



U.S. Department
of Transportation
**Federal Transit
Administration**

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January 4, 2005

Patrick Gamble
President and CEO
Alaska Railroad Corporation
P.O. Box 107500
Anchorage, AK 99510

PKG	EXECUTIVE OFFICE	PCJ
JBB	RECEIVED	SBS
MGG	JAN 10 2005	WGO
DFS		JWK
DJF		EMR
EWP	TEB	WGL

Re: Nenana Rail Realignment Project
**Environmental Assessment Addendum
Finding of No Significant Impact**

Dear Mr. Gamble:

The Federal Transit Administration (FTA) has completed its review of the NEPA Environmental Assessment (EA), September 2004, for the Nenana Rail Realignment Project. Based on our review, FTA has issued a finding of no significant impact (FONSI) for the project. A copy of the FONSI is enclosed.

In addition, an Addendum to the EA dated December 2004 is attached to the FONSI. This Addendum makes several corrections to the EA and addresses comments received during the public comment period on the EA.

The FONSI, EA and its Addendum, and all related supporting materials should be made available to the public, with notice of availability published in one or more newspapers of general circulation. Notice of the FONSI's availability should also be sent to the agencies on the EA circulation list. Please note that if a construction grant is approved for this project, the standard terms and conditions of the FTA grant contract will require the grantee to undertake all environmental mitigation measures identified in the EA and FONSI.

Thank you for complying with the National Environmental Policy Act, and good luck with your project. Please contact Jennifer Bowman at (206) 220-7953 if you have any questions.

Sincerely,

R. F. Krochalis
Regional Administrator

Enclosure

FINDING OF NO SIGNIFICANT IMPACT

APPLICANT: The Alaska Railroad Corporation
PROJECT NAME: Nenana Rail Realignment Project
PROJECT LOCATION: Anchorage, Alaska
GRANT NUMBER: AK-03-0053

PROPOSED PROJECT

The Alaska Railroad Corporation (ARRC), in cooperation with the Federal Transit Administration (FTA), seeks to realign its mainline track away from the downtown area of Nenana, Alaska. The primary objectives of the track realignment project are to:

- improve the safety of rail/highway crossings and railroad operations,
- reduce rail transportation times, and
- reduce operating costs.

The project includes a new embankment (up to approximately 150 feet wide, 25 feet high, and about 2 miles long), a bridge over the George Parks Highway, and culvert underpasses (multi-plate tunnels) to maintain access along the airport access road and 9th Street. The existing track through downtown Nenana and the existing looped approach to the Tanana River bridge will be left in place to maintain freight service to the Port of Nenana. A dike will be constructed at the upstream end of the airport runway if it is determined necessary during final design. The project will provide an opportunity to serve the Nenana Airport, with an optional airport spur or a siding parallel to the new mainline track and extending to the commercial lease lots on the north side of the airport property.

ALTERNATIVES ANALYSIS

Alternatives to the project, including the No-Action alternative and one other build alternative, were evaluated in the October 2004 Environmental Assessment (EA) for the Nenana Rail Realignment Project. The two build alternatives vary primarily in their distance from the Nenana Airport and the downtown area of Nenana. Alternative B is similar to the proposed project, but would be located about 500 to 1,000 feet farther north. Construction would be more difficult, requiring the new track to cross over the existing loop track by installing a culvert underpass. This alternative also includes an optional airport spur or siding to the airport. Several other alternatives were examined, but were eliminated from further consideration in the EA because of their more extensive environmental impacts or safety considerations.

ENVIRONMENTAL CONSEQUENCES

The EA documented that the project will not have any significant adverse environmental impacts. The following paragraphs provide a summary of the EA's findings.

Transportation Impacts

No long-term adverse impacts on traffic and transportation will result from the project. The primary objectives of the track realignment (to improve the safety of rail/highway crossings and railroad operations, reduce rail transportation times, and reduce operating costs) will be realized.

The project will cross above the George Parks Highway on an overpass bridge, ensuring a safe, grade-separated configuration that will accommodate projected future traffic increases and planned improvements to the George Parks Highway. The project will reduce the amount of train traffic at the at-grade road crossings in Nenana, thereby increasing safety, while allowing for higher operating speeds for trains and the associated operational benefits. The project includes grade-separated crossings of two secondary roads (an unnamed road that extends in a southeast direction from 10th Street to provide access to the Nenana Airport from the north, and 9th Street), each with a two-lane oversized culvert underpass (multi-plate tunnel). Some land designated by the City as future roads, but not yet constructed, will be replatted; G Street and 10th Street will end in cul-de-sacs or will be connected with a road extending parallel to the new tracks.

A sufficient portion of the existing loop track would be retained under this project to provide continued opportunities for rail service to the Nenana port and downtown areas during and after the new mainline realignment. The project will not have any adverse effects on airport operations or access. The optional rail spur to the airport provides an opportunity for potential future development of a dual use rail-aviation terminal.

Short-term construction-related traffic interruptions will occur, but access to the airport and emergency facilities will be maintained.

Mitigation: Traffic flow during construction will be controlled by planning and scheduling construction activities to minimize traffic delays. Signs will be used as appropriate to provide notice of road closures and other pertinent information to the traveling public. The public will be notified in advance of road closings and other construction-related activities so that users can plan alternate travel routes in advance. Access to the community, the airport, and emergency facilities will be maintained throughout construction.

The Physical Environment

Air Quality

The project will have no significant impact on air quality. Dust and emissions from construction equipment may result in a short-term increase in criteria pollutants and localized decreases in air quality. Ground-disturbing activities such as vegetation removal, excavation, grading, and fill placement may temporarily generate fugitive dust. Once the project is complete, long-term emissions are expected to be consistent with current emissions from train operations through the area.

Mitigation: If necessary, fugitive dust will be mitigated during construction through application of water or other dust suppressants.

Soils, Geology, and Seismic Conditions

The Nenana area has poorly drained, silty soils and discontinuous permafrost. Geotechnical and thermal studies will be conducted during final design to characterize permafrost conditions. Grading, construction, and mining of the material source will result in minor impacts to the geological environment. Alteration of the existing topography will occur with construction of an approximately 25-foot-high embankment. The material required to construct the embankment will be obtained from an existing ARRC material site located adjacent to the tracks (near ARRC Mile 388) and south of Nenana,

and/or from other privately-owned, permitted material sources. Material may also be obtained from the Nenana City Pond. Although the project is in an area of high seismic potential, seismic conditions are not unusual for the area and can be accommodated in final design. The separated grade crossing over the George Parks Highway will be designed according to the latest applicable seismic codes. With proper design, there will be no significant impacts to existing or planned improvements due to geologic, soil, or seismic conditions.

Mitigation: Based on geotechnical and thermal studies conducted during final design, the embankment will be designed and constructed to address impacts from any degradation of permafrost, thermal erosion, or subsidence. Mitigation measures may include removing unacceptable substrate prior to building the embankment, cutting the standing vegetation but leaving it in place and placing geotextile fabric over the surface prior to fill deposition, completing some construction activities in winter, minimizing disturbance to native vegetation outside of the embankment footprint, encouraging re-growth of disturbed areas, or using thermal siphons, which prevent the melting of permafrost.

Best Management Practices (BMPs) will be employed during construction to minimize the potential for erosion and sedimentation. The embankment slopes will be stabilized upon completion of the project.

Hydrology and Floodplains

The new embankment will be located within a Federal Emergency Management Agency 100-year floodplain. Avoidance of the mapped 100-year floodplain is not practicable since the entire community is within the floodplain. Although the project will result in less total area to provide natural and beneficial floodplain values, the majority of the floodplain will not be affected. The project will minimize the impact of floods to human safety, health, and welfare through construction of a dike (if hydraulic and hydrologic studies conducted during final design confirm that it is needed), installation of drainage culverts with floodgates, use of flood-proof road crossings, and adherence to the stipulations required under the Flood Hazard Permit from the City. If constructed, the dike will divert the overland flood flows around the north and southwest sides of the runway towards the George Parks Highway, back to the main channel of the Tanana River. The floodgates on the culverts will allow management of overland flow from Nenana River flooding and from Tanana River overland flow from the north of the City. Cross culverts in the new rail embankment will allow continued use of floodplain functions and values during low flow stages when the floodgates remain open, and will allow shallow surface water runoff patterns to remain essentially unchanged. The area impacted by the construction of a new alignment will be small relative to the area of the entire floodplain. Therefore, there will be no significant impacts on natural and beneficial floodplain values, no significant increase in flood-related risks to human life, and no significant increase in flood-related risks associated with interruption of service or loss of vital transportation facilities.

Mitigation: ARRC will obtain a flood hazard permit from the City of Nenana and will adhere to the terms and conditions of that permit. Existing surface water runoff patterns will be maintained by placing culverts through the embankment when necessary to maintain existing drainage patterns. If permafrost is present, a bedding of thaw-stable material will be incorporated into the culvert design to provide a stable foundation. To mitigate the impact of a new rail embankment on the floodwater elevation during a 100-year flood, floodgates will be installed on drainage culverts to manage floodwater. Also, if hydraulic and hydrologic studies conducted during final design confirm that it is needed, a dike will be constructed at the upstream end of the airport runway to minimize impacts on floodwater elevations along the upstream side of the embankment.

Water Resources and Water Quality

The project will not increase the amount of impervious surface in the project area, violate state water quality standards, or pose a threat to public water supplies. The Nenana River and Tanana River will not

be affected. The Nenana City Pond will not be affected unless it is used as a material source area, which is encouraged by state biologists to improve the pond's usefulness for a sport fishery. No significant water quality impacts are expected.

Mitigation: Ground disturbance activities during construction will be minimized to reduce the potential for erosion and sedimentation. A storm water pollution prevention plan (SWPPP) will be prepared and implemented as part of the National Pollutant Discharge Elimination System (NPDES) permit required for the project (General Permit for Storm Water Discharges from Construction Sites). BMPs will be employed during construction to control erosion and sedimentation during ground-disturbing activities.

The Biological Environment

Vegetation and Wetlands

Construction of this project will require approximately 66.6 acres of terrestrial habitat (43.9 acres of upland habitat and 22.7 acres of wetland habitat). Of this, approximately 25 acres will be returned to upland habitat with native vegetation. An additional 4.7 acres of wetland habitat would be affected if the optional siding were constructed. Upland and wetland vegetation that will be impacted is common to the region and is not unique or rare. Extensive areas with similar vegetation will remain undisturbed near the alignment; therefore, the impacts of vegetation removal will not affect availability of these habitats in the surrounding area.

The study area for this project is limited to the area between the Tanana and Nenana Rivers and to a location that could support future rail operations to the Port of Nenana and the Nenana Airport. Since a large portion of the study area contains wetlands, the project could not avoid wetlands. Other alternatives that would impact a smaller area of wetlands than the proposed alternative were considered, but determined to be not practicable because of safety considerations, routing restrictions (e.g., airport clear zone), and other factors.

Mitigation: ARRC will obtain a permit from the U.S. Army Corps of Engineers to place fill in wetlands and will adhere to the terms and conditions of that permit, including any compensatory mitigation that may be required. During construction, appropriate BMPs for preventing sedimentation of adjoining wetlands will be employed, and as necessary, on-site monitoring for environmental compliance will be conducted by a qualified environmental inspector. Impacts to terrestrial habitat will be minimized by limiting earth-moving equipment and fill-hauling trucks to disturbed areas (e.g., within the footprint of the embankment and immediately adjacent area) and local roads whenever possible. With the exception of the top several feet of the embankment slopes, vegetation will be reestablished on the embankment using techniques that encourage natural revegetation.

Fish and Wildlife, Essential Fish Habitat (EFH) and Protected Species

As described above, the project will require approximately 66.6 acres of terrestrial habitat, but will return approximately 25 acres to upland habitat with native vegetation. These acreages include the embankment, staging/stockpile areas, and potential flood control dike. An additional 4.7 acres of wetland habitat would be used for the optional siding. Mobile species such as small mammals, waterfowl, shorebirds, and songbirds that presently use habitat affected by the project will be displaced to similar habitat in adjacent areas. Although the new embankment could serve as an obstacle to normal travel and could alter movement patterns of local animals, it is unlikely to create a barrier to wildlife movement.

The Nenana and Tanana Rivers are considered EFH for three species of anadromous fish. There will be no in-water work and no changes in normal stream flow or other alterations that might affect fish or fish habitat. Since the project will not affect these rivers, it will have no impact on fish or EFH.

Coordination with the U.S. Fish and Wildlife Service (USFWS) and the NMFS indicates that no protected species exist in or near the project area. The project will not have an effect on populations or habitat of species listed as threatened or endangered under the Endangered Species Act.

Mitigation: Disturbance to native vegetation will be minimized by limiting earth-moving equipment and fill-hauling trucks to disturbed areas (e.g., within the footprint of the embankment and immediately adjacent area) and local roads whenever possible.

The Human Environment

Land Status and Land Use

No significant impacts on land status or land use are expected. The project will require acquisition of property currently owned by the City of Nenana and several private landowners. In addition, approval from ADOT&PF will be needed to construct an elevated crossing over the George Parks Highway. Several dedicated road easements and rights-of-way that have been platted but not constructed will need to be replatted.

Mitigation: Land needed for the track realignment will be acquired at fair market value and in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Community, Socioeconomic Environment, and Subsistence

No significant adverse impacts on socioeconomic conditions will result from the project. Development of the project is consistent with, and will not adversely impact the community character of the area. No residential structures are within the project limits; therefore, no relocation impacts to residents will occur. The project will not affect the population or housing supply of the Nenana area, and there will be no disruptions in established neighborhoods or to community cohesion. There will be no adverse impacts to minority or low-income populations. The project may require relocation of one business that leases a parcel near the airport from the City. Impacts to subsistence activities will be negligible.

Vehicular access to the Nenana Airport will be maintained through two routes, and rail service to the Port of Nenana and other commercial and industrial businesses in the City will be maintained along the existing alignment. Because the airport already limits expansion of the City to the south, and the Tanana River limits expansion to the east, the proposed railroad corridor will have minimal impact on opportunities for community growth and development.

The project may create a minor short-term beneficial effect to the community through local employment and business revenue opportunities for local residents in the community during construction. It will also provide the potential for a long-term beneficial impact based on additional opportunities at the Nenana Airport due to improved air/rail transportation links.

Mitigation: If relocation is necessary, it will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Noise and Vibration

The project traverses a rural landscape where highway vehicles and railroad activity account for the majority of the existing noise. A noise and vibration analysis indicated that construction of the rail realignment will not cause significant adverse affects due to noise or vibration. By moving the mainline

track further away from the downtown area, future noise levels are expected to decrease for nearby residents, resulting in an overall beneficial noise impact.

Mitigation: During construction, the contractor will use equipment with mufflers and make certain that equipment is in good working order.

Utilities

The project will not impact the Golden Valley Electric Association 138-kV transmission line, but it will intersect a secondary transmission line located on the east side of the George Parks Highway. A new line will be built under or through the new embankment fill or new longer power poles will be installed to carry power over the embankment. During construction, efforts will be made to maintain power to the city by use of detour lines as the new line is spliced to the existing power poles. The project also may require relocation and/or replacement of other utilities. Further evaluation and field identification of utilities will be performed prior to construction. No significant impact is expected to occur.

Mitigation: If a short interruption of service is necessary during work on utility lines, it will be coordinated with the City of Nenana and utility companies to ensure that no vital services are interrupted and at a time of day that causes the least impact to residences.

Archeological and Historic Sites

Based on the results of a field survey and review of previously recorded information available at the time of the survey, no impact to cultural resources (including both archaeological and historic sites) is anticipated. The Alaska State Historic Preservation Officer (SHPO) concurred with the FTA's determination of no adverse effect to historic and prehistoric properties.

Mitigation: If previously unidentified cultural resources are found during construction, potentially harmful activities will be stopped. The SHPO (Judith Bittner, 907-269-8721) and local tribes will be notified.

Contaminated Sites

A limited investigation of contaminated sites conducted as part of the environmental review for this project did not identify any sites that would potentially affect the study area. During the site reconnaissance, no evidence of contamination was observed or reported within the study area.

Mitigation: The potential for encountering contaminated soil and groundwater will be considered during construction planning. In the event contamination is encountered during construction, it will be addressed in accordance with applicable state and federal regulations. BIA will be contacted if contamination is encountered adjacent to restricted lots (Native allotments or restricted townsite lands).

Visual

The new embankment and bridge over the highway will result in minor long-term effects on visual characteristics. The embankment will be most visible to people driving on the George Parks Highway who would view the new railroad bridge over the highway and its gently meandering approach to the south side of the existing Nenana River railroad bridge. It will not be visible from most areas in downtown Nenana, as existing vegetation and structures will fully or partially obstruct views.

Mitigation: After completion of the project, embankment slopes (except for the top several feet), dike slopes, and the staging/stockpile areas will be revegetated so that they blend in color and texture with adjacent vegetated areas. Techniques that encourage natural revegetation would be employed, except on the top several feet of the embankment slopes.

Construction

The project will create minor adverse impacts during construction, including temporary increases in noise, vibration, and dust; the potential for erosion; temporary disruption of utility service; visual impacts of material storage; road wear; and traffic delays. Other potential short-term impacts could include increased housing demand; economic benefit for the local economy; and increased local and regional employment and wage income. Soil erosion within the construction zones of the project area will be short-lived, with minimal impact. The access road to the airport and 9th Street could be temporarily closed during construction of the oversized culverts. To ensure adequate traffic mobility, both roads will not be closed at the same time. Delay may be necessary on the Parks Highway during construction of the new railroad bridge over the highway.

Mitigation: Traffic delays will be mitigated through development of traffic control plans and timing construction to minimize the disruption during peak seasons. Appropriate signage will be used to direct travelers to alternative routes. A SWPPP will be prepared and implemented as part of an NPDES General Permit for Storm Water Discharges from Construction Sites. BMPs will be employed throughout the construction to control soil erosion and sedimentation. Any fugitive dust emissions will be mitigated, if necessary, through application of water or other dust suppressants. ARRC will work with the City of Nenana, utility companies, and their clients that may be affected by utility disruptions to provide notice and determine amenable timing for utility disruptions to minimize impacts.

Cumulative Effects

No significant cumulative effects were identified. In addition to the small increase in water surface elevations for the 100-year flood associated with the project, further encroachment of the City of Nenana south of the currently developed area due to construction of city and private structures within the 100-year floodplain may also increase water surface elevations during flooding. Assuming these developments also adhere to stipulations in flood hazard permits from the City, there would be no significant cumulative effects on natural and beneficial floodplain values, and no significant increase in flood-related risks to human life.

The Bureau of Indian Affairs (BIA) proposes to improve approximately one mile of roadway on 9th and K Streets and create about ½-mile of new roadway from the end of K Street to Front Street, parallel to the railroad tracks. This project also includes construction and installation of erosion control structures along the Tanana River to prevent continued bank erosion along the eastern border of Nenana. The BIA road/bank stabilization project and the realignment project may affect one another with overlapping alignments.

Mitigation: ARRC and BIA will continue to coordinate their activities. If the design and/or construction phases of the two projects overlap, close coordination between ARRC and BIA may help minimize impacts associated with the overlapping alignments and associated costs. If the BIA project is constructed first, the railroad realignment project may require relocation of a portion of the newly constructed road and acquisition of additional land for that relocation.

Other Considerations

Recreation, Section 4(f) Resources, and Section 6(f) Resources

The project will have no impact on Section 4(f) or Section 6(f) resources, and minimal impact on recreational activities. It will not impact use of the Tanana or Nenana Rivers or any tributaries, or disrupt established snowmobile, dogsled, or all-terrain vehicle use. Ample, undisturbed areas for recreation will remain near the City. The project will pass near the northern end of the Nenana City Pond. The Alaska Department of Natural Resources indicated that extraction of additional material from the pond is encouraged by state biologists to improve the pond's usefulness for a sport fishery.

Environmental Justice

The project will not disproportionately or adversely impact low-income or minority residents. No adverse impacts on minority or low-income populations will result from the project.

Government-to-Government Coordination

FTA conducted government-to-government coordination with various federally recognized tribes and also contacted Native corporations for their input. No concerns were identified.

Public Involvement

Public outreach efforts included newspaper advertisements, mailings to businesses and residents, and flyers announcing the public scoping meeting (May 7, 2003); an interagency scoping meeting (May 8, 2003); a field visit with agency representatives; several other meetings and telephone conversations the Mayor of Nenana and the Nenana Native Council; and a public meeting and agency meeting (October 26, 2004) during the 30-day comment period on the EA, which ended on November 15, 2004. Meeting locations and times were chosen to maximize public involvement. No significant controversies or impacts relating to the project were identified. An addendum to the EA dated December 2004, which makes several corrections and addresses comments received during the public comment period to the EA, is attached to this document.

ENVIRONMENTAL FINDING

The Federal Transit Administration (FTA) finds under 23 CFR 771.121 that, with the mitigation measures identified, there are no significant impacts on the environment associated with the project. This Finding of No Significant Impact is based on the October 2004 EA and its supporting documents. FTA has independently evaluated these documents and has found that they accurately discuss the project's purpose and need, relevant environmental issues, impacts of the project, and appropriate mitigation measures. They provide sufficient evidence and analysis for determining that an environmental impact statement is not required.

Moreover, FTA has determined, based on the EA, that the project will have no effect on populations or habitat or species listed as threatened or endangered under the Endangered Species Act, or on habitat protected under the Magnuson-Stevens Fishery Conservation and Management Act, and has so notified appropriate resource agencies.

In addition, FTA has preliminary determined, in consultation with the Alaska SHPO, that this project complies with Section 106 of the National Historic Preservation Act. Early consultation with SHPO has indicated the project will have no adverse effect on cultural resources.

FTA has determined that the project complies with Section 4(f) of the U.S. Department of Transportation Act of 1966, as no Section 4(f) resources will be affected by the project.

The project is in compliance with Executive Order 11988, Floodplain Management. It minimizes the impact of floods to human safety, health, and welfare through installation of culverts with floodgates, use of flood-proof road crossings, adherence to the stipulations required under a Flood Hazard Permit from the City, and potential dike construction (if confirmed to be necessary during final design). There will be no significant impacts on natural and beneficial floodplain values, no significant increase in flood-related risks to human life, and no significant increase in flood-related risks associated with interruption of service or loss of vital transportation facilities.

The project is in compliance with Executive Order 11990, Protection of Wetlands. Since wetlands cannot be avoided, the project has been developed to minimize impact to wetlands. The project will require filling 22.7 acres of wetlands and an additional 4.7 acres if the optional siding is constructed.

FTA has determined that the project meets the requirements of the Clean Air Act, as amended in 1990. The project will not cause or contribute to violations of the National Ambient Air Quality Standards.

Finally, FTA has determined that the project complies with Executive Order 12898, (Environmental Justice) and the Department of Transportation Order on Environmental Justice.

This action complies with the National Environmental Policy Act; the Department of Transportation Act of 1966; the Endangered Species Act of 1973; the Magnuson-Stevens Fishery Conservation and Management Act; the National Historic Preservation Act of 1966; Executive Order 11988, Floodplain Management; Executive Order 11990, Protection of Wetlands, and Executive Order 12898, Environmental Justice.



R.F. Krochalis
Regional Administrator
Federal Transit Administration

December 14, 2004

Date

**NEPA Environmental Assessment
Nenana Rail Realignment Project
Nenana, Alaska
Railroad Mile 410.1 to Mile 413.3**

ADDENDUM – December 2004

This Addendum presents changes and corrections to the Environmental Assessment (EA) dated October 2004 for the Nenana Rail Realignment Project. The changes were either identified by ARRC or through agency and public comments on the EA during the public comment period. Each change or correction states the section, page, paragraph, and sentence in the EA that is being updated. In each case, words being added are underlined and words being deleted are denoted by ~~strikeout~~.

Section 1.0

Section 1-4, Page 1-5, Add new item to bulleted list, and a new sentence following the list.

- Federal Aviation Administration (FAA) consent for acquisition of City of Nenana land associated with the airport as noted on land documents

In addition, should the project be modified to include bank stabilization measures within the limits of ordinary high water of the Nenana or Tanana rivers, or if the floodplain of the Nenana River is used as a material source, an ADNR Fish Habitat Permit would be needed.

Section 2.0

Section 2.1, Page 2-2, 3rd full paragraph

To mitigate impacts on floodwater elevations along the upstream side of the embankment, a dike would be constructed at the upstream end of the airport runway (Figure 2) if hydraulic and hydrologic studies conducted during final design confirm that it is needed. The dimensions of the dike would be developed during final design and would vary with the topography. At its largest, the dike could be approximately 10 feet high, 10 to 12 feet wide across the top, and 65 feet wide across the base (side slopes of 2.5H:1V) (URS 2004). The location of the dike, which would not interfere with airport clear zones, may be adjusted slightly during final design.

Figure 3 (*Clarification only - no change in text*)

The Elevated Rail Section and Optional Spur cross sectional view shows the embankment height as 21 feet. As stated in the text, the embankment height climbs to a maximum height of approximately 25.5 at the Parks Highway bridge, then maintains a height of approximately 25 feet until it meets the existing rail loop at the east end of the project.

Section 2.1.2, Page 2-7, Paragraph 1, sentence 4

Fill material would be transported with work trains from an existing ARRC material site located approximately 25 miles south of the project (railroad milepost 388) and/or purchased from local Native Corporation material source sites or other commercial sources as needed. As recommended by ADF&G,

use of material from the Nenana City Pond would also be considered, since additional material extraction to expand the perimeter of or deepen the pond would improve the pond's usefulness.

Section 3.0

Section 3.1.3, Page 3-4, Paragraph 3

The Tanana River dominates the flood history of the Nenana area. Both the Nenana River and the Tanana River are glacial-fed waterways and are most likely to flood because of excessive summer rainfall. Major flood events in the community are generally assumed to be related to the Tanana River, not the Nenana River. At the confluence of the two rivers, however, ~~the Nenana~~ each river creates a backwater effect on the ~~Tanana~~ other, which means that the ~~Tanana River~~ water surface elevations immediately upstream from the Nenana River ~~is~~ are affected by the discharge in both rivers. Due to the ground elevations through Nenana, the rise in the water levels of the Tanana River is not as evident as the rise in the water levels in the Nenana River. Therefore, the residents of Nenana perceive the majority of the flooding to be coming from the Nenana River, when there is actually a backwater on the Nenana River caused by Tanana River flooding. Consequently, when high discharge events in the Nenana and Tanana rivers coincide, they are likely to intensify flood conditions. A summary of past major flood events on the Tanana River, including flood magnitude and frequency, ~~are~~ is presented in the Preliminary Hydrologic Assessment (URS 2004).

Section 3.1.3, Page 3-6, 5th full paragraph

Based on the preliminary hydrologic evaluation, without mitigation, such an increase might cause water to flow over the George Parks Highway and would result in a substantial change to the flood risks along at least a portion of the upstream side of the embankment. If necessary to mitigate the impact of the Proposed Action on floodwater elevations along the upstream side of the embankment during a 100-year flood, a dike would be constructed at the upstream end of the airport runway (Figure 2). The dike would only be constructed if a more detailed hydraulic and hydrologic analysis conducted during final design confirms that it is needed.

Section 3.1.3, Page 3-7, 4th full paragraph

This project minimizes the impact of floods to human safety, health, and welfare through ~~construction of the dike,~~ installation of culverts with floodgates, use of flood-proof road crossings, ~~and~~ adherence to the stipulations required under the Flood Hazard Permit from the City, and if confirmed to be needed during final design, construction of a dike.

Section 3.2.1, Page 3-11, 1st full paragraph, sentences 5 and 6

As much woody vegetation as possible between the Nenana River and the new track for access to the Nenana waterfront would remain undisturbed. Native vegetation would be reestablished on the embankment and dike slopes to stabilize the slopes prior to completing the project. The staging/stockpile areas (approximately 15 acres) would ~~eventually~~ naturally revegetate with common native upland species that invade disturbed areas, such as birch, alder, and willow. Techniques that encourage natural revegetation would be employed, except on the top several feet of the embankment slopes. These techniques include stockpiling overburden and unsuitable material for use during reclamation, and spreading of reserved overburden onto the dike and toe of the track embankment to establish woody vegetative cover including alder, willow, balsam poplar, and other typical species in the area. Annual ryegrass, a nonpersistent exotic species effective for short-term erosion control, may be used while native species are establishing. Native seed mixes used would be weed-free.

Section 3.2.3.1, Page 3-14, Paragraph 2

The Nenana City Pond, located at the southeast corner of the George Parks Highway and 12th Street intersection, also supports fish. The Nenana City Pond was created when material was removed from an excavated pit during construction of the George Parks Highway. The Alaska Department of Fish and Game (ADF&G) stocks the pond annually with rainbow trout (ADF&G 2001). Although the pond freezes sufficiently deep to kill introduced trout, a resident pike population appears to successfully overwinter in the pond (URS 2003b). Additional material extraction at the Nenana City Pond to expand the perimeter of or deepen the pond is encouraged by ADF&G biologists as a measure to improve the pond's usefulness for a sport fishery.

Section 3.2.3.1, Page 3-15, Table 3-2, footnote 1

¹Alaska Department of Fish and Game (ADF&G) 1996-2004

Section 3.3.1, Page 3-20, Paragraph 7

Impacts and Mitigation: Under the Proposed Action, land transactions (property acquisition and/or land trade) would be required between ARRC and the City of Nenana. Much of the proposed alignment would pass through City-owned land surrounding the Nenana Airport. FAA consent may be needed for ARRC to acquire that land for the project.

Section 3.3.2.2, Page 3-26, Paragraph 2, sentences 3 and 4

~~No businesses would be displaced by the proposed alternative. A bulk propane storage facility near the airport on a lot leased from the City of Nenana may need to be relocated.~~ If relocation of any businesses were necessary, it would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Section 3.5.2, Page 3-44, 1st full paragraph, last sentence

~~Because the proposed ARRC dike would divert water away from the south side of the railroad embankment, and the railroad embankment would contain floodgates and other measures to divert flow, there would be no an increase in water surface elevations that would affect new structures built south of the currently developed area of the City.~~ There would be an increase in the water surface elevation of the 100-year flood of approximately 0.3 feet from the project while the floodgates are closed. If the floodgates on the embankment were kept closed during a flood event, the dike and the embankment would block most Tanana River flooding south of the embankment.

Section 3.8, Page 3-48, Bullet labeled "Water Resources/Hydrology"

To mitigate the impact of a new rail embankment on the floodwater elevation during a 100-year flood, ~~a dike would be constructed at the upstream end of the airport runway (Figure 2), and floodgates would be installed on culverts through the embankment to manage floodwater, flood-proof road crossings would be used, and stipulations required under the Flood Hazard Permit from the City would be followed.~~ Also, if hydraulic and hydrologic studies conducted during final design confirm that it is needed, a dike would be constructed at the upstream end of the airport runway to minimize impacts on floodwater elevations along the upstream side of the embankment.

Section 3.8, Page 3-48, Bullet labeled "Wetlands"

During construction, appropriate BMPs for preventing sedimentation of adjoining wetlands would be employed, and on-site environmental compliance monitoring by a qualified environmental inspector would be performed as necessary to ensure that the embankment is maintained within the fill limits and pollution sources are prevented from entering the surrounding wetlands.

Section 3.8, Page 3-48, Bullet labeled “Vegetation/Habitat”

Disturbance to native vegetation outside of the embankment footprint would be minimized by limiting earth-moving equipment and fill-hauling trucks to areas within the footprint of the embankment or local roads whenever possible. ~~Vegetation would be reestablished~~ Techniques that encourage natural revegetation would be employed on the embankment and dike slopes.

Section 3.8, Page 3-48, Bullet labeled “Visual”

After completion of the project, the embankments (with the exception of the top several feet), dike, and staging/stockpile areas would be revegetated so that they to blend in color and texture with adjacent vegetated areas. Techniques that encourage natural revegetation would be employed in these areas.

Section 4.0

Page 4-1, State Agencies, bullets 2 and 3

- ~~Alaska Department of Fish and Game, Habitat and Restoration Division (now part of Alaska Department of Natural Resources, Office of Habitat Management and Permitting), Anchorage Fairbanks, AK~~
- Alaska Department of Fish and Game, Subsistence Division, ~~Anchorage~~ Fairbanks, AK