



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

ALTERNATIVE DELIVERY DIVISION

REGION 4
300 BENCHMARK PLACE
JACKSON, TENNESSEE 38301

WILL REID
DEPUTY GOVERNOR &
COMMISSIONER OF TRANSPORTATION

BILL LEE
GOVERNOR

October 29, 2025

**Re: Addendum No. 1
Contract No. DB2506
Counties: Haywood and Lauderdale**

To the Shortlisted Proposers:

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

- Minor revisions to Book 1 (ITP).
- Customized Special Provisions 108B, 109A, and 109B for project-specific use.
- Revisions to Book 3 to answer proposer questions and clarify scope requirements. Revisions include:
 - Section 3.4: Received a design waiver for Bridge 29.
 - Section 4.2: Clarified the bridge hydraulic performance requirements and added alternative hydraulic requirements for Bridge 29 and Bridge 46 based on recent Proposer questions and one-on-one meetings.
 - Section 7.4: Provided previously distributed Railroad coordination requirements with added language (in redlines) to allow for a non-compensable time extension if railroad timelines are delayed.
 - Section 7.1 and 8.3.1: Revised permit and utility relocation availability dates for Bridges 31 and 32.

The Proposer must acknowledge this addendum as indicated in Section 3.2.2 of Book 1 by acknowledging the addendum on Form C. The native files for the RFP forms (including Form C) are included on the Project website.

Sincerely,

Derek Link
TDOT Project Manager
Alternative Delivery – Region 4



TENNESSEE DEPARTMENT OF TRANSPORTATION

Design-Build 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# **DB2506**

Final RFP: October 2025

Addendum #1: 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.

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	OVERFLOW OTTER CREEK	single	Fair/Posted
32	SR180	OTTER CREEK 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

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 6, 2025
Proposer's Deadline for submittal of Form QR on the final RFP	October 13, 2025 3 p.m. central time
Optional Confidential (One-on-One) Meetings: re RFP and final ATC discussion	October 23, 2025
<u>TDOT issues Addendum No. 1</u>	<u>October 29, 2025</u>
Proposer's deadline for submittal of <i>any last</i> Form QR, requests for QPL determination, organizational or Key Individual change requests, SOQ conflicts of interests update, and/or alternate technical concepts (ATCs)	November 4, 2025 1 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



TENNESSEE DEPARTMENT OF TRANSPORTATION

Design-Build

Book 2 Contract

Timber Bridge Bundle One

Haywood and Lauderdale Counties, Tennessee

DB Contract# **DB2506**

Final RFP: October 2025

Addendum #1: October 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 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
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
Reinforced Soil Slopes	205RSS
Section 411 – Asphalt Concrete Surface (Hot Mix)	411C
Section 602 – Steel Structures (Inspection Cost Only)	602
Retaining Walls	624
Drilled Shaft Specs	625
Removal and Disposal of Litter	719A
Right-of-Way Mowing	806

STATE**OF****TENNESSEE**

County: Lauderdale
and Haywood Counties
Contract No. DB2506

SPECIAL PROVISION**REGARDING****LANE CLOSURE AND PROJECT COMPLETION 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 29, 30, 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.

STATE**OF****TENNESSEE**

(Rev. 1-3-13)

January 1, 2021

SPECIAL PROVISION
REGARDING
PAYMENT ADJUSTMENT FOR FUEL

This special provision covers the method of payment adjustment for fuel price increases or decreases. Payment adjustments will be made in monthly increments based on the estimated fuel consumed on major items of work, the estimated price per gallon of fuel at the time of letting, and the percentage change of the Producer Price Index for Light fuel oils, Series ID Number WPU0573, published by the U.S. Department of Labor, Bureau of Labor Statistics.

The estimated price per gallon of fuel for this contract is **\$2.57.**

The **September 2025** Price Index (Ib) for light fuel oils shall be used for this contract. Adjustments will be based on the price index in effect for the month in which the item was installed.

Fuel consumption for payment adjustment shall be based on the following:

Item Number	Description of Work	Gallons per unit	Unit of measure
203	Any Road and Drainage Excavation	0.25	Cubic Yard
203	Any Borrow Excavation (Rock)	0.36	Cubic Yard
203	Any Borrow Excavation (Other than Solid Rock)	0.25	Cubic Yard
203	Any Borrow Excavation (Rock)	0.16	Ton
203	Any Borrow Excavation (Other than Solid Rock)	0.11	Ton
203-05	Undercutting	0.25	Cubic Yard
203	Any Embankment (in-place)	0.25	Cubic Yard
303, 309, 312	Any Aggregate Base	0.79	Ton
313, 501	Treated Permeable Base or Lean Concrete Base	0.10	Square Yard
307	Any Bituminous Plant Mix Base (HM)	2.98	Ton
411	Any Bituminous Concrete Surface (HM)	2.98	Ton
501	Any Portland Cement Concrete Pavement		
	≤ 10 in. thickness	0.25	Square Yard
	> 10 in. thickness	0.30	Square Yard

STATE**OF****TENNESSEE**

(Rev. 05-16-16)

(Rev. 04-01-19)

(Rev. 11-08-19)

(Rev. 3-2-23)

January 1, 2021

SPECIAL PROVISION**REGARDING****PAYMENT ADJUSTMENT FOR BITUMINOUS MATERIAL**

This Special Provision covers the method of payment adjustment for bituminous materials.

100% Virgin Bituminous Material

A payment adjustment will be made to compensate for increases and decreases of 5% or more in the contractor's bituminous material cost. The normal bid items in the contract covering the bituminous material shall not be changed. Payment adjustments (+/-) shall be paid under "Payment Adjustment for Bituminous Material" and calculated as described herein:

A "Basic Bituminous Material Index" will be established by the Tennessee Department of Transportation prior to the time the bids are opened. This "Basic Bituminous Material Index" is the average of the current quotations on P.G. 64-22 from suppliers furnishing asphalt cement to contractors in the State of Tennessee. These quotations are the cost per ton f.o.b. supplier's terminal.

The "Basic Bituminous Material Index" for this project is **\$600.00** per ton.

The "Monthly Bituminous Material Index" is also established on the first day of each month by the same method. A payment adjustment shall be made provided the "Monthly Bituminous Material Index" varies 5% or more (+/-) from the "Basic Bituminous Material Index".

Where the price index varies 5% or more (+/-), the payment adjustment will be made as follows:

$$PA = [Ic - Ib] \times T$$

Where:

PA =	Price Adjustment for Adjustment Month
Ib =	Basic Bituminous Material Index
Ic =	Monthly Bituminous Material Index
T =	Tons bituminous material for Adjustment Month



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# **DB2506**

Final RFP: October 2025

Addendum #1 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 <u>OVERFLOW</u>	single	Fair/Posted
32	134877.00	136185.05	SR180	<u>OVERFLOW</u> OTTER CREEK	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

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-ten~~ (105) 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 or 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 (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.

The Department may consider time adjustments for:

- The time for plan revisions requiring additional third-party or other agency (i.e., non-Department) review and/or approval if the Design-Builder is unable to work on the controlling item of work without revised plans or shop drawings;

- The design waivers will be allowed for the minimum vertical design speeds for Bridge 29, 46, 49, and 51, which may be reduced to 45 MPH, 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~~ the approved design exception.

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.

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.

- 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 ~~4)~~ equal to or greater than the higher of 1) 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.

For Bridges 29 and 46, the proposed low girder elevation shall be **the higher of 1) the 10-year flood elevation plus 1' or 2) the existing low girder elevation.** However, the proposed finished grade of the structure shall be equal to or exceed the existing finished grade.

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

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.

This requirement is in addition to the Design-Builder's submittal of necessary shop drawings and erection plans for the 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.

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 1 August 31 , 2026
AT&T (Electric)	Underground Fiber	Relocate Abandoned	Daniel Potts dp7607@att.com 901-488-2359	August 31, 2026 N/A
City of Halls	Water, Gas, & Sewer	No impact	Walter Tate tohpwac@lctn.com 731-836-9653	N/A
Forked Deer Electric	Electric	No impact	Jeff Newman jeff@forkeddeer.com 731-836-7508	N/A

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.

Date Package,” which includes color coded relocation plans (rainbows), a schedule of calendar days, and an estimate of cost in order to generate the Utility Relocation Agreement.

- The “A-date” may be extended an additional forty-five (45) calendar days upon request of the utility owner and approval by TDOT.
- The Design-Builder’s responsibilities during this time may include leading a kickoff meeting and deconfliction meeting(s) with the impacted utility owners.
- TDOT will be responsible for the following during this timeline:
 - Reviewing and approving any engineering packages/contracts requested by the utility owner to complete its relocation design work
 - Reviewing any other utility consultant documentation, including any established MOUs, certification of consultant, proposed scopes of work, and estimate of costs
- Receiving and reviewing the A-Date Packages in coordination with the Department’s Environmental and Utilities divisions.
- Receiving and reviewing the B-Date Packages if a Move-in State (MIS) utility relocation is identified and agreed to by the parties.
 - Move-In State (MIS) utility relocation work is only to be accomplished if a MIS Contract is executed by both TDOT and the utility owner.
 - MIS contracts will require that the utility owner provide the detailed construction plans, construction specifications and quantities, collectively known as the “B-Date Package” in the Utility Agreement, no later than thirty (30) calendar days after the utility receives the fully executed contract back from the Department.
 - In the event the Design-Builder performs any utility relocation work as part of an MIS relocation, the Design-Builder shall complete any necessary TEER reevaluations and obtain all applicable permits (including water quality and environmental permits) to complete the work.
 - The Department will revise the Contract Documents (~~both~~ for added ~~time and~~ cost) to include any MIS work per Standard Specification 109.04.
- Certifying that in a written statement to the Department that the proposed relocation of utilities will not conflict with the proposed highway improvement or with another utility’s relocation plan.
- Supporting the Department in generating the relocation contracts and “put to work” letters with the impacted utility owners.
- After construction NTP, authorizing the utilities to begin work and continuing coordination efforts and record keeping (as detailed in Section 6.3 of the DB Standard Guidance) during the construction Work.
- Locate all final utility locations on the As-built Plans as described in the DB Standard Guidance.

The Design-Builder shall be responsible for identifying any utility conflicts/relocations from the utility construction plans.

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 of Bridges 31 and 32 and that 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.

Table 10: Railroad Timelines

Activity	Estimated Timeframe	Responsible Party
Prepare railroad estimate	8 weeks	TDOT
Prepare Special Provisions 105C and execute the Railroad Agreement	52 weeks	TDOT
Acquire necessary railroad ROW/easement	52 weeks	TDOT
Prepare and provide the railroad certification and notice to proceed for Bridge 46 construction	6 weeks	TDOT

If the total number of weeks extends beyond the total railroad timeline listed in Table 10 (i.e., 118 weeks from TDOT acceptance of the Final DD Plans for Bridge 46), 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.

7.4.3 Design-Builder's Changes in Design

For purposes of this Section 7 related to Railroad coordination, a change in design is defined as the Design-Builder's modification of its Design Documents that require additional or necessitate a change to the ROW or easement areas **or** ~~that~~ require the Department to modify its Special Provision 105C or its Railroad construction agreement(s) **after** acceptance of the Design-Builder's Final Definitive Design Plans (Final DD Plans).

In any of these circumstances, the Design-Builder shall bear all cost and time for the Department's additional Railroad coordination efforts, which shall be accounted for in the CPM Schedule without any extension to the Contract Completion Date.

Table 11: 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 1 July 31, 2026
USACE Nationwide Permit	TDOT	July 1 July 31, 2026
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 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 be the sole determinant to define the necessary water quality permits for Bridges 29, 30, 41, 46, 47, 48, 49, 50, & 51.

Table 12: 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 Individual Aquatic Resource Alteration Permit (IARAP)	29, 30, 41, 46, 47, 48, 49, 50, & 51
USACE Nationwide Permit 404	41, 46, 47, 48, 49, 50, & 51
USACE Individual 404	29 & 30
TDEC National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP)	29, 30, 41, 46, 47, 48, 49, 50, & 51

to Waters of the State/United States or on adjacent property owners, as well as comply with the terms of the TDEC NPDES CGP.

8.3.6 Inspections

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

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

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

Inspectors performing the required twice weekly inspections must ~~have~~:

- Have Aa valid certification from the “Fundamentals of Erosion Prevention and Sediment Control Level I” course, or and
- Be a Licensed professional engineer or landscape architect, or
- Have a Certified Professional in Erosion and Sediment Control (CPESC) certification, or
- Have 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

Attachment B: Roadway Design Criteria

Bridge 29

GENERAL INFORMATION

Roadway Identification	SR 87 Bridge #29 over Lagoon Creek (LM 3.61) - Haywood Co.	
Roadway Limits	L.M. 3.58 TO 3.70	
Functional Classification	Rural Major Collector	
Design Speed	55 (45 pending design waiver approval)	
Design Year	2049	
Traffic Volume	410	
Level of Service	N/A	
Access Control	Full Access	
Design Units	English	
TYPICAL SECTION	See RD11-TS-2	
Travel Lanes		
Number of Lanes	2	
Lane Width	11	
Cross Slope	2%	
Max Superelevation	8%	
Shoulders		
Shoulder Width	4	
Cross Slope	4%	
Max Rollover	7%	
Median	N/A	
Width	N/A	
Slope	N/A	
Side Slopes		
Clear Zone Width	12'-14' Minimum	14'-18' Minimum
Slope Inside Clear Zone	6:1 or Flatter (Unprotected)	5:1 to 4:1 (Unprotected)
Slope Outside Clear Zone	2:1 Maximum	
HORIZONTAL ALIGNMENT		
Min Radius of Curve	960' for 8%	

VERTICAL ALIGNMENT	See RD11-TS-2
Max Grade	
Ascending	6% (Level)
Descending	6% (Level)
Min Curvature (K)	
Sag Vertical Curve	115
Crest Vertical Curve	114
DRAINAGE	
Calculation of Q	Rational Method for D.A. < 100 Acres TR-55 Method for D.A. 128 Acres > D.A. > 100 Acres Rural Regression for D.A. > 128 Acres
Cross Drains	
Flood Frequency	50 Year (100 Year Check)
Pipe Material	RCP
Minimum Freeboard	50 Year
Side Drains	
Flood Frequency	N/A
Pipe Material	N/A
Storm Drains	
Flood Frequency	N/A
Pipe Material	N/A
Pavement Spread	N/A
Minimum Pipe Size	18"
Minimum Cover	Not less than 12" measured from the bottom of the subgrade to the top of the outside face of the pipe.
INTERSECTIONS	
Stopping Sight Distance	495' for 55 mph
Design Vehicle	WB-67
NOTES:	Contact TDOT Hydraulics for Flow Rate for Bridge Design.

GENERAL INFORMATION

Roadway Identification	SR 87 Bridge #29 over Lagoon Creek (LM 3.61) - Haywood Co.	
Roadway Limits	L.M. 3.58 TO 3.70	
Functional Classification	Rural Major Collector	
Design Speed	55	
Design Year	2049	
Traffic Volume	410	
Level of Service	N/A	
Access Control	Full Access	
Design Units	English	
TYPICAL SECTION	See RD11-TS-2	
Travel Lanes		
Number of Lanes	2	
Lane Width	11	
Cross Slope	2%	
Max Superelevation	8%	
Shoulders		
Shoulder Width	4	
Cross Slope	4%	
Max Rollover	7%	
Median	N/A	
Width	N/A	
Slope	N/A	
Side Slopes		
Clear Zone Width	12'-14' Minimum	14'-18' Minimum
Slope Inside Clear Zone	6:1 or Flatter (Unprotected)	5:1 to 4:1 (Unprotected)
Slope Outside Clear Zone	2:1 Maximum	
HORIZONTAL ALIGNMENT		
Min Radius of Curve	960' for 8%	

VERTICAL ALIGNMENT	See RD11-TS-2
Max Grade	
Ascending	6% (Level)
Descending	6% (Level)
Min Curvature (K)	
Sag Vertical Curve	115
Crest Vertical Curve	114
DRAINAGE	
Calculation of Q	Rational Method for D.A. < 100 Acres TR-55 Method for D.A. 128 Acres > D.A. > 100 Acres Rural Regression for D.A. > 128 Acres
Cross Drains	
Flood Frequency	50 Year (100 Year Check)
Pipe Material	RCP
Minimum Freeboard	50 Year
Side Drains	
Flood Frequency	N/A
Pipe Material	N/A
Storm Drains	
Flood Frequency	N/A
Pipe Material	N/A
Pavement Spread	N/A
Minimum Pipe Size	18"
Minimum Cover	Not less than 12" measured from the bottom of the subgrade to the top of the outside face of the pipe.
INTERSECTIONS	
Stopping Sight Distance	495' for 55 mph
Design Vehicle	WB-67
NOTES:	Contact TDOT Hydraulics for Flow Rate for Bridge Design.

Bridge 47

GENERAL INFORMATION

Roadway Identification	SR 87 Bridge #47 over Branch (TMA)(LM 5.18) - Lauderdale Co.	
Roadway Limits	L.M. 5.03 TO 5.33	
Functional Classification	Rural Major Collector	
Design Speed	55	
Design Year	2049	
Traffic Volume	410	
Level of Service	N/A	
Access Control	Full Access	
Design Units	English	
TYPICAL SECTION	See RD11-TS-2	
Travel Lanes		
Number of Lanes	2	
Lane Width	11	
Cross Slope	2%	
Max Superelevation	8%	
Shoulders		
Shoulder Width	2	
Cross Slope	4%	
Max Rollover	7%	
Median	N/A	
Width	N/A	
Slope	N/A	
Side Slopes		
Clear Zone Width	12'-14' Minimum	14'-18' Minimum
Slope Inside Clear Zone	6:1 or Flatter (Unprotected)	5:1 to 4:1 (Unprotected)
Slope Outside Clear Zone	2:1 Maximum	
HORIZONTAL ALIGNMENT		
Min Radius of Curve	960' for 8%	

VERTICAL ALIGNMENT	See RD11-TS-2
Max Grade	
Ascending	6% (Level)
Descending	6% (Level)
Min Curvature (K)	
Sag Vertical Curve	115
Crest Vertical Curve	114
DRAINAGE	
Calculation of Q	Rational Method for D.A. < 100 Acres TR-55 Method for D.A. 128 Acres > D.A. > 100 Acres Rural Regression for D.A. > 128 Acres
Cross Drains	
Flood Frequency	50 Year (100 Year Check)
Pipe Material	RCP
Minimum Freeboard	50 Year
Side Drains	
Flood Frequency	N/A
Pipe Material	N/A
Storm Drains	
Flood Frequency	N/A
Pipe Material	N/A
Pavement Spread	N/A
Minimum Pipe Size	18"
Minimum Cover	Not less than 12" measured from the bottom of the subgrade to the top of the outside face of the pipe.
INTERSECTIONS	
Stopping Sight Distance	495' for 55 mph
Design Vehicle	WB-67
NOTES:	Contact TDOT Hydraulics for Flow Rate for Bridge Design.

GENERAL INFORMATION

Roadway Identification	SR 87 Bridge #47 over Branch (TMA)(LM 5.18) - Lauderdale Co.
Roadway Limits	L.M. 5.03 TO 5.33
Functional Classification	Rural Major Collector
Design Speed	55
Design Year	2049
Traffic Volume	410
Level of Service	N/A
Access Control	Full Access
Design Units	English

TYPICAL SECTION

Travel Lanes	See RD11-TS-2	
Number of Lanes	2	
Lane Width	11	
Cross Slope	2%	
Max Superelevation	8%	
Shoulders		
Shoulder Width	4	
Cross Slope	4%	
Max Rollover	7%	
Median	N/A	
Width	N/A	
Slope	N/A	
Side Slopes		
Clear Zone Width	12'-14' Minimum	14'-18' Minimum
Slope Inside Clear Zone	6:1 or Flatter (Unprotected)	5:1 to 4:1 (Unprotected)
Slope Outside Clear Zone	2:1 Maximum	

HORIZONTAL ALIGNMENT

Min Radius of Curve	960' for 8%
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VERTICAL ALIGNMENT

See RD11-TS-2	
Max Grade	
Ascending	6% (Level)
Descending	6% (Level)
Min Curvature (K)	
Sag Vertical Curve	115
Crest Vertical Curve	114

DRAINAGE

Calculation of Q	Rational Method for D.A. < 100 Acres TR-55 Method for D.A. 128 Acres > D.A. > 100 Acres Rural Regression for D.A. > 128 Acres
Cross Drains	
Flood Frequency	50 Year (100 Year Check)
Pipe Material	RCP
Minimum Freeboard	50 Year
Side Drains	
Flood Frequency	N/A
Pipe Material	N/A
Storm Drains	
Flood Frequency	N/A
Pipe Material	N/A
Pavement Spread	N/A
Minimum Pipe Size	18"
Minimum Cover	Not less than 12" measured from the bottom of the subgrade to the top of the outside face of the pipe.

INTERSECTIONS

Stopping Sight Distance	495' for 55 mph
Design Vehicle	WB-67

NOTES:

Contact TDOT Hydraulics for Flow Rate for Bridge Design.
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Bridge 48

GENERAL INFORMATION

Roadway Identification	SR 87 Bridge #48 over Branch (TMA)(LM 6.42) - Lauderdale Co.	
Roadway Limits	L.M. 6.28 TO 6.59	
Functional Classification	Rural Major Collector	
Design Speed	60	
Design Year	2049	
Traffic Volume	370	
Level of Service	N/A	
Access Control	Full Access	
Design Units	English	
TYPICAL SECTION	See RD11-TS-2	
Travel Lanes		
Number of Lanes	2	
Lane Width	11	
Cross Slope	2%	
Max Superelevation	8%	
Shoulders		
Shoulder Width	2	
Cross Slope	4%	
Max Rollover	7%	
Median	N/A	
Width	N/A	
Slope	N/A	
Side Slopes		
Clear Zone Width	12'-14' Minimum	14'-18' Minimum
Slope Inside Clear Zone	6:1 or Flatter (Unprotected)	5:1 to 4:1 (Unprotected)
Slope Outside Clear Zone	2:1 Maximum	
HORIZONTAL ALIGNMENT		
Min Radius of Curve	1200' for 8%	

VERTICAL ALIGNMENT	See RD11-TS-2
Max Grade	
Ascending	6% (Level)
Descending	6% (Level)
Min Curvature (K)	
Sag Vertical Curve	151
Crest Vertical Curve	136
DRAINAGE	
Calculation of Q	Rational Method for D.A. < 100 Acres TR-55 Method for D.A. 128 Acres > D.A. > 100 Acres Rural Regression for D.A. > 128 Acres
Cross Drains	
Flood Frequency	50 Year (100 Year Check)
Pipe Material	RCP
Minimum Freeboard	50 Year
Side Drains	
Flood Frequency	N/A
Pipe Material	N/A
Storm Drains	
Flood Frequency	N/A
Pipe Material	N/A
Pavement Spread	N/A
Minimum Pipe Size	18"
Minimum Cover	Not less than 12" measured from the bottom of the subgrade to the top of the outside face of the pipe.
INTERSECTIONS	
Stopping Sight Distance	570' for 60 mph
Design Vehicle	WB-67
NOTES:	Contact TDOT Hydraulics for Flow Rate for Bridge Design.

GENERAL INFORMATION

Roadway Identification	SR 87 Bridge #48 over Branch (TMA)(LM 6.42)
Roadway Limits	- Lauderdale Co.
Functional Classification	Rural Major Collector
Design Speed	60
Design Year	2049
Traffic Volume	370
Level of Service	N/A
Access Control	Full Access
Design Units	English

TYPICAL SECTION

Travel Lanes	See RD11-TS-2	
Number of Lanes	2	
Lane Width	11	
Cross Slope	2%	
Max Superelevation	8%	
Shoulders		
Shoulder Width	4	
Cross Slope	4%	
Max Rollover	7%	
Median	N/A	
Width	N/A	
Slope	N/A	
Side Slopes		
Clear Zone Width	12'-14' Minimum	14'-18' Minimum
Slope Inside Clear Zone	6:1 or Flatter (Unprotected)	5:1 to 4:1 (Unprotected)
Slope Outside Clear Zone	2:1 Maximum	

HORIZONTAL ALIGNMENT

Min Radius of Curve	1200' for 8%
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VERTICAL ALIGNMENT

See RD11-TS-2	
Max Grade	
Ascending	6% (Level)
Descending	6% (Level)
Min Curvature (K)	
Sag Vertical Curve	151
Crest Vertical Curve	136

DRAINAGE

Calculation of Q	Rational Method for D.A. < 100 Acres TR-55 Method for D.A. 128 Acres > D.A. > 100 Acres Rural Regression for D.A. > 128 Acres
Cross Drains	
Flood Frequency	50 Year (100 Year Check)
Pipe Material	RCP
Minimum Freeboard	50 Year
Side Drains	
Flood Frequency	N/A
Pipe Material	N/A
Storm Drains	
Flood Frequency	N/A
Pipe Material	N/A
Pavement Spread	N/A
Minimum Pipe Size	18"
Minimum Cover	Not less than 12" measured from the bottom of the subgrade to the top of the outside face of the pipe.

INTERSECTIONS

Stopping Sight Distance	570' for 60 mph
Design Vehicle	WB-67

NOTES:

Contact TDOT Hydraulics for Flow Rate for Bridge Design.
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