

MP 25.4, Falls Creek Bridge Replacement, Project Description

Alaska Railroad (ARRC) proposes to reconstruct its existing bridge over Falls Creek at approximately 60.4305 N, 149.3714 W, approximately four miles south of Moose Pass, Alaska (Figure 1). The bridge was originally built ca. 1920 and has been reconstructed since then. The existing bridge has suffered deterioration and loss of integrity due to high flow events over the years. ARRC investigations have found that the abutments have rotated and pinched the bridge span. In addition, the existing bridge was not designed to meet ARRC's increased line capacity of 286,000 lbs.

Existing Facility

The existing bridge is a open-deck timber trestle bridge, approximately 120 feet long. It sits on 9 bents. The existing bridge's low chord elevation is 482.97 feet. For survey reference, the OHW for Falls Creek is estimated to be 477 feet, and the modeled 100-year flood event elevation is 480.36 feet. The Seward Highway bridge approximately 45 feet downstream has a low chord elevation of 481.46 feet

Proposed Facility

The proposed bridge will be 112 feet in length, resting on 5 bents, with a low chord elevation of 481.08 feet (Figure 2). The abutments will have a sheet pile bulkhead configuration.

Proposed Construction Method

ARRC proposes to reconstruct the existing bridge on the ARRC mainline track once high-season passenger and freight activity tapers off. ARRC does not currently intend to construct or place any temporary work bridge, temporary piles or bents, or temporary work pads to facilitate this construction.

ARRC and their construction contractor will also remove the bents from the existing bridge. If bents cannot be removed completely, they will be cut off approximately at grade with the Falls Creek substrate below OHW.

Environmental and Regulatory Considerations

The bridge spans Falls Creek, a Water of the U.S. (WOUS) subject to US Army Corps of Engineers (USACE) jurisdiction. Falls Creek is listed as anadromous (salmon-bearing) habitat for king salmon (AWC Code 244-30-10010-2225-3002), and as such is subject to Alaska Department of Fish & Game's (ADFG) authority. In addition, the bed and banks of the waterway are state land under state law, and therefore subject to Alaska Department of Natural Resources (ADNR) authority. This waterway is located within the Kenai Peninsula Borough (KPB) and has been mapped for flood zones by the Federal Emergency Management Agency. It is not listed as a navigable waterway by US Coast Guard (USCG) and is therefore not subject to USCG approval for bridges over navigable waterways. Finally, Falls Creek is part of the Kenai River Watershed, and is subject to the Kenai River Center's (KRC) purview as a permitting clearinghouse for that watershed.

To satisfy the USACE regulatory requirements, the work is proposed to occur under Nationwide Permit 3, Maintenance of Existing Facilities. ARRC and its Contractor will not disturb any more than the minimum area necessary, with respect to the ordinary high water (OHW), to complete the proposed bridge reconstruction. No temporary fill will be placed in WOUS. Permanent fill within the watershed will involve fill behind the bulkhead abutment on the embankment on the north side of Falls Creek, due to the scour concerns and angle of the waterway where it encounters the ARRC track. This will soften the angle of the approach into the ARRC bridge and Seward Highway bridge immediately downstream.

To satisfy the KPB, a Multi-Agency Permit is included for submittal to the KRC. This permit application is expected to be conveyed to ADFG, AK State Parks, and KPB Floodplains administrators.

To satisfy ADFG regulations, a Title 16 Fish Habitat Permit is included as part of this effort under the KRC permit application.

To satisfy ADNR, no vehicular access will occur within the bed or banks of the waterway. Work will be conducted form the existing track and adjacent uplands. No Temporary Land Use Permit is anticipated with ADNR at this time.

Mitigation

No mitigation is proposed for this maintenance effort. Removal of the old bents and replacement with fewer bents will have a beneficial effect on the waterway during high flow events.





This Packet Contains:

- ☑ River Center Multi-Agency Permit Application
- ☑ Site Plan Instructions & Checklist with Examples and Drawing Paper

Notes:

Please answer all questions completely. If a question does not pertain to your activity, write "N/A".

► This application will be distributed to multiple agencies including the Kenai Peninsula Borough, Alaska Department of Fish & Game, Alaska State Parks, U.S. Army Corps of Engineers, and the U.S. Fish & Wildlife Service. Individual agencies may contact you about your application. In some cases, additional information or applications may be required. You are responsible for obtaining other required permits for your activity.

Project drawings and descriptions are an important part of your application. Please draw carefully and be sure to include the information outlined in the Site Plan Instructions & Check List. Site plan examples and paper are provided.

Complete applications can take 30 days or longer to process. Be sure to plan your projects accordingly.

For complete instructions on completing this application, visit our web site at www.kenairivercenter.org/application

RETURN COMPLETED PERMIT APPLICATIONS TO:

RIVER CENTER 514 FUNNY RIVER ROAD SOLDOTNA, AK 99669 (907) 714-2460 (907) 260-5992 FAX Email: KenaiRivCenter@kpb.us Website: https://www.kpb.us/river-center





Please answer all questions completely.

Applicant Information:	Agent Information:	
Name: Alaska Railroad Corporation	Name:	
Owner? X Yes No		
Mailing Address: (permits will be mailed to this address) 327 W. Ship Creek Avenue	Mailing Address:	
Anchorage, AK 99501		_
Phone (Home/Work): (907) 265-4733	Phone (Home/Work):	
Cell Phone: (907) 265-4733	Cell Phone:	
Fax:	Fax:	
E-Mail: BrongaR@akrr.com	E-Mail:	

Project Location:

Please complete all information including the legal description of the property or site location. This information can be found on your tax bill or by visiting the KPB Assessing Department website at www.borough.kenai.ak.us/assessingdept/default.htm.

Waterbody Name: _ Falls Creek		
River Mile: Right or Left bank (loc	oking downstream)	
Subdivision:	Lot:	Block:
Township: <u>13</u> Range: <u>01 W</u> Section: <u>04 N</u>		
KPB Parcel Number: Physi	ical Address: <u>60.4305</u>	N, 149.3714 W
Directions to the site: From Seward, drive north on Seward Highway approximately 24.4 miles to		
existing ARRC bridge over Falls Creek.		
Please Complete the Following:		
1) This activity is a: \Box new project $\underline{\mathbf{x}}$ modification, addition	ion, repair, or replacemen	nt to an existing project
2) What is the purpose of this project? <u>ARRC proposes to</u>	reconstruct its existing	g bridge over Falls Creek.
See attached Project Description.		

Multi-Agency Permit Application – Page 2

3) Provide a detailed description of your entire project and all related activities. Attach additional pages if needed. **Please be sure that your description contains all of the following:**

- □ The location and dimensions of all existing and proposed development, including buildings, roads/driveways, pathways, building pads, accessory structures, and fill, as well as the location of any water bodies.
- □ The type(s) and amount(s) of fill material to be used for the project. Include the location/source of the fill material.
- □ The measurements of all new development, including platforms, walkways, structures, and bank restoration techniques. Please include measurements from water bodies and lot lines.
- \Box The area and volume of material to be dredged and the location of the disposal site.
- □ A description of the waterbody, including wetlands to be filled. Include the types and volumes of each type of fill material.
- □ A description of construction methods and types of equipment to be used.
- □ If you are withdrawing water from a waterbody, a description of water use including location, methods of withdrawal, rate of withdrawal, and the total quantity of water required.
- □ If fuel storage is required for your project, indicate the location, quantities, and types of fuel.
- □ If vegetation or trees must be cleared as a result of your project, indicate the location, amount, and type of vegetation to be cleared.
- □ The type(s) and amount(s) of material that will be excavated for the project. Include the location the excavated material will be placed.

	See attached Project Description.				
Estimated number of actual construction days: <u>90</u>					
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	4) Proposed project start date: <u>Fall 2022</u> Proposed project end date: <u>Summer 2023</u>				
5) If this project is within the limits of an incorporated city, please indicate city:	Estimated number of actual construction days: <u>90</u>				
	5) If this project is within the limits of an incorporated city, please indicate city:				
	6) Is the project located within 50 feet of ordinary high water (OHW) or mean high water (MHW) of a stream or waterbody? If Yes INO INOT sure where OHW or MHW line is				

Multi-Agency Permit Application – Page 3

7) Does any portion of the project cantilever or extend <u>over</u> the OHW or MHW of the stream or waterbody? X Yes No Not sure where OHW or MHW line is
8a) Does any portion of the project extend below the OHW or MHW of the stream or waterbody? x Yes No Not sure where OHW or MHW line is
8b) Will a structure (e.g., culvert, bridge support, dike) be placed below OHW, MHW, or High Tide Line (HTL) of the waterbody?
x Yes No
9) Will material be <u>extracted or dredged</u> from
Floodplain of a river, lake, or ocean
Tidal or non-tidal waters
If you checked one of the above boxes, what type of material? <u>In-situ fill, organics and gravels</u> What amount of material? <u>1,750 cubic yards</u> Where will the material be deposited? <u>Removed from site by contractor or stockpiled in ARRC ROW</u>
10) Will material (including spoils, debris or overburden) be <u>deposited</u> in a
Mapped floodplain or velocity zone of a river, lake or ocean
Tidal or non-tidal waters
If you checked one of the above boxes, is the fill temporary or permanent ? If temporary, how long will it be in place?
11) What is the surface area (in acres) that would be filled, excavated, or dredged of any waters, including areas below the HTL or MHW of tidal waters, below the OHW of non-tidal waters and/or wetlands adjacent to tidal or non-tidal waters?
12a) List all motorized equipment to be used in this project, including access route to site and any stream or water- body crossings:
No motorized vehicles will be used within the bed or banks of Falls Creek. Construction will occur from the existing track.
12b) How long will motorized equipment be used below OHW, MHW, or the HTL?
13) Are there any threatened or endangered species that may be affected by the proposed work or that utilize the

designated critical habitat that may be affected by the proposed work? \Box Yes $\begin{bmatrix} x \\ x \end{bmatrix}$ No If yes, list all species:

Multi-Agency Permit Application – Page 4

14) Are there any historic properties that may be affected by the proposed work? \Box Yes \overline{x} No If yes, state which property or properties may be affected and/or attach a vicinity map including the location of the historic property or properties.

15) Is any portion of the work already complete? \Box Yes \underline{x} No If yes, describe the completed work:
ARRC has an existing bridge at this location, which has deteriorated due to age and environmental
stresses.

16) Will utility systems, including water, electric, gas, etc. be developed? Yes x No If yes, describe:

Application Checklist

 \Box Are pages 1 through 4 completely filled out? If a question does not pertain to your activity, write 'N/A'

□ Did you include a detailed project description?

□ Did you complete the Top View & Elevation/Side View drawings? Be sure to review the instructions for site plans and make sure all relevant information is included.

□ Did you include your permit fee (if applicable)? If your project is within State Park Boundaries or cantilevers over a State Park (which includes the Kenai River) a \$100 fee is required at the time of application. Make checks payable to 'State of Alaska.' If you are not certain if a fee is required, contact State Parks at the River Center at (907) 714-2470.

□ Did you sign your application? If you have designated an agent to work the agencies on your behalf, they must also sign the application.

Application is hereby made for a permit or permits to authorize the work described in this application form. I certify the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

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Signature of Applicant

7/7/2022

Date

If you designated an agent, both the applicant and agent must sign this application.

X ______ Signature of Agent

Date

Site Plan Instructions & Checklist



Directions:

PLEASE INCLUDE ALL OF THE FOLLOWING INFORMATION. IF THIS INFORMATION IS NOT PROVIDED, YOUR APPLICATION MAY BE RETURNED TO YOU.

- Print your name, date of drawing, the number of the sheet and total number of sheets in the set (e.g. Sheet 1 of 2), as well as the KPB Parcel No. on all pages.

- Indicate the scale of your drawing and show a North arrow. The scale need not be the same for every drawing.

- Submit one original set of drawings on $8\frac{1}{2} \times 11$ paper. Provide as much detail as you can; however, please submit the fewest number of sheets necessary to adequately show the proposed activity. Please include photos of the project site if available.

- The **TOP VIEW** drawing should show your project in relation to:

- the distance from ordinary (or mean) high water of the stream;
- property lines and any adjacent streets by name;
- any nearby structures, such as houses, outbuildings, fences, etc.;
- any easements and/or location of any nearby utilities;
- + the location of any material to be deposited in a river, floodplain or wetland.

- The **ELEVATION OR SIDE VIEW** drawing should show your project in relation to:

- elevations above ground level
- In non-tidal areas, show the Ordinary High Water Line.
- In tidally influenced areas show the High Tide Line <u>and</u> Mean High Water Mark at the project site.
- Show the distance from the above water lines

- Be sure to include all dimensions, types, and quantities of materials used on the project.

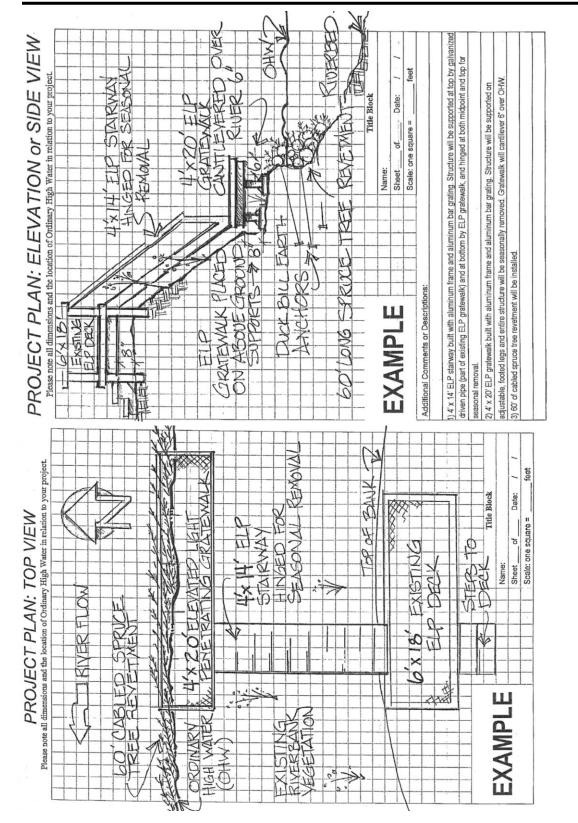
- All structures and other objects on your site plan should be clearly defined as either $\underline{\text{ex-}}$ isting structures or proposed structures.

PLEASE SEE EXAMPLES

Site Plan Examples







For additional site plan examples, please visit www.kenairivercenter.org/application



Alaska Railroad Corporation 327 W. Ship Creek Avenue Anchorage, AK 99501

U.S. Army Corps of Engineers-Alaska District Kenai Regulatory Field Office Attn: Benjamin Soiseth 44669 Sterling Highway, Suite B Soldotna, Alaska 99669-7915

Subject: Replacement of ARRC Bridge over Falls Creek under Nationwide Permit 3

Dear Mr. Soiseth:

The Alaska Railroad Corporation (ARRC) is proposing to replace its existing bridge over Falls Creek at track Mile Post (MP) 25.4, approximately four miles south of the town of Moose Pass, Alaska (Figure 1). The coordinates of the proposed bridge replacement are 60.4305 N, 149.3714 W.

The proposed bridge replacement will involve demolition of the existing bridge and replacement with new bridge on alignment. The existing facility is approximately 120 feet long, and rests on nine bents (Figure 2). The proposed bridge will be approximately 112 feet long, resting on five bents. In addition, ARRC proposes to construct the new bridge abutments somewhat south of the existing abutments at either end, due to the existing offset angle that Falls Creek takes as it descends and encounters the ARRC track. The northern abutment will be located approximately 23 feet to the south of existing, and the southern abutment will be located approximately 16 feet south of existing (Figure 3). During the construction process, ARRC proposes to remove all bents from the existing bridge. If the bents cannot be pulled, they will be cut to the mudline of Falls Creek.

ARRC proposes to conduct this work under the auspices of Nationwide Permit (NWP) 3, Maintenance. ARRC will abide by all requirements of NWP 3. If you have any questions or comments, please feel free to contact me at (907) 265-4733, or you may contact our agent, Patrick Whitesell with Michael Baker International, at (907) 602-5352.

Sincerely,

Riley Bronga

Attachments: Project Description Figures 1-3 CC: