

WSDOT Design-Build Project Delivery

Guidance Statement

Title – Project Basic Configuration Development

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**Relevant Section of WSDOT DB Guidebook – 4.4.3 Prepare
Scope of Work**

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Introduction

The intent of this guidance statement is to give WSDOT project RFP developers information to 1) Understand the concept of a Basic Configuration; 2) What Basic Configuration Plans should consist of; and 3) The areas of focus and level of effort for Basic Configuration development during Preliminary Engineering (PE).

Guidance Statement

Project Basic Configuration

A Project's Basic Configuration should be developed using a format that is similar to developing a project identification statement. That is, identifying and then defining only the necessary information needed to convey a project's basic limitations. When developing a Project's Basic Configuration the following needs to be kept in mind:

- The Design-Builder is the Engineer of Record;
- The "must haves" need to be clearly identified;
- The areas that can be flexible and can provide the Design-Builder innovation opportunities need to be left that way;
- The manuals and standards used to develop a Project's Basic Configuration "must haves" and opportunities for innovation must be the same that the Design-Builder will be required to use;

Project Basic Configuration Plans

A Project Basic Configuration Plans and requirements are used for the purpose of defining the design-builder's limits and to restricting the ability to deviate from any identified requirements, the "must haves." There may be specified pre-approved deviations from the geometric criteria included in the basic configuration alignment while other changes may occur through the Alternative Technical Concept (ATC) process. Proposers can submit ATC(s) for review and concurrence during the proposal process.

Project Basic Configuration Plans are plans that depict the Basic Project Configuration within the limits defined in the contract. The contract defines the features that comprise a Project's Basic Configuration and the limits of flexibility that the Design-Builder has in adjusting the components and elements shown on the Basic Configuration Plans. A Project's Basic Configuration Plan for a highway/ bridge project usually will include the following:

1. Horizontal and vertical alignment;
2. Right of Way 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;
7. Railroad crossings (grade separation or at-grade);
8. Location of signalized intersection; and

9. Paving requirements.

Project Basic Configuration Development during Preliminary Engineering

The Preliminary Engineering (PE) effort should concentrate on adequately defining the elements of the Basic Project 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 work; and
- Interchange types and locations.

Other PE efforts should focus on the following:

- Performance Specifications, including defining any constraints;
- Appropriate design requirements (what standards will the Design-Builder be required to follow);
- Estimates;
- Preliminary scheduling to define appropriate contract time limits;
- Stakeholder desires and requirements; and
- WSDOT-secured permits.

The PE effort also may need to include a VE study of the Project, its components, and associated criteria. This is a requirement for Federal-aid projects and is also advisable for non-Federal-aid projects.

The following guidelines should be followed in determining the appropriate level of PE:

- Concentrate on gathering data (such as, geotechnical and Utility locations) but leave most, if not all, of the analysis to the Design-Builder;
- Leave identification of material sources to the Design-Builder;
- Finalize necessary agreements to the extent possible;
- Progress roadway design to a 15% to 20% level of completion, focusing on horizontal and vertical alignment;
- Determine ROW limits, but allow some room for flexibility in design concepts;
- Update any bridge, roadway feature or pavement condition reports;
- Perform only a preliminary drainage analysis to determine flow requirements to identify special concerns;
- Progress bridge design to the point where requirements are specified. In many cases, only location is required. Note that if a specific type of structure is specified, WSDOT may be preventing innovation as well as adversely affecting cost. An approach regarding structures may be to define the allowable types of structures or what types would not be allowed.

What are the Benefits?

Defines what the intent of a Basic Configuration is, what should be included in Basic Configuration Plans, and identification of the areas of focus and level of effort required.

Concurrence

October 5, 2006

Was the WSDOT DB Guidebook Updated with this information?

When updated - enter date updated and section