King County

Department of Local Services
Road Services Division

April 8, 2024

TO: Stacy Graves, Assistant Planner, Permitting Division

FM: Katie Merrell, Environmental Engineer, Environmental Unit K M

RE: Construction Hours Noise Variance Request
Ames Lake Trestle Bridge No. 1320A Replacement Project No. 1135998

King County Department of Local Services, Road Services Division (Roads) is requesting a Construction Hours Variance to work outside of normal hours of operation per King County Code (KCC) 12.86.550. The following information is provided in support of this request.

Project Name: Ames Lake Trestle Bridge No. 1320A Replacement Project No. 1135998

Variance Requested: To expedite project work and provide more flexibility for the timing of the road closure, Roads is requesting a Construction Hours Variance for fourteen (14) non-consecutive / consecutive timeframes within the construction period, from approximately June 10, 2024, through March 24, 2025. Depending on the work needed, work outside of normal construction hours will be during the day or night.

Associated Permitting Division Tracking No.: GRDE22-0008

Applicant/Contact: Katie Merrell
Environmental Engineer III, Environmental Unit
King County Road Services Division
201 South Jackson Street (Mailstop: KSC-LS-0313)
Seattle, WA 98104

Project Location: Ames Lake Trestle Bridge No. 1320A is in unincorporated King County, approximately 2.5 miles northwest of the City of Carnation, Washington. The bridge conveys Ames Lake-Carnation Road NE over Ames Creek. The project site is located within the southwest quarter of Section 07 of Township 25 North and Range 07 East, Willamette Meridian (latitude north 47.659 and longitude west 121.966). A vicinity map is enclosed with this letter.

Project Narrative: Ames Lake Trestle Bridge No. 1320A is a timber structure built in 1924. The bridge is 168 feet long and 25 feet wide with creosote-treated timber supports within critical areas. Though the bridge was reconstructed in 1970 and again in 2003, the bridge is structurally deficient, functionally obsolete, and load limited. Based on the 2020 routine bridge inspection report, the sufficiency rating of the bridge is 32.44 out of 100, and the bridge substructure was assigned a condition code of 4. This indicates the bridge is in poor condition.

The replacement bridge will be an approximately 142-foot-long single-span structure consisting of pre-cast concrete girders supported by concrete abutments on a drilled pile foundation. The bridge abutments will be constructed landward of Ames Creek, its associated floodplain, and adjacent wetlands. The bridge shoulders will be 8 feet wide; the roadway approaches to the bridge will taper the shoulder width to match the existing roadway. The bridge will be replaced within the King County right-of-way.

Areas for project access and mitigation are needed on portions of adjacent private parcels; all private property instruments have been provided to the Permitting Division. The project includes work associated with utility relocations, drainage improvements, and roadway improvements.

Best management practices will be implemented to avoid, reduce, or minimize project impacts to critical areas and the public. The project will mitigate for unavoidable impacts to critical areas. Impacted stream areas will be restored. Additional site mitigation will include wetland and stream/wetland buffer restoration and enhancement; a small portion of the impacts that are not feasible to mitigate on-site were compensated by purchasing credits from a mitigation bank. The project is funded by King County and via grant funding through the Washington State County Road Administration Board. The estimated project cost is approximately $11 million.

The start date for the work is anticipated to be on, or around, June 10, 2024. The bridge will be under construction and closed to all traffic, including emergency vehicles and school buses, through March 24, 2025.

The work will be completed by a contractor. No pile driving is needed. A list of standard equipment anticipated for the project is enclosed as a reference.

Justification for Variance:

- The project replaces a deteriorated load-limited bridge to minimize future safety hazards if the bridge were to fail. A bridge replacement ensures adequate and safe access for residents, emergency personnel, and other services.
- Ames Lake-Carnation Road NE will be closed for approximately eight (8) months at the project location.
- Roads anticipates that allowing work outside of normal construction hours may minimize the amount of days the road will be closed. It is unknown by exactly how many days fewer the project would be in construction if the variance is issued.
- Having the bridge closed less days may result in reducing economic hardship to local area residents if the closure prevents or delays them from traveling to work, or from accessing childcare, or other services necessary for work.
- Working less days may help reduce potential erosion and water quality impacts.
- Allowing work at night/early morning is anticipated to have less impact on the public because there will be less traffic on the road during this time. Less traffic minimizes safety issues and traveling inconvenience for the public.
- Four (4) homes are located within 500 feet of the project location and may be affected by project noise (see the enclosed map).
- No known sensitive receivers are located within 500 feet of the work area.

Mitigation Measures: Per KCC 16.82.105.B.6, proposed measures are provided to minimize noise impacts to avoid health and safety hazards outside of normal hours of operation. The forested conditions and topography surrounding the project are anticipated to provide additional sound attenuation. To further reduce noise impacts, the following mitigation measures will be implemented:

- Specific mitigation measures listed in attached Equipment Table shall be implemented to the extent feasible.

- All vehicles should be equipped with backup warning devices, except pure tone devices, to the extent allowed or required by the Washington State Department of Labor and Industries. Workers may use back-up observers in lieu of back-up warning devices for all equipment except dump trucks in compliance with WAC Chapter 296-155-610 and 296-155-615. Workers shall use back-up observers and back-up warning devices, except pure tone devices, for dump trucks in compliance with WAC Chapter 296-155-610.
- All trucks shall have well-maintained bed liners as inspected and approved by the Engineer.
- Truck tailgate banging is prohibited. All truck tailgates shall be secured to prevent excessive noise from banging.
- All equipment shall be properly muffled and comply with all applicable local, state, and federal regulations.
- Music, loud voices, radios, and other such amplifying equipment shall not be used in a manner that is heard outside the immediate work area.
- A copy of the construction hours variance shall be kept on the project site at all times.
- A 24-hour complaint number (listed below), as well as a list of designated contact persons, shall be provided for the purpose of forwarding complaints.
- Roads will provide additional verbal and/or written notice to parcel owners within approximately 500 feet that might be potentially affected by noise at least 14 days prior to the start date of the work.
- Public outreach for the upcoming work may also employ use of social media outreach.
- The project webpage provides additional information for the public. https://kingcounty.gov/en/dept/local-services/transit-transportation-roads/roads-and-bridges/projects-and-programs/ames-lake-bridge
- Permitting Division will be notified prior to the actual start date of the work per the conditions of Construction Hours Noise Variance.
- Roads will maintain an accurate record of the work completed on this project per ongoing coordination with the contractor.
- Contact information during construction is as follows:

    - Kyle Thieme, King County Roads, Resident Engineer
      206-806-0426, kthieme@kingcounty.gov

    - Terry DePriest, King County Roads, Inspector
      206-477-3596, terry.depriest@kingcounty.gov

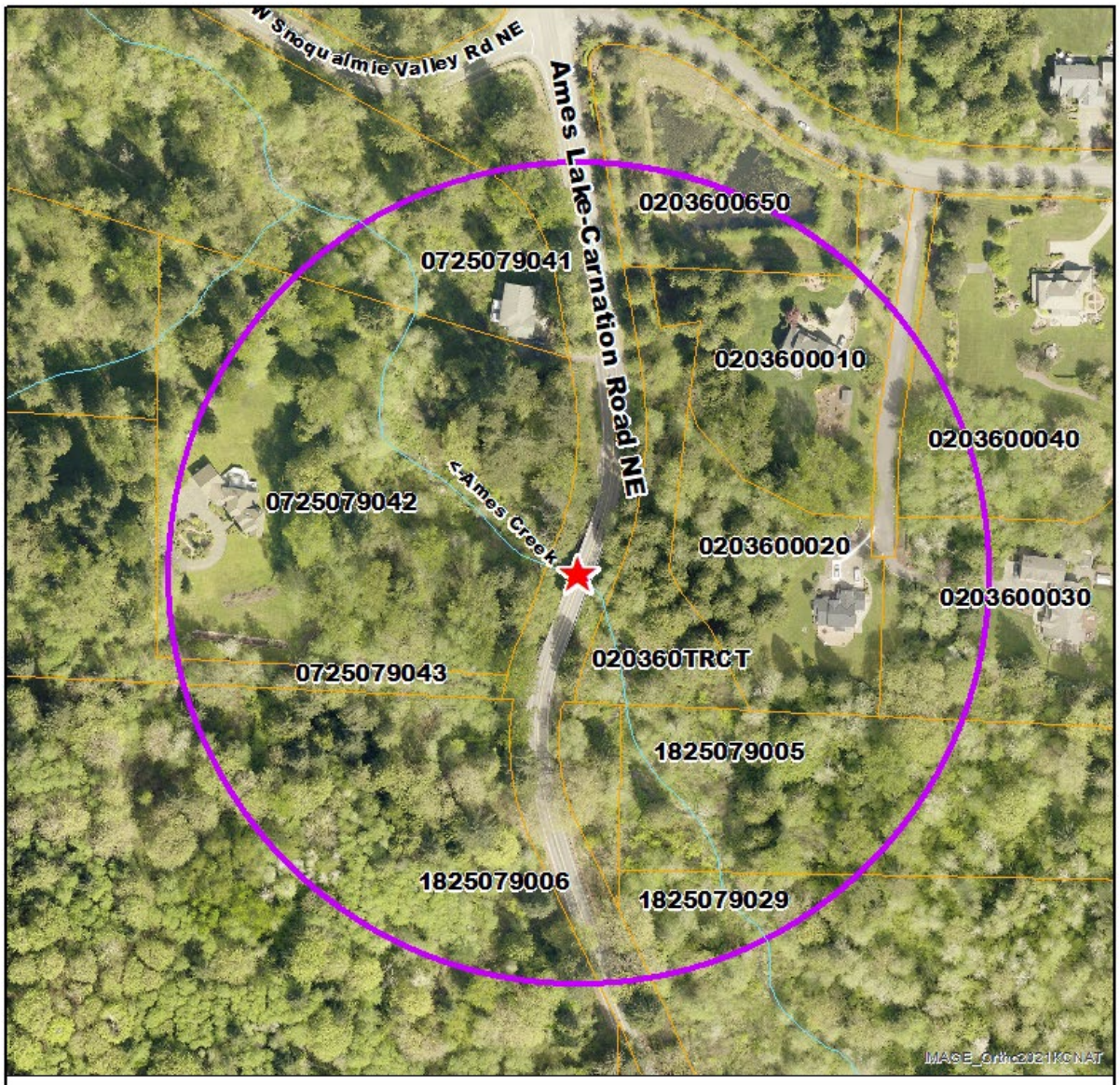
    - Roads 24-hour complaint/information number
      206-477-8100

Thank you for your assistance with this project. If there are any questions, please call me at 206-477-3548 or email me at Katie.Merrell@kingcounty.gov.

Enclosures

KM

cc: Hiromal Premachandra, Project Manager, Bridge Design and Structural Unit



Ames Lake Trestle Bridge No. 1320A Replacement
Project No. 1135998
Parcel Map

250 125 0 250 Feet

Project Location
Parcels
500-foot radius

King County

Disclaimer: The use of the information in this map is subject to the terms and conditions found at: www.kingcounty.gov/services/gis/Maps/terms-of-use.aspx. Your access and use is conditioned on your acceptance of these terms and conditions.

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April 3, 2024

Equipment Table

Equipment	Sound Level (dBA)[a]					Mitigation Measures
	At 50 ft	At 100 ft	At 200 ft	At 300 ft	At 500 ft	
Air compressor	78	70	63	59	53	When possible, air compressors will be located in areas shielded from direct line of sight from residences or temporary noise shields will be used.
Chainsaw	84	76	69	65	59	Chainsaws will only be used during daytime hours.
Chipping hammer	85	77	70	66	60	When possible, contractor will locate shield between chipping hammers and area residents with direct line of sight.
Compactor	83	75	68	64	58	When possible, contractor will locate shield between compactors and area residents with direct line of sight.
Concrete hammer drill	85	77	70	66	60	When possible, contractor will locate shield between concrete hammer drills and area residents with direct line of sight.
Concrete saw	90	82	75	71	65	When possible, contractor will locate shield between concrete saws and area residents with direct line of sight.
Concrete truck	81	73	66	62	56	To the extent feasible, cement trucks will be used during daylight hours only.
Crane	81	73	66	62	56	To the extent feasible, cranes will be used during daylight hours only.
Dump truck	76	68	61	57	51	Non-pure tone back up alarms will be utilized; truck tailgate banging is not allowed.
Generator	81	73	66	62	56	When possible, generators will be located in areas shielded from direct line of sight from residences or temporary noise shields will be used.
Grinder	85	77	70	66	60	When possible, contractor will locate shield between grinders and area residents with direct line of sight.
Jackhammer	89	81	74	70	64	To the extent feasible, jackhammers will be used during daylight hours only.
Mini-excavator	81	73	66	62	56	Use of mini excavators will be minimized to the extent feasible during nighttime work.
Pickup truck	75	67	60	56	50	Contractor shall avoid parking and idling vehicles next to residences.
Vac-truck	85	77	70	66	60	To the extent feasible, vac-trucks will be used during daylight hours only.

[a]Based on published noise levels (L_{max} at 50 ft) for common construction equipment and soft-site noise attenuation (WSDOT Biological Preparation Manual 2023).