

#### STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DIVISION SUITE 700, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402 (615) 741-2414

BUTCH ELEY DEPUTY GOVERNOR & COMMISSIONER OF TRANSPORTATION BILL LEE GOVERNOR

August 12, 2022

Re: ADDENDUM #3 Contract No.: DB2101 County: Hamilton

To Whom It May Concern:

This addendum revises the RFP Contract Book 1 and 3. Attached are the revised sheets.

You must acknowledge this addedendum by completing the "Addendum Letter Acknowledgement" form C and the Technical Proposal Signature Page (Form TPSP) within your Technical Proposal. It is the bidder's responsibility to notify all affected manufacturers, suppliers and subcontractors of this change.

Sincerely,

Clayton Markham, P.E. CE Manager 2, Alternative Contracting

# DESIGN-BUILD RFP CONTRACT BOOK 1 INSTRUCTIONS TO DESIGN-BUILDERS (ITDB)

## **TENNESSEE DEPARTMENT OF TRANSPORTATION**

I-75 Interchange Modification at I-24, Phase 2 (IA)

Hamilton County- TENNESSEE

**CONTRACT NUMBER: DB2101** 



May 27, 2022 Addendum #1 July 8, 2022

Addendum #2 July 27, 2022

Addendum #3 August 12, 2022

### 5. PROCUREMENT SCHEDULE/SUBMITTAL DEADLINES

The Procurement Schedule and submittal deadlines are set out below. The Department will not consider requests on any submittal received by the Department after the deadline for its submittal date stated below. The Department will not consider requests on any submittals pertaining to an Addendum after the deadline established in the Addendum.

Confidential (One-on-One) Meetings with Each Proposer	Week of July 11, 2022
Deadline for Submittal of Question Requests, and Requests for QPL Determination	September 9, 2022 4:00 p.m., CT.
Deadline for Submittal of Alternate Technical Concepts	September 12, 2022 4:00 p.m., CT.
Deadline for Submittal of Initial Lighting Design & Right-of-Way Acquisition (Exhibit)	September 12, 2022 4:00 p.m., CT.
Deadline for Response to Initial Lighting Design & Right-of-Way Acquisition (Exhibit)	September 19, 2022 4:00 p.m., CT.
Deadline for Response to Alternate Technical Concepts,	September 19, 2022 4:00 p.m., CT.
Anticipated Deadline for Issuance of Last Addendum	September 19, 2022 4:00 p.m., CT.
Technical Proposal and Price Proposal Due Date and Time	September 30, 2022 4:00 p.m., CT.
Public Price Proposal Opening	October 28, 2022 9:00a.m., CT.
Anticipated Award of Design-Build contract, or rejection of all proposal	On or before November 18, 2022
Anticipated Issuance of Initial Notice to Proceed	December 9, 2022

The Department will not consider any late Proposals. Proposals received after the Proposal Due Date will be returned unopened to the Design-Builder. The Department will not consider any Proposal modifications submitted after the Proposal Due Date, nor will the Department acknowledge Proposal withdrawals submitted after the Proposal Due Date. Any such attempted withdrawal will be ineffective.

If the Design-Builder does not submit a Proposal by the Due Date and the Department chooses to issue a new, revised, or modified RFP, the Proposal will be considered non-responsive to the requirements set forth herein. As a result, the Design-Builder will not be eligible to respond to any additional RFP requests from the Department on this project.

### 6. CONTRACT DOCUMENTS

- Contract Book 1 (ITDB Instructions to Design-Builders);
- Contract Book 2 (Design-Build Contract);
- Contract Book 3 (Project Specific Information);
- Design-Build Standard Guidance and Addendum;
- The Department Standard Specifications;
- The Department Supplemental Specifications;
- The Department Roadway Design Guidelines, and Addendum;

- 5) Identify drainage modifications and designs to be implemented.
- 6) Identify the appropriate design criteria for each feature if not provided.
- 7) Identify all bridge types to be constructed, including any special design features or construction techniques needed.
- 8) Identify any deviations or proposed design exceptions, from the established design criteria that will be utilized. Explain why the deviation is necessary.
- 9) Describe any geotechnical investigations to be performed by the Design-Builder.
- 10) Describe how any utility conflicts will be addressed and any special utility design considerations. Describe how the design and construction methods minimize the Department's utility relocation costs.
- 11) Describe how the design will affect the right-of-way costs.
- 12) Identify types of any retaining walls and /or noise walls if applicable.
- 13) Provide preliminary lighting design. Information shall include electronic design files using Agi32 software, layout sheets that illustrate the photometrics. All lighting shall be in conformance with the *TDOT Traffic Design Manual*.
- c. The Technical Proposal shall include half-size plan sheets depicting those elements required by the RFP.
- d. Describe any traffic control requirements that will be used for each construction phase.
- e. Describe how traffic will be maintained as appropriate and describe understanding of any time restrictions noted in the RFP.
- f. Describe the safety considerations specific to the Project.
- g. Discuss overall approach to safety.
- h. Describe any proposed improvements that will be made prior to or during construction that will enhance the safety of the work force and/or traveling public both during and after the construction of the Project.

#### 5. INITIAL LIGHTING DESIGN AND RIGHT-OF-WAY ACQUISITION EXHIBIT SUBMITTAL

An Initial Lighting Design and Right-of-Way Acquisition Exhibit submittal containing Item 4.b.13) above and the Right-of-Way Acquisition Sheets is required and is to be submitted in accordance with the Procurement Schedule in Adobe PDF electronic format. Right-of-Way (ROW) Acquisition Sheets comprise the ROW Acquisition Table including all proposed areas of right-of-way and easements and in the format required in the TDOT Roadway Design along with Property Maps or Present Layouts as needed to clearly depict the proposed acquisitions. The Department will respond with comments in accordance with the Procurement Schedule. The technical proposal shall include Item 4.b.13) above along with the ROW Acquisition Sheets with any comments received from the initial design exhibit review addressed.

## DESIGN-BUILD RFP CONTRACT BOOK 3 PROJECT SPECIFIC INFORMATION

#### **TENNESSEE DEPARTMENT OF TRANSPORTATION**

I-75 Interchange Modification at I-24, Phase 2 (IA) Hamilton County- TENNESSEE

**CONTRACT NUMBER: DB2101** 



May 27, 2022 Addendum #1 July 8, 2022 Addendum #2 July 27, 2022 Addendum 3 August 12, 2022 hydraulically or structurally deficient.

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. Video inspection and supporting documentation shall be provided to the Department for concurrence, with the exception of Segment 3. Existing drainage structures and pipes within Segment 3 may remain.

Only pipes within the defined Project limits are subject to be replaced or supplemented. The Design-Builder shall not perform any work outside of the Project limits, including drainage structure repair, maintenance, or any other work.

The Design-Builder shall replace damaged, destroyed, missing, or permanently attached castings on existing drainage structures. This shall include, but is not limited, to 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.

Within the Project limits, there are thirteen (13) fourteen (14) major outfalls that the Design-Builder shall use to discharge the surface runoff from the Project ROW. These include the following:

- An existing double line of 58"x36" CMP arch pipe at STA 108+60 +/-, 167.50' RT +/-, which collects all of the runoff from I-24 from approx. Germantown Road to East of Belvoir Avenue and drains to the south of S. Terrace near the intersection of Brookfield Avenue and Wiley Avenue. The Department's responsibility ends near the existing southern right of way limits. The DB Team shall not perform any work beyond those limits.
- An existing double barrel 8x7 reinforced concrete box culvert at STA. 155+34.04 +/-, 264.17-ft. RT +/-, which collects all of the runoff from I-24 from approx. Germantown Road East of Belvoir Avenue to Spring Creek Road and drains to the south of S Terrace near McBrien Road and ultimately to Spring Creek. The Department's responsibility ends near the existing southern right of way limits. An extension has been constructed onto the end of the Department's limits of responsibility in the past and the DB Team shall not perform any Work beyond those limits. For the purposes of design, the DB Team shall assume that the capacity of the existing structure is the limiting factor for this drainage system. The overall drainage area at the outfall of the double barrel 8'x7' box culvert is 2631.14 acres.
- An existing 42-in. reinforced concrete pipe at STA. 902+62.56 +/-, 65.75-ft. RT +/-, which collects runoff from the Brainerd Road area and is metered by an existing storm water pump station operated by the City of Chattanooga (identified as Pump Station #3 in original TVA construction plans), which ultimately drains to Spring Creek. The drainage area at the outfall of the 42-inch pipe is 49.16 Acres.
- An existing 30-in. reinforced concrete pipe at STA. 629+92.59 +/-, 17.29-ft. LT +/-, which collects runoff from the I-24/I-75 Interchange and ultimately drains into area wetlands that drain into to Spring Creek. The drainage area at the outfall of the 30-inch pipe is 11.91 Acres.
- An existing 36-in. reinforced concrete pipe at STA. 376+68.50 +/-, 250.00-ft. RT +/-, which collects runoff from the I-24/I-75 interchange and drains southeast into a low wetland area, ultimately draining into West Chickamauga Creek. The drainage area at the outfall of the 18-inch pipe is 5.22 Acres.

An existing 60-in. reinforced concrete pipe at STA. 386+09.43 +/-, 287.28-ft. RT +/-, which collects runoff from the I-24/I-75 interchange and receives outflow from another 54-in. reinforced concrete pipe draining the Eastgate Towncenter area and is metered by an

Place concrete parapets on the new bridges (reference TDOT Standard Drawing STD-1-1SS and Standard Drawing STD-11-1).

All exposed surfaces of the parapets, slab cantilevers, concrete beams surfaces, abutment beams, end walls, wing walls, bent caps, and columns of the bridges shall receive a texture finish, mountain grey, AMS STD-595 Color No. 36440 except the top and traffic face of the parapets which shall be white, AMS STD 595 Color No. 37886.

Drilled shafts shall be constructed according to Special Provision 625 Drilled Shaft Specifications and shall be socketed at least two times the shaft diameter into competent bedrock.

The bridges shall be constructed while maintaining the minimum number of lanes open to traffic during construction as specified in this RFP. The minimum vertical and horizontal clearances shall be maintained during construction as specified in this RFP and TDOT's Standard Specifications for Road and Bridge Construction.

Bridges shall be designed and detailed according to current TDOT Structural Design Guidelines & Memorandums <u>Structural Design Guidelines (tn.gov)</u>.

For the I-75 over CSX Railroad Bridge, the Design-Builder shall provide all necessary and pertinent information as outlined in the TDOT Design Guidelines to the State Railroad Coordinator in the preliminary design phase. All railroad coordination, including procurement phase coordination, must be done through the TDOT State Railroad Coordinator. The Design-Builder shall not contact the railroad or any of its representatives directly. TDOT has an approved Deviation from Standard letter from the Railroad for the design included in the Functional Plans. This letter waives the requirement to span the Railroad's right of way. Any deviation from the bridge design shown in the Functional Plans will require a separate Deviation from Standard letter from the Railroad and TDOT design criteria.

#### • NOISE BARRIER WALLS

The Design-Builder shall be responsible for the design and construction of noise barrier walls per the Noise Technical Report dated December 2021, which is included in the approved NEPA document, SP718NB, and Functional Plans. If the The Design-Builder elects to design noise walls that vary from that shown in the Noise Technical Report dated December 2021 and the Functional Plans, the altered design must comply with the current TDOT Environmental Procedures manual, Chapter 5 (provided on the project website), and TDOT's Noise Policy, *Policy on Highway Traffic Noise Abatement*. The Design-Builder shall use individuals that meet the qualifications of Section 5.3.4.2 to conduct the required noise studies. The noise barrier walls shall be designed using the AASHTO LRFD Bridge Design Specifications, Edition (2017), Section 15. The Noise Barrier Evaluation includes the preliminary noise barrier design information based on the Functional Plans. The FHWA TNM files are included in the Reference Documents and should be used by the Design-Builder to assess proposed design changes. TDOT will require all revised TNM files to evaluate any modifications to the noise barrier proposed by the Design-Builder.

The Design-Builder shall ensure that all proposed Work is completed within existing Right-of-Way (ROW). The Design-Builder shall be responsible for securing any additional ROW in accordance with Section 7 of **Contract Book 3 (Project-Specific Information)**.

The noise barrier system shall be continuous within the limits as shown in Noise Technical Report dated December 2021. and The barrier system shall meet the "with barrier" noise reduction levels goal of at least 7 dB insertion loss for 60% or more of the first-row benefited receptors as shown for each receptor in the Noise Technical Report dated December 2021. Gaps between sections will be allowed to accommodate road crossings or interstate ramps. The Design-Builder shall provide overlap of the noise barrier where horizontal gaps are required. If noise barrier overlap is not feasible due to safety requirements, the Design-Builder shall request a variance from the Department. The Design-Builder shall submit an updated noise study based on their design to the TDOT Environment Division, Hazardous Materials, Air and Noise Section for approval.

There Top of barrier elevations shall be no more than a 2-foot difference in top elevations between adjacent panels. The bottom of the wall shall not provide any gaps between the wall and the final

grade except as required to accommodate drainage.

Ground-mounted barriers and barriers on bridges shall be connected to ensure no gaps.

The traffic face of the walls shall be absorptive and meet the following requirements:

- Concrete formliners shall be used to achieve the specified pattern and texture on both the highway and community sides of the barrier. Methods that involve rolling of any kind to achieve the specified pattern and texture shall not be permitted.
- A minimum 1-inch depth of reveal at joints shall be achieved on both the highway and community sides of the noise barrier.
- Top noise barrier panels shall include a 12-inch-wide smooth band across the top of each panel on both sides.
- All posts shall be cut flush with the highest adjacent panel.
- The formliners for both the highway and community sides of the noise barrier shall be approved by the TDOT Environment Division, Hazardous Materials, Air Quality and Noise Section (615-532-9948 or 615-532-8684), TDOT Structures Division (615-741-3351), and TDOT Region 2 Construction (423-892-3430 ext. 6) prior to the manufacture of the noise wall panels.
- The highway side of the noise barrier shall be Architectural Polymers #905O Small Aged Ohio Ashlar or an approved equal. Four have custom form liners, each with a unique pattern, (5' X 10') shall be developed with 20" tall coursing and 2" average joint relief.
- The Design-Builder shall apply an Anti-Graffiti product to the highway side of the Noise Wall. The product must be on TDOT's QPL 26 list and be intended for wall applications. It must be applied in accordance with the manufacturer's specifications.
- The highway side of the noise barrier (including posts) shall be texture coated to match other structures.
- The formliner used on the community side shall be Random Cut Stone #1106 manufactured by Custom Rock or an approved equal.
- The community side of the noise barrier (including posts) shall be texture coated using Federal Standard Color 36373.
- Texture coating shall be applied to ensure all panels and posts appear uniform in color. Several applications shall be applied to ensure all color uniformity. The Design-Builder shall obtain approval from TDOT Region 2 that the noise barrier surfaces are uniform in color before ceasing texture coating operations.
- The Design-Builder shall cast a sample barrier panel with the approved formliners and colors. If the sample meets the requirements of this provision, TDOT will approve the panel and this panel shall serve as a standard for acceptance of subsequent noise barrier panels. If accepted, the demonstration panel can be incorporated into the completed Project.
- The demonstration panel shall be delivered to the Project Site. The delivery location shall be approved in advance by the TDOT Environmental Division and Region 2 Construction Division.
- The Design-Builder shall insure all panels are protected during all aspects of truck loading/unloading and transport to the Project installation location.
- The panels shall be flush with one another; gaps between barrier panels shall not be permitted.
- The horizontal joints between panels shall line up from one bay of panels to the next. Horizontal joints shall have tongue-and-groove configurations.
- No gaps shall exist between the base of the barrier panels and the ground except as required to accommodate drainage.