FHWA Office of Federal Lands Highway

Copper River Access Study

Planning and Design: Final Report

Mt. Drum viewed from the Copper

Prepared for:
Ahtna, Incorporated and the National Park Service – Wrangell-St. Elias National Park and Preserve

Prepared by:
Federal Highway Administration
Western Federal Lands Highway Division

October 2023

Table of Contents

U.S. Department of Transportation

Federal Highway Administration

Project Information

The Copper River Access Study is a collaborative project between Ahtna, Inc., the National Park Service, the Bureau of Land Management, the Alaska Department of Transportation and Public Facilities, and the Federal Highway Administration (FHWA) Western Federal Lands. The project was funded through the Federal Lands Access Program (Project ID: AK GULKANA 2019(1)) and selected in the 2021 Call for Projects. The Federal Lands Access Program was established in 23 U.S.C. 204 to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators.

Project Team

- Cole Grisham, AICP | Transportation Systems Planner | FHWA Western Federal Lands
- Bruce Cain | Land Services Manager | Ahtna, Incorporated
- Joshua Scott | Chief of Lands and Planning | Wrangell-St. Elias National Park and Preserve
- Morgan Sobek | Park Planner / Compliance Coordinator | Wrangell-St. Elias National Park and Preserve

Technical Support

Additional technical support provided by the following staff:

- Jamie Lemon, AICP | Transportation Planner | FHWA Western Federal Lands
- Y-Thao Truong, PE | Highway Designer | FHWA Western Federal Lands
- Rhonda Williams | Realty Specialist, Glennallen Field Office | Bureau of Land Management
- Judy Chapman | Deputy Director of Planning | Alaska Department of Transportation and Public Facilities

Ahtna

NATIONAL PARK SERVICE

TRANSPORTATION & PUBLIC FACILITIES • STATE OF ALASKA •

U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

U.S. Department of Transportation

Federal Highway Administration

Introduction

Project Background

There are over 200 public easements crossing Ahtna, Inc. private lands in accordance with the Alaska Native Claims Settlement Act (ANCSA) Section 17(b) to provide public access to federal lands. These easements are managed by federal land management agencies.

In the area near Glennallen and Gulkana, Alaska, it has not been clear what the best route should be to allow public access to the Copper River between its connections with the Tazlina and Gulkana Rivers. Additionally, once users reach the Copper River, it's not clear where to launch their boats, connect with federal lands trails on the other side, or return to the proper 17(b) easement. This project therefore evaluates where to establish a permanent public easement across Ahtna land to the Copper River, what infrastructure is needed to support access, and what long term maintenance costs and responsibilities would be.

Study Area

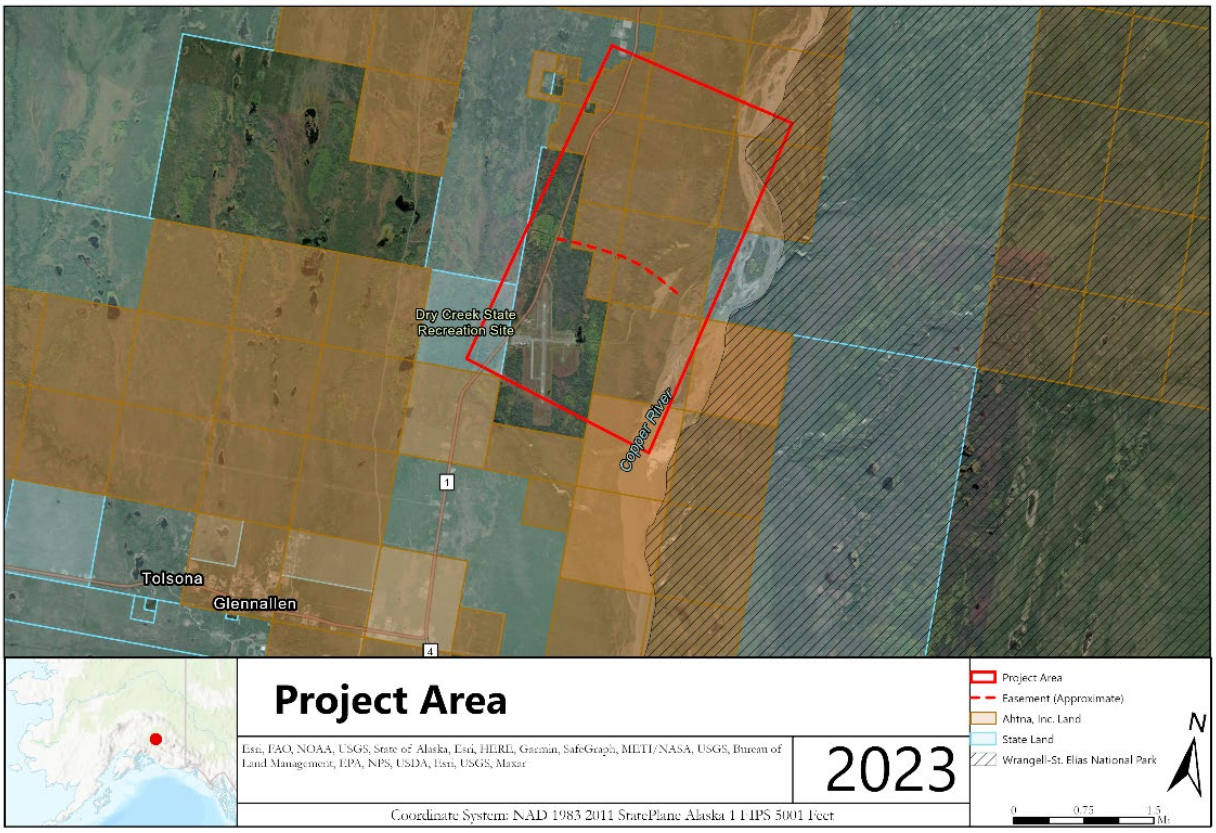


Figure 1. Study area, land ownership, and existing easement.

Study Goals

The study's goals are three-part, as shown below:

1. Analyze three alternative unpaved routes, one of which will be chosen for public access across Ahtna, Inc. lands to access the Copper River
2. Evaluate feasibility of constructing and maintaining a one-acre parking area and Copper River boat launch
3. Identify a preferred public access route, including estimated construction and maintenance costs, easement needs, and land ownership patterns, cultural and natural resource constraints, recreational and subsistence opportunities

Structure of Report

The Final Report is structured as follows. First, we summarize the study approach used by the project team. Second, we summarize the study area existing conditions. Third, we synthesize stakeholder and public feedback received throughout the study development process and how it informed final recommendations. Third, we outline the project findings and recommendations, including the proposed roadway route, parking area design, and boat launch design recommendations along with associated costs. Lastly, we identify additional considerations and future work collected during the study development process.

The Final Report serves as the synthesis of all study development work completed and final recommendations. For more information on any aspect of the study development process or decision making, see the relevant appendices included at the end of this report.

Approach

Overview

The study was developed in four phases over a 12 month period between July 2022 and July 2023. The phases include scope development, documenting existing conditions, developing conceptual designs, and preparing the Final Report. The project team also conducted outreach, engagement, and Tribal consultation parallel to the study phases.

Study Scope Development

The study began with a stakeholder site visit to understand the project issues, context, and scope of work.[1] In July 2022, FHWA Western Federal Lands, Ahtna, Inc., National Park Service, Bureau of Land Management, and Alaska Department of Transportation and Public Facilities, met in Glenallen for a daylong examination of the project area. Figure 2 below shows the sites examined, including nearby facilities toured as examples of what a future parking and boat launch facility might look like.

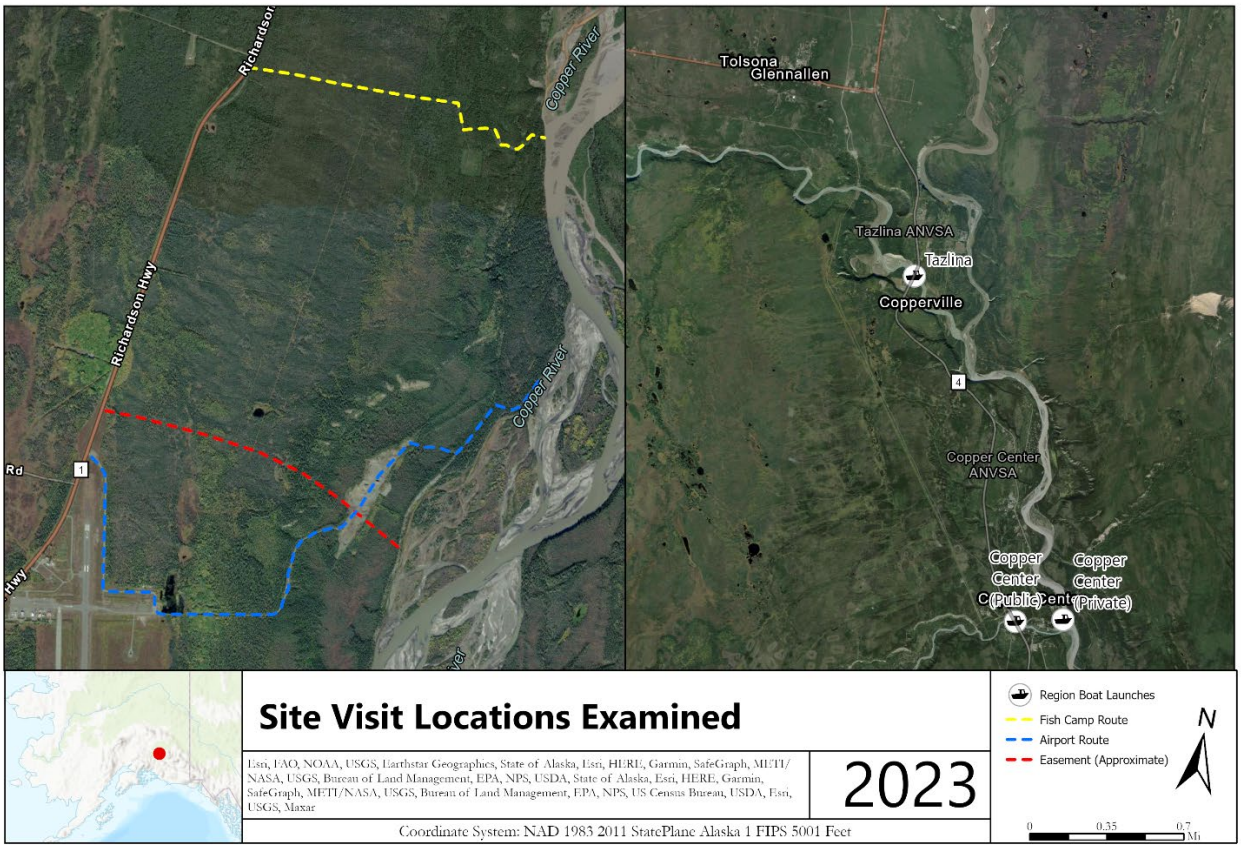


Figure 2. Site visit locations and features.

[1] For more details on the site visit, see Appendix A.

Following the site visit, the project team developed study goals, scope, schedule, and anticipated deliverables for completing the study. This also included contacting nearby Tribal governments to introduce the project and ask how each would like to be engaged and ensure their government's interests are honored through the study.[2]

Existing Conditions

The project team's first task was to document the current conditions related to access route planning in the project area. The existing conditions included summarizing:

- Land ownership, including Ahtna, Inc., Alaska DOT&PF, Alaska Department of Natural Resources, BLM, NPS, and private lands and easements
- Cultural and natural resource considerations
- Trail and road connections within Wrangell-St. Elias National Park relevant to the project
- ANCSA 17(b) considerations, including route, easement designation process, donation and release process, and documents needed

The existing conditions work provides a basic understanding of the land use, transportation, legal, and policy considerations informing the study. This task culminated in remaining gaps for the study to address as well as possible criteria to evaluate later design concepts (shown in Table 1 below).

Table 1. Evaluation criteria developed in existing conditions phase.

Alignment	Parking	Boat Launch
• Alignment with intent of original easement • Long term usability of alignment • Materials • Cost to construct and maintain • Access to adjoining NPS trail easements	• Up to one acre site • Including capacity to expand to one acre total • At point of launch activity (see 17b requirements) • Long term usability and resilience • Materials • Management • Prevent unauthorized use, such as dumping	• Direct access to Copper River • Maintenance cost • Long-term use • Resilience • Silting • Materials • Management • Prevent unauthorized use, such as dumping

The existing conditions work was shared with Tribal governments that were interested, distributed to interested stakeholders, and shared publicly on the project's website. No comments were sent to the project team.

[2] For more details on Tribal consultation, see Appendix B.

The existing conditions phase is summarized in the next section and available in complete detail as Appendix A.

Conceptual Designs

Under the conceptual designs task, the project team evaluated possible roadway routes, roadway designs and cost estimates, parking designs and cost estimates, and boat launch designs and cost estimates. Route, design, and cost considerations were then analyzed against evaluations criteria developed in the existing conditions phase.

The conceptual designs work was shared with interested Tribal governments based on each government's preferred engagement method identified in the initial Tribal consultation outreach. Comments received were used to refine the conceptual design work.

The conceptual designs phase is summarized in the Findings and Recommendations section and available in complete detail as Appendix C.

Final Report Development

The final task was to develop study recommendations and a final report. This involved sharing the proposed trail route, parking and boat launch designs, and cost estimates with the general public and interested stakeholders for discussion and revision through an in-person open house in Glennallen in July 2023 and making open house materials available online for a four week public comment period. Comments received informed the final report development.[3]

[3] For more details on comments received, see Appendix B.

Existing Conditions

Overview

The existing conditions for the Copper River Access Study focus on the planning context, ANCSA regulations, current access and easements, and design considerations for a roadway, parking area, and boat launch. This section summarizes the findings for each of these elements.[4]

Planning Context

The project team reviewed existing planning documents that inform transportation developments in the study area. The intent was to identify any planned improvements in the area, land use and transportation constraints, and other policy and strategy considerations that might influence the study's findings and recommendations. The plans reviewed include:

- The Alaska Federal Lands Collaborative Long Range Transportation Plan (CLRTP)
- The NPS Wrangell-St. Elias National Park and Preserve General Management Plan
- The NPS Wrangell-St. Elias National Park and Preserve Foundation Statement
- The NPS Wrangell-St. Elias National Park and Preserve State of the Parks Report
- Alaska DOT&PF Interior Alaska Transportation Plan
- BLM East Alaska Resource Management Plan

Planning Context Findings

The planning documents reviewed suggest broad considerations for this study's purposes. The CLRTP's goals of system management, user experience, and mobility are all represented by developing a trail and boat launch facility that meets user needs. Other goals of environmental and climate change considerations should be incorporated into which alignment is chosen, how the final alignment impacts the natural environment, and how resilient the constructed facilities would be to climate change effects long term.

NPS planning documents suggest two primary themes for consideration. The first is that of tourism and visitor use management. Any recommendations from this study should address how any proposed trail and facilities would impact adjoining NPS access, visitation, and tourism. Second is protection of natural resources. It is possible that developing a new trail and boat launch facility would lead to increased access to adjoining natural areas by river users. The associated impact to the natural environment, including plants and animals, should be addressed by any final design.

The Alaska DOT&PF plan suggests three themes for consideration. First is the role of tourism in the area, including how this plan responds to and/or induces tourism in the

[4] For more details on each element of the existing conditions, see Appendix A.

area. The second is importance of mining and resource extraction to the local and regional economy. There is an active gravel material source within the project area, which the study should address how any facility might impact future operations. Lastly is the future of the Gulkana Airport. The Airport land forms the southern boundary of the study area and may be expanded in the future, which limits where any proposed alignment could be developed. That said, a public access road already adjoins the Airport's northern property line with no known plans to alter or restrict access, even in the event of future expansion.

Land Ownership and Public Access

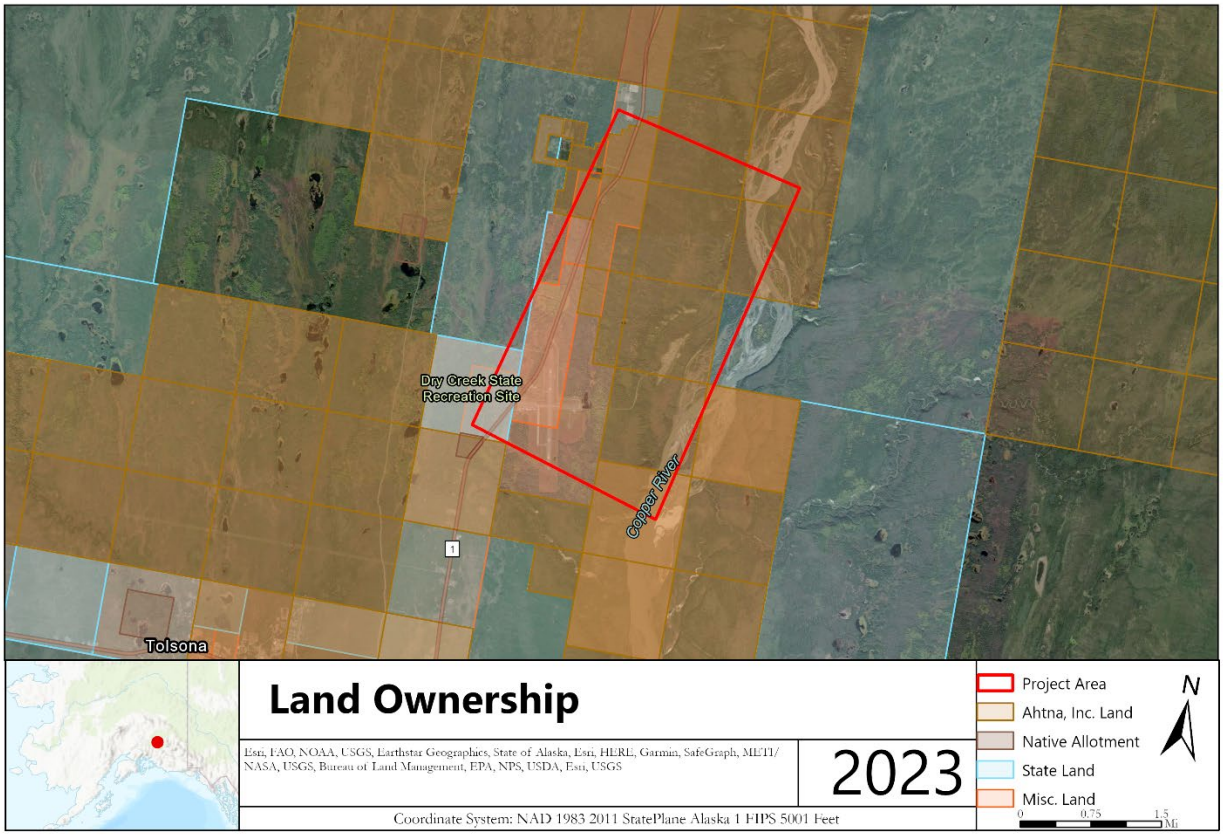


Figure 3. Land ownership in relation to the study area.

The project team collected land use data or the study area to understand what lands any proposed access route might impact. As Figure 3 shows, nearly all land in the study area are Ahtna, Inc. owned with a small portion of state lands along the Copper River. Additionally, the Gulkana Airport is shown as "Miscellaneous Land," which is an artifact of the ANCSA land selection process, even though it is state land as well.

Alaskan Native Claims Settlement Act (ANCSA)

Central to the study is the role, guidance, and parameters of the Alaska Native Claims Settlement Act (ANCSA) of 1974. The public access easement(s) within the project area are governed by Section 17(b) of ANCSA (Public Law 92-203-85 Statute 688).[5] ANCSA settles all aboriginal land claims by Alaskan Native peoples with the Federal government in Alaska and established the current land ownership and management framework that exists between Alaskan Natives and their partners. While the content of ANCSA is broad, for our purposes, we need only examine the aspects of ANCSA that inform land use and public access easements.

ANCSA (PL 93-203), Section 17(b). The original legislative act is the Alaska Native Claims Settlement Act of 1971. Section 17(b) of ANCSA, Joint Federal-State Land Use Planning Commission for Alaska, states that:

> …the Planning Commission shall identify public easements across lands selected by Village Corporations and the Regional Corporations… which are reasonably necessary to guarantee international treaty obligations, a full right of public use and access for recreation, hunting, transportation, utilities, docks, and other such public uses… (ANCSA 1971).

43 U.S. Code, Section 1616. ANCSA 17(b) is codified in US law through 43 U.S. Code, Section 1616. This law mirrors the language in ANCSA 17(b).

43 CFR Part 2650. Regulation of public access easements is governed by 43 CFR Part 2650, Alaska Native Selections. Section 2650.4-7 outlines the scope of public access easements along with the process steps for revising easements.

For the purposes of this study, the steps for modifying the existing easement to reflect any final recommendations are as follows:[6]

1. Alaska Native corporation prioritizes selected lands for conveyance (i.e., modification of existing easement)
2. Native corporation communicates easement modification to BLM
3. BLM reviews the lands for public easement needs and requests comments from the Alaska Native corporations, the State of Alaska, and interested parties
4. The information is analyzed using the 17(b) easement criteria and the results are documented
5. The BLM includes the approved 17(b) easements in an appealable decision and the lands are later conveyed to the Alaska Native corporation with the easements reserved to the United States

[5] *Public Law 92-203.* (18 Dec. 1971). U.S. Government Publishing Office. *Discover U.S. government information*. GovInfo. https://www.govinfo.gov/content/pkg/STATUTE-85/pdf/STATUTE-85-Pg688.pdf#page=1. Accessed 24 Mar. 2022.

[6] See Appendix A for the complete ANCSA regulations, section by section, as well as BLM easement guidance.

The above steps assume that the decision to modify the easement begins with the Native corporation and ends with BLM confirming and documenting the land conveyance. For this study, this would look like:

1. A formal action by the Ahtna, Inc. Board to modify the existing easement to align with the study's recommended route, and
2. Processing of Ahtna, Inc.'s modification action by the BLM Glennallen Field Office to include a request for public comment and recording the final easement conveyance

Existing Access Routes and Easements

The current ANCSA 17(b) easement is shown in Figure 4 below.[7] The easement is 23 C5 D9 and 23a C5 D9, per BLM and US Geological Survey land records, which connects to easement 4a C5 D9 on the east bank of the Copper River. Figure 5 below shows the historical easement location and identification number from BLM and USGS records along with its intended connection to NPS lands on the east bank of the Copper River.

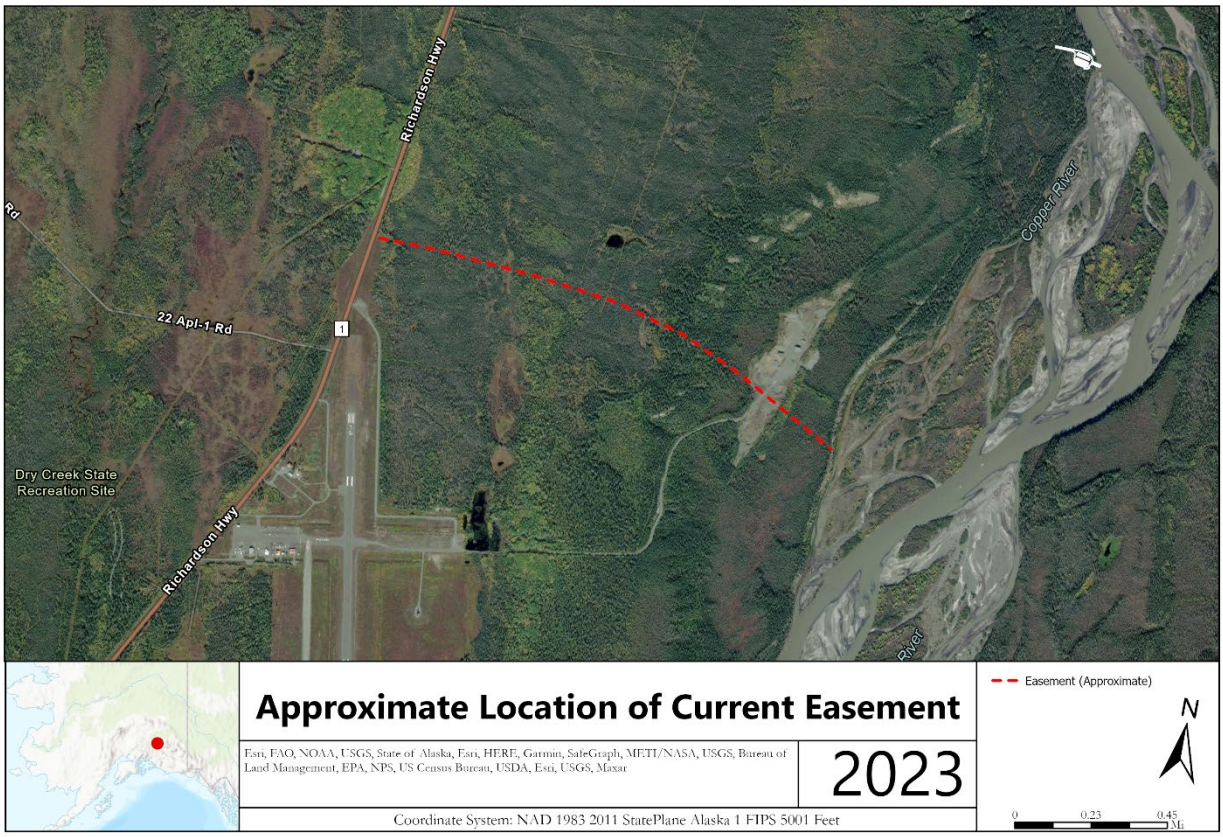


Figure 4. Map of approximate current ANCSA 17(b) easement.

[7] The location of the current easement is approximate and may vary north or south by about 100'. Users should consult the BLM ANCSA 17(b) database for exact location: https://sdms.ak.blm.gov/perl-bin/scanned_images/easement/get_esmt.pl

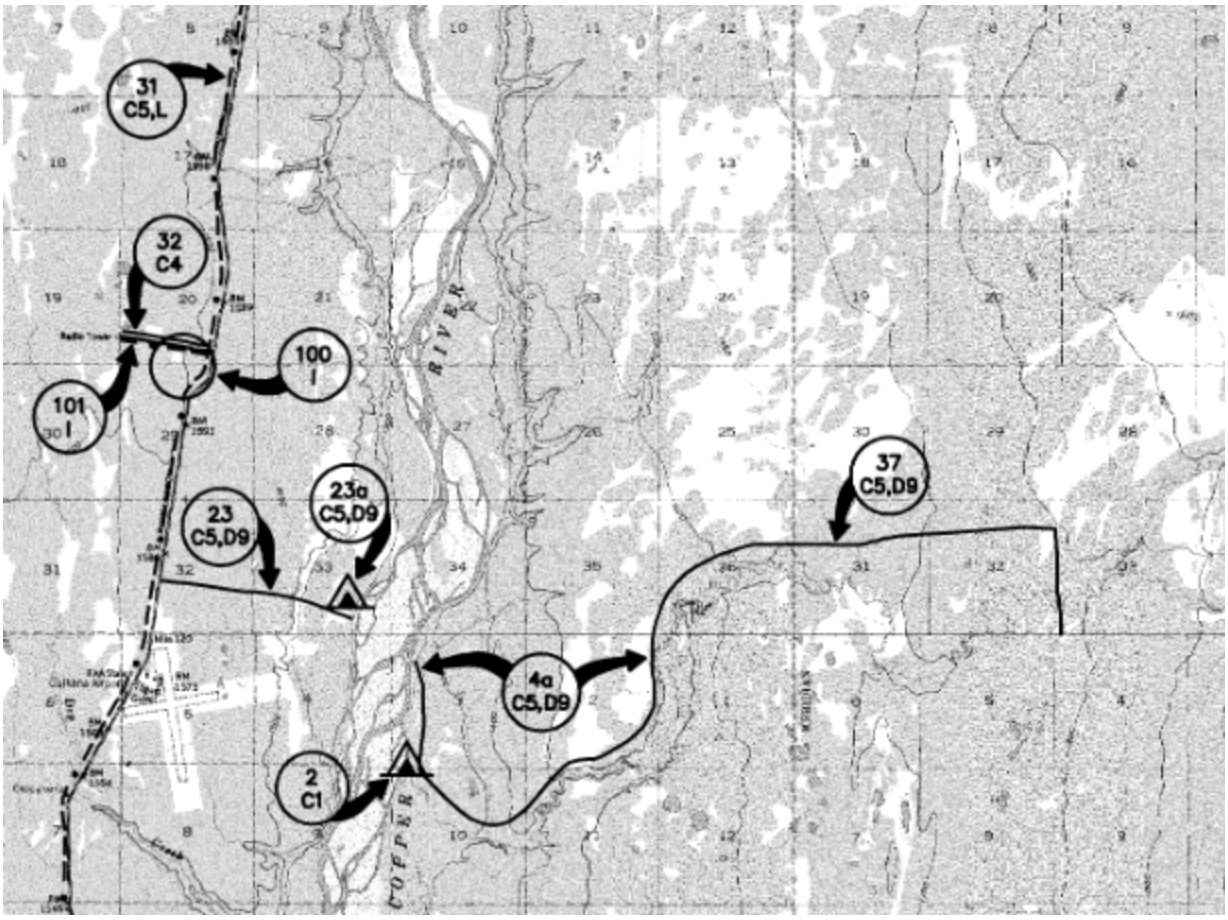


Figure 5. Map of current ANCSA 17(b) easement from BLM and USGS historical records. Easement 23 C5 D9 is shown center left to the north of the Gulkana Airport.[8]

The easements shown, including 23 C5 D9 and 23a C5 D9 were established in 1979 through BLM Interim Conveyance 209, which states that the cited easements are reserved by the BLM for specific use as outlined in the conveyance document.[9] 23 C5 D9 is specifically reserved as "an easement for an existing access trail fifty (50) feet in width from the Richardson Highway… easterly to site easement 23a C5, D9 on the Copper River." 23a C5 D9 is reserved as "a one (1) acre site easement upland of the ordinary high water mark…on the right bank of the Copper River." [10]

The condition of either end of the existing easements (23 C5 D9 and 23a C5 D9) are shown in Figure 6. Figure 7 shows the routes examined during the site visit as well as through the existing conditions and conceptual designs phases.

[8] USGS. 2016. *Gulkana (A-3) Quadrangle, Alaska.* Retrieved October 2023 from: https://sdms.ak.blm.gov/scanned_images_temp/GULA3-0_10252023123602.pdf#toolbar=1&navpanes=1&pagemode=thumbs
[9] See Appendix D. BLM. 1979. *Interim Conveyance 209.* Retrieved October 2023 from: https://sdms.ak.blm.gov/scanned_images_temp/IC_209_10252023125655.pdf#toolbar=1&navpanes=1&pagemode=thumbs
[10] *Ibid*. Page 4.

Figure 6. Images of approximate current ANCSA 17(b) easement, shown in red dashed line. The left image shows the easement from the Richardson Highway. The right image shows the easement terminating in an active material site.

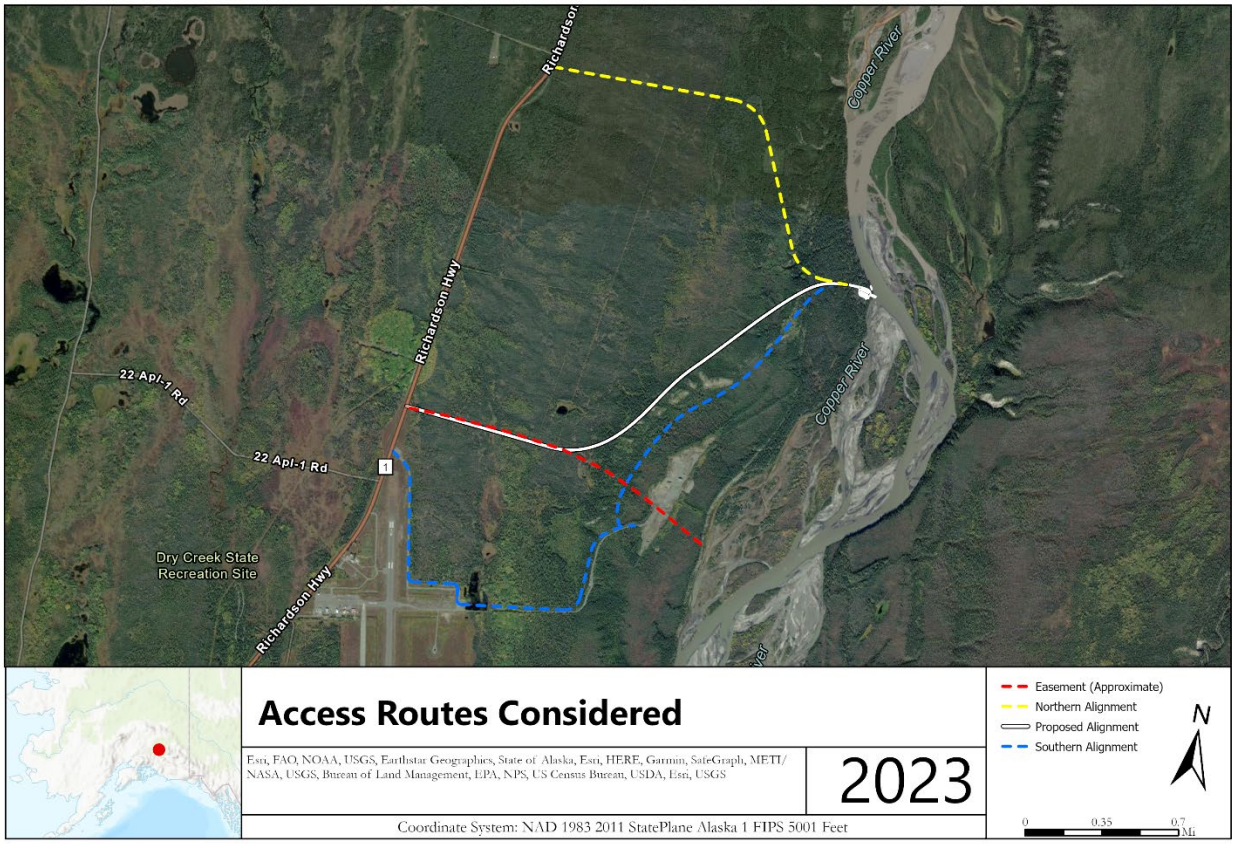


Figure 7. Three routes considered for future easement and access roadway.

Site Visit Land Use Observations

During the initial site visit and through existing conditions work, the project team identified the following considerations and constraints.

- **Gulkana Airport Considerations**. The airport at the southern end of the project area is currently being studied for northward expansion, which could impact any public access along the airport's boundaries.
- **Existing Easement Considerations.** The current easement is undeveloped and terminates near or past a cliff adjoining an active material site.
- **Fish Camp Access Route.** The northern access route examined during the site visit leads to an active fish camp site used by Ahtna shareholders.
- **Cultural Resources.** There are known Ahtna cultural resources near the project area that must be avoided. The project team worked with Ahtna, Inc., and NPS staff to identify and mitigate any interaction with cultural resources. The project team's work was further validated by Ahtna shareholders who attended the in person open house.
- **Boat Launch Design Considerations**. There are no public boat launches on the Copper River in the vicinity of Glennallen. There are launches on tributaries of the Copper River, but not directly accessing it. Similarly, any design for a boat launch must consider the water current, silting, risk of the channel changing, and how users interact with adjoining Ahtna lands.

Additionally, due to the risk of the river channel shifting in the future and direction and intensity of river flow to any launching or recovering boat users, the project team narrowed the initial parking and boat launch options to the sites shown in Figure 8 below. The secondary launch location was considered due to the relatively short distance from the southern/airport access route but was ultimately not selected due to the risk of channel closure and shifting in the future.

Existing Conditions Gaps

The existing conditions work showed that there were three possible routes available for a modified easement, each with its own challenges and opportunities. The existing conditions work did not clarify where the parking and boat launch area would be, but the project team was able to narrow the possible sites for analysis in the conceptual design phase.

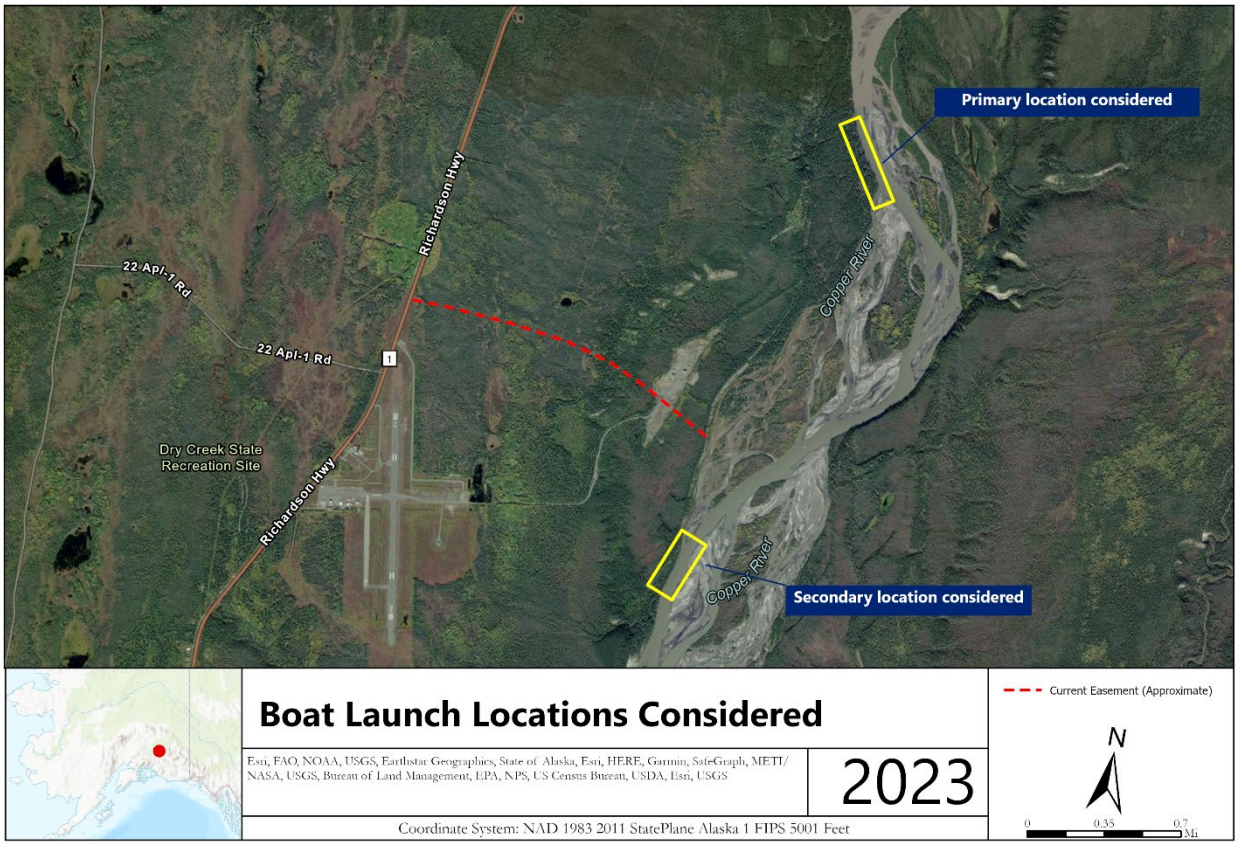


Figure 8. Parking and boat launch areas considered.

Stakeholder and Public Perspectives

Stakeholder and public perspectives on the study were gathered throughout the project as outlined in the Approach section of this report. This section summarizes the activities conducted, what the project team heard, and how it informed the study's recommendations. The project team included the themes shown in Table 3 below based on feedback received and the project team response. For complete comments received, see Appendix B. Engagement activities for this study were organized around key project milestones and consisted of:

- A stakeholder site visit before starting the study,
- Tribal consultation and presentation along with sharing study materials with stakeholders, and
- An in person open house supported by an online public comment period

Figure 9. Attendees at in person project open house, July 10th, 2023.

Stakeholder Site Visit

The initial stakeholder site visit in July 2022 included staff from Ahtna, Inc., NPS, BLM, AKDOT&PF, and FHWA. The site visit was intended to be a small group focused on clarifying the project purpose, goals, scope, and considerations. The key themes of the site visit are shown in Table 3 below.

Table 3. Stakeholder site visit themes and responses.

Theme	Response
Any new trail easement should reflect the original intent of the existing easement.	The original intent of easements 23 C5 D9 and 23a C5 D9 appear to be for accessing NPS lands on the east bank of the Copper River. This intent is confirmed by Ahtna, Inc., NPS, and BLM staff familiar with the area.

Any parking area facilities should reflect the original easement intent and support direct access to the Copper River.	The parking area falls under the intent of easement 23a C5 D9, which is an up to one acre site easement in support of trail easement 23 C5 D9.
A boat launch should allow for safe, long term, direct access to the Copper River for the public.	The project team examined multiple existing boat launches in the area for strengths and weakness of different designs as well as different site locations to improve safe access and mitigate any long term use risks.
Any improvements to the current easement and future facilities should protect unauthorized access and trespassing on adjacent Ahtna, Inc. lands	The project team included Ahtna, Inc. staff that guided any easement and siting decisions for this purposes, as well as validating any project concepts with Ahtna, Inc. leadership and shareholders.

Tribal Consultation

Tribal consultation was conducted at three milestones throughout the study. Initial consultation included a letter to each Native Village Tribal government outlining the study and asking how each would like to engage, be engaged, and have their interests honored through the study. The Native Villages contacted include:

- Native Village of Tazlina
- Gulkana Village Council
- Native Village of Gakona
- Native Village of Kluti-Kaah[11]

The project team followed up with a direct phone call and conversation with each Tribal Administrator to discuss each element. Tribal Administrator responses and preferences were documented in the Engagement Strategy and referenced for each subsequent engagement milestone.

The second milestone was following the completion of the existing conditions and draft conceptual designs and cost estimates. Ahtna, Inc., staff presented at each Tribal government and Native Village Corporation to outline the project status, describe the conceptual design considerations, and learn from each Tribal government how the study aligned or contrasted with their specific interests.

Lastly, each Tribal government was invited to participate in the in person open house and online public comment as well as offered further direct discussion and consultation, if so desired. A

[11] The Native Village of Kluti-Kaah was not included in the initial Tribal consultation, appearing to be too far from the study area. This was corrected later in the study development through direct engagement with the Tribal Administrator of the Native Village of Kluti-Kaah.

number of Ahtna shareholders participated in the open house and provided valuable feedback. No Tribal government sought further direct discussions.

Table 4. Tribal consultation themes and responses.

Theme	Response
Tribal governments wished to engage and be engaged differently from one another throughout the project.	The project team documented the preferred engagement approach for each government in the Engagement Strategy and structured further engagement with each accordingly.
The northern and southern routes are not preferred by Ahtna, Inc. leadership and Tribal governments.	Specific concerns about both routes were documented by the project team and shared with the public and shareholders during public engagement efforts. Final recommendations favored the middle route preferred by Ahtna, Inc. and Tribal governments.
Why is NPS involved if the easement is outside the park boundary?	This comment reflects a general confusion amongst Tribal and non-Tribal individuals on how the 17b easements work and their intent. The project team addresses this question in each meeting with Ahtna, Inc. and Tribal governments by describing the 17b process and intent. The project team also incorporated 17b intent in the public engagement workshop.

Open House and Online Public Comment

Overlapping with the final Tribal consultation milestone, the project team held an open house on July 10th, 2023, at the Copper River School District Board Room. The open house was from 12PM-7PM and consisted of large maps and posters of the study area, context, conceptual designs, cost estimates, and feedback received to that point. The open house also included periodic presentations on the key elements of the study and open house posters. The feedback themes are summarized in Table 5 below.

Table 5. Open house and online public comment themes and responses.

Theme	Response
What is the project's purpose and need?	The purpose of the project is to clarify the existing ANCSA 17(b) alignment across Ahtna, Inc., lands that connects the Richardson Highway to the Copper River north of Glennallen.

	By doing so, Ahtna, Inc., and its partners have the opportunity to provide modern facilities for the public to access and use the Copper River, access NPS on the east bank of the river, and clear guidance on where the public can and cannot cross Ahtna, Inc., lands.
Why did the project team select the alignment proposed?	The middle alignment proposed (see Findings and Recommendations section of this report) was chosen after balancing the strengths and weakness of all alignments and discussions with Ahtna, Inc., oversight boards and area Native Villages. While Appendix C provides complete analysis, the primary benefits for the middle alignment are: • Aligns most closely with existing easement • Ensures separation of public use from native and private uses • Avoids impacts or access to area cultural resources • Presents fewest risks of adjoining land use conflicts, such as airport expansion
How are Ahtna, Inc., lands, and Ahtna cultural resources to be protected?	Working with Ahtna, Inc., staff, Tribal governments in the area, NPS staff, and engaging with Ahtna shareholders, the middle alignment avoids known cultural resources better than the other alignments examined. Ahtna shareholders did identify the area near the middle alignment as having possible subsistence uses for shareholders. This would likely need to be further investigated and addressed in the NEPA portion of any future preliminary engineering phase.
How will the boat launch influence upstream and downstream uses?	The issues in this theme were primarily how a new boat launch might influence (1) parking and demand at other launches and (2) non-motorized users getting out of the water downstream after launching at the new facility.

	It is not clear how a new facility would impact demand at other launches. It is possible that a new facility might generate new demand overall, draw users from other boat launches and smooth demand at each, or both. Exit options for non-motorized users downstream was not considered very well in the study but could be a post-study implementation activity. Following the study, Ahtna, Inc., and it partners could examine public and private lands downstream from the new launch facility that could serve as exit points for non-motorized river users (i.e., float users). Open house attendees said that float users do not need fully-developed boat launch sites for entry and exit from the river, but instead simple pull outs to grab their gear and leave.
What activities will be allowed or not allowed in the new parking and boat launch facility?	The facility is designed for day-use access to the river. This includes parking for vehicles and trailers, picnic areas, bathrooms, and waste receptacles. Overnight uses are not planned for in this study, such as camping. If Ahtna, Inc., so chose in the future, they could consider adding additional camping and recreation facilities in their adjoining lands to complement the boat launch facility, but this is not within the scope of the current study.
Why are each of the agencies on the project team involved?	The agencies involved in this study are engaged for many reasons, but the primary nexus for each is as follows: • Ahtna, Inc.: Landowner any proposed easement would cross • NPS: Federal lands the easement is meant to access; future maintainer of and easement and facility • BLM: Regulating agency for all ANCSA 17(b) easements • AK DOT&PF: Owner of adjoining highway facility and airport

	• FHWA Western Federal Lands: Awarding agency of study funds and project manager

Findings and Recommendations

Following the existing conditions, conceptual design options, and engagement efforts, the project team proposes the following improvements based on public and stakeholder perspectives and project team analysis, as shown in Figures 10-11 and Table 6 below. Findings refers to information gathered during the study to inform project decision making and recommendations refers to decisions on access easements and roadway, parking area, and boat launch designs and cost estimates.

Figure 10. Proposed access easement and roadway alignment.

Figure 11. Proposed parking area and boat launch.

Table 6. Cost estimates for roadway, parking area, and boat launch design and construction.

2022 Estimate								
Design	**Length (mi)**	**Construction**	**Contingency (30%)**	**Total Const.**	**PE (15%)**	**CE (10%)**	**CM (10%)**	**Total**
Roadway	2.33	$9.32	$2.80	$12.11	$1.82	$1.21	$1.21	$16.35
	Area (ac)							
Parking Lot & Boat Ramp	1	$3.25	$0.98	$4.23	$0.63	$0.42	$0.42	$5.70
2027 Estimate (4% Inflation)								
Design	**Length (mi)**	**Construction**	**Contingency (30%)**	**Total Const.**	**PE (15%)**	**CE (10%)**	**CM (10%)**	**Total**
Roadway	2.33	$11.33	$3.40	$14.73	$2.21	$1.47	$1.47	$19.89
	Area (ac)							
Parking Lot & Boat Ramp	1	$3.96	$1.19	$5.15	$0.77	$0.51	$0.51	$6.95
2032 Estimate (4% Inflation)								
Design	**Length (mi)**	**Construction**	**Contingency (30%)**	**Total Const.**	**PE (15%)**	**CE (10%)**	**CM (10%)**	**Total**
Roadway	2.33	$14.60	$4.38	$18.98	$2.85	$1.90	$1.90	$25.63
	Area (ac)							
Parking Lot & Boat Ramp	1	$4.70	$1.41	$6.11	$0.92	$0.61	$0.61	$8.25

Access Easement and Roadway Alignment

The proposed access easement and roadway alignment follows the middle route of the original three considered, as shown in Figure 9 above. Where to site the final access easement and roadway was the primary question for the project team, stakeholders, and the public. This route aligns with the most stakeholder and public preferences by adhering closest to the original easement, ensuring separation the proposed roadway from other area uses, and deconflicting any public easement from any cultural resources or possible future land use conflicts, such as an airport expansion.

The other two alignment options have strengths as weaknesses as well. The northern alignment would benefit from a partially existing roadway already but would still need to be upgraded to a gravel road, require a new roadway construction for the last third of the alignment connecting to parking area, and need a separation of the new public roadway from the existing private fish camp. The southern alignment would benefit from the longest existing roadway, but also would require new roadway construction for the latter half of the road, deconfliction from the active gravel material site, and protection of known cultural resources in the area. When compared, stakeholders and the public preferred the middle alignment.[12]

The roadway is designed as a 20'-wide gravel surface within a 50' total easement. This design allows for two-way traffic along with appropriate drainage, as shown in Figure 12 below.

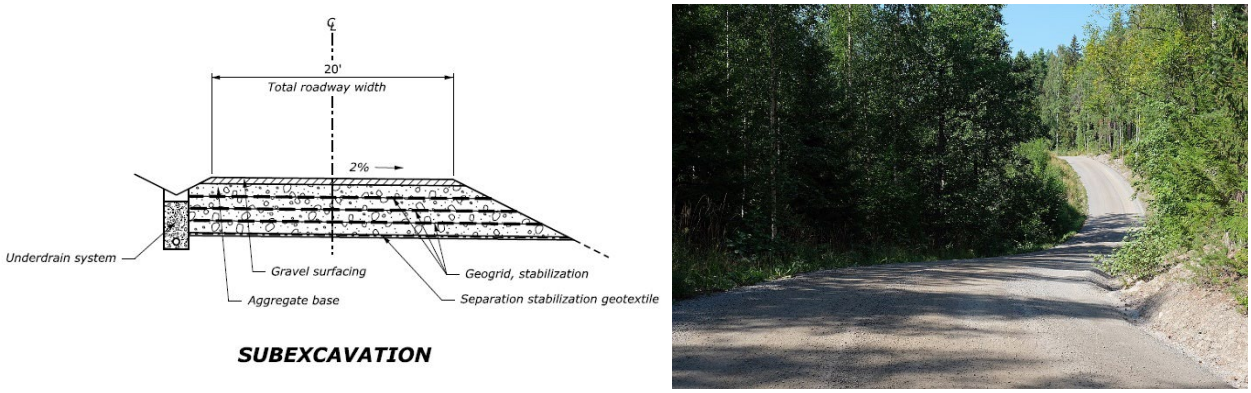


Figure 12. Roadway design and example completed gravel roadway.

Parking Area

The parking area is planned as a one acre paved surface, inclusive of parking and supporting amenities, as shown in Figure 13 below. The boat launch and northern portion of the access roadway to the boat launch is excluded from the calculation of the one-acre easement, per ANCSA 17b. The parking lot layout has a circular pull through access to the boat launch, so that vehicles have a direct path to the ramp and parking stalls without backing in or out. The layout can accommodate 16 boat trailer stalls, 12 regular stalls, and 2 accessible stalls for a total of 30

[12] For complete details on the alignment analysis process, see Appendix C.

stalls. An area for restroom, trash receptacles, and picnic tables off to the shoulder is also included. Locating these amenities off to the shoulder is preferable because it separates pedestrian activities from vehicular traffic and minimizes conflict points.

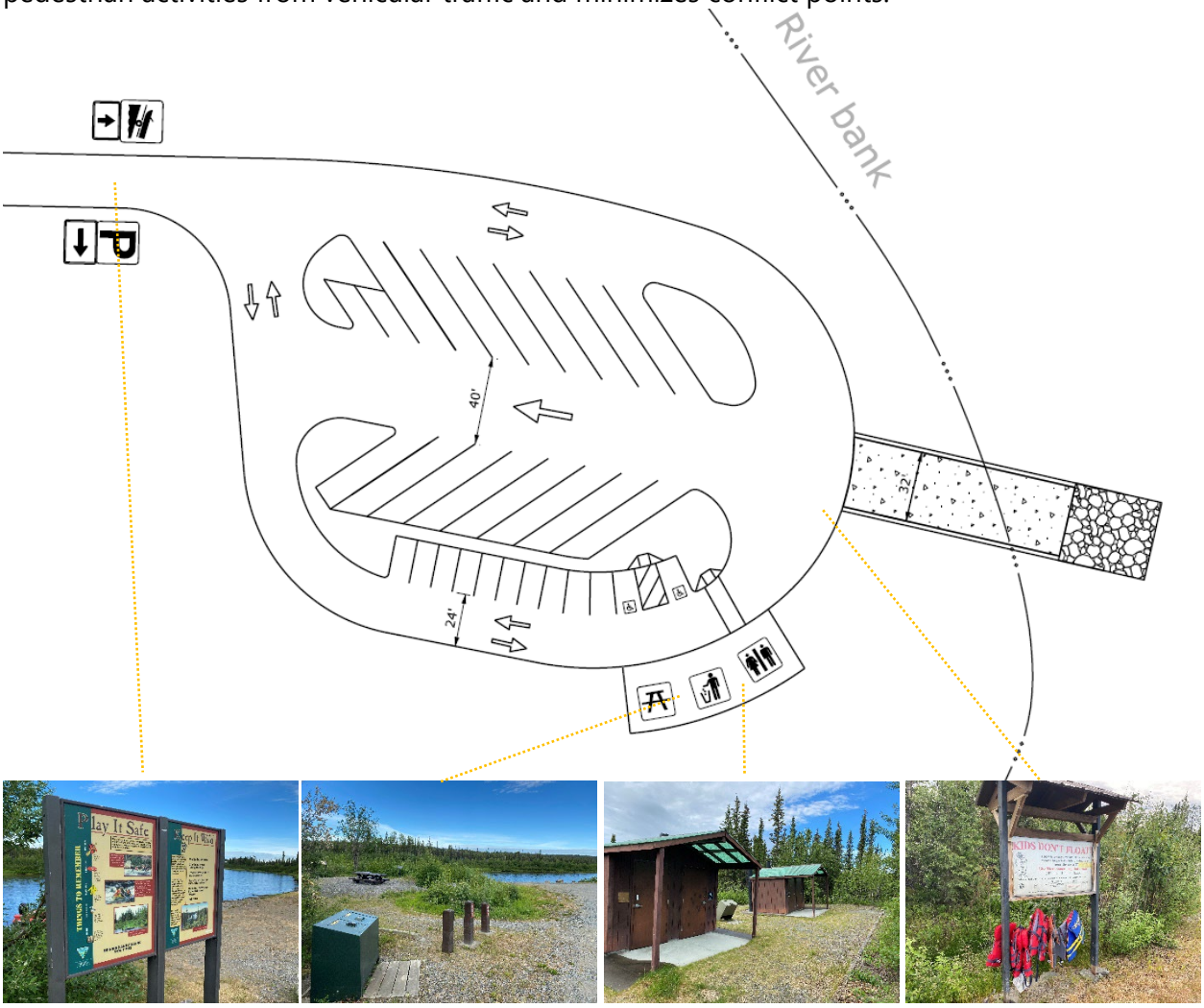


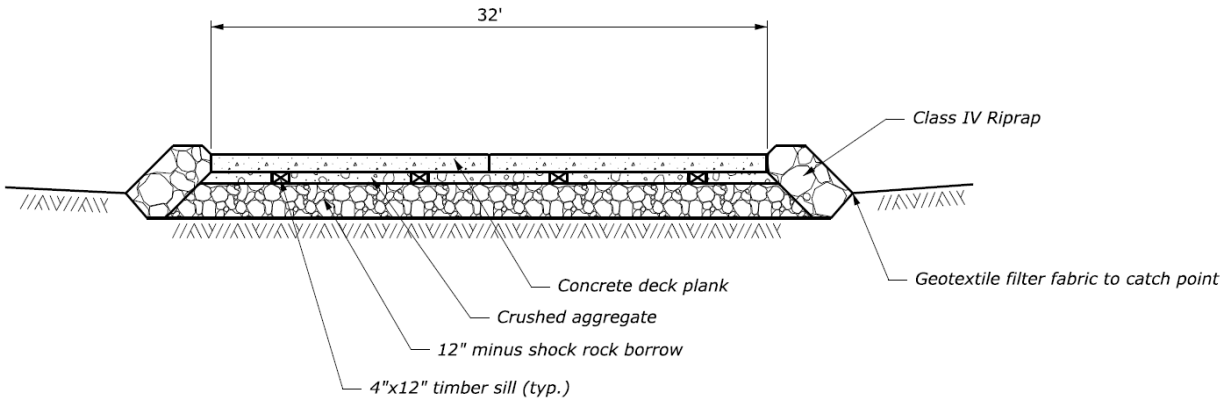
Figure 13. Parking and boat launch area with example amenities. The images shown are from the Sourdough Creek Campground and Boat Launch and used only as examples.

Boat Launch

The boat launch is designed as a concrete pad of approximately 32' in width to allow for two vehicles to launch boats simultaneously. In order to employ a shorter ramp and pull through design, the parking lot is located closer to the bank and may require additional fill and retaining walls, depending on the high water levels.

Survey information and the mean high water mark (MHWM) will inform the future designer how long the jetty and ramp need to extend for successful entry into the water. Typical guidelines recommend a ramp between 12% and 15%, with a rock pad at the bottom where water elevation is at least 4' above the rock pad. The jetty may use aggregate surfacing while the ramp

should be concrete for stabilization and long term integrity. The river experiences strong currents and spring ice breakup and thus it is not recommended to include physical features that extend into the water such as a dock or pier. Figure 14 below shows the boat launch design



along with an example of a completed boat launch.

Figure 14. Boat launch design cross section and example image. The image shown is from a private boat launch in Copper Center and used only as an example.

Cost Estimates for Design and Construction

The estimated cost for design and construction of the roadway, parking area, and boat launch are approximately $22.05 million (2022). The estimates assume a base construction cost with a 30% contingency along with preliminary (design) engineering (PE), construction engineering (CE), and construction modifications (CM). Additionally, these costs increase with inflation for 2027 and 2032 at an estimated 4% inflation rate.

Conclusion and Additional Considerations

The findings of this study provide a foundation for future preliminary design engineering and construction by synthesizing project team analysis with stakeholder and public perspectives. The study's goals were to:

1. Analyze three alternative unpaved routes, one of which will be chosen for public access across Ahtna, Inc. lands to access the Copper River
2. Evaluate feasibility of constructing and maintaining a one-acre parking area and Copper River boat launch
3. Identify a preferred public access route, including estimated construction and maintenance costs, easement needs, and land ownership patterns, cultural and natural resource constraints, recreational and subsistence opportunities

The project team accomplished these goals through the work summarized in this report and provided in greater detail in the respective appendices.

Additional Considerations

In addition to the findings and recommendations of this report, the following issues and opportunities were also identified throughout the study that may be further developed post-study.

- **Non-motorized users exiting the river**. For non-motorized users (i.e., float) launching at the proposed facility, there was a question about where they could exit the river downstream. Users suggested that a fully-developed boat launch facility like the one proposed is not necessary for their purposes, as they only need a relatively flat bank of the river to launch and recover. It was suggested then that a post-study action could be to identify viable public and private lands down stream that could support those floating the river.
- **Access to NPS trails on opposite bank.** The purpose of this study was to look at the access from the Richardson Highway to the Copper River only (easements 23 C5 D9 and 23a C5 D9), while considering the continued trail access on the east bank of the Copper River. The east bank is technically Wrangell-St. Elias National Park but also includes Ahtna, Inc. inholdings. There is therefore another easement on the east bank of the river that could be further developed as a connecting trail for public users (see Figure 5, trail easement 4a C5 D9 and site easement 2 CI).
- **Erosion study.** Staff from the Copper River Native Association noted that they are collaborating with the US Army Corps of Engineers on an erosion study for area Native Villages along the Copper River. As part of the study, they suggested they could add the proposed boat launch location to their scope of work in order to address erosion questions in advance of future preliminary engineering work.

Appendices

- Appendix A – Existing Conditions
- Appendix B – Engagement Strategy
- Appendix C – Conceptual Design and Cost Estimates
- Appendix D – Interim Conveyance 209 document

FHWA Office of Federal Lands Highway

Copper River Access Study

Appendix A: Existing Conditions

Copper River Valley

Date: October 28th, 2022 (updated April 20th, 2023)
To: Project Management Team
From: Cole Grisham, AICP
Subject: Memo 2: Existing Conditions
Project ID: AK Gulkana 2019(1)

FEDERAL LANDS HIGHWAY

Table of Contents

Introduction

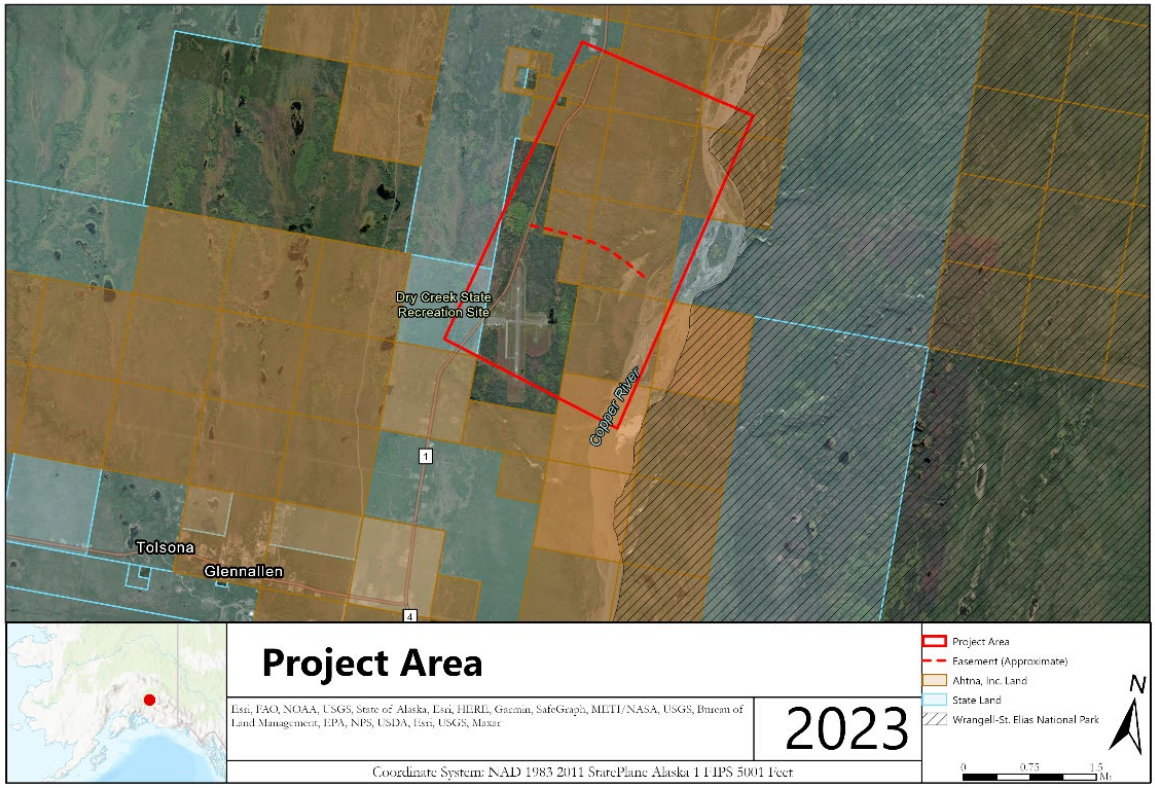
The Copper River Access Study is a Federal Lands Access Program (FLAP) funded project to develop a public access easement between the Richardson Highway and the Copper River in Alaska on Ahtna, Inc., lands north of the Gulkana Airport and south of the Gulkana River. Additionally, the study will develop conceptual designs, cost estimates, and other considerations for a proposed public easement gravel road, an up-to one acre parking area, and a public boat launch. Figure 1 below shows the project area.

The scope of this study is divided into the following:

- Develop three alternative unpaved routes for public access to the Copper River
- Evaluate feasibility of constructing and maintaining a one-acre parking area and Copper River boat launch
- Identify a preferred public access route, including estimated construction and maintenance costs, easement needs, and land ownership, cultural and natural resource, recreational, and subsistence opportunities and constraints

The outcome from this study is to provide a resource that will allow Ahtna, Inc., and its partners to proceed from planning to design and construction phases. This study will provide background and research as it further defines the needs and existing conditions of the area.

Figure 1. Project area and near context.



Planning Context

This section analyzes relevant plans and studies that could inform this study's outcome, which we term the "planning context." The project team seeks to understand any existing plans, opportunities, and constraints developed through partners' work that might strengthen this study's findings. Analysis of the planning context includes the document's purpose, scope, and findings as relevant to this study's outcomes. Documents reviewed are shown in Table 1 below.

Table 1. Planning documents reviewed.

Plan	Agency or Agencies	Source
Alaska Federal Lands Long Range Transportation Plan	National Park Service, Bureau of Land Management, Forest Service, Fish and Wildlife Service	https://highways.dot.gov/federal-lands/programs-planning/lrtps/alaska-collaborative-lrtp
National Park Service Wrangell-St. Elias General Management Plan	National Park Service	https://parkplanning.nps.gov/document.cfm?parkID=21&projectID=34503&documentID=38089
National Park Service Wrangell-St. Elias National Park and Preserve Foundation Statement	National Park Service	https://www.nps.gov/wrst/getinvolved/upload/WRST-Foundation-Statement.pdf
National Park Service Wrangell-St. Elias National Park and Preserve State of the Park Report	National Park Service	http://npshistory.com/publications/state-of-the-park/wrst-2016.pdf
Alaska Department of Transportation Interior Alaska Transportation Plan	Alaska DOT&PF	https://dot.alaska.gov/stwdplng/areaplans/area_regional/iatp.shtml
East Alaska Resource Management Plan	Bureau of Land Management	https://eplanning.blm.gov/eplanning-ui/project/66965/510

Common themes throughout the plans included protecting the natural and cultural resources, enhancing access to and throughout the Federal lands, and planning transportation systems to

address current issues and future travel/climate projections. Alaska's geography and climate make it possible for many different modes of transportation to be utilized. Travel by air or waterway are two of the unique methods that are quite common, particularly due to the tourism in Alaska that is a large part of the economy in certain regions.

The Alaska Federal Lands Collaborative Long Range Transportation Plan[1]

The Alaska Federal Lands Collaborative Long Range Transportation Plan (CLRTP) was composed with input from the National Park Service (NPS), US Fish and Wildlife Service (FWS), US Forest Service, Bureau of Land Management (BLM), Alaska Department of Transportation and Public Facilities (Alaska DOT&PF), and Federal Highway Administration Western Federal Lands Highway Division (WFLHD). The goals of the LRTP are as follows:

- System Management: Provide a long-term transportation system to address current and future land management needs.
- User experience: Proactively enhance the Alaskan multimodal transportation system experience and connectivity.
- Mobility: Provide users with safe, efficient, affordable, and agency-appropriate access to and through Federal lands.
- Environment: Protect and enhance natural and cultural resources through comprehensive transportation planning and management.
- Climate Change: Develop a long-term transportation system that addresses a changing climate.

With these goals in mind, additional consideration was given to the knowledge that many areas in Alaska are tourist destinations with tourism-driven economies. The Federal Lands Management Agencies (FLMA) acknowledged that transportation corridors can have direct impacts on community and economic development. FLMA transportation systems can support subsistence and inter-village travel, which must also navigate seasonal variation in transportation styles. Alaskan winter weather can cause additional hazards for travel, and with that in mind, this plan recognizes the effects that a changing climate can have as well. FLMAs also identified guiding factors when developing this plan as (1) contributing to education and recreational opportunities and (2) preserving historic or traditional access modes of transportation.

Alaska's current transportation system includes a multi-modal network that supports road, trail, rail, marine, snow, and air travel. Alaska has a very low road per square mile of land ratio, while conversely, air travel is a critical travel mode (determined by the large number of registered active aviation pilots and the 548 Federal Aviation Administration documented airports in the state). Air travel helps provide access to Federal lands, which can otherwise be a challenge due to the geography of the state. Along with air travel, rail is another heavily utilized mode of

[1] *Alaska Federal Lands Long Range Transportation Plan*. (2011). U.S. National Park Service, https://parkplanning.nps.gov/projectHome.cfm?projectID=39393. Accessed 1 Jan 2022.

transportation. Trains going out to Federal lands often act as a single leg in a multi-stage trip that visitors take when accessing these locations. Travel via waterways functions similarly to rail, in the sense that waterways often provide transportation through part of a multi-modal trip to Federal lands. The Alaska Marine Highway is a heavily utilized passage with 33 ports alongside it. Inland waterways are a more popular form of remote access to Federal lands for recreation because they do not need formal harbors or ports. Alaska is noted for having the most miles of navigable inland waterways in the country at 15,400 miles. Lastly, trails are able to support transportation where roads and waterways do not exist. Trails not only provide access for recreational travel into Federal lands, but for many communities, trails are the primary way to access neighboring communities and obtain resources.

Trends in this plan reported that out-of-state visits to Alaska were likely to increase over the next 20 years. Due to the nature of out-of-state travel, the increase may be seen the most in FLMA areas that are either accessed directly by cruise ships or in secondary destinations for visitors who arrive by cruise ship ports or airports. While an increase is likely, funding for FLMA transportation programs was not anticipated to increase significantly through 2030. FLMAs get financial resources from the Federal Lands Highway Program (FLHP). WFLHD coordinates with Alaska DOT&PF and FLMAs to identify mutual interests and determine how to optimize the available funds. Alaska has additional funding programs that can be utilized depending on the project type. Some of these programs include transportation enhancements, recreational trail programs, and high-priority projects. Funds often depend on local, Federal, and State partnerships.

This plan was developed utilizing outreach to communicate the goals of the plans and the process of selecting them, provide opportunities for outside comments to be given, encourage support for the transportation planning process, and enhance partnerships. Outreach must include multiple spheres of people who may have different levels of interest in the LRTP. The first group is categorized as the most involved and is made up of the core team, agency management, and other delegations. The second sphere is local governments, Denali Commission, stakeholder organizations, Bureau of Indian Affairs, Tribes, Alaska Railroad, Federal Aviation Administration, other relevant government agencies outside the core team, concessionaires, and Citizen's Advisory Commission on Federal Areas. The third and last sphere is the public, people/groups outside of Alaska, and Alaska residents. Multiple delivery tools were used to connect to all of the different outreach groups, and comments from them were taken into consideration when developing this LRTP.

The following actions (in order of priority) are the result of LRTP's analysis to achieve the goals listed prior.

1. Advanced travel planning: Develop advanced planning tools to inform and enhance visitation to Alaska's public lands.
2. Coordinate Geographic Information System (GIS) interagency data/maps: Create a Federal lands transportation GIS database.

3. Common definitions: Develop common definitions of transportation infrastructure, systems, assets, and planning terms.
4. Winter trail safety (data): Create a collaborative process for improving winter trail travel.
5. Standards for all-terrain vehicle class roads, or "T-Roads:" Develop T-Road standards and definitions.
6. Tribal relations: Reach out to Tribes on LRTP process development.
7. Access to subsistence resources: Provide a multi-agency approach to guidance for access to subsistence.
8. Transportation actions related to climate change: Create a transportation action plan for climate change in Alaska; share this information.
9. Watercraft safety: Support the State's watercraft safety program.
10. Visitor data: Create and complete an Office of Management and Budget approved user survey on transportation in Alaska.

The National Park Service General Management Plan[2]

The National Park Service's General Management Plan was written in 1986 and sets a vision for the park. Wrangell-St. Elias National Park and Preserve (WRST) is 13.2 million acres and is bordered by two of Alaska's major highways. Tons of recreational and subsistence opportunities attract hunters, hikers, trappers, fishermen, scientists, river runners, and photographers. WRST was established in the National Park system under the Alaska National Interest Lands Conservation Act (ANILCA, PL96-487) in 1980.

Current issues revolve around finding a balance between preserving resources and providing adequate facilities for users to be able to subsist or recreate and experience the park in many different ways. At the same time, the park is becoming a popular destination, and numbers of visitors have been increasing since 1986. The General Management Plan focuses on the following topics: overall management, visitor use, information/interpretation, commercial services, development and access, land management (including minerals management, wilderness, and boundary adjustments), resource management, administrative facilities, and subsistence activities and resident lifestyles.

The proposed outcomes of the plan are as follows: Park Service will provide information, orientation, interpretation, and administration services in selected locations that will allow for the continuation of self-initiated and wilderness activities outside of those offices or visitor services in the communities. Small developments are proposed within the park and preserve to provide access to resources that highlight park/preserve values, minimize impact on rural residents, and minimize or avoid adverse impacts on undisturbed landscapes. Natural and cultural resource management will stress nonmanipulative and non-consumptive management actions, as well as cooperation with the state of Alaska.

[2] *Wrangell-St. Elias National Park and Preserve General Management Plan*. (1986). National Park Service U.S. Department of the Interior, https://parkplanning.nps.gov/document.cfm?parkID=21&projectID=34503&documentID=38089. Accessed 1 Jan 2022.

The National Park Service Wrangell-St. Elias National Park and Preserve Foundation Statement[3]

The Wrangell-St. Elias National Park and Preserve Foundation Statement functions to illustrate the purpose, significance, fundamental resources and values, primary interpretive themes, and special mandates of the park. The purpose of the park is to "maintain the natural scenic beauty of the diverse geologic, glacial, and riparian dominated landscapes, and to protect the attendant wildlife populations and their habitats; to ensure continued access for a wide range of wilderness-based recreational opportunities; to provide continued opportunities for subsistence use."

The National Park Service State of the Parks Report[4]

The State of the Parks Report describes the current conditions of the park resources, visitor experiences, and park infrastructure, combined with factual information and analysis by experts in the field. The mission of the National Park Service is "to preserve unimpaired the natural and cultural resources and values of national parks for the enjoyment, education, and inspiration of this and future generations." A big part of this mission is for park resources and values to be presented to future generations in a condition that is "as good or better than" they are currently in.

Alaska DOT&PF Interior Alaska Transportation Plan[5]

The Alaska Interior Plan from 2010 developed a 20-year regional transportation plan to guide the allocation of future investments toward transportation projects that meet the DOT&PF's overall mission. The goals of the transportation plan were grouped into the following categories:

- Economics
- Health, Safety, and Security
- Funding
- Preservations
- Efficiency

One determinant for future growth comes from economic development, and the Alaska Interior plan looked into the natural resources of Copper River Basin. The Ahtna Region was shown to have an assortmentof metallic mineral despots. Most occurrences were reportedly found within the Wrangell-St. Elias National Park and Preserve. Despite this, not much mine development has been established in the region. Ahtna, Inc., land in the Copper Basin has also been noted for its favorable reserves of natural gas. The timber industry also has presence in the region. Ahtna,

---

[3] *Wrangell-St. Elias National Park and Preserve Foundation Statement,* Page 4. (May 2009). National Park Service U.S. Department of the Interior, https://www.nps.gov/wrst/getinvolved/upload/WRST-Foundation-Statement.pdf. Accessed 1 Jan 2022.

[4] *State of the Park Report Wrangell-St. Elias National Park and Preserve.* (2016). National Park Service U.S. Department of the Interior, http://npshistory.com/publications/state-of-the-park/wrst-2016.pdf. Accessed 1 Jan 2022.

[5] *Interior Alaska Transportation Plan*. (2010). Alaska Department of Transportation and Public Facilities, Statewide & Area Transportation Plans, https://dot.alaska.gov/stwdplng/areaplans/area_regional/iatp.shtml. Accessed 1 Jan. 2022.

Inc., began a multiyear contract in 2002 with Northwest Pacific Industries to chip large acreages of beetle-killed spruce, cottonwood, and aspen. As the tourism has increased, the need for new buildings with rustic architectural styles has become an opportunity for the local timber industry.

Tourism itself is another big driver when looking at future planning. Major tourism activities for those traveling to Interior Alaska include bicycling tours, guided fishing and hunting, rafting, riverboat cruises, backpacking, mountain climbing, horseback riding, flightseeing, gold panning, and dog sled rides. A popular highway loop for exploring interior Alaska includes taking the Glenn Highway down from Tok to Anchorage. This highways allows tourists access to Gulkana and the Wrangell-St. Elias National Park and Preserve. It was noted that more of Alaska's tourists are reported flying to the state and then renting a car. Rental agencies often do not allow their vehicles to be driven on gravel roads, which is a travel constraint for those who choose to drive.

The plan notes that the Gulkana Airport is listed as part of the National Plan of Integrated Airport Systems (NPIAS) because it meets the requirements of having at least 10 based aircrafts and being located more than 30 minutes by road from another NPIAS airport. The airport partakes in tourist activities such as guiding, outfitting, and flightseeing. All NPIAS airports in Alaska were projected to see 1.8% growth in the future.

Looking towards the future, Ahtna, Inc., was noted as planning to build a wood pellet plant in Glennallen. The pellets were to be produced from Ahtna timber, of which 80% is located on the other side of the Copper River. With so many previously noted resources located across the river, the plan recommended a feasibility study to see if there was potential for a bridge to be built to increase accessibility. The estimated cost was $400,000, and it was listed as a short-range project.

The Gulkana Airport was also listed to have improvements done. This included $15 million in estimated instrument approach improvements for at least 3/4-mile visibility minimum, requiring approach lights, parallel taxiway, airfield repaving, and floatplane basin. Recent conversation with the partners suggests that funding from the Bipartisan Infrastructure Bill may start to facilitate project discussions about airport expansion projects.

Bureau of Land Management (BLM) East Alaska Resource Management Plan[6]

BLM developed the East Alaska Resource Management Plan (RMP) to manage public lands in the Glenallen Field Office boundaries and assess the environmental impacts of management decisions. In assessing how the agency would manage applicable lands, they considered the following issues:

- Travel management
- Recreation
- Natural and cultural resources

[6] *East Alaska Resource Management Plan*. (March 2022). Bureau of Land Management, https://eplanning.blm.gov/eplanning-ui/project/66965/510. Accessed 21 September 2022.

- Lands and realty
- Vegetation management
- Leasable and locatable minerals
- Subsistence, social, and economic conditions

The RMP ultimately determined that "a moderate level of protection, use, and enhancement of resources and services" is preferred for BLM lands.[7] The RMP notes that many public easements under ANCSA in the project area are:

> …a paperwork exercise using maps without being field-checked. Easements were also frequently reserved for proposed roads and trails. The locations of some easements were not field verified or marked for public use. As a result, easements are often unusable due to terrain or land ownership patterns. Additionally, many easement reservations were effectively nullified by later conveyance of Native allotments across the easement, thereby making them discontinuous. Some 17(b) easement trails are nearly impassible due to wet or unstable surface conditions, resulting in trespass on Native land when users travel off the trail (and off the easement) to avoid boggy or impassable trail segments. Some members of the public use 17(b) easements for uses that are not allowed as specified in the conveyance document or regulations. These uses may constitute a trespass to Native lands underlying the easement or restrict others' valid use of the easement.[8]

The impacts of the RMP on the project area appear to be mostly restricting Off-Highway Vehicles (OHVs) to existing roads and trails, permitting new road development on a case-by-case basis, and influencing the processes for managing wildlife, forestry, and mineral resources.[9] Since the project area does not include BLM lands directly--only BLM's management of the proposed access easement across Ahtna lands--it does not appear that these restrictions apply. Instead, any proposed development for the access easement should respect any adjacent BLM land use considerations addressed in the RMP.

Planning Context Findings

The planning documents reviewed suggest broad considerations for this study's purposes. The CLRTP's goals of system management, user experience, and mobility are all represented by developing a trail and boat launch facility that meets user needs. Other goals of environmental and climate change considerations should be incorporated into which alignment is chosen, how the final alignment impacts the natural environment, and how resilient the constructed facilities would be to climate change effects long-term.

NPS planning documents suggest two primary themes for consideration. The first is that of tourism and visitor use management. Recommendations from this study should address how

[7] BLM 2022, Page viii.

[8] Ibid, Page 10.

[9] Ibid, Chapter 1.

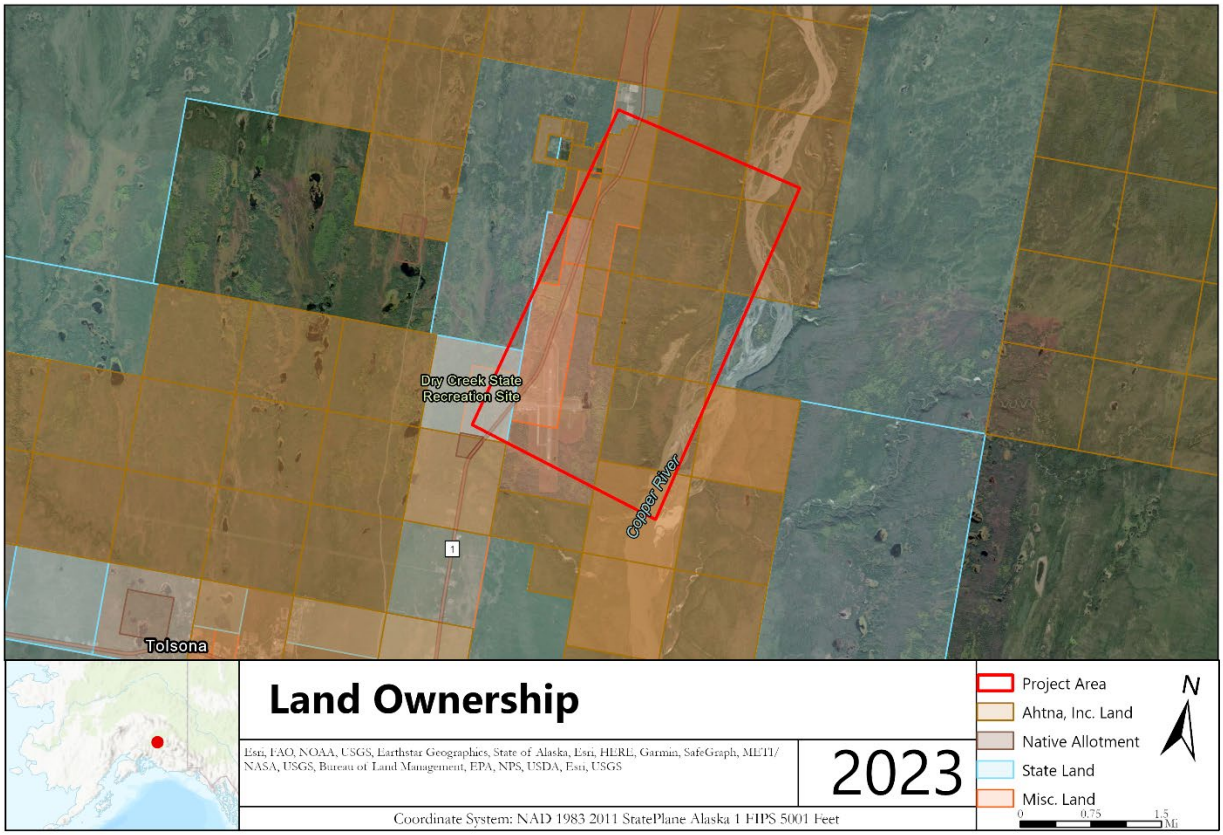
any proposed trail and facilities would impact adjoining NPS access, visitation, and tourism. Second is protection of natural resources. It is possible that developing a new trail and boat launch facility would lead to increased access to adjoining natural areas by river users. The associated impact to the natural environment, including plants and animals, should be addressed in the final design.

The Alaska DOT&PF plan suggests three themes for consideration. First is the role of tourism in the area, including how this plan responds to and/or induces tourism in the area. Second is the importance of mining and resource extraction to the local and regional economy. There is an active gravel material source within the project area, and the study should address how any facility might impact future operations. Last is the future of the Gulkana Airport. The Airport land forms the southern boundary of the study area and may be expanded in the future, which limits where any proposed alignment could be developed. That said, a public access road already adjoins the Airport's northern property line with no known plans to alter or restrict access, even in the event of future expansion.

Land Ownership and Public Access

Figure 2 below shows that Ahtna, Inc., owns the majority of the land in this proposed project area, with a small portion along the waterline under state ownership. Land around the Gulkana Airport, as well as the bank on the east side of the Copper River, are owned by the State of Alaska. In Figure 1, the airport is not explicitly shown to be state land, although this area is indeed state-owned per BLM, State of Alaska, and Ahtna, Inc., records.[10] There is a campground off the west bank of the Copper River named Birdie's Fish Camp, and a trailhead off the east bank of the Copper River called Shrub Trailhead. East of the Copper River also contains boundaries for Wrangell-St. Elias National Park and Preserve.

Figure 2. Land Status in the Ahtna Region in the vicinity of the Gulkana Aiport.



Alaska Native Claims Settlement Act (ANCSA)

The public access easement(s) within the project area are governed by Section 17(b) of the Alaska Native Claims Settlement Act (Public Law 92-203-85 Statute 688).[11] ANCSA settles all aboriginal land claims by Alaskan Native peoples with the Federal government in Alaska and

[10] The data gap for state ownership of the airport land I due to BLM's ANCSA land status showing the airport lands as "miscellaneous conveyed land."

[11] *Public Law 92-203.* (18 Dec. 1971). U.S. Government Publishing Office. *Discover U.S. government information*. GovInfo. https://www.govinfo.gov/content/pkg/STATUTE-85/pdf/STATUTE-85-Pg688.pdf#page=1. Accessed 24 Mar. 2022.

established the current land ownership and management framework that exists between Alaskan Natives and their partners. While the content of ANCSA is broad, for our purposes, we need only examine the aspects of ANCSA that inform land use and public access easements.

ANCSA (PL 93-203), Section 17(b). The original legislative act is the Alaska Native Claims Settlement Act of 1971. Section 17(b) of ANCSA, Joint Federal-State Land Use Planning Commission for Alaska, states that:

> …the Planning Commission shall identify public easements across lands selected by Village Corporations and the Regional Corporations… which are reasonably necessary to guarantee international treaty obligations, a full right of public use and access for recreation, hunting, transportation, utilities, docks, and other such public uses… (ANCSA 1971).

43 U.S. Code, Section 1616. ANCSA 17(b) is codified in US law through 43 U.S. Code, Section 1616. This law mirrors the language in ANCSA 17(b).

43 CFR Part 2650. Regulation of public access easements is governed by 43 CFR Part 2650, Alaska Native Selections. Section 2650.4-7 outlines the scope of public access easements along with the process steps for revising easements, as shown in Table 2 below. The project team shall address each element through this study and provide a response to each component in the Final Report.

Table 2. Alaska Native Selections Public Access Easements Regulations (43 CFR 2650.4-7).[12]

Section	Summary
A – General Requirements	Provides the basic requirements and parameters for establishing easements under this regulation, including acceptable uses, roles and responsibilities, and the initial establishment process.
B – Transportation Easements	Provides guidance in addition to Section A for transportation facilities, including acceptable uses, lands to be accessed, and design considerations. Additionally, Section B(3) outlines the regulations for acceptable supporting facilities, such as parking.
C – Miscellaneous Easements	Provides additional guidance on easements for utilities, public safety, and international treaty obligations.
D – Conveyance Provisions	Provides guidance on transferring easements and lands under this regulation

[12] The complete CFR language is included in Attachment A of this document as well as at the following website: https://www.ecfr.gov/current/title-43/subtitle-B/chapter-II/subchapter-B/part-2650

On June 29, 1979, Sta-Keh Corporation was entitled conveyance through sections of the land on the west side of the Copper River per Sections 14(a) and 22(j) of ANCSA.[13] On October 11th, 1979, the same was done for Tazlina Incorporated.[14] These documents identified easements on both sides of the river that were subject to section 17(b) of ANCSA. Since then, BLM spatial data indicate that Ahtna, Inc., has become the successor of the 17(b) easements.[15]

For this study, revising existing 17(b) easements may be needed to acquire the necessary right of way allowances to permit the proposed route from the Richardson Highway to the Copper River. This requires that Ahtna, Inc., or another Native corporation holds the title to the surrounding land until(?) the rest of the requirements under Public Law 92-203-85 Statute 688 are met.

BLM ANCSA 17(b) Easement Guidance. BLM Alaska Region staff and BLM's website[16] outline the parameters for adding, removing, or revising 17(b) easements, aligning with regulations established in 43 CFR 2650.4-7.[17] The process for all 17(b) easements starts with discussions between the Native corporation and BLM. The Tribal governing body is required to send a corporate resolution to BLM requesting the establishment or revision of an easement. BLM staff then carry out the needed agency actions to approve or deny the request.

For obtaining a new 17(b) easement or revising an existing easement, the BLM conducts a review based on the public easement needs and the 17(b) criteria that must be met. The request is sent to the Alaska Native corporations, the State of Alaska, and any other interested parties. BLM approval of the 17(b) easement requested action is an appealable decision, and the Alaska Native corporation will be notified of the lands with easements reserved to the United States.

BLM may also terminate an existing 17(b) easement. This is done when the easement is determined by BLM or the easement manager as no longer necessary. For termination to occur, public notice must be provided by BLM, and comments from the public must be requested. Comments will be reviewed, and if the easement is still determined as no longer necessary, BLM will submit an appealable decision for easement termination. Termination will finalize when BLM issues a release of interest.

---

[13] *Interim Conveyance*. (29 June 1979). U.S. Department of the Interior Bureau of Land Management, ArcGIS web application, https://sdms.ak.blm.gov/scanned_images_temp/IC_209_05192022121808.pdf#toolbar=1&navpanes=1&pagemode=thumbs. Accessed 22 Mar. 2022.

[14] *Interim Conveyance*. (11 Oct. 1979). U.S. Department of the Interior Bureau of Land Management, ArcGIS web application, https://sdms.ak.blm.gov/scanned_images_temp/IC_245_05192022121402.pdf#toolbar=1&napanes=1&pagemode=thumbs. Accessed 22 Mar. 2022.

[15] Fhwapolicy.maps.arcgis.com. (2022). https://fhwapolicy.maps.arcgis.com/apps/instant/basic/index.html?appid=d1ca54c75fb74cb2b1116e553fdd9715. Accessed 22 Mar. 2022.

[16] https://www.blm.gov/programs/lands-and-realty/regional-information/alaska/17b_easements

[17] *Programs: Lands and Realty: Regional Information: Alaska: 17(b) Easements*. U.S. Department of the Interior Bureau of Land Management. https://www.blm.gov/programs/lands-and-realty/regional-information/alaska/17b_easements. Accessed 19 May 2022.

Existing Access Routes and Easements

BLM conveyance documents recorded 17(b) easements in relation to the United States Public Land Survey System.

The following 17(b) easements are documented near the project area:

1. (EIN 2 CL) A one-acre site easement upland of the ordinary high-water mark in Sec. 10, T.4N., R.1W. Copper River Meridian on the left bank of the Copper River.
2. (EIN 23 C5, D9) An easement for an existing access trail fifty feet in width from the Richardson Highway in Sec. 32, T.5N., R. 1W., Copper River Meridian, easterly to site easement EIN 23a C5 D9 on the Copper River.
3. (EIN 23a C5, D9) A one-acre site easement upland of the ordinary high-water mark in Sec. 33, T.5N., R.1W., Copper River Meridian, on the right bank of the Copper River.
4. (EIN 4a C5, D9) An easement for an existing access trail fifty feet in width from the left bank of the Copper River in Sec. 3, T.4N., R1W. Copper River Meridian, southeasterly through Site EIN 2 C1 and continuing Southeasterly then northeasterly to public lands in Sec 2, T.4N., R.1W., Copper River Meridian.

Figure 3. NPS land manager's 2009 map.

NPS provided records of an email conversation from 2009 with the Park's land manager about the easements.[18] The NPS stated that the easements reserved by BLM in the conveyance documents appear to be untouched (represented in pink on Figure 3). Instead, NPS found an existing alignment just north, which starts at the Richardson Highway across from the rifle range and continues to the Copper River (represented in purple on Figure 3). This trail was described as having a bladed track and was estimated to have been used in the 1950s and '60s for possible oil and gas exploration. The conditions of this trail were reported as crossing wetlands and not showing signs of recent use. The land manager categorizes this trail as unusable due to the location and condition. A subsequent site visit by the project team in July 2022 confirmed that the trail is unusable in its current condition, shown in Figure 4 below.

[18] Rosenkrans, Danny. "*RE: easement information (UNCLASSIFIED).*" Mark J Sisinyak. 31 Mar. 2009. Email.

There are also 17(b) reserved easements for utility use along the Richardson Highway. Due to the nature of this use, it is not relevant to the project's 17(b) easement needs.

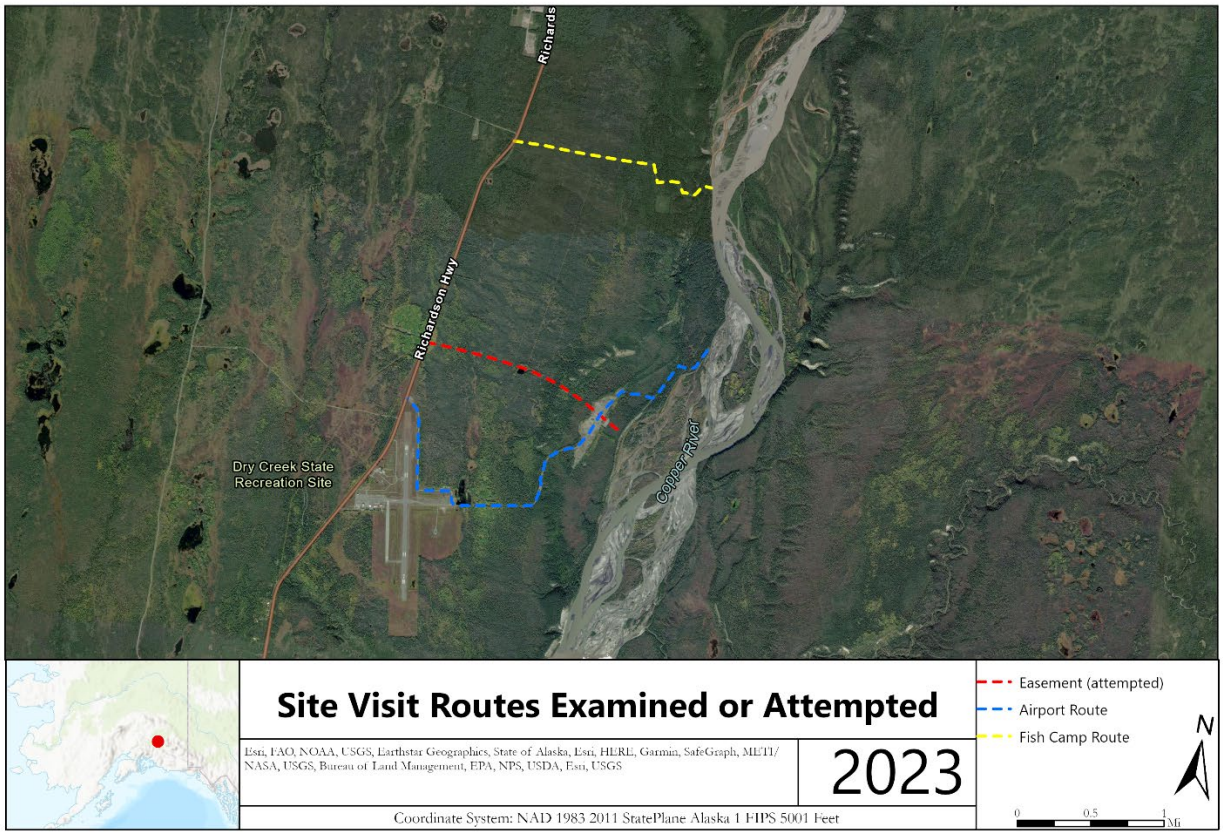
Only the fourth easement from the list above is actually located within the project area and is also shown in current BLM spatial data (see Figure 1). For the purposes of this study, this easement is the primary easement considered for revision, if needed. It is located near an existing public access road to the north of the Gulkana Airport, which accesses an active gravel material source owned by Ahtna, Inc. This study assumes a primary route on, along, or incorporating the existing roadway, since it is already in existence, can handle vehicle traffic, nearly reaches the Copper River, and parallels the existing easement.

Figure 4. Access to possible oil and gas easement from Richardson Highway, 2022.

The remainder of this section details the conditions encountered for this easement during the project team's July 2022 site visit.

Site Visit Land Use Observations

Figure 5. Routes visited and considered for possible access easement.[19]



Gulkana Airport Considerations

A route along the existing public road on the northern boundary of the Gulkana Airport was considered during the site visit. Planning is in early stages for possible future airport expansion, but no decisions have been made. The airport is more likely to expand south away from the highway and project area rather than north towards the highway and into the project area. Materials can be seen to have been deposited on the South side on the for-lease lots already, signaling possible expansion. If the airport is expanded and upgraded for larger planes and higher speeds, the existing roads should still be okay to use for the river access, as long as no infrastructure is built that can cause congregation in one area. Figure 6 below shows the airport route, through the active material source, to the abandoned fish camp.

If the easement is revised to incorporate the existing public roadway, the river access will need to split from the existing gravel road at some point before reaching the active material source. The material source boundary is not set and can be changed as pits are exhausted and new pits are formed. There will have to be access restrictions due to the mine being active, and design

[19] The site visit routes shown are approximated based on the project team's pre-site visit collaborative mapping. Final routes will be included in subsequent deliverables, including conceptual designs and the final report reflecting accurate spatial location.

will need to take Mine Safety and Health Administration (MSHA) regulations into consideration. This alignment will need to skirt the braided section of the river and go north where water is deep enough to establish a boat launch.

Figure 6. Airport route from Richardson Highway through active material source to the Copper River.

Existing Easement Considerations

Another possible route is to make use of the current easement, which is almost a straight route to the river from the highway. The challenges with the existing easement are that it is currently

undeveloped, does not fully reach the Copper River, and appears to dead-end at the bluff overlooking the material source. Figure 6 provides more detail.

Fish Camp Access Route

An additional route exists north of the current easement that appears to access a fish camp. Ahtna prefers that the fish camp stays where it is, so any possible boat launch would have to be away from this fish camp. The soil is wet and mushy due to thawing permafrost, and it deteriorates once leaving the aspen trail on either side. NPS suggests it might be good to clear the land and let it sit for a few years. Wood chips might be a better material to use than aggregate in this area. Figure 8 provides more context for the fish camp route.

Figure 7. Approximate location where existing easement reached active material source bluff, shown dashed green line.

Figure 8. Access gate and ground condition of Fish Camp route.

Site Conditions and Considerations

This section summarizes the site conditions that inform future alignment, design, and construction of any proposed improvements. We outline the considerations for cultural resources, design, safety, culverts and drainage, and any gaps in site condition information. Where possible, we include information and images gathered during the July 25th, 2022, site visit.

Cultural Resources

No known cultural resources have been identified in the project area at this time. Conversations with Tribal governments in the area revealed no particular cultural resource concerns, but the project team will validate any proposed trail alignments and facilities with area Tribal governments per the proposed Engagement Strategy.

The July 2022 site visit identified a fish camp likely used by Alaskan Natives, but it appeared to have been abandoned some time ago when the river channel changed course. Figure 9 at right provides additional views of the fish camp. Another fish camp is known to exist on the north end of the project area that may or may not be in use. The project team noted its existence and will orient any proposed alignments away from the camp.

The project team proposes having cultural resource staff from each participating agency review their own records for any potential conflicts as well.

Figure 9. Three views of abandoned fish camp.

Design Considerations

In order to allow the most flexibility for the trail alignments, the 50' easements will be mapped with additional 25' buffers on either side. This will allow the

alignment to meander within the easements, allowing for accommodations on either side in the event that there are design constraints identified.

Standards from the American Association of State Highway and Transportation Officials (AASHTO) and USFS will be utilized for design. Typically these standards cross-reference each other and can work in conjunction to fill in any gaps.

Boat Launch Design Considerations

Visiting existing boat launch facilities in the region showed a number of considerations and the motivation for a new Copper River boat launch facility. The project team visited three existing boat launches in the area: (1) Tazlina public boat launch, (2) Copper Center public boat launch, and (3) Copper Center private boat launch., shown in Figures 10-12.

Figure 10. Tazlina public boat launch.

Figure 11. Copper Center public boat launch.

The Tazlina boat launch is a gravel boat launch with some wash-out issues. The grade is fairly gentle with the last 15 feet or so steepening into the water. The launch point is at the bank of the river with a manmade riprap bay. The assumed intention is to create a slower protected area in the water to launch the boat, but the water is not deep enough here, and the bay creates an eddy so that it is difficult to launch. For these reasons, boats tend to be released farther from the bank where the current is swift and dangerous. It is better to provide a ramp with a constant steep grade (12-15%) so that there is ample water depth at the launch point to receive the boat, and so that the transition from land to water is without an abrupt grade change. This launch provides access to a tributary but not the main Copper River.

Similar to Tazlina, the Copper Center public boat launch is a gravel boat launch with a fairly shallow and rocky entry at the riverbank. This launch provides access to a tributary, but not the main Copper River. The Copper Center private boat launch is a gravel boat launch with a short concrete ramp at its end, and some silt sediment buildup. The concrete holds up much better to provide an even and stable ramp into the water. Water depth is higher here and the launch is slightly angled into the river, which helps to mitigate the eddy effect seen at the Tazlina launch. Water entry is gentler and more effective in terms of hydraulics current. This launch provides access to the main Copper River but is not open to the public.

Figure 12. Copper Center private boat launch.

Culverts and Drainage

Only one culvert was identified in the project area, shown in Figure 13 on the airport route through the material site to the river. No observed culverts or drainage facilities were identified within the project area.

Figure 13. Culvert in project area.

Conclusion and Next Steps

The available background documents, data, and staff information suggest that three routes could be considered for the revised public access easement. The first is the route from the northern boundary of the airport, through or around the material source, and turning north along the Copper River to reach an ideal launch point. The opportunities here are that it accesses the river already, albeit away from the ideal launch point, and portions of the trail are already able to support vehicle traffic. The challenges include ensuring separation of the traveling public and material source traffic, among other issues.

The second is the existing trail to the known active fish camp. This route continues straight from the highway to the river and has been maintained for a portion of the route. The issues include ensuring the fish camp's use is not disturbed and known permafrost in the area. Any considerations of this route must address both issues, possibly by following the existing route for a portion and then diverging into a new route to the ideal launch point.

The third option is to follow the existing route. The benefits include closely honoring the original easement. The challenge is that the river end of the easement appears to end at a bluff in the material site, creating the same challenges as the airport route.

The next steps for this project include developing alignment and design criteria for the project team to analyze alternative alignments. Preliminary criteria are shown below in Table 4, as identified by the project team, but will be refined in the next deliverable: Alignment Analysis.

Table 4. Design Criteria for Alignment Analysis and Design Deliverables.

Alignment	Parking	Boat Launch
• Alignment with intent of original easement • Long-term usability of alignment • Materials • Cost to construct and maintain • Access to adjoining NPS trail easements	• Up to one acre site • Including capacity to expand to one acre total • At point of launch activity (see 17(b) requirements) • Long-term usability and resilience • Materials • Management • Prevent unauthorized use, such as dumping	• Direct access to Copper River • Maintenance cost • Long-term use • Resilience • Silting • Materials • Management • Prevent unauthorized use, such as dumping

Attachment A – 43 CFR 2650.4-7

Section A	General Requirements
(1)	Only public easements which are reasonably necessary to guarantee access to publicly owned lands or major waterways and the other public uses which are contained in these regulations, or to guarantee international treaty obligations shall be reserved.
(2)	In identifying appropriate public easements assessment shall be made in writing of the use and purpose to be accommodated.
(3)	The primary standard for determining which public easements are reasonably necessary for access shall be present existing use. However, a public easement may be reserved absent a demonstration of present existing use only if it is necessary to guarantee international treaty obligations, if there is no reasonable alternative route or site available, or if the public easement is for access to an isolated tract or area of publicly owned land. When adverse impacts on Native culture, lifestyle, and subsistence needs are likely to occur because of the reservation of a public easement, alternative routes shall be assessed and reserved where reasonably available. The natural environment and other relevant factors shall also be considered
(4)	All public easements which are reserved shall be specific as to use, location, and size. Standard sizes and uses which are delineated in this subsection may be varied only when justified by special circumstances
(5)	Transportation, communication, and utility easements shall be combined where the combination of such easements is reasonable considering the primary purposes for which easement is to be reserved.
(6)	Public easements may be reserved to provide access to present existing Federal, State, or municipal corporation sites; these sites themselves shall not be reserved as public easements. Unless otherwise justified, access to these sites shall be limited to government use.
(7)	Scenic easements or easements for recreation on lands conveyed pursuant to the Act shall not be reserved. Nor shall public easements be reserved to hunt or fish from or on lands conveyed pursuant to the Act.
(8)	The identification of needed easements and major waterways shall include participation by appropriate Natives and Native corporations, LUPC, State, Federal agencies, and other members of the public.
(9)	After reviewing the identified easements needs, the Director shall tentatively determine which easements shall be reserved. Tentative determinations of major waterways shall also be made by the Director and shall apply to rivers, streams, and lakes. All lakes over 640 acres in size shall be screened to determine if they qualify as major waterways. Those smaller than 640 acres may be considered on a case-by-case basis. The Director shall issue a notice of proposed easements which notifies all parties that participated in the development of the easement needs and information on major waterways as to

	the tentative easement reservations and which directs that all comments be sent to the LUPC and the Director.
(10)	The State and the LUPC shall be afforded 90 days after notice by the Director to make recommendations with respect to the inclusion of public easements in any conveyance. If the Director does not receive a recommendation from the LUPC or the State within the time period herein called for, he may proceed with his determinations.
(11)	Prior to making a determination of public easements to be reserved, the Director shall review the recommendations of the LUPC, appropriate Native corporation(s), other Federal agencies, the State, and the public. Consideration shall be given to recommendations for public easement reservations which are timely submitted to the Bureau of Land Management and accompanied by written justification.
(12)	The Director, after such review, shall prepare a decision to convey that includes all necessary easements and other appropriate terms and conditions relating to conveyance of the land. If the decision prepared by the Director is contrary to the LUPC's recommendations, he shall notify the LUPC of the variance(s) and shall afford the LUPC 10 days in which to document the reasons for its disagreement before making his final decision. The Director shall then issue a Decision to Issue Conveyance (DIC).
(13)	The Director shall terminate a public easement if it is not used for the purpose for which it was reserved by the date specified in the conveyance, if any, or by December 18, 2001, whichever occurs first, He may terminate an easement at any time if he finds that conditions are such that its retention is no longer needed for public use or governmental function. However, the Director shall not terminate an access easement to isolated tracts of publicly owned land solely because of the absence of proof of public use. Public easements which have been reserved to guarantee international treaty obligations shall not be terminated unless the Secretary determines that the reasons for such easements no longer justify the reservation. No public easement shall be terminated without proper notice and an opportunity for submission of written comments or for a hearing if a hearing is deemed to be necessary by either the Director or the Secretary.
Section B	**Transportation Easements**
(1)	Public easements for transportation purposes which are reasonably necessary to guarantee the public's ability to reach publicly owned lands or major waterways may be reserved across lands conveyed to Native corporations. Such purposes may also include transportation to and from communities, airports, docks, marine coastline, groups of private holdings sufficient in number to constitute a public use, and government reservations or installations. Public easements may also be reserved for railroads. If public easements are to be reserved, they shall:
i	Be reserved across Native lands only if there is no reasonable alternative route of transportation across publicly owned lands;

ii	Within the standard of reasonable necessity, be limited in number and not duplicative of one another (nonduplication does not preclude separate easements for winter and summer trails, if otherwise justified);
iii	Be subject only to specific uses and sizes which shall be placed in the appropriate interim conveyance and patent documents;
iv	Follow existing routes of travel unless a variance is otherwise justified;
v	Be reserved for future roads, including railroads and roads for future logging operations, only if they are site specific and actually planned for construction within 5 years of the date of conveyance;
vi	Be reserved in topographically suitable locations whenever the location is not otherwise determined by an existing route of travel or when there is no existing site;
vii	Be reserved along the marine coastline only to preserve a primary route of travel between coastal communities, publicly owned uplands, or coastal communities and publicly owned uplands;
vii	Be reserved from publicly owned uplands to the marine coastline only if significant present existing use has occurred on those publicly owned lands below the line of mean high tide. However, for isolated tracts of publicly owned uplands, public easements may be reserved to provide transportation from the marine coastline if there is no other reasonable transportation route;
ix	Be reserved along major waterways only to provide short portages or transportation routes around obstructions. However, this condition does not preclude the reservation of a trail or road easement which happens to run alongside a waterway;
x	Not be reserved on the beds of major waterways except where use of the bed is related to road or trail purposes, portaging, or changing the mode of travel between water and land (e.g., launching or landing a boat); a specific portion of the bed or shore of the waterway which is necessary to provide portage or transportation routes around obstructions, including those that are dangerous or impassible or seasonably dangerous or impassible, may be reserved.
xi	Not be reserved on the beds of nonmajor waterways except where use of the beds is related to road or trail purposes. However, this exception shall not be used to reserve a continuous linear easement on the streambed to facilitate access by boat.
xii	Not be reserved simply to reflect patterns of Native use on Native lands;
xiii	Not be reserved for the purpose of protecting Native stockholders from their respective corporations;
xiv	Not be reserved on the basis of subsistence use of the lands of one village by residents of another village.
(2)	Transportation easements shall be limited to roads and sites which are related to access. The use of these easements shall be controlled by applicable Federal, State, or municipal corporation laws or regulations. The uses stated herein will

	be specified in the interim conveyance and patent documents as permitted uses of the easement.
i	The width of a trail easement shall be no more than 25 feet if the uses to be accommodated are for travel by foot, dogsleds, animals, snowmobiles, two and three-wheel vehicles, and small all-terrain vehicles (less than 3,000 lbs. G.V.W.);
ii	The width of a trail easement shall be no more than 50 feet if the uses to be accommodated are for travel by large all-terrain vehicles (more than 3,000 lbs. G.V.W.), track vehicles and 4-wheel drive vehicles, in addition to the uses included under paragraph (b)(2)(i) of this section;
iii	The width of an existing road easement shall be no more than 60 feet if the uses to be accommodated are for travel by automobiles or trucks in addition to the uses included under paragraphs (b)(2) (i) and (ii) of this section. However, if an existing road is wider than 60 feet, the specific public easement may encompass that wider width. For proposed roads, including U.S. Forest Service logging roads, the width of the public easement shall be 100 feet, unless otherwise justified. Prior to construction, trail uses which are included under paragraphs (b)(2) (i) and (ii) of this section may be permitted if otherwise justified and may continue if the road is not built. If after the road has been constructed a lesser width is sufficient to accommodate the road, the Director shall reduce the size of the easement to that width.
iv	The width of a proposed railroad easement shall be 100 feet on either side of the center line of any such railroad
(3)	**Site easements.** Site easements which are related to transportation may be reserved for aircraft landing or vehicle parking (e.g., aircraft, boats, ATV's, cars, trucks), temporary camping, loading, or unloading at a trail head, along an access route or waterway, or within a reasonable distance of a transportation route or waterway where there is a demonstrated need to provide for transportation to publicly owned lands or major waterways. Temporary camping, loading, or unloading shall be limited to 24 hours. Site easements shall not be reserved for recreational use such as fishing, unlimited camping, or other purposes not associated with use of the public easement for transportation. Site easements shall not be reserved for future logging or similar operations (e.g., log dumps, campsites, storage, or staging areas). Before site easements are reserved on transportation routes or on major waterways, a reasonable effort shall be made to locate parking, camping, beaching, or aircraft landing sites on publicly owned lands; particularly, publicly owned lands in or around communities, or bordering the waterways. If a site easement is to be reserved, it shall:
i	Be subject to the provisions of paragraphs (b)(1) (ii), (iii), (vi), (xii), (xiii), and (xiv) of this section.
ii	Be no larger than one acre in size and located on existing sites unless a variance is in either instance, otherwise justified;

iii	Be reserved on the marine coastline only at periodic points along the coast where they are determined to be reasonably necessary to facilitate transportation on coastal waters or transportation between coastal waters and publicly owned uplands;
iv	Be reserved only at periodic points on major waterways. Uses shall be limited to those activities which are related to travel on the waterway or to travel between the waterway and publicly owned lands. Also, periodic site easements shall be those necessary to allow a reasonable pattern of travel on the waterway;
v	Be reserved for aircraft landing strips only if they have present significant use and are a necessary part of a transportation system for access to publicly owned lands and are not suitable for reservation under section 14(c)(4) of the Act. Any such easement shall encompass only that area which is used for takeoffs and landings and any clear space around such site that is needed for parking or public safety.
Section C	**Miscellaneous Easements**
	Miscellaneous easements. The public easements referred to in this subsection which do not fall into the categories above may be reserved in order to continue certain uses of publicly owned lands and major waterways. These public easements shall be limited in number. The identification and size of these public easements may vary from place to place depending upon particular circumstances. When not controlled by applicable law or regulation, size shall not exceed that which is reasonably necessary for the purposes of the identified easement. Miscellaneous easements may be reserved for the following purposes:
(1)	Public easements which are for utility purposes (e.g., water, electricity, communications, oil, gas, and sewage) may be reserved and shall be based upon present existing use. Future easements for these purposes may also be reserved, but only if they are site specific and actually planned for construction within 5 years of the date of conveyance;
(2)	Easements for air light or visibility purposes may be reserved if required to ensure public safety or to permit proper use of improvements developed for public benefit or use; e.g., protection for aviation or navigation aids or communications sites;
(3)	Public easements may be reserved to guarantee international treaty obligations or to implement any agreement entered into between the United States and the Native Corporation receiving the conveyance. For example, the agreement of May 14, 1974, related to Naval Petroleum Reserve Number Four (redesignated June 1, 1977, as the National Petroleum Reserve-Alaska) between the United States Department of the Navy and the Arctic Slope Regional Corporation and four Native village corporations, shall be incorporated in the appropriate conveyances and the easements necessary to implement the agreement shall be reserved.
Section D	**Conveyance Provisions**

(1)	Public easement provisions shall be placed in interim conveyances and patents
(2)	Permissible uses of a specific easement shall be listed in the appropriate conveyance document. The conveyance documents shall include a general provision which states that uses which are not specifically listed are prohibited.
(3)	The easements shall be identified on appropriate maps which shall be part of the pertinent interim conveyance and patent.
(4)	All public easement shall be reserved to the United States and subject, as appropriate, to further Federal, State, or municipal corporation regulation.
(5)	All conveyance documents shall contain a general provision which states that pursuant to section 17(b)(2) of the Act, any valid existing right recognized by the Act shall continue to have whatever right of access as is now provided for under existing law.

FHWA Office of Federal Lands Highway

Copper River Access Study

Appendix B: Engagement Strategy and Activities

Attendees at the study open house

May 10th, 2022 (Updated July 27th, 2023)

Table of Contents

Introduction

This memorandum describes the public and stakeholder engagement strategy that supports the Copper River Access Study. This memo is a living document that lays out a proposed plan for engagement, recognizing that the approach to engagement will evolve as the project progresses. The initial engagement strategy below should be viewed as a starting point while the summary of engagement activities and feedback can be viewed as what was ultimately completed.

Tribal consultation was conducted in accordance with the USDOT Tribal Consultation Plan,[1] as well as applicable Federal Land Management Agency and partner policies.

This document identifies the applicable federal regulations, engagement goals, key stakeholders, public involvement activities, and Tribal consultation approach. It then summarizes the final engagement and consultation activities completed and how feedback informed the final study recommendations.

[1] See https://www.transportation.gov/tribal

Applicable Federal Regulations

Federal Environmental Justice and Title VI Compliance

The study is funded in part through a federal award administered by the FHWA Western Federal Lands. The project must meet requirements described in Executive Order 12898 (EJEO), Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, and Title VI of the Civil Rights Act of 1964.

Title VI provides that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title VI protects people against discrimination due to race, color, national origin, age, sex, disability, or limited English proficiency.

Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The Executive Order requires each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." EJ provisions generally apply to the same groups considered by Title VI, as well as people who are low-income.

National Environmental Policy Act (NEPA)

The National Environmental Policy Act of 1970 requires the federal government to use all practicable means to create and maintain conditions under which man and nature can exist in productive harmony. NEPA requires federal agencies to incorporate environmental considerations in their planning and decision-making through a systematic, interdisciplinary approach. Specifically, all federal agencies must prepare detailed statements assessing the environmental impact of and alternatives to major federal actions that might significantly affect the environment, commonly referred to as Environmental Impact Statements (EIS) and Environmental Assessments (EA).

National Historic Preservation Act (NHPA)

The National Historic Preservation Act of 1966 provides protection for areas of historical and cultural importance. The NHPA established a partnership between the federal government and state, tribal, and local governments that is supported by federal funding for preservation activities. The NHPA accomplishes this by requiring federal agencies to consider the impact of their actions on historic properties, areas of cultural significance, and to provide interested parties with a n opportunity to comment on projects before implementation.

Alaska National Interest Lands Conservation Act (ANILCA)

The Alaska National Interest Lands Conservation Act of 1980 created most of the national parklands in Alaska today. ANILCA stipulates the designation of wilderness, subsistence management, transportation in and across parklands, use of cabins, archeological sites, and more.

23 CFR Part 450: Planning Assistance and Standards

24 CFR §450.208 and §450.210 govern requirements, strategies, and limitations placed upon the coordination of planning process activities and interested parties, public involvement, and consultation, respectively. These regulations outline the required elements for both public involvement in transportation projects, and tribal consultation in the planning process; both of which were used in developing the elements of the Engagement Strategy for the Copper River Access study.

Section 508 of the Rehabilitation Act of 1973 (Section 508)

Section 508 requires all federal agencies to make their information and communication technology (ICT) accessible to individuals with disabilities in accordance with standards issued by the U.S. Access Board. Section 508 provided technical requirements for the study's visual, print, and electronic media to ensure that individuals with disabilities have equal access to information and data regarding the study.

Alaska Native Claims Settlement Act of 1971

The Alaska Native Claims Settlement Act of 1971 (ANCSA) established 17(b) easements, which reserved rights to the United States from communities, airports, docks, marine coastline, and groups of private holdings sufficient in number to constitute and facilitate public use and government facilities. The purpose of most 17(b) easements are reserved to allow the public to cross private property to reach public lands and major waterways. Using 17(b) easements, however, does not allow the public to use the private lands these easements cross.

Federal Land Management Policy Act of 1976

The Federal Land Management Policy Act of 1976 (FLPMA) governs the way in which the public lands administered by the Bureau of Land Management are managed. FLPMA established guidelines for the administration, management, protection, development, and enhancement of public lands.

Engagement Goals and Strategy

1. **Encourage the participation of all stakeholders by employing a mix of tools to reach the broadest audience possible.**
2. **Provide early and ongoing opportunities for stakeholders to ask questions, raise issues, or share concerns**. Outreach will occur at three major milestones, namely the existing conditions, design engagement, and final report stages of the project.
3. **Seek feedback on three broad fronts.** Focus on how impacted communities want to engage with the project, how they would like to be engaged, and how the proposed engagement methods we have so far identified align with their interests. The primary means of engagement throughout the project will be through development of a project website, open houses at key milestones of the project, and virtual public involvement (VPI).
4. **Ensure that public and government-to-government feedback is considered in the decision-making process and in development of the action plan.** Public feedback on each step of the planning process will be incorporated into decision-making and reflected in relevant evaluation criteria to ensure the final plan reflects the public's needs and priorities.

Stakeholders

Table 1 lists the major stakeholder groups the project team identifies that could be affected by study outcomes.

Table 1. Stakeholder Groups

Group	Stakeholders
Government agencies and institutions	• Ahtna • U.S. Park Service • FHWA • BLM • Native Village of Gakona • Gulkana Village Council • Native Village of Tazlina • Native Village of Kluti-Kaah • Alaska DOT&PF
Local stakeholders	• Glennallen community • Gakona community • Tazlina community • Private landowners • Area residents • Visitors and tourists
Non-profits and private entities	• Recreation groups • Environmental groups

Engagement Approach

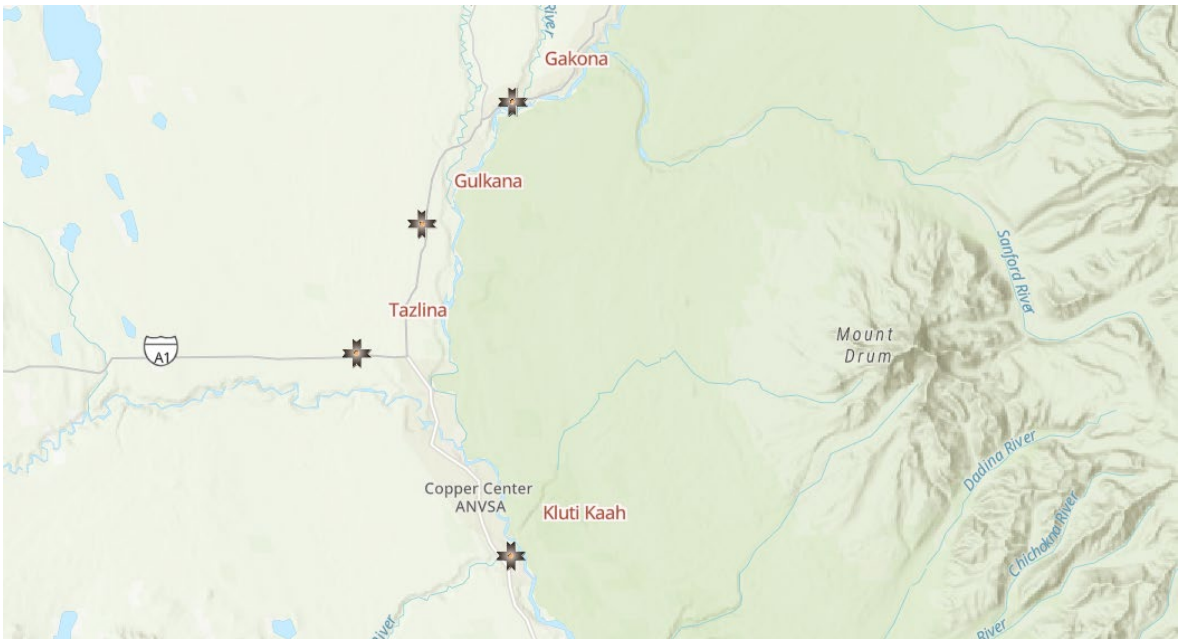
Engagement is focused on key milestones in the project and includes a project website and applicable in-person and VPI strategies. Table 2 on the following pages describes the major engagement milestones, timing, and the proposed engagement methods for each. The project management team will provide a brief outreach summary at the conclusion of each milestone in the project.

Tribal Consultation

Tribal consultation will be conducted in accordance with the USDOT Tribal Consultation Plan (https://www.transportation.gov/tribal), as well as applicable Federal Land Management Agency and partner policies. Tribal consultation is a government-to-government interaction that is distinct from public involvement. While the activities and milestones may be similar to or even the same as those in public involvement, the project team shall recognize the distinction between Tribal consultation and public involvement throughout the study. Figure 1 below shows Tribal governments in and near the study area. Key questions throughout the Tribal consultation process are:

1. How do Tribal governments want to be engaged by the study?
2. How do Tribal governments want to engage with the study?
3. How can the project team honor the Tribal government's interests through the study?

Figure 1. Tribal governments in the Copper River Valley area.[2]



[2] BIA. 2023. U.S. Domestic Sovereign Nations: Land Areas of Federally-Recognized Tribes. https://bia-geospatial-internal.geoplatform.gov/indianlands/#

Table 2. Engagement Approach for Tribal Consultation and Public Involvement

	Milestone 1 – Existing Conditions	Milestone 2 – Design Alternatives	Milestone 3 – Final Report
Purposes and Topics	• Introduce the project to stakeholders and provide opportunity for general feedback on access to the project area. • Provides early information about the study's needs in order to clarify issues that will later be addressed by the study. • Initial engagement with impacted Tribal communities.	• Review concepts and design options to identify any issues, possible improvements, and opportunities. • Provides opportunity for direct input from the public and stakeholders on conceptual improvement ideas and other core elements of the study. • Continued engagement with impacted Tribal communities.	• Final opportunity for public and stakeholder input on the elements of the draft study. • Final engagement with impacted Tribal communities.
Approximate Timing	August 2022	January 2023	June 2023
Primary Engagement Goal	Inform stakeholders about the project and provide an early, general opportunity for input. Validate project needs and goals.	Further feedback on elements of the study; confirm design approaches to closing gaps and meeting initial needs.	Confirm findings and recommendations in the study.
Engagement Tools	• Project website • Formal letters to Tribal governments and possible in-person or virtual meetings • Phone calls to Tribal governments requesting Council meeting and presentation	• Discussion with and presentation to Tribal communities • Small group meetings as needed with specific individuals, groups, and/or Tribal governments	• Online survey and open house for providing feedback on the study
Communication Tools	• Update to project website • Fact sheet for posting, printing, and emailing • Notification to Tribal communities	• Update to project website • Updated fact sheet for posting, printing, and emailing	• Update to project website • Update to fact sheet • Email distribution to interested parties and stakeholders

	• Email distribution to interested parties and stakeholders	• Printed posters for open house • Online public comment

Engagement Summary

At the completion of each engagement milestone, the project team shall consolidate all feedback received and how feedback was addressed. All engagement activities and feedback shall be summarized in the study's Final Report.

Limitations

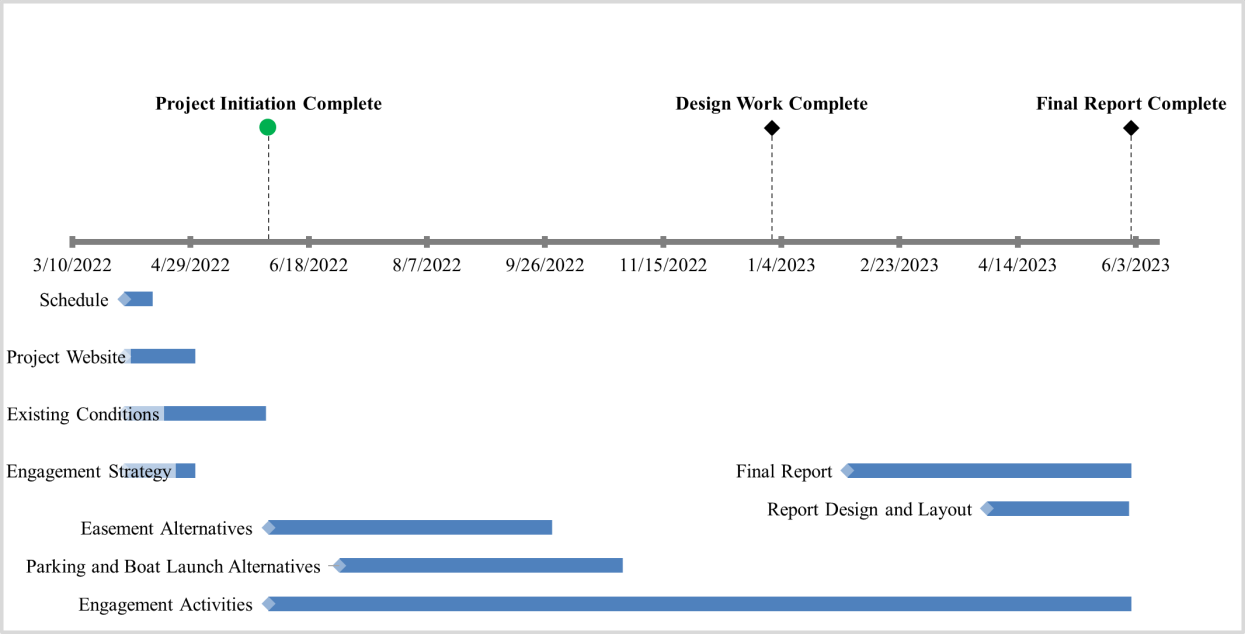
Possible constraints placed on public involvement might include, but are not limited to the following:

1. **COVID/Pandemic**. Changes in COVID restrictions or concerns might fluctuate during the life of the study. These can be addressed primarily through observing Center for Disease Control (CDC) guidance tailoring involvement strategies to the latest recommendations based on local COVID cases. If COVID prevents in-person meetings and site visits, the PMT shall adapt these engagement opportunities to virtual platforms.
2. **Weather concerns**. Severe weather might impact in-person public involvement events. This can largely be mitigated through expanding VPI strategies should an in-person event be impacted by severe weather.
3. **Accessibility concerns.** While VPI is an excellent tool for soliciting public involvement, not all households have access to an internet connection. This can somewhat be mitigated through printed materials and engaging with community centers and public areas with internet access, such as libraries.

Project Schedule

Figure 2 below provides a high-level summary of the project schedule for reference. Engagement activities will occur throughout the easement alternatives, parking and boat launch conceptual design, and Final Report tasks.

Figure 2. Summary of Project Schedule



The final schedule modified the milestones shown. The "Design Work Complete" milestone was completed April 20th following the associated engagement activities. The Final Report engagement and document were completed in July to accommodate meeting space availability in Glennallen for the open house.

Summary of Engagement Activities and Feedback

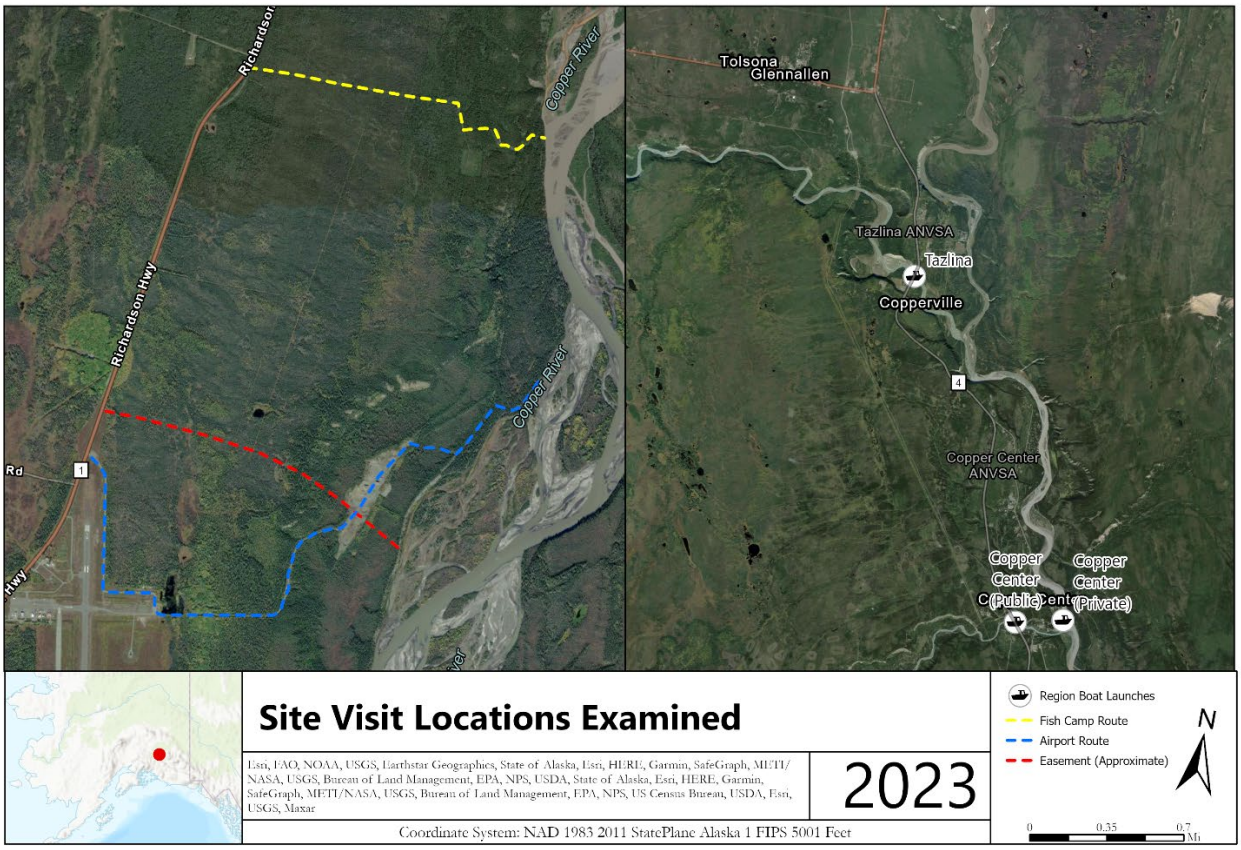
Stakeholder and public perspectives on the study were gathered throughout the project as outlined in the previous section. This section summarizes the activities conducted, what the project team heard, and how it informed the study's recommendations. Engagement activities for this study were organized around key project milestones and consisted of:

- A stakeholder site visit before starting the study,
- Direct engagement with Tribal governments
- An in person open house supported by an online public comment period

Stakeholder Site Visit

Before the project fully started in October 2022, the project team and other interested stakeholders conducted a site visit of the study area in July 2022 to understand the site conditions, challenges, and opportunities.[3] The group examined possible existing routes in the area as well as comparable parking and boat launch facilities. Figure 3 shows the sites examined during the visit.

Figure 3. Site visit locations.



[3] For complete details on the Site Visit, see Appendix A.

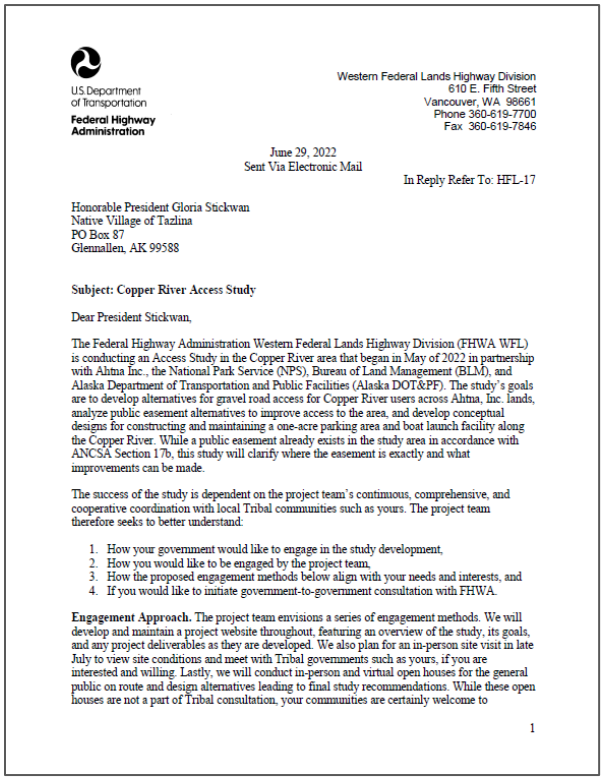
Engagement with Tribal Governments

The project team conducted Tribal consultation with the Tribal governments shown in Figure 1, including:

- Native Village of Tazlina
- Gulkana Village Council
- Native Village of Gakona
- Native Village of Kluti-Kaah[4]

The initial consultation included a formal letter to each Tribal government followed by a phone conversation with the Tribal Administrator for each. Figure 4 below shows an example of the consultation letter was sent to the Native Village of Tazlina.

Figure 4. Example Tribal consultation letter.



U.S.Department of Transportation
Federal Highway Administration

Western Federal Lands Highway Division
610 E. Fifth Street
Vancouver, WA 98661
Phone 360-619-7700
Fax 360-619-7846

June 29, 2022
Sent Via Electronic Mail

In Reply Refer To: HFL-17

Honorable President Gloria Stickwan
Native Village of Tazlina
PO Box 87
Glennallen, AK 99588

Subject: Copper River Access Study

Dear President Stickwan,

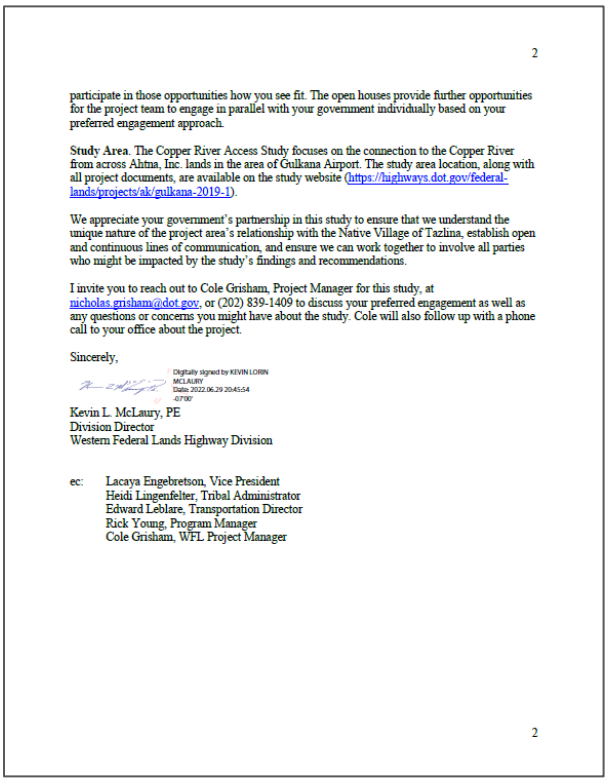
The Federal Highway Administration Western Federal Lands Highway Division (FHWA WFL) is conducting an Access Study in the Copper River area that began in May of 2022 in partnership with Ahtna Inc., the National Park Service (NPS), Bureau of Land Management (BLM), and Alaska Department of Transportation and Public Facilities (Alaska DOT&PF). The study's goals are to develop alternatives for gravel road access for Copper River users across Ahtna, Inc. lands, analyze public easement alternatives to improve access to the area, and develop conceptual designs for constructing and maintaining a one-acre parking area and boat launch facility along the Copper River. While a public easement already exists in the study area in accordance with ANCSA Section 17b, this study will clarify where the easement is exactly and what improvements can be made.

The success of the study is dependent on the project team's continuous, comprehensive, and cooperative coordination with local Tribal communities such as yours. The project team therefore seeks to better understand:

1. How your government would like to engage in the study development,
2. How you would like to be engaged by the project team,
3. How the proposed engagement methods below align with your needs and interests, and
4. If you would like to initiate government-to-government consultation with FHWA.

Engagement Approach. The project team envisions a series of engagement methods. We will develop and maintain a project website throughout, featuring an overview of the study, its goals, and any project deliverables as they are developed. We also plan for an in-person site visit in late July to view site conditions and meet with Tribal governments such as yours, if you are interested and willing. Lastly, we will conduct in-person and virtual open houses for the general public on route and design alternatives leading to final study recommendations. While these open houses are not a part of Tribal consultation, your communities are certainly welcome to

1



2

participate in those opportunities how you see fit. The open houses provide further opportunities for the project team to engage in parallel with your government individually based on your preferred engagement approach.

Study Area. The Copper River Access Study focuses on the connection to the Copper River from across Ahtna, Inc. lands in the area of Gulkana Airport. The study area location, along with all project documents, are available on the study website (https://highways.dot.gov/federal-lands/projects/ak/gulkana-2019-1).

We appreciate your government's partnership in this study to ensure that we understand the unique nature of the project area's relationship with the Native Village of Tazlina, establish open and continuous lines of communication, and ensure we can work together to involve all parties who might be impacted by the study's findings and recommendations.

I invite you to reach out to Cole Grisham, Project Manager for this study, at nicholas.grisham@dot.gov, or (202) 839-1409 to discuss your preferred engagement as well as any questions or concerns you might have about the study. Cole will also follow up with a phone call to your office about the project.

Sincerely,

Digitally signed by KEVIN LORIN MCLAURY
Date: 2022.06.29 20:45:54 -07'00'

Kevin L. McLaury, PE
Division Director
Western Federal Lands Highway Division

ec: Lacaya Engebretson, Vice President
Heidi Lingenfelter, Tribal Administrator
Edward Leblare, Transportation Director
Rick Young, Program Manager
Cole Grisham, WFL Project Manager

2

The feedback from each conversation was documented in the table shown below and referenced at each milestone.

[4] The Native Village of Kluti-Kaah was not included in the initial Tribal consultation, appearing to be too far from the study area. This was corrected later in the study development through direct engagement with the Tribal Administrator of the Native Village of Kluti-Kaah.

Table 3. Summary of initial Tribal consultation feedback.

	Native Village of Gakona	Gulkana Village Council	Native Village of Tazlina
How would your government like to engage in the study development?	By receiving project materials as they are available.	By receiving project materials as they are available.	By receiving project materials as they are available.
How would you like to be engaged by the project team?	By receiving project materials as they are available.	By receiving project materials as they are available.	Please engage with the Native Village of Tazlina once alignment alternatives are available.
How do the proposed engagement methods align with your needs and interests?	Not interested at this time but please include the Tribal government in outreach emails.	Not interested at this time but please include the Tribal government in outreach emails.	Not interested at this time but please include the Tribal government in outreach emails.
Would you like to initiate government-to-government consultation with FHWA?	No.	Not at this time.	Not at this time.
Other Considerations	Tribe determined they have no interest in this study at this time due to their distance from the project area.	Tribal Council meets every other month and will discuss this project at an upcoming meeting. The Tribal Administrator will follow up with the project team as needed to communicate any Tribal Council concerns or preferences.	The Tribe does have historic lands in or near the project area but suggested that Gulkana Village Council likely had more of an interest.

Following the development of conceptual design and cost estimates, including analysis of proposed routes, Ahtna, Inc. staff engaged with each Tribal government, Native Village Corporation, and the Ahtna, Inc. internal land boards in March and April 2023. The feedback is summarized as follows:

- The conceptual design report dated December 15, 2022, was discussed
- The routing alternatives were presented and issues and concerns were discussed
- These entities were informed that Ahtna is working with FHWA and NPS on this project they should expect communication on the project regarding tribal consultation from FHWA

- General concerns were raised about the northern and southern route and about increased access in general
- The northern route used a road currently accessing a family fish camp and was not supported
- The southern route was not favored because it was too far from the existing 17(b) easement, possibly impacted an old village site, and it crossed state lands
- The middle route was preferred if there was going to be a project
- Issues were raised by Gakona about impacts from general increased use of the area by visitors and hunters at the facility, on the Copper River, and across the Copper River
- Issues were raised by Gulkana about the need to manage the facility to prevent trespass, litter, illegal dumping, and sanitation issues
- Tazlina asked "Why is the National Park Service the responsible Federal Agency on this project since it is outside the park boundaries."

Each of these comments were included in the evaluation of route alternatives and directly informed the final proposed access easement and roadway.

In Person Open House and Online Public Comment

The in person open house was held on July 10th, 2023, at the Board Room for the Copper River School District between 12PM and 7PM. Information on the date, time, location, and format were shared with stakeholders by email on June 2nd, 2023, with periodic reminders leading up to the day of the event. The information was also distributed over local radio stations for the month leading up to the event. The email and attached flyer are shown in Figures 5 and 6 on the following pages.

The open house was organized with a series of project maps, space for written comments and drawings, and a periodic project overview presentation. Participants were encouraged to share their thoughts with one another and project team, write on the maps, and provide any questions, comments, or feedback that they wished. The project team addressed all feedback received in the meeting and documented feedback and responses in Table 4 on the following pages.

Overall attendance, based both on sign the in sheet used and additional attendees, was about 25 for the open house. To respect attendees privacy, we have not attached the sign in sheet to this document but made it available to Ahtna, Inc., NPS, BLM, and Alaska DOT&PF for their records.

Figure 5. Email to interested stakeholders about the planned study open house.

Hello everyone,

My name is Cole Grisham and I am leading a study in collaboration with Ahtna, Inc., the National Park Service, Bureau of Land Management, and Alaska DOT&PF called the Copper River Access Study. This project seeks to develop a preferred roadway alignment, parking area, and boat launch along the Copper River north of the Gulkana Airport.

Our team invites you to join us for an open house on the project! Here you will be able to learn more about the project and proposed improvements, provide any feedback you have, and discuss any challenges and opportunities you see with the project team.

Open House Details

- ***Date**: Monday, July 10th, 2023*
- ***Time**: 12PM-7PM*
- ***Location**: Copper River School District Board Room*
- ***Format**: Open House - Come and go as you please!*
- ***Project Website**: https://highways.dot.gov/federal-lands/projects/ak/gulkana-2019-1*

We will add the open house posters and an online feedback form to the project website by June 30th as well for those who cannot join in person.

Please feel free to distribute this invitation as you see fit and reach out to me if you have any questions, comments, or concerns in advance of the open house.

Best regards,

Cole Grisham, AICP | Transportation Planner
Western Federal Lands Highway Division
Phone: 202.839.1409 | Email: nicholas.grisham@dot.gov

Figure 6. Open house and online public comment flyers used in outreach. The flyer on the right was printed and posted in public offices and bulletin boards in Glennallen and nearvy communities.

Figure 7. Images from the open house.

Table 4. Questions and comments from open house and online participants and project team responses.

What feedback do you have on the project background and purpose?	Response
What's driving the NPS and Ahtna to do something about this?	Ahtna notes that they've had some recent successes (Gulkana land trade) and people are realizing that maybe we can protect Ahtna land and still provide for public access too. From NPS perspective, there's been a greater emphasis on provide public access and more funding has been available.
What is the need?	The need is two part. First, Ahtna, Inc., is interested in clarifying where the public access easement is so that users do not trespass (knowingly or otherwise) on Ahtna lands to access the river. Second, the NPS is interested in ensuring any improved easement is a benefit to users and access NPS lands as originally intended.
Why is this being studied now?	The need is two part. First, Ahtna, Inc., is interested in clarifying where the public access easement is so that users do not trespass (knowingly or otherwise) on Ahtna lands to access the river. Second, the NPS is interested in ensuring any improved easement is a benefit to users and access NPS lands as originally intended.
Where does the money come from for this study and for design/construction of the road and boat launch?	The planning study is funded through the Federal Lands Access Program (FLAP), a federal funding mechanism for transportation facilities that are adjacent to federal lands. Future design and construction may also be FLAP funded, but Ahtna would need to compete for such funds.

What feedback do you have on the proposed route and roadway?	
With other 17b easements, why has this one lagged? There are a lot of 17b easements that exist on paper but not in reality.	NPS and Ahtna have been talking about how to improve access to Copper River and have the easement work as intended. NPS is mandated to provide access to the public.

Would prefer to stay away from active gravel pit.	Understood; thank you for your feedback.
Ahtna prefers alternative that matches current 17b alignment.	Understood; thank you for your feedback.
How was the airport site determined as a potential launch site?	There are other 17b easements to the north and south that limit the overall study area. There are also constraints with the river characteristics: want to have a boat launch where the river is calmer and the boat launch can be oriented southward to reduce silting.
Whatever the final alignment/design and expected use is, Ahtna, NPS, and BLM need to clearly communicate information about how it is publicly available.	Agreed; thank you for your feedback.
If this is truly an attempt to address lack of 17b easement, what happens to the easement beyond the river access? If the park isn't on the other side of the river, then technically the 17b isn't accessing the NPS lands.	This is a common point of confusion. The west bank of the Copper River is indeed NPS (Wrangell-St. Elias National Park), but Ahtna, Inc., has what are called "inholdings" within the park that are privately owned lands within NPS. A helpful land status map that shows this overlap is available here: https://www.nps.gov/wrst/learn/management/upload/LAND-STATUS-MAP.pdf
Why was this easement selected out of all the other easement locations?	The brief answer is that (1) it is an easement Ahtna, Inc., has been wanting to correct for a while, (2) there is joint interest from Ahtna, Inc., and NPS on this specific easement, and (3) funding became available to study a possible solution.
Why was the middle alternative selected as the project team recommendation?	The middle alignment was selected based on a combination of factors analyzed in the Conceptual Designs memo, but the primary reasons were alignment with existing easement, separation from other area uses, reduced risk of airport expansion conflicts, and protection of cultural resources.
Want to know resource concerns early before going through NEPA process.	Absolutely. This is also what informed the middle alignment compared to the other two route.
A lot of mushrooms on dry creek ridge near airport.	Understood; thank you for your feedback.

BLM donation release – documenting every step of the planning process will help with NEPA. NEPA on the action of creating the road and boat launch if it's on BLM land. If it involves 17b easement, if BLM wants to release 17b easement in lieu of new access. BLM/NPS to coordinate NEPA.	Understood; thank you for your feedback.
For road construction, stack cut trees (anything larger than 6") for Ahtna fire use. Not really part of this study but more of an FYI.	Understood; thank you for your feedback.
Don't want Alyeska construction and gravel pit to shut down access. Want to protect access to tribal subsistence. Having a separate public access eliminates trespassing issues and user conflicts. Middle alignment seems to address all of these concerns.	Understood; thank you for your feedback. This fits with why the middle alignment is preferred over the southern alignment.
Old village site (where Stickwans came from, dry creek campground area) – located near airport. Tribe was forced to move and the village was burned down but they've always had access. Roy Ewan's family site and fish camp.	Understood; thank you for your feedback. This fits with why the middle alignment is preferred over the northern alignment.
NPS maintaining the road will be a problem.	Understood; thank you for your feedback.

What feedback do you have on the parking and boat launch facilities?	
Impact to lower end of Gulkana River – potential to increase use. It's a four hour float in between launches.	Understood; thank you for your feedback.
Has walked up the braid to old fish camp. Constructability is what should determine final option.	Understood; thank you for your feedback.
What about other areas near Copper Center or Tazlina? Concern was putting in in Gulkana and coming out on the Copper. Used to be able to get out north of Tazlina, then North Archdiocese cut those permits off. There's a good takeout there for rafts and inflatables that is no longer accessible. Gulkana to Copper Center route would be perfect but can't find a take-out. More people would do this float if	The further south you go, you lose the intent of the original easement, which is a limiting factor for this specific study. Additional pull outs for float users is a great idea and will be reflected in the "additional considerations' section.

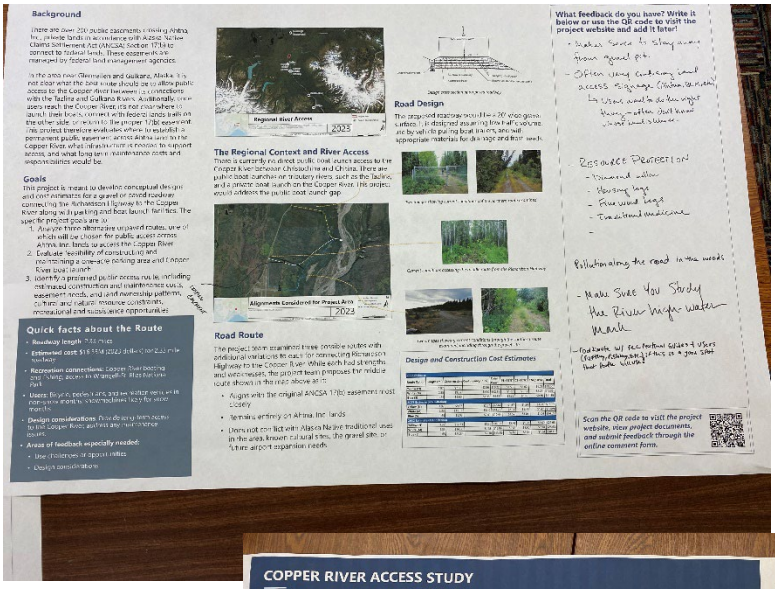
there was a take-out option that reduced the total trip time down from 4 hours.	
Will recreation facilities be added?	Not at the moment, but Ahtna, Inc. could add some later if they wanted to on their adjacent lands.
Could see people wanting to add a fish-wheel. Ahtna has issues with people stealing fish from fish wheels/camps.	Understood; thank you for your feedback.
Who will maintain the boat launch?	NPS is the maintaining agency.
May be a need in the future for a more in-depth hydrology analysis to understand how the river may change.	Understood; thank you for your feedback.
Could see people just fishing around the boat ramp (not even putting in boats, just walking around the river near the launch to fish and possibly creating new informal foot paths).	Understood; thank you for your feedback.
The way the Moose Creek was designed during low water and it's flooded three times in 2 years. Need to study the high water marks during the spring peak season (May/June) to inform design.	Agreed; your feedback aligns with the study's recommendations. We couldn't establish an actual high water mark during this study and so would need to do a hydrology study to figure out true high water mark.
Army Corps is doing an erosion study along Copper River.	This is great to hear and we discussed in the open house with the commenter whether the scope could include the proposed boat launch area too.
Copper River Responder (Alyeska Boat – it's 14' wide)	Understood; thank you for your feedback.
Chitna area is motorized. Around the study area is non-motorized, that's the predominate use. Need to explore non-motorized take-out options downriver.	Understood; thank you for your feedback. This will be added to the "additional considerations" section of the report.
New Gulkana boat launch is packed, no space for people coming in and out. Concerned that the new boat launch will attract a lot of users and be difficult to manage.	Understood; thank you for your feedback. This aligns with take-out variable – people say they don't need much for put-ins. People will want to stick around and play at the take-out.

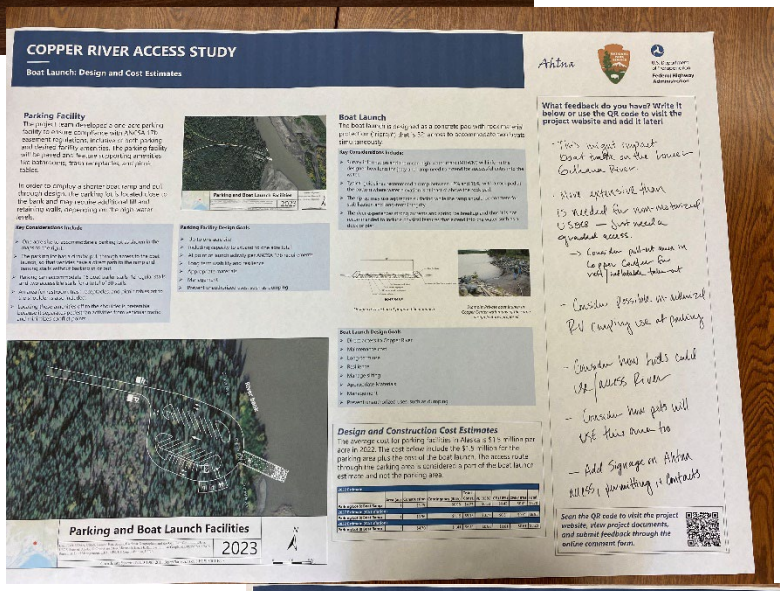
Why are boats prioritized over kids playing at the river? How can kids safely play at the river? Other people will want their dog to be able to play at the river.	Good insight and we will ensure the non-boat users of the site are considered as well.
If there's an issue at the boat launch, will NPS be responsible for enforcement and maintenance/clean-up? If that many people are clustering at the launch, who is enforcing the rules?	NPS is technically responsible for maintenance of the easement, parking, and boat launch area while Ahtna is responsible for its adjoining lands.
It seems like the NPS will be on the hook for this, which is odd because the easement is BLM and it cuts through Ahtna land. However, it's NPS land that is being accessed.	Yes, the jurisdictional overlap is complex. While BLM is the administrator for all ANCSA 17(b) easements and they are on native lands, typically the federal land management agency being accessed is the maintainer.
Like the boat launch conceptual design.	Thank you for your feedback.
This would give people a short float from Gulkana bridge.	Thank you for your feedback.
Similar comment about Copper Center take-out that's existing but not public.	Thank you for your feedback.

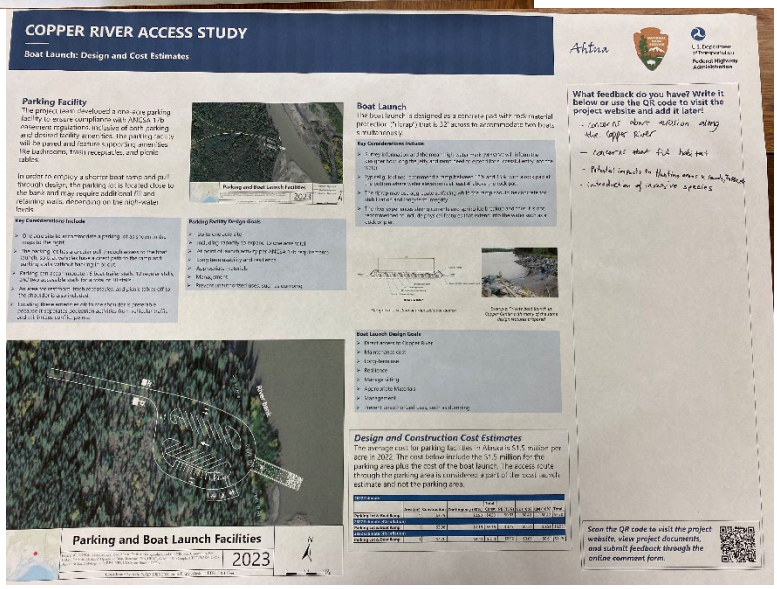
What other feedback or considerations should the project team address in this study?	
Who's responsible for implementation?	Final outcomes are final alignment and design. Next step would be funding design and construction. The final report for this effort will be structured to apply for next FLAP cycle in 2025. Ahtna will likely be the entity that is applying for these funds, but in partnership with a lot of state and federal partners (DOT, NPS, BLM).
There's a proposal to expand/alter the airport at some point and that road may be moved based on the plans. Agencies will need to work with airport to coordinate.	Yes, the project team is aware of the airport expansion and have included this element in our alignment analysis.
Need to be respectful of cultural resources and sites. Concern over subsistence hunting area. You can access the river through September. Boat launch traffic could create noise that would impact Ahtna subsistence hunting area.	Agreed; the project team is working with Ahtna and other agency cultural resource staff to ensure resources are protected and avoided.

Bison in the river because people aren't in this section of the river. Pilots see bison in the river in the study area. Ahtna sells bison permitting tags. If you have a bison license, they'll sell you a permit to hunt a bison on their lands (it's very expensive, thousands of dollars).	Thank you for the information.
Ahtna permitting process could be improved. Hearing that people want to recreate in a compliant way but it's not easy to know how they can go about doing that.	Thank you for your feedback. Ahtna, Inc., staff heard this and related comments and are working on ways to improve and streamline the permitting process.
Signage about reminder of Ahtna permits (if you travel off of the easement, you need a permit). Educate people about how they're on private property.	Thank you for your feedback. Ahtna, Inc., staff heard this and related comments and are working on ways to improve and streamline the permitting and signage process. Ahtna, Inc. staff have proposed signage that will have more information about obtaining a permit. An example proposed in the open house was of "free trade coffee" and "sustainable fisheries." Some willingly pay more for coffee to support farmers and fisheries, etc. Could be applied to Ahtna permits with signs that say, "Does your guide have a license with Ahtna?" Ahtna could find a way to market these businesses that are following the permitting process. A few good examples may be able to drive out the bad.

Figure 9. Posters from July 10th, 2023, open house.







FHWA Office of Federal Lands Highway

Copper River Access Study

Appendix C: Conceptual Designs

Wrangell-St. Elias National Park

Date: April 20th, 2023
To: Project Management Team
From: Cole Grisham, AICP
Subject: Memo 2: Conceptual Designs
Project ID: AK Gulkana 2019(1)

FEDERAL LANDS HIGHWAY

Table of Contents

Introduction

This memorandum outlines the proposed access route options, parking facility, and boat launch designs. The project team shows development of access route alternatives criteria, future design and construction considerations, and summary analysis of each route option. Alternatives analysis in this memo includes:

- Mapping materials to show proposed routes
- Engineering design estimated cost
- Construction estimated cost
- Advantages and disadvantages compared to analysis criteria
- Considerations for survey and right of way acquisition

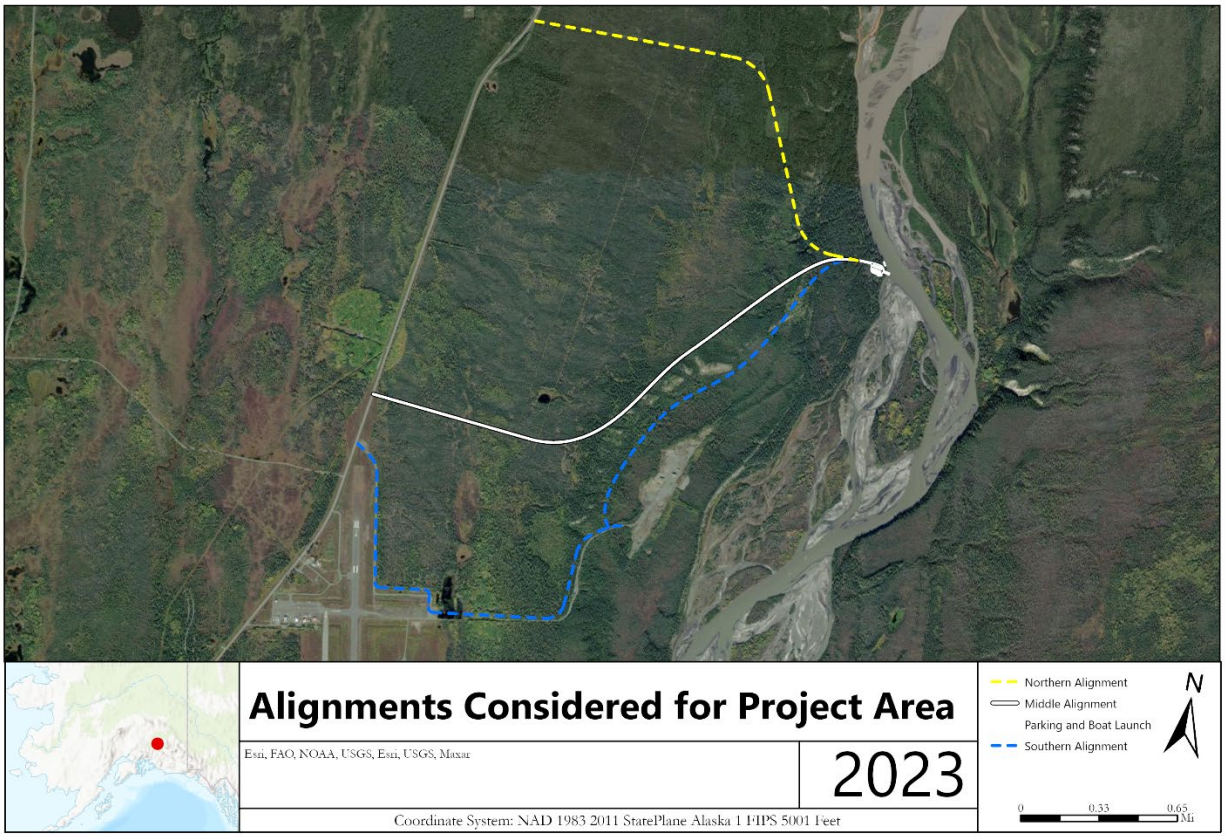
The roadway facilities shown in this design are in accordance with American Association of State Highway Transportation Officials (AASHTO) design standards.

This memorandum and its recommendations are considered a draft and are for discussion purposes only. Final project designs and recommendations shall be incorporated into the final report at the conclusion of the project.

Proposed Routes

The project team examined multiple possible routes to connect the travelling public from Richardson Highway to the Copper River. Figure 1 below shows the three alternatives considered for a future access road to a public boat launch and parking facility.

Figure 1. Access road alternatives.



The northern route (shown in yellow) is an exisiting gated path connecting the Richardson Highway to the Copper River at a known native fish camp. The proposed route would follow the same route about two thirds of the distance to the fish camp but then redirect south to the new parking and boat launch. The current access gate at the Richardson Highway would be moved east to where the new road turns south, preventing the travelling public from entering the existing fish camp.

The middle route (shown in white) makes use of and modifies the existing access easement by connecting it to the proposed boat launch and river.[1] The middle route would head east from the Richardson Highway along the current easement route but redirect north at the ridge overlooking the gravel mine to connect to the proposed boat launch. Running along the top of

[1] The current easement does not reach the river and is not useable in its current condition.

the ridge adjacent to the gravel mine also risks damage to any future facility due to erosion of the ridge. No part of this route exists currently, and it would be entirely new construction.

The southern route (shown in blue) makes use of an exsting access road on the northern perimeter of the Gulkana Airport that also accesses an active gravel mine. This route has the benefit of being partially constructed up to the gravel mine and providing access to multiple uses (gravel mine, airport access, and proposed parking and boat launch). Additionally, there is a known Ahtna shareholder land use lease located approximately half way between the airport and gravel mine on the north side of the existing road. As the segment of roadway near the lease already exists, the design and construction of the southern route facility would likely have no impacts to the shareholder's land but would likely increase public traffic through the area. The challenges with the southern alignment are the possibilities of future airport expansion into the alignment and how to deconflict gravel mine uses from recreation users.

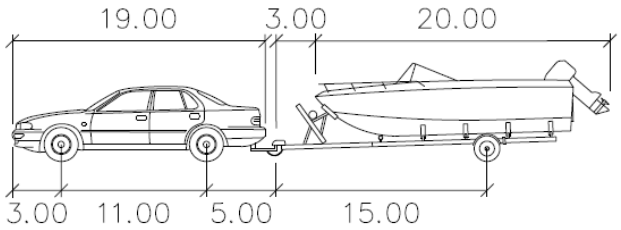
Conceptual Design – Access Road

Road Classification and Design Vehicle

The proposed roadway is a recreational road that provides access to a parking lot and a boat launch. It is expected to be low-volume and will primarily serve passenger cars pulling boat trailers (P-B).

Below is the template of a P-B vehicle along with its dimensions and turning angles (Figure 2). It is an articulated vehicle of 42 feet in total length and with a pivot at the trailer hitch. The design vehicle provides guidance on the total roadway width as well as turning radii within the parking lot.

Figure 2. Typical dimensions of vehicle and attached boat trailer.



P—B

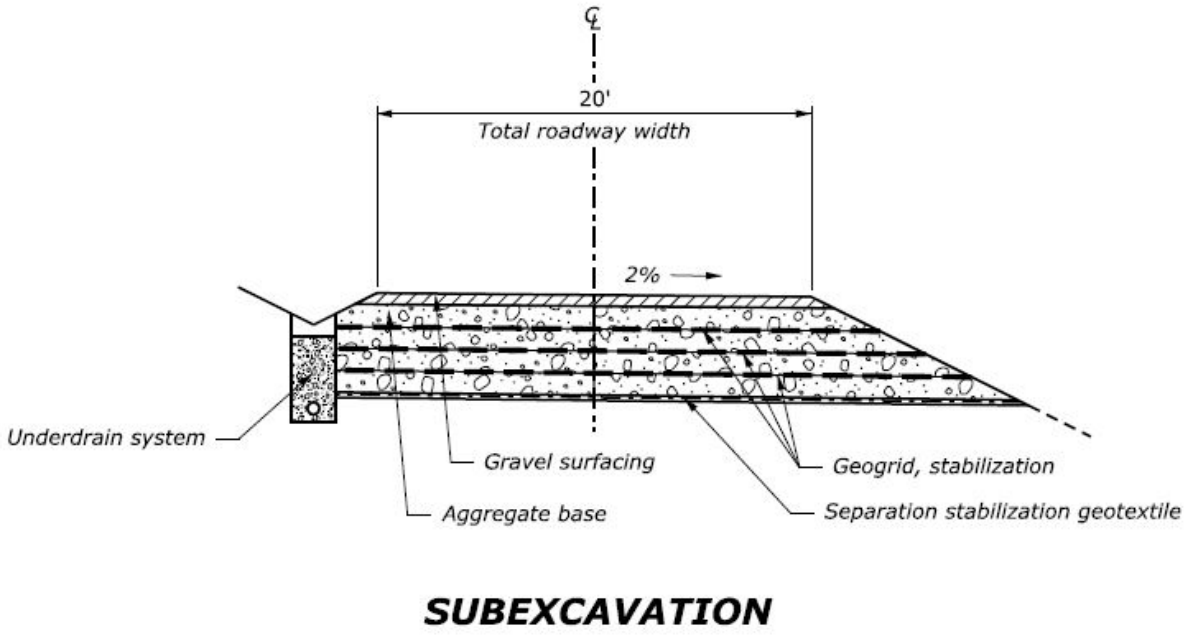
	feet
Car Width	: 7.00
Trailer Width	: 8.00
Car Track	: 6.00
Trailer Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6
Articulating Angle	: 70.0

Cross-Section

According to the *Guidelines for Geometric Design of Low-Volume Roads*, Table 4-1, the total roadway width is recommended to be 18′ to 20′ across, depending on the design speed, for a recreational road. To allow emergency vehicles to pass, or for passing a stalled vehicle when the design vehicle is a P-B, it is recommended that the roadway width is at least 20′ across.[2] The access road is therefore proposed to be 20′ in total width as shown in Figure 3 below. This total roadway width includes the shoulder, which is typically not marked on a low-volume road.

[2] *AASHTO A Policy on Geometric Design of Highways and Streets*, Table 3-26a.

Figure 3. Cross-section of proposed roadway design.



Material

Geotechnical investigation, including soil samplings, is necessary during the design phase for recommendations that are tailored to this site. The following is a general discussion on frost design.

Thawing of the seasonal ground frost typically results in soft, weak subgrade conditions. Traffic often begins using the road before subgrade drainage is sufficient for the soil to obtain its maximum strength, causing failure of the subgrade. Additionally, frost heaving and pumping action generated by traffic can cause fine subgrade soil to migrate into the base material, negating the support value of the aggregate layer.

For frost design, subexcavation will depend on the depth of seasonal frost penetration. A commonly used guideline for minimizing frost heaving is to top the subgrade with a thickness of non-frost-susceptible material equal to half the depth of seasonal frost penetration. Separation geotextile may be recommended on top of the prepared surface prior to placement of embankment to minimize pumping and migration of fine particles into the new material. Providing adequate profile grades and cross-slopes along with installation of underdrains will be instrumental to the subgrade stability during the spring thaw. A good, hard driving surface, such as six inches of crushed gravel, is recommended to prevent future degradation of the road.

Conceptual Design – Parking and Boat Launch

The project team developed a one-acre parking facility to ensure compliance with ANCSA 17(b) easement regulations, inclusive of both parking and desired facility amenities.[3]

One acre of easement will accommodate a parking lot as shown in Figures 4-6. The boat launch and northern portion of the access roadway to the boat launch is excluded from the calculation of the one-acre easement, per ANCSA 17(b). The parking lot layout has a circular pull-through access to the boat launch, so that vehicles have a direct path to the ramp and parking stalls without backing in or out. The layout can accommodate 16 boat trailer stalls, 12 regular stalls, and two accessible stalls for a total of 30 stalls. An area for restrooms, trash receptacles, and picnic tables off to the shoulder is also included. Locating these amenities off to the shoulder is preferable because it separates pedestrian activities from vehicular traffic and minimizes conflict points.

Figure 4. Parking lot and boat launch in relation to roadway access.

[3] See Alaska Department of Fish and Game's summary of ANCSA 17(b) uses and parameters: https://www.adfg.alaska.gov/index.cfm?adfg=habitatoversight.ancsa

Figure 5. Conceptual design of parking lot and boat launch.

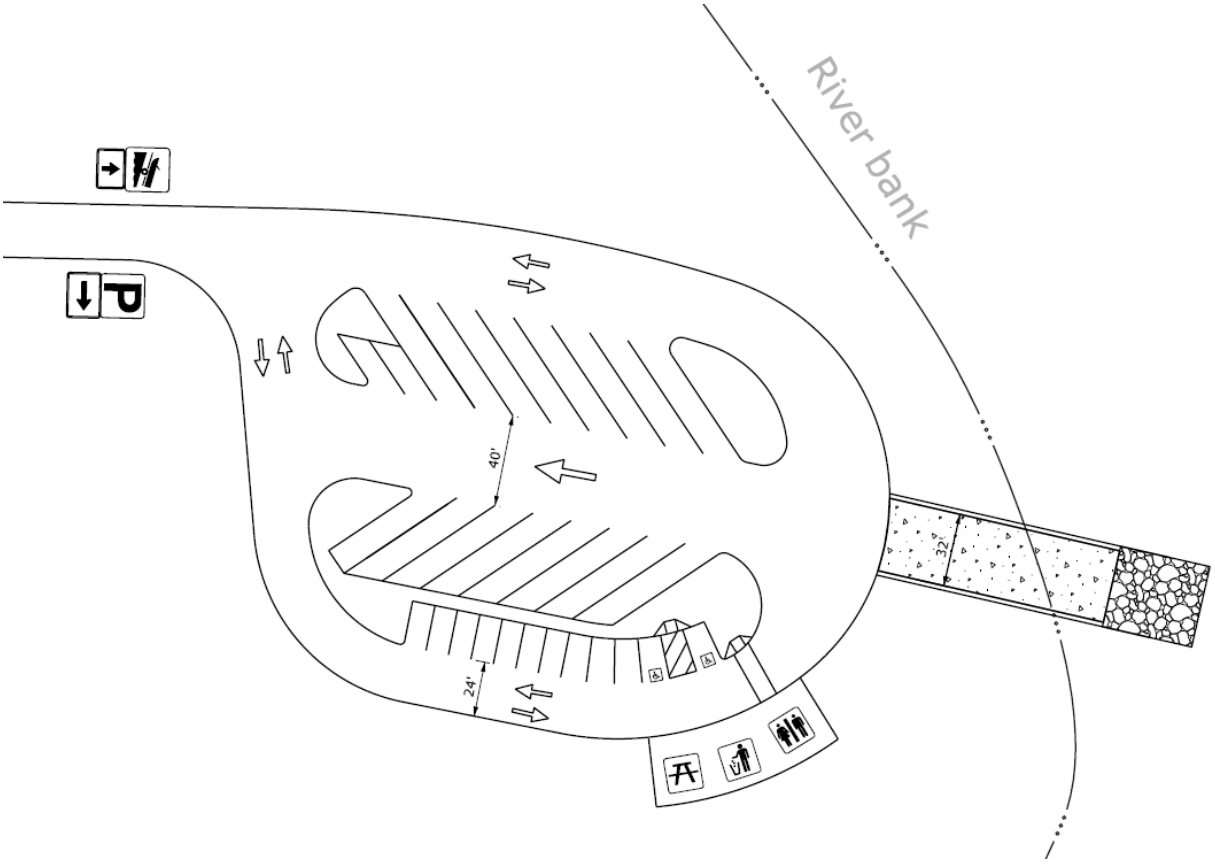


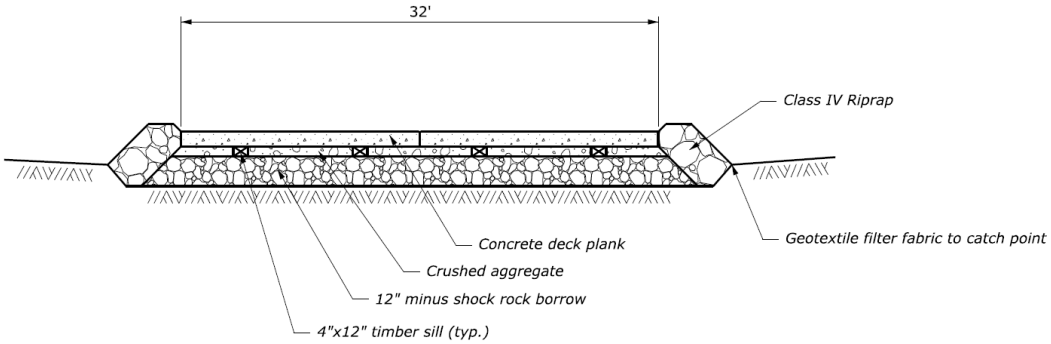
Figure 6. Conceptual design of parking lot and boat launch with existing imagery.

In order to employ a shorter ramp and pull-through design, the parking lot is located closer to the bank and may require additional fill and retaining walls, depending on the high water levels.

The ramp design is 32’ across to accommodate two boats. See Figure 7 below for the boat ramp’s typical section. Survey information and the mean high-water mark (MHWM) will inform the designer how long the jetty and ramp need to extend for successful entry into the water. Typical guidelines recommend a ramp grade between 12% and 15%, with a rock pad at the bottom where water elevation is at least 4’ above the rock pad. The jetty may use aggregate surfacing, while the ramp should be concrete for stabilization and long-term integrity. The river experiences strong currents and spring ice breakup and thus it is not recommended to include physical features that extend into the water such as a dock or pier.

Discussions with FHWA Western Federal Lands Alaska Regional Project Office indicated the proposed facility would be heavily used if constructed, especially by anglers and similar users. However, the locals may prefer a smaller footprint and less formal usage capacity based on staff experiences recreating and working in this area.

Figure 7. Cross-section of proposed boat launch design.



FHWA Western Federal Lands Geotechnical staff add that they have seen some resilience in wrapping the aggregate materials with separation and stabilization geotextile below the concrete deck plank. Geotechnical staff agree with the use of geotextile filter fabric at the edges of the concrete ramp panel as shown in the cross-section already along the base of the riprap mitigation.

Cost Estimates for Roadway, Parking, and Boat Launch Facilities

In 2022, the average cost of similar corridor projects in Alaska is $4 million per mile. The average cost for parking lot projects is $1.5 million per acre. The boat ramp is estimated at $1 million. Table 1 below summarizes the design and construction cost estimates in the years 2022, 2027, and 2032, using 4% annual inflation. Because this is a scoping level estimate, 30% contingency has been added to the total construction cost. For programming purposes, Preliminary Engineering (PE) is estimated at 15%, Construction Engineering (CE) is estimated at 10%, and Contract Modification (CM) is estimated at another 10% of total construction cost.

Table 1. Cost estimates for roadway, parking, and boat launch facilities ($ millions)

2022 Estimate								
Alternative	**Length (mi)**	**Construction**	**Contingency (30%)**	**Total Const.**	**PE (15%)**	**CE (10%)**	**CM (10%)**	**Total**
Yellow (N)	1.97	$7.86	$2.36	$10.22	$1.53	$1.02	$1.02	$13.80
White (M)	2.33	$9.32	$2.80	$12.11	$1.82	$1.21	$1.21	$16.35
Blue (S)	1.65	$6.60	$1.98	$8.58	$1.29	$0.86	$0.86	$11.58
	Area (ac)							
Parking Lot & Boat Ramp	1	$3.25	$0.98	$4.23	$0.63	$0.42	$0.42	$5.70
2027 Estimate (4% Inflation)								
Alternative	**Length (mi)**	**Construction**	**Contingency (30%)**	**Total Const.**	**PE (15%)**	**CE (10%)**	**CM (10%)**	**Total**
Yellow (N)	1.97	$9.57	$2.87	$12.44	$1.87	$1.24	$1.24	$16.79
White (M)	2.33	$11.33	$3.40	$14.73	$2.21	$1.47	$1.47	$19.89
Blue (S)	1.65	$8.03	$2.41	$10.44	$1.57	$1.04	$1.04	$14.09
	Area (ac)							
Parking Lot & Boat Ramp	1	$3.96	$1.19	$5.15	$0.77	$0.51	$0.51	$6.95
2032 Estimate (4% Inflation)								
Alternative	**Length (mi)**	**Construction**	**Contingency (30%)**	**Total Const.**	**PE (15%)**	**CE (10%)**	**CM (10%)**	**Total**
Yellow (N)	1.97	$12.33	$3.70	$16.03	$2.40	$1.60	$1.60	$21.63
White (M)	2.33	$14.60	$4.38	$18.98	$2.85	$1.90	$1.90	$25.63
Blue (S)	1.65	$10.34	$3.10	$13.45	$2.02	$1.34	$1.34	$18.15
	Area (ac)							
Parking Lot & Boat Ramp	1	$4.70	$1.41	$6.11	$0.92	$0.61	$0.61	$8.25

Evaluation of Proposed Alternatives

Based on the working goals identified in the Existing Conditions (Memo 2), the project team evaluated the proposed route alternatives and parking and boat launch facilities as shown in Tables 2-4 below.

Table 2. Evaluation of route facilities with project criteria. Icons for each evaluation reflect positive (+), negative (-), or unknown (?) association with criteria.

Alignment Criteria	North	Middle	South
Alignment with intent of original easement	**(-)** Original easement intended to connect travelers to Copper River and adjoining public lands. This route adjusts easement north to known trail.	**(+)** Original easement intended to connect travelers to Copper River and adjoining public lands. This route makes use of existing easement but completes the route.	**(-)** Original easement intended to connect travelers to Copper River and adjoining public lands. This route adjusts easement south to known road.
Long-term usability of alignment	**(+)** Route enhances known trail and adds new roadway to proposed boat launch. Existing fish camp route creates potential conflict in uses but is mitigated by providing gated access for fish camp users and sending roadway alignment south.	**(+/-)**. No existing trail or roadway exists. Proposed route risks long-term damage due to erosion at top of gravel mine ridge.	**(?/-)** Route enhances known road while adding a new roadway to proposed boat launch. There is a risk to long-term usability as the Gulkana Airport has plans to develop and expand northward and potentially limit access for public. Additionally, current use of the gravel mine requires travelers and mine users to deconflict travel.
Appropriate Materials	**(+)** Roadways design reflects best suited and available materials.	**(+)** Roadways design reflects best suited and available materials.	**(+)** Roadways design reflects best suited and available materials.
Cost to construct and maintain	**(+/-)** Mid-cost alternative due to longer total length and additional cuts to get down from the ridge to the river. Materials chosen for all routes to allow for lowest maintenance cost.	**(-)** High-cost alternative due to longest total length and additional cuts to get down from the ridge to the river. Materials chosen for all routes to allow for lowest maintenance cost.	**(+)** Least-cost alternative due to shortest total length and advantageous elevations. Materials chosen for all routes to allow for lowest maintenance cost.

Access to adjoining public lands[4]	**(+/-)** All routes terminate at proposed boat launch, 1.25 miles north of the Wrangell-St. Elias easement on the opposite bank.	**(+/-)** All routes terminate at proposed boat launch, 1.25 miles north of the Wrangell-St. Elias easement on the opposite bank.	**(+/-)**All routes terminate at proposed boat launch, 1.25 miles north of the Wrangell-St. Elias easement on the opposite bank.
Impact to cultural resources	**(-)** Directs public traffic to an existing trail used by Alaskan Natives for a current fish camp. This would be mitigated by moving the existing access gate further toward the river and splitting the alignment into a new road away from the fish camp.	**(+)** No known impacts to cultural resources.	**(-)** Partner agencies note that a possible historic and cultural resource site exists within or adjacent to the proposed alignment.

Table 3. Evaluation of parking facility proposal with project criteria. Icons for each evaluation reflect positive (+), negative (-), or unknown (?) association with criteria.

Parking Criteria	Facility
Up to one acre site	**(+)** Parking area and facilities total one acre.
Including capacity to expand to one acre total	**(+/-)** N/A **–** already reaches one acre limit.
At point of launch activity per ANCSA 17(b) requirements	**(+)** Yes. Parking and boat launch are attached to one another.
Long-term usability and resilience	**(+)** Capacity for 16 boat trailer stalls, 12 regular stalls, and two accessible stalls for a total of 30 stalls. An area for restrooms, trash receptacles, and picnic tables off to the shoulder is also included. More capacity and amenities for long-term use as desired by project partners.
Appropriate materials	**(+)** Proposed design includes paving and necessary construction materials for planned amenities.
Management	**(+/-)** Proposed design is intended for low management by Ahtna, Inc. Occasional patrolling may be needed at peak usage. Periodic trash removal and bathroom cleaning expected.

[4] See Bureau of Land Management's Spatial Data Management System Section 17(b) Easement database, map Gulkana A-3 Master, for adjoining easements. https://sdms.ak.blm.gov/perl-bin/scanned_images/easement/get_esmt.pl

Prevent unauthorized uses, such as dumping	**(?/+)** Unclear. Including picnic, trash, and bathroom amenities gives users a clear place to dispose of waste, preventing dumping elsewhere on site. Occasional patrolling and enforcement may mitigate disposal of unauthorized items or in unauthorized areas.

Table 4. Evaluation of boat launch with project criteria. Icons for each evaluation reflect positive (+), negative (-), or unknown (?) association with criteria.

Boat Launch Criteria	
Direct access to Copper River	**(+)** Boat launch facility connects directly to Copper River.
Maintenance cost	**(+)** Boat launch angled southward (downriver), designed with riprap barriers, and situated on river to reduce silting to the greatest extent. Facility materials allow for silt removal by machinery seasonally when water level is lowest.
Long-term use	**(+)** Facility location, launch direction, and riprap barriers should allow for best possible launch conditions for users. Design intended to replicate conditions at private boat launch located on Copper Center Loop Road in Copper Center, Alaska.
Resilience	**(+)** Boat launch resilience generally aligns with long-term use and maintenance cost issues. An additional factor is the risk of the river changing course, washing out the facility, or damaging the facility due to ice breakup. The project team therefore located the facility in an area least susceptible to braiding, away from the direct flow of the river current, and without features that could be damaged by ice flow.
Manage silting	**(+)** Similar to maintenance cost, boat launch is angled southward (downriver), designed with riprap barriers, and situated on river to reduce silting to the greatest extent. Facility materials allow for silt removal by machinery seasonally when water level is lowest.
Appropriate Materials	**(+)** Boat launch design includes a rock pad at the bottom where water elevation is at least 4' above the rock pad. The jetty may use aggregate surfacing, while the ramp should be concrete for stabilization and long-term integrity. The river experiences strong currents and spring ice breakup and thus it is not recommended to include physical features that extend into the water such as a dock or pier.
Management	**(+)** Boat launch is intended to be low maintenance by Ahtna staff. Providing enough width for two boats increases capacity and reduces potential traffic conflicts, thus limiting the need for active management of traffic and use by staff. Additionally, location, design orientation, and materials are meant to reduce the amount of silt buildup from season to season, thus reducing maintenance needs.

Prevent unauthorized uses, such as dumping	**(+)** The boat launch does not necessarily generate unauthorized uses but the adjoining parking facility and presence or absence of related amenities may. To mitigate risk of unauthorized uses, see evaluation notes for the proposed parking facility.

Analysis and Recommendations

The evaluation above suggests tradeoffs between proposed routes as well as parking facility options.

Table 5. Recommendations.

Issue	Recommendations
Route	**1. Propose Middle (white) route for final alignment. Collect public, stakeholder, and tribal government feedback on Northern (yellow) and Middle (white) routes for consideration.** **2. Remove Middle (blue) route from consideration.** **3. Project team to determine final route between Northern and Middle based on input received.** Additional information: In terms of strengths, weaknesses, and neutral findings in Table 2, the Middle route is the most aligned with the current easement and has no known impacts to historic and cultural resources. It is, however, the highest-cost alignment at $16.35M in 2022 and may be at risk for long-term erosion issues along the top of the gravel ridge. The Northern route is less expensive at $13.8M, but does not align with the current easement and impacts existing Alaskan Native cultural and economic uses. The Southern route is most cost-effective but has the greatest risk to long-term use through airport expansion, gravel operations, and cultural and historic resource preservation.
Parking Facility	4. **Seek Ahtna, Inc. leadership approval of one acre parking facility.** Additional Information: A one acre facility is proposed in order to ensure the capacity and amenities desired for the boat launch facility are available, as allowed by easement parameters under ANCSA 17(b) and pending approval by Ahtna leadership. No other options are proposed to meet the project intent.
Boat Launch	**5. Approve proposed boat launch design.** Additional information: The boat launch facility addresses all criteria, and no other options are proposed; therefore, this section recommends the proposed boat launch design.

Additional Design and Construction Considerations

FHWA Western Federal Lands (WFL) Geotechnical staff reviewed the conceptual design and cost estimate sections above to provide additional considerations for future design and construction phases.

Table 6. Geotechnical considerations.

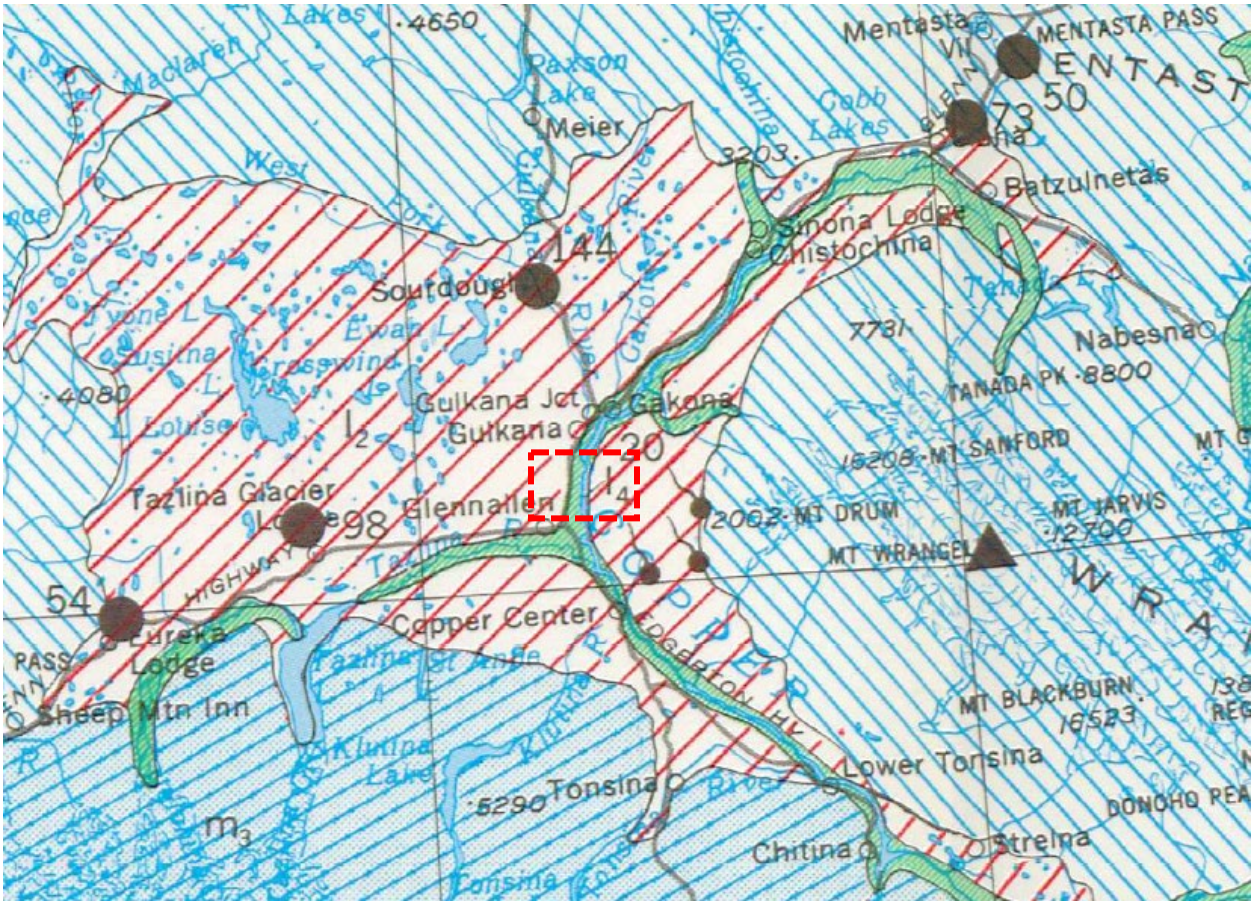
Geology	
Qcr	Copper River deposits (Pleistocene); glacial and glaciolacustrine (saturated, fine soils derived from glacial lakes) deposits. Generally gentle slopes, may contain problematic geologic deposits and permafrost that may need mitigation for the proposed actions.
Qcb	Bluff colluvium (Holocene); mass wasting (landslide) deposits. Generally steep slopes that likely will have significant stability issues and possible permafrost.
Qa	Alluvium (Holocene); alluvial deposits. Generally gentle slopes, which may host geologic materials suitable for use as road building materials (road fill and roadway aggregate). It is anticipated that these slopes will generally lack permafrost, but it may be present.
Permafrost	1. Glacial terrace (Qcr/Qcb): Generally underlain by moderately thick to thin permafrost; areas of predominantly fine-grained soil deposits. Maximum determined depth to base of permafrost is about 600'. Locally, in close proximity to large water bodies, permafrost is likely absent. 2. Alluvial plain (Qa): Generally underlain by numerous isolated masses of permafrost; areas of predominantly coarse-grained soil deposits. Maximum determined depth to base of permafrost is 265'. In the Copper River Basin, extensive areas are free of permafrost. 3. Consider resiliency in light of climate change projections: Design and construction staff may need to consider additional melting of permafrost, which may include reinforcement of constructed roadway to mitigate future differential settlement, especially in the retaining wall, boat, ramp, and parking areas. One lesson learned in adding a large parking area and changing the thermal regime is to keep the parking lot gravel for the first two to five years, then pave thereafter if that is the preferred surface.

Geotechnical staff assess the project area embankment sections as frost-free (see Figure 8 below). Retaining walls may be needed at boat launch or along transition from glacial terrace (Qcr/Qcb) to alluvial plain (Qa) (see Figure 9 below). Alignment grades and cuts/fills in transition areas from glacial terrace to alluvial plain include mass wasting (landslide) deposits, which may need additional investigation and/or mitigation design. If any significant stream crossings are discovered along the alignment that could require a bridge or large culverts that require strip foundations, Geotechnical staff recommend avoiding bottomless drainage structures to limit differential settlement issues with strip footings.

Recommended geotechnical work prior to initiating design beyond 30% includes:

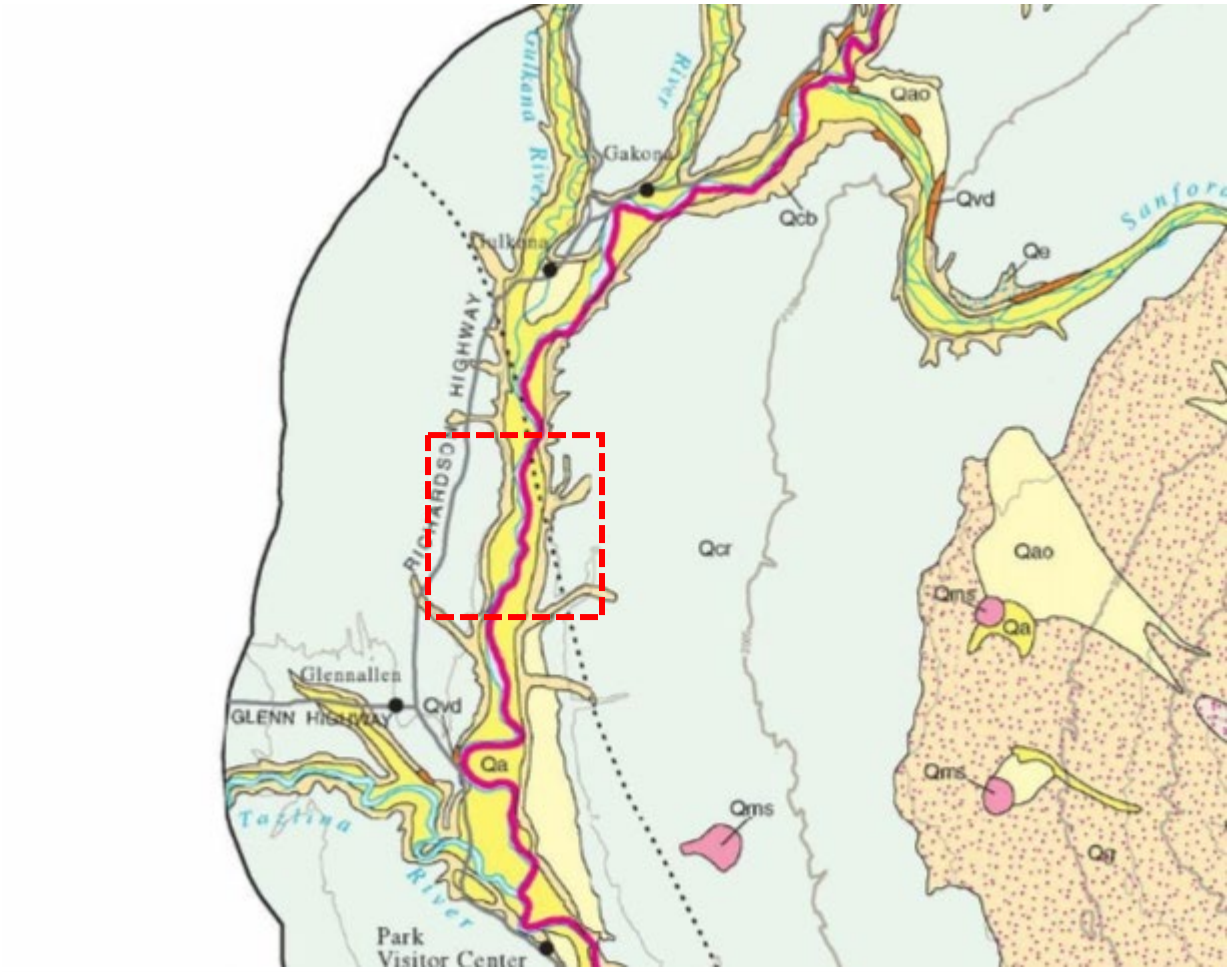
- Desktop landform interpretation along proposed routes utilizing LiDAR to assess potential adverse geologic conditions.
- Field reconnaissance to verify landform interpretation and identify adverse field conditions and areas of needed geotechnical investigation.
- Geotechnical subsurface investigation and laboratory testing to confirm landform interpretation and geologic materials for construction considerations (assess possible materials reuse for embankment construction).

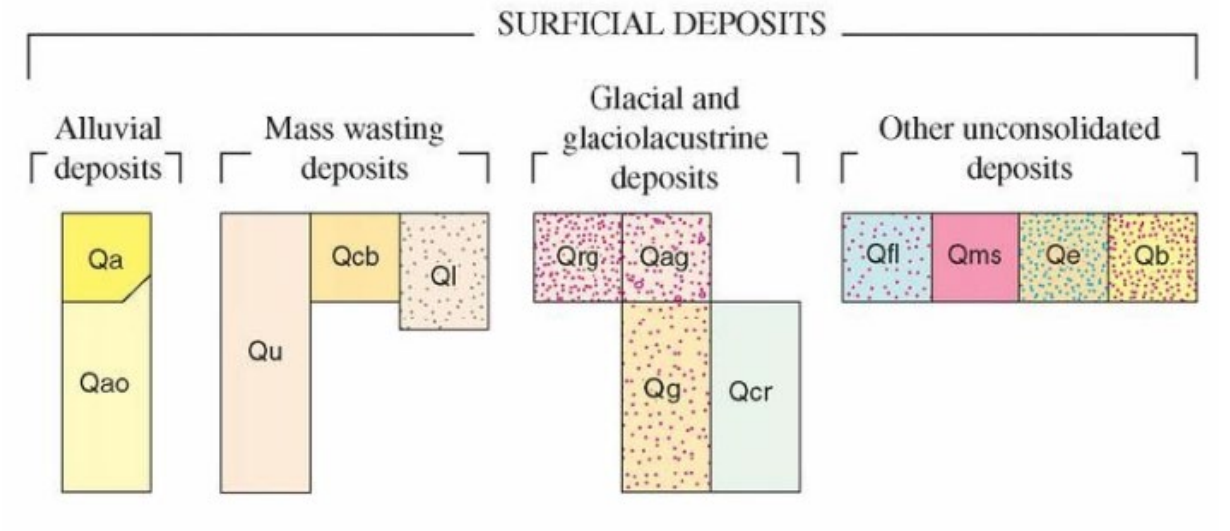
Figure 8. Permafrost locations in the Copper River Valley.[5]



[5] Image taken from Permafrost Map of Alaska (USGS 1965).

Figure 9. Geologic map of the Copper Valley, with project area shown, along with selected map legend information.[6]

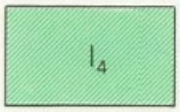




[6] Images taken from Geologic Map of the Wrangell-Saint Elias National Park and Preserve, Alaska (USGS 2006).

Generally underlain by moderately thick to thin permafrost; areas of predominantly fine-grained deposits. Maximum determined depth to base of permafrost is about 600 feet. Locally, in close proximity to large water bodies, permafrost is absent

Underlain by discontinuous permafrost; areas of predominantly coarse-grained deposits. Maximum determined depth to base of permafrost is 390 feet. Permafrost is present in most places, but locally is absent



Generally underlain by numerous isolated masses of permafrost; areas of predominantly coarse-grained deposits. Maximum determined depth to base of permafrost is 265 feet. In the Copper River Basin and along the north flank of the Alaskan Range extensive areas are free of permafrost

Conclusion

The design and cost estimates above reflect an iterative process between the project team members and technical support staff to develop proposed solutions and areas of remining uncertainty. Looking ahead to the project Final Report, the following issues remain:

1. **Validation of Middle Alignment**. Evaluation of alignment alternatives suggests the Middle alignment is the most appropriate solution and will have the least impact on existing adjacent uses in the area. The project team should validate this finding through Tribal consultation and public feedback before making final recommendations.

2. **Ahtna, Inc., Feedback**. Ahtna's staff briefed their organization's Land Committee and ANCSA village corporation staff in March and April of 2023 on project recommendations and considerations for feedback based on this memorandum. The intent was to discuss the project constraints, opportunities, and alternatives to ensure any final project recommendations align with Ahtna's goals and interests and those of their stakeholders. The general feedback from members was as follows, which is incorporated into the Engagement Strategy going forward:

    - Concerns about increased access in general, including possible hunting, trespassing, and dumping
    - The Northern route uses a road currently accessing an active fish camp and is not supported
    - The Southern route is not favored because it is too far from the existing 17(b) platted route, the route impacted cultural and historic site, and it may cross state lands
    - The Middle route is preferred if there is going to be a project
    - Question of why the National Park Service is the responsible Federal agency on this project that is outside the park boundaries

3. **Tribal Consultation**. The project team will engage with Alaskan Native Villages following Ahtna's briefings above. This includes sharing project materials produced so far and asking how the Native Village governments wish to engage and be engaged at this milestone and going forward. Planned Tribal consultation at this milestone aligns with the project Engagement Strategy and earlier discussions with Native Village governments.

4. **Public and Stakeholder Involvement**. The project team identified July 2023 for an in-person open house for the general public. Further planning for that event and any additional engagement shall be documented in the Engagement Strategy.

5. **Final Recommendations and Report**. The last project recommendation will be the final alignment, based on project team, technical staff, stakeholder, and public input. The final

project alignment, design, and cost estimates shall be shown in the project Final Report. The Final Report will also outline the steps for modifying the existing easement through the Bureau of Land Management to reflect the project findings.

FHWA Office of Federal Lands Highway

Copper River Access Study

Appendix D: Interim Conveyance Document 209

View of the Copper River

AA-6667-A
AA-6667-B
AA-6667-C

INTERIM CONVEYANCE

WHEREAS

Sta-Keh Corporation

is entitled to a conveyance pursuant to Secs. 14(a) and 22(j) of the Alaska Native Claims Settlement Act of December 18, 1971 (85 Stat. 688, 702, 715; 43 U.S.C. 1601, 1613(a), 1621(j) (1976)) (ANCSA), of the surface estate in the following described lands:

Copper River Meridian, Alaska (Surveyed)

T. 5 N., R. 1 W.
Those portions of Tract "A" more particularly described as: (protracted)

Sec. 3, excluding the Copper River;
Secs. 4, 5, 6, 7, 8, 9, all;
Secs. 10 and 15, excluding the Copper River;
Sec. 16, all;
Sec. 17, excluding Native allotment application AA-7068;
Sec. 18, all;
Secs. 21, 22, 27, all excluding the Copper River;
Sec. 28, all;
Sec. 33, excluding the Copper River.

Containing approximately 10,126 acres.

T. 5 N., R. 2 W.
Those portions of the surveyed township more particularly described as: (protracted)

Secs. 1, 2, 11, 12, 13, 14, 23, 24, all;
Sec. 25, excluding Native allotment application AA-5929.

Containing approximately 5,723 acres.

T. 6 N., R. 1 W.
Sec. 13, W½SW¼NE¼SW¼, E½W½SW¼, S½NW¼SW¼SW¼, SW¼SW¼SW¼, W½SE¼SW¼, all excluding trade and manufacturing site A-054480;
Sec. 24, N½NW¼NW¼ excluding trade and manufacturing site A-054480;

Tract A, including the bed of the Gulkana River and excluding Native allotment application AA-6231;

Tract B, excluding the Copper River.

Containing approximately 14,048 acres.

T. 6 N., R. 2 W.
Those portions of the surveyed township more particularly described as: (protracted)

Secs. 11, 12, 13, 14, 15, 16, all.

Containing approximately 3,840 acres.

Interim Conveyance No. 209

Date JUN 29 1979

AA-6667-A
AA-6667-B
AA-6667-C

T. 7 N., R. 1 W.
Sec. 3, excluding Native allotment applications AA-6231 and AA-7096 and the Gulkana River;

Those portions of Tr "A" more particularly described as: (protracted)

Secs. 3, 4, lying West of East bank of Gulkana River;
Secs. 7, 8, all;
Secs. 9, 10, 14, 15, lying West of East bank of Gulkana River;
Sec. 21, all;
Secs. 22, 23, 27, lying West of East bank of Gulkana River;
Secs. 28, 29, 30, 31, 32, 33, all;
Sec. 34, lying West of East bank of Gulkana River.

Containing approximately 9,457 acres.

T. 7 N., R. 2 W.
Those portions of surveyed township more particularly described as: (protracted)

Secs. 12, 13, 25, 26, 35, 36, all.

Containing approximately 3,840 acres.

Copper River Meridian, Alaska (Unsurveyed)

T. 5 N., R. 1 W.
The bed of the Gulkana River in Secs. 3, 4, 9, 10, 15.

Containing approximately 110 acres.

T. 6 N., R. 1 W.
The bed of the Gulkana River in Secs. 2, 11, 14, 23, 33, and in Secs. 27 and 34, excluding U.S. Survey 4861.

Containing approximately 316 acres.

T. 7 N., R. 1 W.
Sec. 11, that portion of the unnamed lake lying within surveyed section 11.

Containing approximately 35 acres.

T. 8 N., R. 1 W.
Secs. 4, 18, 19, 29, 30, 31, 32, all;

The unsurveyed land lying south and west of the East bank of the Gulkana River in Secs. 7, 8, 16, 17, 20, 33 and Secs. 21 and 28, excluding U.S. Survey 4910;

The bed of the Gulkana River except through U.S. Survey 4910.

Containing approximately 6,490 acres.

T. 8 N., R. 3 W.
Secs. 10, 11, 12, 13, 14, 15, 21, 22, all;
Sec. 23, excluding U.S. Survey 3672 and Ewan Lake;
Sec. 24, excluding U.S. Survey 3672;
Sec. 25, all;

Interim Conveyance No. 209

Date JUN 29 1979

Secs. 26, 27, 28, 29, 32, 35, excluding Ewan Lake;
Sec. 36, all.

Containing approximately 9,180 acres.

Aggregating approximately 63,165 acres.

NOW KNOW YE, that there is, therefore, granted by the UNITED STATES OF AMERICA, unto the above-named corporation the surface estate in the land above-described, TO HAVE AND TO HOLD the said estate with all the rights, privileges, immunities, and appurtenances, of whatsoever nature, thereunto belonging, unto the said corporation, its successors and assigns, forever:

EXCEPTING AND RESERVING TO THE UNITED STATES from the lands so granted:

1. The subsurface estate therein, and all rights, privileges, immunities, and appurtenances, of whatsoever nature, accruing unto said estate pursuant to the Alaska Native Claims Settlement Act of December 18, 1971 (85 Stat. 688, 704; 43 U.S.C. 1601, 1613(f) (1976)); and

2. Pursuant to Sec. 17(b) of the Alaska Native Claims Settlement Act of December 18, 1971 (85 Stat. 688, 708; 43 U.S.C. 1601, 1616(b) (1976)), the following public easements, referenced by easement identification number (EIN) on the easement maps attached to this document, copies of which will be found in casefile AA-6667-EE, are reserved to the United States. All easements are subject to applicable Federal, State, or municipal corporation regulation. The following is a listing of uses allowed for each type of easement. Any uses which are not specifically listed are prohibited.

   25 Foot Trail - The uses allowed on a twenty-five (25) foot wide trail easement are: travel by foot, dogsled, animals, snowmobiles, two and three-wheel vehicles, and small all-terrain vehicles (less than 3,000 lbs Gross Vehicle Weight (GVW)).

   50 Foot Trail - The uses allowed on a fifty (50) foot wide trail easement are: travel by foot, dogsleds, animals, snowmobiles, two and three-wheel vehicles, small and large all-terrain vehicles, track vehicles and four-wheel drive vehicles.

   One Acre Site - The uses allowed for a site easement are: vehicle parking (e.g., aircraft, boats, ATV's, snowmobiles, cars, trucks), temporary camping, and loading or unloading. Temporary camping, loading, or unloading shall be limited to 24 hours.

   a. (EIN 12b C5, D9) An easement for a proposed access trail twenty-five (25) feet in width from site easement EIN 12a C5, D9, on the left bank of the Gulkana River in Sec. 15, T. 7 N., R. 1 W., Copper River Meridian, southwesterly to public land in Sec. 16, T. 7 N., R. 1 W., Copper River Meridian. The uses allowed are those listed above for a twenty-five (25) foot wide trail easement.

b. (EIN 17 C5, D1, D9) An easement for an existing access trail fifty (50) feet in width from the south border of Sec. 36, T. 8 N., R. 3 W., Copper River Meridian, northerly and northwesterly between Ewan Lake and Middle Lake to public lands in Sec. 9, T. 8 N., R. 3 W., Copper River Meridian. The uses allowed are those listed above for a fifty (50) foot wide trail easement.

c. (EIN 17b C5, D1, D9) An easement for a proposed access trail twenty-five (25) feet in width from the north shore of Ewan Lake in Sec. 23, T. 8 N., R. 3 W., Copper River Meridian, northerly to trail EIN 17 C5, D1, D9. The uses allowed are those listed above for a twenty-five (25) foot wide trail easement.

d. (EIN 23 C5, D9) An easement for an existing access trail fifty (50) feet in width from the Richardson Highway in Sec. 32, T. 5 N., R. 1 W., Copper River Meridian, easterly to site easement EIN 23a C5, D9 on the Copper River. The uses allowed are those listed above for a fifty (50) foot wide trail easement.

e. (EIN 23a C5, D9) A one (1) acre site easement upland of the ordinary high water mark in Sec. 33, T. 5 N., R. 1 W., Copper River Meridian, on the right bank of the Copper River. The uses allowed are those listed above for a one (1) acre site easement.

f. (EIN 30 E) An easement for an existing access trail fifty (50) feet in width from trail easement EIN 17, C5, D1, D9 in Sec. 24, T. 8 N., R. 3 W., Copper River Meridian, northeasterly to public lands. The uses allowed are those listed above for a fifty (50) foot wide trail easement.

g. (EIN 31 C5, L) An easement one hundred (100) feet in width for an existing telephone line and powerline roughly paralleling the Richardson Highway from Sec. 32, T. 5 N., R. 1 W., Copper River Meridian, northerly to the southern terminus of right-of-way application A-062297 (EIN 31c C5, L), in Sec. 12, T. 6 N., R. 1 W., Copper River Meridian. The uses allowed are those activities associated with the operation and maintenance of the telephone and powerline.

h. (EIN 31a C5, L) An easement one hundred (100) feet in width for an existing telephone line and powerline roughly paralleling the Tok Cutoff from the junction with the Richardson Highway in Sec. 23, T. 6 N., R. 1 W., Copper River Meridian, easterly to Sec. 18, T. 6 N., R. 1 E., Copper River Meridian. The uses allowed are those activities associated with the operation and maintenance of the lines.

AA-6667-A
AA-6667-B
AA-6667-C

The grant of the above-described lands shall be subject to:

1. Those rights for pipeline purposes, and related facilities, granted to Amerada Hess Corporation, ARCO Pipeline Company, Exxon Pipeline Company, Mobil Alaska Pipeline Company, Phillips Petroleum Company, Sohio Pipeline Company, and Union Alaska Pipeline Company, their successors and assigns, by the Agreement and Grant dated January 23, 1974, as modified April 27, 1979, pursuant to Sec. 28, of the Mineral Leasing Act (30 U.S.C. 185), as amended November 16, 1973 (87 Stat. 576), more specifically identified as follows:

   a. As to E½ Sec. 1, E½ Sec. 12, E½ Sec. 13, E½ Sec. 24, E½ Sec. 25, T. 5 N., R. 2 W., Copper River Meridian, E½ Sec. 12, E½ Sec. 13, T. 6 N., R. 2 W., Copper River Meridian, NW¼NW¼NW¼ Sec. 7, T. 7 N., R. 1 W., Copper River Meridian, E½ Sec. 12, E½ Sec. 13, E½ Sec. 25, E½ Sec. 36, T. 7 N., R. 2 W., Copper River Meridian, oil transportation pipeline AA-5847;

   b. As to Sec. 12, T. 6 N., R. 2 W., Copper River Meridian, communications site AA-8501 and equipment site AA-8621;

   c. As to SE¼ Sec. 13, T. 5 N., R. 2 W., Copper River Meridian, communications site AA-8503 and main line equipment site AA-8623.

2. Those access road rights-of-way 50 feet in width granted to Alyeska Pipeline Service Company pursuant to Sec. 28 of the Mineral Leasing Act (30 U.S.C. 185), as amended November 16, 1973 (87 Stat. 576):

   a. As to Secs. 29, 30, T. 6 N., R. 1 W., Copper River Meridian, AA-9189;

   b. As to Secs. 31, 32, T. 6 N., R. 1 W., Copper River Meridian, AA-8864.

3. Those rights for pipeline purposes as have been issued to the owners of the Trans-Alaska Pipeline, their successors and assigns, pursuant to Sec. 28 of the Mineral Leasing Act (30 U.S.C. 185) as amended November 16, 1973 (87 Stat. 576), for construction zone permit AA-9149.

4. An easement for highway purposes, including appurtenant protective, scenic and service areas, extending 150 feet on each side of the centerline of the Richardson and the Glenn Highways, as established by Public Land Order 1613 (23 F.R. 2376), pursuant to the Act of August 1, 1956, (70 Stat. 898) and transferred to the State of Alaska pursuant to the Alaska Omnibus Act. P.L. 86-70 (73 Stat. 141), as to Secs. 4, 5, 8, 17, T. 5 N., R. 1 W., Sec. 24, T. 6 N., R. 1 W., Copper River Meridian.

5. The following rights-of-way for Federal Aid Highways, granted to the State of Alaska under the act of August 7, 1958, as amended (72 Stat. 885, 23 U.S.C. 317), as to:

   a. Sec. 4, T. 5 N., R. 1 W., Copper River Meridian, Serial No. AA-7047 (Richardson Highway);

   b. Sec. 24, T. 6 N., R. 1 W., Copper River Meridian, Serial No. A-067583 (Glenn Highway-Tok Cutoff).

6. Rights-of-way for electrical transmission lines granted under the act of March 4, 1911 (36 Stat. 1253; 43 U.S.C. 961) to the Copper Valley Electric Association, Inc.

   a. Those lines running parallel to the Richardson Highway and the Tok Cutoff as to Secs. 4, 5, 8, 17, T. 5 N., R. 1 W., Copper River Meridian, and Sec. 24, T. 6 N., R. 1 W., Copper River Meridian, Serial No. A-042054, 100 feet in width (50 feet on each side of the centerline);

   b. As to Secs. 29, 30, T. 6 N., R. 1 W., Secs. 1, 12, 13, T. 5 N., R. 2 W., Secs. 12, 13, T. 6 N., R. 2 W., Sec. 7, T. 7 N., R. 1 W., and Secs. 12, 13, 25, 36, T. 7 N., R. 2 W., Copper River Meridian, Serial No. AA-9906, 30 feet in width (15 feet on each side of the centerline).

7. An easement and right-of-way 50 feet in width (25 feet on each side of the centerline), conveyed to RCA Alaska Communications, Inc. by Easement Deed dated January 10, 1971, Serial No. AA-6188, pursuant to the Alaska Communications Disposal Act (81 Stat. 441) (40 U.S.C. 771 et seq) as to Secs. 20, 29, T. 5 N., R. 1 W., Copper River Meridian and Sec. 24, T. 6 N., R. 1 W., Copper River Meridian.

8. Issuance of a patent confirming the boundary description of the unsurveyed lands hereinabove granted after approval and filing by the Bureau of Land Management of the official plat of survey covering such lands.

9. Valid existing rights therein, if any, including but not limited to those created by any lease (including a lease issued under Sec. 6(g) of the Alaska Statehood Act of July 7, 1958 (72 Stat. 339, 341; 48 U.S.C. Ch. 2, Sec. 6(g) (1976))), contract, permit, right-of-way, or easement, and the right of the lessee, contractee, permittee, or grantee to the complete enjoyment of all rights, privileges, and benefits thereby granted to him. Further, pursuant to Sec. 17(b)(2) of ANCSA, any valid existing right recognized by ANCSA shall continue to have whatever right of access as is now provided for under existing law.

AA-6667-A
AA-6667-B
AA-6667-C

10. Requirements of Sec. 14(c) of the Alaska Native Claims Settlement Act of December 18, 1971 (85 Stat. 688, 703; 43 U.S.C. 1601, 1613(c) (1976)), that the grantee hereunder convey those portions, if any, of the lands hereinabove granted, as are prescribed in said section.

IN WITNESS WHEREOF, the undersigned authorized officer of the Bureau of Land Management has, in the name of the United States, set his hand and caused the seal of the Bureau to be hereunto affixed on this 29th day of June, 1979, in Anchorage, Alaska.

UNITED STATES OF AMERICA

Robert D Arnold

Assistant to the State Director
for ANCSA

Interim Conveyance No. 209

Date JUN 29 1979