



TENNESSEE DEPARTMENT OF TRANSPORTATION

Design-Build ~~Draft~~ RFP

Book 1 Instructions to Proposer (ITP)

Timber Bridge Bundle One

Haywood and Lauderdale Counties, Tennessee

Project Identification Number (PIN): **136185.00**

State Project Number: **R4SVAR-S1-049**

DB Contract# **2506**

August

Final RFP: October 2025

1 PROJECT AND PROCUREMENT INFORMATION

This **RFP Book 1 (ITP/Instructions to Proposers)** is issued by the Tennessee Department of Transportation (“TDOT”) to all firms and teams of firms (the “Proposers”) that TDOT has shortlisted for the request for proposal (RFP) to solicit competitive proposals for Timber Bridge Bundle One design-build project (the Project). The instructions and details described herein follow the processes and practices described in this RFP ~~and TDOT's DB Procurement Best Practices~~.

TDOT hereby invites such Proposers to submit competitive, sealed proposals (“Proposals”) for completing the Project’s administration, preconstruction coordination, design, and construction work as more specifically described in **RFP Book 2 (Design-Build Contract)** and **RFP Book 3 (Project Specific Information)** (collectively the “Contract Documents”).

This **RFP Book 1 (ITP)** contains:

- A description of the Project, general proposal procedures, and the RFP’s procurement process;
- Submittal requirements for the Proposer’s Technical Proposal, Price Proposal, alternative technical concepts (ATCs), and other necessary pre-award forms and documents;
- The evaluation criteria used to review and score a Proposer’s Technical Proposal and Price Proposal; and
- The post-selection procedures and documents needed to award the Project to the apparent Design-Builder.

The Proposers shall use **RFP Book 1 (ITP)** in conjunction with the other RFP documents to develop and submit all proposed ATCs prior to the Proposal due date, responsive Technical Proposals, sealed Price Proposals, and other required pre-award submittals.

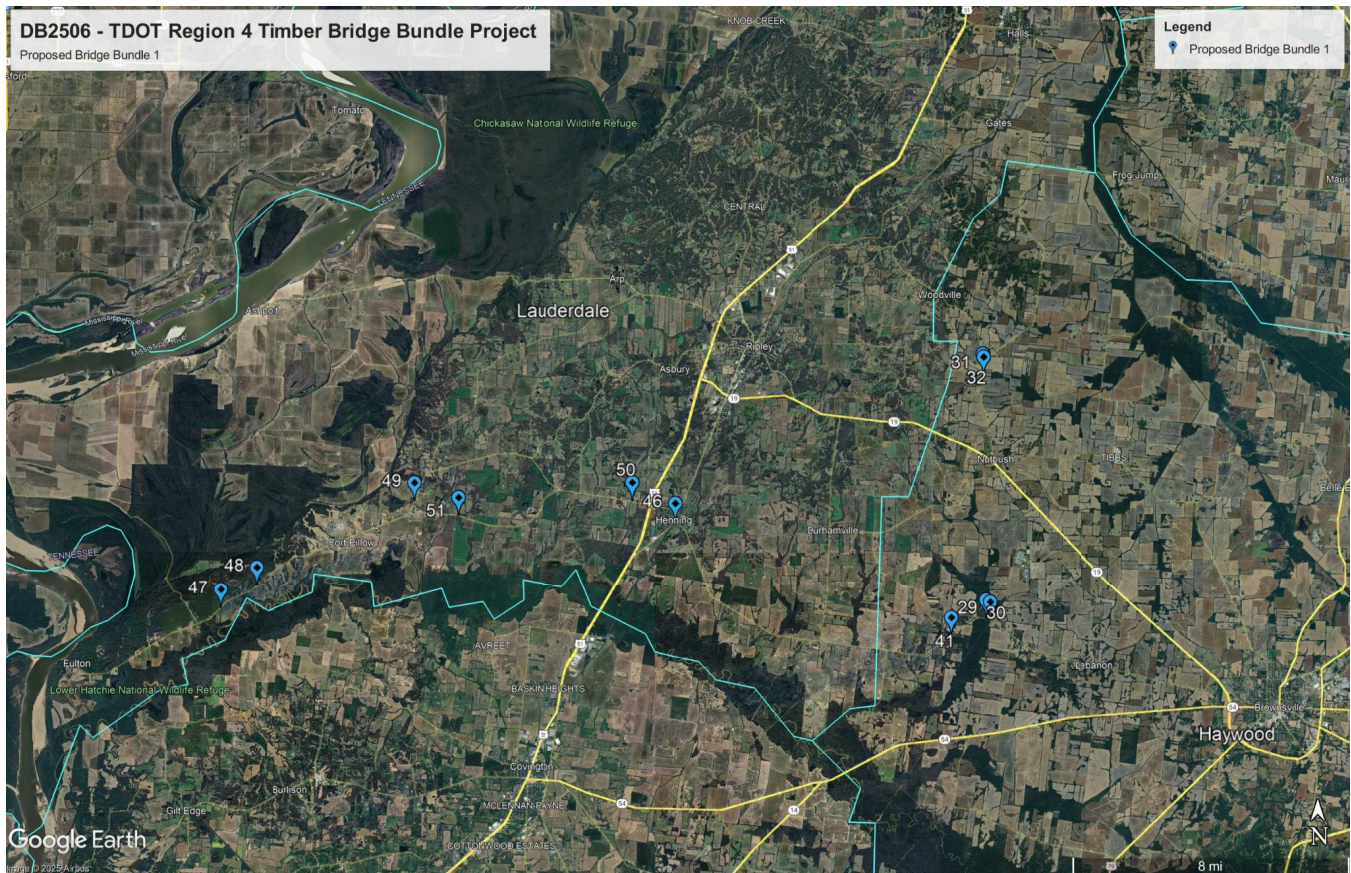
1.1 Project Description

1.1.1 Project Description

This Project includes replacement of eleven (11) timber bridges in Haywood and Lauderdale counties (as listed in the table below and depicted on the figure below).

Additional information on the Project and each of the listed bridges is included in the Reference Materials on the Project website.

Bridge #	State Route	Feature Intersected	Proposed Span	Current Bridge Rating
31	SR180	OTTER CREEK	single	Fair/Posted
32	SR180	OVERFLOW	single or two	Poor/Posted
46	SR087	DRAINAGE DITCH	single	Fair/Posted
49	SR087	BRANCH	single	Poor/Posted
50	SR087	BRANCH	single	Fair/Posted
51	SR371	BRANCH	single	Fair/Posted
47	SR087	BRANCH	single	Poor/Posted
48	SR087	BRANCH	single	Fair/Posted
29	SR087	LAGOON CREEK	single	Fair/Posted
30	SR087	BRANCH	single	Fair/Posted
41	SR087	BRANCH	single	Fair/Posted



Project Construction Funding: The funding source for the construction contract is State funding.

Environmental Clearance Status: TDOT is in the process of completing a Tennessee Environmental Evaluation Report (TEER) for the Project by October/November 2025. The TEER will detail any required environmental commitments to be included in the forthcoming RFP.

It is important to note that, at this time, the proposed Project remains in the environmental review and permitting process. Final environmental approvals and related requirements have not yet been clearly identified and secured. Additional alternatives, including a no-build alternative, are always considered in the environmental process, and it is possible that the Project scope may need to be modified to address changes required by applicable environmental approvals, or that a different alternative or a no-build alternative may be adopted. Nothing contained in this RFP, including any description of the Project, is intended to modify, limit, or otherwise constrain the on-going environmental review and permitting for this Project or other projects within or around the Project area or commit TDOT or any other entity to undertake any action with respect to the Project, including any procurement for the final design and construction of the Project.

Existing Utilities are listed in Section 67 of RFP Book 3.

1.2 Project Goals

The Project is intended to achieve the following goals:

1. Limit the duration for each road/bridge closure and related detour.
2. Minimize project cost and overall schedule duration for replacing all of the eleven (11) bridges.
3. Limit right-of-way, water quality permit/stream mitigation, and utility impacts at each bridge location.

1.3 Procurement Schedule/Submittal Deadlines

The following procurement schedule and submittal deadlines are set out below. TDOT will not consider any submittal received after the deadlines stated below.

Event/Submittal	Date/Time
TDOT issues draft RFP	August 22, 2025
Proposer's Deadline for submittal of Form QR on the draft RFP	September 12, 2025 11 a.m. central time
Confidential (One-on-One) Meetings (as part of the industry review process of a draft RFP)	September 24, 2025
TDOT issues final RFP	October <u>6</u> , 2025
<u>Proposer's Deadline for submittal of Form QR on the final RFP</u>	<u>October 13, 2025</u> <u>3 p.m. central time</u>
<u>Optional Confidential (One-on-One) Meetings: re RFP and final ATC discussion</u>	<u>October 23, 2025</u>
Proposer's deadline for submittal of <u>any last</u> Form QR, requests for QPL determination, organizational or Key Individual change requests, SOQ conflicts of interests update, and/or alternate technical concepts (ATCs)	October 31 <u>November 4</u> , 2025 11 a <u>1</u> p.m. central time
TDOT's last response on Form QR, requests for QPL determination, organizational changes, SOQ resubmittals, and/or alternate technical concepts (ATCs) determination TDOT's issuance of last addendum	November 14, 2025
Proposer's Technical Proposal and Price Proposal Due Date	December 16, 2025 1 p.m. central time
Public Price Proposal opening	January 14, 2026
Notice of Best Evaluated Design-Builder	January 2026
Anticipated award of design-build contract (or rejection of all Proposal)	February 2026
Anticipated issuance of initial notice to proceed	March/April 2026

- b. Area emergency service providers
- c. County public schools
- d. Tennessee Department of Environment and Conservation (TDEC)
- e. Local hospitals, businesses, and farming operations
- f. Impacted railroads (including Illinois Central Gulf Railroad Company) and utilities

1.5.1 General Procurement Communication Protocols

All correspondence and submittals described in this **RFP Book 1 (ITP)** are to be submitted electronically ~~or submitted in a sealed envelope or package~~ addressed to the TDOT primary point of contact.

1.5.2 General TDOT Communication Protocols

TDOT may post advance notices of addenda or other procurement information on the Project website and may also utilize e-mail alerts to all Proposers.

The Proposers may not rely on oral communications, or on any other information or contact that occurs outside the official communication process specified herein. Official communications will only be disseminated in writing, by email or via the website by TDOT.

1.5.3 Confidential (One-on-One) Meetings

TDOT may conduct confidential (one-on-one) meetings with each Proposer on the dates set forth in Section 1.3, and on such other dates as designated by TDOT in writing to all Proposers. The intent of the one-on-one meetings is to discuss:

- Issues, risk allocation, and clarifications regarding the RFP terms and overall Project details as part of an industry review process for a draft RFP release (if used).
- The Proposer's questions and TDOT feedback on its ATC submittals after release of the final RFP.

TDOT reserves the right to disclose to all Proposers any issues raised during any of the one-on-one meetings; provided, however, that TDOT will not disclose such issues if TDOT determines that disclosure (a) would (x) impair the confidentiality of information submitted as part of this procurement or (y) reveal a Proposer's confidential business strategies or (b) is not necessary for purposes of fairness and transparency. Except for meetings that TDOT expressly indicates are optional, participation at such meetings by the Proposers is to be mandatory. Representatives of TDOT, FHWA, and their consultants may attend and participate in one-on-one meetings.

Any communication at the one-on-one meetings is subject to the following rules:

- The meetings are intended to provide clarification to Proposers to enhance understanding of and responsiveness to the RFP and to provide Proposers with a better understanding of the Project and Project-related documents or communications provided by TDOT.
- TDOT will not discuss with any Proposer any information submitted as part of this procurement (including other Proposals or other Proposers' ATCs) other than its own.
- Proposers shall not seek to obtain commitments from TDOT in the meetings or otherwise seek to obtain an unfair competitive advantage over any other Proposer.
- No aspect of these meetings is intended to provide any Proposer with access to information that is not similarly available to other Proposers. Accordingly, TDOT will reasonably attempt to provide

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 submit its Technical Proposal electronically (in searchable PDF format with bookmarks) to the TDOT primary point of contact's email address listed in Section 1.5.1. 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 Proposer **shall not** submit a hardcopy of its Technical Proposal.

The Technical Proposal must adhere to the following naming convention for each volume of the Technical Proposal PDF files:

- Enter proposer name_DB2506_Region 4 Bridge Bundle_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, Forms, and Evidence of Authority)** – There is *no page limit* on the information required to be submitted under Volume I. The Proposer is to place the required forms after a cover sheet labeled "Forms."
- **Technical Proposal: Volume II (Technical Approach)** – Responses under Volume II shall be limited to a maximum of ten (10) 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 cover sheet for each major section described in Section 3.4.

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 letter (8.5" by 11") pages count as one (1) page towards any assigned page limits, and all tabloid (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.

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 ~~EB~~[Electronic](#) 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, Forms, and Evidence of Authority)

3.2.1 Cover Letter

The Proposer is to provide a cover letter (a maximum of one page) 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.

An authorized representative of the Proposer's organization is to sign the cover letter. If the Proposer is not yet a legal entity or is a joint venture or general partnership, authorized representatives from all Principal Participants are to sign the letter.

Additionally, if the Proposer requests to add, delete, or substitute a Principal Participant or Major Participant, or substitute its lead designer or any Key Personnel that it identified in its SOQ, the Proposer must make such request in this cover letter. In addition to including such a substitution or change request in its cover letter, the Proposer must follow the procedures and submit the information required under this RFP.

3.2.2 Forms

The Proposer is to include the following completed/executed forms in the order listed below in Volume I:

- Form TPSP – Technical Proposal Signature Page (**Note:** If the Proposer is a joint venture or partnership, each joint venture or partner must sign Form TPSP);
- Form C – Receipt of Addendum/Clarification;
- Form QR – RFP Question Request (include the most current Form QR with all TDOT answers);
- Form AT – Attestation regarding Personnel Used in Contract Performance;
- Form COI – Conflict of Interest Disclosure Statement; and
- Form LC – Lobbying Certification (submit a blank form if not applicable).

3.2.3 Evidence of Corporate Existence; Certificate of Authority

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

3.4.1 Key Personnel (Level “2” Personnel) Resumes

The Proposer is to provide resumes (not to not exceed one (1) page for each resume) for the following Level “2” Personnel:

- Design Lead Engineer – Structures, who has a PE in the state of Tennessee and has at least four (4) years of structural design experience
- Design Lead Engineer – Geotechnical, who has a PE in the state of Tennessee and has at least four (4) years of geotechnical design experience with the Proposer’s proposed foundations
- Utilities Design Engineering/Coordination Supervisor, who has at least three (3) years of utility engineering/coordination experience
- Erosion Prevention/Sediment Control Inspector, who meets the requirements of Section 8.3.6 of Book 3
- ~~Hydraulics Design Lead~~
- Hydraulics Design Lead, who has a PE in the state of Tennessee and has at least three (3) years of hydraulics design and modeling experience to completing the requirements of Section 3.6.3 of Book 3
- Water Quality Permits Lead, who has at least three (3) years of preparing and submitting the noted permits detailed in Section 8.3 of Book 3
- ~~ROW Lead~~
- ROW Lead, who meets the minimum qualifications listed in Section 6.2.3 of Book 3

3.4.2 Preliminary Roadway Schematic/Concept Plans

The Proposer is to electronically submit a roll plot(s) of its preliminary roadway and bridge schematic/concept plans to represent the Proposer’s **general** design approach consistent ~~with each to a~~ bridge location. It is not the intent for the Proposer to submit plans for each bridge location or 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.~~

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;
- Identify preliminary horizontal and vertical alignments of all roadway elements; and
- Show typical sections for the roadway mainline.

If the Proposer requires additional right-of-way (temporary or permanent) to accommodate its work, the Proposer shall also include specific plans for each impacted bridge location depicting the Planned ROW Limits compared to the base technical concept/BTC. These plans shall include a right-of-way acquisition table that lists the:

- Tract No.
- Property owner
- Area to be acquired for the base technical concept/BTC (from Section ~~56~~ of RFP 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)

3.4.3 ATC Approval Letter and Form ATC

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

3.4.4 Proposal CPM Schedule

The Proposer is to prepare a Proposal CPM schedule ~~to that includes at least~~ a Level IV work breakdown structure (WBS) ~~to, inclusive of the Proposer's activities and sub-activities that~~ represent all administration/management, design, ROW, utility/third-party coordination, permitting, environmental, procurement, Department, major closures, maintenance, and construction work for each bridge location beginning at from the Project's notice to proceed and extending through the Project's substantial completion (a "Contract Completion Date"-) and final acceptance date. Each activity or sub-activity listed in the Proposal CPM schedule is not to exceed forty (40) days in duration.

The Proposer is to submit its schedule electronically in Adobe PDF format and Primavera format (.xer) meeting the requirements in Section 2.2 of **Book 3 (Project Specific Requirement)**, TDOT's Circular Letter 108.03.C, and 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).~~

The purpose of a Proposal CPM schedule is to ensure the Proposer has an adequate plan for execution of the work. The Proposal CPM schedule shall illustrate a meeting or exceeding of the Contract requirements where Project risks are mitigated with schedule logic and work sequencing. ~~The schedule is to provide relevant detail, including right-of-way (for timing to acquire any proposed properties), environmental, third-party/Utilities, Department, administration, design, procurement, construction, contractual milestones, and major closure activities.~~ The Proposal CPM schedule **shall not** include any cost-loading.

Project Section and Pay Items

~~The Proposer is to submit a description of Pay Item Breakdowns, including the physical features and activities included in the Pay Item and all work included in the Pay Item Totals, as reflected on the Schedule of Items.~~

~~105-01.20 Design-Build Construction Stakes, Lines & Grades~~

- ~~▪ Field Survey~~
- ~~▪ Construction Staking~~

~~105-01.55 Design-Build Design Services~~

~~(All Design Activities shall be included in this item.)~~

- ~~▪ Definitive Design and Reviews~~
- ~~▪ Interim Design and Reviews~~
- ~~▪ Readiness for Construction Plans and Reviews, Specification and quantity estimates~~
- ~~▪ Working Drawings~~
- ~~▪ As-Built Plans and Reviews~~

~~105-08.20 Design-Build Contract Management~~

- ~~▪ Project Administration~~
- ~~▪ Project progress (scheduling)~~

- ~~Contract progress submittals for payment~~

~~109-04.50 Design-Build ROW Services~~

- ~~Appraisal~~
- ~~Acquiring~~
- ~~Public meetings if required~~

~~203-01.95 Design-Build Grading & Roadways~~

- ~~Road and drainage excavation~~
- ~~Borrow excavation (rock)~~
- ~~Borrow excavation (other than solid rock)~~
- ~~Undercutting~~

~~204-05.50 Design-Build Geotechnical~~

- ~~Borings~~
- ~~Geotechnical Investigations~~
- ~~Sinkholes~~

~~209-01.50 Design-Build Environmental Management~~

- ~~EPSC measures and installation~~
- ~~EPSC inspections~~
- ~~Permit sketch development, applications, and acquisitions~~

~~301-50.50 Design-Build Pavement~~

- ~~Any aggregate base~~
- ~~Any Bituminous Plant Mix Base (HM) (A, BM-2, Etc.)~~
- ~~Any Bituminous Concrete Surface (HM) (D, E)~~
- ~~Tack, Prime coat~~

~~604-10.95 Design-Build Bridges~~

- ~~Components (steel, deck drains, etc.)~~
- ~~Bridge, including foundations~~
- ~~Inspections~~

~~604-50.50 Design-Build Minor Structures (Other)~~

- ~~Box Culvert~~
- ~~Retaining Walls~~
- ~~Endwalls~~
- ~~Wingwalls~~
- ~~Temporary structures~~

- ~~Minor Structure Repair~~

~~610-10.50 Design-Build Drainage~~

- ~~Catch Basins~~
- ~~Storm drainage system~~
- ~~Side drain~~
- ~~Under drain~~

~~712-01.75 Design-Build Maintenance of Traffic~~

- ~~Work Zone Safety Plan~~
- ~~Temporary Barrier Rail~~
- ~~Changeable Message Sign~~
- ~~Traffic Control~~
- ~~Project photography and videography~~

~~714-40.75 Design-Build Utilities~~

- ~~Coordination~~
- ~~Relocation~~

~~713-15.25 Design-Build Signing~~

- ~~Footings~~
- ~~Installation~~
- ~~Removal and Disposal~~

~~716-99.50 Design-Build Striping/Pavement Markings~~

- ~~Material~~
- ~~Raised Pavement Markers~~

~~717-99.95 Design-Build Mobilization~~

3.5 Price Proposal Content and Disclaimers

The Proposer is to submit responses for each element below, using the required forms as instructed and inputting the requested information into the internet bidding with electronic bid bond. All prices quoted shall be in U.S. currency as of the Proposal due date.

3.5.1 Price Proposal Contents

The Proposer is to include the following as part of its Price Proposal.

- Electronic Price Proposal (including specified Contract Completion Time)
 - The Proposer is to specify the number of calendar days after receipt of the initial notice to proceed required for completion of the Project within its Price Proposal. Completion of the project is completion of all work to be done under the design-build contract (except for plant/vegetation establishment and punch list items as defined in the *Design-Build Standard*

Guidance) and TDOT has provided final acceptance as stated in TDOT's Standard Specifications.

- The number of calendar days specified by the Proposer in its Price Proposal is to be placed in the design-build contract prior to execution of said contract.
- Electronic Proposal Security in the amount of five percent (5%) of the Proposal Price.
 - The Proposal Security may be submitted in the form of a Proposal Bond or Proposal Guarantee issued by an insured institution or certified check payable to the Tennessee Department of Transportation.
 - If the Proposer bidder's bond is offered as guaranty, the bond must be made by a surety company that is qualified and authorized to transact business in the State of Tennessee and must be acceptable to TDOT.

3.5.2 Instructions Regarding Preparation

The Proposer is to complete and submit its Price Proposal ~~in compliance to~~ comply with the following:

- Provide a lump sum price for each Pay Item total ~~in each Pay Item~~.
 - The lump-sum price shall represent the total price to complete and integrate all work represented by that Pay Item into the Project, inclusive of associated physical features, overhead, labor, materials, equipment, tools, transportation, and Project administration.
 - These **are not** bid items and will be used as a basis in developing the cost-loaded Project CPM schedule after award.
- Utilize the same titles, contents, and limits as are shown on the Schedule of Items.

3.5.3 Pay Items

The Proposer is to account for the following sixteen (16) Project-specific Pay Items to build up its Price Proposal. The bullets following each Pay Item are examples of activities to be priced as part of the respective lump-sum price for each Pay Item. Only the Pay Items need to be accounted for when submitting a Price Proposal.

105-01.20 Design-Build Construction Stakes, Lines & Grades

- Field Survey
- Construction Staking

105-01.55 Design-Build Design Services

(All Design Activities shall be included in this item.)

- Definitive Design and Reviews
- Interim Design and Reviews
- Readiness-for-Construction Plans and Reviews, Specification and quantity estimates
- Working Drawings
- As-Built Plans and Reviews

105-08.20 Design-Build Contract Management

- Project Administration

- Project progress (scheduling)
- Contract progress submittals for payment

109-04.50 Design-Build ROW Services

- Appraisal
- Acquiring
- Public meetings if required

203-01.95 Design-Build Grading & Roadways

- Road and drainage excavation
- Borrow excavation (rock)
- Borrow excavation (other than solid rock)
- Undercutting

204-05.50 Design-Build Geotechnical

- Borings
- Geotechnical Investigations
- Sinkholes

209-01.50 Design-Build Environmental Management

- EPSC measures and installation
- EPSC inspections
- Permit sketch development, applications, and acquisitions

301-50.50 Design-Build Pavement

- Any aggregate base
- Any Bituminous Plant Mix Base (HM) (A, BM-2, Etc.)
- Any Bituminous Concrete Surface (HM) (D, E)
- Tack, Prime coat

604-10.95 Design-Build Bridges

- Components (steel, deck drains, etc.)
- Bridge, including foundations
- Inspections

604-50.50 Design-Build Minor Structures (Other)

- Box Culvert
- Retaining Walls
- Endwalls
- Wingwalls

- Temporary structures

- Minor Structure Repair

610-10.50 Design-Build Drainage

- Catch Basins

- Storm drainage system

- Side drain

- Under drain

712-01.75 Design-Build Maintenance of Traffic

- Work Zone Safety Plan

- Temporary Barrier Rail

- Changeable Message Sign

- Traffic Control

- Project photography and videography

714-40.75 Design-Build Utilities

- Coordination

- Relocation

713-15.25 Design-Build Signing

- Footings

- Installation

- Removal and Disposal

716-99.50 Design-Build Striping/Pavement Markings

- Material

- Raised Pavement Markers

717-99.95 Design-Build Mobilization

3.5.33.5.4 Price Proposal Disclaimers

The Proposer is cautioned that the total price proposed in the Price Proposal "Schedule of Items" (the "A") is to become the Contract Amount upon contract execution and constitutes total compensation to the selected Design-Builder for performing the contract, including all minimum contract requirements.

The fact that a selected Proposer's Technical Proposal may contain elements that do not meet or exceed all minimum contract requirements, as determined by TDOT (in its sole discretion), does not entitle the selected Proposer to receive compensation more than the amount of its Proposal Price as a condition of performing the minimum contractual requirements or any other design-build contract obligation. Nor shall such fact entitle the selected Proposer to perform below minimum contract requirements or fail to perform any other design-build contract obligation.

4 EVALUATION AND SELECTION PROCESS

TDOT evaluates all Proposals submitted in accordance with this **RFP Book 1 (ITP)**. As part of the evaluation and selection process, TDOT may reject all Proposals or any Proposal that:

- Does not comply with the requirements set forth in the RFP, TDOT Rule 1680-05-04, or applicable state law; or
- Does not meet the applicable standards of responsibility.

4.1 Responsiveness Criteria

Prior to any evaluation of the Technical Proposal or opening of the Price Proposal, TDOT completes a responsiveness check. A Proposer's failure to properly submit the following submittals in the prescribed format and organization may render the Proposal non-responsive:

- The electronic Technical Proposal (all three volumes that include all completed forms) has been submitted by the due date and adhering to the format and content requirements detailed in Section 1.3 and Sections 3.1 through 3.4 (respectively);
- The electronic Price Proposal and Schedule of Items hashave been submitted as described in Section 3.5; and
- The electronic Proposal Security (Proposal Bond or Proposal Guarantee) has been submitted as detailed in Section 3.5.

4.1.1 Clarification, Waiver, or Omitted Proposal Responses

As permitted by law, the TDOT primary point of contact may seek clarification to request items that may be missing in a Proposal that do not affect the scoring of a Technical or Price Proposal. This includes any DBRC requests that a Proposer provide additional information used when developing its Price Proposal, which may be design assumptions, summary of quantities, mobilization assumptions, and construction staging assumptions.

Additionally, TDOT may waive minor informalities and irregularities it deems necessary or advisable.

Unless TDOT determines that a Proposal is not compliant with the RFP requirements or intentionally incomplete (i.e., is a nonresponsive Proposal), a Proposer should be aware that any omitted responses in its Technical or Price Proposal may be scored lower under the evaluation process described in Section 4.2.1.

4.2 Selection Criteria

TDOT is using a "lowest price-technically acceptable" (A+B) selection process to award a design-build contract to a responsive Proposer that demonstrates it meets the technical criteria and can deliver the best combination of price and time (A+B) to design and construct the Project.

4.2.1 Relative Weights and Scoring of the Proposal

For the Price Proposal to be opened and scored, a Proposer's Technical Proposal must be noted as "responsive" in accordance with Section 4.1 and must achieve a **Pass or Technically Acceptable** rating from the DBRC's review of Volumes I, II, and III of the Technical Proposal. After completing the evaluation of the Technical Proposals, and on the date and time specified in Section 1.3, TDOT will publicly open the Price Proposals and post the total proposed contract amounts (A+B) submitted by the Proposers who have submitted responsive and "technically acceptable" Proposals.



TENNESSEE DEPARTMENT OF TRANSPORTATION

Design-Build

~~Draft~~ Book 2 Contract

Timber Bridge Bundle One

Haywood and Lauderdale Counties, Tennessee

DB Contract# **2506**

Final RFP: October~~August~~ 2025

APPENDIX B

SPECIAL PROVISIONS

The following table incorporates the Special Provisions by reference for bidding and Project design and construction purposes. These Special Provisions may be obtained from the Department's website at:

<https://www.tn.gov/tdot/tdot-construction-division/transportation-construction-division-resources/construction-special-provisions.html>

With the exception of ~~SP-108B (the Special Provisions~~ included below), ~~the table~~, the date of the Department's last RFP addendum shall establish the "revision date" for each of the following Special Provisions.

Title	SP#
Unbalanced Bids	102B
Employing and Contracting with Illegal Immigrants	102I
Specifications for Road and Bridge Construction	102LC
Special Provisions Relative to Protection of Railroad Property Railroad Flagging and Insurance Requirements	105G
Buy American Requirements	106A
Prohibition of Certain Telecommunications & Video Surveillance Services or Equipment	106B
Contractor Payroll Requirements in AASHTOWARE Project Civil Rights & Labor (CRL)	107CP
Water Quality and Storm Water Permits	107FP
Project Completion and Liquidated Damages	108B
Payment Adjustment for Fuel <i>(Note: final adjustment values will be provided with the Final RFP's last addendum)</i>	109A
Price Adjustment for Bituminous Material <i>(Note: final adjustment values will be provided with the Final RFP's last addendum)</i>	109B
Removal of Asbestos Containing Materials (ACM)	202ACM
Scaling and Trimming	203E
Reinforced Soil Slopes	205RSS
Section 411 – Asphalt Concrete Surface (Hot Mix)	411C
Section 602 – Steel Structures (Inspection Cost Only)	602
Retaining Walls	624

Title	SP#
Drilled Shaft Specs	625
Removal and Disposal of Litter	719A
Right-of-Way Mowing	806
Dynamic Pile Testing	930PDA
Equal Employment Opportunity	1230
Debarment, Suspension, etc.	1275
Labor (State Projects Only)	1280
Non-Discrimination in Employment	1290
Tennessee Department of Transportation Minimum Wage Scales for Federal-Aid Construction and State Funded Construction	1320
State Wage Rates	AA-ST RATES

STATE**OF****TENNESSEE**

County: Lauderdale
and Haywood Counties
Contract No. DB2506

SPECIAL PROVISION**REGARDING****LANE CLOSURE AND PROJECT COMPLETION ~~AND~~ LIQUIDATED DAMAGES**

All temporary lane closures and road closures on Interstates, State Routes and local streets must be approved by the Department in advance. Requests for road and temporary lane closure approvals must be sent to the Department at least seven (7) calendar days in advance.

The Design-Builder shall be allowed one (1) full closure of both Bridges 29 and 30 for two hundred (200) Calendar Days to complete its related construction Work and to reopen the bridge to traffic. The closure time shall start once the first of the two bridges are closed and shall end when both bridges are opened back up to traffic (the Bridge 29 and 30 "Bridge Opening Date"). If the Design-Builder fails to open both bridges by the Bridge Opening Date, a sum of money equal to \$2,000.00 per Calendar Day shall be deducted from monies due to the Design-Builder, not as penalty, but as Liquidated Damages.

The Design-Builder shall be allowed a full closure of one hundred twenty (120) Calendar Days for each of the Bridges 31, 32, 41, 46, 49, 50, and 51 to complete its related construction Work and to reopen the bridges to traffic at each location. The closure time shall start once the respective bridge is closed and shall end when the bridge is opened back up to traffic (the listed bridges "Bridge Opening Date"). If the Design-Builder fails to open the respective bridge by the Bridge Opening Date, a sum of money equal to \$2,000.00 per Calendar Day shall be deducted from monies due to the Design-Builder, not as penalty, but as Liquidated Damages.

The Design-Builder shall be allowed two hundred (200) Calendar Days to complete its related construction Work and have both Bridges 47 and 48 fully open to traffic (the Bridge 47 and 48 "Bridge Opening Date"). If the Design-Builder fails to open both bridges by the Bridge Opening Date, a sum of money equal to \$2,000.00 per Calendar Day shall be deducted from monies due to the Design-Builder, not as penalty, but as Liquidated Damages.

Additionally, temporary lane closures on the identified state routes may be allowed, as approved by the Department. A minimum of one lane (with flagging controls) shall be maintained at all times.

All lane closures and operations must be coordinated with other construction contracts in the area and additionally meet the requirements of Section 9.4.4 of Book 3.

The Project shall be completed in its entirety, except for the plant establishment and punch list (defined as a listing of instructions for correction of unsatisfactory work, in whole or in part, after an inspection by the Department prior to final acceptance and clean-up not requiring lane closures), on or before the **Contract Completion Date**. The required Work included to achieve the Contract Completion Date minimally involves that all bridge locations ~~having~~have met their respective Bridge Opening Dates ~~as the bridges and all bridges~~ are open to traffic. Section 9.4.1 of Book 3 describes the process to obtain Final Acceptance and full relief from maintenance for each bridge location and the overall Project.

For each calendar day after the Contract Completion Date, that all Work specified in the Project is not complete, a sum of **\$3,200.00** per day shall be deducted from monies due the Contractor, not as a penalty, but as liquidated damages. The liquidated damage deductions specified in Subsection 108.09 of the Standard Specifications, as amended, for failure to complete the Project on or before the Contract Completion Date, shall not apply to this Project.

Where provisions of this Special Provision conflict with Subsection 108.09 of the Standard Specifications, as amended, this Special Provision prevails.



TENNESSEE DEPARTMENT OF TRANSPORTATION

Design-Build

Book 3 Project Specific Information

Timber Bridge Bundle One

Haywood and Lauderdale Counties, Tennessee

Project Identification Number (PIN): 136185.00

State Project Number: R4SVAR-S1-049

DB Contract# **2506**

~~August~~

Final RFP: October 2025

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, or its representatives ("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., hydraulic analysis, geotechnical, haul road implementation) required to construct the Timber Bridge Bundle One (the "Project") in accordance with the Contract Documents (the "Work").

This Project includes the replacement of eleven (11) bridges and related roadway Work in Haywood and Lauderdale Counties (as listed in Table 1 and depicted on Figure 1 below).

Table 1: Bridge Numbers and Locations

Bridge #	Bridge Concept Report PIN	Current PIN	State Route	Feature Intersected	Span	Current Bridge Rating
29	134873.00	136185.02	SR087	LAGOON CREEK	single	Fair/Posted
30	134874.00	136185.03	SR087	BRANCH	single	Fair/Posted
31	134876.00	136185.04	SR180	OTTER CREEK	single	Fair/Posted
32	134877.00	136185.05	SR180	OVERFLOW	single	Poor/Posted
41	134848.00	136185.01	SR087	BRANCH	single	Fair/Posted
46	134856.00	136185.08	SR087	DRAINAGE DITCH	single	Fair/Posted
47	134857.00	136185.09	SR087	BRANCH	single	Poor/Posted
48	134858.00	136185.10	SR087	BRANCH	single	Fair/Posted
49	134859.00	136185.11	SR087	BRANCH	single	Poor/Posted
50	134860.00	136185.12	SR087	BRANCH	single	Fair/Posted
51	134862.00	136185.13	SR371	BRANCH	single	Fair/Posted

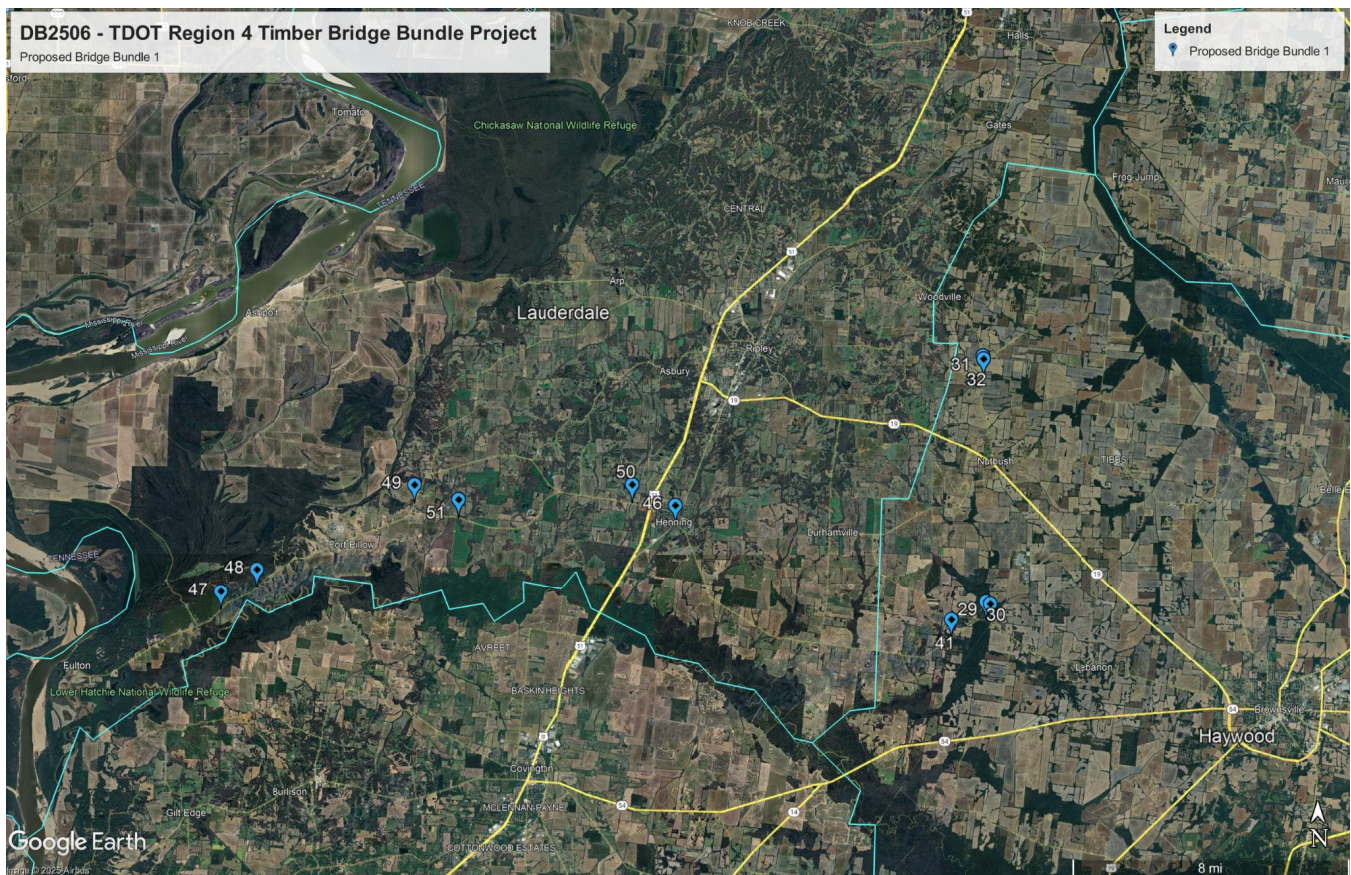


Figure 1: Bridge Location Map

The Project lengths at each bridge replacement location are shown on the Base Technical Concepts for each bridge location (the “Project Limits”). The roadway grade will be transitioned at the ends of the bridge replacements to tie-in to the existing roadway. Bridges 31 & 32 and 29 & 30 are close in proximity such that the proposed roadway improvement encompasses both bridges.

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 Section 3 and Attachment B.
- Removal, disposal, and replacement of the existing bridges meeting or exceeding the bridge design criteria as defined in Section 4.
- Remove and replace all guardrail necessary for construction of the roadway approaches to meet the Project design criteria.
- ~~Resurface or replace~~ Full-depth reconstruction of all existing asphalt pavement within the Project Limits in accordance with Section 3.9 and Attachment A.
- ~~Replace or repair/modify existing~~ drainage structures impacted by the Project 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, to confirm and resolve the Design-Builder’s dispositions (e.g., protect-in-place, avoid, relocate) for each utility that may be impacted by the Design-Builder’s Design Documents and construction Work.

- Install new roadway signs and sign structures within the Project Limits.
- Maintain traffic control during the construction Work, including maintaining detour signs where needed.
- Acquire necessary construction and water quality permits to perform the Work.
- Meet all environmental commitments and perform environmental services in accordance with the approved TEER Document.
- Acquire necessary ROW to perform the Work based on the Design-Builder's Design Documents.

1.1.1 TDOT's and Design-Builder's Responsibilities

The following Table 2 and Table 3 list the general responsibilities for the Department and Design-Builder for the Project. A more detailed description of the Work is included within the various sections of this Contract Book 3 (Project-Specific Information).

Table 2: Division of Responsibilities for Bridges 31 & 32

	TDOT	Design-Builder
Survey	Drone Lidar (as a Reference Document provided and subject to the limitations of use detailed in Section 1.3)	Field Survey, Bathymetric Survey
Roadway & Bridge Plans	Base Technical Concept (including <u>the</u> Roadway Line & Grade Plans and Bridge Preliminary Plans (as a Reference Document provided and subject to the limitations of use detailed in Section 1.3)))	Advancing and finalizing the roadway and bridge Plans per the <i>DB Standard Guidance</i>
Right-of-Way (ROW)	Existing ROW, ROW Footprint, and ROW Acquisition responsibilities as listed in Section 6.1.	Additional ROW coordination and acquisition responsibilities (if the Design Builder's Design Documents require a change to the ROW footprint compared to the Base Technical Concept)
Environmental Permits	Environmental Boundaries Reports (EBRs), permit sketches, permit applications, and obtaining the necessary water quality permits listed in Table 10 (which does not include the Design-Builder's responsibilities for obtaining its TDEC NPDES CGP permit for both bridges)	- Amended water quality permit applications and responsibilities to obtain noted permits (if the Design-Builder's Design Documents change the impacts to the permittable features compared to the Base Technical Concepts) - NPDES Permit
Geotechnical	Boring data (as a Reference Document provided and subject to the limitations of use detailed in Section 1.3)	Geotechnical investigation & Reports <u>and reports to support the Design-Builder's Design Documents</u>
Hydraulics	N/A	Hydrology & hydraulic design &and reports
Utilities	Utility Coordination Plans, Utility Relocation Plans, and completing Concurrent Utility Adjustments as listed in Table 7.	Utility coordination, as needed (notably if the Design-Builder's <u>Design</u> Documents change the <u>utility</u> impacts to the utilities compared to the Base Technical Concept)

Table 3: Division of Responsibilities for Bridges 29, 30, 41, 46, 47, 48, 49, 50, and 51

	TDOT	Design-Builder
Survey	State Lidar (as a Reference Document provided and subject to the limitations of use detailed in Section 1.3)	All survey
Roadway & Bridge Plans	Base Technical Concept Concepts (as a Reference Document provided and subject to the limitations of use detailed in Section 1.3)	Advancing and finalizing the Roadway and Bridge Plans per the <i>DB Standard Guidance</i>
Right-of-Way	Existing preliminary ROW based <u>on</u> deed research considering the Base Technical Concept (as a Reference Document provided and subject to the limitations of use detailed in Section 1.3)	Definitive Design Plan (as revised) and all ROW acquisition responsibilities as listed in Section 6.2
Environmental Permits	EBR and initial water quality permit assessments <u>(for information only)</u>	Water quality permit sketch development, permit applications, <u>and</u> TDEC NPDES CGP permit as listed in Section 8.3.2
Geotechnical	Boring data Report (as a Reference Document provided and subject to the limitations of use detailed in Section 1.3)	Geotechnical investigation <u>& investigations and</u> reports
Hydraulics	N/A	Hydrology & hydraulic design & reports
Utilities	List of utility owners that have responded to the Department's early notify process (as a Reference Document provided and subject to the limitations of use detailed in Section 1.3)	Utility Coordination Plans, Utility Relocation Plans, and completing or coordinating any required utility adjustment per Section 7.2.

1.2 Project Goals

The Project goals are as follows:

1. Limit the duration for each road/bridge closure and related detour.
2. Minimize project cost and overall schedule duration for replacing all eleven (11) bridges.
3. Limit right-of-way, water quality permit/stream mitigation, and utility impacts at each bridge location.

1.3 Reference Documents

Information for all eleven (11) bridges and other Department-supplied materials have been included as Reference Documents, published on the Department's Project website.

[tdot.tn.gov/Applications/Documents?pathName=%5CConstruction%5CDesign_Build%5CDB2506](https://dot.tn.gov/Applications/Documents?pathName=%5CConstruction%5CDesign_Build%5CDB2506)

The Design-Builder shall acknowledge that the Reference Documents are preliminary and provided solely to assist the Design-Builder in the 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.

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 or omissions in the Reference Documents or due to the errors, omissions, or negligence of the Design-Builder in performing the Work required by this Contract.

The Reference Documents include:

- Drone survey data files for Bridges 31 & 32 only, including ORD files (datum adjusted)
- The TEER Document ~~(in-development)~~
- Environmental Boundary Report (EBR)
- Environmental Technical Study Area (ETSA)
 - The .dgn files will be 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).
- The Base Technical Concepts
 - The Base Technical Concepts are provided for information only; the scope of the Project listed in the Contract Documents takes precedence.
 - The .dgn files will be 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).
- Bridge Concept Reports for all eleven (11) bridges
- Asbestos Reports
- Utility Early Notification Letters
- Geotechnical Boring Data
- ~~Pavement Design Report (Note: An alternative pavement design will not be allowed.)~~
- DB2506 Bridge 31 and 32 ROW details.dgn as the “Planned ROW Limits”
 - The .dgn file will be 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).

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.

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 at least one on-site field office of adequate size for use by the Design-Builder and Department staff (including any Department consultant staff) as required and specified in Section 722 of the TDOT Standard Specifications.~~

2.2 Project Schedule and Cost Management

2.2.1 CPM Schedule Requirements

For review at the Post-Award Meeting, the Design-Builder shall prepare a Critical Path Method (CPM) Initial Project Schedule (IPS), in accordance with the Department's Circular Letter 108.03.C, TDOT Standard Specifications, Chapter 3 of the DB Standard Guidance, and the requirements described herein.

2.2.1.1 INITIAL, BASELINE, AND MONTHLY SCHEDULE SUBMITTALS

In accordance with Chapter 2 and 3 of the DB Standard Guidance, the Design-Builder shall use the preliminary CPM schedule submitted with its Proposal as a foundation to prepare the CPM IPS and shall submit it to the Department for Review and Acceptance. Acceptance of the CPM IPS ~~to be the Baseline CPM Schedule~~ by the Department shall be a condition for starting any Work per Section 3.2.1 of the DB Standard Guidance.

Following acceptance of the CPM IPS, the Design-Builder shall submit its Baseline Schedule in accordance with the Department's Circular Letter 108.03.C. Review comments made by the Department on the Baseline Schedule shall not relieve the Design-Builder from compliance with the Contract.

The Design-Builder shall submit an updated CPM Schedule monthly for the Department's Review and Comment in accordance with Department's Circular Letter 108.03.C, TDOT Standard Specifications, and Chapters 3 and 9 of the DB Standard Guidance. Monthly progress payment requests and CPM updates are due ~~five (5) business~~ ten (10) calendar days prior to the estimate cutoff date. Each month, the Design-Builder shall provide a narrative with each CPM Schedule submittal that includes:

- A detailed description of the status of the Project and changes to the CPM Schedule;
- Identification of strategies for mitigation of Project risks or issues impacting the CPM Schedule (describing constraints and discussing contingencies);
- How the proposed Project phasing, sequence of Work, and allocation of resources enable the Design-Builder to progress the Work to achieve completion of the Project in accordance with Contract requirements, including completion of the Contract Completion Date(s);
- How the phasing ensures timely deliveries of materials to achieve the CPM Schedule milestones;
- Identification of categories of Work performed by Design Builder's own direct labor force and those performed by Subcontractors;
- Pay Item activities and all Work included in the Pay Item activities corresponding to totals as reflected on the Schedule of Items; and
- Any other requirements from the Department's Circular 108.03.C, TDOT Standard Specifications, and Chapters 3 and 9 of the DB Standard Guidance.

Acceptance by the Department shall not be construed to imply approval of any particular method or sequence of construction or to relieve the Design-Builder of providing sufficient materials, equipment, and labor, including subcontractors, to guarantee completion of the Project in accordance with all Contract requirements. The Department's acceptance shall not be construed to modify or amend the Contract, Project milestones, Interim Completion Date(s) (as applicable), or the Contract Completion Date.

Furthermore, the Department's acceptance of any schedule update does not relieve the Design-Builder of responsibility for the accuracy or feasibility of the CPM Schedule, does not modify the Contract, will not be construed as an endorsement or validation of the Design-Builder's plan, and does not guarantee that the

Project can be performed or completed as scheduled. The Department's acceptance of the CPM Schedule in no way attests to the validity of the assumptions, logic constraints, dependency, relationships, resource allocations, resource availability, manpower and equipment, or any other aspect of the means and methods of performing the Work.

In all, the Design-Builder shall remain solely responsible for the scheduling, sequencing, planning, and execution of the Work to meet the Project milestones, Interim Completion Date(s) (as applicable), ~~and the Contract Completion Date(s)-), and all other Contract requirements.~~

2.2.1.2 PROJECT CPM SCHEDULE REQUIREMENTS

In addition to the requirements from the Department's Circular Letter 108.03.C, TDOT Standard Specifications, and the DB Standard Guidance, the CPM Schedule shall detail adequate planning and execution of the Work, allow the Design-Builder and Department an opportunity to evaluate the progress of the Work, and shall follow the applicable categories within the Schedule of Items and other cost control systems, including the ~~Payment~~-Progress Payment process.

The CPM Schedule shall include all major activities of Work required under the Contract, in sufficient detail to evaluate design and construction progress. The CPM Schedule shall not contain open-ended activities, except for the first and last activity in the CPM Schedule. The Design-Builder shall provide adequate time in the CPM Schedule for all parties involved with the Project to complete their work, including inspections, submittal and procurement activities, inspections, and testing. The Design-Builder shall include in the CPM Schedule the work of subcontractors, vendors, suppliers, utilities, railroads, permitting agencies, the Department, and all other parties associated with the Project. The CPM Schedule may be utilized to facilitate the Department's Construction Engineering and Inspection (CEI) and Quality Assurance/Acceptance (QA) activities.

~~If at any time the design or construction of the Project potentially affects the approved environmental document, the Design-Builder shall cease Work and contact the Department Alternative Delivery Office.~~

Failure by the Design-Builder to include any element of its Work or the work of others required for completion of the Project will not excuse the Design-Builder from completing the Project by the Contract Completion Date(s).

The scheduling software employed by the Design-Builder shall be compatible with the current and any future scheduling software used by the Department. The Department's current software is *Oracle Primavera P6 (v 18.8)*. The software shall be compatible with the electronic file version of the CPM Schedule that can be loaded or imported by the Department using the Department's scheduling software with no modifications, preparation, or adjustments.

The CPM Schedule shall show the order in which the Design-Builder proposes to complete the Work, the time frame which it will start the major items of work, and the critical features of such work (including procurement of materials, plant, and equipment). The CPM Schedule shall include, at a minimum, the following items:

- Controlling items of Work, major Work, and activities to be performed;
- Seasonal weather limitations;
- Land disturbance restrictions;
- Phase duration or milestone events, based on selected option as applicable; and
- Specified Contract Completion Date(s) from the Contract.

The CPM Schedule shall be time and cost loaded, depicting Pay Items and subordinated activities and their respective prices (distributed over time) in accordance with the DB Standard Guidance. The Design-Builder shall assign a percentage of the Pay Item Cost to each activity in the proposed CPM Schedule that reflects an accurate percentage value to each activity based on estimated costs plus associated profit and overhead. The profit and overhead assigned to the individual activities shall be equal to or less than the mark-up applied to the Work when establishing the Contract Amount. The CPM Schedule shall be in a suitable scale to indicate graphically the total percentage of Work scheduled to be completed at any time.

2.2.1.3 SUBMITTAL REQUIREMENTS

In addition to the requirements of Section 2.7 of the DB Standard Guidance, Design-Build submittals shall be scheduled and submitted based on the approved CPM Schedule. The Design-Builder shall include all review submittals and any resubmittals in the CPM Schedule in order for the Department to appropriately allocate resources for performing the reviews and to track and document any possible schedule impacts.

Ten (10) business days shall be allocated in the CPM Schedule for activities requiring the Department's Review and Acceptance or Review and Comment, unless otherwise indicated in a Special Provision or third-party review. In accordance with the DB Standard Guidance, submittals requiring the Department's Review and Acceptance shall be limited to two concurrent submittals per Division unless indicated otherwise by the TDOT Project Manager.

All submittals required to be reviewed and approved by third-party stakeholders shall be tracked individually. Each such submittal shall have separate activities that track submittal development, required reviews, and revisions required by third-party stakeholders, the Department, or the Design-Builder.

The Design-Builder may submit up to, and the Department will review, no more than five (5) concurrent submittals, in the aggregate. Submittals are deemed concurrent to the extent that the Department's review period for such submittals under this Section either entirely or partially overlap. Whenever the Department is in receipt of excess concurrent submittals, the Design-Builder may establish (by written notice to the Department) an order of priority for processing the Design-Builder's five priority submittals, and the Department may extend the review periods for the remaining submittals under the Department's reasonable discretion.

2.2.1.4 TIME ADJUSTMENTS

Notwithstanding any other provision to the contrary, no time adjustments will be allowed for:

- Adverse weather conditions (e.g., weather days should be accounted for in the CPM Schedule);
- The time required for the Department's review and response to any initial submittal and any required resubmittal to resolve the Design-Builder noncompliance or nonconformance with the Contract Documents;
- The time required to review value engineering cost proposals (VECPs);
- The time to process Change Orders or plan revisions requiring additional Department or other agency review and/or approval;
- The time to complete any Work that the Design-Builder did not account for in its CPM Schedule as required by the Contract Documents; or (including time to correct all defects, deficiencies, or errors and time to address any other non-compliance with the provisions of the Contract);
- Work that could have been re-sequenced or rescheduled to avoid delays; or
- Any delays typically encountered during a Project regardless of the source.

3 ROADWAY

The Design-Builder shall design and construct the Work-roadway infrastructure to include all roadway approaches and tie-in Work within the respective Project Limits at each bridge location listed in Table 1.

3.1 Standards and References

The Design-Builder shall design and construct the roadway and drainage infrastructure to adhere to following ~~roadway~~ standards.

- *TDOT Roadway Standard Drawings*
- *TDOT Roadway Design Guidelines – PDN*
- *TDOT Roadway Design Documents – PDN* (and Instructional Bulletins)
- *TDOT Drainage Manual*
- *TDOT Design Procedures for Hydraulic Structures*
- *TDOT Traffic Design Manual*
- *TDOT Standard Traffic Operations Drawings*
- *TDOT Supplement to the Standard Highway Signs*
- *TDOT Design CADD Standards*
- *TDOT Standard Specifications*
- *TDOT Survey Manual*
- The Department accepted *AASHTO Policy on Geometric Design of Highways and Streets*, *AASHTO Roadside Design Guide*, and *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 – PDN*. The Design-Builder shall design and construct so that the:

- All driveway, field entrance, and intersection connections shall meet minimum sight distance requirements.
- Field entrances shall be a minimum 14 feet wide to accommodate agricultural equipment.
- The proposed ROW line is set at 15 feet (minimum) outside of the toe of the proposed slope along the State Route as shown in the Planned ROW Limits.

Bridges 29 & 30 – Traffic lanes shall be 11 foot wide with 4-foot minimum width shoulders at a minimum 55 MPH design speed on State Route 87 over Lagoon Creek (L.M. 3.61) (Bridge 29) and on State Route 87 over Branch (L.M. 3.47) (Bridge 30). The Bridge 29 and Bridge 30 Project Limits are not continuous between each bridge location. The Work to tie-in to the existing roadway shall avoid impacting the culvert approximately 200 feet west of Bridge 29.

Bridges 31 & 32 – Traffic lanes shall be 11 foot wide with 4-foot minimum width shoulders at a minimum 50 MPH design speed on State Route 180 over Otter Creek (L.M. 2.61) (Bridge 31) and on State Route 180 Overflow (L.M. 2.74) (Bridge 32).

Bridge 41 – Traffic lanes shall be 11 foot wide with 4-foot minimum width shoulders at a minimum 55 MPH design speed on State Route 87 over Branch (L.M. 2.30).

Bridge 46 – Traffic lanes shall be 11 foot wide with 4-foot minimum width shoulders at a minimum 30 MPH design speed on State Route 87 over Drainage Ditch (L.M. 20.76).

Bridge 47 – Traffic lanes shall be 11 foot wide with 2-foot minimum width shoulders at a minimum 55 MPH design speed on State Route 87 over Branch (L.M. 5.18).

Bridge 48 – Traffic lanes shall be 11 foot wide with 2-foot minimum width shoulders at a minimum 60 MPH design speed on State Route 87 over Branch (L.M. 6.42).

Bridge 49 – Traffic lanes shall be 11 foot wide with 4-foot minimum width shoulders at a minimum 60 MPH design speed on State Route 87 over Branch (L.M. 11.75).

Bridge 50 – Traffic lanes shall be 11 foot wide with 4-foot minimum width shoulders at a minimum 55 MPH design speed on State Route 87 over Branch (L.M. 19.11).

Bridge 51 – Traffic lanes shall be 11 foot wide with 4-foot minimum width shoulders at a minimum 55 MPH design speed on SR 371 over Branch (L.M. 1.39).

The Design-BUILDER shall prepare final signed and sealed construction plans used to construct the Project, including:

- Prepare the plans in accordance with *TDOT Roadway Design Guidelines – PDN* and the previous design standards referenced in this section.
- Identify the need for any special roadway design details (i.e., any special drainage structures, special ditches, rock embankment, retaining walls, concrete barrier designs, etc.) and provide special design drawings to the Department for Review and Comment.
- Ensure that all applicable “General and Special Notes” found in Section IX of the current edition of the *TDOT Roadway Design Guidelines – PDN* and Instructional Bulletins (IBs) are included in the Design Documents and are adhered to during construction.

The Design-BUILDER shall design the geometric configurations of all roadway components to provide adequate drainage and prevent hydroplaning (when complete). Design-BUILDER shall design and construct all cross slopes in accordance with the requirements of the roadway typical section (see Attachment B). The Design-BUILDER shall provide hydraulic calculations (including spread calculations) to the Department.

3.3 Environmental Technical Study Area (ETSA)

The ETSA for each bridge is provided in the respective ETSA .dgn files in the Reference ~~Materials Documents~~. Changes to the ETSA limits or Work outside of the ETSA limits shall be governed by the requirements in Section 8.

3.4 Waivers and Exceptions

The following design waivers and exceptions are acceptable for use on this Project:

- The design waivers will be allowed for the minimum vertical design speeds for Bridge 46, 49, and 51, which may be reduced to 20 MPH, 45 MPH, and 30 MPH, respectively.
- A design exception for 11' lane widths and 4' shoulder width will be provided for Bridge 50.

The Reference Documents include the approved design waivers and will include the approved design exception when available.

These design waivers and design exceptions are minimum expectations, and changes to the design waivers or design exceptions will not be allowed without the Department's approval. No additional design waivers or exceptions will be allowed without the Department's approval. ~~See Attachment C for design waivers and design exception.~~

3.5 Safety Appurtenances

All permanent and temporary safety appurtenances (i.e., sign supports, guardrail, barrier rail, impact attenuators, etc.) shall meet current Department standards and shall have all required Department certification documents.

Specific to guardrail, Design-Bulder shall:

- Remove and replace all guardrail in accordance with the TDOT Standard Specifications and TDOT Standard Drawings. The road shall remain closed until all guardrail is installed in accordance with the plans and specifications.
- Propose an AASHTO Manual for Assessing Safety Hardware (MASH) compliant TL-3 guardrail attachment to bridge ends (and retaining walls, if applicable) detail. Design-Bulder shall submit the attachment detail prior to installation for the Department's Review and Approval. All new guardrail and end terminals shall be MASH-compliant TL-3 and be on the Department's Qualified Products List (QPL).

3.6 Drainage

The Design-Bulder shall analyze, design, and construct the entire stormwater management system within the Project Limits, including bridges, stormwater conveyances (open-channel and closed-conduit), stormwater inlets, and stormwater collection systems in accordance with the Department's *Drainage Manual*.

- All stormwater runoff that flows through the Project, whether originating within or outside of the Project Limits, must be accounted for in the design of the drainage system.
- The analysis, design, and construction of all components of the stormwater management system shall address the interim conditions during design and construction of the Project.

3.6.1 Drainage Design Requirements

The Design-Bulder shall use a 50-year design storm for all new (and existing to remain) storm sewer systems in accordance with the Department's *Drainage Manual*.

- For any structure with a Q_{50} that exceeds 500 cfs, the *Design Procedures for Hydraulic Structures* shall be followed.
- All drainage systems shall be designed to convey the 50-year storm without overtopping of any existing or proposed drainage or transportation elements.

The Design-Builder shall design culvert and pipe outfalls, channels, and ditches (including special ditches) within the Project Limits in accordance with the requirements of the Department's *Drainage Manual*. Design-Builder shall design and construct:

- Appropriate energy dissipation devices at culvert outlets to prevent scouring.
- Appropriate channel linings such that erosion within and downstream of the channels and ditches is minimized.
- Energy dissipation devices to fit within the existing ROW.

The Design-Builder shall provide aggregate pipe underdrains as specified in the pavement design and shall provide appropriate outlets for the underdrains as specified by the TDOT Standard Drawings.

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 Work 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 the construction Work.

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.

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. The Design-Builder shall collect survey data for all upstream/downstream/adjacent properties that are impacted, such as road crossing information, structure damage elevations, and channel cross sections (at a minimum), which shall be used in support of hydraulic calculations for the offsite drainage systems. The Design-Builder shall provide the engineering analyses and certifications to the Department ~~and the local jurisdiction (as needed)~~ for Review and Approval prior to performing the alteration.

~~The Design-Builder shall obtain all applicable 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.~~

The Design-Builder shall inspect and verify that existing drainage systems to remain are clean, operable, and structurally adequate. The Design-Builder shall complete any repairs, replacements, debris removal, and/or deficiencies: as a result of designing and constructing the Project.

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 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 TEER Document.

A hydraulic model shall be included for all structures and include a 1D hydraulic model using HEC-RAS or 2D hydraulic model using HEC-RAS or SMS-SRH2D of the 'no-bridge', existing structure, and proposed structure conditions for flood events up to the 500-year flood.

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, 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 shall include the Project description, PIN, and/or Project number as indicated in Department schedules. Also, each stream crossing station, stream name, and associated bridge identification number (if available) shall be indicated on the cover. Survey data shall be included in the file for future reference.

Design-Builder shall submit the HDF for the Department's Review and Comment.

3.7 Pavement Markings

The Design-Builder shall prepare pavement marking Plans and install the pavement markings in accordance with the Department standards and the following requirements.

- The design and installation of permanent pavement markings shall be in strict accordance with the *Manual on Uniform Traffic Control Devices (MUTCD)*, *TDOT Roadway Design Guidelines – PDN*, *TDOT Standard Drawings*, *TDOT Standard Traffic Operations Drawings*, *TDOT Traffic Design Manual*, and the TDOT Standard Specifications.
- All pavement marking removal on final surfaces shall be accomplished by water blasting or another non-marring method.
- Any damage to the pavement surface caused by the selected method shall be removed and replaced at the Design-Builder's cost and time.

3.8 Signing

The Design-Builder shall ~~replace all~~determine if any existing ~~permanent~~signs can be reused and/or shall design and install new signage within the Project Limits. The Design-Builder shall prepare signage Plans prior to ordering and installing all signs: in accordance with the MUTCD, TDOT Roadway Design Guidelines – PDN, TDOT Standard Drawings, the Standard Highway Signs, the TDOT Supplement to the Standard Highway Signs, the TDOT Standard Specifications, and TDOT Traffic Design Manual. All permanent signing Plans, signing layouts, sign schedules, and miscellaneous detail sheets shall be ~~reviewed by the Department~~coordinated as follows prior to ordering and construction/installation.

~~In addition, the Design-Builder shall ensure all signs beyond the Project Limits are consistent with new alignments and travel lanes.~~

- ~~▪ The design and installation of permanent roadway signs shall be in strict accordance with the MUTCD, TDOT Roadway Design Guidelines – PDN and TDOT Standard Drawings, the FHWA Standard Highway Signs, the TDOT Supplement to the Standard Highway Signs, TDOT Standard Specifications, and TDOT Traffic Design Manual.~~
- After the permanent sign locations have been staked, but prior to ordering any material for supports, the Design-Builder shall lead a field review for acceptance by the Department.
- ~~All~~For existing signs to be discarded, the existing sign footings shall be removed to six inches (6") below the ground line.
- The Design-Builder shall verify all support lengths at the site prior to erection.
- The Design-Builder shall install 511 Signs during the installation of the construction signage, as per Traffic Memorandum No. 2509, which can be found in the Reference Documents.

All sign sheeting shall be Type 3 Prismatic or better. All ~~existing~~new signs ~~that do not~~shall meet the retro-reflectivity requirements ~~shall be replaced.~~ All yellow reflective warning signs shall be fluorescent yellow.

~~The Design-Builder shall remove all existing post-mounted signing, replacing each with new sign faces and new breakaway supports.~~

3.9 Pavement

~~The Design-Builder shall construct all asphalt pavements using~~The Design-Builder shall provide full-depth reconstruction of the asphalt pavement at any location where the Design-Builder vertically or horizontally realigns, adjusts (e.g., raises a grade), or removes and replaces a portion of the roadway cross section within the Project Limits. The pavement Work shall include a full-depth reconstruction of the entire roadway section between Bridges 31 and 32 (the noted Project Limits for that bridge location). No transitional pavement section is required between the existing and proposed pavement.

All reconstructed pavement shall apply the pavement design(s) provided in Attachment A and the *TDOT Roadway Design Guidelines – PDN*. The Design-Builder's CPM Schedule shall include time for installing tack coat and prime coat per the application rates in the *TDOT Roadway Design Guidelines – PDN* and *TDOT Standard Specifications*.

4 STRUCTURES

The Design-Builder shall provide all design and construction Work necessary to replace each of the bridges listed in Table 1.

4.1 Standards and References

The Design-Builder shall design and construct the ~~Work~~bridges to adhere to the following structural standards.

- *TDOT Structural Design Guidelines*
- *AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications*
- *AASHTO Guide Specifications for LRFD Seismic Bridge Design*
- TDOT Design Procedures for Hydraulic Structures

4.2 Design and Construction Requirements

~~The Design-Builder shall be responsible for the design and construction Work of all structures within the Project Limits as listed in Table 1.~~

The Design-Builder shall design, detail, and construct all new bridges 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 bridges to meet Seismic Design Category (SDC) C 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 meet the requirements of the TDOT Standard Specifications and TDOT Structural Design Guidelines. Class A concrete in pavement at bridge ends shall have surface aggregate in accordance with Article 903.24 of the TDOT 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 Provisions.

The Design-Builder shall design all bridges for HL-93 live loading increased by 10% increase (multiplied by 1.1). 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 as shown on TDOT Standard Drawing STD-1-1SS, except that Bridge 46 will use the STD-11-1 bridge rail on one side with the proposed sidewalk.

All bridges shall have pavement at bridge ends per TDOT Standard Drawing STD-1-5 and STD-10-2.

Concrete finishing shall be in accordance with Section 604.21 of the Standard Specifications. Additional texture finishing requirements shall adhere to Section 11 of the *TDOT Structural Design Guidelines* regarding application, coloring, and finishing. For each bridge, these requirements include that:

- Class I finish followed by an applied texture finish shall be used in lieu of a Class II finish.
- No texture finish shall be applied prior to completion of paving and hauling operations at a bridge site.

- The front face and top of each parapet shall have the applied texture finish (white, AMS-STD-595A, color number 37886).
- The back face of the parapet to the inside edge of the bottom of the fascia beam shall have an applied texture finish (gray, AMS-STD595A, color number 36440).
- In addition to those surfaces, all exposed surfaces of the wingwalls, abutments, and exterior portions of the endwalls shall receive an applied texture finish (gray, AMS-STD-595A, color number 36440).
- Before applying any texture finish, all surfaces shall be completely cleaned of all debris and foreign material.

The Design-Builder shall use containment screens or other measures as necessary to prevent any texture coating from entering environmental features. Containment measures shall be approved by the Department and consistent with the NPDES construction general permit.

The Department's Tri-Star State Emblem is not required for use on these bridges.

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*. Deck drains, as needed, shall be in accordance with the details shown on TDOT Standard Drawing STD-1-2SS. Bridge deck drains may discharge directly into the stream only if allowed in the permits.

The Design Builder shall adhere to all permits, 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 Procedures for Hydraulic Structures*. 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 all structures shall include a 1D hydraulic model using HEC-RAS or 2D hydraulic model using HEC-RAS or SMS-SRH2D of the 'no-bridge', existing structure, 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 the Department for Review and Comment, which shall be sealed by a Professional Engineer licensed in Tennessee. The bridge hydraulic design shall meet the FEMA requirements for the proposed 100-year flood elevation and meet the Department's backwater requirements for a 50-year design flood. 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 according to Special Provision 625, Drilled Shaft. 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 proposed low girder elevation shall be 1) equal to or greater than the 50-year flood elevation plus 1' **or** 2) the 100-year flood elevation, **or** 3) the existing low girder elevation. However, the proposed finished grade of the structure shall be equal to or exceed the existing finished grade. The 50-year and 100-year flood

elevations shall be determined by the Design-Builder's hydraulic analysis, as concurred to by the Department.

All bridges shall be single span structures with bridge lengths being equal or greater than existing. Lengths shall be set such that stable embankment slopes can be established per *TDOT Design Procedures for Hydraulic Structures*.

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 request to reduce the 90-day cure time to a minimum of 60 days. 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. If needed, the 3-foot standard height for abutment beams may be increased up to a maximum 5-foot height to accommodate any additional grade changes based on the Design-Builder's hydraulic analysis.

4.3 Removal of Existing Structure

~~For demolition of~~ The Design-Builder shall remove and dispose of all existing bridge infrastructure and related materials in accordance with this Section 4.3 and Section 9.6, including any asbestos containing materials as documented in the respective Asbestos Reports. The Design-Builder shall dispose of all roadway and bridge materials, except for the precast concrete channel beams for Bridge 29 (38S80460001), Bridge 47 (49SR0870013), Bridge 48 (49SR0870017), Bridge 49 (49SR0870025), and Bridge 51 (49SR0872003), which the Design-Builder shall salvage and stockpile per Section 202 of TDOT Standard Specifications. The Design-Builder shall contact the Department to coordinate concrete channel beam salvage and storage. For Bridge 29, only the interior precast concrete channel beams shall be salvaged and stockpiled.

The Design-Builder is prohibited from using blasting to demolish any section of the existing structure.

~~For demolition of existing bridge infrastructure,~~ the Design-Builder shall submit demolition plans and calculations for the Department's Review and Comment. at least 30 days prior to related demolition activities for each bridge location. Treatment of the existing piles shall be in accordance with the TDOT Standard Specifications. ~~The Design-Builder shall submit shop drawings, erection plans, and demolition plans for the Department's Review and Comment.~~

This requirement is in addition to ~~the Design-Builder is prohibited from using blasting to demolish any section~~ Builder's submittal ~~of the existing structure.~~

~~The Design-Builder shall be responsible~~ necessary shop drawings and erection plans for the ~~removal and disposal of all existing bridges. The Design-Builder shall coordinate with the Department prior to removal of the existing beams, on the chance that the Department may want to salvage the beams.~~ Department's Review and Comment.

4.4 Retaining Walls

If the Design-Builder utilizes retaining walls, each wall shall be built in accordance with TDOT Special Provision 624, Retaining Walls. Mechanically Stabilized Earth (MSE) walls that can be partially inundated are not allowed.

6 RIGHT-OF-WAY (ROW)

6.1 ROW Acquisition Responsibilities for Bridges 31 and 32

The Department will acquire and provide for the Design-Builder's use (at the Department's costs) the right-of-way (ROW) to construct Bridges 31 and 32 as part of the Planned ROW Limits.

The Department's responsibilities for these two bridges include performing all ROW acquisition activities, including advancing the ROW design (as depicted on the Base Technical Concepts) and completing all title reports and related ROW documentation, appraisals, appraisal reviews, and acquisitions in accordance with Tennessee Uniform Relocation Assistance Act of 1972 and the Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646, as amended by Public Law 100-17).

Table 4 lists the ROW and availability dates that the Department will acquire for Bridges 31 and 32.

Table 4: ROW Acquisitions for Bridges 31 & 32

TRACT NO.	PROPERTY OWNER	AREA TO BE ACQUIRED FEE SIMPLE (ACRES)	CONSTRUCTION EASEMENTS TO BE ACQUIRED (SQ FT)	AVAILABILITY DATE (on or before)
2	Alan and Jennifer Jordan	0.643		TBD (final dates to be confirmed in or before the final RFP) <u>March 31, 2027</u>
3	Ray and Dorothy Ables	0.627	439	TBD <u>March 31, 2027</u>
4	William B. Hathcock Revocable Trust	1.552		TBD <u>March 31, 2027</u>
6	Alan and Jennifer Jordan	1.023	1,674	TBD <u>March 31, 2027</u>

If the actual acquisition 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.

If the Design-Builder deems additional ROW (including any fee simple, permanent easement, or temporary easement) is needed outside of the limits provided because of changes to the Design-Builder's design, the process detailed in Section 6.4 shall apply.

6.2 ROW Acquisition Responsibilities for Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51

The Design-Builder shall be responsible for all scope, time, and cost to establish the final ROW limits and perform all necessary ROW acquisition services to acquire the needed ROW to construct Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51.

6.2.1 Preliminary ROW Impacts

Table 5 lists the preliminary (for information only) tracts and acquisition areas for the noted bridges based on the Base Technical Concept.

Builder's steps and workflow required for certified title reports, appraisals, negotiations, acquisition, and parcel closings.

6.2.4 Condemnation Proceedings and Requirements

The Design-Builder shall recommend tracts for condemnation. When the Design-Builder recommends a tract for condemnation, the request for condemnation must have the necessary supporting documentation attached to properly completed forms as indicated by the Regional ROW Office.

Property acquisition requiring condemnation shall be handled by the State Attorney General's Office. The Department has no control over the timeframe for the condemnation proceedings. The Design-Builder shall anticipate time for condemnation proceedings in accordance with Section 6.2.6. The Design-Builder is solely at risk for any delays for right-of-entry associated with condemnation proceedings.

The Design-Builder shall update the appraisal report(s) on any tract(s) involved in condemnation to "date of possession" when requested to do so by the Department. Appraisal updates shall be completed within sixty (60) days after the request is made in writing by the Department. All such updates shall be in compliance with standards set forth above. The "update" appraisal request may require the Design-Builder to consider and include minor plan revisions and changes in market conditions.

Upon request by the Department, the Design-Builder shall testify in any judicial or arbitration proceeding involving the determination of the value of the property, in support of the opinion of value of any and all of the property included in his/her appraisal report. Further, the Design-Builder agrees to attend, as requested by the Department, any pre-trial conferences, meetings, depositions, etc. related to such proceedings. The Design-Builder shall be compensated for these litigation-related services in accordance with the Expert Valuation Witness Rates in effect at the time the service is rendered. The Expert Valuation Witness Rate Schedule may be adjusted periodically.

6.2.5 Payment Responsibilities

The Department will be responsible for the costs associated with the payment to property owners for negotiated settlements, administrative settlements, and relocation benefits. The Department is also responsible for the costs associated with the payment to be deposited with the court in condemnation cases. In addition, any payments agreed to by the property owner and the Attorney General's Office during the condemnation process either by settlement or through the courts including court costs and any mediation expenses is the responsibility of the Department. The Design-Builder shall be responsible for disbursement of these payments and providing indefeasible title to the Department. All payments shall be made in accordance with the policies and procedures established in the *TDOT ROW Procedures Manual*.

6.2.6 ROW Acquisition Timelines

Once the Final Definitive Design Plans (Final DD Plans) are accepted, the Design-Builder shall account for the following sequential durations (up to 20 months) in its CPM Schedule to complete the ROW acquisition process for each impacted tract. The Design-Builder shall account for the various ROW NTPs detailed in Section 6.1 of the DB Standard Guidance before proceeding to the related steps in the process.

7 UTILITIES AND RAILROAD

The Project is a Chapter 86 qualified project. Reimbursement will be subject to TDOT Policy 340-07, Utility Relocation from Public Highway Right-of-Way Under TCA 54-5-804.

7.1 Utility Coordination Responsibilities for Bridges 31 and 32

As listed on Table 7, the Department has identified the following utilities Bridges 31 and 32.

Table 7: Utility Information for Bridges 31 & 32

Utility Owner	Utility Type	Disposition	Contact	Anticipated Relocation Date
Brownville Energy Authority (Gas)	Underground Gas	Relocate	Russ Stroots rstroots@budutil.com 731-772-8845	July 2026 (final date to be confirmed in or before the final RFP) August 31, 2026
AT&T (Electric)	Underground Fiber	Relocate	Daniel Potts dp7607@att.com 901-488-2359	July 2026 (final date to be confirmed in or before the final RFP) August 31, 2026
<u>City of Halls</u>	<u>Water, Gas, & Sewer</u>	<u>No impact</u>	<u>Walter Tate</u> tohpwac@lctn.com <u>731-836-9653</u>	<u>N/A</u>
<u>Forked Deer Electric</u>	<u>Electric</u>	<u>No impact</u>	<u>Jeff Newman</u> jeff@forkeddeer.com <u>731-836-7508</u>	<u>N/A</u>

While it is anticipated that construction Work will be required around the utilities being protected in place (as listed in Table 7), the Department will coordinate relocation efforts for the balance of impacted utilities either before or concurrently with the Design-BUILDER's construction Work (the "Advanced Utility Adjustments"). The Department's responsibilities for Bridges 31 and 32 include submitting utility coordination plans and receiving, reviewing, and approving responses, reimbursement agreements, easement agreements (if needed), and authorizing the utility owner to proceed with the Advanced Utility Adjustments.

The Design-BUILDER's Design Documents shall accommodate the Advanced Utility Adjustments for Bridges 31 and 32. Any subsequent relocation, adjustments, removal, or alteration of the Advanced Utility Adjustments or alteration of a protect-in-place disposition listed in Table 7, as required by the 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 construction Work considering the Advanced Utility Adjustments, limiting its construction of temporary or permanent improvements in or around the adjustment areas, not prevent the utilities from accessing the Project Limits to complete the utility owner's work, or otherwise not occupy the areas a utility owner is working in until after the relocation dates listed in Table 7.

If the actual relocation date extends beyond the anticipated relocation 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 Utility Coordination Responsibilities for Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51

Through the early utility notification process, the Department has identified the following utilities within the Project Limits for Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51 as listed in Table 8.

Table 8: Utility Table for Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51

Utility Owner	Utility Type	Bridges
Southwest Tennessee Electric Membership Corporation	Power	29, 30, 41, 47, 49, 50, 51
Tennessee Valley Authority	Power	29
Ripley Power & Light Company	Power	46
City of Ripley	Gas	49
AT&T	Communications	29, 30, 41, 46, 47, 48, 49, 50
Charter	Communications	46
Lauderdale County Water System	Water	47, 48, 49

7.2.1 Utility Coordination Activities

As part of its initial field survey Work, the Design-Builder shall locate all utilities in the Project Limits for each bridge location, including the survey data in the Definitive Design Plans. Additionally, the Design-Builder shall develop its Definitive Design Plans to include all required utility information as listed in Section 6.2.2 of the DB Standard Guidance. The Design-Builder shall determine the exact locations of each utility in the field by contacting the utility owners involved. Notification by calling the Tennessee One Call System (as required by TCA 65-31-106) is required, in addition to the Design-Builder monitoring each utility owner's responses to its locate requests per TCA 65-31-118. The Design-Builder shall submit a property packet used to establish the existing right-of-way, One-Call tickets for utility location, and any other pertinent information via email or file share to the Department.

After acceptance of the final Definitive Design Plans (Final DD Plans), the Design-Builder ~~will~~shall lead coordination efforts for all impacted utilities associated with Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51. This includes the Design-Builder:

- Preparing the utility estimate (in parallel with preparing the associated ROW estimate) so that TDOT can authorize utility relocation funding. The Design-Builder shall allow up to four (4) weeks after the estimate is submitted to receive authorization to move forward.
- Preparing the Utility Coordination Plans (based on the Final DD Plans) and associated correspondence to send to the impacted utility owners. The Design-Builder's responsibilities during this time may include leading a kickoff meeting with the impacted utility owners to communicate forthcoming work efforts and utility requirements.
- Overseeing the utility coordination timeline required under TCA 54-5-854, which states:
 - The utility owner is to respond within one hundred and twenty (120) calendar days of receiving the Definitive Design Plans (A-date). A utility owner's response will include the "A-

7.2.2 Utility Coordination Timelines

Once the Final Definitive Design Plans (Final DD Plans) are accepted, the Design-Builder shall account for the following sequential durations in its CPM Schedule to complete the utility coordination process for each impacted utility at each bridge location.

Table 9: Utility Timelines

Activity	Estimated Timeframe	Responsible Party
Prepare utility estimate (in parallel with the ROW estimate)	5 weeks	Design-Builder/TDOT (as demarcated in Section 7.2.1)
Develop and distribute utility coordination plans	2 weeks	Design-Builder
Utility review (utility owner to prepare A-Date package)	Up to 165 calendar days	Utility Owner
Submit rainbows (from the A-Date Package) to the Department utilities and environmental division	2 weeks	Design-Builder
Generate and execute relocation contracts	6 weeks	TDOT
Send “put to work” letters	3 weeks	TDOT
Receive B-Date Package(s) (if an MIS) and complete its relocation work	Timing to be coordinated with the utility owner based on the A-Date Package	Utility Owner

7.3 Design and Construction Requirements

7.3.1 Utility Conflict Matrix

The Department has provided certain utility information in the Reference Documents and this Section 7. The Design-Builder shall analyze the utility information, contact and make inquiries of utility owners, perform surface inspections of the Project’s ROW, and perform such additional inspections (including potholing) as it deems appropriate to verify that the information provided fully and accurately:

- Identifies all utilities within the Project Limits,
- Addresses all field conditions, and
- To supplement the utility information.

Within ninety (90) Calendar Days from the initial NTP, Design-Builder shall submit for Department Review and Approval the Design-Builder’s Utility Conflict Matrix reflecting the existence and dispositions of any and all utilities present within the Project Limits by each bridge location.

If any utility located within the Project Limits and requiring actual relocation is not identified in the utility information provided by the Department or is misidentified therein, but is timely identified by the Design-Builder in the Design-Builder’s Utility Conflict Matrix within the first ninety (90) days, then the Design-Builder may be entitled to a Change Order for performing work directly attributable to such lacking or inaccurate information.

However, the Design-Builder shall not be entitled to a Change Order for any of the following:

- Increased costs of the Work attributable to unidentified or misidentified Utilities to the extent that the existence of the facility was known to the Design-Builder as of the Proposal due date or could have been inferred from a reasonable investigation or the presence of other facilities, such as buildings, meters, junction boxes, manholes or identifying markers, visible during a surface inspection of the area conducted prior to the Proposal due date;
- Increased costs of the Work attributable to unidentified or misidentified utilities where Design-Builder failed to provide timely notice in the time allowed (i.e., on its Utility Impact Matrix submitted within 90 days of the initial NTP).
- Increased costs of the Work attributable to misidentified or unidentified utilities that can be protected in place or removed rather than physically relocated;
- The costs of Design-Builder's supplemental utility investigation performed in accordance with its due diligence of the Project Limits; and
- Delay and disruption damages.

7.3.2 General

The Design-Builder shall make all reasonable efforts to design and construct the Project to avoid conflicts with utilities and minimize impacts where conflicts cannot be avoided.

The Design-Builder shall be familiar with and adhere to TDOT Rule Chapter 1680-06-01, Rules and Regulations for Accommodating Utilities within Highway Rights-of-Way; Tennessee Code Annotated, Title 54, Part 8, Relocation of Utilities (T.C.A. § 54-5-801 through § 54-5-856); 23 CFR Part 645 -- Utilities; and TDOT Policy 340-07, Utility Relocation from Public Highway Right-of-Way Under TCA § 54-5-804 (Chapter 86), *TDOT ROW Procedures Manual*, and Section 6 of the DB Standard Guidance.

The Design-Builder shall notify each individual utility owner of its intent/plan of operation in the area of the utilities. Prior to commencing any Work, the Design-Builder shall contact the utility owners and request the owners to properly locate their respective utility on the ground. This notification shall be given at least three (3) Business Days prior to commencement of operations around the utility in accordance with T.C.A. § 65-31-106.

The Design-Builder shall provide all necessary protective measures to safeguard existing utilities from damage during construction. In the event that special equipment is required to work over and around the utilities, the Design-Builder shall be required to furnish such equipment. The Design-Builder shall include the cost of protecting utilities from damage and furnishing special equipment in the Contract Amount.

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 property rights and applicable permits, including any environmental permits.

7.3.3 Design-Builder's Changes in Design

For purposes of this Section 7 related to utilities, a change in design is the Design-Builder's modification of ~~the Design-Builder's~~ Design Documents that:

- Require a change to the disposition of a utility listed in Table 7,

- Require an adjustment of a utility that was not listed in Table 7,
- Require subsequent relocations, adjustments, removals, or alterations for any of the Advanced Utility Adjustments,
- Require subsequent relocations, adjustments, removals, or alterations for any utility after acceptance of the Design-Builder's Final Definitive Design Plans (Final DD Plans), or
- Necessitate acquisition of a utility easement not included in the Department-provided property.

In any of these circumstances, the Design-Builder shall bear all cost and time for the Department's utility coordination and the utility owner's relocation efforts. If the Department agrees with the Design-Builder's alterations, the Design-Builder shall account for the utility coordination tasks and relocation activities from the utility owner (as listed in Section 7.2.1) in the CPM Schedule without any extension to the Contract Completion Date.

7.4 Railroad Coordination for Bridge 46

In development.

8 ENVIRONMENTAL

8.1 Tennessee Environmental Evaluation Report (TEER)

The Department ~~is obtaining~~has obtained and ~~will provide~~is providing the Tennessee Environmental Evaluation Report (TEER) Document in the Reference Documents ~~as part of the Final RFP documents (preliminary scheduled for an October 2025 release).~~

~~_____ Tennessee Environmental Evaluation Report (TEER)(when available).~~

8.1.1 Environmental Commitments

~~As~~ Expanded upon in Section 5.2.9 of DB Standard Guidance, the Design-Builder shall review and adhere to the approved TEER Document and technical reports—specifically, any environmental commitments listed ~~in the approved TEER Document.~~therein. The Design-Builder shall account for these commitments ~~throughout the Project's~~as part of its design and construction ~~process~~Work. All commitments listed are to be ~~fulfilled~~addressed during the design and construction ~~of~~Work or prior to completing the Project ~~completion~~.

- ~~▪ _____ Commitment #X: In development and to be included (if any) with the Final RFP documents~~
- There shall be no impact or intrusion into Tract 3 shown on the Bridge 48 Base Technical Concept.
- There shall be no impact or intrusion into Tract 4 shown on the Bridge 50 Base Technical Concept.
- There shall be no impact or intrusion into Tract 2 shown on the Bridge 51 Base Technical Concept.

8.1.2 Environmental Boundaries

The Design-Builder is responsible to field verify all features from the final environmental boundaries reports (EBRs), provided by the Department, and the Design-Builder shall update and submit a revised EBR (if necessary) in accordance with TDOT standards to document any missing features.

Should an unknown environmental feature within the environmental technical study area (ETSA) be uncovered ~~during the construction Work~~, all construction Work shall stop immediately in that area, and the Design-Builder shall contact the ~~Department's Project Manager and TDOT Environmental Division~~Department for consultation.

For impacts to any streams, springs, wetlands, sinkholes, or other water resource features not previously documented in the original EBR, ~~it shall be the responsibility of~~ the Design-Builder ~~to~~shall provide the data sheets and forms listed below to the Department for Review and Comment prior to submittal to the applicable regulatory agencies.

Streams

- Hydrologic Determination Field Data Sheet (Version 1.4).
- Ecology Water Resources Field Data Sheet.
- Tennessee Division of Water Resources (TDEC): Habitat Assessment Field Data Sheet – Moderate to High Gradient Stream.
- A location map, plan sheets with resources clearly marked and labeled, and a U.S. Geological Survey (USGS) Quad map showing the proposed stream(s) using Department-provided map templates.

- Photo summary of each feature including photo views of the location of the proposed alteration, upstream, downstream, and along the centerline of the Project.

Wetlands

- U.S. Army Corps of Engineers (USACE): Wetland Determination Data Form – Eastern Mountain and Piedmont Region: Version 2.0.
- TDEC: Tennessee Rapid Assessment Methodology (TRAM) documentation for wetlands, including TRAM Decision Key, TRAM Outstanding Natural Resource Water or Exceptional Tennessee Water Decision Table, appropriate Hydrogeomorphic (HGM) field data forms (if applicable) or Non-HGM field data forms (if applicable) for the wetland type being assessed, and TRAM Quantitative Summary Table.
- A location map, plan sheets with resources clearly marked and labeled, and a USGS Quad map showing the proposed wetland(s) using Department-provided map templates.
- Photo summary of each feature including photo views of the location of the proposed alteration and wetland boundaries.

Water resource determinations shall be completed by a Tennessee Qualified Hydrologic Professional (TN-QHP). The certification for the TN-QHP must be submitted along with the Hydrologic Determination Field Data Sheet for the individual preparing the data sheets and forms. All additional environmental field studies are to be performed by the Design-Builder's personnel with the required qualifications.

8.1.3 State or Federal Endangered/Threatened Species

~~In development and to be included with the Final RFP either as reference to an MOA or to any impacted species.~~

The Department completed species coordination with the relevant agencies for the Project (see the Reference Documents).

If the Design-Builder requires any additional ROW (e.g., fee simple or easement) not studied within the Project's ETSA ~~(also see Section 8.1.5),~~ this will immediately require additional review(s) and coordination ~~of~~regarding the proposed changes by USFWS, TWRA, and TDEC DNA. The Design-Builder shall contact the Department prior to any coordination with resource agencies.

The Design-Builder's coordination with resource agencies must, at a minimum, include the following information:

- A clear description of the Project changes to be reviewed,
- Timing and schedule for implementation of the changes,
- Maps showing location of changes (if applicable),
- Plans documenting the changes,
- Description of how the changes maintain compliance with existing environmental commitments, and
- Previous coordination responses from the resource agencies.

If a TEER re-evaluation is required (also see Section 8.1.6), the Design-Builder shall be responsible for the time and cost necessary to prepare the re-evaluation and adhere to any additional environmental commitments required by the resource agencies as a result of the ~~additional~~ agency review ~~and coordination~~. These commitments may include preparation of species reports or biological assessments,

species surveys, species sweeps and relocations, additional prohibitions on the Work during designated time periods, and any required species monitoring.

The Design-Builder shall (in consultation with the Department) allow time in the CPMProject Schedule for the ~~TDOT Environmental~~Department to coordinate with the appropriate agency (e.g., TWRA, USFWS, and the TDEC DNA~~7~~), if required.

8.1.4 Other Natural Resources

The Design-Builder shall ensure identification, survey, and monitoring of other natural resources, such as sinkholes, caves, or specialized habitats. The Design-Builder shall work with the Department to coordinate with regulatory agencies (e.g., TDEC) as necessary and to obtain any necessary permits for modifications to the natural resources (e.g., TDEC Underground Injection Control (UIC) Permit, etc.).

8.1.5 GPS/GIS Data Collection

The Design-Builder's data collection for streams, wetlands, springs, sinkholes, or other jurisdictional features shall be with mapping grade accuracy (defined as sub meter).

8.1.6 Design-Builder Required Reevaluations

If the Design-Builder's design footprint or construction limits extend beyond the ETSA, including for use of permanent and/or temporary interests, and which results in changes to impacts of identified resources, ~~the Design-Builder shall be responsible for the time and cost to complete additional environmental technical studies and re-evaluation of the TEER Document. The re-evaluation(s) may take place at any time during the development of the Project.~~

the Design-Builder shall bear all cost and time associated with the:

- Design-Builder's preparation of revised environmental technical studies and the TEER Document re-evaluation(s),
- ~~TDOT Environmental Division staff's~~Department's Review and Approval of the TEER Document re-evaluation(s), and
- All agency coordination, as required, of the TEER Document re-evaluation(s).

Additionally, if the Design-Builder's changes result in changes to impacts of the environmental features, the Design-Builder shall bear all cost and time to incorporate additional compensatory mitigation documented in the updated EBR or for additional features identified prior to and during construction Work.

The Design-Builder shall provide the ~~Department's Environmental Division~~Department with a notification and copy of the revised Plans.

8.2 Mitigation of Streams and Wetlands

8.2.1 The Mitigation Responsibilities for Bridges 31 and 32

To construct Bridges 31 and 32, the Base Technical Concept ~~does not require any stream or wetland~~requires proposed mitigation for:

- STR-1 from Station 115+93.03 to 118+88.69.
- STR-2 from Station 126+95.74 to 129+00.33
- WTL-1 at station 117+00.00

In accordance with TDEC Stream Mitigation Guidelines, the Department has developed and provided in the Base Technical Concept a proposed stream mitigation design to offset foot-for-foot impacts to the two listed streams requiring relocation.

In accordance with TDEC Stream Mitigation Guidelines, the Design-Builder shall advance and finalize the stream relocation design and construct Bridges 31 and 32, the stream channel in a manner that additional mitigation credits are not needed or minimized to the greatest extent practicable.

If the Design-Builder's design alters ~~this~~ the proposed mitigation determination, (e.g., alters the mitigation design or increases the impacts required to construct the two bridges), then the Design-Builder shall bear all cost and time required to:

- Modify the Project's environmental water quality permits (see Section 8.3.3 for this process).
- Design and construct additional stream/wetland mitigation or purchase necessary stream/wetland credits to address the additional impacts to the permittable features.

8.2.2 Mitigation Responsibilities for Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51

The Design-Builder's Design Documents shall determine the extent of stream or wetland impacts and mitigation needs (if any (as needed)) for Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51.

The Design-Builder shall design and construct foot-for-foot mitigation to offset all stream relocations, permanent stream impacts, and permanent fill of wetlands at the nine bridge locations in accordance with TDEC Stream Mitigation Guidelines. Per Rule 0400-40-07-.04(7)(b), the Design-Builder's mitigation design shall minimally accommodate (for all new or relocated streams) a vegetated riparian zone, demonstrated lateral and vertical channel stability, and have a natural channel bottom. The Design-Builder is prohibited from rock lining or armoring the channel but may place buried rip rap at defined elevations. All mitigated watercourses shall maintain or improve flow and maintain classified uses after the mitigation has been constructed. The Design-Builder's mitigation design shall be included with the associated water quality permit application as further detailed in Section 8.3.2.3.

As needed (but not intended to fully offset all potential stream and wetland impacts on the Project), the Department is providing the following credits that the Design-Builder may elect to use to offset proposed impacts. The Design-Builder shall request use of the listed credits when preparing the associated water quality permit sketches, by which the Department will provide the necessary information for the Design-Builder to reference in the permit application.

- Three (3) wetland credits
- One hundred (100) stream credits

If the Design-Builder elects to not advance site-specific mitigation design and instead pursues additional credits beyond what is listed above, the Design-Builder shall be responsible for time and cost to purchase these additional credits.

8.3 Environmental Water Quality and Construction General Permits

The Design-Builder is responsible, under federal and state environmental laws and regulations, to avoid and minimize, to the maximum extent practicable, impacts to Waters of the State and/or Waters of the U.S. when designing and constructing the Project. The Design-Builder assumes all responsibility as the Authorized Agent of the Department (Permittee) as indicated in the permit that relates to protection of the "Waters of the United States" and/or "Waters of the State of Tennessee" pursuant to the regulatory permits listed in Section 5.2.10 of the DB Standard Guidance.

8.3.1 Environmental Permit Responsibilities for Bridges 31 and 32

As listed ~~on~~in Table ~~4011~~, the Department has identified the following environmental permits required to construct Bridges 31 and 32. The Department's responsibilities for Bridges 31 and 32 include developing the permit sketches and permit applications for submittal to the relevant agency. However, the Design-Builder shall be responsible for the time and cost to prepare and obtain its TDEC National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) for Bridges 31 and 32.

Table ~~4011~~: Environmental Permits for Bridges 31 & 32

Agency Permit	Party Responsible to Obtain	Anticipated Permit Receipt Date
TDEC Individual Aquatic Resource Alteration Permit (IARAP)	TDOT	July X <u>31</u> , 2026 (final date to be confirmed in or before the final RFP)
USACE Nationwide Permit	TDOT	July X <u>31</u> , 2026 (final date to be confirmed in or before the final RFP)
TDEC National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP)	Design-Builder	To be determined (based upon finalizing the Design-Builder's EPSC sheets and SWPPP)

The Design-Builder's Design Documents shall accommodate the permit documentation advanced by the Department for Bridges 31 and 32. Any additional or altered impacts to the environmental features in the area, because of changes from the 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 8.4.9.

If the actual permit receipt 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.

8.3.2 Environmental Permit Responsibilities for Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51

The Design-Builder is responsible for ~~obtaining~~all time and cost to obtain all necessary water quality permits and TDEC NPDES CGPs to construct Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51.

The Department has initially identified potential water quality permit needs based on the Base Technical Concept as information only; however, the Design-Builder's Design Documents shall ~~establish~~be the sole determinant to define the necessary water quality ~~permit requirements~~permits for ~~each bridge location~~Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51.

Table ~~4412~~: Preliminary Permit List for Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51

Potential Agency Permit (based on the Base Technical Concept)	Applicable Bridge
TDEC General Aquatic Resource Alteration Permit (GARAP)	TBD (determination to be provided in or before the final RFP)
TDEC Individual Aquatic Resource Alteration Permit (IARAP)	TBD (determination to be provided in or before the final RFP) <u>29, 30, 41, 46, 47, 48, 49, 50, & 51</u>

Potential Agency Permit (based on the Base Technical Concept)	Applicable Bridge
USACE Nationwide Permit (non-reporting)	TBD (determination to be provided in or before the final RFP)
USACE Nationwide Permit 404	TBD (determination to be provided in or before the final RFP) 41, 46, 47, 48, 49, 50, & 51
USACE Individual 404	TBD (determination to be provided in or before the final RFP) 29 & 30
TDEC National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP)	29, 30, 41, 46, 47, 48, 49, 50, & 51

8.3.2.1 WATER QUALITY PERMIT ACTIVITIES

Using the Definitive Design Plans, the Design-Builder ~~will~~shall lead permit development and coordination efforts for all impacted permittable features associated with Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51. This includes the Design-Builder:

- Preparing a revised permit assessment for Department Review and Comment.
- Preparing and submitting the permit sketches to the Department for Review and Comment for each noted impact.
- Finalizing and submitting the permittable plans and sketches (as part of the Permittable Plans Package) to the Department for Review and Comment.
- Developing and submitting the permit application to the Department for Review and Comment.
- Once comments are resolved, submitting the permit application to the agency, ~~and~~ paying for all fees in accordance with the DB Standard Guidance.
- Monitoring the process and coordinating with the agencies to answer questions, provide additional information, revise the application, and ultimately secure the noted permits(s).

Additional requirements related to regulatory permits are described in Section 5.2.10 of the DB Standard Guidance.

8.3.2.2 APPLYING FOR AND OBTAINING WATER QUALITY PERMITS

~~Using the Definitive Design Plans, the Design-Builder will lead permit development and coordination efforts for all impacted permittable features associated with Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51.~~

~~Initially, the Design-Builder shall prepare and submit a revised permit assessment considering the impacts from the Design-Builder's Design Documents for Department Review and Comment.~~

To prepare a water quality permit application, the Design-Builder shall be responsible for preparing all documents (including the necessary permit sketches, Permittable Plans Package, and water quality permit application package) and attending all public meetings necessary to obtain the water quality permits required to accommodate the Design-Builder's Design Documents. As needed, the Design-Builder shall obtain the necessary information and prepare the permit drawings/sketches, Permittable Plans Package, and application to reflect the impacts and minimization efforts resulting from the Design-Builder's Design Documents.

The Design-Builder shall be responsible for all public notice requirements such as documentation to be placed in the local newspaper and in the field and answering of public notice comments.

The Design-Builder shall submit the water quality permit application in its own name and ensure the permit is issued in its name. If, under the applicable laws and regulations, the water quality permit application cannot be submitted in the Design-Builder's name, the Design-Builder shall submit the permit application as an Authorized Agent of the Department and ensure the permits are issued with the Department as the Permittee. The Design-Builder shall attend a final review meeting with the Department to review all water quality permit applications prior to submitting the application to the permitting agencies.

~~The Department's Headquarters Environmental Tech Office and Headquarters Environmental Division Permitting Section~~The Department shall be invited to any meeting between the Design-Builder and the respective regulatory agency to discuss issues related to the application for (or refusal of) a permit. The Design-Builder shall inform the Department a minimum of ten (10) business days in advance of the time and location such a meeting is to take place and provide a meeting agenda five (5) business days in advance of the meeting.

The Design-Builder shall assist the Department, as needed, in any proceedings relating to reservations, objections, appeals, and/or applications for preliminary injunctions initiated by others against the water quality permit application or by itself against the permit decision. In such proceedings, the Design-Builder shall make every reasonable effort to defend the submitted application.

If any regulatory agency rejects or denies the permit application, it is the Design-Builder's responsibility to make the necessary revisions to ensure the permit is approved. If revisions are required to obtain the permit, ~~there should be scheduled reviews of the revisions~~Design-Builder shall schedule a review by the ~~Department's Headquarters Environmental Tech Office and, upon request, the Headquarters Environmental Division Permitting Section~~Department to ensure regulatory practices are met. The Design-Builder shall be responsible for preparing and revising its designs and proposing appropriate construction means and methods that are permissible. The Design-Builder shall acquire all permits required for a particular construction activity ~~shall be acquired~~ prior to commencing the particular construction activity. All costs and time/delays associated with an incomplete permit package or application, agency rejection, agency denials, agency processing time, or any permit violations shall be the responsibility of the Design-Builder.

The Design-Builder shall provide the Department with a copy of the draft permit decision and a copy of the final permit upon receipt.

8.3.2.3 WATER QUALITY PERMIT APPLICATION CONTENTS

The water quality permit application (applicable for USACE 404, TVA Section 26a, and TDEC ARAP permits) shall include the:

- Department's application templates, or an approved equal, that meets all the required sections of the agencies' applications forms (e.g., TDEC CN-1091, USACE ENG 4345, NPDES NOC, etc.); and
- Signed application letter to the TDEC Division of Water Resources, Permits Section, TVA, and USACE listing all water quality impacts.

The signed permit application ~~cover letter~~ shall indicate include:

- Alternatives and proposed methods utilized by the Design-Builder to minimize impacts to each environmental feature
- Proposed mitigation for impacts to the environmental features
- Labeled USGS color quadrangle map. The map shall have the following information shown:
- Impact areas labeled by permit type;
 - Longitude and latitude (precision to four decimal places) listed for each impact;

- Quadrangle name and number;
- Project information (including PIN, State Project Number, project description, County name, nearest city);
- Scale bar (quad map scale shall be set to 1:24,000); and
- North arrow.
- Copy of signed CN1091 form (the originally signed CN1091 form shall be submitted to TDEC~~);~~)
- Signed DA/TVA form or DA form (if applicable). DA/TVA form must be filled out if an Individual Section 404 Permit is required. Individual Section 404 Permit applications require the names and addresses of property owners adjacent to all permit impacts listed in an excel spreadsheet.
- Signed TVA Applicant Disclosure Form (if applicable~~);~~)
- Pre-filing and certification request (if applicable~~);~~)
- Environmental feature impact tables based on Design-Builder's Design Documents -
- TN SQT data and debit tools-
- Individual permit sketches of impacts to environmental features (if applicable).
- ~~Mitigation-Stream~~ mitigation design/plan or mitigation credit ledger to account for impacts to environmental features (if applicable~~);~~)
- Hydrologic Determination Field Data Sheet (if applicable~~);~~)
- Ecology Field Data Sheet (if applicable~~);~~)
- Habitat Assessment Field Data Sheet (if applicable~~);~~)
- Wetland Determination Data Form (if applicable~~);~~)
- TRAM Decision Form (if applicable~~);~~)
- Quad map and photographs showing impact area and/or environmental features-
- Marked-up plan sheets showing features from the ~~Environmental Boundaries Report~~EBRs (if applicable~~);~~)
- A copy of all coordination correspondence between the Department and the USFWS (if applicable~~);~~)
- TDEC DNA endangered species database search (if applicable~~);~~)
- A copy of all coordination correspondence between the Department and the TWRA (if applicable~~);~~)
- Federal Emergency Management Agency (FEMA) flood map for the subject project with construction
 - limits labeled-
- FEMA No-Rise Certification letter or Conditional Letter of Map Revision (CLOMR) (if applicable).
- A copy of approved environmental document (Environment Assessment, Finding of No Significant Impact, TEER, Categorical Exclusion, etc.) or Design-Builder prompted reevaluation (if applicable~~);~~)
- A copy of the State Historic Preservation Office (SHPO) letter (architectural and archaeological~~);~~)
- Mitigation plan/plans for all streams and wetlands changes proposed by the Design-Builder (if applicable~~);~~)
- Half-size copy of the bridge layout(s) proposed by the Design-Builder (if applicable~~);~~)
- Half-size copy of any utility layout(s) plans that impact(s) environmental features (if applicable~~);~~)
- Include an excel table listing the revised utility layout(s) impacts to environmental features (if applicable).
- Half-size set of plans showing all environmental features. The plans shall be highlighted according to the following guidelines:
 - New culvert construction (extensions included) shall be highlighted in orange on the proposed layout.
 - Existing culverts shall be highlighted in blue on the present layout (blue on the proposed layout if sections are remaining).
 - Stream inlet and outlet protection measures and channel detailed dimensions shall also be labeled on the plans and recorded in the impact table.

- Streams/springs shall be highlighted in blue on the present and proposed layout.
- Wetlands shall be highlighted on present layout (green for permanent impacts and yellow for temporary impacts).
- Bank stabilization, outfall structures, and sinkholes shall be highlighted in pink on proposed layout.

Any temporary construction measures, including de-watering, construction access, haul roads, EPSC measures, temporary crossings, stream diversions, etc., required for the Design-Builder's revised Design Documents shall be addressed in the water quality permit application. The Design-Builder shall clearly indicate the location of and impacts from haul roads on jurisdictional areas. The Design-Builder shall identify all proposed borrow and waste sites and provide all clearance documentation per TDOT's *Waste and Borrow Manual*. These details shall be included in the permit application data. ~~Further, the Design-Builder shall describe the methods of construction of all structures.~~

8.3.2.4 WATER QUALITY PERMIT TIMELINES

For all water quality permit submittals, the Design-Builder shall include standard Department Review and Comment time periods in its CPM Schedule (notably for submittal of its Permittable Plans Package, the permit application, and permit conditions). The Department will review the submittals to ensure regulatory practices have been met.

Upon submittal of the Permittable Plans Package, the Design-Builder shall account for the following sequential durations in its CPM Schedule to complete the water quality permitting process for each bridge location.

Table 4213: Water Quality Permit Timelines

Activity	Estimated Timeframe	Responsible Party
Review the Permittable Plans Package	2 weeks	TDOT
Develop application	At least 1 month	Design-Builder
<u>Department review of the application</u>	<u>2 weeks</u>	<u>TDOT</u>
Agency Response Timelines (permit dependent)		As required to address the impacts to the environmental features by the Design-Builder's Design Documents
GARAP, USACE Non-notification	6 months	
IARAP, NW-404	9 months	
IARAP, I-404 (with simple PRM or no PRM)	12 months	
IARAP, I-404 (with PRM)	18 months	

8.3.3 Permitting for Design-Builder's Temporary Interest

The Design-Builder shall bear all cost and time for complying with and obtaining any necessary building, demolition, grading, and environmental and regulatory permits or approvals, including archaeology, ecology, historical, hazardous materials, air quality and noise, TVA 26a, TDEC, and USACE permits from federal, state and/or local agencies regarding any Design-Builder temporary interest, including material and staging areas, storage areas, excess excavated materials disposal areas, and the operation of any Project-dedicated asphalt, concrete plants, and waste or borrow sites that will be used. These areas are to be

- ~~—~~A valid certification from the “Fundamentals of Erosion Prevention and Sediment Control Level I” course,
- and licensed professional engineer or landscape architect, or
- Certified Professional in Erosion and Sediment Control (CPESC) certification, or
- A person who has 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).

8.3.7 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 responsibility 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.

8.3.8 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,
- Purpose of the permit,
- Reference to the document in which the permit conditions are defined,
- Status of permit,
- Date by which the authorization of the specific permit is anticipated,
- Permit conditions relevant for the Work,
- Date by which the permit is required (milestone),
- How the Design-Builder ensures that it will comply with the permit requirements and conditions, and
- Validity and the expiry date (if any) of the permit.

9.4 Maintenance During Construction

The Design-Builder shall prepare and submit (prior to starting any construction Work) a Maintenance Plan for Department Review and Approval that meets the requirements hereinof the TDOT Standard Specifications (including Section 104.05), the DB Standard Guidance, and this Section. The Design-Builder is responsible for the maintenance of the Project Limits in accordance with these requirements and the approved Maintenance Plan at least 90 days prior to starting the construction Work at each specific bridge location and until Project completion and acceptance by the Design-Builder requests and the Department accepts relief of maintenance in accordance with Section 9.4.1.

9.4.1 General Requirements

~~During its Work,~~ The Design-Builder shall ~~be fully responsible for maintenance as required by TDOT Standard Specifications, Section 104.05 (Maintenance During Construction) at each bridge location. The Design-Builder shall be responsible for maintain~~ all components of the transportation system within the Project Limits ~~to, which shall~~ include asphalt roadway, signing, and guardrail ~~until completion and acceptance by the Department for each bridge location and the Project in its entirety.~~

Department acceptance and subsequent Design-Builder relief of maintenance for each bridge location shall occur when both 1) the Bridge Opening Date has been met and 2) all Punch-List items and vegetation establishment requirements have been completed and accepted by the Department ~~for each bridge location~~.

Upon acceptance by the Department and granting relief of maintenance for the last bridge location, the Department will issue Final Acceptance to ~~close out~~ close out the Project.

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 at least 90 days prior to starting the ~~date of the Notice to Proceed for~~ construction Work ~~from at each specific bridge location and until the Design-Builder requests and~~ the Department ~~until Project completion and acceptance by the Department~~ accepts relief of maintenance in accordance with Section 9.4.1.

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

9.4.3 Acceptance of the Project

Upon completion and acceptance of each bridge location (as described above) and the overall Project, 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.

9.4.4 Maintenance of Traffic

The road closures for structure replacements and all other related construction Work shall be in accordance with Special Provision 108B and this Section 9.

- The Design-Builder shall maintain access to all side roads, driveways, and field entrances during the construction Work. The Design-Builder shall not close any pairs of bridges that have a field entrance between the two bridge locations.
- Considering the detour information provided in the Reference Documents, the Design-Builder shall identify detours to be utilized during construction. Detours shall be approved by the Department.
- Detours shall not be used for Bridges 47 and 48.

Attachment A: Pavement ~~Design Report~~Schedule

Pavement Schedule			
Mainline			
	Item #	Description	Depth (in)
Pavement	411-01.10	ACS MIX(PG 64-22)Grading D	1.25
	307-01.08	Asphalt Conc Mix(PG 64-22)(BPMB-HM) GR B-M2	2
	307-01.01	Asphalt Conc Mix(PG 64-22)(BPMB-HM) GR A	3
Base	303-01	Mineral Aggregate, Type A	4
Subgrade	0		

Shoulder			
	Item #	Description	Depth (in)
Pavement	411-01.07	ACS MIX(PG 64-22)Grading E	1.25
Base	303-01	Mineral Aggregate, Type A	9
Subgrade	0		

Note:

- 1 Mill 1.25" of the existing pavement and resurface with 1.25" of D mix
- 2 Add Tack Coat Per Standard Specification 403.05 between each pavement layer
- 3 Use Prime coat @0.30-0.35 gal/sy between base and pavement
- 4 Less than 4' paved shoulder, use the mainline pavement design.
- 5 The shoulder design can be used for temporary traffic movement as well.

Pavement Schedule		
Mainline & Shoulder		
	Description	Depth (in)
Pavement	ACS MIX (PG 64-22) Grading D	1.25
	Asphalt Conc Mix (PG 64-22) (BPMB-HM) GR B-M2	2
	Asphalt Conc Mix (PG 64-22) (BPMB-HM) GR A	3
Base	Mineral Aggregate, Type A	6
Subgrade		

Note:

- 1 - Add Tack Coat Per Standard Specification 403.05 between each pavement layer
- 2 - Use Prime Coat @ 0.30-0.35 gal/sy between base and pavement

~~Attachment C: Approved Design Waivers and Design Exception~~

~~To be included with the final RFP; see Section 3.4 for current design exceptions for the Project~~