Request for Proposal

Orogrande Bridge Design

Nez Perce Tribe and Idaho County Road Department

 **Description of Work**

**General:** The Nez Perce Tribe, in partnership with Idaho County Road Department, intends to replace the stream crossing structure on National Forest System Road (NFSR) 233 at Crooked River (MP 16). The bridge is an Idaho County owned and maintained bridge. The current structure is a 26-foot span wooden bridge with timber abutments. The bridge decking and abutments are rotting and at risk for failure. The Williams Fire severely burned the riparian area and adjacent hillslopes immediately upstream of the bridge. Large amounts of wood are in the stream corridor and are likely to move during high flow events.

The description of work is for a site analysis, including Geotechnical Surveys, Hydraulic Surveys, Preliminary (30%, 60%, 90%) and Final Design, Special Project Specifications, Drawing and Estimates for a new bridge structure. The preliminary design shall provide more than one option with overall cost as a driver for materials and type of bridge being selected for the final design. The design work shall consider the associated transition roadway work, be 16 feet curb-to-curb, and pass all highway rated vehicles and equipment. The new bridge length shall accommodate the 100-year flow event with at least 2-feet of freeboard, where the abutments are not within the bankfull prism. The design firm will have a preliminary meeting on site with the County and Tribe to discuss bridge options.

**Design Specifications:**

**Road Design:** The current location of the existing road is generally to be maintained. Some adjustments to the horizontal and vertical alignment maybe needed to fit the new structure or improve road BMPs. Private property on either side of the bridge is not to be impacted. The project is not intended to improve speeds or promote additional traffic capacity and thus roadway design shall concentrate on preserving and protecting the facility and improving BMP’s. This philosophy is the basis for the “Guidelines for Geometric Design of Low-Volume Roads 2019” which shall be the design specifications for this project. Other design references and specifications are:

• AASHTO’s, A Policy on Geometric Design of Highways and Street.

• AASHTO’s, Roadside Design Guide.

• Manual for Uniform Traffic Control Devices.

• Water Quality Best Management Practices for Montana Forests.

**Drainage Structures:** The drainage structures shall be designed in accordance with the

9th edition of AASHTO LRFD Bridge Design Specifications 2020, or most recent version.

**Construction Specifications:** Construction specifications shall be Standard

Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-

14. Drawings and specifications shall be in English units.

**Restoration Programmatic:** Follow and include Design Criteria (Chapter 4.1.6) and General Conservation Measures (Chapter 3) outlined in the FY 2025 HIP IV Programmatic (Exhibit A).

**Bridge Inspection:** Section 4, Inspection “Manual for Bridge Evaluation, 3rd edition,

2018, published by the American Association of State Highway and Transportation Officials, 444 North Capitol Street, NW, Suite 225, Washington, DC 20001, shall be a part of this Description of Work.

**Design Criteria:**

Design Loadings: HL-93 Per AASHTO

Design Vehicle: Highway Vehicle with a bumper pull four horse trailers

Roadway Widths: Match existing unless alignment shift requires adjustment for curve widening to accommodate design vehicle

Hydraulics: Design to pass 100-year flood event with adequate freeboard to pass locally derived debris. Maintain channel so there is no restriction under bankfull conditions. Aquatic organism passage is required.

**Survey, Preliminary, 30% Design, 60% Design, 90% Design, Final Package:**

Preliminary Assessment and proposed preliminary Design

The preliminary design for this project shall include:

* Recommendations for types of bridge structures

• Recommendations regarding road traffic, maintenance and drainage improvements

• Recommendations regarding the need for geotechnical investigations

• Hydraulic analysis to support preliminary structure sizing.

30% Design

The 30% Design shall include:

• All anticipated plan sheets including dimensioned:

o geometry and alignment of the road and replacement structure

o drawing details or placeholders for drawing details with labels

• All anticipated specifications,

• A dewatering plan

• All anticipated line items for construction and approximate quantities,

• Initial construction cost estimate by FP14 pay item

60% Design

The 60% Design shall include:

• All anticipated plan sheets including dimensioned:

o geometry and alignment of the road and replacement structure

o drawing details or placeholders for drawing details with labels

o cross sections of needed earthwork

• All anticipated specifications,

• All anticipated line items for construction and quantities,

• A construction cost estimate by FP14 pay item, and

• An estimate of anticipated construction duration.

90% Design

The 90% Design shall include:

• All plan sheets with dimensioned geometry layouts and drawing details,

• All specifications,

• All line items for construction and associated quantities,

• Construction cost estimate by line item, and

• Construction duration broken down by major work items.

Quality control is expected on the 90% Design.

Final Package

The final package shall include:

* 100% Design with all recommended changes,

• All plan sheets with geometry layouts and drawing details,

• Stamped plans for bridge design,

• All specifications,

• All line items for construction and associated quantities,

• Construction cost estimate by line item, and

• Construction duration broken down by major work items.

• Design calculations

* Draft implementation Request for Proposal (RFP)

Deliverable Schedule

1. Site Visit with Tribe and Idaho County Road Department –Summer 2025.

2. Delivery of pdf files of the preliminary assessment and proposed preliminary design–

60 calendar days after receiving the order for the project design

3. Delivery of pdf files of the 30% Design – 45 calendar days after receiving written feedback on the preliminary design

4. Delivery of pdf files of the 60% Design – 45 calendar days after receiving written feedback on the 30% Design.

5. Delivery of pdf files of the 90% Design – 45 calendar days after receiving written feedback on the 60% Design.

6. Delivery of pdf files of the Final Package including design calculations, and electronic Autocadd file of plans drawings – 30 calendar days after receiving written feedback on 90% Design.

The Tribe and County have 10 business days to provide comments on each design phase. A call will be scheduled upon receipt of each design phase to discuss any changes, comments or questions, with the exception of the 100% package. The comments will be provided to the design firm prior to the call.

**Bid Proposal:** Consultant shall submit a detailed bid proposal for the Orogrande Bridge Design. The bid proposal shall include a detailed price proposal, past projects similar in size and scope, experience of personnel on the design team, and a detailed timeline.

**Submit proposals to Jenifer Harris, Project Manager, at** **jeniferh@nezperce.org** **by July 7, 2025, at 4:00 PM Pacific time.** No late proposals will be accepted.

Please contact Jenifer Harris at 208-983-1290 or jeniferh@nezperce.org for questions.

**Exhibits**:

2023 Idaho Transportation Department Inspection Report

Site Photo- Orogrande Bridge

Orogrande Bridge Site location