

# DESIGN-BUILD LOW BID

## 15-STEP PROJECT DELIVERY PROCESS SUMMARY

(DESIGN-BUILD LOW BID MODIFICATIONS TO STANDARD PROJECT DELIVERY)

### Concept

Design-Build (DB) Low Bid is a Design-Bud-Build (DBB) contract with a single entity for design and construction services with selection based on the lowest, responsive and responsible bid. With DB Low Bid, the Agency assesses projects in advance of design expenditures and utilizes a streamlined solicitation and award process.

### Overview

As a general rule, DB Low Bid should be used on less complex projects where the design and construction criteria are concise and clearly defined and innovation or alternatives are not being sought. The project scope and area of impact avoid environmental permitting, right-of-way acquisition, railroad impacts, and unresolved Third Party Agreements (Utility Owners, and County/City Stakeholders).

The Agency establishes DAP or Conceptual Design or Design Concepts with unit quantities. The portion or extent of the design can vary--30% or less depending on the size and complexity of the project and the needs of the Owner. The Agency submits a bid booklet package that includes bid items and performance specifications, special provisions, and Agency provided forms for completion of design as well as for construction services. Prior to contract award, the Agency performs a Pass/Fail responsiveness/responsibleness review of the lowest bidder's bid package.

DB Low Bid utilizes a 15 step modified process based on the DBB project delivery process outlined in the [Project Delivery Guide](#). See Attachment A - DB Low Bid Delivery Process Flow Chart which outlines the modified process. The below 15 step delivery process summary highlights additional tasks that are unique to Design-Build Low Bid.

### Program Development

**Step 1 – Project Selection:** Step 1 follows Agency Project Delivery in the same manner as a DBB project with the addition of an initial assessment of whether DB Low Bid is the appropriate delivery method for the project. This step concludes upon completion of Delivery Method Decision Point A.

#### Delivery Method Decision Point A

Agency/Regions complete an initial assessment of the appropriate delivery method

utilizing the Decision Matrix for Design Build Delivery (Matrix available from MPB.)

## Project Development

**Step 2 – Start Project/Project Team Kick-off:** Step 2 follows Agency Project Delivery Guidebook-Phase 1 Project Development, ODOT Guidelines for Project Delivery Teams in the same manner as a DBB project, with the exception that work plan, schedule and milestones are based on the DB Low Bid project delivery method.

**Step 3 – Data Collection – Survey, Maps, Engineering, Gap Analysis, Risk Assessment & Environmental Reports:** Step 3 follows project kick-off and precedes the DAP Phase and includes gap analysis and risk assessment focused on the DB Low Bid project delivery method. Project Delivery Team (PDT) identifies key factors impacting desired minimal level of engineering and project/contract requirements and constraints. This step concludes upon completion of Delivery Method Decision Point B.

### Delivery Method Decision Point B

PDT reviews all new information, including gap analysis and risk assessment. Based on the evaluation of information project needs, information availability, and the risk of failure, the PDT decides whether the project should proceed with DB Low Bid as the delivery method.

**Step 4 – Development of Design and Construction Criteria:** Step 4 follows Agency Project Delivery Guidelines for Design Acceptance Phase in the same manner as DBB with the exception that design and Bid Documents are prepared based on DB Low Bid project delivery. PDT develops and establishes desired minimal level of engineering and project/contract requirements and constraints and identifies and drafts “anticipated” Design Exceptions. PDT obtains DB Low Bid Base Template Documents from Agency DB Low Bid Coordinator.

**Step 5 – Development of any Project Specific Pass-Fail Qualification Requirements:** Step 5 Occurs during Design Acceptance Phase and includes identifying project specific minimal Pass/Fail qualification requirements for bidder key positions and personnel. PDT drafts the minimal Pass/Fail qualifications /requirements/criteria for the project and up-dates special provisions and the DB Low Bid Qualifications Checklist (Pass/Fail Minimum Requirements) and drafts Bidder Qualifications Pass/Fail Evaluator Sheet.

**Step 6 – Preliminary Plans and Special Provisions:** Step 6 follows Agency Project Delivery Guidelines and initiates development of design in the same manner as DBB with the

exception that design is developed to a level that identifies the footprint of the project with adequate certainty to reveal any impacts to railroads, utilities or right of way; needs for environmental permits; and any third party impacts that may require agreements. Utilizing the DB Low Bid Base Template Documents the PDT drafts project/contract requirements, constraints, and performance specifications, special provisions, Agency provided forms, bid booklet documents, and anticipated Design Exception request forms; and prepares for Decision Point C.

The PDT utilizes processes, forms, and manuals located on ODOT's [Estimating](#) web site to determine if the estimated project fuel, asphalt and steel quantities are below or at ODOT required minimal qualities, whether lump sum or pay item methods will be used, and if escalation/de-escalation provisions should included in the project special provisions.

PDT reviews current ODOT Standard Specifications 00200 series and all applicable Boiler Plate Special Provisions and Special Provisions updates to determine if any apply to the project.

This step includes the DOJ, FHWA, OPL and ODOT Roadway Engineering initial review & approval of Bid Booklet documents and anticipated Design Exceptions, if applicable. The step concludes with Delivery Method Decision Point C.

### **Delivery Method Decision Point C**

Area Manager, Region Project Delivery Manager, ODOT Roadway Engineering Section Manager (as appropriate), and Agency DB Low Bid Coordinator (at the request of Region) formally evaluate risk assessments, mitigations measures, detailed Work Plans, anticipated Design Exceptions request forms, and anticipated impacts to access of Interstate facilities. In addition, they review recommended project delivery method, inclusion/non-inclusion of escalation/de-escalation forms and special provisions, and whether payment method is lump sum or pay items.

**Step 7 – Finalized PS&E Conceptual Design or Scope of Work and Construction Plans:** Step 7 follows Agency Project Delivery Guidelines in the same manner as a DBB project with design at approximately DAP level. In addition, elements from “Lifecycle Milestone 4-Advance Plans” are completed to prepare project for procurement. This step concludes upon completion of Delivery Method Decision Point D – Procurement Readiness Review.

### **Delivery Method Decision Point D**

PDT holds a Procurement Readiness Review meeting, at which time the PDT reviews project information including all data impacting project delivery method and decides whether circumstances dictate that the project should continue to procurement as a DB Low Bid project.

**Step 8 – Final Specifications, Special Provisions and Estimate for Construction:** Step 8 follows Agency Project Delivery Guidelines with a level of design that identifies the footprint constraints of the project, impacts to railroads, utilities or right of way, needs for environmental permits, any third party impacts that may require agreements; and includes PDT defined contract requirements and minimal Bidder qualifications. PDT finalizes the DB Low Bid Qualifications Checklist (Pass/Fail Minimal Requirements, Bidder Qualifications Pass/Fail Evaluator Sheet and Agency provided forms. For projects with anticipated design exceptions and anticipated impacts to interstate access FHWA approval will be “conceptual” based on Agency concept level design.

## Award Contract

**Step 9 – Project Advertisement and Public Bid Opening:** Step 9 follows Agency Project Delivery Guidelines in the same manner as DBB with the exception of OPL/FHWA review process and requirements for “Design-Build Low Bid Qualifications Checklist (Pass/Fail Minimal Requirements)” and Agency provided forms.

**Step 10 – Award Contract:** Step 10 follows Agency Project Delivery Guidelines in the same manner as DBB, with the exception of the technical responsiveness review of minimal Pass/Fail qualifications, and finalization of contract requirements and contract execution, and hand-off to Contract Administration Team.

## Construction Management -

**Step 11 – Before On-Site Work Begins:** Step 11 follows Agency Project Delivery Guidelines in the same manner as DBB, with the exception of the Pre-Construction meeting purpose and content. For a DB Low Bid Project the Pre-Construction meeting establishes a team-wide understanding of the planned project as conceptually designed and sets the ground rules, roles, and expectations for the parties involved. FHWA has an active role in the Pre-Construction meeting as well as design and design exceptions review and approval meetings for projects that have FHWA oversight.

**Step 12 – On-Site Work Begins:** On-Site Work Begins – ODOT issues First Notifications and the Design-Builder sets up a materials plant, develops aggregate sources and

starts design and construction work according to the construction contract plans and specifications.

**Step 13 – On-Site Work Completed:** Construction work is completed or a portion of the project is satisfactorily finished by the Design-Builder. Key stakeholders review the progress, identify future maintenance concerns, and resolve any issues regarding the scope and budget. During this step, the construction contractor’s work progresses to the point where the Second Notice criteria per Standard Specification, Subsection 00180.50(g) of the contract have been met. All required work has been successfully completed. This step concludes when Second Notice has been issued to the construction contractor.

**Step 14 – Acceptance of Project:** *Step 14 follows Project Delivery Guidelines in the same manner as DBB.*

**Step 15 – Transition to Maintenance:** *Step 15 follows Project Delivery Guidelines in the same manner as DBB.*