



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J.R. "JOEY" HOPKINS  
SECRETARY

May 15, 2024

**Addendum No. 1**

RE: Contract # C204796

WBS # 49622.3.1

FEDERAL AID # 0040120

**Haywood County (HB-0002)**

BRIDGES #248 AND #249 OVER SR-1613 (BEAVERDAM RD) ON I-40.

**May 28, 2024 Letting**

To Whom It May Concern:

Reference is made to the plans and proposal furnished to you on this project.

The following revision has been made to the Roadway plans.

| Sheet Nos.     | Revision  |
|----------------|---|
| 2B-1 thru 2B-2 | Temporary shoring labels revised.   |
| 3G-1           | “Summary of Settlement Gauges” table added. “Summary of Surcharges and Surcharge Waiting Periods” table added. “Summary of Reinforced Soil Slopes and Slope Erosion Control” table added. |

Please void the above listed Sheets in your plans and staple the revised Sheets thereto.

The following revision has been made to the Traffic Management plans.

| Sheet Nos.     | Revision  |
|----------------|---|
| TMP-08, TMP-11 | Revised to remove the conflicting shoring labels. |

Please void the above listed Sheets in your plans and staple the revised Sheets thereto.

Mailing Address:  
NC DEPARTMENT OF TRANSPORTATION  
CONTRACT STANDARDS AND DEVELOPMENT  
1591 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1591

Telephone: (919) 707-6900  
Fax: (919) 250-4127  
Customer Service: 1-877-368-4968

Location:  
1020 BIRCH RIDGE DR.  
RALEIGH, NC 27610

Website: [www.ncdot.gov](http://www.ncdot.gov)

The following revision has been made to the Cross Section plans.

| Sheet Nos.                        | Revision  |
|-----------------------------------|---|
| X-13 thru X-14,<br>X-35 thru X-41 | Cross sections have been revised to show the temporary shoring. |

Please void the above listed Sheets in your plans and staple the revised Sheets thereto.

The following revisions have been made to the proposal.

| Page No.          | Revision  |
|-------------------|---|
| Proposal Cover    | Note added that reads<br>"Includes Addendum No. 1 Dated 05-15-2024".                            |
| Table of Contents | Table of Contents updated to reflect changes below.   |
| G-35 thru G-47    | The Project Special Provision entitled <b>COOPERATION BETWEEN CONTRACTORS</b> has been revised. |

Please void the above listed existing Pages in your proposal and staple the revised Pages thereto.

The contract will be prepared accordingly.

Sincerely,

DocuSigned by:  
  
 52C46046381F443...

Ronald E. Davenport, Jr., PE  
 State Contract Officer

RED/cms  
 Attachments

cc: Mr. Wiley W. Jones III, PE  
 Ms. Wanda H. Payne, PE  
 Mr. Ken Kennedy, PE  
 Mr. Malcolm Bell

Mr. Forrest Dungan, PE  
 Ms. Jaci Kincaid  
 Mr. Jon Weathersbee, PE  
 Project File (2)

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH, N.C.

PROPOSAL

**INCLUDES ADDENDUM No.1 DATED 05-15-2024**

DATE AND TIME OF BID OPENING: **May 28, 2024 AT 02:00 PM**

CONTRACT ID C204796  
WBS 49622.3.1

FEDERAL-AID NO. 0040120  
COUNTY HAYWOOD  
T.I.P NO. HB-0002  
MILES 0.540  
ROUTE NO. I-40  
LOCATION BRIDGES #248 AND #249 OVER SR-1613 (BEAVERDAM RD) ON I-40.

TYPE OF WORK GRADING, DRAINAGE, PAVING, AND STRUCTURES.

**NOTICE:**

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

**BIDS WILL BE RECEIVED AS SHOWN BELOW:**

**THIS IS A ROADWAY & STRUCTURE PROPOSAL**

**5% BID BOND OR BID DEPOSIT REQUIRED**

---

**TABLE OF CONTENTS**

**COVER SHEET**  
**PROPOSAL SHEET**

**PROJECT SPECIAL PROVISIONS**

BUILD AMERICA, BUY AMERICA (BABA): ..... G-1  
 CONTRACT TIME AND LIQUIDATED DAMAGES: ..... G-1  
 INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES: ..... G-2  
 INTERMEDIATE CONTRACT TIME NUMBER 2 AND LIQUIDATED DAMAGES: ..... G-2  
 INTERMEDIATE CONTRACT TIME NUMBER 3 AND LIQUIDATED DAMAGES: ..... G-3  
 INTERMEDIATE CONTRACT TIME NUMBER 4 AND LIQUIDATED DAMAGES: ..... G-4  
 INTERMEDIATE CONTRACT TIME NUMBER 5 AND LIQUIDATED DAMAGES: ..... G-4  
 INTERMEDIATE CONTRACT TIME NUMBER 6 AND LIQUIDATED DAMAGES: ..... G-4  
 INTERMEDIATE CONTRACT TIME NUMBER 7 AND LIQUIDATED DAMAGES: ..... G-5  
 INTERMEDIATE CONTRACT TIME NUMBER 8 AND LIQUIDATED DAMAGES: ..... G-5  
 INTERMEDIATE CONTRACT TIME NUMBER 9 AND LIQUIDATED DAMAGES: ..... G-5  
 PERMANENT VEGETATION ESTABLISHMENT:..... G-5  
 CONSTRUCTION MORATORIUM:..... G-6  
 DELAY IN RIGHT OF ENTRY:..... G-6  
 MAJOR CONTRACT ITEMS: ..... G-6  
 SPECIALTY ITEMS:..... G-7  
 FUEL PRICE ADJUSTMENT:..... G-7  
 STEEL PRICE ADJUSTMENT:..... G-8  
 SCHEDULE OF ESTIMATED COMPLETION PROGRESS:..... G-19  
 DISADVANTAGED BUSINESS ENTERPRISE: ..... G-19  
 CERTIFICATION FOR FEDERAL-AID CONTRACTS: ..... G-32  
 RESTRICTIONS ON ITS EQUIPMENT AND SERVICES:..... G-33  
 USE OF UNMANNED AIRCRAFT SYSTEM (UAS): ..... G-33  
 EQUIPMENT IDLING GUIDELINES:..... G-33  
 U.S. DEPARTMENT OF TRANSPORTATION HOTLINE: ..... G-34  
 SUBSURFACE INFORMATION:..... G-34  
 PORTABLE CONCRETE BARRIER - (Partial Payments for Materials):..... G-34  
 MAINTENANCE OF THE PROJECT: ..... G-35  
 COOPERATION BETWEEN CONTRACTORS:..... G-35  
 BID DOCUMENTATION: ..... G-36  
 TWELVE MONTH GUARANTEE:..... G-39  
 EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION:..... G-39  
 PROCEDURE FOR MONITORING BORROW PIT DISCHARGE:..... G-44  
 NOTES TO CONTRACTOR: ..... G-46

ROADWAY ..... R-1

**STANDARD SPECIAL PROVISIONS**

AVAILABILITY FUNDS – TERMINATION OF CONTRACTS..... SSP-1  
 NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY ..... SSP-2  
 ERRATA..... SSP-5

PLANT AND PEST QUARANTINES ..... SSP-6  
 TITLE VI AND NONDISCRIMINATION ..... SSP-7  
 MINORITY AND FEMALE EMPLOYMENT REQUIREMENTS ..... SSP-15  
 REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONST. CONTRACTS ..... SSP-18  
 ON-THE-JOB TRAINING ..... SSP-32  
 MINIMUM WAGES ..... SSP-35

**UNIT PROJECT SPECIAL PROVISIONS**

GEOTECHNICAL .....GT-0.1  
 TRAFFIC CONTROL ..... TC-1  
 LIGHTING..... LT-1  
 UTILITY CONSTRUCTION ..... UC-1  
 UTILITY BY OTHERS.....UBO-1  
 EROSION CONTROL .....EC-1  
 STRUCTURE / CULVERTS..... ST-1

**PERMITS** .....P-1

**PROPOSAL ITEM SHEET**

ITEM SHEET(S)

The provisions of Subarticle 109-5(B) of the *Standard Specifications* will apply to the portable concrete barrier.

**MAINTENANCE OF THE PROJECT:**

(11-20-07) (Rev. 1-16-24)

104-10

SP1 G125

Revise the *Standard Specifications* as follows:

**Page 1-35, Article 104-10 Maintenance of the Project, line 3**, add the following after the first sentence of the first paragraph:

All guardrail/guiderail within the project limits shall be included in this maintenance.

**Page 1-35, Article 104-10 MAINTENANCE OF THE PROJECT, line 8**, add the following as the last sentence of the first paragraph:

The Contractor shall perform weekly inspections of guardrail and guiderail and shall report damages to the Engineer on the same day of the weekly inspection. *Where damaged guardrail or guiderail is repaired or replaced as a result of maintaining the project* in accordance with this article, such repair or replacement shall be performed within 7 consecutive calendar days of such inspection report.

**Page 1-35, Article 104-10 MAINTENANCE OF THE PROJECT, lines 20-22**, replace the last sentence of the last paragraph with the following:

The Contractor will not be directly compensated for any maintenance operations necessary, except for maintenance of guardrail/guiderail, as this work will be considered incidental to the work covered by the various contract items. The provisions of Article 104-7, Extra Work, and Article 104-8, Compensation and Record Keeping will apply to authorized maintenance of guardrail/guiderail. Performance of weekly inspections of guardrail/guiderail, and the damage reports required as described above, will be considered to be an incidental part of the work being paid for by the various contract items.

**COOPERATION BETWEEN CONTRACTORS:**

(7-1-95)(Rev. 1-16-24)

105-7

SP1 G133

The Contractor's attention is directed to Article 105-7 of the *Standard Specifications*.

HB-0003 (Haywood County) is located in proximity to this project; HB-0003 is anticipated for a July 16, 2024 Letting.

HB-0004 (Haywood County) is located in proximity to this project; HB-0004 is anticipated for a July 16, 2024 Letting.

I-5834B (C204701) is located within the project limits. I-5834B is currently under construction and not anticipated to be complete prior to the letting of this project.

The Contractor on this project shall cooperate with the Contractor working within or adjacent to the limits of this project to the extent that the work can be carried out to the best advantage of all concerned.

**BID DOCUMENTATION:**

(1-1-02) (Rev.8-18-15)

103

SP1 G142

**General**

The successful Bidder (Contractor) shall submit the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation used to prepare the bid for this contract to the Department within 10 days after receipt of notice of award of contract. Such documentation shall be placed in escrow with a banking institution or other bonded document storage facility selected by the Department.

The Department will not execute the contract until the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation has been received by the Department.

**Terms**

*Bid Documentation* - Bid Documentation shall mean all written information, working papers, computer printouts, electronic media, charts, and all other data compilations which contain or reflect information, data, and calculations used by the Bidder in the preparation of the bid. The term *bid documentation* includes, but is not limited to, contractor equipment rates, contractor overhead rates, labor rates, efficiency or productivity factors, arithmetical calculations, and quotations from subcontractors and material suppliers to the extent that such rates and quotations were used by the Bidder in formulating and determining the bid. The term *bid documentation* also includes any manuals, which are standard to the industry used by the Bidder in determining the bid. Such manuals may be included in the bid documentation by reference. Such reference shall include the name and date of the publication and the publisher. *Bid Documentation* does not include bid documents provided by the Department for use by the Bidder in bidding on this project. The Bid Documentation can be in the form of electronic submittal (i.e. thumb drive) or paper. If the Bidder elects to submit the Bid Documentation in electronic format, the Department requires a backup submittal (i.e. a second thumb drive) in case one is corrupted.

*Contractor's Representative* - Officer of the Contractor's company; if not an officer, the Contractor shall supply a letter signed and notarized by an officer of the Contractor's company, granting permission for the representative to sign the escrow agreement on behalf of the Contractor.

*Escrow Agent* - Officer of the select banking institution or other bonded document storage facility authorized to receive and release bid documentation.

**Escrow Agreement Information**

A draft copy of the Escrow Agreement will be mailed to the Bidder after the notice of award for informational purposes. The Bidder and Department will sign the actual Escrow Agreement at the time the bid documentation is delivered to the Escrow Agent.

**Failure to Provide Bid Documentation**

The Bidder's failure to provide the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation within 10 days after the notice of award is received may be just cause for rescinding the award of the contract and may result in the removal of the Bidder from the Department's list of qualified bidders for a period of up to 180 days. Award may then be

made to the next lowest responsible bidder or the work may be readvertised and constructed under the contract or otherwise, as the Department may decide.

### **Submittal of Bid Documentation**

- (A) Appointment – Email [specs@ncdot.gov](mailto:specs@ncdot.gov) or call 919.707.6900 to schedule an appointment.
- (B) Delivery - A representative of the Bidder shall deliver the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation to the Department, in a container suitable for sealing, within 10 days after the notice of award is received.
- (C) Packaging – The container shall be no larger than 15.5 inches in length by 12 inches wide by 11 inches high and shall be water resistant. The container shall be clearly marked on the face and the back of the container with the following information: Bid Documentation, Bidder's Name, Bidder's Address, Date of Escrow Submittal, Contract Number, TIP Number if applicable, and County.

### **Affidavit**

Bid documentation will be considered a certified copy if the Bidder includes an affidavit stating that the enclosed documentation is an EXACT copy of the original documentation used by the Bidder to determine the bid for this project. The affidavit shall also list each bid document with sufficient specificity so a comparison may be made between the list and the bid documentation to ensure that all of the bid documentation listed in the affidavit has been enclosed for escrow. The affidavit shall attest that the affiant has personally examined the bid documentation, that the affidavit lists all of the documents used by the Bidder to determine the bid for this project, and that all bid documentation has been included. The affidavit shall be signed by a chief officer of the company, have the person's name and title typed below the signature, and the signature shall be notarized at the bottom of the affidavit.

### **Verification**

Upon delivery of the bid documentation, the Department's Contract Officer and the Bidder's representative will verify the accuracy and completeness of the bid documentation compared to the affidavit. Should a discrepancy exist, the Bidder's representative shall immediately furnish the Department's Contract Officer with any other needed bid documentation. The Department's Contract Officer upon determining that the bid documentation is complete will, in the presence of the Bidder's representative, immediately place the complete bid documentation and affidavit in the container and seal it. Both parties will deliver the sealed container to the Escrow Agent for placement in a safety deposit box, vault, or other secure accommodation.

**Confidentiality of Bid Documentation**

The bid documentation and affidavit in escrow are, and will remain, the property of the Bidder. The Department has no interest in, or right to, the bid documentation and affidavit other than to verify the contents and legibility of the bid documentation unless the Contractor gives written notice of intent to file a claim, files a written claim, files a written and verified claim, or initiates litigation against the Department. In the event of such written notice of intent to file a claim, filing of a written claim, filing a written and verified claim, or initiation of litigation against the Department, or receipt of a letter from the Contractor authorizing release, the bid documentation and affidavit may become the property of the Department for use in considering any claim or in litigation as the Department may deem appropriate.

Any portion or portions of the bid documentation designated by the Bidder as a *trade secret* at the time the bid documentation is delivered to the Department's Contract Officer shall be protected from disclosure as provided by *G.S. 132-1.2*.

**Duration and Use**

The bid documentation and affidavit shall remain in escrow until 60 calendar days from the time the Contractor receives the final estimate; or until such time as the Contractor:

- (A) Gives written notice of intent to file a claim,
- (B) Files a written claim,
- (C) Files a written and verified claim,
- (D) Initiates litigation against the Department related to the contract; or
- (E) Authorizes in writing its release.

Upon the giving of written notice of intent to file a claim, filing a written claim, filing a written and verified claim, or the initiation of litigation by the Contractor against the Department, or receipt of a letter from the Contractor authorizing release, the Department may obtain the release and custody of the bid documentation.

The Bidder certifies and agrees that the sealed container placed in escrow contains all of the bid documentation used to determine the bid and that no other bid documentation shall be relevant or material in litigation over claims brought by the Contractor arising out of this contract.

**Release of Bid Documentation to the Contractor**

If the bid documentation remains in escrow 60 calendar days after the time the Contractor receives the final estimate and the Contractor has not filed a written claim, filed a written and verified claim, or has not initiated litigation against the Department related to the contract, the Department will instruct the Escrow Agent to release the sealed container to the Contractor.

The Contractor will be notified by certified letter from the Escrow Agent that the bid documentation will be released to the Contractor. The Contractor or his representative shall retrieve the bid documentation from the Escrow Agent within 30 days of the receipt of the certified letter. If the Contractor does not receive the documents within 30 days of the receipt of the certified letter, the Department will contact the Contractor to determine final dispersion of the bid documentation.

## Payment

The cost of the escrow will be borne by the Department. There will be no separate payment for all costs of compilation of the data, container, or verification of the bid documentation. Payment at the various contract unit or lump sum prices in the contract will be full compensation for all such costs.

### **TWELVE MONTH GUARANTEE:**

(7-15-03)

108

SP1 G145

- (A) The Contractor shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the Department. The Contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of the Department, and/or for use in excess of the design.
- (B) Where items of equipment or material carry a manufacturer's guarantee for any period in excess of twelve months, then the manufacturer's guarantee shall apply for that particular piece of equipment or material. The Department's first remedy shall be through the manufacturer although the Contractor is responsible for invoking the warranted repair work with the manufacturer. The Contractor's responsibility shall be limited to the term of the manufacturer's guarantee. NCDOT would be afforded the same warranty as provided by the Manufacturer.

This guarantee provision shall be invoked only for major components of work in which the Contractor would be wholly responsible for under the terms of the contract. Examples would include pavement structures, bridge components, and sign structures. This provision will not be used as a mechanism to force the Contractor to return to the project to make repairs or perform additional work that the Department would normally compensate the Contractor for. In addition, routine maintenance activities (i.e. mowing grass, debris removal, ruts in earth shoulders,) are not parts of this guarantee.

Appropriate provisions of the payment and/or performance bonds shall cover this guarantee for the project.

To ensure uniform application statewide the Division Engineer will forward details regarding the circumstances surrounding any proposed guarantee repairs to the Chief Engineer for review and approval prior to the work being performed.

### **EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION:**

(1-16-07) (Rev 12-15-20)

105-16, 225-2, 16

SP1 G180

## General

Schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. Comply with the requirements herein regardless of whether or not a National Pollution discharge Elimination System (NPDES) permit for the work is required.

Establish a chain of responsibility for operations and subcontractors' operations to ensure that the *Erosion and Sediment Control/Stormwater Pollution Prevention Plan* is implemented and maintained over the life of the contract.

- (A) *Certified Supervisor* - Provide a certified Erosion and Sediment Control/Stormwater Supervisor to manage the Contractor and subcontractor operations, insure compliance with Federal, State and Local ordinances and regulations, and manage the Quality Control Program.
- (B) *Certified Foreman* - Provide a certified, trained foreman for each construction operation that increases the potential for soil erosion or the possible sedimentation and turbidity of surface waters.
- (C) *Certified Installer* - Provide a certified installer to install or direct the installation for erosion or sediment/stormwater control practices.
- (D) *Certified Designer* - Provide a certified designer for the design of the erosion and sediment control/stormwater component of reclamation plans and, if applicable, for the design of the project erosion and sediment control/stormwater plan.

### **Roles and Responsibilities**

- (A) *Certified Erosion and Sediment Control/Stormwater Supervisor* - The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:
  - (1) **Manage Operations** - Coordinate and schedule the work of subcontractors so that erosion and sediment control/stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.
    - (a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.
    - (b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
    - (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
    - (d) Implement the erosion and sediment control/stormwater site plans requested.
    - (e) Provide any needed erosion and sediment control/stormwater practices for the Contractor's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
    - (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.

- (g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.
  - (h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.
  - (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Contractor's operations.
  - (j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or any location where sediment leaves the Right-of-Way.
  - (k) Have available a set of erosion and sediment control/stormwater plans that are initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.
- (2) Requirements set forth under the NPDES Permit - The Department's NPDES Stormwater permit (NCS000250) outlines certain objectives and management measures pertaining to construction activities. The permit references *NCG010000, General Permit to Discharge Stormwater* under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion and Sediment Control Program for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. Some of the requirements are, but are not limited to:
- (a) Control project site waste to prevent contamination of surface or ground waters of the state, i.e. from equipment operation/maintenance, construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste.
  - (b) Inspect erosion and sediment control/stormwater devices and stormwater discharge outfalls at least once every 7 calendar days and within 24 hours after a rainfall event equal to or greater than 1.0 inch that occurs within a 24 hour period. Additional monitoring may be required at the discretion of Division of Water Resources personnel if the receiving stream is 303(d) listed for turbidity and the project has had documented problems managing turbidity.
  - (c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily record of rainfall amounts and dates.
  - (d) Maintain erosion and sediment control/stormwater inspection records for review by Department and Regulatory personnel upon request.
  - (e) Implement approved reclamation plans on all borrow pits, waste sites and staging areas.
  - (f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.
  - (g) Provide secondary containment for bulk storage of liquid materials.
  - (h) Provide training for employees concerning general erosion and sediment control/stormwater awareness, the Department's NPDES Stormwater

Permit NCS000250 requirements, and the applicable requirements of the *General Permit, NCG010000*.

- (i) Report violations of the NPDES permit to the Engineer immediately who will notify the Division of Water Quality Regional Office within 24 hours of becoming aware of the violation.
- (3) Quality Control Program - Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:
- (a) Follow permit requirements related to the Contractor and subcontractors' construction activities.
  - (b) Ensure that all operators and subcontractors on site have the proper erosion and sediment control/stormwater certification.
  - (c) Notify the Engineer when the required certified erosion and sediment control/stormwater personnel are not available on the job site when needed.
  - (d) Conduct the inspections required by the NPDES permit.
  - (e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
  - (f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.
  - (g) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
  - (h) Ensure proper installation and maintenance of temporary erosion and sediment control devices.
  - (i) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
  - (j) The Contractor's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records available at all times for verification by the Engineer.
- (B) *Certified Foreman* - At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:
- (1) Foreman in charge of grading activities
  - (2) Foreman in charge of bridge or culvert construction over jurisdictional areas
  - (3) Foreman in charge of utility activities

The Contractor may request to use the same person as the Level II Supervisor and Level II Foreman. This person shall be onsite whenever construction activities as described above are taking place. This request shall be approved by the Engineer prior to work beginning.

The Contractor may request to name a single Level II Foreman to oversee multiple construction activities on small bridge or culvert replacement projects. This request shall be approved by the Engineer prior to work beginning.

(C) *Certified Installers* - Provide at least one onsite, Level I Certified Installer for each of the following erosion and sediment control/stormwater crew:

- (1) Seeding and Mulching
- (2) Temporary Seeding
- (3) Temporary Mulching
- (4) Sodding
- (5) Silt fence or other perimeter erosion/sediment control device installations
- (6) Erosion control blanket installation
- (7) Hydraulic tackifier installation
- (8) Turbidity curtain installation
- (9) Rock ditch check/sediment dam installation
- (10) Ditch liner/matting installation
- (11) Inlet protection
- (12) Riprap placement
- (13) Stormwater BMP installations (such as but not limited to level spreaders, retention/detention devices)
- (14) Pipe installations within jurisdictional areas

If a Level I *Certified Installer* is not onsite, the Contractor may substitute a Level II Foreman for a Level I Installer, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.

(D) *Certified Designer* - Include the certification number of the Level III Certified Designer on the erosion and sediment control/stormwater component of all reclamation plans and if applicable, the certification number of the Level III Certified Designer on the design of the project erosion and sediment control/stormwater plan.

### **Preconstruction Meeting**

Furnish the names of the *Certified Erosion and Sediment Control/Stormwater Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* and notify the Engineer of changes in certified personnel over the life of the contract within 2 days of change.

### **Ethical Responsibility**

Any company performing work for the North Carolina Department of Transportation has the ethical responsibility to fully disclose any reprimand or dismissal of an employee resulting from improper testing or falsification of records.

### **Revocation or Suspension of Certification**

Upon recommendation of the Chief Engineer to the certification entity, certification for *Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* may be revoked or suspended with the issuance of an *Immediate Corrective Action (ICA)*, *Notice of Violation (NOV)*, or *Cease and Desist Order* for erosion and sediment control/stormwater related issues.

The Chief Engineer may recommend suspension or permanent revocation of certification due to the following:

- (A) Failure to adequately perform the duties as defined within this certification provision.
- (B) Issuance of an ICA, NOV, or Cease and Desist Order.
- (C) Failure to fully perform environmental commitments as detailed within the permit conditions and specifications.
- (D) Demonstration of erroneous documentation or reporting techniques.
- (E) Cheating or copying another candidate's work on an examination.
- (F) Intentional falsification of records.
- (G) Directing a subordinate under direct or indirect supervision to perform any of the above actions.
- (H) Dismissal from a company for any of the above reasons.
- (I) Suspension or revocation of one's certification by another entity.

Suspension or revocation of a certification will be sent by certified mail to the certificant and the Corporate Head of the company that employs the certificant.

A certificant has the right to appeal any adverse action which results in suspension or permanent revocation of certification by responding, in writing, to the Chief Engineer within 10 calendar days after receiving notice of the proposed adverse action.

Chief Engineer  
1536 Mail Service Center  
Raleigh, NC 27699-1536

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified will result in a waiver of all future appeal rights regarding the adverse action taken. The certificant will not be allowed to perform duties associated with the certification during the appeal process.

The Chief Engineer will hear the appeal and make a decision within 7 days of hearing the appeal. Decision of the Chief Engineer will be final and will be made in writing to the certificant.

If a certification is temporarily suspended, the certificant shall pass any applicable written examination and any proficiency examination, at the conclusion of the specified suspension period, prior to having the certification reinstated.

### **Measurement and Payment**

*Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer* will be incidental to the project for which no direct compensation will be made.

### **PROCEDURE FOR MONITORING BORROW PIT DISCHARGE:**

(2-20-07) (Rev. 1-16-24)

105-16, 230, 801

SP1 G181

Water discharge from borrow pit sites shall not cause surface waters to exceed 50 NTUs (nephelometric turbidity unit) in streams not designated as trout waters and 10 NTUs in streams, lakes or reservoirs designated as trout waters. For lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTUs. If the turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased.

If during any operating day, the downstream water quality exceeds the standard, the Contractor shall do all of the following:

- (A) Either cease discharge or modify the discharge volume or turbidity levels to bring the downstream turbidity levels into compliance, or
- (B) Evaluate the upstream conditions to determine if the exceedance of the standard is due to natural background conditions. If the background turbidity measurements exceed the standard, operation of the pit and discharge can continue as long as the stream turbidity levels are not increased due to the discharge.
- (C) Measure and record the turbidity test results (time, date and sampler) at all defined sampling locations 30 minutes after startup and at a minimum, one additional sampling of all sampling locations during that 24-hour period in which the borrow pit is discharging.
- (D) Notify DWQ within 24 hours of any stream turbidity standard exceedances that are not brought into compliance.

During the Environmental Assessment required by Article 230-4 of the *Standard Specifications*, the Contractor shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

The discharge shall be closely monitored when water from the dewatering activities is introduced into jurisdictional wetlands. Any time visible sedimentation (deposition of sediment) on the wetland surface is observed, the dewatering activity will be suspended until turbidity levels in the stilling basin can be reduced to a level where sediment deposition does not occur. Staining of wetland surfaces from suspended clay particles, occurring after evaporation or infiltration, does not constitute sedimentation. No activities shall occur in wetlands that adversely affect the functioning of a wetland. Visible sedimentation will be considered an indication of possible adverse impacts on wetland use.

The Engineer will perform independent turbidity tests on a random basis. These results will be maintained in a log within the project records. Records will include, at a minimum, turbidity test results, time, date and name of sampler. Should the Department's test results exceed those of the Contractor's test results, an immediate test shall be performed jointly with the results superseding the previous test results of both the Department and the Contractor.

The Contractor shall use the *NCDOT Turbidity Reduction Options for Borrow Pits Matrix*, available at <https://connect.ncdot.gov/resources/roadside/FieldOperationsDocuments/TurbidityReductionOptionSheet.pdf> to plan, design, construct, and maintain BMPs to address water quality standards. Tier I Methods include stilling basins which are standard compensatory BMPs. Other Tier I methods are noncompensatory and shall be used when needed to meet the stream turbidity standards. Tier II Methods are also noncompensatory and are options that may be needed for protection of rare or unique resources or where special environmental conditions

exist at the site which have led to additional requirements being placed in the DWQ's 401 Certifications and approval letters, Isolated Wetland Permits, Riparian Buffer Authorization or a DOT Reclamation Plan's Environmental Assessment for the specific site. Should the Contractor exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

The Contractor may use cation exchange capacity (CEC) values from proposed site borings to plan and develop the bid for the project. CEC values exceeding 15 milliequivalents per 100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.

**NOTES TO CONTRACTOR:**

The Department will survey bridge structures and any culverts greater than or equal to 3 feet manufactured diameter within the action area for bats and signs of bat use within 14 days of construction. If federally listed or proposed bats are found during construction, work on the bridge or culvert shall be halted and the Department will contact the U.S Fish and Wildlife Service (USFWS) for further coordination prior to work resuming.

Temporary lighting associated with night work shall be shielded and directed away from waterways and riparian areas.

No Blasting shall occur.

No staging activities shall occur outside of the project limits.

The Department will perform archaeological monitoring of the non-contributing element of 31HW271 within the existing right of way (161.1 m) during construction activities per the request of the Cherokee Nation Tribal Historic Preservation. An archaeologist will be on site daily during construction activities adjacent to or on the 31HW271 site. The site is located in the northeast quadrant of the intersection of Beaverdam Road and Freedom Drive. The specific 161.1 square meter area requiring monitoring is located in the southwest corner of this quadrant. All work shall be in accordance with the *Standard Specifications* with the contractors attention specifically directed to Section 225-3, Page 2-15 lines 27-30.



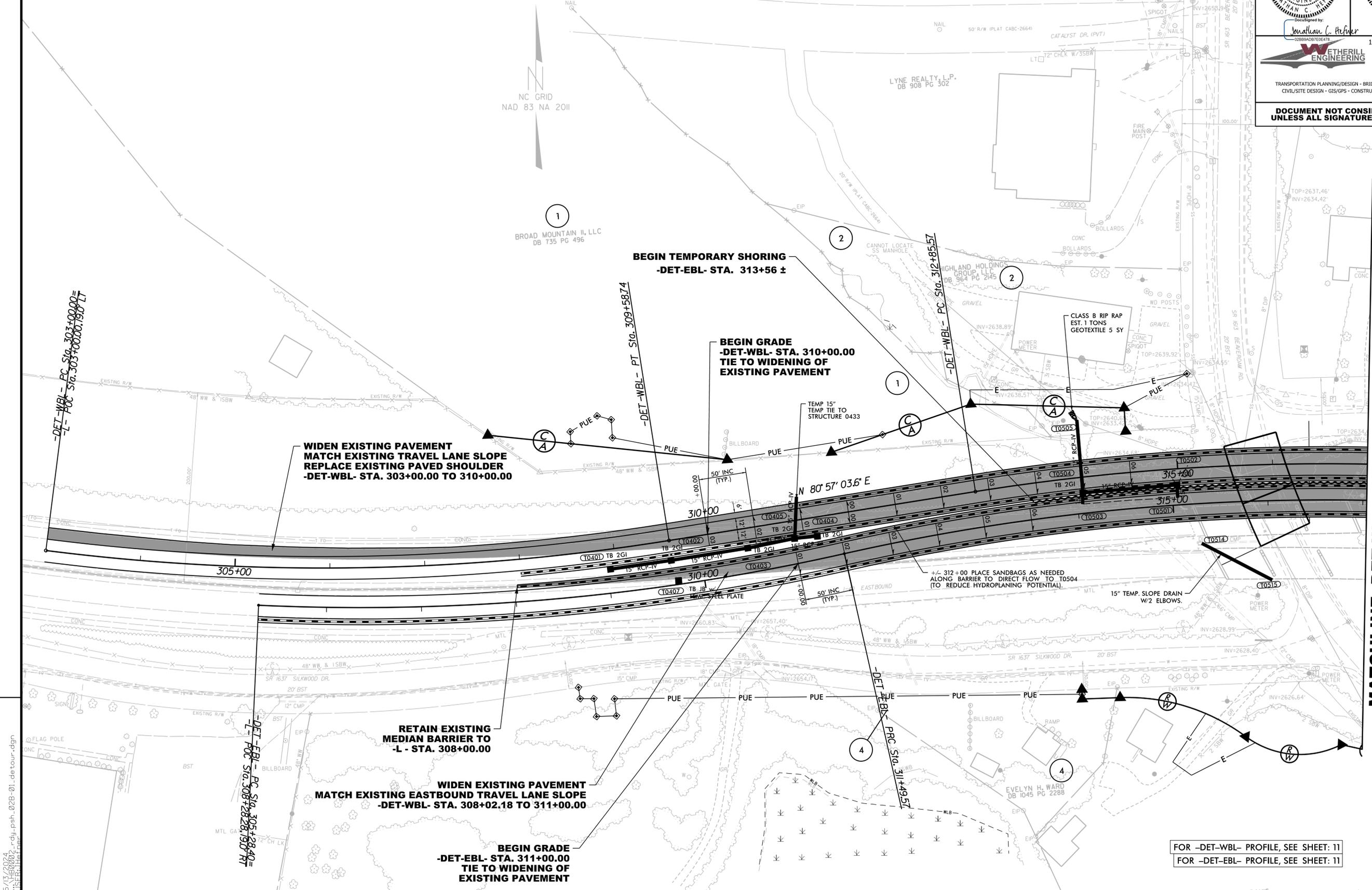
8/17/2024

| -DET-WBL- CURVE DATA                 |                                      | -DET-EBL- CURVE DATA                 |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| PI Sta 306+31.60                     | PI Sta 316+48.00                     | PI Sta 308+40.85                     | PI Sta 317+76.32                     |
| $\Delta = 16^{\circ} 16' 06.6"$ (LT) | $\Delta = 17^{\circ} 32' 05.3"$ (RT) | $\Delta = 15^{\circ} 20' 26.5"$ (LT) | $\Delta = 30^{\circ} 20' 06.8"$ (RT) |
| D = 2' 28' 10.7"                     | D = 2' 26' 17.2"                     | D = 2' 28' 10.7"                     | D = 2' 28' 41.5"                     |
| L = 658.74'                          | L = 719.19'                          | L = 621.17'                          | L = 1,224.09'                        |
| T = 331.60'                          | T = 362.43'                          | T = 312.45'                          | T = 626.75'                          |
| R = 2,320.00'                        | R = 2,350.00'                        | R = 2,320.00'                        | R = 2,312.00'                        |
| SE = EXIST                           | SE = .06                             | SE = .06                             | SE = .06                             |
| DS = 60 MPH                          |

**TEMPORARY SHORING**  
 SEE TRAFFIC CONTROL PLANS FOR DESIGN PARAMETERS AND FINAL LOCATIONS.

|  |                                  |
|--|----------------------------------|
| PROJECT REFERENCE NO.<br><b>HB-0002</b>  | SHEET NO.<br><b>2B-1</b>         |
| RW SHEET NO.   |                                  |
| ROADWAY DESIGN ENGINEER<br>5/13/2024   | HYDRAULICS ENGINEER<br>6/13/2024 |
|  |                                  |
| <br>TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN<br>CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION |                                  |
| <b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>   |                                  |

REVISIONS



MATCHLINE -DET-WBL- STA. 317+00 SEE SHEET 2B-2

FOR -DET-WBL- PROFILE, SEE SHEET: 11  
 FOR -DET-EBL- PROFILE, SEE SHEET: 11

5/13/2024  
 JLS:EBL  
 11:58:11 AM

8/17/99

| -DET-WBL- CURVE DATA                 |                                      | -DET-EBL- CURVE DATA                 |  |
|--------------------------------------|--------------------------------------|--------------------------------------|--|
| PI Sta 316+48.00                     | PI Sta 325+12.73                     | PI Sta 317+76.32                     |  |
| $\Delta = 17^{\circ} 32' 05.3" (RT)$ | $\Delta = 10^{\circ} 33' 12.2" (RT)$ | $\Delta = 30^{\circ} 20' 06.8" (RT)$ |  |
| D = 2' 26' 17.2"                     | D = 1' 02' 30.3"                     | D = 2' 28' 41.5"                     |  |
| L = 719.19'                          | L = 1,013.05'                        | L = 1,224.09'                        |  |
| T = 362.43'                          | T = 507.96'                          | T = 626.75'                          |  |
| R = 2,350.00'                        | R = 5,500.00'                        | R = 2,312.00'                        |  |
| SE = .06                             | SE = EXIST                           | SE = .06                             |  |
| DS = 60 MPH                          | DS = 60 MPH                          | DS = 60 MPH                          |  |

PROJECT REFERENCE NO. **HB-0002** SHEET NO. **2B-2**

R/W SHEET NO.

ROADWAY DESIGN ENGINEER  
5/13/2024  
SEAL 35016  
JONATHAN C. HEFFNER

HYDRAULICS ENGINEER  
5/13/2024  
SEAL 15833  
JERRY L. LINDSEY

WETHERILL ENGINEERING  
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

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

**TEMPORARY SHORING**  
SEE TRAFFIC CONTROL PLANS FOR DESIGN PARAMETERS AND FINAL LOCATIONS.

NC GRID  
NAD 83 NA 2011

**MATCHLINE -DET-WBL- STA. 317+00 SEE SHEET 2B-1**

**WIDEN EXISTING PAVEMENT  
MATCH EXISTING TRAVEL LANE SLOPE  
REPLACE EXISTING PAVED SHOULDER  
-DET-WBL- STA. 322+50.00 TO  
-L- STA. 331+50.00**

**END GRADE  
-DET-WBL- STA. 322+50.00  
TIE TO WIDENING OF  
EXISTING PAVEMENT**

**END TEMPORARY SHORING  
-DET-EBL- STA. 322+60 ±**

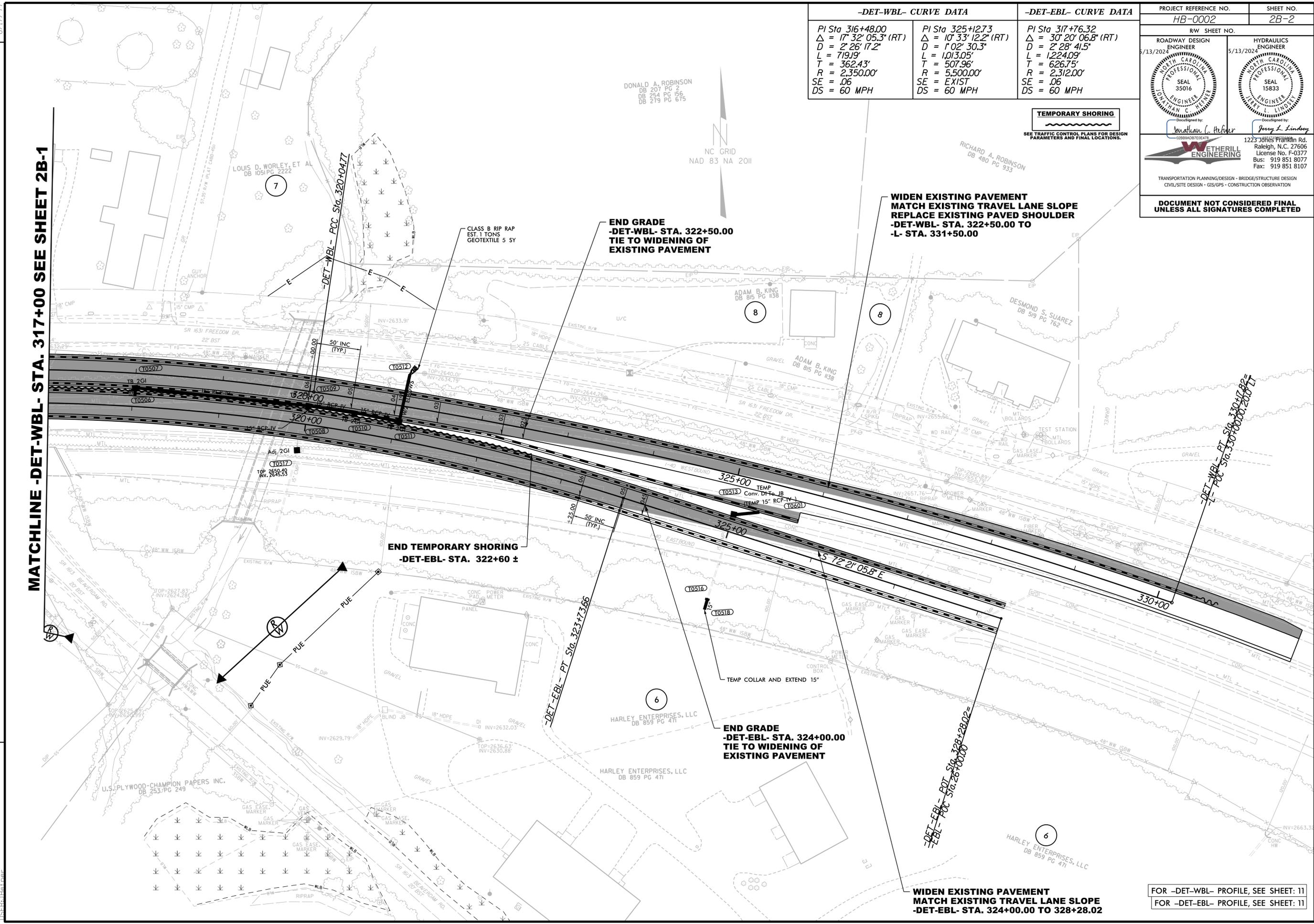
**END GRADE  
-DET-EBL- STA. 324+00.00  
TIE TO WIDENING OF  
EXISTING PAVEMENT**

**WIDEN EXISTING PAVEMENT  
MATCH EXISTING TRAVEL LANE SLOPE  
-DET-EBL- STA. 324+00.00 TO 328+28.02**

FOR -DET-WBL- PROFILE, SEE SHEET: 11  
FOR -DET-EBL- PROFILE, SEE SHEET: 11

REVISIONS

5/13/2024  
11:58:11 AM  
rdu\_psh\_02B-02\_detour.dgn



**(2-3-23)**  
**STATE OF NORTH CAROLINA**  
**DIVISION OF HIGHWAYS**

| SUMMARY OF SETTLEMENT GAUGES |       |                        |                 |
|------------------------------|-------|------------------------|-----------------|
| GAUGE No.                    | Stage | Offset                 |                 |
|                              |       | Distance FT            | Direction LT/RT |
| 1-4                          | 1     |                        |                 |
| 5-8                          | 2     | See 2G Surcharge Plans |                 |
| 9-12                         | 3     |                        |                 |
| TOTAL GAUGES (EACH):         |       |                        | 12              |

| SUMMARY OF SURCHARGES AND SURCHARGE WAITING PERIODS |         |         |                               |        |
|---|---------|---------|-------------------------------|--------|
| LINE  | Station | Station | Surcharge Elevation (Average) | MONTHS |
| -Y1- Stage 1  | 8+22    | 9+30    | 2661                          | 2      |
| -Y1- Stage 2  | 8+69    | 9+83    | 2662                          | 2      |
| -Y1- Stage 2  | 9+23    | 10+77   | 2659                          | 2      |
| * See 2G Surcharge Plans for addition information.  |         |         |                               |        |

| SUMMARY OF SUBSURFACE DRAINAGE |         |         |                     |                       |             |
|--------------------------------|---------|---------|---------------------|-----------------------|-------------|
| LINE                           | STATION | STATION | LOCATION (LT/RT/CL) | DRAIN TYPE (UD/BD/SD) | LENGTH (LF) |
| CONTINGENCY                    |         |         |                     |                       | 200         |
| TOTAL                          |         |         |                     |                       | 200         |

\*UD = Underdrain  
 \*BD = Blind Drain  
 \*SD = Subsurface Drain

| SUMMARY OF AGGREGATE SUBGRADE / STABILIZATION |         |         |                              |  |                       |  |  |                             |   |
|---|---------|---------|------------------------------|--|-----------------------|--|--|-----------------------------|---|
| LINE  | STATION | STATION | Aggregate Type* ASU(1/2)/AST | Aggregate Thickness [8" for ASU(2)] (INCHES) | Shallow Undercut (CY) | Class IV Subgrade Stabilization (TONS) | Geotextile for Subgrade Stabilization (SY) | Stabilizer Aggregate (TONS) | Class IV Aggregate Stabilization (TONS) |
| CONTINGENCY                                   |         |         | 1                            |  | 100                   | 200                                    | 500  |                             |   |
| TOTAL (CY/TONS/SY):                           |         |         |                              |  | 100                   | 200**                                  | 500**                                      |                             |   |

\*ASU(1/2) = Aggregate Subgrade (Type 1 or 2)  
 \*AST = Aggregate Stabilization  
 \*\*Total tons of "Class IV Subgrade Stabilization" and total square yards of "Geotextile for Subgrade Stabilization" are only the estimated quantities for ASU(1/2)/AST and may only represent a portion of the subgrade stabilization and geotextile quantities shown in the Item Sheets of the Proposal.

| SUMMARY OF REINFORCED SOIL SLOPES AND SLOPE EROSION CONTROL |                            |                 |                         |                 |                |                                |             |                   |                                |
|---|----------------------------|-----------------|-------------------------|-----------------|----------------|--------------------------------|-------------|-------------------|--------------------------------|
| LINE  | Beginning Slope/ RSS (H:V) | Approx. Station | Ending Slope/ RSS (H:V) | Approx. Station | Location LT/RT | Reinforced Soil Slope (RSS) SY | Geocells SY | Coir Fiber Mat SY | Matting for Erosion Control SY |
| -L-   | 2:1/1:1                    | 318+50          | 1:1/2:1                 | 320+00          | RT             | 420                            | 420         |                   |                                |
| TOTAL SY:   |                            |                 |                         |                 |                | 420                            | 420         | 0*                | 0**                            |

\*Total square yards of "Coir Fiber Mat" is only the estimated quantity for slopes steeper than 2:1 (H:V) and may only represent a portion of the coir fiber mat quantity shown in the Item Sheets of the Proposal.  
 \*\*Total square yards of "Matting for Erosion Control" is only the estimated quantity for RSS and may only represent a portion of the matting quantity shown in the Item Sheets of the Proposal.

6 QUANTITY = 502 SF  
 TEMPORARY SHORING  
 FROM STA. 315+12 +/- -DET-EBL-,  
 45.5' RT OF CL  
 TO STA. 316+01 +/- -DET-EBL-,  
 48.2' RT OF CL

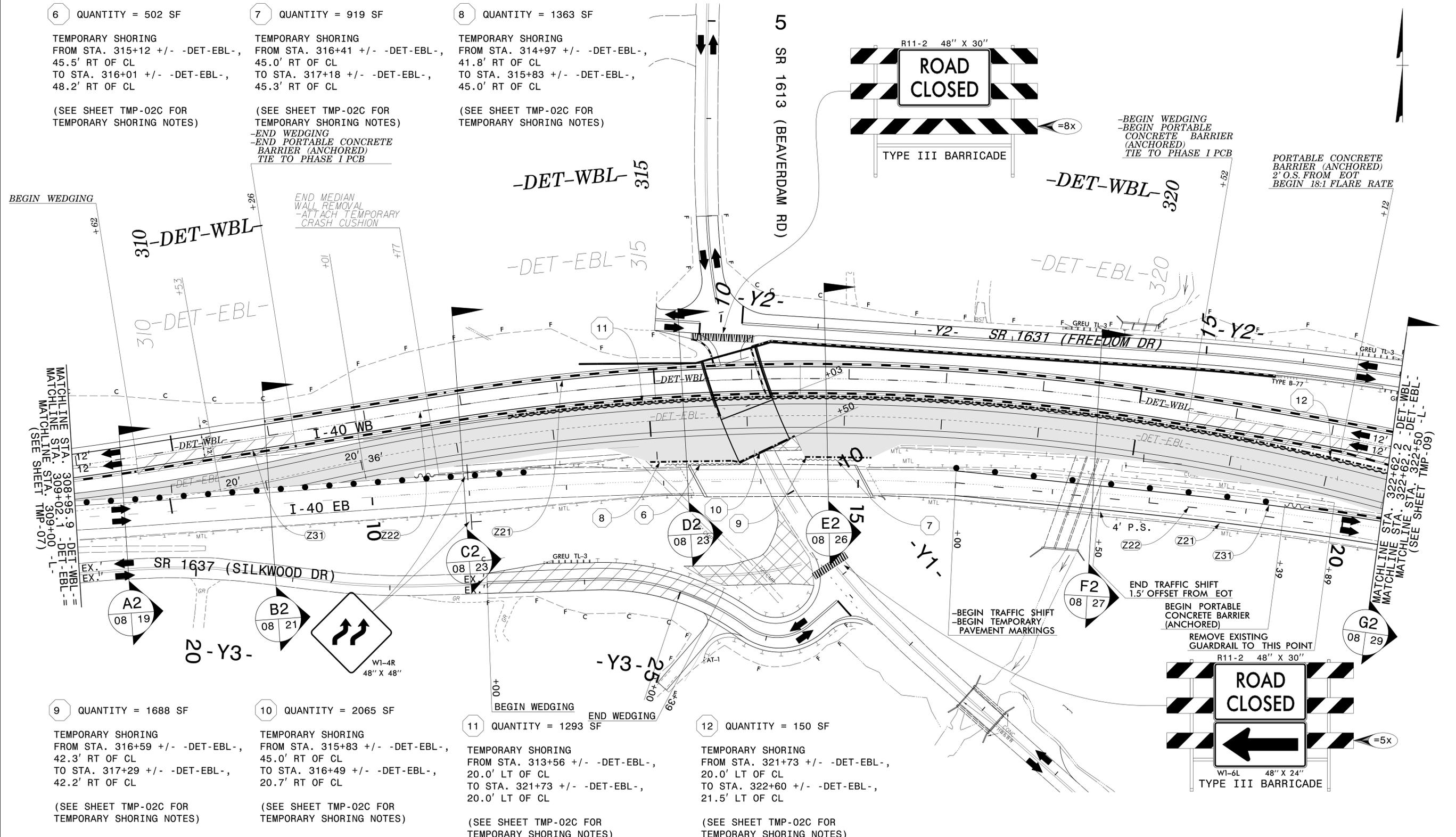
(SEE SHEET TMP-02C FOR  
 TEMPORARY SHORING NOTES)

7 QUANTITY = 919 SF  
 TEMPORARY SHORING  
 FROM STA. 316+41 +/- -DET-EBL-,  
 45.0' RT OF CL  
 TO STA. 317+18 +/- -DET-EBL-,  
 45.3' RT OF CL

(SEE SHEET TMP-02C FOR  
 TEMPORARY SHORING NOTES)

8 QUANTITY = 1363 SF  
 TEMPORARY SHORING  
 FROM STA. 314+97 +/- -DET-EBL-,  
 41.8' RT OF CL  
 TO STA. 315+83 +/- -DET-EBL-,  
 45.0' RT OF CL

(SEE SHEET TMP-02C FOR  
 TEMPORARY SHORING NOTES)



9 QUANTITY = 1688 SF  
 TEMPORARY SHORING  
 FROM STA. 316+59 +/- -DET-EBL-,  
 42.3' RT OF CL  
 TO STA. 317+29 +/- -DET-EBL-,  
 42.2' RT OF CL

(SEE SHEET TMP-02C FOR  
 TEMPORARY SHORING NOTES)

10 QUANTITY = 2065 SF  
 TEMPORARY SHORING  
 FROM STA. 315+83 +/- -DET-EBL-,  
 45.0' RT OF CL  
 TO STA. 316+49 +/- -DET-EBL-,  
 20.7' RT OF CL

(SEE SHEET TMP-02C FOR  
 TEMPORARY SHORING NOTES)

11 QUANTITY = 1293 SF  
 TEMPORARY SHORING  
 FROM STA. 313+56 +/- -DET-EBL-,  
 20.0' LT OF CL  
 TO STA. 321+73 +/- -DET-EBL-,  
 20.0' LT OF CL

(SEE SHEET TMP-02C FOR  
 TEMPORARY SHORING NOTES)

12 QUANTITY = 150 SF  
 TEMPORARY SHORING  
 FROM STA. 321+73 +/- -DET-EBL-,  
 20.0' LT OF CL  
 TO STA. 322+60 +/- -DET-EBL-,  
 21.5' LT OF CL

(SEE SHEET TMP-02C FOR  
 TEMPORARY SHORING NOTES)

- NOTES:
- SEE FINAL PAVEMENT MARKING PLAN FOR INFORMATION RELATED TO -Y1-, -Y2-, AND -Y3-.
  - ALL DATA INCLUDING STATIONS, OFFSETS, ETC. HAVE BEEN DETERMINED BY THE NCDOT GEOTECHNICAL UNIT.

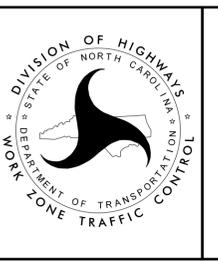
**ETHERILL ENGINEERING**  
 1223 Jones Franklin Rd.  
 Raleigh, N.C. 27606  
 License No. F-0377  
 Bus: 919 851 8077  
 Fax: 919 851 8107

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

APPROVED: *Greg S. Purvis*  
 DATE: 5/13/2024

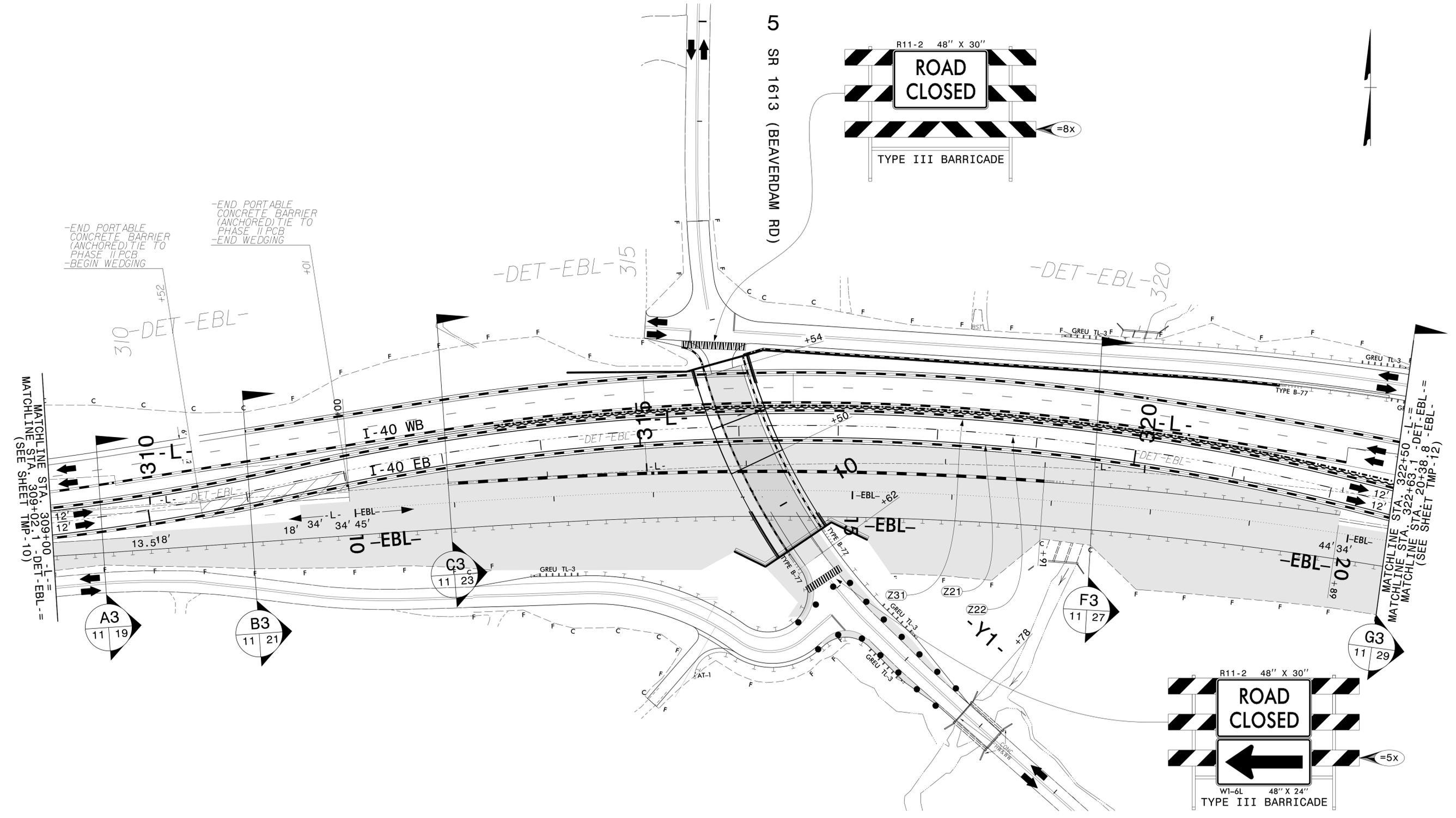
**PROFESSIONAL SEAL**  
 NORTH CAROLINA  
 22999  
 ENGINEER  
 GREG S. PURVIS

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



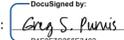
**PHASE II DETAIL**

5/13/2024  
 \\net-fs01\projects\2021\2147.07\_HB-0002\Traffic\Traffic\Pre-Let\Plan\WZTC\_AR\HB-0002\_TMP-08\_Phil.dgn  
 User: AHayes



5/13/2024  
 \\net-fs01\projects\2021\2147.07\_HB-0002\Traffic\Traffic\Pre-Left\Plan\WZTC\_AR\HB-0002\_TMP\_11.PHIL.dgn  
 User: AHayes

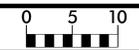

**WEATHERILL ENGINEERING**  
 1223 Jones Franklin Rd.  
 Raleigh, N.C. 27606  
 License No. F-0377  
 Bus: 919 851 8077  
 Fax: 919 851 8107

Approved by:   
 DATE: 5/13/2024  
  
**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

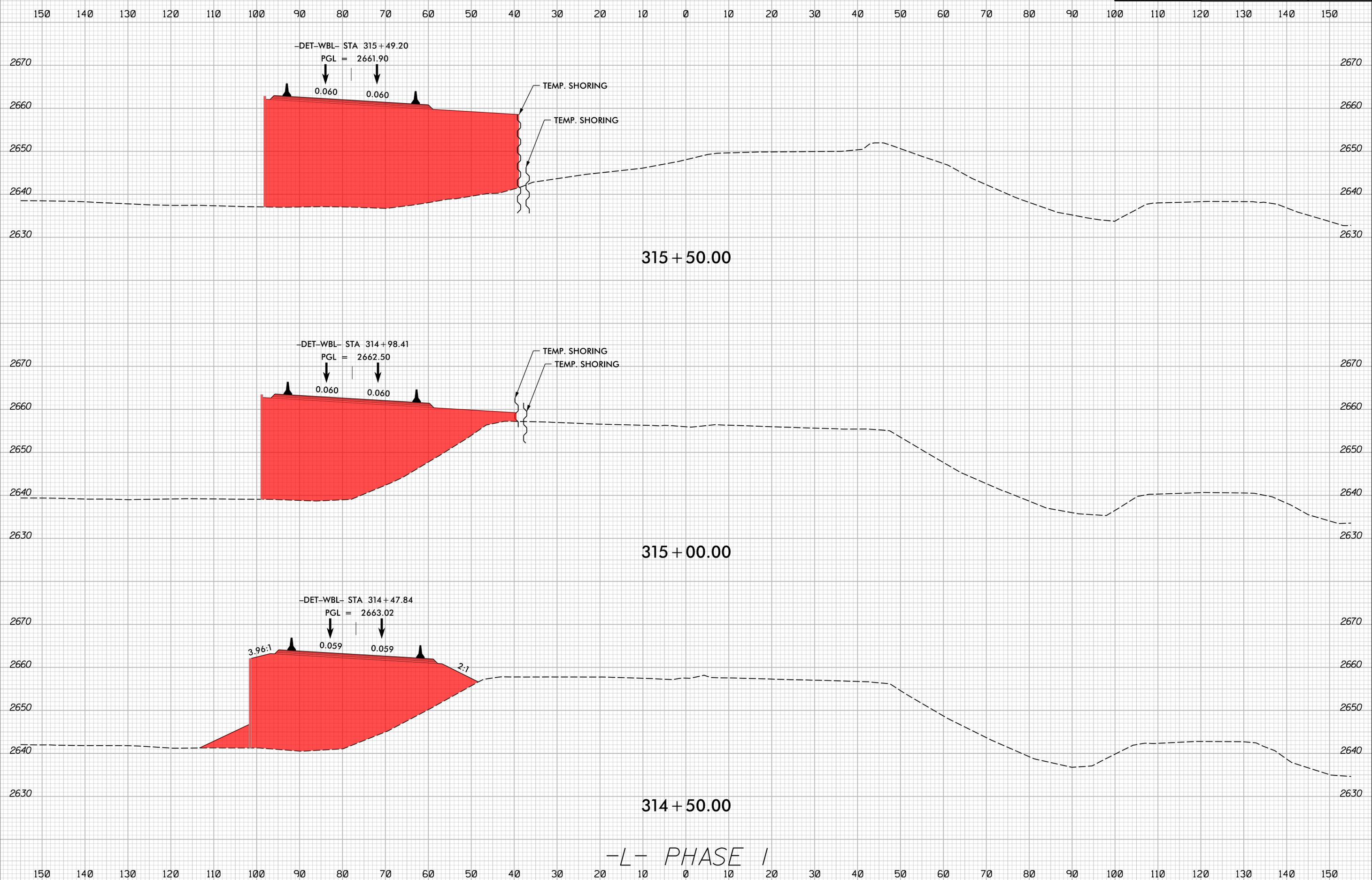


PHASE III DETAIL

8/23/99

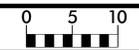


|                     |           |
|---------------------|-----------|
| PROJ. REFERENCE NO. | SHEET NO. |
| HB-0002             | X-13      |

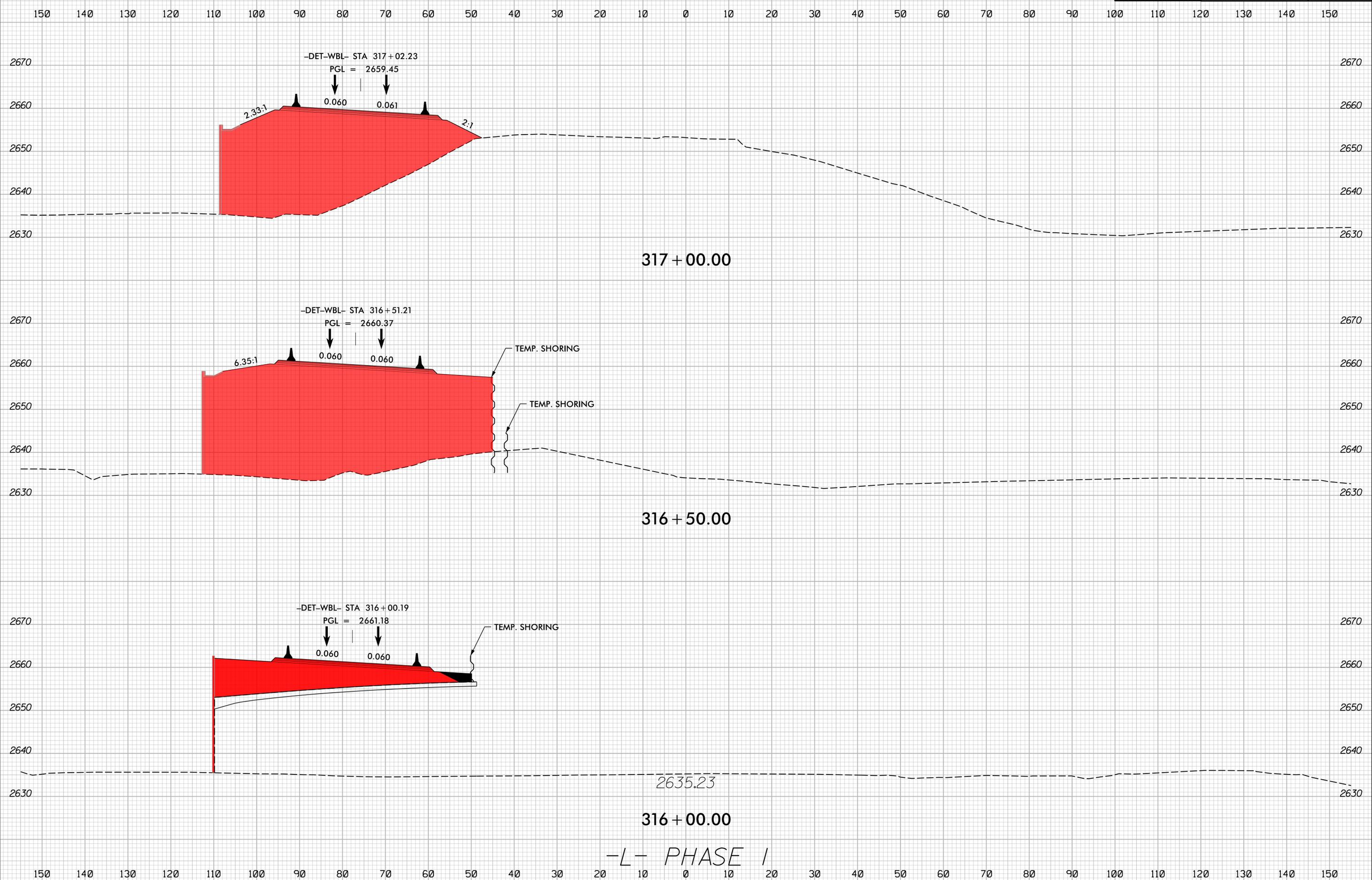


5/13/2024 10:51:13 AM HB0002\_rdy\_xpl\_L\_phase1.dgn

8/23/99



|                     |           |
|---------------------|-----------|
| PROJ. REFERENCE NO. | SHEET NO. |
| HB-0002             | X-14      |

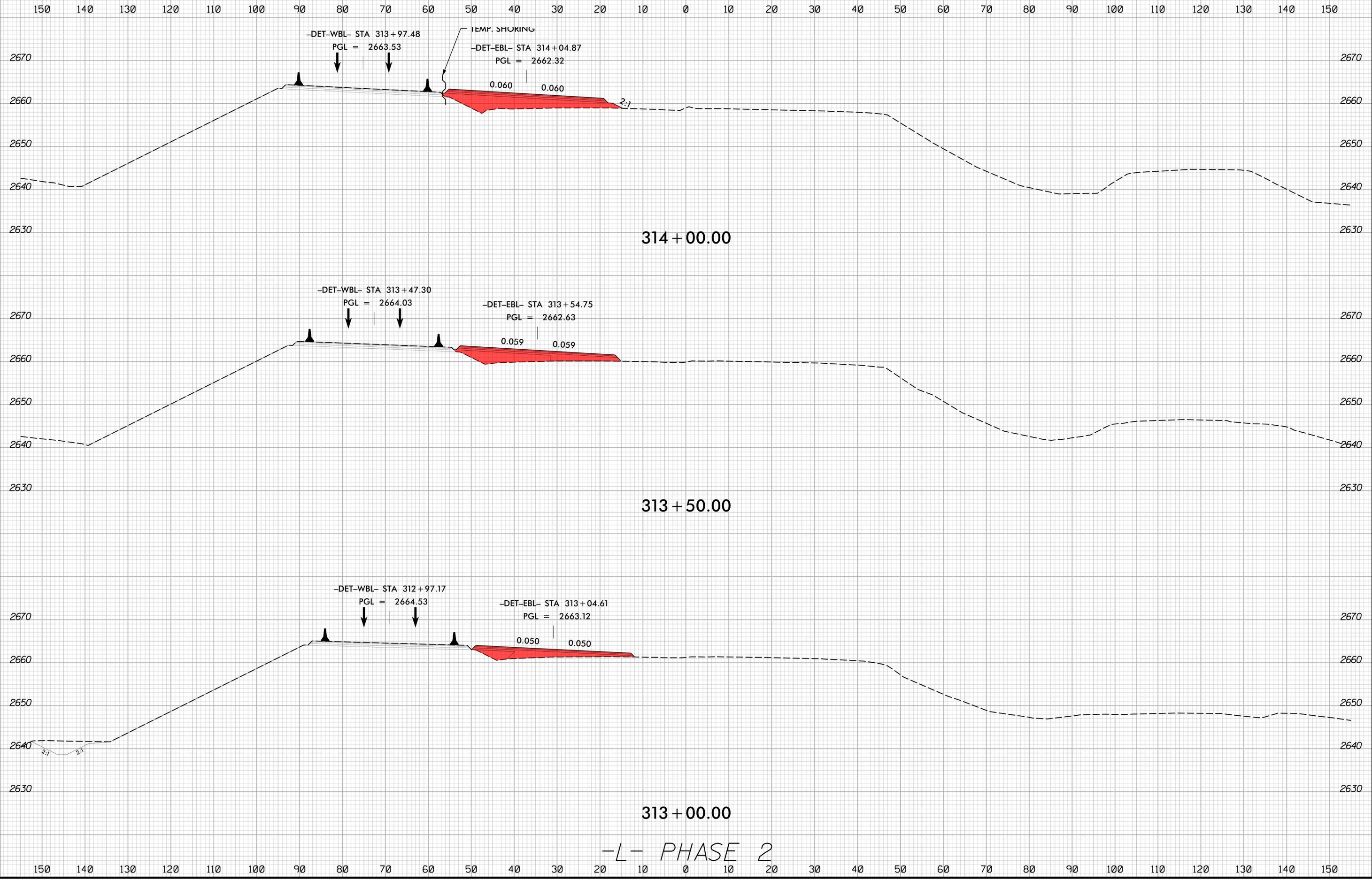


-L- PHASE I

5/13/2024  
1:51:13 PM  
I:\HB\0002\_rdy\_xpl\_L\_phase-1.dgn

8/23/99

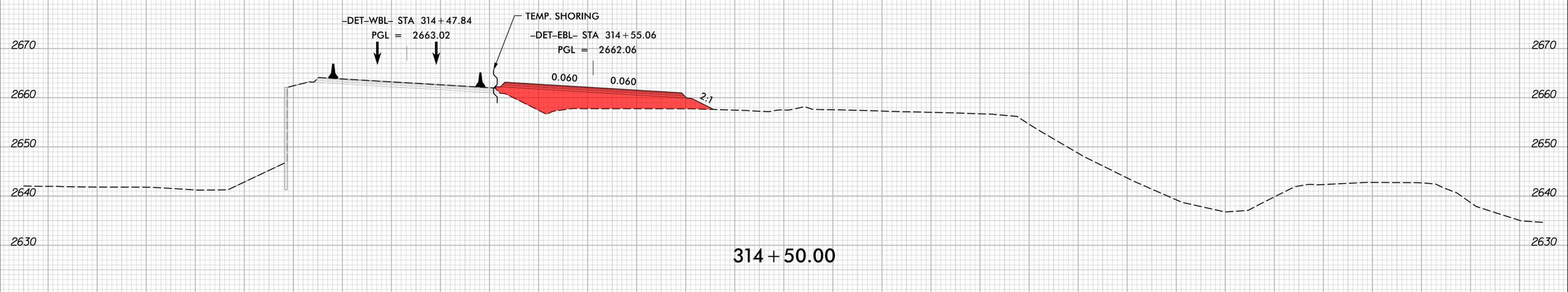
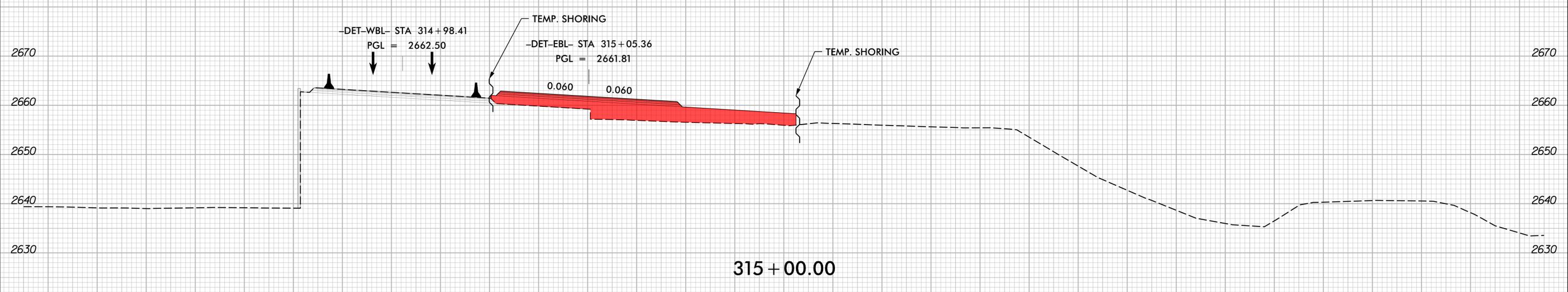
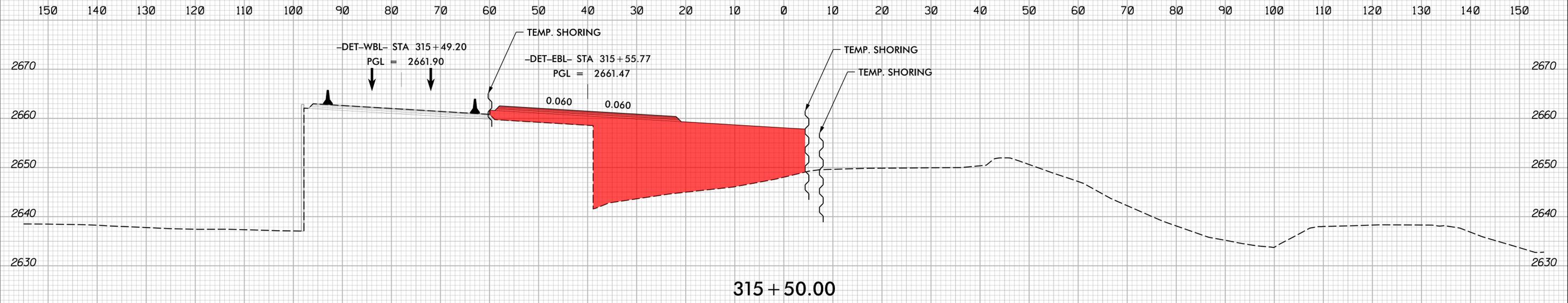
|        |                                |                   |
|--------|--------------------------------|-------------------|
| 0 5 10 | PROJ. REFERENCE NO.<br>HB-0002 | SHEET NO.<br>X-35 |
|--------|--------------------------------|-------------------|



5/13/2024  
1:51:13 PM  
I:\Projects\002\_rdy\_xpl\_L\_phase-2.dgn

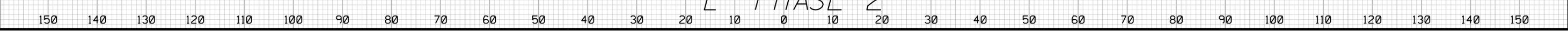
8/23/99

|        |                                |                   |
|--------|--------------------------------|-------------------|
| 0 5 10 | PROJ. REFERENCE NO.<br>HB-0002 | SHEET NO.<br>X-36 |
|--------|--------------------------------|-------------------|



-L- PHASE 2

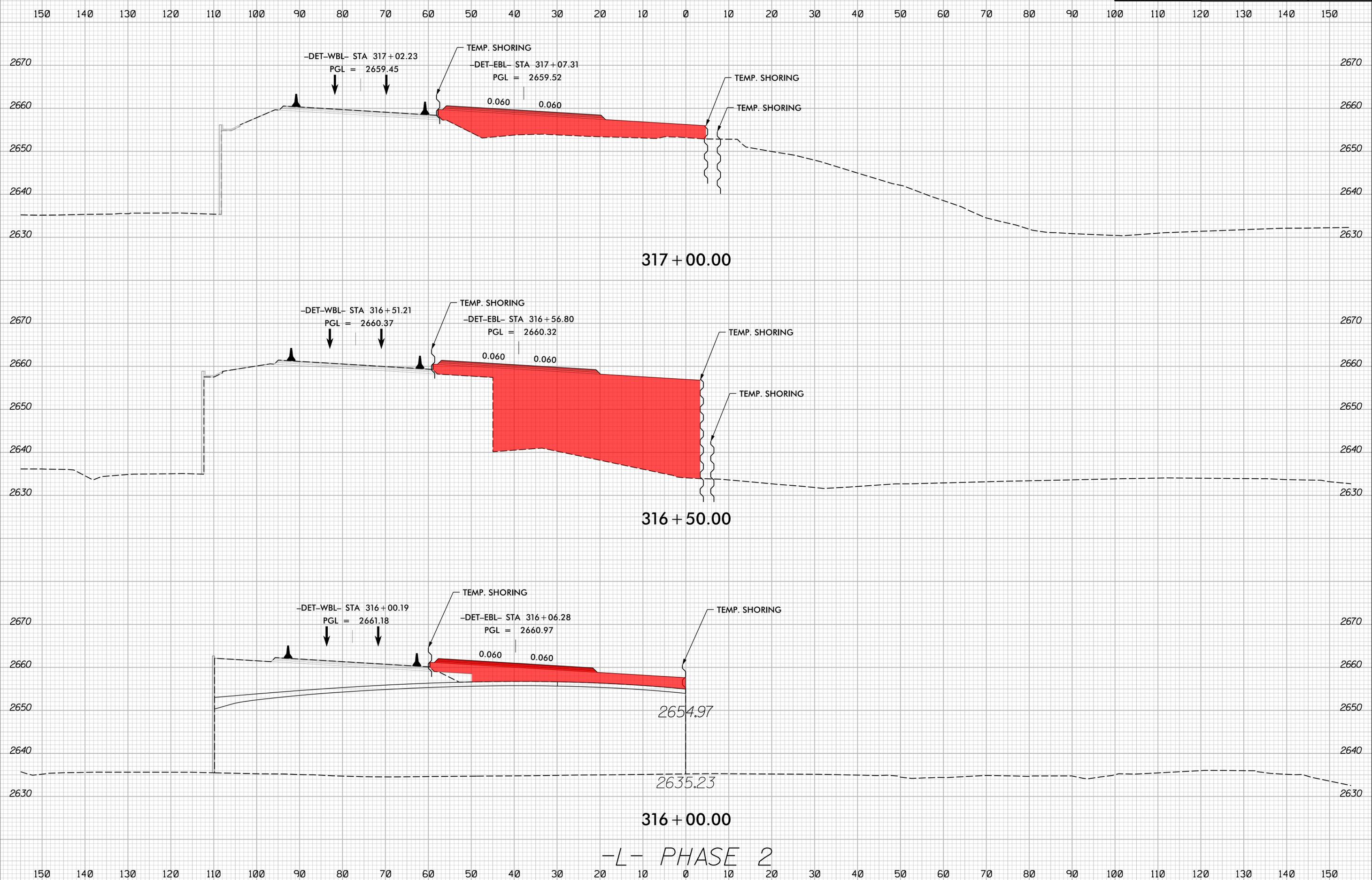
5/13/2024 1:51:13 PM HB0002\_rdy\_xpl\_L\_phase-2.dgn



8/23/99

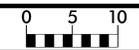


|                     |           |
|---------------------|-----------|
| PROJ. REFERENCE NO. | SHEET NO. |
| HB-0002             | X-37      |



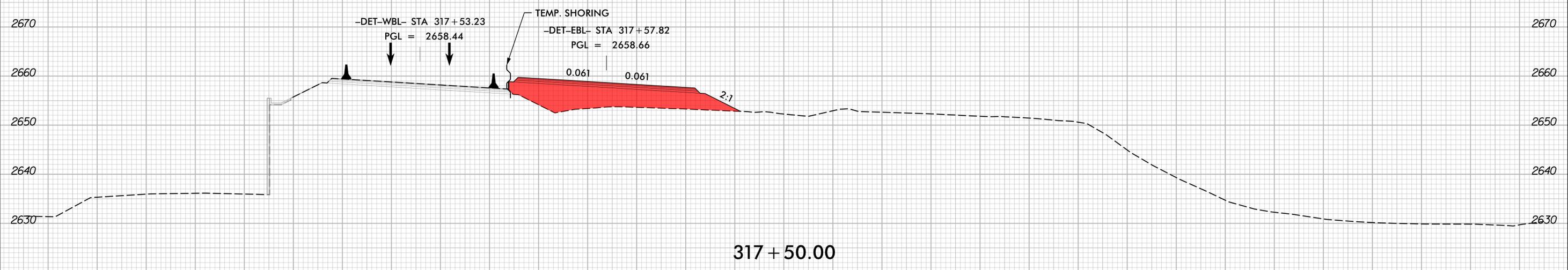
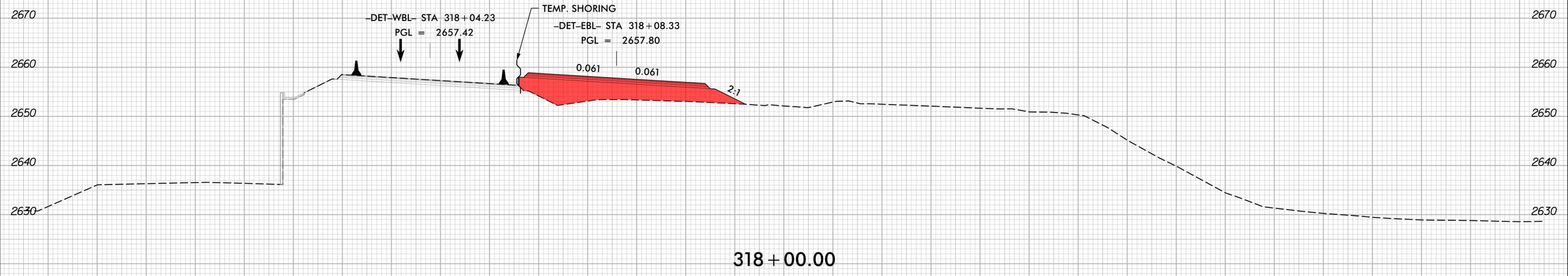
5/13/2024  
1:51:13 PM  
I:\Projects\2024\105\105-10002-rdy\_xpl\_L\_phase-2.dgn

8/23/99



|                     |           |
|---------------------|-----------|
| PROJ. REFERENCE NO. | SHEET NO. |
| HB-0002             | X-38      |

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



-L- PHASE 2

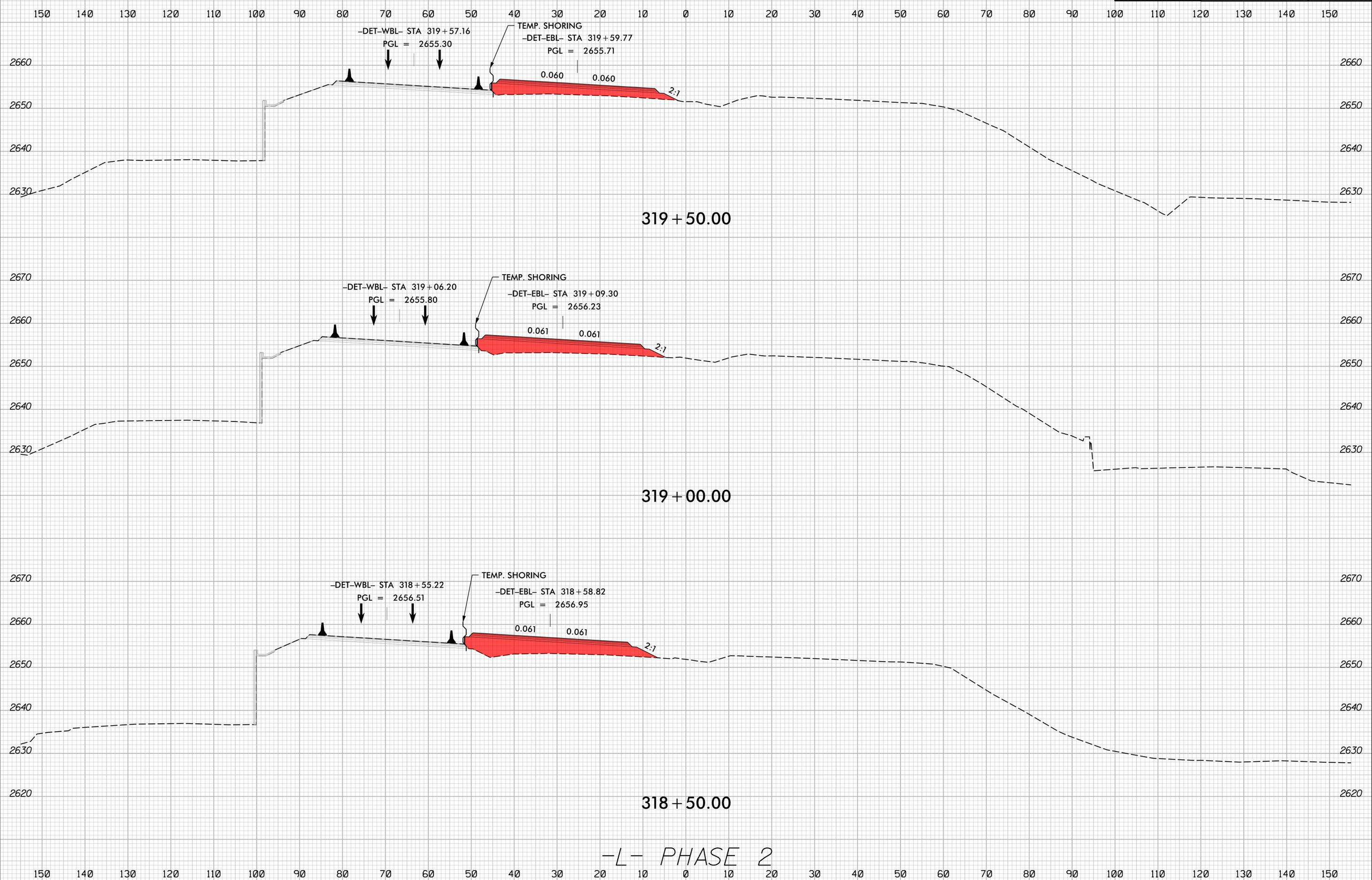
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

5/13/2024 1:51:13 PM HB-0002-rdy\_xpl\_L\_phase-2.dgn

8/23/99



|                     |           |
|---------------------|-----------|
| PROJ. REFERENCE NO. | SHEET NO. |
| HB-0002             | X-39      |

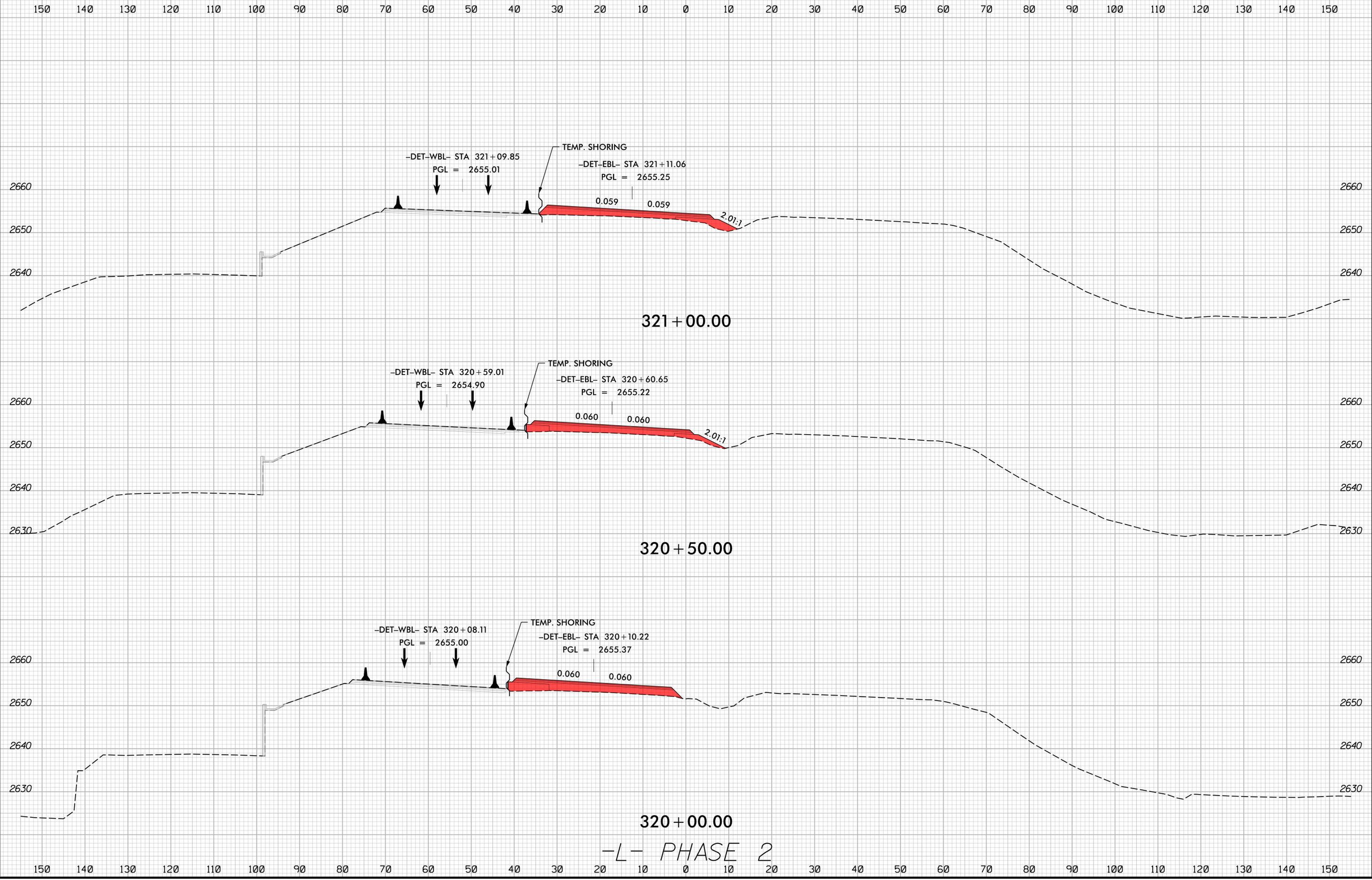


-L- PHASE 2

5/13/2024 10:51:00 AM I:\HB\0002\_rdy\_xpl\_L\_phase-2.dgn

8/23/99

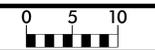
|        |                     |           |
|--------|---------------------|-----------|
| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|        | HB-0002             | X-40      |



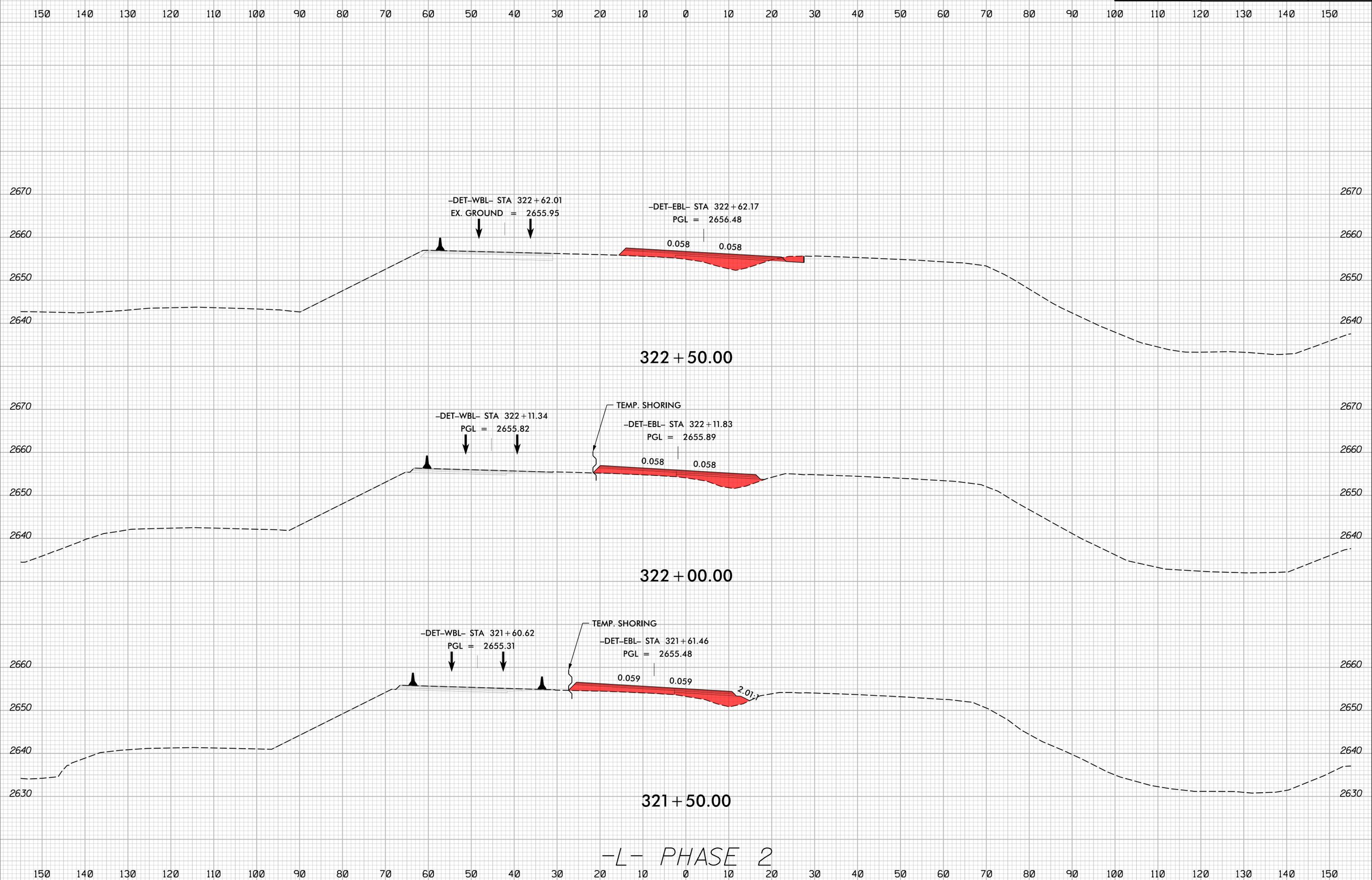
-L- PHASE 2

5/13/2024  
I:\HB0002\_rdy\_xpl\_L\_phase-2.dgn  
JSE

8/23/99



|                     |           |
|---------------------|-----------|
| PROJ. REFERENCE NO. | SHEET NO. |
| HB-0002             | X-41      |



-L- PHASE 2

5/13/2024  
1:51:13 PM  
I:\HB\0002\_rdy\_xpl\_L\_phase-2.dgn