

Design-Build (DB) Procurement Best Practices

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Document Purpose

The purpose of the *Design-Build (DB) Procurement Best Practices* is to detail the Tennessee Department of Transportation's (TDOT's) processes and practices for procuring, evaluating, and awarding a design-build proposer via the design-build (DB) delivery method.

This guideline opens with a brief discussion on how to identify a project as a candidate for DB delivery (Chapter 2). However, the focus of the guideline is on the pre-procurement development details (Chapter 3) and related development and evaluation for a request for qualification (RFQ; Chapter 4) and request for proposal (RFP; Chapter 5). The guideline concludes with the award process for a DB contract and a segue (in Chapter 5) to the previously published *Design-Build Standard Guidance* that details how to administer the design and construction phases for a DB project.



Who will use this Document?

This guideline is written primarily for TDOT staff responsible for developing DB procurement documents and evaluating statements of qualifications (SOQs) and proposals – all to award a DB contract to the best evaluated proposer. This guideline may also be used by other TDOT personnel, consultants, and contractors to better understand TDOT's DB procurement and evaluation process.

How will the Document be Updated?

This guideline is a compilation of best practices gathered from DB projects that TDOT and other transportation agencies have delivered. TDOT may revise any part described herein, with or without notice. This guideline is a living document that evolves as TDOT's alternative delivery program progresses and as TDOT further identifies agency-specific best practices.



1 Introduction

This Chapter 1 provides an overview of the design-build (DB) delivery method, including the current state of best practices, established laws and regulations, and a comparison of the DB method to that of traditional design-bid-build (DBB).

1.1 Background

The Tennessee Department of Transportation (TDOT) has a variety of project delivery methods available to deliver its construction program; one of these methods is DB delivery.

At the highest level, DB delivery is an alternative contracting method where TDOT executes a single contract with a design-builder to design and construct a project. As part of delivery, TDOT develops project-specific procurement and contract documents (via a request for qualifications [RFQ] and request for proposal [RFP]) using performance specifications to convey project obligations that the design-builder considers when pricing and ultimately completing the project. The DB method is also intended to allow flexibility when implementing innovative solutions consistent with TDOT's goals and objectives.

During the procurement phase, TDOT works to clearly define the project's performance objectives, TDOT-defined design parameters, and an initial concept (the "base technical concept") that a proposer then references to develop both a technical proposal and lump-sum, fixed-price bid to complete the project's design and construction phases.

1.2 Federal Laws, State Laws, and Regulations

This section covers federal and state laws/regulations guiding the DB procurement process in Tennessee.

1.2.1 Federal Authority and Requirements

Beginning in 1998, with the enactment of the Transportation Equity Act for the 21st Century (TEA-21), and as further amended under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005, Title 23, Section 112, of the United States Code (U.S.C.) has authorized State transportation departments to use design-build contracting, if authorized under State law, as a method for delivering federal-aid highway projects (23 U.S.C. § 112(c)).

In turn, the Federal Highway Administration (FHWA) has promulgated regulations, codified in Title 23, Part 636, of the Code of Federal Regulations (CFR) that describe FHWA's policies and procedures for approving all DB projects funded under Title 23 of the United States Code.



1.2.2 State Authority and Requirements

Beginning in 2007, with the enactment of 2007 Public Chapter 274, Tennessee State law has authorized TDOT to use DB as a contract delivery method pursuant to Tennessee Code Annotated (TCA) 54-1-119. In turn, TDOT has promulgated rules, codified in Chapter 1680-05-04 of the Tennessee Secretary of State's Official Compilation of Rules and Regulations, to establish procedures for the selection and award of DB Contracts.

1.2.3 Limitations

The following limitations are noted in the current TCA.

- If the proposed DB contract has a total estimated contract amount exceeding \$100 million, TDOT must identify the project as a proposed DB project in the transportation improvement program, submitted annually to the Tennessee General Assembly in support of the Commissioner's annual funding recommendations (TCA § 54-1-119(f)).
- TDOT may not let/advertise more than 28 alternative delivery projects (DB, construction manager/general contractor [CM/GC], and progressive design-build [PDB]) each year when the funding originates from the State Highway Fund (TCA §§ 54-1-601 and -602).

1.3 Comparison of DB and Design-Bid-Build (DBB)

Project delivery is a process by which a project is comprehensively designed, procured, and constructed. The steps to complete a project typically include:

- Defining the project's scope,
- Considering methods to complete the project,
- Sequencing design and construction operations, and
- Executing the design and construction work.

Different delivery methods are distinguished by how contractual relationships among TDOT, its designers, and its contractors are formed and defined in the contract(s). This section provides an overview and comparison of two delivery methods –DB and the more traditional DBB method. The contractual relationship for these two methods is depicted on Figure 1-1.

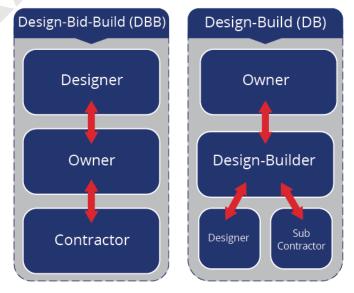


Figure 1-1. Contractual relationships for DBB vs. DB



1.3.1 Design-Bid-Build (DBB)

DBB has been, and continues to be, TDOT's most used delivery method. Most TDOT staff members are knowledgeable of the DBB process and familiar with how it works, including the linear nature of the planning, preconstruction (i.e., design), and construction phases. Under this delivery method, TDOT staff (or a consultant) designs a project and creates the construction plans.

When the construction plans and specifications are complete, TDOT solicits competitive bids from prequalified construction contractors. Typically, the lowest responsive and responsible bidder is awarded the contract, and construction then occurs under TDOT oversight. TDOT allocates most of the responsibility for risk and change management to itself when using this delivery method.

1.3.2 Design-Build (DB)

In DB, TDOT procures a single entity (a design-builder) to complete both a project's design and construction phases (and may include completing right-of-way acquisitions, securing the project's environmental permits, and coordinating utility relocations). Using 1) TDOT's concept design/base technical concept (BTC), 2) the defined technical (i.e., project-specific) performance specifications, and 3) contractual risk allocation, the design-builder designs and builds the project in compliance with the contract requirements, all while integrating innovative solutions consistent with the TDOT's project goals and contractual risk allocation.



2 Project Selection Process

This Chapter 2 provides an overview of the process used to select design-build (DB) to deliver a project. Determining the most appropriate delivery method starts with developing and reviewing a project's goals and risks and considering the project's schedule and TDOT's available resources to manage the chosen delivery process.

In general, DB projects place a unique demand on 1) internal TDOT staff (both Alternative Delivery staff and typical design leads) and 2) Owner's Representative support staff (recommended to be used on complex, high-value projects). This is especially a constraint considering the method's more involved contract procurement and administration demands balanced against the design-builder's fast-paced design and construction schedule.

Throughout the procurement process, the engagement level of internal TDOT staff and the Owner's Representative is very involved when:

- Developing the initial design (the base technical concept/BTC),
- Advancing needed preliminary engineering work, and
- Preparing the DB procurement documents (i.e., the request for qualifications [RFQ] and request for proposal[RFP]).

Once awarded, TDOT's role shifts to that of compliance review, charged with ensuring the design-builder's design and construction work adheres to the contract requirements. This role typically requires considerable discipline-specific staffing throughout the fast-paced design phase and well into construction. This compliance role can be staffed by either TDOT internal discipline leads or as assigned to an Owner's Representative.

While TDOT Alternative Delivery staff remains engaged throughout a DB project's duration, TDOT leads for environmental permitting, utility coordination, and right-of-way acquisitions/relocations are still very much involved in the administration phase until their respective work is complete (i.e., permits have been received, all utilities have been put to work and completed their adjustments, right-of-way is fully acquired, etc.)

2.1 General Guidelines for Considering Design-Build (DB)

Not all projects can and should be delivered under the DB delivery method. There are pros (advantages) and cons (disadvantages) to delivery considering a variety of factors.



2.1.1 Cost

When considering cost, DB delivery may yield the following **advantages**:

- TDOT can be assured it is receiving a fair price due to competitive bidding.
- TDOT has cost certainty at the time of award (e.g., typically fewer change orders) because the design-builder prices known project requirements and assumes cost for unknowns early in the design stage.
- Cost savings are realized via alternative technical concepts (ATCs) from losing proposers who receive a stipend.

However, DB may lead to the following **disadvantages** regarding cost:

- There is an increase in cost to transfer risk and other contractual requirements to the design-builder, who prices that risk when bidding.
- TDOT pays for development of the proposals from multiple unsuccessful designbuilders via stipends.
- TDOT pays for design-builder to potentially have to redesign the BTC during its proposal and for its first submittal of the Line and Grade Package/plans in the design phase.
- TDOT pays for increased internal and consultant/Owner's Representative staffing costs to administer the procurement and then design and construction phases.

2.1.2 Schedule

DB may yield the following **advantages** regarding schedule:

- There is a higher probability of completing early or on schedule because the design-builder knows and accepts the schedule risks associated with its design, quantities, and means and methods (i.e., constructability).
- There is a potential for a shorter project schedule due to parallel design and construction activities.

However, DB may lead to the following **disadvantages** regarding schedule:

• The preparation of an RFQ/RFP and evaluation of proposals takes considerable time.

2.1.3 Opportunity to Manage Risk

DB may yield the following **advantages** regarding the opportunity to manage risk:

- The project may have fewer change orders because the design-builder owns the risks associated with its design, its quantities, and how it executes its work (i.e., its means and methods and constructability).
- TDOT may allocate risks best managed by the design-builder because the design-builder's design and construction approach are tailored to its abilities.

However, DB may yield the following **disadvantages**, including:

• Fewer bidders proposing because of increased proposal costs.



- An inappropriate transfer of risk to the design-builder that TDOT is more capable of managing (e.g., right-of-way acquisition, obtaining needed permits). (See Chapter 3 for more details on risk allocation.)
- Less innovation as the design-builder may not introduce new construction means, methods, or techniques to avoid taking on risk.

2.1.4 Complexity of Design and Construction Phasing

For project complexity, DB may yield the following **advantages**:

- The design-builder is best positioned to understand and apply its expertise to manage complexity, potentially improving constructability and reducing errors and change orders.
- TDOT gains the benefit of innovative ideas to reduce the project's overall complexity,
 which is then integrated early in the design stage, where it most significant for change.

However, DB may yield TDOT the following **disadvantages**:

- TDOT has less control of the design and its implementation, leaving management of a project's complexity in the design-builder's control.
- TDOT may incur unexpected cost and schedule delays due to the difficulty in scoping the unique issues and complexities of a project.

2.1.5 Opportunity for Innovation

For innovation, DB may yield TDOT the following **advantages**:

• TDOT gains the benefit of proposer-derived ideas being introduced in the procurement phase for evaluation and then early in the design process for implementation.

DB may yield TDOT the following disadvantages:

- The opportunity to fully innovate may be limited by proposers' abilities, comfort, and time constraints to respond to an RFP.
- Post award, TDOT may not realize full savings from innovations because these saving usually accrue (at least in part) to the contractor via design and construction optimization or value engineering change proposals (VECPs). (See Chapter 2 of TDOT's Design-Build Standard Guidance for more information on VECPs.)

2.2 Project Goal Setting

An understanding of project goals, objectives, or desired outcomes is essential to selecting the appropriate delivery method, and contractors, consultants, and others reference these goals when preparing their proposals and in guiding the project through the design and construction phases.

For significant transportation projects, a best practice is to establish the goals early in the project development process, prior to selecting the delivery method. Using a goal setting



workshop, participation or concurrence with setting the project goals should include TDOT Executive Staff, in addition to the following representatives:

- Director of Alternative Delivery
- Regional Alternative Delivery Manager
- TDOT Project Manager
- TDOT specialty area staff
- Key stakeholders¹
- Funding partners²

It is good practice to use a project's purpose and need established in Stage 0 of the Project Delivery Network (PDN) to start the dialogue on potential goals. From there, the primary project goals can be divided into smaller objectives, prioritized to direct the DB Project Team on making decisions.

Specific to each project, it is good practice to have the goals remain consistent throughout the selection, design, and construction phases. Ideally, Led by the TDOT Project Manager, the **DB Project Team** consists of the TDOT discipline leads and Owner's Representative, who help develop the request for proposal (RFP), base technical concept (BTC), applicable reference documents, and the estimate and procurement/project schedule.

the number of goals should be limited to three to five (optimally four) and could be based on:

- Schedule (completing the project by a specific date, completing project phases within a specified timeframe, starting construction by a specified date, minimizing the project delivery timeframe).
- Budget (completing the project on budget, maximizing project scope and improvements with the project budget, minimizing project cost).
- Quality (meeting or exceeding project requirements, selecting the most qualified or best value organization to perform the work and to best address project complexity).
- Scope (completing the project to meet functional objectives and outcomes, maximizing a life-cycle's performance, providing innovative solutions, or minimizing inconvenience to the traveling public during construction).
- Risk (providing a design or construction approach that minimizes known, established project risk and enables TDOT to transfer, share, and manage those risks).
- Safety (maximizing safety of the workers and traveling public during construction, providing a design to maximize safety).

¹ Oftentimes, transportation projects include significant stakeholder interests beyond TDOT. In these cases, it is good practice to include relevant stakeholders in the goal setting process.

² To ensure that funding is available for each work package, it is particularly vital to include funding partners in the development of the project goals.



2.3 Identifying and Analyzing Risk

"Risk" is defined as an uncertain event or condition that, if it occurs, has a negative or positive (in the case of an opportunity) effect on a project's goals and objectives. It is good practice to have an initial assessment of project risks prior to selecting the delivery method. If DB is selected, continued risk analyses (i.e., assessment, allocation, and mitigation) are critical elements for both project and contract development throughout the procurement phase.

The TDOT Project Manager, with support of the DB Project Team, identifies and assesses potential risks and preferred risk allocation, building on any previous work completed during Stage 0 of the PDN. As the procurement progresses, the DB Project Team continues to draft and refine strategies to avoid/mitigate impacts to schedule and/or cost, in addition to maximizing opportunities that will add value to the project. Any adjustments are updated in the RFP to reflect revised risk allocation strategies for the design-builder to understand and bid accordingly.

2.4 Project Delivery Recommendation Process

The evolution of alternative contracting methods, such as DB or construction manager/general contractor (CM/GC), has made it important to evaluate projects early in their development to determine the most beneficial delivery method. TDOT has developed a structured Project Recommendation Tool Worksheet (PRTW) to assess the most appropriate delivery method for a project. The use of a PRTW as part of the recommendation process is optional, but highly encouraged. The Director of Alternative Delivery may choose to forego the PRTW approach and simply develop a memo summarizing the project delivery recommendation.

The PRTW is typically prepared during a formal workshop, with workshop participants being selected by the Director of Alternative Delivery. The Regional Alternative Delivery Manager, as overseen by the Director of Alternative Delivery, leads the workshop and develops the project delivery recommendation. The Regional Alternative Delivery Manager (and TDOT Project Manager assigned to the project) are to participate in the workshop.

The primary objectives of the PRTW are to:

- Present a structured approach to assist TDOT in making project delivery decisions,
- Assist TDOT in determining if there is a prevailing or obvious choice for project delivery, and
- Provide transparency by documenting TDOT's rationale for selecting a particular delivery method in the form of a project delivery recommendation based on the PRTW.



If a formal PRTW is not used, TDOT should base its decision to use DB for project delivery considering guidance outlined herein and in compliance with Tennessee Code Annotated (TCA) 54-1-119 and TDOT Rule 1680-5-4.

2.5 Project Delivery Selection Approvals

After the project delivery recommendation has been completed, the Director of Alternative Delivery presents the results of the PRTW (if used) and/or the recommendations to TDOT's Executive Staff for concurrence.

2.5.1 Legislative Approvals

The TCA does not require TDOT to obtain any specific legislative approvals for selecting or awarding a DB contract except when the total estimated contract amount exceeds \$100 million, as required in TCA § 54-1-119(f).

However, the Commissioner is required to send written notice to the chair of the transportation and safety committee of the senate and the chair of the transportation committee of the house of representatives prior to executing a design-build contract (TCA 54-1-119(e)). To ensure timely compliance with this requirement, it is good practice to send this notice at the time of selecting DB for project delivery, rather than when the DB contract is ready for execution/award.

2.5.2 Federal Highway Administration (FHWA) Approval / Concurrence

When considering a DB project with federal funding or oversight, TDOT must comply with 23 CFR Part 636, Design-Build Contracting, which outlines the requirements (including FHWA approvals) specific to federally funded DB projects. FHWA and TDOT also have a Stewardship and Oversight Agreement that outlines the roles and responsibilities between the agencies on federal-aid projects. Federally funded DB projects are to follow the processes and procedures outlined in the Stewardship and Oversight Agreement and as described in this guideline.

Table 2-1 provides an overview of the processes and procedures for involving FHWA on federally funded DB projects.



Table 2-1. Overview of FHWA Involvement on a DB Project

| Section | on Work Activity | | |
|----------------------------------|---|-----------------|---------------------|
| Section | | TDOT Action | FHWA Action |
| | Procurement of Design-Build | der | |
| RFQ and RFP Development Meetings | | Invite | None |
| RFQ Authorizat | ion/Publication | Prepare/Approve | None |
| RFP Authorizati | on/Publication | Prepare/Approve | None ¹ |
| RFQ and RFP CI | arifications and Addenda | Prepare | Consult |
| Re-issuing a Pro | ocurement | Prepare | Concur |
| Cancelling a Pro | ocurement | Notify | None |
| | Evaluation of Design-Build Prop | oosers | |
| Proposal Evaluations | | Invite | Observe (if |
| Proposal Evalua | ations | mvite | desired) |
| Short-Listing | | Prepare | None |
| | Award of a Design-Build Cont | ract | |
| Awarding a Cor | ntract | Prepare/Approve | Concur |
| Debriefing | | Invite | None |
| | Administration of a Design-Build | Contract | |
| Proceeding witl | n Preliminary Design Work under a DB Contract | Notify | Concur |
| At-Risk Final De | sign Prior to NEPA Completion | Notify | Concur ¹ |
| Authorization o | f Construction Funds | Prepare | Concur |
| Terminate DB 0 | Contract | Notify | None |
| Use another pr | ocurement process | Notify | Concur |

¹ Per 23 CFR § 636.302(a), where the contracting agency (TDOT) elects to release the final RFP and award the design-build contract before the conclusion of the NEPA process but wishes to use federal-aid highway funds for final design and construction activities, the contracting agency's finding of price reasonableness is subject to FHWA concurrence. However, TDOT's standard practice is to wait until the environmental process is complete before issuing a final RFP.

Additional Federal Requirements

FHWA's typical contracting requirements (e.g., Form FHWA-1273, Buy America, DBE goals, etc.) apply to the contract if project construction is federally funded.



3 Procurement Process: Base Technical Concept Development

Developing the base technical concept (BTC) is the first step in the procurement process, where the DB Project Team works to:

- Develop the initial project concept (the BTC),
- Gather information helpful for the designbuild proposers and TDOT to allocate risk, and
- Establish the initial scope, schedule, and budget to inform the subsequent request for qualifications (RFQ) (see Chapter 4) and request for proposals (RFP) (see Chapter 5).

TDOT typically leads the following two phases to progress through the process.

The **base technical concept (BTC)** is the project's design concept provided in the RFP upon which the design-build proposers develop their technical and price proposals, and may include the roadway alignment, preliminary designs, interchange configurations, etc.

- Phase 1: Shortlisting, which includes issuing an RFQ that establishes minimum design-build (DB) team and key personnel qualifications. Prospective teams submit statements of qualifications (SOQs) in response to the RFQ. TDOT then evaluates the SOQs according to the RFQ's evaluation criteria to shortlist the most qualified teams to move into Phase 2.
- Phase 2: Design-Builder Selection, which involves issuing an RFP to all shortlisted proposers. Each proposer submits a separate technical and price proposal in response to the RFP. TDOT then evaluates the technical proposals and scores the price proposals to determine the best evaluated proposer in accordance with the RFP, Tennessee Code Annotated (TCA), and TDOT Rules.

TDOT also has the option to procure a design-builder using a one-phase RFQ/RFP (a "single phase selection process"). While this guideline does not specifically describe the single-phase selection process, TDOT does have examples of an RFQ/RFP using a single phase for reference (which includes the RFP books defined in Chapter 5).

Concurrent with either a single or two-phase process, TDOT develops the following documents, engineering work, and plans to complete the BTC and to prepare for the industry-facing procurement process.



3.1 Developing the BTC and Completing Necessary Preliminary Engineering Work

Prior to releasing an RFQ and RFP, TDOT advances the project's BTC in line with its preliminary engineering efforts to create an equivalent level of design to that of the Line and Grade Package (see 1RD1 of the Project Delivery Network [PDN] for more information).

As led by the TDOT Project Manager, it is good practice for the DB Project Team (which includes TDOT discipline leads and the Owner's Representative) to review the current list of project risks and unknowns (see Section 3.3) when determining what portions of the plans should be advanced and what additional data should be gathered to reduce TDOT's exposure to change and increased bid pricing for the proposers.

The following is a list of typical considerations and general risk sharing philosophy for delegating cost and time responsibilities to the party best able to mitigate (or manage) impact from the change.

- Geotechnical: It is good practice for TDOT to identify known geotechnical risks inherent to the BTC, and on a project-by-project basis, TDOT may complete strategic geotechnical investigations (e.g., borings and soils testing) to report on soil and geological conditions at the boring locations. Although the final Soil and Geology report is completed by the design-builder, TDOT should consider developing a draft Soils and Geology report (see 2GT1 in the PDN for more details) to help the proposers better quantify risk and potential costs related to geotechnical conditions.
- Right-of-way: TDOT may elect to set and begin the acquisition of any right-of-way (including easements) needed to construct the BTC, where it provides right-of-way availability dates in the RFP.

If a proposer's design requires additional right-of-way not previously identified by TDOT, the proposer includes that request as part of an alternative technical concept (ATC).

An **alternate technical concept (ATC)** is an alternative to the BTC, which

promotes innovation and is equal or better in quality or effect, as determined by TDOT, and which has successfully been used elsewhere under comparable circumstances.

And, if approved (and selected as the design-builder), the proposer is responsible for the cost and time to acquire the additional right-of-way.

As applicable, TDOT should weigh the benefits of any ATC requesting additional right-ofway considering the cost and benefit, as compared to the potential acquisition delays or complications (even despite the cost and schedule risks being borne by the designbuilder).



- Environmental Permits (e.g., TDEC 401, USACE 404/408 permits): It is good practice for TDOT to prepare the agency application and secure the listed environmental permits needed to construct the BTC, providing availability dates in the RFP.
 - If a proposer's design alters (i.e., increases) impacts to the project's permittable features (e.g., streams/ephemerals, wetlands), the proposer is responsible for the cost and time to redesign the mitigation layout, secure needed credits, and/or resubmit the application to the agencies.
- **Utility Coordination and Relocations:** Typically, the design-builder bears the cost and time for utility coordination and relocations because it is responsible for developing the plans for each specific utility impacted by the design-builder's design.

However, during this initial phase, TDOT may be able to reduce project risk and related costs by:

- Starting earlier coordination with all known utilities (see 1UT1 in the PDN),
- Gathering and releasing utility information of the project area as either information only or "reliable" reference documents (e.g., utility as-builts, a reliable utility conflict matrix, defined utility design and construction requirements),
- Conducting subsurface utility investigations (SUE) to depict a more complete picture of utility locations (considering both horizontal and vertical locates), and
- In limited circumstances, completing early relocations for utilities with long-lead material procurement times or known schedule delays.
- **Railroad:** Typically, the design-builder bears the cost and time for railroad coordination as it is responsible for developing the plans to be sent to any railroad impacted by the design-builder's design.

However, during this initial phase, TDOT may be able to reduce project risk and cost by:

- Beginning coordination with the impacted railroad using the BTC,
- Entering into a preliminary railroad engineering agreement to be used for forthcoming design reviews, and/or
- Providing the proposers assumed terms and conditions of any forthcoming railroad construction agreements.
- Design-builder driven changes: The design-builder is responsible for any cost and time impacts caused by its changes to the design, with the exception of changes to the basic project configuration as directed by TDOT.

Exhibit 1 summarizes a *starting point* for potential contractual risk allocation to be modified for each project. The DB Project Team and the Regional Alternative Delivery Manager (with concurrence from the Director of Alternative Delivery) should consider the factors listed above and those detailed in the *Design-Build Standard Guidance* when developing contract-specific risk allocations for Book 2 (Design-Build Contract) and Book 3 (Project Specific Information) discussed further in Chapter 5.



3.2 Creating and Updating a Project/Procurement Schedule

The TDOT Project Manager, in coordination with the DB Project Team, develops and maintains a procurement and project schedule to document major activities and milestones related to:

- PE-NEPA (PE-N) and ROW incidentals and utility coordination funding
- BTC development
- RFQ release
- SOQ submittal due date
- Shortlist notification
- PE-Final Design (PE-D) and ROW/utility funding request
- RFP release
- Question and response deadlines (notably for requests to add to the qualified product list)

- Final date for alternative technical concept (ATC) submittals
- Price and technical proposal due date(s)
- Award of the design-build contract
- Design-builder's initial notice to proceed
- Design phase start date (after the postaward meeting)
- Construction phase start date
- Substantial completion

The procurement/project schedule is helpful for determining the best time to initiate the design-builder's work and overall calendar or working days to complete the project.

The TDOT Project Manager provides a status on the schedule using Project Online (POL) on a reoccurring timeframe (e.g., bi-weekly), or when significant changes occur, to inform the Regional Alternative Delivery Manager and Director of Alternative Delivery on project progress.

If delays arise, the TDOT Project Manager coordinates any needed recovery with both the DB Project Team (to manage day-to-day delays) and the Regional Alternative Delivery Manager (or the Director of Alternative Delivery) to manage larger schedule adjustments—all to communicate overall schedule expectations as transparently as possible.

3.3 Conducting a Project-Specific Risk Analysis

Risk analysis (i.e., risk assessment, allocation, and mitigation) is a critical element for both project and RFP/contract development throughout the procurement process. The TDOT Project Manager, with support from the DB Project Team and Regional Alternative Delivery Manager, identifies and assesses potential risks and preferred allocation, building on any previous work completed during the identification phase and consistent with the PDN and TDOT *Risk Management Guide*. As the procurement progresses, the team continues to identify and refine strategies that avoid/mitigate impacts to schedule and cost, in addition to maximizing potential opportunities that add value to the project.



3.3.1 Risk Assessment

The TDOT Project Manager may coordinate and facilitate risk discussions to identify, assess, and preliminarily allocate cost and schedule impacts specific to the party and specific to the project. Initiating the risk assessment early provides valuable information for developing the procurement documents, notably Book 2 and 3 of the RFP. While timing may depend on the level or advancement of the BTC, projects that have advanced through the environmental (NEPA or TEER) process should be ready for a detailed risk assessment (see Section 3.7 for additional information).

Based on the findings developed, TDOT generates a risk register (using the template from the TDOT *Risk Management Guide*) to document the discrete risks and opportunities and to establish an overall approach to mitigate the listed items. Cost estimates can be completed for projects of certain thresholds, with the TDOT *Risk Management Guide* providing additional guidance for consideration.

3.3.2 Value Engineering Analysis

Title 23 U.S.C. § 106(e)(5) and 23 CFR § 627.5(e) exempt DB projects from value engineering (VE) requirements because the DB method incorporates value engineering concepts using the ATC process, competitive procurement, and terms of the RFP/contract. However, the team should still consider opportunities to add value throughout the procurement process. This focus is also carried into any value engineering change proposals (VECPs) considered during the DB design and construction phases.

3.4 Establishing and Updating the Project Estimate

Early establishment and continual tracking of project cost is critical to understand current budget status and to provide needed data to analyze a delivery's value. With preference for a "bottoms-up" estimate or use of the estimating procedures for the Line and Grade Package in 1PM5 of the PDN, the Owner's Representative develops the cost estimate(s) for the BTC. As reviewed by the TDOT Project Manager and approved by the Regional Alternative Delivery Manager and the Director of Alternative Delivery, the budget is updated throughout the procurement process until the last addendum of the RFP.

3.4.1 Estimate Details

The TDOT Project Manager compiles and updates the cost estimate consistent with typical, full program DB delivery costs, which include costs for:

- Engineering (TDOT internal and Owner's Representative),
- Construction support/augmentation for construction engineering and inspection (CEI),



- Stipends to unsuccessful proposers,
- Utility relocations for in-contract or Chapter 86-eligible utilities,
- Right-of-way and easement acquisitions,
- Environmental permitting and mitigation, and
- Design-builder administration, project management, design, and construction work.

3.4.2 Analysis Considerations

It is good practice to account for any cost savings that may result from a shorter project schedule, a common characteristic of a DB project. Example cost savings for an accelerated completion date could include reduced user costs and reduced inflation/escalation costs.

The TDOT Project Manager should also separately track any anticipated costs associated with DB-specific risk allocations or anticipated savings due to project innovations (e.g., ATCs or VECPs). Tracking these elements allows for a quantitative value of risks and opportunities during preparation of the risk register. The TDOT Project Manager should also account for any stipend amount payable as part of the DB procurement in the cost estimate (see Section 3.8 for additional details).

3.5 Preparing a Project Management Plan (PMP)

It is good practice to prepare a concise and tailored Project Management Plan (PMP) consistent with the requirements outlined in 2PM1 of the PDN, including:

- A communication and document control plan (for internal and external file sharing),
- Quality plan and commitments defining the team's review roles and responsibilities for all documents sent to TDOT and released to the proposers or the public,
- The overall procurement and project schedule, including procedures to manage and update the schedule, and
- Current scope and budget considerations that account for all program costs listed in Section 3.4.

The PMP also identifies the roles and responsibilities of the DB Project Team during the procurement process (including contact information and organizational charts).

As a living document, the TDOT Project Manager updates (and the Regional Alternative Delivery Manager or the Director of Alternative Delivery approves) the PMP throughout the procurement process and design/construction phase, as needed.

3.5.1 FHWA Major Projects

While not anticipated due to TDOT's "pay as you go" funding approach, TDOT may have opportunities to advance projects that rise to the level of a "Major Project" as defined by FHWA (over \$500M) or TDOT may be assigned a risk-based involvement project (as identified by



FHWA). In either instance, TDOT is to prepare its project-specific PMP compliant with FHWA guidelines/requirements.

3.6 Programming the Project

DB projects can be programmed using federal, state, local, and/or combination of funding sources. While TDOT does not currently have a formal process for programming and obligating DB project funding, TDOT follows its internal process and federal requirements as summarized herein and further detailed in 1PM1 of the PDN.

- **Prior to developing the BTC and RFQ:** Request preliminary engineering/NEPA (PE-N) funds (and right-of-way incidentals and utility coordination funds).
- Prior to release of the RFP (and after the environmental clearance): Request Preliminary Engineering Final Design (PE-D), right-of-way acquisition/utility relocation, and construction funds.

3.7 Environmental Clearance Requirements

Although TDOT's approach is to obtain environmental clearance (either via a TEER or NEPA document) *before obligating funding and releasing the RFP*, TDOT may consider releasing the RFQ prior to the environmental clearance. The RFQ provides template language for document release when the environmental document is not complete.

3.8 Establishing a Stipend Amount

The intent of a stipend is to encourage competition and higher quality proposals. At the time DB is selected as the delivery method, TDOT may elect to use a stipend in accordance with TDOT Rule 1680-05-04-11 and the following considerations.

Stipend means a monetary amount that may be paid to unsuccessful design-builder proposers who have submitted responsive proposals in response to an RFP.

3.8.1 Stipend Considerations

TDOT anticipates using a stipend for all projects that use a two-phase procurement process, where an RFQ and shortlisting is followed by an RFP and proposal submittals. Under the single-phase process, TDOT may provide a stipend on a case-by-case basis. TDOT may also elect to use the two-phase procurement process and not offer a stipend based on TDOT's analysis of the estimated proposal development costs, the complexity of the project, and the anticipated degree of competition (see Table 3-2 for more information).

If a stipend is paid, TDOT owns the ideas included in all unsuccessful proposals, including any ATCs submitted. TDOT may evaluate and select the ideas in the unsuccessful proposals that



provide significant public or project benefit, negotiating with the selected proposer to incorporate these ideas into the conformed contract at the time of award. If this path is chosen, TDOT should consider legitimate schedule and cost claims by the selected proposer when incorporating additional ATCs or scope changes into its design and construction work. TDOT's *Design-Build Standard Guidance* provides additional information on this topic.

3.8.2 Stipend Amount

The TDOT Project Manager recommends the use of a stipend, the stipend range, or a fixed stipend amount (as applicable) to the Regional Alternative Delivery Manager and Director of Alternative Delivery for approval. The recommended stipend range or fixed amount should consider the following:

- Table 3-1 provides general guidance for determining the amount of a stipend offered to a responsive proposer.
- However, a variety of factors (including those listed in Table 3-2) may be considered to increase or decrease this initial stipend amount.

Any reimbursement made is payable in the manner set forth in the RFP, which also includes other terms and conditions related to the stipend. As a general consideration, such payment is typically made right after execution of the DB contract. Proposers submitting an SOQ, who are considered non-responsive or unqualified, or who are not shortlisted, are not eligible for a stipend.

Table 3-1. Potential Stipend Ranges

| Duningt Value | | |
|-----------------|-----------------------------|---------------------------|
| Project Value | % Compensation Range | Compensation Range |
| \$5M to \$20M | (0.0025 - 0.0030) *Estimate | \$12.5K to \$60K |
| \$20M to \$50M | (0.0018 - 0.0020) *Estimate | \$36K to \$100K |
| \$50M to \$100M | (0.0012 - 0.0015) *Estimate | \$60K to \$150K |
| >\$100M | (0.001 - 0.0012) *Estimate | >\$150K |

Table 3-2. Factors that may Increase (or Decrease) a Stipend Amount

| Variable | | |
|-------------------------|---|---|
| | Discussion | lmpact |
| Project Size | The cost of preparing a proposal is somewhat a function of the size of a project. However, there are considerable fixed costs that are not related to project cost. | There is an inverse relationship between stipend amount and project size. The smaller the project, the larger the stipend is relative to the overall project size (i.e., small projects tend to have a larger percentage of project stipends versus a large project). |
| Technical Complexity | Projects that require technically complex solutions often require more work on the part of the proposer, which increases the cost of preparing the proposal. | RFPs requiring the proposer to address complex technical issues lead to a higher percentage stipend. |



| Variable | | |
|--|---|--|
| variable | Discussion | Impact _ |
| Risks Transferred | The more project risk that a proposer is asked to assume often leads to greater proposal costs since the proposer develops approaches to mitigate these risks. | The more risk transferred to a proposer often leads to a higher percentage stipend. |
| Information Required from the Proposer | The extent of information required in a proposal could have an impact on proposal development costs. As a result, TDOT needs to be careful that information requested is of value in selecting or is required by the TCA and TDOT Rule. | The more extensive the requirements of the proposal, the higher the stipend should be as a percentage of project costs. |
| Competition | If the stipend is considered insufficient by proposers relative to the variety of elements required to submit a proposal, some proposers may drop out of the competition, or may not even submit qualifications. In deciding to submit a proposal, a proposer typically weighs several factors: Type and size of project, Probability of being awarded the project, Cost of preparing a submittal(s)/proposal, Specific project requirements, Stipend amount, and Current and projected workloads. | Larger stipends tend to encourage more proposers, leading to greater competition. Greater competition benefits the project both in terms of better pricing, more innovative technical solutions, and greater public confidence in the process. |
| Market | In tough construction markets, when there is not a lot of work available, proposers are more aggressive in project pursuits. This includes willingness to accept lower stipends. Conversely, in good markets with a lot of work, proposers can afford to be choosier about the projects they pursue or do not pursue. | In slower construction markets, TDOT can offer lower stipends; in a robust construction market, TDOT may need to offer higher stipends to foster adequate competition. |
| Quality of Proposals | All things being equal, larger stipends tend to generate better proposals. In essence, stipends are sometimes viewed as supplemental funds, which allow more resources to be expended on a proposal. | Higher stipends tend to lead to higher quality and more fully developed proposals. |



4 Procurement Process: RFQ Development and Shortlisting

Under either a single-phase or two-phase selection process, Chapter 4 discusses how TDOT determines a proposer's qualifications to deliver the project. TDOT typically uses a two-phase selection process (RFQ – Shortlist – RFP) unless specific circumstances, such as a shortened schedule, a project smaller in size, or a project with limited construction complexity, afford the use of a single-phase.

A request for qualifications (RFQ) is a document issued by TDOT in the first phase of a two-phase selection process that describes the project in enough detail to let potential design-builders determine if they wish to compete and forms the basis for identifying (i.e., short listing) the most qualified design-builder proposers.

This chapter focuses on the two-phase selection process allowed under TDOT Rule 1680-05-04-.07. TDOT develops and advertises a request for qualifications (RFQ) to initially describe the project and provide the necessary criteria and forms for identifying (i.e., shortlisting) the most qualified design-build proposers in terms of capabilities, organizational structure, firm and personnel experience, financial strength, and past performance.

Figure 4-1 depicts the RFQ process from initial development of the document through shortlisting.

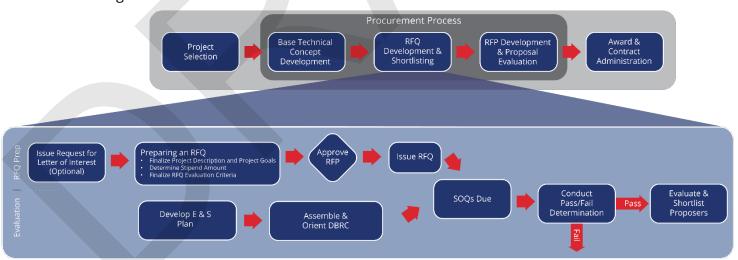


Figure 4-1. RFQ Development and Shortlisting Overview



4.1 Issue a Request for Letter of Interest (RLOI) (Optional)

The purpose of a request for letter of interest (RLOI) is to gauge potential interest in an upcoming project and to receive industry feedback on the use of design-build (DB) delivery. The RLOI provides helpful, early industry outreach that allows prospective proposers to:

- Begin teaming,
- Evaluate financial and bonding capacities, and
- Initiate preliminary investigative work.

4.1.1 Preparation and Approvals

The TDOT Project Manager (or Regional Alternative Delivery Manager) may request the use of an RLOI, preparing the RLOI form for the Director of Alternative Delivery and TDOT legal review prior to release on TDOT's <u>Alternative Delivery Webpage</u>.

4.1.2 RLOI Content and Timing

RLOI content typically includes:

- General project objectives/goals,
- A high-level overview of the project's scope and location,
- A proposed procurement schedule, and
- Potential RFQ or RFP evaluation considerations.

While the timing to release an RLOI is open ended, it is good practice to release the letter four to eight weeks before release of any subsequent procurement documents (like an RFQ).

As coordinated with the Director of Alternative Delivery and Regional Alternative Delivery Manager, the TDOT Project Manager states in the RLOI that a mandatory response is required to continue in the procurement process.

4.1.3 Proposer Response Content and Timing

The RLOI requests a proposer's response within one to two weeks from issuance of the letter, and the general content of a proposer's response should match a typical Introductory Letter/Statement of Interest (SOI), which includes:

- The Project name and DB Contract #,
- A brief overview of the Proposer's interest in the project,
- Statement that the Proposer is pre-qualified with TDOT, with the Proposer's prequalification expiration date, <u>or</u> that the Proposer has filed an application for prequalification with the TDOT Construction and Design divisions,
- A commitment for key individuals and/or major participants identified in the submittal to be available to the extent necessary to meet quality and schedule expectations,



- Certification that the information and data submitted in the letter is true and complete to the best knowledge of the individual signing the letter, and
- Name, telephone number, and email address of the individual to contact regarding the future statement of qualification (SOQ) submittal.

Only prime contractors or joint ventures need to submit a response; designers and other subconsultants are not required to submit a response.

4.2 Advertisement of the Proposed Design-Build Project (Request for Qualifications)

The RFQ provides:

- Information for potential proposers to understand the project's scope and goals,
- A list of required prequalification elements needed for a successful design-build proposer to execute a contract for the work, and
- The requirements for developing and submitting an SOQ demonstrating an ability to deliver the project considering TDOT's goals and expectations.

Expanded on in TDOT's DB RFQ template, Table 4-1 lists the typical elements of the RFQ.

Table 4-1. Typical RFQ Content and Forms

RFQ Content

Primarily narrative or bullet points describing the project and its goals, SOQ submittal requirements, and evaluation criteria

- Project goals and project description (e.g., roadways included in construction of the project, major interchanges) and general location
- Procurement/project schedule and milestones
- Description of the procurement process
- Request for clarification and addendum process
- Minimum prequalification requirements
- SOQ submittal and formatting requirements
- Evaluation process and criteria/weightings
- TDOT rights and disclaimers

RFQ Forms

Typical forms provided with the RFQ or on the TDOT webpage to ensure consistency in the information provided by the potential proposers

- Form A: Proposer's organizational information
- Form B: Acknowledgements of all clarifications and addendum
- Form C: Project description form
- RFQ Comment Form



4.2.1 Preparing an RFQ

Although the TDOT Project Manager leads the overall RFQ development using the template, he/she should consult with the DB Project Team (which includes TDOT discipline leads and the Owner's Representative) on customizable evaluation criteria and specific project details (such as scope, specialized technical input, the project's initial/preliminary estimate, and the procurement/project schedules).

As part of this work, the TDOT PM should recognize potential conflicts of interest prohibited under the TCA and TDOT Rules. Although TDOT Rule 1680-05-04-07(5) states that no individual or firm assisting TDOT in preparing the RFQ or RFP is allowed to participate on a proposer team or as a member of the design-builder's team, there are two exceptions for when an individual or firm may be on a proposer's team (as approved by the Director of Alternative Delivery):

- The role of the individual/firm was limited to provision of preliminary design, reports, or similar "low-level" documents to be incorporated into the RFP, and the firm did not assist in the development of Instructions to Proposers (ITP/Book 1) or the RFQ/RFP evaluation criteria, or
- All documents and reports delivered to TDOT by the individual or firm are made available to all potential proposers/design-builders.

Additionally, if an individual or firm has participated in preparing the project's NEPA or TEER document, that individual/firm is not allowed to respond to the RFQ and/or RFP if:

- The NEPA or TEER process is not complete prior to the date when the project is advertised: or
- The individual/firm has continuing decision-making responsibilities with respect to the NEPA or TEER process after the date on which the proposed project is advertised.

4.2.2 Confirming Minimum Prequalification and Other RFQ Requirements

Firm qualifications should always consider minimum pre-qualifications as determined in the RFQ template (e.g., required certifications/licenses, completed "Prequalification Questionnaires"). Additionally, it is good practice to list minimum qualifications in terms of years and experience levels for both construction and design key personnel.

The RFQ template also requires documentation of certain legal and financial information to ensure that a proposer is in good standing and has sufficient financial/bonding capacity to complete the project.

Lastly, an RFQ must require the following in compliance with the related TCA and TDOT Rule (all of which are embedded in the current DB RFQ template):



- A request for a proposer's statement of interest (SOI), which could also be a proposer's letter response to TDOT's RLOI (see Section 4.1);
- A request to disclose (and mitigate or eliminate if known) all relevant facts concerning any past, present, or currently planned interests that may present an organizational conflict of interest; and
- Specific requirements for the timing, format, and page limits for each SOQ submittal (as established by the TDOT Project Manager and the Regional Alternative Delivery Manager).

4.2.3 Developing RFQ Evaluation Criteria

The foundational component for any RFQ evaluation criterion is its relevance to how the Design-Build Review Committee (DBRC) can effectively assess and score a proposer's experience, qualifications, and ability to deliver. (Section 4.4 provides additional information on how and when to organize the DBRC, in addition to finalizing the project's evaluation and selection plan [E&S Plan] as the guide to the evaluation and shortlisting process.)

It is good practice to write the evaluation criteria specific to the project, while also providing a consistency from RFQ to RFQ to match industry expectation and response. The evaluation criteria must be clearly stated and be as objective and measurable as practicable.

Consistent with TDOT Rule 1680-05-04-.07(3), typical evaluation criteria and the associated objectives for each are as follows.

- Past Performance by members of the design-builder's team (both design and construction): Qualified proposers are to identify design and construction experience that demonstrate a record of producing quality work on projects similar in size and complexity.
 - Qualified proposers are to establish through past performance an effective management approach for all aspects of the project, including delivery in a quality, timely, and effective manner.
 - Qualified proposers are to also demonstrate a history without legal, financial, safety, quality, and timeliness problems that could adversely impact the project.
- Capabilities to Perform (a.k.a., Key Personnel Qualifications), including availability: Qualified proposers are to identify key personnel who have availability, show demonstrated example of teamwork, and can exhibit relevant experience in managing, designing, and/or constructing projects of similar size and complexity.
- Technical qualifications: Qualified proposers are to demonstrate specialized experience and technical competence tailored to the specific project needs. This evaluation criterion is optional depending on project complexity or its uniqueness to promote a technical solution.



4.2.4 Issuing/Advertising an RFQ

The TDOT Project Manager should verify that an extensive internal review has occurred from TDOT legal counsel, the DB Project Team, the Regional Alternative Delivery Manager, and the DBRC no less than four weeks before issuing an RFQ.

Following resolution of all comments, the TDOT Project Manager compiles the RFQ, necessary forms, and the Notice to Contractors (if not released earlier). The TDOT Project Manager then requests approval from the Regional Alternative Delivery Manager and Director of Alternative Delivery to proceed with issuance.

After receiving approval, the TDOT Project Manager notifies the DBRC of the SOQ evaluation timelines and then publishes the RFQ, forms, and Notice to Contractors on TDOT's <u>Alternative Delivery Webpage</u>.

4.2.5 Conducting a Pre-SOQ Meeting

TDOT may require a mandatory pre-SOQ meeting for all interested proposers as led by the TDOT Project Manager. Generally scheduled within 2 weeks after release, the RFQ details the time, place, and logistics for this meeting. For a single-phase procurement, this meeting is scheduled and further described in the RLOI.

The general material to cover at the meeting includes:

- Project's description and goals,
- Procurement process and unique, project-specific RFO details,
- Procurement and project schedules, and
- Questions from the proposers.

4.2.6 Issuing RFQ Clarifications and Addenda

Upon issuing an RFQ, proposers may submit questions or request clarifications regarding RFQ content or SOQ submittal requirements. It may also be necessary to issue RFQ addenda to correct errors or provide supplemental information not known at the time of initial release.

As part of the procurement schedule, it is good practice to set the deadline for proposer questions to be three weeks (but no more than four weeks) after the initial RFQ release. There is typically only one round needed for questions and answers, and the deadline for TDOT to answer the questions must be sufficient to allow the proposers time to adjust their SOQs based on TDOT response. To this end, TDOT should endeavor to answer all questions no later than three weeks before the SOQ due date.



TDOT's typical practice is to issue formal responses to all questions received, and TDOT may also include a "redline" document that specifically highlights changes to the RFQ via addendum. It is good practice to limit "redlines" to only the pages that were modified for easier reference. This is in addition to issuing a "clean" version with the final addendum to be the revised RFQ that incorporates all changes to date.

TDOT's responses and the amended RFQ documents are released to all proposers on TDOT's Alternative Delivery Webpage.

4.3 Submission of a Statement of Qualifications (SOQs)

A proposer's response to an RFQ is through its statement of qualifications (SOQ), which addresses both the pass/fail and qualification requirements listed in the RFQ.

For pass/fail requirements, a complete list is provided in the RFQ template and the related E&S Plan. Key pass/fail requirements, however, involve the:

- Timing for when to submit an SOQ and the note that any late submittals are not acceptable,
- Format and SOQ organization,
- Page limits and inclusion of completed forms, and
- Electronic SOQ submittal procedures as described in the RFQ.

Table 4-2 lists the typical structure and content for an SOQ.

Table 4-2. Typical SOQ Content and Organization

SOQ Volume I Statement of interest letter and responsiveness/ prequalification responses Cover/title page Introductory Letter/Statement of Interest (SOI) Mandatory SOI Attachments Proposer contact information and organization (Form A)

- Prequalification listing
- Acknowledgment of receiving all addenda (Form B)
- Legal structure
- Identification of known conflicts of interest
- Surety letter
- Information (as applicable) for bankruptcies, debarment, or default



SOQ Volume II

Proposer qualifications-focused submittal in response to RFQ-defined evalution criteria

- Cover/title page
- Section 1: Organization, including a brief narrative and organizational chart of the proposer
- Section 2: Proposer team experience (past performance) using Form C
- Section 3: Key personnel qualifications
- Section 4: Unique technical capabilities or qualifications (if used)
- SOQ Attachments
 - Resumes and references for all listed Key Individuals
 - Supplemental materials, such as a list of awards, letters of recommendations, additional past performance project details, or additional photos or exhibits

The typical timing from when an RFQ is published to when SOQs are due ranges from 45 to 60 days, as determined by the TDOT Project Manager and Regional Alternative Delivery Manager. While a more accelerated timeline is possible (although not less than 30 days), acceleration must consider project complexity and a commitment to more aggressive turn-around time for both proposer questions and TDOT responses.

4.4 Determination of the Most Qualified Design-Builders (Shortlisting)

4.4.1 Developing an E&S Plan

The guiding document for evaluating and shortlisting the submitted SOQs is the evaluation and selection plan (SOQ E&S Plan). Using the SOQ E&S Plan template and its associated forms, the TDOT Project Manager prepares a project-specific E&S Plan, inclusive of:

- References to the project goals and evaluation factors/criteria,
- Evaluation and procurement roles and responsibilities, and
- SOQ review and shortlisting steps.

It is good practice to finalize this plan and obtain approval from both the Regional Alternative Delivery Manager and Director of Alternative Delivery about two weeks before establishing the DBRC.

4.4.2 Establishing and Orienting the DBRC

The DBRC comprises of critical team members that lead the review/confirming of the project goals, evaluation criteria, and the selection method as part of their approval to advertise the RFQ. The DBRC is also the primary team to evaluate the qualifications for all submitted SOQs, recommending the shortlist of proposers.



Per TDOT Rule 1680-05-04-.04, the members of the DBRC are to include at least three (3) TDOT employees from various TDOT divisions who are qualified by education and experience and at least two (2) of whom shall be licensed professional engineers. Additional engineering and technical experts may be selected by TDOT to serve on the DBRC on a project-by-project basis.

It is good practice to establish and onboard the DBRC early enough (about six to ten weeks prior to release of an RFQ) to train each member on the procurement process and to solicit feedback/confirm content of the RFQ in order to finalize and approve release.

The DBRC uses this training and the process detailed in the E&S Plan when reviewing all SOQs that have passed both the responsive and pass/fail checks.

4.4.3 SOQ Pass/Fail and Responsiveness Determination

Promptly after receipt of the SOQs, the Regional Alternative Delivery Manager or TDOT Project Manager reviews each SOQ using the pass/fail and responsiveness factors established in the RFQ and set forth in the E&S Plan.

The Regional Alternative Delivery Manager or TDOT Project Manager reports to the Director of Alternative Delivery and DBRC the results of the pass/fail and responsiveness determination.

4.4.4 SOQ Evaluation Process and Initial Shortlist Rankings

The DBRC reviews all SOQs that pass both the responsive and pass/fail checks. The committee uses the instruction and forms in both the RFQ and the E&S Plan to evaluate each proposer fairly and completely. At its most basic level, the DBRC considers the extent of the qualifications and experience presented by a proposer in comparison with the complexity, goals, and needs of the project.

Once the DBRC's individual reviews are complete, the Regional Alternative Delivery Manager (or TDOT Project Manager) compiles the scores using the evaluation forms and then averages the scores from all DBRC members to establish the initial rankings for the shortlist.

TDOT's intent is to shortlist at least three of the most qualified Proposers. However, it is good practice to shortlist as many proposers that fall within a "competitive ranking range," where a natural scoring break occurs between qualified and unqualified proposers **and** where a proposer that receives on overall score of "poor" is not allowed to move forward in the process.

If fewer than three acceptable SOQs are received, TDOT may proceed with the RFP subject to the approval of the Executive Staff (including the Chief Engineer). If more than one of the lowest



ranked proposers receives the same score, TDOT may decide whether to shortlist those proposers together or not shortlist either.

The Regional Alternative Delivery Manager and TDOT Project Manager meet with the DBRC to confirm and approve the recommended shortlist before moving forward in the process. This meeting includes confirmation by the DBRC (via a simple majority vote) that the process was followed to justify the shortlist/rankings.

4.4.5 Proposer Rankings and Shortlist Approval

Once the DBRC has recommended the shortlist rankings, the Director of Alternative Delivery presents the recommendations to TDOT's Executive Staff for concurrence.

4.4.6 Notification and Debriefing

Upon completing the review and approval process, TDOT publishes the shortlist on TDOT's <u>Alternative Delivery Webpage</u>. The TDOT Project Manager also sends a notification email to the proposers.

All shortlisted proposers are invited to continue in the procurement process and prepare for receipt of the request for proposal (RFP) to follow.



5 Procurement Process: RFP Development and Proposal Evaluation

Under either a single-phase or two-phase selection process, the request for proposal (RFP) step establishes the proposal submittal requirements and TDOT's evaluation criteria considering a proposer's price and technical merit to complete the project's design and construction work. This chapter focuses on the two-phase selection process consistent with TDOT Rule 1680-05-04-.08, where TDOT develops and advertises an RFP that provides

A request for proposals (RFP) is a document issued by TDOT under a single-phase process or the second phase of a two-phase selection process that describes the procurement process, forms the basis for a proper's proposals, and may potentially become an element of the design-build contract.

the necessary price and technical criteria and forms to select the apparent best evaluated design-builder.

Figure 5-1 depicts the RFP process from initial development through evaluating and selecting the apparent best evaluated design-builder.

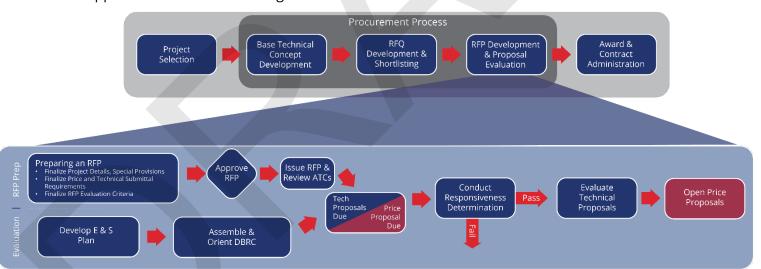


Figure 5-1. RFP Development and Proposal Evaluation Overview

5.1 Issuance of the Request for Proposals (RFP)

The purpose of an RFP is to define the technical and price requirements for all shortlisted proposers' reference when submitting a responsive proposal. The RFP includes the:

- Instructions to Proposers/ITP (Book 1),
- Design-Build Contract (Book 2),
- Project Specific Information (Book 3), and



 Reference Documents (see Exhibit 2 for a list of common Reference Documents and how to use these materials during the procurement and administration phases).

The ITP (Book 1) includes four major components:

- Project and procurement information,
- Alternative technical concept (ATC) submittal and review procedures,
- Proposal submittal requirements, and
- Evaluation and selection protocols.

The forms described in Book 1 allow the proposer to document and TDOT to evaluate supplemental information related to the proposer's price and technical proposals. Table 5-1 lists the typical content and forms of the ITP.

Table 5-1. RFP Book 1 (ITP) Content and Forms

Book 1 (ITP) Content

Primarily narrative and bullet points describing the project and its goals, price and technical proposal requirements, and evaluation criteria for selection of an apparent best evaluated design-builder

- Project Description (e.g., roadways included in construction of the project, major interchanges) and General Location
- Procurement/Project Schedule and Milestones
- Description of the RFP Step in the Procurement Process
- Request for Clarification and Addendum Process
- Conflict of Interest Requirements
- Terms and Conditions of the Project's Stipend
- Alternative Technical Concept (ATC) Submittal, Evaluation, and Authorization to Use Requirements
- Proposal Submittal and Formatting Requirements
- Price Proposal Guaranty Requirements
- Evaluation and Selection Process and Criteria/Weightings (both for the price and technical proposals)
- TDOT Rights and Disclaimers

Book 1 (ITP) Forms

Typical forms provided with the RFP or on the TDOT webpage to ensure consistency in the information provided by the potential proposers

- Alternative Technical Concept Form (Form ATC)
- Attestation re Personnel Used in Contract Performance (Form AT)
- Receipt of Addendum/Clarification (Form C)
- Conflict of Interest form (Form COI)
- RFP Comment and Question Form (Form QR)
- Lobbying Certification (Form LC)
- Technical Proposal Signature Form (Form TPSP)



The design-build contract (Book 2) accounts for the general terms and conditions to administer a design-build (DB) project, describing the relationships between TDOT and the design-builder. Book 2 appendices include:

- Project-specific special provisions;
- The necessary project, state, and federal special provisions; and
- The forms to represent the design-builder's commitments.

Table 5-2 lists typical contractual content and the appendices at a high-level, with the design-build contract template providing additional detail on terms, conditions, and administrative procedures.

Table 5-2. RFP Book 2 (Design-Build Contract) Content and Appendices

Book 2 (Design-Build Contract) Content

Terms and conditions of the contract between TDOT and the awarded design-builder

- General Contract Provisions, Defined Terms, and General Scope of Work
- General Standards for Performance of the Work
- Relationship and Roles of the Parties
- Date of Commencement and Completion of Services
- Compensation and Changes in the Work
- Insurance and Bonding Requirements
- Ownership and Use of Work Product of the Design
- Project Records
- Termination or Suspension
- Enumeration of Contract Documents and Order of Precedence
- Design-Builder Certifications and Disclosures
- Other (Miscellaneous) Provisions

Book 2 (Design-Build Contract

Appendices Content Appendices to the design-build contract

- Appendix A: Supplemental Specifications to the Standard Specifications
- Appendix B: Special Provisions
- Appendix C: Design-Build Contract Forms

The Project Specific Information (Book 3) offers specific requirements related to designing and constructing the project. This is the most customized book of the three, starting with unique project features and goals and extending through project management and discipline-specific terms and performance specifications. Table 5-3 lists typical content and potential appendices for this book.



Table 5-3. RFP Book 3 (Project Specific Information) Content and Appendices

Book 3 (Project Specific Information) Content

Project-specific technical information and requirements organized by discipline

- General Project Description, Scope of Work, and Project Goals
- Use of Reference Documents
- Project Management Requirements Related to Organization and Staffing Resources, Schedule and Cost Management, Quality Management, Public Relations/Information, and Records Management
- Project-specific Technical Requirements Organized by Discipline
- Appendices to Support the Project-specific Requirements/Information

5.1.1 Preparing a Request for Proposal (RFP)

Although the TDOT Project Manager oversees the RFP development using the design-build template documents and referencing past examples, he/she should also consult with the DB Project Team (which includes TDOT discipline leads and the Owner's Representative) on project details, special provisions, and customizable evaluation criteria for the ITP. As part of this coordination, the TDOT Project Manager continues to mitigate/prevent any conflicts of interest prohibited under the TDOT Rule 1680-05-04-.07 (as further described in Section 4.2.1).

Preparing an RFP can often require considerable time and staffing resources. While needs are driven primarily by project size and complexity, it is good practice to start developing each of the three RFP books at the same time as (but no more than 3 months after) the DB Project Team has started developing the base technical concept (BTC) and request for qualifications (RFQ).

The TDOT Project Manager is to consider schedule and staffing commitments for developing an RFP in line with the typical timeline to advance design work to a Line and Grade design level as described in the Project Delivery Network (PDN). It is good practice to release the RFP one day to two weeks after shortlist notification. This requires a proactive approach to account for internal leadership and legal approvals (see below), FHWA consultation (as required per Table 2-1), and the time needed to prepare the documents for publication on TDOT's <u>Alternative Delivery Webpage</u>.

Specific to each book, it is good practice to advance the following RFP elements early and fully.

Instructions to Proposer/ITP (Book 1)

 Defining the price and technical submittal and evaluation requirements. TDOT must consider if the ITP's selection is to be based on a weighted criteria process or lowest



price-technically acceptable process, both of which are allowed under the TDOT Rule and detailed further in the RFP template.

To determine the most appropriate evaluation approach, the TDOT Project Manager and DB Project Team should consider the project's technical complexity and potential value a proposer can describe in its technical approach.

- More straightforward (i.e., less complex) projects are often best evaluated under low-bid, fastest-to-complete criteria (i.e., A+B bidding or the lowest pricetechnically acceptable process).
- More technically complex projects that warrant thoughtful maintenance of traffic strategies, coordinated utility or agency work, complex structural design, or involved right-of-way or permit engagement (as some examples) are often better suited for a weighted criteria process. This process considers a proposer's technical approach alongside its price and time to complete the project.

The DB Project Team should customize the evaluation point breakdown as a direct correlation to the project's complexity and the value a technical approach may offer TDOT. Price points should always be the lead consideration in whatever method of best-value selection is chosen. However, it is good practice to assign **no lower** than 60 points or **no higher** than 75 points (of the total 100 points) to the price score when using a weighted criteria process.

The RFP template includes more details on the proposal submittal and evaluation options.

- Site access considerations. TDOT should consider the extent to which it allows a
 proposer access to the site to complete a reasonable investigation (such as survey,
 potholing, or geotechnical borings) to inform the proposer's due diligence and price to
 complete the project.
- **Setting the procurement timeline and proposal due date.** TDOT should set a reasonable procurement timeframe, starting with the release of the RFQ to the proposal due date that is not too long that proposers lose interest or not too compressed that proposers do not have enough time to prepare their responses.
 - It is good practice to set the timing from RFQ release to the proposal due date to be 10 to 14 months long. It is also good practice to consider the last RFP addendum and response to ATCs and qualified product list (QPL) requests to be 30 to 45 days before the proposal due date, allowing the proposers enough time to revise their price and technical proposals.
- **Confidentiality.** Various documents submitted during the procurement process are subject to the Tennessee Open Records Law, including particularly TCA §§ 10-7-503 to 10-7-506. However, TCA § 10-7-504(a)(7) specifically provides that proposals for professional and consultant services contracts, and related records, including evaluations, are available for public inspection only after the evaluation is completed.



Accordingly, TDOT retains RFP proposer submittals as confidential to ensure a competitive and fair procurement process until after contract award (unless otherwise directed by law or court order).

Throughout the procurement process, the DB Project Team is to ensure the following proposer submittals and TDOT responses remain confidential:

- Certain QPL requests and TDOT approval,
- Proposer organizational change requests,
- Proposer statement of qualification (SOQ) section resubmittals to address organizational conflicts of interests,
- Proposer ATCs,
- Information discussed at any confidential procurement-related meeting, and
- Proposer technical proposal and price proposal.

Contract (Book 2) and Project-Specific (Book 3)

- Risk allocation to match the type and location of the project, including:
 - Governmental and regulatory compliance risks that may involve timing to secure
 design deviations and exceptions, required environmental permits and availability of
 mitigation credits (from the Tennessee Department of Environment and
 Conservation and the US Army Corps of Engineers), and agency review obligations;
 - Construction phase risks for complying with environmental commitments, encountering known or unknown hazardous materials, coordinating with adjacent projects, addressing potential differing site conditions and force majeure risks, ensuring safety and site security, and defining project maintenance responsibilities during construction;
 - Post-construction risks related to long-term maintenance and infrastructure longevity, project closeout and reporting, document retention, and indemnification against claims and lawsuits;
 - Right-of-way risks, including securing all right-of-way acquisitions prior to TDOT's
 committed dates, the process for acquiring additional right-of-way for the designbuilder's convenience, and provisions to address added requirements arising out of
 right-of-way negotiations; and
 - Other third-party risks, including delays in utility relocations or coordination complications, completing railroad agreements in a timely manner, or stakeholder/political spheres of influence on the project's direction.
- **Payment and performance bonds** to protect the design-builder's subcontractors and TDOT's project interest, respectively.
- Post-construction warranties for both the work and materials or equipment procured for the project.



- General and professional liability insurance plus required workers' compensation, automobile, railroad protective, pollution liability, and builder's risk coverage (as needed) to protect TDOT's investment.
- *Meetings and coordination* regarding the preconstruction and construction services.
- Application and use of TDOT's and other project standards, rules, guidelines, and special provisions.
- **Environmental regulatory requirements**, including whether TDOT or the design-builder will acquire any or all of the permits required for construction.
- Design and construction requirements, including specifications.
- Final documents to be provided by the design-builder upon project completion, which may include as-built plans, engineering reports, shop drawings, test results, documentation, and daily reports as further detailed in TDOT's Design-Build Standard Guidance.

Additionally, the Design-Build Contract (Book 2), the Project-Specific Information (Book 3), the design-builder's proposal, and portions of the Reference Documents (explicitly identified as reliable) become the contractual elements to be executed and used to administer (for TDOT) and deliver (for the design-builder) the design and construction phases. The contract defines the order of precedence to resolve any possible conflicts among the various RFP books and standards.

5.1.2 Issuing a Request for Proposal (RFP)

The TDOT Project Manager should verify that an internal review has occurred from TDOT legal counsel, the DB Project Team, the Regional Alternative Delivery Manager, and Design-Build Review Committee (DBRC) no less than two to six weeks before issuing the RFP (either for the industry review/draft RFP or the final RFP release).

Following resolution of all comments received, the DB Project Team (as directed by the TDOT Project Manager) compiles the RFP, necessary forms, and Reference Materials, and the TDOT Project Manager then requests approval from the Regional Alternative Delivery Manager and Director of Alternative Delivery to proceed with issuance. The Regional Alternative Delivery Manager may also send the draft or final RFP to FHWA for information (if a federally funded project).

After receiving approval, the TDOT Project Manager notifies the DBRC of the RFP evaluation timelines and then publishes the RFP, forms, and Reference Materials on TDOT's <u>Alternative Delivery Webpage</u>.



Issuing a Draft RFP and Coordinating an Industry Review Period

As an option during this step in the procurement phase and subject to concurrence from the Regional Alternative Delivery Manager and Director of Alternative Delivery, TDOT may initially issue a draft RFP for the industry's review. This step is done to gather preliminary feedback on risk allocation and allow the proposers an early look at the project details, contract terms and conditions, and technical requirements. The intent of this industry review is to provide TDOT with feedback to improve its procurement documents, clarify RFP requirements (including the contract documents), and resolve potential issues based on industry/proposer input.

If the schedule allows, the draft RFP process is encouraged and generally consists of a draft ITP (including the draft technical and price submittal requirements, evaluation criteria, and a procurement schedule), a draft form of the Contract as Book 2, and a draft Project-Specific Information (Book 3) document that describe the project scope and related technical requirements. TDOT may also elect to release Reference Materials available at the time of publishing. If used, the industry review process occurs right after the shortlisting notification, runs for about a month, and finishes with the issuance of the final RFP.

Leading an Industry Review Meeting

Led by the TDOT Project Manager, TDOT may hold an Industry Review Meeting either collectively or one-on-one with each shortlisted proposer. The goals of this meeting are to share additional project information and obtain feedback, comments, and suggestions that could be implemented into the final RFP. This meeting's information could include:

- Procurement and project schedule updates;
- Discussion on contract risk allocation, scope, and/or the project status;
- Clarifications on RFP terms or content; and/or
- General project details and next steps in the procurement process.

One-on-one meetings are meant to be confidential, and any questions from a proposer (e.g., RFP questions) are to remain confidential throughout the procurement process. It is good practice to request that all shortlisted proposers submit an agenda and topics for discussion prior to the meeting.

Organizing Industry Review Questions & Answers and Revising the RFP

It is also good practice to solicit proposer questions during this step, and if TDOT responds to questions received, responses should be made available to all shortlisted proposers.

Additionally, draft RFP redlines/markups may serve as TDOT's response to proposer questions



and are a helpful reference for proposers to quickly evaluate what changed from the draft to final RFP.

Issuing a Final RFP

Prior to release of the final RFP, the TDOT Project Manager should verify that an internal review has occurred from TDOT legal counsel, the DB Project Team, the Regional Alternative Delivery Manager, and Design-Build Review Committee (DBRC) no less than two weeks before issuance.

Following resolution of all comments received, the DB Project Team (as directed by the TDOT Project Manager) compiles the RFP, all necessary forms, and Reference Documents, and the TDOT Project Manager then requests approval from the Regional Alternative Delivery Manager and Director of Alternative Delivery to proceed with issuance. The Regional Alternative Delivery Manager also sends the final RFP to FHWA for information (if a federally funded project).

After receiving approval, the TDOT Project Manager notifies the DBRC of the RFP evaluation timelines and then publishes the RFP, forms, and Reference Documents on TDOT's <u>Alternative Delivery Webpage</u>.

5.1.3 Leading a Proposal Meeting

Led by the TDOT Project Manager, TDOT may hold mandatory or optional meetings with the proposers either collectively or one-on-one during the draft RFP/Industry Review step (see Section 5.1.2 above) or after release of the final RFP. After release of the final RFP, the goals of the meeting are to share additional project information and discuss the proposers ATCs (see Section 5.1.4 below).

In all cases, all one-on-one meetings are meant to be confidential, and the information/questions from a proposer (e.g., RFP questions or discussions on an ATC) are to remain confidential throughout the procurement process. It is good practice to request that all shortlisted proposers submit an agenda and topics for discussion prior to each meeting.

5.1.4 Submitting and Reviewing Alternative Technical Concepts (ATCs)

To allow for innovation that may not be specifically allowed in the RFP, proposers are provided an opportunity to submit confidential ATCs. As described in the RFP template, proposers may submit one or more ATCs for TDOT's review and preapproval by a date specified therein.

If an ATC is approved, the proposer has the option to include the ATC in its technical proposal, which would also involve including TDOT's pre-approval letter and a narrative description of the ATC's use and benefit. The proposer's price proposals must also account for any ATC it elects to incorporate into its proposal, reflecting any cost adjustments in a proposer's price. Except for



incorporating an approved ATC in its proposal, the proposer may not otherwise contain exceptions to or deviations from the requirements of the RFP.

Expanded on in the RFP templates (for Book 1), each ATC submittal is to include:

- Description, usage, and history,
- Deviations and analysis,
- Impacts and risks, and
- Cost.

For all ATCs submitted, TDOT organizes a review panel (which often includes members of the DBRC supplemented with technical support as needed) to evaluate each ATC's eligibility. The panel considers the following:

- Does the concept conflict with criteria agreed upon in the NEPA or TEER environmental decision-making process?
- Is the concept equal to or better than the BTC or the contract requirements the ATC intends to deviate from?
- Does the concept take advantage of an error or omission in the RFP; seek to reduce quantities, performance, or reliability; or seek a relaxation of the contract requirements?
- Does the ATC improve project quality and/or reduce project costs or schedule duration?
- Has the concept been proven successful for TDOT or other state DOT projects?

TDOT is not to distinguish between a proposal that does not include any ATCs versus a proposal that does, with both types of proposals evaluated against the same evaluation criteria.

If selected, all of the proposer's ATCs that it elects to incorporate into its proposal are to be included with both the proposal and the contract upon award.

5.1.5 Issuing Request for Proposal (RFP) Clarifications and Addenda

Upon issuing the RFP, proposers may submit questions or request clarifications regarding RFP content or the procurement process in general. It may also be necessary to issue RFP addenda to correct errors or provide supplemental information not known at the time of initial release.

As part of the procurement schedule, it is good practice to set the deadline for proposers to submit questions three to four weeks after release of the RFP and any major addendum. The final addendum to answer last questions must be released with sufficient time (typically 30 to 45 days prior to the proposal due date) for the proposer to adjust its price and technical proposals based on TDOT's response.

TDOT's typical practice is to issue formal responses to all questions received, which may also include a "redline" to the RFP that specifically calls out all changes between versions. It is good practice to limit "redlines" to only the pages that were modified for easier reference. This is in



addition to issuing a "clean" version with the final addendum to be the revised RFP that incorporates all changes to date prior to the proposal due date.

TDOT's responses and the amended RFP documents are released to all shortlisted proposers on TDOT's <u>Alternative Delivery Webpage</u>.

5.1.6 Additional Procurement Phase Outreach

At strategic points in the procurement process (typically after release of the RFP, but well before the proposal due date), TDOT may allow proposers to meet with certain utilities, railroads, third-parties, or other permitting agencies that are in or around the project area.

For projects with particularly involved contract compliance requirements, TDOT may also organize other workshops (e.g., a DBE Meet and Greet, Equal Opportunity Outreach events) to provide additional information to the industry.

TDOT reserves the right to participate in any such meeting; however, TDOT is not obligated to answer any questions during these meetings.

5.2 Submission of a Price and Technical Proposal

A proposer's response to an RFP is its "proposal," which addresses both the responsiveness and price and technical requirements listed in the RFP.

For responsiveness, a complete list is provided in the RFP template and related evaluation and selection plan (E&S Plan), with key criteria typically involving the:

- Timing for when to submit a proposal and the note that any late submittals will not be accepted;
- Proposal format, organization, and inclusion of all items listed in Table 5-4 and 5-5, including the separate submittal of the price and technical proposals;
- Page limits and inclusion of necessary forms; and
- Hard copy and electronic submittal procedures (unless otherwise specified in the RFP).

For the technical proposals, a proposer may be evaluated using a weighted criteria process or lowest price-technically acceptable approach. In either instance, the technical proposal is a critical element for a proposer's representation of its approach and technical solutions. Table 5-4 lists the organization and content for a technical proposal.



Table 5-4. Technical Proposal Content and Organization

Volume I

Includes the cover letter, forms, and evidence of authority

- Cover/title Page
- Cover Letter
- Forms
- Evidence of Corporate Existence; Certificate of Authority
- Evidence of Authority to Enter into Joint Venture; Execute Joint-Venture Agreement (if needed)
- Evidence of Proposal Signatory Authority

Volume II

Includes the proposer's technical approach

- Cover/title Page
- Project Management Approach
- Design Approach
- Construction Approach

Volume III

Includes the proposer's appendices to the technical approach

- Key Personnel (level "2" personnel) Resumes
- Preliminary Roadway Schematic/Concept Plans
- ATC Approval letter(s) and Form(s) ATC
- Critical Path Method (CPM) Schedule

For its price proposal, a proposer is to submit the items listed in Table 5-5, separate from its technical proposal, using internet bidding with electronic bid bond. As further detailed in the RFP template, the internet bid and electronic bid bond executed by the proposer and surety are considered a "complete" price proposal, which is printed at the time of the public opening.

Table 5-5. Price Proposal Content

Volume II: Price Proposal

- Electronic Price Proposal (including specified Contract Completion Time)
- Electronic Proposal Security (e.g., the Proposal Bond)

Of note, the awarded proposer's total price from its price proposal becomes the contract amount and constitutes the design-builder's total compensation to complete the project and deliver on the contract requirements. In instances where the selected proposer's technical proposal does not meet or exceed all minimum contract requirements, the selected proposer is not to receive additional compensation to perform the minimum contract requirements or any other contract obligation.



5.3 Evaluation of Technical Proposals

5.3.1 Developing a Proposal E&S Plan

The guiding document for evaluating and selecting the submitted proposals is the proposal E&S Plan. Using the Proposal E&S Plan template and its associated forms, the TDOT Project Manager prepares a project-specific plan, inclusive of:

- References to the project goals and evaluation factors/criteria,
- Evaluation and procurement roles and responsibilities, and
- Proposal review/evaluation steps.

It is good practice to finalize this plan and obtain approval from both the Regional Alternative Delivery Manager and Director of Alternative Delivery about two weeks before releasing the RFP, with consideration for revising the plan based on any addendum issued.

5.3.2 Determination of a Proposal's Responsiveness

Promptly after receipt of the proposals, the Regional Alternative Delivery Manager or TDOT Project Manager reviews each proposal by referencing the responsiveness factors established in the RFP and set forth in the Proposal E&S Plan.

The Regional Alternative Delivery Manager or TDOT Project Manager reports to the Director of Alternative Delivery and DBRC the results of the responsiveness determination.

5.3.3 Determination of the Apparent Best Evaluated Design-Builder

Based upon each proposal, the appropriate selection method specified in the RFP, or the best and final offer RFP detailed in Section 5.5 (if applicable), the DBRC reviews all proposals that pass the responsiveness check to determine the best evaluated proposer/apparent best evaluated design-builder using the process and forms in the Proposal E&S Plan. At its most basic level, the DBRC considers the merits of each technical proposal in comparison with the complexity, goals, and needs of the project.

Once the DBRC's individual reviews are complete, the Regional Alternative Delivery Manager (or TDOT Project Manager) compiles all the scores using the evaluation forms and then averages the scores from all DBRC members to establish the final proposal rankings.

The Regional Alternative Delivery Manager and TDOT Project Manager meet with the entire DBRC team to confirm and approve the proposal ranking before moving forward in the process. This meeting includes confirmation by the DBRC (via a simple majority vote) that the process was followed to justify the rankings.



TDOT may choose to discontinue the selection process at any time prior to the opening of price proposals, subject to any applicable obligation to pay a stipend to eligible and responsive proposers.

5.4 Opening of the Price Proposals

After evaluating the technical proposals, and on the date and time specified in the RFP, TDOT publicly opens and reads the total contract amount in the price proposal submitted by each eligible and responsive proposer.

The DBRC may request that a proposer provide additional information used when developing its price proposal, which may be its design assumptions, summary of quantities, mobilization assumptions, and construction staging assumptions.

For a weighted criteria selection, the RFP template includes steps to calculate the total proposal score that includes both a weighted technical and price (A+B) score to arrive at a total proposal score and ranking.

Chapter 6 details how TDOT recommends award of a design-build contract to the apparent best evaluated design-builder.

5.5 Issuance and Submission of Best and Final Offers (if needed)

In the event all price proposals submitted exceed the acceptable and reasonable range of TDOT's cost estimate, TDOT, at its discretion, may request the proposers submit a best and final offer. If requested, TDOT issues the best and final offer RFP to the shortlisted proposers that are eligible (i.e., those proposers that passed the responsiveness check).

The best and final offer RFP may include minor changes in the scope or contract requirements as compared to the original RFP, primarily to drive down costs that exceeded the TDOT estimate. This could include:

- Reducing the project limits or adjusting the project's basic configuration,
- Loosening maintenance of traffic restrictions to allow for additional or longer construction closures,
- Re-allocating identified contract risk that previously fell on the proposer to be a shared or TDOT-owned risk,
- Eliminating prescriptive design or construction requirements detailed in Book 3, and/or
- Increasing TDOT's project estimate.



6 Award and Construction Administration

The DBRC, via the Director of Alternative Delivery, forwards the results recommending the apparent best evaluated design-builder for the Commissioner to complete one of the following actions per TDOT Rule 1680-05-04.10.

- Reject all proposals; or
- Award a design-build contract to the best evaluated design-builder.

However, if the DBRC determines after opening the price proposals that the apparent best evaluated design-builder should be considered non-responsive, or if the best evaluated design-builder declines the award and forfeits the proposal guaranty, the DBRC may recommend that the Commissioner award the contract to the next best evaluated design-builder.

After the design-build contract has been awarded, TDOT publishes the technical scores and adjusted prices on TDOT's <u>Alternative Delivery Webpage</u>.

6.1 Debriefs

After contract award and execution, each shortlisted proposer is afforded an opportunity for a debriefing with TDOT regarding the relative merits of its technical and price proposals. Typically led by the TDOT Project Manager and Regional Alternative Delivery Manager, debriefings are to focus on the proposer's proposal (highlighting the strengths and weaknesses noted during the technical proposal evaluation process) and not those of other proposers. Any TDOT staff in attendance should not discuss any other proposer's alternative technical concepts (ATCs), qualified product list (QP) submissions, proposal information, and organizational details during these debriefs.

Prior to any debriefing, it is good practice to consult with TDOT legal counsel and the Director of Alternative Delivery (as needed) to discuss content, form, and function for consistency in messaging during each debrief.

6.2 Design and Construction Phase Administration

Following contract execution (as detailed in the Instructions to Proposers/ITP [Book 1]), the design-builder receives the initial Notice to Proceed to complete the design and construction of the project in accordance with the design-build contract (namely Book 2 and Book 3) and TDOT's *Design-Build Standard Guidance*.



Exhibit 1: Potential Design-Build Contact Risk Allocation

The following table summarizes a *starting point* for potential contractual risk allocation to be modified for each project. The DB Project Team and the Regional Alternative Delivery Manager (with concurrence from the Director of Alternative Delivery) should consider several factors detailed in the guideline (see Section 3.1) and *Design-Build Standard Guidance* when developing contract-specific risk allocations. **Note:** any examples (e.g.,) provided in the table below are not meant to be an exhaustive list of options.

| Potential Design-Build Contractual Risk Allocation | TDOT | Design- Builder | Shared |
|--|------|--------------------|--------|
| Right-of-Way | | | |
| Parcels to be Acquired by Owner (including Owner-related acquisition delays) | Х | | |
| Additional Parcels Required by Design-Builder Changes (including additional property costs and delays) | | Х | |
| Railroad right-of-way / Access | | | Х |
| Design | | | |
| Use of Alternative Technical Concepts (ATCs) | | Х | |
| Deviations from Contract Documents | | Х | |
| Design Defects | | Х | |
| Accuracy of Base Technical Concept (BTC) | | Х | |
| TDOT Design Review – Delays or Changes | Х | | |
| Third-Party (e.g., Utility Owner, Railroad) Design Review – Delays or Changes | | X | |
| Design-Builder's Proposal – Extent to Which it is Binding | | Х | |
| Basic Configuration Change as defined in Book 3 and Exhibit 2 of this Guidance | Х | | |
| Utilities | | | |
| Accuracy of Department-Supplied Information: a. Identified Utilities b. Misidentified / Unidentified Utilities | Х | | |
| Master Utility Agreements / Individual Agreements | | | Х |
| Utility Betterments/Enhancements | | Х | |
| Utility Owners – Delays | | | Х |
| Utility Owner and Design-Builder Separate Contract | | Х | |
| Sufficiency of right-of-way for Utility Adjustments / Acquiring Utility Easements (unless due to Design-Builder changes) | Х | | |
| Change in Relocation Requirements Due to Department Design or Scope Changes | Х | | |
| Incidental Utility Work | | Х | |



| Potential Design-Build Contractual Risk Allocation | TDOT | Design- Builder | Shared |
|--|------|--------------------|--------|
| Governmental Approvals / Permits | | | |
| Environmental Clearance (NEPA/TEER clearance) | Х | | |
| Environmental Permitting (e.g., changes to mitigation design, credits, and/or the application process) | | | Х |
| Encroachment Permits – Local Municipalities | | Х | |
| Delays in Approvals | | | Х |
| Department-Provided Approvals – Changes | Х | | |
| New Approvals – Responsibility for Obtaining/Changing | | | Х |
| On or Offsite Mitigation – Added sites by Design-Builder | | Х | |
| Hazardous Material | | | |
| Known / Identified as of Proposal Date | | Х | |
| Unknown Pre-Existing Hazardous Materials – Compensation and Relief | Х | | |
| Occurring During Design and Construction: | | | |
| 1. Releases by Design-Builder | | Х | |
| 2. Releases by Owner | X | | |
| 3. Releases by Others | | | Х |
| Governmental Approvals re: Hazardous Materials | | Х | |
| Force Majeure | | | Ī |
| Force Majeure – Relief, Compensation | Χ | | |
| Construction | | | |
| Owner / FHWA – Reviewers / Oversite / Approvals | Х | | |
| Incorrect Survey Control or Survey Data | | Х | |
| Owner-Directed Changes | X | | |
| Traffic Management | | Х | |
| Closures Due to Project | | X | |
| Coordination with Other Contractors in the Area or on the Project | | | Х |
| Property Damage / Third-Party Injury / Site Security / Risk of Loss | | X | |
| Nonconforming Work | | Х | |
| Maintenance of Improvements During Construction / Maintenance of Existing Improvements within the Project limits/right-of-way | | Х | |
| Third-Party Construction Approvals, Permits, or Requirements (e.g., railroad right-of-entry, utility clearance or protection standards, municipal coordination requirements) | | Х | |
| Community / Business Impacts (loss of convenience, access and visibility, dust, vibration, noise, pedestrian safety, night work) | | Х | |
| Contract Completion Dates/Deadlines | | Х | |
| Change in Law or Standard | | | |
| Change in Law (change beyond 30 days prior to the Proposal due date) | Х | | |
| Changes in Standards (change beyond 30 days prior to the Proposal due date) | Х | | |



| Potential Design-Build Contractual Risk Allocation | TDOT | Design- Builder | Shared |
|--|------|--------------------|--------|
| Warranties | | | |
| General Warranties | | X | |
| Plant Establishment / Site Stabilization | | X | |



Exhibit 2: Potential Design-Build Reliable Reference Documents

- Basic Project Configuration as the highest-level project layout set by the base technical concept (BTC), but does not include all of the design details in the BTC. The Basic Project Configuration includes:
 - o The (i) Planned ROW Limits and (ii) control of access as set forth in the BTC;
 - The number of lanes (as set forth in the BTC), subject to any Book 3 requirements;
 - The approximate location of ramps (as set forth in the BTC), subject to any Book
 3 requirements; and
 - The number and approximate location of interchanges (as set forth in the BTC), subject to Book 3 requirements.
- Geotechnical Data Report (boring log/subsurface data results only) to the extent that it
 defines a differing site condition within the project limits. TDOT is to redact any
 geotechnical recommendations in the report prior to publishing.
- **Utility Impact Matrix** (a list of how the BTC impacts project area utilities) that includes reliable information related to:
 - Name/owner of the utility;
 - Location of the utility (horizontally using station and offsets);
 - o Utility type (e.g., 12" sewer, UG catv, manhole, OH transmission);
 - Disposition of the impact (relocate, protect in place, adjust, remove, abandon);
 and
 - Compensability of the utility (who owes what to whom if the utility is moved/impacted).
- SUE level A/utility pothole data
- Utility Maps as compiled by TDOT to illustrate accurate/known:
 - Utility as-built information,
 - Historical information about the utility,
 - Various SUE level research (including site investigation, one call, and pothole data), and
 - o Any other related utility information.
- Municipal, utility, or railroad agreements that TDOT has entered into for the project.
- **TDOT bridge inspection reports** for structures in the project limits.
- Obtained/approved design exceptions for the base technical concept (BTC).



- The Project's **NEPA/TEER document**, to note the mitigation commitments for the project as listed in the document or in Book 3 (Project Specific Information).
- The **Planned ROW Limits** as a layer in the BTC's design native files (e.g., ORD layer) to represent the:
 - o Current TDOT right-of-way for the BTC,
 - o To-be-acquired right-of-way to accommodate the BTC,
 - o All temporary construction easements or permanent easements,
 - o Utility replacement easements, and
 - Advance utility adjustment locations (early moves by TDOT or the utility to reduce risk).