# Tolt Bridge 1834A Replacement

(On Northeast Tolt Hill Road over the Snoqualmie River)
CIP 200394

# SEPA ENVIRONMENTAL CHECKLIST

King County, Washington

**Prepared by**

King County

**King County**
**Department of Transportation**
**Road Services Division, Engineering Services Section**
**201 South Jackson Street, KSC-TR-0231**
**Seattle, WA 98104-3856**

**September 2005**

**Tolt Bridge 1834A Replacement Project**
**King County, Washington (CIP 200394)**

## TABLE OF CONTENTS


**A. BACKGROUND** ..... 3

**B. ENVIRONMENTAL ELEMENTS**

1. Earth ..... 7
2. Air ..... 8
3. Water ..... 9
4. Plants ..... 12
5. Animals ..... 15
6. Energy and Natural Resources ..... 16
7. Environmental Health ..... 16
8. Land and Shoreline Use ..... 17
9. Housing ..... 20
10. Aesthetics ..... 21
11. Light and Glare ..... 21
12. Recreation ..... 21
13. Historic and Cultural Preservation ..... 22
14. Transportation ..... 23
15. Public Services ..... 24
16. Utilities ..... 24

**APPENDIX A:** **Vicinity Map**
**APPENDIX B:** **70% Project Plan Sheet 11: Showing Overall Proposal**

*Purpose of checklist:*

The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

## A. Background

1. **Name of proposed project, if applicable:**
   Tolt Bridge 1834A Replacement (on Northeast Tolt Hill Road over the Snoqualmie River) CIP 200394.

2. **Name of applicant:**
   King County Department of Transportation, Road Services Division, Engineering Services Section

3. **Address and phone number of applicant and contact person:**
   King County Department of Transportation
   Road Services Division
   King Street Center, MS KSC-TR-0231
   201 South Jackson Street
   Seattle, WA 98104-3856

| | | |
|---|---|---|
| Contacts: | Lorraine Lai, Project Manager | 206-296-8760 |
| | Katherine Merrell, Environmental Engineer | 206-296-8884 |

4. **Date checklist prepared**: September 2005

5. **Agency requesting checklist**:
   King County Department of Transportation, Road Services Division, Engineering Services Section

6. **Proposed timing or schedule (including phasing, if applicable):**
   Construction was originally scheduled to begin in the Spring of 2004, but was deferred to accommodate a redesign of the bridge. Depending on the final advertisement date, construction could begin as early as March 2006 and will be completed by December 2008.

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**
   No further action related to the subject proposal is planned at this time: any plans for future additions, expansion, or further activity related to or connected with this proposal will require public notification.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

Environmental information prepared that directly relates to this proposal:

- *Tolt Bridge 1834A Replacement Project Archæological Resources Assessment Addendum.* Larson Anthropological Archæological Services Limited (LAAS), July 25, 2005
- *Biological Assessment* ESA Section 7 Concurrence letter from U.S. Fish and Wildlife Service, dated February 13, 2004
- *Biological Assessment* ESA Section 7 and Essential Fish Habitat Concurrence letter from the National Oceanic and Atmospheric Administration Fisheries, dated September 17, 2003
- *Biological Assessment* prepared by Parametrix Inc., dated July 2003
- *Critical Areas Report* prepared by Parametrix Inc., dated June 2003
- *Stream Survey Report* prepared by Parametrix, Inc., dated May 2003
- *Environmental Phase Surface Water Technical Information Report (Preliminary).* King County, January 2003
- *Tree Survey Memo for the Tolt Bridge 1834A Replacement (CIP 200394).* King County, December 2002
- *Tolt Bridge Replacement 1834A Design Report.* Lin and Associates, December 2002.
- *Draft Bridge Hydraulics, Scour and Geomorphology Assessment Detailed Report for Tolt Hill Bridge #1834A (Replacement), Tolt Hill Road over the Snoqualmie River.* West Consultants, Inc., December 2002
- *Tolt Bridge Replacement (No. 1834A): Special Studies Floodplain and Fluvial Studies.* Lin and Associates, March 19, 2002
- *A Cultural Resources Survey of King County Road Services Division's Tolt Bridge Replacement Project, King County, Washington.* Archaeological and Historical Services, Eastern Washington University, September 1998
- *Type, Size and Location Study Replacement of the Tolt Hill Bridge 1834A.* GHL Consultants, July 1996
- Geotechnical Engineering Study Tolt Hill Bridge Replacement. Lorilla Engineering Inc., 1995
- *King County Underwater Inspection for the Tolt Bridge.* Lin and Associates, 1995
- *Tolt Bridge BRAC Field Review Memo.* King County, 1994

Environmental information that will be prepared that directly relates to this proposal:

- *Biological Assessment Addendum* prepared by Parametrix Inc.
- *Tolt Bridge Replacement Mitigation Plan* prepared by Parametrix, Inc.
- *Section 4(f) Nationwide Programmatic Evaluation* prepared by King County Department of Transportation
- Final *Surface Water Technical Information Report* prepared by King County Department of Natural Resources and Parks
- Final *Geotechnical Report* prepared by Lorilla Engineering Inc.
- Final *Bridge Hydraulics, Scour and Geomorphology Assessment* prepared by WEST Consultants, Inc.

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**
There are no known applications pending for governmental approval of other proposals directly affecting the property covered by this proposal.

10. **List any government approvals or permits that will be needed for your proposal, if known.**
Federal Permits, Approvals and Reviews:
- National Environmental Policy Act Categorical Exclusion
- Section 106 of the National Historic Preservation Act Review and Memorandum of Understanding
- Department of Transportation Act Programmatic 4(f) Analysis
- United States Army Corps of Engineers Nationwide Permit Number 23
- United States Fish and Wildlife Service Concurrence with Biological Assessment and Addendum
- National Oceanic and Atmospheric Administration Concurrence with Biological Assessment and Addendum

Washington State Permits and Approvals:
- Department of Fish and Wildlife Hydraulic Project Approval
- Department of Ecology:
  - National Pollutant Discharge Elimination System (NPDES) General Permit for Construction;
  - Water Quality Certification (401); and
  - Notification of Hazardous Waste Disposal: Form 2
- Washington State Department of Natural Resources Aquatic Lands Easement

King County Permits and Approvals:
- Department of Development and Environmental Services
  - Clearing and Grading Permit and Public Agency Utility Exception
  - Flood Hazard Certification
  - Shoreline Substantial Development Permit
- Department of Natural Resources and Parks
  - Two Special Use Permits
- Landmarks Commission
  - Type III Certificate of Appropriateness

11. **Give brief, complete description of your proposal, including the proposed uses and the size of the project and 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).**

The purpose of the project is to accomplish the demolition and replacement of the existing Tolt Bridge 1834A due to structural deficiencies and to correct safety deficiencies. The replacement structure will be situated on a new alignment that crosses the Snoqualmie River approximately 165 feet upstream (south) of the existing bridge. It will include two 12-foot-wide travel lanes, and two eight-foot-wide shoulders. Bicyclists and pedestrians will share the shoulders. The project scope includes improvements to driveways and access roads, replacement of a culvert, and the installation of water quality treatment facilities.

The Road Services Division revised the design of the Tolt Bridge replacement structure because of rising costs and lead times for steel. The previous bridge design featured steel-plate girders; due to worldwide demand, however, steel prices went up substantially in 2004, and the wait time for steel-plate girder orders increased significantly. The Road Services Division will therefore design and construct a bridge using steel elements that are more readily available.

The new bridge plan features a double-truss design. The double truss system employs a single truss to span the high-quality wetland on the west side of the river; the second truss is connected to the first and spans the Snoqualmie River. To accommodate the use of steel trusses, the new design is approximately four feet wider than the original steel-plate girder design; the revised design also results in a bridge elevation that is approximately four feet lower on average.

Sensitive areas in the vicinity of the project limits include wetlands, the Snoqualmie River and its floodplain, three streams, steep slopes, and landslide, seismic, and erosion hazard areas. Wetlands and streams will be impacted by the project in a number of ways, including fill, shading, clearing, and limitations affecting vegetation height under the bridge. As part of this proposal, an Environmental Mitigation Plan is being prepared that addresses the temporary and permanent impacts the project has upon the biological environment. The Plan includes elements such as:

- The use of project timing, sequencing, and Best Management Practices (BMPs) to reduce impacts on fish and wildlife.
- Erosion and sediment control measures and planting native vegetation to mitigate vegetation clearing.
- Noise attenuation devices such as bubble curtains to mitigate underwater noise associated with pile driving.
- Construction of a water quality pond, a bioswale, and improvements to existing ditches to mitigate increased impervious surfaces.
- To comply with local regulatory requirements, the project scope also includes areas for compensatory flood storage to balance fill within the floodplain.

With the issuance of a Type III Certificate of Appropriateness May 2, 2005, the King County Landmarks Commission approved the removal of the existing historic bridge. The impact on a historic resource that the removal and demolition of the historic bridge represents will be mitigated by preparing photos and written documentation, installing permanent interpretive historic materials at the project site, and developing a paint scheme for the new bridge trusses that closely matches the color of the existing Tolt Bridge.

The total project area including all potential mitigation sites is approximately 14 acres. Approximately six acres of the project site will be disturbed for construction and for vegetation planting as mitigation.

**12. Location of the 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, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a 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 area is about 1.5 miles west of the City of Carnation and within Section 20 and 21, Township 25N, Range 7E. The existing Tolt Bridge conveys Northeast Tolt Hill Road over the Snoqualmie River (at River Mile 25.25) about one mile west of Fall City-Carnation Road Northeast (State Route 203) near the intersection with West Snoqualmie River Road Northeast. The general project location is shown on the vicinity map in Appendix A.

## B. ENVIRONMENTAL ELEMENTS

### 1. Earth

**a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.**

The project area on the west side of the Snoqualmie River has steep slopes near the existing western bridge approach along Northeast Tolt Hill Road, and along West Snoqualmie River Road Northeast. At the toe of the slope the site is generally flat to the Snoqualmie River. On the east side of the river, the project site is generally flat with slightly rolling slopes. The majority of the project is in a flat area.

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

The steepest slopes on the site are approximately 60-75 percent located east of the existing bridge along Northeast Tolt Hill Road, and along West Snoqualmie River Road Northeast near its intersection with Northeast Tolt Hill Road.

**c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.**

The King County Soil Survey (1973) indicates that Alderwood, Everett, Kitsap, Puget, Puyallup, Riverwash and Seattle series soils comprise most of the area. Each of these soils is typically used for pasture and/or row crops.

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

The King County Department of Development and Environmental Services' geographic information systems (GIS) data catalog (1992) indicates a history of unstable soils in the immediate vicinity of the project area along the existing western approach to the bridge, and along West Snoqualmie River Road Northeast. These areas are mapped as being susceptible to landslides and have high erosion potential. Areas of high erosion and seismic potential are found on the west side of the Snoqualmie River and within the footprint of the project.

**e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.**

In general, the purpose of the proposed cut and fill is to accommodate the construction of the new bridge, intersection, roadway, and driveway improvements, the new boat launch access, the water quality treatment pond and bioswale, compensatory flood storage, all access, and stockpiling and staging areas (before construction begins and after construction ends), as well as the reconstruction of the access road southeast of the existing bridge, and the replacement of the culvert at Tributary 2. The total excavation anticipated is about 7,245 cubic yards, and the total fill anticipated is about 11,420 cubic yards. The project will not increase the fill located within the 100-year floodplain.

Source of Fill:

- Concrete and rebar will be used for construction of the bridge piers.
- A prefabricated concrete culvert will be used at the access road over Tributary 2.
- Gravel borrow from local gravel pits will be used for all roadway embankment fill and to construct the two proposed water quality treatment facilities.
- Quarry spalls from local gravel pits and geotextile fabric will be among the materials used to stabilize temporary construction access, stockpiling and staging areas.
- Some existing material will be used as backfill, and excess or unsuitable excavated material will be hauled off-site by the contractor and disposed of appropriately and as required by King County Ordinance and contract specifications.

f. **Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**
Erosion could occur as a result of construction activities because vegetation will be removed and the ground disturbed. Erosion and sedimentation control measures will be employed during construction through use of King County Best Management Practices (BMPs) and compliance with applicable permit conditions and King County's contract specifications.

g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**
The total existing impervious surfaces is approximately 75,302 square feet: new impervious surfaces associated with the project total approximately 106,748 square feet, a net gain of 31,446 square feet, which represents a 42 percent increase.

h. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**
Best Management Practices (BMPs) specified by the 1998 *King County Surface Water Design Manual* will be used during construction to reduce and control erosion impacts. A construction inspector will inspect the erosion control measures daily to ensure their adequacy and to ensure that maintenance needs are met. In addition, the need of erosion control measures in any area shall be immediately addressed. BMPs may include, but are not limited to, use of silt fencing, turbidity curtains, temporary coverage with straw mulch or plastic sheeting, grass seeding, and storm sewer inlet protection. Grass seeding and native plantings will be provided at the close of the project to ensure bare earth areas are revegetated.

2. **Air**

a. **What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**
During construction, emissions to the air may occur from equipment (e.g., cranes, backhoe, bulldozer, grader, scoop-loader, trucks, etc.). Airborne dust particles may also result from construction activities. The sources of these short-term construction emissions would be eliminated at the end of the project.

**b. Are there any off–site sources of emissions or odor that may affect your proposal? If so, generally describe.**
No off-site sources of emissions or odors are expected to affect the proposal.

**c. Proposed measures to reduce or control emissions or other impacts to air, if any:**
During and following construction activities, the project site may be watered daily to suppress dust as needed. Adjoining streets will also be swept as needed to control dust emissions.

**3. Water**

**a. Surface:**

**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, describe type and provide names. If appropriate, state what stream or river it flows into.**

The Snoqualmie River flows underneath the bridge in the project area and is a "Shoreline of state-wide significance" because it has an annual flow of more than 1,000 cubic feet per second (cfs). There are three tributaries that flow into the Snoqualmie River and six wetlands near the bridge. According to the King County Sensitive Area Code, the three tributaries are classified as Class 2 streams with salmonids (see Figure 2 in Appendix C).

As designated by King County, the wetlands include two Class 2 forested wetlands, a Class 1 forested/scrub-shrub/emergent/open water wetland, one Class 2 emergent wetland, and two Class 3 emergent wetlands on agricultural land (see Figure 2 in Appendix C). All of these features are located within the 100-year floodplain and floodway of the Snoqualmie River. The project is vested under the 2004 King County Sensitive Areas Code 21.A.24.

**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.**
All the project activities will require work over, in, or adjacent to (within 200 feet) at least one of the above-described waters (please see Appendix B to view plan sheets), including, in no particular order:

- Construction of the new bridge, including driving temporary support piles in the river, stream, and wetland to erect the truss.
- Mobilization and the installation of staging, stockpiling, and access areas and temporary erosion controls.
- Realignment of West Snoqualmie River Road Northeast intersection.
- Construction of the new boat launch gravel parking lot access road.
- Joining the new bridge with Northeast Tolt Hill Road.
- Demolition of the existing bridge and approaches.
- Construction of stormwater pond and bioswale.
- Compensatory flood storage mitigation excavation.
- Historic interpretive mitigation (viewer and the kiosks).
- Mitigation planting, landscaping, and seeding.
- Demobilization of temporary erosion control methods, access, staging and stockpiling areas.
- The reconfiguration of the gravel road southeast of the existing bridge and subsequent culvert replacement for affected tributary; and

- Installation of utilities.

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.**

Driving temporary in-river piles: In the first season of construction, the design requires that 24 to 30 steel piles be driven in the Snoqualmie River to support a temporary work trestle from which to build the new bridge. Between six and 12 additional steel piles would be driven in the river to support the new truss during erection. Potentially, approximately eight of the temporary support piles for the new truss could remain in the channel because the erected truss structure would create a conflict that prevents access to remove the piles. Divers would cut these inaccessible piles off below the riverbed grade. The remaining piles will be removed using a vibratory hammer. Demolition of the existing bridge piers requires in-water work that consists of installing temporary cofferdams or turbidity curtains near the existing concrete bridge piers in order to remove the two piers to the mud line during the second season of construction.

Permanent wetland impacts: The only permanent impacts on the wetlands in the project area include small areas of wetland and buffer fill, permanent vegetation clearing (due to pier placement), and permanent shading. Two drilled concrete/rebar shafts will be placed in Wetland 1, requiring the introduction of approximately 157 square feet of permanent wetland fill.

Temporary wetland impacts: Use of a temporary construction trestle on the north side of the proposed bridge will create temporary impacts on the wetlands and their buffers on the west side of the Snoqualmie River. The placement of temporary piles is necessary to create a work platform. The effects of placing the piles are considered temporary because the pilings and work trestle would be removed, and disturbed areas would be replanted with appropriate native vegetation once construction is complete.

On the east side of the Snoqualmie River, temporary impacts on the wetland and buffer area will occur both under the new bridge approach and in an area south of the approach, where the construction easement and temporary access road are situated. These impacts are also considered temporary: steel plates, crane mats, and construction fabric placed on the pasture grasses with crushed rock on top of it have been proposed as methods by which to minimize the impacts caused by construction equipment access.

4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

The removal of the existing concrete bridge piers by cutting them at the mud line will require turbidity containment. Methods by which to accomplish this activity are being analyzed: if water must be diverted during the removal of the piers is required, the approximate volumes are unknown at this time. The replacement of the culvert at Tributary 2 may also require surface water diversions around the work area: methods by which to accomplish this activity are also being analyzed and approximate volumes of diverted water are unknown at this time.

5) **Does the proposal lie within a 100–year floodplain? If so, note location on the site plan.**

The majority of the proposal lies within a 100-year floodplain. Both the project site on the east side of the river and the low-lying area on the west side of the river are within the floodplain.

6) **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**
No waste materials will be discharged to surface waters.

b. **Ground:**

1) **Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**
It is likely that ground water will be encountered during the installation of the shafts drilled for piers that will support the bridge structure. Material, including ground water, that is excavated from the shafts will either be hauled off-site to an approved receiving facility, or pumped into on-site separation tanks where suspended particles will be allowed to settle out of the water. The water may either be pumped onto adjacent agricultural fields, or hauled off-site. There will be no discharges to ground water as a result of the proposal.

2) **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals…; agricultural; etc.). 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.**
This proposal does not involve the construction or operation of a septic tank system or any other waste disposal system or facility: no waste material will be discharged into the ground as a result of this project.

c. **Water runoff (including stormwater):**

1) **Describe the source of runoff (including storm water) 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, describe.**
There is limited drainage along the existing road: most road runoff from east of the existing bridge flows in sheets into the adjoining fields, where it infiltrates the soil or is drained to the river via ditches and/or tributaries. Stormwater from the existing bridge deck drains into the river through scuppers. Drainage from the west side of the project either sheets off the shoulder or is collected in a roadside ditch and pipe system that eventually discharges below the existing bridge approach into the river and/or into a nearby wetland, where it is dispersed.

The proposed stormwater system for the replacement bridge will be designed in accordance with the 1998 *King County Surface Water Design Manual*. Because the receiving body for all stormwater is the Snoqualmie River, stormwater detention or flow control is not required. Even so, the project proposal includes stormwater collection and conveyance features, including catch basins, storm pipes, and ditches. On the east side of the bridge, stormwater runoff will be treated using a bioswale located under the existing bridge right-of-way and along a ditch system on Northeast Tolt Hill Road. Stormwater runoff from the bridge deck and the roadway east of the bridge will be collected and treated through an upgraded ditch system and bioswale to prevent direct flows to the Snoqualmie River.

All runoff from the westerly portion of the project will be treated in a water quality pond constructed at the intersection of West Snoqualmie River Road and Northeast Tolt Hill Road. The pond will be located outside of any sensitive area buffers in an area that is now paved and/or graveled. The outfall from the water quality pond will be located under the existing western bridge approach.

2) **Could waste materials enter ground or surface waters? If so, generally describe.**
Fuel spills from the construction machinery that could enter ground or surface waters are possible, but unlikely. Containment devices such as tarps will be used to prevent construction materials from entering surface waters.

d. **Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:**
Drip pans will be fitted with absorbent pads and placed under all equipment being fueled. Spill Prevention, Control and Countermeasures (SPCC), and Temporary Erosion Control (TESC) Plans will be included in the Surface Water Pollution Prevention Plan (SWPPP), which will be implemented during construction.

4. **Plants**

a. **Check or circle types of vegetation found on the site:**
deciduous tree: alder, maple, aspen, other: Pacific willow, cottonwood
evergreen tree: fir, cedar, pine, other
shrubs: salmonberry, sword fern, other: red elderberry, western hazelnut, western crabapple, Pacific ninebark, snowberry, Douglas spirea
grass
pasture
crop or grain:
wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other: curly dock, reed canarygrass, lady fern, piggyback plant, horsetail, stinging nettle
water plants: water lily, eelgrass, milfoil
other types of vegetation: Himalayan Blackberry

b. **What kind and amount of vegetation will be removed or altered?**
The project will affect the vegetation in two of the six wetlands (Wetlands 1 and 2) and in the buffers of four of the six wetlands (Wetlands 1, 2, 4, and 6), and pasture grass. The impact the project will have upon these areas can be divided into permanent and temporary categories. Permanent impacts occur where there is a permanent or long-term loss of wetland, buffer area, or function, which includes loss of wetlands or buffers as the result of the placement of fill (i.e., for the piers), vegetation clearing[1], and/or a conversion of wetland from one class (forested) to another class (shrub or emergent) as a result of shading by the bridge or its approaches.

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[1] For the purposes of this analysis, clearing refers to the removal of some or all of the vegetation in a wetland or buffer. Construction of the new western approach will require selective cutting of trees within the ROW using chainsaws and selective cutting of shrubs with hand tools as necessary to install the permanent and temporary structures.

Within the project limits, permanent fill in vegetated areas occurs where the drilled shafts will be installed, at the west end of the west approach structure where the aerial structure ties into the existing slope, at the east approach where a backfilled retaining wall will be constructed (east of Pier 6), and where the intersection of West Snoqualmie River Road Northeast and Northeast Tolt Hill Road will be realigned. Permanent clearing and shading will affect wetland and buffer vegetation within (under) the proposed bridge footprint on the east and west sides of the river.

The areas within the permanent bridge footprint will be selectively cleared during construction; on the west side of the river, there will, however, be a change in the vegetation class of the wetland and buffer compared to preproject conditions. This type of plant community change is the result of shading and is a subset of the clearing impacts, not an addition to the clearing impacts. Within the project limits, these impacts occur where the west bridge approach limits the height of plants that can grow beneath it, which effectively changes a forested community into a shrub and/or emergent community.

Temporary impacts occur where there is a short-term loss of wetland area or function, but the area is restored once construction is complete. The result is no net loss of wetland (or buffer) area or function. Temporary fill will be placed on the east side of the river to provide construction access. The fill may remain in place up to a year, but will be removed and the areas restored after construction. Temporary clearing—where some or all of the vegetation in an area is cleared, then replanted following construction—will occur in the area on the west side of the bridge, where trees will be cut to accommodate the installation of a temporary work platform next to the proposed bridge, and south of the new bridge, where trees will be cut to allow bridge maintenance[2]. Wetland and wetland buffer impacts from the Tolt Bridge replacement are described in detail below.

**Table 1. Wetland Impacts in the Tolt Bridge Replacement Project Area [a]**

| | Permanent Impacts in Square Feet | | | Temporary Impacts in Square Feet | | |
|---|---|---|---|---|---|---|
| **Wetland** | **Fill** | **Clearing** | **Total** | **Fill** | **Clearing** | **Total** |
| 1 | 323 | 7,248 | 7,571 | 19,462 | 0 | 19,462 |
| 2 | 0 | 10,513 [b] | 10,513 | 0 | 12,697 [c] | 12,697 |
| 3 | - | - | - | - | - | - |
| 4 | - | - | - | - | - | - |
| 5 | - | - | - | - | - | - |
| 6 | - | - | - | - | - | - |
| **Total** | **323** | **17,761** | **18,084** | **19,462** | **12,697** | **32,159** |

[a] Impact areas based on revised design footprint (King County, April 2005).

[b] Calculated impact for Wetland 2 includes permanent shading to a small portion of Tributary 3.

[c] Temporary clearing impacts shown for Wetland 2 includes temporary shading to a small portion of Tributary 3.

[2] To accommodate bridge maintenance on the west side of the river, the County will limb or top trees periodically that have grown to within ten feet of the bottom of the bridge girder or to within 15 feet of the edge of the bridge deck.

**Table 2. Wetland Buffer Impacts in the Tolt Bridge Replacement Project Area [a]**

| Wetland Buffer | Permanent Impacts in Square Feet | | | Temporary Impacts in Square Feet | | |
|---|---|---|---|---|---|---|
| | Fill | Clearing | Total | Fill | Clearing | Total |
| 1 | 2,995 | 4,760 | 7,755 | 7,185 | 0 | 7,185 |
| 2 | 3,726 | 7,791 | 11,517 | 0 | 11,148 | 11,148 |
| 3 | - | - | - | - | - | - |
| 4 | 11,863 | - | 11,863 | - | - | - |
| 5 | - | - | - | - | - | - |
| 6 | 410 | 0 | 410 | - | - | - |
| **Total** | **18,994** | **12,551** | **31,545** | **7,185** | **11,148** | **18,333** |

[a] Impact areas based on revised design footprint (King County, April 2005).

**Table 0-1. Tree Clearing Impacts Associated with the Tolt Bridge Replacement Project**

| Tree Species to be Cut | # Trees >6-inches DBH |
|---|---|
| **West Side** | |
| Red alder | 21 |
| Black cottonwood | 0 |
| Willow | 4 |
| Big leaf maple | 2 |
| Other (Red-osier dogwood, Red elderberry, Vine maple, unidentified snags) | 14 |
| **West Side Total** | **41** |
| **East Side** | |
| Red alder (likely) | 7 |
| **East Side Total** | **7** |
| **Overall Total** | **48** |

Data provided by King County in 2003. The findings are based on survey of trees within the proposed ROW and in the temporary construction easement areas.

**c. List threatened or endangered species known to be on or near the site.**

In 2005, the Washington State Department of Natural Resources was consulted regarding the potential presence of significant plant species on or near the site. The National Heritage Information system searched for information regarding significant natural features in the project area and found no records of rare plant species or communities.

**d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:**

All bare areas will receive vegetative cover. Mostly native species will be provided to replace disturbed vegetation (e.g., trees for trees, grass for grass, shrubbery for shrubbery). Areas in which pasture grasses are disturbed will be reseeded with grass species suitable to the areas and preferred by

the landowner. No invasive species, such as blackberries, will be replanted. Felled trees will be left in place at or near their original location.

5. **Animals**

a. **Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:**
birds: hawk, heron, eagle, songbirds, other
mammals: deer, bear, elk, beaver, other
fish: bass, salmon, trout, herring, shellfish, other

b. **List any threatened or endangered species known to be on or near the site.**
The National Oceanic and Atmospheric Administration Fisheries and United States Fish and Wildlife Service require that the project be assessed to address the effects of the project on bull trout (*Salvelinus confluentus*) and proposed critical habitat for bull trout, Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*) and critical habitat for Chinook salmon, and bald eagles (*Haliaeetus leucocephalus*). In addition, the provisional effects of the project on southern resident killer whales was assessed. The whales, which are a marine species proposed for listing under the Endangered Species Act, use as prey the fish species that migrate to the marine environment from the project area.

c. **Is the site part of a migration route? If so, explain.**
In the vicinity of the project area, the Snoqualmie River is a low-gradient river that meanders through a broad floodplain with numerous remnant oxbow lakes. The project action area, however, includes a relatively straight segment of river channel. This reach serves as migration and rearing waters for a variety of anadromous salmonids including chinook, coho, chum, and pink salmon. High-quality spawning habitat is present below (downstream) the Snoqualmie River's confluence with the Tolt River (approximately 750 feet away). These spawning areas are used by several species including chinook, pink, and chum salmon. Steelhead, rainbow, and cutthroat trout are also present in the Snoqualmie River and its tributaries.

It is probable that foraging bull trout are present in the Snoqualmie River main stem and/or its major tributaries. USFWS indicated that bald eagles are present in the vicinity of the project. bald eagle presence occurs primarily during the wintering period between October 31 and March 31. Although USFWS indicated that nesting bald eagles are also present in the area, Priority Habitat Species data from Washington State Department of Fish and Wildlife (WDFW) shows there are no bald eagle nests, territories, or wintering concentration areas within at least one mile of the project area. A bald eagle nest is located north of the project site, but it is over two miles away. The site is within the Pacific Flyway and is part of the migration route for a number of waterfowl, including Canada geese.

d. **Proposed measures to preserve or enhance wildlife, if any:**
Mitigation measures will be employed at the site to avoid or reduce harm to environmental resources including wildlife. Areas that have been temporarily cleared will be replanted with plant materials that will provide wildlife habitat. Felled trees will be left in place to provide wildlife habitat. Best Management Practices (BMPs)—including, but not limited to—placement of mulch, use of silt barriers, and covering erodable stockpiles, will prevent soil erosion that could affect water quality for fish and wildlife. Water quality treatment, a Surface Water Pollution Prevention Plan, Spill

Prevention, Control and Countermeasures Plan (SPCC), and a Temporary Erosion and Sedimentation Control (TESC) plan will be implemented during construction activities to preserve the integrity of any habitat in the project vicinity. The use of project timing, sequencing, and Best Management Practices (BMPs) will be used to reduce impacts on fish and wildlife. Noise attenuation devices such as bubble curtains will be employed to mitigate underwater noise associated with pile driving.

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? Describe whether it will be used for heating, manufacturing, etc.**
   Construction vehicles and machinery will use gasoline and diesel fuels. Electrical power will be needed temporarily for construction trailers and lights.

   b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**
   No.

   c. **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:**
   None.

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, describe.**
   Workers handling the steel trusses coated with lead-based paint and the creosote timber piles of the existing bridge may expose themselves and the environment to environmental health hazards. The accidental leakage of petroleum products (e.g., gasoline, diesel fuel, hydraulic fluid, anti-freeze, grease, etc.) from construction equipment could occur, but is not likely. These substances can be toxic to nearby aquatic systems, and to humans upon prolonged skin contact, and can pose a fire hazard.

      1) **Describe special emergency services that might be required.**
      The proposed project will not require any special emergency services.

      2) **Proposed measures to reduce or control environmental health hazards, if any:**
      A Lead Health Protection Plan (LHPP) will be implemented during construction because the existing bridge truss was painted with lead-based paint and the existing bridge approach timbers were likely treated with creosote. Workers will be required to have taken lead abatement training and to wear protective equipment. SPCC and TESC Plans will be included in the SWPPP, which will be implemented during construction.

b. **Noise**

1) **What types of noise exist in the area, which may affect your project (for example: traffic, equipment, operation, other)?**
Existing noise emanates primarily from daily traffic along Northeast Tolt Hill Road and West Snoqualmie River Road Northeast. Noise levels may vary slightly during construction, but will not affect the project.

2) **What types and levels of noise would be created by or associated with the project on a short–term or a long–term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**
On a short-term basis, noise will be generated by the construction equipment (e.g., pile driving, truck traffic hauling materials to and from the site, cranes, drilling equipment, backhoe, generators, grader, bulldozer, and deck resurfacing operations). Construction hours are controlled by the King County Noise Ordinance and are typically limited from 7:00 A.M. to 10:00 P.M.; however, work hours must be determined on a project-by-project basis and may be adjusted for the construction work schedule.

3) **Proposed measures to reduce or control noise impacts, if any:**
Construction Phase:
Standard mufflers will be used on all construction equipment. The construction work will occur during hours limited by the contract documents. Noise attenuation devices such as bubble curtains will be employed to mitigate underwater noise associated with pile driving.

Operational Phase:
Changes in traffic noise as a result of the proposal are not anticipated.

8. **Land and Shoreline Use**

a. **What is the current use of the site and adjacent properties?**
The proposed project site is used for motorized travel on an existing two-lane roadway and bridge. The adjacent properties serve residential, recreational and agricultural purposes.

b. **Has the site been used for agriculture? If so, describe.**
Part of the proposed project site has been used for agriculture. East of the river and south of the existing bridge, the land is used for grass propagation.

c. **Describe any structures on the site.**
The existing structures on site include the bridge, bridge approaches, roadway, utility poles, and signage.

d. **Will any structures be demolished? If so, what?**
The existing bridge structure and bridge approaches will be demolished.

e. **What is the current zoning classification of the site?**
According to the *King County Zoning Code* (KCC21.A.02.110), roadways are unclassified. The area next to the bridge on the west side of the river is classified as (RA-10) Rural Area, with ten dwelling

units per acre. The area south of the existing bridge and east of the Snoqualmie River are classified as (A-35) Agricultural, with one dwelling unit per 35 acres.

**f. What is the current comprehensive plan designation of the site?**

According to the *King County Comprehensive Plan* (2000), the project site is located within a rural development area.

**g. If applicable, what is the current shoreline master program designation of the site?**

According to the King County Code, Title 25, *Shoreline Management Master Program*, the shoreline of the Snoqualmie River is a conservancy environment. Conservancy areas are intended to maintain existing character, and are designed to protect, conserve, and manage existing natural resources and valuable historic and cultural areas. The preferred uses are those that do not consume the physical and biological resources of the area.

The Snoqualmie River is a shoreline of the State, subject to the Shoreline Management Act permit requirements. A Shoreline Substantial Development permit will be required. The project will comply with the permit requirements of King County Code, Title 25, administered by King County with oversight by the Washington Department of Ecology. Applicable policies within the transportation facilities section of the County's master program that must be met in order to comply with permit requirements include:

- **Pedestrian access should be built where access to public shorelines is desirable and has been cut off by linear transportation corridors. New linear facilities should enable pedestrian access to public shorelines where access is desirable.**
  A desirable public access point exists north of the existing bridge on the east side of the Snoqualmie River, where the boat launch is located. The existing bridge does not provide pedestrian access from the western portion of the Tolt River-John MacDonald Park and Campground to the boat launch on the east side of the river. The proposal includes two 8-foot-wide shoulders for bicyclists and pedestrians to share the shoulders.
- **Shoreline transportation facilities should be encouraged to include in their design and development multimodal provision where public safety can be assured.**
  The width of the bridge will be increased from two nine-foot-wide lanes with no shoulders, to two 12-foot lanes and two 8-foot shoulders. The new shoulders will provide improved access for pedestrians and bicyclists.
- **Shoreline transportation facilities should be planned to fit the topography and to minimize cuts and fills, and they should be designed, located, and maintained to minimize erosion and degradation of water quality, and to give special consideration to shoreline aesthetics.**
  The proposal takes into account the natural topography of the area: the project will not result in creation of areas of unstable soils. Fill material will be placed within the shoreline management area of the Snoqualmie River to accommodate the bridge replacement, roadway realignment, and the construction of the new access road to the boat launch. The proposed project activities will, however, meet King County zero-rise floodway requirements and will not cause changes to the Snoqualmie River floodway. The bridge and roadway will be maintained on a regular basis during and after construction. The replacement bridge will be constructed employing erosion control methods to minimize the potential detrimental erosion and water quality effects on the

shoreline. There are no water quality treatment facilities at the site of the existing bridge: the proposed replacement includes water quality treatment of stormwater runoff from the roadway.

- **Transportation and utility facilities should be encouraged to coordinate joint use of rights-of way and to should be encouraged to consolidate crossings of water bodies when adverse impact to the shoreline can be minimized by doing so.**
  The King County Department of Transportation will work with the utility companies to coordinate joint use of right-of-way for the proposed project.
- **Transportation facilities should avoid shoreline areas known to contain development hazards (e.g., slides and slump areas, poor foundation soils, and marshes).**
  The King County Department of Development and Environmental Services' geographic information systems (GIS) data catalog (1992) indicates a history of unstable soils in the along the western approach to the existing bridge, and along West Snoqualmie River Road Northeast. These areas are mapped as being susceptible to landslides and having high erosion potential. Areas of high erosion and seismic potential are found on the west side of the Snoqualmie River and within the footprint of the project, but all the reasonable sites considered as alternatives for the replacement bridge are within areas of unstable soils.
- **Transportation facilities crossing 100-year floodplains should be constructed on a low-profile design so that they do not serve as dikes or levees to floodwaters.**
  The elevation of the replacement bridge will be designed over the 100-year flood elevation. The bridge piers and abutments will be aligned and configured to maximize hydraulic performance and minimize debris catchment in the river.
- **All transportation facilities in shoreline areas should be constructed and maintained to cause the least possible adverse impact on the land and water environments, should respect the natural character of the shoreline, and should make every effort to preserve wildlife, aquatic life, and their habitats.**
  King County Best Management Practices (BMPs) will be employed to control erosion and sedimentation. The clearing of vegetation will be restricted to the minimum necessary for construction activities. Native trees, shrubs, and herbaceous plants will be used to replace vegetation lost as a result of construction, except in agricultural areas where grass will be reestablished.

**h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.**
Several parts of the project site that have been classified as "environmentally sensitive," including:

- The Snoqualmie River (a King County Class 1 stream) and its 100-foot stream buffer;
- The floodplain of the Snoqualmie River
- The three tributaries to the Snoqualmie River (King County Class 2 streams with salmonids) and their 100-foot buffers;

- The six wetlands:

| Wetland | Size (Acres)[a] | Ecology Rating[b] | King County Rating[c] | Buffer (ft)[d] | USFWS Classification |
|---|---|---|---|---|---|
| 1 | 1.07 | IV | 2 | 50 | Emergent |
| 2 | >3.42 | I | 1 | 100 | Forested/Scrub-Shrub/Emergent/Open Water |
| 3 | >0.24 | III | 2 | 50 | Forested |
| 4 | >5.0 | II | 1 | 100 | Forested/Emergent |
| 5 | 0.04 | IV | 3 | 25 | Emergent |
| 6 | 0.04 | III | 3 | 25 | Emergent |

- Steep slope areas along the existing western approach to the bridge and along West Snoqualmie River Road Northeast are mapped. These areas are susceptible to landslides and have high erosion potential. Areas of high erosion and seismic potential are found on the west side of the Snoqualmie River within the footprint of the project.

**i. Approximately how many people would reside or work in the completed project?**
Not applicable.

**j. Approximately how many people would the completed project displace?**
None.

**k. Proposed measures to avoid or reduce displacement impacts, if any:**
No such measures are necessary.

**l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**
This project is listed in the *King County Transportation Needs Report* and complies with the *King County Comprehensive Plan*. The proposed project is consistent with existing and projected land uses in the area that are potentially affected by the project.

**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 new structure will be a double steel truss with cement concrete piers and deck. The bottom of the structure would be a minimum of three feet above the river at flood stage (based on a 100-year flood event).

b. **What views in the immediate vicinity would be altered or obstructed?**
The view in the immediate vicinity of the existing bridge would be changed because the bridge will be moved upstream. Affected areas and additional mitigation areas will be planted once construction is complete.

c. **Proposed measures to reduce or control aesthetic impacts, if any:**
None.

11. **Light and glare**

a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**
Night traffic creates light and glare at the existing bridge. During construction, the proposed project will not result in any significant change to light or glare because most project work is expected to occur during the day. Once the project is complete, no roadway/bridge luminaries will be provided.

b. **Could light or glare from the finished project be a safety hazard or interfere with views?**
Light or glare from the finished project is not expected to represent a safety hazard, but homeowners close to the project may notice more light from vehicles traveling at night.

c. **What existing off–site sources of light or glare may affect your proposal?**
No off-site sources of light or glare are anticipated to affect the proposal.

d. **Proposed measures to reduce or control light and glare impacts, if any:**
None.

12. **Recreation**

a. **What designated and informal recreational opportunities are in the immediate vicinity?**
The King County Tolt River-John MacDonald Park and Campground and the Snoqualmie River are the primary recreational opportunities in the immediate vicinity of the Tolt Bridge. River enthusiasts use the Snoqualmie River for fishing, kayaking, canoeing, and rafting. A boat launch located just downstream from the existing Tolt Bridge is used for launching a variety of craft. The Tolt River-John MacDonald Park and Campground covers more than 450 acres on both sides of the Snoqualmie River. Sections of the park on the east and west sides of the river are linked by a 500-foot-long suspension bridge. A gated King County Parks maintenance access roadway is located along the west side of the Snoqualmie River from the Tolt River-John MacDonald Park and Campground. The access roadway's intersection with Northeast Tolt Hill Road near the western approach of the existing bridge is accessible to hikers even when the gate is closed.

b. **Would the proposed project displace any existing recreational uses? If so, describe.**
Construction activities will temporarily interrupt recreational use of the boat launch and the adjacent parking lot. Recreational activities associated with the boat launch and parking lot can, however, be resumed at present levels once the project is complete.

Because the replacement of the Tolt Bridge affects both an historic structure—the existing bridge is a King County Landmark; please see Section 13 for more information—and public land (the park and the boat launch), and because the project will receive federal funding and be subject to federal permits, the King County Department of Transportation must also comply with Section 4(f) of the Department of Transportation Act of 1966. The Act requires that, before impacting recreational areas and historic structures for a federal project, a determination must be made that there are no feasible and prudent alternatives to the use, and that the proposed action includes all possible planning to minimize harm to the property resulting from the project.

In order to comply with Section 4(f), the King County Department of Transportation will prepare an assessment that documents the applicability of a programmatic evaluation of projects that affect recreational areas that was authored by the Federal Highway Administration. The evaluation will be forwarded to the Washington State Department of Transportation and the Federal Highway Administration for their approval before construction.

c. **Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**
Because of its 19.5-foot width, the existing Tolt Bridge does not allow pedestrian access. The eight-foot-wide shoulders included in the proposed replacement structure will provide increased accessibility and safety for pedestrians and other non-motorized recreational activities. Short-term measures to reduce or control impacts on recreation opportunities will include highly visible signage describing the temporary closures aimed at users of the boat launch and river.

**13. Historic and Cultural Preservation**

a. **Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**
The Tolt Bridge 1834A was designated as a King County Landmark in 1997 and is eligible for listing on the National Register of Historic Places.

b. **Generally, describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**
The Tolt Bridge 1834A was designated as a King County Landmark in 1997 and is eligible for listing on the National Register of Historic Places. A cultural resources survey of portions of the project was prepared in 1998 and updated in 2005; according to these reports, the proposed project will not affect any known historic and/or cultural resources present within the area of potential effects.

c. **Proposed measures to reduce or control impacts, if any:**
Because the existing Tolt Bridge demolition will adversely affect a historic structure (the existing bridge is a King County Landmark) the Road Services Division obtained a Type III Certificate of Appropriateness from the King County Landmarks Commission. Because the project will receive federal funding and permits, the Road Services Division must also comply with Section 106 of the National Historic

Preservation Act, in addition to Section 4(f) of the Department of Transportation Act. Section 106 requires that a project's area of potential effects be determined and approved, a cultural resources survey be prepared and widely distributed for comments, and that mitigation be prepared and approved by the State and the Tribes.

Mitigation for Adverse Impacts to an Historic Structure: King County will prepare Level II Historic American Engineering Record (HAER) documentation, which includes providing existing historic photos on stable medium, preparing ten to 12 large current photos of the existing bridge that illustrate the bridge in its overall setting and close up shots of the engineering details that make the bridge unique. Original engineered drawings will be copied on stable medium, such as Mylar. A written history and description of the bridge will also be prepared. Copies of all HAER documentation will be given to the State Historic Preservation Officer, the King County Archives, the King County Library in the City of Carnation, and the Tolt Historical Society. Once the project is complete, on-site interpretive kiosks and an off-site viewer will be provided. In addition, the paint scheme developed for the new steel truss bridge will be similar to that of the existing structure.

In the event that archæological deposits and/or human remains are inadvertently discovered in any portion of the proposed project during construction excavation, an immediate halt will be called to ground-disturbing activities in an area large enough to maintain integrity of the deposits: the King County Archæologist, the Washington State Department of Transportation, the State Director of Archæology and Historic Preservation, the Federal Highway Administration, the Tulalip Tribe, the Snoqualmie Tribe and the Muckleshoot Indian Tribe will be notified immediately. Treatment of the archæological deposits or human remains would be coordinated through consultation among these parties.

**14. Transportation**

**a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on-site plans, if any.**

Northeast Tolt Hill Road provides rural, residential, and commercial access from Fall City-Carnation Road Northeast/State Route (SR) 203 to the Redmond area via SR 202. Average daily traffic volume on Northeast Tolt Hill Road in 2000 was 4,065 vehicles. There are four access points along Northeast Tolt Hill Road within the study area. They include one public roadway (West Snoqualmie River Road Northeast), two public driveways, and one private driveway. West Snoqualmie River Road Northeast intersects Northeast Tolt Hill Road from the south, approximately 300 feet west of the west approach structure. A public access driveway on the west side of the Snoqualmie River and north of Northeast Tolt Hill Road provides access to King County's Tolt River-John MacDonald Park. The second public driveway is located on the east side of the Snoqualmie River along the north side of Northeast Tolt Hill Road, and provides access to a public boat launch. The private driveway is located west of the Snoqualmie River on the north side of Northeast Tolt Hill Road, and provides access to several residences.

**b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

The site is not currently served by public transit.

c. **How many parking spaces would the completed project have? How many would the project eliminate?**
The project will not generate any new parking spaces; the informal parking in a gravel area on the west side of the river and south of Northeast Tolt Hill Road will be eliminated to accommodate a water quality pond.

d. **Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**
Construction of the new bridge will require that the existing gravel access road to the public boat launch on the east side of the river north of the existing bridge be modified. The driveway to the parking lot will be moved approximately 350 feet east. The new driveway also will be used temporarily during construction of the east approach roadway to route vehicles around the construction area. Additionally, the intersections of Northeast Tolt Hill Road with West Snoqualmie River Road Northeast and any associated driveways will all be designed to meet the appropriate stopping and entering sight distance requirements.

e. **Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**
No.

f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**
The proposal does not, in and of itself, generate the need for more vehicular trips per day.

g. **Proposed measures to reduce or control transportation impacts, if any:**
Motorists and bicyclists will be notified of construction impacts with appropriate construction signage. Traffic safety flaggers will be added if the work requires supplemental control, as determined by the Road Services Division Construction Inspection staff.

The posted speed limit on Northeast Tolt Hill Road following construction will be 35 miles per hour. Roads Services Division staff collected pedestrian, bicycle, and vehicular travel data in June 2005 to assess whether long-term measures are needed to control transportation impacts. The data and field observations indicated that nearly all bicyclists traveled along Northeast Tolt Hill Road and crossed the bridge, rather than crossing Northeast Tolt Hill Road from the south to get to the King County Park access road to the north. In addition, bicyclists and motorist both had used caution when crossing the bridge structure because of limitations affecting the visibility of approaching traffic. Thus, the information supports the assertion that the greatest benefit to bicyclists will be achieved by providing eight-foot-wide shoulders on each side of the bridge and by straightening the road/bridge section to provide increased sight distance. A second study will be completed once the new bridge is open to the traveling public to reevaluate this conclusion.

**15. Public services**

a. **Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.**
No.

**b. Proposed measures to reduce or control direct impacts on public services, if any.**
None. Access for public services will not be impeded significantly during construction.

**16. Utilities**

**a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other: cable television**

**b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity, which might be needed.**
The project area is served by several utility companies, both public and private, which occupy King County right-of-way. The utility companies known to have utilities in the areas include Puget Sound Energy, Tanner Electric Company, and Comcast. Utility facilities will be located under the bridge.

## C. SIGNATURE

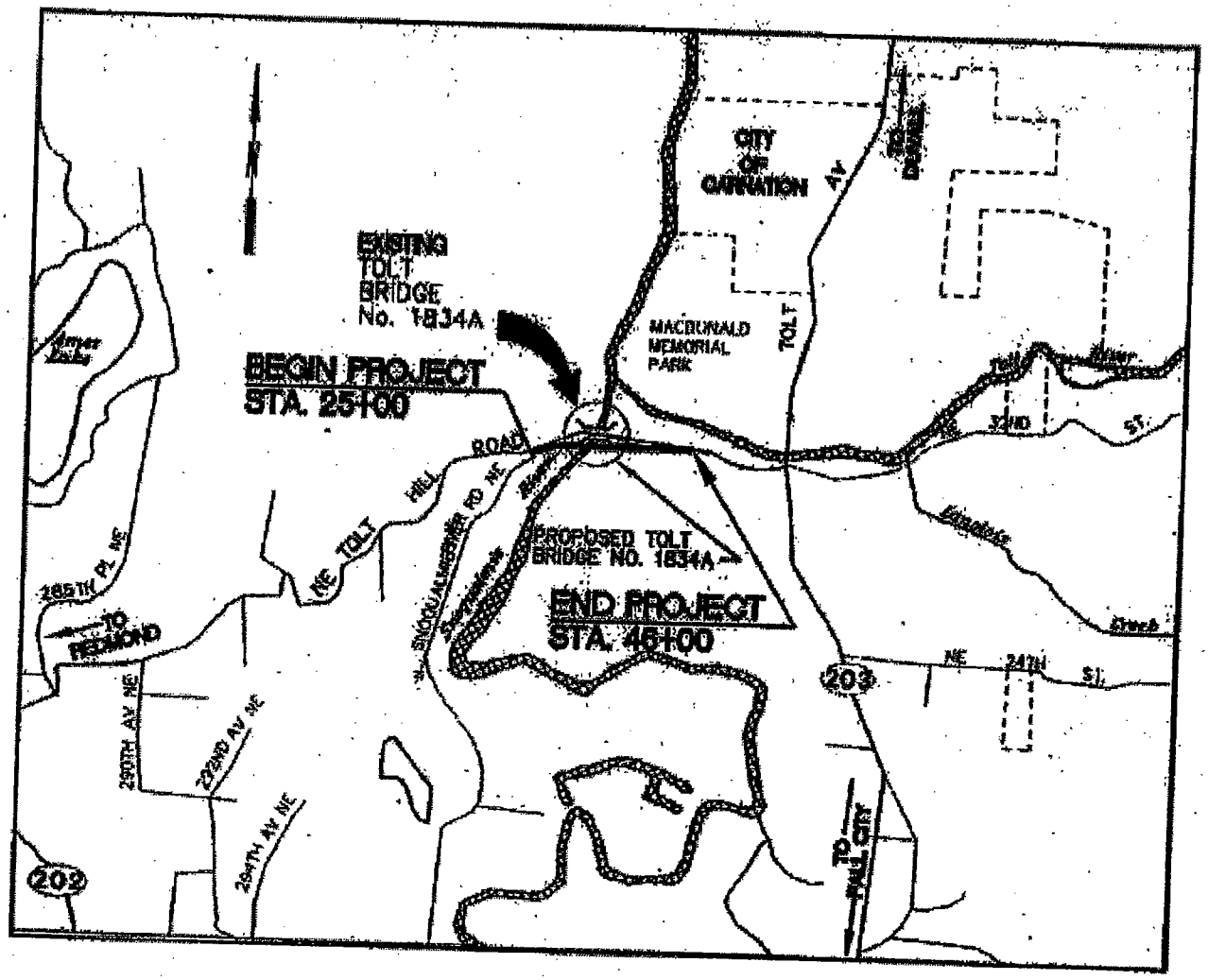
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

**Signature:** Wally Archuleta

Wally Archuleta, Manager, Environmental Unit

**Date:** 9/15/05

**APPENDIX A: Vicinity Map**




VICINITY MAP

NTS