

Federal Railroad Administration
Finding of No Significant Impact (FONSI)

Alaska Railroad Corporation
North Pole Road / Rail Crossing Reduction Project

November 27, 2012

The Alaska Railroad Corporation (ARRC) proposes to reduce the number of crossings on a portion of its Eielson Branch through North Pole, Alaska by completing the North Pole Road/Rail Crossing Reduction Project (Project). The Project, located in the Fairbanks North Star Borough (FNSB), is Phase 1 of a larger Fairbanks Rail Line Realignment (FARLR), as described below. In 2010, federal funding became available for preliminary engineering and environmental studies, and the Federal Railroad Administration (FRA) agreed to serve as the lead federal agency for preparing an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) to analyze and document whether the proposed action would have significant environmental effects¹. The ARRC contemplates potentially seeking or using Federal funds to carry out the Project and thus completion of a NEPA analysis was considered prudent and appropriate. The FRA has funded a number of ARRC projects over the years and completed a number of NEPA evaluations for individual projects. The EA was prepared in accordance with FRA's Procedures for Considering Environmental Impacts (64 FR 28545, May 26, 1999) (FRA Environmental Procedures). This Finding of No Significant Impact (FONSI) is made based on the information in the EA and has been prepared to comply with NEPA, the FRA's Environmental Procedures, and other related laws.

Background Information

In 1985, the Fairbanks Metropolitan Area Transportation System (FMATS) completed a study that recommended re-alignment of a portion of the Alaska Railroad Eielson Branch to the Tanana River Flood Control Levee.² ARRC has studied the feasibility of realigning the Eielson Branch around the more urbanized areas of Fairbanks and North Pole since the late 1990s, with reports issued in 2001 and 2002. In 2002, FNSB created the Rail 2100 Task Force and commissioned another study that also supported track realignment to the Tanana River Flood Control Levee.

¹ Funding for the preliminary engineering and environmental review is provided by the Federal Highway Administration (FHWA). These funds, originally directed to the Fairbanks Metropolitan Area Transportation System (FMATS), were transferred to FRA for the North Pole Road/Rail Crossing Reduction Project preliminary engineering and environmental studies.

² The Tanana River Flood Control Levee is a component of the Chena Lakes Flood Control Project constructed in 1973 by the USACE, Alaska District to protect Fairbanks and adjacent areas from recurring flood damage from the Chena and Tanana rivers. During flood conditions, the flood control project structures divert water from the Chena River to the Levee-protected Tanana River. The portion of Levee within the Project area has long been considered a prime location for relocation of the railroad tracks to remove them from downtown North Pole and reduce the number of at grade crossings.

In 2005, ARRC proposed the Eielson Branch Realignment Project, which would have realigned 19 miles of track from the Fairbanks Depot through Fort Wainwright and North Pole. As a result of community outreach during preparation of an environmental document for that project, it became apparent that several aspects of the project would be better addressed in a larger study. ARRC began developing the Fairbanks - North Pole Rail Realignment project, now known as the FARLR.

ARRC and FNSB signed a Memorandum of Understanding (MOU) in 2007 covering the FARLR that identified the long-term desire of both parties to optimize the alignment of the railroad within the Fairbanks to North Pole area to improve safety, customer response, and minimize transportation conflicts within the adjacent communities. The MOU identified and described three phases of that effort:

- Phase 1:* Richardson Highway MP 9 to North Pole
- Phase 2:* Richardson Highway MP 3 to Richardson Highway MP 9
- Phase 3:* West of Phase 2 past the Chena River

The 2007 MOU formalized an agreement between the parties that Phase 1 is the first priority since it is the least complex from both a financial and engineering point of view, has independent utility, and would provide immediate safety benefits.

Procedural History and National Environmental Policy Act Compliance

The Project is included in the Alaska Department of Transportation and Public Facilities (ADOT&PF) State Transportation Improvement Program (STIP). In 2010, funding became available to conduct preliminary engineering and preparation of an EA. Funding has not been secured for construction of Phase 1 or for preliminary engineering and environmental analyses for Phases 2 and 3. However, efforts by ARRC and the FNSB to identify funding sources and obtain funding are ongoing.

The FRA is the lead federal agency for preparing the EA for the Project. In addition, the Federal Highway Administration (FHWA)³, the United States Army Corps of Engineers (USACE), and the FNSB are cooperating agencies. The City of North Pole is a participating agency.

Agency and public scoping specific to the North Pole Road/Rail Crossing Reduction Project was conducted in January 2011. Comments made during scoping meetings indicated general support for realigning the railroad out of downtown North Pole, reducing the number of at-grade crossings, and constructing a separated-grade crossing of the Richardson Highway.

After scoping was completed, ARRC and FRA prepared an EA that analyzed the potential impacts of two build alternatives as compared to the No Action Alternative. The EA was made available for a 35 day public review period commencing on March 20, 2012 and a Public Hearing was held in North Pole on April 5, 2012. Copies of the EA Executive Summary, the ARRC Project Fact Sheet, CDs containing an electronic copy of the EA, and comment sheets

³ FHWA is a cooperating agency, because the Project includes relocation of a crossing of the Richardson Highway and associated grade separations FHWA is a modal administration within the U.S. Department of Transportation, and has promulgated specific NEPA-implementing regulations at 23 CFR 771. The EA has been prepared to comply with both FRA and FHWA requirements.

were made available at the Public Hearing. The public comment period ended on April 25, 2012.

The Public and Agency Coordination Section below contains additional information about the Public Hearing and comments received. Based on the U.S. Army Garrison Fort Wainwright (USAG FWA) comments, ARRC prepared Addendum 1 to the EA, which is included as FONSI Attachment 1. Addendum 1 provides more detailed information about the Dyke Range Impact Area and its past and current use, potential impacts on the area due to the Project, and environmental commitments and mitigation.

Statement of Purpose and Need

The purpose of the Project is to enhance public safety, reduce transportation conflicts, and improve ARRC's operating efficiency in the Fairbanks Alaska area while ensuring continued rail access to existing and potential future ARRC customers and minimizing impacts to businesses and property owners.

The tracks between ARRC Milepost (MP) G12 (Richardson Highway MP 9) and the Chena River Floodway (ARRC MP G20) would be realigned on or near the existing Tanana River Flood Control Levee to reduce the number of at-grade crossings, including removal of the existing four-lane road/rail at-grade crossing of the Richardson Highway.

There is a need to improve vehicular and pedestrian safety at the numerous at-grade crossings in the Project corridor. The existing corridor contains 14 at-grade road crossings between ARRC MPs G12 and G20, including a crossing at G14.73, or MP12 of the Richardson Highway (also known as the Peridot Crossing, due to its proximity to Peridot Street) (Figure 1-2). A reduction in the number of the heavily used at-grade crossings would decrease inherent safety concerns associated with crossings, including the potential for train and vehicular/pedestrian traffic accidents.

Safety would also be enhanced by reducing the potential for delays to emergency response vehicles while train operations move through or service existing rail customers in North Pole. In addition, the existing track passes between local businesses and two schools - the North Pole High and Middle Schools, both of which are accessible from the Old Richardson Highway. Public activity near the schools and frequenting of businesses in North Pole present increased risk each day, as students and the general public use the existing at-grade crossings.

There is also a need to improve ARRC's operational efficiencies, preferably in a manner that would benefit ARRC and also reduce transportation conflicts in the North Pole community. Currently, the maximum train operating speed in the corridor is limited to 20 miles per hour (mph), which increases train travel times and operating costs and causes transportation conflicts. Existing track in North Pole is limited and trains are broken into multiple pieces to serve the Flint Hills Refinery, resulting in multiple movements blocking public crossings. As a result, vehicular and pedestrian traffic is delayed and users are inconvenienced.

The Project would enhance safety by reducing the number of at-grade crossings in and around North Pole, and improve ARRC's operating efficiency, allowing ARRC to provide better service to its customers. The Project would allow an increase in operating speeds as much as three-fold, cutting travel time in this corridor from 24 minutes to as little as 8 minutes. The Project would

also reduce transportation conflicts, as North Pole vehicle drivers would no longer need to wait for trains to pass through at-grade crossings.

Alternatives Considered

ARRC considered a range of reasonable alternatives for the Project. As part of scoping and preliminary engineering, a detailed alternatives analysis was conducted to identify, consider, and compare potential alternatives. Based on the Alternative Analysis Report, two build alternatives, depicted on the attached figures, and the No-Action alternative were selected to be analyzed in detail in the EA. Several other alternatives were considered but eliminated from further study in the EA. The build alternatives, the No-Action alternative, and the other alternatives considered but eliminated from further study are described below.

Build Alternatives

Two build alternatives were studied to reduce the number of road/rail crossings in North Pole. Aspects of the Project common to both build alternatives are as follows:

- Realign the track outside of the downtown area of North Pole, on or near the Tanana River Flood Control Levee.
- Construct a new relocated grade-separated crossing of the Richardson Highway (roadway overpass or underpass) approximately 2 miles west of the existing at-grade crossing at Milepost (MP) 9 of the highway, and remove the existing crossing (rails, panels, etc.).
- Remove rails and ties that are no longer needed along the existing alignment (approximately MP G14.7 to G19.1 through North Pole), and convert some or all of the section from MP G12.0 to MP G14.7 to a rail spur.
- Provide continued access for FNSB and USACE to the Tanana River Flood Control Levee, which serves primarily as a flood control structure, for inspections, maintenance, and flood fighting activities.
- Address recreational access to the Flood Control Levee Trail (a multi-use motorized recreational trail located in the Levee corridor) and across the Levee to the Tanana River. Construct grade-separated crossings for trail users, whenever possible, and consolidate existing informal access trails to help ensure the safety of trail users.
- Construct a new access to the Flint Hills Refinery from the realigned track to the south, and additional support tracks and related facilities parallel to the new alignment to provide for necessary switching and storage of cars for the refinery. Close the existing access north of the refinery.
- At the east end of the Project near Dyke Road, near MP G19, realign approximately 0.5 mile of Old Richardson Highway to the north to eliminate the existing public at-grade crossing. Realign the road onto the existing rail bed, and construct the rail embankment on top of the existing road.
- Acquire right-of-way (ROW) and address utility relocations as necessary.

Alternative A: Alignment on the Levee. In addition to the common Project elements described above, Alternative A would realign the track on top of the existing Levee and would close ten at-grade crossings within North Pole, including the existing crossing of the Richardson Highway. Three other crossings located along the spur track would experience significantly reduced train traffic because most train traffic would be on the realigned branch line rather than the spur. The relocated Richardson Highway crossing would be rail over road, providing a vertical clearance of 18 feet.

If construction is phased⁴, a temporary at-grade crossing of the Richardson Highway would be required. The temporary crossing would be constructed with acceleration and deceleration lanes, and would be removed once construction of the grade-separated crossing is complete.

Because Alternative A would realign the railroad embankment directly on top of the Levee, the existing Flood Control Levee Trail would be relocated. A new trail corridor would be established on the landward side of the Levee, adjacent to and outside of the proposed ARRC ROW and the Golden Valley Electric Association (GVEA) line. The proposed trail corridor would consolidate trail crossings of the Levee to help ensure the safety of trail users.

Because the proposed track location would impact the FNSB's existing day-to-day Levee access road/stability berm, a new dedicated access road/stability berm would be provided near the base of the Levee. FNSB and the USACE have confirmed that locating the rail on top of the Levee is not technically infeasible, but it would likely be considered a major modification under the USACE Levee Safety Program. Major modifications require an in depth engineering analysis of the changes to the Levee and approval of the modification by USACE headquarters prior to any construction activities. Any significant changes to the Levee system would also require an engineering reevaluation of the Levee certification for the National Flood Insurance Program.

Alternative C (Proposed Action): Alignment Landward of the Levee. In addition to the common Project elements described above, Alternative C (Proposed Action) would realign the track on the landward side of the Tanana River Flood Control Levee and would close nine at-grade crossings within North Pole, including the existing crossing of the Richardson Highway. Three other crossings located along the spur track would experience significantly reduced train traffic because most train traffic would be on the realigned branch line rather than the spur. The relocated grade-separated crossing of the Richardson Highway would be road over the rail, providing a minimum vertical clearance of 23.5 feet.

Alternative C (Proposed Action) would maintain access to the Tanana River Flood Control Levee, as well as the Flood Control Levee Trail. Crossings of the realigned track would be provided at key locations to ensure continued access for FNSB and USACE to the Levee (for inspections and maintenance), with grade-separated crossings, whenever possible, to provide continued access to the recreational trail.

⁴ Phased construction means that all of the construction will not be conducted at one time, and a period of up to several years may separate construction of the phases. Construction may be phased due to funding constraints. For example, if insufficient funding is obtained for full project construction, ARRC may initially realign the track and construct a temporary at-grade crossing of the Richardson Highway. Once additional funding is secured, the separated grade crossing of the Richardson Highway would be constructed.

Where possible, the rail embankment would diverge from the Levee to provide additional separation between the rail and the Levee (up to about 250 feet of separation). If left in place, the existing GVEA line would constrain the rail realignment and maintaining separation between the rail and the Levee would not be possible along the entire corridor. Relocating the GVEA line, at least in some locations, may be required.

No-Action Alternative

Under the No Action Alternative, other than routine maintenance (e.g., replacement of rails, ties, and surfacing), there would be no changes in the existing Eielson Branch alignment through North Pole, between ARRC MP G12 (Richardson Highway MP 9) and the Chena River Floodway (Alaska Railroad MP G20). The track would continue to bisect downtown North Pole and all existing at-grade crossings would remain open, including the crossing of the Richardson Highway. If the alignment remains unchanged, the purpose and need would not be met, and the safety issues and rail traffic conflicts/delays currently experienced in the Project area would continue.

Alternatives Considered but Eliminated from Further Study

Several other alternatives were considered in the alternatives analysis, but eliminated from further consideration in the EA because they did not meet the purpose and need, they had more adverse environmental impacts than alternatives carried through the EA, or technical feasibility challenges. Brief descriptions of the alignment alternatives and reasons for their elimination from further study are provided below. The City of North Pole, FHWA, and ADOT&PF are in favor of eliminating Alternative E, and also expressed no objections to eliminating Alternative B, Alternative C Option 2, and Alternative D.

Alignment Alternative B: Alignment inside the Levee. Alignment Alternative B would realign the track on the landward side of the Levee, on top of the existing Levee maintenance road/stability berm. The grade separation of the Richardson Highway would be with the rail crossing over the road. The roadbed would be wide enough to accommodate access and maintenance for both the FNSB and ARRC without a shared access road. FNSB and ARRC require daily access, and both believe that a shared road would result in conflicts and hinder their ability to properly maintain and operate their respective infrastructure.

Alternative B is similar to Alternative A, yet provides no additional advantages and several disadvantages relative to Alternative A. For example, the FNSB has indicated that it does not want the top of the Levee to be used for trail purposes. Further, a trail on top of the Levee would be too close to the track, compromising safety improvements described in the Project's Purpose and Need. The Flood Control Levee Trail would be relocated outside of the proposed ARRC ROW and the GVEA line, similar to Alternative A, with crossings provided for recreational users at key locations. However, the elevation of the track and proximity to the Levee make separated grade crossings for recreational users considerably more difficult to implement than under Alternative A or C (too low for a recreational user culvert/underpass, and too high for an overpass). Also, relocating the GVEA line in some locations would be required, but it would not be feasible in the areas near the Bradley Sky Ranch Airport due to the height of the poles and airstrip restrictions.

Alignment Alternative C Option 2: Alignment on the Levee – Levee Relocation. Alternative C Option 2 is similar to Alternative C, except that a section of the Tanana River Levee would be relocated to the southwest (riverward) to reduce impacts to developed private properties at the west end of the Project in the vicinity of the new Richardson Highway crossing. The rail embankment would be constructed where the levee is now located, and like Alternative C, there would be a road-over-rail crossing of the Richardson Highway. The existing Tanana River Levee would be relocated riverward to avoid sharing access for maintenance, inspection/monitoring, and flood fighting activities between ARRC and FNSB. As compared to Alternative C, Alternative C Option 2 would reduce private property acquisitions, but it would have greater environmental impacts relative to flood hazards and floodplain management, wetlands, Essential Fish Habitat (EFH), and uplands. Alternative C Option 2 would also have substantially higher costs than Alternative C. For these reasons, Alternative C Option 2 was eliminated from further review.

Alignment Alternative D: Alignment on the Levee – Riverward Side. Alternative D is similar to Alternative A, except that it would be offset several feet from the centerline of the Levee toward the Tanana River. Like Alternative A, it would be considered a major modification requiring re-certification of the Levee, but it would also have a significant disadvantage in that required fill necessary to support the track roadbed would be placed entirely within the mapped 100-year floodplain. For these reasons, Alternative D was eliminated from further review. The key positive features of Alternative D were incorporated into Alternative A through the refinement of the design.

Alignment Alternative E: Improvements in the Existing Alignment. This alternative evaluates three options for improvements to the existing rail alignment through North Pole to provide safer crossings and increased track speed Option E-1 (Crossing Consolidation); Option E-2 (Rail Over Road); and Option E-3 (Overpass Construction). In addition to the higher costs associated with the Alternative E options, there would not be adequate space to construct the proposed Flint Hills siding tracks to provide rail car storage outside the North Pole community. Therefore, Alternative E does not meet the purpose and need, as a key element of the purpose and need is to improve ARRC's operating efficiency while ensuring continued rail access to existing and potential future ARRC customers.

Summary of Environmental Assessment

Discussions of the environmental impacts associated with the North Pole Road/Rail Crossing Reduction Project are located in Section 3.0 of the EA. This FONSI identifies Alternative C (Proposed Action) as preferred over Alternative A based largely on considerations related to flood hazards and floodplain management, land ownership/land use, input from public agencies, and cost benefits, as described below.

1. **Flood Hazards and Floodplain Management:** Alternative A would be a major modification of the Levee, and two federal agencies (FEMA and USACE) have concerns regarding potential regulatory difficulties of constructing and operating a railroad on top of an active flood control structure. Under Alternative C (Proposed Action), major modifications to the Levee would not be necessary, but under both alternatives, an operational agreement between FNSB, USACE, and ARRC would be required.

2. Land Ownership and Land Use: Under both alternatives, ROW acquisition of business, residential, city, state, and federal lands would be required, and existing land use would change. Both alternatives would affect 65 parcels and 17 property owners. However, Alternative C would require acquisition of less acreage than Alternative A (approximately 177 acres as compared to 200 acres). Additionally, the two public land owners (FNSB and USACE) do not support construction of the railroad on top of the Levee as required under Alternative A.

3. Input from Public Agencies and the City of North Pole: The Mayor of North Pole provided comments on the EA in support of Alternative C. Also, as mentioned above, FNSB and USACE have indicated they do not support construction of the railroad on top of the Levee. ADOT&PF supports inclusion of the grade separated crossing of the Richardson Highway as part of the project, and expressed a preference for the road over rail option included as part of Alternative C.

4. Cost Considerations: Alternative A has a substantially greater construction cost than Alternative C (\$95 million as compared to \$60.9 million). The cost difference is largely due to the detailed studies/design required for constructing the rail on top of the Levee and the much larger quantities of fill required for Alternative A.

For Alternative C (Proposed Action), Table 1 summarizes the potential environmental effects for each resource category and also identifies proposed mitigation measures. Certain impact categories are not addressed in the table, as there are no anticipated impacts of these types. These impact categories include: barriers to the handicapped/elderly, solid waste disposal, coastal zone management, use of energy resources, use of other natural resources, and farmland.

Table 1			
Summary of Impacts and Mitigation for the Project (Alternative C)			
Impact Area	EA Sections With Detail	Summary of Impact	Mitigation Measures
Physical Environment			
Air Quality	3.1.1	<p>Beneficial Effect. In the long term, the Project would have a positive effect on air quality by relieving congestion at existing at-grade crossings.</p> <p>Impact. No permanent adverse impacts were identified. Portions of North Pole are located within a designated carbon monoxide (CO) maintenance area and a fine particulate matter (PM2.5) non-attainment area. Worst-case estimates of emissions for the Project fall well below the applicability thresholds for CO, PM2.5, and related precursor emissions. The Project meets conformity requirements, and would not cause or contribute to any new localized CO violations or increase the frequency or severity of an existing CO violation. Temporary (short-term) localized impacts to air quality due to increased dust would occur during construction, but are not expected to affect long-term air quality.</p>	<p>MM #1. Dust during construction would be controlled as necessary during construction by implementation of Best Management Practices (BMPs) (e.g., watering or using other dust suppression measures).</p> <p>MM #2. Exposed earthwork would be stabilized as soon as practicable to reduce windblown particulates.</p>
Flood Hazards	3.1.4	Impact. Permanent impacts to approximately	MM #3. Project design would comply with FNSB

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and Floodplain Management		17.7 acres of mapped 100-year floodplains would occur. This represents 4.4% of the total acreage of the available acreage within the existing floodplains. In conformance with EO 11988, Floodplain Management, the Project is not anticipated to adversely impact floodplain values or pose a significant risk. Minor modifications of the Levee stability berm and ROW would occur in some areas, but these impacts would not likely be considered a major modification. FNSB and USACE would have continual access to the Levee for inspection, maintenance, and flood fighting. No temporary impacts were identified.	floodplain management regulations and permit conditions. MM #4. The Project would include drainage structures (cross culverts) in the Zone A special flood hazard areas to maintain hydrologic connectivity. MM #5. A detailed hydrologic and hydraulic analysis would be performed during final design and permitting to confirm that placement of fill within the floodplain would not pose a significant risk through raising base flood elevations and/or displacing floodwaters during a 100-year event, and that floodplain values would be maintained. MM #6. An operational agreement between FNSB, USACE, and the ARRC would be needed for impacts to the Levee.
Water Quality	3.1.2	Impact. No permanent adverse impacts were identified. Temporary (short-term) impacts to water quality (e.g., turbidity from stormwater runoff) may occur during construction due to such activities as clearing and grubbing and placement of fill.	MM #7. A Stormwater Pollution Prevention Plan (SWPPP) would be prepared and would identify BMPs that would be implemented to minimize erosion and sedimentation. MM #8. ARRC would use contaminant-free embankment and surface materials in construction, and would monitor construction activities as necessary. MM #9. Standard spill-prevention measures would be implemented and spill clean-up equipment would be available onsite during construction. MM #10. Disturbed areas would be reseeded with non-invasive species to stabilize soils and minimize erosion.
Soils, Geology, and Seismic	3.1.5	Impact. Permanent impacts would occur due to loading of new fill on native organic soils, which could result in differential settlement. Permafrost may undergo thaw and settlement once fill is placed over undeveloped areas. In such areas, settlement could take several years. No temporary impacts were identified.	MM #11. Geotechnical studies would be conducted during final design to reduce potential differential settlement, permafrost, and potential for seismic events. MM #12. Ground disturbance would be limited to only those areas necessary for construction activities, and appropriate erosion control measures would be implemented.
Navigable Waters	3.1.3	No Impact. Navigable portions of Tanana River are located near the Project area, but outside of the construction limits and would not be affected.	None Required.
Biological Resources (BR)			
Wetlands / Waters of the U.S.	3.2.1	Impact. Permanent impacts would occur due to filling of approximately 20 acres of wetlands (mainly scrub/shrub and mixed evergreen/forest wetlands, with less than 2 acres of emergent wetlands or open water affected). This is a small percentage of the abundant similar wetlands in the vicinity. The affected wetlands are neither limited nor unique to the greater landscape and many are adjacent to or within previously disturbed areas. Temporary (short-term) impacts to wetlands (e.g., sedimentation from stormwater runoff) may occur during construction.	MM #13. ARRC would obtain and comply with the provisions of the Clean Water Act Section 404 Permit, including any compensatory mitigation required for unavoidable impacts to wetlands. MM #14. Temporary impacts to wetlands during construction would be minimized. For example, staging activities would occur in non-wetland locations to the extent possible. MM #15. Native vegetation would be reestablished in areas that are temporarily disturbed. MM #16. The Project would include drainage structures, as needed, to maintain existing drainage patterns and/or hydrologic connectivity.
Ecological	3.2.2,	Impact. Permanent impacts to habitat and	MM #17. To the extent possible, clearing of

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Impact Area	EA Sections With Detail	Summary of Impact	Mitigation Measures
Systems (Upland Habitats/Wildlife)	3.2.4	<p>ecological systems would occur due to loss of approximately 63 acres of forested or scrub-shrub uplands. This would result in some habitat loss and displacement of species from the realignment area. The habitats in the Project area are neither unique nor limited, allowing mobile species relocate to similar habitats in adjacent areas. Further, the quality of the upland habitat has been compromised in the areas proposed for development due to construction of the existing utility corridor, the Levee corridor, Levee maintenance, and human disturbances associated with recreational use.</p> <p>Temporary (short-term) impacts include brush clearing and physical disturbance of habitat during construction. Increased human presence, noise, and dust could cause temporary disturbances to nearby birds and other wildlife.</p>	<p>vegetation would occur before or after the typical bird nesting season, following United States Fish and Wildlife Service guidance on time periods for avoiding vegetation clearing in Interior Alaska.</p>
Threatened and Endangered Species	3.2.5	<p>No Impact. No federally protected species are known to be present in the Project area.</p>	<p>None Required.</p>
Fish and Essential Fish Habitat	3.2.3	<p>No Impact. There are no anadromous stream crossings or stream impacts.</p>	<p>None Required.</p>
Human Environment (HE)			
Property Impacts /Business and Residential Relocations	3.3.1	<p>Impact. Permanent impacts would occur due to full or partial acquisition of 65 parcels (18 full parcel acquisitions) from 17 property owners. A total of approximately 177.3 acres would be acquired. There is a potential for 7 residential acquisitions and relocations and 7 business acquisitions and relocations on 9 parcels. A relocation study show that adequate housing resources and business properties exist in the community for relocation of displaced residents and businesses.</p> <p>Temporary (short-term) impacts could occur during construction to residents and business owners due to road closures, lane restrictions and associated access modifications.</p> <p>With regard to the ADOT&PF Richardson Highway ROW, property transaction delays and associated temporary impacts could occur if a mechanism is not identified to facilitate conveyance of ROW between ARRC and ADOT&PF.</p>	<p>MM #18. With respect to properties that would be acquired, both acquisition and subsequent relocations would be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 and the Alaska Relocation Assistance and Real Property Acquisition Practices.</p> <p>MM #19. For those potentially affected properties where acquisition is not necessary, ARRC would work with affected property owners to address project-related construction activity issues.</p> <p>MM # 20. To the extent practicable, ARRC would ensure that obstructions to business entrances and exits are minimized during construction. Once the funding and schedule for project construction are better defined, ARRC and ADOT&PF real estate representatives will work together to develop a process for acquiring the ROW necessary for the Richardson Highway crossing and overpass concurrently with acquisition of the ROW for the realignment, and to streamline the conveyance process.</p>
Land Use	3.3.1	<p>Impact. Permanent impacts would occur due to ROW acquisition of private, city, state, and federal lands and the associated change in land use may change. For example several residential properties would be acquired and would be used for railroad purposes rather than residential use. However, the Project would remain consistent with existing local land use plans.</p>	<p>None Required.</p>

Table 1
Summary of Impacts and Mitigation for the Project (Alternative C)

Impact Area	EA Sections With Detail	Summary of Impact	Mitigation Measures
Socioeconomics	3.3.2	Beneficial Effect. Community cohesiveness would be enhanced with elimination of train traffic through downtown North Pole and between the middle and high schools. The Project would provide a temporary short-term benefit due to increased employment and purchases of local goods, such as fuels and construction materials, and services during construction.	None Required.
Environmental Justice	3.3.2.1	No Impact. Based on demographic analysis, there are no Environmental Justice communities in the project area. The Project would not have an impact on minority or low-income populations. It would remove track that currently bisects North Pole creating traffic and pedestrian obstacles when trains travel through this city thus improving community connectivity.	None Required.
Safety	3.3.9	Beneficial Effect. The Project would have a number of long term benefits. It would close nine grade crossings, grade-separate the crossing at the Richardson Highway, and significantly reduce train traffic at three other crossings due to their location on a rail spur instead of the main line. This would decrease inherent safety concerns associated with crossings, including the potential for train and vehicular/pedestrian traffic accidents. Safety would also be enhanced by reducing the potential for delays to emergency response vehicles while train operations move through or service existing rail customers in North Pole.	None Required.
Noise and Vibration	3.3.4	Beneficial Effect. The rail alignment would be relocated outside downtown North Pole to an area with far fewer noise sensitive receivers. The residential receptors in the vicinity of the existing at-grade crossings that would be eliminated would experience less noise impacts. Impact. No permanent adverse impacts were identified. No "severe" noise impacts would occur and there would be no vibration impacts. Temporary (short-term) increases in noise and vibration would occur during construction.	MM #21. ARRC would work with its construction contractor(s) to identify and implement BMPs that would minimize, to the extent practicable, construction-related noise disturbances near residential areas. For example, construction and maintenance vehicles would be in good working order with properly functioning mufflers. MM #22. Additional specific mitigation measures, if necessary, would be determined during final design.
Utilities	3.3.1.1	Impact. The Project would affect the GVEA electric transmission line, which would need to be raised, buried, or relocated in 3 locations. Certain telephone lines may also require relocation. Temporary (short-term) impacts may include limited scheduled utility service disruptions during construction.	MM #23. ARRC would coordinate with appropriate utility companies during design and construction. MM #24. ARRC would minimize disruptions to utilities by scheduling construction work and outages to low-use periods to the extent possible. MM #25. ARRC would notify residents and other utility customers in advance of project-related construction activities requiring temporary service interruption.
Cultural Resources	3.3.6	No Impact. No historic or archaeological sites or features were identified within Area of Potential Effect. FRA determined and SHPO concurred that no historic properties would be affected by either build alternative. Correspondence with SHPO is included in Appendix H.	MM #26. Should construction activities unearth any archaeological or cultural resources, ARRC would halt construction in the immediate area until the State Historic Preservation Officer is notified, the significance of the find is evaluated, and an appropriate course of action is identified.

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Impact Area	EA Sections With Detail	Summary of Impact	Mitigation Measures
Recreation	3.3.7	<p>Impact. Informal trails would be consolidated or eliminated and redirected to designated crossings to maintain safe access to the Levee Trail and other recreational areas to the south.</p>	<p>MM #27. Grade-separated crossings, where feasible, would provide continued access to the Tanana River Levee Trail.</p> <p>MM #28. During construction, some access restrictions to the existing trail and the Levee area could occur for safety purposes. Appropriate notification would be made to the FNSB and users, and well-marked detours would be provided.</p>
Contaminated Sites	3.3.8	<p>Beneficial Effect. To the extent the Project results in cleanup of any contamination, a beneficial impact would occur.</p> <p>Impact. The Project would result in acquisition of five properties with possible contamination and acquisition or construction through areas with unexploded ordinance.</p> <p>Temporary (short-term) impacts could occur if contamination is encountered during construction.</p>	<p>MM #29. Further investigation into possible contamination and presence of unexploded ordinance would be conducted prior to acquisition, as necessary.</p> <p>MM #30. Construction through the unexploded ordinance area would be coordinated with U.S. Army, US Environmental Protection Agency, and Alaska Department of Environmental Conservation, as appropriate.</p> <p>MM #31. Short-term construction impacts would be limited through ARRC contracting requirements, management plans, and implementation of BMPs.</p> <p>MM #32. Spill clean-up equipment would be available onsite during construction. Any contamination encountered would be addressed in accordance with applicable regulations.</p>
Transportation System/Facilities	3.3.3	<p>Beneficial Effect. The Project would remove 9 existing at-grade crossings and 3 that remain would be on a spur track that would have reduced train traffic (most train traffic would be on the realigned branch line). Fewer at-grade crossings in the community would result in better traffic flow and fewer vehicle-train conflicts. The existing Richardson Highway at-grade crossing would be eliminated, and replaced with a grade-separated crossing (road-over-rail).</p> <p>In the Dyke Road/Old Richardson Highway area, approximately 0.5 miles of the Old Richardson Highway would be realigned to eliminate the existing public at-grade crossing.</p> <p>Impact. Several permanent impacts would occur. The relocated Richardson Hwy crossing would block existing access to the frontage road southeast of the crossing. Most of the frontage road would remain in place, but it would be terminated with a cul-de-sac. Access to homes and businesses would be maintained.</p> <p>Access to the Levee via the Frontage Road, would be eliminated, but alternative access is available.</p> <p>Temporary (short-term) impacts such as road closures and lane restrictions would occur during construction, but would be minimized to the extent possible. A temporary at-grade crossing of the Richardson Highway would be needed if construction is phased due to funding constraints.</p>	<p>MM #33. The final design of the Richardson Highway crossings (temporary at-grade and grade-separated crossings), the frontage road, and the Old Richardson Hwy realignment would be coordinated with ADOT&PF. Acceleration/deceleration lanes would be 12-foot wide, and the vertical clearance for the rail-over-road grade-separated crossing (Alternative A) would be 18-feet.</p> <p>MM #34. ARRC would consider establishing a diagnostic team to review the relocated Richardson Highway crossing in accordance with its Policy on Railroad/Highway Crossings.</p> <p>MM #35. A traffic control plan would be prepared prior to initiating construction to avoid and minimize road closures and lane restrictions to the extent practical.</p> <p>MM #36. Road users would be notified of temporary road closures and other construction-related activities, so alternate routes could be planned.</p> <p>MM #37. Proper signage and notice of lane closures would be provided. Signs providing the name, address, and telephone number of a contact person would be displayed on-site to assist the public in obtaining immediate responses to questions and concerns about project activities.</p> <p>MM #38. ARRC would coordinate with the FNSB and USACE to ensure adequate access for maintenance of the Levee is provided.</p> <p>MM #39. ARRC would coordinate with ADOT&PF regarding the levee access from the Richardson Highway.</p>
Railroad	3.3.3	<p>Beneficial Effect. Reduced travel times through</p>	None Required.

Table 1
Summary of Impacts and Mitigation for the Project (Alternative C)

Impact Area	EA Sections With Detail	Summary of Impact	Mitigation Measures
Operational Efficiency		the corridor and better access to the Flint Hills Refinery would improve ARRC operating efficiency.	
Aesthetics	3.3.5	No Impact. The periodic and temporary visual disturbances along the existing rail corridor through downtown North Pole would be removed, but there would be a minor increase in visual impacts near the Levee corridor. The proposed action would largely maintain the Levee Trail, thereby maintaining the broader landscape views.	None Required.

Section 4(f) and Section 6(f)

Section 4(f) of the Department of Transportation Act of 1966 provides protection for certain park and recreational lands, refuges, and historic sites in transportation project development. Section 4(f) resources include any publicly owned public park, recreation area, or wildlife or waterfowl refuge or any publicly or privately owned historic site. In general, U.S. DOT-funded transportation programs and projects are prohibited from using Section 4(f) resources, or where the use of such resources cannot be avoided, the project must include all possible planning to minimize harm to these areas. No properties eligible for protection under Section 4(f) are present within the study area and therefore no Section 4(f) uses result from the Project.

Section 6(f) of the Land and Water Conservation Fund Act of 1965 prevents the acquisition or development of property that has been acquired or developed with Land and Water Conservation Fund Act of 1965 funds. There are no Section 6(f) properties within the study area.

Cumulative Impacts

Potential cumulative effects were also evaluated. Cumulative effects occur when there is an additive relationship among past, present, and future projects in relation to the resources being analyzed.

- *Physical Environment* - The present and future projects in the vicinity of North Pole and Fairbanks focus largely on highway and road improvements that would improve air quality due to increased operational efficiencies. As a result of decreased vehicle idling, the Project would result in a minor beneficial impact to regional air quality by reducing the amount of vehicular emissions in the Project area. BMPs adopted during construction-related activities would prevent cumulative adverse impacts to water quality. Any construction within the 100 year floodplain requires specific permitting from the FSNB which will ensure minimal adverse cumulative impacts to floodplain functions and values.

- *Biological Environment* –Uplands and wetlands along the Project corridor would experience cumulative impacts as development within the region continues. A large portion of the Project falls within a previously cleared corridor, but there are significant tracts of undisturbed and native vegetation within the region. The cumulative amount and quality of uplands and wetlands that would be permanently lost is small and of lesser quality, relative to the amount of habitat that exists in the surrounding area. Therefore, the contribution of the Project to the cumulative loss of habitat and displacement of wildlife would be minor.
- *Human Environment* – Continued growth and change in land use patterns in the Project area are expected. As long as land use controls remain in place and proposed changes to land use remain consistent with existing zoning requirements, the magnitude and extent of the cumulative effects on land use is anticipated to be minor. The Project would be beneficial relative to safety and traffic conflicts by reducing at-grade crossings through the downtown area of North Pole. Cumulative impacts to aesthetic and recreational resources would be minor. The Project would have a very minor beneficial cumulative impact on noise and vibration associated with railroad and train operations in the area by increasing the distance between noise sensitive receptors and the rail alignment. Therefore, cumulative impacts to the human environment from the construction of the Project would be minor.

Public and Agency Coordination

Circulation of the Environmental Assessment. The EA was made available for public review on March 20, 2012 and comments were accepted through April 25, 2012. The environmental documents were made available at the following four locations: North Pole City office; North Pole Library; Fairbanks North Star Borough office in Fairbanks; and the Noel Wien Library in Fairbanks. Copies were distributed to state and federal agencies and local government offices, as appropriate, and were made available to other parties upon request. Electronic documents were made available on the ARRC Project website www.AlaskaRailroad.com, and were also available at the public hearing in both electronic and hard copy format.

Public Hearing. A public hearing was held in North Pole on April 5, 2012 from 4:30 pm to 6:30 pm to receive comments and answer questions regarding the proposed Project. The public notice and mailings for the hearing are included in Attachment 2. A formal presentation at the public hearing included: review of the purpose and need; a summary and comparison of the build alternatives; review of previous public comments; and a summary of the EA process and schedule. Copies of the ARRC Project Fact Sheet, the EA Executive Summary, and comment sheets were made available to attendees. Approximately 33 members of the public attended the public hearing.

Public Comments Received on the Environmental Assessment. A total of six comments from five individuals or agencies were received during the comment period. Attachment 3 provides copies of all comments received and individual responses provided. A summary of key comments/responses is provided below (comments of support excluded).

Issue 1: In light of the MOU between the FNSB and ARRC, it is not appropriate to propose a very costly grade-separated crossing of the Richardson Highway Mile 9 at this

time. Before doing so, the locations of the new rail corridor (for Phases 2 and 3) should be established as set forth in the MOU. Once the new rail corridor is established the decisions can be made as to the necessity and location of a grade-separated crossing of the Richardson Highway. Making that decision at this time violates and undermines the overall intent of the MOU.

Response: The ARRC, in concert with the FNSB, executed the MOU in good faith. Due to the complexity and magnitude of the overall Fairbanks-North Pole Rail Realignment, the MOU acknowledges that the larger project must be pursued in phases, and that the North Pole Road / Rail Crossing Reduction Project makes sense as Phase 1. As specifically stated in the MOU, the “NEPA process for Phase 1 can be accomplished expediently by relying on the engineering effort and environmental studies conducted to date. Securing independent utility in order to set the scope of study for NEPA looks to be a possible strategy for proceeding with Phase 1 and if determined to be viable will be supported by the FNSB.”

The EA demonstrates that the Project has independent utility and there is an immediate need for the Project, which would provide substantial benefits even if all of the remaining phases of the larger project are not completed. Further, the EA confirms that the project would not preclude implementation of any alternatives that may be considered for subsequent phases of the Fairbanks-North Pole overall project, nor would it render any alternatives infeasible (please see page 3 of the EA document).

Notably, in comments on the EA, the Mayor of North Pole stated his support for the grade separation at 9 mile and that he will be working with FMATS to recommend that the Northern Region and headquarters of ADOT&PF include this project into the STIP. He believes the 9 mile grade separated crossing is becoming a much higher priority than the Moose Creek grade separated crossing. The grade-separated crossing at Richardson Highway Mile 9 is also supported by ADOT&PF.

***Issue 2:** The cost of currently needed transportation improvements within the FMATS area already far exceeds available and projected state capital project funding. Since ARR operations are the primary beneficiary of the proposed improvements, it should have the primary responsibility for funding the improvements without adversely affecting the funding or otherwise delaying other much needed transportation improvements within the FMATS boundaries.*

Response: This Project, requested and supported by the City of North Pole and the FNSB, is primarily to improve safety as well as to improve ARRC’s operational efficiencies. The purpose, as stated in the EA, is to enhance public safety, reduce transportation conflicts, and improve ARRC’s operating efficiency while ensuring continued rail access to existing and potential future ARRC customers and minimizing impacts to businesses and property owners. As specifically stated in the MOU, the safety benefits of Phase 1 are substantial.

To summarize information in the EA, the Project would result in a reduction in vehicle crossings in downtown North Pole, a grade-separated crossing at the Richardson Highway, fewer petroleum tank rail cars traveling and/or stored in downtown North Pole, and fewer delays to emergency vehicles. The Project would provide much needed safety benefits to the North Pole community and roadway users, including pedestrians. Under the proposed action, nine at-grade crossings would be eliminated, and three others would have significantly reduced train traffic

due to their location on a rail spur instead of the main line. Safety would be enhanced through the center of North Pole by eliminating crossings that are frequented by busses, school children walking to and from school, and emergency response vehicles. The existing track passes between two schools -- the North Pole High and Middle Schools, both of which are accessible from the Old Richardson Highway. Public activities near the schools and frequenting of businesses in North Pole present risk each day, as students and the general public use the existing at-grade crossings. FRA and ARRC are well aware of the funding constraints for Project construction. ARRC and the FNSB continue to seek funding for construction of the North Pole project, and ARRC is not ruling out any potential funding sources at this time. Also, consistent with the MOU, we continue to seek funding to pursue the second and third phases, beginning with the environmental work.

Issue 3: ADF&G understands that no significant fencing, mounding, or similar impediments to movement of wildlife are proposed along ARRC new right-of-way at this time, and as such, the potential for alterations of moose travel patterns or access to habitat is considered low. If potential restrictions of wildlife movements are planned in the future, please contact ADF&G early in the process so we can provide guidance on design of the appropriate crossing aids and structures.

Response: ARRC will contact ADF&G for guidance early in the process if fencing, mounding, or other impediments to wildlife movements are proposed during final design.

Issue 4: Acquisition of any properties at the end of H & H Lane not currently in the City but accessible by H & H Lane--either currently or as a result of proposed development--should be brought into the City of North Pole by petition of the ARRC to ensure greatest amount of benefit to the ARRC and to the City, which maintains H & H Lane.

Response: ARRC will coordinate with the City of North Pole regarding acquisition of properties at the end of H & H Lane and acquisitions shall be consistent with state and federal law.

Issue 5: USAG FWA provided a number of comments regarding the Dyke Range Impact Area and its past and current use, and potential impacts on the area due to the proposed project. In general, USAG FWA expressed concern that ARRC did not fully understand the complications associated with past use of Dyke Range, particularly with regard to UXO. Refer to the specific comments and responses in Attachment 3.

Response: ARRC prepared Addendum 1 to the EA, which is included as FONSI Attachment 1. Addendum 1 provides more detailed information about the Dyke Range Impact Area and its past and current use, potential impacts on the area due to the proposed project, and environmental commitments and mitigation.

Environmental Commitments

During the NEPA process, commitments are made to avoid, minimize, or mitigate Project impacts. Commitments result from public comment or through the requirements of environmental resources and regulatory agencies. There are no special commitments for the Project, beyond those specified in the EA and summarized in Table 1. ARRC will monitor project construction to ensure the mitigation measures and environmental commitments are appropriately implemented and will provide FRA with information regarding implementation

and effectiveness of mitigation upon request. The Project will comply with applicable federal, and state requirements and regulations, including the National Environmental Policy Act; the Department of Transportation Act; the Endangered Species Act; the Magnuson-Stevens Fishery Conservation and Management Act; the National Historic Preservation Act; Executive Order 11988 (Floodplain Management); Executive Order 11990 (Protection of Wetlands), and Executive Order 12898 (Environmental Justice).

Finding of No Significant Impact

FRA finds that the Project, as assessed in the *North Pole Road / Rail Crossing Reduction Project Environmental Assessment* (March 2012) satisfies the requirements of FRA's "Procedures for Considering Environmental Impacts" (64 FR 28545, May 26, 1999) and NEPA (42 USC § 4321, 1969) and will not have any significant impacts on the human or natural environment if implemented as described in the EA and this FONSI. As the Project sponsor, ARRC will be responsible for ensuring all mitigation measures identified above are fully implemented. At present, no Federal funds are available to carry out the Project and FRA does not have a pending approval action subject to NEPA.



Joseph C. Szabo, Administrator
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12/7/12

Date

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