TENNESSEE DEPARTMENT OF TRANSPORTATION

**REQUEST FOR PROPOSAL**

Construction Manager/General Contractor
(CM/GC) Services

# Interstate 275
## I-275 Bridge over Elm Street (LM 0.39)
Knox County, Tennessee

Project Identification Number (PIN): 124437.00
Federal Project Number: BR-I-275-3(136)
State Project Number: 47I275-F3-002,
47I275-F2-002, 47I275-F1-002
Contract Number: **CMGC06**

May 22, 2023

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# Chapter 1

# INTRODUCTION AND GENERAL INFORMATION

## 1.1 CM/GC INTRODUCTION

Construction Manager/General Contractor (CM/GC) is a contracting method that involves a Contractor in the design and construction phases of the project. The intent is to form an integrated project team with TDOT, the Design Consultant, and the Contractor.

The goals of this integrated project team are to mitigate risk, improve the construction schedule, streamline the design process, and develop a project that adheres to the budget. An important role of the Contractor is to evaluate the constructability of the design plans to reduce risk in all phases with innovative approaches to meet budget goals. We anticipate the involvement of the Contractor will help improve the design and the overall constructability of the project.

The Integrated Project Team (TDOT, Design Consultant, and the Contractor) collaborates to deliver the project in less time and at a lower total cost, while meeting the project goals. As a member of the Project Team, the Contractor offers the skills and knowledge to provide:

1. Information on constructability, phasing, and other design input;
2. Estimates of the quantities of materials, labor, and equipment needed for construction;
3. A description of the tasks (work breakdown structure) needed to complete the project and an estimate of the costs, the anticipated duration, and sequence of these tasks;
4. An understanding of the availability, cost, and capacities of materials, labor, and equipment;
5. Identification of the potential risks (including financial risks) and methods to mitigate them during the design process; and
6. A preliminary estimating model for estimating project costs. The accepted estimating model will serve as a basis for all Opinion of Probable Construction Cost (OPCC) estimates in the program and the development of the proposed Guaranteed Maximum Price (GMP) at agreed upon design milestones.

During the design process, the Contractor will work with the Design Consultant and the TDOT Project Management Team to:

7. Implement a risk management strategy, and develop and monitor the Risk Register;

8. Update, at regular intervals, the project estimate and construction Schedule;
9. Lead the development of a cost model for the TDOT Estimator and Independent Cost Estimator (ICE) so that assumptions, contingency, and approach to the estimate are similar;
10. Participate in up to three (3) formal reviews of the design at designated design milestones for each phase of the construction package;
11. Participate in risk assessment and mitigation workshops at agreed upon milestones;
12. Provide up to three progressively refined Opinion of Probable Construction Cost estimates (OPCC) at designated design milestones. The format and breakdown of the deliverables will be provided by the Department prior to the milestone;
13. Provide continuing informal input on constructability, value engineering, and cost as requested;
14. Provide open-book examination of cost model by TDOT, the program manager, and the Design Consultant;
15. Prepare and submit Guaranteed Maximum Price (GMP) Proposals to TDOT with appropriate backup documentation for all construction, early work, and procurement Plans, Specifications, and Estimates (PS&E) packages; and
16. Develop, propose, and track innovations for project construction.

If the Contractor is awarded a construction contract, the Contractor's role will be to construct the project within the GMP and propose solutions that will help achieve the goal of staying within the budget. If the project cannot be delivered within the allocated budget, TDOT retains the option to cancel the project, reduce the scope, or deliver the project by other means.

Early procurement or construction work may be considered for acquisition of long lead items or to complete early construction tasks. Early utility or construction work may be considered with the understanding that early phases are not a guarantee of selection for final construction. Early phases must be independent and severable from the final construction package, with a well-defined end point. Final construction activities will not begin until a GMP has been accepted for a substantially complete PS&E package.

## 1.2 SCOPE OF THIS RFP FOR CM/GC SERVICES SELECTION

This RFP is a one-phase procurement that includes a Statement of Interest(SOI)/Proposal. TDOT is soliciting written Statements of Interest and Proposals from pre-qualified general contractors to provide CM/GC Services for the replacement of one structurally deficient bridge on I-275 Bridge over Elm Street (LM 0.39) Knox County, Tennessee. The existing bridge has a sufficiency rating of 65.5 and will be replaced to meet current roadway standards. On both I-275 and Elm Street, the work will be limited within the existing ROW, however, vehicular and pedestrian traffic will be affected during construction. The work includes but is not limited to design (includes meeting current code requirements for seismic event) and construction utilizing Accelerated Bridge Construction (ABC) techniques to construct a new bridge for I-275 Bridge over Elm Street (LM 0.39). ABC techniques will be utilized to minimize impact to vehicular traffic.

The project will include but is not limited to improved or maintained horizontal and vertical clearances; survey; earthwork; pavement; bridge demolition; debris protection of existing telecommunication conduit; pre-demolition preparatory new work beneath existing bridge; bridge reconstruction (possibly staged), retaining walls, closed bridge deck drainage system and storm drainage connection; reconstruction of sidewalk; grading; erosion control; water quality; signing; ITS; lighting; striping; texture coating; seeding; traffic control; and coordination with public and private utilities. In addition, the Contractor will be involved in the design development by providing input to TDOT and the Design Consultant concerning various design elements and constructability throughout the CM/GC process.

Contractors interested in submitting Proposal packages to TDOT are requested to submit one package that is inclusive of pre-construction CM/GC services, with the option of construction if TDOT subsequently accepts construction GMP proposals. Selection will be based on qualifications in accordance with the evaluation criteria set forth in Chapter 3, SOI/Proposal Content and Evaluation Criteria.

Contractors or Joint Ventures from this point forward in the RFP will be referred to as the **"Proposer" or "Proposers"**.

## 1.3 PROJECT DESCRIPTION AND SCOPE

### 1.3.1 Project Background

**I-275 Bridge over Elm Street (LM 0.39); Knox County.**
The existing structure built in 1954 as a four-span concrete tee beam bridge, was widened in 1984 on each side with precast boxes and precast deck panels. The structure has an out-to-out width of one hundred and forty-four feet (144') and an overall structure length of approximately one hundred thirty-four feet (134'). The vertical clearance is approximately fourteen feet six inches (14'6") measured from the inside lane of eastbound Elm Street/Bernard Avenue. In 2014, I-275 was restriped and resurfaced with an open-graded friction coarse (OGFC) mix. The sufficiency rating for this structure is 65.5 based on a Bridge Inspection Report from October 24, 2018.

Interstate 275 has a base year 2025 Annual Average Daily Traffic (AADT) of 82,800 and a design year 2045 AADT of 89,420. There is a 55-mph posted speed limit on I-275 with the design speed recommendation to be 60-mph. The northbound lanes on the existing structure consist of three (3) twelve-foot (12') travel lanes, one (1) varying width merge lane, a six-foot (6') interior shoulder and a twelve-foot (12') exterior shoulder. The southbound lanes on the existing structure consist of three (3) twelve-foot (12') travel lanes, one (1) sixteen-foot (16') off-ramp which merges into travel lanes, one (1) varying width exterior shoulder and one (1) six-foot (6') interior shoulder.

The route is classified as an Urban Interstate and Standard Drawing RD11-TS-5B was used for design considerations. The roadway on the proposed structure is recommended to be the same as the existing to minimize project length, however the southbound exterior shoulder shall be widened to allow full shoulder width. With the interior and exterior shoulders, travel lanes, tapered ramp lanes, and median barrier, the proposed exterior curb-to-curb width is one hundred forty-four feet (144'). With STD-1-1 concrete barriers, the proposed out-to-out is one hundred forty-four feet (144').

The skew of the existing structure is ninety (90) degrees with Elm Street/Bernard Avenue and will remain the same. The grade of the proposed structure will remain approximately the same and maintain the current minimum vertical clearance. The proposed alignment for the replacement

structure will remain the same, and the bridge will be constructed using accelerated bridge construction (ABC) method. Two detours are provided for I-275 traffic and shall utilize I-40 and I-640. In addition, Elm Street/Bernard Avenue will be closed to pedestrian and vehicular traffic during construction. Since no State Routes are available, local traffic shall be detoured using Baxter Avenue and Marion Street. Pedestrian traffic will be detoured using Marion Street and West $5^{th}$ Avenue. Coordination with the City of Knoxville will be required during construction of the bridge.

In 2014, the existing concrete pavement section along I-275 was resurfaced with an open-graded friction (OGFC) overlay. The roadway approaches will be removed and replaced in-kind.

The recommended structure is to consist of two (2) forty-seven foot (47') spans for a total length of ninety-four feet (94'). The proposed abutments shall be constructed behind the existing exterior bents and retaining walls shall be constructed in front of the proposed bents. In addition, the existing center bent shall be modified and will remain in place. No improvements are proposed for Elm Street/Bernard Avenue under the bridge, and sidewalks shall remain in place.

Overhead power lines run parallel along Elm Street, and overhead power is present across I-275 at the southern end of the bridge. In addition, underground natural gas, sanitary sewer, and underground fiber are present at the southern end of the bridge and run parallel along Elm Street. Fiber conduit is attached to the southern abutment and attached to the underside of the deck. Moreover, power conduit is attached to the underside of the deck and extends to the mounted lights across each bent. Underground natural gas, overhead power, and underground fiber shall be relocated during construction. In addition, TDOT maintained conduit, fiber, electrical service, and one (1) CCTV shall also be relocated. Sanitary sewer shall remain in place, and shall not be damaged during construction. It is estimated that no right-of-way (ROW) tracts will be affected.

Replacing the I-275 bridge over Elm Street with conventional methods would cost millions of dollars in the road users' costs due to roadway or lane closures, impose a financial hardship on businesses in the area, and create traffic congestion for the many residents who use this bridge on their daily commute. The goal of using accelerated bridge construction on this project is to enable quick demolition and reconstruction of the bridge, such that the construction will not require more than two (2) weekends of full closure for the new bridge work. A detour plan during full closure will be developed and coordinated with the City of Knoxville. Not all work is anticipated to be completed during the full closures; therefore, weekly night time lane closures will be utilized, which will be defined in more detail in *SP108B* during the design phase. For the purposes of planning and budgeting, a Transportation Investment Report (TIR) was completed by TDOT for the subject project (available on the TDOT Construction Division's webpage). This report is not intended to be the final decision but rather a starting point for development of the plan with input from the selected Construction Manager (CM).

The project will require coordination with several major stakeholders, including but not limited to the City of Knoxville, Knoxville Utility Board (KUB), Knoxville-Knox County Planning, and local businesses and residents. The design and construction will be developed to avoid or minimize impacts to utilities within the project area.

### 1.3.2 Project Information and Definition

**Project Location**: I-275 Bridge over Elm Street (LM 0.39)

**Project Limits**: I-275 over Elm Street/Bernard Avenue between LM 0.39 and LM 0.42 in Knox County.

**Work**: Traffic, Survey, Roadway, Bridges, Utilities, ITS, Lighting and Materials.

**Current Level of Design**: Conceptual design discussions are underway. The survey within the project area is under process. The design consultant has completed geotechnical exploration, and conceptual roadway plans are being developed. Preliminary design of structures, asphalt pavement, and maintenance of traffic is being held at preliminary level.

**Project Schedule**: The estimated schedule for this project includes a pre-construction phase that is anticipated to be completed by April 17, 2024 and a construction phase that is estimated to be completed by November 14, 2025.
The project includes, but is not limited to, design and construction of the proposed bridge replacement. The project will utilize Accelerated Bridge Construction (ABC) techniques.

**Owner Furnished Materials**: TDOT will provide all necessary survey and site investigations during the design phase. However, the Contractor shall be required to provide its own independent survey for construction.

**Existing Operations Critical to Project**: Minimizing the maintenance of traffic (MOT) impact to the public during construction by limiting the duration of full closure.

**Restrictions and Constraints**: Complete closures of I-275 shall be restricted to a maximum of two (2) weekends. Outside of weekend closures, six (6) 12-foot lanes, three (3) in each direction, northbound merge lane, southbound off-ramp, and 2-foot shoulders shall be maintained at all times. Nightly lane closures, Sunday through Thursday, will be allowed and shall be approved in advance by the engineer.

**Traffic Lane Closure Information**: Lane closures and other MOT requirements will be developed through the CM/GC design process.

**Existing Utilities**: Existing utilities will include, but are not limited to, ITS, underground gas, underground fiber, and overhead power to be relocated during construction. Bridge mounted conduit and mounted lighting shall be removed prior to bridge demolition and replaced on the new bridge. Sanitary sewer shall not be damaged during construction. Existing TDOT conduit, fiber, electrical service, and one (1) CCTV camera shall be relocated. TDOT's ITS system will remain operational at all times. The contractor must consider the utility affects and advance required notices when looking at different construction methods. There may be other underground and overhead utilities close to the bridge site. The CM/GC process will consider different construction methods that may require additional utility adjustments.

**Project Commitments**: An asbestos containing materials (ACM) survey was completed for the I-275 bridge over Elm Street/Bernard Avenue. The bridge has approximately fifty linear feet of vertical deck drains that have ACM. Abatement work shall be conducted in accordance with TDEC Rules Chapter 1200- 01-20.

## 1.4 PROJECT FUNDING

The sources of funding for this CM/GC contract are federal grant (90%) and TDOT (10%).

## 1.5 PROJECT ADMINISTRATION

During the CM/GC selection process, all questions and clarifications regarding the RFP by Proposers and the Selection Committee members shall be directed to the Project Manager (TDOT/PM). The TDOT/PM and the Primary Point of Contact (POC) for this project is:

**Kimberly Welch, P.E.**
kimberly.welch@tn.gov
Civil Engineering Manager 2
TDOT HQ Project Management — Alternative Delivery
5th Floor, James K. Polk Building
505 Deaderick Street, Nashville, TN 37243
Phone: (615) 557-4502

## 1.6 PROJECT COORDINATION

1. **Routine Working Contact**

   The routine working contact will be between the TDOT Project Manager (TDOT/PM), the Design Consultant Project Manager (C/PM), and the Contractor Project Manager (CMGC/PM).

2. **Project Manager Requirements**

   Each Project Manager will provide the others with the following:

   - A written synopsis or copy of their respective contacts (both by telephone and in person).
   - Copies of pertinent written communications, including but not limited to, email, memorandum, letters, meeting minutes, and phone logs.

3. **Coordination**

   The Contractor shall partner with the Design Consultant and the TDOT Management Team as part of the design team. The following groups will be part of that partnership and will be required to coordinate with each other:

   (a) TDOT Project Management Team
   (b) Project Design Manager/Design Consultant: TDOT Design Manager
   (c) CM/GC Contractor and any sub-contractors
   (d) TDOT Specialty Groups: Bridge, Roadway, Utilities, Traffic, Hydraulics, Environmental, Geotechnical, and Survey
   (e) TDOT Civil Rights Office
   (f) Stakeholders or Stakeholder Groups:
      - The City of Knoxville
      - Knoxville Utility Board
      - City of Knoxville – Police Department
      - City of Knoxville – Fire Department

- Knoxville-Knox County Planning
- Knox County Schools
- Knox County Parks & Rec
- Local Businesses
- Local Commercial Developments
- Local Hospitals

## 1.7 PROJECT SCOPE OF WORK

The Contractor's Scope of Work and the Pre-Construction Roles and Responsibilities Matrix are described in detail in Chapter 4 of this RFP.

## 1.8 FIXED LIMIT OF CONSTRUCTION COST

The Fixed Limit of Construction Cost is the total project budget allocated for the construction phase of the project. This includes the profit and overhead, the actual cost of construction, mobilization, force accounts, and all costs that are associated with the construction of all elements of the work designed or specified by the Design Consultant.

The Construction Cost for this project shall not exceed $13.5 Million.

## 1.9 PROJECT GOALS

This project is intended to achieve the following goals:

1. **Replace the existing bridge on I-275 within the project budget.**
2. **Facilitate a collaborative partnership with all the members of the project team and the stakeholders.**
3. **Accelerate delivery of the construction schedule and obtain final project acceptance no later than November 14, 2025.**
4. **Minimize inconvenience to the traveling public and ensure safety of workers and the traveling public.**
5. **Provide an innovative design and construction.**
6. **Provide a well-publicized, highly successful Accelerated Bridge Construction (ABC) Project.**

Note: TDOT will be primarily responsible for the public involvement and public relations. The Contractor will provide support for the public involvement and public relations effort.

In consideration of the project goals, there is a compelling need to use advanced ABC technology to construct the project in a manner that minimizes the impact of the construction schedule to the traveling public and construct a new bridge for I-275 over Elm Street/Bernard Avenue, and specifically to install the bridge with a minimized duration for closure of the interstate. On that basis, the ABC superstructure or other advanced ABC techniques that **minimize the exposure of construction to the interstate and local traffic** shall be used for the project.

Complete closures of I-275 shall be restricted to a maximum of two (2) weekends. Outside of weekend closures, six (6) 12-foot lanes, three (3) in each direction, northbound merge lane, southbound off-ramp, and 2-foot shoulders shall be maintained at all times. Nightly lane closures, Sunday through Thursday, will be allowed and shall be approved in advance by the engineer.
Elm Street/Bernard Avenue will be closed for the duration of construction; pedestrian and vehicular traffic will be detoured to Marion Street.

## 1.10 REFERENCE ITEMS REQUIRED BY THE CONTRACTOR

The standards, data, and reports in Appendix F are Contract Documents. These standards apply unless otherwise defined in the Plans, Specifications, and Estimate (PS&E) Packages. The Contractor shall obtain and utilize the most recent adopted references, including TDOT standards and specifications, manuals and software, or as directed by the TDOT/PM as specified in Section 1.5.

## 1.11 PROJECT DEFINITIONS

Project definitions for language and references in this RFP are described in Appendix G.

## 1.12 PRELIMINARY DOCUMENTS AND DRAWINGS

Reference documents and drawings are available on the project website at: https://www.tn.gov/tdot/tdot-construction-division/transportation-construction-alternative-contracting.html

## 1.13 SPECIFICATIONS

The most current edition of TDOT's Standard Specifications for Road and Bridge Construction and Supplemental Specifications will control construction of this project. In case of discrepancy, Supplemental Specifications will govern over the TDOT Standard Specifications. The contract Plans will govern over both Supplemental and Standard Specifications, and Special Provisions will govern over both Plans and Specifications. The Design Consultant will develop the Project plans that will take precedence over TDOT Standard Drawings.

## 1.14 OWNERSHIP OF THE DOCUMENTS

All tracings, bids, plans, manuscripts, specifications, data, maps, etc., prepared by or obtained by the Contractor as a result of working on this contract shall be delivered to and become the property of TDOT.

## 1.15 REQUIRED PERCENTAGE OF WORK

The Contractor must perform construction work valued at not less than 30% of the total work, excluding specialty items, with its own staff. The cost for pre-construction services shall not be considered part of the 30% but may be considered as a specialty item. Specialty items are those

services or items that are not usually furnished by a Contractor or Joint Venture performing the particular type of service contained in this RFP and will be defined in the construction contract documents.

## 1.16 PROJECT COMPUTER SOFTWARE REQUIREMENTS

The Contractor shall utilize the most recent TDOT-adopted software. The primary software used by TDOT is as follows:

- Estimating: Microsoft Excel 2010 or other software that is compatible with providing pricing on the TDOT Schedule of Bid Items standard format using the most current TDOT Roadway Item Lists, available on the Construction Website.
- Scheduling: Primavera P6 (Version 18)
- Specifications: Microsoft Word 2010
- Survey and DTM: OpenRoads (ORD)
- Plans Review: PlanGrid

## 1.17 PROJECT DESIGN DATA AND STANDARDS

### 1.17.1 General

Appendices F and G contain lists of technical definitions and references applicable to TDOT work. This is not a full list and other national standards and references could apply. TDOT projects shall be in general conformance with TDOT design criteria. Conflicts in criteria shall be resolved by the TDOT/PM as identified in Section 1.5.

### 1.17.2 Construction Materials/Methods

The materials and methods specified for construction will be selected to minimize the initial construction cost and long-term maintenance cost to the State of Tennessee. Non-typical construction materials and methods must be approved in writing by TDOT.

## 1.18 REQUIRED AVAILABILITY OF KEY PERSONNEL

Listed personnel in the Project Management Team/Capability of the Proposer section of the Proposal constitutes an agreement by the Proposer to make the personnel available to complete work on the contract at whatever level the project requires. Modifications to the Proposer's Team or Key Individuals and other personnel listed in the Proposer Statement of Qualifications require TDOT approval in advance. TDOT will not approve requests for modification without justification. Examples of justification include death of a team member, changes in employment status, bankruptcy, inability to perform, organizational conflict of interest, or other such significant cause. In order to secure TDOT's approval prior to the award of the contract, a written request shall be forwarded to the person and address as shown in Section 1.5 of this RFP. The request shall include:

1. The nature of the desired change,

2. The reason for the desired change, and

3. A statement of how the desired change will meet the required qualifications for the position/responsibility.

No such modification will be made without prior TDOT approval.

## 1.19 APPLICABLE FEDERAL AND STATE REGULATIONS

The Proposer shall conform to all applicable State and Federal regulations and recognized industry, safety, environmental, and design standards.

## 1.20 NONDISCRIMINATION IN CONTRACTING

The Contractor agrees that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of any Contract or in the employment practices of the Proposer on the grounds of handicap or disability, age, race, color, religion, sex, national origin, or any other classification protected by Federal, Tennessee State constitutional, or statutory law. The Contractor shall, upon request, show proof of such nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.

## 1.21 ORGANIZATIONAL CONFLICTS AND INELIGIBLE FIRMS

1. The Proposer will include a full disclosure of all potential organizational conflicts of interest in the Proposal. By submitting its Proposal, each Proposer agrees that, if an organizational conflict of interest is thereafter discovered, the Proposer will make an immediate and full written disclosure to TDOT. The disclosure will include a description of the action that the Proposer has taken or proposed to take to avoid or mitigate such a conflict. If an organizational conflict of interest is determined to exist, TDOT may, at its discretion, cancel the contract. If the Proposer was aware of an organizational conflict of interest prior to the award of the contract and did not disclose the conflict to TDOT, TDOT may terminate the contract for default. No firm that is ineligible for State contracts may be part of any Proposer. Each Proposer is responsible for determining eligibility of its team members.

2. Any person, firm or entity that has received compensation for assisting TDOT in preparing this RFP shall be prohibited from submitting a Proposal, or participating in the submission of a Proposal, in response to this RFP.

3. Each Proposer shall submit an affidavit certifying that no person, firm or entity participating in the submission of the Proposal has received compensation for assisting TDOT in preparing this RFP. The form of the required affidavit is provided in Appendix C.

## 1.22 PROHIBITED COMMUNICATIONS AND CONTINGENCY FEES

1. Any person, firm or entity that submits a Proposal, as well as its employees, agents, and subcontractors, shall not communicate with any member of the RFP Selection Committee, nor

with any employee or official of TDOT, concerning the review or evaluation of any Proposal, except that a Proposer may communicate with those TDOT employees who are specifically identified in the RFP as appropriate points of contact. Any Proposer's failure to comply with this prohibition shall render it ineligible for selection as the Contractor under this RFP.

2. Any person, firm or entity submitting a Proposal and competing for a CM/GC contract is also prohibited from offering or paying a contingency fee of any type that is directly tied to specific actions or work designed to help the Proposer obtain a contract through this RFP process. The selected Contractor shall complete an affidavit certifying compliance with this requirement before being awarded any contract.

3. Each Proposer shall submit an affidavit certifying that:

   (a) No person, firm or entity participating in the submission of the Proposal has communicated, or will communicate, with any member of the RFP Selection Committee or any employee or official of TDOT concerning the review or evaluation of any Proposal, except those TDOT employees who are specifically identified in the RFP as appropriate points of contact; and

   (b) No person, firm or entity participating in the submission of the Proposal has offered or paid, or will offer or pay, a contingency fee of any type that is directly tied to specific actions or work designed to help the Proposer obtain a contract through this RFP process.

   The form of the required affidavit is provided in Appendix C.

## 1.23 PREQUALIFICATION AND LICENSES

1. Each Proposer, including any Proposer submitting a Proposal as a joint venture, must be prequalified with the Construction Division as provided in Tennessee Code Annotated § 54-5-117 and Tennessee Department of Transportation Rule 1680-05-03, Prequalification of Contractors. The list of prequalified contractors may be found at https://www.tn.gov/tdot/tdot-construction-division/construction-contractor-prequalification.html

2. Any person, firm or entity intending to submit a Proposal that is not currently prequalified must submit an application for prequalification, including the required "Prequalification Questionnaire," at least fourteen (14) days prior to the date for submission of Proposals under this RFP, as provided in Tennessee Department of Transportation Rule 1680-05-03,-04.

3. A Tennessee contractor's license shall not be required to submit a proposal or to be considered for award of a contract for preconstruction services; however, a Tennessee contractor's license shall be required prior to the execution of any contract for pre-construction services and shall be required to construct the Project.

4. Each Proposer shall submit relevant information regarding any licenses, including information on the revocation or suspension of any license.

5. TDOT requires all contractors and subcontractors that are domestic or foreign Corporations, Limited Liability Companies, Limited Partnerships, or Limited Liability Partnerships to be in good standing with the Secretary of State. This includes being duly incorporated, authorized to transact business, and/or in compliance with other requirements as detailed by the Secretary of State. Please contact the Secretary of State should you have any questions at

(615) 741-2286 or visit: https://sos.tn.gov/businesses. The Department will not execute any contracts or approve subcontracts with contractors that are domestic or foreign Corporations, Limited Liability Companies, Limited Partnerships, or Limited Liability Partnerships, who are not in good standing with the Secretary of State (i.e., have a valid Certificate of Existence/Authorization).

## 1.24 CONSTRUCTION CONTRACT BONDS

Provide a letter from a surety company indicating that the Proposer is capable of obtaining Payment and Performance Bonds covering Project No. 47I275-F3-002 Bridge over I-275/Elm Street (IA) for at least $13.5 Million. The surety company submitting the letter must be a company or companies licensed by the State of Tennessee and listed in the current United States Department of the Treasury financial management service list of approved bonding companies. The said list is published annually in the Federal Register. And the surety company must be listed or approved to write a bond in an amount equal to or greater than $13.5 Million.

Letters indicating "unlimited" bonding/security capability are not acceptable.

Performance and Payment Bonds will be required at the time the Guaranteed Maximum Price is accepted and at the time any contract for early construction work is executed. The final value of the Bonds will be equal to the amount of the negotiated GMP.

## 1.25 INSURANCE REQUIREMENTS

Within fourteen (14) days after notification of the selection, the selected Proposer shall provide proof of adequate and appropriate general liability insurance providing liability coverage in an amount not less than $2 million dollars per occurrence and $300,000 per claimant, naming the State of Tennessee as an additional insured. The Contactor or Joint Venture is not required to provide Professional Liability insurance certificates.

## 1.26 REQUIRED PROPOSAL CONTENTS

Instructions on preparing a Statement of Interest (SOI)/Proposal for this project are found in Chapter 2 of this RFP. The SOI/Proposal from the Proposer shall contain the information required in Chapter 3 of this RFP.

## 1.27 PROPOSAL EVALUATION PROCEDURES

The Proposal shall be evaluated by a Selection Committee appointed by the Commissioner. See also Appendix D.

## 1.28 COST OF PROPOSAL PREPARATION

No reimbursement will be made by TDOT for any costs related to the preparation of the SOI/Proposal, required documentation, interviews, presentations, discussions, and/or any related activities. These costs are the sole responsibility of the Proposer.

## 1.29 DISPOSITION OF PROPOSALS

Proposals become the property of TDOT and are disposed of according to TDOT policies. Proposals are treated as confidential documents until TDOT issues a written notice of award.

TDOT reserves the right to reject all Proposals.

## 1.30 AWARD OF CONTRACT

TDOT intends to evaluate, select, and award one CM/GC contract based on qualifications. The Proposer with the highest aggregate score, and any other Proposer within five percent (5%) of the highest aggregate score (with the 5% measured as a percentage of the highest aggregate score), will be identified as a Tier 1 Proposer. The Tier 1 Proposers will be submitted to the Commissioner in alphabetical order without an evaluation ranking. The Commissioner may select any Tier 1 Proposer for award of the contract, or the Commissioner may reject all Proposals and proceed with construction of the Project through any other lawful method for procuring a construction services contract.

The selected CM/GC Contractor will be awarded a contract for Preconstruction CM/GC Services. When the design of construction package(s) has been sufficiently developed, the CM/GC Contractor will prepare and submit a Guaranteed Maximum Price (GMP) proposal. If the GMP proposal is accepted, a TDOT Construction Contract will be compiled and executed.

## 1.31 COMPENSATION FOR CM/GC PRECONSTRUCTION SERVICES

The selected Contractor will be awarded a professional service contract and will be paid for CM/GC services during the Preconstruction Phase up to a maximum amount of $250,000. Monthly payments will be made based on actual cost for hours worked at the negotiated fixed hourly rates.

## 1.32 GUARANTEED MAXIMUM PRICE (GMP)

The GMP amount that will be incorporated into the standard Contract for Construction Services will be determined as provided in Appendix B. The GMP is the sum of the total Cost of the Work, the total amount of any authorized contingency risk-sharing pool, the overhead and profit, and the actual reimbursable cost of bonds and insurance available to pay the Contractor to construct the Project in accordance with a sufficient Plans, Specifications, and Estimates (PS&E) construction package. Payment for the construction of the project will be paid through a Schedule of Bid items.

TDOT anticipates initiating the process for determining the final GMP based on 60% complete contract documents, and TDOT intends to establish a GMP for the 100% complete project no later than March 21, 2024. TDOT reserves the right not to award any part or all of the Construction Phase Services, and to bid/award some or all of the construction work separately. The selected Contractor shall deliver to TDOT a proposed GMP and GMP Supporting Documents at any appropriate milestones identified at the Project Scoping Workshop as identified in Chapter 4.

All evaluations of the GMP proposal shall be open book. TDOT shall have access to all GMP proposal documents, quotations, takeoffs, and other construction cost estimates during evaluation

of the submitted GMP proposal. Issuance of a Construction Contract will be subject to the Proposer posting a 100% performance and payment bond. The CM/GC Contractor will competitively procure and award subcontracts to subcontractors in accordance with its proposed subcontracting plan, as described in Chapters 2 and 3 of this RFP.

Except for amendments approved by TDOT, the GMP will not be increased. The Contractor assumes all risk with performance of the work, including management of its subcontractors, suppliers, and any associated cost impacts over and above the GMP.

TDOT anticipates that a GMP proposal may be prepared and submitted up to three times. TDOT reserves the right at any time to terminate the GMP proposal process and prepare the PS&E package for advertisement under standard low-bid procurement procedures.

# Chapter 2

# CM/GC REQUIREMENTS AND SOI/PROPOSAL INSTRUCTIONS

## 2.1 MANDATORY MINIMUM SOI/PROPOSAL REQUIREMENTS

All Proposers shall meet minimum requirements to be considered for this project. To be considered as responsive to this RFP, interested Proposers are required, as a minimum to:

1. Attend the mandatory Pre-Proposal meeting on **June 1, 2023**. Sign-in and attendance at the Pre-Proposal meeting is **required** in order to submit a proposal.

2. Demonstrate a bonding capability up to $13.5 Million for an individual project along with current and anticipated workloads. Provide a letter from a surety or insurance company stating that the Proposer is capable of obtaining a Performance and Payment Bond covering the Project. **Letters indicating "unlimited" bonding capability are not acceptable.** The surety or insurance company providing such letter must be licensed as a surety and qualified to do business in the State of Tennessee. In addition, the surety must be listed in the current United States Department of the Treasury Circular 570 financial management service list of approved bonding companies, which is published annually in the Federal Register, and the surety must be listed or approved to write a bond in the amount indicated in the letter equal to or greater than $13.5 Million.

3. Be pre-qualified with the TDOT Construction Division or satisfy all requirements of application for pre-qualification per TDOT Rule 1680-05-03, Prequalification of Contractors, at least fourteen (14) days prior to the Proposal submittal deadline as shown in the Key Events Schedule below. The Proposer, or any firm, which is a member thereof, shall not be presently debarred, suspended, or excluded from bidding on any contract with the Department or any Federal-aid contract.

4. Provide relevant information regarding any contractor's licenses, including information on the revocation or suspension of any license.

5. Provide relevant information regarding Certificate of Existence or Authority to transact business in the State of Tennessee.

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

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

8. Certify that the Proposer, or of any firm which is a member thereof, has not defaulted on a Federal, state, or local government contract within the past five (5) years.

9. Submit an affidavit signed by the Proposer, on the form provided in Appendix C, certifying that the Proposer, and its member firms (if any), agents, subcontractors and employees:

   (a) Have not received any compensation for assisting TDOT in preparing this RFP;

   (b) Have not communicated, and will not communicate, with any member of the RFP Selection Committee or any employee or official of TDOT concerning the review or evaluation of any Proposal, except those TDOT employees who are specifically identified in the RFP as appropriate points of contact; and

   (c) Have not offered or paid, and will not offer or pay, a contingency fee of any type that is directly tied to specific actions or work designed to help the Proposer obtain a contract through this RFP process.

10. Any proposal received by TDOT after the time specified in Section 2.3 shall be considered late and shall be returned unopened to the Proposer. No late proposals will be accepted for this project.

11. The Proposer shall include a full disclosure of all potential organizational conflicts of interest in the Proposal, as per Section 1.21.

## 2.2 PROPOSAL GENERAL INFORMATION

All respondents accept the conditions of this RFP, including, but not limited to, the following:

1. All submittals shall become the property of TDOT and will not be returned.

2. Multiple proposals from a single Proposer will not be considered.

3. TDOT reserves the right to reject any or all proposals on the basis of being unresponsive to this RFP or for failure to disclose requested information as detailed in Sections 2.1 and 2.6.

4. TDOT shall not be liable for any costs incurred by respondents in the preparation of submittals and proposals, nor in costs related to any element of the selection and contract negotiation process.

5. The Proposer has reviewed Appendix A and by responding has agreed that the terms and conditions of the sample Construction Management/General Contractor Contract are acceptable without reservation.

6. Although the Proposer selected through this selection process will be awarded a contract for Pre-construction Services to be performed during the design review and may perform construction services for this project through an Early Work Amendment or a GMP Amendment, the selected Contractor is not guaranteed to receive a Notice to Proceed to perform any construction work if services are terminated at the completion of the design phase.

7. If TDOT chooses to advertise this project under the low-bid process authorized under Tennessee Code Annotated Title 54, Chapter 5, the selected Contractor **will not** be authorized to submit a bid.

## 2.3 KEY EVENTS SCHEDULE

Key events schedule is shown in the following Table 2.1. These dates are subject to change.

Table 2.1: Key Events Schedule for Project No. 47I275-F3-002

| **Public Notice Phase** | **Date** |
|---|---|
| Advertisement of RFP | May 22, 2023 |
| Mandatory Pre-proposal Meeting | June 1, 2023 |
| Last Submission of Questions/Request Clarification | June 12, 2023 |
| **Selection Phase** | **Date** |
| Submittal of SOI/Proposal | June 22, 2023, 12 Noon Central |
| Selection Committee Meetings (Interviews) | July 11 – 12, 2023 |
| Contractor Selection Notification | July 20, 2023 |
| Anticipated Contract Approval/Execution | August 17, 2023 |

Proposers are required to meet the key dates set for the SOI/Proposal submission and the oral interviews. Contractors are also required to meet the information submittal dates outlined in **key event dates**. Failure to meet these dates will result in the Proposal being considered non-responsive.

## 2.4 MANDATORY PRE-PROPOSAL MEETING

The mandatory Pre-Proposal meeting will be held on June 1, 2023, at TDOT Region 1 Auditorium located at 7345 Region Lane, Knoxville, TN 37914, at 1:00 PM Eastern Time. This meeting will introduce all contractors to the CM/GC contract delivery method, give an overall introduction to the project as scoped, and enable TDOT to answer questions about the project and process. The TDOT Project Management team for the project will be present. This meeting will be approximately two (2) hours long. Failure of a contractor to attend any such meeting(s) will result in elimination of that contractor, and any Proposal submitted by the contractor will be rejected. The Department will respond, orally or in writing, to any contractor's questions raised at the meeting. In the event the Department determines that formal answers or change of the RFP, specifications or Contract terms is warranted, the Department will issue formal written clarifications or Addenda in accordance with the terms of this RFP.

## 2.5 QUESTIONS AND CHANGES TO THE RFP

1. TDOT reserves the right to make changes to the RFP. Changes to the RFP generally consist of Clarifications, Scope Changes, or Time and/or Date Changes. All changes to the RFP prior to the receipt of proposals shall be made by an addendum to the RFP, which shall be made available to all Proposers on the TDOT webpage. Following receipt of proposals, any

changes to the RFP will be conveyed in writing to those Proposers determined to have met the minimum qualifications.

2. Proposers may submit questions, request clarification, or request a change to the RFP by submitting an e-mail or a written request on Form QR (Appendix D) to the address set forth above. The request shall specify the provision and section of the RFP in question, and, if a change is requested, contain an explanation for the requested change. TDOT will not respond to questions or change requests received later than the date specified in Section 2.3.

3. TDOT will evaluate any questions or requests submitted but reserves the right to determine whether to respond or accept any requested change.

4. Proposers shall not rely on oral or written instructions regarding this RFP, unless issued in writing as an addendum by TDOT.

5. Proposers must acknowledge all issued addenda in their submittal and proposal.

## 2.6 STEP 1 - STATEMENTS OF INTEREST (SOI)/PROPOSAL SUBMITTAL

Respondent must comply with items 1 through 9 of Section 2.1. TDOT retains the right to waive any minor irregularity or requirement should it be judged to be in the best interest of TDOT. The **primary focus of the evaluation will be the Proposer's capabilities**.

1. Submit one (1) electronic copy in portable document format (.pdf) via email to **Kimberly Welch, P.E. (kimberly.welch@tn.gov)** by the date and time shown in Section 2.3.

2. **Statement of Interest (SOI)/Proposal Format**:

   (a) Submittals shall be formatted and tabbed in the exact form and sequence of the Evaluation Form, Appendix D.

   (b) All narratives shall use minimum font size of 11-point Times New Roman. Limited use of smaller font sizes for charts, diagrams, graphs, and tables are allowed.

   (c) Include a cover or introductory letter (2-page limit, 8-1/2" x 11" paper).

   (d) Include a proposal section (20-page limit, 8-1/2" x 11" paper).

   (e) An optional section may be included (5-page limit, 8-1/2" x 11" paper, and up to 3 of the 5 pages may be on 11" x 17" paper). Description of the optional section is given below in item 7 of this section.

   (f) An optional commendation section for awards or letters of recommendations from past clients may be included (5-page limit, 8-1/2" x 11" paper).

   (g) An appendix Section may be included (no page limit, but see items 7, 8 and 9 of this section).

3. Submittals will be evaluated in accordance with criteria as indicated in Section 3.2, Evaluation Criteria for Proposals, and ranked on the corresponding evaluation form in Appendix D.

4. Responses to all items shall be complete.

5. All references shall be current and relevant.

6. Complete and execute the appropriate Acknowledgment and Attestation Forms, as provided in Appendix C, and submit with the SOI/Proposal Package.

7. The optional section should include supplemental materials for risk assessments, cost models examples, processes, and additional photos, exhibits, or schedules.

8. An appendix section may be included in the proposal. This section will include resumes, references, Surety Letters, and Acknowledgement and Attestation Form. Resumes and references for team members should be limited to the Key Personnel (Section 3.2.2a Project Management Team) of the Proposer's team.

9. Tabs, covers, and tables of content pages do not count against the page limit.

## 2.7 STEP 2 - ORAL INTERVIEWS

**Oral Interview**: Mandatory oral interviews will be conducted for all Proposers. Interview times and location will be arranged by TDOT and all Proposers will be notified in advance. Oral interviews will be evaluated on the enclosed CM/GC Interview Evaluation Form (Form B) in Appendix D.

# Chapter 3

# SOI/PROPOSAL CONTENT AND EVALUATION CRITERIA

## 3.1 METHOD OF SELECTION AND AWARD

All Proposers shall be invited to, and required to participate in, Oral Interview meetings with the Selection Committee and further evaluated based on criteria in Section 3.3.
The score from the qualitative evaluations from all Selection Committee Members for each Proposal will be averaged to produce the total overall score for each Proposer on the corresponding evaluation form in Appendix D. The Proposer with the highest aggregate score, and any other Proposer having a score within five percent (5%) of the highest score (where 5% is measured as a percentage of the highest score) will be identified as Tier 1 Proposers and those Proposals will be submitted to the Commissioner in alphabetical order without any evaluation ranking. The Commissioner may select any Tier 1 Proposer. The final scope of work may be negotiated at TDOT's discretion.
Each separate section will be ranked with a maximum score of 100 points. Each section will then have the appropriate overall weighted multiplier applied to it for final ranking.

Table 3.1: Weighted Multipliers

| **Section** | **Weight** | **Appendix D** |
|---|---|---|
| SOI/Proposal | 50% | Scoring Form A |
| Interview | 50% | Scoring Form B |
| Final Scoring Matrix | Total | Scoring Form D |

## 3.2 EVALUATION CRITERIA FOR PROPOSALS (100 Points Total, 50% Overall Weight)

**Statement of Interest (SOI)/Proposal Evaluation Criteria**
Note that the primary focus of the evaluation will be the Proposer's ability, as a member of the project team, to maximize the project goals as are provided in Chapter 1 of the RFP.

1. Statement of Interest (SOI)/Proposals shall contain the following:

(a) Introductory Letter and Statement of Interest

Address the Cover or Introductory Letter to:

*Tennessee Department of Transportation*
*Kimberly Welch, P.E.*
*Civil Engineering Manager 2*
*TDOT HQ Project Management — Alternative Delivery*
*5th Floor, James K. Polk Building*
*505 Deaderick Street, Nashville, TN 37243*
*Phone: (615) 557-4502*

In up to **two pages**, express your interest in the project, state qualifications for doing the work, and recount any summary information on the project team or your company that may be useful or informative to TDOT. **Include the mailing and e-mail addresses and phone number** of the **primary contact person** for this Contractor selection process in the Introductory Letter. Please acknowledge receipt of any addenda to the RFP. **No evaluation points are assigned to this section**.

Include the following elements of information in the letter as a minimum and highlight these items in **bold letters**.

i. Project number and project location for project specific contracts.
ii. Statement that the Proposer is pre-qualified with the Department, with the Proposer's pre-qualification expiration date, or that the Proposer has filed an application for pre- qualification with the TDOT Construction Division at least fourteen (14) days prior to the Proposal submittal deadline identified in Section 2.3, Key Events Schedule.
iii. Statement that the Proposer is in good standing with the Secretary of State to transact business in the State of Tennessee, including a valid Certificate of Existence or Certificate of Authority to transact business, as applicable.
iv. Statement that the Proposer, and any firm which is a member thereof, is not presently debarred, suspended, or excluded from bidding on any contract with the Department or any Federal-aid contract.
v. Certification that the information and data submitted in the letter and its attachments is true and complete to the best knowledge of the individual signing the letter.
vi. Name, telephone number, e-mail address, and fax number of the individual to contact regarding their SOI/Proposal submittal.
vii. TDOT **requires** electronically signed original (.pdf format), by an authorized principal, partner, or officer of the firm.

(b) Mandatory Attachments

The following information and certifications shall be separately attached to the introductory letter and statement of interest. **No evaluation points are assigned to this information; however, the Proposal will be rejected as non-responsive if the required information and certifications are not attached.**

i. Provide a letter from a surety or insurance company stating that the Proposer is capable of obtaining a Performance and Payment Bond covering up to $13.5 Million

for an individual project along with the Proposer's current and anticipated workload. Letters indicating "unlimited" bonding capability are not acceptable. The surety or insurance company providing such letter must be licensed as a surety and qualified to do business in the State of Tennessee. In addition, the surety must be listed in the current United States Department of the Treasury Circular 570 financial management service list of approved bonding companies, which is published annually in the Federal Register, and the surety must be listed or approved to write a bond in the amount indicated in the letter equal to or greater than $13.5 Million.

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

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

iv. Certify that the Proposer, or of any firm which is a member thereof, has not defaulted on a Federal, state, or local government contract within the past five (5) years.

v. Submit an affidavit signed by the Proposer, on the form provided in Appendix C, certifying that the Proposer, and its member firms (if any), agents, subcontractors and employees:

   a. Have not received any compensation for assisting TDOT in preparing this RFP;

   b. Have not communicated, and will not communicate, with any member of the RFP Selection Committee or any employee or official of TDOT concerning the review or evaluation of any Proposal, except those TDOT employees who are specifically identified in the RFP as appropriate points of contact; and

   c. Have not offered or paid, and will not offer or pay, a contingency fee of any type that is directly tied to specific actions or work designed to help the Proposer obtain a contract through this RFP process.

vi. CM/GC Fee Percentage – CM/GC construction fee will be considered during the negotiation process for the GMP.

vii. Indirect Cost Rates – Where contract terms and payment are negotiated based on individual elements of costs, the CM/GC contractor must provide an indirect cost rate established in accordance with the Federal cost principles (as specified in 2 CFR part 200, subpart E), and it shall include a certification by an official of the CM/GC contractor that all costs are allowable in accordance with the Federal cost principles. An official of the CM/GC contractor shall be an individual executive or financial officer of the CM/GC contractor's organization, at a level no lower than a Vice President or Chief Financial Officer, or equivalent, who has the authority to make representations about the financial information utilized to establish the indirect cost rate proposal submitted.

2. Proposal Section

(a) **Project Management Team/Capability of the Proposer** (50 Points Maximum) (See Appendix D, Scoring Form A, for additional scoring details)

i. Project Management Team

- Provide a description of the composition of your project management team. If your team is a joint venture or association, indicate specific responsibilities of each member and firm of the team.
- Provide job descriptions and responsibilities and authority for each working title. Identify and discuss the qualifications of the following Key Personnel:
  - Project Manager;
  - Construction Manager;
  - Cost Estimator;
  - ABC Specialist; and
  - Up to two other persons that the Proposer considers as key to the success of the project.
- Present a brief discussion regarding how the team's qualifications and experience relates to this project. Include the following:
  - Qualifications and relevant individual experience of prime and subcontractor team members (if applicable);
  - Unique knowledge of team members related to the project;
  - Commitment of time and availability of key staff members;
  - Length of time with the firm for each key team member; and
  - Experience on similar projects as a team.
- Provide a separate graphic organizational structure chart, complete with working titles, for the project management team during both the pre-construction phase and construction phase of the Project.
- Provide resumes and two references for the Key Personnel for key positions in an appendix to the Statement of Interest (SOI)/Proposal.
- Provide narrative describing how the proposed Key Personnel of the team will meet the stated project goals, including building a professional and collaborative Project Team.
- Provide narrative describing succession planning for team stability and planning for any member of the Project Team that leaves during design or construction.
- Identify all current office locations and the resident expertise intended to be provided under this RFP. Provide a description of the location of the staff for the performance of this contract, their expertise, and generic equipment that will be located in Tennessee that will act in support of the anticipated contract.
- Evidence of Risk and Safety Performance: Provide the following information for each entity involved, covering the period 2018 to present:
  - Experience Modification Rates (EMR);
  - List of any OSHA/TOSHA citations received and for what; and
  - List of any incidents that resulted in significant injury, loss of life, or major property damage.

ii. Project Team Capability

- Prior Experience/Performance/References

  Provide a list and description of previous experience relevant to this project. The proposing firm shall provide evidence that it has actual experience in the successful construction of other highway bridge replacement projects, demonstrating the

competency, capability, and capacity to complete a project of similar size, scope or complexity of this project, a heavily traveled interstate bridge with six through lanes in an urban area. The proposing firm may not rely on the construction experience of a subcontractor for the purpose of meeting this requirement. The owner and, if desired, architect/engineer references shall be included for each listed project. TDOT may at its discretion contact references and/or conduct independent performance analysis on projects on which the firm has worked.

All references submitted shall be current for projects listed. References will be considered current if the party's name and position/title held at the time of the project for which the recommendation is being made are provided. Telephone numbers must be current as of the date of the submittal of the proposal.

- Project Background and Success

  Select your four most relevant ABC projects/programs that include at least two projects in urban areas.

  For each project provide, at a minimum, the following:
  - The project/contract name;
  - Description of services provided;
  - Planned vs. actual completion date;
  - Overall construction cost of project, as applicable, including initial contract value and final contract value and reasons for the difference, if any;
  - Key personnel that were assigned to the project and their roles; and
  - Reference(s) from Owner and, if applicable, Design Consultants.

(b) **Project Approach** (25 Points Maximum)
(See Appendix D, Scoring Form A, for additional scoring details)

i. Project Goals
Describe your firm's understanding of the project goals listed in the RFP and your approach to maximizing the project goals.

ii. Project Approach
Provide a strategic project approach summary. It should:

- Include discussion of your firm's approach in providing successful General Contracting services and how it applies to meeting TDOT's project goals. Consider discussing specific examples of your firm's processes such as estimates, progress reports, schedules, constructability reviews, value engineering studies, forms, cost savings, plan reviews, general conditions budgets, organizational structures, quality control, etc.
- Provide a description of the construction work the Prime Contractor has the capability to self-perform, and work that will be done by subcontractors.
- Propose a construction approach and sequence that optimizes value to the project, with a realistic view of known constraints. Discuss factors that would affect schedule such as outside constraints, seasonal work, materials, equipment and labor availability and maintenance of traffic considerations, etc. Discuss the value of and types of multiple construction packages to expedite the project.
- Provide a discussion of the schedule aspects of ABC, including prefabrication of construction components, implementation and maintenance of traffic considerations, and approaches to minimize exposure of construction to traffic on I-275.

- If desired, describe any additional unique resources and capabilities that your company will bring to the project and how these unique resources and capabilities will be beneficial in achieving the project goals.
- Discuss the potential project challenges. Describe any project challenges that are anticipated by your company and how you plan to mitigate the risk of these challenges.

iii. Safety

Provide a discussion of your approach to ensure the safety of workers and the traveling public.

(c) **Project Innovations** (5 Points Maximum)
(See Appendix D, Scoring Form A, for additional scoring details)

In conjunction with your team's Project Approach, your team may have some innovative ideas that may or may not meet the requirements of the RFP that could increase the likelihood for success. The Selection Committee will consider how well your innovative ideas help balance the project goals. Please discuss these further as follows:

i. Describe various types of Accelerated Bridge Construction (ABC) that may be applicable to the project and how they could be employed on the project and their respective advantages and disadvantages.

ii. Describe any other specific technical or production innovations related to design or construction that may further improve reaching project goals.

iii. Describe impacts of the innovation(s) on time, cost, and quality.

Any innovations proposed will be expected to be used in design unless TDOT determines they are not in the best interest of the project.

(d) **CM/GC Design Process** (20 Points Maximum)
(See Appendix D, Scoring Form A, for additional scoring details)

How would you support the CM/GC process and the project goals critical to the team's success? In the Project Approach you may provide some response to this issue. This section is an opportunity to provide additional information related to the CM/GC Design Process.

i. Risk Management

The CM/GC process is intended to eliminate or reduce risk. Removing risk and adding innovation will reduce the cost of construction. Therefore, it is expected that bid items on CM/GC projects will be lower in cost than what is found in comparable design-bid- build projects.

In your response to the RFP, give an overall summary explanation on how you will identify, price, and mitigate risk through the formalized risk management process that TDOT expects to use. How will you support the team during pre-construction and construction activities in achieving a cost at or below traditional projects? How will you provide input in assigning risk responsibility and developing the Risk Register? How will you track and document risk and its cost and schedule impacts?

Include a discussion of the impact of risk on price. Topics of discussion are listed in the bullets below.

- In the format indicated below, identify risks that would increase cost and the anticipated cost of that risk. It is expected that your submitted bid prices will include innovative cost savings and not include the cost of risk.

- Describe risk mitigation that you will apply to decrease the cost and the projected cost savings, including actions that will be undertaken by your team during pre-construction to identify and minimize risk.
- Discuss communication of the schedule and cost risk to the project team.
- Discuss effect of schedule on costs.
- Provide examples of risks mitigated on previous projects.
- Use the table below to create a Risk Mitigation Matrix to identify key risks that affect project costs and schedule. Explain risk mitigation with probable cost and schedule savings.

| Identified Risk | Probable Cost | Risk Mitigation Plan | Cost Savings to Project | Scheduled Impacts to Project (Days) |
|---|---|---|---|---|

ii. Decision Analysis and Resolution

The Contractor's participation in the design effort should help to reduce errors and omissions, improve constructability, and reduce the cost of construction. Describe means and methods that will be used to support the design development and decision-making process in both the pre-construction and construction phases of the project. How will the proposed processes help TDOT decide which suggestions to use, and how will the benefits and cost savings of CM/GC be documented? How will you provide recommendations to achieve the CM/GC goal of zero unplanned change orders?

iii. Cost Estimating and Open Cost Modeling

Project estimating on CM/GC projects is a collaborative process where team members discuss and negotiate assumptions. These assumptions and prices are communicated to the design consultant, TDOT, and the Independent Cost Estimator (ICE) over the course of the project to ensure that the project meets the budget. Cost Models and OPCC estimates should be open book and transparent.

Describe the estimating process you will use to communicate the cost of each bid item and the cost of any risk. Explain how you will compare your cost to market conditions. How will you communicate assumptions, risk, and innovation to the designer and the ICE? Can your system produce a Schedule of Bid Items with items from the current TDOT Bid Item Book located at: https://www.tn.gov/tdot/tdot-construction-division.html

- Provide a discussion of a Cost Model that you could use to communicate design decision choices, design elements, and construction packages to the project team. This model may include early procurement for long lead time items, early phasing for material and other independent contracts that may be accomplished before project design completion. Use tasks as a basis for developing a project cost model. This model will be used as part of the open book estimating and collaboration throughout the design process, to develop the OPCC at each design milestone, and the GMP Proposals. Consider providing an example Cost Model (not necessarily prepared specifically for this project.)
- In the discussion of the Cost Model, describe or provide an example of your approach to estimating project bid items with a Cost-Based or Force Account Analysis that includes labor, materials, and equipment.

- Use TDOT Cost Data and TDOT Road Items List as references. GMP proposals are required to be compatible with these references. Items used in developing estimates and the GMP will be used for tracking and payment during construction phase of this project.

iv. Schedule Management

Your contract will be with TDOT. The designer's contract is also with TDOT. Address how you will collaboratively integrate and optimize the construction schedule with the design schedule.

v. Subcontractor Plan

Provide a subcontractor selection and integration plan that describes your process for:

- Soliciting three (at a minimum) reliable bids and making a selection;
- Ensuring the selection of high-quality subcontractors that are competitively bid;
- Bringing market competitive pricing into the project;
- Identifying and developing quality small business opportunities on the project; and,
- Providing timely payments to all subcontractors.

## 3.3 EVALUATION CRITERIA FOR ORAL INTERVIEWS (100 Points Total, 50% Overall Weight)

An oral interview will be a mandatory part of the selection process. The structure of the oral interview will be as follows:

1. **Presentation (35 Points) (15 minutes)**

   Summarize the Proposal and describe the Contractor's innovation ideas and unique resources. This is the part of the interview where the Proposer needs to communicate to the Selection Committee why it should be chosen. What strategies and abilities does the Proposer bring to this CM/GC project that makes it the best candidate? Limit the presentation to the most critical points of the Proposal and focus on what your team can bring to the table and why.

2. **Team Challenge (30 Points)**

   The Proposer will be given project challenges to review and propose a course of action to address the elements in the problems. The Proposer will be given fifteen (15) minutes to prepare responses or solutions and five (5) minutes to discuss responses and solutions to the Selection Committee. This challenge scoring will be determined by the following criteria:

   (a) Challenge Understanding;

   (b) Recognition of Key Points and Ideas;

   (c) Team Collaboration;

   (d) Communication Skills;

   (e) Understanding of CM/GC Delivery Method, Context Sensitive Solutions, and ABC method; and

(f) Understanding of Project Goals.

3. **Q&A Session with the Selection Committee (35 Points)**

The questions asked in this session will include both standard questions for all short-listed Proposers and specific questions relative to the Proposer's proposal and presentation. The interview presentation and question/answer scoring will be based on the following criteria:

(a) Project Understanding;

(b) Project Approach;

(c) Project Innovation;

(d) Communication Skills; and

(e) Understanding of CMGC Delivery Method.

# Chapter 4

# SCOPE OF WORK AND CM/GC SERVICES

## 4.1 CM/GC SERVICES SCOPE OF WORK

1. **Project Goals**

   This project is intended to achieve the following goals:

   (a) Advance the knowledge, experience, and cost efficiency of TDOT and the local construction industry in Accelerated Bridge Construction and CM/GC project delivery.

   (b) Replace the existing bridge on I-275 within the project budget.

   (c) Accelerate delivery of the construction schedule and obtain final project acceptance no later than November 14, 2025.

   (d) Minimize inconvenience to the traveling public and ensure safety of workers and the traveling public.

   (e) Facilitate a collaborative partnership with all of the members of the project team and the stakeholders.

   (f) Provide an innovative design and construction.

   (g) Provide a well-publicized, highly successful Accelerated Bridge Construction project.

   *Note*: TDOT will be primarily responsible for public involvement and public relations. The Contractor will provide support for the public involvement and public relations effort.

2. **Work Duration**

   The time period for the work described in this scope is approximately 226 calendar days for design and 410 calendar days for construction.

3. **Work Product and Work Product Completion**

   The Contractor shall provide the work product and deliverables as described in Sub-section 5, Scope of Work, of this section. All submittals, reports, and reviews must be accepted by the TDOT/PM.

4. **Additional Project Information**

   Additional information regarding this project is available from the documents provided on the alternative contracting webpage of TDOT.

5. **Scope of Work**

   One factor determining the selection of CM/GC is the ability of the Contractor to analyze the project goals, evaluate the work elements, and formulate a proposal. This process may produce new approaches or modification to the project work elements. Because of that, all Proposers should be aware that the final scope of work for a project will be produced with input from the selected Design Consultant and the selected Contractor. This draft scope of work has been reviewed by TDOT and reflects a plan of approach based on the known goals.

   The Contractor will be part of the design team. As part of the design team, the Contractor will provide input on schedule, phasing, constructability, material availability, and cost throughout the design phase of the project. The Contractor tasks during the design phase include:

   (a) The Contractor shall attend the initial project workshop. The Contractor shall be introduced to the project, the stakeholders, specialty groups, the TDOT Project Team, and the Design Consultant. This workshop includes the following tasks:

| Task No. | Workshop Goals and Tasks |
|---|---|
| 1 | Introduction to the project, CM/GC, partnering session and the project stakeholders. |
| 2 | Project status, goals, objectives, funding, preliminary schedule, etc. |
| 3 | Presentation of project elements and scope. |
| 4 | Identifying project risks and developing an initial risk management plan. |
| 5 | Review of relevant plans, specifications, and reports. |
| 6 | Project site visit. |
| 7 | Schedule bi-weekly project meetings, Functional Design Plans Field Review (FDP), Plan-In-Hand Field Review (PIH), and PS&E Review. |
| 8 | Establish Communication and Document Control Plan. |
| 9 | Question and Answer Session. |

   (b) The Contractor will provide the following reporting and billing:
      i. **Coordination**: Coordination of all contract activities will be conducted by the TDOT/PM. The CMGC/PM shall keep regular contact with the D/PM and the TDOT/PM on a weekly basis.
      ii. **Periodic Reports and Invoices**: Includes detailed breakdown of actual costs and hours worked, in addition to TDOT standard invoice form. Information regarding TDOT invoices can be found on TDOT's Construction Website.
      iii. **General Reports and Submittals**: In general, all reports and submittals must be approved by TDOT prior to their content being used in a follow-up work effort.

   (c) The Contractor shall partner with the Design Consultant, and the TDOT Leadership Team, as part of the design team. The Contractor will provide input on schedule, phasing, constructability, materials and equipment availability, cost, etc.

(d) The Contractor shall be required to attend the meetings and produce the deliverables at the milestones described in Table 4.1.

Table 4.1: Milestones and Deliverables

| Task | Work Product Short Description | Unit | Total Estimated Quantity | Project Workshop | 30% FDP | 60% PIH | 90% PS&E | 100% PS&E or GMP | Misc |
|---|---|---|---|---|---|---|---|---|---|
| 1 | As-Built, Current Design, and Site Conditions Review | EA | 1 | 1 | | | | | |
| 2 | Attend Project Scoping Workshop | EA | 1 | 1 | | | | | |
| 3 | Bi-weekly Team Meetings | EA | 30 | | | | | | |
| 4 | Milestone Meetings | EA | 4 | | 1 | 1 | 1 | 1 | |
| 5 | GMP Negotiation Meetings | EA | 3 | | | | | | |
| 6 | Project Action Team Meetings | EA | 4 | | 1 | 1 | 1 | 1 | |
| 7 | Constructability Reports | EA | 3 | | | 1 | 2 | | |
| 8 | Value Engineering Workshop, Review, and Report | EA | 2 | | 1 | 1 | | | |
| 9 | Procurement Review | EA | 3 | | | | | | |
| 10 | Bid Item List | EA | 2 | | | 1 | 1 | | |
| 11 | Quantity Reconciliation Meetings | EA | 2 | | | 1 | 1 | | |
| 12 | Contracting and Diversity Plan | EA | | | | | | 2 | |
| 13 | Baseline Construction Schedule and Phasing | EA | 3 | | 1 | 1 | 1 | | |
| 14 | Risk Management Plan including Risk Register and Assessment Update | EA | 3 | | | 1 | 1 | 1 | |
| 15 | Innovation Tracking and Performance Report | EA | 2 | | | 1 | | 1 | |
| 16 | Material Sourcing Plan | EA | 2 | | | 1 | 1 | | |
| 17 | Quality Control Plan | EA | 1 | | | | | 1 | |
| 18 | Worker and Public Safety Plan | EA | 1 | | | | | 1 | |

Table continues to the next page

Table 4.1: Milestones and Deliverables *cont.*

| Task | Work Product Short Description | Unit | Total Estimated Quantity | Project Workshop | 30% FDP | 60% PIH | 90% PS&E | 100% PS&E or GMP | Misc |
|---|---|---|---|---|---|---|---|---|---|
| 19 | Site Specific Work Plan (MHT and Safety Critical) | EA | 2 | | | | 1 | 1 | |
| 20[1] | Written Reviews and Redline Reviews of PS&E Packages | EA | 2 | | | | | | |
| 21 | OPCC Cost Estimates | EA | 3 | | | | | | |
| 22 | Construction GMP | EA | 3 | | | | | | |

End of the Table

## 4.2 ROLES AND RESPONSIBILITIES MATRIX

The matrix is intended to establish the roles and responsibilities for the pre-construction phase tasks listed below, in accordance with the forms and conditions contained herein, and the applicable TDOT standards.

The following activities of communication, consensus building, project team reviews, conceptual design, data gathering, documentation, and formal public notice should be planned by the appropriate responsible party and coordinated with all team members. The type and number of meetings, documents, etc., will depend on the category and characteristics of the project work. The time of their accomplishment will overlap, and parallel paths of activity should be planned to finish the development phase in accordance with the shortest possible schedule. A proposal shall be developed by the Contractor which satisfies the requirements of the project development. This plan must be approved by the TDOT/PM before starting the work.

[1]The Contractor shall be required to provide written reviews or reports and details/redlines of PS&E Packages. The Contractor shall thoroughly review all plans, specifications, reports, diagrams, shop drawings, and all other necessary project documentation. The Contractor shall independently calculate quantities of the construction package. The Design Consultant will also calculate quantities as part of the design process. Comments should be related to constructability, clarifications, design errors or omissions, effect on schedule, effect on cost, risk identification, or value engineer suggestions/recommendations.

Table 4.2: PRE-CONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX

| **Construction Management Services** | **Required of Contractor** | **Required of Design Consultant** | **Required of TDOT/Others** |
|---|---|---|---|
| PHASE: PRE-CONSTRUCTION | | | |
| **INITIAL PROJECT SCOPING MEETING (WORKSHOP)** | | | |
| A. CM/GC AND PARTNERING INTRO SESSION | C | C | C |
| B. PROJECT SITE VISIT AND INSPECTION | C | C | C |
| C. PROJECT STATUS, GOALS, ELEMENTS, OBJECTIVES, DESIGN SCHEDULE REVIEW | C | C | C |
| D. IDENTIFY PROJECT RISKS AND DEVELOP INITIAL RISK MANAGEMENT PLAN AND RISK REGISTER | 1 | 2 | 2 |
| E. REVIEW APPLICABLE ENVIRONMENTAL DOCUMENTS (ROD, FONSI, ETC.) | | 1 | 2 |
| F. INDEPENDENT DESIGN AND AS-BUILT REVIEW | 1 | 2 | 2 |
| G. DEVELOP PROJECT SCHEDULE AND TASKS | C | C | C |
| H. SCHEDULE BI-WEEKLY PROGRESS, PIH, PS&E, AND MILESTONE MEETINGS | | 2 | 1 |
| I. IDENTIFY DESIGN CRITERIA | | 1 | 2 |
| J. DISCUSSION OF POSSIBLE EARLY DELIVERY AND LONG LEAD TIME ITEMS | C | C | C |
| K. ANALYSIS OF PROJECT PHASING AND MULTIPLE PS&E PACKAGES | 1 | 2 | 2 |
| L. DEVELOP DOCUMENT REVIEW AND NAMING CONVENTION STANDARDS | | | 1 |
| M. QUESTION AND ANSWER SESSION | C | C | C |
| **PROGRESS MEETINGS** | | | |
| A. TDOT/PM, C/PM, CMGC/PM | C | C | C |
| B. PROJECT MEETING MINUTES | 2 | 1 | 2 |

The managers and team members will meet periodically as required (typically at two-week intervals). These progress meetings will be used to coordinate and track the work effort and resolve problems. The meetings will review the following:

- Activities required to be completed since last meeting (Action Items)
- Problems and challenges encountered/anticipated and potential solutions
- Project schedule updates (Design and Construction)

  Action Items
- Coordination and communication required with
  - Team Members (TDOT/PM, CMGC/PM, D/PM)
  - TDOT Specialty Units (Each functional area)
  - Other

The TDOT/PM will provide meeting minutes that include details discussed, notes, and all action items relating to the meeting within one week of the meeting.

LEGEND: C=Collaborative Responsibility, 1=Primary Responsibility, 2=Secondary Responsibility

Table continues to the next page

| PRE-CONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX Cont. | | | |
|---|---|---|---|
| **Construction Management Services** | **Required of Contractor** | **Required of Design Consultant** | **Required of TDOT/Others** |
| PHASE: PRE-CONSTRUCTION | | | |
| **1. PROJECT DEVELOPMENT PROCESS** | | | |
| **Project Management** | 2 | 2 | 1 |
| The TDOT/PM will coordinate all the work tasks being accomplished by all parties to ensure project work completion stages are on schedule. The C/PM and CMGC/PM shall coordinate all the work tasks being accomplished by their respective teams to make sure project work completion stages are on schedule. | | | |
| **Communication and Consensus Building** | 2 | 2 | 1 |
| The TDOT/PM is responsible for the consensus building and facilitating the communication between all members of the project team. This does not dismiss the responsibility of all team members to communicate with the TDOT/PM and the TDOT Project Management Team when required. | | | |
| **Maintain Updated Contact List** | | 1 | |
| Establish and maintain a computerized list of all appropriate interested parties for the communication process. The list will be used for notices regarding public meetings, mailings, newsletters, or other communication as appropriate. | | | |
| **2. MEETINGS** | | | |
| **Graphics support and presentations** | 2 | 1 | 2 |
| Each project team member is responsible for the graphics, documents, reports, plans, specifications, and written reviews from each specific scope of work item. Presentation of these documents and their reviews will be available on the shared project server after the meeting has been adjourned. | | | |
| **PM Updates on Progress** | 2 | 2 | 1 |
| The TDOT/PM, CMGC/PM, and the C/PM will all update the team members at the scheduled meetings as to their progress on deliverables, challenges, and the feedback/comments they need. | | | |
| **Project Discussion** | 2 | 2 | 1 |
| The team members need to come prepared to discuss any and all reservations, ideas, and challenges to the project. Open and honest dialogue is the key to the success of project delivery. | | | |
| 3. PRELIMINARY DESIGN | | | |
| Preliminary Roadway, Geometric, Structural, Environmental, SWMP, etc. Design | 2 | 1 | 2 |
| TDOT/PM will coordinate all design activities with required TDOT specialty units, the Contractor, the Design Consultant, and other outside entities. Design Consultant is responsible for the civil and structural design, plans, specifications, and estimate packages at each formal review. | | | |
| Environmental - gathering data, analysis, and mitigation development | | 2 | 1 |
| Environmental clearances | | 2 | 1 |
| ROW, specialty, and local clearances | | 2 | 1 |
| Drainage plans | C | 1 | 2 |
| Hazardous material investigation | | 2 | 1 |
| TDOT processes (forms, clearances) | | 2 | 1 |
| Utility coordination (protect sanitary sewer) | C | C | C |
| Conduct field survey of project area | | 1 | 2 |
| Field and project research | | 1 | 2 |
| Field survey and existing feature development | | 1 | 2 |
| Construction requirements | 1 | 2 | 2 |
| Innovation development, proposal, and tracking | C | C | C |
| Provide construction plans, specifications, and estimates | | 1 | |
| Plot/develop all required information on the plans in accordance with all applicable TDOT policies and procedures and all industry standards for civil, electrical, ITS, and structural design. | | | |
| LEGEND: C=Collaborative Responsibility, 1=Primary Responsibility, 2=Secondary Responsibility | | | |

Table continues to the next page

| PRE-CONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX Cont. | | | |
|---|---|---|---|
| **Construction Management Services** | **Required of Contractor** | **Required of Design Consultant** | **Required of TDOT/Others** |
| PHASE: PRE-CONSTRUCTION | | | |
| Develop construction cost model for Engineer Estimator and ICE | 1 | 2 | 2 |
| Develop and calculate quantities | 2 | 1 | 2 |
| Risk Register development | 1 | 2 | 2 |
| Initiate and Track Subcontractor Plan | 1 | 2 | 2 |
| Constructability reviews and reports | 1 | 2 | 2 |
| Construction Phasing Plan | 1 | 2 | 2 |
| Value Engineering proposals | | | |
| Cost savings reviews | 1 | 2 | 2 |
| Preliminary construction schedule | 1 | 2 | 2 |
| Long lead time GMP submissions and proposals | 1 | | |
| Long lead time negotiations | 1 | | |
| Long lead time item procurement | 1 | | |
| Opinion of Probable construction cost Estimate#1 | 1 | 2 | 2 |
| **PIH (Plan-In-Hand) Review Preparation** | | | |
| Coordinate, complete, and compile the plans with input from other branches: Materials, Hydraulics, Environmental, Traffic, Right-of-Way, Maintenance, Safety, and Structures, if applicable. | | 1 | 2 |
| The PIH plans and specifications shall comply with TDOT requirements and shall include: title sheet, typical sections, general notes, plan/profile sheets, and preliminary layouts. | | 1 | 2 |
| The plans shall be submitted to the TDOT/PM and the CMGC/PM for preliminary review at least two weeks prior to the PIH. | | 1 | 2 |
| The plans will be reproduced by TDOT or the Consultant. | | 1 | 2 |
| Prepare the Engineer's Estimate for work described in the PIH plans based on estimate quantities. | | 2 | 1 |
| Prepare the PIH Opinion of Probable Construction Cost (OPCC #1) | 1 | 2 | 2 |
| Supply cost model and assumptions to ICE and Engineer Estimate. | 1 | | |
| **PIH (Plan-In-Hand) Review Meeting** | | | |
| Review PIH PS&E package and provide written reviews, comments, and redlines. | | C | C |
| Attend the PIH review meeting | | C | C |
| Provide post-PIH revisions and memo. | | 1 | 2 |
| Provide list of all deviations from the standard design criteria and written justification for each. | | 1 | 2 |
| Update Subcontractor Plan. | | | 1 |
| Update Risk Register and Cost Model. | 1 | 2 | 2 |
| LEGEND: C=Collaborative Responsibility, 1=Primary Responsibility, 2=Secondary Responsibility | | | |

Table continues to the next page

| PRE-CONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX Cont. | | | |
|---|---|---|---|
| **Construction Management Services** | **Required of Contractor** | **Required of Design Consultant** | **Required of TDOT/Others** |
| PHASE: PRE-CONSTRUCTION | | | |
| **Final Roadway, Geometric, Structural, Environmental, SWMP, etc. Design** | | | |
| TDOT/PM will coordinate all design activities with required TDOT specialty units, the Contractor, the Design Consultant, and other outside entities. Design Consultant is responsible for the civil and structural design, plans, specifications, and estimate packages at each formal review. | | | |
| Environmental - gathering data, analysis, and mitigation development | | 2 | 1 |
| Final environmental clearances | | 1 | 2 |
| Final environmental permits | | 1 | 2 |
| ROW, specialty, and local clearances | | 2 | 1 |
| Final utility coordination | 2 | 2 | 1 |
| Develop and calculate final quantities | 2 | 1 | 2 |
| TDOT processes (forms, clearances) | | 2 | 1 |
| Update Risk Register, formal risk assessment meeting | 1 | 2 | 2 |
| Constructability reviews and reports | 1 | 2 | 2 |
| Construction Phasing Plan | 1 | 2 | 2 |
| Value Engineering proposals | | | |
| Final construction requirements | C | C | C |
| Innovation development, proposal, and tracking | C | C | C |
| Cost Savings reviews | C | C | C |
| PS&E Construction Schedule | 1 | 2 | 2 |
| Long lead time GMP submissions and proposals | 1 | | |
| Long lead time negotiations | 1 | | |
| Long lead time item procurement | 1 | | |
| Opinion of Probable Construction Cost Estimate #2 | 1 | 2 | 2 |
| Provide construction PS&E (plans, specifications, and estimates) | 2 | 1 | 2 |
| Develop and calculate final quantities | 2 | 1 | 2 |
| **PS&E (Plans, Specifications, and Estimates) Preparation** | | | |
| Coordinate, complete, and compile the PS&E plans with input from other branches: Materials, Hydraulics, Environmental, Traffic, Right-of-Way, Maintenance, Safety, and Structures, if applicable. | 2 | 1 | 2 |
| The PS&E plans and specifications shall comply with TDOT requirements and shall include: title sheet, typical sections, general notes, plan/profile sheets, and preliminary layouts. | 2 | 1 | 2 |
| The plans shall be submitted to the TDOT/PM and the CMGC/PM for preliminary review at least two weeks prior to the PS&E. | 2 | 1 | 2 |
| The PS&E plans will be reproduced by TDOT or the Consultant. | | 1 | |
| Prepare the Engineer's Estimate for work described in the PS&E plans based on estimate quantities. | | 2 | 1 |
| LEGEND: C=Collaborative Responsibility, 1=Primary Responsibility, 2=Secondary Responsibility | | | |

Table continues to the next page

| PRE-CONSTRUCTION ROLES AND RESPONSIBILITIES MATRIX Cont. | | | |
|---|---|---|---|
| **Construction Management Services** | **Required of Contractor** | **Required of Design Consultant** | **Required of TDOT/Others** |
| PHASE: PRE-CONSTRUCTION | | | |
| Prepare the PS&E Opinion of Probable Construction Cost (OPCC #2) | 1 | | |
| Supply cost model and assumptions to ICE and Engineer Estimate. | 1 | | |
| **PS&E (Plans, Specifications, and Estimates) Meeting** | | | |
| Review PS&E package and provide written reviews, comments, and redlines. | 2 | 2 | 1 |
| Attend the PS&E meeting. | C | C | C |
| Post-PS&E revisions and memo | 2 | 1 | 2 |
| Provide list of all deviations from the standard design criteria and written justification for each. | 2 | 1 | 2 |
| Provide a PS&E Construction Plan. | 1 | 2 | 2 |
| Obtain final environmental and access permits. | 2 | 2 | 1 |
| Finalize construction cost model for Engineer Estimator and ICE. | 1 | 2 | 2 |
| Update Subcontractor Plan. | | | 1 |
| Update Risk Register. | 1 | 2 | 2 |
| **GMP Proposal and Negotiations** | C | C | C |
| Notify TDOT/PM at a point where GMP proposals can be sufficiently prepared. | 1 | | |
| Supply cost model and assumptions to ICE and Engineer Estimate. | 1 | | |
| Supply EBS to CM/GC Contractor. | 2 | 2 | 1 |
| Prepare and submit construction GMP proposals. | 1 | | |
| Procure independent cost estimate. | | 2 | 1 |
| Submit an electronic EBS to the TDOT/PM for each phase. | 1 | | |
| Review the construction GMP proposals and compare to Engineer's Estimate and ICE estimate. | | 1 | 2 |
| Negotiate final GMPs for each phase. | C | C | C |
| TDOT requires no more than three attempts to negotiate assumptions and prepare GMP proposals. TDOT reserves the right at any time to prepare the bid package for advertisement under low-bid procurement procedures. | | | |
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| LEGEND: C=Collaborative Responsibility, 1=Primary Responsibility, 2=Secondary Responsibility | | | |
| End of Table | | | |

# Chapter 5

# APPENDICES

## APPENDIX A: SAMPLE CM/GC SERVICES CONTRACT

A template of the CM/GC services contract will be available on the project website at https://www.tn.gov/tdot/tdot-construction-division/transportation-construction-alternative-contracting.html or click here.

# APPENDIX B: CM/GC PROCESS

**DESIGNER AND CONTRACTOR DESIGN PROJECT**

The selected Contractor will be awarded a consulting contract, prepared and administered by the Department. The cost of the contract will be based upon negotiated unit rates for key personnel and support staff identified on the project team that will participate on the project. The requirements will be identified in the contract (further outlined in Section 4 – Scope of Work and CM/GC Services). These requirements can include, but are not limited to:

- Constructability reviews of the design.
- Assistance in shaping the project scope of work to the available budget. Assistance in improving project schedule.
- Provide detailed cost estimates and cost estimate breakdowns of elements of the work as the design is developed using open-book methods.
- Design reviews to ensure that the package is complete and without ambiguity. Finding plan discrepancies.

**CONTRACTOR SUBMITS BID FOR PROJECT (EARLY PROCUREMENT)**

The Contractor may be asked to procure long lead materials such as bridge girders, retaining wall panels, piling, and other materials that may be in short supply or require longer than desired lead times from purchase to delivery. The Department may also procure through the Contractor such services as pavement cores, pipe videos, potholes, or other investigations to facilitate the design. TDOT may choose to exercise this option if the early procurement saves significant construction time, money, or avoids potential delays once the project begins.

If TDOT elects to use this early procurement option, it proceeds as follows:

→ The Contractor will prepare a bid to supply the item(s), including all other costs associated with the procurement (such as transportation, storage, etc.). The bid is only for purchased items and should not include mobilization for construction or other unrelated costs.

→ The Contractor will submit the bid through the TDOT Electronic Bid System (EBS). TDOT will secure an independent cost estimate for the item(s). Upon opening the Contractor's bid, TDOT will determine the acceptability of the bid by comparing it to state averages, similar projects, the independent cost estimate, and the Department engineer's estimate. The Department's estimate and the ICE estimate will remain confidential. TDOT will evaluate the bid to determine if the Contractor's proposed GMP is within 10% of the Department's estimate or the ICE estimate and is otherwise acceptable.

If the prices are acceptable, TDOT will prepare a construction contract for this portion of the work. If a previous construction contract had been entered into, a separate contract may be prepared, or the work may be added to that contract by supplemental agreement at the discretion of TDOT.

If the prices are not acceptable, TDOT may enter into a process of risk identification that identifies price differences between the Contractor's bid, the Department's estimate, and the Independent Cost Estimate. Following the resolution of these risk issues, the items may be re- bid. If this is not successful, TDOT has the option to procure the items later as part of the bid process for the construction project or by some other method. The construction contract is prepared and executed to cover only the defined procurement services. Site preparation to support the procurement or additional procurement services may be made a part of this contract.

**CONTRACTOR SUBMITS BID FOR PROJECT (EARLY CONSTRUCTION CONTRACT)**

If time and/or money can be saved by allowing the Contractor to start initial work prior to the completion of the total design package, TDOT may ask the Contractor to prepare a lump sum or unit cost bid for all or a portion of the work.

If TDOT elects to use this contracting option, it proceeds as follows:

→ TDOT and the Contractor will agree upon a scope of work to accomplish in this phase of the contract. The agreement may take the form of a set of plans or it may consist of something less formal such as sketches, drawings, or written descriptions. Both parties must agree that the scope of work is clear and unambiguous.

→ The Contractor will prepare a bid to perform the agreed to scope of work. The bid will be based on the estimating model and the most recent OPCC for the agreed scope of work.

→ The Contractor will submit the bid through EBS. TDOT will secure an independent cost estimate for the work. Upon opening the Contractor's bid, TDOT will determine the acceptability of the bid by comparing it to state averages, similar projects, the independent cost estimate, and the Department engineer's estimate. The Department's estimate and the ICE estimate will remain confidential. TDOT will evaluate the bid to determine if the Contractor's proposed GMP is within 10% of the Department's Estimate or the ICE estimate and is otherwise acceptable.

If the prices are acceptable, TDOT will prepare a construction contract for this portion of the work. If a previous construction contract had been entered into, a separate contract may be prepared, or the work may be added to that contract by supplemental agreement at the discretion of TDOT.

If the prices are not acceptable, TDOT may enter into a process of risk identification that identifies price differences between the Contractor's bid, the Department's estimate, and the Independent Cost Estimate. Following the resolution of these risk issues, the work may be re-bid. TDOT has the option to accept the revised price, if within 10% of the Department's estimate or the ICE estimate, to procure the items of Work later as part of the bid process for the final construction project, or to terminate the CM/GC process and procure the construction project by some other method.

**CONTRACTOR SUBMITS BID FOR PROJECT (DESIGN IS COMPLETE)**
When TDOT, the designer, and the Contractor agree that the project has been designed to a sufficient level of detail to allow the Contractor to accurately bid the project, the following procedure will be used:

→ The designer will produce a set of plans and specifications showing all work to be accomplished. The plans will also show all work accomplished under any previous Early Construction packages.

→ The Contractor will prepare a bid to perform the work shown. The bid will be based on the estimating model and the most recent OPCC for the agreed scope of work.

→ The Contractor will submit the bid through EBS. TDOT will secure an independent cost estimate for the work. Upon opening the Contractor's bid, TDOT will determine the acceptability of the bid by comparing it to state averages, similar projects, the independent cost estimate, and the Department engineer's estimate. The Department's estimate and the ICE estimate will remain confidential. TDOT will evaluate the bid to determine if the Contractor's proposed GMP is within 10% of the Department's estimate or the ICE estimate and is otherwise acceptable. If it is, the Department will prepare an Early Work Amendment for execution and performance by the Contractor.

If the prices are acceptable, TDOT will prepare a construction contract. If a previous construction contract had been entered into, a separate contract may be prepared, or the work may be added to that contract by supplemental agreement at the discretion of TDOT.

If the prices are not acceptable, TDOT will enter into a process of risk identification that identifies price differences between the Contractor's bid, the Department's estimate, and the Independent Cost Estimate. Following the resolution of these risk issues, the project may be re-bid. TDOT has the option to accept the revised price if within 10% of the Department's estimate or the ICE estimate, or to terminate the CM/GC process and procure the construction Project by some other method.

**CONTRACTOR BUILDS PROJECT**
From this point forward, the work proceeds in the same manner as a design-bid-build project as per the negotiated contract.

# APPENDIX C: AFFIDAVITS, ACKNOWLEDGMENT AND ATTESTATION FORMS

## AFFIDAVIT REGARDING PROHIBITED COMMUNICATIONS, CONTINGENCY FEES AND CONFLICTS OF INTEREST

| | |
|---|---|
| **SUBJECT RFP PROJECT NUMBER:** | |
| **PROPOSER LEGAL ENTITY NAME:** | |

**The Proposer, identified above, does hereby attest, certify, warrant, and assure that the Proposer, and its member firms (if any), agents, subcontractors or employees:**

1. Have not communicated, and will not communicate, with any employee or official of the Tennessee Department of Transportation, or with any member of the Selection Committee for this RFP, concerning the review or evaluation of any Proposal, except those Tennessee Department of Transportation employees who are specifically identified in the RFP as appropriate points of contact;
2. Have not offered or paid, and will not offer or pay, a contingency fee of any type that is directly tied to specific actions or work designed to help the Proposer obtain a contract through this RFP process; and
3. Have not received any compensation for assisting the Tennessee Department of Transportation in preparing this RFP.

---

**Proposer's Signature**

NOTICE: This affidavit MUST be signed by an individual empowered to contractually bind the Proposer. If said individual is not the chief executive or president, this document shall attach evidence showing the individual's authority to contractually bind the Proposer.

---

**Printed Name and Title of Signatory**

---

**STATE OF TENNESSEE**
**COUNTY OF _____**

Personally appeared before me,

_____

*[name of authorized signatory for the Proposer identified above]*
with whom I am personally acquainted, and who acknowledged that the statements contained in this affidavit are true to the best of his knowledge, information, and belief.

Witness my hand, at office, this _____ day of _____ 2023.

_____
**NOTARY PUBLIC**

My Commission Expires on: _____

**ACKNOWLEDGEMENT AND ATTESTATION (PARTNERSHIPS) FORM**

Date: _____ Page 1 of 1

By responding to this RFP, the Respondent(s) certify that he/she has reviewed the Construction Management/General Contractor Sample Contract, and its Exhibits contained herein, and are familiar with their terms and conditions and find them expressly workable without change or modification.

We certify and declare that the foregoing is true and correct.

Subscribed on _____ *Date* at _____ *City*,

_____ *County*, State of _____ *State*

1. _____ *Partner Signature* _____ *Printed Name*

2. _____ *Partner Signature* _____ *Printed Name*

Notary: _____ *Notary Signature* _____ *Date*

Commission Expires: _____

Note: Add additional signature(s) if there are more than two partners.

## ACKNOWLEDGEMENT AND ATTESTATION (JOINT VENTURE) FORM

Date: _____ Page 1 of 1

By responding to this RFP, the Respondent(s) certify that he/she has reviewed the Construction Management/General Contractor Sample Contract, and its Exhibits contained herein, and are familiar with their terms and conditions and find them expressly workable without change or modification.

We certify and declare that the foregoing is true and correct.

Subscribed on _____ (*Date*) at _____ (*City*),

_____ (*County*), State of _____ (*State*)

1. _____ (*Venture Partner*) _____ (*Binding Signature*) _____ (*Date*)

   _____ (*Printed Name*) _____ (*Title*) _____ (*Type of Business*)

   _____ (*Witness*) _____ (*Date*)

   _____ (*Printed Name*)

2. _____ (*Venture Partner*) _____ (*Binding Signature*) _____ (*Date*)

   _____ (*Printed Name*) _____ (*Title*) _____ (*Type of Business*)

   _____ (*Witness*) _____ (*Date*)

   _____ (*Printed Name*)

---

Please attach joint venture agreement.

Type of business shall identify the venture partner as a corporation, venture, partnership, sole proprietorship, or other legal entity.

Witnesses of venture partners shall be corporate secretary for corporations, partners for partnerships, and notaries for sole proprietorships.

Add additional venture partners as necessary.

**ACKNOWLEDGEMENT AND ATTESTATION (CORPORATE) FORM**

Date: _____ Page 1 of 1

By responding to this RFP, the Respondent(s) certify that he/she has reviewed the Construction Management/General Contractor Sample Contract, and its Exhibits contained herein, and are familiar with their terms and conditions and find them expressly workable without change or modification.

We certify and declare that the foregoing is true and correct.

Subscribed on _____ (*Date*) at _____ (*City*),

_____ (*County*), State of _____ (*State*)

_____ (*Corporate Officer Signature*) _____ (*Date*)

_____ (*Secretary*) _____ (*Date*)

Note: Use full corporate name and attach corporate seal here.

SEAL

**ACKNOWLEDGEMENT AND ATTESTATION (SOLE PROPRIETORSHIP) FORM**

Date: _____ Page 1 of 1

By responding to this RFP, the Respondent(s) certify that he/she has reviewed the Construction Management/General Contractor Sample Contract, and its Exhibits contained herein, and are familiar with their terms and conditions and find them expressly workable without change or modification.

We certify and declare that the foregoing is true and correct.

Subscribed on _____ *Date* at _____ *City*,

_____ *County*, State of _____ *State*

_____ *Respondent Signatur* _____ *Date*

_____ *Printed Name*

Notary: _____ *Notary Signature* _____ *Date*

Commission Expires: _____

# APPENDIX D: EVALUATION AND PROPOSAL FORMS

## PROPOSAL, ORAL INTERVIEW EVALUATION SCORING NOTES

i. TDOT has developed a CM/GC Selection Committee Scoring Guide to promote objectivity and transparency. Selection Committee Members are required to read and follow all scoring guidelines.

ii. Agencies are encouraged to include additional criteria that reflect the unique characteristics of the project under each category to help determine the submitter's overall qualifications.

iii. Weights are to be assigned prior to evaluation and are to be consistent on all evaluation forms.

iv. Selection Committee scoring values will be only numbers in whole number increments. Scoring for the SOI/Proposal and Oral Interview Criteria form will be based on the following Qualitative Assessment Guidelines, which will be applied to all sections except the CM/GC Pre- Construction Fee.

| **Qualitative Assessment Guidelines** | |
|---|---|
| Selection Committee members will individually review and score each proposal category according to the criteria set forth in the RFP. Committee members will evaluate each category sub-factor listed in this Evaluation Manual and assign those sub-factors a Qualitative Assessment Percentage according to the scoring range listed below: | |
| **90-100%** | The Proposer demonstrates a complete understanding of the subject and an approach that significantly exceeds the stated requirements and objectives of this scoring category. The proposal communicates an outstanding level of quality. The Proposer's qualifications are exceptional. Proposal shows no weaknesses or deficiencies for this scoring category. |
| **80-89%** | The Proposer demonstrates a strong understanding and has a strong approach to the scoring category. The proposal communicates a high level of quality, and the proposal exceeds the stated requirements of the RFP. The proposal shows few weaknesses or deficiencies for this scoring category. |
| **70-79%** | The Proposer demonstrates a general understanding of the project and an approach containing some weaknesses/deficiencies regarding the stated requirements and objectives of this project. The proposal communicates an average level of quality and meets the stated requirements of the RFP. |
| **60-69%** | The Proposer has demonstrated a below average understanding of this scoring category and their response contains significant weaknesses and deficiencies. The proposal communicates a below-average level of quality. The Proposer's qualifications raise questions about the Proposer's ability to successfully meet the project goals. |
| **0-59%** | The Proposer has demonstrated a minimal understanding of this scoring category and their response contains numerous weaknesses and deficiencies. The proposal demonstrates little or no level of quality or value. The Proposer's qualifications raise questions about the Proposer's ability to successfully meet the project goals. |

# TOTAL SCORING EVALUATION SCORING NOTES

1. The maximum point total for each of two evaluation sections is 100 points weighted by the following factors:

| **Section** | **Weight** | **Appendix D** |
|---|---|---|
| SOI/Proposal | 50% | Scoring Form A |
| Interview | 50% | Scoring Form B |
| Final Scoring Matrix | Total | Scoring Form D |

2. The score from the qualitative evaluations from all Selection Committee Members for each Proposal will be averaged to produce the total overall score for each Proposer. The Proposer with the highest aggregate score, and any other Proposer having a score within five percent (5%) of the highest score (where 5% is measured as a percentage of the highest score) will be identified as Tier 1 Proposers and recommended to the Commissioner in alphabetical order without any evaluation ranking. The Commissioner may select any Tier 1 Proposer.

TENNESSEE DEPARTMENT OF TRANSPORTATION
**SCORING FORM A: PROPOSAL SCORING CRITERIA**
STATEMENT OF INTEREST/PROPOSAL EVALUATION FORM
CONSTRUCTION MANAGER/GENERAL CONTRACTOR SERVICES

Name of Firm: _____ Project No.: _____

Evalulator No: _____ Date: _____

RFP Reference: Meets Minimum Requirements YES _____ NO _____

If the minimum requirements (including letter from surety) have not been met, specify the reason(s):

_____

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | **Project Management/Team Capability of the Contractor - 50 Points Maximum** | Rating | × | Weight | = | Score |
| | **Project Management Team** | | | | | |
| | Composition of Team/Location/Organization | | × | 0.05 | = | |
| | Job Descriptions and Responsibilities | | × | 0.01 | = | |
| | Qualifications and Experience | | × | 0.05 | = | |
| | Team Building and Collaboration | | × | 0.04 | = | |
| | References | | × | 0.02 | = | |
| | **Project Team Capability** | | | | | |
| | Prior Experience/Performance/References | | × | 0.14 | = | |
| | Project Background and Success | | × | 0.14 | = | |
| | Local Experience | | × | 0.05 | = | |
| | | | | **Subtotal** | = | |
| 2 | **Project Approach - 25 Points Maximum** | Rating | × | Weight | = | Score |
| | **Project Goals** | | | | | |
| | Firm Understands Project Goals | | × | 0.06 | = | |
| | **Project Approach** | | | | | |
| | Strategic Project Approach | | × | 0.13 | = | |
| | Safety | | × | 0.06 | = | |
| | | | | **Subtotal** | = | |
| 3 | **Project Innovations - 5 Points Maximum** | Rating | × | Weight | = | Score |
| | | | × | 0.05 | = | |
| 4 | **CM/GC Design Process - 20 Points Maximum** | Rating | × | Weight | = | Score |
| | Risk Management | | × | 0.04 | = | |
| | Decision Analysis and Resolution | | × | 0.04 | = | |
| | Cost Estimating | | × | 0.04 | = | |
| | Schedule Management | | × | 0.04 | = | |
| | Subcontractor Plan | | × | 0.04 | = | |
| | | | | **Subtotal** | = | |
| | | | | | Total Score: (A) (100 Points Maximum) | |
| | | | | | **Overall Weighted Score: 50% × (A) _____=** | |

TENNESSEE DEPARTMENT OF TRANSPORTATION
**SCORING FORM B: ORAL INTERVIEW SCORING CRITERIA**
ORAL INTERVIEWS STANDARD EVALUATION FORM
CONSTRUCTION MANAGER/GENERAL CONTRACTOR SERVICES

Name of Firm: _____ Project No.: _____

Evaluator No: _____ Date: _____

**Oral Interview Section** 100 Points Maximum, 40% Overall Weight

| Oral Interview Scoring Criteria | Rating | × | Weight | = | Score |
|---|---|---|---|---|---|
| Presentation Session | | × | 0.35 | = | |
| Team Challenge | | × | 0.30 | = | |
| Question and Answer Session | | × | 0.35 | = | |
| | Total Score (B) | | | = | |
| **Overall Weighted Score** | (B) | × | 50% | = | |

## Team Project Challenge(s):

1. _____
2. _____

## Questions Asked:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

TENNESSEE DEPARTMENT OF TRANSPORTATION

**SCORING FORM D: FINAL SCORE**

FINAL SCORING MATRIX
CONSTRUCTION MANAGER/GENERAL CONTRACTOR SERVICES

Project No.: _____

Evalulator No: _____ Date: _____

| **Firm Name** | **Minimum Requirements Met** | **SOI/Proposal Weighted Score** | **Oral Interview Weighted Score** | **Total Score** |
|---|---|---|---|---|
| | | | | |
| | | | | |
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TENNESSEE DEPARTMENT OF TRANSPORTATION

**FORM QR: RFP QUESTIONS**

RFP QUESTION REQUEST FORM QR

CONSTRUCTION MANAGER/GENERAL CONTRACTOR SERVICES

Name of Firm: _____ Project No.: _____

Date: _____

| **RFP Section ID** | **Question** | **Reserved for Agency Response** |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

# APPENDIX E: CONSTRUCTION GENERAL CONDITIONS

| | **Costs TO BE included in CM/GC Fee Percentage** | | **Costs NOT TO BE included in CM/GC Fee Percentage**[2] |
|---|---|---|---|
| **Item** | **Other indirect and non-reimbursable costs to be included are listed below** | **Item** | **Costs for the categories below will be negotiated and included in the direct "Cost of the Work"** |
| E001 | Project Principal – all costs | E101 | Mobilization |
| E002 | Cost Estimator services during Construction Phase –all costs[3] | E102 | Project Manager |
| E003 | Project Manager relocation, housing, and subsistence costs | E103 | Construction Manager/Superintendent |
| E004 | Construction Manager/Superintendent relocation, housing, and subsistence costs | E104 | All other on-site, construction management staff as approved by the Agency |
| E005 | Additional CM/GC staff relocation, housing, and subsistence cost | E105 | **On-site** administrative staff, including clerical and secretarial staff |
| E006 | Home, branch, district, and regional office administrative support staff, shared services staff, and all related costs | E106 | All project direct costs related to Safety |
| E007 | Home, branch, district, and regional office safety support staff and all related costs | E107 | All project direct costs related to Quality Control |
| E008 | Home, branch and regional office quality control support staff and all related costs | E108 | Project office costs for cleaning, set-up/demobilization, maintenance, security, utilities, rent/lease, equipment, and furniture |
| E009 | Profit | E109 | Materials and equipment handling, including shipping/transport to site and storage costs |
| E010 | | E110 | Job site temporary toilet facilities and maintenance |
| E011 | | E111 | Construction rental equipment |
| E012 | | E112 | Actual cost of permits |
| E013 | | E113 | All project direct costs related to implementation of Agency-approved DBE program |
| E014 | | E114 | Construction equipment and vehicles at Proposer's internal cost rate, including costs of maintenance and fuel **or** 75% of blue book value, whichever is less |
| E015 | | E115 | All costs related to cell phones, radios, fax machines, pagers, computers and software |
| E016 | | E116 | All costs of capital and interest; licenses and taxes required by law |
| E017 | | E117 | Miscellaneous project office costs, including but not limited to, drinking water, printing, reproduction, postage, delivery, and supplies |

[2]As per 2 CFR 200.450(c)(2)(v) and 2 CFR 200.413(f)(1), the Department will not pay for fees paid to groups who lobby, such as Tennessee Roadbuilders Association.

[3]Cost Estimator services during Pre-construction Phase are reimbursable as included in the Pre-construction Services Fee.

# APPENDIX F: REFERENCES

1. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) PUBLICATIONS (using latest approved versions):

   (a) A Policy on Design Standards-Interstate System
   (b) A Policy on Geometric Design of Highways and Streets
   (c) Guide for Design of Pavement Structures
   (d) Standard Specifications for Highway Bridges
   (e) Guide for the Design of High Occupancy Vehicle and Public Transfer Facilities
   (f) Guide for the Development of Bicycle Facilities
   (g) Standard Specifications for Transportation Materials and Methods of Sampling and Testing – Part 1, Specifications and Part II, Tests
   (h) Highway Design and Operational Practices Related to Highway Safety
   (i) Roadside Design Guide
   (j) AASHTO LRFD Bridge Design Specifications

2. TENNESSEE DEPARTMENT OF TRANSPORTATION PUBLICATIONS (using latest approved versions):

   (a) The Department Standard Specifications
   (b) The Department Supplemental Specifications
   (c) The Department Design Guidelines, and Addendum
   (d) The Department Construction Circular Letters
   (e) The Department Standard Drawings
   (f) Design Procedures for Hydraulic Structures 2004
   (g) Drainage Manual
   (h) Utility Manual
   (i) Change Orders
   (j) Force Account Work Orders
   (k) Written Orders and Authorizations Issued by the Department
   (l) All Other Programmatic Plans or any Other Documents
   (m) All Material Included by Reference in any of the above Documents
   (n) The Department Material and Test Standard Operating Procedures

3. FEDERAL PUBLICATIONS (using latest approved versions):

   (a) Manual on Uniform Traffic Control Devices
   (b) Highway Capacity Manual
   (c) FHWA scour publication HEC-18, FHWA publication HEC-21 or HEC-22;
   (d) Urban Transportation Operations Training – Design of Urban Streets, Student Workbook
   (e) Reference Guide Outline – Specifications for Aerial Surveys and Mapping by Photogrammetric Methods for Highways
   (f) FHWA Federal-Aid Policy Guide
   (g) Technical Advisory T6640.8A
   (h) U.S. Department of Transportation Order 5610.1E

(i) Geometric Geodetic Accuracy Standards and Specifications for Using GPS Relative Positioning Techniques

(j) ADAAG Americans With Disabilities Act Accessibility Guidelines

(k) Roundabout Design Guide

4. MISCELLANEOUS PUBLICATIONS AND STANDARDS

(a) ASTM

(b) Electronics Industries Alliance (EIA)

(c) Roadway Lighting, ANSI Approved RP-8-00 - Illuminating Engineering Society of North America

(d) Life Safety Code - National Fire Protection Agency (NFPA)

(e) National Electric Code - National Fire Protection Agency (NFPA)

(f) U.S. Army Corp of Engineers

(g) National Transportation Communications for ITS Protocol Standards (NTCIP)

# APPENDIX G: DEFINITIONS

| | |
|---|---|
| AASHTO | American Association of State Highway & Transportation Officials |
| ADT | Average Daily Traffic in Number of Vehicles |
| ADAAG | Americans with Disabilities Accessibility Act Guidelines |
| CATEX | Categorical Exclusion |
| CONSULTANT | Design Consultant for this project |
| CONTRACTOR | The selected Proposer that has ranked as a Tier 1 Proposer in the Technical Proposal and Interview Sections of the selection process and has been selected for the award of contract for pre-construction services |
| D/PM | Design Project Manager – The lead Design Consultant engineer responsible for combining the various inputs in the process of completing the project plans and managing the consultant design effort |
| CMGC/PM | Contractor Project Manager – The Contractor's Project Manager on this project will oversee and coordinate all pre-construction and construction phase services of the CM/GC |
| CM/GC | Construction Manager/General Contractor is the firm responsible for completing all CM/GC services on this project |
| DBE | Disadvantaged Business Enterprise |
| EA | Environmental Assessment |
| EIS | Environmental Impact Study |
| FHPG | Federal Aid Highway Policy Guide |
| FHWA | Federal Highway Administration |
| FONSI | Finding of No Significant Impact |
| GMP | Guaranteed Maximum Price |
| GPS | Global Positioning System |
| ICE | Independent Cost Estimator/Estimate |
| Limit of Construction Cost | The limit of actual cost of construction that includes construction services staff, profit, overhead, labor, materials and equipment, mobilization, and all other costs of the actual construction of the work |
| MPO | Metropolitan Planning Organization |
| MS4 | Municipal Separate Storm Sewer System |
| NEPA | National Environment Policy Act |
| NGS | National Geodetic Survey |
| NOAA | National Oceanic and Atmospheric Administration |
| OPCC | The Opinion of Probable Construction Cost is the actual construction cost to the CM/GC to build all aspects of a 100% Plans, Specifications, and Estimate Package. These are required at established milestones for each phase, procurement, or construction package. |
| PE | Professional Engineer registered in Tennessee |
| PEIS | Programmatic Environmental Impact Statement |
| PM | Project Manager |
| PIH | Plan-In-Hand, 60% Right of Way Plans |
| PLS | Professional Land Surveyor registered in Tennessee |
| PS&E | Plans, Specifications and Estimate; 90% Construction Plans |
| PROJECT | The work defined by a scope of work. |
| PROPOSER | Firm or Joint Venture submitting a statement of interests and proposal for consideration |
| ROW | Right-of-Way: A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to a highway |
| TDEC | Tennessee Department of Environment & Conservation |

# Definitions[4] cont.

| | |
|---|---|
| TDOT/PM | Tennessee Department of Transportation Project Manager – The TDOT Civil Engineer who is responsible for the day-to-day direction and Design Consultant coordination of the design effort, and responsible for the satisfactory completion of the contract by CM |
| TOPOGRAPHY | In the context of TDOT plans, topography normally refers to existing cultural or man-made details |
| USCOE | United States Army Corp of Engineers |

[4]This list is not exhaustive of all definitions used in this RFP. For other definitions and terms, refer to Section 101 of the TDOT Standard Specifications for Road and Bridge Construction and the TDOT Design Guidelines.