

# Final Project Delivery Method Selection Checklist

|   |  |
|---|--|
| Project Title: SR9/ Marsh Road to 2nd Street - Widening | Date: 1/8/2020   |
| Route: SR9  | WIN: A00912K   |
| MP(s): 8.41 to 9.68                                     | PIN: 100912K   |
| Cost: \$142,600,000                                     | List any additional PINs at bottom or attached to this form. |

**Part I — Cost** RCW 47.20.785 does not encourage Design-Build for a project contract cost (PE & Construction) less than \$2 Million

Is the Project Estimate less than \$2 Million?

Yes — A selection process and authorization are not required — the delivery method is Design-Bid-Build.

No — Continue to Part II

**Part II — RCW 47.20.785 Project Qualifications for Design-Build Method**

1. Are construction activities highly specialized?  Yes  No

2. Is a DB approach critical in developing the construction methodology?  Yes  No

3. Does the project provide opportunity for greater innovation & efficiencies between the designer & builder?  Yes  No

4. Would use of DB result in significant reduction to the overall project schedule or critical milestones?  Yes  No

If **Yes** was selected for any of questions 1 through 4 above, Design-Build is a viable PDM option. (Go to Part III)

If **No** was selected for all of the questions 1 through 4 above, it indicates Design-Bid-Build as the PDM — get authorization (end).

**Part III — Project Questions**

**SCHEDULE**

A. Are there 3rd party agreements with local government or agencies that require a full design before execution? (Is a significant portion of the project impacted?)  Yes  No

**Justification:** BNSF, rail service, and the U.S. Coast Guard require 100% bridge design as part of the permit application processes. The new bridge will span BNSF and Snohomish river and is a significant portion of this project with long lead procurements items; Pre-Stressed and Steel Plate Girders.

B. Are there long lead, lengthy environmental permits or ROW issues that would delay start of Construction? (Is a significant portion of the project impacted?)  Yes  No

**Justification:** Yes, based on the preferred alternative to widen on the Westside of existing SR9, ROW acquisition of existing farmland will be needed. Also, a Coast Guard Bridge Permits (12 month review after 100% Design) and US Corps of Engineer's 404 Individual permits (12 month review after SEPA) will be required as there will be impacts to the existing navigable channel in the Snohomish River to install pier/shafts for the new bridge.

C. Is early obligation of funds necessary? (Such as a deadline to obligate grant funding)  No  Yes

**Justification:** Legislative funding for the this project under Connecting Washington (CWA) is spread over at least 4 years which is sufficient to complete the design and construction. Thus, there is no immediate need for early obligation of funds especially considering that the existing facility will continue to be operational during construction of the new bridge and widening with minimal traffic interruptions.

D. Is there time to prepare 100% design?  Yes  No

**Justification:** The current critical paths for this project is finalizing the project foot print, ROW acquisition and Environmental permits which is estimated to take 18 - 24 months to complete. This time is sufficient to complete the 100% design while concurrently pursue ROW acquisition and permits.

Note that, between 2009 and 2012, WSDOT completed several preliminary engineering work under **XL3504** including: Survey, basemap, utility locations, cross sections for site data, approved Chan plans, approved TSL (Type, Size, Location) with a preferred alternative for bridge and widening, wetland delineation, identification of TDAs, most environmental documentation, design deviations.

E. Is there a need to compress the schedule?  No  Yes

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| Part III — Project Questions   |  |
|--|--|
| <p><b>Justification:</b> Compressing the schedule is not required, the design schedule's critical path is the environmental permits and ROW acquisition with 3rd party control. Also, there is no need to compress the construction schedule as there are long lead items which include: signal poles, precast concrete and steel plate girders - other works can proceed during the procurement of long lead items</p>  |  |
| <p>F. Do funding limits restrict when the schedule can start?<br/>(Such as the Biennium)</p>   |  |
|  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| <p><b>Justification:</b> Funding for project was approved July 2019. Also, the legislative funding distribution allows for the project to be and spread-out for three biennium's.</p>  |  |
| <p>G. Are there significant risks that could be better managed by others than WSDOT?</p>   |  |
|  | <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes            |
| <p><b>Justification:</b> With proximity to flood plain, navigable waterway, BNSF, and airport; the highest risks for this project is getting environmental permits and approvals from outside agencies. WSDOT started the coordination and permitting process for this project in 2010.</p> <p>The majority of the environmental documentations and reports are completed and are currently being reviewed and updated by NWR Environmental team. Thus, WSDOT have already taken ownership and performed majority of the high risk items for the project. Therefore, it will be ineffective at the current level of what has already been completed to restart the whole process again by turning over the high risk items to others than WSDOT.</p>   |  |
| <p>H. Does the project involve specialty engineering or high-tech designs or have other opportunities for innovation?</p>  |  |
|  | <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes |
| <p><b>Justification:</b> The answer to this question is both "yes" and "no". It is agreed that there might be opportunities for innovations especially in bridge design and construction methods. However, these innovation might not be feasible or practical due to the high risks and constraints involved in this project. For example, the bridge over Snohomish river will need to clear a minimum of 300 ft. of unsupported span. Per the US Coast Guard, no piers will be allowed in the river and the existing vertical clearance will need to be maintained.</p> <p>In addition, due to close proximity to Harvey Airfield with noise abatement rules, the FAA will not allow direct flights over the City of Snohomish thus moving the flight path over the Snohomish River Bridge and the FAA will not allow the new bridge to be higher than the existing bridge for example using a cable stay bridge. This limits the selection of the bridge type that can address the long unsupported span with vertical clearance restriction</p> |  |
| <p>I. Does the project require complex phasing and staging with the possibility of high impacts to the public?</p>   |  |
|  | <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes            |
| <p><b>Justification:</b> There is not much phasing or staging needed for this project as a new separate bridge and widening will be built while the existing facility remains fully operational. Thus, there will be minimum impacts to the traveling public during construction.</p>  |  |
| <p>J. Does an existing road or facility need to remain in service? (no options for detour, or no alternate facility available, and a significant portion of the project is impacted)</p>   |  |
|  | <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes            |
| <p><b>Justification:</b> The SR9 over Snohomish river is one of the main corridors connecting the City of Snohomish with the City of Lake Stevens to the north and the City of Woodinville to the south. The existing Snohomish River bridge will remain in use during the construction of the new adjacent bridge.</p> <p>However, there is alternate detour route with reasonable distance through Airport Way that can be used for the minimal works needed during tie-ins between new and existing facility.</p>   |  |
| <p>K. Is WSDOT willing to give up control of design and/or construction on this project?</p>   |  |
|  | <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes |
| <p><b>Justification:</b> Yes, but due to previously identified risks we do not think it makes sense. See Item G.</p>   |  |
| <p>L. Are critical 3rd party involvement and changes likely during design &amp; construction?</p>  |  |
|  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No            |

COMPLEXITY & INNOVATION

# Final Project Delivery Method Selection Checklist

| Part III — Project Questions  |  |           |            |           |  |           |   |
|---|--|-----------|------------|-----------|--|-----------|---|
|   | <p><b>Justification:</b> There have been critical 3rd party involvement including the City &amp; County of Snohomish, and local partners for this project since 2003.</p> <p>In collaboration with WSDOT, the SR9 Corridor Working group (CWG) was created from this group. The CWG conducted and completed a 30+ mile SR9 Corridor Study in the Spring of 2010. The SR9/Marsh to 2nd Widening is one of the projects identified for improvements. WSDOT completed the bridge Type, Size and Location (TLS) for the project and it was presented to the CWG prior to approval by HQ with a preferred alternative.</p> <p>Thus, the likeliness of critical changes to the project are minimum. Also, community engagement (3rd party involvement) will continue to validate the previously identified needs through stakeholder interviews, community briefings, and regular media updates.</p>   |           |            |           |  |           |   |
| <b>COST</b>   | <p>M. Is early certainty of the total project cost important?<br/>(Increased certainty of total cost early in the project needed due to funding or project constraints) <span style="float: right;"><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes</span></p> <p><b>Justification:</b> Projects under CWA are funded at the project level which requires legislative approvals to make changes. Thus, increased certainty of total project cost is important to make sure the project will have sufficient funds for design and construction. However, an estimate of \$111M was developed in 2011 based on the preferred alternative and design-bid-build (DBB) delivery method. This estimate was reviewed again early this year 2019 and updated to \$141M taking into account future cost escalations with the same DBB delivery method. The legislative budget for the project is \$142M - the project is still within budget as of the date writing this PDMSG.</p> |           |            |           |  |           |   |
| <p>Sum each column to the right—a checked answer is worth one (1) point. The column with the most points indicates the recommended delivery method.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;"></td> <td style="text-align: center; border-bottom: 1px solid black;"><u>DBB</u></td> <td style="text-align: center; border-bottom: 1px solid black;"><u>DB</u></td> </tr> <tr> <td><b>Project Delivery Method indicated from the responses to the questions in Part III (above)</b></td> <td style="text-align: center;">Score: 10</td> <td style="text-align: center;">5</td> </tr> </table> <p><input checked="" type="checkbox"/> DBB    <input type="checkbox"/> DB    <input type="checkbox"/> Inconclusive</p> |  |           | <u>DBB</u> | <u>DB</u> | <b>Project Delivery Method indicated from the responses to the questions in Part III (above)</b> | Score: 10 | 5 |
|   | <u>DBB</u>   | <u>DB</u> |            |           |  |           |   |
| <b>Project Delivery Method indicated from the responses to the questions in Part III (above)</b>  | Score: 10  | 5         |            |           |  |           |   |

**The project cost is:**

- less than \$25 million — get Authorization Level 1 (below)
- \$25 million or greater, but less than \$100 million — get Authorization Levels 1 & 2 (below)
- \$100 million or greater — apply Project Delivery Selection Matrix / Workshop

| Final Project Delivery Method Selected   |                         |
|--|-------------------------|
| <input checked="" type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build |                         |
| <b>Authorization Level 1</b>   |                         |
| <b>Project Engineer</b>  |                         |
| Name: Kyengo Ndile, P.E.   | Signature:  13 Jan 2020 |
| <b>PDE/EM Manager</b>  |                         |
| Name: Cathy George, P.E.   | Signature:  1/13/2020   |
| <b>Authorization Level 2</b>   |                         |
| <b>ASCE/ASDE</b>   |                         |
| Name:  | Signature: _____        |
| <b>Regional Administrator</b>  |                         |
| Name: Mike Coffen  | Signature:  1-16-2020   |

Attach project information, assumptions and additional justification to Form

PDMSG 9/26/2019 Version does require ASCE/ASDE signatures