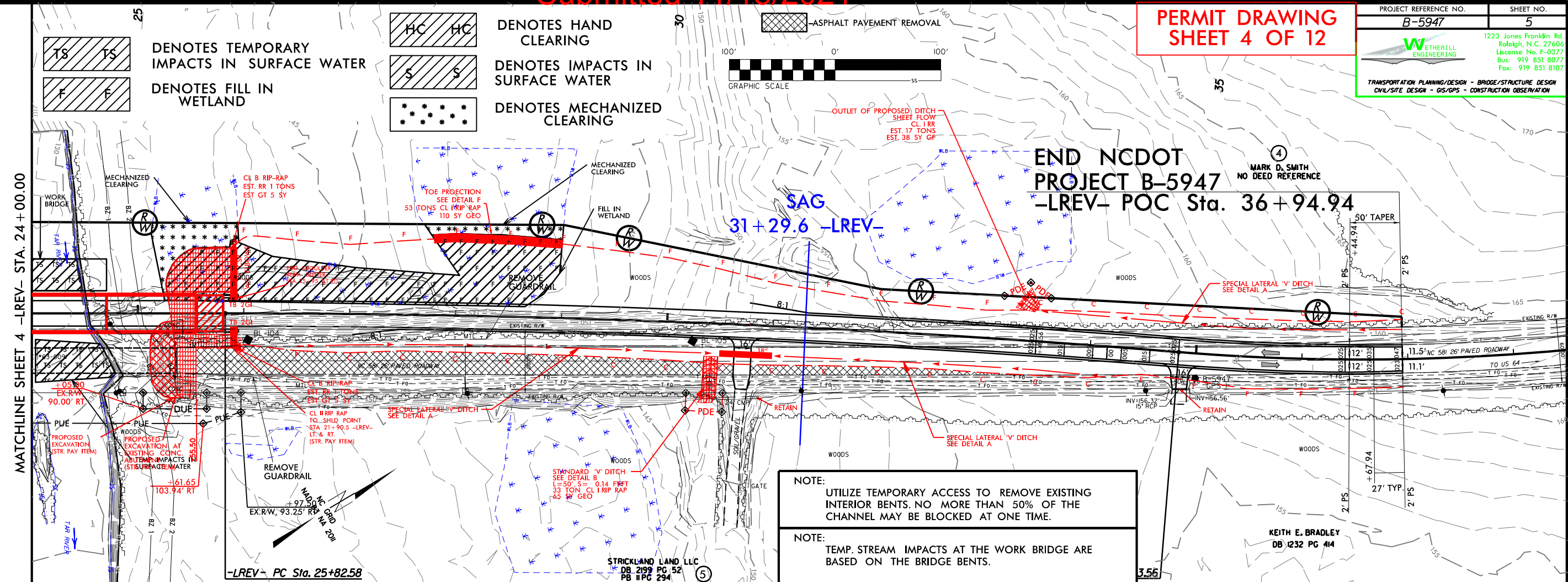
OVERTOPPING ELEVATION = 133.0 FT

BMI ELEVATION = 146.10

N 777073 E 2269535

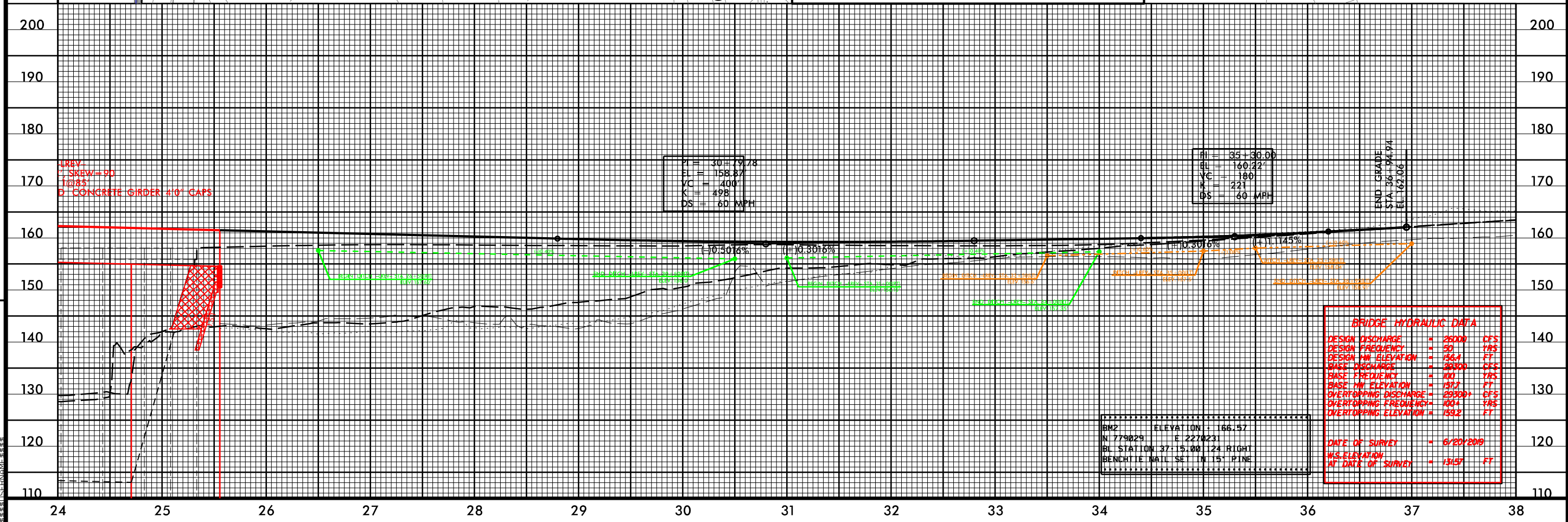
LREV STATION 21+89.98 108.86 LEFT

BENCHMARK NAIL SET IN 16" HARDWOOD

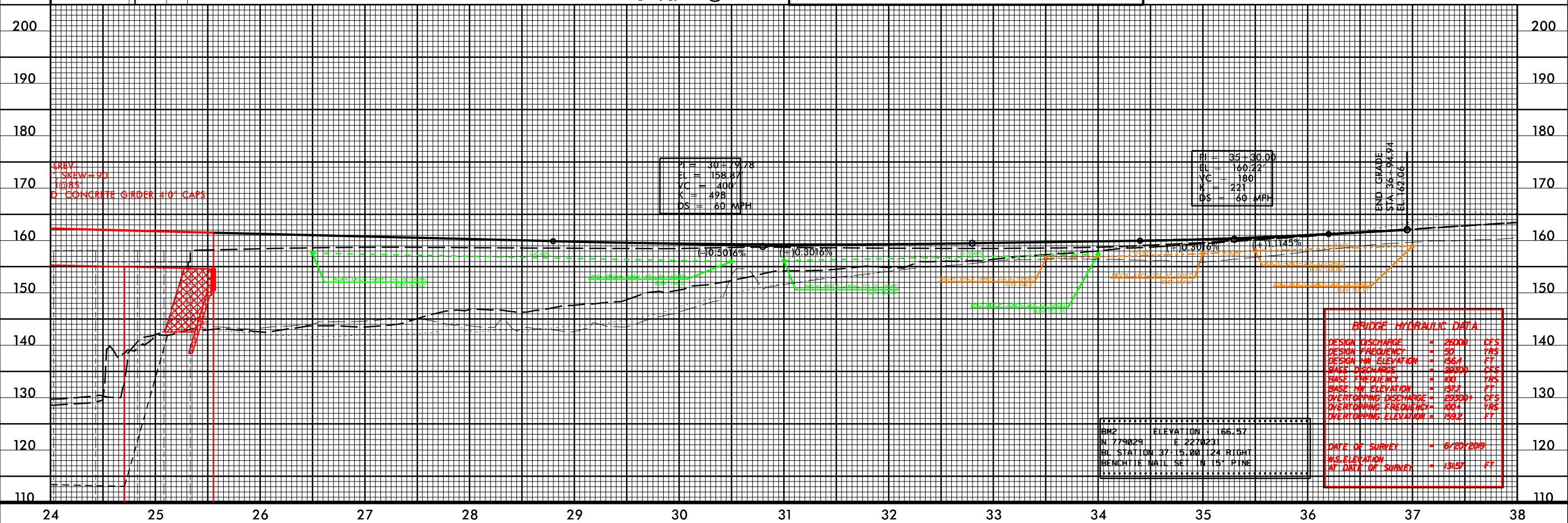
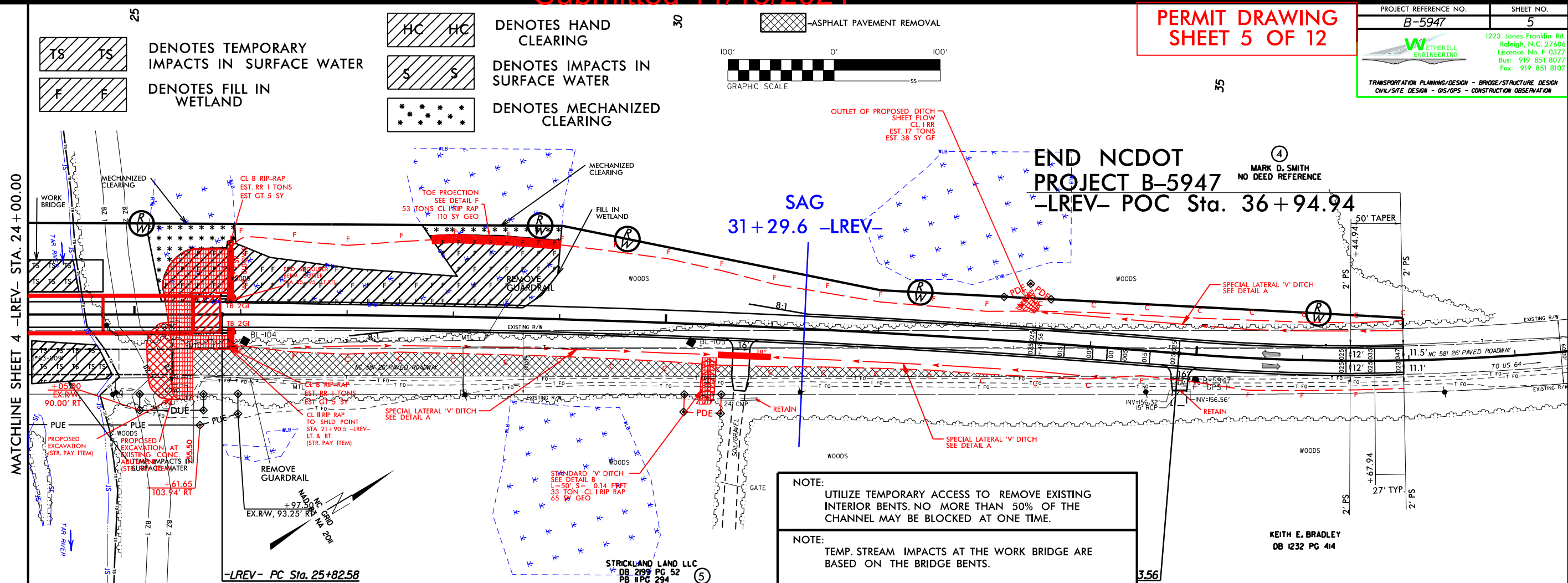


NOTE:
UTILIZE TEMPORARY ACCESS TO REMOVE EXISTING
INTERIOR BENTS. NO MORE THAN 50% OF THE
CHANNEL MAY BE BLOCKED AT ONE TIME.

NOTE:
TEMP. STREAM IMPACTS AT THE WORK BRIDGE ARE
BASED ON THE BRIDGE BENTS.



BRIDGE HYDRAULIC DATA	
DESIGN DISCHARGE	= 26000 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 156.4 FT
BASE DISCHARGE	= 26300 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 157.7 FT
OVERTOPPING DISCHARGE	= 29300 CFS
OVERTOPPING FREQUENCY	= 1001 YRS
OVERTOPPING ELEVATION	= 158.2 FT
DATE OF SURVEY	= 6/20/2019
WS ELEVATION AT DATE OF SURVEY	= 134.5 FT



WETLAND PERMIT IMPACT SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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	-LREV- 10+00 to 41+53	Roadway and Bridge	0.51			0.11	< 0.01	< 0.01	0.08	20		
1	-LREV- 23+25.5 to 24+70.5	Temporary Work Bridge							< 0.01			
TOTALS*:			0.51			0.11	< 0.01	< 0.01	0.08	0	0	0

*Rounded totals are sum of actual impacts

NOTES:
 Utilize temporary access to remove existing interior bents. No more than 50% of channel may be blocked at one time.
 The Temp. SW Impacts at existing bridge are based on the use of a causeway.

The Temp. Stream Impacts at work bridge are based on impacts from bridge bents (span arrangement to be determined by contractor).
 The Permanent SW impact is due to riprap embankment (131 sq ft).

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

B-5947

NASH CO.

8/3/2020

SHEET

6

OF

12

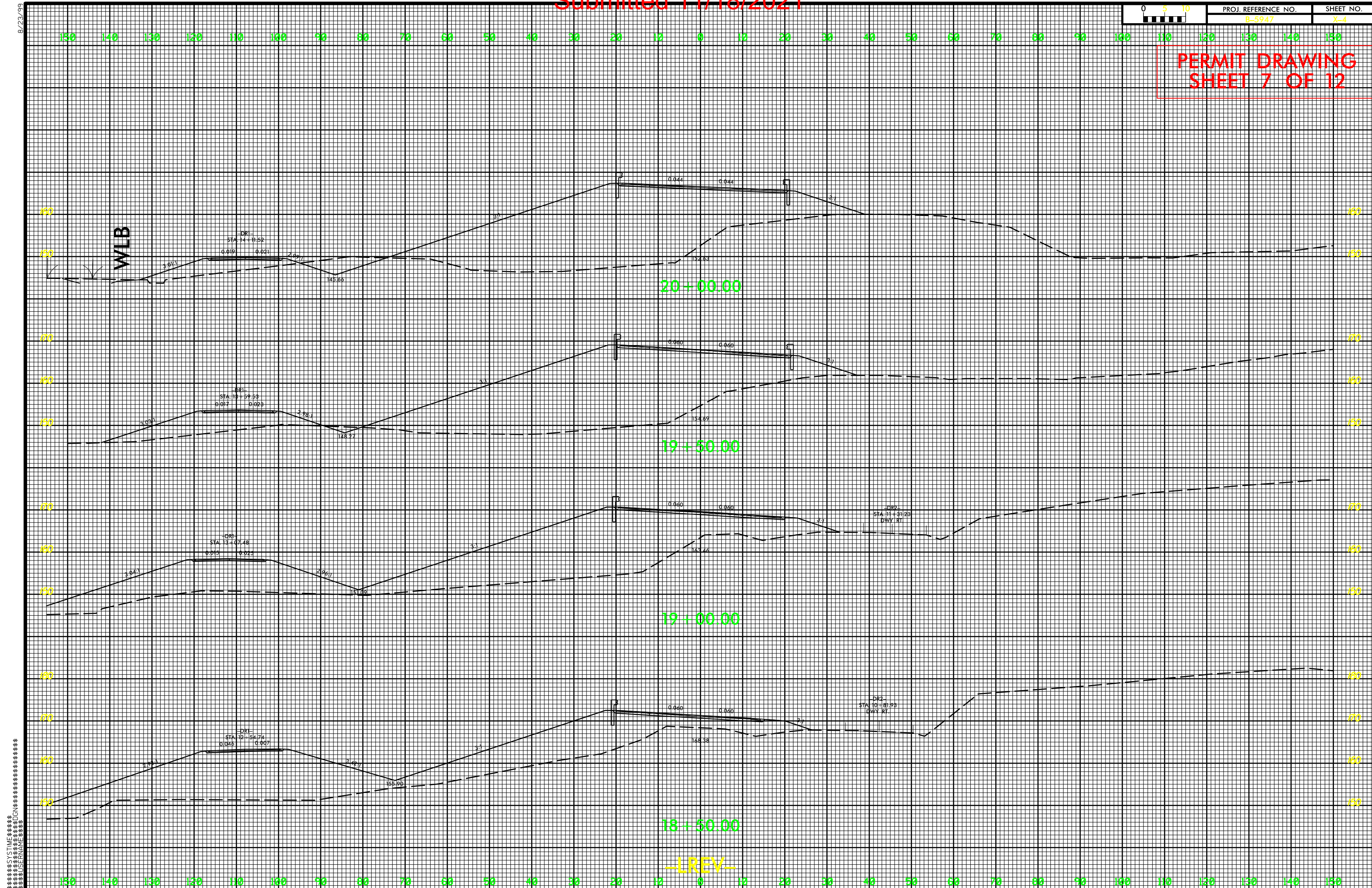
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PROJ. REFERENCE NO.
B-5947

SHEET NO.
X-4

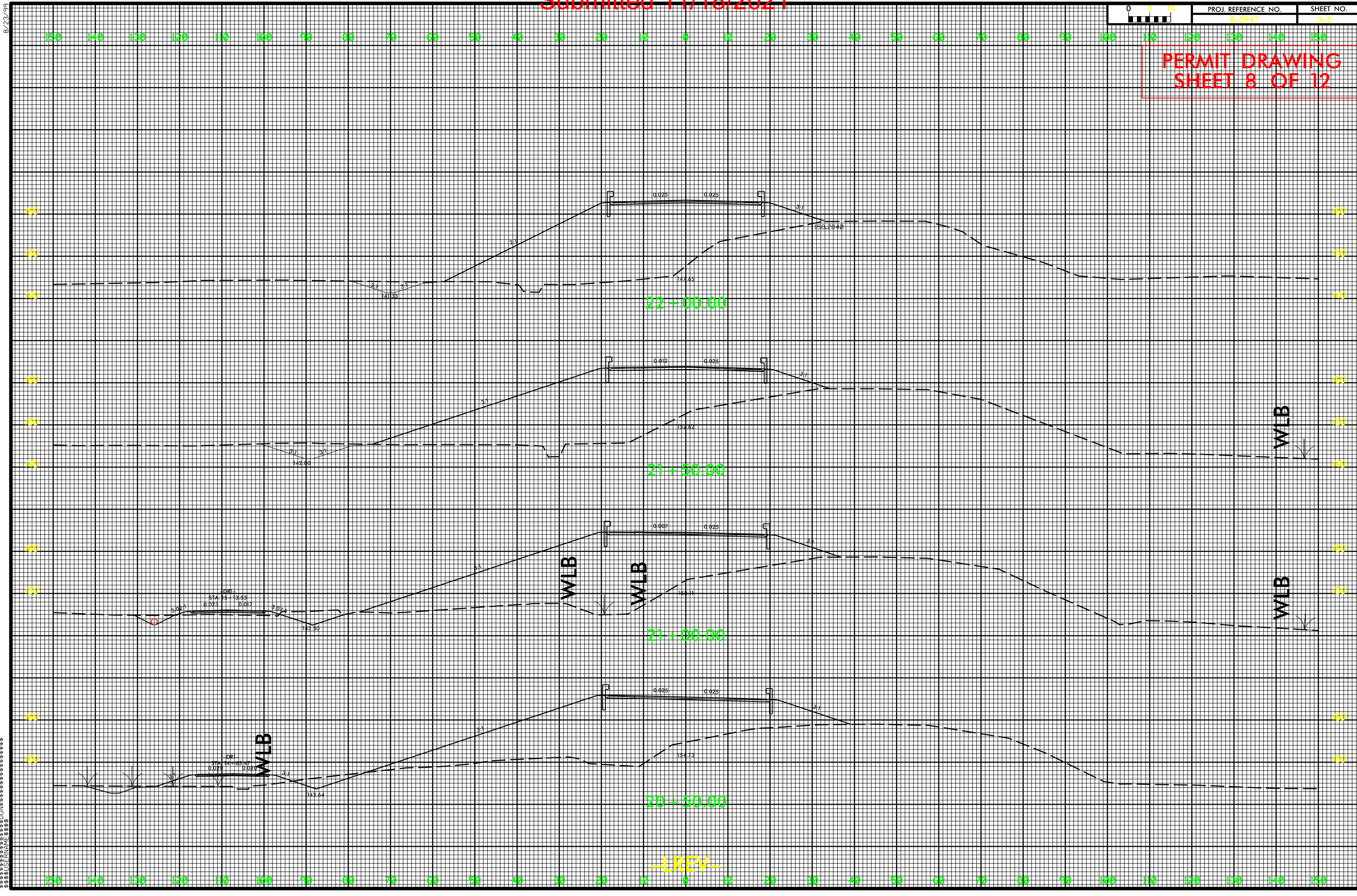
PERMIT DRAWING
SHEET 7 OF 12



SYNTHETIC
SECTION
PLAN
VIEW

8/23/99

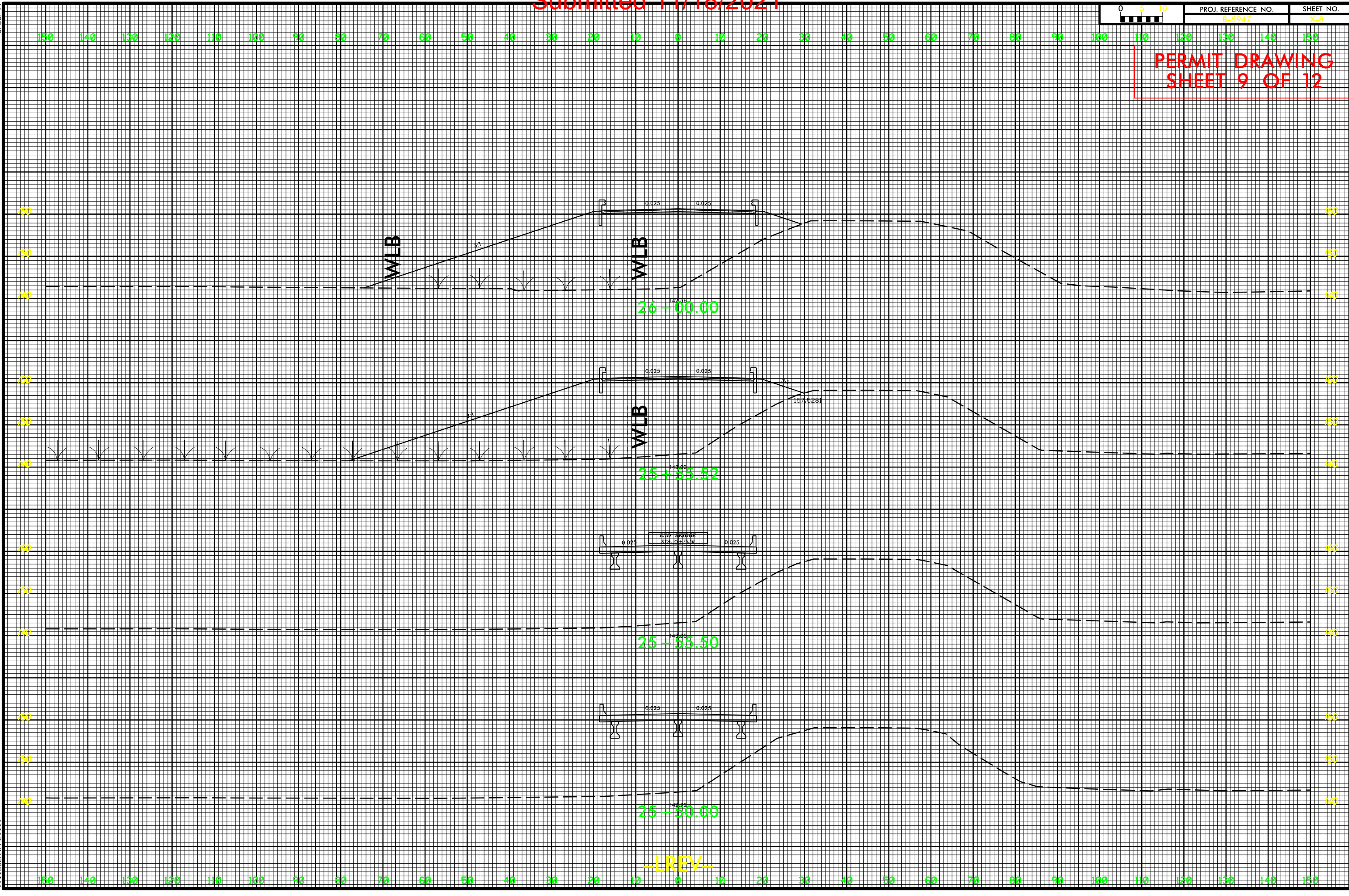
PERMIT DRAWING
SHEET 8 OF 12





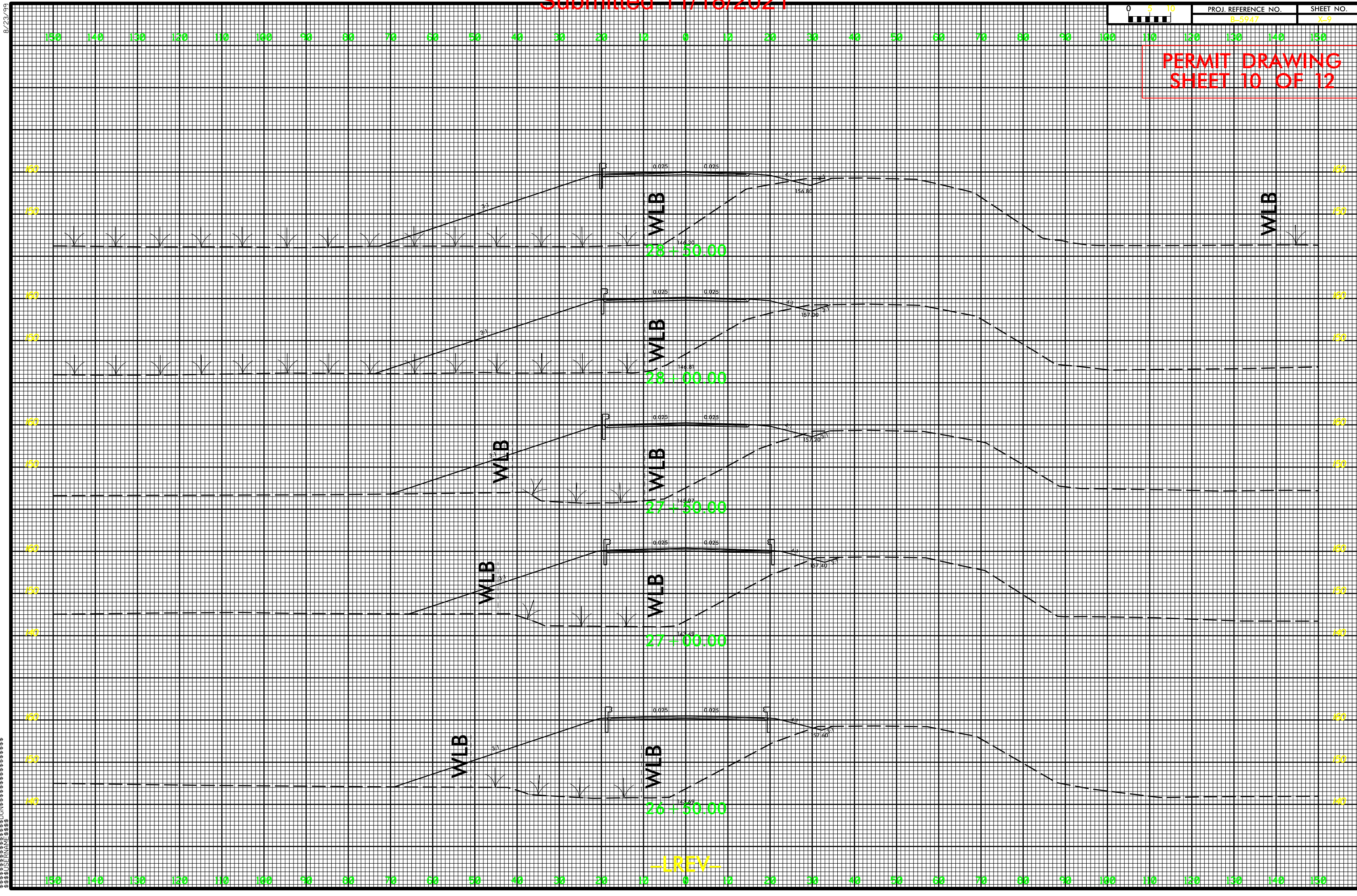
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B-5947	X-8

PERMIT DRAWING
SHEET 9 OF 12



8/23/99

PERMIT DRAWING
SHEET 10 OF 12





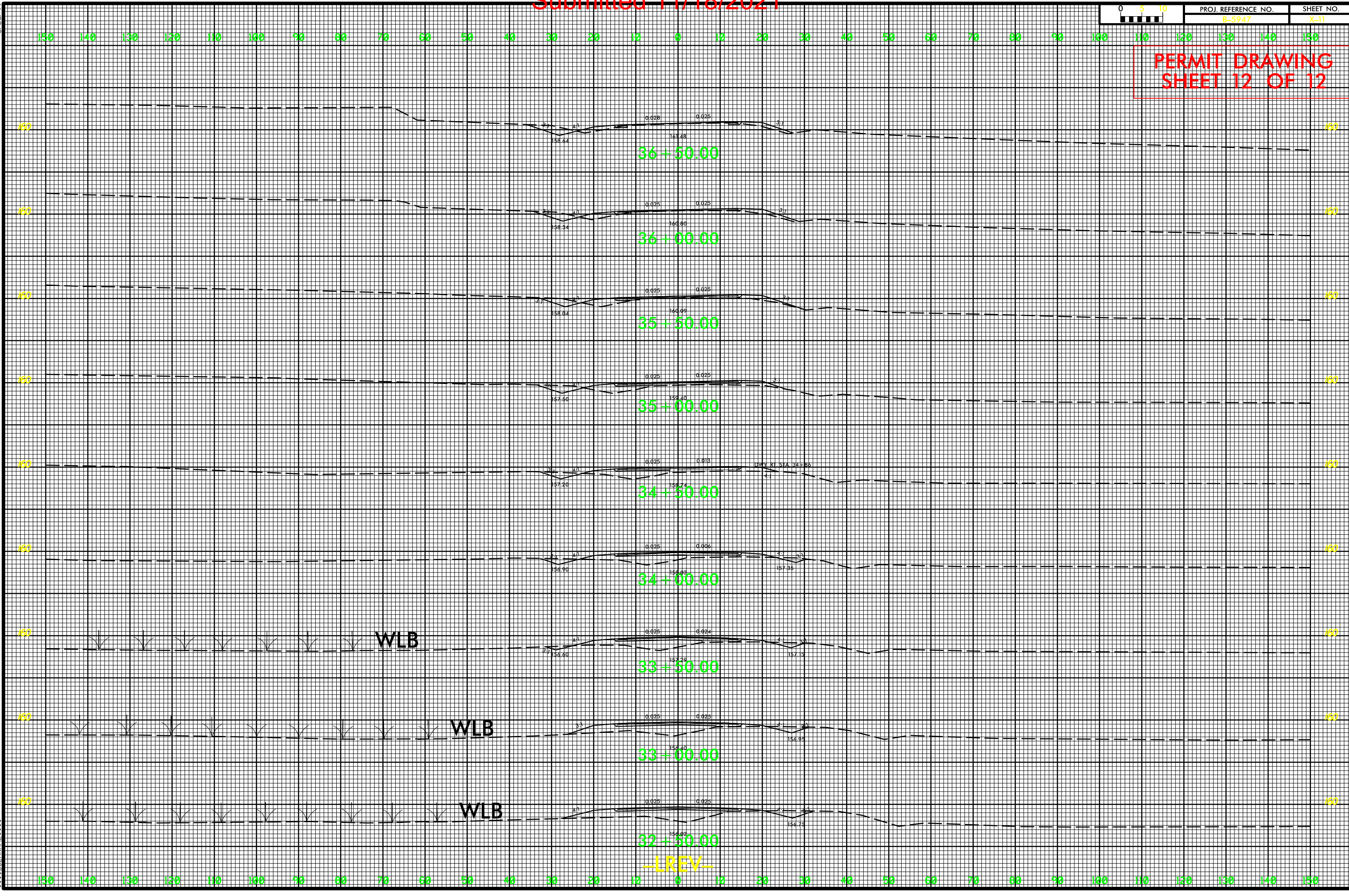
—LREV—

8/23/99



PROJ. REFERENCE NO.	SHEET NO.
B-5947	X-11

PERMIT DRAWING
SHEET 12 OF 12




SYNTHETIC
SECTION
PLAN
NAME

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols
See Sheet RW02C-1 TO RW02C-2 For Survey Control Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BUFFER DRAWING
SHEET 1 OF 4

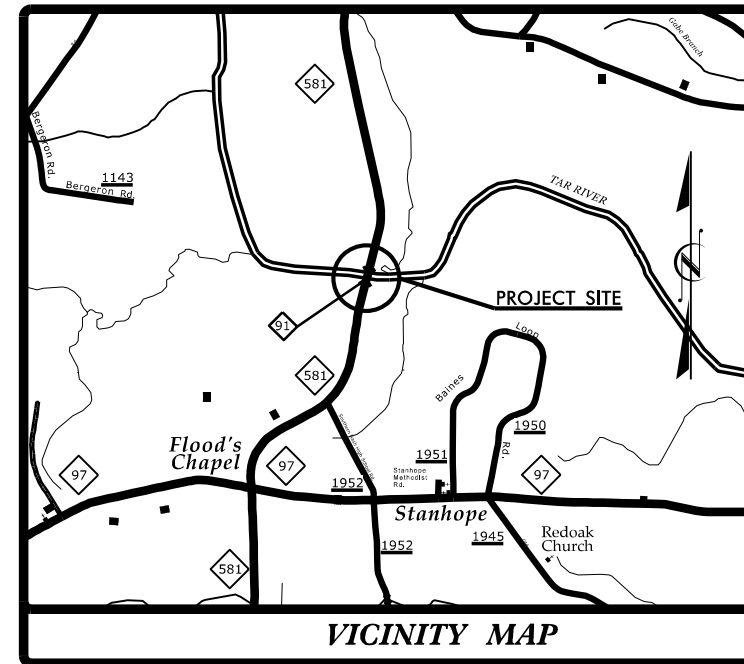
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5947	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
45983.1.1		PE	
45983.2.1		ROW, UTIL.	



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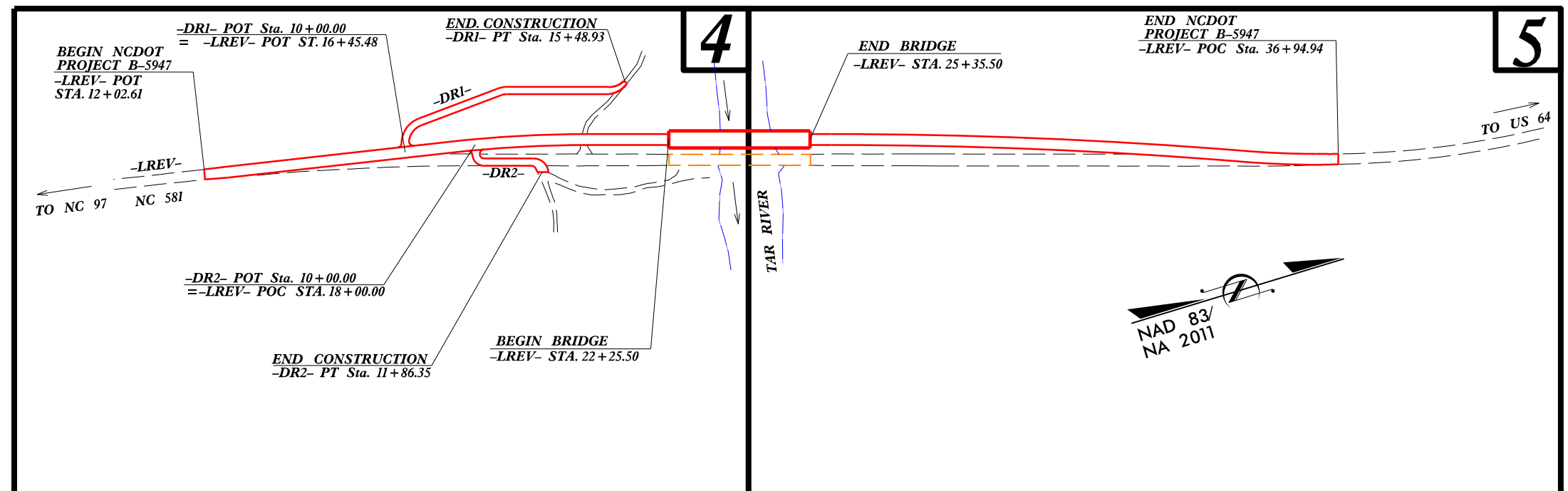
BRIDGE #630091



LOCATION: BRIDGE NO. 630091 OVER TAR RIVER
ON NC 581

TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE

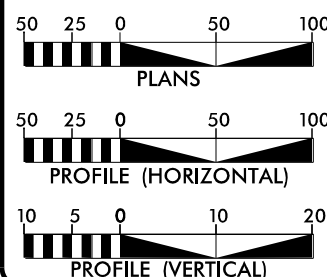
BUFFER IMPACTS PERMIT



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

DOCUMENT NOT CONSIDERED FINAL
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GRAPHIC SCALES



DESIGN DATA

ADT 2020 = 5,300
ADT 2040 = 6,300
K = 10 %
D = 55 %
T = 5 % *
V = 60 MPH
* (TTST = 1% +
DUAL = 4%)
FUNC CLASS =
MAJOR COLLECTOR
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY PROJECT B-5947 = 0.413 MILES
LENGTH STRUCTURE PROJECT B-5947 = 0.059 MILES
TOTAL LENGTH PROJECT B-5947 = 0.472 MILES

NCDOT CONTACT: DAVID STUTTS, PE
PROJECT ENGINEER - PEP/PROGRAM MGT.

Prepared for:
DIVISION OF HIGHWAYS
STRUCTURES MANAGEMENT UNIT
1000 BIRCH RIDGE DRIVE RALEIGH NC, 27610

2018 STANDARD SPECIFICATIONS
RIGHT OF WAY DATE:
DECEMBER 23, 2019

LETTING DATE:
DECEMBER 22, 2020

EDWARD G. WETHERILL, PE
PROJECT ENGINEER

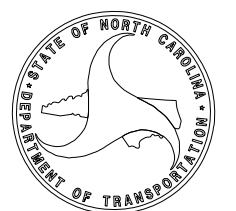
GREG S. PURVIS, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: P.E.

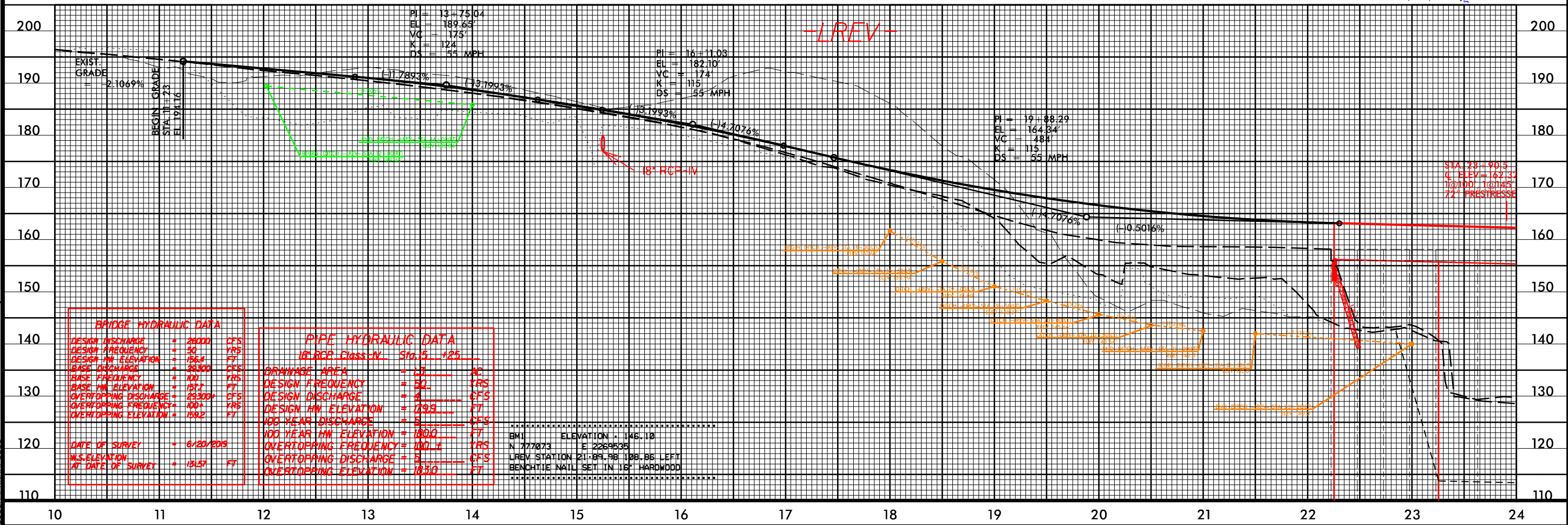
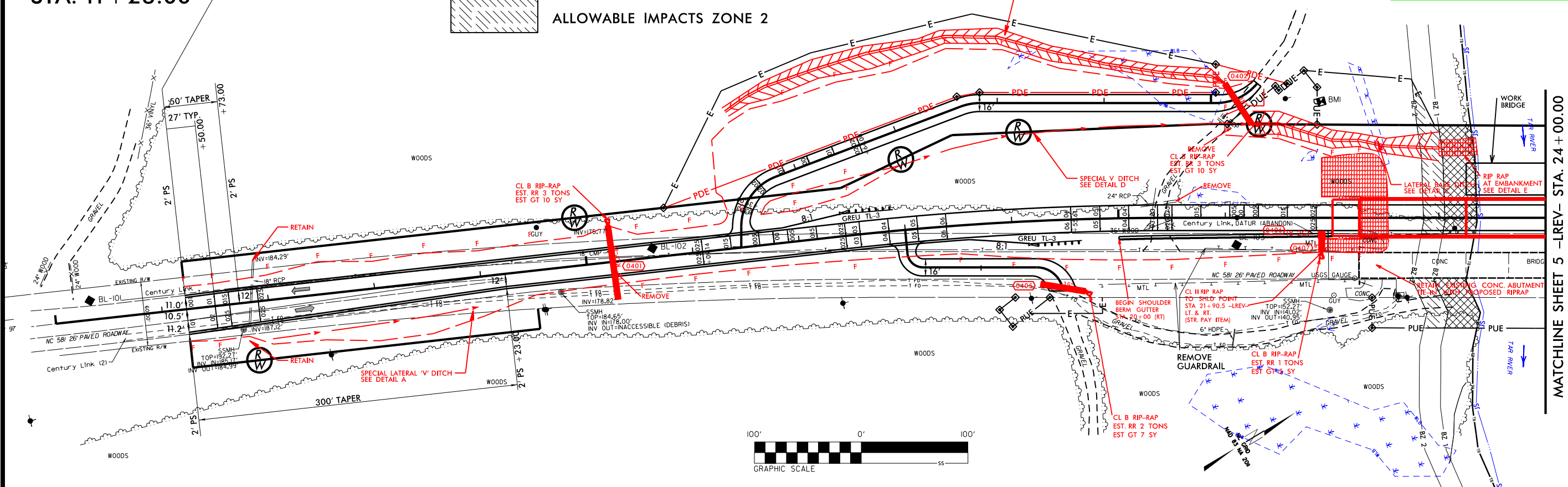


BEGIN NCDOT
PROJECT B-5947
-LREV- POT
STA. 11 + 23.00


BUFFER DRAWING
SHEET 2 OF 4

PROJECT REFERENCE NO. B-5947 SHEET NO. 4
WETHERILL ENGINEERING
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Fax: 919 851 8107
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CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2



DGN

PROJECT REFERENCE NO.	SHEET NO.
B-5947	5
	
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION	

