STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ALTERNATIVE DELIVERY DIVISION
REGION 1
7345 REGION LANE
KNOXVILLE, TENNESSEE 37914

BUTCH ELEY
DEPUTY GOVERNOR &
COMMISSIONER OF TRANSPORTATION

BILL LEE
GOVERNOR

November 26, 2024

Re: ADDENDUM #2
Contract No. DB2401
County: Washington

To Whom it May Concern:

This addendum revises the RFP sections as detailed below. Attached are the revised sheets.

Book 1 (ITP)

- Section 3.1.1 – Revised requirements to allow for an electronic submittal of the three volumes of the Technical Proposal
- Section 3.2.2.2 – Removed reference for the Project Manager to be a professional engineer in the State of Tennessee
- Section 3.2.8 – Added reference to Form COI and requirements to complete said form
- Section 3.4.3 – Added requirements for the roadway schematic to include additional right-of-way information

Book 2 (Contract)

- Section 4.3 – Clarified the Contract Completion Date to either be the Proposer's calendar days or May 22, 2026, whichever is earlier

Book 3 (Project-specific requirements)

- Various sections were revised to answer Proposer questions.
- See the provided QR Form references and the following revised sheets for Book 3 changes.

Reference Documents

- See the updated RID Index for information regarding revisions to reference documents. Such revisions include drive-way tie-ins and low member design elevation clarifications.

You must acknowledge this addendum and all the receipts of any addenda to RFP by acknowledging the addendum on Form C.

Sincerely,

Amber Warren
TDOT Project Manager
Alternative Delivery – Region 1

TENNESSEE DEPARTMENT OF TRANSPORTATION

Design-Build RFP

Book 1 Instructions to Proposer (ITP)

State Route 353 (Bailey Bridge Road)

Bridge over Nolichucky River, LM 0.44

Washington County, Tennessee

Project Identification Number (PIN): **135866.08**

State Project Number: **N/A**

Federal Project Number: **90S353-M1-005**

Contract# **DB2401**

November 2024

Addendum #2

3 PROPOSAL SUBMITTAL INSTRUCTIONS

The Proposal consists of two parts: 1) the Technical Proposal and 2) Price Proposal. By submitting a Price Proposal and executing the signature sheets contained in the RFP, the Proposer acknowledges that it understands the procurement process, submittal requirements, and evaluation criteria contained in this **RFP Book 1 (ITP)**.

3.1 Submission and Format Requirements

3.1.1 Technical Proposal

~~The Proposer is to deliver the Technical Proposal in a sealed container within a mailing package that is clearly identified, labeled, and addressed as follows:~~

- ~~Recipient is the TDOT primary point of contact at the address listed in Section 1.5;~~
- ~~Return address is to include the Proposer's name, contact person's name, mailing address; and~~
- ~~Contents are to be labeled as "State Route 353 (Bailey Bridge Road) Bridge over Nolichucky River, LM 0.44 DB2401" and "Design-Build Technical Proposal – Procurement Sensitive Information".~~

~~The Proposal may be sent by United States mail or private carrier (e.g., Federal Express, United Postal Service), or be hand-delivered to the address shown in Section 1.5.~~

~~All narrative sections in the Technical Proposal are to be Arial font with a minimum font size of 11-points. The Proposer may use smaller font sizes for charts, diagrams, graphs, and tables.~~

The Proposer is to submit its Technical Proposal electronically (in searchable PDF format with bookmarks) to Jason.Sholtz@tn.gov. If the file(s) are over 20MB in size, the Proposer is to send a file transfer link to the listed email address. The submittal of Technical Proposal materials must be sent prior to the time and date for the Technical Proposal due date listed in Section 1.3. A Proposer may only submit one Technical Proposal in response to this RFP.

The Technical Proposal must adhere to the following naming convention:

- For each volume of the Technical Proposal PDF files: Enter proposer name_DB2401_SR 353 Bailey Bridge_Technical Proposal Vol. X

The Proposer is to organize its Technical Proposal into three electronic volumes in the order listed in this Section 3.1.1.

- **Technical Proposal: Volume I (Cover Letter, Qualifications, Forms, and Evidence of Authority)** – Responses under Volume I shall be limited to a maximum of seven (7) pages for the cover letter and qualification information. The Proposer is to place the required forms after a tab labeled "Forms."
- **Technical Proposal: Volume II (Technical Approach)** – Responses under Volume II shall be limited to a maximum of fifteen (15) pages, not including cover/title page or section dividers. All other information submitted in Volume II is to be counted in calculating page count.
- **Technical Proposal: Volume III (Technical Proposal Appendices)** – There is *no page limit* on the information required to be submitted under Volume III (Technical Approach Appendices). The Proposer is to include a tab for each major section described in Section 3.4.

~~Technical Proposal pages shall be 8-½ inch x 11-inch white paper. Drawings or sketches shall be submitted on 11-inch x 17-inch and/or 8 ½ inch x 11-inch white paper. The Proposal CPM schedule plots shall be on 8-½-inch x 11-inch or 11-inch x 17-inch paper. Double-sided pages shall be used except for pre-printed information, such as corporate brochures, and the original copy of all signed forms, which are to be single-sided. Where page limits are required, each 8 ½ inch by 11 inch page counts as one (1) page towards any assigned page limits; each 11-inch by 17-inch page counts as two (2) pages towards any assigned page limits.~~All narrative sections in the Technical Proposal are to be Arial font with a minimum font size of 11 points. The Proposer is to limit use of smaller font sizes for charts, diagrams, graphs, and tables.

Where page limits are required, all 8.5" by 11" pages count as one (1) page towards any assigned page limits, and all 11" by 17" pages count as two (2) pages towards any assigned page limits.

The Technical Proposal should present information clearly and concisely. Text or other information that is difficult to read may be disregarded, potentially resulting in either a lowered score or rejection of the Proposal as non-responsive.~~The Proposer is to submit one (1) original of its Technical Proposal, labeling the original Technical Proposals "ORIGINAL". Additionally, one (1) electronic copy of the Technical Proposal shall be submitted on a USB/flash drive in Adobe.pdf format that is searchable and organized consistent with the order detailed in this Section 3.~~

3.1.2 Price Proposal

The Proposer is to submit its Price Proposal using internet bidding with an electronic bid bond. The Proposer **shall not** submit a hardcopy of its Price Proposal. The internet bid and electronic bid bond executed by the Proposer and its surety is considered a complete Price Proposal to be printed at the time of the public opening.

TDOT posts letters recognizing RFP addenda/amendments to the electronic bidding file on the Alternative Delivery or internet bidding with electronic bid bond website. The Proposer is to acknowledge addenda by completing the Technical Proposal Signature Page (Form TPSP) and including the form in Volume I. Also, by submitting the EBS bid file within a Proposer's Price Proposal, the Proposer is acknowledging all addenda associated with the Price Proposal. It is the Proposer's responsibility to notify all affected manufacturers, suppliers, and subcontractors of any change. Failure to acknowledge receipt of addenda or to apply any applicable amendments to the electronic bidding file is grounds for rejection. The electronic bid "A" shall be the Total Bid Amount using any incorporated ATCs.

3.1.3 Forms

The forms referenced in this **RFP Book 1 (ITP)** and **RFP Book 2** (**Design-Build Contract**) can be downloaded from Alternative Delivery website.

3.2 Technical Proposal Volume I (Cover Letter, Qualifications, Forms, and Evidence of Authority)

3.2.1 Cover Letter

The Proposer is to provide a cover letter (a maximum of two pages) that includes:

- The Proposer's desire to be considered for the Project;
- The official names and roles of all Principal Participants, the lead designer, and the Project Manager; and
- A single point of contact and the address and telephone and email address to which communications should be directed.

a. Be responsible for overall design, construction, quality management, and contract administration for the Project, and must be available on the construction site as necessary for the duration of the Project;

b. Have full responsibility for the prosecution of the work and shall have authority to bind the Design-Builder on all matters relating to the Project after award;

c. Act as agent and be a single point of contact in all matters on behalf of Design-Builder after award;

d. Have the authority to stop all work that does not meet the standards, specification, or criteria established for the Project;

e. Be responsible for adherence to all environmental document and permit requirements and commitments if found on the Project;

f. Be a registered professional engineer ~~in the State of Tennessee~~; and

g. Have at least seven (7) years of experience managing on projects of similar scope and size.

Design Manager shall:

a. Be responsible for ensuring that the overall Project design is completed and design criteria requirements are met;

b. Work under the direct supervision of the Design-Builder's Project Manager;

c. Must not be assigned any other duties or responsibilities on the Project, and must be available whenever major design activities are being performed;

d. Be a registered professional engineer in the State of Tennessee; and

e. Have at least seven (7) years of recent experience in managing the design phase on projects of similar scope and size.

Construction Manager shall:

a. Be on-site whenever any construction activities are being performed;

b. Be responsible to manage the Design-Builder's workmanship inspections, implement quality planning, and oversee the Design-Builder's construction quality control;

c. Not be assigned any other duties or responsibilities on the Project; and

d. Have at least seven (7) years of recent experience managing the construction phase on projects of similar scope and size.

Safety Manager shall:

a. Be on-site whenever any construction activities are being performed;

b. Be responsible for overseeing all safety procedures and protocols for the Design-Builder and related subcontractor's work;

c. Not be assigned any other duties or responsibilities on the Project; and

d. Have at least five (5) years of recent experience overseeing safety on projects of similar scope and size.

Quality Manager shall:

- Form LC – Lobbying Certification (submit a blank form if not applicable).

3.2.4 Evidence of Corporate Existence; Certificate of Authority

The Proposer is to submit the following (as applicable):

- A Certificate of Good Standing issued by the Proposer's state of residence; or
- For entities not in the State of Tennessee, a Certificate of Authority to transact business in Tennessee.

3.2.5 Evidence of Authority to Enter into Joint Venture; Execute Joint-Venture Agreement

If the Proposer is a joint venture, the Proposer is to submit a copy of the joint venture agreement. Also, for each joint venturer, the Proposer is to submit the partnership agreement or corporate resolution authorizing it to enter into the joint venture and authorizing named individuals to execute the joint venture agreement on the joint venturer's behalf.

3.2.6 Evidence of Proposal Signatory Authority

The Proposer is to submit bylaws, or the corporate resolution, partnership agreement, or joint venture agreement evidencing authority of each signatory to the Technical Proposal Signature Page (TPSP) and Proposal firm offer to execute it on behalf of the Proposer.

3.2.7 Evidence of Ability to Obtain a Performance and Payment Bonding

The Proposer is to submit a letter from a surety company indicating that the Proposer is capable of obtaining Payment and Performance Bonds in the amount of $21,000,000.00.

The surety submitting the letter must be a surety company or companies licensed by the State of Tennessee, as listed by the Tennessee Department of Commerce and Insurance authorized to do business in Tennessee and who is also listed in the current United States Department of the Treasury's "Listing and Approved Sureties" (Circular 570). The surety must be listed or approved to write a bond in an amount equal to or greater than the amount listed above. Letters indicating "unlimited" bonding/security capability are not acceptable.

Approved performance and payment bonds are required at the time of contract execution. The final value of the bonds is to be equal to the amount of the Proposer's Price Proposal.

3.2.8 Other Evidence of Qualifications

1. A copy of the **prequalification listing** showing all the firms required by Section 1.16.
2. **Identification of any organizational conflicts of interests** on Form COI required per TDOT Rule 1680-05-04-.07(5) and 23 CFR § 636.116 that discloses the following:
    a. The Proposer must identify all relevant facts relating to past, present, or planned interest(s) of the Proposer (including the Major Participants, proposed Proposer members, and their respective chief executives, directors, and Key Personnel/Individual of the Project) that may result in, or could be viewed as, an organizational conflict of interest in connection with this RFP.
        i) This includes preparation of TDOT reports, surveys, preliminary plans and similar low-level documents that may be incorporated into the RFP.
        ii) All documents and reports must be identified and assurances made that the information was delivered to a TDOT representative and to whom.
    ~~b. The Proposer, including any person or firm participating in the Proposer's team, must disclose:~~

~~i) Any current contractual relationships with TDOT, including identification of the TDOT contract number and project manager);~~

~~ii) Present or planned contractual or employment relationships with any current TDOT employee;~~

~~iii) Current relationships between members of the Proposer's team on any other TDOT project, including identification of the TDOT contract number and project manager; and~~

~~iv) Any other circumstances that might be considered to create a financial interest in the contract for the Project by any current TDOT employee if the Proposer is awarded the contract.~~

~~The foregoing is provided as a minimum requirement and shall not constitute a limitation on the disclosure obligations.~~

~~c.~~b. For any fact, relationship, or circumstance disclosed in response to this Section on Form COI, the Proposer must identify steps that have been or will be taken to avoid, neutralize, or mitigate any organizational conflicts of interest.

~~d.~~c. In cases where Major Participants on different Proposers/Design-Builder organizations belong to the same parent company or are affiliated with it, each Proposer/Design-Builder must describe how the participants will avoid conflicts of interest on Form COI.

~~e.~~d. Participation by a Principal Participant or lead designer on multiple teams under this RFP shall be deemed an organizational conflict of interest disqualifying affected design-builders.

~~*At the end of this section*, the Proposer must include the following statement and provide signature, print name, and title.~~

~~*The undersigned hereby certifies that, to the best of his or her knowledge and belief, no interest exists that is required to be disclosed in this Conflict of Interest Disclosure Statement, other than as disclosed above.*~~

If no conflict of interest or items of note listed in this Section 3.2.8, item 2, exist, the Proposer shall note "not applicable" on noted sections in Form COI and execute the certification accordingly. ~~include the following statement in this section and provide signature, print name, and title.~~

~~*The undersigned hereby certifies that, to the best of his or her knowledge and belief, no interest exists that is required to be disclosed in this Conflict of Interest Disclosure Statement.*~~

3. Any information concerning any **bankruptcy or receivership of the Proposer**, or of any firm which is a member thereof, including information concerning any work completed by a surety.

4. Certification that the Proposer, or of any firm which is a member thereof, has **not been debarred by, defaulted from, and/or entered into any voluntary exclusion agreement** in lieu of debarment with, any federal, state, or local government agency, within the past five (5) years. Provide information concerning any suspension or temporary disqualification from bidding on any federal, state, or local government contract.

5. Certification that the Proposer, or any person or firm which is a member thereof, **has not defaulted** on a federal, state, or local government contract within the past five (5) years.

- Construction Lead – Roadway/General Site Superintendent

3.4.2 Reserved

3.4.3 Preliminary Roadway Schematic/Concept Plans

The Proposer is to submit half-size plan sheets of its preliminary roadway schematic/concept plans. It is not the intent for the Proposer to submit fully developed design plans, but instead, include details sufficient to illustrate color, texture, pattern, emblems, proportion, corridor consistency, or other such visual effects. For those details used in multiple locations, typical details will suffice with the locations for use noted in narrative or graphic form.

The preliminary schematic/concept plans are to include, at a minimum, the following:

- Show plan view of design concepts with key elements noted~~;~~
- Show preliminary drawings of bridge elements ~~(as applicable);~~
- Identify preliminary horizontal and vertical alignments of all roadway elements
- Show typical sections for the roadway mainline~~;~~
- Depict the Planned ROW Limits from the base technical concept/BTC

    i) As applicable, the Proposer shall provide clear annotations/callouts for any additional right-of-way that the Proposer may require to accommodate its construction work or its design modifications compared to base technical concept/BTC~~and~~

If the Proposer requires additional right-of-way (temporary or permanent) to accommodate its work, the Proposer shall also include in this section a right-of-way acquisition table similar in form to Table 1 in Book 3 that lists the:

- Tract No. (from Table 1 in Book 3)
- Property owner (from Table 1 in Book 3)
- Area to be acquired for the base technical concept/BTC (from Table 1 of Book 3)
- Additional area to be acquired for the Proposer's design
- Reason additional right-of-way is needed (e.g., temporary construction easement, temporary interest, permanent right-of-way because of a design change compared to the base technical concept/BTC)

3.4.4 ATC Approval Letter and Form ATC

The Proposer is to include a copy of each ATC approval letter with the approved Form ATC.

3.4.5 Proposal CPM Schedule

The Proposer is to prepare a Proposal CPM schedule to a Level IV work breakdown structure (WBS) to represent all design and construction work beginning at the Project's notice to proceed and extending through the Project's substantial completion (a "Contract Completion Date"). The Proposer is to submit its schedule both as a hard copy (in color) and electronically in Primavera format (.xer) meeting the requirements in Section 2.2 of **Book 3 (Project Specific Requirement),** TDOT's Circular Letter 108.03.C, Chapters 2, 3, and 9 of the *Design-Build Standard Guidance*, and as consistent with TDOT's Project Sections and Pay Items (see list below).

TENNESSEE DEPARTMENT OF TRANSPORTATION

Design-Build

Book 2 Contract

State Route 353 (Bailey Bridge Road)

Bridge over Nolichucky River, LM 0.44

Washington County, Tennessee

Contract# **DB2401**

November 2024

Addendum #2

4.2 Commencement of Services

The Design-Builder is authorized to commence the work within the Contract for post-award submittals pursuant to the *Design-Build Standard Guidance*. The Design-Builder shall not perform any services beyond post-award submittal until the issuance of first Notice to Proceed (NTP) and for each subsequent phase requiring a Review and Approval NTP.

4.3 Completion Dates

The Design-Builder shall complete all work to be done under the Contract, except for punch list and plant/vegetation establishment, by [Enter date based on proposed B:Calendar Days but not later than May 22, 2026] (the "Contract Completion Date").

5 COMPENSATION

5.1 Contract Amount

The Department agrees to compensate the Design-Builder for all work performed under the Contract for a fixed price of $[**Enter** Contract Amount] (the "Contract Amount"). The Contract Amount includes the entire cost of completing the Project in accordance with all Contract requirements as contemplated by the Parties under the Contract, and further includes all contingencies and the Design-Builder's overhead and profit.

5.2 Progress Payments

The Department shall make progress payments to the Design-Builder in accordance with the *Design-Build Standard Guidance*. Progress payments shall be based upon the Design-Builder's Schedule of Items, which shall include the cost of all work. The Department's payment of progress payments shall not be deemed by either Party to constitute Acceptance or Approval of any Pay Item covered by such payment, or a waiver of a claim or demand for repair of any defects therein.

5.3 Adjustments to the Contract Amount

The Contract Amount shall only be adjusted through issuance of properly authorized Change Orders.

5.4 Payments for Extra Work

The Department will make payments for Extra Work in accordance with the provisions of the *Design-Build Standard Guidance***.**

5.5 Deductions from Monies Due

The Department may deduct from monies due or to become due the Design-Builder, as follows:

- Amounts representing price adjustments authorized under the provisions specified in **Book 3 (Project Specific Information)**;
- Amounts representing recoupment of damages, including, but not limited to, Liquidated Damages as stated in **Book 3 (Project Specific Information)**;
- Amounts assessed by Authorities (e.g., fines and penalties) for which the Design-Builder is responsible under the terms or the Contract or by law;
- Amounts the Department is compelled by court order or other legal mandate to withhold and/or tender to Authorities or third parties; and

TENNESSEE DEPARTMENT OF TRANSPORTATION

Design-Build

Book 3 Project Specific Information

State Route 353 (Bailey Bridge Road)

Bridge Over Nolichucky River, LM 0.44

Washington County, Tennessee

Contract# DB2401

November 2024

Addendum #2

1 GENERAL

This Book 3 (Project Specific Information) contains the requirements and conditions by which the Design-Builder shall design and construct the Project, except for any portions of the work that may be stipulated within this Book 3 (Project-Specific Information) to be performed by the Tennessee Department of Transportation ("TDOT", or "the Department").

The order of precedence of this Book 3 (Project Specific Information) with the other Contract Documents is described in Book 2 (Design-Build Contract).

The definition of terms corresponding with this Book 3 (Project-Specific Information) are found in the Department's *Standard Specifications for Road and Bridge Construction* (TDOT Standard Specifications) and *Design-Build Standard Guidance* (DB Standard Guidance) in effect 30 days prior to the Proposal due date, unless specifically stated herein. The Design-Builder shall use the most current version of any listed standard or reference as of 30 days prior to the Proposal due date, unless expressly stated otherwise in the Contract Documents.

1.1 General Project Description; Scope of Work

The Design-Builder shall perform all surveying (including a bathymetric survey), design, construction, administration, project management, and other necessary services/work (e.g., ~~hydraulics~~hydraulic analysis, geotechnical, haul roads) required to construct the SR 353 (Bailey Bridge Road) over Nolichucky River (LM 0.44) (the "Project") in accordance with the Contract Documents (the "Work").

Flooding from Hurricane Helene destroyed the existing State Route 353 (SR-353) over the Nolichucky River bridge and severely damaged the approach roadway to the bridge. This Project includes the construction of a new 2-lane roadway and bridge carrying SR-353 over the Nolichucky River on existing alignment, as well as the construction of a cul-de-sac on OO Moore Road. As shown on the Base Technical Concept (otherwise known as the Conceptual Roadway and Structural Plans provided in the Reference Documents), the proposed roadway is to be two travel lanes with shoulders with a design speed of 50 miles per hour (mph).

The Project length is approximately 0.4 mile (2,200 feet), extending from Station 11+00.00 to Station 33+00.00 (the "Project Limits"). The proposed bridge will be approximately 480 feet in length, and the preliminary bridge plans represent the bridge grade being raised approximately 3 feet. Precast prestressed concrete beams are anticipated for the bridge superstructure. The roadway grade will be transitioned at the ends of the Project to tie-in to the existing roadway.

The Design-Builder's general responsibilities with respect to the Work include:

- Meet or exceed minimum Project design criteria for all improvements as defined in Attachment B.
- Remove and replace all guardrail necessary for construction of the roadway approaches to meet the Project design criteria.
- Resurface or replace all existing asphalt pavement within the Project Limits.
- Replace or repair/modify existing drainage structures and install proposed drainage improvements within the Project Limits.
    - For any existing drainage structures that the Design-Builder proposes to keep in service, the Design-Builder must confirm that the existing drainage structure meets hydraulic design requirements and that it is in good condition and founded on solid bedding. TDOT's concurrence must be obtained to keep in service any existing drainage structure.
- Coordinate with utility owners (as necessary) for each utility owner to perform its work.
- Install new roadway signs and sign structures within the Project Limits.
- Provide traffic control during construction.
- Acquire necessary permits not previously obtained by TDOT.

1.2 Project Goals

The Project goals are as follows:

1. Restore the river crossing impacted from flooding due to Hurricane Helene and ensure traffic operations and safety on State Route 353 (Bailey Bridge Road) within the Project Limits.
2. Deliver the construction schedule and obtain substantial completion no later than May 22, 2026.
3. Minimize impacts to ROW and environmental features and maximize safety of workers.

1.3 Reference Documents

The Base Technical Concept and Department-supplied materials have been included as Reference Documents, published on the Department's Project website. The Design-Builder shall acknowledge that the Reference Documents are preliminary and provided solely to assist the Design-Builder in development of its Design Documents. The Design-Builder shall be fully responsible for the accuracy and completeness of all Design Documents and related Work performed under this Contract.

Unless otherwise noted as a Necessary Basic Configuration Change, the Design-Builder shall be fully liable and hold the Department harmless for any additional costs and all claims against the Department that may arise due to any Department errors in the Reference Documents or due to the errors, omissions, or negligence of the Design-Builder in performing the Work required by this Contract. As defined:

- A "Necessary Basic Configuration Change" is a change in the Basic Configuration that is necessary to meet the requirements of the Contract Documents as the result of an error in the Basic Configuration (with the understanding that a change shall be deemed "necessary" only if the error creates a problem in which Design-Builder is unable to meet the requirements of the Contract Documents without a material change in the Basic Configuration).
- Basic Configuration means the following elements defining the Project:
    - The "Planned ROW Limits" (see Section 6 for a definition of this term) and control of access as set forth in the Base Technical Concept,
    - The Base Technical Concept's design criteria (defined in Attachment B) related to the Federal Highway Administration's (FHWA's) controlling criteria, and
    - The number of lanes as set forth in the Base Technical Concept, subject to Section 3 and Attachment B.

The Department-provided Reference Documents include:

- Survey data files, including ORD files (Not datum adjusted)
- The NEPA Document (under development)
- Base Technical Concept (in .dgn format and sheet files), otherwise known as the Conceptual Roadway and Structural Plans
    - The Base Technical Concept is provided for information only; the scope of the Project listed in the Contract Documents takes precedence.
    - The .dgn files will sent to the Design-Builder upon receipt of an executed CAD Disclaimer form (provided on the Project website) to the TDOT point of contact listed in Section 1.5 of Book 1 (Instructions to Proposers).

- Utilities Contact List
- Traffic Data
- Draft Geotechnical Report, dated October 28, 2024
- Pavement Design Report, dated October 17, 2024 (Note: An alternative pavement design will not be allowed.)

The Design-Builder shall establish datum adjusted survey control tied to the Tennessee Geodetic Reference Network (TGRN) in accordance with TDOT Survey Manual Section 2.1. The existing coordinates, dimensions, and elevations used in the Reference Documents are provided for information only. The Design-Builder shall verify all existing elevations, dimensions, and horizontal and vertical alignments in the field. This shall include elevations at interfaces of existing and proposed pavement, drainage features, structures, and grading limits. The Design-Builder shall be responsible for all surveys, including those relating to the work and utilities and including locating the Planned ROW Limits established by the Department to perform the work. The Design-Builder shall provide survey control to the Department prior to submission of its Definitive Design. ~~The Design-Builder shall verify all information provided by the Department (including the existing survey) and shall provide all updated surveys, mapping, plans, verification of existing utilities, investigation, and analysis required to complete the Work.~~

1.4 Construction Engineering Inspection

The Department will be responsible for Construction Engineering Inspection (CEI) work and Quality Acceptance Testing. The Design-Builder shall provide and maintain an on-site field office of adequate size for the exclusive use of the Engineer and Department staff (including any TDOT consultant staff) as required and specified in Section 722 of the TDOT Standard Specifications.

2.2.2 Schedule and Cost Controls

The Design-Builder shall develop procedures for schedule and cost control on the Project, including the cost control and schedule management system to be used to control and coordinate the Work.

The cost-control approach shall include a description of the proposed approach for calculating progress performance for preparing the monthly payment requests using the Pay Item activities, Schedule of Items, and the CPM Schedule. The Design-Builder shall include a procedure for re-scheduling its Work to achieve schedule recovery objectives and how these objectives will be enforced with its work force and Subcontractors.

2.2.3 Liquated Damages for Failure to Meet Completion Deadline

The Design-Builder shall complete the Project within the time limitations set forth in Book 2 (Design-Build Contract) and Special Provision 108B.

If the Design-Builder fails to ~~complete the Project~~achieve Substantial Completion ~~within the time limitations set forth in the Contract~~by the Contract Completion Date, then the Department will suffer substantial losses and damages.

Special Provision 108B ~~The Contract, therefore,~~ provides ~~that a sum~~ the daily sum that shall be deducted from monies due the Design-Builder, not as a penalty, but as Liquidated Damages, if ~~such completion~~the Contract Completion Date is delayed.

The Liquidated Damage for non-compliance is $10,000 per Calendar Day*. This is also the Time Value used for calculation of selection and for failure to complete the Work on time. It shall be calculated as follows:

> If the Project is NOT completed in time “B”, then the following amount shall be deducted from the monies due the Design-Builder as:
>
> (Actual Time Charged – B) x **$10,000/Calendar Day***
>
> * Calendar Day amounts are applicable when the Contract Time is expressed on the Calendar Day or fixed date basis.

Any Liquidated Damages shall be ~~addressed, not as a penalty, and~~ computed as ~~they~~ each occurs with a separate item number subtracting from monies due the Design-Builder.

2.3 Quality Management Plan

The Design-Builder shall establish and implement a Quality Program and prepare a Quality Management Plan in accordance with Section 2.5 of the DB Standard Guidance and the requirements described herein. To expedite the Project’s development and construction phases, the Quality Management Plan required for submittal and approval by the Department shall only include the Environmental Compliance Plan (ECP).

However, in addition to the ECP, the Department expects the Design-Builder to continually and effectively manage quality for design, construction, and safety and health over the Project’s duration as required by the executed Contract and the TDOT Standard Specifications (e.g., Section 105). The Design-Builder must ensure that its designers, Subcontractors, and construction forces maintain and follow a quality plan. It is of the utmost importance that the Design-Builder involves its staff and partners with the Department to ensure overall Project satisfaction. This will only be possible if the Design-Builder’s Quality Program exhibits sufficient staff and sound processes and practices that place quality design and workmanship above production and/or cost by all team members.

3 ROADWAY

3.1 Standards and References

The Design-Builder shall design and construct the Work to adhere to the latest editions of the following standards in effect 30 days prior to the Proposal due date.

- *TDOT Roadway Standard Drawings*
- *TDOT Roadway Design Guidelines and Instructional Bulletins*
- *TDOT Drainage Manual*
- TDOT *Design Procedures for Hydraulic Structures*
- *TDOT Traffic Design Manual*
- *TDOT Design CADD Standards*
- *TDOT Survey Manual*
- The Department accepted *AASHTO Policy on Geometric Design of Highways and Streets Manual on Uniform Traffic Control Devices (MUTCD)*

OpenRoads Designer (ORD) shall be used in the development of 3D parametric modeling to provide model-centric design deliverables. The Design-Builder shall use ORD in accordance with requirements and guidelines provided on the Department's website: ORD (tn.gov)

3.2 Design Requirements

TDOT has developed the roadway design criteria for Design-Builder use on this Project (see Attachment B) in accordance with TDOT's *Roadway Design Guidelines*. The Design-Builder shall design and construct so that the:

- Proposed horizontal and vertical alignments of SR-353 meet or exceed a 50-mph design speed for a Rural Major Collector Roadway and level terrain for a 2-lane facility.
- Traffic lanes along SR-353 are 11 feet wide (see TDOT Typical Sections Standard Drawing(s) RD11-TS-2).
- The cul-de-sac on OO Moore Road meets the design standards (40' radius) in accordance with the *Subdivision Regulations of Washington County, TN* (see Reference Documents).
- Shoulder widths along SR-353 are 6 feet (4 feet paved).
- The minimum clear zone along SR-353 is 16 to 18 feet for cut slopes and 16 to 18 feet for fill slopes at 6:1 slope.
    - Any slopes steeper than 6:1 shall meet the clear zone criteria listed in TDOT Standard Drawing S-CZ-1.
- All driveway, field entrance, or intersection connections to SR-353 are to meet minimum sight distance requirements.
    - The two existing field entrances, as depicted on the Base Technical Concept, shall be replaced at approximately the same location and in a similar fashion as the original.

The Design-Builder shall re-establish drainage in situations where sedimentation has changed the flow line from the existing profile. No Work should be done to Waters of the State or US, which might appear to be a ditch, without proper permits.

The Design-Builder shall provide erosion control for the construction Project per the guidelines specified in the Department's *Drainage Manual* and this Book 3.

The Design-Builder shall design the drainage system to accommodate construction staging. Spread requirements for temporary traffic control may be reduced to a 5-year storm event; however, permanent conditions must meet the requirements of the Department's *Drainage Manual*. The design shall include temporary erosion control, sediment basins, and other Best Management Practices (BMPs) needed to satisfy NPDES, local municipality, and other regulatory requirements. All environmental commitments related to drainage design and erosion control shall be included as "notes" on the plans for each stage of construction.

3.6.2 Existing Drainage Systems

The design of stormwater management facilities shall be compatible with existing or any known proposed improvements to drainage systems on adjacent properties and shall preserve existing drainage patterns wherever possible.

If existing drainage patterns must be altered due to a temporary or permanent aspect of the design, the Design-Builder shall provide documentation of any/all impacts to upstream/downstream and/or adjacent properties and/or road crossings for Department's Review and Approval prior to alteration of existing drainage patterns. Survey data shall be collected for all upstream/downstream/adjacent properties that are impacted, such as road crossing information, structure damage elevations, and channel cross sections (at a minimum), and shall be used in support of hydraulic calculations for the offsite drainage systems. Engineering analyses and certifications shall be provided to the Department and the local jurisdiction for Review and Approval prior to performing the alteration.

The Design-Builder shall obtain all applicable municipal drainage plans, watershed management plans, and records of citizen concerns. The Design-Builder shall obtain all pertinent existing storm drain plans, bridge hydraulic studies, and/or survey data, including data for all culverts, drainage systems, storm sewer systems, and bridge sites within the Project Limits. The Design-Builder shall also identify existing drainage areas and calculate the estimated runoff to the highway drainage system. If documentation is not available for certain components of the existing drainage system within the Project Limits and these components are planned to remain in place, the Design-Builder shall investigate and video record or photograph these components to determine condition, size, material, location, and other pertinent information.

For the purposes of the bid, the Design-Builder shall assume that no components of the existing drainage system within the Project Limits are suitable for re-use. However, within the first 60 (sixty) Calendar Days after the initial NTP, the Design-Builder shall propose to the Department any specific existing drainage components (such as drainage structures, pipes, etc. (except underdrains)) that are suitable for re-use as a VECP administered per TDOT Standard Specifications. Re-use of existing components is contingent on the facilities meeting the requirements of the Contract Documents and related standards. No components shall be permitted for reuse by the Design-Builder without written approval from the Department.

The Design-Builder shall inspect and verify that existing drainage systems to remain are clean, operable, and structurally adequate. Any repairs, replacements, debris removal, and/or deficiencies shall be corrected by the Design-Builder. The most current information available to the Department for the existing drainage systems for the Project include ~~a field-run topographic~~ survey information provided in the Reference

Documents~~of the existing horizontal and vertical alignments, storm pipe inverts, and pipe material type~~.
(Note: The Design-Builder shall verify all existing survey information provided by the Department.)

The Design-Builder shall analyze existing storm drainage systems to remain, culverts (boxes and cross pipes), and open channels within the Project Limits that are impacted by the Design Documents.

The Design-Builder shall replace or supplement any pipes or culverts that are deemed hydraulically or structurally deficient in the existing condition or as a result of this Project.

The Design-Builder shall replace damaged, destroyed, missing, or permanently attached castings on existing drainage structures. This shall include any structure located within the proposed roadway that is not already being modified or addressed within the proposed drainage Work or a structure which is within the resurfacing limits, which is not being affected by any proposed drainage Work.

3.6.3 Hydraulic Design File Report for Hydraulic Structures

The Design-Builder shall prepare a Hydraulic Design File (HDF) Report and any other required documentation for all existing and/or proposed bridge-class structure crossing sites and for culverts that convey at least 500 cubic feet per second for the design storm. All aspects of the drainage design must meet all criteria listed in the latest edition of the TDOT *Design Procedures for Hydraulic Structures*, the Department's *Drainage Manual*, and any environmental commitments identified in the NEPA Document.

All structures must include a hydraulic model from Hydraulic Engineering Center – River Analysis System, Volume 6 or later. The hydraulic model should include "existing", "proposed", and "no project" conditions.

The HDF Report shall include detailed calculations with electronic and printed copies of the computer software input and output files, as well as a discussion about hydrologic and hydraulic analyses and reasons for the design recommendations. At a minimum, for each bridge-class crossing or structure conveying more than 500 cubic feet per second for the design storm, the HDF Report shall include:

- Correspondence in chronological order.
- Maps that depict a portion of the county map or city map, 7.5-minute USGS quadrangle (preferably color), and FEMA NFIP map.
- Hydraulic report summary.
- Photographs per the requirements of TDOT *Hydraulic Manual*, Chapter 10. Include aerial photographs if available.
- Analysis:
  - Discharge calculations
  - Frequency discharge relationship
  - Stage discharge relationship
  - Supporting hydraulic information (previous flood studies, gauge data, etc.)
  - Existing structure analysis with cross sections plotted (if applicable)
  - Natural water surface model with no bridge or road fill
  - Proposed structure analysis, with cross sections plotted and any alternatives
  - Existing, proposed, and no-bridge output tables
  - Scour analysis, if applicable
  - Deck drainage analysis
  - On-site inspection report
  - Other information

Where multiple structures occur on a single project, the correspondence section should not be repeated. The cover of the design file should include the project description, PIN, and/or project number as indicated in Department schedules. Also, each stream crossing station, stream name, and associated bridge

4 STRUCTURES

The Design-Builder shall be responsible for the design and construction of all structures within the Project Limits, including:

- The SR-353/ Nolichucky River Bridge (as further described below), and
- The box culvert at STA 29+50.00 (see TDOT Standard Drawing STD-17-52).

Upon Project completion, the Design-Builder shall provide the TDOT Structures Division a final revised set of plans and final design calculations for all structures (bridges, walls, etc.). The plans shall be delivered on USB flash drive (each sheet an individual PDF file). The Design-Builder shall also conduct and submit a load rating analysis report for each new bridge that is constructed.

4.1 Design Requirements

The new bridge shall be designed and detailed using the AASHTO *Load and Resistance Factor Design (LRFD) Bridge Design Specifications* and the AASHTO *Guide Specifications for LRFD Seismic Bridge Design* with all interims as well as the current practices and policies of the TDOT Structures Division. This includes designing the new bridge to meet Seismic Design Category (SDC) B requirements per the *TDOT Structural Design Guidelines*.

The Design-Builder shall reference and adhere to the TDOT Standard Specifications for construction materials and methods.

Concrete for the bridge deck and substructures shall be as shown in the Base Technical Concept and meet the requirements of the TDOT Standard Specifications. Class A concrete in pavement at bridge ends shall have surface aggregate in accordance with Article 903.24 of the Standard Specification. Other types of concrete required shall meet the minimum design strength requirements, in addition to the requirements of the TDOT Standard Specifications or any applicable Supplemental Specification or Special Provision.

The SR 353 Bridge over the Nolichucky River shall be designed for HL-93 live loading. The bridge design shall include 35 pounds per square foot (psf) for a future wearing surface.

The bridge rail shall be a concrete rail crash tested to meet a 50-mph design speed and be MASH TL-3 compliant. It shall include the Tri-Star emblem as shown on the TDOT Standard Drawing STD-8-6.

The Design-Builder shall perform a hydraulic analysis for bridge deck drainage and shall meet the criteria in the TDOT *Design Procedures for Hydraulic Structures*. The Design-Builder shall design and install the deck drains for the typical section as shown on the Preliminary Bridge Plans included in the Reference Documents. Deck drains shall be in accordance with the details shown on TDOT Standard Drawings STD-1-2 and STD-1-2SS. Bridge deck drains may discharge directly into the Nolichucky River.

The Design Builder shall adhere to all permit, FEMA, and hydraulic design criteria when designing bridges, culverts, and culvert extensions. As noted in Section 3, the Design-Builder shall reference the Department's *Drainage Manual* and ~~design~~ *Design* ~~*procedures*~~ *Procedures for Hydraulic Structures* ~~(2012)~~. Design Builder shall use FHWA scour publication HEC-18, and FHWA's Hydraulic Engineering Circular 21 "Design of Bridge Deck Drainage" and Hydraulic Engineering Circular 22, "Urban Drainage Design Manual". Hydraulic designs for structures with a 50-year flow rate higher than 500 cubic feet per second (cfs) shall include a HEC-RAS model of the 'no-bridge', existing structure prior to collapse, and proposed structure conditions for flood events up to the 500-year flood. TDOT's hydrologic procedure requires evaluating the recommended flow rates from StreamStats, any nearby stream gages, and any existing flows published in a FEMA Flood Insurance Study. The Design-Builder shall determine flow rates following this procedure and increase the

established flow rates by 10% to account for current hydrological conditions. The Design-Builder shall submit a hydraulic design to TDOT for Review and Approval, which shall be sealed by a Professional Engineer licensed in Tennessee. The bridge hydraulic design shall meet the FEMA "No-rise" requirement (i.e., the proposed 100-year flood elevation is equal to or less than the existing). Excavation below natural ground elevation for the purpose of flood storage or adding hydraulic capacity to the bridge shall not be allowed.

The Design-Builder shall submit shop drawings in accordance with the requirements set forth in the TDOT Standard Specifications for bridge components, erection plans, and calculations for concurrence by the Department.

Should the Design-Builder elect to use drilled shafts, the Design-Builder shall construct each drilled shaft ~~shall be constructed~~ according to Special Provision 625 Drilled Shaft Specifications. Design-Builder shall prepare all drilled shafts to accommodate cross-hole sonic logging (CSL) testing per the *TDOT Structures Design Guidelines*. Additionally, 3D tomography will be required for shafts that are six feet in diameter and larger per Special Provision Section 625.51.

The low girder elevation shall meet or exceed either elevation 1423.00 or the 100-year flood elevation plus~~+~~ 1', whichever is greater. The 100-year flood elevation will be determined by the Design Builder's hydraulic analysis, as approved by TDOT. ~~The new structure shall provide a minimum of 1-foot clearance over the previous 100-year flood elevation.~~ The spans in the river shown on the Base Technical Concept (Bridge Conceptual Layout) shall not be shortened. No piers can be placed in a way to narrow the main channel of the river between the stations for Piers 1 and 2 as shown on the Base Technical Concept (Bridge Conceptual Layout.

TDOT Structural Design Guidelines SDG 5 states that 90 days after detensioning is the earliest time a beam can receive a full depth continuity diaphragm. The Design-Builder may reduce the 90--day cure time request. Successful documentation and design notes shall be required with the submission of the beam shop drawings.

Semi-integral abutments are prohibited without prior approval from the Department.

4.2 Project Photography and Videography

The Design-Builder shall provide and use high-resolution camera equipment resulting in still photos and a time-lapse video of the bridge construction Work from start to finish.

1. The location of the camera placement must be approved by TDOT and must have clear sight lines for full visibility of the bridge. The Design-Builder shall submit a camera placement plan of the Project site with notation of the vantage point(s) marked for location and direction along with the elevation.
2. The Design-Builder shall provide the Department unlimited access to and ability to download from an online photo album, including still photos and high-quality time-lapse videos, in order to view what is happening at any time during the construction Work, as well as to review what has already happened. The Design-Builder shall submit for approval the proposed frequency for taking the images. Still photos shall include the date and time within the file name. Time-lapse videos shall include the date range within the file name.
3. All images and time-lapse footage shall be the property of the Department.
4. All original digital still images shall be provided without alteration, manipulation, editing, watermarks, or modifications using image-editing software.

5. At the conclusion of the construction Work, the Design-Builder shall submit a professionally produced high-definition time-lapse movie of the Project. Editing shall include image stabilization, color correction, removal of inclement weather footage, and removal of images outside the desired daily time range as directed by the Department.
6. Final video should be a minimum resolution of 4K (3840 x 2160 pixels) with minimal compression at 30 frames per second. Photos should be a minimum resolution of 20MP (5472 x 3648 pixels) with minimal compression.

The Design-Builder shall also provide monthly drone footage with a minimum resolution 4k (3840 x 2160 pixels).

4.3 Removal of Existing Structure

The existing SR-353 structure~~bridge~~ was destroyed by the flooding caused by Hurricane Helene. Portions of the existing structure~~bridge~~ are visible, while other portions could be present underwater. The Design-Builder shall remove all remnants of the existing structure~~bridge~~ 100' upstream and 50' downstream of the previous structure's centerline~~.~~. For demolition of the existing structure~~bridge~~, the Design-Builder shall submit demolition plans and calculations for concurrence by the Department. Treatment of the existing piles from the collapsed structure~~bridge~~ shall be in accordance with the TDOT Standard Specifications. The shop drawings, erection plans, and demolition plans shall be submitted for the Department's Review and Comment.

Blasting is prohibited to demolish any section of the existing structure~~bridge~~.

4.4 Retaining Walls

Retaining walls are not anticipated for this Project.

The Design-Builder shall accommodate utility adjustments, emergency construction, new installation, and routine maintenance work by others that may be underway or take place during the progress of the Contract. No additional compensation or time shall be granted for any delays, inconveniences, or damage sustained by the Design-Builder or its Subcontractors due to interference from utilities or the operation of relocating utilities.

In the event the Design-Builder performs any utility relocation work, it is the Design-Builder's responsibility to obtain any and all applicable permits, including any environmental permits.

7.2.2 Concurrent Utility Adjustments

While it is anticipated that construction Work will be required around utilities that are being protected in place, the following four utility locations will be adjusted concurrently with the Design-Builder's construction Work.

Table 4: Concurrent Utility Adjustments

Name and Location	Anticipated Completion Dates
Electric Pole 11+36.97 LT	July 18, 2025~~TBD~~
Comm Pole 11+87.96 RT	July 18, 2025~~TBD~~
Electric Pole 13+35.28 LT	July 18, 2025~~TBD~~
Comm Pole 15+00.84 RT	July 18, 2025~~TBD~~

The Department is using the Base Technical Concept to coordinate with the respective utility owners on the relocation of the four utilities in conflict with the Project. The Design-Builder's Design Documents shall accommodate the facilities listed in Table 4 (the "Concurrent Utility Adjustments").

Any subsequent relocation, adjustments, removal, or alteration of the four listed facilities, as required by Design-Builder's Design Documents or construction Work, shall be considered a change in design and the responsibility of the Design-Builder in accordance with Section 7.3.

The Design-Builder shall coordinate its Work with the Concurrent Utility Adjustments, limiting its construction of temporary or permanent improvements in or around the noted adjustment areas, not prevent the utilities from accessing the Project Limits to complete their work, or otherwise not occupy the areas the utilities are working until the completion dates listed in Table 4.

If the actual date extends beyond the anticipated date, the Department will review the Design-Builder's time impact analysis for impacts to the Critical Path that may justify additional Contract Time. If warranted, additional time will be granted to extend the Contract Completion date, but this extension will be non-compensable.

7.2.3 Chuckey Utility District Water Line

The Design-Builder shall remove any remnants of the Chuckey Utility District's water line within the roadway prism of the Project Limits. As part of the removal and subsequent construction Work, the Design-Builder shall not disrupt service of the active Chuckey Utility District water line on the south side of the Project Limits. The Department will coordinate with the Chuckey Utility District and the Design-Builder on the full extent of PVC water line removal limits consistent with what is depicted in the Base Technical Concept.

Additionally, as detailed in the Base Technical Concept, the Design-Builder shall design and construct the new bridge to accommodate the loading of a 12-inch, ductile iron water line across the entirety of the bridge

- BMPs that show compliance with the General Aquatic Resource Alteration Permit (GARAP) for Emergency Infrastructure Repair
- Annotated photographs submitted prior to Substantial Completion that depict:
    - Existing conditions (of the piers in the water, abutments, and other areas impacted by the flooding) prior to starting construction,
    - The haul roads and any temporary construction impacts to the river or riverbanks during the work, and
    - Area restoration and characteristics of repair once construction is complete for the bridge, stream bank areas, and overall Project area.
- ~~Characteristics of repairs, including photographic documentation~~
- Dimensions of all fill or excavation, including depth, width, and distance

8.3.1.4 NPDES PERMIT REQUIREMENTS

A TDEC National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) for construction stormwater runoff is required for this Project. The Design-Builder shall develop the final EPSC sheets and the Storm Water Pollution Prevention Plan (SWPPP) to obtain the NPDES CGP for the Project.

The Design-Builder shall prepare a SWPPP, Documentation and Permits Binder, and a Notice of Intent (NOI) using the Department's template prior to submittal of the NPDES CGP to TDEC. A copy of the SWPPP template used by the Department to develop SWPPPs and the Documentation and Permits Binder can be obtained from the Department's Environmental Division, Ecology and Permits Office: NPDES Stormwater Permitting Program (tn.gov) The Design-Builder shall use the SWPPP template as a guide in preparation of the SWPPP, and the Design-Builder is responsible for complying with all requirements of the CGP.

The SWPPP shall include the EPSC plans for application of coverage under the CGP. The Design-Builder shall submit the SWPPP and NOI at least forty-five (45) business days prior to beginning construction activities. Once a Notice of Coverage (NOC) is received by the Design-Builder, the EPSC submitting the SWPPP for coverage under the CGP shall be submitted to both TDEC and the Department for their records.

As described in Section 8.3.1.2, the Design-Builder shall prepare EPSC plans detailing BMPs to prevent erosion, control sedimentation, and prevent the discharge of any pollutants from leaving the Project Limits and Department's ROW or easements, or from entering jurisdictional features or stormwater conveyances, and be transported to receiving waters during the construction of the Project. The Design-Builder shall identify all outfall locations on the EPSC plans with an appropriate numbering or lettering system.

The Design-Builder shall revise the SWPPP and the EPSC plans as necessary based on actual construction activities throughout the duration of the Project. All SWPPP and EPSC revisions shall be documented. The Design-Builder shall certify that the individual who prepared and reviewed the EPSC plans and SWPPP is currently certified according to the CGP. The Design-Builder shall also certify that the BMPs are designed so that if properly implemented, installed, and maintained, they will manage erosion and prevent sedimentation to Waters of the State/US or on adjacent property owners, as well as comply with the terms of the TDEC NPDES CGP.

8.3.1.5 INSPECTIONS

The Design-Builder shall complete Project site inspections of the erosion control measures, disturbed areas, areas used for storage of material, construction entrance/exit, and all outfalls. Following the inspection, the

Design-Builder shall prepare and maintain a report with the SWPPP. The CGP requires the inspections to be performed at least twice a week, 72 hours or more apart. The inspector must document the findings of the inspection fully in the report and provide a copy to the site operator and the Design-Builder, document that the rain gauge has been read and rainfall recorded on a daily basis or that a reference site has been used to document rainfall. The inspector shall also document that all records are being completed and maintained per the TN CGP.

The inspector shall use photo documentation to clearly convey recommendations to the site operator and the Design-Builder. All photos shall be saved to document site conditions over time to support the inspection report findings when the site is audited by TDEC or other regulators.

The Design-Builder shall maintain a rain gauge on-site that measures up to 6-inches of rainfall. The rain gauge shall be located within the Project Limits in an open area such that measurements will not be influenced by outside factors. The Design-Builder shall initiate rainfall monitoring prior to clearing, grubbing, excavation, grading, cutting or filling. The rain gauge shall be read and emptied after every rainfall event occurring on the Project site (at approximately the same time of day). The rainfall records shall be recorded and maintained with the SWPPP. Record data should include date of rain event, amount of rainfall and the approximate duration.

Inspectors performing the required twice weekly inspections must have:

- A valid certification from the “Fundamentals of Erosion Prevention and Sediment Control Level I” course, licensure as a professional engineer or landscape architect, Certified Professional in Erosion and Sediment Control (CPESC) certification, and
- Successfully completed the “Level II Principles for Erosion Prevention and Sediment Control for Construction Sites” course.

A copy of each inspector’s certificate, license, or training record shall be kept on site.

As outlined in the NPDES CGP, the Department will perform the monthly Environmental Quality Assurance Project Compliance Assessments (QA Inspections) on this Project, which will include any Design-Builder temporary interest sites (including waste and borrow areas).

8.3.1.6 NONCOMPLIANCE DETERMINATIONS

If at any time, the Design-Builder is not in compliance with any applicable permit regulations, all noncompliance items must be addressed by the Design-Builder within 24 hours of such identification. The Department has the authority to suspend Work until such time as the deficiencies have been corrected.

The Design-Builder shall not be granted any compensation or time extension for any work suspension associated with a non-compliance determination. Any monetary fees and/or fines associated with any violations shall be the sole responsibly of the Design-Builder. In the event that a Notice of Violation (NOV) is issued by a regulatory agency, the response to the NOV shall be written by the Design-Builder and approved by the TDOT Environmental Division – Environmental Engineering Office – Permits Unit prior to submittal to the agency.

8.3.2 Permit Register

The Design-Builder shall maintain a permit register and provide updates with every progress report. The permit register shall include an overview of all permits required of the Project. The permit register requires each permit to be indicated as follows:

- Name and address of the granting authority,

9.4 Maintenance During Construction

The Design-Builder shall prepare a maintenance plan for Department Review and Approval that meets the requirements herein. The Design-Builder is responsible for the maintenance of the Project Limits in accordance with the approved maintenance plan until Project completion and acceptance by the Department.

9.4.1 General Requirements

The Design-Builder shall maintain the Project Limits, from the date of the Notice to Proceed for construction Work until Project completion and acceptance by the Department, in a manner that provides a safe and reliable transportation system.

The Design-Builder shall be fully responsible for maintenance as required by TDOT Standard Specifications, Section 104.05 – Maintenance During Construction. The Design-Builder shall be responsible for all components of the transportation system within construction limits to include asphalt roadway, signing, and guardrail until Project completion and acceptance by the Department.

9.4.2 ROW Mowing and Litter Removal

The Design-Builder shall perform ROW mowing (two mowing cycles each year) and litter removal (as needed) in the Project Limits to provide a consistent vegetation height and a clean non-littered appearance from the date of the Notice to Proceed for construction Work from the Department until Project completion and acceptance by the Department.

The Department shall direct the Design-Builder with the exact dates for the annual mowing cycles.

9.4.3 Acceptance of the Project

Upon Project completion and acceptance, the Department will assume responsibility for the operation and maintenance of the Project Limits. Nothing contained herein shall otherwise limit any warranty obligations of the Design-Builder with respect to any defect or non-conforming Work.

9.5 Construction Signage

Access to all side roads, business entrances, and driveways shall be maintained during the construction Work unless specified elsewhere in the Contract Documents.

All construction signing shall be in strict accordance with the current edition of the MUTCD.

TDOT has put in place road closure signs and barricades due to the existing bridge being destroyed by the flood. Per Special Provision 108B, u~~U~~pon the Notice to Proceed for construction Work, the Design-Builder shall be responsible for maintaining the proper signing and barricades of the road closure until ~~Project completion~~ Substantial Completion and acceptance by the Department.

9.6 Temporary River Traffic Closures

With TDOT's prior approval, the Design-Builder may close the river within the Project Limits to recreational users during beam erection and bridge demolition activities. For this purpose, the Design-Builder shall submit a notification plan for the Department's Review and Comment at least 30 days prior to the Design-Builder's first river traffic closure request. Upon finalizing the plan, the Design-Builder shall coordinate with the Department 72 hours in advance of all river traffic closure requests. The Design-Builder shall provide