



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

CONSTRUCTION DIVISION
SUITE 700, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
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CLAY BRIGHT
COMMISSIONER

BILL LEE
GOVERNOR

July 24, 2019

Re: ADDENDUM #3
Contract No.: DB1802
County: Polk

To Whom It May Concern:

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

You must acknowledge this addendum 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,

A handwritten signature in blue ink that reads "Lia Obaid".

Lia Obaid, P.E.
Assistant Director of Construction
Construction Division

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

TENNESSEE DEPARTMENT OF TRANSPORTATION

**STATE ROUTE 40 / US 64, BRIDGE OVER OCOEE RIVER
POLK COUNTY- TENNESSEE**

CONTRACT NUMBER: DB1802



April 12, 2019

Addendum #1 May 30, 2019

Addendum #2 June 26, 2019

Addendum #3 July 24, 2019

The Design-Builder shall conduct and submit a load rating analysis for the existing bridge if the use of the existing bridge for construction activities exceeds normal highway loading. The load rating is to be submitted in AASHTOWare Bridge Rating software or a format to be concurred with by the Department. If the load rating analysis results in a substandard load capacity, the Design-Builder shall be responsible for any remedial action required on the bridge or modify their construction means and methods to ensure that any portion of the bridge that will be open to live loads has sufficient load capacity.

Upon completion of the Project, the Design-Builder shall provide TDOT Structures Division a final revised set of plans and final design calculations for all structures (bridges, walls, etc.). The plans shall be delivered on USB flash drive (each sheet an individual PDF file).

4.1 SR 40 / US 64 BRIDGE OVER OCOEE RIVER DESIGN REQUIREMENTS

The new bridge shall be designed and detailed using the AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications, Eighth Edition (2017), and the AASHTO Guide Specifications for LRFD Seismic Bridge Design, Second Edition (2011) with all interims as well as the current practices and policies of the TDOT Structures Division.

The Design-Builder shall reference and adhere to the Department's Standard Specifications for Road and Bridge Construction (January 1, 2015 edition) for construction materials and methods.

Structural steel girders shall be designed continuous for all loads and shall be haunched as depicted on the bridge renderings. Structural steel shall be A709 Grade 50W. Concrete for the bridge deck shall be Class "DS" ($f'_c = 4000$ psi) and meet the requirements of the Standard Specifications. Concrete for substructures shall be Class "A" ($f'_c = 3000$ psi) and meet the requirements of the Standard Specifications. Class A concrete in pavement at bridge ends shall have surface aggregate in accordance with Article 903.24 of the Specification. Other types of concrete required by the design from the Design-Build Team shall meet the minimum design strength requirements and also the requirements of the Standard Specifications or any applicable Supplemental Specification or Special Provision.

The SR 40 / US 64 Bridge over the Ocoee River shall be designed for HL-93 live loading. The bridge design shall include 35 pounds per square foot (psf) for a future wearing surface.

The bridge rail shall be a concrete open rail crash tested to meet a 50-mph design speed. It shall include the Tri-Star emblem as shown on the TDOT Standard Drawing STD-8-6. The bridge preliminary provided by TDOT shows standard rail STD-11-4 (included in Reference Material located on the project website) which can be used for speeds of 50 mph when a TL-3 rated guardrail transition is used. The Design-Builder may submit an ATC for an alternative open concrete rail for approval. An open concrete rail is required for aesthetics to provide a view of the river through the rail.

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 shall be designed and installed for the "ultimate" 4-lane section as shown on the Preliminary Bridge Plans included in the Reference Material on the project website.**

The Design Builder shall adhere to all permit, FEMA, and hydraulic design criteria when designing bridges, culverts and culvert extensions. Design Builder shall use Drainage Manual found on TDOT Design Division website, and Design procedures for Hydraulic Structures 2012 found on TDOT Structure Division website. 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

4-feet above ground level with the base of the rock wall 1-foot below ground level. The Design-Builder shall provide a mock-up of the rock wall for approval prior to construction.

Pylon signs shall be constructed at all four corners of the bridge as shown on the bridge renderings. Pylon renderings are provided to demonstrate the desired appearance including aesthetic treatments and approximate dimensions. The proposed pylons are similar to the existing pylon signs along SR 40. The Design-Builder shall submit for TDOT's approval pylon construction plans and material details. Up-lighting for the pylons must be similar in style and compliment the bridge rail accent lighting.

The stone masonry for the base of the two piers immediately adjacent to the river and for the pylons at the ends of the bridge shall meet the following requirements:

- The stone facing shall be natural rock with a minimum width of 5-inches from the face of the pylon or pier. Also, different thicknesses of rocks shall be utilized to provide a look similar to the existing Forest Service pylons on SR 40 (see the photo provided in the Reference Materials).
- The stone shall be placed using dry stack installation with a colored mortar to match the stones. Gaps shall be filled as necessary while maintaining the dry stack appearance.
- The stone shall be supported by the concrete footing of the pylon or pier either directly on the footing or on a concrete ledge built up from the footing, or by forming a ledge out from the pier column.

All guardrail (including guardrail terminal, anchor and hardware) shall be brown powder coated and MASH TL-3 compliant.

The Design Builder shall accommodate the Ocoee Utility District's water line to be attached to the new bridge. The water line and hanger system shall be installed between bridge girders to be hidden from view. The water line and hanger system details will be provided by the utility through TDOT. A letter from Ocoee Utility District stating their intentions for this project is included in the reference material.

4.3 REMOVAL OF EXISTING STRUCTURE

During demolition of the existing bridge deck over the Ocoee River, the Design-Builder shall prevent debris from falling into the river and to protect river traffic. The deck over the river shall be removed by cutting it in sections and lifting each section out.

Blasting will not be permitted to demolish the existing bridge piers in the Ocoee River without prior approval of the detailed plan by TDOT and by the permitting and natural resources agencies.

If blasting is used for the demolition of the existing bridge, a blasting plan will be required and need to be included with permit application package submitted to the regulatory agencies. Please refer to Section 8.10, Permitting, for additional information.

4.4 RETAINING WALLS

Retaining walls are not anticipated. If the Design-Builder utilizes retaining walls, they shall be built in accordance with Special Provision 624, Retaining Walls. The exposed face of the retaining wall shall have a cut stone form finish approved by TDOT. The addition of a retaining wall shall be submitted through an ATC. MSE walls that can be partially inundated are not allowed.