



**Washington State  
Department of Transportation**

---

# **Design-Build Manual**

**M 3126.08**

February 2022

**Construction Division**  
Design-Build Program

## **Americans with Disabilities Act (ADA) Information**

**Title VI Notice to Public** It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our non-discrimination obligations, please contact OEO's Title VI Coordinator at 360-705-7090.

**Americans with Disabilities Act (ADA) Information** This material can be made available in an alternate format by emailing the Office of Equal Opportunity at [wsdotada@wsdot.wa.gov](mailto:wsdotada@wsdot.wa.gov) or by calling toll free, 855-362-4ADA(4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

# Foreword

---

The Design-Build Manual has been prepared for Washington State Department of Transportation Engineering Managers, Design Engineers, Construction Engineers, Evaluators, Project Engineers, and other staff who are responsible for appropriately selecting, developing, and administering projects using design-build project delivery.

This manual describes the processes and procedures for procuring and administering design-build contracts. Decisions to deviate from the guidance provided in this manual must be based on representing the best interests of the public and are to be made by the individual with appropriate authority.

A thorough knowledge of the contents of this manual is essential for effectively procuring and administering design-build contracts.

Updating the Design-Build Manual is an ongoing process and revisions are issued regularly to address lessons learned, evolving approaches, updates to federal and state laws and regulations, and overall continuous improvement. Comments, questions, and improvement ideas are welcomed and accepted by using the [Suggestion Log](#).

# Contents

---

<b>Chapter 1</b>	<b>Introduction and State of the Practice</b>	<b>1-1</b>
1-1	Introduction	1-1
1-1.1	Project Delivery Methods	1-1
1-1.2	Overview of Design-Build Procurement Process	1-3
1-2	Laws and Regulations Design-Build	1-3
1-2.1	Washington State Laws	1-3
1-2.2	Federal Transportation Act and Design-Build	1-4
1-2.3	Federal Design-Build Law	1-4
1-2.4	Federal Regulations and the NEPA Process	1-5
1-3	Resources	1-7
1-3.1	Project Delivery Method	1-7
1-3.2	Design-Build Work Group	1-7
1-3.3	Design-Build Training Modules	1-7
1-3.4	Design-Build Institute of America (DBIA)	1-7
1-4	Acronyms (common design-build acronyms)	1-8
1-5	Definitions (common design-build definitions)	1-8
<b>Chapter 2</b>	<b>Pre-Procurement Activities</b>	<b>2-1</b>
2-1	Project Delivery Method	2-1
2-2	Initial Project Development	2-1
2-2.1	Project Development	2-1
2-2.2	Identification of Funding and Schedule	2-2
2-2.3	Scoping a Design-Build Project	2-3
2-2.4	Office of Equal Opportunity (OEO) Involvement	2-4
2-2.5	Risk Identification and Analysis	2-4
2-3	Selecting the Project Delivery Method	2-5
2-3.1	Project Delivery Method Selection Guidance	2-6
2-3.2	Approval for Design-Build Delivery Method Use	2-6
2-4	Developing the Project Management Plan	2-7
2-5	Project Goal Setting	2-8
2-5.1	Project Goal Setting Workshop	2-9
2-6	Project Development Organizational Structure	2-13
2-6.1	Project Development Team Composition	2-13
2-6.2	Project Development Team Member Roles & Responsibilities	2-14
2-6.3	WSDOT Headquarters Roles & Responsibilities	2-15
2-7	Preliminary Engineering	2-16
2-7.1	Practical Design, Conceptual Layout, and Basic Configuration	2-17
2-7.2	Preliminary Survey and Mapping	2-19

2-7.3	Right of Way and Access Determination .....	2-19
2-7.4	Pavement Design .....	2-20
2-7.5	Geotechnical and Soils Investigation.....	2-20
2-7.6	Bridges and Structures.....	2-21
2-7.7	Stormwater and Water Crossings.....	2-22
2-7.8	Traffic .....	2-23
2-7.9	Environmental Considerations .....	2-26
2-7.10	Utilities.....	2-30
2-7.11	Interagency/Intergovernmental Agreements.....	2-31
2-7.12	Railroad.....	2-31
2-7.13	Third Party/Adjacent Property Owners .....	2-33
2-7.14	Community Engagement/Public Information.....	2-33
2-8	Design Documentation.....	2-34
2-8.1	Conceptual Design Approval.....	2-34
2-8.2	Basis of Design, Design Parameter Sheets, and Design Analyses....	2-34
2-8.3	Project Development Approval .....	2-34
<b>Chapter 3</b>	<b>Risk Management .....</b>	<b>3-1</b>
3-1	Risk Management Processes.....	3-1
3-2	Risk Register.....	3-5
3-3	Design Issues .....	3-7
3-4	Typical Design-Build Risks on Transportation Projects.....	3-7
3-4.1	Site Conditions and Investigations.....	3-7
3-4.2	Utilities.....	3-7
3-4.3	Environmental Permitting .....	3-8
3-4.4	Right of Way .....	3-8
3-4.5	Railroads.....	3-8
3-4.6	Drainage and Water Quality .....	3-9
3-4.7	Third-Party Involvement .....	3-9
3-4.8	Construction .....	3-9
3-4.9	Differing Site Conditions.....	3-9
3-4.10	Completion and General Warranty .....	3-10
3-4.11	Local Agencies.....	3-10
3-4.12	Third-Party/Adjacent Property Owners .....	3-10
<b>Chapter 4</b>	<b>Structure and Content of the Procurement .....</b>	<b>4-1</b>
4-1	Request for Qualifications .....	4-1
4-2	Instructions to Proposers.....	4-8
4-3	Chapter 1 General Provisions .....	4-15
4-4	Chapter 2: Technical Requirements .....	4-20

<b>Chapter 5</b>	<b>General Procurement Activities</b>	<b>5-1</b>
5-1	Introduction	5-1
5-2	Procurement Resources	5-1
5-3	Timelines and Deliverables	5-2
5-4	Approval of Design-Build Projects to Advertise	5-8
5-4.1	Level 1 Approval	5-9
5-4.2	Level 2 Approval	5-9
5-4.3	Level 3 Approval	5-9
5-5	Electronic Submittal Process	5-10
5-5.1	WSDOT Secure File Transfer Protocol	5-10
5-5.2	Requesting a Username and Password	5-10
5-5.3	Statement of Qualifications Electronic Submittal	5-10
5-5.4	Proposal Electronic Submittal	5-10
5-6	Contract Ad & Award	5-11
5-6.1	Initiating the Advertisement and Award Period	5-11
5-6.2	Request a Project Webpage and Document Directory	5-12
5-6.3	Advertisement Notice	5-12
5-6.4	Submitting Documents for Web Posting and Notifications	5-13
5-7	Statement of Qualification Process	5-14
5-7.1	Voluntary Submitters Meeting	5-14
5-7.2	Request for Username and Password	5-14
5-7.3	Request for Qualifications Questions, Clarifications, and Addenda	5-14
5-7.4	Request for Qualifications Addenda	5-15
5-7.5	Receipt of Statement of Qualifications	5-15
5-7.6	Evaluation Process	5-15
5-8	Request for Proposal Process	5-16
5-8.1	Voluntary Proposers Meetings	5-16
5-8.2	1:1 Meetings	5-16
5-8.3	Request for Proposal Questions, Clarifications, and Addenda	5-18
5-8.4	Request for Proposal Addenda	5-19
5-8.5	Receipt of Proposal	5-20
5-8.6	Proposal Evaluation and Determination of the Apparent Best Value Proposer	5-20
5-9	Alternative Technical Concepts	5-21
5-9.1	Submittal	5-21
5-9.2	Review	5-22
5-9.3	WSDOT Response	5-23
5-9.4	Incorporating Alternative Technical Concepts into the Proposal	5-23
5-9.5	Evaluating Alternative Technical Concepts in the Proposal	5-23
5-9.6	WSDOT Use of Concepts Contained in an Alternative Technical Concept	5-24

5-10	Security and Confidentiality .....	5-24
5-10.1	Confidentiality and Non-Disclosure Agreement and No-Conflicts of Interest Affidavit .....	5-24
5-10.2	Security of Work Area .....	5-25
5-10.3	Documentation Control.....	5-25
5-10.4	Information Release .....	5-25
5-11	Roles and Responsibilities .....	5-25
5-11.1	Responsibilities of the Contract Ad & Award Office.....	5-25
5-11.2	Project Management Team .....	5-25
5-11.3	Region Executive Team .....	5-25
5-11.4	Headquarters Executive Team .....	5-26
5-11.5	WSDOT Project Engineer .....	5-26
5-11.6	Technical Point of Contact .....	5-26
5-11.7	Assistant State Construction Engineer .....	5-26
5-11.8	Procurement Support/ Request for Qualifications /Request for Proposal Coordinator.....	5-27
5-12	Design-Build Delivery Interface with Other Processes.....	5-27
5-12.1	Environmental Processes.....	5-27
5-12.2	Federal Highway Administration Processes .....	5-28
5-13	Debriefs .....	5-28
5-13.1	Evaluation – Key Points .....	5-29
5-13.2	Incorporating Reference Feedback .....	5-29
5-13.3	Incorporating Statement of Qualifications and Proposal Comments .....	5-30
5-13.4	Getting Ready for Debrief Sessions.....	5-30
5-13.5	External Debriefs .....	5-31
5-13.6	Summary or Closing .....	5-32
<b>Chapter 6</b>	<b>Evaluation of Statements of Qualifications (SOQ) and Proposals.....</b>	<b>6-1</b>
6-1	Introduction .....	6-1
6-1.1	Transparency .....	6-1
6-1.2	Scoring Systems .....	6-2
6-1.3	Evaluation Methods .....	6-2
6-1.4	Confidentiality and Non-Disclosure Agreement (Agreement), and No-Conflicts of Interest Affidavit (Affidavit).....	6-2
6-1.5	Information Release .....	6-3
6-1.6	Security of Work Area .....	6-3
6-1.7	Documentation Control.....	6-3
6-1.8	Potential Evaluators List .....	6-4

- 6-2 Roles and Responsibilities .....6-4
  - 6-2.1 Facilitator .....6-4
  - 6-2.2 Evaluators.....6-5
  - 6-2.3 Technical Advisor .....6-7
  - 6-2.4 Office of Equal Opportunity Technical Advisor .....6-7
  - 6-2.5 Observer.....6-8
  - 6-2.6 Project Management Team .....6-8
  - 6-2.7 Region Executive Team .....6-9
  - 6-2.8 Headquarters Executive Team .....6-9
  - 6-2.9 Contract Ad & Award Office ..... 6-10
- 6-3 Statement of Qualifications Evaluations Process..... 6-10
  - 6-3.1 Objectives ..... 6-10
  - 6-3.2 Overall Statement of Qualifications Evaluation Process ..... 6-10
  - 6-3.3 Statement of Qualifications Evaluation Chart ..... 6-12
  - 6-3.4 Schedule..... 6-13
  - 6-3.5 SOQ Evaluation Process ..... 6-13
  - 6-3.6 Adjectival Rating Criteria..... 6-14
  - 6-3.7 Assessing Strengths and Weaknesses..... 6-14
  - 6-3.8 Conclusion of SOQ Evaluation Procedure ..... 6-15
  - 6-3.9 SOQ Evaluation Materials..... 6-16
- 6-4 Proposal Evaluations..... 6-16
  - 6-4.1 Objectives ..... 6-16
  - 6-4.2 Overall Proposal Evaluation Process..... 6-16
  - 6-4.3 Proposal Evaluation Chart..... 6-18
  - 6-4.4 Schedule..... 6-18
  - 6-4.5 Proposal Evaluation Process..... 6-19
  - 6-4.6 Proposal Evaluation Kick-Off Meeting ..... 6-20
  - 6-4.7 Independent Evaluations..... 6-20
  - 6-4.8 In-the-Room Evaluations..... 6-21
  - 6-4.9 Internal Proposal Debriefs..... 6-22
  - 6-4.10 Identification of Betterments ..... 6-22
  - 6-4.11 Award Process..... 6-22
  - 6-4.12 Proposal Evaluation Materials ..... 6-22



<b>Chapter 7</b>	<b>Contract Administration/Implementation</b>	<b>7-1</b>
7-1	Project Organization: Key Personnel	7-1
7-1.1	Other Project Personnel	7-2
7-2	Project Startup	7-2
7-2.1	Award, Contract Execution, and Notice to Proceed	7-2
7-2.2	Co-Location	7-3
7-3	Contract Meetings, Hold Points, and Milestones	7-3
7-3.1	Contract Meetings	7-3
7-3.2	Milestones and Hold Points	7-5
7-4	Contract Submittals	7-7
7-4.1	Document Control Work Plan	7-7
7-4.2	Quality Management Plan	7-7
7-4.3	Environmental Compliance Plan	7-7
7-4.4	Design Documentation	7-7
7-4.5	Released for Construction Documents	7-8
7-4.6	Non-Conformance Report and Non-Conformance Issue	7-8
7-4.7	As Builts	7-9
7-4.8	Final Records	7-9
7-5	Partnering	7-10
7-6	Design Development	7-10
7-6.1	Process	7-10
7-6.2	Design Quality Assurance and Quality Control	7-11
7-7	Construction Processes	7-11
7-7.1	Testing, Inspection, and Materials Quality Assurance	7-11
7-7.2	Statistical Analysis of Materials	7-12
7-7.3	F&t Analysis	7-12
7-7.4	Testers and Inspectors Quality Control	7-13
7-7.5	Independent Assurance	7-13
7-7.6	Quality Assessment	7-13
7-7.7	Quality Verification	7-13
7-8	WSDOT Auditing Processes and Non-Conforming Work	7-14
7-8.1	WSDOT Audits	7-14
7-8.2	Non-Conforming Work	7-21
7-9	FHWA Audits	7-21
7-10	Change Orders	7-22
7-10.1	Change Order	7-22
7-11	Construction Contracts Information System Database	7-23

7-12	Payments .....	7-24
7-12.1	Progress Payments .....	7-24
7-12.2	Processing Liquidated Damages .....	7-24
7-13	Final Documents and Meetings for Close Out .....	7-24
<b>Chapter 8</b>	<b>Project Acceptance and Close Out .....</b>	<b>8-1</b>
8-1	Introduction .....	8-1
8-2	Project Acceptance .....	8-1
8-2.1	Completion and Final Acceptance .....	8-1
8-2.2	Physical Completion .....	8-2
8-2.3	Substantial Completion .....	8-2
8-3	Close Out of Final Design Documentation .....	8-3
8-3.1	Design Documentation Package .....	8-3
8-3.2	Project File .....	8-4
8-3.3	Project Development Approval .....	8-4
8-3.4	Technical Memoranda .....	8-5
8-3.5	Design Analyses .....	8-5
8-3.6	WSDOT Quality Verification Design Documentation .....	8-5
8-3.7	Approval and Retention of Final Design Documentation .....	8-6
8-4	Close Out of Final Construction Documentation .....	8-7
8-4.1	As Built Plans .....	8-7
8-4.2	Construction Final Records .....	8-8
<b>Chapter 9</b>	<b>Vacant .....</b>	<b>9-1</b>
<b>Chapter 10</b>	<b>FHWA and Civil Rights .....</b>	<b>10-1</b>
10-1	FHWA Involvement .....	10-1
10-1.1	Stewardship and Oversight Agreement .....	10-2
10-1.2	FHWA Authorization of Design-Build Projects .....	10-3
10-1.3	FHWA Concurrence of Design Analyses on NHS Highways .....	10-4
10-1.4	FHWA Projects of Division Interest (PoDIs) .....	10-4
10-2	Civil Rights .....	10-4
10-2.1	Disadvantaged Business Enterprise (DBE) .....	10-4
10-2.2	Federal Small Business Enterprise (FSBE) .....	10-5
10-2.3	On-the-Job Training (OJT) .....	10-5
10-2.4	Equal Employment Opportunity (EEO) .....	10-5
10-2.5	Apprenticeships .....	10-6
10-2.6	Requirements for Affirmative Action to Ensure Equal Employment Opportunity .....	10-7
10-2.7	Title VI .....	10-9
10-2.8	ADA .....	10-9

## 1-1 Introduction

Design-build is a highly utilized project delivery method by state departments of transportation (DOTs) across the country. Transportation is the fastest growing design-build sector in the United States, with transportation design-build projects substantially increasing since 2010, both in quantity and value of projects.

Design-build is only one method of project delivery used by Washington State Department of Transportation (WSDOT) for delivering transportation projects. Because design-build incorporates both design and construction services in the same contract, it can offer numerous benefits for the right projects. Those benefits include:

- Achieving the best value for the project
- Achieving critical schedule requirements for the project including key milestones
- Achieving the best quality and maximum scope within the limitations of cost, schedule and other project limits
- Early price certainty
- Opportunity for innovation
- Single point of responsibility
- Sustainable staffing levels
- Fair and equitable risk allocation

However, design-build may not be optimal for every project so the WSDOT Project Delivery Method Selection Guidance (PDMSG) should be reviewed when choosing a delivery method.

The Project Delivery Methods section in this Chapter provides background on the three project delivery methods used by WSDOT.

### 1-1.1 *Project Delivery Methods*

WSDOT primarily employs three types of project delivery methods: (1) traditional Design-Bid-Build (DBB), (2) Design-Build (DB), and (3) General Contractor/Construction Manager (GCCM). The delivery methods differ in the contractual relationship between WSDOT, the contractor, and the designer.

#### **Design-Bid-Build**

DBB has been the most utilized project delivery method and continues to be the method most used by WSDOT. The linear nature of the planning, preconstruction, and construction phases is well known and practiced. In this delivery method, WSDOT staff or consultant staff design a project, and when construction plans are complete, the project is let for bids to the construction industry. Typically, the lowest bidder is awarded the contract and construction occurs under WSDOT oversight. Using this delivery method, WSDOT allocates the majority of the responsibility for risk to itself.

## Design-Build

DB is a common alternative project delivery method that began in 2001 at WSDOT and has since become a delivery method used by the WSDOT for projects with specialized construction techniques, where opportunities for innovation exist, or where savings in delivery time can be realized. In DB, the owner procures a DB team (a paired contractor and design consultant) with a best-value procurement process. The selected design-build team takes over the preliminary design from the owner and develops the final design for the project. When construction packages are ready, the contractor builds the packages until the project is complete. During this delivery method, the majority of the responsibility and risk for the design and construction is allocated to the selected design-build team. The Design-Builder is responsible for the budget, schedule, and Quality Control. However, for this method to be effective, the owner needs to recognize that there are certain responsibilities and associated risks that the owner is better able to manage. A key to successful design-build is to properly allocate the project risks to the parties that are best able to manage them. The WSDOT project team should spend significant efforts during the procurement phase to research project risks and develop the Technical Requirements to properly allocate risk and focus the design-build team toward achievement of the project goals.

## General Contractor/Construction Manager

In GCCM, the owner is the primary Project Manager much like in DBB. However, with this method, the owner takes on new roles while managing separate contracts with a selected GCCM services contractor and its design consultant team. The owner must act as a facilitator, negotiator, decision maker, collaborator, and manager and must be an active participant in every step of the preconstruction and construction phases. GCCM Project Managers make the final decisions on completion; the contractor provides the owner with construction pricing that is negotiated to reach an agreed construction price.

Once a construction contract is executed, the contractor's role changes to that of a general contractor (GC) during construction. This is a very traditional role and is similar to the responsibilities of a GC on a DBB project. The contractor also manages its own risk that it assumed responsibility for or is sharing with the owner.

## Comparison of Project Delivery Methods

The delivery methods differ in the timing of the design, procurement, and construction phases of a project. DB and GCCM are often used to advance the construction phase of a project or accelerate the total project delivery schedule. Although project schedules are still controlled by items such as Right of Way (ROW) acquisition, permitting, and funding availability, both design-build and GCCM offer opportunities to accelerate the project delivery time. This is accomplished by having overlapping design, procurement, and construction phases. The contractor also has greater control over project phasing and construction methods that can accelerate the project schedule. The designer and contractor collaborate to develop the design, construction methods, and phasing in support of an efficient construction schedule. Schedule and budget certainty is also obtained sooner in design-build, as the Design-Builder commits to a construction schedule earlier in the procurement process.

## 1-1.2 Overview of Design-Build Procurement Process

In a typical 2-step design-build procurement process, the first phase is the qualifications phase. WSDOT issues a Request for Qualifications (RFQ). Interested design-build firms respond to the RFQ by submitting Statements of Qualification (SOQs). WSDOT's evaluation team evaluates the SOQs and short lists three to five most qualified firms. The short listed firms are then invited to participate in the second phase – the Request for Proposals (RFP).

In the second phase of design-build procurement, WSDOT issues an RFP along with Instructions to Proposers (ITP). The RFP is comprised of both General Provisions and Technical Requirements and provides the basis for the eventual design-build contract. The ITP requires the short listed Proposers to submit two separate proposals – a Price Proposal and a Technical Proposal. WSDOT's evaluation team evaluates the Technical Proposals and scores them without regard to price. In fact, the Price Proposals are not seen by the evaluation team until bid opening day. At that time, the technical scores for each proposal are combined with the Price Proposals to identify the Apparent Best Value (ABV) Proposer. Refer to Chapters 5 and 6 for additional information regarding the procurement process.

## 1-2 Laws and Regulations Design-Build

Federal and state legislation continue to evolve in the support of design-build for publicly funded transportation projects. The following section summarizes the existing Federal laws and Washington state legislation that allow for design-build and the regulations that govern design-build.

### 1-2.1 Washington State Laws

Legislative changes in 2015 approved the use of design-build for projects with contract cost of \$2 Million or greater. Prior to this, projects were approved for a Small Design-Build Pilot Project with the report located at: [www.wsdot.wa.gov/NR/rdonlyres/E69DBA9F-45DA-4791-AFC0-33128C1565A1/0/SmallDesignBuildPilotProjectsReport.pdf](http://www.wsdot.wa.gov/NR/rdonlyres/E69DBA9F-45DA-4791-AFC0-33128C1565A1/0/SmallDesignBuildPilotProjectsReport.pdf)

According to current State law, [RCW 47.20.780](#), “The department of transportation shall develop a process for awarding competitively bid highway construction contracts for projects over two Million dollars that may be constructed using a design-build procedure.”

According to current State law, [RCW 47.20.785](#), “The department of transportation is authorized and strongly encouraged to use the design-build procedure for public works projects over two Million dollars when:

1. The construction activities are highly specialized and a DB approach is critical to developing the construction methodology; or
2. The projects selected provide opportunity for greater innovation and efficiencies between the designer and the builder; or
3. Significant savings in project delivery time would be realized.

## 1-2.2 Federal Transportation Act and Design-Build

The last three Federal surface transportation-funding acts included provisions in the support of design-build, which led to the creation and reforms of the FHWA statutory requirements for design-build.

On December 10, 2002, in response to Section 1307 of the Transportation Equity Act for the 21st Century (TEA-21), the FHWA published the final rule that established regulations for design-build contracting in the Code of Federal Regulations (CFR) as Title 23 CFR Part 636. Subsequent modifications required by Section 1503 of the *Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) resulted in revisions published in a final rulemaking on August 14, 2007. Among the revisions made by SAFETEA-LU were the elimination of the dollar thresholds for qualified projects and permission to release a Request for Proposal (RFP) or award a design-build contract prior to completion of the National Environmental Policy Act (NEPA) of 1969 process. Design-build procurement processes that deviate from the requirements of 23 CFR Part 636 may still require a Special Experimental Project No. 14 (SEP-14) work plan and approval.

The Federal surface transportation bill *Moving Ahead for Progress* in the 21st Century Act (MAP-21) was signed in to law on July 6, 2012 and it further defined regulations for using design-build to deliver Federal-aid projects. MAP-21 made provisions to streamline the environmental review process and broadened the ability for states to acquire or preserve Right of way (ROW) for a transportation facility prior to completion of the review process required under NEPA. MAP-21 also increased funding for the Transportation Infrastructure Finance and Innovation Act (TIFIA) and expanded the types of projects eligible for the program. This increased the states' abilities to engage in public-private partnerships (P3s).

## 1-2.3 Federal Design-Build Law

### Statutory Requirements:

Title 23 of the United States Code (U.S.C.), Part 112(b) (3) provides the FHWA's statutory requirements for the design-build project delivery method. It includes the following:

- *A state transportation department or local transportation agency may award a Design-Build contract for qualified projects using any procurement process permitted by applicable state and local law.*
- *Design-build contract means an agreement that provides for design and construction of a project by a contractor, regardless of whether the agreement is in the form of a design-build contract, a franchise agreement, or any other form of contract approved by the Secretary.*

## Regulatory Requirements:

Title 23 CFR Part 636 provides the FHWA's regulatory policy for the design-build project delivery method and is broken into five subparts:

- Subpart A—General
- Subpart B—Selection Procedures, Award Criteria
- Subpart C—Proposal Evaluation Factors
- Subpart D—Exchanges; and Subpart E—Discussions, Proposal Revisions and Source Selections

Qualified projects are defined as projects meeting requirements of Title 23 CFR Part 636.

For information regarding 23 CFR, Chapter 1 (Federal Highway Administration, Department of Transportation, see [Chapter 10](#) of this manual.

### 1-2.4 **Federal Regulations and the NEPA Process**

Within 23 CFR Part 636, FHWA has put into effect its design-build contracting regulations that establish the parameters by which state transportation departments (STDs) may deliver projects using design-build, and how it relates to the NEPA process. The section that pertains to how far an STD can take a procurement process prior to the conclusion of the NEPA process follows:

*§ 636.109 - How does the NEPA process relate to the design-build procurement process?*

*The purpose of this section is to ensure that there is an objective NEPA process, that public officials and citizens have the necessary environmental impact information for Federally funded actions before actions are taken, and that design-build Proposers do not assume an unnecessary amount of risk in the event the NEPA process results in a significant change in the proposal, and that the amount payable by the contracting agency to the Design-Builder does not include significant contingency as the result of risk placed on the Design-Builder associated with significant changes in the project definition arising out of the NEPA process.*

*Therefore, with respect to the design-build procurement process:*

*(a) The contracting agency may:*

- (1) Issue a Request for Qualifications (RFQ) prior to the conclusion of the NEPA process as long as the RFQ informs Proposers of the general status of NEPA review.*
- (2) Issue an RFP after the conclusion of the NEPA process.*
- (3) Issue an RFP prior to the conclusion of the NEPA process as long as the RFP informs Proposers of the general status of the NEPA process and that no commitment will be made as to any alternative under evaluation in the NEPA process, including the no-build alternative.*

- (4) *Proceed with the award of a design-build contract prior to the conclusion of the NEPA process.*
  - (5) *Issue NTP with preliminary design pursuant to a design-build contract that has been awarded prior to the completion of the NEPA process.*
  - (6) *Allow a design-builder to proceed with final design and construction for any projects, or portions thereof, for which the NEPA process has been completed.*
- (b) *If the contracting agency proceeds to award a design-build contract prior to the conclusion of the NEPA process, then:*
- (1) *The contracting agency may permit the Design-Builder to proceed with preliminary design.*
  - (2) *The contracting agency may permit any design and engineering activities to be undertaken for the purposes of defining the project alternatives and completing the NEPA alternatives analysis and review process; complying with other related environmental laws and regulations; supporting agency coordination, public involvement, permit applications, or development of mitigation plans; or developing the design of the preferred alternative to a higher level of detail when the lead agencies agree that it is warranted in accordance with 23 U.S.C. 139(f)(4)(D).*
  - (3) *The design-build contract must include appropriate provisions preventing the design-builder from proceeding with final design activities and physical construction prior to the completion of the NEPA process. (contract hold points or another method of issuing multi-step approvals must be used)*
  - (4) *The design-build contract must include appropriate provisions ensuring that no commitments are made to any alternative being evaluated in the NEPA process and that the comparative merits of all alternatives presented in the NEPA document, including the no-build alternative, will be evaluated and fairly considered*
  - (5) *The design-build contract must include appropriate provisions ensuring environmental and mitigation measures identified in the NEPA document will be implemented.*
  - (6) *The Design-Builder must not prepare the NEPA document or have any decision-making responsibility with respect to the NEPA process.*
  - (7) *Any consultants who prepare the NEPA document must be selected by and subject to the exclusive direction and control of the contracting agency.*
  - (8) *The Design-Builder maybe requested to provide information about the project and possible mitigation actions, and its work product may be considered in the NEPA analysis and included in the record.*
  - (9) *The design-build contract must include termination provisions in the event that the no-build alternative is selected.*



- (c) *The contracting agency must receive prior FHWA concurrence before issuing the RFP, awarding a design-build contract, and proceeding with preliminary design work under the design-build contract. Should the contracting agency proceed with any of the activities specified in this section before the completion of the NEPA process (with the exception of preliminary design, as provided in paragraph (d) of this section), the FHWA's concurrence merely constitutes the FHWA approval that any such activities complies with Federal requirements and does not constitute project authorization or obligate Federal funds.*
- (d) *The FHWA's authorization and obligation of Preliminary Engineering and other preconstruction funds prior to the completion of the NEPA process is limited to preliminary design and such additional activities as may be necessary to complete the NEPA process. After the completion of the NEPA process, the FHWA may issue an authorization to proceed with final design and construction and obligate Federal funds for such purposes.*

Further information about the NEPA process may be found in Chapter 400 of the WSDOT [Environmental Manual](#) M 31-11.

## 1-3 Resources

### 1-3.1 *Project Delivery Method*

In 2015, WSDOT developed the PDM to evaluate projects for the most appropriate PDM based on each projects attributes, opportunities, and risks that result in the most cost effective and best value project delivery. A State Construction Office led focus group developed the PDM guidance, with input from the WSDOT, AGC and ACEC Design-Build Committee. With this new guidance, all projects will be evaluated for the optimal PDM.

### 1-3.2 *Design-Build Work Group*

The WSDOT Design-Build Work Group (DBWG) which has representatives from each region had significant input into the development of this manual and will continue to be an advisory group for future manual updates. The DBWG is a resource for Regions and Project Engineer Offices in the project delivery and administration of a Design-Build project. Contact the Design-Build Program at WSDOT HQ Construction Office for a distribution list of DB Work Group members.

### 1-3.3 *Design-Build Training Modules*

The HQ Design-Build Program has established and implemented an approved DB Training Program. The [DB Training Program](#) consist of varies training module ranging from procurement guidance to contract close out. These trainings are offered annually at the DB Training Summit and on demand as necessary.

### 1-3.4 *Design-Build Institute of America (DBIA)*

The Design-Build Institute of America is an organization that defines, teaches and promotes best practices in design-build. [www.dbia.org/Pages/default.aspx](http://www.dbia.org/Pages/default.aspx)

## **1-4 Acronyms (common design-build acronyms)**

Common design-build acronyms and abbreviations can be found in [Section 1-01.2\(1\)](#) of the RFP.

## **1-5 Definitions (common design-build definitions)**

Common design-build definitions can be found in [Section 1-01.3\(1\)](#) of the RFP.

### 2-1 Project Delivery Method

Not all projects can or should be delivered with the design-build project delivery method (PDM). Considering the time and resource investment required to properly execute a design-build procurement process, each project needs to be carefully scoped and scheduled, its project goals set, its staff and resource requirements considered, and an initial project risk assessment completed before the PDM is selected.

The Washington State Department of Transportation's (WSDOT) formal Project Delivery Method Selection Guidance (PDMSG) process should be employed as a best practice to identify the appropriate PDM. Several of the characteristics of design-build delivery noted by the (PDMSG) are provided below:

- Design-build can expedite the overall project delivery schedule or the construction schedule.
- Design-build can obtain aggressive project pricing with a process of innovation focused on cost-efficient solutions.
- Design-build is most effective when funding available for design and construction of the basic project is known and set.
- Design-build requires that the project scope of work and the desired performance be fully defined through a preliminary project design development and detailed Technical Requirements.
- Design-build requires the project team to have the resources (usually including potential consultant support) to preliminarily advance the design and execute a formalized and extensive procurement process.
- After the procurement phase, the project team (often including consultant support) must have the resources to oversee the implementation (design and construction) of the project, including possible co-location requirements.
- To be most effective, the project risks should be well understood, defined, and properly allocated between WSDOT and the Design-Builder.

Using the PDMSG methodology, these factors and more are considered in conjunction with other characteristics of traditional Design-Bid-Build (DBB) to identify the best PDM.

### 2-2 Initial Project Development

#### 2-2.1 Project Development

Project development for design-build projects is a distinctly different process than for DBB projects. In the DBB format, WSDOT typically bears the majority of responsibility and risk for any design-related issues. The Engineer of Record (EOR) responsibility for design decisions and conformance to design requirements rests with the owner. In design-build, the Design-Builder is the EOR and is ultimately responsible for meeting all design requirements. WSDOT is still responsible for initial project development that establishes

the project scope, design criteria, conceptual plans, and the performance requirements in the procurement documents (Request for Qualifications (RFQ), Instructions to Proposers (ITP), General Provisions, Technical Requirements, and appendices. As the Design-Builder is ultimately responsible for the design, wherever possible, WSDOT project personnel should resist the temptation to insert their preferences or solutions into the RFP, as this tends to transfer the risk originally intended for the Design-Builder back to WSDOT.

The RFP should consist of design elements and requirements that WSDOT believes are absolutely necessary. In design-build projects, WSDOT does not have a direct contractual relationship with the EOR; however, successful design-build projects require continuous WSDOT collaboration and engagement throughout the procurement and the implementation phases of the project.

### 2-2.2 Identification of Funding and Schedule

WSDOT prioritizes projects through the development and ongoing maintenance of the Statewide Transportation Improvement Program (STIP) as required by Federal regulations. The Office of Financial Management manages the STIP.

In order to be included in the STIP, a project must be scoped and a total project estimate must be prepared. For design-build projects, it is especially important to include any anticipated stipend costs in your scoping estimate. One way to calculate this amount is to apply a typical percentage for stipends as a function of total estimated contract cost. Additionally, keep in mind that typical percentages used for estimating Construction Engineering and Mobilization will differ between DBB and design-build projects. Refer to the WSDOT [EBASE Users Guide](#) for guidance on calculating these typical percentages.

The scoping team creates a draft baseline schedule that identifies key project milestones and related activities, which is then reviewed by the WSDOT discipline managers and subsequently approved by the Region Management Team.

The project team should review the established project schedule and funding source(s) along with any associated requirements, as these may affect the PDM and the decision to use design-build.

#### 2-2.2.1 Upset Amount Development and Usage

For some projects, the establishment of an Upset Amount may be necessary. The Upset Amount establishes the maximum proposal price WSDOT will accept in the Apparent Best Value Determination. Philosophically, this amount establishes the maximum amount WSDOT is willing to pay for the basic scope of the project as defined by the RFP plus Betterments that a Proposer may choose to include in their proposal. The decision to include an Upset Amount in the RFP should be carefully considered based on discussions with Region leadership and the Capital Program Development and Management (CPDM) office. The use of an Upset Amount must be approved by the Deputy State Construction Engineer. If included, the Upset Amount should not be adjusted or removed.

The Upset Amount is set as the project budget available for payments to the Design-Builder less sales tax. This amount is determined by reducing the total project budget

by the amounts expended and planned for engineering, Right of Way (ROW), utility relocations, any “below the line” items, State force work, owner supplied materials, contingencies, stipends, etc. In establishing the Upset Amount, the project team needs to be diligent in estimating the total budget needs and the amount remaining for the maximum proposal price.

On some projects there may be a significant difference in the engineer’s estimate and the budget for the project. When the engineer’s estimate exceeds the budget, the project team must either reduce the basic scope of the project or add funds until they are confident that the project can be designed and constructed within the budget. When the engineer’s estimate is significantly less than the budget, the Upset Amount could be set at the budget or at the probable greatest cost of the contract (including risk and Betterments) as determined by a Cost Estimate Validation Process (CEVP) or another objective tool.

The Upset Amount should never be used to artificially suppress proposal prices.

### 2-2.2.2 Stipends

WSDOT will pay a stipend to all Proposers submitting a responsive proposal to partially offset the proposal preparation cost. Best practice suggests that approximately one-half to one-third of the proposal preparation cost be covered by the stipend. The cost of preparing a responsive proposal is directly related to the requirements of the RFP documents and this effort must be recognized when determining the amount of the stipend. In lieu of estimating such costs or soliciting them from Proposers, a minimum stipend amount equal to 0.30 percent of the engineer’s estimate is recommended.

In addition to offsetting the proposal preparation costs, payment of the stipend to the Proposer allows WSDOT to use any ideas or information contained in the proposals without obligation to pay additional compensation to the Proposer. If a Proposer selects not to accept a stipend, WSDOT may not use the ideas or information in the proposal but the document is accessible by request in accordance with the Public Records Act. Refer to the ITP template for additional details.

### 2-2.3 *Scoping a Design-Build Project*

The scoping of a project should begin with the development and review of the project goals and risks. The identified goals and risks are then used to prepare the PDMSG Checklist and determine the best PDM.

When initially scoping a project for possible design-build project delivery, the project team should consider the project schedule and resources available to manage the process. Design-build projects place a unique demand on project team members in both the development and execution of the procurement process and in the oversight of the project implementation (design and construction). The project team must become knowledgeable in design-build delivery and have the commitment of resources necessary to perform its processes. If the project team members do not have prior experience implementing design-build delivery for a project of similar nature, then they must attend WSDOT developed training sessions.

The project team should review the project for elements that can be favorably addressed by the design-build PDM. These may include:

- The capability to provide a best value process that evaluates the technical merit, cost, and schedule in the selection of a Design-Builder for the project, with a focus on meeting and exceeding the project goals;
- The capability to expedite the overall delivery schedule of the project, particularly for large, complex projects;
- The capability to minimize the construction durations and construction impacts of the project;
- The promotion of innovation to provide an equal or better product that more efficiently utilizes project budget; and
- An effective means of addressing project risks by allocating them to the parties that are best able to manage them.

#### **2-2.4 Office of Equal Opportunity (OEO) Involvement**

See Section 26.51(d-g): Contract Goals of the OEO publication “Disadvantaged Business Enterprise Program Participation Plan”.

#### **2-2.5 Risk Identification and Analysis**

A risk is defined as an uncertain event or condition that, if it occurs, has a negative or positive effect on a project goals and objectives. Understanding which risks can and must be controlled by WSDOT and which risks can and should be shared with the Design-Builder results in an efficient and effective proposal package, a competitive bidding environment, and overall lower costs.

Risk management is discussed in more detail in [Chapter 3](#); however, a basic understanding of the risk characteristics relative to the different methods of project delivery is important in initial project scoping, goal setting, and selection of the appropriate PDM.

Traditional DBB delivery uses prescriptive provisions and fully completed designs that effectively assign most of the risk to WSDOT. When project risks are well defined, an advantage of the design-build PDM is that those risks can be properly assigned in the Technical Requirements.

An initial assessment of project risks needs to be performed by the project team at the time of project scoping to assist with the selection of the appropriate PDM. Project risks also need to be continually reviewed throughout the development of the RFP, the design development, and the construction phases of the project. The risk matrix diagrams the analysis and management process and generally includes these five steps:

- Identify the risk
- Assess and analyze the risk
- Mitigate and plan for the risk
- Allocate the risk
- Monitor and control the risk

Design investigations and development by WSDOT in design-build delivery is focused on minimizing and managing project risks. Elements of the design are advanced not blindly to an arbitrary level of completion but as necessary to manage their risks. Low-risk areas of the project may need to be advanced to only a very low level of development to adequately address the risks associated with the scope of work; however, high-risk areas of the project may need to be developed to a more significant level to address the risks and properly allocate them. The identification of risk and preparation of a risk management plan leads to the development of a Risk Based Estimating Self-Modeling Spreadsheet for the project, which is further explained in [Chapter 3](#).

## 2-3 Selecting the Project Delivery Method

The PDMSG is the method by which a project is comprehensively designed, procured, and constructed. The PDM generally begins with the development of a project design and continues through the administration of the construction. The choice of PDM influences many aspects of the project at different stages, including the:

- Project scope definition;
- Organization of contractors, designers, and various consultants;
- Sequencing of design and construction operations;
- Execution of design and construction;
- Environmental approvals;
- Testing, inspection, and acceptance; and
- Startup and close out procedures.

The different PDMs are distinguished by the manner in which contracts between WSDOT, designers, and contractors are formed and the technical relationships that evolve between each party as described in the contracts. The key contractual relationships of the primary methods of delivery are described in the following paragraphs.

In the DBB PDM, WSDOT is responsible for the details of design during construction; as a result, in DBB WSDOT is responsible for the cost of any errors or omissions encountered in construction.

Design-build is a PDM in which WSDOT procures both design and construction services in the same contract from a single, legal entity referred to as the Design-Builder. The method typically uses a two-phase selection process consisting of RFQ and RFP phases. The Design-Builder controls the details of design and the critical path for the project delivery life cycle and is responsible for the cost of any errors or omissions encountered in construction.

### 2-3.1 *Project Delivery Method Selection Guidance*

The evolution of innovative contracting PDMs such as design-build has made it important to evaluate projects early in their development to determine the most beneficial PDM. WSDOT has developed the PDMSG tool for assessing traditional DBB and design-build delivery for a given project in order to select the PDM most suitable for a project.

The PDMSG is available on the [Project Delivery Method Selection Guidance page](#) of the WSDOT website.

The PDMSG provides the detailed methodology and worksheets to use for the delivery selection process, summarized in the narrative of this manual.

The PDMSG is a formal, documented approach for WSDOT PDM selection. Forms and guidance documents are available for use by WSDOT staff and project team members. The primary objectives of the checklist (and matrix, for projects in excess of \$100M) are to:

- Present a structured approach to assist WSDOT in making project delivery decisions;
- Assist WSDOT in determining if there is a prevailing or an obvious choice of a PDM; and
- Provide documentation of the project delivery decision in a Project Delivery Approval Memo.

The PDMSG should not be used to justify a predetermined decision of PDM.

### 2-3.2 *Approval for Design-Build Delivery Method Use*

The PDMSG is integrated with the existing WSDOT Project Development process. All projects are evaluated in two steps:

The Probable PDM is established during the Scoping Phase prior to the approval of the Project Profile by Region Program Management Offices while collaborating with region subject experts and documented in the Capital Program Management System.

The Final PDM is determined once the Project Profile is approved, a Work Order is set up for the project, and the project is assigned to the Design Office. This Final PDM is determined at 10 percent to 30 percent design.

The use of the Probable PDM is a preliminary determination for project planning until the Regional Design Project Office, assigned to the project in the Final PDM, can approve the PDM. The Probable PDM is determined in the scoping phase of a project before the approval of the Project Profile/Summary. The Probable PDM process is to provide the PDM intent for the project as initial direction to the project office, with the basis for that Probable PDM selection.

Final PDM is the PDM determination submitted for approval in preliminary design. Final PDM selection occurs after assignment of the project to a Project Engineer's Office (approximately 10 percent to 30 percent design). The Project Engineer will determine the Final PDM using either the PDM Selection Checklist or the PDM Selection Matrix, or both.



**Exhibit 2-1 Final Project Delivery Method Selection Process**

Project Cost	Selection Document/ Tools	Authorizations
Less Than \$2 Million	Projects will be DBB	Programmatically Except
\$2 Million or Greater but Less than \$25 Million	Selection Checklist	<ul style="list-style-type: none"> <li>• Signature by Project Engineer</li> <li>• PDE/EM Manager Approval</li> </ul>
25 Million or Greater but Less than \$100 Million	Selection Checklist and Consider *Selection Matrix	<ul style="list-style-type: none"> <li>• Signature by Project Engineer</li> <li>• PDE/EM Manager Endorsement</li> <li>• Regional Administrator Approval</li> </ul>
\$100 Million or Greater	*Selection Matrix	<ul style="list-style-type: none"> <li>• Signature by Project Engineer</li> <li>• PDE/EM Manager</li> <li>• Regional Administrator Approval</li> </ul>
Exception or Change of Final PDM (regardless of Project Cost)	N/A	<ul style="list-style-type: none"> <li>• PDE/EM Manager Endorsement</li> <li>• Regional Administrator Endorsement</li> <li>• Chief Engineer Approval for Projects greater than \$100 Million</li> </ul>

**Notes:**

The Project Cost is the total of the Preliminary Engineering and Construction Costs. Projects under \$2 Million are programmatically exempt from PDMSG, do not require a Selection Checklist, and will be DBB. Preservation paving projects under \$10 Million are programmatically exempt from PDMSG, do not require a Selection Checklist, and will be DBB.

Design-build's most likely application would be for improvement projects in the mobility, economic initiatives, or environmental subprograms where there are opportunities for innovation, greater efficiencies, or significant savings in project delivery time.

\*The Selection Matrix is developed using a workshop approach. The workshop should include the Project Engineer, PDE/EM, ASCE, ASDE, region and HQ support groups, subject matter experts, etc.

**2-4 Developing the Project Management Plan**

WSDOT is committed to project management best practices. The WSDOT Project Management Guide offers resources for best practices.

The Project Management Guide consists of five process groups: Initiating, Planning, Executing, Monitoring and Controlling, and Closing. A key deliverable to these processes is the Project Management Plan.

The Project Management Plan contains, at a minimum, the following elements:

- Initiate and Align Worksheet
- Project Performance Baseline
- Scope
- Schedule
- Budget
- Risk Management Plan
- Change Management Plan
- Quality Management Plan
- Communications Plan
- Transition and Closure Plan

## 2-5 Project Goal Setting

Project goals are observable, measurable end results having one or more objectives to be achieved during delivery of the project. Project goals should be based on the unique objectives, needs, and benefits of the project as well as capture stakeholder commitments. Project goals can provide a project team long-term vision and short-term motivation while helping the project team focus time and resources around what is important.

An understanding of project goals is essential to the selection of an appropriate PDM. The goals influence the project development, procurement, implementation, and administration of the contract. The goals communicate what WSDOT values for the project and become distinguishing factors between Proposers when determining which proposal provides the best value. Project goals are used to evaluate the strengths of the design-build teams and short list the three teams that provide the best fit. Design-build teams will put together their basic proposal strategy based on the goals in the RFQ. It is important to maintain the same goals from the RFQ to the RFP. If completely different goals are used in the RFP, the project team may miss an opportunity to utilize a design-build team that better aligns with the project needs than the three short listed design-build teams. These goals should provide guidance to contractors, consultants, and others in assembling their teams and preparing proposals for the project. The purpose of the goals is to ultimately guide the project throughout the design and construction phases.

Project goals are developed by the project team and vetted by the Project Development Engineer or Project Director. To maximize the usefulness of project goals for the life of the project, the project team and management should reach a consensus on the selection of said goals. Project risks, opportunities, and concerns should be examined when shaping project goals. The development of a position paper should specifically define the project's needs and objectives, its specific scope of work, the project goals, and ultimately the benefits of the selected PDM.

The project goals align the owner and Design-Builder and are an important aspect for managing change and influencing decision-making by reminding team members of established priorities.

The goals become the basis of the partnering charter and will ideally unify WSDOT and the Design-Builder into a collaborative design-build team, rather than each party guarding its own interests. Potential disputes are filtered through the lens of the project goals and decisions are made based on what best meets the project goals.

It is recommended that projects be limited to 2 to 4 goals. Having too many goals diffuses focus and defeats the purpose of focusing on priorities. The project goals must be specific for each project and remain consistent over the life of the project.

DBE participation, which must be a project goal for Federal-aid projects, is measured through evaluation of the DBE Performance Plan. Work with WSDOT's Office of Equal Opportunity in obtaining DBE participation goal (percentages). For more information, refer to [Chapter 10](#) of this manual.

## Typical Generic Project Goals

The following are generic examples of transportation project goals:

### Schedule

- Minimize the project delivery time
- Complete the project before a specified date
- Make the project operational prior to a specified date
- Accelerate the start of project revenue
- Minimize inconvenience to the traveling public during construction
- Maximize safety of workers and the traveling public during construction

### Cost

- Maximize the project scope and improvements within the project budget
- Complete the project on budget

### Quality

- Meet and exceed the project requirements
- Produce a high-quality design and construction that minimizes project risks
- Produce the most highly qualified organization to perform the work
- Produce an aesthetically pleasing project

### Functional

- Maximize the life cycle performance of the project
- Maximize capacity and mobility improvements
- Provide innovative solutions to the complex project problems

### Environmental

- Maximize Stewardship
- Maximize Collaboration

## 2-5.1 *Project Goal Setting Workshop*

Significant transportation projects should include a goal-setting workshop early in the project development, prior to selection of the PDM. The workshop can be conducted by the project team or by an outside expert. Facilitated goal setting workshops preferably include expertise in both goal setting for transportation projects and innovative contracting.

Oftentimes, transportation projects include significant stakeholder interests beyond the WSDOT project teams. In these cases, it is advantageous to include stakeholders in goal setting. This is best accomplished by including the stakeholders in the goal-setting workshop or by soliciting their input in one-on-one meetings prior to the workshop if their participation in the workshop is not feasible. In projects with multiple funding sources, it is particularly important to solicit input from funding partners in the development of the project goals.

Representation to consider in assembling the goal setting team:

- Assistant Regional Administrator (ARA) or Engineering Manager (EM)
- Regional Project Engineer or Project Manager
- Consultant Project Manager and key staff
- Specialty project staff (major contributors)
- Lead agency representation (Federal Highway Administration [FHWA], Federal Transit Administration [FTA], Federal Railroad Administration [FRA], Regional Transportation District [RTD])
- Entity funding partners (local government)
- Facilitator
- Other stakeholders

It is important for WSDOT Executive Management to support the project goals. Their support is usually attained through the approval of the project goals by the project Executive Oversight Committee. An example worksheet for the development of the initial project definition and goals is provided in [Initial Project Definition and Goal Setting Worksheet](#). When the worksheet is completed and the project goals are determined, it can provide the basis of a position paper that summarizes the initial project definition and goal setting.

**Exhibit 2-2 Comparison of Primary Evaluation Factors for Delivery Methods**

Factor	Design-Bid-Build	Design-Build
<b>Delivery Schedule</b>	<ul style="list-style-type: none"> <li>• Requires time to perform sequential design and procurement</li> <li>• If design time is available, has the shortest procurement time after the design is complete</li> </ul>	<ul style="list-style-type: none"> <li>• Can get a project phase under construction before completing total design for the project</li> <li>• Parallel process of design and construction can accelerate project delivery schedule</li> <li>• Procurement time can be lengthy due to the time necessary to develop an adequate RFP, evaluate proposals, and provide for a fair, transparent selection process</li> </ul>
<b>Complexity and Innovation</b>	<ul style="list-style-type: none"> <li>• Allows WSDOT to fully resolve complex design issues and qualitatively evaluate designs before construction bidding</li> <li>• Innovation provided by WSDOT/consultant expertise and through traditional WSDOT-directed processes such as value engineering (VE) studies and contractor bid alternatives</li> </ul>	<ul style="list-style-type: none"> <li>• Incorporates Design-Builder input into the design process through:               <ol style="list-style-type: none"> <li>1. Best value selection</li> <li>2. Contractor-proposed ATCs</li> </ol> </li> <li>• ATCs focus on innovative, cost-efficient solutions to complex problems</li> <li>• Requires that desired outcomes to complex projects be well defined through contract requirements</li> </ul>

Exhibit 2-2 Comparison of Primary Evaluation Factors for Delivery Methods

Factor	Design-Bid-Build	Design-Build
<b>Level of Design</b>	<ul style="list-style-type: none"> <li>100 percent design by WSDOT, with WSDOT having complete control over the design</li> </ul>	<ul style="list-style-type: none"> <li>Design advanced by WSDOT to the level necessary to precisely define contract requirements and properly allocate risk (typically 30 percent or less)</li> </ul>
<b>Project Cost</b>	<ul style="list-style-type: none"> <li>Competitive bidding provides a low-cost construction for a fully defined scope of work</li> <li>More cost change orders due to the contractor having no design responsibility</li> </ul>	<ul style="list-style-type: none"> <li>It is possible that a given project will cost more when delivered using design-build versus DBB.</li> <li>Designer-Builder collaboration and ATC process can enhance the potential of increased value to WSDOT.</li> <li>Poor risk allocation can reduce cost efficiency or can jeopardize the success of the procurement</li> </ul>
<b>General Characteristics</b>	<ul style="list-style-type: none"> <li>Requires that most design-related risks and third-party risks be resolved prior to procurement to avoid costly contractor contingency pricing and change orders and claims</li> </ul>	<ul style="list-style-type: none"> <li>Provides opportunity to properly allocate well-defined and known risks to the parties best able to manage them</li> <li>Risks allocated to Design-Builder must be well defined to minimize contractor contingency pricing of risks</li> </ul>
<b>Site Conditions and Investigations</b>	<ul style="list-style-type: none"> <li>Site condition risks are generally best identified and mitigated during the design process prior to procurement to minimize the potential for change orders and claims</li> </ul>	<ul style="list-style-type: none"> <li>Certain site condition risks can be allocated to the Design-Builder provided they are well defined and associated third-party approval processes are well defined</li> <li>Unreasonable allocation of site condition risk results in high pricing due to risk</li> <li>Site investigations by WSDOT should include but are not limited to: <ol style="list-style-type: none"> <li>Basic design surveys</li> <li>Hazardous Materials</li> <li>Geotechnical investigations</li> <li>Utilities investigations</li> <li>High seasonal groundwater surface elevation</li> <li>Existing soil infiltration rates</li> <li>Existing wetlands and sensitive areas</li> </ol> </li> </ul>
<b>Utilities</b>	<ul style="list-style-type: none"> <li>Utilities risks are best allocated to WSDOT and are mostly addressed prior to bid to minimize potential for claims.</li> </ul>	<ul style="list-style-type: none"> <li>Utilities responsibilities need to be clearly defined in the contract requirements and appropriately balanced between Design-Builder and WSDOT. Refer to Section 2.10, <i>Utilities and Relocation Agreements</i>, of the RFP for more information.</li> </ul>

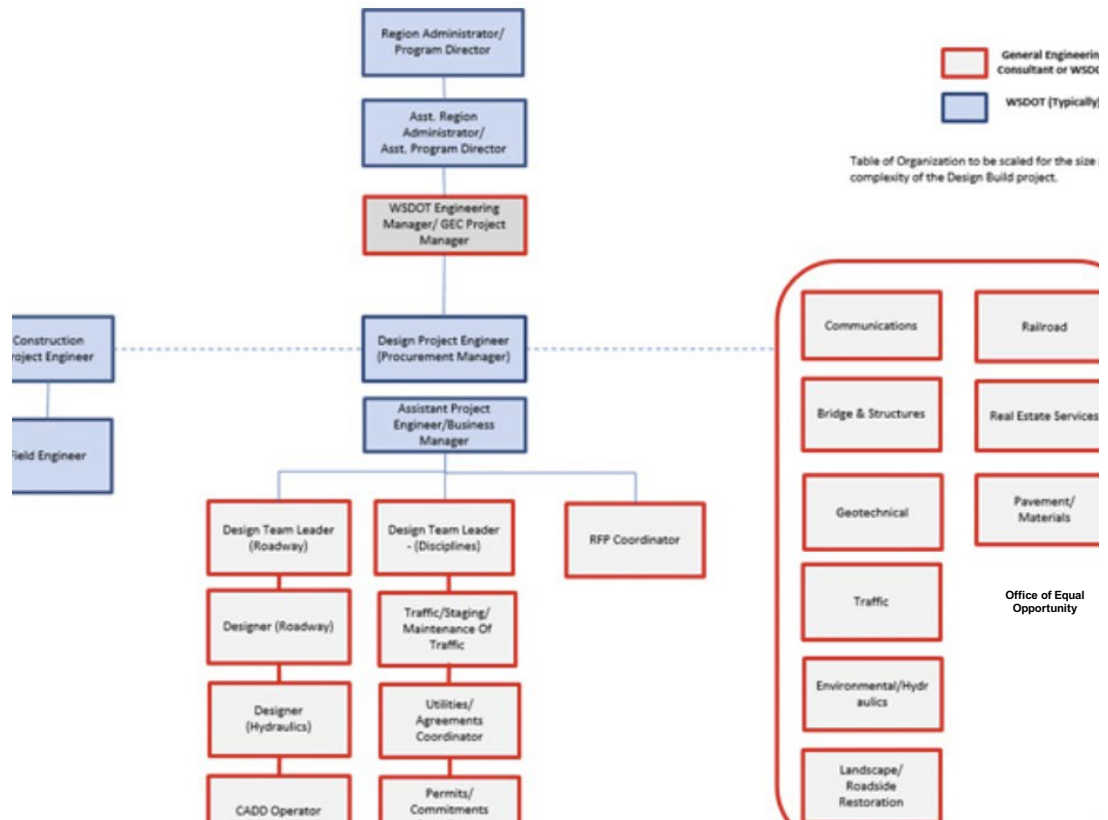
Exhibit 2-2 Comparison of Primary Evaluation Factors for Delivery Methods

Factor	Design-Bid-Build	Design-Build
<b>Environmental</b>	<ul style="list-style-type: none"> <li>Risk is mitigated by completing all environmental documentation and obtaining all environmental permits and approvals prior to bid.</li> </ul>	<ul style="list-style-type: none"> <li>WSDOT can minimize risk by completing all environmental documentation and obtaining the major environmental permits and approvals before accepting proposals. WSDOT may also need to develop agreements or memoranda of understanding (MOUs) with regulatory agencies and/or Tribes prior to procurement. Certain environmental permits and approvals can be delegated to the Design-Builder, as allowed per the law or our agreements.</li> </ul>
<b>Right of Way</b>	<ul style="list-style-type: none"> <li>ROW clearances are obtained before bid</li> </ul>	<ul style="list-style-type: none"> <li>ROW clearance commitments can be defined to allow design-build before completing all acquisition</li> <li>ROW acquisition responsibilities and risks can be shared if well defined</li> </ul>
<b>Drainage and Water Quality</b>	<ul style="list-style-type: none"> <li>Drainage, water quality, and water quantity systems are designed prior to bid</li> </ul>	<ul style="list-style-type: none"> <li>For design-build projects, drainage features are conceptually designed up to 30 percent. The Conceptual Designs are not guaranteed to be accurate nor constructible. The conceptual hydraulic designs provide Design-Builders with the minimum requirements determination, design guidelines, and standards that the Design-Builder must follow, any commitments made, and any other restrictions that we may have.</li> </ul>
<b>Third-Party Involvement</b> (FHWA, railroads, funding partners, adjacent jurisdictions, etc.)	<ul style="list-style-type: none"> <li>Third-party risk is best mitigated through the design process prior to bid to minimize potential for change orders and claims</li> </ul>	<ul style="list-style-type: none"> <li>Third-party approvals and processes that can be fully defined can be allocated to the Design-Builder</li> <li>Agreements or MOUs with approval agencies prior to procurement should be obtained to minimize risks</li> </ul>

## 2-6 Project Development Organizational Structure

Design-build projects are typically larger projects that involve multiple agencies and stakeholders and require large project teams, but design-build projects can also be smaller, less complex projects with proportionally smaller project teams. Regardless of the size of the project and for the projects to be executed efficiently, it is important to set up a formalized organizational structure that defines roles, responsibilities, and decision-making authority. The specific organization for a given project may vary however a typical structure maybe as shown in the Exhibit 2-3.

Exhibit 2-3



### 2-6.1 Project Development Team Composition

The composition of design-build project development teams (project team) can vary based on project size, scope, complexity, location, and available resources. On large design-build projects, all or the majority of the project team are assigned to work full-time on the project and may include co-located General Engineering Consultants (GECs) that report directly to the Project Engineer (PE). On small design-build projects only a core group of the project team work full-time while many team members work part-time, while remaining in their existing organizations or support groups, to support the development of procurement and contractual documents.

GEC tasks on a design-build project may include pre-award project development (preparation of environmental documents, design documentation (Conceptual Design Approval), conceptual geometric layout, preliminary bridge design, hydraulics, and stormwater, etc.), development of contract documents, and post-award contract administration support (submittal review, etc.). The GEC supporting the pre-award project development on a specific design-build project cannot be part of a design-build team (pre-award) or perform work on that design-build project for the selected Design-Builder (post-award).

The policies and procedures for A&E related consultant services acquisition including GEC are included in the WSDOT [Consultant Services Manual](#) M 27-50. Consultants can be procured either separately, for the procurement and implementation phases of the project, or under a single consultant agreement that issues separate consecutive task orders for the procurement and implementation phases of the project.

### 2-6.2 **Project Development Team Member Roles & Responsibilities**

**Regional (or Program) Administrator:** The Regional Administrator (RA) is ultimately responsible for the delivery of the project and provides guidance from a programmatic level. The RA or designee has the authority to remove any project team member for failure to comply with the confidentiality requirements of the project. On smaller design-build projects, the Assistant Regional Administrator (ARA) or designee may perform the responsibilities of the RA.

**ARA/EM (or equivalent):** The ARA or EM-level individual who directly supports the RA in leading the project, including development of procurement goals and schedule parameters, and serves as the liaison to WSDOT Headquarters (HQ) Design, Construction, and Contract Ad & Award.

**Design Project Engineer:** The Design PE is the procurement manager and leads the development of the Conceptual Design, RFQ, and RFP documents. The Design PE is the single point of contact responsible for the development and delivery of the project through procurement. After the project is awarded, the Design PE may also lead the design oversight activities of the design-build contract. The Design PE is responsible for coordinating with key stakeholders, FHWA, critical technical disciplines, and Local Agencies to ensure their organization's interests are fully considered in the development of the procurement documents.

The Design PE is generally responsible for the day-to-day management, coordination, and development of the project and the design-build procurement process. The Design PE oversees the activities of the technical teams and ensures their work products are appropriately incorporated in the procurement documents. The Design PE is also responsible to ensure all parties involved in the project are aware of and have signed [Confidentiality and Non-Disclosure Agreements and No-Conflicts of Interest Affidavits](#).

The Design PE is responsible for setting up the evaluation team and for scheduling the Statement of Qualifications (SOQ) evaluation, proposal evaluation, and debrief meetings, both internal and external. The Design PE is also responsible for scheduling and overseeing the one-on-one meetings with the short listed Proposers.



**Construction Project Engineer/WSDOT Engineer:** The Construction PE supports the Design PE during project development and procurement process through reviews of Conceptual Design and development of RFQ and RFP documents. The Construction PE ultimately serves as the WSDOT Engineer after procurement and is the single point of contact responsible for implementation and administration of the design-build contract.

The Construction PE or designee is responsible for attending the one-on-one meetings with the short listed Proposers.

**Design Team Discipline Leads and/or Specialty Office Leads:** The project team also includes the Office of Equal Opportunity and specialty office leads (Geotechnical, Bridge, Environmental, Traffic, etc.), who are responsible for defining technical design requirements and modifying their respective RFP template sections, including appendices, to ensure that the project's specific Technical Requirements are clearly communicated in the contract. They participate in the multi-disciplinary review of the RFP documents and assist in resolving any review comments. Specialty office leads are responsible for responding to questions and reviewing Alternative Technical Concepts (ATCs) (through the Design PE) during procurement and are also responsible for attending discipline specific Task Force Meetings and providing review and comment of Design-Builder submittals after the project is executed.

**RFP Coordinator:** The RFP coordinator plays a critical role during the procurement process and has the responsibility for developing or compiling various elements of the procurement documents (RFQ, RFP, and ITP) into the final product. RFP coordinator ensures technical discipline leads develop the Technical Requirements in accordance with RFP development schedule, process, and procedures. The RFP coordinator reviews Technical Requirements for clarity and consistency and facilitates multi-disciplinary Review and Comment resolution. The RFP coordinator may also coordinate with WSDOT Region and HQ Construction for final RFP approval and coordinate with Contract Ad & Award to issue final RFQ, RFP, and addenda for advertisement.

Every project team is different and will likely have additional members supporting the delivery efforts beyond the members listed above. The Project Management Plan should include all team members and their specific roles and responsibilities on that particular project.

### **2-6.3 WSDOT Headquarters Roles & Responsibilities**

**Assistant State Design Engineer:** The Assistant State Design Engineer (ASDE) supports the project development team in practical design process and approves the Basis of Design and Design Analyses pertaining to Basic Configuration and Conceptual Design.

The ASDE coordinates with FHWA on any required design related approvals and engages with WSDOT project teams in assessing project risks during the development of Basic Configuration and project goals.

During the procurement phase, the ASDE may be involved in reviewing design related ATCs and approves all Design Analyses and Access Revision Report (ARR) revisions through final design. The ASDE will also be involved in review and approval of the final design documentation in accordance with WSDOT [Design Manual](#) Chapter 300.

**Assistant State Construction Engineer:** The Assistant State Construction Engineer (ASCE) supports the project development team in design-build procedures, reviews RFP documents for template changes including project specific language, and provides approval to issue the RFP. The ASCE acts as an official observer in procurement evaluations to ensure consistency and neutrality. The ASCE will also be involved with change approvals during contract administration.

**Contract Ad & Award Office:** The Contract Ad & Award (CAA) Office advertises the RFQ, and RFP and announces Apparent Best Value Proposer. CAA responsibilities also include verifying EBASE against the Price Proposal Form, posting addendums and other project information, reviewing Pass/Fail criteria for SOQ and proposal submittals, and responding to procurement protests. CAA compiles the design-build contract, including the Contract Form and Betterments, and manages contract award and execution.

## 2-7 Preliminary Engineering

Defining an appropriately detailed project scope requires a preliminary risk assessment. The WSDOT project team must weigh the project risks associated with the technical areas and determine the appropriate level of development to define and allocate these risks to the appropriate party (WSDOT or the Design-Builder). WSDOT [Project Risk Management Guide](#) provides guidance on identifying and analyzing risks and guidelines for performing risk assessment using tools such as Cost Risk Assessment (CRA) and CEVP.

Preliminary investigations needed to develop the design-build project are similar to those undertaken for a DBB project. Control surveys, preliminary surveys, ROW plans, environmental studies and permits, hydraulic analysis, geotechnical investigations, utility investigations, and required agreements must be completed for a typical design-build project. The information acquired as a result of these activities provides the base data required to develop the Conceptual Design, identify, assign and allocate risk, and provide other information necessary to develop design approval and prepare the RFP. WSDOT's Conceptual Design must display that the improvements can be reasonably constructed within the constraints and restrictions identified in the RFP. Consider utilizing the value engineering approach to help narrow and establish the Conceptual Design and Basic Configuration in order to maximize project value.

The detail and amount of data gathered will vary project by project dependent on the amount of information needed to concisely define the project scope and appropriate risk assignment, but usually will require less effort than for a DBB project. Focus should be on gathering data, while the analysis should be left up to the Design-Builder. In an ideal scenario, the amount of base data provided by WSDOT should be to the point at which Design-Builder can separate solutions (bridge types, walls vs. fills, alignments, etc.). Base maps, project geologic boring investigations, and generalized hydraulic basin evaluations can be completed without significantly impacting a specific solution.

The Preliminary Engineering (PE) effort should concentrate on adequately defining the elements of the project's Basic Configuration and the allowable limits for the following:

- Horizontal and vertical alignment
- Project limits and ROW
- Vertical clearances
- Horizontal clearances
- Locations of signal and Intelligent Transportation System (ITS) work
- Interchange types and locations
- Mitigation measures for environmental commitments (e.g. noise walls, wetland mitigation, historic/cultural resources mitigation)

Other PE efforts should focus on the following:

- Performance specifications, including defining any constraints
- Appropriate design requirements (what design criteria will the Design-Builder be required to meet)
- Locations of existing utilities
- Estimates
- Preliminary scheduling to define appropriate contract time limits
- Stakeholder desires and requirements
- WSDOT-secured permits
- Location of sensitive areas (e.g. known existing contamination, wetlands, trees, Endangered Species Act (ESA) habitat, historic/cultural resources)
- Location of existing fish barriers within the project limits
- For fish passage projects, bankfull width determination
- Wildlife collisions and connectivity opportunities

Additional considerations for the level of project development are discussed in the subsequent sections.

## **2-7.1 Practical Design, Conceptual Layout, and Basic Configuration**

WSDOT is committed to context appropriate, multimodal, and performance based practical designs. WSDOT [Design Manual](#) Chapter 11 discusses WSDOT's approach to performance based practical solutions and practical design for developing cost efficient solutions. Design-build projects are also required to follow the practical design procedures outlined in Chapter 11 for developing the conceptual layout and the project's Basic Configuration.

### **2-7.1.1 The Basic Configuration**

The Basic Configuration defines fundamental parameters of the project, and it is a critical provision in the contract documents. The Basic Configuration is described in the RFP in the *General Provisions*, Section 1-01.3(1). Unlike the project description, which is furnished to the Proposers as information, the Basic Configuration is a contractual obligation to which the Design-Builder must conform. The Basic Configuration describes the scope of

the improvements and elements that at a minimum must be included in the proposal by the Design-Builder. The Basic Configuration is generally a narrative description formatted as a bulleted list, not a set of plans, exhibits, or technical documents. The bulleted list includes features or attributes from the conceptual plans and consists of the essential project elements that all responsive proposals must adhere to in order to establish a level playing field.

The Basic Configuration combines with the technical provisions of the RFP to fully define the project. Generally, the Basic Configuration describes the basic elements to be built, and the technical provisions describe what is to be designed and constructed. Basic Configuration is the standard against which constructability is measured. WSDOT warrants that the project is constructible with the Basic Configuration parameters listed in the *General Provisions* and as shown in the conceptual plans.

The essence of writing the Basic Configuration is finding the appropriate balance between maintaining sufficient control over the basic design and allowing enough room to incorporate innovative ideas from the Proposers. WSDOT should have a good understanding of project goals and risk allocation before developing the Basic Configuration. The Basic Configuration should be limited to the fundamental scope of work that is necessary to meet the project purpose and need and project commitments.

Critical project components, such as interchanges, on-and off-ramps, number of lanes, trail locations, alignment and widths, intersection control types, etc. often are included in the Basic Configuration. The Basic Configuration is the foundation of the project scope of work and its elements may not be omitted, altered, or substituted in a proposal without WSDOT approval. The Basic Configuration should be defined in such a way as to give the design-build team latitude to make design adjustments that provide cost or schedule advantages while maintaining compliance with project goals, objectives, criteria, and other contract requirements. The “footprint” described by the Basic Configuration should provide the Design-Builder appropriate flexibility to modify the preliminary design developed by WSDOT, in order to ensure transfer of design risk from WSDOT to the Design-Builder. In establishing the Basic Configuration, WSDOT should avoid imposing unnecessary controls over the design that may lay liability for design defects on WSDOT and limit the Design-Builder’s flexibility for innovation. A project’s Basic Configuration may include the following dependent on the project risks and constraints:

1. Begin and end points for tying in horizontal and vertical alignment
2. ROW plans that depict the limits of ROW or easements obtained or to be obtained by WSDOT
3. Vertical clearances
4. Horizontal clearances
5. Number and width of lanes
6. Location of major structures (or crossings)
7. Railroad crossings (grade separation or at-grade)

8. Location of signalized intersection
9. Paving requirements
10. Mitigation measures for environmental commitments (e.g. noise walls, wetland mitigation, historic/cultural resources mitigation)

### **2-7.2 Preliminary Survey and Mapping**

WSDOT is responsible for providing survey control and preliminary base mapping for the project. The level of mapping should be adequate to support initial project development, including a complete definition of the project, development of the necessary Conceptual Design, basis for estimating the project cost, completing environmental documents, and determining ROW needs. The mapping will ultimately be provided in the RFP and will serve as the basis for the Design-Builder to develop concepts. The Design-Builder is responsible for all final design surveying and construction staking surveying.

The survey and mapping performed for the preliminary and Conceptual Design is made available for the Design-Builder as a reference document, with the caveat that it is the Design-Builder's responsibility to validate and confirm the quality and accuracy of this data to use in their effort to finalize the design of the project. The recommended survey and mapping tasks include:

- Establishing control throughout the project
- Stationing along the control lines to establish feature and design criteria locations
- Existing cadastral information describing existing and future ROW
- Construction easements associated with WSDOT's Conceptual Design
- Topographic information, such as contour lines, and major site features to define the footprint of the project as expected by the Department or as intended by the Design-Builder. This level of mapping also supports other data gathering investigations and provides the base map for delineating feature locations
- Location of sensitive areas (e.g. known existing contamination, wetlands, trees, ESA habitat, historic/cultural resources)

### **2-7.3 Right of Way and Access Determination**

WSDOT must delineate existing ROW and access as part of base data collection. ROW and access are potential high-risk areas that can significantly impact the project schedule both in initial project development by WSDOT and contract execution by the Design-Builder. If additional ROW needs are identified to construct the conceptual plan, WSDOT is generally responsible for developing or modifying existing ROW and access control plans and acquiring necessary ROW within which the Design-Builder must work based on the Conceptual Design footprint. The Design-Builder can pursue additional ROW acquisition for their design and is responsible for all additional construction easements that may become necessary. The Design-Builder assumes all schedule risk for additional ROW needs arising from their design during the procurement and implementation phase.

WSDOT will typically acquire all ROW needed for the project, but at the expense of the Design-Builder when it is beyond that identified for the conceptual plan. It is not necessary to have all ROW acquired at the time the RFP is released. If it is not, however, the RFP should identify the dates at which WSDOT will obtain possession and use. ROW parcels not available at Notice to Proceed shall be detailed in Chapter 2 Technical Requirements of the RFP. To avoid delay claims, it is important to provide access to parcels by the dates indicated.

In some cases, it may be advantageous to delay purchasing a portion of the required ROW until the footprint is finalized by the selected Design-Builder, or until all proposals are submitted to determine if the conceptual ROW footprint is needed. This is important in areas with very high real estate costs where minimizing the amount of real estate purchased is critical to successful delivery of the project. It will require incorporating this requirement in the project goals and the scoring criteria for proposals to incentivize ROW minimization. When making this decision, factor the potential cost of delays associated with ROW acquisition into WSDOT's risk cost.

#### **2-7.4 Pavement Design**

It is important to provide the Design-Builder with pavement condition reports and the structural composition of the existing pavements. Due to time constraints placed on the project, the Design-Builder will be inclined to assume that all existing pavements are in good condition unless noted otherwise. Provide a full pavement report to the Design-Builder for all roadways within the project limits, including all shoulders.

Pavement designs for all permanent roadways, ramps, shoulders, paths, and trails must be designed by WSDOT in accordance with WSDOT's Pavement Policy; the pavement design report will be referenced in the Technical Requirements and provided in RFP appendices. The pavement designs shall include minimum pavement sections, pavement types, and base materials. Typical roadway sections will be provided in the Conceptual Design, depicting the width, depth, and material type for the permanent roadway work. Pavement designs for temporary work are the responsibility of the Design-Builder. Typically, pavement designs for Local Agency roadways are the responsibility of the Design-Builder.

#### **2-7.5 Geotechnical and Soils Investigation**

Geotechnical data represents a significant risk to both WSDOT and the Design-Builder. Focus should be on providing the data and the analysis should be left up to the Design-Builder. The geotechnical data should provide enough information to permit the Design-Builder to perform a preliminary assessment of geologic features and to address key engineering issues such as foundation and wall types.

Borehole data information must be prepared and provided as part of the Geotechnical Data Report (GDR). The borehole data must include a log indicating depths and layers of subsurface materials, and groundwater elevations. Boreholes with piezometers or other geotechnical instrumentation should be installed sufficiently ahead of time to provide the design-build teams with a full year of data prior to advertisement of the RFP. The borehole locations must be accurately surveyed, and all wells installed as part of the field

exploration efforts need to be decommissioned following the guidance in Chapters 3 and 22 of the WSDOT *Geotechnical Design Manual* prior to RFP advertisement.

WSDOT's Conceptual Design used to develop the field exploration program for the preliminary design and the development of the GDR. Together, the Conceptual Design and the GDR data will be used by the Geotechnical Office, or Geotechnical Consultant, to prepare the Geotechnical Baseline Report (GBR). The GBR and GDR data will also be used to estimate the allotted value for change conditions as it is encountered by the Design-Builder and will be the baseline for establishing Differing Site Conditions (DSC).

Data prepared and gathered by WSDOT is provided and represented as specific to the exact location where it is taken. WSDOT intends to minimize proposal development costs by gathering enough data to allow competitive price estimates by the design-build teams. However, all Design-Build teams have the opportunity and option to develop their own data and create alternate solutions based on that data.

The risk management approach for unknown geotechnical conditions is one of shared assignment and shared allocation. Geotechnical information and details are gathered consistent with the current version of the WSDOT *Geotechnical Design Manual*.

Supplemental information may be gathered and made available from As Built plans and other geotechnical reports prepared for earlier projects.

Refer to WSDOT *Geotechnical Design Manual* Chapter 22, for more detailed, design-build geotechnical investigation requirements.

## **2-7.6** *Bridges and Structures*

During PE and conceptual plan development, WSDOT prepares the structure conceptual plan to be included as part of the RFP Appendix M. The purpose of the structure conceptual plan is to present a baseline structural concept where bridges or buried structures are assumed by WSDOT to be necessary in the conceptual plans.

The structure conceptual plan should be limited to the assumed type, size, and location information for each structure and any other pertinent information included in the WSDOT *Bridge Design Manual* Appendix 15.2-A1 Conceptual Plan Checklist.

Conceptual plan information regarding the location, size, and type of retaining walls assumed to be needed should be limited to a plan view of the approximate locations. General assumptions regarding the locations of retaining walls should be made for estimating purposes and to provide a general concept of the need for retaining walls to the design-build teams. Efforts to minimize the use of retaining walls and to balance cuts and fills should be kept to a minimum with the understanding that this is likely one of the first efficiencies that the design-build teams will investigate.

WSDOT *Bridge Design Manual* Chapter 15 provides detailed structural design requirements for design-build contracts.

### 2-7.7 Stormwater and Water Crossings

This information developed for the Conceptual Hydraulic Report and the Draft Preliminary Hydraulic Design Report serves as the basis for environmental permits and ROW acquisition. Complete or final stormwater and water crossing designs should not be provided to the Design-Builder. The focus should be on establishing the stormwater and water crossings design requirements for the project beyond those already set by the Mandatory Standards (WSDOT *Hydraulics Manual* and WSDOT *Highway Runoff Manual*). If the stormwater and water crossing requirements or design criteria are ambiguous or can lead to significantly different results, WSDOT may set the design basis for all design-build teams in the RFP as minimum acceptable parameters. The supplemental stormwater and water crossing parameters may include items such as:

1. Minimum stormwater structure dimensions
2. Acceptable alternative runoff treatment or flow control BMP options
3. Local Agency or other regulatory requirements or agreements
4. Minimum Bankfull Width
5. Minimum Hydraulic Clear Span
6. Minimum Structural clear Span
7. Maximum Hydraulic length
8. Minimum 100-year design freeboard
9. Minimum maintenance clearance
10. Expected Structure type
11. Required Design methodology
12. Channel morphology
13. Channel regrade expectation
14. Bed material composition
15. Minimum number of Large Woody Material expected
16. Use of Large Woody Material within the hydraulics length of the structure

The Mandatory Standards, supplemental hydraulics and stormwater requirements, and desired end results should be clearly identified and defined in the RFP Technical Requirements.

Ambiguous, vague, or incomplete information increases the risk to WSDOT and the possibility of undesirable stormwater and water crossing designs and results. Some project areas may require a preliminary hydrologic and hydraulic analysis to establish minimum design criteria or fulfill regulatory requirements such as:

1. Conducting a floodplain analysis or no-rise analysis for Environmental Assessment (EA)/Environmental Impact Statement (EIS) on projects with water-crossing structures



2. Determining the drainage area data for site drainage design criteria
3. Conducting an existing stormwater drainage feature system evaluation to determine which part of the existing stormwater drainage system doesn't need to be replaced by the project.

In summary, the information included in the RFP should be the minimum required to meet the regulatory requirements, define the scope of hydraulic and stormwater design criteria, and serve as the basis for environmental permits and ROW acquisition.

### **2-7.7.1 Roadside Restoration**

The WSDOT project team should work with their Region support staff and Bridge & Structures to identify any project specific landscaping or architectural requirements. This should also be a topic that is discussed with project stakeholders. Any project specific, regional roadside restoration, or structural architectural treatments need to be identified in the RFP. For projects that require corridor continuity or other specific needs, the WSDOT project team should consider including an appendix that would include details for landscaping and architectural features.

## **2-7.8 Traffic**

### **2-7.8.1 Traffic Data and Analysis**

Traffic data supports many technical areas of the project scope and definition both during initial project development and during proposal development as the basis for design-build teams to develop concepts. WSDOT performs much of the traffic data and analysis during initial project development in order to conduct tasks necessary for developing Basic Configuration and completing the National Environmental Policy Act (NEPA) process.

The traffic data and analysis may be necessary to develop design year traffic forecasts, environmental studies (noise, air quality, etc.), Intersection Control Evaluation, ARR, construction phasing, and Maintenance of Traffic (MOT) strategies.

Where minimum requirements are not the desired end result, the RFP must identify the controlling criteria, such as acceptable levels of service, minimum lane widths, minimum shoulder widths, minimum temporary alignment designs, safety requirements, or other design criteria.

### **2-7.8.2 Safety Analysis**

All projects are required to perform safety analysis in accordance with the WSDOT *Design Manual* Chapter 321. On design-build projects, WSDOT project teams typically perform safety analysis on the conceptual plans during initial project development. During procurement, design-build proposals and ATCs developed by the design-build teams could require re-evaluation of safety and modifications to the safety analysis. The Design-Builder is required to address safety concerns as part of the ATC analysis they provide to WSDOT to show that the ATC is equal or better. The Design-Builder is responsible for revising safety analysis as part of the final Design Documentation Package for their proposed designs.

### 2-7.8.3 Intelligent Transportation System

The ITS Technical Requirement section will need to include any project or region specific requirements such as fiber count, conduit type, conduit routing, fiber termination, proprietary equipment, or other requirements not covered by the Mandatory Standards. Recommendations for ITS elements to be incorporated in the RFP include:

1. Early identification and meeting of the ITS stakeholder group to define the ITS needs
2. Early planning to identify, develop, and execute necessary agreements
3. Development of 30 percent or less system design plans for ITS and communications that provide the conceptual locations of ITS devices
4. Specify the minimum number of devices, if necessary. An example requirement could be “One Variable Message Sign (VMS) sign on mainline I-5 for the northbound and one for the southbound direction, north of SR 16.”
5. Verification of existing infrastructure needed to support ITS elements, communication, and identification of required minimum standards
6. WSDOT specifications beyond performance and function requirements
7. WSDOT oversight and acceptance requirements including inspection and testing
8. Inclusion of ITS elements, work, and testing in the Design-Builder Project Schedule
9. Identification of standards to be used for bidding and work identification purposes. Should include Local Agency standards if applicable.

Based on specific project needs, consideration should be given for ITS elements to include:

1. Software development
2. Incident Information Management Systems
3. Mass Transit signal priority systems
4. Parking management systems
5. Light Rail Transit public address systems
6. VMS systems, camera system, toll system
7. Active Traffic Management System
8. Proprietary or specific types of material

### 2-7.8.4 Signing

The conceptual plans should include a conceptual guide sign plan that provides the location and messaging for key guide signs. This would include any signing that has been committed to for destination signing or other messaging. The WSDOT project team should work with the Traffic Office to develop this conceptual plan, which will typically include the mandatory locations of overhead sign placement. The conceptual guide sign plan should not include regulatory signing or other signs that are adequately covered by the Mandatory Standards. The signing section of the RFP will need to include any project

or region specific requirements such as sign sheeting, steel versus wood posts, or other specific requirements not covered by the Mandatory Standards.

### **2-7.8.5 Traffic Signals**

The conceptual plans should include a conceptual traffic signal plan to identify the locations of vehicle and pedestrian signals as well as ramp meter signal configurations and locations. The conceptual traffic signal plan should not provide the level of detail that is typically included in a DBB project such as conduit runs and conductor sizing, but it should provide the basic orientation of each signal system. The traffic signals section of the RFP will need to include any project or region specific requirements such as LED signal heads, region or project specific pole or cabinet specifications or other specific requirements not covered by the Mandatory Standards. Details for cabinets, poles, or other features that are unique to the project due to commitments to Local Agencies or other requirements need to be included in Appendix T or otherwise referenced in the RFP documents.

### **2-7.8.6 Illumination**

The conceptual plans typically will not include a conceptual illumination plan unless there is a need to show what the requirements or project commitments are to tie into an existing system or other need to identify luminaire spacing that would conflict with a light level analysis. If a conceptual illumination plan is necessary, it should not provide the level of detail that is typically included in a DBB project such as conduit runs and conductor sizing, but it should only provide the conceptual location of each luminaire. The illumination section of the RFP will need to include any project or region specific requirements such as LED luminaires, Region or project specific pole or cabinet specifications or other specific requirements not covered by the Mandatory Standards. Details for cabinets, poles, or other features that are unique to the project due to commitments to Local Agencies or other requirements need to be included in Appendix T or otherwise referenced in the RFP documents.

### **2-7.8.7 Pavement Markings**

The conceptual plans should include a conceptual pavement marking plan if the project includes intersections, interchanges, or other features that require somewhat complex pavement markings. All Regional or project specific pavement marking requirements, such as thermoplastic or recessed pavement markings, need to be identified in the pavement marking section of the RFP. If there is a Region Pavement Marking Policy, it should be included in Appendix T and referenced in the RFP documents.

### **2-7.8.8 Maintenance of Traffic**

Consideration must be given to the interim condition during construction. The development of a stakeholder work group may assist in identifying the need and solutions for MOT. This is especially helpful when an Interagency/Intergovernmental Agreement may be necessary to implement the MOT. Typically, a conceptual MOT plan will not be included in the RFP. However, a conceptual MOT plan must be developed by the WSDOT

project team to confirm that the project is constructible and to develop allowable ramp or lane closures, project schedule, and engineering estimate.

Traffic Management Strategies (TMS) must also be defined in the RFP. The thresholds, conditions, and definitions of the TMS should be under the direction of WSDOT and stakeholders and must be included in the RFP. The Design-Builder must prepare strategies and solutions for all construction activities and impacts. These strategies and solutions must be refined to account for dynamic field conditions and safety aspects specific to location and situation. Strategies or solutions that should be considered for development in the RFP include:

1. Mandatory weekly Traffic Management Meetings
2. Allowable extended closures of ramps or roadways
3. Mandatory Courtesy Patrol during “peak hours”
4. Mandatory “pull-outs” where full shoulders are not provided at all times
5. Mandatory installation of milepost markers at all times
6. Americans with Disabilities (ADA) requirements

## 2-7.9 Environmental Considerations

### 2-7.9.1 Coordination

Early coordination with regional or modal environmental staff is critical for project success. Environmental staff can help identify the major risks associated with the Project and provide the expertise necessary to address these risks. It is suggested that the Project Team coordinate with the region or modal environmental staff on the following:

- Setting Project Goals
- Filling out the risk matrix as part of the Project Delivery Selection Guidance
- Conducting preliminary investigations
- Engaging with regulatory agencies and Tribes on preliminary designs and plans when appropriate
- Determining a strategy and schedule for completing environmental documentation and obtaining environmental permits and approvals
- RFQ and RFP Development
- Review of ATCs and Proposal Evaluation

### 2-7.9.2 Environmental Documentation

The environmental documentation process, which is described in the WSDOT *Environmental Manual* M 31-11, is generally the same for a design-build project as a DBB project. This process includes documentation to ensure compliance with the NEPA, State Environmental Policy Act (SEPA), ESA, and Section 106 of the National Historic Preservation Act (including tribal coordination). The WSDOT project team should complete environmental documentation prior to advertising the RFP, except for exceptional cases in which the potential for innovation would be stifled by WSDOT

completing the NEPA process for a Basic Configuration. It is important to consider that, even with this scenario, in many cases having an environmental decision document in hand to revise or update could be simpler and faster than starting from scratch.

The NEPA process needs to be carefully addressed in the initial project development phase. A project team should consult with the ASCE, Region environmental manager(s), and FHWA (or other lead Federal agency) to determine the risks involved with going to advertisement before NEPA documentation is complete, prior to making a decision on which way to go. NEPA processes can have a significant impact on the project schedule.

23 Code of Federal Regulations (CFR) 636.109 allows contracting agencies to proceed with the award of a design-build contract prior to the conclusion of the NEPA process, as long as certain conditions have been met at the time of RFQ advertisement, RFP advertisement, and contract award.

If WSDOT does not complete the NEPA process prior to issuing the RFQ, then you must inform Submitters of the general status of the NEPA review.

If WSDOT does not complete the NEPA process prior to issuing the RFP, then you must again inform the Proposers of the general status of the NEPA review. You must also modify the RFP to include specific language from the CFR and get FHWA approval to move forward with the RFP. In addition, the RFP must inform Proposers that no commitments are to be made to any alternatives that are under evaluation in the NEPA process, including the no-build alternative. WSDOT should also identify the amount of time it will take to complete the NEPA process in the RFP. If it takes longer than what is identified in the RFP, WSDOT would be responsible to reimburse the Design-Builder for a delay. Any such timeline will be based on assumptions environmental staff have used to build schedule and budget considerations. Environmental staff often are able to provide an accurate NEPA timeline post award, based on whether or not WSDOT programmatic agreements for NEPA CEs, ESA, and Section 106 apply. Schedule and budget risks of any elements proposed by the Design-Builder that push us outside of those assumed level of impacts/ processes, would be owned by the Design-Builder.

If WSDOT does not complete the NEPA process prior to awarding the contract, then the contract must include the appropriate provisions described in Federal regulation. As described above, the contract must state that no commitments will be made as to any alternatives that are under evaluation in the NEPA process, including the no-build alternative, and include termination provisions if the no-build alternative is selected.

The Design-Builder must not have any decision-making responsibility with respect to the NEPA process. Therefore, it is recommended that for higher risk projects (i.e., those that require an EA or EIS), the NEPA process be completed prior to the award of a design-build contract.

### **2-7.9.2.1 Air Quality, Greenhouse Gasses, and Energy**

The NEPA/SEPA process may require an air quality analysis to demonstrate that the project meets air quality requirements (conformity, mobile source air toxics, greenhouse gas emissions, and, if an EIS, energy effects).

Since acquiring environmental approvals is WSDOT's responsibility, completing the air quality analysis may be part of that process. Design changes that affect traffic volumes or traffic flows could affect air quality impacts and may require reevaluation. Contact the WSDOT HQ air quality specialist to determine type of reevaluation needed.

### **2-7.9.2.2 Noise Analysis**

The NEPA/SEPA process may require a noise study to identify project impacts and the required mitigation measures. Since acquiring environmental approvals is WSDOT's responsibility, determining the noise impacts of the project may be part of that process. WSDOT project teams need to consider balance between fulfilling regulatory requirements, allocating risk, and allowing innovation. Projects anticipating noise walls based on the conceptual plans should include the preliminary noise analysis in a noise technical report in the RFP. The noise technical report should document the allowable impact to receivers, the analysis assumptions (including profiles and alignments), and the prescribed mitigation measures. In the RFP, clearly define changes in the horizontal and vertical alignments that will require an adjustment to the prescribed mitigation measures. If significant variability is allowed in the design criteria, define the reevaluation process (including the involvement of WSDOT HQ noise experts) and how the schedule and cost risk will be allocated. Make WSDOT's noise analysis model available to design-build teams in order to maintain consistency in design-build teams' Conceptual Designs. In situations where the design-build teams are allowed to deviate from WSDOT's Conceptual Design, include the noise study as an attachment and provide scoring criteria during the RFP process to assist them in making design decisions. If the noise wall locations and height are commitments made to stakeholders by WSDOT, noise wall configurations must be included as a Basic Configuration element.

### **2-7.9.3 Aquatic and Sensitive Areas (Wetlands, Streams, Lakes, Jurisdictional Ditches)**

WSDOT should delineate all wetlands and aquatic resources within the project area. WSDOT typically obtains a preliminary permit from the US Army Corps of Engineers (Army Corp) and Washington State Department of Ecology (Ecology) based on the anticipated (often worst case) impact to the aquatic resources. To minimize risk, WSDOT should develop a mitigation strategy and clearly communicate requirements in the RFP. WSDOT often includes scoring incentives in the ITP that provide Technical Credits to Proposers if they can further avoid and minimize impacts to the aquatic resources. If the design-build team impacts more aquatic resources than WSDOT anticipated or permitted, the design-build team shall assume the risk of schedule delays and costs associated with having to obtaining a permit modification and mitigating the additional impacts.

### 2-7.9.4 Contaminated Materials

Contaminated materials investigation is required prior to releasing the RFP. Unless the risks can be quantified during procurement, the testing, handling, and disposal of contaminated materials should not be delegated to the design-build team for inclusion in their Price Proposal. WSDOT's Environmental Services Office has a Hazardous Materials Program that can help WSDOT project offices identify, characterize, and estimate cleanup costs for inclusion in the RFP. The presence of asbestos and lead-based materials that may be encountered should be investigated by WSDOT so it can be clearly identified in the RFP. Because there is cost associated with the disposal of soil with low levels of contaminants, WSDOT should identify the threshold for what constitutes "Solid Waste, Dangerous Waste, and/or Hazardous Waste". Material that may have contamination in concentrations below the Models Toxics Cleanup Act (MTCA) Cleanup Levels (CULs), may be reused on-site by the Design-Builder pursuant to the Solid Waste Handling Rule, Washington Administrative Code (WAC) 173-350, and approval of the local Jurisdictional Health Department. Material with concentrations above MTCA CULs may be considered a DSC. Unless WSDOT is aware of a specific location of Hazardous Materials or suspects that the Hazardous Materials are confined to a specific location, it may not be cost effective to attempt to quantify the amount of Hazardous Material. Instead, the WSDOT project team should consider developing a reasonable estimate for the cost of the disposal of Hazardous Material within the project limits. Based on this estimate of disposal costs, the WSDOT project team would establish a threshold amount that the Design-Builder should assume and include in their bid. Any disposal costs encountered by the Design-Builder beyond this amount would be the responsibility of WSDOT and would qualify for payment under DSC.

### 2-7.9.5 Environmental Permits

To reduce Design-Builder risk, WSDOT should obtain the major environmental permits (i.e., those with a lengthier lead-time) before accepting proposals, without limiting potential innovation. These include, but are not limited to, Individual Section 404/Section 10 permits from the Army Corps, Individual Section 401 Water Quality Certifications from Ecology or the Tribes, Section 9 Bridge Permits from the Coast Guard, Hydraulic Project Approvals from the Washington State Department of Fish and Wildlife, and Shoreline Approvals from Local Agencies. The design-build team will often need to obtain certain permits based upon their operations or design such as noise variances from Local Agencies, local street use permits, and the National Pollutant Discharge Elimination Systems Construction Stormwater General Permit from Ecology. WSDOT should coordinate early with the regulatory agencies to share their permitting strategy and to outline the project's risks and anticipated environmental impacts. If necessary, it may be appropriate during procurement to obtain conditional permits outlining the anticipated impacts. In these cases, the Design-Builder would work with WSDOT to obtain the final permit or to request a permit modification based upon the final design.

### 2-7.9.6 Temporary Erosion and Sediment Control

The responsibility of adhering to the Construction Stormwater General Permit and the necessary permit requirements including temporary erosion and sediment control plans should rest with the Design-Builder.

### 2-7.10 Utilities

It is important to investigate and define the utility information in the RFP to establish an equal basis for all design-build teams. Typically, WSDOT will retain the risk of unidentified utility conflicts within the footprint of the conceptual plan. WSDOT's standard utility process should be followed for utility and conflict identification. This may include identification of the utility by owner, As Built plan and profile location, requirement for relocation or adjustment, determining franchise or easement rights, and other utility owner stipulated design and construction requirements. High-risk areas should be evaluated for potholing to verify plan and profile information. Completing an in-depth Subsurface Utility Engineering site investigation with survey documentation of existing utilities may be warranted for projects with extensive existing utilities and limited or suspect As Built information.

The RFP should include current schedule or matrix for utilities identified for relocations or adjustments and should identify the party responsible for performing the work and the schedule by which the work will be completed. The utility agreements or their draft, and the matrix should be included in Technical Requirements Section 2.10, *Utilities and Relocation Agreements*, and Appendix U of the RFP.

Exact dimensions of utilities can often be difficult to verify. Although it is Design-Builder's responsibility to verify the exact horizontal and vertical location, size, and type of utility impacted by the project, best available information should be included in the RFP. If WSDOT is aware of conceptual plan facilities such as foundations or drainage structures that will be in close proximity to known existing utilities, potholing should be done during RFP development to ensure the conceptual plan can be constructed without necessitating utility relocation.

WSDOT should secure all utility permits prior to release of the RFP. Early coordination by the Design-Builder with the utility companies will assist in securing buy-in and resolving issues related to budgeting, scheduling, inspections, approvals, and performance of the work.

Under design-build contracting, WSDOT assigns franchise rights to the Design-Builder. The RFP should emphasize that the Design-Builder is responsible for the following:

1. Require coordination meetings (Task Force Meeting) between the Design-Builder, WSDOT, and utility owners
2. Require scheduling, verification, and documentation of all utility work completed on the project (utility owner and Design-Builder)
3. Show all proposed utility relocation designs on the project plans (utility owner and Design-Builder)
4. Field survey and locate all utilities
5. Provide location information for all utility relocations
6. Complete "As Built" drawings for all utilities
7. Require a utility pre-construction conference



### 2-7.11 Interagency/Intergovernmental Agreements

When projects are jointly developed (funded) or when different agencies or governmental entities have jurisdiction over portions of the project, it is advisable to execute a joint agreement among all such entities covering the following:

1. Applicable criteria and specifications for all components of the project
2. Procedures for implementing changes to the project
3. Approvals of changes desired by one or more parties
4. Limits on changes in scope, criteria, or specifications
5. Responsibility for cost or credits for changes or Betterment
6. Involvement of parties in design reviews and construction inspection
7. Designation and authority of representatives of each entity
8. Designation and recognition of the contracting agency and the relationship of other parties with the Design-Builder
9. Review time required by jurisdictions to be defined in the RFP

These issues may be similar to those in DBB projects but may be addressed in different ways. The purpose of such agreements is to ensure the relationship among the various agencies or governmental entities are as transparent to the Design-Builder as possible in order to avoid perceived risk and contingency costs. Since the design-build contract will be between the Design-Builder and WSDOT, the RFP will include the scope of work included in the Interagency/Intergovernmental Agreements (IGA) that will be part of the project. The RFP requires the Design-Builder to include the IGA work in their proposal. Also, even though different agencies may be responsible for design reviews and construction inspection for different portions of the project, a single process should be specified and followed by all responsible agencies.

WSDOT should always be the contact point for agencies and governmental entity review of design-build submittals to ensure that their review comments are supported by WSDOT prior to sending the comments to the Design-Builder.

### 2-7.12 Railroad

Discussions with railroads should be initiated as early as possible in the project and agreements with railroads should be in place prior to issuance of the RFP. The HQ Railroad Liaison should be contacted as soon as possible to assist with coordination. To contact the HQ Railroad Liaison and find additional highway-railroad coordination support, visit: [www.wsdot.wa.gov/engineering-standards/design/utilities/railroad](http://www.wsdot.wa.gov/engineering-standards/design/utilities/railroad)

Railroad agreements often require long lead times. If a project interfaces with railroads, advance agreements with the railroad operator are critical in terms of schedule and costs. Typical agreements may be similar to a railroad agreement for a DBB project. Due to the fast track schedule in design-build, the potential limitations railroads place on accommodating project schedules for review can have costly impacts.

Depending on the scope of work and impacts to the railroad, the following issues need to be considered prior to the issuance of the RFP:

- Design criteria and requirements relating to construction on railroad property and for facilities affecting railroad operations
- Required training prior to entry on railroad property. Consult with HQ Railroad Liaison for railroad-specific training links.
- Requirements for necessary investigations on railroad property
- WSDOT survey under Revised Code of Washington (RCW) 47.01.170, will require railroad flagging
- Permit requirements for Design-Builder survey
- Permit requirements for environmental studies or monitoring
- Locating and treatment of railroad-related or owned utilities
- Railroad procedures and schedule for design review (railroads have manuals that serve as guides for these processes).
- Contractor Right of Entry agreements
- Conditions under which construction on railroad property may start prior to completion of design
- Time periods during which field and construction activities can occur, including designated construction windows (Form B)
- Operational constraints and requirements for field and construction activities, including flagging responsibility, costs, 4th quarter moratorium, and inspection
- Payments to railroad
- Review time on submittals under contract defined requirements in RFP
- Federal Railroad Administration (FRA) and Utilities Transportation Commission (UTC) (Petition and Order) compliance for any changes to track prior to construction

Railroads typically require review and “no exception” of 100 percent design on DBB projects prior to allowing construction on or over their property. For design-build projects, it would be preferable to obtain a clearance envelope over and beside the railroad and any protective measures required (such as throw fence or crash barrier) based on the conceptual plan. The WSDOT project team should emphasize to the railroad that these minimum requirements will be contractual and although the final design might be different from the conceptual plan, any commitments made in the agreement will be upheld. Any variances during the final design must be approved by the railroad. Once the Design-Builder’s design efforts related to the railroad commence, design submittals will need to be sent to the railroad for their Review and Comment. The over-the-shoulder design reviews should include FRA discussion, additional risks, and Washington UTC.

### 2-7.13 **Third Party/Adjacent Property Owners**

While WSDOT is in a contractual relationship with the Design-Builder, third parties and adjacent property owners will expect direct communication with WSDOT. If a third-party benefit is requested (local developer, Local Agency), set up the agreement and establish the performance criteria prior to the RFP. The improvement requested by the third party(ies) will be included in the RFP Technical Requirements and appendices for the Design-Builder to include in their proposal.

### 2-7.14 **Community Engagement/Public Information**

Community engagement is part of the practical design and practical solutions approach and should be performed by WSDOT in accordance with the WSDOT Community Engagement Plan. It is the WSDOT project team's responsibility to gain endorsement from stakeholders, Local Agencies, public, and other interested parties of the Conceptual Design prior to issuing the RFP. The intent of the community engagement is to determine the necessary contractual requirements that need to be added to the RFP based on the needs of the project stakeholders. For example, the Design-Builder shall conduct work as described in the Environmental Justice (EJ) analysis completed by WSDOT. This work may include, but is not limited to, ensuring all outreach materials are in all relevant Limited English Proficiency languages and distributed appropriately to the identified populations within the project area. Community engagement will play a critical role in guiding the Conceptual Design and may shape project goals.

Since the final design, staging, and schedule are the responsibility of the Design-Builder, shifting public information responsibilities to the design-build team during final design and construction is encouraged. If the planned work changes (including additional ROW, added or changed detours/alternative routes, schedule), the Design-Builder shall notify the WSDOT Engineer of the change(s) and a new EJ analysis may need to be completed by WSDOT to reflect the changes. On complex projects with heavy public involvement, requiring the Design-Builder to have a highly skilled public relations expert on staff is encouraged. Press releases and direct contact with elected officials, media, and the public regarding the project (or changes to the project) should *remain* the responsibility of WSDOT except for responses to construction noise inquiries.

## 2-8 Design Documentation

The WSDOT *Design Manual* Chapter 300 defines design procedures, documentation, and the approvals necessary to deliver successful projects, including projects involving FHWA. The Design Documentation requirements for design-build projects are similar to DBB projects, however, it is the Design-Builder's responsibility to complete all required project development documents for Project Development Approval and to complete the final design documentation Package as part of the final records. WSDOT generally completes the Conceptual Design Approval on design-build projects that include a Basic Configuration prior to issuing the RFP. The Conceptual Design Approval package is included in the appendices as a Reference Document. Those design-build projects that do not include Basic Configuration as part of the RFP, transfer the Conceptual Design Approval and NEPA responsibilities to the Design-Builder as part of their preliminary design effort.

If NEPA responsibilities are transferred to the Design-Builder, the project funding phases need to be modified to align with Federal PE and construction requirements. Coordinate with region Program Management and the HQ Capital Program Development and Management Office.

### 2-8.1 *Conceptual Design Approval*

The Conceptual Design Approval records the evaluations and decisions made during initial project development that established the design-build project's baseline configuration and the design criteria. The documents required for Conceptual Design Approval on highway projects are defined in the WSDOT *Design Manual* Chapter 300.

### 2-8.2 *Basis of Design, Design Parameter Sheets, and Design Analyses*

As part of the Conceptual Design Approval package, the Basis of Design is completed to document the project scope and design elements that will be addressed during final design. The conceptual plans are based on the preferred alternative identified in the Basis of Design. Design Parameter Sheets are also part of the Conceptual Design Approval Package and document the conceptual plans design elements against the required WSDOT *Design Manual* criteria.

Any conceptual plans design elements not meeting the criteria in the WSDOT *Design Manual* requires an approved Design Analysis prior to issuing the RFP in accordance with WSDOT *Design Manual* requirements in Chapter 300. All WSDOT approved Design Analysis are identified in the RFP Technical Requirements Section 2.12, *Project Documentation*. For ATCs submitted by the Design-Builder that require a Design Analysis, the Design Analysis must be approved prior to approving the ATC.

### 2-8.3 *Project Development Approval*

The Project Development Approval is completed by the Design-Builder in accordance with RFP Technical Requirements Section 2.12, *Project Documentation*.

## 3-1 Risk Management Processes

This chapter provides guidance for risk management as it relates to design-build project delivery and the tools that WSDOT has developed to assist with project risk management.

Risk management is the identification, analysis, planning, allocation, and control of project risks. It is a central concept to design-build. The proper allocation of risk to the parties that are best able to manage it is a key attribute of the design-build delivery method.

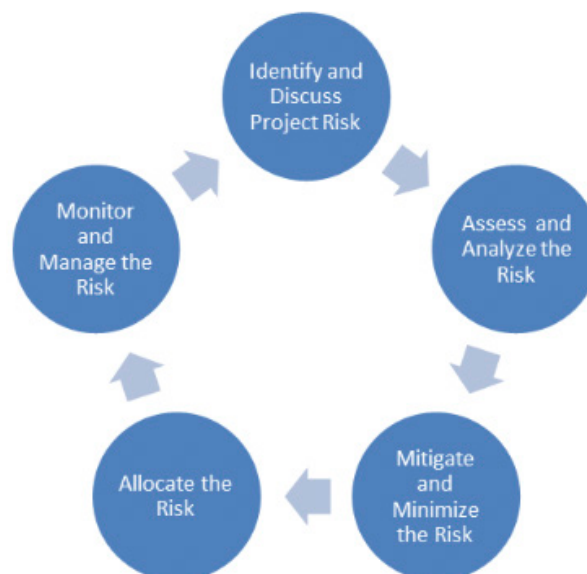
Risks that would otherwise reside with WSDOT in design-bid-build (DBB) can instead be assigned to the Design-Builder.

When risks best managed by WSDOT are transferred to the Design-Builder, increases in contingency pricing and unnecessary increases in the schedule for the project are likely to occur. Improperly assigned risk can jeopardize the success of the project by increasing exposure to claims and litigation.

The risk analysis and management process generally includes the following five steps:

1. Identify and discuss project risk.
2. Assess and analyze the specific risks associated with the project.
  - a. What is the probability of the risk (high, medium, or low)?
  - b. What are the consequences of the risk?
3. Mitigate and minimize the risk.
4. Assign the risk.
5. Monitor and manage the risk.

**Exhibit 3-1 Risk Management Process**



Risk management should start in the planning phase of a project and continue through the Completion of the project. The five steps are explained in detail below:

### 1. Identify and Discuss Project Risk

Project risks are identified during WSDOT's Project Delivery Selection Matrix (PDSM) process, which is discussed in [Chapter 2](#) of this manual. Risk assessment is a primary consideration in determining the appropriate method of delivery.

The project risk assessment in the Project Delivery Method Selection Guidance provides a starting point for the development of the initial project risk register. Additional project risks are identified, addressed, and added to the risk register throughout the design development process.

### 2. Assess and Analyze the Risk

Allocation of the risks inherent in highway projects will also define ownership and responsibility for each task of the design-build process. Though risk management should be a continuous process through the life of the project, there needs to be an especially strong emphasis during the initial design development and Request for Proposal (RFP) development phase of the project. Risk management should drive much of those processes. Risk is identified, assigned, and then mitigated through the development of both the project design and the RFP Technical Requirements.

Because of its importance, WSDOT's technical experts should be involved early on in the project risk discussions.

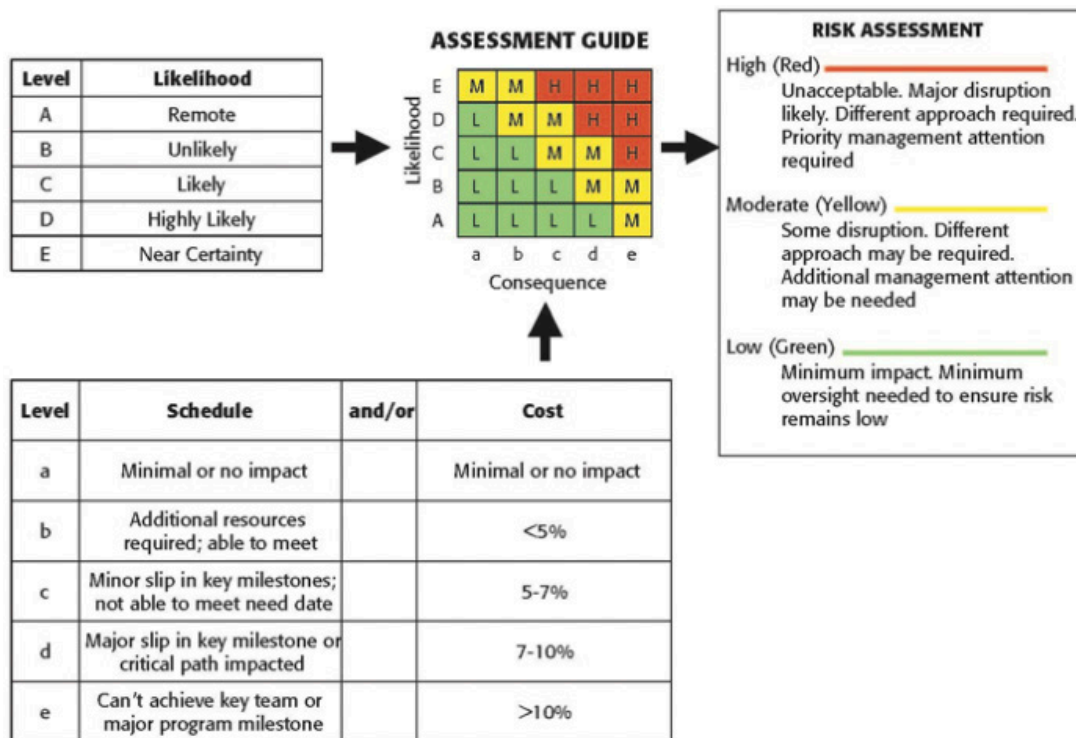
In design-build, the guiding principle should be one of assigning risk to the party (owner or Design-Builder) that can most economically handle the risk. One key question to be answered in risk allocation is, "How much is WSDOT willing to pay a Design-Builder to assume risk that WSDOT typically owns?" This question may be asked for each individual task to tailor the contracting approach to each specific project. Project risk is the defining issue that permeates all decisions related to developing the contract provisions. High-risk items that will typically remain the responsibility of WSDOT and must be addressed prior to awarding a contract include:

- Environmental studies
- Public endorsement
- Interagency agreements
- Utility Agreements
- Right of Way acquisition

Risk mitigation plans may include additional investigations, additional design, and stakeholder coordination activities that the project team performs during the development of the RFP.

Assessment of risk should include an examination of both the probability of the risk and the consequences of the occurrence. Exhibit 3-2 depicts a process for risk assessment.

**Exhibit 3-2 Risk Assessment Process (adapted from Federal Highway Administration, *Guide to Risk Assessment and Allocation for Highway Construction Management*, October 2006)**



**3. Mitigate and Minimize the Risk**

Design development by WSDOT should be limited to allow the most design flexibility for the Design-Build, but needs to be advanced to the extent necessary to ensure project risks can be identified and properly managed and allocated. WSDOT’s design must ensure that the project is well defined, is buildable, and facilitates strong proposal designs with manageable risks. To meet these objectives, every discipline of the design needs to be individually assessed, resulting in differing levels of design development. Some elements of the project may only require a low level of design effort, whereas other elements of the design may require much higher levels of development to define the work and minimize risk.

**4. Allocate the Risk**

Once a risk has been identified and analyzed, it should be assigned to either WSDOT or the Design-Build. Risks can be shared or allocated solely to the Design-Build or WSDOT, however shared risks can lead to disputes and are recommended to be avoided if possible. In situations where it seems that shared risk may be appropriate, the project team should first consider a more detailed assessment of the sub-factors that drive the risk and try to assign each risk associated with the sub-factors solely to the party who is best able to mitigate it.

Exhibit 3-3 provides an example risk allocation matrix displaying how transportation project risks are typically allocated in DBB and in design-build project delivery methods.

Exhibit 3-3 Example Risk Allocation Matrix

RISK ALLOCATION MATRIX	Design-Bid-Build			Change	Design-Build Process		
	Owner	Shared	Contractor		Owner	Shared	Design Builder
RISK							
<b>Design Issues</b>							
Definition of Scope	X				X		
Project Definition	X				X		
Establishing Performance Requirement	X				X		
Preliminary survey/base map	X				X		
Geotech Investigation - Initial Borings based on prel des.	X				X		
Geotech Investigation - Initial Borings based on proposal	X			→			X
Establish/Define initial subsurface conditions	X				X		
Init proj Geotechnical Anal/Report based on prel. Des.	X				X		
Proposal specific Geotechnical Analysis/Report	X			→			X
Plan conformance with regulations/guidelines/RFP	X			→			X
Plan accuracy	X			→			X
Design Criteria	X				X		
Conformance to Design Criteria	X			→			X
Design Review Process	X			→			X
Design QC	X			→			X
Design QA	X			→			X
Owner Review Time	X				X		
Changes in Scope	X				X		
Constructability of Design	X			→			X
Contaminated Materials	X			→	X	X	

During the procurement phase, specified project risks are addressed through the development of the Technical Requirements of the RFP. The Technical Requirements specify the Design-Builder’s responsibilities for managing and resolving the elements of the design and construction of the project and should clearly identify and allocate risk. When there are shared risks between WSDOT and the Design-Builder, the Technical Requirements should also clearly define the risk sharing and the collaborative processes that are required to jointly address the risk.

5. Monitor and Manage the Risk

An important advantage of design-build is the collaborative environment it fosters between WSDOT and Design-Builder during the implementation phase of the project.

Successful projects are dependent on collaboration and partnership in risk management. Through strong collaboration, the project risks are effectively managed to the benefit of the Design-Builder, WSDOT, and the project as a whole.

To facilitate this process, it is valuable to maintain a risk register through the construction of the project and schedule regular management meetings to review the status of risk resolution.



## 3-2 Risk Register

Early in the project, the design team will begin to identify potential risks associated with the project. Assigning responsibility for each risk is not a one-time task. The project team should continually revisit the risk register as more information becomes available about the project.

Utilize the risk register throughout development and implementation of the project. This register will not only govern the responsible party for each risk, but it will help the project team determine how far to advance each technical element within the preliminary design during development of the RFP.

A collaboratively created risk register is available on WSDOT's Design-Build SharePoint site. The project team will carefully review all elements that could affect the specific project and tailor the register to fit the project. This risk register is not all-inclusive. The register should be open for review throughout the entire RFP development process.

The risk register is a tool used to guide and document the risk management process. The purpose of the risk register is to define and document the risks, identify cost and schedule impacts associated with the risks, and produce mitigation plans. Ideally, the development of the risk register is part the project delivery selection, and it progressively evolves as the project advances through all of its stages to Completion.

The outline and WSDOT template for a typical risk register includes the following:

- **Risk ID Number**
- **Project Title**
- **Risk Name**
- **Risk Description**
- **Disposition** (Active, Retired, etc.)
- **Risk Impacts**
  - Often the description of risk impacts are in terms of schedule and cost, but they can also include stakeholders, product quality, and other elements.
- **Likelihood**
- **Notes and Assumptions**
- **Risk Response Actions (Mitigation, Avoidance, Acceptance, etc.)**
  - A detailed description of the specific actions to execute to manage the risk.

An example risk register is provided in Exhibit 3-4. The example shows a typical risk register process in the early design phases of a project. As the project design becomes more advanced, the risk register becomes more detailed, assigning specific costs and schedule impacts to risks, to both help inform mitigation decisions and to determine contingency pricing needs for the project.

Exhibit 3-4

ID	Project	Risk Name	Risk Description	Disposition	Direct Cost Impact (\$M)	Schedule Impact (Cal. Mo)	Risk Quantification		Flowchart Activity Allocation	Notes / Assumptions	Risk Response
							Likelihood	Impact			
ENV 10.1	see below	Additional NEPA documentation required	The project teams are working through the WSDOT Practical Solutions process. The preferred scenario for each project has not yet been selected by the Executive & Steering Committee. This scenario may be outside of the previously approved Record of Decision and may necessitate a supplement to the EIS or a standalone EA. Mutually-exclusive scenarios: A: Re-evaluation + EA B: Supplemental EIS / updated ROD C: Re-evaluation Only (Base)	see below	see below	see below	see below				
see above	SR 167		NB and SB I-5 aux lanes are not covered under the previous Tier II FEIS (2006) or ROD (2007) and would therefore require additional documentation, which could come in the form of a supplemental EIS or standalone EA. Tolling (which is assumed in all scenarios for the CEVP) might also necessitate supplemental analysis, based on statements from PHVA (Dean Moberg) in meetings with OR SR 167 Project on 8/16/15 and 8/18/15.	Modeled	Scenarios: A: +0.75 B: +1 C: 0	Scenarios A: +9 to +12 B: +9 to +12 C: 0	Scenarios (Tolling+NB/RSB Aux Lanes) A: 40% B: 60% C: 0 NEPA (10.1)		Base duration is 8 months for re-evaluation, assuming January 2017 start.		
see above	SR 509		All planned scope elements have been included in the corridor ROD with the exception of tolling.	Modeled	Scenarios: A: N/A B: +5 C: 0	Scenarios A: N/A B: +6 to +9 C: 0	Scenarios: A: N/A B: 60% C: 40%	NEPA (9.1)	Base duration is 8 months for re-evaluation, assuming January 2017 start.		
	Program	Environmental Justice (EJ) re-initiation	EJ re-initiation may take longer and delay the Ad date.	Retired					2016 CEVP issue resolved, risk retired. Any associated EJ issues are addressed in NEPA		
ENV 10.2	Program	Challenge to environmental clearance or other legal challenge (NEPA)	A successful legal challenge could result in delays to the project due to an injunction and/or requirement for additional NEPA analysis. If a re-evaluation was done, a challenge could require a supplemental EIS to be performed.	Modeled	+0.5	+6 to +12	Re-evaluation: 10% Supplemental: 5%	NEPA (9.1, 10.1)	Some toll opposition exists. Project will follow Benfon to believe so an assess, based on the prior project can be incorporated into the EA. Applies independently to each project, and is dependent upon NEPA documentation outcome (see risk ENV 10.1).		
ENV 20.1	Program	Endangered Species Act (ESA) issues	The list of endangered species may change during the life of the project to include either reclassified on-site species or the unlikely possibility of newly found and listed species. There is no "grandfather" clause that would preclude the effects of this change. Discovery of these newly classified species could result in permit and scope changes. There could be delays to ongoing permit applications or due to the need to revise approved permits. In addition, WSDOT has recently updated the stormwater analysis assumptions (to use the "high run" model). The results of the re-analysis could trigger a formal consultation process.	Modeled	Minor	+9 to +11	15%	NEPA (9.1, 10.1)	Applies independently to each project		
ENV 30.1	Program	Delay in issuance of local/state/federal permits	A variety of major permits will be required, including USACE (404/001), shoreline (local jurisdictions), etc. Base schedule allows 12 months for permitting which should be adequate. However, delays are possible e.g., due to questions from permitting agencies, shoreline permit appeal, etc.	Modeled	Minor	+3 to +6	10%	WSDOT Permits (2.7, 3.7, 4.7, 6.7, 7.7)	Assume independent among stages and projects.		
ENV 30.2	Program	Shoreline permit appeal	Shoreline permits can be appealed and can result in delay due to need for court hearing.	Modeled	Minor	+6	5%	WSDOT Permits (2.7, 3.7, 4.7, 6.7, 7.7)	Assume independent among stages and projects.		
	see below	Archaeological, cultural, or historical discoveries during construction	Low likelihood of significant find. Moderate probability for each Section of some find near water, but impacts to cost and construction schedule for the type of work being performed are not significant in the overall scheme of construction.	see below							

### 3-3 Design Issues

In design-build, several design responsibilities shift to the Design-Builder. WSDOT is responsible for establishing the scope, project definition, design criteria, performance measurements, and existing conditions of the site.

As the Design Engineer of Record, plan accuracy, design errors, conformance with established standards and contractibility rest with the Design-Builder.

### 3-4 Typical Design-Build Risks on Transportation Projects

Though each project has unique risks, the risks that follow are present on most transportation projects.

#### 3-4.1 Site Conditions and Investigations

Certain site condition responsibilities can be allocated to the Design-Builder provided they and any associated third-party approval processes are well defined. However, unreasonable allocation of site condition risks result in high contingency pricing by the Design-Builder. At a minimum, site investigations should be performed by WSDOT to minimize overall project risk and provide the necessary base information for Proposers to complete their pursuit designs without redundant investigations being performed by each Proposer. These investigations typically include the following:

- **Basic design surveys** – as necessary for the Proposers to complete their proposal design
- **Contaminated materials and groundwater investigation** – at a minimum to characterize the general nature of mitigation requirements
- **Geotechnical investigations** – as necessary for Proposers to advance the design of structures foundations, retaining walls, and pavements as required for their proposals
- **Utilities investigation** – physical determination of horizontal and vertical locations at critical locations of potential conflicts

#### 3-4.2 Utilities

Utility responsibilities need to be clearly defined in the Technical Requirements and appropriately allocated to the Design-Builder or WSDOT:

- **Private Utilities** - WSDOT needs to define coordination and schedule risks as they are difficult for the Design-Builder to price. It is preferable to have Utilities Agreements executed with each private utility before the completion of the procurement.

The agreements should define the scope of anticipated relocations, relocation responsibilities (both construction and design), and the schedule for relocations.

- **Public Utilities** - If the work and approval processes are fully defined in the Technical Requirements, design and construction risks can be allocated to the Design-Builder.

### **3-4.3 Environmental Permitting**

Typically, environmental permitting can be more effectively managed by WSDOT because WSDOT has stronger working relationships with the permitting agencies and a better understanding of the processes. However, certain environmental approvals and processes that can be well defined can be allocated to the Design-Builder. Agreements or memorandums of understanding (MOUs) with permitting agencies that define approval requirements and processes can significantly reduce risks to the Design-Builder. In situations where permitting can be clearly defined and allocated to the Design-Builder, scheduling benefits can be recognized.

### **3-4.4 Right of Way**

In the majority of design-build projects, WSDOT acquires the Right of Way (ROW) necessary to construct the project. When all of the ROW is not acquired by WSDOT prior to the start of construction, a ROW clearance schedule should be provided in the Technical Requirements to define and minimize schedule risk for the Design-Builder. This schedule becomes part of the contract and provides an assurance to the Proposers that the risk is recognized and allocated to WSDOT. ROW acquisition responsibilities and risk can be transferred to the Design-Builder, with potential schedule benefits, but because WSDOT needs to become involved in any condemnation process, ROW acquisition responsibilities then become a shared risk that must be carefully defined in the Technical Requirements. To avoid the shared risk, preferably WSDOT should perform all of the ROW acquisition.

### **3-4.5 Railroads**

The railroad companies are a particularly challenging third-party to manage in design-build projects. They often require very advanced designs as a condition precedent to their formal approval of grade separation structures over their facilities and before executing construction and maintenance agreements. Their processes introduce a high level of risk to Proposers needing to include the costs and schedules for work that interfaces with the railroad in their proposals. Typically, the risks can be best minimized and managed by WSDOT advancing the designs as much as possible prior to the procurement phase.

### 3-4.6 *Drainage and Water Quality*

Often project drainage facilities receive flows from outside the project limits and/or release flows to outside the project limits. When the project design is likely to change historic flow patterns or release volumes, it is necessary to negotiate with adjacent owner agencies for the revised conditions. In this situation, WSDOT is usually in a better position to manage the risk. Ideally, MOUs or Intergovernmental Agreements should be developed to define off-site drainage requirements for the Design-Builder.

Water quality requirements are continually evolving and are frequently difficult to define and assess. As a result, water quality is often a high-risk item for the Design-Builder. In most cases, WSDOT has ultimate responsibility for any water that is treated from their ROW, therefore, a prescriptive approach to water quality Technical Requirements that the Design-Builder can rely on minimizes contingency pricing. This allows the Design-Builder to propose more maintenance-efficient and effective alternative systems.

### 3-4.7 *Third-Party Involvement*

In general, WSDOT can most effectively manage third-party involvement. Railroad companies, the Federal Highway Administration, public utilities commissions, adjacent jurisdictions, funding partners, and other third-parties often have established relationships with WSDOT. In particular, third-party agencies that have contributed funding to the project usually participate in WSDOT's project management organization and decision-making process. In cases where WSDOT can clearly define processes and approval requirements, it can be beneficial to allocate some third-party risks to the Design-Builder, who is in a better position to incorporate those well-defined processes into its design and project schedule.

### 3-4.8 *Construction*

Many of the traditional materials testing and inspection responsibilities transfer to the Design-Builder. Items such as surveying, spill prevention, and maintenance of traffic shift entirely to the Design-Builder.

WSDOT project personnel are still responsible for procuring the services of law enforcement and ensuring that Local Agency and other agreements are in place prior to execution of the contract.

### 3-4.9 *Differing Site Conditions*

Differing site conditions for work situations are covered in the *General Provisions*. It is the responsibility of the Design-Builder to prove a Differing Site Condition exists, and that the condition could not reasonably have been worked around as to avoid additional cost.

The party that discover such conditions will promptly notify the other party in writing of the specific Differing Site Condition before it is disturbed or affected by work.

### **3-4.10 Completion and General Warranty**

Ultimately, the final responsibility and ownership of a project will transfer to WSDOT. This final responsibility and ownership may occur at the completion of the project or at the completion of the general warranty.

A contract Completion Date is given once all obligations under the contract (with the exception of warranty work) have been performed by the Design-Builder.

The general warranty for work commences on the day Physical Completion is given, and it remains in effect for the time-period stated in the contract. If at any time during the general warranty time-period, WSDOT determines that any of the work has not met the standards set forth in the contract, then the Design-Builder is obligated to correct the work even if the performance of such correction extends beyond the stated general warranty period.

### **3-4.11 Local Agencies**

Identifying impacts to communities and developing preliminary agreements regarding site access and mitigation requirements are often part of the conceptual design process. If a Design-Builder's specific solution goes beyond the predicted impacts, the resulting communication and coordination can rest with the Design-Builder.

When an improvement project has a direct impact on a Local Agency, establish all mitigation requirements and limitations between WSDOT and the Local Agency prior to sending out the final RFP.

It is WSDOT's responsibility to provide all Local Agency requirements and local standards in the RFP.

### **3-4.12 Third-Party/Adjacent Property Owners**

While WSDOT is in a contractual relationship with the Design-Builder, third-parties and adjacent property owners will expect direct communication with WSDOT. If a third-party benefit is requested (local developer, Local Agency), set up the agreement and establish the performance criteria prior to the RFP.

# Chapter 4                      *Structure and Content of the Procurement*

---

This chapter provides brief discussions of the content of the sections of the Request for Qualifications, Request for Proposal, and Instructions to Proposers. Refer to the [Preparation Guide for Request for Qualification \(RFQ\)](#), [Request for Proposal \(RFP\)](#), and [Instructions to Proposers \(ITP\)](#) for a detailed process of procurement document preparation.

Prior to initiating the development of the RFQ and RFP, novice project team members should consult with an experienced project team whose members can share their expertise. This transfer of knowledge helps ease the learning curve associated with design-build, encourages the application of best practices, and highlights the pitfalls that other projects have overcome so that they may be avoided from the outset.

**Note:** Make sure the paragraph symbol (show/hide) is active in order to see the instruction boxes in the templates.

**Note:** When fill-in information is added in a template, the author should insert the information by removing the dollar signs and number, but leave the asterisks:

\*\*\*\$\$2\$\$\*\*\* becomes \*\*\*Information\*\*\*

If an entire subsection has been altered, then the title of the subsection would be bracketed by asterisks (2.5.3.1 \*\*\*General\*\*\*)

Header and Footers should be consistent on all Projects.

1. Remove the template version number and date in the headers and footers on all documents prior to publishing.
2. Add the Project name to the headers prior to publishing the RFQ or RFP, do not make any additional edits to the header.
3. Add applicable RFQ or RFP advertisement date and Project name to the footers prior to publishing the RFQ or RFP, do not make any additional edits to the footer.

## 4-1      **Request for Qualifications**

The RFQ is the first phase of a two-phase procurement process and is used to solicit the Statements of Qualifications (SOQ's) from interested Design-Build Firms. It is a formal and structured process which must comply with Federal Regulations, State Statute, and the Washington Code of Regulations. The RFQ asks interested Submitters to submit a SOQ in response to criteria defined within the RFQ.

The RFQ consist of 7 Sections:

- |                         |  |
|-------------------------|--|
| 1. Introduction         | 5. Teaming Parameters                  |
| 2. Contact Information  | 6. Submittal Quantities and Logistics  |
| 3. Procurement Process  | 7. SOQ Content and Evaluation Criteria |
| 4. Scope of the Project |  |

The following sections provide overviews of the sections of the RFQ. Instructions for completing fill-ins are also provided where appropriate. When fill-in information is added in a template, the author should insert the information by removing the dollar signs and number but leave the asterisks. For example: \*\*\*\$\$2\$\$\*\*\* becomes \*\*\*Information\*\*\*

If an entire subsection has been altered, then the title of the subsection would be bracketed by asterisks. For example: 3.1 \*\*\*Process Overview\*\*\*

### **Request for Qualifications**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the title of the Project.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the location of the Project.

### **Submittal Information Point of Contact**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the webpage Ad & Award created for your Project. For more information on webpage reference *Design-Build Manual* Chapter 5, Section 5-3, *Contract Ad & Award Website Information*.

### **WSDOT Technical Point of Contact**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Technical Point of Contact information for the Project. For more information reference *Design-Build Manual* Chapter 5, Section 5-9, *Roles and Responsibilities*.

### **Process Overview**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the stipend amount. For more information on stipend reference *Design-Build Manual* Chapter 2 Section 2-2.2.2, *Stipends*.

### **Procurement Schedule**

For more information on procurement schedule reference *Design-Build Manual* Chapter 5-1, *Timelines and Deliverables*.

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the RFQ issue date.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the date for voluntary submitter's meeting.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the date and time for the RFQ questions. For more information reference *Design-Build Manual* Chapter 5 Section 5-4, *Request for Qualification Process*.

\*\*\*\$\$4\$\$\*\*\* This fill-in is for the deadline for WSDOT response.

\*\*\*\$\$5\$\$\*\*\* This fill-in is for the SOQ due date.

\*\*\*\$\$6\$\$\*\*\* This fill-in is for the date to notify short listed submitters.

\*\*\*\$\$7\$\$\*\*\* This fill-in is for the issue RFP date for the Project.

\*\*\*\$\$8\$\$\*\*\* This fill-in is for the voluntary Proposer's meeting date for the Project.



\*\*\*\$\$9\$\$\$\*\* This fill-in is for the ATC submittal deadline date for the Project.

\*\*\*\$\$10\$\$\$\*\* This fill-in is for the deadline for submitting Proposers' questions for the Project.

\*\*\*\$\$11\$\$\$\*\* This fill-in is for the deadline for WSDOT response to Proposers' questions for the Project.

\*\*\*\$\$12\$\$\$\*\* This fill-in is for the proposals due date for the Project. (varies wildly depending on the size/scope/complexity of the project. Ad & Award prefers this to occur on Thu or Fri. Cannot occur on Bid Opening Day

\*\*\*\$\$13\$\$\$\*\* This fill-in is for the announce best value proposer date for the Project. (3 weeks, or more after Proposal Due Date. Must occur on Bid Opening Day

\*\*\*\$\$14\$\$\$\*\* This fill-in is for the estimated Notice to Proceed date for the Project.

### **Questions, Clarifications, and Addenda**

\*\*\*\$\$1\$\$\$\*\* This fill-in is for the specific date and time for deadline of questions. Time shall be in "hour:minutes:seconds" format.

### **Voluntary Meeting for Potential Submitters**

\*\*\*\$\$1\$\$\$\*\* This fill-in is for the meeting start and end time. For more information reference *Design-Build Manual* Chapter 5 Section 5-4, *Request for Qualification Process*.

\*\*\*\$\$2\$\$\$\*\* This fill-in is for the meeting location with address.

### **Estimated Cost**

\*\*\*\$\$1\$\$\$\*\* This fill-in is for the estimated contract cost.

### **Time for Completion**

\*\*\*\$\$1\$\$\$\*\* This fill-in is for the substantially complete date for the Project.

### **WSDOT's Project Goals**

\*\*\*\$\$1\$\$\$\*\* This fill-in is for Project goals. Pick 3 to 4 project goals. These goals need to be consistent with those chosen in the RFP. Goals need to reflect project specific attributes and aspects of the project, which the D-B can provide added value. Keep in mind that the more goals selected the longer the evaluation will take. If the Project is a Federal Funded Project, one of the Project Goals must be Disadvantaged Business Enterprise (DBE) Participation. If it is determined that this Project will not have DBE goals, remove the DBE Participation Project goal. For more information reference *Design-Build Manual* Chapter 2 Section 2-5, *Project Goal Setting*.

### **Project Scope and Status**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the scope/description for the Project. For more information reference *Design-Build Manual* Chapter 2 Section 2-2.2, *Identification of Funding and Schedule*.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the funding information for the Project. For more information reference *Design-Build Manual* Chapter 2, Section 2-2.2, *Identification of Funding and Schedule*.

### **WSDOT Consultant/Technical Support**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Consultant Firm name for the Project.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the Consultant Firm name for the Project.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the description of work the Consultant Firm is supporting WSDOT on for the Project.

### **Disadvantaged Business Enterprises Participation**

*If it is determined that this Project will not have DBE goals, remove this section and replace with "This Section is intentionally omitted."*

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the percent amount of construction portion for the project. For more information contact OEO and reference *Design-Build Manual* Chapter 10.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the percent amount of design portion for the project. For more information contact OEO and reference *Design-Build Manual* Chapter 10.

### **Federal Small Business Enterprise Participation (Federally-Funded Template Only)**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the percent amount of construction portion for the project. For more information contact OEO and reference *Design-Build Manual* Chapter 10.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the percent amount of design portion for the project. For more information contact OEO and reference *Design-Build Manual* Chapter 10.

### **SOQ Submittal Quantities**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the number of copies for the Project

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the number of copies for the Project

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the title for the Project.

### SOQ Organization and Scoring (Federally-Funded Template)

Key Personnel can be changed on a project-by-project basis and the use of DBE Participation with FSBE should be discussed with OEO.

If it is determined that this Project will not have DBE goals and no DBE Participation, remove DBE Participation from the table.

\*\*\*\$\$1\$\$\*\*\* Note user to provide “fill-in” key personnel points for the Project.

\*\*\*\$\$2\$\$\*\*\* Note user to provide “fill-in” maximum number of pages for key personnel for the Project.

\*\*\*\$\$3\$\$\*\*\* Note user to provide “fill-in” Project Manager points for the Project.

\*\*\*\$\$4\$\$\*\*\* Note user to provide “fill-in” goals for the Project.

\*\*\*\$\$5\$\$\*\*\* Note user to provide “fill-in” points for the Project.

\*\*\*\$\$6\$\$\*\*\* Note user to provide “fill-in” Design Manager points for the Project.

\*\*\*\$\$7\$\$\*\*\* Note user to provide “fill-in” Construction Manager points for the Project.

\*\*\*\$\$8\$\$\*\*\* Note user to provide “fill-in” major participants points for the Project.

\*\*\*\$\$9\$\$\*\*\* Note user to provide “fill-in” maximum number of pages for major participants for the Project.

\*\*\*\$\$10\$\$\*\*\* Note user to provide “fill-in” criteria or project goals for major participants for the Project.

\*\*\*\$\$11\$\$\*\*\* Note user to provide “fill-in” criteria for major participants points for the Project.

\*\*\*\$\$12\$\$\*\*\* Note user to provide “fill-in” total points for the Project.

### SOQ Organization and Scoring

Key Personnel can be changed on a project-by-project basis and the use of DBE Participation with FSBE should be discussed with OEO.

If it is determined that this Project will not have an Inclusion Manager, remove Inclusion Manager from the table.

If it is determined that this Project will not have DBE goals and no DBE Participation, remove DBE Participation from the table.

\*\*\*\$\$1\$\$\*\*\* Note user to provide “fill-in” key personnel points for the Project.

\*\*\*\$\$2\$\$\*\*\* Note user to provide “fill-in” maximum number of pages for key personnel for the Project.

\*\*\*\$\$3\$\$\*\*\* Note user to provide “fill-in” Project Manager points for the Project.

\*\*\*\$\$4\$\$\*\*\* Note user to provide “fill-in” goals for the Project.

\*\*\*\$\$5\$\$\*\*\* Note user to provide “fill-in” points for the Project.

\*\*\*\$\$6\$\$\*\*\* Note user to provide “fill-in” Design Manager points for the Project.

\*\*\*\$\$7\$\$\*\*\* Note user to provide “fill-in” Construction Manager points for the Project.

\*\*\*\$\$8\$\$\*\*\* Note user to provide “fill-in” Inclusion Manager points for the Project.

\*\*\*\$\$9\$\$\*\*\* Note user to provide “fill-in” major participants points for the Project.

\*\*\*\$\$10\$\$\*\*\* Note user to provide “fill-in” maximum number of pages for major participants for the Project.

\*\*\*\$\$11\$\$\*\*\* Note user to provide “fill-in” criteria or project goals for major participants for the Project.

\*\*\*\$\$12\$\$\*\*\* Note user to provide “fill-in” criteria for major participants points for the Project.

\*\*\*\$\$13\$\$\*\*\* Note user to provide “fill-in” total points for the Project.

### **SOQ Format**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the title for the Project.

### **Introduction Letter (Section 1) (pass/fail)**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the maximum bidding capacity for the Project. For more information contact WSDOT Contract Ad & Award and reference the WSDOT *Advertisement and Award Manual*.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the work class(es) title for the Project. For more information contact WSDOT Contract Ad & Award and reference the WSDOT *Advertisement and Award Manual*.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the amount of dollars in work class for the Project. For more information contact Contract Ad & Award and reference the WSDOT *Advertisement and Award Manual*.

### **Key Personnel (Section 2) (\*\*\*\$\$1\$\$\*\*\* Points)**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the key personnel points for the Project.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the number of years for the Project.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the number of years for the Project.

\*\*\*\$\$4\$\$\*\*\* This fill-in is for the number of years for the Project.

\*\*\*\$\$5\$\$\*\*\* This fill-in is for the additional key personnel for the Project (i.e. Project Quality Manager, Geotechnical Group Manager, and Structural Lead Engineer).

**Major Participants (Section 3) (\*\*\*\$1\$ Points)**

\*\*\*\$1\$\*\*\* This fill-in is for the major participants points for the Project.

**Evaluation Criteria**

\*\*\*\$1\$\*\*\* This fill-in is for the major specific criteria for the project. If necessary, adjust number of criteria in table 7.2.

\*\*\*\$2\$\*\*\* This fill-in is for the number (s) in which information shall be assessed for the Project.

\*\*\*\$3\$\*\*\* This fill-in is for the number (s) in which information shall be assessed for the Project.

**Financial (Appendix B) (pass/fail)**

\*\*\*\$1\$\*\*\* This fill-in is for the Proposal Bond/Security Penal Sum =5% of estimated upset price or project budget (if no upset price) for the Project.

\*\*\*\$2\$\*\*\* This fill-in is for the umber (s) Performance and Payment Bond Penal Sum = 100% of estimated upset price or project budget (if no upset price) for the Project.

**FORM A**

\*\*\*\$1\$\*\*\* This fill-in is for the Project Title for the Project.

**Appendix B**

Make sure the defined terms are a mirror image of what is in the General Provisions. If you add definitions to the General Provisions, you must add them here.

If the Project has a FSBE Goal, delete the "Small Business" definition and remove it from the General Provisions as well.

\*\*\*\$1\$\*\*\* This fill-in is for the elements of the Conceptual Plans for the Project.

\*\*\*\$2\$\*\*\* This fill-in is for the Forward Compatible elements for the Project.

\*\*\*\$3\$\*\*\* This fill-in is for the Future Channelization Plan improvements for the Project.

\*\*\*\$4\$\*\*\* This fill-in is for the Interim Channelization Plan information for the Project.

\*\*\*\$5\$\*\*\* This fill-in is for the title for the Project.

\*\*\*\$6, 7 & 8\$\*\*\* This fill-in is for the Hot Lane Roadway for the Project.

## 4-2 Instructions to Proposers

The ITP provides guidance to the proposers on submittal requirements, procurement processes, and Proposal evaluation criteria. Most important, the ITP defines the ways the project goals will be optimized to provide the owner best value through a combination of cost, schedule, and technical considerations. The ITP consist of 8 Sections:

- |  |   |
|--|---|
| 1. General Information                       | 5. Contract Award and Execution         |
| 2. Procurement Process                       | 6. Practical Design<br>Workshopminority |
| 3. Proposal Delivery, Content, and<br>Format | 7. Proposer Stipends                    |
| 4. Proposal Evaluation Process               | 8. Protests                             |

The following sections provide overviews of the sections of the ITP. Instructions for completing fill-ins are also provided where appropriate. When fill-in information is added in a template, the author should insert the information by removing the dollar signs and number but leave the asterisks. For example: \*\*\*\$\$2\$\$\*\*\* becomes \*\*\*Information\*\*\*

If an entire subsection has been altered, then the title of the subsection would be bracketed by asterisks. For example: 1.3.3 \*\*\*Utility Relocations\*\*\*

### Introduction

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the title for the project.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the RFQ advertisement date of the project.

### Project Goals

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the *goals for the project*. (Pick 3 to 4 project goals. These goals need to be identical with those chosen in the RFQ. Goals need to reflect project specific attributes and aspects or the project which the D-B can provide added value. Keep in mind that the more goals selected the longer the evaluation of Proposals will take.)

### Procurement Schedule

For more information on procurement schedule reference *Design-Build Manual Chapter 5, Section 5-1, Timelines and Deliverables*.

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the RFP issue date.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the date for Voluntary Proposer's Meeting.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the ATC submittal deadline date.

\*\*\*\$\$4\$\$\*\*\* This fill-in is for the deadline for submitting Proposers' questions.

\*\*\*\$\$5\$\$\*\*\* This fill-in is for the deadline for WSDOT response to Proposers' questions.

\*\*\*\$\$6\$\$\*\*\* This fill-in is for the proposals due date.

\*\*\*\$\$7\$\$\*\*\* This fill-in is for the announce Apparent Best Value Proposer.

\*\*\*\$\$8\$\$\*\*\* This fill-in is for the estimated Notice to Proceed date.

### **Project Cost**

This is the Engineer's estimate.

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Engineer's estimate range.

### **Disadvantaged Business Enterprise Participation Requirements**

If the Project is determined not to have a DBE Goal, leave the Section number and title, delete the unused Section and replace with "This Section is intentionally omitted."

### **Disadvantaged Business Enterprise Goals**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the percentage amount for the design portion.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the percentage amount for the construction portion.

### **Federal Small Business Enterprise Goals**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the percentage amount for the design portion.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the percentage amount for the construction portion.

### **Organizational Conflicts of Interest**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the consultant firm information.

### **Communications**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the proper communication contact information.

### **RFP Addenda and Responses to Questions**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the link to the Contract Ad and Award website

### **Right of Way Access**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the required application.

### **Pre-Proposal Submittal of Alternative Technical Concepts**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the time ATC must be submitted by.

### Liquidated Damages for Key Personnel

If used, WSDOT Engineer must document the basis for the Liquidated Damages in the Project file.

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the liquidated damage amount.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the liquidated damage amount.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the liquidated damage amount.

\*\*\*\$\$4\$\$\*\*\* This fill-in is for the liquidated damage amount.

### Contents of the Proposal (Federally-Funded Template)

If a Section, form, or appendix is not used delete it.

If it is determined that this Project will not have DBE Goals, remove the \*\* paragraph near the end of this table.

\*\*\*\$\$1\$\$\*\*\* Note user to provide “fill-in” title of proposal Section for the Project.

\*\*\*\$\$2\$\$\*\*\* Note user to provide “fill-in” maximum number of pages for goals and sub goals for the Project.

\*\*\*\$\$3\$\$\*\*\* Note user to provide “fill-in” goal #2 for the Project.

\*\*\*\$\$4\$\$\*\*\* Note user to provide “fill-in” goal #3 for the Project.

\*\*\*\$\$5\$\$\*\*\* Note user to provide “fill-in” goal #4 for the Project.

\*\*\*\$\$6\$\$\*\*\* Note user to provide “fill-in” price proposal Section for the Project.

### Contents of the Proposal (State Funded Template)

If a Section or form is not used delete.

\*\*\*\$\$1\$\$\*\*\* Note user to provide “fill-in” title of proposal Section for the Project.

\*\*\*\$\$2\$\$\*\*\* Note user to provide “fill-in” goal #1 for the Project.

\*\*\*\$\$3\$\$\*\*\* Note user to provide “fill-in” maximum number of pages for goals and sub goals for the Project.

\*\*\*\$\$4\$\$\*\*\* Note user to provide “fill-in” goal #2 for the Project.

\*\*\*\$\$5\$\$\*\*\* Note user to provide “fill-in” goal #3 for the Project.

\*\*\*\$\$6\$\$\*\*\* Note user to provide “fill-in” goal #4 for the Project.

\*\*\*\$\$7\$\$\*\*\* Note user to provide “fill-in” price proposal Section for the Project.



## Appendices

Delete “A DBE Performance Plan in Appendix D in accordance with Section 3.3.3 of this ITP” if it is determined that this Project doesn’t have a DBE Goal (Federal).

### Page Limits, Copies, and Submission Instructions

\*\*\*\$1\$\*\*\* This fill-in is for the title.

\*\*\*\$2\$\*\*\* This fill-in is for the title.

\*\*\*\$3\$\*\*\* This fill-in is for the Section number.

\*\*\*\$4\$\*\*\* This fill-in is for the number of copies.

\*\*\*\$5\$\*\*\* This fill-in is for the number of copies.

\*\*\*\$6\$\*\*\* This fill-in is for the Section number.

\*\*\*\$7\$\*\*\* This fill-in is for the Section number.

\*\*\*\$8\$\*\*\* This fill-in is for the title.

### Disadvantaged Business Enterprise Participation (Section 2) (Federally-Funded Template)

If the Project is determined not to have a DBE Goal, leave the Section number and title, delete the unused Section and replace with “This Section is intentionally omitted.”

#### \*\*\*\$1\$\*\*\* (Section 3)

\*\*\*\$1\$\*\*\* This fill-in is for the Project Goal number.

\*\*\*\$2\$\*\*\* This fill-in is for the summary description of what WSDOT is looking for.

\*\*\*\$3\$\*\*\* This fill-in is for the how the Design-Builder will meet the goal.

\*\*\*\$4\$\*\*\* This fill-in is for the Goal criteria.

\*\*\*\$5\$\*\*\* This fill-in is for the what very good or excellent is.

#### \*\*\*\$1\$\*\*\* (Section 4)

\*\*\*\$1\$\*\*\* This fill-in is for the Project Goal number.

\*\*\*\$2\$\*\*\* This fill-in is for the summary description of what WSDOT is looking for.

\*\*\*\$3\$\*\*\* This fill-in is for the how the Design-Builder will meet the goal.

\*\*\*\$4\$\*\*\* This fill-in is for the Goal criteria.

\*\*\*\$5\$\*\*\* This fill-in is for the what very good or excellent is.

**\*\*\*\$\$1\$\$\*\*\* (Section 5)**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Project Goal number.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the summary description of what WSDOT is looking for.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the how the Design-Builder will meet the goal.

\*\*\*\$\$4\$\$\*\*\* This fill-in is for the Goal criteria.

\*\*\*\$\$5\$\$\*\*\* This fill-in is for the what very good or excellent is.

**Appendix A - Proposer Information and Certifications**

If a Form is not used leave the Form and replace with “This Form is intentionally omitted.”

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Substantial Completion date.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the DBE Performance Plan Section.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the WSDOT-Owned property address.

**Price Proposal (Section \*\*\*\$\$1\$\$\*\*\*)**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Price Proposal Section number.

**Technical Evaluation Scoring Summary**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the technical Section number.

\*\*\*\$\$2\$\$\*\*\* If it is a Federal aid Project and it has a DBE Goal. Use This fill-in is for the DBE Participation credit/points.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the Project goal title.

\*\*\*\$\$4\$\$\*\*\* This fill-in is for the Project goal credit/points.

\*\*\*\$\$5\$\$\*\*\* This fill-in is for the Project goal title.

\*\*\*\$\$6\$\$\*\*\* This fill-in is for the Project goal credit/points.

\*\*\*\$\$7\$\$\*\*\* This fill-in is for the Project goal title.

\*\*\*\$\$8\$\$\*\*\* This fill-in is for the Project goal credit/points.

\*\*\*\$\$9\$\$\*\*\* This fill-in is for the Price Proposal Section number.

\*\*\*\$\$10\$\$\*\*\* This fill-in is for the total credits/points.

## Upset Amount

If it is determined that an Upset Amount is not required on this Project, leave the Section number and title, delete the unused Section and replace with “This Section is intentionally omitted”.

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Upset Amount.

## Evaluation of the Technical Proposal

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Section number that identifies the elimination of allowable closures.

## Proposer Stipends

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the stipend amount.

## PROPOSAL FORMS

### FORM A (Federally-Funded Template)

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Project title.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the Project title.

\*\*\*\$\$3\$\$\*\*\* Note user to provide “fill-in” goal #2 for the Project.

\*\*\*\$\$4\$\$\*\*\* Note user to provide “fill-in” goal #3 for the Project.

\*\*\*\$\$5\$\$\*\*\* Note user to provide “fill-in” goal #4 for the Project.

### FORM A (State Funded Template)

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Project title.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the Project title.

\*\*\*\$\$3\$\$\*\*\* Note user to provide “fill-in” goal #1 for the Project.

\*\*\*\$\$4\$\$\*\*\* Note user to provide “fill-in” goal #2 for the Project.

\*\*\*\$\$5\$\$\*\*\* Note user to provide “fill-in” goal #3 for the Project.

\*\*\*\$\$6\$\$\*\*\* Note user to provide “fill-in” goal #4 for the Project.

### FORM B

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Project title.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the calculated or estimated value.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the item number.

**FORM C**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Upset Amount.

**FORM D**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Project title.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the interim milestones.

**FORM E**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Project title.

**FORM K**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Project title.

**FORM M**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the Project title.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the Project title.

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the stipend amount.

**FORM N**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the invoice date

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the bill to name and address

\*\*\*\$\$3\$\$\*\*\* This fill-in is for the Project title.

\*\*\*\$\$4\$\$\*\*\* This fill-in is for the stipend amount.

\*\*\*\$\$5\$\$\*\*\* This fill-in is for the stipend amount.

\*\*\*\$\$6\$\$\*\*\* This fill-in is for the stipend amount.

**FORM Q**

\*\*\*\$\$1\$\$\*\*\* This fill-in is for the location of property.

\*\*\*\$\$2\$\$\*\*\* This fill-in is for the Appendix name.

## 4-3 Chapter 1 General Provisions

RFP Chapter 1 contains the contract General Provisions. It replaces Division 1 of the Washington State Department of Transportation (WSDOT) [Standard Specifications M 41-10](#) and provides the general provisions applicable to design-build delivery. RFP Chapter 1 is largely a standardized document applicable to all WSDOT conventional design-build projects.

Though it is largely standardized, it is nonetheless very important for the WSDOT project team to be familiar with its terms, both the parts of the chapter that must be tailored to the project-specific conditions and the key parts that drive the contractual relationships between WSDOT and the Design-Builder.

***Any changes to RFP Chapter 1 that modify policy, content that may materially affect the intent, or content that may affect Federal eligibility or involve Federal Regulations, must be reviewed and approved by the Washington State Attorney General's Office and the FHWA.***

Key elements of RFP Chapter 1 are discussed in Exhibit 4-1 below:

### Exhibit 4-1 RFP Chapter 1: General Provisions

RFP Chapter 1 is the overriding contract that governs the design and construction of the project. It replaces Division 1 of the WSDOT [Standard Specifications M 41-10](#). Key elements of the chapter include:

1-01	Definitions and Terms	1-06	Control of Material
1-02	Certifications and Representations	1-07	Legal Relations and Responsibilities to the Public
1-03	Interpretation of Contract Documents	1-08	Prosecution and Progress
1-04	Scope of the Work	1-09	Measurement and Payment
1-05	Control of Work		

### Definitions and Terms

Section 1-01, Definitions and Terms, includes the definitions for acronyms and defined terms in the RFP. Any term (or acronym) that is capitalized in the RFP is a defined term with its definition provided in this section.

### Certifications and Representations

Certifications and Representations, describes:

- Responsibility For Design
- Disclaimer Regarding Documentation
- Design Professional Licensing Requirement
- Examination of Site of Work
- Further Assurances

## Interpretation of Contract Documents

- Interpretation of Contract Documents, describes:
- Contract Documents
- Order of Precedence
- Integration of WSDOT [Standard Specifications M 41-10](#) and Cited References into Contract
- Contract Bond
- Ambiguities
- Interpretations
- Approvals and Acceptances
- Computation of Periods
- Waiver
- Limitation on Third Party Beneficiaries
- Severability
- Headings
- Amendments
- Governing Law
- Escrowed Proposal Documents

The decision on whether to include the Escrowed Proposal Documents (EPDs) requirement in the RFP lies with WSDOT Region Management. While there is no set dollar threshold, it is common to only require EPDs when the project is of significant size and its duration extends across multiple construction seasons. Work with your ASCE if you wish to omit General Provision 1-03.15 from your RFP.

## Scope of the Work

Scope of the Work, describes:

- Intent of contract
- Coordination of contract documents, plans, Special Provisions, specifications, and addenda
- Practical Design Workshop
- Changes
- Procedure and Protest by the Design-Builder
- Differing Site Conditions
  - Guidance requiring coordination between the requirements of Section 1-04.7 and the information provided in the GBR, GDR, and SGDR. Work with the GeoTech Engineer and ASCE.
- Progress Estimates and Payments
- Use of Materials Found on the Project
- Final Cleanup

## Control of Work

Control of Work, describes:

- Authority of The WSDOT Engineer
- Authority of Assistants and Inspectors
- Plans and Working Drawings
- Performance
- Inspection of Work and Materials
- Removal of Defective Work
- Guarantees
- Final Inspection
- Final Acceptance
- Superintendents, Labor, and Equipment of The Design-Builder
- Cooperation With Other Contractors
- Method of Serving Notices
- General Warranties

## Control of Material

Control of Material, describes Buy America requirements for Federally- funded projects and is intentionally omitted for State-funded projects.

## Legal Relations and Responsibilities to the Public

Legal Relations and Responsibilities to the Public, describes:

- Laws to be Observed
- State Taxes
- Forest Protection and Merchantable Timber Requirements
- Sanitation\*
- Permits and Licenses
- Load Limits
- High Visibility Apparel
- Wages\*\*
- Worker's Benefits
- Requirements for Nondiscrimination
- Federal Agency Inspection
- The Design-Builder's Responsibility for Work
- Responsibility for Damage
- Protection and Restoration of Property
- Utilities Relocations

- Public Liability and Property Damage Insurance
- Gratuities
- Patented Devices, Materials, and Processes
- Rock Drilling Safety requirements
- Use of Explosives
- Public Convenience and Safety
- Rights-of-Way
- Opening of Sections to Traffic
- Personal Liability of Public Officers
- No Waiver of State's Legal Rights

For additional information on Section 1-07 for Federal-aid projects, refer to Chapter 10 of this manual.

\* COVID-19 Health and Safety Plan requirement resides.

\*\* See Wages section of this Chapter for Prevailing Wage information.

### **Prosecution and Progress**

Prosecution and Progress, describes:

- Subcontracting
- Assignment
- Contract Schedule
- Prosecution of Work
- Time for Completion
- Suspension of Work
- Maintenance During Suspension
- Extensions of Time
- Liquidated Damages
- Termination of Contract
- Incentives and Disincentives

### **Measurement and Payment**

Measurement and Payment, describes:

- Measurement of Quantities
- Weighing Equipment
- Scope of Payment
- Equitable Adjustment
- Deleted or Terminated Work
- Force Account
- Mobilization
- Payment for Material on Hand
- Payments
- Partnering
- Disputes and Claims
- Audits
- Claims Resolution



## Use of Design-Build Reference Documents

Reference documents may be in the form of environmental documents and decisions, old contract plans or As Built plans, reports, condition surveys, agreements, GSPs, other contracts, photographs, old boring logs, correspondence, and meeting minutes.

Reference Documents should be used to provide information that may be useful or of interest to the Proposers in preparing their proposals and executing the contract.

Reference Documents are provided to the Design-Builder for use at the Design-Builder's risk and come without Department warranties except as specifically provided for in the contract documents. Reference Documents are not to be confused with RFP Technical Requirements. Reference Documents that are going to be included need to be reviewed as a project's RFP is being developed. Items found within Reference Documents that are viewed as mandatory (not to be left to the decision of the Designer of Record) need to have their context included in the contract documents as a Technical Requirement.

Reference Documents are not included in the contract documents for many reasons, including the following:

- The intent may be to show a historical aspect and may be outdated or obsolete;
- The information may have been provided or prepared by parties that the Department has no control or with which the Department has no contractual or legal agreement;
- The document itself may be guidance not a requirement;
- The Designer of Record needs to have the ability to use Reference Documents in the same manner as Department staff;
- The volume of Reference Documents being used on the Department's design-build projects creates a high potential for conflict;
- The information may be ambiguous regarding its assignment of responsibility for performance of work; and/or
- The information may have been obtained for a different project or at another time and may or may not represent current conditions, such as geotechnical borings for building projects along the roadway corridor.

The Department cannot require work to be done in accordance with all of the Reference Documents, essentially using Reference Documents as the Technical Requirements. An RFP's technical requirements may incorporate portions of the Reference Documents by reference, thereby converting that portion of the Reference Document into a technical requirement. However, it is preferable to avoid this approach because it can lead to confusion regarding the intent.

## 4-4 Chapter 2: Technical Requirements

RFP Chapter 2 provides the project Technical Requirements. The Technical Requirements are organized by discipline. The Technical Requirements are primarily the governing design requirements for the project. They also include construction requirements where they vary from the WSDOT *Standard Specifications* M 41-10.

Some of the key elements of RFP Chapter 2 are discussed in Exhibit 4-2 below:

### Exhibit 4-2 RFP Chapter 2: Technical Requirements

RFP Chapter 2 provides the project-specific Technical Requirements of the project, including design criteria, methodology, and deliverables; project-specific construction requirements; and operational requirements. RFP Chapter 2 is divided into 30 sections:

- |   |  |
|---|--|
| 1. General Information                  | 16. Illumination                       |
| 2. Mandatory Standards                  | 17. Traffic Signals                    |
| 3. Vacant                               | 18. Intelligent Transportation Systems |
| 4. Vacant                               | 19. Signing                            |
| 5. Surveys and Mapping                  | 20. Pavement Marking                   |
| 6. Geotechnical                         | 21. Traffic Operations                 |
| 7. Pavement                             | 22. Maintenance of Traffic             |
| 8. Environmental                        | 23. Railroad                           |
| 9. Communications                       | 24. Right of Way                       |
| 10. Utilities and Relocation Agreements | 25. Control of Materials               |
| 11. Roadway                             | 26. Toll Infrastructure                |
| 12. Project Documentation               | 27. Vacant                             |
| 13. Bridges and Structures              | 28. Quality Management Plan            |
| 14. Stormwater                          | 29. Maintenance During Construction    |
| 15. Roadside Restoration                | 30. Water Crossings                    |

The following sections provide overviews of the Technical Requirements. Instructions for completing fill-ins are also provided where appropriate. When fill-in information is added in a template, the author should insert the information by removing the dollar signs and number but leave the asterisks. For example: *\*\*\*\$\$2\$\$\*\*\* becomes \*\*\*Information\*\*\**

If an entire subsection has been altered, then the title of the subsection would be bracketed by asterisks. For example: *2.5.3.1 \*\*\*General\*\*\**

If the requirements/language of a Technical Requirements' subsection do not apply to a specific Project, the text of that subsection can be omitted from the RFP, but the RFP must retain the title of the omitted subsection to preserve the subsection numbering and referencing throughout the entire RFP. Leave the subsection number and title and replace the content with "This section is intentionally omitted."

## Section 2.1: General Information

Section 2.1, General Information, provides the project scope and description.

## Section 2.2: Mandatory Standards

Section 2.2, *Mandatory Standards*, describes how Mandatory Standards are to be followed by the Design-Builder. Refer to [Section 2.2](#) for further information.

## Section 2.3: Vacant

Section 2.3 is currently vacant.

## Section 2.4: Vacant

Section 2.4 is currently vacant.

## Section 2.5: Surveys and Mapping

### Introduction

Surveying and Mapping creates the base map for all projects. Understanding the basic principles of surveying is important to ensure the project features are constructed at the correct location and elevation. The backbone of all surveying is monuments, which makes it critical to preserve as many monuments as possible.

### Reference Documents

\*\*\*\$1\$\*\*\* This fill-in describes the method/type of survey used to create the base map. WSDOT typically uses two different methods/types of surveying: LIDAR and standard.

Lidar uses a scanner and generates a point cloud that creates a 3D image without point coding. Standard surveying is the traditional method with either a total station and prism, or GPS receiver. All points surveyed using standard methods have point coding. There is also a difference in the accuracy of the points, with standard survey being more precise.

\*\*\*\$2\$\*\*\* This fill in describes the Plane Coordinates Zone. It is either North Zone or South Zone.

The area now included in the following counties shall constitute the north zone: Chelan, Clallam, Douglas, Ferry, Island, Jefferson, King, Kitsap, Lincoln, Okanogan, Pend Oreille, San Juan, Skagit, Snohomish, Spokane, Stevens, Whatcom, and that part of Grant lying north of parallel 47° 30' north latitude.

The area now included in the following counties shall constitute the south zone: Adams, Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, that part of Grant lying south of parallel 47° 30' north latitude, Grays Harbor, Kittitas, Klickitat, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum, Walla Walla, Whitman and Yakima.

\*\*\*\$3\$\*\*\* This fill-in defines the horizontal survey datum for the project. All WSDOT projects use the North American Datum of 1983 (NAD 83). There have been several adjustments to the NAD 83, such as NAD 83/91, NAD 83/07, and NAD 83/11.

Survey control monuments may have coordinates associated with each of the NAD 83 adjustments. The user of this section needs to know which adjustment was used when the base map survey data was collected.

\*\*\*\$4\$\*\*\* This is the combined factor used to build the base map and typically matches the Record of Survey.

## Survey Manager

### Interagency Agreements and Memoranda

In 1990, The Board of Registration for Professional Engineers and Land Surveyors (Board), and WSDOT developed an interagency agreement regarding surveying. This agreement allows WSDOT employees to practice land surveying under the direct supervision of a licensed Professional Land Surveyor (PLS) or Professional Engineer (PE), provided the PE competent in the principles of land surveying.

The provisions of the interagency agreement between the Board and WSDOT do not extend to design-build consultants. Therefore, the design-build survey manager must be a licensed Professional Land Surveyor, if they are directing or supervising non-licensed staff performing surveying.

### WSDOT Monumentation

It is important to notify the Region Survey Office when a design-build project is awarded. The timelines specified in this section are short and may be difficult to achieve if the Region Survey Office does not receive advance notification. Record of Surveys and Monument Maps should be reviewed at 30 percent, 60 percent, 90 percent, and draft final stages of completion.

When highways were originally constructed, the centerline was monumented. These monuments are the basis for determining WSDOT property ownership. As subsequent construction projects occurred on highways monuments were removed without sufficient documentation to their original positions. It is best to take all precautions not to impact the monuments. If construction activities must impact monuments, the monument location must be accurately determined and tied to other monuments that will not be impacted.

### Monument Submittal

The WSDOT Engineer needs to review the DNR monumentation permit and understand how each monument position will be referenced. Once, an original monument is disturbed or removed there may be no way of determining the original position.

## Post Construction Record of Survey

In order to meet the 7 day review time allotted the Region Survey Office will need to be informed of monuments impacted and control points set for the project as the project progresses.

## Section 2.6: Geotechnical

### Introduction

Section 2.6, Geotechnical, defines the technical requirements that the Design- Builder must meet when performing geotechnical work. The chapter defines the technical requirements in two ways:

1. The chapter contains specific language against which the Design-Builder's work will be evaluated and accepted.
2. The chapter refers the Design-Builder to Mandatory Standards that contain specific language against which the Design-Builder's work will be evaluated and accepted.

It may be necessary to augment, or add to, the current template language to provide project specific technical requirements for work not covered in the base template document. Modifications to the template require the involvement of the Geotechnical Office and the Construction Office. Carefully review the requirements for the decommissioning of wells contained in the template and ensure that the requirements are aligned with the requirements in Chapter 3 of the *Geotechnical Design Manual*. Coordinate all template revisions related to wells with the Geotechnical Office.

For Alternate Technical Concepts (ATC) proposed by the Design-Builder, the Design-Builder must identify any necessary revisions to Section 2.6, provide revisions to the technical requirements, and receive approval from WSDOT before moving forward with the ATC.

### Usage

The Geotechnical Office will work with the Project Office to add project specific requirements into the RFP language if needed.

If the template requires fill-ins, instructions on their use will be included in the template. The author should follow the instructions within the template document.

The WSDOT [Geotechnical Design Manual](#) (GDM) M 46-03 contains additional guidance in Chapter 22 regarding the geotechnical work necessary for RFP development.

Specific preparatory work needed for RFP development, such as subsurface drilling, testing, geotechnical characterization, development of the GDR and GBR, etc., should be discussed with the Geotech office well in advance of the Ad Date. Chapter 22 of the GDM should be consulted for additional background on what is required to be accomplished prior to Ad.

In accordance with the GDM, the Geotechnical Office will prepare a Geotechnical Data Report (GDR), Geotechnical Baseline Report (GBR), and compile pertinent reference geotechnical documentation into a package for prospective Proposers for inclusion in the appendices.

## Section 2.7: Pavement

### Introduction

WSDOT retains the responsibility for pavement designs on design-build projects. The Region Materials Engineer or the HQ Pavement Office provides a Pavement Design Report that includes the pavement sections and other design requirements needed to construct the project. The requirements of the Pavement Design Report are incorporated into the Section 2.7 template that, along with general design and construction requirements, forms the basis of pavement related plans developed by the Design-Builder. Include the Pavement Design Report in the appendices. Pavement design details not provided for in the Pavement Design Report or Section 2.7 are to be provided by the Design-Builder.

WSDOT has found that a State-provided pavement design ensures that the resulting pavement is a good investment. There are many different pavement designs that could work for a project and some will result in a lower initial cost than WSDOT's design. If the pavement design were left to the Design-Builder, the structure of a design-build contract would encourage the design of the lowest initial cost pavement. However, the pavement with the lowest initial cost is usually not the pavement that has the lowest cost over the pavements life. WSDOT's policy is to design pavement that results in the lowest life-cycle cost taking into account the cost of maintenance and rehabilitation in addition to the initial cost when determining the appropriate design for a project. This does not restrict the Design-Builder from providing alternate pavement designs. Alternative proposals will be considered provided they are structurally equivalent and equal or lower life-cycle cost than WSDOT's design. By providing the pavement design, WSDOT ensures a long lasting low life-cycle cost pavement while providing a level playing field for the design-build Proposers.

### General

Fill-in: \*\*\*\$\$1\$\$\*\*\* Elements of pavement work

### Pavement Sections

The pavement sections to be used in the project are shown in the approved pavement design report. The pavement sections for each alignment are inserted into this section. Ensure that every alignment that may require pavement work is included.

Include any additional requirements for each pavement section. Example: The compacted depth for the I-5 lanes and shoulders shall be as follows:

- 1.05 feet PCCP with corrosion resistant dowel bars, over
- 0.25 feet HMA Class ½-inch PG 64-22 (0.29 Million mix design ESALs), over
- 0.35 feet CSBC.

Place geotextile for soil stabilization meeting the requirements of Section 9-33 of the WSDOT *Standard Specifications* M 41-10 between subgrade and the CSBC.

This section also includes design and construction requirements common to all pavement construction. These requirements should only be changed if different requirements are called out in the Pavement Design Report.

Fill-ins:

\*\*\*\$1\$\$\*\* Mainline SR number or alignment (i.e. I-5 mainline or LR Line)

\*\*\*\$2\$\$\*\* Pavement sections from the Pavement Design Report

### **Local Agency Pavement**

It is WSDOT policy to design and construct Local Agency pavement to the Local Agency's standards. Most design-build projects will require the Design-Builder to provide a design for Local Agency pavement.

Projects with minor pavement construction on Local Agency facilities may include pavement sections for the Local Agency pavement. In this case, this section can be omitted and the pavement sections for the Local Agency pavement included in Section 2.7.3.1.1.

Minimum pavement thicknesses are shown for Local Agencies without pavement design standards. These are intended for low volume roadways that may need pavement work as part of the project. A specific pavement design should be required for higher volume roadways or roadways where substantial work required.

### **Miscellaneous Pavement**

Miscellaneous pavement includes driveways, parking areas, maintenance access roads, and any other pavement outside the travel lanes and shoulders. Design of these pavement sections is left up to the Design-Builder.

### **Incorporation of Existing HMA into Final Pavement Design**

This section provides criteria under which WSDOT may allow the reuse of existing pavement. There is some risk that the existing pavement has hidden distress or is too thin to provide adequate structural support. To reduce the risk to WSDOT, minimum requirements for investigating the existing pavement are included in this section. The core information (thickness and photos) should be submitted to the Region Materials Engineer and HQ Pavement Office to determine if the pavement is adequate to carry future traffic. More investigation may be needed if there are questions regarding the quality or thickness of the existing pavement.

## Hot Mix Asphalt Pavement Rehabilitation

The purpose of pavement rehabilitation is to restore the structural capacity of the pavement and provide a smooth riding surface for future traffic. HMA rehabilitation may include crack sealing, pavement repair, prelevel, an HMA overlay or planing the existing pavement followed by an overlay. The specific requirements will be included in the approved pavement design report.

It is important that all distress in the existing pavement be properly identified to ensure the rehabilitated pavement performs well. The pavement design report will detail the types and general locations of distress that needs to be repaired. The Design-Builder is required to identify specific locations of the distress to be repaired and prepare a pavement rehabilitation plan. The pavement rehabilitation plan is WSDOT's chance to ensure that all of the locations requiring rehabilitation work have been properly identified. The project team should carefully review the plan and verify the type and location of repairs correlate with the condition of the existing pavement in the field.

Fill-in:

\*\*\*\$\$1\$\$\*\*\* HMA pavement rehabilitation requirements from the Pavement Design Report

## Crack Sealing

Prior to an HMA overlay cracks greater than 0.25 inches wide need to be sealed to prevent the intrusion of water and eliminate voids in the surface to be paved. Where planing bituminous pavement is called for prior to the overlay the cracks will need to be sealed after planing. After planing, many of the cracks will be narrower which must be considered when estimating the quantity.

Fill-ins:

\*\*\*\$\$#\$\$\*\*\* \*\*\$\$1\$\$\*\*\* Estimated quantity (LF) of crack sealing

## Hot Mix Asphalt Pavement Repair

Pavement repair is needed to restore sections of HMA where cracks have propagated through the entire thickness of the HMA reducing the pavement's capability to carry loads. These areas are usually identified by small (6 to 18 inch) block type cracking where the pavement has begun to depress under loads. These areas should not be confused with age related cracks that do not penetrate full depth of the HMA and will be removed by planing bituminous pavement (if required) before the overlay. Additional evidence such as depressed pavement, pumping of fines or coring to verify crack depth should be used to verify that the cracks extend through the entire thickness of the HMA.

Fill-ins:

\*\*\*\$\$2\$\$\*\*\* Estimated quantity (SY) of pavement repair



### Prelevel

Prelevel is a thin layer of HMA used to fill ruts and improve the smoothness of the existing HMA prior to an overlay. Prelevel is not needed if planing bituminous pavement is performed prior to the overlay.

Fill-ins:

\*\*\*\$1\$\*\*\* Tons per lane mile of prelevel from Pavement Design Report

\*\*\*\$2\$\*\*\* PG of asphalt in the HMA for prelevel

### Hot Mix Asphalt Overlay

An HMA overlay increases the structural thickness of HMA and provides a smooth riding surface. Distress in the existing HMA needs to be repaired in accordance with the Pavement Design Report prior to the overlay.

Fill-ins:

\*\*\*\$1\$\*\*\* Class of mix from Pavement Design Report

\*\*\*\$2\$\*\*\* PG of mix from Pavement Design Report

\*\*\*\$3\$\*\*\* The location of the overlay should be shown in the Conceptual Plans. If not shown in the Conceptual Plans, the location should be shown here.

### Bridge Overlay Replacement

To be completed by the bridge office.

Planing Bituminous Pavement and Hot Mix Asphalt Overlay

Planing bituminous pavement prior to overlaying is an economical way to rehabilitate an HMA pavement. Planing the existing HMA prior to paving removes surface distresses eliminating the need to repair them prior to the overlay. Planing also allows paving of just the travel lanes if the shoulders are in good condition. Distress that extends below the HMA removed by planing must still be repaired prior to overlaying.

The planing depth in the RFP is the minimum depth of planing required. The Design-Builder may have to increase the depth of planing to remove the entire existing top lift if delamination occurs.

Fill-ins:

\*\*\*\$1\$\*\*\* The location of the overlay should be shown in the Conceptual Plans. If not shown in the Conceptual Plans, the location should be shown here.

\*\*\*\$2\$\*\*\* Depth of planing from the Pavement Design Report

\*\*\*\$3\$\*\*\* Class of mix from Pavement Design Report

\*\*\*\$4\$\*\*\* (need to add fill-in to RFP) PG of mix from Pavement Design Report

## Cement Concrete Pavement Rehabilitation

Cement concrete pavement rehabilitation preserves the pavement by replacing broken panels, grinding to provide a smooth pavement, repairing spalled pavement, and restoring load transfer between panels by retrofitting with dowel bars. The specific requirements will be included in the approved pavement design report. Not all projects will require that existing cement concrete pavement be rehabilitated. For projects that do require cement concrete pavement rehabilitation, it is important the requirements be clearly described to ensure that the needed rehabilitation is performed.

It is important that all distress in the existing pavement be properly identified to ensure the rehabilitated pavement performs well. The pavement design report will detail the types and general locations of distress that needs to be repaired. The Design-Builder is required to identify specific locations of the distress to be repaired and prepare a pavement rehabilitation plan. The pavement rehabilitation plan is WSDOT's chance to ensure that all of the locations requiring rehabilitation work have been properly identified. The project team should carefully review the plan and verify the type and location of repairs correlate with the condition of the existing pavement in the field.

Fill-in:

\*\*\*\$1\$\$\*\* PCCP pavement rehabilitation requirements from the Pavement Design Report

## Replace Cement Concrete Panel

The goal of cement concrete panel replacement is to replace panels that have a high likelihood of failure. This section lists typical distresses that indicate a panel more likely to fail (break up) in the near future. The Pavement Design Report may provide other criteria that should also be included in this section.

Fill-ins:

\*\*\*\$\$#\$\$\*\* Estimated number of cement concrete pavement panels to be replaced

## Partial Depth Spall Repair

Partial depth spall repair is used to correct distress near the surface of concrete pavement. Locations of spall repair need to be identified by the Design-Builder and included on the pavement rehabilitation plan.

## Dowel Bar Retrofit

Locations to be dowel bar retrofitted are described in the approved pavement design report. The locations should be identified in the RFP or Conceptual Plans.

## Cement Concrete Pavement Grinding

Locations of cement concrete pavement grinding are described in the approved pavement design report. The locations should be identified in the RFP or Conceptual Plans.

## Construction Requirements

GSPs or Special Provisions required by the pavement design report should be included in this section.

Fill-ins:

\*\*\*\$1\$\*\*\* Fill in Special Provisions to be used for the pavement construction on the project. The Pavement Design Report will include Special Provisions that are needed for the project. Other Special Provisions related to paving may need to be included at the designer's discretion.

\*\*\*\$2\$\*\*\* Include the number of ESALs for the HMA mix design found in the Pavement Design Report

## Cement Concrete Pavement Smoothness

Mean roughness index (MRI) is used to evaluate the smoothness of new cement concrete pavement and cement concrete pavement grinding. The requirements for measuring smoothness are included in Section 5-01 of the WSDOT [Standard Specifications](#) M 41-10 for cement concrete pavement grinding and Section 5-05 of the WSDOT [Standard Specifications](#) M 41-10 for new cement concrete pavement. The incentives and disincentives for smoothness are only applicable to new cement concrete pavement. Cement concrete grinding only needs to meet the minimum MRI requirement. Corrective action is required if the cement concrete grinding does not meet the minimum requirements but there is no incentive or disincentive payment.

## Hot Mix Asphalt Smoothness

HMA pavement smoothness data and testing is provided by the HQ Pavements Office. Designers should follow the instructions of GSP 5-04.3(13).OPT1.FR5 to obtain the existing MRI values to include in Appendix J of the RFP. Only existing travel lanes that will be overlaid (including lanes to be planed and overlaid) require the existing MRI values be included in Appendix J.

\*\*\*\$1\$\*\*\* Date the existing MRI testing was performed by HQ Pavement Office

## Temporary Traffic Detours

The Design-Builder may propose detouring traffic to construct the project. The design of the detour is left up to the Design-Builder since WSDOT cannot always predict the location and duration that a detour is needed on a design-build project.

WSDOT typically constructs shoulders with thinner pavement than the mainline travel lanes. Thin shoulder will not stand up to prolonged mainline traffic and the pavement structure may need to be increased to carry detour traffic. If the Design-Builder proposes to detour traffic onto a shoulder an evaluation of the shoulder's ability to carry traffic will be required. The evaluation may include coring or other means to determine the thickness and underlying condition of the shoulder pavement. If the evaluation shows that the shoulder will not support traffic for the duration of the detour, the shoulder pavement will need to be improved or replaced before traffic is detoured onto it.

If a detour is unacceptably rough, contact the HQ Pavements Office for IRI testing. For long duration detours, the Region may consider lowering the required IRI limits.

## Section 2.8: Environmental

### Introduction

Environmental compliance in design-build can pose a considerable risk to both WSDOT and the Design-Builder. The design-build process allows the Design-Builder latitude in developing a design that varies from the conceptual plans, providing the Design-Builder the opportunity to develop the most efficient or innovative design. However, these variations may change environmental impacts, which could affect project approvals, permits, and the schedule.

As a result, early and continued involvement from environmental staff is necessary to identify how the design can be flexible and innovative while ensuring the project scope and RFP is consistent with the regulatory approvals and permits being obtained for the project.

The environmental requirements included in Section 2.8, *Environmental* must clearly identify environmental permitting and mitigation responsibilities to be managed by the Design-Builder. If not, it can lead to schedule and cost risks to the Design-Builder and the Project. This section (as do all the DB template documents) includes fill-in locations that allow the project team to incorporate project-specific information. Please note that some entire sections may need modification to accurately describe project requirements. Furthermore, a project team may need to add a subsection(s) to address unique project requirements (e.g., dredging, fish exclusion, underwater noise monitoring, etc.).

A critical step in the development of Section 2.8, *Environmental* is the preparation of a Commitments List. This list identifies all of the environmental commitments that the Design-Builder is responsible for implementing during design and construction of the project. It is compiled from all the environmental permits and approvals obtained for or applicable to the project. The Commitments List becomes a contract document and gets included in the RFP as Appendix C1. Section 2.8.4 requires the Design-Builder to implement and report on the fulfillment of these commitments. Additional guidance for tracking environmental commitments can be found in [Chapter 490](#) of the WSDOT *Environmental Manual* M 31-11.

Appendix E contains all the environmental documents related to the project. Examples include the NEPA decision document, Endangered Species Act (ESA) documentation and concurrence, Section 106 concurrence, and wetland and stream memos. In addition, any other studies conducted to gain an understanding of the environment resources that exist within the project area should be included in Appendix E to help the Proposers prepare an accurate proposal.

Appendix P contains all the permits obtained for the project. It is worth noting that permits will often include requirements that may apply to WSDOT or to the Design-Builder, so just including a copy will not necessarily make it clear to the Design-Builder what is expected. The Commitments List spells out the requirements that the Design-Builder is responsible for implementing.

An [Environmental flowchart](#) and [tables](#) are available for download on the DB Program SharePoint Site to facilitate your understanding of environmental processes in design-build projects.

## Usage

This section explains how to use the template and provides guidance for certain subsections of Section 2.8, *Environmental*. This includes guidance for fill-ins, GSP selection, and references to helpful examples or resources for the author.

## Mandatory Standards

If your project includes in-water work that involves the need for a Temporary Stream Diversion, please include the General Special Provision (GSP) for Temporary Stream Diversion 7-06.SA1.FR7 or 7-06.SA2.FR7 (whichever is appropriate for your project) within the Special Provisions in Appendix B.

Recommend referencing other applicable GSPs in Section 2.8 and including them in Special Provisions Appendix B.

## Interagency Agreements and Memoranda

If there are agreements with regulatory agencies or the tribes that pertain to the Project, keep this subsection and include the appropriate agreements in Appendix E. If there are no applicable agreements, the author may omit this subsection.

Below are examples of existing interagency agreements that may apply to WSDOT design-build projects. Any commitments that exist within these documents (that are to become the responsibility of the Design-Builder) will need to be spelled out in the Commitments List.

- Memorandum of Agreement (MOA) Concerning Implementation of the Fish and Wildlife Hydraulic Code for Transportation Activities between the Washington State Department of Fish and Wildlife (WDFW) and WSDOT.
- Other project-specific agreements. For example, an MOA between WSDOT, FHWA, the tribes and the Department of Archaeology and Historic Preservation (DAHP) regarding historic or archaeological resources.

### **Environmental Compliance Manager**

If the Environmental Compliance Manager was described as Key Personnel in the Request for Qualifications, adjust this section to ensure qualification requirements are in alignment or do not contradict.

There is an optional fill-in that can be used if the project is not a linear roadway project. For example, if the project involved the construction of a new Ferry Terminal, the author could include the phrase “and aquatic or marine-related” for the fill-in.

### **Environmental Compliance Inspector**

The Environmental Compliance Inspector (ECI) shall be responsible for producing a Daily Environmental Inspection Reports (DEIR). A DEIR shall be produced for each day of field Work. The RFP should list out what a DEIR shall include at a minimum. The template includes a couple standard requirements and a fill-in for more requirements. The fill-in allows the RFP author to address unique areas of risk associated with the project.

Below are examples of DEIR requirements to consider:

- Project name and Contract number
- Inspectors name
- Date, time, weather conditions and precipitation totals
- Inspections performed and the results of the inspections, including specific location in the case of projects with multiple stages or work areas
- A list of special inspections performed (Hold Points) and the results
- A list of BMP maintenance or additions needed
- Documentation of communications with the ESC Lead regarding BMP maintenance or additions needed
- Documentation of required water quality testing performed and the results of these tests
- A copy of any checklist used in performing the inspection
- ECI signature
- ECM initials indicating review of the document

If your Project has a significant amount of earth moving and acres of soils disturbed, consider adding a subsection under Personnel Requirements below the Environmental Compliance Inspector subsection to require the Design-Builder to hire a full-time Erosion and Sediment Control (ESC) Lead.

If you add a new subsection, consider using the following language:

**“Erosion and Sediment Control Lead**

The ESC Lead shall be assigned to the Project and be available on-site, full-time until Ecology approves the Notice of Termination for the Project’s NPDES permit. A commitment of less than full-time may be approved by the WSDOT Engineer based on Project needs and time of year.”

Note, additional ESC Lead requirements are currently listed under the Temporary Erosion and Sediment Control Plan subsection.

**Environmental Meetings**

Modify this section based on project specific requirements. For example, consider adding an additional subsection after the Kick-Off Meeting if the Project requires an Environmental Preconstruction Meeting. An example of a new subsection follows:

**“Environmental Preconstruction Meeting**

The Design-Builder shall organize and lead an environmental preconstruction meeting with WSDOT and any necessary regulatory agencies ~~\*\*\*\$\$1\$\$~~ Calendar Days prior to the start of construction activities. During the environmental preconstruction meeting, the Design-Builder shall discuss the ECP, including its environmental training program, to demonstrate how the Design-Builder shall meet permit conditions and fulfill environmental commitments. The Design-Builder shall discuss its construction schedule and identify the early construction elements.”

If the Project has a significant number of commitments, consider adding a subsection that requires Environmental Commitments Review Meetings. An example of a new subsection follows:

**“Environmental Commitments Review Meetings**

The Design-Builder’s ECM shall organize and implement monthly environmental commitment review meetings with WSDOT during design and construction to ensure that the Project meets all Project environmental commitments included in the Environmental Commitments List (Appendix C). The ECM shall review environmental commitments at each meeting and work with WSDOT staff to close out commitments as they are met throughout the life of the Contract.”

## Part II: Environmental Plans and Strategies

Add subsections for any Project-specific plans that the Design-Builder must prepare, as required. Examples include:

- Soil and Groundwater Management Plan,
- Concrete Containment and Disposal Plan,
- Temporary Stream Diversion Plan,
- Fish and Aquatic Species Exclusion Plan,
- Invasive Plant Species Monitoring and Control Plan
- Worker and Public Health and Safety Plan.

Others may be required depending on your Project-specific commitments.

If there are expectations or minimum plan requirements, be sure to include those in the appendices of your RFP and reference them. For example, the WSDOT General Special Provision (GSP) regarding Temporary Stream Diversion (either 7-06.SA1.FR7 or 7-06.SA2.FR7, whichever is appropriate for each culvert site).

### Spill Prevention, Control, and Countermeasures (SPCC) Plan

This subsection states that the Design-Builder's SPCC Plan shall meet the "SPCC Plan Requirements" provided in Appendix E. These requirements were adapted from the existing SPCC requirements listed in Section 1-07.15(1) of the WSDOT [Standard Specifications](#) M 41-10 so they would be appropriate for a design-build project. [Click here](#) for the most recent copy of the SPCC Plan Requirements for inclusion in Appendix E.

### Water Quality Monitoring

#### Monitoring Plan for In-Water Work

Include this subsection if the project involves in-water work and has the potential to violate State surface water quality standards (WAC 173-201A). In-water work consists of work that occurs below the Ordinary High Water Mark (OHWM) of lakes and streams or work that occurs below the Mean Higher High Water (MHHW) in tidal areas.

You must modify this subsection in the template depending on the whether you have an individual 401 Water Quality Certification from Ecology, or if you have a Section 401 Letter of Verification (LOV) or "no further action" from the Army Corps. *If left alone, this subsection will lead to confusion since the two pathways have redundant but inconsistent requirements.* If the Project requires an individual 401 Water Quality Certification from Ecology, include *only* the first two paragraphs of this subsection (shown below in quotes), and strike the remaining paragraphs:

"The Design-Builder shall prepare a WQMPP as a Type 3 Working Drawing and submit it to the WSDOT Engineer for Review and Comment \*\*\*\$\$1\$\$\*\*\* Calendar Days prior to beginning in-water work so WSDOT can work with Ecology to



get the required approval. The WSDOT Engineer may grant the Design-Builder permission to coordinate directly with Ecology in preparing their submittal. The WQMPP shall address all of the requirements identified within the Section 401 Water Quality Certification (Appendix P) issued to WSDOT. WSDOT has guidance that was developed in collaboration with Ecology for preparing a WQMPP and sampling water quality, which is available on WSDOT's website under Environmental Commitments and Compliance.

All costs, delays, or both that result from not having an Ecology-approved WQMPP shall be the Design-Builder's responsibility, in accordance with Section 1-04 of the General Provisions. The Design-Builder shall be responsible for updating the WQMPP in accordance with the requirements of the Section 401 Water Quality Certification (Appendix P). If monitoring shows the activity is out of compliance, the Design-Builder shall immediately stop the in-water work that is causing noncompliance with the water quality standard and notify the WSDOT Engineer. The Design-Builder shall provide the sampling results to WSDOT on a weekly basis during in-water construction."

If the project has a Section 404/10 Nationwide Permit that is automatically certified (i.e., no further action from the Army Corps) or receives a Section 401 Letter of Verification (LOV) from Ecology, strike the first two paragraphs of this subsection, and include *only* the third and subsequent paragraphs (shown below in quotes):

"The Design-Builder shall prepare a water quality monitoring plan as a Type 3 Working Drawing, and submit it to the WSDOT Engineer for Review and Comment. The water quality monitoring plan shall identify how the Design-Builder will comply with State water quality standards contained in WAC 173-201A and authorized by U.S.C. Section 1313 and by Revised Code of Washington 90.48. WSDOT has guidance that was developed in collaboration with Ecology for preparing a water quality monitoring plan and sampling water quality, which is available on WSDOT's website under Environmental Commitments and Compliance.

At a minimum, the Design-Builder's water quality monitoring plan shall include the following:

- Description of in-water activities
- BMPs and procedures use to protect water quality during work occurring in waters of the State
- Applicable water quality standards and parameters
- Sampling locations and monitoring frequency
- Name(s) and phone number(s) of the person(s) responsible for on-site monitoring and reporting
- Documentation and reporting protocols
- Map showing sampling locations
- Monitoring form for recording sample results in the field

The Design-Builder shall submit the water quality monitoring plan as part of the Design-Builder's ECP to WSDOT for Review and Comment 14 Calendar Days prior to beginning construction.

If monitoring shows the work is out of compliance, the Design-Builder shall immediately stop the in-water work causing noncompliance with the water quality standard and notify the WSDOT Engineer. The Design-Builder shall provide the sampling results to WSDOT on a weekly basis during in-water construction. The Design-Builder shall update the water quality monitoring plan during construction of the project to address changes required to meet water quality standards. The Design-Builder shall submit updates to the water quality monitoring plan to the WSDOT Engineer."

### **National Pollutant Discharge Elimination System Construction Stormwater General Permit Sampling**

Only include this subsection if the project triggers an NPDES Construction Stormwater General Permit (CSWGP).

### **Bird Protection Plan**

This subsection states that the Design-Builder's Bird Protection Plan shall be prepared in accordance with the WSDOT *Bird Protection Protocols and Standards* provided in Appendix E. [Click here](#) to get the most recent copy of the *Bird Protection Protocols and Standards* for inclusion in Appendix E

### **Permits and Approvals**

#### ***Permit Acquisition***

WSDOT has determined that the Design-Builder shall obtain the NPDES CSWGP because the application (Notice of Intent (NOI)) requires specific information that will be based on the Design-Builder's approach. If the project team does not want the Design-Builder to obtain the CSWGP, then they must obtain approval from the WSDOT Assistant State Construction Engineer assigned to their region or mode.

Some projects will trigger supplemental data submittals to Ecology during the NOI process. For example, projects with:

- New outfalls to surface waters that are impaired (303(d) or TMDL) for turbidity, fine sediment, pH, or phosphorus, and/or;
- Known existing site contamination (soil or groundwater).

WSDOT maintains NOI guidance to assist in various aspects of the submittal requirements that can be found on the Erosion Control [Policies and Procedures webpage](#):

- General submittal requirements
- Existing Contamination
- Discharges to Impaired Waters

The Design-Builder may trigger supplemental data submittal(s) during the NOI process, which could result in additional environmental commitments. The cost of compliance during construction will depend on the extent of existing contamination that will be disturbed and the potential to discharge into an impaired waterbody. Additional environmental commitments may include:

- Enhancements to pollution prevention planning documents (e.g., TESC, SPCC, dewatering or concrete handling plans) for impairments or contamination
- Specific performance expectations for contamination
- Monitoring, sampling, and reporting requirements for impairments or contamination (these requirements could be triggered by presence of hazardous materials or Section S8 of the CSWGP)
- Administrative Order for contamination

If the Project has complex surface water environmental risks or existing known contamination that will likely be disturbed, WSDOT should clearly describe this in Section 2.8, *Environmental* including the potential for increased costs associated with compliance.

The Design Builder is ultimately responsible for identifying all receiving water outfalls (that may receive a discharge) and known contamination based on readily available data during the NOI process. This responsibility includes all areas disturbed by construction and construction support activity (including off-site areas that meet the CSWGP criteria). Failure to identify all outfalls and contamination during the NOI process may lead to permitting delays, including NOI resubmittal and additional public notice in accordance with General Condition 20 (G20) of the CSWGP.

### **Permit Compliance, Modifications, and Additional Approvals**

Coordinate with region or mode environmental staff when the Design-Builder proposes an alternative construction method or a design change(s) to determine whether the change is consistent with the initial environmental permit applications and documentation. If the change(s) alter the Project description or the methods and means previously described, then WSDOT may need to contact regulatory agencies or tribes to determine if reevaluation or permit modifications are necessary. Examples of items to review for changes to environmental permits and documentation include:

- Alternative Technical Concept (pre-proposal)
- Change Order
- Notice of Design Change (NDC)
- Field Change Request (FCR)
- Nonconforming Issue (NCI)
- Nonconformance Report (NCR)

## Threatened and Endangered Species

If the Project utilizes the WSDOT/FHWA Programmatic Biological Assessment (PBA) to ensure compliance with the ESA, reference and include completed Project Notification Forms (PNF) in Appendix E and reference PBA minimization measures included in the Environmental Commitments List (Appendix C). Consider adding (and modifying if necessary) the following language that informs the Design-Builder of risks associated with designs exceeding thresholds for coverage under the PBA:

“If the Design-Builder modifies design or construction activities from those described in the \*\*\* WSDOT United State Fish and Wildlife Services (USFWS) and WSDOT National Marine Fisheries Services (NMFS) Project Notification Forms (PNF) \*\*\*, ESA consultation may have to be re-initiated. If this occurs, the Design-Builder shall work through WSDOT to provide the necessary information required to determine if re-initiation of ESA is needed. If reinitiation is needed, then the Design-Builder shall work through WSDOT to provide the necessary information required for re-initiation of ESA consultation. WSDOT will take the lead in coordinating with USFWS and NMFS. If ESA consultation needs to be re-initiated due to changes made by the Design-Builder, all cost and schedule impacts shall be the Design-Builder’s responsibility.

The \*\*\* WSDOT USFWS and NMFS PNFs \*\*\* contains a number of performance standards. Performance standards have been included in the Environmental Commitments List (Appendix C). The Design-Builder shall fulfill and report on the implementation of performance standards and environmental commitments in the Environmental Commitments Close Out Report described in this Section.”

## Submittals

Make sure this subsection is consistent with the general and Project-specific submittals described in the Environmental Plans and Strategies subsection. Review the bullets and sub-bullets in the Submittals subsection, and add or delete plans as necessary (e.g., Soil and Groundwater Management Plan, plans for temporary stream diversion, Worker Health and Safety Plan, Air Quality and Fugitive Dust Control Plan).

## Section 2.9: Communications

Section 2.9, Communications, contains the requirements for handling internal and external communications about the project. It plays a strategic role in obtaining stakeholder and public consensus for the project.

WSDOT will lead communications on projects. The extent of the Design-Builder’s support will depend on the WSDOT region communications office’s ability to devote the necessary time and resources to the project. For some projects, WSDOT may want to take the lead on most communications efforts while the Design-Builder will provide support by supplying construction closure info, drafting key messages, noise flyers, etc. In other cases, WSDOT may want the Design-Builder to do most of the work, while WSDOT retains approval rights for any communications written/created by the Design-Builder. The correct approach for the project may also depend on the sensitivity of the public.

The WSDOT project team, which should include personnel from the region communications office, determines the best approach and the requirements for this section.

When developing Section 2.9, consideration must be given to the flow of communication. The flow of communication must consider internal employees, the general public, stakeholders, media, and other governmental agencies. Each group has unique requirements and deadlines for receipt or dissemination of information. The WSDOT project team must consider each group's needs and determine the best method and timelines for handling information.

Section 2.9 should also include requirements for public outreach such as a hotline, project signs, and project website. Public outreach may also require meetings with the general public, stakeholders, media, and governmental agencies.

Section 2.9 should include information on the following topics:

- Mandatory Standards
- Joint responsibilities, WSDOT responsibilities, and Design-Builder responsibilities
- Project communications plan requirements
- Crisis communications plan requirements
- Design-Builder Communications Specialist requirements and duties
- Communications Task Force requirements
- Maintenance of Traffic (MOT) and Access notification requirements
- Construction information
- Media relations

## General

Describe the purpose for communications for the project. Create a bulleted list of some of the project goals, such as supporting successful delivery of the project, providing information to individuals and entities directly affected by construction, educating the public about environmental benefits and improvements, reinforcing positive WSDOT relationships, educating the public about the need, vision, and context for the project.

## Mandatory Standards

Review this list to ensure the standards are listed. Consider whether you need to include the Associated Press Stylebook, particularly if the Design-Builder will be creating public materials such as news releases, blogs, media advisories, project website, and other written materials.

## Joint Responsibilities

\*\*\*\$\$1\$\$\*\*\* Modify this to fill in the name of the project

## Communications Planning Workshop

\*\*\*\$\$1\$\$\*\*\* Modify this to fill in to indicate whether WSDOT or the Design-Builder will plan the communications/No Surprises workshop.

The Communications Planning Workshop should include the WSDOT Communications Team, WSDOT Project Office, and Design-Builder to review the project, communications planning, review emergency communications procedures, and create a flow chart of communications to outline the phone tree. WSDOT should also take the opportunity to review our “No Surprises” philosophy.

## Project Communications Plan

Modify this to state whether WSDOT or the Design-Builder will establish and implement the project communications plan. It is helpful to have a WSDOT plan to provide to the Design-Builder to describe expectations, roles, responsibilities, and WSDOT resources that can be utilized by the Design-Builder. WSDOT will always retain final approval of a project communication plan, regardless of authorship.

## WSDOT’s Responsibilities

\*\*\*\$\$1\$\$\*\*\* - Modify this to describe a goal/task specific to this project in the first bullet point. It may involve coordination with other construction projects, attending community meetings or briefings. If the listed goals are sufficient, you may eliminate the \*\*\*\$\$1\$\$\*\*\* bullet point.

## Design-Builder’s responsibilities

Consider adding a bulleted list in here of other things you want the Design-Builder to be responsible for such as:

- Responding to correspondence
- Providing noise hotline support
- Creating and maintaining a citizen database of emails/phone calls/letters, and public information materials such as folios, maps, fliers and fact sheets
- Taking photos
- Shooting and editing project video

## Personnel Requirements

\*\*\*\$\$1\$\$\*\*\* Modify this to indicate how many years of experience the Design-Builder’s Communications Specialist should have. When deciding, consider the required outreach, the level of support they will be expected to provide, and the level of expertise needed to accomplish the goals. A project with more outreach required to State and elected officials or that is inherently controversial may warrant a Communications Specialist with more experience than other projects.

If the Project Engineer, in consultation with WSDOT communications, determines that the Design-Builder will not be required to hire a communications specialist, this section may be intentionally omitted.

## Task Force Meetings

This section is designed to ensure that the Design-Builder keeps WSDOT communications and the project team apprised of plans.

## Construction Schedule

Modify \*\*\*\$1\$\$\*\* to note email address of either project email, regional construction email or another user.

Modify \*\*\*\$2\$\$\*\* and \*\*\*\$3\$\$\*\* with time and days of the week. Example “no later than 11 a.m. Tuesdays”

If a Design-Builder communications specialist will not be required due to intentionally omitting section 2.9.5.1, delete the last sentence of the section that states: “The Communications Specialist shall write a summary of the upcoming approved closures for posting on the construction closures website and submit it to WSDOT by \*\*\*\$3\$\$\*\*.”

## Coordination with Traffic Management Plan

This section ensures that the Design-Builder coordinates closures and communications with other nearby projects.

## Traffic Conditions

If the region does not have a Traffic Management Center, delete that portion of it, but keep the section about informing the WSDOT project personnel.

## Commercial Vehicle Access and Restriction Information

Modify \*\*\*\$1\$\$\*\* to indicate how many Calendar Days that freight/commercial vehicles must be notified in advance of the restriction.

Modify \*\*\*\$2\$\$\*\* to note which agencies must be notified. Examples may include the Washington Trucking Association, the WSDOT Commercial Vehicles Division, Washington State Patrol, transit, emergency services, transportation offices of other cities/agencies, and local ports or trucking areas.

## Emergency Vehicle Access

This is to ensure that local emergency service providers such as local law enforcement, hospitals, and ambulance services are notified about access through or detours around the area.

## Bicycle and Pedestrian Access

No modifications are needed unless the State wishes to identify specific bicycle and pedestrian groups.

## Methods and Tools for Dissemination of Information

Modify \*\*\*\$1\$\$\*\*\* to indicate whether WSDOT or the Design-Builder will be responsible for updating the project website.

## Telephone Hotline

Determine whether a hotline is needed for the project. If not this section may be intentionally omitted.

## Collateral Materials

The fill-in can be modified to indicate additional collateral materials that must be developed such as progress fact sheets for media and folios.

## External Events

Modify \*\*\*\$1\$\$\*\*\* to indicate approximately how many events the will occur during the project.

Modify \*\*\*\$2\$\$\*\*\* to list event names specific to the Project. This list should be consistent with the number of events shown in \*\*\*\$1\$\$\*\*\*.

## Photographs and Video

Modify \*\*\*\$1\$\$\*\*\* to indicate whether WSDOT or the Design-Builder will lead photography and video efforts.

External whether WSDOT or the Design-Builder will lead photography and video efforts

## Submittals

Modify this section to add bullet points of other deliverables listed in the project design- build contract. Examples of additional submittal materials may be noise flyers, project folio, media fact sheets, PCMS messaging, HAR messaging, and project webpage content.

## Section 2.10: Utilities and Relocation Agreements

### Introduction

WSDOT retains the responsibility to work with public utilities for reimbursement or compensation for relocation of their facilities.

It is important to provide utility locations to the Design-Builder. Due to time constraints placed on the Design-Builder, it is likely that the Design-Builder will assume that all existing utilities are in good condition unless noted otherwise, although utility As Builts are a Reference Document and should be relied upon.



Utilities will already have an existing agreement with WSDOT or a Local Agency. During the preliminary site investigation, determine the location and condition of all utilities. In preliminary design, identify any utilities that will be impacted and, whenever possible, relocate them prior to the Design-Builder beginning work. An exception would be for a multi-season project that has the potential for an innovative solution that could change utility impacts. In this case, it may be prudent to delay utility relocation until after award.

If relocation must be done in conjunction with the design-build contract, give the Design-Builder responsibility for and control of the relocation itself. Establishing a cost for potential coordination delays can impact the overall price of a contract.

If the preliminary agreement with a utility (public or private) requires modification as a result of the Design-Builder's final design, the risk and responsibility for this delay should rest with the Design-Builder.

In urban environments, consider a full subsurface utility investigation if the conditions of the existing facilities could potentially impact the project schedule.

Care should be taken to ensure a franchise agreement or permit exists. Expired permits should be addressed prior to ad.

## Usage

### **Mandatory Standards:**

Verify the list of Mandatory Standards and their hierarchy listed in the template for accuracy for the project and add any other project-specific Mandatory Standards in the fill-in.

### **Protection in Place**

List any additional Protect in Place requirements or agreement commitments in the fill-in.

## **Section 2.11: Roadway**

### **Introduction**

Section 2.11, Roadway, outlines the contract requirements for roadway design and grading elements including design criteria that Design-Builder must follow. With the inclusion of practical design in WSDOT [Design Manual M 22-01](#), there is a significant amount of flexibility afforded the designer and the Engineer of Record. The project team needs to verify the appropriate level of flexibility that should be allowed based on context and modal needs in the Basis of Design and include appropriate minimum requirements in the RFP. Where minimum criteria called out in the WSDOT [Design Manual M 22-01](#) are not the desired end result, the project team should identify controlling criteria that meet the needs of the project. These controlling criteria should be identified in the RFP in the Basic Configuration.

## Usage

### Mandatory Standards:

Verify the list of Mandatory Standards and their hierarchy listed in the template for accuracy for the project and add any other project-specific Mandatory Standards in the fill-in.

### Design Criteria

Although WSDOT develops Conceptual Plans, the Design-Builder will likely propose revisions to WSDOT's roadway design within the given constraints in this section. This section needs to outline the roadway design criteria that Design-Builder must meet

in order to meet project needs. The project-specific design criteria could be identified in design documents such as Basis of Design, Design Analysis, or environmental and community engagement processes resulting in project commitments or constraints.

During the RFP development, the project team needs to evaluate inclusion of project specific design criteria and determine where the WSDOT *Design Manual* M 22-01 minimums need to be revised to meet project needs such as:

- Design Speed
- Design Vehicle
- Cross-Slope
- Superelevation Rate
- Maximum or Minimum Profile Grade
- Cut/Fill slope
- Clear Zone
- Pedestrian and Bike requirements
- Median Cross-Overs
- Enforcement Areas
- Highway Classification and access control
- Reference to Pre-Approved Design Analysis

### Roadside Barrier Selection & Impact Attenuators

Include these sections in the RFP if guardrail or concrete barrier may be included in the project or if elements such as guardrail are to be prohibited. The fill-ins may include a barrier type preference such as single slope concrete barrier, minimum exposed height, or any other project specific criteria. The WSDOT *Design Manual* M 22-01 provides guidance on the types of barrier that could be considered and the project team should review the guidance and may include the acceptable barriers and impact attenuators for site-specific conditions, locations, or corridor consistency.

### Fencing

Include this section if the Design-Builder needs to address existing or new fence on the project. If fencing is included, the project team should develop a Design Document identifying the criteria for constructing, repairing, or replacing fence as part of the conceptual design approval package.

**Fall Protection**

Include this section in projects requiring fall protection for pedestrian facilities or future maintenance of project elements such as culverts, walls, steep reinforced slopes.

**Side Slopes**

Include in all projects that include earthwork and side slopes.

**Maintenance Access**

Existing maintenance access roads that need to remain should be identified in the Conceptual Plans. The project team should also evaluate future maintenance needs for drainage, illumination, landscaping etc. and include any project specific requirements in the RFP.

**Break In Limited Access**

Include this section in all projects with limited access. Necessary breaks in limited access must be pre-approved in accordance with the WSDOT [Design Manual M 22-01](#). Break in limited access on interstate requires FHWA approval. The fill-ins identify the location of limited access breaks and any specific purpose of their intent or if no breaks are allowed in the project.

**Channelization Design**

Include this section in projects with proposed channelization revisions. Fill-in #1 is intended to identify project specific locations such as intersections, ramps, and ramp meter storage etc. where the Design-Builder must provide minimum configuration identified in the conceptual channelization plans.

**Pedestrian Facilities**

Include in all projects that impact existing pedestrian facilities or to identify project specific pedestrian improvements included in the project.

**Noise Walls**

Include this section in projects with noise walls and provide project specific noise wall requirements (height, location etc.) and their configuration in accordance with the environmental commitments. When landscaping is required along noise walls, make sure that Section 2.15 language is consistent with this section.

**Rumble Strips**

Include this section in projects with rumble strips. Fill-ins to identify types and location of rumble strips specific to the project.

### **Design Parameter Worksheet**

Include this section in all projects. The project team as part of the conceptual design approval package must develop the design parameter table and identify the criteria used for the conceptual design. The project team should thoroughly evaluate the range of dimensions allowed for each element in order to determine an acceptable minimum because the Design-Builder will typically choose allowable minimums for bidding purposes. The Design-Builder updates the design parameter table based on the final design and constructed project.

### **Roadside Barrier Technical Memorandum**

Include in all projects that may affect existing barrier or require new roadside barrier.

### **Impact Attenuator Technical Memorandum**

Include in all projects that may affect existing impact attenuator or require new attenuator.

## **Section 2.12: Project Documentation**

### **Introduction**

Section 2.12, *Project Documentation*, identifies the project documentation requirements for both design and construction on a design-build project. WSDOT [Design Manual M 22-01, Chapter 300](#) provides guidance on the design procedures, Design Documentation, and approval requirements necessary to deliver successful highway projects. For design-build projects, WSDOT is responsible for acquiring Conceptual Design Approval including approval of known Design Analyses prior to advertisement of the RFP documents. Involve the ASDE (and FHWA as necessary) early on during Preliminary Engineering. The Design-Builder is responsible for acquiring the Project Development Approval and preparing the Design Documentation package. WSDOT [Design Manual M 22-01, Chapter 300](#) provides guidance on approval authorities for various Design Documents dependent on FHWA oversight. Project documentation requirements for construction documents is included in the WSDOT *Construction Manual M 41-01* including requirements for temporary and permanent final records. In order to avoid a lengthy close out process, the project team and Design-Builder close out task force should start developing project documentation as early as possible, and it is recommended that documentation be finalized as the project is progressed and various project phases are completed.

### **Usage**

#### **Mandatory Standards:**

Verify the list of Mandatory Standards and their hierarchy listed in the template for accuracy for their project and add any other project specific Mandatory Standard in the fill-in such as regional Channelization Plan Checklist, etc.

## Design Documentation Package and Project File

In a design-build project, WSDOT is responsible for completing Conceptual Design Approval prior to advertising the RFP. The Conceptual Design Approval should be included in the appendix for reference. The guidance on Conceptual Design Approval for design-build projects is included in the WSDOT *Design Manual* M 22-01. The Design-Builder is responsible for completing Project Development Approval, Design Documentation Package, and Project File, all applicable components identified in the [Chapter 300](#) of the WSDOT *Design Manual* M 22-01. Include this section in all projects.

All revisions to the concept as documented in the Conceptual Design Approval must be updated in the PDA. The fill-in in this section is intended to provide the guidance or template for the Design-Builder to follow in developing the Project Development Approval.

## Practical Design Documents (Basis of Design, Alternative Comparison Table)

The Basis of Design and alternative comparison table are developed as part of the conceptual design approval package during the RFP development. The Basis of Design identifies project need, context, design controls, modal priorities, preferred alternative, and required design elements. The Design-Builder is responsible for making all revisions to the Basis of Design and alternative comparison table resulting from the proposed design. Include this section in all projects.

### \*\*\*\$\$1\$\$\*\*\* Package

Different regions have different names for channelization plans. All fill-ins in this section are used to provide the regional term for channelization plans, except fill-in #12, which identifies the Mandatory Standard (Channelization Plan Checklist, Plan for Approval Checklist, etc.) that will be used to Review and Comment on the channelization plan submittal. Include this section in all projects that require Design-Builder to develop channelization plans.

Clarify in the RFP if a Channelization Package has been prepared by WSDOT. If it has, consider using it as a Reference Document. If the Channelization Package is identified as contractual Basic Configuration, then any minor changes to radius, transitions, etc. will require an ATC or change order.

## Technical Memoranda

This section includes requirements for the development of technical memoranda required in the contract for design decisions. Include in all projects requiring technical memoranda in the RFP.

## Calculations

The contract requirements for preparing calculations would generally be included in all projects.

## Design Analyses

Include in all projects. All Pre-Approved Design Analyses are listed in this section and must be included in the appendix for reference. Any Design-Builder proposed revisions to existing design analyses or new proposed design analyses must be reviewed and approved in accordance with this section. WSDOT [Design Manual](#) M 22-01, [Chapter 300](#) provides the necessary guidance on developing a Design Analysis.

## Maximum Extent Feasible

Include this section in all projects where existing pedestrian facilities may be altered and it may not be feasible to meet WSDOT design criteria for pedestrian facility design elements. If only new pedestrian facilities are proposed on a project, WSDOT design criteria for pedestrian facilities must be met and MEF documentation is not allowed. The design-build team must coordinate with the Regional ADA Coordinator on all proposed MEFs prior to preparing and submitting the MEF document.

## Final Design Documents

Include in all projects. The project team should encourage the Design-Builder to develop and complete the final Design Documents as the design is being developed and Released for Construction. The project team should review and verify the final Design Documents depict the final constructed design by the Design-Builder.

## Section 2.13: Bridges and Structures

### Introduction

Section 2.13, *Bridges and Structures*, defines the requirements for bridges, retaining walls, noise walls, buried structures, , illumination/ITS/sign structures, and other structures.

The WSDOT *Bridge Design Manual* (BDM) sets the standard for bridge and structure design within WSDOT right of way. The BDM outlines WSDOT's design details and methods, incorporating standard practices that are based on years of experience and historical performance. All mandatory requirements for design-build contracts are in Chapter 15 of the BDM. If the RFP or a Mandatory Standard references a specific section in the BDM, the Design-Builder shall first review the applicable portions of Chapter 15. All other chapters in the BDM shall be considered a Reference Document. All active BDM Design Memorandum shall be included as Mandatory Standards.

The template is meant to provide general design requirements. It may be necessary to augment, or add to, the current 2.13 template language to provide project specific technical requirements for work not covered in the base template document. Modifications to the template require the involvement of the WSDOT Bridge & Structures Office and the HQ Construction Office.

## Usage

The Bridge and Structures Office will work with the Project Office to add project specific requirements into the RFP language is needed.

The WSDOT *Bridge Design Manual* (BDM) Chapter 15 contains additional technical requirements that may not be contained in the RFP. Coordination with the Bridge & Structures Office is necessary to ensure any fill-ins do not create conflicts.

## Design Criteria

\*\*\*\$1\$\*\*\* Provide required minimum clearances for each overwater structure. Required minimum vertical clearances may vary at each location and shall be defined for freeboard and maintenance access. If site specific clearances are not defined in the RFP, the default clearances shall control.

- a. Freeboard - above the 100 year Mean Recurrence Interval (MRI) and maintained across the width of the hydraulic opening This dimension is defined in the Preliminary/Final Hydraulic Design Report.
- b. Maintenance - above the channel thalweg to the Controlling Top Elevation. This should be determined in accordance with the WSDOT [Design Manual](#).

\*\*\*\$2\$\*\*\* Test level requirements for all bridge barrier for the project. Typically will Be TL-4, for most bridge. TL-5 shall be used for bridges as described in the BDM 10.2.1.

## Bridge Seismic Design Criteria

\*\*\*\$1\$\*\*\* Each bridge on the project shall be classified as Critical, Essential or Normal for purposes of seismic design. See WSDOT *Bridge Design Manual* Section 4.1.

## Temporary Structures

\*\*\*\$1\$\*\*\* List the structures(s) where the foundations need to be located outside the ordinary high water. Contact the Hydraulics Office for recommendations on identifying locations.

## Conceptual Design Development Requirements

The design development by WSDOT should be advanced as necessary to identify the conceptual type, size, and location of all major structures, such as bridges and buried structures with a span length 20 feet or greater. Retaining walls with an exposed face height at any location of more than 10 feet that have significant surcharge loads, subsurface soil reinforcing conflicts, or utility conflicts shall be identified as high risk and may benefit from a conceptual type, size, and location. The Geotechnical Office may provide global stability analysis for high risk walls to increase the confidence of constructability prior to RFP release.

Structures design and construction is an opportunity to recognize both the cost and schedule advantages of design-build. Design-Builders have different areas of expertise, resources, and subcontractors, which can be most efficiently utilized in

design-build if they have flexibility in determining structure types. To facilitate the process, it is best to not prescribe structure types in the Technical Requirements.

The structure conceptual plan is part of RFP Appendix M. The purpose of the structure conceptual plan is to present a baseline structural concept where bridges or buried structures are assumed by those preparing the RFP to be appropriate based on the criteria and requirements specified in the RFP. When determining the structure type, size and location for the structure conceptual plan, constructability shall be considered which may require construction staging diagrams, evaluation of potential crane placement locations, girder launching, girder shipping, and potential capacity of existing adjacent structure. The structure conceptual plan is developed to be consistent with the overall baseline civil roadway concept of RFP Appendix M. The content of the structure conceptual plan for a bridge or buried structure includes the items listed in the Conceptual Plan Checklist of WSDOT *Bridge Design Manual* (BDM) Appendix 15.2-A1.

Structure conceptual plans for retaining walls should include plan location, elevation view, and a cross section taken at the critical wall locations to demonstrate surcharge locations, utility conflicts, or maximum soil reinforcing lengths.

## Section 2.14: Stormwater

### Introduction

Section 2.14, *Stormwater* specifies requirements for design and construction of the stormwater drainage system. The WSDOT *Highway Runoff Manual* M 31-16 directs the planning and design of stormwater management facilities for new and redeveloped Washington State highways, rest areas, park and ride lots, ferry terminals, and highway maintenance facilities statewide. The WSDOT *Highway Runoff Manual* frequently references the WSDOT *Hydraulics Manual* M 23-03 to address the analysis and design of hydraulic features. The two manuals are used in tandem to complete the analysis and design of stormwater drainage systems within the Project.

### Usage

Section 2.14, *Stormwater* is applicable whenever there is stormwater or drainage work within the Project. Section 2.14, *Stormwater* is created to supplement the WSDOT *Highway Runoff Manual*, the WSDOT *Hydraulics Manual*, and other documents included in the Mandatory Standards. The WSDOT *Highway Runoff Manual* and WSDOT *Hydraulics Manual* cannot provide the solutions for all possible stormwater and hydraulic design scenarios. As WSDOT gains more experience with the design-build process, Section 2.14, *Stormwater* will be updated with lessons learned from stormwater and drainage designs that may help future design-build projects. Any supplemental stormwater and hydraulic policies and requirements in Section 2.14, *Stormwater* may eventually be incorporated into the WSDOT *Highway Runoff Manual* or WSDOT *Hydraulics Manual*. When tailoring Section 2.14, *Stormwater* to the Project and creating the Conceptual Hydraulic Report, the Project Engineering Office (PEO) should work closely with the Region Hydraulics office.



This section provides guidance on how to add to or edit Section 2.14, *Stormwater*, including guidance on how to complete the fill-ins. The person who prepares Section 2.14, *Stormwater* must have detailed knowledge about the Project and have experience in stormwater and hydraulic design. Looking through the scope of work, the designer should identify which work would need additional clarification, guidance, or project specific requirements.

For example: The Conceptual Hydraulic Report calls for a cross culvert to be installed along an interstate highway. It has been determined that using an open cut method to install the culvert is not allowed. However, this requirement is not mentioned anywhere in the Mandatory Standards. To enforce this requirement, it must be written in Section 2.14, *Stormwater*. This type of issue is normally a project-specific decision. The language added to Section 2.14, *Stormwater* for the new requirement could be, “Using an open cut method along the highway \*\*\*\$1\$\*\*\* at milepost \*\*\*\$2\$\*\*\* to install the culvert is not allowed.” Without this written requirement in the 2.14, *Stormwater*, the Design- Builder can open cut the highway to install the culvert, and legally WSDOT cannot stop the Design-Builder from doing it.

Another example is where the WSDOT PEO creating the RFP has determined that only steel pipes can be installed on the WSDOT bridge even though other pipe materials may meet the requirements. Section 2.14, *Stormwater* should provide the detailed specifications for the acceptable pipe material to be installed on the WSDOT bridge. The language added to Section 2.14, *Stormwater*, for the new project-specific requirement could be, “Only steel pipes are allowed to be installed on WSDOT Bridge \*\*\*\$1\$\*\*\*/\*\*\*\$2\$\*\*\*.”

### General

The fill-in is for any additional element of Work that needs to be added to the Section 2.14, *Stormwater*.

- \*\*\*\$\$<Number>\$\$\$\*\*\* Note user to provide “fill-in” details specific to the Project.

### Mandatory Standards

The fill-in is for any additional Mandatory Standard that needs to be added to the Section 2.14, *Stormwater*.

- \*\*\*\$\$<Number>\$\$\$\*\*\* Note user to provide “fill-in” Mandatory Standards specific to the Project.

### Computer Software

The fill-in is for to specify the acceptable version MGSFlood. Consult with Headquarters Hydraulics Section for the latest version.

- \*\*\*\$\$<Number>\$\$\$\*\*\* Note user to provide “fill-in” version number specific to the Project.

## Acceptable Design Reference Documents

The first fill-in is to specify either “Eastern” or “Western” Washington. The second fill-in is for any additional Acceptable Design Reference Document that needs to be added to the Section 2.14, *Stormwater*.

\*\*\*\$\$<Number>\$\$\*\*\* Note user to provide “fill-in” guideline specific to the Project.

## Conceptual Level Hydraulic Report and the Design Builder’s Hydraulic Reports and Intermediate Drainage Designs

Typically, the conceptual designs are about 15 percent to 30 percent complete. The Conceptual Hydraulic Report should document all assumptions and show all calculations made. The Conceptual Hydraulic Report should follow the Hydraulic Report Outline and Checklist posted on the website <https://wsdot.wa.gov/Design/hydraulics>

All deviations and adjustments from the WSDOT *Highway Runoff Manual* and the WSDOT *Hydraulics Manual* should be identified and documented in the Conceptual Hydraulic Report. Approval of deviations and adjustment should be obtained prior to the RFP.

Existing soil infiltration rates and seasonal high groundwater surface elevations at potential BMP locations may take a long time to obtain. Completing and having this type of information in the Conceptual Hydraulic Report is recommended to help reduce questions about the project site.

All the commitments should be identified and documented in the Conceptual Hydraulic Report.

## Drainage Conveyance System

This section sets the default requirements for dealing with the existing drainage conveyance system that is impacted or modified by the Project. The PEO creating the RFP can change the requirements in this section if the PEO does a lot of up-front work determining the condition of the existing drainage conveyance system. If any section of the existing drainage conveyance system is determined by the PEO to be in good condition and does not need to be replaced by the Project, the PEO, in close coordination with the Region Hydraulics office, will list that part of the existing drainage conveyance system in Appendix H of the RFP.

## Wall Drains

Work with Headquarters Hydraulics Section, Structural, and Geotechnical Offices to determine the minimum wall drain pipe diameter.

- \*\*\*\$\$<Number>\$\$\*\*\* Note user to provide “fill-in” minimum diameter of underdrain pipes specific to the Project.

## Infiltration

Existing soil infiltration rates and/or seasonal high groundwater surfaces elevation need to be determined for the designs of infiltration type detention and treatment BMPs. It is best to obtain the infiltration rates and groundwater surface elevations prior to the RFP. For infiltration facilities, long lead times are required to define groundwater levels (at least one complete winter season). Document in the Conceptual Hydraulic Report any infiltration BMP design and assumptions made for the infiltration rates and groundwater surface elevations.

## Runoff Treatment and Flow Control

Follow the minimum requirements determination in Chapter 3 in the WSDOT [Highway Runoff Manual](#) to determine if runoff treatment and/or flow control is required. Also determine if any retrofit requirements, especially if the Project is within the Puget Sound Basin, apply to the project. If required, document how runoff treatment, flow control, and stormwater retrofit will be provided in the Conceptual Hydraulic Report.

The fill-in is for any project-specific construction activities based on the type of stormwater BMPs that were called out in the Conceptual Hydraulic Report.

- \*\*\*\$\$<Number>\$\$\*\*\* Note user to provide “fill-in” construction activities for stormwater BMP construction specific to the Project

## Abandonment and Removal of Existing Drainage Structures

For the fill-in, provide stations and offsets, or Mileposts for the existing drainage structures called out for removal or to be abandoned. If an existing drainage structure is abandoned, it needs to follow the requirements in the WSDOT [Hydraulics Manual](#) and WSDOT [Standard Specifications](#) M 41-10.

- \*\*\*\$\$<Number>\$\$\*\*\* Note user to provide “fill-in” drainage structures specific to the Project.

## Hydraulic Reports

There are six fill-ins within this section. The first, second, fourth, and fifth fill-ins are used to lengthen or shorten the review time of each submittal based on the complexity of the project and of the submittal. Please keep in mind Section 2.28, *Quality Management Plan* generally says the Design-Builder shall provide a 14 Calendar Day review period for all submittals.

The third fill-in is used to make sure Final Hydraulic Report is submitted to WSDOT within a specified length of time after the last drainage intermediate drainage design package has been submitted.

The sixth fill-in is used to make sure As Built Hydraulic Report is submitted to WSDOT within a specified length of time after the project achieves Substantial Completion.

- \*\*\*\$\$<Number>\$\$\*\*\* Note user to provide “fill-in” Calendar Days for the WSDOT Engineer’s Review and Comment period of each submittal.

## List of Submittals

The fill-in is for any submittal that has been added to the contract that was not previously called out in the Section 2.14, *Stormwater*.

- \*\*\*\$\$<Number>\$\$\*\*\* Note user to provide “fill-in” submittals specific to the Project.

## Section 2.15: Roadside Restoration

### Introduction

Section 2.15, Roadside Restoration, covers all work necessary to provide aesthetic guidance for structures and for the restoration of the roadsides. Environmental mitigation may also be included.

Roadside work in design-build is an important part of any project and should comply with WSDOT policy as well as environmental requirements for Sensitive Areas. The Design-Build process allows the Design-Builder latitude in developing a design that varies from the Conceptual Plans or guidance included in Appendix L, providing the Design-Builder the opportunity to develop the most efficient or innovative design. However, these variations require review and concurrence by the WSDOT Landscape Architect or as delegated to the region Landscape Architect (LA), which could affect the project schedule.

As a result, early and continued involvement from LA staff is necessary to identify how the design can be flexible and innovative while ensuring the project scope and RFP are consistent with the regulatory requirements for the project and the statewide Roadside Policy.

The RFP Coordinator/Procurement Manager should contact the Bridge & Structures Architecture Services for support with architectural aspects of roadside structures such as retaining walls, noise walls, bridges, barriers, sign structures, and fencing. If Chapter 2.15 is written by a consultant, Bridge & Structures Architecture Services should be provided opportunity for review of the RFP text and of the Bridge and Landscape Architectural Standards appendix document.

The requirements included in Section 2.15 must clearly identify aesthetic requirements, roadside restoration requirements, and mitigation responsibilities to be managed by the Design-Builder. This section (as do all the DB template documents) includes fill-in locations that allow the project team to incorporate project-specific information. Please note that some entire sections may need modification to accurately describe project requirements. Furthermore, a project team may need to add a subsection(s) to address unique project requirements (e.g., the LA and the Bridge Architect work together to define structure aesthetics, Environmental staff work with LA staff on Sensitive Area restoration, hydraulics engineers work with LA staff on stream restoration, etc.)

A critical step in the development of Section 2.15 is the determination of the structural needs, environmental mitigation needs, the potential impacts of the project, and Right of Way expected to be available for restoration. This list identifies all of the commitments that the Design-Builder is responsible for implementing during design and construction of the project. These project requirements are conceptually defined and become contract documents in the RFP and in Appendix L. Additional guidance for policy requirements can be found in the WSDOT [Roadside Policy Manual](#) M 31-10.

Appendix L contains all the restoration and aesthetics guidance related to the project. Examples include the Project Aesthetic Guidelines document, a Roadside Restoration Conceptual Plan, Conceptual Mitigation Plans, or other guidance documents to aid in preparation of the contract plans. In addition, other studies that support environmental requirements may be found in Appendix E, Environmental Documents. These documents should provide clear enough guidance to help the Proposers prepare an accurate Proposal.

Section 2.15 should also make the Proposer aware of the expectation for community involvement in developing plans to meet their expectations. While adhering to the standards in the guidance in Appendix L is mandatory, the public expectations must also be met, so engaging the public early on is a necessary component in eliminating surprises to the community.

The RFP Coordinator/Procurement Manager should contact the Bridge & Structures Architecture Services for support with architectural aspects of roadside structures such as retaining walls, noise walls, bridges, barriers, sign structures, and fencing. If Chapter 2.15 is written by a consultant, Bridge & Structures Architecture Services should be provided opportunity for review of the RFP text and of the Bridge and Landscape Architectural Standards appendix document.

## Usage

Application of template: This template is to be used as a starting place. Each project has its own particular needs and constraints, which require careful consideration when reviewing the section for retention, deletion, or addition. This template applies

to most roadway projects, but does not include complete guidance for environmental mitigation or fish passage projects. Those sections must be developed to represent the unique needs and requirements. For further fish passage project guidance, please refer to in the Design-Build Resources folder in SharePoint.

It is critical to review several other sections when preparing the requirements for Section 2.15. Check sections on geotechnical, erosion control, environmental, and structures to be certain that aesthetic, environmental, roadside, and mitigation requirements are consistent from section to section. This consistency may require meeting with other groups to develop consensus for approach and adaptation of the various sections to be consistent. Examples where consistency may be an issue:

- Aesthetic guidance for roadside restoration does not allow quarry spalls as final ground treatment but Erosion Control or Geotechnical section allows it.

- Aesthetic guidance allows limited wall types while structure or geotechnical sections allow more types than desirable from an aesthetic standpoint.
- WSDOT [Roadside Policy Manual](#) M 31-10 stresses retention of existing vegetation while staging areas are being offered to the contractor, which may be detrimental to the existing vegetation and require tree mitigation depending on impact type.
- Erosion control materials or maximum slopes allowed by geotechnical section can be inconsistent with the ability to replace trees on the roadsides as required in Section 2.15.
- Soil depth requirements for growing trees on lids require structural ability of the bridge to withstand the weight, while structural engineers or project engineering may not want to make specific requirements of the contractor. This collaboration needs to be worked out very early on.

### RFP Fill-In Guidance

Section fill-in suggestions are listed below:

#### Mandatory Standards

- Fill-in **\*\*\*\$1\$\*** - Enter the name of the design criteria document.
- Fill-in **\*\*\*\$2\$\*** - Enter the name of the Bridge and Landscape Architectural Standards.
- Fill-in **\*\*\*\$3\$\*** - Enter any additional mandatory standards.

#### Design Criteria, General

Fill-in **\*\*\*\$1\$\*** - Enter the name of the aesthetics guidance document from Appendix L.

#### Retaining Walls

Fill-in **\*\*\*\$1 & 2\$\*** (two locations) - Enter the name of the aesthetics guidance document from Appendix L.

#### ***Retaining Walls Facing Away from the Roadway***

Review this section for applicability - may need to delete it. Fill-in **\*\*\*\$1\$\*** - Enter pigmented sealer color for the community side of the walls. Generally, this will be a selection from the WSDOT [Standard Specifications](#) M 41-10, Section 9-08.3 and will be specified in Appendix L guidance document.

### **Retaining Walls Visible from the Roadway**

Review this section for applicability – may need to delete it.

Fill-in \*\*\*\$1\$\*\*\* - Enter in either WSDOT [Standard Concrete Finishes for Bridge & Structure Construction in Highway Projects](#) or the name of the aesthetics guidance document from Appendix L.

Fill- in \*\*\*\$2\$\*\*\* with color of pigmented sealer color.

Review this section for applicability – may need to delete it.

Fill-in \*\*\*\$2\$\*\*\* (two locations) – Enter the name of the aesthetics guidance document from Appendix L.

Fill-in \*\*\*\$3\$\*\*\* - Enter the concrete color of pigmented sealer color.

### **Bridge Aesthetics**

Review this section for applicability – may need to delete it. Fill-in \*\*\*\$1\$\*\*\* -name of design criteria specific for the Project.

### **Abutment Wall Aesthetics**

Review this section for applicability – may need to delete it. Fill-in \*\*\*\$1\$\*\*\* - Fill in the name of design criteria specific for the Project.

### **Barrier Aesthetics**

Review this section for applicability – may need to delete it. Fill-in \*\*\*\$1\$\*\*\* - Enter the name of the aesthetics guidance document from Appendix L.

### **Sign Structures and Toll Gantries Aesthetics**

Review this section for applicability – may need to delete it. Fill-in \*\*\*\$1\$\*\*\* - Enter the name of the aesthetics guidance document from Appendix L.

### **Right of Way and Fall Protection Fencing Aesthetics**

Review this section for applicability – may need to delete it. Review this section for applicability – may need to delete it. Fill-in \*\*\*\$1\$\*\*\* - Enter the name of the aesthetics guidance document from Appendix L.

### **Lighting**

Fill-in \*\*\*\$1&2\$\*\*\* (two locations) – Enter the name of the aesthetics guidance document from Appendix L.

### **Planting Design Requirements**

Fill-in \*\*\*\$1\$\*\*\* - Enter the name of the aesthetics guidance document from Appendix L.

Fill-in \*\*\*\$2\$\*\*\* - Enter the on center spacing of vines expected to be planted on noise and retaining walls.

Fill-in \*\*\*\$3\$\*\*\* - Enter roadside restoration plans and design criteria document.

Fill-in \*\*\*\$4\$\*\*\* - Enter the name of the aesthetics guidance document from Appendix L.

Fill-in \*\*\*\$5\$\*\*\* - Enter the name of the aesthetics guidance document from

Fill-in \*\*\*\$6\$\*\*\* Enter the vine center spacing requirements.

Fill-in \*\*\*\$7\$\*\*\* - Enter the center spacing requirements for shrubs and trees, respectively.

### **Mitigation**

Fill-in \*\*\*\$8\$\*\*\* - Enter additional species of weeds expected to be controlled.

### **Grading**

Review grading section to include or delete as appropriate to the project work. Fill-in \*\*\*\$1\$\*\*\* -Enter name of the aesthetics guidance document from Appendix L.

### **Planting and Seeding Preparation**

Fill-in \*\*\*\$1\$\*\*\* - Enter the minimum depth of topsoil expected where topsoil is used.

### **Gravel, River Rock, and Boulders**

Review this section for applicability – may need to delete it.

### **Plant Establishment**

Fill-in \*\*\*\$1\$\*\*\* - Fill in the number of years of plant establishment period for the project. The years of plant establishment depend upon the number of years required for environmental mitigation work. The roadside tree replacement numbers to mitigate according to the WSDOT [Roadside Policy Manual](#) M 31-10 requirements for trees removed may be reduced by 5 percent for each year over 3 years.

### **Roadside Restoration and Mitigation Standards**

Review and determine if mitigation language is necessary.



## Landscaping Warranty

Review this section for items included in the project and delete unnecessary items such as form liners, MSE panel samples, concrete sealer or other items.

## Project Submittals During Construction

Fill-in \*\*\*\$\$1\$\$\*\*\* - Enter any additional submittals required for the project regarding roadside, mitigation, or aesthetic design. May include samples of streambed gravel, form liner samples or MSE panels for MSE walls, pigmented sealer samples, certified lab analysis for topsoil type A, etc.

## GSP Selection Guidance / Standard Specifications References

### General

General paragraph mentions concrete wall finishes (GSP 6-02.3(14). GR6) and pigmented sealers (GSP 6-02.3(14)C.GR6) for the project. These specifications are applicable to sections

- Retaining Walls
- Retaining Walls Facing Away from the Roadway
- Retaining Walls Visible from the Roadway
- Noise Wall Aesthetics
- Bridge Aesthetics
- Barrier Aesthetics

### Sign Structures and Toll Gantries Aesthetics

Sign Structures and Toll Gantries require paint to be specified from GSP 6-03.3(30). GR6. This section also covers work in:

- Right of Way and Fall Protection Fencing Aesthetics
- Color Aesthetics
- Lighting

### Vegetation Replacement Criteria

Planting Area design requires weed and pest control (Sections 8-02.3). Soil replacement or restoration specifications are required from 8-02.3. Planting Design is covered by Sections 8-02.3. Mulch is required in Section 8-02.3.

### Mitigation

Mitigation usually requires Section 2-01 and 2-03 specifications to cover clearing, disposal of cleared materials, and grading. Habitat structures are also required for some.

## **Planting and Seeding Preparation**

Grading specifications are covered in Section 2-03.

Planting Area Preparation work requires specifications in Section 8-02.3. Seeding Area Preparation requires work in Section 8-01.3. Compost is covered in Section 8-02.2. Include weed control specifications from Sections 8-02.3.

## **Topsoil**

Include topsoil specification in Sections 8-02.2 and 8-02.3.

## **Planting Area Soil Preparation**

Planting area soil preparation materials are covered in Section 8-02.2 and requirements are covered in Sections 8-02.3.

## **Seeded Area Preparation**

Seeded Area Preparation is covered in Section 8-01.3.

## **Bark or Wood Chip Mulch**

Include Bark or Wood Chip Mulch requirements from Section 8-02.2 and installation requirements from Section 8-02.3.

## **Gravel, River Rock, and Boulders**

River rock gravel and boulders are covered in Sections 9-03.11.

## **Plant Establishment**

Include plant establishment requirements from Section 8-02.3.

2.15.6.1: Submittals include Section 8-02.3 work plans and other project specific submittals. Additionally, submittals may be needed for concrete textures and pigmented sealers. See 6-03.13 specifications.

## **Section 2.16: Illumination**

### **Introduction**

Section 2.16, Illumination, applies to work related to modifying existing or installing new Street lighting systems. However, this section also contains directions and requirements for impacts to other more generic electrical equipment such as electrical service cabinets, transformers, conduit, conductors, junction boxes, pull boxes, and cable vaults. Other sections such as Section 2.17, Traffic Signals, and Section 2.18, ITS, will refer to Section 2.16 for directions and requirements concerning these electrical components.

Street light systems may be owned, operated, and maintained by either WSDOT, cities, or counties. When street light systems, owned by either cities or counties, are effected by the project, all subsections of Section 2.16 must be evaluated for modifications to include the requirements of those other agencies.

## Usage

Section 2.16, Illumination, should be included in design-build contracts when new highway or street lighting systems will be installed or existing highway or street light systems will be modified or otherwise impacted or any of the following work items are included in the project:

- Installing new or impacting existing power supply systems including electrical service cabinets, transformer cabinets or the power supply systems between a utility service point and an electrical service cabinet.
- Installing new or impacting any conduit runs, junction boxes, pull boxes, cable vaults, electrical conductors, or communication cable associated Traffic signal or ITS systems.
- Installing and removal of temporary electrical systems such as temporary lighting, or other systems that include, conduit, junction boxes, pull boxes, cable vaults, electrical conductors, or communication cables

When the design-build contract does not include any street light system work but does include impacts to conduits, conductors, junction boxes, pull boxes, cable vaults, electrical service cabinets, or transformer cabinets associated with other systems, Section 2.16 should be included. Modified by deleting, omitting, or otherwise modifying those sections specifically referring to Illumination systems, leaving only those sections applying to electrical equipment impacted by the project.

## 2.16 Illumination

### Mandatory Standards

(DM1040.02)

Modify this list of standards to reflect the work being performed. Add city and county standards references as they would apply to work being performed on their equipment.

Fill-ins **\*\*\*\$1\$\*\*\***, **\*\*\*\$2\$\*\*\***, and **\*\*\*\$3\$\*\*\***, should reflect the WSDOT region where the project is located. For example - **\*\*\*\$1\$\*\*\*** "Northwest Region".

### Software

(DM1040.02)

Update the lighting software, AGI32, requirements to the most current version of the software.

### Traffic Task Force Meetings

(DM1040.02)

\*\*\*\$\$1\$\$\*\*\* Include other agency stakeholders and individuals that would be relevant to the project.

### Permanent Lighting Design Requirements

(DM1040.04)

\*\*\*\$\$1\$\$\*\*\* Provide allowable line loss specific to the project. This requirement may differ between different WSDOT Regional requirements and other agency requirements.

\*\*\*\$\$2\$\$\*\*\* Provide minimum allowable wire size specific to the project. This requirement may differ between different WSDOT Regional requirements and other agency 2.1 requirements.

\*\*\*\$\$3\$\$\*\*\* Provide truck size specific to the project. This requirement may differ between different WSDOT Regional requirements and other agency requirements.

\*\*\*\$\$4\$\$\*\*\* Provide relevant WSDOT Region or Local Agency document identified in Appendix Q.

### Photometric Analysis

(DM1040.07)

\*\*\*\$\$1\$\$\*\*\* Provide applicable depreciation factor for HPS fixture analysis to the project. This requirement may differ between different WSDOT Regional requirements and other agency requirements

\*\*\*\$\$2\$\$\*\*\* Provide applicable depreciation factor for LED fixture analysis. This requirement may differ between different WSDOT Regional requirements and other agency requirements

### Lighting Under and Inside of Structures

(DM1040.050.20 &21)

Add additional verbiage to this section when there are steel or concrete box girders installed or impacted on the project that will require the installation of bridge inspection lighting inside of the girders.

### Specific Requirements

(DM1040.07)

\*\*\*\$\$1\$\$\*\*\* Provide job specific lighting locations and requirements

## Light Standards and Foundations

(DM1040.05)

\*\*\*\$1\$\*\*\* Provide additional requirements unique to the project.

\*\*\*\$2\$\*\*\* Provide location of light standards to would be installed per other agency standards. If all light standards on the project are per WSDOT requirements, delete this bullet item.

\*\*\*\$3\$\*\*\* Provide the Local Agency name for installation standards. Repeat this bullet item for multiple Local Agency light requirement areas. If all light standards on the project are per WSDOT requirements, delete this bullet item.

## Luminaires

(DM1040.05)

\*\*\*\$1\$\*\*\* Provide the type of fixtures, usually either HPS or LED type.

\*\*\*\$2\$\*\*\* Provide the specific manufacturer(s) and fixture specific requirements for LED fixtures. LED specific fixture requirements may vary between WSDOT regions.

Typically provide multiple manufacturers approved for the project.

## Equipment Provided by WSDOT

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.2)

\*\*\*\$1\$\*\*\* Provide a list of equipment supplied by WSDOT. If none, indicate that in this section.

## Electrical Service, Transformers and Cabinets

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3)

\*\*\*\$1\$\*\*\* Indicate the breaker rating for illumination branch breakers. This requirement may vary between WSDOT regions. If no standard breaker rating is required then say that breakers are to be rated to meet NEC requirements.

## Salvage

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3)

\*\*\*\$1\$\*\*\* Indicate the address and location where equipment is to be returned to WSDOT. This will vary depending on WSDOT Region. Identify location of Local Agency where removed Local Agency equipment is to be returned.

\*\*\*\$2\$\*\*\* List the specific pieces of equipment including quantities to be returned to either WSDOT or the Local Agency. Specify which pieces of equipment go to each location.

## Conduit System

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3)

Modify this section per WSDOT Regional requirements. Add or modify this section to reflect the requirements of Local Agencies. Sections 2.17 (Traffic Signals) and 2.18 (ITS) will reference this section. Coordinate with those sections to modify to reflect the job specific requirements for Traffic Signal and ITS work.

## Junction Boxes, Pull Boxes, and Cable Vaults

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3)

Modify this section per WSDOT Regional requirements. Add or modify this section to reflect the requirements of Local Agencies. Sections 2.17 (Traffic Signals) and 2.18 (ITS) will reference this section. Coordinate with those sections to modify to reflect the job specific requirements for Traffic Signal and ITS work.

## Junction Boxes

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3)

Modify this section per WSDOT Regional requirements. Add or modify this section to reflect the requirements of Local Agencies. Sections 2.17 (Traffic Signals) and 2.18 (ITS) will reference this section. Coordinate with those sections to modify to reflect the job specific requirements for Traffic Signal and ITS work.

## Pull Boxes

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3)

Modify this section per WSDOT Regional requirements. Add or modify this section to reflect the requirements of Local Agencies. Sections 2.17 (Traffic Signals) and 2.18 (ITS) will reference this section. Coordinate with those sections to modify to reflect the job specific requirements for Traffic Signal and ITS work.

## Cable Vaults

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3)

Modify this section per WSDOT Regional requirements. Add or modify this section to reflect the requirements of Local Agencies. Sections 2.17 (Traffic Signals) and 2.18 (ITS) will reference this section. Coordinate with those sections to modify to reflect the job specific requirements for Traffic Signal and ITS work.

## Section 2.17: Traffic Signals

### Introduction

Section 2.17, Traffic Signals, applies to work related to modifying existing or installing new Traffic Signal systems. In addition to vehicle traffic signal systems, this section would also include work involving pedestrian traffic signal systems, bicycle signal systems, ramp meter traffic signals (although ramp meters are typically included in Section 2.18, ITS), flashing beacons used to control vehicle traffic, warning signals (usually flashing beacons with signs) and emergency vehicle traffic signals. All are considered different types of Traffic Signal Systems.

Traffic Signals, as a system, may include, but are not limited to the following items:

- Traffic signal standards and mast arms
- Strain poles
- Span wire
- Vehicle and ADA-compliant pedestrian signal heads
- Vehicle detection (typically either induction loops or video cameras)
- Pedestrian detection
- Emergency vehicle detection
- Traffic signal controllers and cabinets
- Traffic signal interconnects

Additional electrical equipment used to support the traffic signal system are also included as work items with the effected traffic signal systems. These additional electrical equipment items could include conduit, conductors, junction boxes, pull boxes, cable vaults, service cabinets and transformers and uninterrupted power supply (UPS) cabinets. The technical materials and construction requirements for these items are detailed in Section 2.16, *Illumination*. These requirements should not be duplicated in different sections of the RFP. Information regarding these items should be referenced back to Section 2.16. Coordination in developing Sections 2.16, *Illumination*, and Section 2.17, Traffic Signals, in regards to these requirements is essential.

Traffic Signal systems may be owned, operated, and maintained by either WSDOT, cities, or counties. When Traffic Signal systems owned by either cities or counties are effected by the project, all subsections of Section 2.17 must be evaluated for modifications to include the requirements of those other agencies.

## Usage

Section 2.17 Traffic Signals should be included in design-build contracts when new Traffic Signal systems will be installed or existing Traffic Signal systems will be modified or otherwise impacted or when any of the following work items are included in the project:

- Installing new or impacting existing conduit runs, junction boxes, pull boxes, cable vaults, electrical conductors or communication cable associated with Traffic signal systems
- Installing and removal of temporary Traffic Signal systems including temporary vehicle detection systems and the associated electrical equipment
- Installing or modifying a traffic signal interconnect system

## General

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20)

Modify this section to include other types of traffic signal systems as they apply to the project. This may include flashing beacon signals, warning signs with flashing beacons or emergency vehicle signal systems

## Forward Compatibility

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.1)

\*\*\*\$\$1\$\$\*\*\* Add requirements to this section that would make the traffic signal system compatible with future projects or requirements. If a future project is planned to modify the channelization at the traffic signal location then the current design would want to build the traffic signal to accommodate that future expansion. For example if a future project would add lanes and widen the roadway then the current project RFP may want to ensure that the Traffic signal poles and controller cabinets were located far enough away from the roadway to accommodate that future expansion without moving the signal poles or cabinets.

## Mandatory Standards

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.1)

Modify this list of standards to reflect the work being performed. Add city and county standards references as they would apply to work being performed on their equipment.

Fill-ins \*\*\*\$\$<Number>\$\$\*\*\* should reflect the WSDOT region where the project is located. For example: \*\*\*\$\$1\$\$\*\*\* “Northwest Region”.



## Design Requirements

(DM1330.06)

\*\*\*\$1\$ Describe the locations and level of work at each location

\*\*\*\$2\$ Describe locations and work involving other aspects of Traffic signal revisions or modifications.

## Operational Analysis Software

(DM1330.06)

\*\*\*\$1\$ Add software requirements to design or modify traffic signal systems or to provide traffic analysis information such as modeling traffic flow to determine turning movement volumes of delay times at intersections.

## Foundations

(DM1330.06)

\*\*\*\$1\$ Provide additional requirements for soil conditions such as lateral bearing pressure requirements or other job specific requirements

## Junction Boxes, Pull Boxes and Cable Vaults

(DM1330.06)

Refer back to Section 2.16.3.4.5 for all requirements. Coordinate with that section to add job specific requirements for Traffic signal Design.

## Wiring

(DM1330.06)

\*\*\*\$1\$ Add WSDOT Regional specific requirements for signal wiring

## Signal Heads

(DM1330.06)

Modify requirements to meet WSDOT Region requirements.

## Induction Loop and Video Camera Vehicle Detectors

(DM1330.06)

\*\*\*\$1\$ Provide requirements specific to the WSDOT Region

## Traffic Signal Controller and Controller Cabinet Equipment

(DM1330.06)

\*\*\*\$1\$ Provide requirements specific to the WSDOT Region

### General

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3)

\*\*\*\$\$1\$\$\*\*\* Provide requirements specific to the WSDOT Region

### Emergency Maintenance

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3) No additional instructions

### Signal System

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.3)

\*\*\*\$\$1\$\$\*\*\* Provide requirements specific to the WSDOT Region and the project

### Material Requirements

(WSDOT [Standard Specifications](#) M 41-10, Section 9-29)

Modify this section per WSDOT Regional requirements. Add or modify this section to reflect the requirements of Local Agencies. Sections 2.17(Traffic Signals) and 2.18(ITS) will reference this section. Coordinate with those sections to modify to reflect the job specific requirements for Traffic Signal and ITS work.

### Submittals

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.2)

\*\*\*\$\$1\$\$\*\*\* Provide requirements specific to the WSDOT Region and the project

### Final Signal Plan

(WSDOT [Standard Specifications](#) M 41-10, Section 8-20.2)

\*\*\*\$\$1\$\$\*\*\* Provide requirements specific to the WSDOT Region and the project.

## Section 2.18: Intelligent Transportation Systems

### Introduction

The primary document driving the design of the Intelligent Transportation Systems (ITS) component of the Design-Build project is the ITS Design Requirement document. This document provides background on how and why certain ITS components are designed as well as specific requirements associated with many ITS components. Section 2.18 of the RFP is more of an overlay to the ITS Design Requirements document, adding project specific requirements as well as site-specific requirements. While a Conceptual Plan may be developed for the project, the requirements of the RFP and ITS Design Requirements document are the primary tools that guide the overall ITS design.

When developing Section 2.18 of the RFP, early and continued involvement with the regional ITS Implementation and Operations staff is required to identify specific ITS needs from the project.

The ITS requirements included in Section 2.18 of the RFP need to clearly identify specific ITS features to be included by the Design-Builder. This section includes a number of fill-in locations that allow the project team to incorporate project-specific information (such as the number of metered lanes on an on-ramp, or the approximate location where a weather station is needed). Some entire sections may need modification or deletion to accurately describe project requirements. In special situations, a subsection (or sections) may need to be added to address unique project requirements (e.g., Active Traffic Management (ATM), Part-time Use Shoulder Lane (PUSL), tolling, etc.)

Appendix T contains the ITS Design Requirements document, Appendix B contains the ITS Special Provisions and Appendix T contains the ITS Standard Details. It is imperative that the latest versions of these items are obtained for inclusion in the project. All of these items are living documents that are frequently being updated by the ITS Design and ITS Implementation groups.

## Usage

This section explains how to use the template and provides guidance for certain subsections of Section 2.18, *Intelligent Transportation Systems*. This includes guidance for fill-ins, GSP selection, and references to helpful examples or resources for the author.

### General

This section contains a brief summary of the ITS elements expected to be included in the project. It should be modified for each project to only include those items that are applicable. It also contains two fill-in sections. Both fill-in items are for non-typical ITS devices as well as tolling devices. If not applicable, these fill-ins should be left blank and the sentence syntax modified accordingly.

### Mandatory Standards

There are four fill-in locations in this section. The first fill-in is for the WSDOT Regional ITS Special Provisions; the second fill-in is for the WSDOT Intelligent Transportation System Design Requirements document if your region has adopted it; the third fill-in is for the WSDOT Regional ITS Details; and the fourth fill-in is for the WSDOT Signal, Illumination, and ITS Details. These fill-ins are required for all projects that contain ITS elements. The documents for first three fill-ins are to be provided by the Regional ITS Design team.

## General Requirements

This section contains four fill-ins. The first fill-in is for the ITS expandability requirements specific to the project. The second fill-in is for the Region-specific documents that dictate cabinet layouts (typically the ITS Design Requirements and ITS Details). The third fill-in is for the Region-specific document that describes cabinet labelling (typically the Regional ITS Special Provisions). The fourth fill-in is for the Region-specific document which directs the replacement of existing ITS cabinets (typically the ITS Design Requirements).

## Vehicle Detection

This section contains two fill-ins for the Region-specific document that describes vehicle detection (typically the Regional ITS Special Provisions).

## Temporary Vehicle Detection

This section contains a fill-in for the Region-specific document that describes temporary vehicle detection.

## Loop Detectors

This subsection contains a single fill-in for the Region-specific details for loops not covered by the [Standard Plans](#) (typically the Regional ITS Details). The template refers to loop names common to the Northwest Region; these names may need to be changed when used in other regions.

## Ramp Metering/Data Stations

This section contains more detailed information on where ramp meters are to be constructed or modified by the project. The first and third fill-ins reference Regional ITS Details. The second fill-in is a list of all of ramp locations where ramp meters are to be constructed on, as well as the number of metered lanes they should have and if any HOV bypasses are required. The fourth fill-in contains the same information for any existing ramp meters that are being modified or reconstructed by the project.

## Ramp Meter Advance Warning Sign

This subsection contains a single fill-in for the Region-specific details for ramp meter advance warning signs not covered by the [Standard Plans](#) (typically the Regional ITS Details).

## Grounding

This subsection contains a single fill-in for the Region-specific document that describes loop testing procedures (typically the Regional ITS Special Provisions).

## Ramp Meter Pole

This section contains a fill-in for the Region-specific document that describes Ramp Meter Poles (typically the ITS Design Requirements).

### **Closed Circuit Television System**

This section contains more detailed information on where traffic surveillance cameras are to be constructed or modified by the project. This section does not contain any fill-ins, but the author may wish to modify the section requiring the Design-Builder to show that the views from the proposed camera locations will meet the listed requirements. Typical ways of doing this are to require video from a bucket truck or aerial drone, or in the case of new roadways, a 3-dimensional model showing the future camera views. This is especially important when considering the impact of future signs and sign bridges as well as large structures and can help identify view occlusions from vegetation.

### **Closed-Circuit Television Camera Pole Site**

This subsection contains a fill-in for the region-specific details for camera poles not covered by the Standard Plans (typically the Regional ITS Details).

### **Variable Message Signs**

This section contains more detailed information on where Variable Message Signs (VMS) are to be constructed by the project. The first fill-in is a list of all of the locations that VMS are to be constructed (usually by station, as well as direction).

### **Access to Variable Message Signs**

This subsection contains a fill-in for the Region-specific details for Access to Variable Message Signs (typically the ITS Design Requirements).

### **Highway Advisory Radio Sign**

This subsection contains more detailed information on where Highway Advisory Radio Signs (HARS) are to be constructed by the project. The first fill-in is a list of all of the locations that HARS are to be constructed (usually by station, as well as direction). The second and third fill-ins are for the documents guiding the HARS design (typically the Regional ITS Special Provisions and ITS Details).

### **Highway Advisory Radio Transmitter**

This subsection contains more detailed information on where one or more Highway Advisory Radio Transmitters (HART) are to be constructed by the project. The first fill-in is a list of all of the locations that HART are to be constructed (usually by highway and cross street, or by Station). The second and third fill-ins are for the documents guiding the HART design (typically the Regional ITS Special Provisions and ITS Details).

### **Environmental Sensor Station**

This section contains more detailed information on where one or more Environmental Sensor Stations (weather stations) are to be constructed by the project. The first fill-in is a list of all of the locations that weather stations are to be constructed (usually by highway and cross street, or by Station). The second and third fill-ins are for the documents guiding the weather station design (typically the Regional ITS Special Provisions and ITS Details).

### **Communication Conduit System**

This section contains more detailed information on where the communication conduit system is to be constructed by the project. The first fill-in is the Regional document that contains details about conduit placement and vaults, typically the ITS Details. The second fill-in is a list of all of the locations where a mainline conduit system is to be constructed (usually by roadway with begin and end stations). The third fill-in is for the document guiding the warning tape and locate wire design (typically the Regional ITS Special Provisions).

### **Existing Conduit Systems**

This subsection describes whether the Design-Builder may reuse the existing communication conduit system within the limits of the project. The fill-in is simply “not” if the existing conduit system needs to be replaced. However, if the existing conduit system only needs to be replaced where impacted then the first paragraph should be modified accordingly.

### **Junction Boxes, Pull Boxes and Cable Vaults**

This subsection contains two fill-ins for the Region-specific details for junction boxes, pull boxes and cable vaults not covered by the Standard Plans (typically the Regional ITS Details).

### **Communication Cables and Interfaces**

This section contains more detailed information on where the communication cable and interface system is to be constructed by the project. The first fill-in is for the highways that the system should be installed along. The second fill-in is a list describing the existing communication system within the project limits. An example of this fill-in is:

- Mainline SMFO cable
- Distribution SMFO cable
- Distribution copper twisted pair cable
- Communication end equipment
- Splice vaults, splice closures, fiber optic connection components, and copper terminations

The third fill-in is a list of the types of cabinets that communication equipment needs to be installed in on the project; typical choices are: ITS, TRS, Permanent Traffic Recorder (PTR), weather station, and roadside toll cabinets. The fourth fill-in lists the Region- specific details for Communication Cables and Interfaces not covered by the Standard Plans (typically the Regional ITS Details).

### **Fiber Optic Cable**

This subsection contains more detailed information on where the communication cable to be constructed by the project. The first fill-in is a list of each type of cable (mainline or distribution), the strand count of the cable, and the cable end points. A few examples of this fill-in are:

- A new continuous 96-strand mainline cable between the Stevenson Hub (SR 514, MP 12.34) and the Riverside Hub (SR 514, MP 28.70), with additional full terminations at the Skyway Fiber Terminal Cabinet (SR 514, MP 18.40) and the Kingsgate Hub (SR 514, MP 23.10)
- A new 48-strand distribution cable between the Stevenson Hub (SR 514, MP 12.34) and the Skyway Fiber Terminal Cabinet (SR 514, MP 18.40), connecting all devices in between
- Strands 43-48 (Six strands) of the 48 SMFO distribution cable shall be terminated in each roadside toll cabinet in the 12-port preterminated patch panel

The second fill-in is the strand count of the distribution SMFO cable. The third fill-in is a list of the types of cabinets that need to be connected to the distribution cable on the project; typical choices are: ITS, TRS, Permanent Traffic Recorder (PTR), and weather station cabinets. The fourth fill-in is typically for identifying the Regional ITS Special Provisions. The fifth fill-in is for the document that contains cable pulling lubricant requirements (typically the Regional ITS Special Provisions).

### **Fiber Optic Cable Installation**

This subsection contains a single fill-in for the document containing fiber optic cable installation requirements (typically the Regional ITS Special Provisions).

### **Fiber Optic Cable Identification Requirements**

This subsection contains a single fill-in for the document containing fiber optic cable identification requirements (typically the Regional ITS Special Provisions).

### **Fiber Optic Connection Components**

This subsection contains a single fill-in for the document containing requirements for fiber optic connection components (typically the Regional ITS Special Provisions).

### **Lucent Connector-Ultra-Physical Contact Fiber Connectors**

This subsection requires that all fiber optic connectors be type LC-UPC, the standard in the Northwest Region. Modify this section as needed to meet the requirements of the Region where the project is located.

### **Patch Panel Components**

This subsection contains more detailed information on the locations where existing fiber distribution panels need to be replaced with new preterminated patch panels. The first fill-in is a list of the types of cabinets that panels needing replacement; typical choices are: ITS, TRS, Permanent Traffic Recorder (PTR), roadside toll, and weather station cabinets.

The second fill-in for any specific locations not included in the first list. The third fill-in is for the document that contains patch panel requirements (typically the Regional ITS Special Provisions).

### **Wireless Communications**

This subsection prohibits the use of wireless communication for ITS within the project to prevent the Design-Builder from replacing fiber optic-based communication with wireless communication. This section will need to be changed if the project has a need for wireless communication.

### **Twisted Pair Media**

This subsection is used for projects that contain existing twisted pair (TWP) cable plant that needs to be maintained throughout the life of the project. If the ITS devices connected to the existing TWP system are to be moved to a new fiber optic based system and the existing TWP system is to be removed once the project is complete, the first paragraph should be modified accordingly. The first fill-in is the roadway (or roadways) within the project that contain existing TWP systems. The second fill-in represents a termination point that is outside of the project limits. If a cable is damaged that extends outside of the project, it needs to be replaced to its termination point. Also needed in this section is a description of the TWP system that the Design-Builder is required to provide when the project is complete.

### **Electric, Electronic, Video and Telephone Cables**

This section contains a single fill-in for the document containing cable requirements (typically the Regional ITS Special Provisions).

### **Video, Voice, and Data Distribution and Transmission System**

This section contains five fill-ins describing the networking needs for the ITS. The first fill-in is the quantity of separate and distinct Ethernet communication networks to be constructed using the distribution fiber. Often this is two, but it will be more if tolling is part of the project. The second fill-in describes each of the required networks. In the case of the typical two networks, this would be stated as: "one for ITS (ES, VMS,



HAR, signals, etc.), and one for CCTV.” In the case of tolling, it might be added to with: “one for TRS, and one for tolling.” Other networks should be identified here, as needed. The third fill-in is the location of the TMC that the field information is sent to. As an example, for the Seattle area this fill-in would be “TMC in Shoreline, WA.” The fourth fill-in is for any specific equipment (and its location) needed for the project that is otherwise not covered in the ITS Design Requirements or elsewhere in the RFP. The fifth fill-in is for listing any additional items that are to be furnished and installed in the hub.

### **Intelligent Transportation Systems Hubs**

This section is a single fill-in that should contain the project requirements for communication hubs, both new installations as well as hub replacements or modifications to existing hubs. This is also where the requirement for a hub generator should be located. A reference to the current specification (normally contained in the Regional ITS Special Provisions) should be included in this section.

### **Allowable Working Hours on the Intelligent Transportation Systems**

This subsection contains a single fill-in that provides the daily time window that the Design-Builder is allowed to take existing ITS devices and systems offline. This entry can be as simple or as complicated as is needed. However, simpler often creates better results. As an example, in the Seattle area the allowable window is typically 9:00 p.m. to 4:00 a.m.

### **Maintaining Ramp Metering During Construction**

This subsection contains a single fill-in for the document containing ramp metering maintenance requirements during construction (typically the ITS Design Requirements).

### **Intelligent Transportation Systems Testing**

This section contains a single fill-in for the document containing specific ITS testing requirements (typically the Regional ITS Special Provisions).

### **Fiber Optic Cable Test Documentation**

This subsection contains three fill-ins for the documents that contain specific fiber optic cable testing requirements (typically the Regional ITS Special Provisions).

### **Maintenance Access Requirements**

This section contains two fill-ins for the document that contains the Regional ITS Details.

## Intelligent Transportation Systems Final Design Submittal

This section contains a single fill-in for the document that contains the Regional ITS Details. In addition, the bulleted list could be shortened for projects that do not contain all of the ITS items listed.

### Other Submittals

This section contains a bulleted list that could be shortened for projects that do not contain all of the ITS items listed.

## Section 2.19: Signing

### Introduction

The Washington State Department of Transportation (WSDOT) uses traffic control signs as the primary mechanism for regulating, warning, and guiding traffic. The proper traffic control signs must be in place when any section of highway is open to the motoring public. Each Design-Build project has unique and specific signing requirements. For statewide signing uniformity and continuity, it is sometimes necessary to provide signing beyond the project limits. Design characteristics of the facility determine the size and legend for a sign. As the design speed increases, larger sign sizes are necessary to provide adequate message comprehension time. The [Manual on Uniform Traffic Control Devices](#) (MUTCD), the WSDOT [Traffic Manual M 51-02](#) and the WSDOT [Sign Fabrication Manual M 55-05](#) contain standard sign dimensions, specific legends, and reflective sheeting types for all new signs.

### Usage

A note to the user: If a section is not used, leave the section number and title, delete the unused section, and replace with “This section is intentionally omitted.”

#### General

\*\*\*\$\$1\$\$\*\*\* Identify the State Route(s) and Milepost Limits.

\*\*\*\$\$2\$\$\*\*\* Identify the State Route(s) and Milepost Limits.

\*\*\*\$\$3\$\$\*\*\* Identify the State Route(s) and Milepost Limits.

#### Sign Spacing

\*\*\*\$\$1\$\$\*\*\* Identify Specific Service Signs – i.e. Motorist Information Signs.

\*\*\*\$\$2\$\$\*\*\* Identify Local Agency.

### Sign Posts

\*\*\*\$1\$\*\*\* Identify the State Route(s) and Milepost Limits.

For Construction Specifications, include the following General Special Provisions (GSP) in Appendix B:

- GSP 8-21.GR8
- GSP 8-21.2.GR8
- GSP 8-21.2(9-06.16).GR8
- GSP 8-21.2(9-06.16).OPT1.GR8
- GSP 8-21.2(9-28.11).GR8
- GSP 8-21.2(9-28.14).GR8
- GSP 8-21.2(9-28.14).OPT6.GR8
- GSP 8-21.2(9-28.14(2)).GR8

### Overhead Signs on Structures

\*\*\*\$1\$\*\*\* Identify State Route(s) and Milepost Limits.

\*\*\*\$2\$\*\*\* Identify the Specific Bridge(s) – i.e. 005/312 – I-5 Under Israel Rd.; 005/337E – I-5 Over Martin Way.

\*\*\*\$3\$\*\*\* Identify the Specific Bridge(s) – i.e. 405/21 – I-405 Over NE 3rd Street.

### Signs on Signal Poles and Mast Arms

\*\*\*\$1\$\*\*\* “Signal Standard Detail Plan Sheet, IS-13. See: [www.wsdot.wa.gov/publications/fulltext/Standards/PSL/is-13/IS-13.pdf](http://www.wsdot.wa.gov/publications/fulltext/Standards/PSL/is-13/IS-13.pdf).”

### Ramp Meter Signing

\*\*\*\$1\$\*\*\* “Ramp Meter Signal Standard Plan Sheet IS-13A. See: [www.wsdot.wa.gov/publications/fulltext/Standards/PSL/is-13/IS-13A.pdf](http://www.wsdot.wa.gov/publications/fulltext/Standards/PSL/is-13/IS-13A.pdf).”

### Speed Limit and Speed Reduction Signs

\*\*\*\$1\$\*\*\* Identify the State Route(s) and Milepost Locations.

### Toll Rate Signs

\*\*\*\$1\$\*\*\* Identify State Route(s) and Milepost Limits.

### Left Lane Restriction Signs

\*\*\*\$1\$\*\*\* Identify State Route(s) and Milepost Limits.

### Left Lane Restriction Ends Signs

\*\*\*\$1\$\*\*\* Identify State Route(s) and Milepost Locations.

### Conceptual Guide Sign Plan

\*\*\*§§1§§\*\*\* “, when applicable, Motorist Information Signs; Overhead Active Traffic Management Signs; Overhead HOV Signs; Overhead Toll Signs; and Overhead HOT Lane Signs.”

### Bicycle Restriction Signs

\*\*\*§§1§§\*\*\* Identify State Route(s) and Milepost Limits.

### Plan Requirements

\*\*\*§§1§§\*\*\* “when applicable, Variable Message Signs”

\*\*\*§§2§§\*\*\* “WSDOT [Plans Preparation Manual](#) M 22-31, pages 4-42 to 4-44”

### Future Active Traffic Management Signs

\*\*\*§§1§§\*\*\* Identify State Route(s) and Milepost Limits.

## Section 2.20: Pavement Marking

Section 2.20, Pavement Marking, contains the requirements for permanent pavement markings for the project.

## Section 2.21: Traffic Operations

Section 2.21, Traffic Operations, contains the requirements for Traffic Operations.

## Section 2.22: Maintenance of Traffic Introduction

Section 2.22, is required in all Design-Build projects that anticipate implementing temporary traffic control. This may range from one-time set-ups to set-ups that may need to be in place for multiple days/months. The traffic control configuration can range from daily/nightly closures of lanes using temporary devices to re-stripping the roadway to create space for construction work activities for a longer period of time.

### Usage

This section explains how to use the template and provides guidance for certain subsections of Section 2.22, *Maintenance of Traffic*. This includes guidance for fill-ins, GSP selection, and references to helpful examples or resources for the author.

Unless noted elsewhere in this document, all sections and subsections of 2.22, Maintenance of Traffic (MOT), are required.

### General

\*\*\*§§1§§\*\*\* List Local Agencies that are anticipated to approve or provide comment on TTC Plans.

### **Transportation Management Plan**

\*\*\*\$\$1\$\$\*\*\* List region-specific department. An example would be the WSDOT Region's Traffic Management Center.

### **Traffic Incident Management Plan**

WSDOT Regions vary on how they manage incidents and the plan should reflect the Region's specific approach. For example, the Northwest Region has a Traffic Management Center that actively monitors multiple highway/freeway systems via cameras and loop detection. Incidents can be detected via this system, monitored on the WSP Radio, or reported to the Region's Radio Team. They will then activate Variable Messages on the permanent system. Incidents within a project can be reported to the TMC and actions taken accordingly. It is recommended that the designer be familiar with their Region's methods of response to incidents.

### **General**

\*\*\*\$\$1\$\$\*\*\* List region-specific department. An example would be the WSDOT Region's Traffic Management Center.

### **Variable Message Signs**

\*\*\*\$\$1\$\$\*\*\* List region-specific department. An example would be the WSDOT Region's Traffic Management Center.

Note that if the Region does not have a permanent Variable Message Sign system within the project limits, that this section may be deleted and replaced with "This section is intentionally omitted."

### **Highway Advisory Radio**

\*\*\*\$\$1\$\$\*\*\* List region-specific department. An example would be the WSDOT Region's Traffic Management Center.

Note that if the Region does not have a permanent Highway Advisory Radio system within the project limits, that this section may be deleted and replaced with "This section is intentionally omitted."

### **Design-Builder Response Time**

\*\*\*\$\$1\$\$\*\*\* Time should be appropriate for project location. An example would be 45 minutes for populated areas such as Seattle, Olympia, and Tacoma.

### **Maintenance of Traffic Task Force Meetings**

\*\*\*\$\$1\$\$\*\*\* Insert cities, counties and known applicable agencies such as local school district, local transit, bike clubs such as Cascade Bicycle club, etc.

## Design Vehicle

\*\*\*\$\$1\$\$\*\*\* Insert design vehicle size. For example, for freeway system a WB-67 would be appropriate.

## Allowable Closures

\*\*\*\$\$1\$\$\*\*\* Design-Builder should coordinate with the WSDOT Engineer on determining events where closures would need to be restricted. The events would be large enough in size where its attendance arriving and leaving have a significant impact to the corridors used for the event. An example would be a Fair, a city event such as a parade, a football game, a local race (example Seafair Rock n' Roll) etc.

\*\*\*\$\$2\$\$\*\*\* Design-Builder should work with the WSDOT Engineer on determining local venues where their arrival and departure could affect the highway system. The Traffic Office can assist in determining the venue capacity that would impact the State highway system. An example would be a local Amphitheatre, racetrack, or stadium whose combined attendance over a set number would impact the roadway. The Region Traffic Office can provide guidance on what this capacity would be based on the maximum capacity or near maximum capacity of a venue based on type of event.

## Lane Closures

\*\*\*\$\$1\$\$\*\*\* This section should be a table listing details of the allowable closure times for each lane to be closed, and days of the week. The designer should contact their Region Traffic Office on determining lane closure hours.

The example table below shows the format that NWR uses to list lane closure hours in the RFP:

A table is prepared for each direction and each section of the project, should the project extend through areas requiring different closure hours.

## Full Freeway, Highway, and Roadway Closures

\*\*\*\$\$1\$\$\*\*\*

This section should be a table listing details of the allowable closure times for each lane to be closed, and days of the week. Designer should contact their Region Traffic Office on determining times for freeway, highway, and roadway closures.

The example tables below show the format that NWR uses to list freeway, highway, and roadway closure hours in the RFP:

A descriptive paragraph is provided for each section to be closed that addresses the limits, any pertinent details, duration, etc.

**\*\*\*\$\$1\$\$\*\*\***

\*\*\*\$\$1\$\$\*\*\* This section would be developed if the designer determined that there were work elements that would be performed best under a full freeway, highway, or roadway closure. The designer should work with the Region Traffic Office on determining the best closure window and verbiage for this section. Typically the verbiage includes the section of roadway that may be closed, list any associated ramps that may be closed, and provide the allowable hours for this closure such as Friday 10:00 p.m. to Monday 5:00 a.m. If a roadway is being allowed to be closed in each direction, the designer will need to work with the Region Traffic Office on determining if both directions can be closed simultaneously or separately and that criteria addressed in this section. Each closure and their times would be listed separately.

**Entrance and Exit Ramp Closures**

\*\*\*\$\$1\$\$\*\*\* This section would be a table listing each ramp and the times they may be closed. The Designer should work with their Region Traffic Office on determining the hours.

**\*\*\*\$\$1\$\$\*\*\***

\*\*\*\$\$2\$\$\*\*\* Additional closures that are not already covered above may be described here.

**Allowable Shoulder Closures**

\*\*\*\$\$1\$\$\*\*\* This section would be a table listing times that shoulders may be closed.

If there are multiple roadways, the closures should be listed by roadway (example, SR routes, interstate routes, local streets). The Designer should work with their Region Traffic Office on determining the hours.

**Traffic Operations During Construction**

\*\*\*\$\$1\$\$\*\*\* List region-specific department and phone number. An example would be the WSDOT Region's Traffic Management Center or Radio center.

**Mainline During Construction**

\*\*\*\$\$1\$\$\*\*\* This fill-in addresses minimum lane and shoulder widths. The Designer should work with the Region Traffic Office on determining what these widths should be. Example language: **\*\*11-foot wide lanes with 4-foot shoulders\*\***. For projects where it is anticipated that re-striping may be occurring over multiple nights the following has been provided on projects: **\*\*11-foot wide lanes, and shall not exceed 14 feet wide unless otherwise specified and 4-foot shoulders\*\***

**Design Criteria**

\*\*\*\$\$1\$\$\*\*\* Taper rate should be based on design speed. Example, if design speed is 70 mph, then minimum taper rate would be 70:1.

### Advance Signing

Designer to work with their Region on determining when these signs are to be provided. Not every project may have space for these signs.

\*\*\*\$\$1\$\$\*\*\* Provide the quantity of signs that are to be installed.

\*\*\*\$\$2\$\$\*\*\* This fill-in provides the location. Example: One in the northbound and one in the southbound direction of I-5. The quantity should add up to the total listed in

\*\*\*\$\$1\$\$.

\*\*\*\$\$3\$\$\*\*\* Provide the contact name and number, and WSDOT office with address (typically a maintenance office) where the signs can be picked up. The Designer will need to verify the office and contact name.

### Design Criteria

The design team will work with their Region Traffic Office to provide these fill-ins.

\*\*\*\$\$1\$\$\*\*\* Provide minimum lane widths on ramps (typically nothing less than 11 feet)

\*\*\*\$\$2\$\$\*\*\* Provide minimum shoulders widths on ramps (typically 2 feet)

\*\*\*\$\$3\$\$\*\*\* Provide design vehicle (typically WB-67)

\*\*\*\$\$4\$\$\*\*\* Provide desirable ramp taper rate (typically 20:1)

\*\*\*\$\$5\$\$\*\*\* Provide minimum ramp taper rate (typically 15:1)

\*\*\*\$\$6\$\$\*\*\* Input the design vehicle

For fill-ins \*\*\*\$\$4\$\$\*\*\* and \*\*\*\$\$5\$\$\*\*\*, when determining these, keep in mind duration that the temporary configuration may be in place. If anticipating several months or years, you may want to consider something more towards a 20:1 taper rate minimum.

### Local Roads During Construction

\*\*\*\$\$1\$\$\*\*\* Insert the local cities and counties that will be reviewing and approving TTC plans.

### Design Criteria

The design team will work with their Region Traffic Office to provide fill-ins for lane widths on local streets.

\*\*\*\$\$1\$\$\*\*\* Provide minimum lane widths on local roads

\*\*\*\$\$2\$\$\*\*\* Provide minimum existing lane widths on local roads



### **Barrier and Glare Screen**

\*\*\*\$\$1\$\$\*\*\* Insert mainline roadway name project is on

### **Pedestrian and Bicycle Access During Construction**

\*\*\*\$\$1\$\$\*\*\* Designer can work with Region Traffic Office and/or their communications office on identifying the local bicycle clubs that utilize the local trails, to provide the fill-in.

### **Traffic Control Supervisor**

\*\*\*\$\$1\$\$\*\*\* Time should be appropriate for project location. An example would be 45 minutes for populated areas such as Seattle, Olympia, and Tacoma.

### **Rolling Slowdowns**

\*\*\*\$\$1\$\$\*\*\* Fill-in to provide roadway that rolling slowdowns will be permitted and include times and days of week. Example: "Rolling slowdowns on southbound I-5 will only be permitted between 12:01am and 4:00am on Monday, Tuesday, Wednesday, Thursday, and Friday.

Designer to work with the Region Traffic Office for times and days of the week.

If it is determined that rolling slowdowns are not suitable for the project, then this section may be deleted and replaced with "This section is intentionally omitted."

### **Traffic Safety Drums**

Designer to work with their Region Traffic Office. If the retroreflective sheeting is not an option that will be permitted, this section will require modification and Section "Wide Angle Prismatic Retroreflective Sheeting" will need deletion. See guidance provided for Section "Wide Angle Prismatic Retroreflective Sheeting"

### **Wide Angle Prismatic Retroreflective Sheeting**

Not all Regions may wish to utilize this type of reflective sheeting on the drums. Designer to work with the Region Traffic Office for concurrence of use. If not permitted, this section may be deleted as well as the subsections and replaced with "This section is intentionally omitted." It will also require modification to "Traffic Safety Drums". The second paragraph would be modified to read: The Design-Builder shall use traffic safety drums with two white and two fluorescent orange bands in accordance with Sections 9-28.12 and 9-35.7 of the WSDOT [Standard Specifications](#) M 41-10. All traffic safety drums shall be the same type.

## Section 2.23: Railroad

### Introduction

Construction and Maintenance Agreements with each Railroad within the project area need to be initiated a minimum of 1 year prior to RFP date. These agreements with Railroads must be executed BEFORE the project is awarded. The HQ Railroad Liaison, or designee, may assist with preparing Special Provisions of the RFP.

### Railroad Right of Entry and Training Requirements

There are many scenarios for working on or near railroad property. The table below is a basic list of type of intrusion and requirements. Please contact Railroad Liaison for specific site or project information.

On railroad property	Not within 25 feet of track (no potential to foul)	Railroad flagging not required	Right of Entry permit or agreement needed	Safety Certification and E-rail Safe requires
On railroad property	Within 25 feet of track	Railroad flagging needed	Right of Entry permit or agreement needed	Safety Certification and E-rail Safe requires
Off railroad property	Within 25 feet of track or potential to foul track	Railroad Flagging needed	Right of Entry not needed	Safety Certification required

### Usage

- Application of template will be determined during the scoping and initial design phase, please consult with the HQ Railroad Liaison (or designee) if there are any potential impacts to Railroad property.
- Fill-in guidance (each fill-in for each section/subsection of template)
  - Railroad Owner/Operator
  - Railroad facilities location
  - Railroad publish standards
  - Protective Services (Flagging)
  - Construction Requirements or minimum clearance standards provided by Railroad
  - Insurance safety and background check requirements required by Railroad (generally described in the Contractors Right of Entry Agreement with the Railroad)
- GSP Selection guidance will be provided by the HQ Railroad Liaison for each project

## Contractor's Right of Entry Agreement

Use this fill-in to provide contact information for obtaining the Contractor's Right of Entry Agreement.

### Section 2.24: Right of Way

#### Introduction

WSDOT must delineate existing Right of Way (ROW) and access as part of base data collection. ROW and access are potential high-risk areas that can significantly impact the project schedule both in project development by WSDOT and contract execution by the Design-Builder. To determine if adequate ROW is available to build the project, it is necessary to accurately determine the physical boundaries of existing ROW along the route. Whenever possible, establish the ROW limits within which the Design-Builder must work on a project.

In some cases, it may be advantageous for WSDOT to delay purchasing a portion of the required ROW until the final footprint is created by the selected Design-Builder. This is important in areas with very high real estate costs where WSDOT wishes to minimize the amount of real estate purchased. It is important to relay WSDOT's desire to minimize ROW within the RFP scoring system. When making this decision, factor the potential cost of delays associated with ROW acquisition into WSDOT's risk cost.

Under Federal and Washington State statutes and regulations, WSDOT's ability to acquire property in a timely manner is limited. Because WSDOT is in the best position to appraise, negotiate, and purchase ROW or relocate impacted facilities associated with a design-build project, these risks will normally remain with the WSDOT. A preliminary assessment of the ROW personnel required to meet a project's schedule is necessary in order to determine whether the project should even be considered for design-build.

#### Usage

This section explains how to use the template and provides guidance for certain subsections of Section 2.24 Right of Way. This includes guidance for fill-ins, GSP selection, and references to helpful examples or resources for the author.

#### Available Right of Way

The following are optional fill ins for this section:

***\*\*(WSDOT Ownership) \*\**** WSDOT owns existing right of way, including access rights, as shown on the Right of Way Plans (Appendix R). WSDOT has not determined the need for, nor acquired any additional ROW, for the subject project. The Design-Builder shall have access to the ROW upon Notice to Proceed (NTP).

**\*\* (WSDOT Acquire) \*\*** WSDOT will acquire the property for this Project as shown in the Conceptual Plan or the Right of Way Plans (Appendix R), or both. The Design-Builder shall have access to the ROW upon NTP. If the ROW is not available upon NTP, WSDOT will consider an extension of time in accordance with Section 1-08 of the General Provisions.

### **Right of Way Use Permit**

If there are Right of Way Use Permits or a Haul Road/Detour Agreement with a Local Agency, fill in the appropriate agency name and include the appropriate documents in Appendix R.

### **Additional Right of Way Acquisition**

Additional ROW may be necessary if the Design-Builder's proposed design requires the acquisition of property outside the ROW. This subsection outlines all requirements by the Design-Builder to contact the WSDOT engineer to obtain an approximate amount of time that would be required for acquisition. The WSDOT Real Estate Services (RES) office shall be consulted to determine availability of existing ROW or impacts to project schedule, risks, and budget regarding acquisition of additional right of way either by WSDOT or the Design-Builder. If the Design-Builder requests additional ROW, all costs associated with the additional ROW are paid by the Design-Builder. Design Builder shall not have access to additional properties until the ROW is certified by WSDOT RES.

### **Property Management**

This subsection states that the Design-Builder shall establish a Property Management Plan for all property existing, acquired or to be acquired for the project. The plan at a minimum should include temporary fencing, how often inspections for vandalism, rodent infestation and illegal dumping. The plan should also include the methods for curing any issues found during inspections. See the WSDOT *Right of Way Manual* for more information regarding the Property Management Plan.

### **Demolition**

The Design-Builder is responsible for all demolitions to be removed by Project. This section outlines requirements for the Work.

### **Right of Entry**

Right of Entries are to be used only for the sole benefit of the property owner, i.e. for driveway reconnects and slope blending of property adjacent to the highway.

If there are right of entries that pertain to the project, then fill in the County Assessor's Tax Parcel numbers.

## Notice of Entry

If the Design-Builder determines the need to conduct due diligence on property pursuant to RCW 47.01.170, and the property is not owned by WSDOT, the Design-Builder shall issue a Notice of Entry. The work associated with the Notice of Entry shall not be for invasive work or ground disturbance activities. A Temporary Easement may be required for more invasive work than permitted in RCW 47.01.170.

A sample of a Notice of Entry is available on the DB Program SharePoint Site [here](#).

## Construction Interdisciplinary Commitments

If there have been commitments made to property owners through a Construction Memo: (Form RES-344) executed by the WSDOT Engineer during the acquisition of the property that shall be fulfilled by the Design-Builder with respect to the property parcel acquired, then the copies are included in Appendix R. See [Form RES-344](#).

## Notification

\*\*\*\$\$1\$\$\*\*\* Provide “fill-in” number of Calendar Days required by the WSDOT Engineer for advance notification of any work within the right of entry limits for the project.

## Right of Way Certification

Prior to the commencement of construction in any Project phase or segment, ROW must be certified in accordance with Chapter 17 of the WSDOT *Right of Way Manual*. If additional ROW acquisitions occur after certification, an updated certification must be submitted to the WSDOT Engineer for approval prior to commencement of construction

## Section 2.25: Control of Materials

Section 2.25, *Control of Materials*, contains no fill-ins and is not typically modified.

## Section 2.26: Toll Infrastructure

### Introduction

When tolling is included as part of a Design-Build project, WSDOT typically will have a civil design-build contract provide the physical civil infrastructure needed for the toll system (e.g. toll gantries, toll cabinets, toll rate signs, signing, etc.) while having a separate contract with a roadside toll vendor whom provides actual toll equipment at toll points (license plate cameras, lane controllers, readers/antennas, etc.) This Section gives requirements for toll infrastructure elements, coordination requirements with the toll vendor, and requirements for developing a toll system roll out plan in order to achieve a toll system rollout.

When developing Section 2.26 of the RFP, early and continued involvement with the WSDOT Toll Division staff is required to identify specific toll infrastructure needs for the project.

The toll infrastructure requirements included in Section 2.26 of the RFP need to clearly identify specific toll features to be included by the Design-Builder. This section includes a number of fill-in locations that allow the project team to incorporate project-specific information (such as the number of toll points, or the approximate type and location where a toll rate sign is needed). Some entire sections may need modification or deletion to accurately describe project requirements. In special situations, a subsection (or sections) may need to be added to address unique project requirements (e.g., express toll lanes, single point tolling, modifications to existing toll system elements, etc.)

Coordination with the authors of the following sections are critical in development of the RFP:

- Section 2.13 Bridges and Structures (toll gantries and toll rate sign structures)
- Section 2.16, Illumination (power needs for toll vendor)
- Section 2.18, Intelligent Transportation Systems (general ITS elements and toll and toll rate sign communication networks)
- Section 2.19, Signing (toll signing)
- Section 2.20, Pavement Markings (express toll lane markings and access point locations)
- Section 2.22, Maintenance of Traffic (traffic control closures to be provided by the Design-Builder to the toll vendor for their installation and testing work)

Appendix Z contains toll appendices that are project specific.

## Usage

This section explains how to use the template and provides guidance for certain subsections of Section 2.26, *Toll Infrastructure*. This includes additional guidance for fill-ins contained within the Section 2.26 template and references to helpful examples or resources for the author.

## Performance Requirements

This subsection identifies the requirements for coordinating with the WSDOT Engineer and the toll vendor. It identifies the need for the Design-Builder to provide a Toll System Coordinator. The size and complexity of the tolling piece of the project will dictate the experience needed by the person for this position. It also establishes the frequency for toll task force meetings throughout the project where the Design-Builder will coordinate their design and construction with the toll vendor.

## Design and Construction Requirements

This subsection gives a general outline of what is required of the Design-Builder for toll related work. The type of toll facility will dictate what is needed. In general, the two types of toll facilities are either a single point full road toll system (typical for toll roads, tunnels, or bridge) or an express toll lane system (currently on I-405 and SR 167). It is critical to coordinate with the WSDOT Toll Division to determine what their toll vendor needs in order to install the toll equipment on these facilities.

## Express Toll Lane Access Points

This subsection shall include detailed information on where access points into/out of express toll lanes are to be located. These location description should be fairly detailed for beginnings, endings, and mid-point/intermediate access points. These locations shall be agreed upon by the project office and the WSDOT Toll Division using actual and project traffic pattern data during the conceptual design phase.

This subsection can be omitted if the toll system is not an express toll lane facility.

## Toll Point

A toll point is a location on the toll facility where vehicle information is collected in order to charge a user a toll. It typically consists of a toll gantry and associated toll cabinets. The Design-Builder will install these elements and the toll vendor will come later and install toll equipment on the gantry and within the toll cabinets.

Depending on the corridor, these toll points can either be called out to specific locations (like on a ramp) or a general area to allow some flexibility by the Design-Builder. The goal of a toll point location is to ensure that all vehicles using the toll facility travels through a toll point.

## Radio Frequency Survey

When a toll point is completed, antennas and readers are installed on a toll gantry to identify transponders that are installed on vehicles as part of the *Good To Go!* program. This equipment uses radio frequency to read the transponders. Some toll projects will warrant a need to work with the WSDOT Radio Shop to perform a radio frequency (RF) survey to ensure that a location does not currently have existing frequencies in a the range that the toll readers use that would interfere with toll operations. Having this survey done before advertising the RFP will mitigate risk of needing to relocate a toll point. Some projects may not have flexibility to move toll points around which would not necessitate the need for an RF survey.

## Toll Gantry

A toll gantry is typically a monotube structure over the road which looks very similar to a sign structure. They can be either cantilevers or full span structures depending on the need of the project. Currently, the toll vendor only needs one toll gantry at a toll point but this needs to be confirmed with the WSDOT Toll Division for each project.

It is best practice to have a toll gantry be exclusively used for toll equipment installation and not have overhead signs installed on it. For efficiency, toll gantries can be shared for more than one toll point (e.g. a T-cantilever used for a northbound and a southbound toll point on direct access ramps) but this needs to be coordinated with the WSDOT Toll Division beforehand.

Coordination with Section 2.13 Bridges and Structures is required. Vibration requirements and per lane/shoulder loads of toll equipment that will be installed by the toll vendor will be included in Section 2.13.

## Roadside Toll Cabinets

The Design-Builder will install roadside toll cabinets that are connected to the final communications network and power service before turning over the cabinets to the toll vendor for their installation of toll equipment. Generally these cabinets are double wide cabinets (four doors). This section will need to specify the type of finish the cabinet will have (either color or mill finish) based on the project needs.

This subsection also discusses the needs for cabinets to be provided for uninterruptible power supplies (UPS) and toll reader equipment. The Design-Builder provides these empty cabinets for the toll vendor's use if required.

## Toll Rate Sign

Toll rate signs are required on a toll facility to indicate the current toll a user would pay at that time. The type and locations of the toll rate sign(s) will depend on the type of facility. Express toll lane systems require toll rate signs before each access point and at direct access interchanges leading directly into the toll lanes. A single point full toll facility requires the toll rate sign to be placed near but upstream of a toll point. Please see the WSDOT Toll Signing Guidance document for more information on the type of toll rate sign needed.

This section goes into great detail on the design and testing needs for toll rate signs. Coordinate with the Region on the type and manufacturer of electronic displays and signs controllers that will be installed on the toll rate signs.

Toll rate signs will be completely installed by the Design-Builder and operated and maintained by WSDOT. Currently, the toll vendor will not have any involvement in the installation, testing, operations, or maintenance of toll rate signs.

## Communication System

Each toll point will have their own dedicated toll network which typically consists of six-strands of distribution fiber that connects to a nearby communication hub. This ensures that no other data is on the toll network fiber when connected to the hub. The toll information then travels from the communication hub to the WSDOT Northwest Region TMC where the toll vendor's host system servers are located.

Details on the toll fiber network are located in Section 2.18 Intelligent Transportation System

## Conduit

Coordinate with the WSDOT Toll Division to determine the type and quantity of conduit that is to be provided by the Design-Builder for the Toll Vendor's use. The Design-Builder will install these conduit empty and the Toll Vendor will pull their cable for the toll equipment.



## **Spare Parts**

Due to the uniqueness of the toll infrastructure for a project, spare parts for toll rate signs and toll cabinet are typically provided by the Design-Builder and given to the WSDOT entity that will be responsible for maintaining physical infrastructure on the corridor (usually Signal Maintenance).

## **Turnover, Operations, and Maintenance**

This subsection goes into detail regarding what toll infrastructure elements need to be completed before turning toll point sites over to the toll vendor for their toll equipment installation and testing activities. Coordination with the WSDOT Toll Division and overall project phases is needed as this subsection is written.

## **Toll Infrastructure Design Concept Plan**

This is a deliverable by the Design-Builder that gives the general layout of toll infrastructure elements on the corridor. This enables the Design-Builder to start thinking about the toll pieces as the rest of their design progresses. This also allows WSDOT and the various departments have a better understanding of where toll points, signs, access points, etc. are proposed to be located which helps with later design reviews.

## **Toll System Rollout Plan**

The Toll System Rollout Plan is more of a narrative document that gives insight on how the Design-Builder plans to meet the requirements of this section from design, through construction, and reaching Toll Commencement (start of toll collection). This document needs to include all coordination efforts, schedule, and phasing for the Design-Builder, the toll vendor, and WSDOT's efforts.

## **Toll Infrastructure Preliminary Design Submittal**

This design submittal is focused on schedule and narrative deliverables required by the Design-Builder. Since there are no "tolling" RFC drawings/sheets, the actual design of toll infrastructure, ITS, signing, pavement markings, roadway, etc. will be captured in those discipline plan sheet deliverables.

## **Toll Infrastructure Final Design Submittal**

Similar to the Preliminary Design Submittal, this Final Design Submittal is focused on narrative documents, schedule, and additional supportive materials to ensure that turnover of toll points to the toll vendor is smooth. The Design-Builder will also provide traffic control to the toll vendor so this submittal includes updates to the Design-Builder's various traffic control plans.

## Section 2.27: Vacant

Section 2.27 is currently vacant.

## Section 2.28: Quality Management Plan

### Introduction

The Quality Management Plan is an integral portion of each Design-Build project. The “Plan” is the basis by which the Design-Builder conducts their management processes for the project. Furthermore, the “Plan’s” WSDOT approval for Design and Construction is integral to any work proceeding.

### Usage

Section 2.28 defines the relationship between the Design-Builder and WSDOT.

- WSDOT’s expectations for; partnering/disputes, pre-activity meetings, QA task force team, nonconformance, executive management, quality system, other project documents for submittal, and pre-approved corrective action plans
- Principal and general staffing requirements with some variation allowed due to project complexity are stated
- Design processes requirements are defined from, development, to RFC, and finally to As Built.
- Materials requirements, deliverables, materials testing quality program, materials laboratory, materials testing frequencies/random sampling, testing plans, F & t analysis, materials documentation reviews and expectations
- Construction QA and QC plan requirements for progress schedule, notice to WSDOT, Hold Points, electrical inspection, WSDOT oversight, QA inspection, inspection guidelines/documentation, inspection forms/checklists, and the right to “Stop Work”
- Submittals, the executive management review/audits, document review, and QA/QC for submittals

### Fill-Ins

- Section 2.28 has very few fill-in possibilities and they are all self-explanatory.

## Section 2.29: Maintenance During Construction

### Introduction

Typical maintenance activities include patching potholes, cleaning ditches, painting stripes on the roadway, repairing damage to guardrail, and controlling noxious weeds. In addition to maintaining assets, operational services are also provided, including plowing snow, cleaning rest areas, responding to incidents, operating structures (e.g. drawbridges), and operating traffic signals, lighting, and Intelligent Transportation Systems (ITS).

Given the nature and cost of maintenance work, as well as the exposure inherent in maintenance and operational activities, it is important for designers to consider maintenance and operations staff as major stakeholders in every project. It is also important for maintenance and operations staff to understand the purpose of the project and to participate in determining the best method(s) to keep it functioning as designed while maintaining their responsibilities outside of the specific project limits. This chapter provides multiple options to help improve coordination with maintenance and operations staff during project design. These “best practices” are a culmination of responses from WSDOT [Design Manual](#) M 22-01 user surveys, interviews with maintenance and operations superintendents, and various regional practices that have demonstrated potential improvement related to the coordination of design and maintenance efforts and personnel. The concepts and methods presented herein do not replace any approved communication or documentation processes that may be currently required by a WSDOT region during the project development process.

### Usage

All sections in 2.29 are to be used and determined by the project limits if they apply or not.

## Section 2.30: Water Crossings

### General

#### Introduction

Section 2.30 should be included in any contract that builds a structure over water. It addresses the requirements for fish passage as well as hydrologic requirements such as hydraulics reports, scour analysis, long term aggradation and degradation, FEMA flooding analysis, and designer qualifications.

#### Assumptions

Section 2.30 was developed with several built in assumptions. Please be sure your project aligns with these assumptions. If they do not, changes to the Section 2.30 template will probably be needed. These assumptions are as follows:

1. The project is primarily fish passage.
2. WSDOT has not developed the JARPA. The contract assigns this to the Design-Builder.
3. Before the RFP is issued, the Design PEO and Headquarters Hydraulics and Region Environmental have developed a draft PHD through extensive discussions and negotiations with the Tribe(s) and WDFW. This is when many decisions about the final design are made.
4. As policy, WSDOT does not want to assign the Design-Builder the risk to do whatever it takes, at whatever the cost, to obtain the permits.

5. Therefore, the expectations of the Tribe and WDFW must be put in the contract as requirements, not as options.
6. We do not expect the Design-Builder to innovate the dimensions in Table 2.30-B or other commitments we have made to the Tribes. All of these must be made contract requirements. If any innovation is to occur in those dimensions, it will require an ATC.
7. ATC's on channel, structure, restoration, or that change or affect any of the commitments made to the Tribe(s) or WDFW must be reviewed by both before we respond to the Design-Builder. ATC's that are uncertain of approval by the Tribes or WDFW should be rejected.
8. Design-Builder innovation is expected to be limited to constructability and managing traffic.

### Usage

- Subsections that contain fill-ins and instruction boxes
- Any additional subsections that provide background/explanation for technical/complex Technical Requirement language. (This is at the discretion of the SME)
- Current content

### General

- \*\*\* $\$<1>\$$ \*\*\* Note user to provide "fill-in" Fish Passage ID Numbers specific for the Project.
- \*\*\* $\$<2>\$$ \*\*\* Note user to provide "fill-in" State Routes specific for the Project.
- \*\*\* $\$<3>\$$ \*\*\* Note user to provide "fill-in" Mileposts specific for the Project.
- \*\*\* $\$<4>\$$ \*\*\* Note user to provide "fill-in" names specific for the Project.

### Definitions

- Must include the Structure Free Zone exhibit drawing in Appendix H. The purpose of the Structure Free Zone is to define the zone within which there is zero tolerance for encroachment by any part of a structure, even by 0.001 inch. The most up to date version of the SFZ drawings are found in the Plan Sheet Library.
- Consider using the term "Projects of Similar Scope and Complexity (Relates to fish passage Work)" in the RFQ and ITP when describing Key Personnel experience requirements or past project requirements. If doing so, this definition should be added to the RFQ and ITP.

### Personnel Requirements

Be sure to check the RFQ and ITP for consistency of meaning, qualifications and job duties when using these terms: Stream Team, Stream Design Engineer, Geomorphologist, Biologist. Also note that some qualifications are identified as minimums: these are expected to be scored as zero for failure to meet the minimums. Other qualifications are described as desirable: these should be scored as the Evaluators see fit.

## Fish Passable Structures

Be sure to review Section 2.13 for consistency with Section 2.30 for allowable structure types. Section 2.13 is developed by the HQ Bridge and Structured Division and they might not be aware of restrictions on structure types that could be imposed by the Tribe(s) or WDFW are allowable structures.

### Table 2.30-B – Structure and Channel Design Characteristics

- \*\*\*\$1\$\$\*\*\* \*\*\$2\$\$\$\*\*\* Note user to provide “fill-in” type of LWM required for each passage based on the structure length and diameter in Chapter 10 of the WSDOT *Hydraulics Manual* or, if there is an agreement with the Tribe, the type and number agreed with the Tribe. Add more rows if there are more than one type.
- For guidance on establishing the Maintenance Clearance, see: <https://wsdot.wa.gov/sites/default/files/2020/07/08/Design-Instructions-2020-01.pdf> and <https://wsdot.wa.gov/publications/manuals/fulltext/M22-01/720.pdf>

### Channel Design

- \*\*\*\$\$<1>\$\$\$\*\*\* Note user to provide “fill-in” if any fish passage is required to be designed to regrade, insert here any contract specific requirements for the channel bank as is erodes as part of the regrade process specific for the Project.

### Preconstruction Conference, Placing Aggregate in Streambed, and Streambed Test Section

These sections specifically mention required attendance by HQ Hydraulics. This is to ensure state-wide consistency in messaging to the Design-Builders on certain expectations.

#### Other Contract Considerations - TR 2.30

1. Hydraulic Length and use of headwalls?
2. LWM – stipulate whether it’s inside or outside the shadow of the structure?

#### Other Contract Considerations - RFQ

3. Consider using the Goal described herein along with Submittal/Evaluation Requirements
4. Consider using the term “Projects of Similar Scope and Complexity (Relates to fish passage Work)” in the RFQ and ITP when describing Key Personnel experience requirements or past project requirements. If doing so, this definition should be added to the RFQ and ITP.

#### Other Contract Considerations - ITP

5. Consider using the Goal described herein along with Submittal/Evaluation Requirements

6. Consider using the term “Projects of Similar Scope and Complexity (Relates to fish passage Work)” in the RFQ and ITP when describing Key Personnel experience requirements or past project requirements. If doing so, this definition should be added to the RFQ and ITP.
7. Submittal requirements are necessary as a check to be sure each Proposer understands what is required and is committed to build what is required.

#### **Other Contract Considerations - Ch1 - General Provisions**

8. Must include Indemnification for Flooding 1-07.14(1)
9. Must include the indemnification for Regrade 1-07.14(1)
10. Consider using the Incentive spec below, 1-08.11
11. Basic Configuration – The Basic Configuration provides several functions on a design-build contract, most of which are usually not necessary on a fish passage contract. Several WSDOT DB fish passage contracts have deleted all references to the Basic Configuration and Necessary Basic Configuration Changes. The concept of Basic Configuration was created as a convenient way to address two important functions: (1) to define aspects of the design that cannot be changed (without an approved ATC or change order) and are best described in a drawing, and (2) which the owner guarantees there is an acceptable design solution using the basic configuration. Examples used in the past have been complex horizontal and vertical roadway alignments, top elevation and offsets of noise walls, and existing right of way. It was “convenient” on complex geometric contracts because the owner’s conceptual design frequently could be used with little modification. The second function flows from what is known as the Spearin Doctrine which, translated into design-build terms, is the owner’s implied warranty that the project can be designed and constructed in accordance with the plans and specifications. Most contract requirements that require a drawing can simply be stated in the technical requirements by referencing the drawing; and, owing to the relative simplicity of a fish passage contract, there are usually few if any of these needed. On the other hand, the owner’s implied duty to create a contract that is constructible meeting all contract requirements still exists in a fish passage contract. That means it is still up to the design office to verify that there is a combination of stream horizontal alignment, stream vertical alignment, right of way area, MOT constraints, utility considerations, structure type with a Maintenance Clearance, Hydraulic Length, and Hydraulic Span Width that can be designed and constructed in concert with the contract. It is recommended, therefore, that the design office carry its conceptual design to the extent needed to affirm this to be true.

#### **Other Contract Considerations - TR Utilities**

12. In order to avoid a costly delay by discovering an unknown utility during construction, it is recommended that the PEO conduct a three-dimensional Subsurface Utility Exploration and include the results in the RFP documents.

### 5-1 Introduction

The procurement process is one of the most important milestones of Design-Build (DB) delivery. It is important to recognize that the procurement milestone is much more than selection of the Design-Builder for the project. It is a pivotal step in the development of the project. It implements a process whereby the owner and the Design-Builder advance the design of the project in a manner that both maximizes the project goals and provides the most cost-effective designs to achieve those goals.

DB apparent best value selection typically utilizes a two-step procurement process. In step 1, WSDOT prepares the Request for Qualifications (RFQ) outlining the minimum and desired DB team qualifications. Interested DB teams submit Statements of Qualifications (SOQ) in response to the RFQ. An Evaluation Team evaluates the SOQs according to the criteria published in the RFQ and establishes a short list of the most highly qualified Submitters. It is best practice to select three to five Submitters for the short list.

In step 2, the Request for Proposal (RFP) is issued to short listed Submitters. Proposers submit Technical and Price Proposals in response to the RFP. Prior to opening the Price Proposals, the Evaluation Team evaluates the Technical Proposals. The proposal offering the apparent best value is awarded the contract

### 5-2 Procurement Resources

All procurement resources mentioned in this chapter are available for download on the [DB Program SharePoint site](#) in the [DB Resources folder](#).

**Preparation Guide:** This chapter does not go into detail on how to prepare the actual RFQ, Instructions to Proposers (ITP), and RFP documents. For suggested best practices on DB procurement document preparation, refer to the *Preparation Guide*.

**Design-Build Procurement Folder Structure:** A standardized folder structure for storing and organizing DB procurement called the *Design-Build Procurement Folder Structure* is designed to accommodate projects of varying size and complexity and should be used for all DB projects during the procurement process. Within the *Design-Build Procurement Folder Structure* is a Word file with brief instructions detailing which documents should be included in each folder.

**SOQ/Proposal Review Checklists:** After the SOQ and Proposal Due Dates, Contract Ad & Award uses these checklists to ensure Submitter and Proposers are adhering to the submission requirements of the RFQ and ITP. Each SOQ and proposal are reviewed prior to being sent to the Evaluation Team.

**SFTP Configuration Instructions:** Instructions detailing the steps for configuring to the WSDOT SFTP are for Submitters. Contract Ad & Award will post these instructions on the online directory for the project in the folder named "Submittals".

**Design-Build to Advertisement Checklist:** The tool used on all DB projects to determine the level of formal approval needed to advertise. This spreadsheet assigns level of confidence to key elements of the RFP to determine whether those key elements are on target for the advertisement date. The advertisement date represents the RFQ date.

**Advertisement Notice:** WSDOT's initial release of information to procure a DB project is prepared in a formal notice to the industry as an *Advertisement Notice*. You can find examples of past advertisement and pre-advertisement notices on the SharePoint site.

**Confidentiality and Non-Disclosure Agreement and No Conflicts of Interest Affidavit:** To ensure confidentiality and impartiality, everyone who is involved in the procurement of a DB project in any capacity must fill out a *Confidentiality and Non-Disclosure Agreement* and *No Conflict of Interest Affidavit*. These agreements will be kept on file with the project office; and will become part of the evaluation record. The *Confidentiality and Non-Disclosure Agreement* and *No Conflict of Interest Affidavit* are discussed in further detail in [Chapter 6](#).

**Apparent Best Value Determination Spreadsheet:** The tool that calculates the Proposal Price with the Technical Score to determine which Proposer provides WSDOT with the apparent best value.

**Qualitative Evaluation Forms:** The forms used by Evaluators to comment and score SOQs and Proposals.

**Prompt Questions:** A list of suggested questions for External Debriefs.

### 5-3 Timelines and Deliverables

The procurement steps represent the process of selecting the Design-Builder. However, the procurement steps include many activities beyond just the procurement process. As can be seen from the flowchart in [Exhibit 5-1](#), an extensive work effort is necessary to support the procurement process and to simultaneously advance the project development.

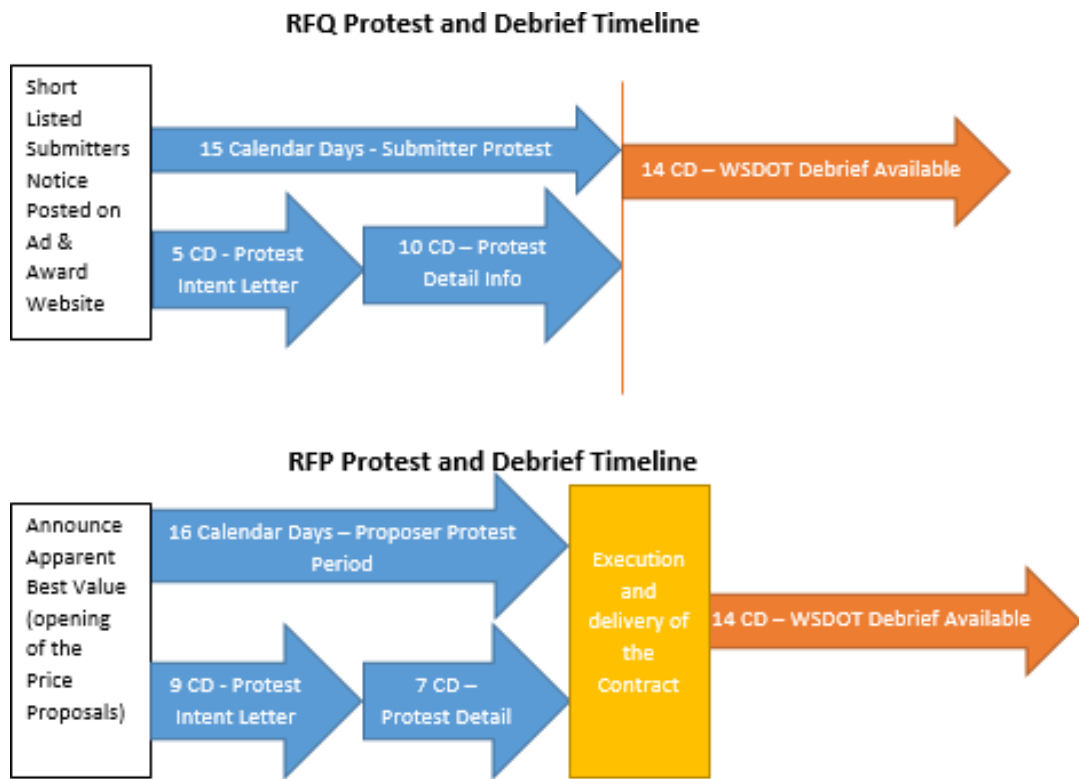


Exhibit 5-1



Exhibit 5-2 identifies the timeframe required for both protest and debrief for the RFQ and the RFP.

Exhibit 5-2



[Exhibit 5-3](#) identifies approximately a 1-year timeline for the procurement process, which is generally appropriate for large DB projects. Though DB delivery offers a strong potential to minimize the overall projects delivery time, it does require a significant duration for the procurement step to realize its benefits. Refer to [Exhibit 5-3](#) as you populate the procurement timeline tables in the RFQ and the ITP.

### Exhibit 5-3

#	Action	Typical schedule logic	Notes
Step 1 – SOQ Phase			
1	Pre-advertisement	Approx. 2 to 8 weeks before RFQ advertisement	During this period your website will be posted with the advertisement notice, fact sheet and any informational documents. This period builds the Interested Parties List and is important for generating interest in large or unusual projects.
2	RFQ Issue Date	Approx. 8 to 12 weeks before RFP issue (#14)	
3	Voluntary Submitter's Meeting	7 to 10 days after #2	Must occur after advertisement in Daily Journal of Commerce (DJC). The DJC is published every Friday, and the advertisement must be submitted to Contract Ad & Award before Wednesday in order to be published the same week.
4	Deadline for Submission of Submitters' Questions	2 weeks prior to #7	
5	Deadline for requesting Username and Password for WSDOT SFTP site	2 weeks prior to #7	Must be done to ensure Submitters have access to the WSDOT SFTP site.
6	Deadline for WSDOT Response to Submitters' Questions	1 week after #4 and 1 week before #7	<ul style="list-style-type: none"> <li>• Provide guidance on where to find the answer in the RFQ</li> <li>• Issue an addendum</li> </ul>
7	SOQ Due Date	4 to 6 weeks after #2	Provide a longer timeline for SOQ development if advanced notification of the project was not given to industry.
8	SOQ Review Checklist	Day after #7	Done by Contract Ad & Award
9	SOQ Evaluations	Allow 3 to 5 weeks between #7 and #11	Projects may receive several SOQs for review. Ensure sufficient time is provided for Evaluators to review and comment on SOQs and for the Evaluation Team to combine comments.

Exhibit 5-3

#	Action	Typical schedule logic	Notes
10	Internal Debriefs with WSDOT Management and Executive Teams	Before #11	Present evaluation results to project, region, and Headquarters (HQ) management and executives to gain their concurrence. Schedule debriefs prior to advertising RFQ to ensure availability of executives. See the <i>Internal Debriefs</i> subsection of this chapter for a list of executives to be invited to the debrief meetings.
11	Notify Short Listed Submitters	Before #14	WSDOT Project Team provides a letter to Contract Ad & Award to publish shortlisted Submitters. WSDOT Project Team provides copies of each Submitter's evaluation comments, individual score, summary scoring sheet for each submitter without other Submitters' names
12	Protest	Notice of protest must be filed within 7 days of #11	Protests have the potential to delay the procurement. See RFQ Section 7.13 for more details.
13	External Debriefs with Submitters	Immediately following the end of the protest period	
<b>Step 2 – Proposal Phase</b>			
14	RFP Issue Date	Week of #11	Within the week after notification of short list. Maybe longer depending on circumstances.
15	Voluntary Proposer's Meeting	5 to 10 days after #14	Provide a short period of time for the short listed Submitters to review the RFP.
16	1:1 Meeting	Start within 1 week of #14 and end 2 to 3 weeks prior to #20	1 to 2 hour(s) per week per Proposer. Consider scheduling meetings to occur all on the same day.
17	ATC Submittal Deadline	2 to 3 weeks prior to #20	WSDOT has 14 calendar days to evaluate ATCs, then provide a 2 week "quiet period" for Proposers to finalize proposal.
18	Deadline for Submission of Proposers' Questions	2 to 3 weeks prior to #20	
19	Deadline for WSDOT Response to Proposers' Questions	1 to 2 weeks after #17 and at least 2 weeks before #20	Ensure WSDOT has enough time to answer questions and that the Proposers have a "quiet period" prior to proposal due date. This is the last day to issue an addendum.

## Exhibit 5-3

#	Action	Typical schedule logic	Notes
20	Proposal Due Date	6 to 9 months after #14 (typical)	This varies greatly depending on the scope/ complexity of the project. To take advantage of innovative design solutions, a minimum of 6 to 9 months should be provided for proposal development. Emergency projects could have 2 month procurement periods, but this would be an exception.
21	Proposal Review Checklist	Day after #20	Done by Contract Ad & Award
22	Proposal Evaluations	Allow a minimum of 3 to 6 weeks between #20 and #26	Include time for Evaluators to review and score proposals, and for the Evaluation Team to combine comments.
23	Internal Debrief with WSDOT Management	Within week after #22	Time to present evaluation results to project, region, and HQ executives. Debrief meetings should be scheduled while the SOQ debriefs are being scheduled to ensure availability of executives.
24	Price Proposals Opening	Within week after #22	The unsealing of the proposal price always occurs on a Wednesday (unless Monday is a holiday) WSDOT Project Team provides copies of each proposer's evaluation comments, individual score, and summary scoring sheet without the other proposer's names.
25	Announce Apparent Best Value Proposer	Same time as #22	Allow time for evaluation and debrief/ concurrence from Region and HQ Executive Teams
26	Protest	Within 9 business days after #25	Protests have the potential to delay the procurement. See ITP Section 8.0 for more details.
27	Notice to Award	Within 45 calendar days after #25	Prior to award, you will need to submit your list of agreed betterments to Contract Ad & Award.
28	Pay Stipends	Within 30 calendar days after receiving Form N, <i>Stipend Invoice</i> .	WSDOT will pay a Stipend to all Proposers who submit a Form M ( <i>Stipend Agreement</i> ), Form N ( <i>Stipend Invoice</i> ) and responsive proposal.
29	Execution of Contract	20 to 40 calendar days after #27	

Exhibit 5-3

#	Action	Typical schedule logic	Notes
30	Practical Design Workshop (Optional)	Within 7 calendar days after #29 and before #32	Within 7 calendar days of Contract execution, and prior to issuing NTP, the parties will discuss and potentially initiate a Practical Design Workshop. The Practical Design Workshop may last up to 30 Calendar Days
31	External Debrief with Proposers	Within 14 calendar days after #29 and must be after #26	
32	Estimated Notice to Proceed	Up to 30 calendar days after #27 and 29	Approx. 7 days to Award (can be expedited if necessary) and 3 weeks to Execute the Contract (cannot be expedited without changing the ITP – DBer is allowed 20 days to return signed contract).

#### 5-4 Approval of Design-Build Projects to Advertise

All DB projects must have formal approval action for the RFQ and RFP to be published. Publishing the RFQ is a function of the RFP and shall be based on a readiness assessment of the RFP. The form of this approval action will depend on the risks WSDOT will be assuming with the publishing of the RFQ and RFP. It is the goal of WSDOT to minimize risks associated with the RFQ and RFP prior to publishing.

The risk levels are not to be confused with right of way certification status. Right of way certification is specific to the status of right of way acquisition needed for the project. The risk levels detailed below quantify risk associated with all the project development disciplines, including right of way certification. This assessment needs to be a collaborative effort between the Region and Headquarters.

The risk levels described below are associated with an assessment of the RFP status. The assessment is intended to determine that all components of the RFP are on track to be completed and incorporated into the RFP prior to Issue RFP Date.

Prior to publishing the RFQ, Region and HQ will conduct a collaborative assessment of the RFP to determine if it is on target for the Ad Date by comparing the target dates in the *Design-Build to Advertisement Checklist* to the actual schedule dates. The “Level of Confidence” column in the checklist will be used to document whether all key elements are tracking by selecting green, yellow, or red status.

### 5-4.1 **Level 1 Approval**

This approval level is for projects that demonstrate that all aspects of the project are on track to be complete by the “Target Date” column in the checklist, and there is high confidence (all green) the RFP will be complete by the Ad Date.

Approval action shall consist of a letter from the Region to Contract Ad & Award Office certifying the project meets the conditions of a Level 1 Approval.

### 5-4.2 **Level 2 Approval**

This approval level is for projects that are generally on track to be complete by the Target Date, but still have some activities/issues to be resolved prior to the Ad Date. Note, elements in the checklist that are at risk to miss the Target Date but are tracking to be complete prior to Ad Date shall have a yellow Confidence Level. Elements that are tracking to be complete after the Ad Date shall have a red Confidence Level.

Approval action for these projects shall consist of a letter from the Region to the Contract Ad & Award Office, certifying the project meets the criteria for a Level 2 Approval, and identifying all outstanding issues along with a plan to resolve said issues prior to the Ad date. Approval to publish the RFQ will require concurrence by HQ Construction. This concurrence will be based on the risk associated with outstanding issues and the likelihood of resolving them prior to the scheduled Ad date.

### 5-4.3 **Level 3 Approval**

This approval level is for projects that are not on track for completion prior to the Ad Date, missing critical elements required for a complete biddable project, but there is a clear and compelling need to begin the advertisement process. Note, elements in the checklist that are at risk to miss the Target Date but are tracking to be complete prior to Ad Date shall have a yellow Confidence Level. Elements that are tracking to be complete after the Ad Date shall have a red Confidence Level.

Approval action for these projects shall consist of a letter from the Region to the Contract Ad & Award Office, certifying the project meets the criteria for a Level 3 Approval, identifying all outstanding issues along with a plan to resolve said issues two weeks prior to the proposal due date. HQ’s approval to proceed to RFQ publishing will be based on clearly defined risk associated with outstanding issues, and a plan for resolving said issue two weeks prior to the scheduled proposal due date. In the event all issues are not resolved, and appropriate conditions incorporated into the contract a minimum of two weeks before the proposal due date, the proposal due date may be extended. Any conditions incorporated into the RFP and extensions proposal due date will require concurrence by HQ Construction.

## 5-5 Electronic Submittal Process

It is the intent of WSDOT to implement a “paperless” DB process in accordance with Executive Order E 1066.00, Executive Order E 1010, and [RCW 19.360](#).

Part of the “paperless” DB initiative is to move away from hard copy, paper documents and allow for the electronic submittal of SOQs and proposals. Contract Ad & Award, HQ DB and the IT Division developed an electronic submittal process, outlined below, that allows Submitters and Proposers to send in their submissions securely and remotely.

### 5-5.1 *WSDOT Secure File Transfer Protocol*

WSDOT is requiring that all DB procurements be submitted completely electronically. Electronic submittal of the SOQs and the Technical Proposal is accomplished using a WSDOT Secure File Transfer Protocol (SFTP) site. Shortly after the Voluntary Submitters Meeting, Submitters will request a username and password, then use an FTP Client to configure and connect to the WSDOT SFTP site using their assigned username and password. This WSDOT SFTP site is set up once a DB contract is advertised and published on the Contract Ad & Award page.

### 5-5.2 *Requesting a Username and Password*

To connect to the WSDOT SFTP site, Submitters must request a username and password from Contract Ad & Award by sending an email [caa@wsdot.wa.gov](mailto:caa@wsdot.wa.gov). Once a username and password are requested, Contract Ad & Award will forward the request on to the IT Division so that a username and password can be generated for the Submitter. This username and password is unique to the Submitter and only applicable to the specific contract that the Submitter plans on pursuing.

To submit a Technical Proposal, Short Listed Submitter will use the same username and password Contract Ad & Award assigned to them in the SOQ phase to connect to WSDOT SFTP site once again in the proposal phase.

### 5-5.3 *Statement of Qualifications Electronic Submittal*

SOQs are submitted prior to the SOQ due date to WSDOT via the WSDOT SFTP site. At midnight on the SOQ due date, Submitters will have their access to the WSDOT SFTP site revoked so that Contract Ad & Award can conduct their SOQ review using the *SOQ Review Checklist*. After the SOQ review, SOQs are passed along to the Evaluation Team.

### 5-5.4 *Proposal Electronic Submittal*

The Proposal is separated into two parts: Technical Proposal and Price Proposal. The Proposer must follow two separate processes to submit. Technical Proposals and Form C, *Upset Amount Determination* (if applicable to the project) are also uploaded to the WSDOT SFTP site the same way SOQs were submitted. After midnight on the proposal due date, Proposers will have their access to the WSDOT SFTP site revoked so that Contract Ad & Award can conduct their proposal review using the *Proposal Review Checklist*. After the proposal review, Technical Proposals are passed along to the Evaluation Team.



Price Proposals and Proposal Bonds are submitted electronically using BidX. Former Form B, *Price Proposal* and Form F, *Proposal Bond* are built into BidX, so they are no longer part of the ITP. Proposers will need a BidX account, have an approved digital ID, submit a request to bid with WSDOT, then download the bid file in advance. Once their account is set up, Proposers can submit their electronic proposal bond and complete their price proposal through BidExpress. The Bid may be resubmitted as many times as needed prior to the deadline. Bids are still publicly opened by the Contract Ad & Award office on the date of the Apparent Best Value determination.

## 5-6 Contract Ad & Award

DB contracts follow a different process during contract advertisement and contract award than Design-Bid-Build (DBB) or small works contracts. Typically, DB contracts have a need to enter the advertisement and award period before the RFQ has been fully developed to share informational documents with interested parties and start to gain notice in the contracting community. This is referred to as the pre-advertisement period. Due to the number and size of advertising documents on a DB contract, these documents are shared with contractors electronically through use of a website. Because all documents are shared electronically, a GovDelivery distribution list is created by Contract Ad & Award and this list is used to communicate to interested parties throughout the procurement period. Throughout this period, the project office generating documents will work with Contract Ad & Award who will manage, post, and notify interested parties of these documents. These processes are outlined in detail below.

### 5-6.1 *Initiating the Advertisement and Award Period*

To initiate the advertisement and award process, a contract number for the subject contract must be assigned. Contract numbers are assigned by the Contract Administration and Payment System (CAPS) office in HQ Accounting. Email [CAPS@wsdot.wa.gov](mailto:CAPS@wsdot.wa.gov) with a request for a contract number. Contract Ad & Award will post new DB project pages and notices on Mondays so the request for a contract number needs to reach CAPS by no later than Wednesday afternoon the week prior. The request should include the following items:

1. A request for a contract number
2. The Construction Project Engineer's (PE) name (if known). Otherwise the Design PE's name may be given.
3. The proposed advertisement date (when the RFQ is published) for the DB contract (if known)
4. Evidence of construction funding

### 5-6.2 Request a Project Webpage and Document Directory

To request a webpage and document directory, email [caa@wsdot.wa.gov](mailto:caa@wsdot.wa.gov) by no later than 1:00 p.m. on the Wednesday prior to the project page going live on Monday. Provide Contract Ad & Award with the following information:

1. Project Title
2. County
3. Name, phone number, and email address of the project contact that will be receiving questions for the project

Contract Ad & Award will create a project webpage for the project, creating a file directory on the <ftp://ftp.wsdot.wa.gov/contracts> server and create a GovDelivery subscription service for interested parties to sign up to receive alerts about the project during the procurement process. Note that Contract Ad & Award cannot create the project webpage and document directory until a request for a contract number is submitted and the contract number is provided from HQ CAPS.

### 5-6.3 Advertisement Notice

As is customary with developing, advertising, and awarding work, WSDOT publicly communicates its intent to procure the DB project. This communication effort informs industry partners of WSDOT's intent to solicit proposals, and it establishes a process and opportunity for WSDOT and industry partners to begin to exchange information, gain understanding, and measure interest. The project office should allow up to 30 Calendar Days for this step.

The project office shall prepare the *Advertisement Notice* using an official WSDOT letterhead template and, at a minimum, include the following information:

- Project title
- Contract number
- The schedule for the procurement process
- The approximate construction value
- Prequalification bidding amount and major work class number
- Scope of work/a brief description of the project
- RFQ advertisement date
- Date, time, and place of the Voluntary Submitters Meeting
- Links to project website and interested parties list
- Small and Veteran-Owned Business Enterprise (SVBE)/ Disadvantaged Business Enterprise (DBE)/Federal Small Business Enterprise (FSBE) Goal (as applicable) and On-The-Job Training and Apprentice Utilization goals (as applicable)

- Outstanding permits
- Outstanding agreements
- Utility and railroad issues
- Right of way issues
- EBASE job number and version

Authorization of the notice content and approval to release should be obtained from the Regional Administrator, Regional Administrator for Construction, or HQ Construction.

Once the notice is approved, email it to [caa@wsdot.wa.gov](mailto:caa@wsdot.wa.gov).

#### **5-6.4 Submitting Documents for Web Posting and Notifications**

The project office will need to set up another location on the FTP site that you can use as a directory for submitting your documents to Contract Ad & Award. Small documents can be attached to an email and sent to [caa@wsdot.wa.gov](mailto:caa@wsdot.wa.gov) but large documents will need to be saved on the FTP server and you may send a link to the file directory.

Please use care in choosing your file and folder names and adhere to the following best practices when setting up your appendices and creating folders and files:

- Do not use spaces in folder and files names – remember these will become internet links and web browsers turn every space into “%20”
- Do not use underscores “\_” in file names. When viewing the URL it is not possible to tell whether or not the symbol is there because all URL text appears underlined.
- Only use safe characters in file and folder names (alphanumeric and limited special characters (although we recommend using no special characters as a best practice))
- File and folder names should be as short as possible.
- Do not repeat the same text in file and folder names.
- Do not repeat the name of the project in file and folder names.
- Shorten whenever possible (example – use “A” instead of Appendix). The total length of the URL cannot be more than 256 characters (if it is, most browsers will not allow users to view the files and they will get an error message).

Contract Ad & Award will review and rename your documents as necessary to conform to best practices for web posting and to be consistent with other DB contracts, and post them in the file directory for your contract at: <ftp://ftp.wsdot.wa.gov>. Contract Ad & Award will also update your project webpage and add links to the new documents. When that is completed, Contract Ad & Award will send an alert to the GovDelivery account for your project informing interested parties that new documents are available.

## 5-7 Statement of Qualification Process

### 5-7.1 *Voluntary Submitters Meeting*

After the issuance of the RFQ, WSDOT typically holds a voluntary meeting for potential Submitters that provides information regarding the project and answers questions arising from the RFQ. There is not a set agenda for the meeting, but common topics are:

- Introduction of WSDOT Project Team
- Project Scope
- Project Goals
- Review SOQ Process
- Electronic Submittal Process
- Minority and Women Business Enterprise (MWBE)/SVBE/DBE Networking

The WSDOT Project Team is usually present and introduced. The WSDOT Project Team is available to describe and answer questions on the project scope and goals. The SOQ process is reviewed, including important dates. The Voluntary Submitter's Meeting should elaborate on exactly how the project goals will be scored. The discussion with Submitters regarding the scoring of goals should be the same as will be used with the Evaluation Team.

To the extent that there are goals or participation requirements for MWBE, SVBE or DBE, these are explained. In addition, sometimes there is a networking event set up for Submitters, and the details of the event are announced.

Submitters should be informed that, to the extent that any information in the meeting conflicts with information in the RFQ or any of other procurement documents, the written procurement document will govern. The purpose of this announcement is to encourage the flow of information. Because it is impossible for the people holding the meeting to be certain that the information provided in response to questions is 100 percent accurate, Submitters should be encouraged to refer to the documents in writing as the final word on any issues.

### 5-7.2 *Request for Username and Password*

This process should take place no less than 2 weeks before the SOQ due date. See [Section 5-5.2](#) above for more information on this process.

### 5-7.3 *Request for Qualifications Questions, Clarifications, and Addenda*

The clarification process allows WSDOT to respond to Submitters' questions during the RFQ advertisement period. Submitters may have two types of questions: proprietary (confidential) or general questions. Initial determination of whether a question is general or proprietary can be made by simply asking the Design-Builder if they would object to WSDOT posting their question online. The PE shall employ their professional judgement when considering Design-Builder claims of proprietary questions. If the PE disagrees with the Design-Builder and considers their question to be general (non-proprietary), then

they may choose to not answer the question unless the Design-Builder agrees to allow WSDOT to post it online.

A response to a proprietary question will be sent directly to the Submitter that asked the question. A response to a general question will be posted on the project webpage for all to see. Responses to clarification questions need to be carefully drafted for consistency and ensure fair competition. Clarification responses are meant to clarify the RFQ, but should not be used to materially change the RFQ. Material changes to the RFQ should be modified via the addendum process. All responses to clarification questions need to be approved by the Assistant State Construction Engineer (ASCE).

#### **5-7.4 Request for Qualifications Addenda**

RFQ addenda are generated by clarification questions but can also be generated to modify the contents of the RFQ. Submitters begin preparing SOQs shortly after the RFQ is issued. Changes to the RFQ often have a major impact on SOQs. If a notable addendum needs to be issued less than 2 weeks before the SOQ due date, the PE should consider delaying the SOQ due date. Please notify Contract Ad & Award whenever a change to the SOQ will impact a document submittal date or otherwise require rescheduling of Contract Ad & Award resources.

#### **5-7.5 Receipt of Statement of Qualifications**

Contract Ad & Award receives all SOQs and completes the SOQ review check using the *SOQ Review Checklist*. Contract Ad & Award will compile and distribute the Submitter's List with Single Point of Contact.

#### **5-7.6 Evaluation Process**

The evaluation of SOQs is done by the Evaluation Team. For more information on the evaluation process, see [Chapter 6](#).

##### **5-7.6.1 Short Listing**

The short listing of contractors will take place following the completion and acceptance of the Evaluation Process as described in [Chapter 6](#). The Project Team will provide the short list letter, unsuccessful letter, complete scoring spreadsheet, summary comments for each submitter, detailed scores for each submitter and summary scores with the names of each submitter removed to Contract Ad & Award for review, signing and distribution. Contract Ad & Award and distribute the short list information and scoring to each submitter.

##### **5-7.6.2 Protests**

Contract Ad & Award will receive and respond to any protests.

## 5-8 Request for Proposal Process

### 5-8.1 Voluntary Proposers Meetings

After the issuance of the ITP/RFP, WSDOT typically holds a voluntary meeting for Proposers that provides information regarding the project and answers questions arising from the ITP or RFP. There is not a set agenda for the meeting, but common topics are:

- Introduction of WSDOT Project Team
- Project Scope
- Project Goals
- Electronic Submittal Process
- Review any unique RFP content
- Engineers Estimate/Upset Amount
- Procurement Schedule
- Outstanding ROW
- Supplemental Boring Program
- Alternative Technical Concept (ATC) Process

Typically, there will be very few questions, with the Proposers holding their cards close in this public setting. This is the reason we hold confidential 1:1 meetings.

### 5-8.2 1:1 Meetings

The 1:1 meetings are an effective communications tool during the procurement process. Very important discussion occurs here. These meetings require significant effort by WSDOT and Proposer, but also offer significant value. The WSDOT Project Team should recognize the significant effort required for the 1:1 meeting process when determining staffing levels on DB projects. Consider keeping staff participation small and limit consulting support to ensure the strictest confidentiality.

In general, the following project personnel each have a role during the 1:1 meetings:

1. Point of Contact/PE
  - Quality control responses to formal questions and addenda
  - Solicit Engineering Manager (EM) and ASCE approvals
2. Design Manager/Conceptual Design Lead/Team Leader
  - Write responses to formal questions and addenda
3. Procurement Manager
  - Record/track issues, questions, addenda
  - Resolve 1:1 action items
  - Facilitate coordination with Contract Ad & Award
  - Maintain original and conformed documents
4. Approving Authority – EM/ASCE
  - Review and approve formal questions and addenda

The 1:1 meetings are confidential and conducted individually with each short listed Proposer. WSDOT cannot disclose information about competing Proposers, including their relative standing among the other Proposers. WSDOT cannot disclose any specific pricing that a Proposer must meet.

In 1:1 meetings, Proposers may ask any questions they wish. The meetings are the Proposer's to manage, although WSDOT should track any action items. The Procurement Manager should request that the Proposers send an agenda at least 2 days prior to the meeting to allow WSDOT time to organize subject matter experts to attend the meeting as necessary. The meetings are an appropriate venue for the Procurement Manager to discuss pending addendums, progress on permits or ROW, or any other updates. These updates must be consistent between all the Proposers. Questions may range from evaluation processes, RFP content, scope of work, to what does WSDOT consider a good example of "xyz".

In most DB procurements where the Proposers develop their designs, the owner has very little communication with the proposers and, therefore, the owner has limited opportunity to provide input and guidance regarding the design. WSDOT is unique in the number of 1:1 meetings it conducts with its Proposers. These meetings allow for significant WSDOT input and collaboration into the development of the design. For large projects, the 1:1 meetings are as frequent as once per week, typically lasting from 1 to 2 hours. The Proposers can vet their ideas with WSDOT staff and ask questions to clarify any ambiguities in the RFP.

The development of ATCs requires significant effort. The 1:1 meetings allow Proposers to vet the ATC ideas with WSDOT prior to expending that effort. WSDOT may still reject an ATC once it is developed. The early vetting allows WSDOT to guide Proposers in the right direction and steer Proposers away from ATCs that the WSDOT Project Team knows will not be acceptable.

WSDOT can use the 1:1 meetings to ask Proposers if there is any portion of the RFP that is unnecessarily increasing the cost of the procurement.

WSDOT should respect the Design-Builders' need to wrap up during last 2 weeks, finish estimates, and produce their proposals. We recommend a quiet period during the last weeks with no addenda or no significant addenda. Finally, we recommend when structuring your internal teams, that members of RFP development and 1:1 meetings transition to contract administration to provide continuity.

It is very important that the procurement team respond to questions from each Proposer in a consistent manner. The procurement team should be open and honest about providing information to Proposers to help them better understand project risks, challenges, stakeholder participation, project needs and any other key elements related to making the project a success. Each Proposer should be treated by the procurement team as members of the project team. It is in the best interest of WSDOT to provide open communication to each Proposer to ensure they are able to submit a successful proposal that provides an innovative solution to solving the project needs. The procurement team must respond to Proposer questions and innovative solutions carefully as to not

tip a Proposer that the procurement team has already discussed the issue with another Proposer. Proposers need to evaluate how they intend to market their proposal to meet the RFP and meet or exceed the project goals. WSDOT's expectations or preference must be clearly stated in the RFP. Proposals will be evaluated based on criteria found in the RFP/ITP. See [Chapter 6](#) for additional information.

### 5-8.2.1 Following the Meeting(s)

The PE should recap each 1:1 meeting to determine if there are any action items, make a general assessment as to what items may need an addendum and target a date for the addendum. The PE should also evaluate what resources are needed to process the addendum (technical expertise, etc.). Issues that have the greatest impact to Proposers should be prioritized first, followed by what can reasonably be handled within the period of time available.

### 5-8.3 Request for Proposal Questions, Clarifications, and Addenda

The clarification process allows WSDOT to respond to Proposers' questions during the RFP advertisement period. See [Section 5-7.4](#) of this manual for discussion on general versus proprietary questions. A response to a general question will be posted on the project webpage for all to see. Responses to clarification questions need to be carefully drafted for consistency and ensure fair competition. Clarification responses are meant to clarify the RFP but should not be used to materially change the RFP. Material changes to the RFP should be modified via the addendum process. The Procurement Manager should ensure that the Proposer wants their question to be posted publicly prior to posting the Q&A on the project website. To ensure confidentiality of the content of a proposal, the Procurement Manager should allow each Proposer to ask confidential questions during 1:1 meetings. All responses to clarification questions need to be approved by the ASCE.

#### 5-8.3.1 Questions

Submitting Deadline is "fill in date and time" from RFQ/RFP. Response Deadline is "fill in date and time" from RFQ/RFP. Submitter/Proposer Questions are provided to the Point of Contact in writing. RFQ Section 3.3 outlines the process for Questions, Clarifications, and Addenda and ITP Section 2.3, Section 2.4 and Section 2.5 for Communications, Questions, and Addenda.

- WSDOT should track formal questions (on a spreadsheet or other tool)
- Responses should generally be one of the following:
  - Your question will be addressed by addendum
  - Refer to the RFQ/RFP documents – page/sheet #
  - Submit in accordance with the RFQ/RFP
- Responses may also include clarifying information
- Responses should not change the intent of the RFQ/RFP
- WSDOT can ask the submitting Submitters/Proposers to rephrase their question
- WSDOT can refuse to answer the question



- Do not give partial answers
- WSDOT may submit formal questions
- The EM and ASCE need to concur with the responses prior to posting
- Submitters/Proposers bring their questions for WSDOT to answer – WSDOT does not offer up solutions, suggestions, or opinions
- In general, WSDOT will share the following information
  - Redirect to information posted on the WSDOT website (Contract Ad & Award, and project site) – RFQ, RFP, ITP, fact sheet, conceptual plans or potentially any responses to formal questions
  - Share that detailed technical information is available in the RFQ/RFP/ITP
  - Restate information that was shared at the Voluntary Submitter/Proposers Meeting
- Provide uniform information to each Submitter/Proposer (if at all possible on the same day)
- WSDOT may need to ask if questions are intended to be a formal question (public) – which will be posted to the Contract Ad & Award site along with a response

#### **5-8.4 Request for Proposal Addenda**

RFP addenda are generated by clarification questions but can also be generated to modify the contents of the RFP. Proposers begin preparing proposals shortly after the short list is announced. Changes to the RFP often have a major impact on proposals. If a notable addendum needs to be issued less than 2 weeks before the proposal due date, the PE should consider delaying the proposal due date. Please notify Contract Ad & Award whenever a change to the RFP will impact a document submittal date or otherwise require rescheduling of Contract Ad & Award resources. You must also notify Contract Ad & Award each time a change is made to EBASE that needs to be advanced to the bids module (a change to the Price Proposal).

##### **5-8.4.1 Posting Addenda and Formal Question Process**

- The PE will notify the EM and ASCE of addenda and formal questions as they are identified
- The WSDOT Project Team will assemble documents and review for spelling, grammar, line and section references, etc. a minimum of 1 day prior to posting to Contract Ad & Award
- The PE will review and comment
- After review, the PE will solicit EM and ASCE approval(s)
- Upon EM/ASCE approval, the WSDOT Project Team will provide the PE a conformed document at the conclusion of the addenda process and send documents to the Contract Ad & Award to be posted and distributed.
- The PE will provide the conformed document(s) to Proposers as a courtesy (they are not contractual) after they are posted to the Contract Ad & Award website

### **5-8.5 Receipt of Proposal**

Contract Ad & Award receives all proposals and completes the proposal review using the *Proposal Review Checklist*. See [Chapter 6](#).

### **5-8.6 Proposal Evaluation and Determination of the Apparent Best Value Proposer**

The Evaluation Team performs the evaluation of the proposals. For information on the evaluation process, see [Chapter 6](#).

#### **5-8.6.1 Apparent Best Value Determination**

After the Evaluation Team has completed the Evaluation and secured concurrence from the Executive Team, the Project Team and Contract Ad & Award will prepare for the Best Value Determination. The Project Team will send Contract Ad & Award the full evaluation spreadsheet for use at the public opening. Only the sheet with the calculation showing the best value will be shared publicly. Contract Ad & Award will conduct the public opening of the price proposal and the Best Value Determination on the date specified at the link available on the website. Contract Ad & Award will publicly open the price proposals on camera and read the prices and overall scores and announce the Best Value Proposer, second Best Value Proposer and Third Best Value Proposer.

After the public opening and announcement, Contract Ad & Award will post and distribute the Best Value Determination. Contract Ad & Award will then begin the post-bid opening process which will eventually result in a tabulations of the price proposals being posted and distributed.

#### **5-8.6.2 Protests**

Contract Ad & Award will receive and respond to any protests.

#### **5-8.6.3 Contract Award and Execution**

After the Apparent Best Value Determination has taken place, Contract Ad & Award will clear the Apparent Best Value Proposer for award and begin preparations to award the contract. If additional information is needed of the proposer, Contract Ad & Award will send a request for pre-award information. This would be done in cases where additional information is needed in order to determine that the Apparent Best Value proposer submitted a responsive proposal. When the request has been satisfied by the contractor, award can move forward.

Prior to contract award, the Project Team will need to provide Contract Ad & Award with a list of the agreed-to betterments. It is preferred to verify that the contractor agrees to the betterments identified prior to awarding the contract because once the contract is awarded, it must be executed within 20 days. Contract Ad & Award will conform the Contract Form to the successful proposer and prepare the award documents. Prior to the awarding the contract, the following approvals must be provided:

- Region approval to award
- HQ Construction approval to award

- HQ Bridge approval to award
- HQ CPDM funding approval
- FHWA concurrence (only for select PoDi or PoCi projects)
- Other approvals as needed (Contract Ad & Award will notify you)

After all approvals are secured, Contract Ad & Award will prepare the award documents and award the contract. This begins the 20 day timeline for execution of the contract. The execution documents will be routed by CAPS and upon the return of the completed and compliant documents the contract will be signed and executed by the Deputy State Construction Engineer. At this point, CAPS will issue the Notice to Proceed.

## 5-9 Alternative Technical Concepts

An ATC is a confidential request by a Proposer to modify a contract requirement, specifically for that Proposer, prior to the proposal due date. The Procurement Manager should encourage Proposers to discuss potential ATC concepts early to ensure that time is not wasted pursuing a concept that is fatally flawed, and to allow WSDOT to help ensure Proposers are aware of any potential challenges in getting an ATC approved. ATCs are evaluated for approval or denial by WSDOT within the deadline set forth in the ITP, which is usually set to occur several weeks before the proposal due date. The Proposer may only incorporate unconditionally approved ATCs into a proposal, but they do not have to include an approved ATC in their proposal. Except as noted herein, any contract requirement can generally be subject to consideration for an ATC. To be approved, an ATC must be deemed, in WSDOT's sole discretion, to provide a project that is "equal or better" on an overall basis than the project would be without the proposed ATC. Concepts that simply delete scope, lower performance requirements, lower standards, or reduce contract requirements are not acceptable as ATCs. WSDOT generally allows the ATC process for all DB contracts to promote innovation, find the best solutions, and to maintain flexibility in the procurement process.

### 5-9.1 Submittal

To allow sufficient time for review, all proposed ATCs must be submitted to WSDOT no later than the time specified in the ITP. This deadline applies to both initial submissions and revised submissions in response to WSDOT's comments.

Each ATC submittal package shall address the elements required by the ITP. Each of the elements are intended to facilitate one of the following purposes:

1. Help WSDOT understand what is being proposed
2. Help WSDOT understand specifically what changes to the RFP are being requested
3. Establish a firm commitment from the Design-Builder to implement the requested changes
4. Help WSDOT determine whether or not the ATC will provide a project that is "equal or better" on an overall basis to what the project would be without the proposed ATC

At no time during the ATC submittal and review process shall the Proposer disclose any pricing information related to the ATC, including but not limited to, estimated increases or decreases to the Proposer's Price Proposal, if any.

Absent permission from WSDOT, once an ATC is discussed with or submitted to WSDOT, the ATC shall not be disclosed to third parties including other Proposers, and to the extent permitted by law, shall remain confidential until after contract award. WSDOT's permission to the Proposer prior to the Proposer disclosing ATC information to third parties (such as other governmental agencies that may have an interest in the ATC) is required in order to allow WSDOT to review and either approve or disapprove the ATC.

## 5-9.2 Review

Incomplete ATC submittal packages may be returned to the Proposer without review or comment. WSDOT may, in its sole discretion, request additional information regarding a proposed ATC. WSDOT may, in its sole discretion, deny any ATC. ATCs that do not meet the "equal or better" standard shall be rejected. ATCs that would require excessive time or cost for WSDOT to review, evaluate, or investigate will not be considered.

WSDOT will not consider contract cost savings in the "equal or better" determination. This is because (1) doing so could create an unlevel playing field where all Proposers are not bidding on an equivalent project, and (2) there is no way of identifying whether the suggested price benefit actually materialized in the proposal documents.

All discussions with Proposers regarding ATCs and information contained in an ATC submittal will remain confidential. Due to the confidential nature of ATCs and the need to respond in a timely manner, the WSDOT Project Manager shall minimize the number of staff involved in the ATC review process. When technical issues and questions arise that are outside the WSDOT Project Team's expertise, HQ Construction should be consulted. All staff that are to be involved in the review shall sign a confidentiality agreement before beginning the review.

WSDOT shall refrain at all times during the ATC submittal review process, including 1:1 meetings, from indicating in any manner to a Proposer that a particular ATC would favorably or unfavorably affect the Proposers technical score. To do so can not only short circuit the proposal evaluation process, but it can also interject the owner's bias into the proposal process. When measured in terms of the competitive process, this could provide advantages to a single Proposer to the detriment of the remaining Proposers. The Proposer should be advised that, if approved, the ATC will be evaluated in accordance with the ITP.

Design analyses, as described in the WSDOT [Design Manual](#) M 22-01, are not categorically prohibited from consideration in an ATC. In addition, design analyses that are approved for inclusion into an ATC shall not be disclosed to other Proposers until such time as the contract is executed and WSDOT takes full ownership and control of the unsuccessful proposals, which includes the design analysis. Any question that may arise regarding conducting an "apples to apples" comparison of proposals is resolved by requiring the ATC to meet the "equal or better" standard.

The policy notwithstanding, owing to the nature of design analyses, which in and of themselves tend to lower the functionality of the project, meeting the “equal or better” standard will be difficult.

Matters that are specifically not eligible for approval as an ATC include the following:

1. Concepts that are not deemed, in WSDOT’s sole discretion, to meet the “equal or better” criteria (as stated above, concepts that simply delete scope, lower performance requirements, lower standards, or reduce contract requirements are not acceptable as ATCs). When making this determination, consider the project as a whole. Ask the following question: “Is the project with this ATC ‘equal or better’ than the project without the ATC?”
2. Any change that would require excessive time or cost for WSDOT review, evaluation, or investigation

WSDOT reserves the right in its sole discretion to reject any ATC.

### **5-9.3 WSDOT Response**

WSDOT will respond to each Proposer within the timeframe stipulated in the ITP. The WSDOT Project Manager shall obtain written approval from the State Construction Engineer or his delegate, and Federal Highway Administration (FHWA) concurrence as appropriate on Federal oversight contracts, prior to providing a final response to an ATC. The format for the response should include the ATC number, brief description, and shall be limited to one of the designated responses provided in the ITP.

### **5-9.4 Incorporating Alternative Technical Concepts into the Proposal**

A Proposer has the option to include any or all unconditionally approved ATCs in its proposal and the proposal price should reflect such incorporated ATCs. If WSDOT returned an ATC stating that certain conditions must be met prior to granting approval, the Proposer must satisfy the stated conditions and obtain WSDOT’s unconditional approval of the ATC prior to incorporating the ATC in the proposal. Except for approved ATCs, the proposal shall not otherwise contain exceptions to or variations from the requirements of the RFP.

WSDOT will not advise Proposers on whether or not to include ATCs in their proposals in that such a practice can lead to claims of favoritism thereby resulting in an increased likelihood of a bid protest.

### **5-9.5 Evaluating Alternative Technical Concepts in the Proposal**

To avoid potential conflicts and ensure the objectivity of the evaluation process, WSDOT employees or consultants that participate in pre-proposal 1:1 meetings with Proposers shall not participate in the evaluation of the proposals.

Once an approved ATC is included in a proposal, it is the responsibility of the Evaluation Team to determine how the ATC fits within the evaluation criteria. Technical scoring shall be the sole province of the Evaluation Team and shall be based solely on the scoring criteria in the ITP.

### 5-9.6 *WSDOT Use of Concepts Contained in an Alternative Technical Concept*

By submitting a proposal in compliance with the ITP, all unsuccessful Proposers acknowledge that upon payment of the designated stipend, all ATC incorporated into a proposal, shall become the property of WSDOT without restriction on use.

## 5-10 Security and Confidentiality

### 5-10.1 *Confidentiality and Non-Disclosure Agreement and No-Conflicts of Interest Affidavit*

The most important pieces of the DB procurement process are confidentiality and impartiality. Whether it be development of the RFQ (such as project goals), the RFP (elements of the conceptual plans), or the actual evaluations of SOQs and proposals, confidentiality and impartiality are of utmost importance. This is to ensure that no DB Teams submitting SOQs and proposals could have an unfair advantage by obtaining “inside information” about the proposed project that other firms would not have access to or by receiving an evaluation tainted by conflicts of interest.

At the Evaluation Kick-Off Meeting, prior to the start of the evaluation, the Facilitator will inform the Evaluation Team, and all others present in the evaluation room, of the importance of confidentiality safeguards. The Facilitator will verify the submission of a *Confidentiality and Non-Disclosure Agreement* (Appendix X) and a *No-Conflict of Interest Affidavit* (Appendix X) from each Evaluation Team member.

The Management Team will resolve indications of real, apparent, perceived, or possible conflicts of interest. If a conflict cannot be resolved, the individual involved will be removed from the evaluation process. The submissions of the *Confidentiality and Non-Disclosure Agreements* and *No Conflict of Interest Affidavits* to the Facilitator will become part of the evaluation record. After the Evaluation Kick-Off Meeting, all individuals involved in the evaluation process will be responsible for maintaining confidentiality.

#### 5-10.1.1 (RFQ) Voluntary Submitters/Proposers Meeting:

The Voluntary Submitters Meeting really has no expectation of confidentiality. Clarifications or questions answered (unless trivial, at the PE’s discretion) would typically be published on the project website.

See [Chapter 6](#) for additional information.

#### 5-10.1.2 (RFP) One on One Meetings:

Unlike the Voluntary Submitters Meeting, the discussions and content of the 1:1 meetings are highly confidential. For details on these 1:1 meetings, see [Chapter 6](#) for additional information.

### **5-10.2 Security of Work Area**

The Facilitator will secure a private meeting room for all group reviews, evaluations, and discussions pertaining to the evaluation. Only the Evaluation Team will be authorized admittance to this area. For details on Security of Work Area. See [Chapter 6](#) for additional information.

### **5-10.3 Documentation Control**

Authorized personnel should directly control and keep secured all SOQ and proposal evaluation documentation at the end of each day. Adherence to the procedures in this manual as it relates to safeguarding and storing of confidential documentation is of utmost importance. Do not store computer files on drives accessible to others. All computer-generated data will be securely stored on drives accessible only to those on the Evaluation Team or the individual Evaluation Team member (such as personal drives).

At the conclusion of the evaluation process, the Evaluation Team will not retain any part of the SOQs or proposals. All work must remain in the project specific evaluation file, clear of any notations or markings by the Evaluation Team. Remember it is the intent of WSDOT to remain paperless during this process.

### **5-10.4 Information Release**

No information regarding the contents of the SOQs/proposals, members of the Evaluation Team, deliberations by the Evaluation Team, or other information relating to the evaluation process shall be released (except to authorized persons) or publicly disclosed without WSDOT executive authorization. It is particularly important that any information designated as “proprietary or confidential” by any Proposer be carefully guarded to avoid its inadvertent release.

## **5-11 Roles and Responsibilities**

### **5-11.1 Responsibilities of the Contract Ad & Award Office**

See [Chapter 6](#) for the roles and responsibilities of the Project Management Team.

### **5-11.2 Project Management Team**

See [Chapter 6](#) for the roles and responsibilities of the Project Management Team.

### **5-11.3 Region Executive Team**

See [Chapter 6](#) for the roles and responsibilities of the Region Executive Team.

#### **5-11.4 Headquarters Executive Team**

The HQ Executive Team consists of the Assistant Secretary for Regional and Mega Programs/Chief Engineer, the Assistant Secretary for Multimodal Development & Delivery, the Director of Construction/State Construction Engineer, and the Deputy State Construction Engineer. If appropriate, consider including the State Design Engineer, Environmental Services Office (ESO), and Office of Equal Opportunity (OEO) to the above list of participants.

#### **5-11.5 WSDOT Project Engineer**

The WSDOT PE is responsible for ensuring the timely progress of the evaluation and coordinating any consensus meetings or re-evaluations. To the extent that the WSDOT PE determines it appropriate, the WSDOT PE may deviate from any procedure as prescribed herein as long as said deviations do not otherwise constitute a violation of applicable law. Any such deviation must be documented and addressed in the presentation to the Management Team. The WSDOT PE is Responsible for scheduling oral debriefing sessions with the Submitters/Proposers (in accordance with the ITP). The WSDOT PE selects the Evaluators. If an Evaluation Team member is unable to complete their evaluation responsibilities to the extent the WSDOT PE determines necessary, or if additional Evaluators or Technical Advisors are necessary to evaluate the Technical Proposals more completely, the WSDOT PE will take the required steps necessary to arrange for substitution or supplementation of evaluation personnel.

The WSDOT PE will facilitate the participation of Observers, as may be necessary during the course of the evaluation process.

#### **5-11.6 Technical Point of Contact**

A Technical Point of Contact is identified to Submitters/Proposers in the RFQ and the RFP documents. The Technical Point of Contact is available for questions and clarifications during the processes. Often this role is filled by the WSDOT PE. The Technical Point of Contact cannot be an Evaluator.

#### **5-11.7 Assistant State Construction Engineer**

The ASCE provides HQ oversight of the entire procurement process, including:

- Provides input on goal setting, scoring, and development of the RFQ, participates in the Voluntary Submitters Meeting, and the SOQ Evaluations as the HQ Observer. Reviews and approves the RFQ prior to advertisement.
- Provides input on the development of the RFP and Information to Proposers (ITP), scoring, participates in the 1:1 meetings, and the proposal evaluations as the HQ Observer. Reviews and approves the ITP/RFP prior to advertisement. Reviews Q&A and addendums prior to posting.
- After the apparent best value Proposer is announced, continues oversight of the award and contract administration of the project.



### 5-11.8 **Procurement Support/ Request for Qualifications /Request for Proposal Coordinator**

- Responsible for ensuring the timely progress of the evaluation
- Responsible for scheduling oral debriefing sessions with the Submitters/Proposers (in accordance with the ITP).
- The PE works with region leadership to select Evaluators and an alternate, in the event of an Evaluator being unable to complete their evaluation responsibilities.
- Scheduling Technical Advisors necessary to evaluate the Technical Proposals
- The WSDOT PE will facilitate the participation of Observers, as may be necessary during the course of the evaluation process.

For more information on Roles and Responsibilities, see [Chapter 6](#).

## 5-12 **Design-Build Delivery Interface with Other Processes**

DB delivery is unique in the way in which it interfaces with many processes that are integral parts of WSDOT transportation projects. Primary among those are environmental processes, FHWA processes and WSDOT internal administrative processes. This section identifies key elements of interfaces between those three processes and DB delivery, primarily through the use of flowcharts.

### 5-12.1 **Environmental Processes**

Environmental interface is important throughout the development and execution of DB delivery. Most all significant transportation projects include elements of risk associated with the environmental conditions. As a result, environmental conditions play a role in the selection of the appropriate method of delivery, the initial project development, the development of the RFP, the procurement process, and ultimately the implementation of the project.

Federal regulations establish the parameters by which State departments of transportation may deliver projects using DB ([23 CFR Part 636](#)). For environmental aspects of the regulation, see [Chapter 1](#). Per guidance from FHWA, WSDOT has established a standard of practice that typically includes the issuance of an RFP on DB projects after the National Environmental Policy Act (NEPA) process has been completed and a decision document has been signed. Exceptions to this practice should be carefully considered.

If the NEPA process has not been completed prior to the issuance of an RFP, the solicitation document must include a notification of the status of the NEPA review and a statement that no commitments are to be made to any of the NEPA alternatives currently under consideration, including the no-build alternative. WSDOT must receive prior FHWA concurrence before issuing the RFP, per [23 CFR 636.109](#).

When a specific DB project is developed within the limits of a previously completed NEPA decision document, it is not uncommon for the design development of the project to vary somewhat from the preferred alternative of the NEPA decision document. In those

instances, it may be determined that a formal environmental reevaluation needs to be completed prior to the issuance of the RFP to determine the requirements for the final NEPA approvals. When an environmental reevaluation is necessary, its processes must be carefully determined and integrated into the design development procurement schedule for the project as it can often dictate the critical path of the project schedule.

It is not uncommon for Design-Builders to develop designs that are not fully consistent with the final NEPA decision documents, usually as a result of ATCs. If the Design-Builder designs or constructs the project in such a way that causes different impacts to the environment or surrounding communities, additional NEPA/State Environmental Policy Act (SEPA) documentation may be required. If required, the Design-Builder shall be responsible for providing additional information/data necessary to support WSDOT's NEPA/SEPA analysis. In addition, the Design-Builder shall pay all costs and accept all responsibility for any schedule delays associated with updating or securing the additional environmental approvals. WSDOT will coordinate with all applicable agencies as part of any environmental documentation process.

In situations where the NEPA process had not been completed prior to the award of a DB contract, the Design-Builder's specific responsibilities concerning NEPA approvals and associated environmental permitting processes must be clearly defined in the RFP and contract documents. The process requires the Design-Builder to closely coordinate with WSDOT. The DB contract must include termination provisions in the event that the no-build alternative is selected. The DB contract must also include appropriate provisions preventing the Design-Builder from proceeding with final design activities and physical construction prior to the completion of the NEPA process (WSDOT uses a two phase Notice to Proceed to comply with this requirement).

### 5-12.2 **Federal Highway Administration Processes**

Although not all WSDOT DB projects include Federal funding, the interface with DB projects and the FHWA is an important component of the delivery method. WSDOT and FHWA have jointly developed the *Washington State Department of Transportation Federal-Aid Highway Program Stewardship and Oversight Agreement*, which defines how they will work together to provide project and program oversight.

For more information on FHWA processes, see [Chapter 10](#).

## 5-13 **Debriefs**

The debrief process is a valuable part of WSDOT's DB program. The debrief process consists to two basic parts: debriefing internally with the Management, Region, and HQ Executive Teams, and externally with the Submitters/Proposers. WSDOT continues to improve its DB Program and the debrief process is one way WSDOT gathers input on how we can improve and WSDOT shares input on how the Submitters/Proposers can improve.

The internal debrief process is used to gain concurrence on the Evaluation Team's score and assessment of the SOQs and proposals.

The external debrief process is a coordinated effort with our industry partners. Our industry partners have continued to say that they appreciate the feedback, positive and negative, and value the transparency that WSDOT creates by holding these meetings and that we incorporate them into our DB procurement process.

The debrief process is integral to, and a continuation of, WSDOT's SOQ and proposal evaluation and scoring efforts. The Information that we discuss comes directly from the SOQ and proposal evaluation as well as the procurement documents.

### **5-13.1 Evaluation – Key Points**

The input on the evaluation and scoring forms comes directly from the Evaluation Team. The Evaluation Team should be encouraged to provide feedback to the Submitters/Proposers about their SOQ/proposal content, how the information was presented, did they address the contractual requirements (how were project goals addressed), was the SOQ/proposal clearly written, etc. This information is critical to both the internal and external debriefs to demonstrate that the evaluation process for fair, consistent, and followed WSDOT's processes.

Strong SOQs/proposals assume that the Evaluation Team is not familiar to WSDOT.

SOQs/proposals should stand-alone, be complete, and not leave questions for the Evaluators to make assumptions on what the Submitter/Proposer meant.

SOQs/proposals should tell the readers how their experience or approach relates to the project goals. The Evaluation Team should not have to make assumptions or rely on their own experience.

The Evaluation Team should provide thoughtful comments. The Evaluation Team should present these comments in a positive way. The Facilitator should be helping the Evaluation Team to record this feedback on the scoring spreadsheets.

The Evaluation Team should make sure their comments support the score that has been chosen for each section. The supporting information should be reviewed at all levels of WSDOT and revised as needed to make sure the written comments support the score. It may require being more specific in a comment and indicating why the Evaluation Team determined this score was appropriate.

### **5-13.2 Incorporating Reference Feedback**

Reference checks are an important and integrated piece of the evaluation process. Reference reviews should be consistent and should be a group effort. How to incorporate reference feedback:

1. Never use reference names in a comment
2. An appropriate comment might read like – “Reference checks support an evaluation in the Excellent” range”; or, “Reference checks indicated that the WSDOT Project Manager did not collaborate well to solve contract issues”
3. Other references than those listed may be used. If asked, we should tell the Submitter that other references were contacted.

### 5-13.3 *Incorporating Statement of Qualifications and Proposal Comments*

When possible be specific and incorporate page and figure references. This information will help the teams relate to specific issues or items of work.

The comments should be related to what WSDOT is asking for in the RFQ or ITP. The comments should support the score that is shown and provide documentation from the proposals.

### 5-13.4 *Getting Ready for Debrief Sessions*

#### 5-13.4.1 **General Items**

The comment sheets should be reviewed and proofread to ensure there are no typos, no grammatical errors, there are no personal or derogatory comments, there are no personal opinions, and that all comments comply with the terms of the contract.

#### 5-13.4.2 **Internal Debriefs**

Determine who the WSDOT representatives will be. The WSDOT Project Team will select whom they want to present the evaluation results. It is important that the person(s) presenting have knowledge of the contract and evaluation process. These debrief meetings are fairly short, typically no longer than a half-hour and are supported by previously distributed evaluation material and scoring results. Due to the DB paperless process, paper handout should not be used. For an in person meeting, you should have a presentation. If for any reason handouts are provided in hard copy, collect and destroy them.

These debrief meetings will need to be scheduled several months in advance with WSDOT executives and in time to support the overall project schedule. The WSDOT Project Team needs to determine whether or not to hold these debriefs in person; an in person meeting is not necessary. The Evaluation Team should be invited and encouraged to provide the support as well.

All HQ staff listed below should receive an invitation to the debrief meeting. The **bolded** titles in the list are considered the core meeting group, so the date and time of the meeting should be determined based on those individuals' schedule.

- **Assistant Secretary Regions and Mega Programs,**
- **Assistant Secretary of Urban Mobility & Access**
- **Deputy Assistant Secretary Mega Projects**
- **Deputy Assistant Secretary Multimodal Development and Delivery**
- **State Construction Engineer (Director of Construction Division)**
- **Deputy State Construction Engineer**
- Lead Construction Engineer, Projects
- Lead Construction Engineer, Administration
- ASCE supporting the project

- State Design-Build Program Manager
- State Design-Build Engineer
- Procurement Manager/PE/Point of Contact

During the Internal Debrief Meeting:

- Agenda
- It is strongly encouraged that practice sessions be used to prepare the presenter for these debrief sessions. Each WSDOT Project Team will need to make their own decision on how they will get prepared to present to Region and HQ Executive Teams.
- Never compare one proposal to another, one Proposer to another, or one key person to another
- You are not defending the Evaluation Team's score. That is not the purpose of the meeting.
- You need to be prepared to describe the process and why the Evaluation Team scored the way that they did. The assumption is that the Evaluation Team reached agreement on the scores and that the process was fair and consistent.

### 5-13.5 External Debriefs

For the RFQ, Contract Ad & Award will email each successful Submitter an "Invitation to Submit Proposal" notification and include their scoring summary and summarized Evaluator comments of their SOQ. Submitters who did not make the short list are notified that they did not make the short list and are sent their scoring summary and summarized Evaluator comments of their SOQ.

For the RFP, within 7 calendar days after the announcement of Apparent Best Value Proposer, WSDOT will email each Proposer the scoring summary and summarized Evaluator comments of their proposal.

PE's Office should determine who the WSDOT representatives will be. There should always be two WSDOT staff in the meeting. It is highly recommended that one person be someone who was a member of the Evaluation Team and one at a management level that can speak to policy issues if needed. It is suggested that at least one person be at EM level or above.

Be prepared to schedule debriefs as quickly as possible after protest period is complete ([Exhibit 5-2](#)). Suggest allowing for a least one hour. This length of time should provide the opportunity for a good conversation and to answer any questions the Submitters/Proposers may have.

Please note that the amount/type of information provided is different for internal and external debriefs.

Do have the summary scores for all Submitters. This information is OK to share. It is not appropriate to share Submitter's name with their scores. Make sure have available the SOQ or proposal for that specific Submitter/Proposer. During the External Debrief Meeting:

- Remember you are providing feedback to Submitters/Proposers that reflects on their hard work. Feedback should be presented in a positive manner that will help lead them to lessons learned and to make improvements on their next submittals, whether they are the successful team or not
- See [list of prompt questions](#) to help get prepared
- Never indicate who the Evaluators or references were
- Never compare one proposal to another, one team to another, or one key person to another
- You are not defending the Evaluation Team's score. That is not the purpose of the meeting.
- You need to be prepared to describe the process and why the Evaluation Team scored the way that they did. The Evaluation Team reached agreement on the scores and that the process was fair and consistent.
- You should prepare a short agenda to help guide the meeting – suggested topics might include:
  1. Introductions
  2. Safety Briefing
  3. Hand out the comment forms and allow time to review
  4. Overall assessment of the Submitter or Proposer and where they scored (this is your chance to summarize the Evaluation Team's comments)
  5. Highlight several key areas from evaluations – positive and negative
  6. Open discussion or dialog
- Remember the debrief meetings are for the Submitters or Proposers so the meeting should really be managed so that they get what they need
- Never offer an opinion about your thoughts about the strengths or weaknesses of a particular teaming partner

### 5-13.6 Summary or Closing

Thank the Submitter or Proposer for their interest and participation and encourage them to submit on future WSDOT DB projects.

Let them know about any upcoming work and encourage them to stay engaged with WSDOT. Let them know about ways to get involved or to stay in touch:

- Project/program webpages
- HQ DB office and their resources
- WSDOT/AGC/ACEC Committees
- Offer follow up meetings as needed

## 6-1 Introduction

This chapter provides the methodology and procedures for evaluation of Statements of Qualifications (SOQs) received in response to the Request for Qualifications (RFQ) and proposals received in response to Request for Proposal (RFP). The purpose of this chapter is to provide guidance to ensure the impartial, equitable, and comprehensive evaluation of each SOQ and proposal, in accordance with the RFQ and RFP requirements.

### 6-1.1 Transparency

It is imperative for all the parties involved in a design-build project that the evaluation process be fair, equitable, and transparent. The evaluation process should clearly communicate how WSDOT establishes the short list from the SOQs and how WSDOT determines the Proposer's technical score.

The following list of recommendations should be followed:

- Clearly state the evaluation criteria and score/technical credits given for each item related to identified project goals and ensure that the Evaluation Team understands them.
- Clearly state the requirements of the RFQ and RFP including what will be considered a non-responsive submittal.
- Clearly state the requirements of the RFQ and RFP including what will be considered a strength, weaknesses, and neutral response.
- Do not seek from Proposers the number or dollar amount of changes on past projects constructed by them.
- In the proposal phase, give equal opportunity for each short-listed Submitter to converse with representatives of the WSDOT project team to clarify their proposal and any of the requirements of the RFP.
- Provide debriefs for the industry following the announcement of the short listed Submitters and the Apparent Best Value Proposed team. For more information on both internal and external debriefs reference [Chapter 5](#).

This list is based on several cases in alternative contracting methods for public works projects nationwide where the award was successfully protested because the evaluation plan was unclear and overly subjective. Award protests and their subsequent project delays are avoidable if the agency invests the upfront resources necessary to develop a fair, equitable, and, perhaps most importantly, transparent evaluation process with which to select the best apparent value from among several competing proposals.

### 6-1.2 Scoring Systems

WSDOT uses both an adjectival and numerical evaluation and scoring methodology for design-build projects as a key part of its reproducible scoring process. If a project team requests to use an alternative to this methodology, it must gain approval from the Assistant State Construction Engineer (ASCE) before proceeding. The adjectival rating methodology is described in other Sections of this chapter.

### 6-1.3 Evaluation Methods

WSDOT has two evaluation methods. The first evaluation method requires each Evaluation Team member to use the Qualitative Evaluation Form to record Strengths and Weakness and individual comments. The second evaluation method uses the SOQ or Proposal PDF to identify Strengths and Weakness and record individual evaluation comments within the PDF.

If the comment in the RFF method is used, the Facilitator must:

- Ensure each evaluator has two full-sized monitors.
- Ensure each evaluator has Adobe Acrobat Pro DC
- Assign highlight color to each evaluator
- Show how to use Adobe DC “Highlight” tool to highlight strengths and weaknesses and comment in their Proposal PDF.
- States the comment format is “Goal <dash> Comment and Justification <period> strength or weakness value in accordance with Exhibit 6-3 Strengths and Weaknesses Assessment Table”
- If this comment identifies a Betterment the format should include the capital letter “B” at the end of the format.

Both method must use the Qualitative Evaluation Form to record the final comments and scores. The Qualitative Evaluation Form is the official evaluation record.

### 6-1.4 Confidentiality and Non-Disclosure Agreement (Agreement), and No-Conflicts of Interest Affidavit (Affidavit)

Prior to the start of the SOQ and RFP evaluation, at or before the evaluation kick-off meeting, the Facilitator will inform the Evaluation Team of the importance of confidentiality safeguards. Refer to the WSDOT [Organizational Conflicts of Interest Manual M 3043](#) for guidance on confidentiality and non-disclosure requirements and non-conflicts of interest affidavits.

The Project Management Team will mitigate indications of real, apparent, or perceived conflicts of interest. If a conflict cannot be mitigated, the individual involved will be removed from the evaluation process. The submissions of the Agreements and Affidavits to the Facilitator from the evaluation team will become part of the evaluation record. After the evaluation kick-off meeting, all individuals involved in the evaluation process will be responsible for maintaining confidentiality.



### **6-1.5 Information Release**

No information regarding the contents of the SOQs/Proposals, Evaluation Team member identities (including Technical Advisors), deliberations by the Evaluation Team, or other information relating to the evaluation process shall be released (except to authorized persons) or publicly disclosed unless otherwise provided for by statute or regulation. It is particularly important that any information designated as “proprietary or confidential” by any Proposer be carefully guarded to avoid its inadvertent release.

### **6-1.6 Security of Work Area**

The Facilitator will secure a private meeting room or virtual workspace that can be locked and secured for all group reviews, evaluations, and discussions pertaining to the evaluation (e.g., covering windows). Only the Evaluation Team and personnel approved by the Project Engineer, will be authorized admittance or access to this area or media platform. The Facilitator must provide justification to the Project Engineer for additions to the Evaluation Team. If a situation arises that requires an individual who is not an Evaluation Team member to enter the evaluation area or invited to collaborate via the virtual media platform, discussions will discontinue and all records must be properly stored or safeguarded. This safeguard is to remain in effect until the individual has departed the work area. The Facilitator must ensure that the identity of the evaluators is kept confidential.

The Evaluation Team will ensure their evaluation is done in secure private location. For virtual meetings, attendees shall ensure that their work area is private so that confidentiality can be maintained.

### **6-1.7 Documentation Control**

Depending upon the phase of evaluation, the Facilitator will give access to a secure, permission-restricted location to each Evaluation Team member so they can evaluate each SOQ or Proposal. For no reason should the SOQ or Proposal be printed or emailed. During independent evaluation of SOQs, proposals, and evaluation materials, each Evaluation Team member will maintain and ensure confidentiality by securing all of the materials under his/her direct control from others not associated with the Evaluation Team. All materials must be saved in a designated, secure, permission restricted, location.

During group evaluations, the Facilitator should directly control and secure all documentation at the end of each day. Adherence to the procedures in this chapter as it relates to safeguarding and storing of confidential documentation is of utmost importance. Do not store computer files on drives accessible to others. All materials must be saved in a designated, secure, permission restricted, location accessible only to those on the Evaluation Team.

At the conclusion of each evaluation process, the Evaluation Team will not retain any draft or any part of the SOQ or Proposal evaluation materials. All work must be retained in the project specific evaluation file. The Evaluation Team can make marks, or comments on their individual electronic copies of SOQs/proposals.

### 6-1.8 **Potential Evaluators List**

This list in the Design-Build Resources folder on the Design-Build Program's SharePoint site provides names of potential evaluators. This list is searchable by region, name, title, training, experience as an unofficial observer, and experience as a past evaluator. All evaluators should be an Assistant Project Engineers or above. Every evaluator should complete both SOQ Evaluation and Proposal Evaluation Trainings. Best practice is to have at least one of the evaluators have previous experience as an unofficial observer or an evaluator on a previous design-build project. This list will assist in narrowing down potential evaluators.

## 6-2 **Roles and Responsibilities**

The SOQ and Proposal Evaluation Team members include a Facilitator, Evaluators, Technical Advisors, and an Observer. The following are the general roles and responsibilities for the Evaluation Team during the both the SOQ and proposal evaluation phase:

### 6-2.1 **Facilitator**

The Facilitator may be the Project Engineer or Procurement Specialist. Titles may vary by region.

- Ensures that procedures as prescribed in this manual are followed
- Coordinates with the Project Engineer to determine who will be Evaluation Team members, inclusive of Technical Advisors and Observers
- Develops evaluation schedule
- Provides CAA list of Evaluation Team members for access to the secure Book11, *Evaluations* in the ECM
- Coordinates with the Information Technology Division (ITD) access restricted folders created for confidential information
- Determine the evaluation method to use
- Develops the Qualitative Evaluation Form
- Ensures Evaluation Team is trained on evaluation method
- Ensure Evaluation Team has the necessary equipment and software to use the desire evaluation method
- Schedules and facilitates the evaluation kick-off meeting, evaluations, and debrief meetings with the Project Management, Region Executive, and HQ Executive Teams
- Schedules reference phone calls and invites Technical Advisors, as necessary, for team evaluations.
- Provides a list of each Submitter's team members (Key Personnel and Major Participants) to the Evaluation Team
- Ensures each Evaluation Team member completes a *Confidentiality and Non-Disclosure Agreement* and a *No-Conflicts of Interest Affidavit*.

- Collects and records the Agreement and Affidavit on a simple tracking list. This list is needed to support the Proposers' one-on-one meetings confidentiality. The list is created at the start of the project and supports additions as other reviewers and executives are included in the project. The benefit of the list is that it reminds the Facilitator to ensure they have a conversation with each new person added and to reinforce the need for confidentiality and that no outside conversations or reviews can occur.
- Serves as a point of contact if an Evaluation Team member has questions or encounters problems relative to the evaluations
- Ensures the timely progress of the evaluation and coordinates any consensus meetings or re-evaluations
- Identifies backup Evaluators or Technical Advisors as necessary to evaluate the SOQs or proposals
- Requests approval from the ASCE regarding any deviations from the procedures prescribed in this chapter
- Schedule internal debriefs with Project Management, Region Executive, and HQ Executive Teams
- Summarizes the final evaluation comments and technical scores in the *Qualitative Evaluation Form*
- Presents the evaluation summary to the Project Management, Region Executive, and HQ Executive Teams at the internal debriefs
- Coordinates with Contract Ad & Award Office (CAA)
- Prepares [Apparent Best Value Determination spreadsheet](#) and submits it to CAA
- Maintains all evaluation records
- Provides the Qualitative Evaluation Form to CAA
- Provides to CAA anonymous total scores of each Submitter/Proposer
- Schedules external debriefing sessions with the Proposers (in accordance with the Instructions to Proposers (ITP))
- Protect the identities of the Evaluators

## 6-2.2 Evaluators

Evaluators should be the same individuals for both the SOQ and the Proposal evaluation phases. There are usually three Evaluators, consisting of individuals in the position of Assistant Project Engineer, Project Engineer, or Engineering Manager. The individuals who serve as Evaluators should have a broad range of experience in both design and construction.

Typically, one of the Evaluators is familiar with the project and the other two Evaluators are from outside the WSDOT Project Team. In addition, one Evaluator is typically from outside the Region.

The Technical Point of Contact identified in the RFQ/RFP is prohibited from being an Evaluator.

- Completes and executes a *Confidentiality and Non-Disclosure Agreement* and a *No-Conflicts of Interest Affidavit* and submits completed and executed forms to the Facilitator
- Takes all required trainings
- Accepts meeting requests and commits ample time to evaluate both the SOQs and the Proposals – both for individual review and evaluation time and for group evaluation and scoring
- Reviews the *Qualitative Evaluation Forms*, RFQ, ITP, and any RFP Technical Requirements sections and appendices related to the submittal requirements as provided by the Facilitator
- Evaluates individually the SOQs and Proposals, recording evaluation comments on the *Qualitative Evaluation Form (or alternative method as instructed by the Facilitator)*, and assessing strengths and weaknesses of each provided comment compared to the technical criteria elements and goals outlined in the RFQ and RFP.
- Documents the reasons for strengths and weaknesses. Comments must be specific and not generalized. Section references will be included with the provided comment to support an assessment.
- Identifies questions regarding any Technical Requirements that require a Technical Advisor response and communicates this need to the Facilitator. The questions and subsequent responses shall be coordinated through the Facilitator and shared in an ‘open forum’ where all the Evaluators are present. This can be done via an email, teleconference, MS Teams (or equivalent), or waiting until the in-the-room evaluation meeting.
- Works with other Evaluators and Facilitator to combine similar comments and delete irrelevant comments. Deliberates on and reach consensus on each comment, strength/weakness assessment, and determination of numerical scores.
- As an Evaluation Team member, meets with each Technical Advisor in the proposal evaluation phase to receive input and recommendations to develop adjectival ratings for each Technical Proposal section.
  - Upon completion of the discussion with the Technical Advisors, the Evaluators agree on an adjectival rating and numerical score for each Technical Proposal section using the adjectival systems described in the ITP.
- May participate in meetings with the Project Management, Region Executive, and HQ Executive Teams to review the scoring of both evaluation phases.

### 6-2.3 *Technical Advisor*

Technical Advisors may be used during the evaluation of both the SOQs and the proposals.

- Reviews the RFQ RFP, ITP, and any Technical Requirements sections related to the proposal evaluation
- Reviews specific technical sections of the proposal, using the directed evaluation method recording individual comments, and assessing strengths and weaknesses of each technical criteria element. Reasons for strengths and weaknesses will be thoroughly documented and comments will be specific and not a generalization. Proposal section references will be included to support each assessment.
- Presents their recommendations and supporting logic to Evaluators at a scheduled proposal evaluation meeting.
- Responds to questions from the Evaluation Team (via the Facilitator) during the SOQ and Proposal evaluation periods.

### 6-2.4 *Office of Equal Opportunity Technical Advisor*

The Office of Equal Opportunity (OEO) has responsibility for ensuring that Federal and State civil rights program requirements are being met per Federal and State laws and statutes. Inclusive of the programs are Title VI, Disadvantaged Business Enterprise (DBE), Americans with Disabilities Act (ADA) and Equal Employment Opportunity (EEO) Compliance. For Federal-aid projects, OEO will review all submitted DBE performance plans in accordance with the following process:

- Project Facilitator notifies HQ OEO that DBE Performance Plan reviews are required.
- HQ OEO will assign the reviews to OEO region personnel.
- Region OEO personnel sign Confidentiality and Non-Disclosure Agreement and a No-Conflicts of Interest Affidavit.
- Project Facilitator provides DBE Performance Plans to Region OEO personnel.
- Region OEO personnel review the RFP sections related to the Proposal evaluation (specifically those sections related to the DBE Performance Plan)
- Region OEO personnel review performance plans (5 days).
- Region OEO personnel identify strengths and weaknesses as identified in DBM Section 6-2.3, Technical Advisor.
- Region OEO personnel determine Adjectival Rating.
- Region OEO personnel provide Qualitative Evaluation Form and Adjectival Rating to Project Facilitator.
- Project Facilitator merges the contents of the OEO completed Qualitative Evaluation Form into the Summary Qualitative Evaluation Form, including the Adjectival Rating, and provides it to the Evaluation Team during in the room evaluations.
- Evaluation Team use Summary Qualitative Evaluation Form and Adjectival Rating to evaluate the DBE Participation Project Goal and determine applicable percentage within the Adjectival Rating to calculate technical scores.

- Evaluation Team use the OEO determined Adjectival Rating, subject to outcome of the Disagreement Resolution process, and calculates technical scores.
  - Disagreement Resolution: If the Evaluation Team takes exception to the Adjectival Rating or the supporting comments, or identifies a deviation from the ITP, the ASCE observer will review the circumstance and attempt to resolve between the OEO personnel and the Project Facilitator.
  - If the ASCE is unable to facilitate a resolution, then the ASCE and Project Facilitator will present the issue to the OEO Director and the Deputy State Construction Engineer for resolution.

### 6-2.5 **Observer**

The Observer is the ASCE for the project or their designee.

- Ensures that appropriate evaluation records are being maintained by the Facilitator
- Ensures that all approved evaluation processes and procedures are followed
- Reviews the RFQ, SOQ, ITP, the RFP, and the Technical Proposals
- Attends any part of the SOQ and Technical Proposals evaluation meeting and provides input to the Evaluation Team and Technical Advisors regarding evaluation processes and procedures
- Does not provide input regarding the qualitative evaluations or scoring.

### 6-2.6 **Project Management Team**

The Management Team consists of the Engineering Managers (design and construction) and the Program Director/Assistant Regional Administrator and/or their Deputies. The Management Team will participate in an Evaluation Debrief Meeting to discuss the submitted SOQs/Proposals and the evaluation forms completed by the Evaluators in connection with their review and scoring of the SOQs/Proposals.

During the Evaluation Debrief Meeting, the Facilitator will present the evaluation results to the Management Team. The Evaluation Team will have the opportunity to explain their evaluations to the Management Team. The Management Team:

- Participates in an evaluation debrief meeting to discuss the SOQs/Proposals and the evaluation forms completed by the Evaluators
- Reviews the summary page of the *Qualitative Evaluation Form*, asks questions, and provides comments
- Participates in evaluation debrief meetings with Region Executive and HQ Executive Teams
- Provides concurrence of the evaluation process to the Region Executive Team
- Recommends approval of the evaluation process to the Region Executive Team

### 6-2.7 *Region Executive Team*

Region Executive Team may be comprised of the Region Administrator, Deputy Region Administrator, and Assistant Region Administrator.

The Region Executive Team will participate in an Evaluation Debrief Meeting to review the recommendations of the Management Team regarding the proposed short list/ Technical Scores. The Region Executive Team:

- Participates in an evaluation debrief meeting to discuss the SOQs/Proposals and the evaluation forms completed by the Evaluators
- Reviews the summary page of the *Qualitative Evaluation Form*, asks questions, and provides comments
- Participates in evaluation debrief meetings with Project Management and HQ Executive Teams
- Provides concurrence of the evaluation process to the HQ Executive Team
- Recommends approval of the evaluation process to the HQ Executive Team

### 6-2.8 *Headquarters Executive Team*

HQ Executive Team may include the State Construction Engineer (Director of Construction Division), Assistant Secretary Regions and Mega Programs, Deputy Assistant Secretary Mega Projects, Deputy Assistant Secretary Multimodal Development and Delivery, Deputy State Construction Engineer, Lead Construction Engineer, Projects Lead Construction Engineer, Administration, ASCE supporting the project, , State Design-Build Program Manager, State Design-Build Engineer. If appropriate, consider including the State Design Engineer, Environmental Services Office (ESO), and OEO to the above list of participants.

The Facilitator will develop an Executive Summary of the evaluations and make a presentation to the HQ Executive Team for approval.

The HQ Executive Team will participate in an Evaluation Debrief Meeting to review the recommendations of the Region Executive Team regarding the proposed short list/ Technical Scores. The HQ Executive Team:

- Participates in an evaluation debrief meeting to discuss the SOQs/Proposals and the evaluation forms completed by the Evaluators
- Reviews the summary page of the *Qualitative Evaluation Form*, asks questions, and provides comments
- Provides final approval of the evaluation process

### 6-2.9 **Contract Ad & Award Office**

CAA is coordinated with throughout all phases of the design build procurement.

Creates the DB Project Page on Public Works Website.

- Manages all DB Procurements documents on the Public Works Website.
- Provides Submitters WSDOT SFTP Username and Passwords
- Create WSDOT SFPT Folder
- Receives SOQs
- Completes SOQ Pass/Fail Review Checklist
- Moves SOQs to the ECM
- Receives Proposals
- Review proposals upset value determination
- Completes Proposal Pass/Fail Review Checklists
- Receives the Apparent Best Value Determination Spreadsheet from the Facilitator
- Conducts the public opening of the Price Proposals and inputs pricing into the Apparent Best Value Determination Spreadsheet.
- Receives evaluation summary spreadsheets from the Facilitator
- Provides evaluation materials to the Submitters and Proposers at the appropriate time
- Receives the Apparent Best Value Determination Spreadsheet from the Facilitator

## 6-3 **Statement of Qualifications Evaluations Process**

### 6-3.1 **Objectives**

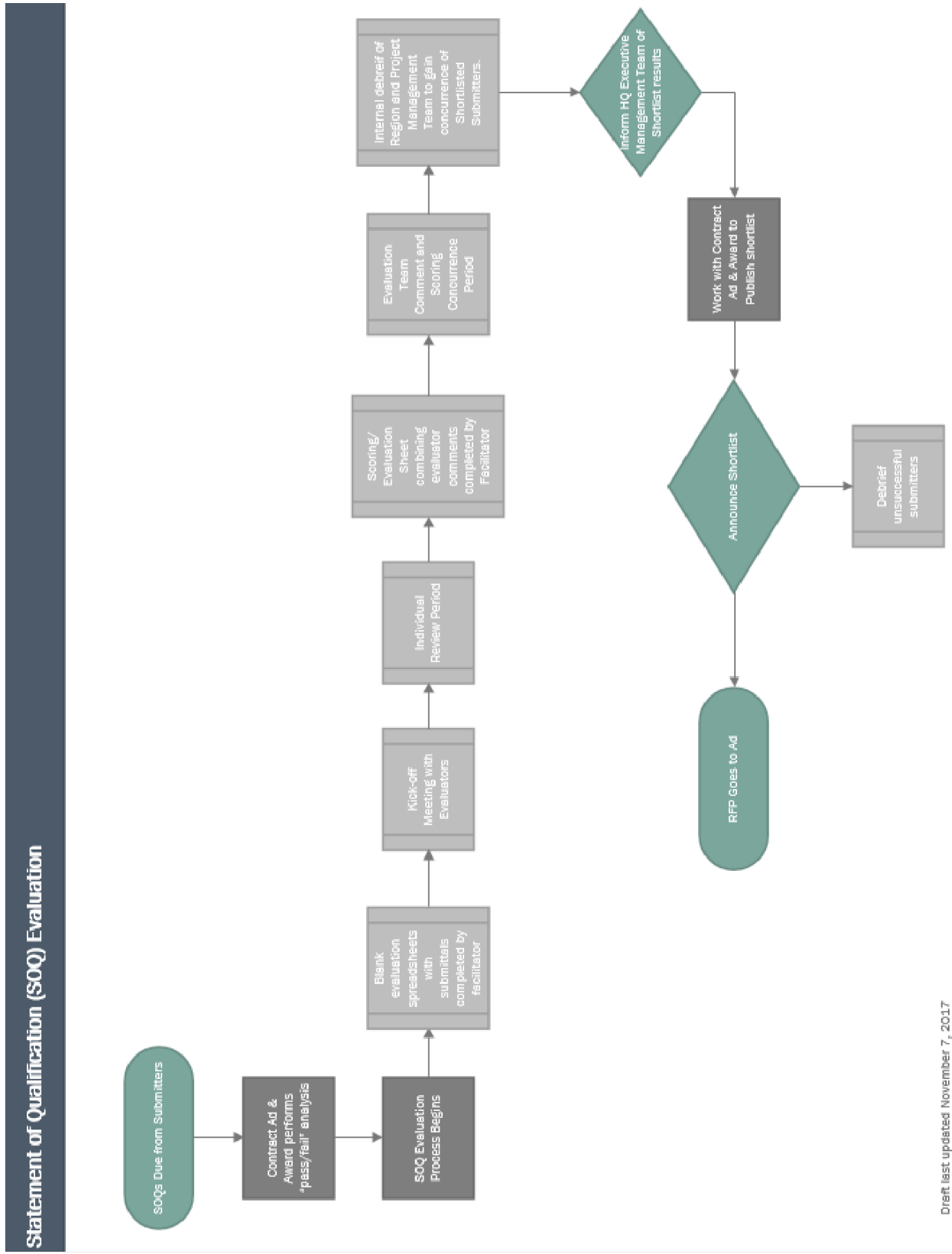
The objective of the SOQ evaluation process is to conduct a transparent and defensible selection process by evaluating SOQs fairly. The Evaluation Team must maintain confidentiality not only of the documents but the process as well. The end result is to produce a short list of qualified Submitters that WSDOT will then invite to propose on the project.

### 6-3.2 **Overall Statement of Qualifications Evaluation Process**

The SOQ is a response to the RFQ. It is at this time that Submitters describes how their experience on past projects of similar scope and complexity meet the project goals. Illustrated in the flow chart below (Exhibit 6-1) is the SOQ evaluation process.



Exhibit 6-1 SOQ Evaluation Flow Chart

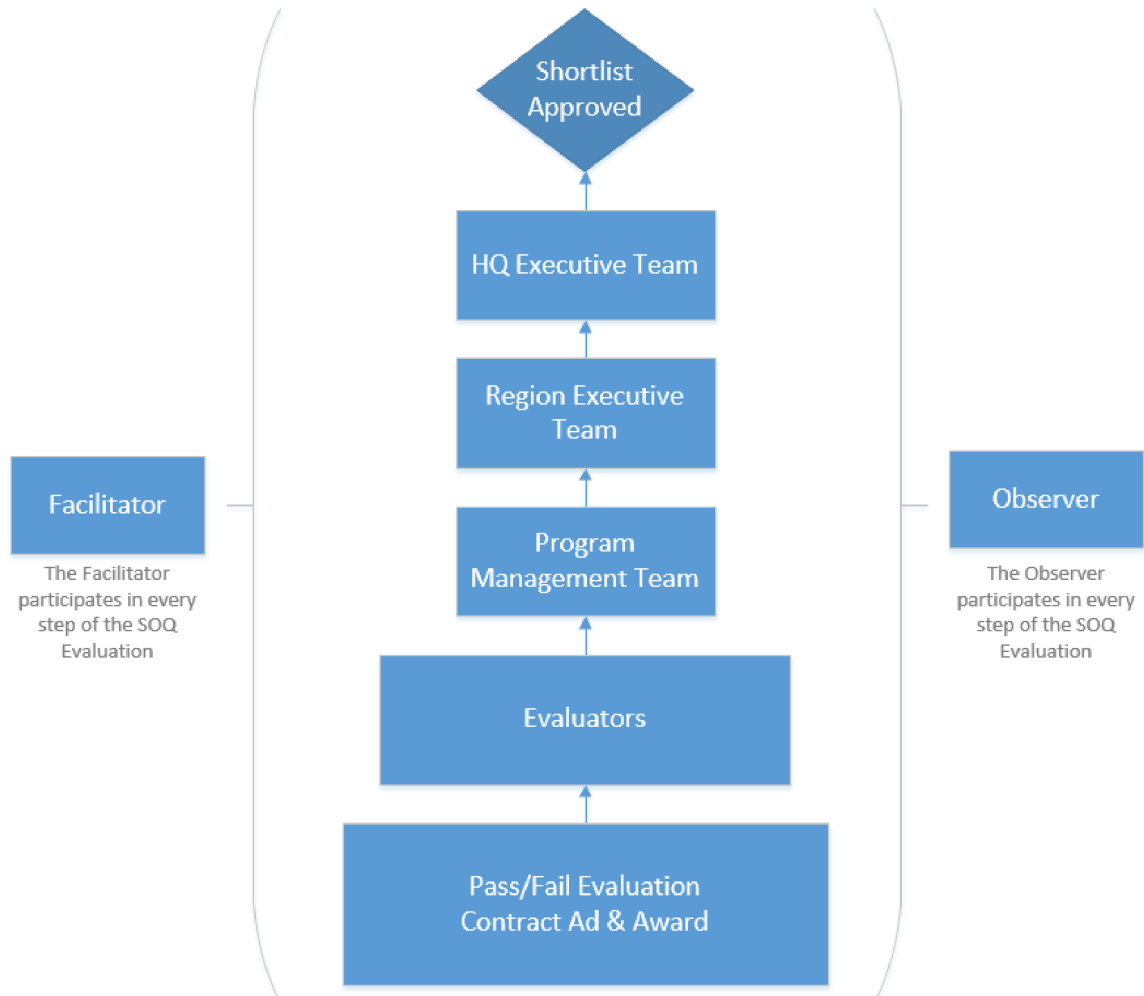


Draft last updated November 7, 2017

### 6-3.3 Statement of Qualifications Evaluation Chart

When evaluating SOQ, it is important to have an understanding of how the various teams' Key Personnel and Major Participants will work together. If they have worked together in the past, the Submitter's team can demonstrate this through examples of past experience. In the chart below (Exhibit 6-2), you will see that the work of CAA forms the basis for all subsequent evaluation work.

Exhibit 6-2 SOQ Evaluation Chart



### 6-3.4 Schedule

The SOQ evaluation process generally takes 2 to 3 weeks depending on how many submittals are received.

### 6-3.5 SOQ Evaluation Process

Described below are the procedures for developing the short list of Submitters:

- The Facilitator completes the project-specific SOQ [Pass/Fail Review Checklist Template](#) and submits it to CAA.
- The WSDOT CAA Office receives the SOQs and reviews each for Pass/Fail criteria and completes the SOQ Pass/Fail Review Checklist provided by the Project Team.
- CAA saves responsive SOQs in Book 11, *Evaluations* in ECM.
- The Facilitator makes a copy of each SOQ and saves it in a secure restricted access location.
- The Facilitator will briefly review each SOQ and make a list that includes the name of Key Personnel and Major Participants firm mentioned in each SOQ. This list will be provided to the Evaluation Team to aid them in identifying any possible conflicts of interest. A report for concurrence is sent to the ASCE.
- Each Evaluation Team member will receive the conformed RFQ at the SOQ evaluation kick-off meeting and guidance on which evaluation method to use.
- Questions pertaining to the evaluation criteria or the evaluation process will be addressed at the SOQ evaluation kickoff meeting. The discussion will include any subjective or other terms that require a common interpretation.
- Depending on which evaluation method the Facilitator decides, each Evaluator will either individually score the SOQs using the *Qualitative Evaluation Form* to identify strengths and weaknesses or will identify strengths and weaknesses and comment in the SOQ PDF. This activity takes approximately two weeks.
- The Evaluation Team will provide either their individual *Qualitative Evaluation Form* or their individual PDF with comments to the Facilitator to combine. This activity takes approximately 2 days.
- The Evaluation Team will collaborate during in the room evaluations with the Facilitator to finalize scoring of all the strengths and weakness identified by the individual evaluations for each SOQ. This activity takes approximately two weeks.
- The official evaluation summary will be recorded in the *Qualitative Evaluation Form* regardless of the evaluation method used.

### 6-3.6 *Adjectival Rating Criteria*

The adjectival rating criteria will be used when evaluating the SOQs.

Each Evaluator will review the SOQs independently, determine strengths and weaknesses for each scored element of the SOQ, and record their findings on the Qualitative Evaluation Form. Strengths and weaknesses related to a particular criteria element may be evaluated from any component of the SOQ. Documentation in the Qualitative Evaluation Forms should be comprehensive and adequately provide the basis of the assessment, including the strengths and weaknesses supporting the assigned ratings.

After completing and submitting the individual forms to the Facilitator, the Facilitator working with the Evaluators, will combine the comments into one Qualitative Evaluation Form, grouping similar comments together. The Facilitator will temporarily use colors or shading to differentiate each evaluator to help facilitate the consolidation efforts that will occur in the next step. (Note that these colors/shading are temporary and will be removed prior to finalizing the Qualitative Evaluation Form.)

Using the Adjectival Evaluation and Scoring Guide (as provided in Table 7-1 of the RFQ), the Evaluators determine an adjectival rating based on the requirements of the RFQ, and select the percentage from within the range associated with the adjectival rating that best reflects the strength/weakness of the element. That percentage of the maximum score will determine the final score for that section.

### 6-3.7 *Assessing Strengths and Weaknesses*

In reviewing each SOQ, the Evaluators determine the strengths and weaknesses for each of the evaluation criteria, recording their findings on the Qualitative Evaluation Form for each Key Personnel and Major Participant. Strengths and weaknesses do not have to be exclusively indicated within the section being evaluated to influence the evaluation scoring. For example, if a statement that is submitted in one section influences the score in another section, the Evaluator may take that statement into account.

The Evaluators may further distinguish the strengths and weaknesses as “significant” or “minor.”

The Evaluators may also use a “high” or “low” prefix to further differentiate the strengths or weaknesses. When, in the judgment of the Evaluators, an SOQ element does not equate to a strength or weakness, but is being acknowledged, a “Neutral” will be identified.

The definitions of Strength and Weakness are found in [Chapter 1](#) and are further expanded in Exhibit 6-3.

**Exhibit 6-3 Strengths and Weaknesses Assessment Table**

1. High Significant Strength	Strength – That part of the proposal which represents a benefit to the project and is expected to increase the Proposer’s ability to meet or exceed the project goals.	A significant strength has a considerable positive influence on the Submitter’s ability to meet or exceed the project goals.
2. Significant Strength		
3. Low Significant Strength		
4. High Minor Strength		A minor strength has a slight positive influence on the Submitter’s ability to meet or exceed the project goals.
5. Minor Strength		
6. Low Minor Strength		
7. Neutral		
8. Low Minor Weakness	Weakness – That part of the proposal which detracts from the Proposer’s ability to meet the project goals or may result in an inefficient of ineffective performance.	A minor weakness has a slight negative influence on the Submitter’s ability to meet the project goals.
9. Minor Weakness		
10. High Minor Weakness		
11. Low Significant Weakness		A significant weakness has a considerable negative influence on the Submitter’s ability to meet the project goals.
12. Significant Weakness		
13. High Significant Weakness		

**6-3.8 Conclusion of SOQ Evaluation Procedure**

After conferring with the Project Management Team, the Project Team will debrief the Region Executive, and HQ Executive Teams to obtain their concurrence that the Evaluation Team following the SOQ evaluation process. The Facilitator will prepare the notices with the results of the evaluation process using the Qualitative Evaluation Form for CAA to release to all Submitters. An invitation to respond to the RFP will be extended to the short listed Submitters only.

At the conclusion of the evaluation process, it is the responsibility of the Facilitator to prepare the Project SOQ Evaluation Summary. The Project SOQ Evaluation Summary includes all evaluator affidavits, all final comments as noted on the Qualitative Evaluation Forms, all final scoring sheets, and the final Executive Summary in a single PDF file. Upon completion of the Project SOQ Evaluation Summary, the Facilitator retains one copy for the project file and forwards one to CAA. This is the official evaluation record and should be stored in the ECM.

For SOQ evaluations, the Evaluation Team will recommend a logical breaking point to identify the most highly qualified Submitters and develop a recommended short list. If there are more than three SOQs, the Evaluation Team should recommend a short list of at least three of the most highly qualified Submitters.

### 6-3.9 SOQ Evaluation Materials

Each Submitter will be provided their detailed scores and Evaluators' comments, along with the anonymous total scores of all Submitters, as attachments to their Short List letter.

The project team must submit this evaluation information to CAA the day before the Short List announcement is scheduled at the latest.

The Facilitator will email CAA the Qualitative Evaluation Form and the following information for each Submitter:

- Detailed scores
- Evaluators' comments
- Total scores for all the Submitters without Evaluators names

The Facilitator is responsible for ensuring the Evaluators' comments are error free, written in a factual manner devoid of opinion, and identify the correct Submitter.

CAA will do a cursory review prior to emailing each Submitter their evaluation information.

## 6-4 Proposal Evaluations

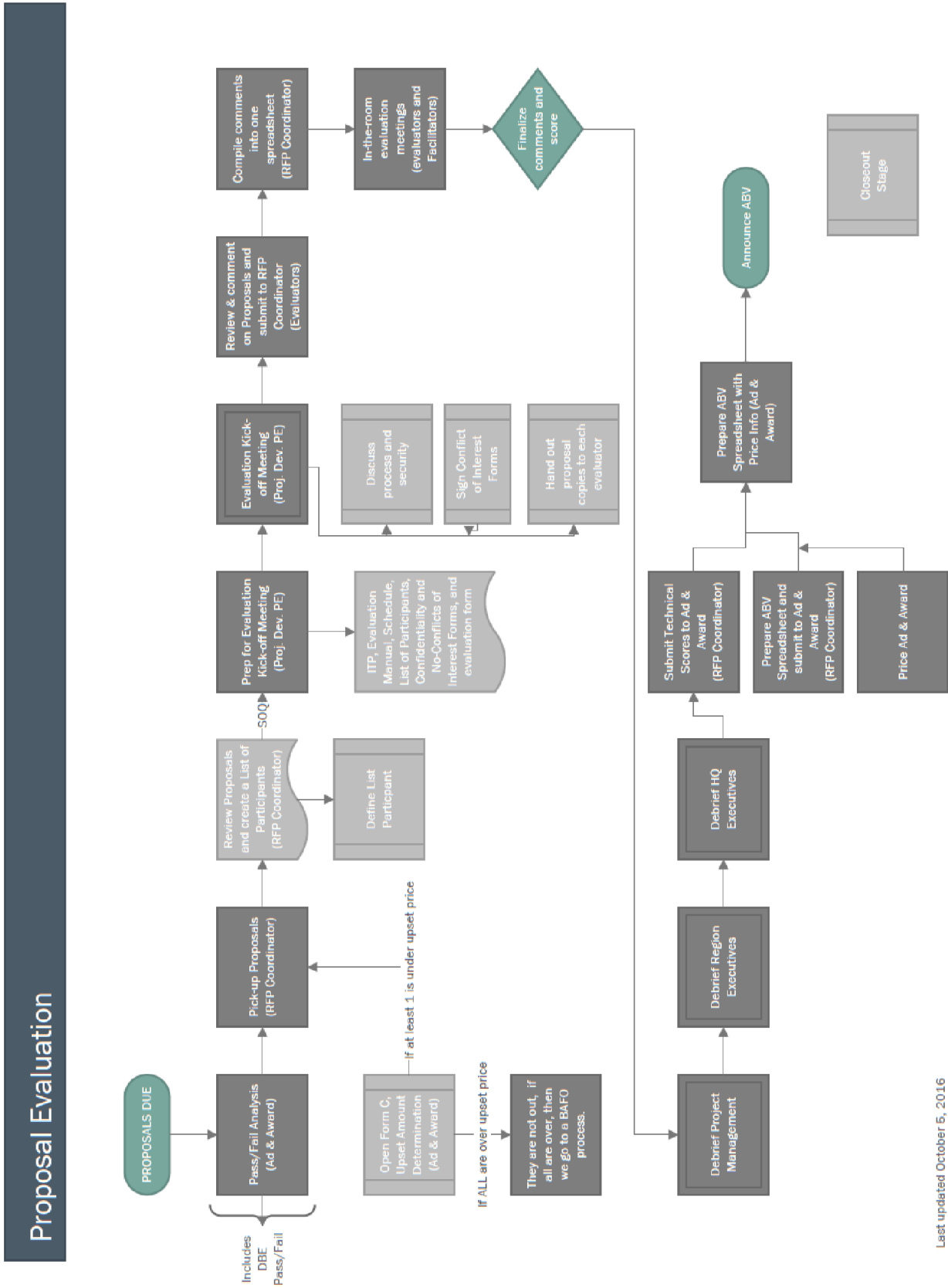
### 6-4.1 Objectives

The objective of the proposal evaluation process is to conduct a transparent and defensible selection process by evaluating proposals fairly and according to the criteria established in the RFP documents (ITP, General Provisions, Technical Requirements, and Appendices). Confidentiality is vital throughout the evaluation proceedings. The ultimate objective of the proposal evaluation is to create value for the project. An Apparent Best Value selection process concludes and a better project is achieved as Proposers provide innovation and Betterments in an effort to gain more technical credits and be the successful Proposer.

### 6-4.2 Overall Proposal Evaluation Process

The Proposal is a response to the RFP. It is at this time that Proposers describe the overall approach their firm will take to design and construct the project. Illustrated in the flow chart below (Exhibit 6-4) is the proposal evaluation process.

Exhibit 6-4 Proposal Evaluation Process



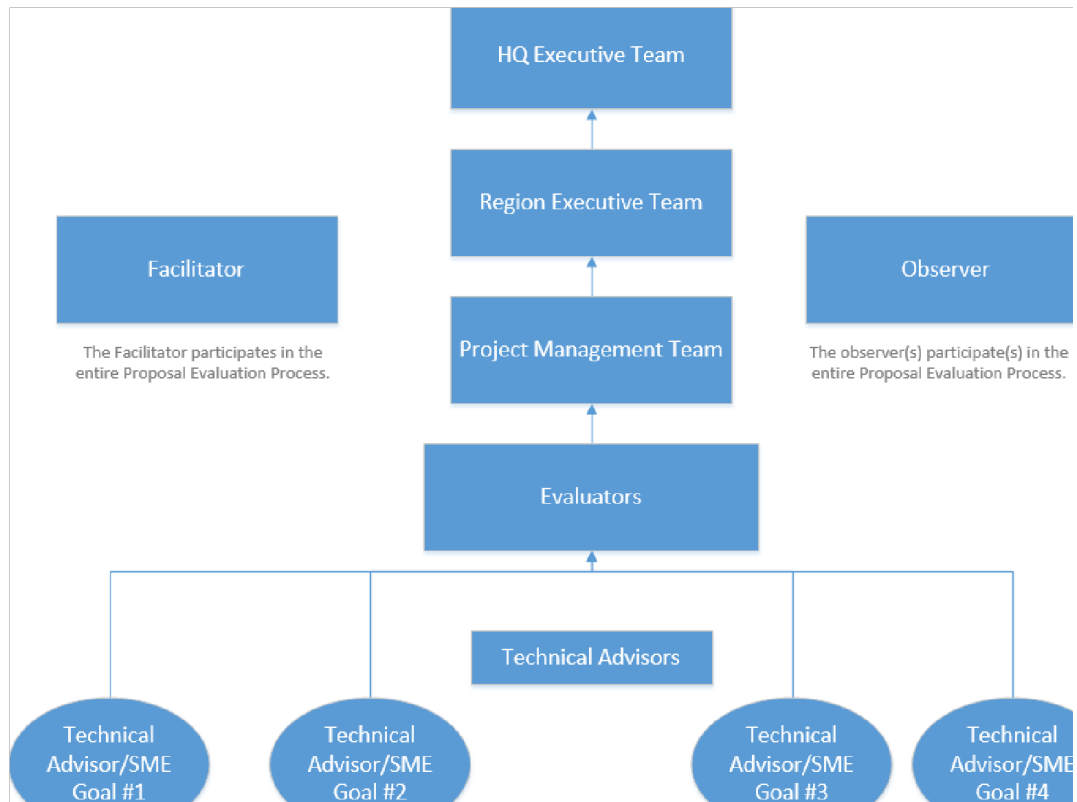
Last updated October 5, 2016

### 6-4.3 Proposal Evaluation Chart

When evaluating a Proposal, it is important to have an understanding of how the various teams of people work together as depicted in the organizational chart below (Exhibit 6-5).

A confidential chart should be provided to the Proposal Evaluators that identifies the names of the individuals performing the functions in Exhibit 6-5.

**Exhibit 6-5 Proposal Evaluation Chart**



### 6-4.4 Schedule

The proposal evaluation process is 3 to 4 weeks. This schedule could be longer, depending on project complexities.

The proposal evaluation debriefs take approximately two weeks to present to the following teams: HQ Management, Regional Management, Executive Management, and Project Management.



### 6-4.5 Proposal Evaluation Process

The Evaluation Team will evaluate the Proposals as outlined in Section called Adjectival Rating Criteria.

- The Facilitator conforms the RFP to include all addenda for convenience
- The Facilitator prepares the project-specific [Proposal Pass/Fail Review Checklist](#)
- The Facilitator develops the Proposal Evaluation Kick-Off Meeting Agenda
- The Facilitator develops the Evaluation Team Organizational Chart
- The Facilitator develops evaluation schedule
- The Facilitator schedules the Evaluators' Proposal evaluation kick-off meeting
- The Facilitator schedules the in-the-room evaluation meetings (via virtual media platform)
- The Facilitator schedules the Technical Advisor report-out meetings
- The Facilitator schedules all proposal internal debrief meetings.
- The Facilitator arranges with the CAA Office to obtain the Technical Proposals. The Price Proposal remain secure in BidX.
- The Facilitator reviews each of the proposals and verifies the participants list
- The Facilitator ensure that all Major Participants and Key Personnel referenced match that of the SOQ.
- If applicable, CAA opens Form C, Upset Amount to verify if one Proposer is under Upset Amount.
- CAA completed Proposal Pass/Fail Review
- CAA Saves Proposals in the ECM
- CAA meets with Facilitator to ensure access to ECM Book 11.
- The Evaluation Team has Proposal Evaluation Kick-Off Meeting.
- The Evaluation Team follows the Evaluation Method approved by the Facilitator.
- Evaluators due their Independent Evaluations.
- Technical Advisor and OEO Technical Advisor review their requested sections and provide materials back to Facilitator.
- The Facilitator combines all S/W and comments.
- The Evaluation Team does In-The-Room Evaluations.
- The Facilitator provides CAA final Qualitative Evaluation Forms.

### 6-4.6 *Proposal Evaluation Kick-Off Meeting*

This meeting is used to kick-off the evaluation process. It is where the Project Goals are reviewed.

The Facilitator gathers all of the evaluation kick-off meeting materials, including:

- Confidentiality and Non-Disclosure Agreements
- No-Conflicts of Interest Affidavits
- List of participants
- Conformed ITP, [Chapter 2](#), (Technical Requirements), [Chapter 1](#) (GP)
- Responses to formal questions
- Example completed evaluation form to show level of detail
- Evaluation schedule
- Proposals
- The Facilitator, Evaluators, Technical Advisors, OEO Technical Advisor (if applicable), and Observers attend the evaluation kick-off meeting, where the Facilitator provides secure access to the evaluation materials.
- The Facilitator ensures that any new members of the Evaluation Team sign a Confidentiality and Non-Disclosure Agreement and a No-Conflicts of Interest Affidavit. Previous SOQ Evaluation team members should have already completed the Confidentiality and Non-Disclosure Agreement and a No-Conflicts of Interest Affidavit. If an additional Major Participant or Key Personnel is identified, all Evaluators should ensure there are no conflicts of interest.
- The Facilitator describes the evaluation process
- If the comment in the Proposal PDF method is used, the Facilitator verifies Evaluation Team has the required software.

### 6-4.7 *Independent Evaluations*

- The Evaluators individually read the proposals, document their findings either in the comment in the PDF method or on their individual Qualitative Evaluation Forms, and assign strengths and weaknesses to each.
- The Evaluators submit their individual PDF with comments or Qualitative Evaluation Forms to the Facilitator.

### 6-4.8 In-the-Room Evaluations

Prior to the in the room evaluation, the Facilitator combines the assessments from each evaluator and OEO Technical Advisor (on Federal projects) into one PDF with comments or on one Qualitative Evaluation Form .

- The Evaluation Team meets to discuss each of the evaluators' perspectives and to combine their similar comments into a single comment. The Evaluators then agree on a final strength and weakness for each comment.
- Technical Advisors will review the Technical Proposal in their respective discipline areas, and will present their findings to the Evaluators during a scheduled session. The Evaluators can ask questions of the Technical Advisors but only in an 'open forum' where all the Evaluators are present. Evaluators may consider the Technical Advisor's input when determining a score for that particular section.
- The Facilitator and Evaluators develop the finalized Qualitative Evaluation Form (even if the comment in the PDF method is used a finalized Qualitative Evaluation Form must be created)
- After considering the Technical Advisor's input, the Evaluators will consolidate their comments and develop a single agreed to Qualitative Evaluation Form for each criteria element.
- The Evaluation Team may perform reference checks for each Proposer. Reference checks are typically performed by the Facilitator (or the PE) in the presence of the rest of the Evaluation Team. The Evaluation Team will supplement existing findings with information obtained during the reference checks and may revise strength/ weakness ratings accordingly.
- Evaluators determine an adjectival rating based on the requirements of the ITP and select the percentage from within the range associated with the adjectival rating that best reflects the strength/weakness of the element. That percentage of the maximum score will determine the final score for that section.
- The Facilitator finalizes the Qualitative Evaluation Form for the evaluators to perform a side-by-side consistency check for each proposal. This is intended to check that there was consistency in how the strengths, weaknesses, and adjectival ratings were assigned. THE PROPOSALS ARE NOT EVALUATED IN RELATION TO ONE ANOTHER, BUT AGAINST THE REQUIREMENTS OF THE RFP.
- The Facilitator reveals the Overall Summary Form, which is part of the Qualitative Evaluation Form, to the Evaluation Team to review the final scores for each proposal.
- The Facilitator prepares the Apparent Best Value spreadsheet, inserting the final overall technical score for each Proposer, and all other project-specific information, except for the Price Proposals (which have not been opened yet) and submits the Apparent Best Value spreadsheet to the CAA Office.

### **6-4.9 Internal Proposal Debriefs**

In accordance with [Chapter 5 General Procurement Activities](#).

### **6-4.10 Identification of Betterments**

A Betterment is identified as any component or system, which exceeds the minimum requirements stated in the RFP. Betterments are included in the proposals and are intended to make the proposal more competitive and are often tied to areas of importance specified by WSDOT in the RFP documents. Betterments may provide additional features and functions such as the capacity, capability, level of service, efficiency, duration and performance of the project, which is superior to WSDOT's RFP requirements. It is important to recognize that a Betterment should be an improvement, not merely a change, to the contract and must be related to the project goals.

The Betterments list is initially determined during the evaluation of the Proposal and concurred to by the Project Engineer. The list is discussed and agreed upon with the Proposer. The list is then given to the Facilitator who forwards it to CAA to become a part of the successful Proposer's contract.

### **6-4.11 Award Process**

The CAA Office receives the Apparent Best Value spreadsheet, prepopulated with the technical credits awarded, and the Apparent Best Value Proposal Score formula, which is shown in the ITP.

The CAA Office conducts the public opening of the Price Proposals. As each proposal price is entered into the spreadsheet, the technical credit is applied to the proposal price giving the Apparent Best Value Score.

The proposal deemed responsive, under the Upset Price (if any), and with the lowest Apparent Best Value Score is announced as the Apparent Best Value Proposal.

The technical credits do not actually reduce the contract amount; they are only used to obtain the Apparent Best Value Score.

### **6-4.12 Proposal Evaluation Materials**

The Facilitator must email the evaluation information listed below to CAA within 24 hours after announcement of the Apparent Best Value Proposer:

- Detailed scores for each proposer
- Evaluators' comments for each proposer

The Facilitator is responsible for ensuring the Evaluators' comments are error free and identify the correct Proposer.

CAA will do a cursory review prior to emailing each Proposer their evaluation information.

After the Design-Builder is selected in the procurement phase and a contract is executed, the project enters into the implementation phase.

The term implementation phase is used instead of construction phase because this phase includes both design and construction elements of the project. These two elements of work are typically performed in overlapping schedules, resulting in project management processes that are unique to design-build delivery.

## **7-1 Project Organization: Key Personnel**

As the project transitions from procurement to implementation, the organization will transition from a WSDOT team to a joint WSDOT/Design-Builder team.

Each Request for Qualifications (RFQ) will list the required Design-Builder personnel for a project. These Key Personnel are typically:

- **Project Manager**

The Design-Builder's Project Manager (PM) will be responsible for the overall design, construction, schedule, budget, quality management, and contract administration for the project. It is the PM's responsibility to ensure that the project is managed and delivered in accordance with the contract requirements and to be available to assist in issue resolution. The PM will be assigned to the project full-time from Notice to Proceed (NTP) to Physical Completion. The PM can also be the Design Manager or the Construction Manager, but cannot be both. While these positions are unlikely to be combined on large projects, smaller projects might benefit from combining these positions.

- **Design Manager**

The Design-Builder's Design Manager (DM) will be responsible for ensuring that the overall project design is completed, design criteria are met, and the design is managed and delivered to meet or exceed the project goals. The DM is assigned to the project full-time, from NTP through completion of the design effort, and will be available, as needed, during construction activities.

- **Construction Manager**

The Design-Builder's Construction Manager (CM) will be responsible for all project construction. It is the CM's responsibility to ensure that the construction is managed and delivered in accordance with the contract requirements and to ensure that the work meets or exceeds the project goals. The CM makes sure that construction is consistent with the project design. If changes to the design are needed during construction, the CM reevaluates the design to ensure that the as-constructed product will remain consistent with the contract requirements.

The CM will have experience with managing a diverse group of subcontractors and coordinating with project stakeholders to comply with Local Agency and environmental issues and requirements. The CM will be available for design package reviews and project meetings during construction. The CM is assigned to the project full-time during construction activities.

### 7-1.1 *Other Project Personnel*

Some projects, depending on scope, risk, and complexity, may benefit from requiring additional Key Personnel such as:

- Construction Quality Assurance Manager (CQAM)
- Design Quality Assurance Manager (DQAM)
- Document Control Manager (DCM)
- Drainage Design Lead Engineer
- Environmental Compliance Manager
- Geotechnical Group Manager
- Materials Approval Engineer
- Project Quality Manager (PQM)
- Quality Testing Supervisor (QTS)
- Structural Lead Engineer
- Water Resources Engineer

## 7-2 **Project Startup**

### 7-2.1 *Award, Contract Execution, and Notice to Proceed*

In the final steps of the procurement phase, the proposals are reviewed and the Apparent Best Value Proposer is announced. Contract award will typically occur within 60 calendar days of the Proposal Due Date. After the contract is awarded, the successful Proposer has 20 calendar days to submit all required documents for execution of the contract. The documents include the signed contract, insurance certification, contract bond, and other pre-award information required by the contract, as well as registration as a contractor in the State of Washington.

Within 7 calendar days of contract execution, and prior to issuing NTP, the WSDOT Engineer and the Design-Builder shall discuss the merits of a Practical Design Workshop. Refer to Request for Proposal (RFP) Section 1-04.3 for further information on Practical Design Workshops.

NTP is written authorization issued by WSDOT that permits the Design-Builder to commence performance of the work. NTP is issued shortly after contract execution, but WSDOT may defer issuance of NTP for up to 30 calendar days after contract execution. NTP marks the start of contract days. For certain projects, such as those where the NEPA analysis has not been completed prior to contract execution or where phased authorization is required due to Governmental Body imposed restrictions, multiple NTPs (e.g. NTP1, NTP2, etc.) may be utilized.

Refer to the following flowcharts to review the steps taken after the Apparent Best Value Proposer is announced:

- [ABV to Award Flow Chart](#)
- [Award to NTP Flow Chart](#)

## 7-2.2 Co-Location

Co-location can greatly facilitate collaboration between WSDOT and the Design-Builder. The size, location, and complexity of a project should be considered when determining the level of co-location needed. It might not be practical for smaller, simpler projects to provide co-location. Generally, the Design-Builder will provide and maintain all building space, including office space for WSDOT, facilities, equipment, and vehicles necessary to construct the project and to meet the requirements of the RFP. Sufficient space will be provided in the Design-Builder's project office for simultaneous occupancy by both construction and design personnel. Specific office requirements are specified in the RFP.

At project startup, the Design-Builder is encouraged to co-locate its staff with WSDOT into a single project office, with the Design-Builder and WSDOT staff integrated by discipline. The Design-Builder will coordinate with WSDOT prior to securing data or phone connections for a co-located office. Refer to RFP Section 2.1 for further information on co-location.

## 7-3 Contract Meetings, Hold Points, and Milestones

### 7-3.1 Contract Meetings

#### 7-3.1.1 All Meetings

The Design-Builder is responsible for providing meeting facilities and the development and distribution of meeting agendas and minutes. Refer to RFP Section 2.1 for further information.

#### 7-3.1.2 Orientation Meeting

Within 14 calendar days of NTP, the Design-Builder will schedule an orientation meeting between the Design-Builder and WSDOT Engineer to address documentation requirements. Refer to RFP Section 2.1 for further information.

#### 7-3.1.3 Kick-Off Meeting

As soon as possible, but not more than 30 calendar days after NTP, the Design-Builder will schedule a kick-off meeting with WSDOT Engineer to discuss the project, exchange information as described in the *WSDOT Construction Manual M 41-01*, and cover topics relevant to design phase of the contract. The orientation and kick-off meetings may be combined if the Design-Builder and WSDOT Engineer agree. Refer to RFP Section 2.1 for further information.

### 7-3.1.4 Pre-Fabrication Meeting

A pre-fabrication meeting will be held prior to the fabrication of major items requiring WSDOT inspection and approval. The Design-Builder will be responsible for scheduling the pre-fabrication meeting, which is to be held at the facility where the fabrication will take place. The Design-Builder will arrange for WSDOT Fabrication Office inspection of all fabricated materials for the project. Refer to RFP Section 2.25 for further information.

### 7-3.1.5 Task Force Meetings

Task force meetings encourage close communication between WSDOT and the Design-Builder throughout the design and construction of the project. It is anticipated that this close communication will expedite project reviews and facilitate the incorporation of innovative project solutions. These meetings, combined with over-the-shoulder reviews, shall be an integral part of the process to discuss and resolve design issues outside of the formal review process. Task force meetings are required for specific disciplines as noted in the Technical Requirements of the contract. Some examples are Disadvantaged Business Enterprise (DBE) program, environmental, close out, and design task force meetings. Refer to RFP Section 2.1 for further information.

### 7-3.1.6 Quality Assurance Task Force Meetings

The WSDOT Engineer and Design-Builder will form a Quality Assurance (QA) Task Force that will provide the initial forum for quality issue resolution in the design-build process. The QA Task Force's responsibility is to remedy all non-conforming work in the field identified by Non-Conformance Reports (NCRs) or Non-Conformance Issues (NCIs). They will also be required to address issues that either directly or indirectly affect project quality.

Once the Design-Builder has formed a QA Team with individuals responsible for QA activities, the QA Task Force shall begin weekly meetings. WSDOT will form its own quality team and will participate in these meetings. These meetings will discuss, address, and correct quality related issues. Potential quality issues include but are not limited to the following: design, inspection, substandard material, deficient QA and Quality Control (QC) processes, test results that are out of tolerance, variations between QA and Quality Verification (QV) test data (F&t analysis), future quality concerns, as well as other issues that the Design-Builder or WSDOT may have regarding quality of the project.

Meeting frequency may decrease if quality issues decrease. If, however, contract performance becomes substandard, the Design-Builder could be required to increase the frequency of the meetings until project quality issues improve.

Either the PQM, DQAM, or CQAM will schedule meetings, develop agendas, document the meeting minutes, and distribute minutes to attendees. Refer to RFP [Section 2.28](#) for further information.



### 7-3.1.7 Close Out Task Force Meetings

Close Out Task Force meetings will include the PQM, DCM, PM, DM, and the WSDOT Engineer at a minimum. It is important that close out efforts commence immediately after NTP and proactively continue throughout the duration of the project. Therefore, Close Out Task Force meetings will be held monthly starting after NTP, earlier if proposed by the Design-Builder, and continuing through Substantial Completion. After Substantial Completion is given, meetings occur weekly from Substantial Completion through Completion. Refer to RFP Section 2.12 for further information.

### 7-3.1.8 Pre-Activity Meetings

The Design-Builder will hold pre-activity meetings to ensure that all project personnel have a thorough understanding of the work to be accomplished prior to beginning construction on a work activity. Refer to RFP [Section 2.28](#) for further information.

## 7-3.2 Milestones and Hold Points

### 7-3.2.1 Milestones

Form D, of the Instructions to Proposers, is the Design-Builder's proposal on contract time commitments for completion of the listed milestones. Upon contract execution, the contract time/milestone completion deadlines shown on Form D become contractual requirements.

All schedules by the Design-Builder shall include contract milestones that include those listed on Form D of the Design-Builder's proposal and completion milestones (Completion Date and Final Acceptance Date). Refer to RFP [Section 1-08.3\(2\)](#).

### 7-3.2.2 Hold Points

RFP Section 2.28 defines the deliverable requirements for Hold Points. The Hold Point procedure is used to enhance the level of control at specific construction milestones. WSDOT requires construction QA personnel to use Hold Points to ensure that an individual phase of construction is complete and in accordance with the contract before moving on to the next phase of work. The Design-Builder's QC or production group is responsible for resolving outstanding NCRs and NCIs. Construction QA personnel also use Hold Points to restrain, remediate, and refocus QC/production when the Design-Builder has not completed QC/production work before moving on to the next stage of work (working at risk).

Hold Point refers to pausing construction activities until a QA inspection is accepted. Construction QA inspection Hold Points are particularly important when work cannot be inspected later because a problem or non-conformance could be covered up.

Hold Points are also defined for critical inspections when cost of re-work would be high if problems are identified later. Pre-activity meetings are Hold Points.

### 7-3.2.3 Hold Point Inspection

1. Hold points shall be identified in the construction process where critical characteristics are to be measured and maintained and at points where it is impractical to determine the adequacy of either materials or workmanship once work proceeds past these points.
2. Pre-activity meetings shall be included in the Design-Builder's Quality Management Plan (QMP) as Hold Points.
3. Hold Points shall be established where required QA inspection is mandatory.
4. The Design-Builder shall provide 3 calendar days' notice to WSDOT prior to each Hold Point so that WSDOT, at its discretion, can observe or visually examine a specific work operation or test.
5. Work shall not proceed until inspection is completed and a written release is granted by the Design-Builder's QA organization.
6. The Engineer of Record (EOR) and the Designer of Record shall submit specific Hold Points with the Released for Construction (RFC) Documents.
7. The CQAM shall establish Hold Points per RFP Section 2.28. The QMP shall identify all additional Hold Points necessary to certify compliance.
  - a. The Hold Points listed in the RFP provide the Design-Builder's QA organization notice of the minimum expected or owner-predicted hold points that are required.

As mentioned in item 6, the EOR shall expand this list to reflect the RFC plans and specifications.

Hold Points should be listed on all inspection and test plans so that QV/QA/QC personnel will all know when Hold Points are to be in effect. A hold status indicator should also be used to indicate when the inspection is passed. The code inspection green tag is a well-known example of a hold status indicator.

Appropriately used, Hold Points are an effective tool to monitor production and ensure quality.

Hold Points allow all obligated stakeholders the opportunity to review plan and specification compliance. The Design-Builder's QA organization is obligated to identify all quality incidents, non-conformances, and field design changes. In the case of pre-activity meetings, work plans can be discussed, augmented, adjusted, or curtailed, dependent on specific needs that may have not been initially apparent.

## 7-4 Contract Submittals

### 7-4.1 Document Control Work Plan

The Design-Builder will submit a document control work plan within 30 calendar days of NTP or prior to the first design submittal, whichever occurs first. Reference RFP Section 2.1 for further information.

### 7-4.2 Quality Management Plan

The QMP is one of several submittals that are required to be approved in writing by the WSDOT Engineer (a complete list of WSDOT approvals can be found [here](#)). The QMP shall be consistent with the Design-Builder's proposal. A draft QMP is to be submitted to the WSDOT Engineer for review within 30 calendar days of NTP.

The WSDOT Engineer will not accept RFC design submittals until the Design-Builder's final QMP for design has been approved in writing by the WSDOT Engineer. No construction work activities that require QA/QC inspection or testing will commence until the Design-Builder's final QMP for construction has been approved in writing by the WSDOT Engineer.

The QMP will remain in effect until all requirements of the contract have been fulfilled and the project is accepted.

Refer to RFP [Section 2.28](#) for further information on all the different technical discipline submittals the QMP addresses.

### 7-4.3 Environmental Compliance Plan

The Design-Builder will submit an environmental compliance plan in accordance with RFP [Section 2.8](#).

### 7-4.4 Design Documentation

The Design-Builder is required to submit a draft Project Development Approval (PDA) within 60 calendar days of the last RFC design submittal. The WSDOT Engineer will Review and Comment within 25 calendar days. All comments have to be resolved before the PDA is finalized and submitted to the WSDOT Engineer for approval.

Prior to Physical Completion or termination of the contract, the Design-Builder will collect and submit all design documents prepared in the performance of the contract.

The final design documents will include, at a minimum, the following:

- Design Documentation Package, Project File, and technical memoranda
- PDA
- Updated electronic MicroStation and InRoads files in accordance with the WSDOT Electronic Engineering Data Standards, including all RFC sheets, reference files, and base mapping (topography, including survey updates).

Refer to RFP [Section 2.28](#) for further information on preliminary design submittals. Refer to RFP [Section 2.12](#) for further information on final design submittals.

### **7-4.5 Released for Construction Documents**

RFC documents are the primary documents that define the construction of the project. To leverage the design-build advantages of a parallel and overlapping design and construction, RFC documents are usually issued in multiple packages to allow for the early start of construction before the design for the project as a whole is completed.

However, what is to be constructed must have supporting designs that are complete and final. WSDOT generally reserves acceptance authority over revisions to RFC documents. Acceptance can be withheld if partial or incomplete designs are included in the revised documents. This puts the risk of continuity and compatibility of subsequent RFC documents on the Design-Builder. Throughout the course of the project, the Design-Builder will maintain in the Design-Builder's project office and make available for WSDOT review RFC documents and revised RFC documents. The QA and QC procedures in the QMP will identify procedures for RFC.

### **7-4.6 Non-Conformance Report and Non-Conformance Issue**

The Design-Builder's QA organization assesses the performance of the Design-Builder's QC organization and identifies and documents all elements of work that have not, or are believed to have not, been performed in accordance with approved drawings, specifications, and other contract documents. This documentation along with the reason for non-conformance will be captured in an NCR. The NCR will be submitted to the WSDOT Engineer in writing within 24 hours of identification and a copy will be sent to the DM.

For every instance of non-conforming work that is cited by the Design-Builder or by the WSDOT Engineer, the Design-Builder will perform remediation to bring the work into conformance with the contract. If the WSDOT Engineer does not agree with the remedial actions set forth in the NCR, the WSDOT Engineer has the authority to call for removal of the non-conforming work, or to stop work within that area until the corrective action plan has been approved by the WSDOT Engineer. The CQAM will maintain a log of all NCRs and corrective action plans and present them at QA Task Force meetings. If, in the design/construction process, WSDOT identifies elements that do not conform with contract requirements, WSDOT should document its own NCIs based on its observance of the work.

### 7-4.7 **As Builts**

Prior to Physical Completion of the project, the Design-Builder is required to update and re-release all RFC and Design Documents affected by significant revisions made during construction. All revisions to RFC documents will be performed by, or under the direct supervision of, the EOR.

For significant revisions, each re-issued sheet of the revised RFC plans and the cover of each of the re-issued revised RFC Technical Specifications will include the Licensed Professional Engineer's stamp and signature. The Design-Builder shall outline the threshold for these changes in their QMP. MicroStation and InRoads files will be updated with all significant revisions to show the as-constructed conditions, incorporating all revisions made during construction. The As Built plans will reflect the same degree of detail as the RFC documents.

As Built plans shall be submitted as a complete package in sequence, including all RFC sheets, both those with significant revisions and those without, in accordance with the numbering and naming conventions as defined in the *WSDOT Plans Preparation Manual M 22-31* and *WSDOT Construction Manual M 41-01*. There may additional As Built requirements if compensatory wetland or stream mitigation is required for the project. The U.S. Army Corps of Engineers and the Washington State Department of Ecology typically require an As Built report with photos and other information (the project-specific environmental commitments list should include any environmental specific As Built requirements. The WSDOT Engineer will Review and Comment on the submittal and advise the Design-Builder of acceptance or provide comments to be resolved. Comments will be addressed as outlined in the Design-Builder's QMP. Once comments are addressed, the final As Built submittal is sent to the WSDOT Engineer. The WSDOT Engineer's approval is required prior to Completion.

Refer to RFP Section 2.12 for further information on the As Built submittal.

### 7-4.8 **Final Records**

The Design-Builder will submit final temporary and permanent final records for the project in accordance with RFP [Section 2.12](#).

## 7-5 Partnering

WSDOT encourages partnering among WSDOT, the Design-Builder, and its subcontractors. The partnering process is intended to draw on the strengths of each organization to help identify and achieve reciprocal goals, including achieving Completion of the work on time, within budget, and in accordance with its intended purpose.

A primary consideration of partnering is the prompt and equitable resolution of issues affecting the conduct of the work under the contract and the rights and responsibilities of the respective parties.

Partnering is an integral part of the QMP. A partnering agreement will be included in the QMP for handling disputes related to quality.

Refer to RFP [Section 1.09.10](#) for further information on partnering schedules, cost, scheduling, and workshops. Also, refer to RFP [Section 2.28](#) for further information on partnering.

## 7-6 Design Development

WSDOT's intention is to allow the Design-Builder flexibility in design and construction by accommodating the processes, procedures, and innovative techniques that are preferred by the Design-Builder, as long as they are consistent with the Basic Configuration, site conditions, accepted engineering practices, environmental commitments, and the standards, guidelines, and procedures identified in the contract.

### 7-6.1 Process

After award, the design responsibility of the project is transferred to the Design-Builder. The owner remains involved in the design process through joint task force meetings, during formal reviews of milestone design submittals, and as the design is further refined during the construction of the project.

The intent of design submittals is to provide a formal opportunity for WSDOT, the Design-Builder, various design team disciplines, and other approved project stakeholders to review the construction documents in order to ensure that:

- The design is progressing appropriately and proceeding in accordance with contract requirements
- The plans reflect the Design-Builder's requirements for construction
- The design features are coordinated
- That there are no fatal flaws within a given discipline or between disciplines
- The necessary WSDOT Engineer approvals are received (i.e. Design Analysis, maximum extent feasible, etc.) prior to incorporation into the project

The minimum contents of design submittals for each discipline shall be:

- As specified in each discipline's respective RFP section
- As specified in RFP [Section 2.28](#)
- As mutually agreed by members of the applicable task force (or by agreement between the WSDOT Engineer and the Design-Builder if no specific task force applies.)

### **7-6.2 Design Quality Assurance and Quality Control**

The QA and QC procedures for each type of Design Document and RFC document are organized by engineering discipline in the QMP.

Refer to RFP [Section 2.12](#) and [Section 2.28](#) for further information on design submittals (preliminary, final, and RFC), QA and QC responsibilities, and Design Documentation.

## **7-7 Construction Processes**

Unless exclusively stated in the RFP documents any reference of the Project Engineer (PE) in the WSDOT *Construction Manual M 41-01* shall mean the WSDOT Engineer.

### **7-7.1 Testing, Inspection, and Materials Quality Assurance**

It is the responsibility of the CQAM to implement quality planning, oversee the QA testing and inspection, and coordinate with WSDOT's verification testing, inspection, and Independent Assurance (IA) requirements. All duties listed in Section 9-1.4 of the WSDOT *Construction Manual M 41-01* are the responsibility of the CQAM.

The Design-Builder will designate a Materials Approval Engineer having authority for the approval of all materials. The Materials Approval Engineer will review and approve all materials submitted through Request for Approval of Materials (RAM), Qualified Products List (QPL), and proprietary items for the project in accordance with Section 9-1.3 of the WSDOT *Construction Manual M 41-01*. The Materials Approval Engineer reports directly to the DM. The Materials Approval Engineer could also be the PQM or the DQAM, but cannot have responsibility for construction production.

The Design-Builder will provide a QTS who may be an employee of the Design-Builder's QA testing laboratory or of the independent testing laboratory hired to perform the QA testing. The QTS or their representative will be at the site where the testing is being performed. The QTS schedules, reviews, and verifies for compliance all test reports performed by the QA testing laboratory. The QTS report to the CQAM. The QTS cannot have responsibility for construction production or be the CQAM.

QA Testing Technicians performing the field and laboratory QA sampling and testing will be employed by the Design-Builder or an agent's laboratory. QA Testing Technicians will not be affiliated with or employed by materials suppliers, subsidiaries, or the QC organization. QA Testing Technicians will not perform QC testing and they will report to the CQAM or the QTS.

QA Inspection Technicians will inspect, verify materials, and document all construction activities for compliance to the contract. QA Inspection Technicians will not be affiliated with or employed by materials suppliers, subsidiaries, or the QC organization. QA Inspection Technicians will not perform QC inspection. QA Inspection Technicians report to the CQAM.

All QA testing that will be used for acceptance of materials will be performed by a laboratory approved by the WSDOT Engineer. The QA Laboratory Manager reports directly to the QTS. The Design-Builder or a subcontractor employs the laboratory personnel. The materials testing laboratory that is used for QA testing will not perform QC testing and will not be owned, operated, equipped, or staffed by material suppliers. The laboratory will meet the requirements of AASHTO R-18 for qualified testers and calibrated/verified equipment and be able to accomplish the testing according to the test procedure they are performing.

QA Testing Technicians and construction inspectors may attend the instructional courses WSDOT provides its personnel on a space-available basis, at no cost to the Design-Builder.

Refer to RFP [Section 2.28](#) for further information.

### **7-7.2 Statistical Analysis of Materials**

The Design-Builder is required to input all QA testing data that is categorized in RFP [Section 2.25.12.6](#). This table replaces the frequency table in the WSDOT *Construction Manual* M 41-01. Once that data is input in Statistical Analysis of Materials (SAM), there is direction in RFP [Section 2.25.12.6](#) as to whether or not F&t Analysis is required for acceptance of the Design-Builder's QA testing. The Design-Builder is also required to make the F&t comparisons using SAM and report during the QA Task Force meeting whether or not there are differing means or variabilities within the constituent portions of each material mix design.

### **7-7.3 F&t Analysis**

RFP [Section 2.25.5.2](#) requires QV to validate QA test results through F&t analysis on WSDOT design-build projects. QV test results act as either the validation or the rejection vehicle for WSDOT as they are no longer self-performing acceptance or QA testing. Validation through F&t analysis helps develop a confidence level in testing results with few exceptions. As WSDOT is bound to comply with [23 CFR 637](#), we are also required to validate all agents performing QA on our behalf.

WSDOT's role in design-build requires F&t analysis for all processed materials being incorporated into the project. F&t analysis takes into account the variability and populations of materials being tested by both QV and QA. The "F" test deals with variability while the "t" test deals with populations or means of the test sample populations for both QV and QA.



#### **7-7.4 Testers and Inspectors Quality Control**

The Design-Builder will be responsible for QC, which is defined as activities performed by the Design-Builder, the producer, or the manufacturer to ensure that a product is of uniform quality, meeting the contract requirements. Components of QC may include inspecting and obtaining material certifications, materials handling, construction procedures, calibration and maintenance of equipment, production process controls, and all sampling, testing, or retesting conducted for these purposes.

The Design-Builder will perform, control, and ensure that operational techniques and activities provide acceptable quality and comply with the contract. The Design-Builder's QC personnel will be a separate organization within the Design-Builder's organization from the Design-Builder's front line supervisors. They may be suppliers, producers, or manufacturers, but in no case may they be associated with the Design-Builder's QA organization. The Design-Builder's QC personnel will be trained and provided the necessary tools, testing procedures, and inspection checklists to ensure that the work product meets the contract requirements. The QC testers and inspectors report to the CM or designee but that designee cannot be the CQAM.

#### **7-7.5 Independent Assurance**

The IA is an independent verification performed by WSDOT, which includes an observation of sampling and testing procedures, a review of the qualifications of the tester, and a verification of the testing equipment used to perform acceptance-testing activities. The IA will validate both the Design-Builder's QA processes and WSDOT's QV processes. The IA may include auditing of acceptance testing records, observing the tests being performed by the Design-Builder's technicians, or taking split samples with the Design-Builder on a random basis for verifying the Design-Builder's testing equipment. WSDOT will enter findings of all IA observations into the Construction Audit Tracking System (CATS). Deficiencies will result in a NCI. The Design-Builder will take corrective action immediately for all noted deficiencies.

#### **7-7.6 Quality Assessment**

WSDOT will perform non-scheduled quality assessments of the Design-Builder's work, including sampling, testing, and documentation reviews.

#### **7-7.7 Quality Verification**

QV is a combination of inspections, independent sampling, and testing performed by WSDOT, or their agent, to validate that the Design-Builder is following approved QA procedures and that such procedures appear to be effective in assuring quality.

Refer to RFP [Section 2.28](#) for further information on QV.

## 7-8 WSDOT Auditing Processes and Non-Conforming Work

It is important to recognize that workmanship is as fundamental an element of overall project quality as materials. The quality of workmanship is demonstrated through the Design-Builder's process control procedures, QC inspections, and through WSDOT's auditing program.

WSDOT's program to assess workmanship on design-build projects centers on compliance with the specifically stated requirements of the contract documents. For the most part, these are the project Technical Requirements and the Standard Specifications. To be effective in their role, WSDOT auditors should have an intimate familiarity with the requirements of the contract Documents and be able to cite specific requirements that are or are not in compliance.

### 7-8.1 WSDOT Audits

The Design-Builder's wage, payroll, subcontractors, materials, testing, equipment, working drawings, material laboratories, fabrication plants, and cost records on this contract will be open to inspection or audit by representatives of WSDOT during the life of the contract and for a period of not less than 3 years after the date of Final Acceptance. The Design-Builder will retain records identified in RFP Section 1-09.12(3) for that period. The Design-Builder is to guarantee that the wage, payroll, and cost records of all subcontractors and all lower tier subcontractors will be retained and open to similar inspection or audit for the same period. The audit may be performed by employees of WSDOT or by an auditor under contract with WSDOT. Refer to RFP Section 1-09.12 for Design-Builder required audit documents.

WSDOT will periodically audit the field performance of the Design-Builder's QA organization, testing frequencies, and acceptance testing results. The WSDOT Engineer will conduct oversight inspection audits to verify the adequacy of the Design-Builder's inspection activities and testing procedures.

#### 7-8.1.1 Quality Verification Audits

QV audits are WSDOT's tool to evaluate the day-to-day, week-to-week, and month-to-month operations of a design-build project. CATS is WSDOT's software or tool for documenting the audit findings. Inside CATS, there are Headquarters (HQ) checklists that reflect the construction requirements in Divisions 2, 4, 5, 6, 7, 8, and 9 of each version of the Standard Specifications. Each design-build project is responsible for turning their RFP into PE checklists.

Each of these types of checklists provides audit criteria that are extracted from the "shall" statements. "Shall" statements are found throughout the general requirements, Technical Requirements, Standard Specifications, appendices, proposal Betterments, management plans, and permit requirements.

"Shall" statements give the Design-Builder direction and supply WSDOT auditors with audit-verifiable items. The contract-specific documents should be studied and explored for their specific shall statements.

- Each “shall” statement is made into a question. You do this by first stating each “shall” statement verbatim and then asking, “Was this requirement met?”
- Each RFP chapter, appendix, or permit requirement is made into a PE checklist;
- Each checklist becomes table from which a situation-specific audit can be assembled.
- Frequency of audits:
  - 2 to 5 times per week for the first 6 to 9 months of a long duration project (1½ years and greater). Once the QV team is confident that QA is performing their function adequately, this frequency could drop off to 1 to 3 times per week.
  - 2 to 5 times per week should be maintained throughout the life of the project for short duration projects (single season construction).

**Note:** Auditors should also maintain an electronic or hard copy diary for those days that audits are not performed (an Inspector’s Daily Report narrative section or PE diary are good formats).

- Each audit should contain between 5 to 15 questions or audit items.
  - Single audit item audits (cherry picking) tend to only note non-conformance and should only be used when the WSDOT Engineer, the Lead Auditor, or both agree with the auditor that this format is appropriate to the issue in question.
- Those audit items pertain to the work which:
  - Has been completed to that point; or
  - Is ongoing that requires certain intermediate steps (Hold Points) be completed prior to the work being completed.
- Each audit item has an “Observations” area or box that allows the auditor to document their observations regarding the specifics of conformance/non-conformance.
- Each audit item has an “Accepted” area or box where there are three options that you can select: “Yes”, “No”, or “N/A”.
  - Each audit item that receives a “Yes” means that, by the auditor’s observation, the work meets contract requirements.
  - Each audit item that receives a “No” means that, by the auditor’s observation, the work does not meet contract requirements and is an NCI.
- QV audits should examine all phases of the QA and QC work or processes in:
 

– Quality	– Construction
– Design	– Business
– Environmental	– Materials

QV audit questions should pertain to the deliverable function of the work or process:

- Who was doing the work: Design-Builder, subcontractor, vendor, laboratory, consultant, QA, QC, or production?
  - Was this who should have been doing the work?

- What work was being done?
  - This is where the auditor discusses what was observed.
- Where was the work being done?
  - Was the location in conformance with the requirements?
- When did it happen?
  - Date and time, especially if the aspect is time critical.
- Why was the work being done in the manner it was?
- How was the work being done?
  - Was the work completed in conformance with the requirements?

The WSDOT Engineer will perform an on-site evaluation of the Material Testing Laboratory, in accordance with WSDOT Standard Practice QC 3, Quality System Laboratory Review, in the WSDOT *Materials Manual* M 46-01, to ensure that all work is being performed according to the contract. The evaluation will include audit and inspection functions, review of training, equipment calibration, verification of records, and observance of testers as they perform the test procedures. Refer to RFP [Section 2.28](#) for further information.

The QMP describes the procedures for auditing and checking conformance with working drawings and the distribution to the WSDOT Engineer for Review and Comment. Refer to RFP [Section 2.28](#) for further information on working drawing reviews and audits.

WSDOT will periodically audit the field performance of the Design-Builder's QA organization, testing frequencies, and acceptance testing results. The WSDOT Engineer will conduct oversight inspection audits to verify the adequacy of the Design-Builder's inspection activities and testing procedures. Refer to RFP [Section 2.28](#) for further information.

The Design-Builder and its subcontractors will provide adequate facilities acceptable to WSDOT for the audit during normal business hours. The Design-Builder and all subcontractors will cooperate with WSDOT auditors. Refer to RFP [Section 1-09.12](#), for further information.

### 7-8.1.2 Construction Audit Tracking System

WSDOT began development of CATS software in 2005 to give staff a tool for QV audit tracking in design-build projects. In the design-build project delivery model, WSDOT no longer leads QA inspection/acceptance processes but, rather, verifies that those processes are taking place. WSDOT recognized that an audit system needed to be developed to facilitate the capture of frequent snapshots in time and the oversight of progress in design-build projects. This was important so that the agency could verify that quality requirements were being met within reasonable conformance with the RFP.

### 7-8.1.3 How Do I Start?

In the case of the project office, take Chapters 1 and 2 of the RFP and search (Ctrl-F) for all of the “shall” statements. These are the requirements or deliverables through which you assess the Design-Builder’s conformance, processes, and end products. Do yourself a favor and highlight all of the occurrences of “shall” in the Microsoft Word documents or PDFs of the RFP.

### 7-8.1.4 Where Do I Start?

You will look in the General Provisions for administration or business requirements. RFP Chapter 2 is where the Technical Requirements are spelled out for each discipline specific criteria. Think of these as if they were the amendments to the Standard Specifications and Special Provisions. These requirements spell out the contract as it is to be administered. The discipline-specific chapters of RFP Chapter 2 also outline the Mandatory Standards required for use in design, environmental, quality, and construction facets of the project.

### 7-8.1.5 When Do I Start?

As soon as you have conformed RFP documents in electronic form, begin to develop your PE checklists for use in CATS. It works best if you initially develop your audit questions offline in a spreadsheet. The Construction Division’s Design-Build Quality Manager (DBQM) has a spreadsheet template specifically created for this purpose. Plan on spending approximately 20-40 hours to develop your PE checklists.

### 7-8.1.6 Why Do I Start?

CATS is a unified, Standard Specifications-based auditing software system that provides WSDOT management with unbiased, at-a-glance assessments of auditing and reporting status through various summary reports.

### 7-8.1.7 Entering a New Design-Build Project into CATS

Enter the contract/work order into the “Contract Info” page of CATS by clicking the “Add New Contract” button.

In the work order field, enter your six-digit contract number (using leading zeroes as needed). Next, type in the project title as it appears on the WSDOT Construction Office’s Design-Build website. Then type in the “Orgcode”. Click the “Save” button. After a successful save, the system will respond, “Data saved successfully.”

Type in the “Award Date”.

To type in the “Spec Book Version”. Use the one listed in the conformed appendices - usually B1 or D18.

Type in the “Prime Contractor” and their email address. Click the “Save” button.

### 7-8.1.8 Headquarters Audit Types, Disciplines, and Sub-Categories

The DBQM has an extensive list of audit types to choose from that were established over the history of the CATS program's use. After many years of use, the following audit types have become most prevalent:

- Inspection (Catch all for most field observations)
- QMP or Quality (Process-oriented audits of QA)
- Design (Through all stages of development: over-the-shoulder, preliminary, final, and RFC)
- Business (contract administration)
- Environmental (Everything short of an environmental compliance assurance procedure)
- Maintenance of Traffic (MOT)
- Documentation (RAM, Record of Materials, and QPL review)
- Materials (Region IA inspector observations)

### 7-8.1.9 Headquarters Checklists

HQ checklists are developed from the construction requirements of the Standard Specifications Divisions 2, 4, 5, 6, 7 and 8. The requisite "shall" statements are copied into the checklist. In order to convert the "shall" statements into audit questions, the checklist editor appends each "shall" statement with "Was this requirement met?" See the PE checklists section below for an example.

To ensure statewide consistency, HQ checklists are developed and maintained by WSDOT HQ Construction Division.

### 7-8.1.10 Project Engineer Disciplines and Sub-Categories

Simply, these are the General Provisions, Technical Requirements, QMP requirements, and Betterments in an outline, bulleted format for database organizational purposes. WSDOT auditors choose from HQ audit types like; Betterments, QMP, materials, environmental, inspection (catch-all for field work), MOT, geotechnical design, public information, roadway design, project documentation, stormwater management, roadside restoration design, and so on.

### 7-8.1.11 Project Engineer Checklists

PE checklists are organized using the RFP's organizational structure (sections and subsections) as the basis of the for audit folder and subfolder organization.

For example:

Section 2.28 is titled, "Quality Management Plan", subsection 2.28.1 is titled, "General", Subsection 2.28.1.2 is titled, "Pre-Activity Meetings"

These are your audit type, discipline, and sub-category, respectively.

Once the checklist structure is defined, audit questions may be created as follows:

1. Identify contract requirements by looking for “shall” statements in the RFP, QMP, Betterments list, and any other source of contract requirements.
2. Copy each requirement verbatim, skip a line, and ask, “Was this requirement met?” For example:

The Design-Builder shall hold pre-activity meetings to ensure that all Project personnel have a thorough understanding of the Work to be accomplished prior to beginning construction on a Work activity.

Was this requirement met?

#### 7-8.1.12 Scheduled Activities

This is where the scheduled activity numbers and descriptions from the baseline schedule, as submitted by the Design-Builder, are input into CATS. The schedule can either be copy and pasted into CATS one activity at a time or it can be sent to WSDOT’s IT helpdesk for batch uploading.

#### 7-8.1.13 Work Locations

Each element of work’s location is defined with a primary location, a primary and secondary location, or a primary, secondary, and tertiary location. This is where the work is to be audited.

*Note: Work locations can be refined even further with stations and offsets.*

#### 7-8.1.14 Associate Scheduled Activities and Work Locations

Tie work locations to scheduled activities. Audit scope is defined by specific scheduled activities that are paired or associated with specific work locations. Multiple scheduled activities may be paired or associated with common work locations. For example: preliminary, over-the-shoulder, final, and RFC audits could all be performed at a co-located office. Other activities and locations may have a one-off usage. For example, “Signal turn-on” would be paired or associated with the project’s only signalized “intersection” (primary) at “32nd St. SE” (secondary) in the intersection’s NW quadrant (tertiary).

### 7-8.1.15 Audit Plans (not part of CATS)

Audit plans are to be developed by each design-build PE's office. The PE, Lead Auditor, and auditors need to identify the areas of work where the greatest risk of failure is and then to place emphasis on auditing those areas more frequently. Lessons learned should play into every audit plan. Talk to experienced auditors in current design-build projects. These individuals have profound knowledge regarding the who, what, where, when, why, and how of a project's day-to-day operation.

If there are work elements that are known to frequently fall outside contract requirements, then those elements should require a greater level of scrutiny, dependent on the risk level associated with non-conformance. Namely, these would include items identified in the pre-approved corrective action plans described in RFP [Section 2.28.1.11](#).

Audit priorities need to be bulleted in an outline format and expanded to encompass the work. Prioritize each of the specific bullet points according to risk. Once the QV team reaches a consensus and agrees on the priority ranking, audit preparation may begin.

Auditing should be a matter of fact, "Did the Design-Builder comply with the contract requirement or not?"

- If the Design-Builder did, there is compliance.
- If the Design-Builder did not, there is a NCI.

NCIs should not be primarily considered a deficiency. They should be considered a learning tool.

For each NCI, the Design-Builder must provide a corrective action plan along with the repair, re-work, remediation, removal, or replacement of non-conforming work.

### 7-8.1.16 Prepare Audit

Once the QV team has studied the audit plan, they should review the work to be verified, be it design, business, environmental, quality, or construction and then pull related questions from the HQ or PE checklists. If the QV team helped assemble the PE checklist then they will have a far better grasp of the requirements or deliverables that need verification or oversight. The knowledge of both contract requirements and the audit plan should give the QV team insight into the elements of work that have the greatest risk of failure.

Initially, the Lead Auditor needs to be responsible for preparing audits as they should have a better feel for the aspects being audited. As experience and confidence are exhibited by the auditors, they should be given this task along with expectations of performance.



### 7-8.1.17 Perform Audit

Invariably, auditors will begin to build audits that have a great deal of content but, sometimes, are not entirely applicable to the work being audited. It is best, at least initially, to have auditors export their draft audits from CATS to PDFs using the “View Current Audit Items” radio button and the “Preview” button.

Bring the draft audit PDF to the audit site and determine which audit questions should be deleted or deferred. This goal is to ask only relevant audit questions. By doing this, “N/A” acceptance findings should be eliminated.

Armed with a relevant set of audit questions, you may now perform your audit. Sometimes audit questions can be answered with only a visual verification of conformance with requirements. Other audit questions require more coordination with the Design-Builder. In either case, the auditor needs to document their observations and determine the level of acceptance: “Yes”, “No”, or “N/A”.

### 7-8.2 Non-Conforming Work

Non-conforming work is work performed that does not meet the requirements of the contract. Auditors determine non-conforming work by identifying objective evidence that the finished product does not conform to a stated contract requirement. Objective evidence is evidence that directly relates to the Design-Builder’s fulfillment of a contract requirement and does not include opinion, commentary, or grievance. Refer to the General Provisions, for further information on non-conforming work.

Audit questions that result in an acceptance code of “No” will automatically generate NCIs. NCIs require the same review and ultimate closure as NCRs generated by the CQAM. Refer to RFP [Section 2.28](#) for further information.

## 7-9 FHWA Audits

FHWA audits will be performed in accordance with the Stewardship and Oversight Agreement (executed on 2015-03-15 between the FHWA and WSDOT) and as authorized by the Federal Managers' Financial Integrity Act (FMFIA); 49 CFR 18.26; OMB Circular A-87, A-123, 133, 127; GAAP; Chief Financial Officers (CFO) Act of 1990; and DOT Order 8000 1C.

## 7-10 Change Orders

The change order process in design-build delivery differs significantly from that in design-bid-build (DBB) delivery. For the most part design-build contracts are lump sum based, and design-bid-build contracts are unit price based. Therefore, in design-build delivery, instead of relying on contractually set unit pricing, change order costs must be negotiated. The fact that the Design-Builder performs much of the design work further complicates the change order process.

As part of contract management, it is important that WSDOT maintain a conformed contract that reflects all changes to the contract documents because of change orders, regardless of which party initiates the changes. Maintaining a conformed contract ensures that all parties are working off the most updated contract requirements throughout the implementation of the project. At the end of the project, the conformed contract becomes part of the final record of the project and reflects the administration of the project.

### 7-10.1 Change Order

A change order can be described as a written amendment to the contract. Approved change orders are a legal part of the contract documents and are treated just like the original contract documents.

The intent of the contract documents is that the Design-Builder undertake full responsibility for delivery of the project. The contract documents do not provide details of design necessary to carry out the intent of the contract documents. Such detailed designs are the sole responsibility of the Design-Builder to develop.

WSDOT wants the Design-Builder to have flexibility in determining how best to design and construct the project. This must be done within the parameters established by the contract, unless WSDOT approval is granted for contract modifications. WSDOT's internal process for design-build contract modification approval and execution authority will adhere to the requirements detailed in this chapter and in the contract.

Contract modifications can be unilateral or bilateral, but bilateral modifications are always preferred.

#### 7-10.1.1 Types of Change Order

- WSDOT-Initiated Change Order
- Design-Builder-Initiated Change Order

#### 7-10.1.2 WSDOT-Initiated Change Orders

WSDOT reserves the right to authorize and/or require contract modifications in the work within the general scope of the contract as provided in RFP [Section 1-04.4\(1\)](#).

### 7-10.1.3 Design-Builder-Initiated Change Orders

It is the desire of WSDOT to allow the Design-Builder to have significant flexibility in determining how best to design and construct the project, within the parameters established by the contract documents. The Design-Builder is encouraged to propose changes whenever it identifies potential savings. The approval of a Design-Builder-Initiated change is at WSDOT's sole discretion. RFP [Section 1-04.4\(2\)](#) of the contract sets forth the requirements for a Design-Builder-Initiated change.

## 7-11 Construction Contracts Information System Database

The Construction Contracts Information System (CCIS) is a mainframe application designed to track contract information and generate reports for all WSDOT administered construction projects. The initial setup of contract information into CCIS is done automatically by using information in the Contract Administration and Payment System. However, after the initial setup, the project offices enter the majority of the contract information into the CCIS system. The data entered is then maintained and stored on the mainframe. For more information on CCIS see the WSDOT *Construction Manual M 41-01*, and the CCIS manual.

All design-build contract Category A and B Requirement changes will be entered into CCIS and may be changed only through Value Engineering Change Proposals or WSDOT-Directed Changes, and Category B Requirements may be changed only through Category B Change Proposals or WSDOT-Directed Changes.

### Category A and Category B Changes

WSDOT approval is required with respect to any proposed changes in the Category A and B Requirements. Section 1-04.4 of the General Provisions sets forth the requirements applicable to requests for modifications in Category A and B Requirements submitted by the Design-Builder.

The requirements of the contract documents are designated as either "Category A Requirements" or "Category B Requirements" in accordance with the following table:

Contract Requirement Designation	Change Category
Chapter 1 General Provisions	Category A
Chapter 2 Technical Requirements - Mandatory Standards (Except the Standard Specifications)	Category A
Chapter 2 Technical Requirements - All except Mandatory Standards	Category B
Standard Specifications	Category B
Special Provisions	Category B
Amendments to the Standard Specifications	Category B
Proposal Documents	Category A
Basic Configuration	Category A

## 7-12 Payments

### 7-12.1 Progress Payments

The Design-Builder shall submit monthly invoices to WSDOT on a mutually agreed date that is consistent with the progress payment cutoff date set by WSDOT. No payment item shall be included on an invoice for work that has been documented as deficient by the Design-Builder's QA organization.

If requested by WSDOT, the Design-Builder shall provide separate invoices for work subject to reimbursement by the Federal government or third parties. Such invoices shall be organized to meet all applicable reimbursement requirements and to facilitate the reimbursement process.

No invoice will be processed until WSDOT has received the documents required in the contract.

The invoice value will be based on the agreed upon progress for the contract schedule activities as outlined in RFP Sections [1-08.3](#) and [1-09.9](#).

WSDOT will simultaneously review each invoice and progress report in detail and then process the invoice for payment. Partial Payments will be made once each month. If WSDOT questions or disputes any item, it will redline the item and refer the item back to the Design-Builder for resolution before payment. WSDOT will deduct from the payment the value of the items not resolved to its satisfaction before the payment date.

Refer to RFP [Section 1-09](#) for further information on payments, invoices, and documents submitted with invoices.

### 7-12.2 Processing Liquidated Damages

There are two types of liquidated damages: contract time and miscellaneous. Refer to the *WSDOT Construction Manual M 41-01*, for further information on how to process these two types of liquidated damages.

## 7-13 Final Documents and Meetings for Close Out

Final Design Documents, As Builts, and construction document submittals are discussed in [Chapter 8](#) of this manual and in RFP Section 2.12. The Design-Builder will establish Close Out Task Force meetings to oversee and provide input on developing final Design Documentation and final permanent and temporary construction records. At a minimum, Close Out Task Force meetings shall include the PQM, DCM, PM, DM, and the WSDOT Engineer.

## 8-1 Introduction

This chapter discusses key dates of acceptance in a design-build project.

This chapter also discusses the close out and acceptance of final project documentation for both design and construction and defines the responsibilities the Design-Builder has concerning project documentation, and the responsibilities of WSDOT for project documentation and retention of documents.

Section 2.1 requires the Design-Builder to use an electronic Document Control System (DCS) to track and manage project documentation through the design and construction phases of the project. It is a best practice to start the compilation of final design documentation and final construction documentation early in a project. Planning for close out of documentation should start at the beginning of the project.

The Design-Builder is required to establish a close out task force meeting to oversee and provide input on developing design and construction documentation. These meetings begin monthly, shortly after Notice to Proceed (NTP) is given, and continue monthly until Substantial Completion given, and then weekly through Completion. Meeting personnel will include, at a minimum, Project Quality Manager, Document Control Manager, Project Manager, Design Manager and WSDOT Engineer.

## 8-2 Project Acceptance

### 8-2.1 *Completion and Final Acceptance*

Project Acceptance is when Completion and final acceptance of the contract occurs. Final acceptance is given as the date the Final Contract Voucher Certificate (FCVC) is signed by the Secretary (or designee). The signing accepts that all obligations of the contract are complete and acknowledges the final amount due to Design-Builder. Failure of the Design-Builder to perform all the obligations under the contract shall not prevent WSDOT from unilaterally accepting the contract as provided in Section 1-09.9(2).

The FCVC is part of the Final Estimate Package. The WSDOT Engineer will create and transmit the Final Estimate Package for signature. Refer to *Final Estimate - Contract Acceptance* in SS 1-09.0 of the *WSDOT Construction Manual M 41-01* for information on what documents are required in the Final Estimate Package, the transmittal of the package, and who reviews and signs the FCVC.

In order for the project Completion Date to be established, all the physical work on the project must be completed, and the Design-Builder must have furnished all documentation required by the contract. This includes all approved Affidavits of Wages Paid, and the signed FCVC. (**Note:** Establish the Completion Date as soon as the last item of paper work is received.)

WSDOT will give the Design-Builder written notice of the Completion Date of the contract after all of the Design-Builder's obligations under the contract (with the exception of warranty work) have been performed by the Design-Builder. Completion of the contract shall occur within 90 calendar days of Physical Completion. The following events must occur before the Completion Date can be established:

1. The work on the project must be complete pursuant to the contract documents.
2. The Design-Builder must furnish all documentation required by the contract and required by law.

Refer to the Section 1-08.5, General Provisions for more information, and SS 1-08.5 of the WSDOT *Construction Manual* M 41-01 for more information on Completion.

### 8-2.2 *Physical Completion*

Physical Completion occurs prior to Completion and final acceptance of the contract, and is given when Design-Builder has achieved the following:

- Completed all construction work
- Satisfied all conditions for acceptance by utility owners
- Satisfied all requirements regarding Final Cleanup pursuant to Section 1-04.11, General Provisions
- Furnished the Design Documentation Package and Project File as required in Section 2.12, Project Documentation, and as noted further in this chapter

The Design-Builder will notify WSDOT when all of the above referenced conditions have been met. Upon receipt of the notice, WSDOT will perform final inspection pursuant to Section 1-05.11. Should WSDOT identify any defects or deficiencies in the work, the Design-Builder shall immediately remedy such defects or deficiencies at no additional cost. Upon full compliance with bulleted items listed above, the WSDOT Engineer will give the Design-Builder written notice of the Physical Completion Date for the contract.

Refer to the Section 1-08.5, General Provisions, of the RFP, and SS 1-08.5 of the WSDOT *Construction Manual* M 41-01 for more information on Substantial and Physical Completion.

### 8-2.3 *Substantial Completion*

Substantial Completion occurs prior to Physical Completion. Before Substantial Completion will be given by the WSDOT Engineer, the Design-Builder is required to notify the WSDOT Engineer that the following have occurred prior to Substantial Completion:

The Design-Builder has completed all site work such that WSDOT and the traveling public have full and unrestricted use and benefit of the facilities from both the operational and safety standpoint, and only minor incidental work, replacement of temporary substitute facilities, or correction or repair remains for the Physical Completion of the total contract.

- The Design-Builder has ensured that all work completed to achieve Substantial Completion has been performed in accordance with the requirements of the contract documents.

- The Design-Builder has ensured that the facilities may be operated without damage to the project or any other property on or off the project site, and without injury to any person.
- The Design-Builder has obtained all design and construction approvals by utility owners.
- The Design-Builder has ensured that the facilities are ready to be opened for public traffic and that remaining work can be completed within single lane or shoulder closures between times given in the RFP, in accordance with the Technical Requirements of the RFP.

Upon compliance with all requirements noted above, the WSDOT Engineer will grant the Design-Builder written notice of the Substantial Completion Date.

Substantial Completion is often linked to contract insurance requirements, therefore the Contract Administration and Payment System (CAPS) Unit of Accountability and Financial Service (AFS) must be notified of the Substantial Completion Date (email to caps@wsdot.wa.gov).

Refer to the Section 1-08.5, General Provisions, for more information on Substantial and Physical Completion and SS 1-08.5 of the WSDOT *Construction Manual* M 41-01.

## 8-3 Close Out of Final Design Documentation

All documentation for design need to be submitted for review in accordance with the Quality Management Plan (QMP), as described in Section 2.28. The QMP includes an organization chart of the Quality Assurance (QA) and Quality Control (QC) personnel for design of the project and their responsibilities along with the lines of authority for each employee.

The final design documents need to reflect the actual condition of the constructed work, to the same degree of detail as the Request for Construction (RFC) documents. It is the responsibility of the Design-Builder to do all work necessary to complete the required documentation for the design and construction of the project, and to obtain WSDOT acceptance of the final project documentation.

### 8-3.1 Design Documentation Package

The Design-Builder will prepare a Design Documentation Package (DDP) for the project.

The DDP preserves the major decision documents generated during the design process and is retained for 75 years. The DDP documents explain design decisions, design criteria, and the design process that was followed. In each DDP, a summary (list) of the documents in the DDP is required. The summary (list) is the DDP checklist. The DDP checklist is an appendix to the RFP and can be further discussed in [Chapter 300](#) of the WSDOT *Design Manual* M 22-01.

The DDP will include signed and approved cover pages of the *Design Approval*. In a design-build project, the *Design Approval* is completed prior to issuing a RFP. A copy of the *Design Approval* can be found in the appendices of the RFP. Environmental documentation completion is recommended to be complete prior to issuing a RFP, if not, it is required prior to Execution.

### 8-3.2 **Project File**

The Project File (PF) contains the remaining project documentation that is pertinent to construction, but not necessary to be retained for 75 years. This will include documentation for planning, scoping, programming, design, contract assembly, utility relocation, needed Right of Way, advertisement, award, construction, and maintenance review comments for a project. The PF is completed for all projects.

The PF will include all applicable components identified in the WSDOT *Project File Checklist*, Refer to RFP appendices for *Project File Checklist*, or the WSDOT *Design Manual M 22-01*. Elements that do not apply to the project are to be noted on the checklist with clarifying statements explaining why they are not applicable.

The Design-Builder needs to obtain copies of WSDOT generated information created during the Conceptual Design that may not be included in the original Request for Proposal, but are needed by the Design-Builder in order to complete the DDP and PF items.

The DDP and PF are to be maintained throughout the project by the Design-Builder.

For additional DDP and PF submittal requirements, refer to Section 2.12, Project Documentation, and [Chapter 300](#) of the WSDOT *Design Manual M 22-01*.

### 8-3.3 **Project Development Approval**

Significant revisions to the concept design as documented in the *Design Approval* shall be noted and updated in the Project Development Approval (PDA). The Design-Builder is required to submit a draft of the PDA within 60 calendar days of the last RFC design submittal. The WSDOT Engineer will Review and Comment within 25 calendar days. All comments shall be resolved before the PDA is finalized and submitted to the WSDOT Engineer for approval. The WSDOT Engineer's approval is required prior to Completion.

When all project development documents are completed and approved, the PDA is approved. The PDA Approval becomes part of the DDP.

It is a best practice to start the compilation of design documentation early in a project and to acquire PDA before the Completion of the project.

Refer to Section 2.12, Project Documentation; and [Chapter 300](#) of the WSDOT *Design Manual M 22-01* for more information on what needs to be contained in the DPA.



### 8-3.4 *Technical Memoranda*

The Design-Builder is required to provide technical memoranda that document decisions made during completion of the design regarding components not included in the Mandatory Standards. The memoranda shall be provided with associated preliminary design documents at the task force meetings. Technical memoranda shall be dated, indicate the project title, and include the stamp and signature of a Licensed Professional Engineer. Technical memoranda need to follow the format shown in Section 2.12.

### 8-3.5 *Design Analyses*

A Design Analysis is a process and tool used to document important design decisions, summarizing information needed for an approving authority to understand and support the decision. A Design Analysis is required where a dimension chosen for a design element that will be changed by the project is outside the range of values provided for that element in the *WSDOT Design Manual M 22-01*.

In design-build contracts, there can be a Pre-Approved Design Analyses prepared and made part of the RFP appendices. If required, the Design-Builder shall update the Pre-Approved Design Analyses by preparing documentation that conforms to the [Chapter 300](#) of the *WSDOT Design Manual M 22-01*, uses the Design Analysis template, and submitting this documentation to the WSDOT Engineer for review and approval. The Design-Builder shall conduct all work necessary to complete the Design Analyses for the project. All Design Analyses shall be prepared by, or under the direct supervision of, a Licensed Professional Engineer. The cover of each Design Analysis shall carry the Licensed Professional Engineer's stamp and signature.

Design Analyses approved after contract award will be addressed in accordance with Section 1-04 of the General Provisions.

Refer to Section 2.12, Project Documentation, and [Chapter 300](#) of the *WSDOT Design Manual M 22-01* for further information.

### 8-3.6 *WSDOT Quality Verification Design Documentation*

The design document deliverables from the Design-Builder will often be submitted to the WSDOT Engineer in partial submittal packages for review in the months leading up to the contract Physical Completion, when the entire submittal is due. A best practice is to have the WSDOT Quality Verification (QV) teams review and verify those partial submittals as they are submitted, so that the majority of the final submittal at Physical Completion has been previously reviewed and verified.

For some design documentation (i.e. additional Design Analyses is a good example) the WSDOT QV personnel may need to coordinate between the Design-Builder, HQ Design and FHWA to ensure FHWA is appropriately involved in the approval process if the contract has FHWA Federal-aid or Federal oversight.

During the production of these design documents, WSDOT QV personnel may apply the QV Audit processes in their review of the documents to determine if the deliverables meet contract requirement. The CATS Audit System is used to document any such WSDOT audits. Upon final submittal of the Documents, the WSDOT Engineer will need to ensure completeness of the Documents.

WSDOT QV efforts may require locating and providing the Design-Builder with design documents that WSDOT prepared either prior to or during the design-build contract. Therefore, discussions with the WSDOT design team, early in life of contract, on obtaining those design documents can be beneficial for later in the contract.

### **8-3.7 Approval and Retention of Final Design Documentation**

Prior to Physical Completion or termination of the contract, the Design-Builder is required to submit all design documents prepared in the performance of the contract. The final design documents shall include, at a minimum, the following:

- DDP including a copy of the original DA and PDA
- PF
- Updated electronic Micro Station and InRoads files in accordance with the WSDOT *Electronic Engineering Data Standards* (copy in RFP appendices), including all RFC sheets, reference files, and base mapping (topography, including survey updates).

The final design documents need to reflect the actual condition of the constructed work, to the same degree of detail as the RFC documents. The WSDOT Engineer will review the submittal and advise the Design-Builder of their acceptance of the final design documents or will provide comments detailing issues to be resolved. The Design-Builder shall address all comments in a manner consistent with the comment resolution process outlined in the Design-Builders QMP, and then resubmit the final design documents to the WSDOT Engineer. The WSDOT Engineer's approval is required prior to Completion.

Once the DDP is approved by the WSDOT Engineer, the WSDOT Engineer is responsible for assuring the DDP is retained in a permanent retrievable file for a period of 75 years, in accordance with the WSDOT records retention policy.

Once the PF is approved by the WSDOT Engineer, with the exception of the DDP, the WSDOT Engineer can purge the PF when retention of the final temporary construction records are no longer necessary.

Once the PDA is complete and approved by the WSDOT Engineer, it remains valid for a period of 3 years.

## 8-4 Close Out of Final Construction Documentation

### 8-4.1 As Built Plans

As Built drawings should reflect the same degree of detail as the awarded plan drawings or Released for Construction (RFC) drawings. As Built plans are necessary as a way of preserving the historical detail of what occurred on the project. As Built plans can also be used as a basis to plan and design future projects in the same location and to make repairs to damaged structural components or other non-functioning facilities. In addition, State law RCW 19.122.020(23), requires that owners of “underground facilities” be able to locate these facilities within 24 inches of the outside dimensions. As Built plans offer a convenient means for recording these facilities.

Prior to Physical Completion of the contract, the Design-Builder shall update and re-release all RFC plans affected by significant revisions made during construction in accordance with Section 2.28. Revisions to the RFC plans are to be performed by, or under the direct supervision of, the Engineer of Record (EOR). Re-issued RFC plans will need to include the professional engineer’s stamp and signature. The As Built plans will reflect the detail of the RFC plans and will be submitted to the WSDOT Engineer for review.

Refer to Section 2.12, Project Documentation, for more information on preparing, compiling, numbering, and marking of As Built plans.

#### 8-4.1.1 Acceptance and Retention of As Built Plans

Once As Built plans are compiled by the Design-Builder, they will be submitted to the WSDOT Engineer for Review and Comment. The WSDOT Engineer will advise the Design-Builder of acceptance or will provide comments detailing issues to be resolved. The Design-Builder will address all comments in a manner consistent with the comment resolution process outlined in the Design-Builder’s QMP, and then resubmit the final As Built plans. The WSDOT Engineer’s approval is required prior to Completion.

Once the WSDOT Engineer accepts and approves As Built plans from Design-Builder, the WSDOT Engineer will be responsible for submitting As Built plans to HQ Engineering Records for retention.

Refer to Section 10-3.11A of the WSDOT *Construction Manual* M 41-01 on preparing and submitting As Built plans to HQ Engineering Records.

Retention of As Built plans are stored in ILink or silverfiled for 75 years at HQ Engineering Record Services.

## 8-4.2 Construction Final Records

All records that are created during the administration of a construction contract can be placed in one of two categories, *Permanent Records*, records kept by the Headquarters and State Archives for future reference, and *Temporary Records*, records kept by the Region for a limited period of time after which the Region discards them.

The Design-Builder is required to conduct all work necessary to provide **construction temporary and permanent final records**.

These records will include field books, inspector's record of field tests, project and inspector's diaries, *Inspector's Daily Reports* (IDR)s, invoices, weigh bills, contaminated material disposal bills, item quantity tickets, receiving reports, project ledgers, mass diagrams, plotted cross-sections, computer listings, working profiles, and any other documents that could be considered a basis of payment for work performed or materials furnished. Section 2.12, Project Documentation and Section 10.3 of the WSDOT *Construction Manual* M 41-01 provides further descriptions and examples of temporary and permanent final records.

The Design-Builder is required to submit final records to the WSDOT Engineer prior to Completion or termination of the contract.

The Design-Builder shall prepare and submit final records as shown in Section 2.12, Project Documentation.

### 8-4.2.1 Permanent Final Records

The Design-Builder is responsible to provide permanent final records to be assembled and numbered as required in Section 2.12, Project Documentation prior to Completion or termination of the contract. Section 10.3 of the WSDOT *Construction Manual* M 41-01 allows permanent final records to be either paper or electronic.

To submit electronically, two requirements must be met:

1. The project must be in CCIS
2. All final records must be filed electronically

If the Design-Builder chooses to submit electronic permanent final records, WSDOT Information Technology (IT) ECM Support must be contacted to request an Enterprise Management Content (ECM) set-up for use. If the Design-Builder chooses to submit electronic permanent final records, the WSDOT Engineer staff may want to assist the Design-Builder in setting up the ECM by contacting IT by email. The IT email address is given in the ECM User Guide, which is discussed further in this section. Once contacted, IT establishes a directory to deposit the files. The directory contains a folder for each of the eight books, with additional subfolders as needed for each document type. Refer to the ECM User Guide, which is available in folder titled, My Favorites at web address <http://wsdotecm/Portal> for instructions on use of the Electronic of the directory and filing of records. Section 10-3 of the WSDOT *Construction Manual* M 41-01 also provides further information on electronic permanent final records.

Section 2.12, Project Documentation provides a list of the numbered permanent final record books. The following provides a short description of those books. Refer also to Section 10-3 of the WSDOT *Construction Manual M 41-01*.

Final Record, Book 1 is the first book of the permanent final records for a construction contract. It contains indices to the records that have been compiled for both permanent and temporary final records. It also identifies Key Personnel that have worked on the project and provides specific summary information. Final Record Book No. 1 is to be signed by the Regional Administrator or designee. Final Record Book No. 1 should contain a title sheet (DOT Form 422-009) and should be assembled with a semi rigid, water resistant cover.

1. **Index** – Section 1 of Final Record Book No. 1 is the first of two indices within Final Record Book 1. It is an index or detailed listing showing the various sections of Final Record Book No. 1 itself. An example of an index for Final Record Book No. 1 can be found in Figure 10-2 of the WSDOT *Construction Manual M 41-01*. The second index is actually the first section of the book. It provides a detailed listing of all records that have been kept and assembled for the project, including both permanent records and temporary records. An example of this index can be seen in Figure 10-3 of the WSDOT *Construction Manual M 41-01*.
2. **Design-Builder Project Personnel List** – Section 2 of Final Record Book No. 1 contains a copy of the listing of all design-build personnel assigned to the project and their classifications. The list should contain the name and classification of managers, supervisors, supervisors, testers, engineers, and any other Design-Builder personnel who were responsible for signing documents or forms or were responsible for decision-making on the project. Each person noted should place their identifying signature and initials after their name on the listing in the same manner as it appears in other final record documents. WSDOT Form 422-001 can be used as a guide in creating a Project Personnel Signature Listing.
3. **Comparison of Quantities** – Section 3 of Final Record Book No. 1. Not required for design-build projects.
4. **Final Estimate Sheets** – Section 4 of Final Record Book No. 1 contains a copy of the Final Contract Voucher Certification (FCVC), which will be prepared by WSDOT and provided to Design-Builder for review and signature.
5. **Contract Estimate Payment Totals** – Section 5 of Final Record Book No.1 contains a copy of the CAPS report obtained from the final estimate. This document will be given to Design-Builder by WSDOT. See Section 10-3.15 of the WSDOT *Construction Manual M 41-01* for further information.
6. **Change Orders** – Section 6 of Final Records Book No. 1 contains a listing of all change orders prepared for the completed project.
7. **Record of Construction Materials** – Section 7 of Final Records Book No. 1 contains a tabulation showing the source of all construction materials. For design-build contracts, this would be a copy of the Design-Builders Record of Materials (ROM). See Section 2.25, Control of Materials for additional information.

When preparing the individual Final Record Books, other than Book No. 1, it is not necessary to label pages within each book. Where it is appropriate, a table of contents may be added to identify sections within a particular book.

### **Project Engineer's Diaries, Book 2**

A complete, well-kept Project Engineer's Diary is a valuable administrative tool. Diaries done by both the Design-Builder and the WSDOT Engineer are filed in this book. See Section 10-3.6A of the WSDOT *Construction Manual* M 41-01 for more information on what should be included in the Project Engineer's Diary. WSDOT Form 422-014 is available for use for Project Engineer's Diaries.

### **Inspector's Daily Report, Book 3**

IDRs are permanent final records and shall include the key points of record. Each of the Quality Assurance (QA) inspectors shall summarize their daily inspections, tests, and material sampling activities in an IDR, in accordance with Section 2.28. The QA inspectors shall use WSDOT's *Inspector's Daily Report*, DOT Form 422-004, 422-004A, and 422-004B, or a similar form approved by the WSDOT Engineer, to maintain a written record of inspection results, and shall provide copies of the daily reports to the WSDOT Engineer the next business day.

The QV inspector's IDRs will also be filed in this book. The WSDOT Engineer will include or provide to the Design-Builder the QV IDRs for inclusion in this book.

Refer to Section 10-3 of the WSDOT *Construction Manual* M 41-01 for further information.

Subject to the following, it is acceptable for Quality Assurance (QA) inspectors to produce IDR's by recording information onto a recording device while at the job site for later transcription to a paper format:

1. All information required on the regular handwritten form must appear on the typed version.
2. The QA inspector must read and sign the typed document. (It is desirable for this to take place within 24 to 48 hours of the reporting period. However, it is recognized that certain situations may not permit this time frame and therefore it is not mandatory).
3. The QA inspector may make and initial hand corrections to the typed document.

Please note that inspectors who use lap top computers can also produce electronic versions of the IDR document. The electronically produced document must be complete, including the inspector identification block (the old signature block), consistent with the above criteria.

### **Contractor's Daily Report of Traffic Control, Book 4**

WSDOT Form 421-040A and 421-040B, Contractor's Daily Report of Traffic Control, are completed by the Design-Builder's Traffic Control Supervisor and included as part of the Project's Permanent Final Records. The Contractor's Daily Report of Traffic Control is discussed in more detail in Section SS 1-10 of the WSDOT *Construction Manual M 41-01*.

### **Pile Driving Records, Book 5**

The *Pile Driving Record* DOT Form 450-004 or *Pile Driving Log* DOT Form 450-004A should be included and made a part of the Permanent Final Records. The requirements for pile driving and pile driving records are further detailed in [Chapter 6](#) of the WSDOT *Construction Manual M 41-01*.

### **Post Tensioning Records, Book 6**

The *Post Tensioning Record* DOT Form 450-005 should be included and made a part of the Permanent Final Records. The requirements for post tensioning and post tensioning records are further detailed in [Chapter 6](#) of the WSDOT *Construction Manual M 41-01*.

### **Contaminated Material Disposal Bills, Book 7**

These records can consist of disposal invoices paid to take contaminated materials.

### **Miscellaneous Records, Book 8**

- As Built plans
- Completed Shop Drawings
- Section 2.12, Project Documentation identifies key documents for miscellaneous records, however miscellaneous records can also include other optional records that the WSDOT Engineer and Design-Builder feel of significant importance and should be part of the permanent records. Optional records can include correspondence or photographs deemed significantly important such as articles or photographs regarding project openings to public use or dedication. Placing these in the permanent final records will make them a matter of permanent record where they will be retained for future reference.

### **Material Certification**

At the conclusion of the contract, the Design-Builder shall submit a final Materials Certification Checklist to the WSDOT Engineer. The materials certification is to be signed by the EOR, and the Construction Quality Assurance Manager (CQAM). The Design-Builder may use the *Contract Materials Checklist* Form (DOT Form 350-115) or develop its own checklist with the same information as part of the Material Certification Package. The Materials Certification Package shall include all necessary supporting documentation. This documentation shall consist of all documentation practices used for material acceptance, and an explanation of any deficiencies noted in the checklist. The summary of this documentation shall be organized in an order similar to Division 9 of the *Standard Specifications*.

#### **8-4.2.1.1 Acceptance and Retention of Permanent Final Records**

The Design-Builder will submit final records (including all RFC documents) prior to Completion or termination of the contract. The WSDOT Engineer will Review and Comment on the submitted permanent final records and advise the Design-Builder of acceptance of permanent final records or will provide comments detailing issues to be resolved.

If the Design-Builder chooses to do permanent final records electronically once complete and assembled, they are sent to the WSDOT Engineer for review through the ECM. When one group completes their review, the records are locked to that group and are made available to the next. If a reviewer finds issues within the records, comments are added and the records are returned to the previous reviewer. Once all reviews are complete, HQ Record Services are notified by the WSDOT Engineer that the final records for the contract are complete.

WSDOT Engineer will include all QV *Inspector's Daily Reports* in Book 3 of final permanent records if not included by Design-Builder.

The WSDOT Engineer will include all WSDOT Project Engineer diaries in Book2 of the final permanent records or provide diaries to Design-Builder to include in Book 2.

Once WSDOT Engineer accepts and approves WSDOT Form 422-012 should be completed and affixed to each final record book when submitted with the files to WSDOT Engineering Records for filing. The address for Engineering Records may be found on the most current version of DOT Form 722-025. All final records sent to Engineering Records for filing will be kept permanently as the permanent final records for the completed project.

Retention of paper permanent final records, are sent to WSDOT Engineering Records by the WSDOT Engineer and stored by State Records Center for 75 years.

Retention of electronic permanent final records, are archived and stored electronically in ILink, for 75 years.

#### **8-4.2.2 Temporary Final Records**

The Design-Builder is required to collect and submit to the WSDOT Engineer temporary final records. Temporary final records consist of all construction records that are not retained as permanent final records.

If temporary final records are kept in numbered books then, in order to eliminate confusion with permanent final records, these books are to be numbered consecutively beginning with Book Number 9. Refer to Figure 10-3 in the *WSDOT Construction Manual M 41-01* for example.

Temporary Records submitted by the Design-Builder will consist of Nonconformance Reports (NCR)s, Nonconformance Issues (NCI)s, Material Certification (shown below), and the documents listed in Section 2.12.



## Material Certification

At the conclusion of the contract, the Design-Builder shall submit a final Materials Certification Checklist to the WSDOT Engineer. The materials certification is to be signed by the EOR, and the Construction Quality Assurance Manager (CQAM). The Design-Builder may use the *Contract Materials Checklist Form* (DOT Form 350-115) or develop its own checklist with the same information as part of the Material Certification Package. The Materials Certification Package shall include all necessary supporting documentation. This documentation shall consist of all documentation practices used for material acceptance, and an explanation of any deficiencies noted in the checklist. The summary of this documentation shall be organized in an order similar to Division 9 of the Standard Specifications.

### 8-4.2.2.1 Acceptance and Retention of Temporary Final Records

All records designated as temporary final records, once reviewed and accepted by the WSDOT Engineer, will be retained by the WSDOT Engineer. The WSDOT Engineer should ensure that those records designated as temporary final records are also assembled as a portion of the overall project final records.

All records designated as temporary final records, will be retained by the WSDOT Engineer for a period of 3 years after which they may be destroyed. If a claim, lawsuit, or other circumstance is found to be pending at the end of this 3-year period, the WSDOT Engineer should further retain those pertinent records until the issues have been resolved. The date for the beginning of this 3-year retention period for State-funded projects is the Acceptance Date; the date the State Construction Engineer signs the FCVC accepting the project. If Federal funds are involved in the project, the date for the beginning of this 3-year retention period is the date that FHWA accepts the final payment voucher. The Headquarters Accounting and Financial Services Division will send a Retention of Records on Federal Aid projects letter to the Region that specifically indicates the retention period.

**Note:** Sources for this chapter were:

- Section 2.1, 2.12, 2.25 and 2.28 of the RFP Technical Requirements
- General Provisions of the RFP
- Close Out Training Module
- WSDOT *Construction Manual* M 41-01
- WSDOT *Design Manual* M 22-01
- Discussions with DB Work Group members







## Chapter 10 *FHWA and Civil Rights*

---

This chapter provides guidance for WSDOT personnel that are involved with Federally-funded design-build projects. It is intended to be used with the Federally-funded version of the General Provisions RFP template.

The Secretary of the Washington State Department of Transportation (WSDOT) has established a Secretary's Executive Order E 1009.02 to affirm WSDOT's commitment to promoting equity in contracting. This includes a priority to expand efforts to include Disadvantaged Business Enterprise (DBE), and Federal Small Business Enterprise (FSBE) certified firm participation in Federal aid contracts and to afford those entities fair and equal opportunity to compete for WSDOT contracts.

The Office of Equal Opportunity is tasked with increasing contracting opportunities for DBE businesses and to provide a welcome and responsive environment for contractors and consultants that support such efforts. The Office of Equal Opportunity is identifying and changing internal processes in order to achieve the agency's overall goal for DBE and FSBE participation in contracting. Additionally, the Secretary's Executive Order assists WSDOT and its sub-recipients with implementing and monitoring the DBE Program in a manner to achieve the intent of the program at both the project and program level.

OEO continues to reorganize the management of the DBE and Civil Rights programs to determine best practices to develop, implement, monitor, and measure directives in order to deliver more successful DBE and FSBE programs. The reorganization process provides WSDOT the opportunity to increase small business participation via design-build and other alternative project delivery methods.

### **10-1 FHWA Involvement**

The U.S. Department of Transportation (DOT) was established in 1967 and is currently responsible for overseeing and administering a wide range of transportation programs, policies and regulations for both aviation and surface transportation. The top priorities at DOT are to keep the traveling public safe and secure, increase their mobility, and have our transportation system contribute to the nation's economic growth. The DOT is comprised of multiple administrations. WSDOT interacts primarily with the following three operating administrations of the DOT:

#### **Federal Highway Administration**

The Federal Highway Administration (FHWA) coordinates highway transportation programs in cooperation with states and other partners to enhance the country's safety, economic vitality, quality of life, and the environment. Major program areas include the Federal-Aid Highway Program, which provides Federal financial assistance to the States to construct and improve the National Highway System, urban and rural roads, and bridges. This program provides funds for general improvements and development of safe highways and roads.

The Federal Lands Highway Program provides access to and within national forests, national parks, Native American reservations and other public lands by preparing plans and contracts, supervising construction facilities, and conducting bridge inspections and surveys. The FHWA also manages a comprehensive research, development, and technology program.

### **Federal Transit Administration**

The Federal Transit Administration (FTA) assists in developing improved mass transportation systems for cities and communities nationwide. Through its grant programs, FTA helps plan, build, and operate transit systems with convenience, cost and accessibility in mind. While buses and rail vehicles are the most common type of public transportation, other kinds include commuter ferryboats, trolleys, inclined railways, subways, and people movers. In providing financial, technical and planning assistance, the agency provides leadership and resources for safe and technologically advanced local transit systems while assisting in the development of local and regional traffic reduction.

### **National Highway Traffic Safety Administration**

The National Highway Traffic Safety Administration (NHTSA) is responsible for reducing deaths, injuries and economic losses resulting from motor vehicle crashes. NHTSA sets and enforces safety performance standards for motor vehicles and equipment, and through grants to state and local governments enables them to conduct effective local highway safety programs.

## **10-1.1 Stewardship and Oversight Agreement**

The [Stewardship and Oversight \(S&O\) Agreement](#) sets forth the agreement between the FHWA and the Washington State Department of Transportation (WSDOT) on the roles and responsibilities of FHWA and WSDOT with respect to project approvals, related responsibilities and oversight activities. The Construction Monitoring Plan is part of the S&O Agreement outlining additional reporting requirements on Federal projects.

FHWA must review and approval certain operating procedures and guidance documents such as:

- WSDOT's DBE Program Plan
- *Construction Manual*
- Standard Specs/GSPs
- [Design Manual M 22-01](#)

Design-build projects will follow the processes and procedures outlined in the S&O Agreement and as described in this manual. Listed below are the processes and procedures for involving the FHWA on design-build projects.

### **10-1.1.1 FHWA Approval of Design-Build Manual**

The FHWA has approved the WSDOT *Design-Build Manual M 3126* for use in Washington State. All WSDOT design-build projects will follow this manual. All future modifications to the *Design-Build Manual* will be made in accordance with the S&O Agreement.

## 10-1.2 FHWA Authorization of Design-Build Projects

The FHWA must authorize any design-build project involving Federal funds before the RFP can be issued. Federal authorization requires an accumulation of various planning and pre-design activities. This procedure outlines the steps and procedures for obtaining Federal authorization.

1. Unless otherwise authorized by the FHWA, the following is necessary prior to requesting Federal authorization:
  - a. Completion and approval of the NEPA process\* per Section 300.04 of the *Design Manual* M 22-01.
  - b. The Conceptual Design Approval memorandum, channelization plans, and alignment plans
  - c. All ROW is acquired\* per Chapter 510 of the *Design Manual* M 22-01 and the *Right of Way Manual* M 26-01
  - d. ROW certifications per the *Right of Way Manual* M 26-01
  - e. Any Public Interest Funding (PIF) has been obtained
  - f. DBE/FSBE goals have been calculated using WSDOT's FHWA-approved contract goal setting methodologies
  - g. Funding sources have been identified and funding groups have been finalized per the *Program Management Manual*
  - h. Engineer's Estimate is complete
  - i. State-furnished materials and proprietary materials have been tabulated per Section 700.01 of the *Plans Preparation Manual*
  - j. Value Engineering has been completed, when applicable, as described in Chapter 310 of the *Design Manual* M 22-01
  - k. The Detailed Damage Inspection Report (DDIR) has been completed, when applicable
  - l. Agreement numbers have been obtained
  - m. The draft transportation management plan has been completed for Significant Projects as per Chapter 1010 of the *Design Manual* M 22-01 (the final TMP is completed by the design-build team).
2. FHWA approval is achieved per the requirements of Chapter 300 of the *Design Manual* M 22-01, Chapter 8 of the *Program Management Manual*, and the March 2015 FHWA/ WSDOT S&O Agreement.

\*See Chapter 11 of the WSDOT *Design-Build Manual* for potential exceptions.

### 10-1.2.1 Project Delivery Method Selection

WSDOT may invite the FHWA to Project Delivery Method Selection workshops for federally funded projects.

### 10-1.3 FHWA Concurrence of Design Analyses on NHS Highways

WSDOT [Design Manual Chapter 300](#) provides WSDOT design procedures, documentation and approvals necessary to deliver successful projects involving the Federal Highway Administration. All Design Analyses, whether initiated by WSDOT pre-award or by the Design-Builder post award, shall be developed and approved in accordance with Section 300.06(4) of the [Design Manual](#) M 22-01.

### 10-1.4 FHWA Projects of Division Interest (PoDIs)

Projects of Division Interest (PoDI) are a set of projects for which FHWA determines the need to exercise oversight and approval authority. These are projects that have an elevated risk, contain elements of higher risk, or present a meaningful opportunity for FHWA involvement to enhance meeting program or project objectives. See [Design Manual](#) Section 300.05(1) for additional guidance on PoDI projects.

## 10-2 Civil Rights

WSDOT's Office of Equal Opportunity (OEO) has several programs that require the incorporation of specific provisions within the RFPs of Federally-funded design-build projects. These programs include:

- Disadvantaged Business Enterprise (DBE)
- Federal Small Business Enterprise (FSBE)
- On-the-Job Training (OJT)
- Equal Employment Opportunity (EEO)

These Federally-mandated programs (DBE, FSBE, OJT, and EEO) are utilized on all projects with Federal funding.

### 10-2.1 Disadvantaged Business Enterprise (DBE)

Secretary's Executive Order E 1009.02 directs WSDOT divisions and offices to increase contracting opportunities for DBE businesses and to provide a welcome and responsive environment for contractors and consultants that support such efforts.

#### 10-2.1.1 Disadvantaged Business Enterprise Goals

The DBE Goal is determined by OEO and is an assigned numerical percentage of the proposal price that may be applied separately to the design portion and construction portion of the project. This is the minimum amount that the Proposer shall commit to by submission of the DBE Performance Plan including Good Faith Efforts. The DBE Goal will also be applied to change orders associated with this contract. HQ OEO determines the DBE Goals for the project; a DBE Design Goal and a DBE Construction Goal.



### 10-2.1.2 DBE Performance Plan

The DBE Performance Plan is submitted with the Proposer's proposal pursuant to the Instructions to Proposers and updated in accordance with Section 1-07.11(12) of the General Provisions. Region OEO as a technical advisor, reviews the DBE Performance Plan in accordance with Section 6-2.4 of this manual.

After execution, the DBE Performance Plan is updated monthly. For more information refer to Section 1-07.11 (12) of the General Provisions.

## 10-2.2 Federal Small Business Enterprise (FSBE)

The Federal Small Business Enterprise (FSBE) Program is a race and gender-neutral element of the Disadvantaged Business Enterprise (DBE) in accordance with the requirements of [49 CFR Part 26.39](#). WSDOT is committed to ensuring small businesses are afforded equal and fair opportunities to participate on WSDOT contracting, consulting, and procurement opportunities. The FSBE Program aims to structure contracting requirements to facilitate competition by small business concerns, take all reasonable steps to eliminate obstacles for small businesses to participate, and eliminate unnecessary and unjustified bundling of contract requirements.

### 10-2.2.1 Goals

WSDOT uses a similar goal setting methodology for FSBE goals that is used to set DBE Goals. Federally-funded WSDOT design-build projects may have FSBE goals established for both the design and construction portion of a project. Both FSBE goals can be established in addition to any DBE Goal requirements on a project.

Design-Builders are expected to achieve the FSBE goal or demonstrate Good Faith Efforts to do so and FSBE firms are required to perform a Commercially Useful Function in order for participation to be credited toward the FSBE goals.

## 10-2.3 On-the-Job Training (OJT)

Section 1-07.11(13) of the General Provisions is where you will outline your training requirements. There is only one fill-in in this section. It is for listing the required number of training hours. You will obtain this number from the HQ OEO office.

## 10-2.4 Equal Employment Opportunity (EEO)

Section 1-07.11(10).2 of the General Provisions is where you will find Office of Federal Contract Compliance Programs (OFCCP).

## 10-2.5 Apprenticeships

### On-the-Job Training (OJT) – Federally Funded Contracts

The amount of training hours are determined by HQ OEO. The requirements for trainee, training plan approval, and trainee payment are all specified in the contract. Refer to the Section 1-07.11(13), Special Training Provisions, of the General Provisions for training requirements.

The contract allows the Design-Builder to accomplish required training hours as part of their work activities, or through the activities of their subcontractors or lower-tier subcontractors. However, the Design-Builder is designated as being solely responsible for the completion of the training requirements.

Increases in training hours are allowable and may be approved on a case by case basis by the WSDOT Engineer in consultation with the Regional EEO Officer.

### On-the-Job-Training Required Reports

#### ***DOT Form 272-049, Training Program***

This report shall be submitted to the WSDOT Engineer for approval prior to commencing contract work. For projects within Northwest Region, the DOT Form 272-049 Training Program reports are forwarded to the NW Region EEO Officer for approval before the work begins. The Project Office has the authority to approve Apprenticeship, Training, Employer and Labor Services (ATELS) or State Apprentice and Training Council (SATC) programs provided they meet the requirements specified in the contract. The Region EEO Officer will review any non-ATELS/SATC training plans submitted under Section III of the form for compliance and submit the plan to HQ OEO for concurrence and submittal to FHWA for final approval.

#### ***DOT Form 272-050, Apprentice/Trainee Approval Request***

Approval of an individual trainee cannot be authorized until an approved Training Program is filed with the Region. This form shall be submitted by the Design-Builder for each trainee to be trained on the project. When an ATELS/SATC trainee is first enrolled, a copy of the trainee's certificate showing training registration shall accompany the Trainee Approval Request. Trainees are approved by the Project Office based on the criteria in the Special Provisions. If the Design-Builder submits a request for approval of a trainee who is neither female, nor a minority, the Design-Builder shall submit a GFE and the Project Office will obtain concurrence from the Regional EEO Officer and OEO prior to approval.

#### ***DOT Form 226-012, Trainee Interview Questionnaire***

One trainee interview is to be conducted for each craft designated on an approved training program for contracts which have 600 or more training hours or as designated by the Region EEO. The Region EEO shall designate additional contracts on which trainee interviews are to be completed in conjunction with those that meet the criteria above to ensure that trainee interviews are conducted on at least one fourth of all the contracts that have training hours established for any given construction season. The intent of these

training interviews is to document that the trainees are working and receiving proper training consistent with their approved programs, that the trainee is being paid at the appropriate wage rate, and that discrimination/harassment is not occurring. Interviews are to be confidential and aside from the Design-Builder and subcontractors unless the Trainee states otherwise. The individual's identity should not be disclosed to the employer without employee's written permission.

Submit completed interviews to the Region EEO Office.

### ***DOT Form 272-060, Federal-Aid Highway Construction Annual Project Training Report***

This report will be completed annually by the WSDOT Engineer summarizing the training accomplished by the individual trainees during the reporting period beginning January 1 and ending December 31 of the calendar year. This report is due at the Regional EEO Office by December 20th of the same calendar year, for submission to FHWA.

## **10-2.6 Requirements for Affirmative Action to Ensure Equal Employment Opportunity**

### **EEO (State Funded Projects)**

The Design-Builder shall comply with the EEO requirements detailed in Section 1-07.11 of the General Provisions. The WSDOT Engineer should be alerted and respond to any indications or accusations of discrimination. If the WSDOT Engineer, or any other Project Office staff, becomes aware of any indications or accusations of discrimination, they will immediately notify the Region OEO Compliance Specialist, who will in turn immediately notify OEO. OEO will handle any investigation that is warranted.

### **EEO (Federally Funded Projects)**

WSDOT has committed to FHWA to perform comprehensive construction compliance reviews, consistent with WSDOT's approved EEO Assurances Program document, to ensure compliance with the Federal non-discrimination requirements ([49 CFR Part 26](#)) and FHWA 1273 as referenced in Section 1-07.11(10).2 of the General Provisions. This review is performed by OEO on a select number of FHWA funded contracts and may take place at any time, including after contract Completion. These reviews do not normally involve the Project Office other than notification of their occurrence and the resulting findings, however, OEO may elect to interview Project Office staff associated with the contract as part of their review. OEO will contact the Region OEO Compliance Specialist or Project Office to facilitate the timing of the review.

### **Sanctions**

The WSDOT Engineer shall take steps to stop any acts that are harassing in nature as described in the Section 1-07.11(2) of the General Provisions. These steps may include removing a Design-Builder's employee pending outcome of an investigation. ASCE approval is required in the case where the WSDOT Engineer determines that the conditions warrant removal of a Design-Builder's employee. It is important to note that

this is not a request that the employee be terminated by the Design-Builder, just that they are removed from this project. The ASCE will consult with the Region OEO and investigate the conditions prior to directing the removal. Care should be taken to ensure that all parties are treated with respect and in a nondiscriminatory manner. The facts should be established and everyone should be given a chance be heard.

## **Records and Reports**

### ***FHWA-1391, Federal-Aid Highway Construction Contractors Annual EEO Report***

FHWA Form 1391 is required from both the Design-Builder and each subcontractor on Federally funded contracts that have construction activity during the month of July. These forms shall be submitted to the WSDOT Engineer, and are due by August 25<sup>th</sup> of each year.

A Design-Builder who works on more than one Federally funded contract in July is required to file a separate report for each of those contracts. For multi-year projects, a report is required to be submitted each year work was performed for the duration of the contract. A responsible official of the company must sign the completed report.

Upon receipt, the WSDOT Engineer will review, sign and date, and forward the annual report to the Region EEO Officer by September 5<sup>th</sup>. The Region EEO staff at the direction of the OEO will compile and report the information noted on the forms.

### ***FHWA-1392, Summary of Employment Data Report***

WSDOT is required to submit a summary of employment data to FHWA for each Federal fiscal year. This report is prepared using the data from FHWA-1391 (project specific annual reports) that have been submitted to the Region OEO Compliance Specialist by the Project Offices. The summary is prepared by the Region OEO Compliance Specialist or other Region designee for each Federally assisted project. The report also includes Local Agency Projects administered through the Region's Highways and Local Programs Offices. The completed FHWA-1392 Report, including all FHWA-1391 reports, are then submitted by the Region EEO Officer to the WSDOT Office of Equal Opportunity by September 15<sup>th</sup> each year, for formal submission to FHWA.

### ***DOT Form 820-010, Monthly Employment Utilization Report***

The information required by DOT Form 820-010 may be accepted in an alternate format provided that format contains all of the data required by and is completed in accordance with the instructions for DOT Form 820-010. The Region EEO staff should be consulted regarding the acceptability of any alternate format proposed by the Design-Builder.

Instructions for completing the form can be found on the back of the form itself. This monthly report is to be maintained by the Design-Builder in the Design-Builder's or subcontractor's records for a period of three years from Acceptance of the contract, and available to WSDOT and/or Federal reviewers upon request.

### ***DOT Form 272-055, Final DBE Utilization Plan Report***

The Final DBE Utilization Plan Report is required on all contracts that include DBE requirements and must be accompanied by a report of the final amounts paid to DBEs, as verified from the final report generated through DMCS. The signed Final DBE Utilization Plan Report and the attached final amounts paid report become part of the three-year Temporary Final Records retained by the Region. The form may be signed by the WSDOT Engineer, Region Construction Engineer or the Region OEO Compliance Officer.

The Final DBE Utilization Plan Report represents a certification that contracting records associated with DBE work have been reviewed, on-site performance has been monitored, and it has been determined that work committed to DBEs was performed by the designated DBEs. Signing this report also testifies that all DBE On-site Reviews are complete, on file, and can be retrieved as supporting documentation for the certification. This certification is a requirement of [49 CFR Part 26.37\(b\)](#).

#### **10-2.7 Title VI**

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, and national origin in the provision of benefits and services. Additional nondiscrimination laws include the Federal-aid Highway Act of 1973, which added sex (gender) as a protected class; and Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, which prohibits discrimination on the basis of disability.

The Civil Rights Restoration Act of 1987 clarified the broad institution-wide application of Title VI and other nondiscrimination statutes. The term “program or activity” means all of the operations of Federal-aid recipients, subrecipients, and contractors, whether such programs and activities are Federally funded or not.

#### ***Title VI Discrimination Complaints Procedure***

The Title VI Discrimination Complaints Procedure is a mechanism to resolve grievances, remedy discrimination and improve program delivery and services. Any person/s who believes they have been subjected to unlawful discrimination (denied the benefits of, access to, or participation in the programs and activities of WSDOT) based on race, color, national origin, sex, age, disability, income or Limited English Proficiency in programs, activities, or services of WSDOT or organizations funded through WSDOT may file a complaint. The complaint may be filed by the individual or his/her representative. A complaint must be filed no later than 180 days after the date of the alleged discrimination, unless extended by WSDOT. The complaint should be forwarded to WSDOT’s Office of Equal Opportunity for processing.

#### **10-2.8 ADA**

American with Disabilities Act of 1990 guidance can be found in Chapter 15 of the [Design Manual M 22-01](#)

This page intentionally left blank.