**HYDRAULIC DEVIATION**

**(HYDRAULICS DESIGN ELEMENTS)**

**[Project Title]**

**[Design Deviation Name]**

[State Route], MP [Begin] to MP [End]

[Enter multiple SR and MP as necessary]

[Work Order Number] [WIN Number] [PIN Number]

[Month Day, Year]

**WASHINGTON STATE DEPARTMENT OF TRANSPORTATION**

Region

[City], Washington

Prepared by: [Name, Title]

[PE Stamp here]

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| REGION HYDRAULIC ENGINEER APPROVAL | | | | | | | | | | | STATE HYDRAULIC ENGINEER APPROVAL | | | | | | |
| [Signature]  [Name and title] | | | | | | | | | | | [Signature]  [Name and title] | | | | | | |
| **DESIGN DEVIATION METADATA** | | | | | | | | | | | | | | | | | |
| PROJECT TITLE | | |  | | | | | | | | | | | | | | |
| DEVIATION NAME | | |  | | | | | | | | | | | | | | |
| REPORT TYPE | | | Hydraulics Deviation | | | | | | REGION | | Choose an item. | | | | Report Date | | MO/DA/YEAR |
| Work Order # | | |  | | | PIN # | | | |  | | | WIN # | | |  | |
| SR | |  | | Begin MP | | | |  | | | | End MP | | | |  | |
| **Elements Considered in the Design Deviation (Check all that apply)** | | | | | | | | | | | | | | | | | |
|  | Freeboard Clearance | | | |  | | Wood In Structure | | | | | |  | [Insert Other Element] | | | |

Notes

Remove/replace all highlighted text when the document will be submitted for signature.

If the design deviates from guidance in the WSDOT Design Manual, complete the Design Manual Deviation procedure and the applicable Design Analysis/Decision forms. This form is for design elements that comply with the Design Manual but deviate from the Hydraulics Manual guidance.

This is not a standalone document. Provide a brief description of the project, and only provide background information relevant to the deviation being documented. Reference other design documents and be concise.

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| **Section 1: Background** |
| **Briefly describe the project:**  In a few sentences provide a brief description of the project. Include a description of the existing structure and the proposed structure. State the project intent and key design methods/elements that achieve the intent. |
| **Provide any background information important to understanding the design justification:**  Provide project context relevant to the issue(s) to be discussed. For example: Site/region conditions, relevant geotechnical data, major design constraints, or maintenance records.  You are “setting the stage” here for the discussion to follow, do not discuss the deviation in the background section. |
| **Related documents:**  Link or list design documents referenced. By listing documents such as the Hydraulic Report, you can minimize or eliminate the need to reiterate information in this document. |

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| **Section 2: Deviation Description** | | | | | | |
| **Describe the design element(s) that will be discussed. Identify the proposed design elements and how they compare to Hydraulics Manual guidance.** | | | | | | |
| **This deviation is referencing the [INSERT VERSION] version of the WSDOT Hydraulics Manual.** | | | | | | |
|  | *Design Element* | *Location* | *Guidance* | *Proposed* | *Shown on*  *(Sheet #)* |  |
|  |  | Loc. on attachment sheet |  |  | Insert attachment sheet # |  |
|  |  |  |  |  |  |  |
| * State the Hydraulics Manual guidance and provide the manual section. Clearly explain the proposed design and how it deviates from this guidance (and how it complies/deviates from other guidance, if used).   **If guidance other than the Hydraulics Manual was used, describe it here:** | | | | | | |

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| **Section 3: Deviation Justification** |
| **Explain why the Hydraulics Manual criteria cannot be met:**  Justify why meeting the criteria is not practicable.  **Evaluate the performance of the proposed design:**  Evaluate the proposed design based on applicable factors (e.g., short- and long-term performance; maintenance needs; project constructability/feasibility; project footprint (impact to surrounding community and habitat); possible mitigating measures, or other considerations, as necessary/requested). Demonstrate that efforts have been made to best align with the manual criteria and its intent to the extent practicable.  Per section 7.4.5.1 of the Hydraulics Manual, for Freeboard Deviations, demonstrate the following:   * The proposed freeboard will pass all expected debris, water, and sediment through the system * There is no history of repetitive maintenance at the existing crossing location * Providing the required freeboard would cause adverse environmental impacts, impacts from changes to roadway geometry, or other unacceptable impacts * Efforts have been made to maximize the freeboard to the extent practicable, including evaluating different structure types * Documented acceptance of the proposed freeboard from WDFW and the Tribes   Were relevant WSDOT offices consulted on the decision (e.g., Maintenance, Bridge Preservation, Landscape, Environmental, etc.)? What was their input? |

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| **Section 4: Attachments** |
| * Vicinity Map * [add items as necessary. E.g., plan sheets.] |