SEPA CHECKLIST

Richardson Creek Bridge 300 Replacement  RC 1419

January 2021
Purpose of Checklist:
Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

SUMMARY
A. BACKGROUND
Name of proposed project:
Richardson Creek Bridge 300 Replacement (RC 1419)
Name of applicant:
Snohomish County Public Works- Engineering Services
Address and phone number of applicant and contact person:
Crilly Ritz, Senior Planner II
3000 Rockefeller Avenue M/S 607
Everett, WA. 98201
(425) 262-2476
Date checklist prepared:
January 19, 2021
Agency requesting checklist:
Snohomish County Public Works
Proposed timing or schedule (including phasing, if applicable):
Construction is scheduled to begin in 2023 pending funding availability and regulatory permitting approval.
Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, please explain.
There are no plans for future additions, expansion, or further activity connected with the proposed bridge replacement.
List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
Critical Area Study and Geotechnical Report will be prepared
Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, please explain.
None known at this time.
List any government approvals or permits that will be needed for your proposal, if known.

<table>
<thead>
<tr>
<th>Permit/Approval:</th>
<th>Required from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Section 404 Authorization: Nationwide Permit</td>
<td>U.S. Army Corps of Engineers</td>
</tr>
<tr>
<td>☑ Section 7 Endangered Species Act Consultation</td>
<td>NOAA Fisheries and U.S. Fish and Wildlife Service</td>
</tr>
<tr>
<td>☑ Section 106 National Historic Preservation Act</td>
<td>Federal Lead Agency (FHWA)</td>
</tr>
<tr>
<td>☐ Section 401 Water Quality and CZM Certification</td>
<td>Washington State Department of Ecology</td>
</tr>
<tr>
<td>☐ NPDES Permit</td>
<td>Washington State Department of Ecology</td>
</tr>
<tr>
<td>☑ Hydraulic Project Approval (HPA)</td>
<td>Washington State Department of Fish and Wildlife</td>
</tr>
<tr>
<td>☑ Drainage &amp; Land Disturbing Activity Certification</td>
<td>Snohomish County – Public Works</td>
</tr>
<tr>
<td>☑ Critical Area Certification</td>
<td>Snohomish County – Public Works</td>
</tr>
<tr>
<td>☑ Flood Hazard Permit</td>
<td>Snohomish County Planning and Development Services</td>
</tr>
<tr>
<td>☑ Shoreline Substantial Development Permit/Shoreline Variance Permit</td>
<td>Snohomish County Planning and Development Services</td>
</tr>
</tbody>
</table>

1. Give a brief, complete description of your proposal, including the proposed uses and the size of the project site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal; you do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description).

**Snohomish County Public Works proposes to replace Richardson Creek Bridge 300.** The existing bridge is an 18-foot long single span (short span bridge) with a curb-to-curb width of 22.8 feet (total width of 24.2 feet). Built in 1961, the bridge is constructed with concrete tub girders, a guard rail for a bridge rail, and is supported on timber piles. The timber piles and abutments at the east end of the bridge are located at the ordinary high water mark for the stream. The bridge deck has an asphalt overlay. There is no pedestrian walkway on the existing bridge or on the bridge approach roadway. The bridge is functionally obsolete due to its narrow width.

The proposed bridge replacement would be a 30-foot long single span constructed with prestressed and precast concrete voided slab girders, with a...
width of 44 feet between the bridge rails with 5-foot bike lanes and 6-foot sidewalks.

2. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address if any, and section/township/range if known. If a proposal would occur over a range of areas, provide the range or boundaries of the site(s). Provide legal description, site plan, vicinity map, and topographic map if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project is located on Wood Creek Road between Ingraham Road and Wagner Road, east of Monroe at the Bridge 300 crossing of Richardson Creek in Section 32, Township 28 North, Range 7 East W.M.

B. ENVIRONMENTAL ELEMENTS

1. Earth

   a. General description of the site (check one):

      ☑ FLAT
      ☐ ROLLING
      ☐ HILLY
      ☑ STEEP SLOPES
      ☐ MOUNTAINOUS
      ☐ OTHER (please describe):

      The project site's topography is relatively flat along the roadway and lies within the lower Skykomish River valley. The project is located at a crossing of Richardson Creek, a tributary that flows from north to south to Woods Creek. Woods Creek flows to its confluence with the Skykomish River in Monroe. Steep forested slopes rise north from Woods Creek Road while flat areas gently slope to the south from the roadway in a floodplain associated with Richardson Creek. These flat areas extend downstream to the stream’s confluence with Woods Creek.

   b. What is the steepest slope on the site (approximate percent slope)?

      Slopes are moderate on the project site and are approximately 0-3% along the roadway. The longitudinal profile of Richardson Creek ranges from approximately 2-6% slope throughout the project area. There are steep slopes located north and northwest of the site that are approximately 33%.

   c. What general types of soil are found on the site (i.e., clay – sand – gravel – peat – muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

      The Natural Resources Conservation Service identifies two soil series in the project area. The soil series descriptions are provided below:
Pastik silt loam 25-50% slopes
Pastik soils are mapped north of the roadway. Pastik soils are located on terraces and formed in lake sediment and volcanic ash. Pastik soils are very deep and moderately well drained.

Sultan silt loam
Sultan soils are mapped south of the roadway. Sultan soils are located in floodplains and were formed in alluvium. Sultan soils are very deep and moderately well drained.

The subsurface conditions at this site were explored with 1 boring that was advanced with a drill rig to a depth of 71.5 feet below the ground surface. Below the asphalt the boring encountered a brown, fine- to coarse-grained silty sand with gravel, organics, and wood debris. The stratum was loose to medium dense and moist to wet. At 7 feet drilling encountered a brown, fine- to coarse-grained sandy gravel with gravel up to 2 inches in diameter. This stratum was medium dense to very dense and wet. At a depth of 20.5 feet drilling encountered a brown, fine- to coarse-grained sand with a trace of gravel and silt. The layer of sand was very dense and wet.

At 25 feet the layer was characterized as a gray, fine- to medium-grained sandy gravel that contained a trace of silt. This stratum was dense to very dense and wet. At 35 feet and extending to 55 feet the layer was comprised of a gray, fine- to coarse-grained sand that contained a trace of gravel. This layer of sand was medium dense and wet. At 55 feet and extending to the bottom of the boring at 70.5 feet there was a gray, fine- to coarse-grained gravelly sand that contained a trace of silt. This stratum of sandy gravel was very dense and wet. Groundwater was encountered at a depth of 4 feet at the time of drilling within the boring and approximately matched the elevation of the surface flows within the creek.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, please describe.

There are no surface indications of unstable soils in the immediate project vicinity. Localized scour erosion of the Richardson Creek streambanks has occurred in the past 10 years and is associated with high flows that caused erosion on the stream’s left bank in proximity to the bridge abutment.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling excavation and grading proposed. Indicate source of fill.

Excavation would occur within the existing roadway prism to remove unsuitable roadway fill materials in order to accommodate the approach roadway work associated with bridge replacement. Approximately 385 cubic yards of material would be removed within the roadway prism, and approximately 88 cubic yards would be excavated in adjacent roadside areas.
Approximately 355 cubic yards of gravel borrow would be imported to backfill portions of the excavated areas and to extend the roadway prism for approach roadway widening that would match the proposed bridge layout. A total of 24,050 square feet will be disturbed, with approximately 11,232 square feet of clearing occurring outside of existing paved areas. The final determinations of ground disturbance area affected will be revised as needed as the design process move forward. These fill materials and other materials such as gravel borrow, washed gravel, and compost-amended soils would be obtained from permitted commercial sites.

f. Could erosion occur as a result of clearing, construction or use? If so, please generally describe.

Erosion could potentially occur during site clearing and grading. Construction work would occur adjacent to the Richardson Creek ordinary high water mark (OHWM). With use of erosion and sediment control Best Management Practices (BMPs), it is expected that only moderate levels of sediment would potentially be transported during construction. With the majority of grading cuts and fills occurring landward of the stream OHWM, and use of materials suitable for roadway construction it is expected that there would be a reduced risk for erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (i.e., asphalt or buildings)?

The existing project site limits have been divided into two Threshold Discharge Areas (TDA) for stormwater runoff analysis. TDA 1 has a total of 6,982 square feet of existing impervious surface area while TDA 2 has a total of 7,084 square feet of existing impervious surface. The two TDA areas total 14,066 square feet (0.32 acre) of existing impervious surface area. A total of 9,102 square feet (0.21 acre) of new impervious surface area would be added as part of the project. The project will be designed in compliance with Snohomish County Code (SCC) 30.63A “Drainage” and 30.63B “Land Disturbing Activity”. Both TDAs are under the 5,000 square feet of new effective pollution-generating hard surfaces threshold. Therefore, neither TDA is required to have stormwater runoff flow control nor water quality treatment detention (MRs 6 and 7) per SCC 30.63A and the Snohomish County Drainage Manual. However, the County proposes to include infiltration facilities that will provide treatment for runoff from much of the replaced and new impervious surfaces within the project limits. To comply with SCC 30.62A 320 (1) (c) (ii) limiting effective impervious surface near salmonid streams, the project is proposing the installation of bioretention cells in each TDA on the south side of Woods Creek Road.
Infiltration will address the impervious surface area and ensure that the project results in no adverse effects to Richardson Creek, which provides habitat for salmonid species, including ESA listed species. Existing drainage patterns will be maintained, runoff will be conveyed via sheet flow, curb, and thickened edge into the bioretention cells.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

No significant adverse impacts are anticipated. Application of erosion control Best Management Practices (BMPs) would be used throughout project construction. These BMPs would be in place around stockpiles of excavated materials, in proximity to project-area streams and ditches, and in active construction areas, and would be designed to prevent sediments from entering surface water and storm drainage systems. Excavated soils not re-used in the project would be disposed of offsite at a permitted facility. Bare soil areas would be seeded and planted where required after establishment of final grades.

All project activity would be conducted subject to implementing Best Management Practices and would comply with the provisions of all applicable permits. Best Management Practices may include, but are not limited to the following:

- Protective covering would be placed over exposed soil areas to prevent sediments and other contaminants from entering the road side areas near the streams. Protective covering would be clear plastic sheeting, straw mulch, jute matting, or erosion control blanket per Department of Ecology requirements.
- A temporary erosion and sediment control plan would be implemented during construction.
- Erosion and sedimentation control measures would be routinely inspected, maintained and repaired. Damaged or inadequate erosion and sedimentation control measures would be corrected quickly.
- Any bare soil that may result from project activity would be reseeded with an approved seed mix or mulch immediately following construction.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, please generally describe and give approximate quantities if known.

Construction equipment, construction-related activities, and vehicles carrying workers and equipment to and from the site would result in minor, temporary increases in emissions and dust. There would be no increase in emissions once construction is complete. During grading, dust levels may increase temporarily.
In addition, minor temporary increases in emissions would be released from construction equipment.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, please generally describe.

No off site sources of emissions would affect construction.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

During construction, equipment emissions would not exceed state and national air quality standards. The project would use only equipment and trucks in optimal operational condition. Dust control measures would be implemented to minimize airborne dust.

3. Water

a. Surface Water:
   1. Is there any surface water body on or in the immediate vicinity of the site (including year round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, please describe type and provide names. If appropriate, state what stream or river if flows into.

Richardson Creek Bridge 300 crosses Richardson Creek, a Type S stream. There are no wetlands located in the immediate project vicinity. Wetlands are located further downstream in proximity to the Richardson Creek/Woods Creek confluence and in the associated floodplain.

Richardson Creek is a tributary to Woods Creek that originates approximately 1.5 miles north of the bridge. The stream flows south from its headwaters through wetlands with additional contributing flows from a tributary that flows from the Wagner Lake outlet and then flows down the steep slopes of the creek drainage. At the Bridge 300 crossing, the stream transitions to more moderate flat slopes associated with the stream’s floodplain. Richardson Creek below the bridge crossing is a transitional reach where sediment and cobble are deposited. A downstream concrete retaining wall confines the creek’s left (east) bank, with the top of the wall high enough to divert higher flows to the stream channel with overflow toward the right (west) bank.

2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Bridge replacement construction would occur within 200 feet of Richardson Creek. In-water work would be limited to removal of the existing bridge piles and abutments. Over water work would include removal of the existing bridge and construction of the replacement span.
3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. 
   
   The project proposes no dredging and no fill would be placed in surface water or wetlands. Timber piles located at the ordinary high water mark boundary on the east side of the bridge would be removed.

4. Will the proposal require surface water withdrawals or diversions? Please give a general description, purpose, and approximate quantities if known.
   
   The project does not propose surface water withdrawals.

5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
   
   Yes, the project lies within the Richardson Creek floodplain.

6. Does the proposal involve any discharges of waste materials to surface waters? If so, please describe the type of waste and anticipated volume of discharge.
   
   The project proposes no discharges of waste materials to Richardson Creek.

b. Groundwater:
   
   1. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, please give a general description of the well, proposed uses and approximate quantities withdrawn from the well.
      
      No groundwater would be withdrawn by the project for drinking water.
      Excavation or drilling for the new bridge foundation may require pumping of groundwater that seeps into the excavated area to facilitate construction.
   
   2. Will water be discharged to groundwater? Please give a general description, purpose, and approximate quantities if known.
      
      No water would be discharged to groundwater.
   
   3. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (i.e., domestic sewage, industrial, containing the following chemicals..., agricultural, etc.).
      
      No waste material would be discharged into the ground from septic tanks or other sources.
   
   4. Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
      
      Not Applicable.
   
   c. Water Runoff (including storm water):
   
   1. Describe the source of runoff (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, please describe.
      
      The project site contains 2 separate threshold discharge areas (TDAs) that separate at the roadway high point on the bridge. As per definition, the
drainage discharge paths from these areas do not intersect within ¼ mile. This was field verified during a storm event on February 7, 2020 by project staff. Stormwater runoff from both TDAs flows from the Woods Creek road surface, shoulders, and driveways with minimal upland contribution.

For TDA 1 under existing conditions, surface flow runoff from the roadway sheet flows off to the north and south, then either infiltrates or flows west, then south and leaves the site. The runoff that does not infiltrate flows west through the ditched section and crosses under the road just west of the project limits in a 12-inch cross culvert that conveys flows to the south. After daylighting from the culvert, the flow cascades down a grassy slope into a ditched system around the edge of an old horse racing track. Flow goes to the west around the crest of the horse oval nearest Woods Creek Road and continues along the poorly maintained horse oval ditch system to the west curving south along the straightaway toward Woods Creek.

For TDA 2 under existing conditions, onsite runoff sheet flows off the roadway into relatively flat grassy areas on both sides of the road and infiltrates into the ground. If the runoff did not infiltrate under a massive storm event, perhaps a 500-yr rainfall, then it is possible overland flow would occur following the contours down across the rural pastures to the south, eventually into Woods Creek.

2. Could waste materials enter ground or surface waters? If so, please generally describe.
   The project would use temporary erosion control and sediment controls during construction to prevent waste materials from entering ground or surface waters.

3. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, please describe.
   The bridge replacement project would maintain existing drainage patterns.

d. Proposed measures to reduce or control surface water, groundwater, runoff water, and drainage impacts, if any:
   Runoff from approximately 82% of new pollution-generating impervious surfaces and 59% of existing pollution-generating impervious surfaces over both TDAs will be routed to and treated by two bioretention cells. Runoff will be conveyed by curb off the bridge, thickened edge, picked up in catch basins, and directed to a bioretention swale for treatment and infiltration located either west of east of the bridge. Water quality treatment is provided in the bioretention cell by allowing runoff to infiltrate through the 18-inch layer of bioretention soil media in the bottom and sides of the cell into the ground. The
two bioretention cells have been modeled using the Western Washington Hydrologic Model (WWHM). The two bioretention facilities have 1,509 cubic feet and 888 cubic feet of capacity and are expected to infiltrate 99% of water entering the swales. The bioretention facilities are proposed to ensure the project has no adverse effects to Richardson Creek, which provides habitat for salmonid fish species including ESA listed species. This action helps the project comply with SCC 30.62A 320 (1) (c) (ii) limiting effective impervious surface near salmonid streams.

4. Plants
   a. Check all types of vegetation below found on or in close proximity to the site:
      - ☑️ deciduous tree: alder, maple, aspen, other
      - ☑️ evergreen tree: fir, cedar, pine, other
      - ☑️ shrubs
      - ☑️ grass
      - ☑️ pasture
      - ☐ crop or grain
      - ☐ orchards, vineyards, or other permanent crops
      - ☐ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
      - ☐ water plants: water lily, eelgrass, milfoil, other
      - ☐ other types of vegetation present: Click here to enter text.
   b. What kind and amount of vegetation will be removed or altered?
      The areas immediately adjacent to the roadway shoulder areas are dominated by grasses and invasive weedy species (Himalayan blackberry). The bridge replacement project would clear trees adjacent to the shoulder to accommodate the approach roadway improvements that include bike lanes and sidewalks constructed in proximity to the bridge. Roadside conifer trees (non-native ornamental black pine) that were planted on the south side of the road east of the bridge would be cleared. Trees located on the south side of the road west of the bridge would also be cleared and includes a mix of native and non-native deciduous trees. The total area of vegetation clearing would total approximately 11,232 square feet.
   c. List threatened and endangered plant species known to be on or near the site.
      No threatened or endangered plant species are known to be located at the project site.
   d. List all noxious weeds and invasive species known to be on or near the site.
      Extensive patches of Himalayan blackberry and English ivy are located in proximity to the project site.
   e. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation of the site, if any:
Some areas for onsite restoration are available in the project limits. The areas adjacent to the streambank at all four corners of the new bridge will have areas for riparian plantings. Tree and shrub planting area is also expected to be available behind the southwest guardrail. There may also be an opportunity to plant in the two proposed bioretention cells with shrubs suitable for bioretention facilities.

5. Animals
   a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. (i.e. birds: hawks, heron, eagle, songbirds, owls, ducks, woodpeckers; mammals: deer, bear, elk, beaver, opossum, raccoon, coyote, small rodents; fish: bass, salmon, trout, herring, shellfish, other:

   b. List any threatened and endangered wildlife species known to be on or near the site. There are no known Threatened or Endangered species of animals on the site. Richardson Creek is mapped as supporting steelhead. Chinook salmon, steelhead, and bull trout are found nearby in Woods Creek.

As of August 22, 2019 the following threatened, endangered, sensitive, or priority species that may be found within the county include (check all that apply):

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Latin Name</th>
<th>Federal Listing</th>
<th>State Listing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puget Sound ESU Chinook</td>
<td>Oncorhynchus tshawytscha</td>
<td>Threatened</td>
<td>Candidate</td>
</tr>
<tr>
<td>Puget Sound DPS Steelhead</td>
<td>O. mykiss</td>
<td>Threatened</td>
<td>N/A</td>
</tr>
<tr>
<td>Bull trout</td>
<td>Salvelinus confluentus</td>
<td>Threatened</td>
<td>Candidate</td>
</tr>
<tr>
<td>Pygmy whitefish</td>
<td>Prosoptium coulteri</td>
<td>N/A</td>
<td>Sensitive</td>
</tr>
<tr>
<td>Margined sculpin</td>
<td>Cottus marginatus</td>
<td>N/A</td>
<td>Sensitive</td>
</tr>
<tr>
<td>Olympic mudminnow</td>
<td>Novumbra hubbsi</td>
<td>N/A</td>
<td>Sensitive</td>
</tr>
<tr>
<td>Oregon spotted frog</td>
<td>Rana pretiosa</td>
<td>Threatened</td>
<td>Sensitive</td>
</tr>
<tr>
<td>Larch mountain salamander</td>
<td>Plethodon marselli</td>
<td>N/A</td>
<td>Sensitive</td>
</tr>
<tr>
<td>Common loon</td>
<td>Gavia immer</td>
<td>N/A</td>
<td>Sensitive</td>
</tr>
<tr>
<td>Peregrine falcon</td>
<td>Falco peregrinus</td>
<td>Species of Concern</td>
<td>Sensitive</td>
</tr>
<tr>
<td>Marbled murrelet</td>
<td>Brachyramphus marmoratus</td>
<td>Threatened</td>
<td>Endangered</td>
</tr>
<tr>
<td>Northern spotted owl</td>
<td>Strix occidentalis caurina</td>
<td>Threatened</td>
<td>Endangered</td>
</tr>
<tr>
<td>Yellow-billed cuckoo</td>
<td>Coccyzus americanus</td>
<td>Threatened</td>
<td>Candidate</td>
</tr>
<tr>
<td>Fisher</td>
<td>Martes pennahti</td>
<td>Endangered</td>
<td>Endangered</td>
</tr>
<tr>
<td>Gray wolf</td>
<td>Canis lupus</td>
<td>Endangered</td>
<td>Endangered</td>
</tr>
<tr>
<td>Grizzly bear</td>
<td>Ursus arctos horribilis</td>
<td>Threatened</td>
<td>Endangered</td>
</tr>
</tbody>
</table>
Where federal threatened and endangered species are found, all work will conform to the requirements of the Endangered Species Act administered by the US Fish and Wildlife Service and the National Marine Fisheries Service. Where state listed species or Priority Habitats and Species (PHS) are found, the Washington Department of Fish and Wildlife Priority Habitats and Species recommendations will be followed, when appropriate. The most current PHS list can be found at: https://wdfw.wa.gov/species-habitats/at-risk/phs/list.

c. Is the site part of a migration route? If so, please explain.
Yes. The site is within the Pacific Flyway for migratory birds which stretches between Alaska and South America. All migratory birds are protected by the Migratory Bird Treaty Act administered by the US Fish and Wildlife Service. The site lies upstream from Woods Creek which supports several anadromous salmonid species, some of which may use Richardson Creek for foraging or rearing.

d. List any invasive animal species known to be on or near the site.
There are no known invasive animal species in the project area.

e. Proposed measures to preserve or enhance wildlife, if any:
Project construction would occur during the summer months when rainfall is minimal. This would help to minimize erosion and prevent sedimentation of surface waters. Bare soil areas would be revegetated once construction is complete.

6. Energy and Natural Resources
a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project’s energy needs? Please describe whether it will be used for heating, manufacturing, etc.

   **No energy will be used once the bridge construction has been completed.**

   Would your project affect the potential use of solar energy by adjacent properties? If so, please generally describe.

   **The bridge replacement will not affect the potential use of solar energy by adjacent properties.**

b. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any:

   **There are no energy conservation features included in the bridge replacement design.**

7. Environmental Health
a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, please describe.
Except for the potential of a fuel spill during construction, there are no environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this bridge replacement construction.

1. Describe any known or possible contamination at the site from present or past uses.
   **There are no known contamination issues at the bridge site.**

2. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. **There are no known existing hazardous chemicals/conditions that might affect project development and design. There are no underground transmission lines in the project area.**

3. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project’s development or construction, or any time during the operating life of the project. **There are no uses of toxic or hazardous chemicals that would be stored, used, or produced during the project’s development. Fuel and hydraulic fluids for vehicle and equipment use would be used and would be stored onsite in secured areas according to adopted safety standards.**

4. Describe special emergency services that might be required. **Emergency response vehicles may be required in the event of a construction accident. The completed project would not require any additional emergency services.**

5. Proposed measures to reduce or control environmental health hazards, if any:
   **Spill control measures and clean-up material would be implemented onsite as required. The construction crew leader or other designated person would have a spill control plan and be trained in spill prevention and clean up. All equipment would be well maintained and in good repair to prevent the loss of petroleum or other products. Refueling and vehicle maintenance would generally occur well landward of Richardson Creek.**

b. Noise:
   1. What types of noise exist in the area which may affect your project (i.e., traffic, equipment, operation, aircraft, other)? **There are no types of noise in the project vicinity that would affect project construction.**
   2. What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (i.e., traffic, construction, operation, other)? Indicate what hours noise would come from the site.
During construction (short-term) there would be increased noise levels generated by heavy equipment. These noise levels are likely to exceed existing background noise levels associated with surrounding rural residential properties.

3. Proposed measures to reduce or control noise impacts, if any:
   No additional measures to reduce or control noise impacts are proposed.

8. Land and Shoreline Use
   a. What is the current use of the site and adjacent properties? Will the proposal affect current land use on nearby or adjacent properties? If so, please describe.
      The project site is used as an arterial roadway including an existing bridge crossing of Richardson Creek. Adjacent properties are used for rural residential land use and agricultural land uses (pasture). The project would not affect these land uses.
   b. Has the site been used as working farmlands or working forestlands? If so, please describe. How much agriculture or forestland of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forestland tax status will be converted to non-farm or non-forest use?
      The site has not been used for working farmlands or working forestlands. Adjacent areas are not used for commercial agriculture or commercial forestry.
   1. Will the proposal affect or be affected by surrounding working farmland or forestland’s normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:
      The project would not be affected by surrounding working farmland or forestland normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting.
   c. Describe any structures on the site.
      The existing Richardson Creek Bridge 300 is the only structure on the site.
   d. Will any structures be demolished? If so, what?
      The existing bridge will be demolished as part of the bridge replacement project.
   e. What is the current zoning classification of the site?
      Richardson Creek Bridge 300 lies on the border between two different zoning classification areas. Snohomish County has zoned the areas upslope and north of the site as Rural-5 Acres while the downslope areas to the south have been zoned A-10 Agriculture 10.
f. What is the current comprehensive plan designation of the site?
   Snohomish County Future Land Use Maps designate the area upslope and north from the bridge site as **Rural Residential (1 DU/5 Acre Rural Basic)** and the area downslope and to the south as **Riverway Commercial Farmland**.

g. If applicable, what is the current shoreline master program designation of the site?
   The Snohomish County Shoreline Management Program designates the area upslope and north of the site as a **Rural Conservancy** environment and the area downslope and south of the project as a **Resource** environment.

h. Has any part of the site been classified critical area by the city or county? If so, please specify.
   Snohomish County critical areas regulations identify Richardson Creek as a fish and wildlife habitat conservation area. The stream and the area landward of the ordinary high water mark are also identified as primary association areas for critical species.

i. Approximately how many people would reside or work in the completed project?
   **No people would reside or work in the completed project area.**

j. Approximately how many people would the completed project displace?
   **No people would be displaced by the completed project.**

k. Proposed measures to reduce or control impacts to nearby agricultural and forestlands of long-term commercial significance, if any:
   **None.**

l. Proposed measures to ensure the proposal is compatible with existing projected land uses and plans, if any:
   **The project is consistent with the Snohomish County Growth Management Act Comprehensive Plan - Transportation Element for 2019-2024 and designated as a Bridge Replacement and Rehabilitation Project (TIP #F.38 Richardson Creek Bridge #300 (Woods Creek Road) Replacement).**

m. Proposed measures to avoid or reduce displacement, if any:
   **None.**

9. Housing
   a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
      **None.**

   b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
      **None.**

   c. Proposed measures to reduce or control housing impacts, if any:
      **None.**
10. Aesthetics
   a. What is the tallest height of any proposed structure(s), not including antennas; what is
      the principal exterior building material(s) proposed?
      The bridge rail for the replacement bridge would be the highest portion of the
      project and would extend approximately 4 feet up from the roadway at the
      bridge crossing.
   b. What view in the immediate vicinity would be altered or obstructed?
      The project would not construct or alter views in the immediate project
      vicinity. Minor clearing along the roadway within the existing right-of-way
      would occur to accommodate the roadway improvements.
   c. Proposed measures to reduce or control aesthetic impacts, if any:
      Temporarily disturbed areas would be revegetated.

11. Light and Glare
   a. What type of light or glare will the proposal produce? What time of day would it mainly
      occur?
      The proposed bridge replacement project would not produce light or glare.
   b. Could light or glare from the finished project be a safety hazard or interfere with views?
      No.
   c. What existing off-site sources of light or glare may affect your proposal?
      No existing off-site light sources would affect the proposed bridge replacement
      project.
   d. Proposed measures to reduce or control light and glare impacts, if any?
      None proposed.

12. Recreation
   a. What designated and informal recreational opportunities are in the immediate vicinity?
      There are no designated or informal recreational opportunities located in the
      immediate project vicinity.
   b. Would the proposed project displace any existing recreation uses? If so, please describe.
      The proposed project would not displace existing recreation uses.
   c. Proposed measures to reduce or control impacts on recreating, including recreation
      opportunities to be provided by the project or applicant, if any:
      None.

13. Historic and Cultural Preservation
   a. Are there any buildings, structures, or sites located on or near the site that are over 45
      years old listed in or eligible for listing in national, site, or local preservation registers
      located on or near the site? If so, please general describe.
      This site was screened by Public Works for proximity to known archaeological
      and cultural sites. There are no known recorded sites located where potential
      ground disturbance activities are anticipated.
b. Are there any landmarks, features or other evidence of Tribal or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

   **None have been identified at this time.**

c. Describe methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with Tribes and the Department of Archeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.

   A preliminary cultural resources screening was conducted using archaeological site GIS data provided by the Washington State Department of Archaeology and Historic Preservation (DAHP) to Snohomish County as part of a data sharing agreement. No recorded sites were found as part of this preliminary screening.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required:

   Compliance with Section 106 National Historic Preservation Act is required as part of the project’s FHWA federal funding. A cultural resources survey will be performed and a report prepared by the Snohomish County archaeologist.

   The following management recommendations would likely be developed as part of the Section 106 consultation:

   • The proposed project would proceed as planned if no sites are affected by the project. A project specific Unanticipated Discoveries Protocol (UDP) would be developed as part of the Section 106 process, including keeping a UDP on site during construction.

   • If any ground-disturbing activities or other project activities related to this development or in any future development uncover protected cultural material (e.g., bones, shell, stone or antler tools), all work in the immediate vicinity should stop, the area should be secured, and any equipment moved to a safe distance away from the location. The on-site superintendent would then follow the steps specified in the UDP developed for the project.

   • If any ground-disturbing activities or other project activities related to this development or in any future development uncover human remains, all work in the immediate vicinity would stop, the area secured, and any equipment be moved to a safe distance away from the location. The on-site superintendent would then follow the steps specified in the UDP developed for the project.
14. Transportation
   a. Identify public streets and highways serving the site, or affected geographic area, and
decribe proposed access to the existing street system. Show on site plans, if any.
   Bridge #300 is located on Woods Creek Road, a rural major collector, between
Ingraham Road and Yeager Road, east of the City of Monroe.
   b. Is the site or affected geographic area currently served by public transit? If so, please
generally describe. If not, what is the approximate distance to the nearest transit stop?
The site is not served by public transit. The nearest transit stop would be for
Community Transit Routes 270 and 271 located in Monroe at the intersection
of Woods Creek Road and US 2, approximately 0.66 miles west of the project
site.
   c. How many additional parking spaces would the completed project or non-project
proposal have? How many would the project proposal eliminate?
The project would not eliminate or construct parking spaces.
   d. Will the proposal require any new – or improvements to existing – roads, streets,
pedestrian, bicycle, or state transportation facilities, not including driveways? If so,
please generally describe (indicate private or public).
The planned bridge and roadway improvements are anticipated to be able to
be completed within the existing Woods Creek Road right of way. It is
anticipated that right of way acquisitions will not be required for this project.
The parcel located on the northwest corner of the bridge has a driveway that
may need to have its entrance relocated to the west in order to accommodate
the longer bridge and guardrail terminals.
Temporary Construction Easements will likely be required to construct the
bridge, especially if the full road closure option is denied and the construction
is to be staged. If acquisitions are needed for this project, a Right of Way Plan
will be developed accordingly.
   e. Will the project or proposal use (or occur in the immediate proximity of) water, rail, or
air transportation? If so, please generally describe.
The project will not use or occur in the immediate proximity of water, rail, or
air transportation.
   f. How many vehicular trips per day would be generated by the completed project or
proposal? If known, indicate when peak volumes would occur and what percentage of
the volume would be trucks (such as commercial or non-passenger vehicles). What data
or transportation models were used to make these estimates?
The project would not generate vehicular trips. The bridge replacement design
would accommodate future estimated increased traffic volumes.
   g. Will the proposal interfere with, affect, or be affected by the movement of agricultural
and forest products on roads or streets in the area? If so, please generally describe.
The project will not interfere with, affect, or be affected by the movement of
agricultural and forest products on roads or streets in the area. During the
duration of bridge replacement, a full road closure of Woods Creek Road is proposed. A detour route of approximately 2 miles from end to end would result in increased travel times for area residents and for through traffic that originates from outside of the project area.

h. Proposed measures to reduce or control transportation impacts, if any:
   The project would develop a traffic control plan and detour plan to be used during construction. The detour plan would close Woods Creek Road to through traffic between Ingraham Road and Wagner Road. The traffic control measures would be implemented to still allow local access for residents from these roads up to the bridge crossing. Traffic would be detoured around the closure using Ingraham Road, 132nd St. SE, and Wagner Road. This is a familiar detour for travelers in the area who have had to use this in the past when this portion of Woods Creek Road has been closed for bridge maintenance work and nearby areas needing repairs from past storm damage. The detour is necessary to replace the new bridge in the same location as the existing bridge. Utilizing a detour and closing Woods Creek Road would provide for improved work zone safety, minimize stream buffer impacts, shorten the construction schedule, and reduce construction cost. It is expected that impacts to school bus traffic would be minimized by the shortened work schedule that would be associated with a full closure.

15. Public Services
   a. Would the project result in an increased need for public services (i.e., fire protection, police protection, public transit, health care, schools, other)? If so, please generally describe.
      The completed bridge replacement would not result in an increased need for public services.

   b. Proposed measures to reduce or control direct impacts on public services, if any.
      No measures are proposed.

16. Utilities
   a. Check all utilities currently available at the site:
      ☑ Electricity
      ☐ Natural Gas
      ☐ Water
      ☑ Refuse Service
      ☑ Telephone
      ☐ Sanitary Sewer
      ☑ Septic System
      ☐ Other (please describe) Click here to enter text.

   b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site of in the immediate vicinity which might be needed.
Snohomish County PUD has overhead power lines and poles located on the north side of the Woods Creek Road with existing roadway right of way. The lines cross over Bridge #300. Comcast and Frontier Communications also have lines on these poles that cross over Bridge #300. These will all require relocation prior to construction. PUD will need to permanently relocate the pole immediate north of the bridge and possibly others to accommodate the project design. Frontier also owns a system of poles and lines on the south side of the road that will need to be relocated prior to construction.

Current laws and franchise agreements obligate the utilities to pay for the relocation of their utilities located within Snohomish County right of way.

Woods Creek Road does not have any existing underground utilities. However, the County will coordinate with the City of Monroe, water, and gas companies to determine if accommodations should be made for potential future underground facilities along the roadway.

Septic drainfields are also present in the vicinity of Bridge #300. The County will have them located and have their locations incorporated into the design drawings to ensure roadway and drainage improvements do not impact the drainfields. If relocation is required, Snohomish County will work with the property owners to ensure the septic drainfields are relocated. County staff will offer information on local septic programs, loans, grants, and rebates available for property owners. The County may need to have the property owner apply for a C10 permit with the County if the septic drainfield is in the County right of way but is not expected to be impacted by the project and remain in place.

C. SIGNATURE
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.
Signature:

Printed name and Digital Signature  Crilly R. Ritz

Position and Agency/Organization: Senior Planer II Snohomish County Public Works TES/ENVS
Date Submitted: January 19, 2021
Appendix A - Photos

Richardson Creek Bridge 300 - This view is from upstream looking downstream at the bridge crossing on Woods Creek Road.

Richardson Creek Bridge 300 - This view looks southeast from the upstream side of the bridge toward blackberries located north of Woods Creek Road.
Richardson Creek Bridge 300 – Looking south and downstream at the retaining wall that extends into the right-of-way on the south side of Woods Creek Road.

Richardson Creek Bridge 300 - This view looks west from the east side of the bridge and shows the roadside black pine trees that would need to be cleared for the bridge replacement and associated roadway improvements.