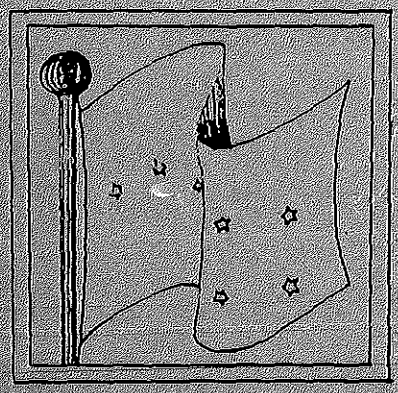
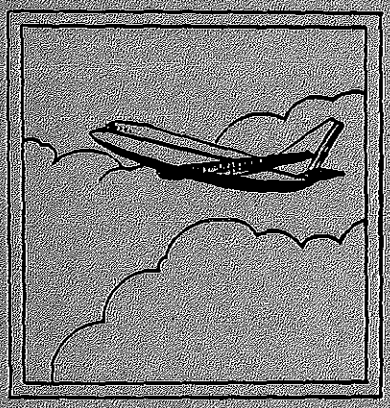


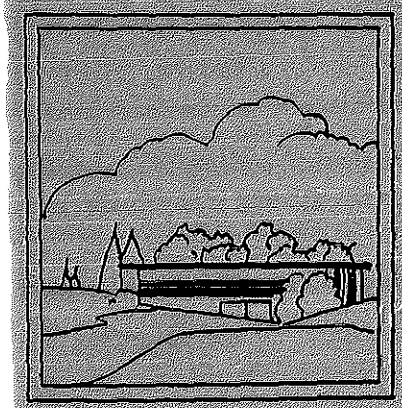
RECONNAISSANCE STUDY

Without Blue-Lines

McCARTHY ROAD

60550





STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

NORTHERN REGION

DECEMBER, 1989

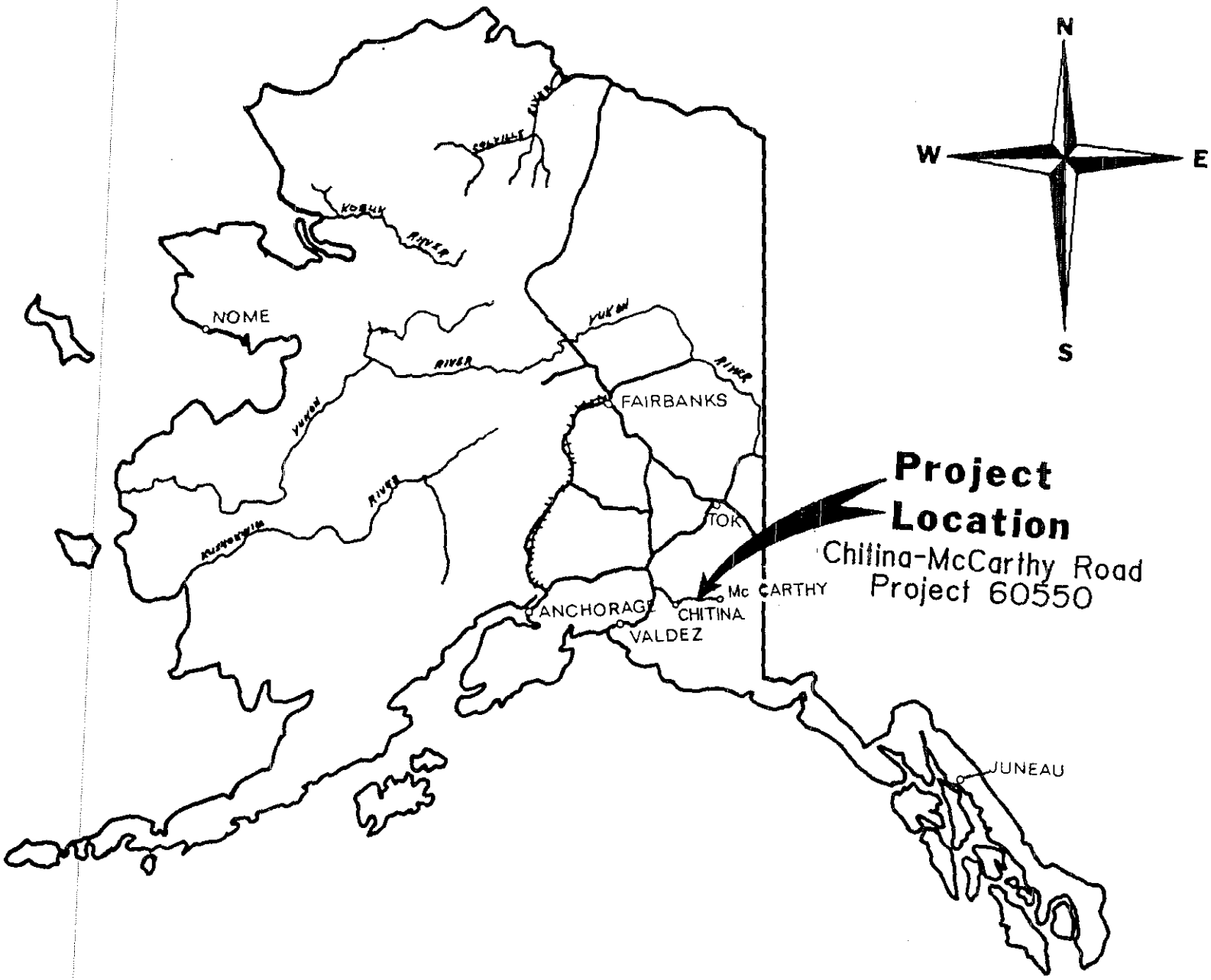
McCARTHY ROAD
CHITINA TO McCARTHY
60550

RECONNAISSANCE STUDY

PREPARED BY

NORTHERN REGION RECONNAISSANCE SECTION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
2301 PEGER ROAD
FAIRBANKS, AK, 99709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INTRODUCTION

The Department of Transportation & Public Facilities for the State of Alaska is planning long range improvements to the Chitina-McCarthy Road. The study begins in the town of Chitina on the west bank of the Copper River and ends at the town of McCarthy approximately 60 miles to the east. The highway generally follows the old grade and alignment of the Copper River and Northwestern Railroad.

The Copper River and Northwestern Railroad was constructed between the years 1908 and 1911. The railroad operated for nearly 30 years transporting copper ore from the Kennecott mine to port facilities at Cordova. In 1938 the mining operation was terminated due to falling copper prices and the railroad was abandoned. Almost immediately efforts were started by citizens groups in Cordova, Chitina, and McCarthy to convert the railroad embankment into a useable road. In 1940 the Alaska Road Commission assumed the maintenance of the 60 miles of abandoned railroad between Chitina and McCarthy.

In the early 1950's the Bureau of Public Roads surveyed a route generally following the railroad alignment. The intent was to reconstruct the embankment and decaying structures, however, no construction took place.

It was not until 1962 that the Alaska Department of Highways awarded a maintenance contract for removal of the rails and ties from the railroad bed. Under the same contract placement of culverts and grading of the road

bed was also undertaken. Upon completion of the contract the road could be safely driven from the east bank of the Copper River to the Kennicott River near McCarthy. The only obstacle for completion of the road was a bridge across the Copper River.

In 1966 the State received authority to proceed with the design of a bridge across the Copper River. The bridge was completed and dedicated on August 27, 1971. Since the opening of the road the Department of Transportation & Public Facilities has gradually upgraded the road bed through maintenance operations but funds for such operations are always inadequate for major improvements such as culverts and the driving surface. Historically, maintenance costs have been reduced after improvement to a section of roadway are completed.

Purpose

The purpose of this Reconnaissance Study is to present and discuss the available alternatives for upgrading the existing road and to recommend a standard of improvement that will provide adequate safety and convenience for the traveling public. Environmental factors such as impacts to noise and air quality, right-of-way, wetlands, and visual aesthetics as well as soil conditions and maintenance problems were considered.

Study Area

The Chitina-McCarthy area lies in southcentral Alaska and can be reached via the Richardson and Edgerton Highways. The McCarthy Road lies entirely within the Wrangell-St. Elias National Park and Preserve. Three major mountain ranges meet in the park: The Wrangells to the north, the Chugach Mountains along the southern boundary, and the St. Elias along the Alaska-Canada border to the east. The McCarthy Road and Chitina valley are surrounded by magnificent mountain peaks and glaciers which add to the experience of travelling to McCarthy and the historic Kennecott mining area.

The McCarthy Road follows the upland terraces above the Chitina River from the Copper River to the Kennicott Glacier near the community of McCarthy. The road gradually climbs from an elevation of approximately 500 feet at Chitina to near 1500 feet at McCarthy. The Chitina Glacier carved the valley, creating the numerous shallow lake depressions and deposited the moraines and various materials which are the basis for the present variable patterns of soils and vegetation.

Importance

The McCarthy Road is used by a variety of travelers including local residents, recreational property owners, miners, tourists, and park visitors. It is the only road serving the southern area of the park. The primary destination is the McCarthy-Kennecott area at the end of the road

but as the park develops it will also become a "destination" thus increasing use of the road and associated turnouts and scenic viewing spots. The primary concern of any agency charged with the responsibility of overseeing a public property such as the McCarthy road is safety. Also of concern are maintenance costs and traveler comfort. The improvements proposed by this study are made with these considerations in mind and the recommendations found at the end of the report reflect the overall needs of the traveling public.

Because the McCarthy Road follows the abandoned CR & NW railroad alignment the route itself is of historic significance. For the most part the horizontal alignment of the railroad grade can be brought up to acceptable standards for use by automobiles without major changes in the location of the road. The one major exception would be the first 2 miles east of the Copper River which requires an alignment shift for both safety and maintenance considerations.

Alternatives

The following alternatives were analyzed:

1) No build
2) Upgrading the existing facility with minor realignments (dashed line on mosaics)
3) Major realignment (solid line on mosaics)

No Build Alternative

Adoption of the "no build" alternative would mean continued use of the existing facility. Maintenance efforts would continue, but probably only at the level currently in effect. Winter maintenance and improvements to the driving surface would not be possible without increased funding through the State legislature. Primary reasons for adopting the "no build" alternative would be to preclude project impacts and construction costs.

Upgrading the Existing Facility with Minor Realignments

Upgrading the existing facility would primarily involve following the existing grade and alignment within the existing right-of-way. One major exception would be the first two miles along the Kotsina bluff. This segment should be realigned to the south of the existing roadway to avoid the slides and steep sidehill cut currently encountered. A few minor realignments would also be required to alleviate steep grades or foundation problems but most could be accomplished within the existing right-of-way. Other project improvements should involve culvert and bridge upgrading, roadside brush removal, raising the existing grade above the surrounding ground, and providing a crushed aggregate driving surface. With minor realignments this alternative will meet a 40 mile per hour design standard.

Major Realignment

The solid line on the mosaic sheets indicates areas of suggested realignments that offer improvements for foundations or horizontal geometrics. These realignments would require new right-of-way and would cause greater environmental impacts than upgrading the existing facility. If the road were to be brought up to a 50 mile per hour standard these major realignments would likely be necessary.

Other Alternatives

Federal Aid Safety Project: The McCarthy Road is a Federal Aid Secondary route and is eligible for Federal Highway safety funding. This type of funding is very limited. Safety project funding is allocated on the basis of traffic volumes and facility type. The low traffic volumes associated with the McCarthy Road will make it difficult for this road to compete for safety funds with the high volume roads in the State.

Construct a railroad: This alternative would require a complete reconstruction of the old railroad grade, construction of at least 3 major bridges (including crossing the Copper River) and construction of numerous trestles. The cost would be much greater than that required for upgrading the road for use by automobiles. A railroad project is not eligible for Federal Highway funding. This is not a viable alternative, considering the type of use this transportation corridor receives.

ROADWAY REQUIREMENTS

The existing roadway through the project area for the most part follows the Copper River and Northwestern Railroad alignment. The grades required to operate a railroad are usually no steeper than 1 or 2 percent and as such provide a very good vertical alignment for a highway. The deep gullies were crossed, by the railroad, using wooden trestles to avoid the steep grades that would otherwise be necessary to traverse these areas. Constructing bridges across these gullies for highway use is not practical nor is it necessary. Most of the streams can be handled with culverts and acceptable grades are possible without excessively high fills.

The existing roadway width averages 12 to 16 feet with short stretches barely wide enough for 2 vehicles to pass. From the "Park Road Standards", the minimum roadway width for a road with a 20 year projected average daily traffic of 75 is 20 feet. The Transportation Research Board Special Report 214 "Designing Safer Roads" recommends a minimum width of 24 feet. The American Association of State Highway and Transportaton Officials (AASHTO), Policy on Geometric Design of Highways and Streets, 1984 Edition, requires a width of 24 feet (20′ traveled way with 2′ shoulders).

The horizontal alignment of the existing road, for the most part, falls within the requirements of a 40 mph design. The maximum degree of curvature for a 40 mph design is 11° 15′ (510 ft. radius).

Traffic Data

Highway design is generally based on a useful roadway life of 20 years. The average daily traffic (ADT) used to determine design criteria for a particular road is derived by projecting current traffic counts 20 years into the future.

The current ADT for the McCarthy Road is 125 at the Copper River bridge and 25 at the Chokosna River. The projected annual ADT for the road is 75. If the land use in the area should change dramatically in the future, i.e., major park development or increased use by private land owners, this projected ADT would increase.

The following design criteria is based on an ADT of 75. The design criteria was taken from the 1984 edition of "Park Road Standards" published by the National Park Service. The criteria presented in the Park Road Standards was adapted primarily from policies established by the American Association of State Highway and Transportation Officials (AASHTO).

Design Criteria

The functional classification of the McCarthy Road most closely fits that of a Class I road which is defined as a "Principal Park Road/Rural Parkway."

The first consideration in determining a design speed for a particular road is the type of terrain crossed. The McCarthy Road crosses a mixture of flat and rolling terrain with the majority being flat.

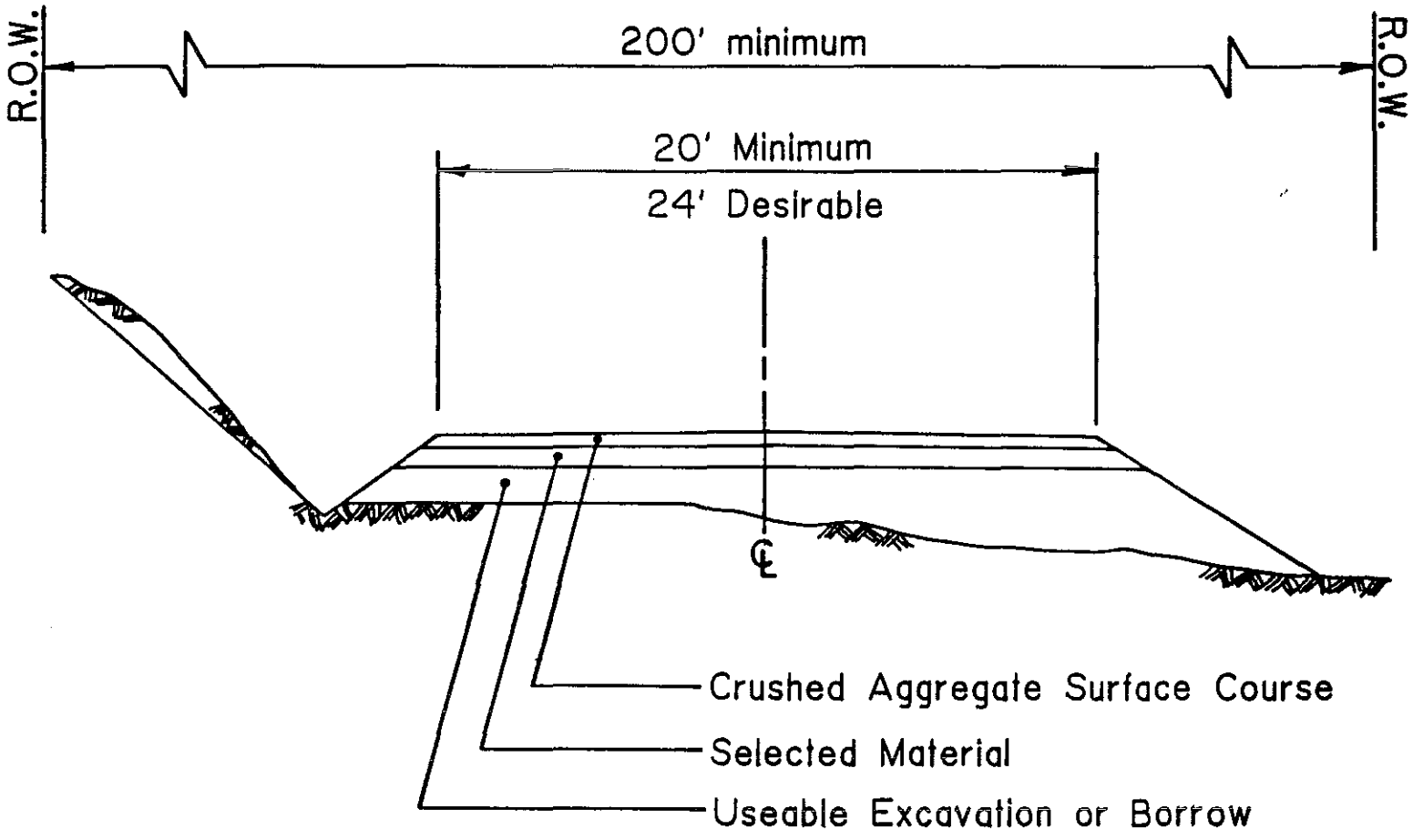
Using the projected ADT of 75 and a terrain type of "flat" the following design standards apply:

Design Speed	40 mph
Grades	7% maximum
Degree of Curvature	11° 15′ maximum
Passing Sight Distance	730 feet
Stopping Sight Distance	325 feet
Roadway Width	20 feet minimum
	24 feet desirable

The posted speed of a road is usually lower than the design speed. If it is not feasible to construct a short section of roadway to the recommended design speed that section should be "signed down" to a lower speed as appropriate.

Right-of-Way

The existing right-of-way width of the McCarthy Road is at least 200 feet total. In areas where realignments are necessary this width should be maintained as a minimum. If a large cut or fill is required a short section of right-of-way in excess of 200′ may be required.



TYPICAL SECTION
(40 mph Design)

Along with the National Park Service, lands adjacent to the right-of-way fall under a variety of ownerships including the AHTNA Regional Corporation, Chitina Village Corporation, the University of Alaska, the State of Alaska, and private holdings. The private holdings along the McCarthy Road are found primarily between Chitina and Strelna, in the Long Lake area and from milepost 54 to McCarthy.

Right-of-way management includes not only road design and alignment but also roadside maintenance. Roadside maintenance involves constructing and maintaining bridges, culverts, and drainage ditches, utilization of material sources, roadside tree and brush management, and providing a clear zone for errant vehicles. Controlling roadside brush is the most visually sensitive maintenance practice. Brush clearing is necessary to provide site distance for motorists and to allow unimpeded travel width for vehicle passage. Vista clearing at sites of interest to travelers and scenic overlooks are also part of good right-of-way management. Providing a vegetation screen between the roadway and material sources or other roadside disturbances is also a responsibility of those charged with right-of-way management.

Foundations and Materials

The entire project is located in the Chitina valley and lies between the southern flank of the Wrangell Mountains and the Chitina River. The physiography of the area represents glaciation and glacier related erosion.

The Chitina Glacier was the major glacier responsible for carving out the topography of the valley.

The Chitina valley follows a northwest direction to merge with the Copper River basin. The Chitina River, traversing the entire length of the valley, drains all the ice fields from the south side of the Wrangell Mountains and from the North side of the Chugach Mountains. A network of glacier fed streams and rivers empty into the Chitina before draining into the Copper River.

In general, the geology of the Chitina valley reflects its creation and alteration by glacial action. Most of the soils are ground moraine deposits or ice contact deposits (sands and gravels) with a few areas of alluvial sands and gravels, such as the Kotsina River flats, around Strelna Creek, the Chokosna River, Lakina River, and across the Kennicott River flats. From the Gilahina River to near the Lakina River the road crosses a series of alluvial fans. Bedrock is exposed in some of the ridges along the route. Permafrost is present throughout much of the valley, especially in the silty sods.

Before any realignment or major reconstruction is undertaken along the McCarthy Road a thorough field investigation, including core drilling, will be conducted by Department of Transportation & Public Facilities geologists and materials engineers. Information obtained will be used in making geotechnical recommendations for the design of the project.

Some of the problems anticipated to require solutions include: perennially frozen foundation materials, side hill cuts and large fills, useability of excavated material and location of borrow sources.

Sites that are permitted to the State as sources of borrow material are scarce throughout the project. Additional material sources will be necessary for continued maintenance and/or construction of the roadway. The alluvial materials found in the river flood plains along the route such as the Kotsina, Lakina, and Kennicott would provide good material with the least amount of aesthetic disturbance.

Maintenance

The McCarthy Road is maintained by the State of Alaska Department of Transportation & Public Facilities maintenance personnel from the Chitina Maintenance Station. Drainage problems, roadside brush control, and the lack of adequate surface course material as well as the remote nature of the road all contribute to the costs of maintaining this road. An additional problem encountered with the McCarthy Road is the continuous surfacing of railroad spikes during blading operations.

Any new roadway design should address winter maintenance problems such as drifting snow and hillside icing. A field review of the route should be planned with local maintenance personnel.

ROUTE DESCRIPTION

The McCarthy Road follows the basic alignment used by the Copper River and Northwestern Railroad. The vertical alignment (grade) is, for the most part, also the same as that used by the railroad.

The photo mosaic sheets on the following pages were made from September 1985 aerial photography. The existing roadway shows as a narrow, light band across the middle of each sheet. A dashed line follows the existing alignment for most of the route. The few short segments where the dashed line does not remain on the existing roadway are areas suggested for realignment for safety improvements.

The solid line visible on the mosaics depicts the alignment that was recommended in a 1966 Reconnaissance Report produced by the Valdez District for the State of Alaska Department of Highways (now DOT&PF). This report is available for inspection at the Fairbanks office of DOT&PF, 2301 Peger Road, Fairbanks, Alaska. This alignment was also surveyed and in many areas the brushed survey line is still visible today. In most cases the realignments indicated in the 1966 report are not being recommended in the new study.

The mileposts (MP) shown on the existing roadway begin at the Copper River (MP 0) and end at the Kennicott River (MP 58). These mileposts coincide with the McCarthy Road Milepost Log furnished by the National Park Service.

These mileposts are used as reference points in the following discussion even though they may not agree precisely with mileposts that exist on the ground.

The photo mosaic sheets should be folded out for reference while reading the description of the project.

Chitina to the Copper River

Although this 1-1/4 mile section of roadway is outside the limits of the original scope of the project it is included in this Reconnaissance Report since it is in fact the beginning of the McCarthy Road. The first one thousand feet of the road passes through the narrow, one lane, steep sided cut that was made by the CR & NW Railroad. While this short segment does not meet recommended standards for a two lane road it probably should be preserved as is. This narrow cut affords a memorable "entrance" into the Chitina-McCarthy Road area. If traffic volumes reach a point in the future that require a wider road this rock cut could be widened to accommodate 2 lanes but careful design and construction procedures should be followed so as not to destroy this unique section of roadway.

The next 0.9 mile stretch descends gradually along the east side of a ridge from the "cut" to the Copper River bridge. This section is 20-24' wide and with minimal horizontal and vertical realignment can easily meet the 40 mph design standards.

During the dipnetting season this segment of road incurs much heavier traffic volumes than normal due to numerous trips back and forth between Chitina and the river.

The Copper River bridge was completed in 1971. It is a steel plate girder structure with a reinforced concrete deck. The bridge is 1,378 feet long and is 30 feet wide. It is in good condition and no improvements are required.

Copper River to Kuskulana River

This segment begins at milepost 0 which is at the east end of the Copper River bridge. From mile 0 to approximate mile 1.5 the existing road climbs along the steep bluff of the Kotsina River flood plain on a 3% grade. This section of road is narrow, unstable, and a continuous maintenance problem. A number of short segments are sliding downhill. The material encountered along this bluff is primarily silt and sandy gravel over top of volcanic rubble and is covered with spruce and cottonwood. To improve the substandard curves and width would require a number of large cuts or sliver fills which would only lead to the same slide problems that exist now.

Two alternatives exist for this area. The first is shown on mosaic number 1 as the dashed line which departs the existing road approximately 1/4 mile east of the bridge and climbs on an 8% grade to the south of the bluff rejoining the existing road near milepost 2. Some of the material

encountered in the excavation along this alignment may be usable for fill embankment in the approach to the hill from mile 0.1 to mile 0.3. If additional material is required the Kotsina River flood plain would be a good source of borrow. A field investigation by geologists and materials engineers should be made before a final alignment is selected.

The second alternative would be to swing to the north after crossing the bridge and construct the road on the southerly edge of the Kotsina River flood plain rejoining the existing road near milepost 1.5. The problem with this route is climbing the bluff at mile 1.3. The elevation difference from the flood plain to the top of the bluff is at least 200 feet which would require a very substantial cut and fill transition. The roadway on the flood plain would also require a large quantity of riprap to protect it from Kotsina River flooding.

The 1966 Reconnaissance Report recommends a continuation of the realignment, shown as a solid line on mosaic 2, crossing the existing road at MP 1.8 and rejoining at MP 7.4. This realignment would shorten the route by nearly 3/4 of a mile and would bypass a section of road that winds along the Chitina River bluff with a number of sharp curves.

The existing road from MP 2 to MP 7 follows a winding route along the Chitina River bluff. For the most part the curves encountered in this stretch are within the 40 mph design standard.

The dashed line on mosaic 2 recommends a few minor realignments to bring the entire road up to standard. The realignments at MP 2.5 and MP 3 are necessary to meet the minimum tangent length between curves. The realignment from MP 3.8 to MP 4.2 is required to remove the sharp curve and slide area at MP 4. This realignment would require cutting into the hillside to form a solid bench for the roadbed to alleviate the sliding problem that exists now. A portion of the existing roadway could be utilized as a scenic overlook.

From MP 4.2 to MP 15 the existing alignment for the most part meets the 40 mph design standard. The stretch from MP 9 to MP 11 will require a small realignment to make the curves flow smoothly but this can be accomplished within the existing right-of-way and with minimal disturbance to the surrounding terrain. Because this two mile segment winds through a number of small lakes and ponds a field investigation by materials engineers is required before final recommendations are made on alignment and type of embankment construction.

From MP 15.3 to MP 15.7 the existing road follows a substandard alignment up to the north end of the Kuskulana River bridge. The dashed line shown on mosaic 4 meets the 40 mph requirement but would require a side hill cut to alleviate the sharp curves on the existing road. The road in this short segment is in a side hill bench situation and the realignment would require cutting further into the hillside. The existing roadway at MP 15.5 could be utilized as a scenic viewpoint for the Kuskulana canyon and bridge.

The 1966 Reconnaissance Report recommends shifting the roadway to the north of the ridge top from MP 15.1 to the bridge. This alignment would require a full cut but in turn would avoid the side hill situation encountered on the alternative discussed above. A thorough soils investigation would need to be undertaken for this alternative.

The Kuskulana River bridge at MP 15.8 received major improvements to the approach trestle and the driving surface in 1988 and does not require further upgrading. It has a 15' treated glulam deck with metal bridge rail.

The segment of the McCarthy Road from the Copper River to the Kuskulana River does not cross any major streams except Strelna Creek. There are no bridges in this stretch. Strelna Creek is crossed with a 96" culvert and does not require further improvement. This 16 mile stretch of roadway will require a careful investigation of drainage problems by design and maintenance personnel to determine culvert sizes and locations.

Kuskulana River to Gilahina River

This segment of the McCarthy Road begins at the east end of the Kuskulana River bridge near MP 16 and ends at the Gilahina River near MP 28. Fold out mosaic 4 to begin this segment.

The existing road from MP 15.8 to MP 17.3 winds along the base of a number of small ridges. This alignment falls within acceptable standards for a 40

mph design although some of the areas crossed between ridges do not afford favorable drainage or soils conditions. At MP 17.1 the road passes through a rock cut which will require widening into the hill to bring the roadway within standards.

From MP 18 to MP 20.5 the road passes through the Chakitna Slough area. The alignment meets the 40 mph standard although at MP 19.8 there is a 11^{0} curve which could be shifted to the right to move out of a small pond. Past soils investigations in the area indicate that under a layer of peat the soils are predominately gravel. The railroad bed shows signs of good soil stability which would indicate that the roadway can be upgraded to an acceptable width with minimal subsurface efforts.

From MP 21 to MP 25 the existing alignment will meet the 40 mph standard with only minor adjustments to smooth some of the curves. At MP 23.6 the road passes close to the west end of Chokosna Lake. A careful soils investigation of the area near the lake should be made before upgrading the roadway but it does not appear that a realignment would afford any better conditions than that found under the existing alignment.

At MP 25.6 the road crosses the Chokosna River. The Chokosna River bridge is a 103 foot long 20 foot wide steel pony truss. When funding becomes available for roadway improvements the bridge should also be included as part of the project.

From MP 25.7 to MP 27.4 the road winds along a low ridge near the Chokosna River. The existing alignment is within acceptable standards except at MP 26.2 and 26.7 where minor realignments are necessary to provide adequate tangent distance between curves.

At MP 27.4 the road turns sharply to the left and descends to the Gilahina River at MP 27.7. The road crosses the Gilahina River on a 43 foot long, 12 foot wide timber stringer bridge. The roadway between MP 27.4 and 28.2 does not meet the criteria for a 40 mph road but with minimal realignment could be brought up to standard. The 14^{o} curve shown on mosaic 6 is as flat a curve possible without shifting the roadway a considerable distance downstream. The embankment height at the river would need to be approximately 10 feet in order to keep the grade at 7% climbing out of the river bottom. A new bridge should be constructed at this crossing.

The large railroad trestle to the north of the road at MP 27.7 is one of the major historic attractions along the road. As such, provisions should be made for tourist parking and viewing in this area.

Between the Kuskulana River and the Gilahina River the 1966 Reconnaissance Report describes a number of major realignments as shown by the solid line on mosaics 4, 5, and 6. Generally the realignments are suggested in an attempt to relocate the roadway over better foundation conditions. Before any of these realignments are considered an in depth study of the foundation under the existing road should be conducted.

Gilahina River to Lakina River

This segment extends from the Gilahina River near MP 28 to the Lakina River near MP 43. The existing alignment, with a few minor realignments, meets the 40 mph design standard. The 11° curve at MP 40 near Crystal Lake should be flattened to 6° 45′ since it is the only sharp curve for many miles in each direction. Also, the stretch from MP 41 to MP 43 will require some minor realignments to alleviate the short substandard curves along the bluff above the Lakina River.

From MP 30 to MP 35 the road crosses an area of mud flows. These mud flows were a maintenance problem to the railroad. There is nothing to indicate that they will ever become stable enough to not be an ongoing maintenance problem on the roadway.

Foundations through the entire section from the Gilahina River to the Lakina River need to be carefully evaluated by geologists and soils engineers before any improvements are made to the existing road.

The 1966 Reconnaissance Report recommends a number of realignments along this section of the McCarthy Road. The most sweeping change is from MP 30 to MP 35 where a realignment curves to the south near Tooth Lake climbs onto a small ridge and continues for nearly 4 miles, passing to the south of Moose Lake, rejoining the existing road near MP 35. This realignment avoids the mud flows mentioned above and places the roadway on a more stable base.

A realignment is also shown around the north side of Crystal Lake to move the roadway away from the privately owned airstrip at MP 40.5. At one time there were plans to extend the airstrip to the east.

The realignment from MP 42 to MP 43 would move the road out of the side hill cut above the Lakina River and alleviate the glaciering problem encountered on the existing alignment.

The Lakina River bridge is a 203 foot long, 13 foot wide steel through truss structure. This one lane bridge should be included for replacement when funds become available to improve the roadway.

Lakina River to McCarthy

This section of road extends from the Lakina River near MP 43 to the Kennicott River near MP 58. Fold out sheets 8, 9, 10, and 11 should be used to follow this segment.

From MP 43.2 to MP 44.2 the road passes through an area of privately owned property. An airstrip is located adjacent to the roadway from MP 43.6 to MP 44. The road crosses Salmon Creek near MP 44.1.

The existing road along Long Lake follows a series of curves next to the lake. With some minor curve flattening these curves could be brought up to the 40 mph standard. This section extends from MP 44.1 to MP 46.8. Although the roadway alignment can be brought within acceptable standards a

major problem exists with glaciering through this entire side hill section. If the road is to be considered for year around use this problem will require correcting. A large fill would be required at MP 46.6 to correct the steep grades crossing a gulley.

Two alternatives are shown on mosaics 8 and 9 that would bypass Long Lake. The solid line to the north of the lake makes best use of the existing topography and soil conditions in the area. This realignment ascends the ridge north of the lake and follows the ridge top, rejoining the existing road near MP 48.3. The other alternative swings to the south of Long Lake and rejoins the existing road at MP 49. This alignment, while avoiding the problems encountered along the lake, crosses an area of low ground and poor soils conditions.

With a few minor realignments the existing road between MP 49 and MP 54.8 will meet the 40 mph standard. The soils and drainage problems through this area need to be reviewed before any reconstruction takes place.

From MP 54.8 to MP 57.3 the existing road winds along a steep hill side with a number of substandard curves. The dashed line shown on mosaic 11 would bring the alignment up to the 40 mph standard but benching into the steep side hill will not be easy. Sliver cuts and fills will be hard to avoid and the stability of the road may be difficult to preserve. A number of small drainages are crossed in this segment.

The realignment beginning near MP 54.8 drops down off of the hill side and follows along the base of the hill. This realignment would place the roadway on more stable ground but would involve crossing a number of private land holdings in the Fireweed Mountain Subdivision area. This realignment would rejoin the existing road near MP 58.

From MP 57.3 to the end of the road at MP 58 the existing road crosses the flood plain of the Kennicott River. A parking area with restrooms and garbage cans was constructed at MP 58. Any road reconstruction should include expansion of this parking area and facilities to accommodate the growing demand on this site. The Kennicott River is crossed at this point using hand operated trams.

Crossing the Kennicott River to the McCarthy-Kennecott area is a subject that needs to be addressed with careful thought and planning. The options that draw the most favorable response at this time are to retain the hand operated trams in their present form or to construct a foot bridge.

Beyond McCarthy

The road from McCarthy to Kennecott is maintained by DOT&PF. It is adequate for current conditions but if the traffic should increase in the future this segment of road should be considered for improvements. It is approximately 4-1/2 miles from McCarthy to Kennecott.

A road also runs in a southeasterly direction from McCarthy to May Creek and Dan Creek. It is approximately 12 miles to May Creek Camp and another 7 miles to Dan Creek Camp. If access to these areas is considered in the future, crossing the Kennicott River with a bridge, approximately 1/2 mile upstream from its confluence with the Nizina River appears to be a viable alternative to crossing near McCarthy. Crossing the river at this point would require approximately 6 miles of new road to connect the McCarthy Road near mile point 55 with the Dan Creek Road near mile point 3.

The roads from McCarthy to Kennecott and from McCarthy to Dan Creek are not on the Federal Aid System and would not be eligible for federal funding.

COST ESTIMATE

The following estimates are presented for comparison of the different alternatives. These estimates are based on 1989 dollars. They assume the reasonable availability of material sources throughout the project limits. Excessively long hauls of borrow and surface material would increase these figures.

Upgrade the existing alignment to 40 mph standard:

(20′ roadway)	Design & Construction	=	$ 15 million
	Right-of-Way	=	0.1 million
(24′ roadway)	Design & Construction	=	$ 17 million
RECOMMENDED WIDTH	Right-of-Way	=	0.1 million

Upgrade along the suggested major realignments to 50 mph standard:

(28′ roadway)	Design & Construction	=	$ 45 million
	Right-of-Way	=	0.5 million

Replace 3 bridges (Chokosna, Gilahina, and Lakina) = $ 2 million

ENVIRONMENTAL CONSIDERATIONS

A draft EIS for the realignment project proposed in 1966, was approved for circulation on September 10, 1973. No final EIS was ever issued. The environmental process would have to be redone for the following reasons:

1) Changes in the purpose and need of the project.
2) Changes in land status.
3) Changes in State and Federal regulations.
4) Changes in the project scope.

The improvements recommended in this report are very minor in the regional transportation context and a full environmental impact statement may not be necessary.

RECOMMENDATIONS

The recommendation of this Reconnaissance Study is to "Upgrade the Existing Facility with Minor Realignments" (alternative 2). This alternative is depicted on the mosaic sheets with a dashed line. A 40 mph design standard should be followed with a 24 foot roadway width.

APPENDIX

- Traffic Projections
- Kennicott River Footbridges Estimate
- Park Service Road Log
- Public Input

MEMORANDUM

State of Alaska
Department of Transportation & Public Facilities

TO: Steve Sisk
Chief of Design
Northern Region

DATE: June 1, 1987

FILE NO: 300/100td

TELEPHONE NO: 474-2437

FROM: Beverly Nice Fantazzi
Manager of Traffic Data & Forecasting
Northern Region

SUBJECT: Rural Traffic Projections

Traffic Projections for McCarthy Road:

Currently the 1986 ADT is 25 and has not changed since 1976. Both the Interior and SIRTS Studies did not make any traffic projections because of the uncertainty of future land use in the Wrangall-St. Elias National Park and Preserve. With the information we have, a 2010 projection would not exceed 75.

If you have any questions, please feel free to call.

BNF/cv
Attachments

cc: Jonathan Widdis, Manager-CIP Planning, Northern Region

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NORTHERN REGION, REGIONAL DIRECTOR

STEVE COWPER, GOVERNOR

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5316
PHONE: (907) 451-2210

April 7, 1989

Re: Footbridge at McCarthy
Log #89-140

The Honorable Jalmar Kerttula
Alaska State Senator
P.O. Box V
Juneau, Alaska 99811

Dear Senator Kerttula:

Paula Terrel has requested that we provide a cost estimate to replace the two tramways at McCarthy with footbridges.

We estimate this project could be completed for $1,400,000, including design and construction inspection. This estimate is based on an eight foot wide bridge. The opening could be controlled with bollards to allow only foot traffic or to allow three or four wheelers. In an emergency this bridge could accommodate a car or light pickup.

Sincerely,

John Horn, P.E.
Acting Regional Director

RRP/kk

cc: Mark S. Hickey, Commissioner
Catherine McHugh, Legislative Liaison, Headquarters
John D. Martin, P.E., Chief of Planning & Research, Northern Region

Mileages and Descriptions

STARTS ON VALDEZ C-2 QUAD

Odometer Reading	Side of Road	Description
00.00	S	Starting point at the east side of the Chitina Bridge (Valdez C-2).
00.10	N	Gravel road to mouth of Kotsina River.
00.20	S	Camping area.
00.30	S	Trail(possibly for 3-wheelers).

CONTINUES ON VALDEZ C-1 QUAD

01.45	N	Parking lot and cabin.
01.55	N	Pullout.
01.60	N	Pullout and possible trail.
02.00	N	Two-track vehicle trail.
03.60	S	Scenic overlook of Chitina River.
03.65	S	Scenic overlook of Chitina River.
03.95	S	Scenic overlook of Chitina River.
08.35	S	Private access road.
08.40	S	Private access road.
08.40	N	Airstrip entrance.
08.50	N	Vegetated road, probably to airstrip.
08.70	N	Camping area.
08.75	N	Two-track vehicle trail.
09.20	S	Trail.
09.25	S	Access to trailer.
09.30	S	Access to tent camp, trail probably continues beyond camp.
09.45	S	Road to Silver Lake.
10.00	S	New Road.
10.05	S	Private Road.
10.10	N	Pullout: possible woodcutting area.
10.90	S	Nelson's Lakeside Campground and road.
11.55	S	Pullout.
13.10	N	Turnoff to the Kotsina and Kuskulana Rivers.
13.35	N	Pullout and camping area.
13.40	B	Private Roads to houses and trailers.
13.45	B	Private Roads to houses.
13.45	B	Strelna Creek.
13.50	N	Road access to Strelna.
13.55	R	Road to gravel pit.
14.70	S	Pullout.

CONTINUES ON VALDEZ B-1

15.50	S	Viewpoint of Kuskulana Bridge.
15.60	S	Viewpoint of Kuskulana Bridge.
15.80	N	Pullout.
15.80	B	Bridge over Kuskulana River

DESIGN CHIEF
Olmstead
Urbach
Venusti
Platzke
Trailer Safety Engr.
Location & Survey
CONSTRUCTION
Tinker
TECHNICAL SERVICES
RIGHT OF WAY
PROJECT CONTROL
VALDEZ Residency
NOME Residency
Return

Trail Inventory from NPS — McCarthy Rd. They have lots of detailed data

Mile	Side	Description
15.00	S	Gravel pit and faint road to SW (trail #334).
20.05	N	Cat tracks on map
22.20	B	Pullouts.
22.35	N	Chokosna Creek Trailheads.
23.40	N	Cleared swath.
24.10	N	Pullout.
24.20	N	Pullout.
25.20	N	Old roadbed, access to Chokosna Lake.
25.40	N	Burnt out cabins and trail to gravel pit.
	S	Landing strip.
25.55	B	Chokosna creek.
25.60	N	Access to cabins and perhaps a trail heading north.
26.90	N	Trailhead.
27.25	N	Pullout.
27.45	N	Railroad access road
27.65	N	Access to Gilahina River, camping area.
	S	Access trail.
27.70	B	Gilahina River.
27.75	N	Trail.
28.25	B	Pullouts.
28.45	N	Foot trail.
29.85	N	Pullout & campsite.
30.20	S	Mechanized vehicle trail.
30.65	S	Trail.
31.20	N	Pullout.
31.40	N	Pullout & camping area.
31.80	S	Gravel pit.
	N	Pullout & camping area.
31.90	N	Gravel pit.
32.50	N	Pullout, trailhead.

CONTINUES ON McCARTHY B-7

33.60	S	Campsite & Trail.
34.10	S	Moose Lake Viewpoint & Campsite.
35.15	N	Abandaned Cabin.
35.20	N	Trail into clearing.
36.85	N	Road.
37.60	N	Camp road.
38.25	N	Survey line.
39.00	B	Tributary creek to Crystal Creek.
39.10	S	Unimproved campsite & trail.
39.40	N	Ruth Lake.
40.00	N	Trail to cabin.
40.25	B	Crystal Creek.
40.30	N	Posted road.
40.80	N	Crystal Lake Subdivision.
41.25	B	Gravel pit & overgrown trailhead.
42.50	N	Foottrail to Crystal Lake.

Mile	Side	Description
40.35	S	Crystal Lake Airstrip.
40.40	S	Trail to Lakina Lake.
40.50	N	Access to Crystal Lake & camping area.
41.05	S	Access to forest harvest area.
42.05	S	Pullout & gravel pit.
42.20	S	Trail.
42.75	S	Pullout.
42.80	B	Lakina River.
42.90	S	Access to private property, (house, etc.)
	N	River access trail.
43.15	S	Timber access trail.
43.20	N	Access to river and private dwelling.
43.50	B	Access to private dwelling & airstrip.
43.70	S	Access to private dwelling.
	N	Access to private dwelling, Coolins.
43.90	B	Access to dwellings.
44.00	S	Overgrown trail.
44.10	N	Access to dwellings & western end of Long Lake.
44.55	N	Campsite on Long Lake.

CONTINUES ON McCARTHY B-6

46.60	N	Pullout.
46.65	B	Unnamed Creek.
46.85	S	Access to unfinished dwelling.
48.55	S	Pullout & viewpoint.
49.20	S	Access to private dwelling.
49.60	N	Campsite.
49.95	N	Campsite.
50.70	N	Gravel pit & access to Univ. of Alaska lands.
51.60	N	Campsite & paralleling trail.
52.00	N	Shortcut to paralleling trail.
52.15	B	Tractor Creek.
52.20	S	Gravel pit & trail.
52.30	B	Trails.
54.10	S	Access to campsite.
54.85	N	Pullout.
	S	Road.
54.95	N	Campsite.
54.95	B	Swift Creek.
55.00	S	Trail.
55.15	N	Trail.
55.25	N	Trail.
57.20	N	Road.
	S	Trail.
57.50	S	Road.
57.65	S	CJ's Store.
57.75	S	Campsite.
[illegible]	End	Parking Lot, Chitina River Overview. & Tram.

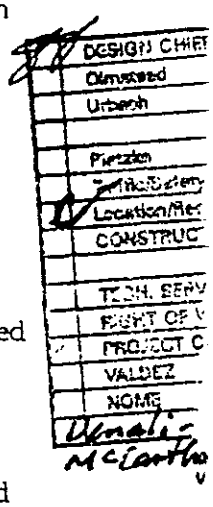
McCarthy Community
McCarthy via Glennallen, AK 99588

September 20, 1988

Steven C. Sisk
DOT & PF-Northern Region
2301 Peger Road
Fairbanks, AK 99701

George Levasseur
DOT & PF-District Office
P.O. Box 507
Valdez, AK 99686

George Hermann
DOT & PF-Tazlina Station
Glennallen, AK 99588



Gentlemen:

We understand that you are in the process of developing a reconnaissance report for the McCarthy Road, which will guide future construction and upgrading decisions. We would like to take this opportunity to restate our views regarding access to our community, so that your department can give them appropriate consideration as you proceed with your work.

1. First, we'd like to express our appreciation for what the Department has done on the road over this past year -- foremost for the beautiful reconstruction of the Kuskalana Bridge, but also for grading and maintenance between Chitina and McCarthy and for the much-needed brushing and grading of the road from McCarthy to Kennicott. Thank you.

2. Increasingly, we are finding that people come from all over the world to visit the McCarthy area, and that one aspect of their visit that they especially enjoy is the calm, quiet setting created by pedestrian access across the Kennicott River. We feel that maintaining this situation is important personally for us as residents as well as for these visitors. We will appreciate your help in planning over the long term for continued safe and adequate pedestrian-only crossing of the Kennicott.

This summer we observed that the Kennicott trams are beginning to reach their capacity with increased traffic. We'd be grateful for your help in designing and installing a footbridge as a permanent solution. Our suggestion is that the bridge be limited to non-motorized use, and that the tram continue to serve for transportation of freight.

(It appears that soon -- perhaps next summer -- the river will finish cutting through the ice-cored moraine at the head of the island separating the two channels, probably sending the entire water flow through the west channel. In this event, only one footbridge/tram will be needed.)

3. We feel that upgrading of the road should be limited to the minimum necessary for safety. Safety, of course, is an important concern for us all. But by keeping the design speed low, modifications to the existing curves, grades and roadway cross-section can be minimized, and visitors can be encourage to appreciate the drive by traveling at a slow pace.

As a long-term objective for reconstruction, we suggest you consider the AASHTO standard of two lanes, 8-foot lane width and one foot

shoulder, as presented in "Park Road Standards," adopted by the National Park Service in 1984. An appropriate design speed for most of the road could be 35 mph, with lower speeds posted at some curves.

4. We appreciate good maintenance of the road on a seasonal basis. It is also helpful to have the road opened at some point during the late winter so that hauling can be done over the Kennicott ice . At the same time, we feel it is unnecessary and undesirable to keep the road open through the winter.

5. Located in one of the most spectacular parts of Alaska, and in the largest national park in the nation, the McCarthy road deserves the care that will make it an especially beautiful drive. Hand brushing (especially between the Gilahina River and McCarthy), attention to design of turnouts and signing, and the use of professional landscape architect services in design and maintenance are appropriate.

We look forward to a continuing positive dialogue with the Department of Transportation and Public Facilities and, as residents familiar with the local conditions, will assist you any way we can. We appreciate your attention to our concerns.

Sincerely,

cc: Senator Jay Kertulla
Representative Bette Cato
Park Superintendent Richard Martin

Benjamin A. Shaine
James Miller
Jeannie Miller
Howard Mozen
Jennifer Carroll
Anthony J. Zak
Gary Green
Chris Richards

Marci K. Thurston
Robert L. Engelbach
Loy Green
Nancy Green
[illegible]
Edward R. LaChapelle
Bob Jacobs
M. J. Jacobs
[illegible]

(The first page of this letter was retyped only to modify addresses.)

Return to:

State of Alaska
Department of Transportation
and Public Facilties
Environmental Section
2301 Peger Road
Fairbanks, Alaska 99709

MCCARTHY ROAD
USAGE QUESTIONNAIRE

The following questions are to help the Alaska Department of Transportation and Public Facilities determine who is using the McCarthy Road and what type of road service they would like to see.

Name _____

Address _____

_____

Do you Own?_____ or Rent? _____ property that is accessed via the McCarthy Road?

Is your property your Permanent residence? _____, Part-Time residence? __ a Mining Claim? _____ or Recreational property?_____

How many trips per week? _____ Or per year? _____ do you make?

How many vehicles do you have? _____

What type of vehicles do you drive on the McCarthy Road? _____

At what Milepost on the McCarthy Road is your property access?_____

Are you satisfied with the existing road condition? Yes _____ No _____

If you are not happy with the existing condition, what changes would you like to see? _____

_____

_____

Are you satisfied with the existing level of maintenance on the McCarthy Road? Yes _____ or No _____

If you are not satisfied with the maintenance, what other activities would you like to see (or not see)?_____

_____

_____

Other comments on the highway. _____

_____

_____

Use the back side of this paper if you need to.

Road Usage Questionnaire Summary

Approximately 120 questionnaires were mailed on August 10, 1989. A self-addressed, stamped envelope was included with each mailing. Approximately 55 completed questionnaires were returned.

A breakdown of the responses to the questions follows:

Permanent Resident	-	16
Part Time Resident	-	8
Recreational Property	-	27
Mining Claim	-	0
Other	-	4

Satisfied with existing condition	-	Yes	32
	-	No	21

Satisfied with existing maintenance level	-	Yes	32
		No	20

It is not possible to include all of the comments received, but a few of the points made most often were:

- Cut the brush for sight distance safety
- Do not construct bridge across the Kennicott at McCarthy
- Blade the road more often
- Leave it like it is

United States Department of the Interior
NATIONAL PARK SERVICE
Wrangell-St. Elias National Park / Preserve
P.O. Box 29
Glennallen, Alaska 99588

IN REPLY REFER TO:

A44

August 18, 1989

Mr. Mike Tinker
State of Alaska
Department of Transportation
and Public Facilities
Environmental Section
2301 Peger Road
Fairbanks, Alaska 99709-6394

Dear Mr. Tinker,

Thank you for the opportunity to comment on the McCarthy Road Usage Questionnaire. Since the majority of the questions do not pertain to us, we will respond in general to the overall issue.

First and foremost, the National Park Service considers the McCarthy Road to be a vital visitor access link to the interior of the park especially to the communities of McCarthy and Kennecott. We are naturally concerned and interested in the maintenance of the road. We have received numerous visitor comments as to the condition of the road both positive and negative this past summer. Our responses and recommendations to the questionnaire are as follows:

1. Consideration of any upgrades to the McCarthy road be consistent with National Park Service Park Road Standards which Mr. Steve Sisk should have.

2. Consistent maintenance throughout the summer or at regular intervals to eliminate road "washboard" and other physical road hazards.

3. Reconstruction of the road base to include additional base material to eliminate soft spots, old railroad ties, spikes, etc. which surface each time road maintenance occurs. We additionally are concerned as to source of material along the road to eliminate roadside "pits" and for the scenic vistas and aesthetics qualities along the road.

4. Improvements for road drainage by the installation of culverts and ditching where and when needed.

5. Straightening out dangerous curves and improving line of sight through clearing and brushing.

6. Consultation with the NPS to develop "wayside" areas along the roads for some additional interpretative exhibits/signs.

Overall, we are very pleased with the efforts the DOT&PF have done in the past concerning road maintenance. We are interested in the responses you receive from the questionnaire and look forward to attending the public meeting in September regarding this matter.

Sincerely,

Richard H. Martin
Superintendent

MEETING

MCCARTHY ROAD

The Alaska Department of Transportation and Public Facilities (ADOT&PF) will be holding two meetings on September 20, 1989 to discuss their plans for the McCarthy Road.

Date	Meeting Location	Meeting Time
September 20, 1989	McCarthy, Alaska	1:00 p.m.
September 20, 1989	Chitina Village Council Hall	7:00 p.m.

For further details you may contact Danny Johnson, Project Manager, in Fairbanks at (907) 451-2293.

If you cannot attend and would like information on the McCarthy Road or would like to comment, please write to:

Danny Johnson, Project Manager
Location Section
Department of Transportation
and Public Facilities
2301 Peger Road
Fairbanks, Alaska 99709-5316

MEMORANDUM

State of Alaska
Department of Transportation and Public Facilities

To: Stephen C. Sisk, P.E.
Director, Design & Construction
Northern Region

Date: October 6, 1989

File No: 60550

Telephone No: 451-2293

From: Danny Johnson & Kirk Hebard
Location/Reconnaissance
Northern Region

Subject: McCarthy Road
Public Meetings

On September 20, 1989 we held public meetings to discuss the Draft Reconnaissance Study for McCarthy Road. We met with the McCarthy residents at 1:00 p.m. and with Chitina area residents at 7:00 p.m. We compiled a list of property owners in the McCarthy Road area and mailed out about 120 notices of the meetings. Sixteen McCarthy area residents attended the meeting in McCarthy along with personnel from the Wrangell-St. Elias National Park and the Tazlina Maintenance Station. Nine residents attended the meeting in Chitina. The Park Service personnel also attended the Chitina meeting.

We also mailed a road usage questionnaire in August using the property owner mailing list. Approximately 50 completed questionnaires were returned. A majority of the respondents desired a continuing maintenance effort, roadside brush cutting, and the retention of "foot access only" to McCarthy.

Both meetings began with a brief explanation of the purpose of the Reconnaissance Study. It was also explained that the McCarthy Road was not currently in the 6 year plan for funding highway projects and that this study does not get us to a final decision on roadway improvements. The study would be used by Department of Transportation & Public Facilities (DOT&PF) planners to program future projects. It was pointed out that the McCarthy Road is a Federal Aid secondary highway and is thus eligible for federal funding for reconstruction but that maintenance efforts were the responsibility of the State.

The meeting was open to questions and discussion and nearly everyone in attendance participated.

McCarthy Meeting

A brief summary of the concerns and feelings follows:

- Question the need for 24' width.
- Question the traffic projections (too low!)
- What improvements will occur if no funding is available within 6 years?
- Need speed limit signs along road now.
- Where are material sources (Park Service response - It is up to DOT&PF to locate them then get approval from the National Park Service. They will treat it like a mining operation).
- Need electromagnet to pick up spikes (George Herrman said they use one now but it does not work very well on the uneven surface).
- The National Park Service has foot bridge design available if we need it.

- How much right-of-way is required if we realign? (Answer - 200' minimum)
- Parking lot at Kennicott River - what can be done? (George Herrman says DOT&PF is waiting for the National Park Service and Department of Natural Resources to "chip in"). National Park Service does not own any land at end of road.
- Brushing contract - the State needs to enforce removal of slash. George said contractor will haul to an area out of sight.
- Winter Maintenance - George said the road is opened by request if Fairbanks allows it. Opened in spring for breakup. They try to not let more than 2' of snow build up.
- Residents would like for DOT&PF to send message to McCarthy before opening road (so they can plan accordingly).
- Russell Galipeau, of the National Park Service, says wayside exhibits and turnouts will help in speed control and passing.
- How long would traffic be delayed during construction? (Answer - 30-60 minutes)
- Residents would support 20' width but not 24'.
- How wide is the road at Strelna?
- Can we get Federal funds for safety projects?
- Could we replace the road with a railroad? Discuss in alternatives.
- What is the time frame for completing an Environmental Impact Statement?
- National Park Service is sticking to the "minimum width" (Galipeau)
- National Park Service says the right-of-way belongs to the State. The National Park Service can comment but not control.
- Residents would like the National Park Service to support 20' width.
- Nebesna Road and McCarthy Road are different in that people came to Nebesna after the road was built.
- Keep road on existing right-of-way.
- George says liability is a DOT&PF concern.
- George says the current level of maintenance is funded now. The residents need to go to the legislature to get additional funding.
- Road needs to be wider for safety (resident).
- Keep balance of mystique and improvement.
- Where is pressure coming from to improve the road?
- Need support from National Park Service and residents to get McCarthy Road on 6 year plan.
- Please put a summary of questionnaire comments in the final report.

<u>Chitina Meeting</u>

- Danny gave the same introduction as in McCarthy.
- Which side of road is the Kotsina Bluff realignment? (Answer - we recommend moving south).
- Fix "kink" at 4 mile.
- Raise road and cut brush.
- Jack (from Strelna) says the road needs 25 mph speed limit.
- Need speed limit signs in Chitina.
- Why not go up Kotsina floodplain and up bluff? (Answer - might be possible but would require large fill and a lot of riprap).
- A lot of Chitina and Kenny Lake people go in as far as Silver Lake.
- About 35 people reside full time between MP 10 and Strelna plus recreation users add another 15 or so.

- Green Butte Claim mining proposal being reviewed by the National Park Service. They would need to cross Kennicott River and McCarthy Creek. Do not need bridge, will ford river. Could add 3 trucks per day on road.
- Bear Bros. mining in Kotsina area (Iron Butte).
- Pave McCarthy Road from Chitina to the Copper River Bridge (crosses slide area).

There was general agreement that people did not want to see a bridge across the Kennicott River at McCarthy and that any roadway improvements should be to minimal standards.

We left 3 copies of the draft Reconnaissance Study in McCarthy, 3 in Chitina, 1 with George Herrman, and 1 with the National Park Service. We asked for comments within a month.

The following recommendations for McCarthy Road improvements were presented:

- A 40 mph design speed.
- The "desirable width of 24' should be utilized.
- Follow the existing alignment except along the Kotsina Bluff. We recommend moving to the south of the bluff. There are a few other areas requiring short realignments to maintain a 40 mph design.

djh

cc: Mike Tinker, Environmental Coordinator, Northern Region
Gary Tyndall, Review Engineer, Northern Region
Jonathan Widdis, Manager, CIP Planning, Northern Region

60550/60550001.MMO/C

A L A S K A H E R I T A G E T O U R S

P.O. BOX 210691 • ANCHORAGE, ALASKA 99521 • TEL. (907) 696-8687 • FAX (907) 696-2452

November 13, 1989

Mr. Mike Tinker
Regional Coordinator
Dept. of Transportation
2301 Pegar Road
Fairbanks, AK 99709

Dear Mr. Tinker:

During our last tour to Kennicott, in the Wrangell/St. Elais Park, I talked to Ben Shaine and he suggested that I write to you with some input on our tours.

We have been offering tours to the area for the past 3 years for senior groups and anyone else that wants to go. What makes Kennicott and McCarthy so sellable is the fact that it is a remote location, plus the fun of the pully trams at Kennicott River. We have had no problem what so ever with the senior, or even handicapped, for that matter, being able to use the pully trams. Everyone thinks it's great fun and since we tell everyone what to expect before they sign up, it is no great surprise. The road improvements have been great this pass year and I would hope that the grading could be increase to help keep the road smooth more often. I have heard that there is to be some brush clearing before next summer. I hope that it is not going to be stripped back to far. That would take away from the over-all feeling that one is entering a remote area.

I have also heard there are plans for a foot bridge at Kennicott River. I feel that the shear numbers of people will one day warrant the need of such a bridge. I hope that day is a long way off. I think a very unique part of Alaska will be lost when we can no longer use the pully trams.

Sincerely,

Glenn Williams, President

cc:file

MEMORANDUM

State of Alaska
Department of Transportation and Public Facilities

To: Ron Tanner
Traffic-Safety Engineer
Northern Region

Date: October 10, 1989

File No: 60550

Telephone No: 451-5392

From: Kirk Hebard
Asst. Reconnaissance Engineer
Northern Region

Subject: McCarthy Road
Speed Limit

On September 20, 1989 we held public meetings in McCarthy and Chitina to discuss the McCarthy Road draft Reconnaissance Study. We explained that there was no funding in the 6-year plan for upgrading the McCarthy Road and that any improvements to the road would have to come through maintenance funds. A number of people felt that speed limit signs along the road were necessary now and asked that we pass this concern along to the appropriate department.

In addition to a general speed limit for the entire road there are three areas that were mentioned as needing speed limit signs; Silver Lake (C.D.S. MP 44 ±), Strelna (MP 48 ±), and Lakina River/Long Lake (MP 78 ±).

It was pointed out that enforcement is a problem with remote area speed limits but the residents felt that signs were better than nothing.

djh

60550\60550002.MMO/C

Public Meeting at McCarthy 9-20-89

McCarthy Road

Name	Address
Russell Galipeau	Wrangell-St. Elias NP, P.O. Box 29 Glennallen AK
Frank Fiala	" " " "
Danny [illegible]	DOTPF [illegible]
Tom McClain	Fredericksburg, VA
Geo. Heyrman	TAZ maint Box? Glennallen
Larry Ferguson	" " Chitina
Ed LaChapelle	McCarthy Resident
Gary Green	McCarthy Resident
Mike Treesh	McCarthy Resident
Jeanine Miller	McCarthy Resident
Jonasen Miller	McCarthy Resident
Thomas Bursch	McCarthy, AK
Bob Jacobs	McCarthy Alk
Pric Cocrins	Long Lake
Catie Bursch	McCarthy AK.
Nancy Green	McCarthy AK.
Gary Hickling	McCarthy AK 99588
Betty Hickling	McCarthy AK 99588
Tim Mischel	Kennicott
Chris Richards	Kennicott, AK 99588
Log Green	McCarthy Alk - 99588
Kirk Olsen	" "
Corky Hebard	DOTPF

Public Meeting at Chitina 9-20-89

McCarthy Rd.

Name	Address
Al Roy	SR-274 Henry Lake 99573
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McCARTHY ROAD
CHITINA TO McCARTHY
60550

RECONNAISSANCE STUDY

PREPARED BY

NORTHERN REGION RECONNAISSANCE SECTION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
2301 PEGER ROAD
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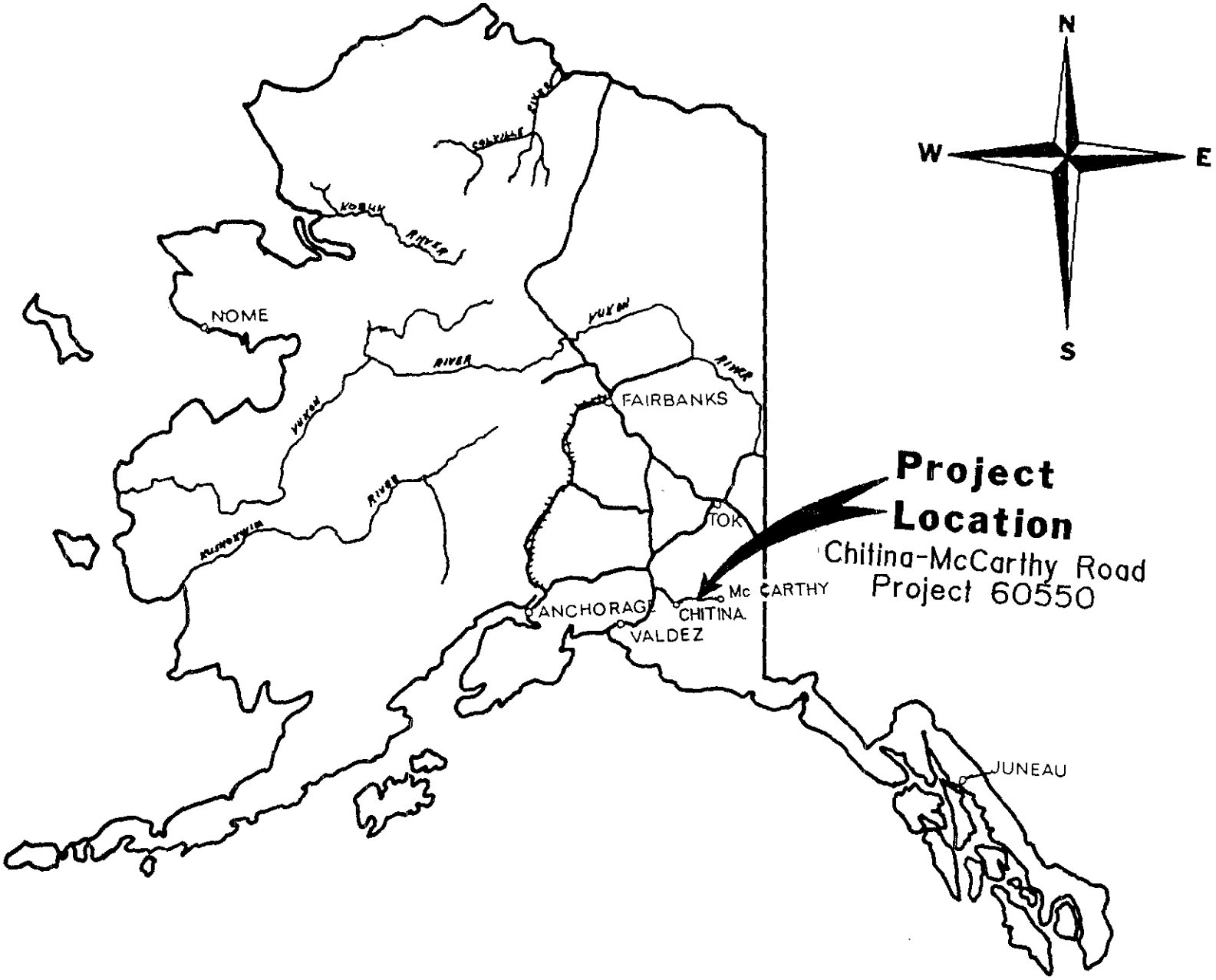
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Project
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Chitina-McCarthy Road
Project 60550

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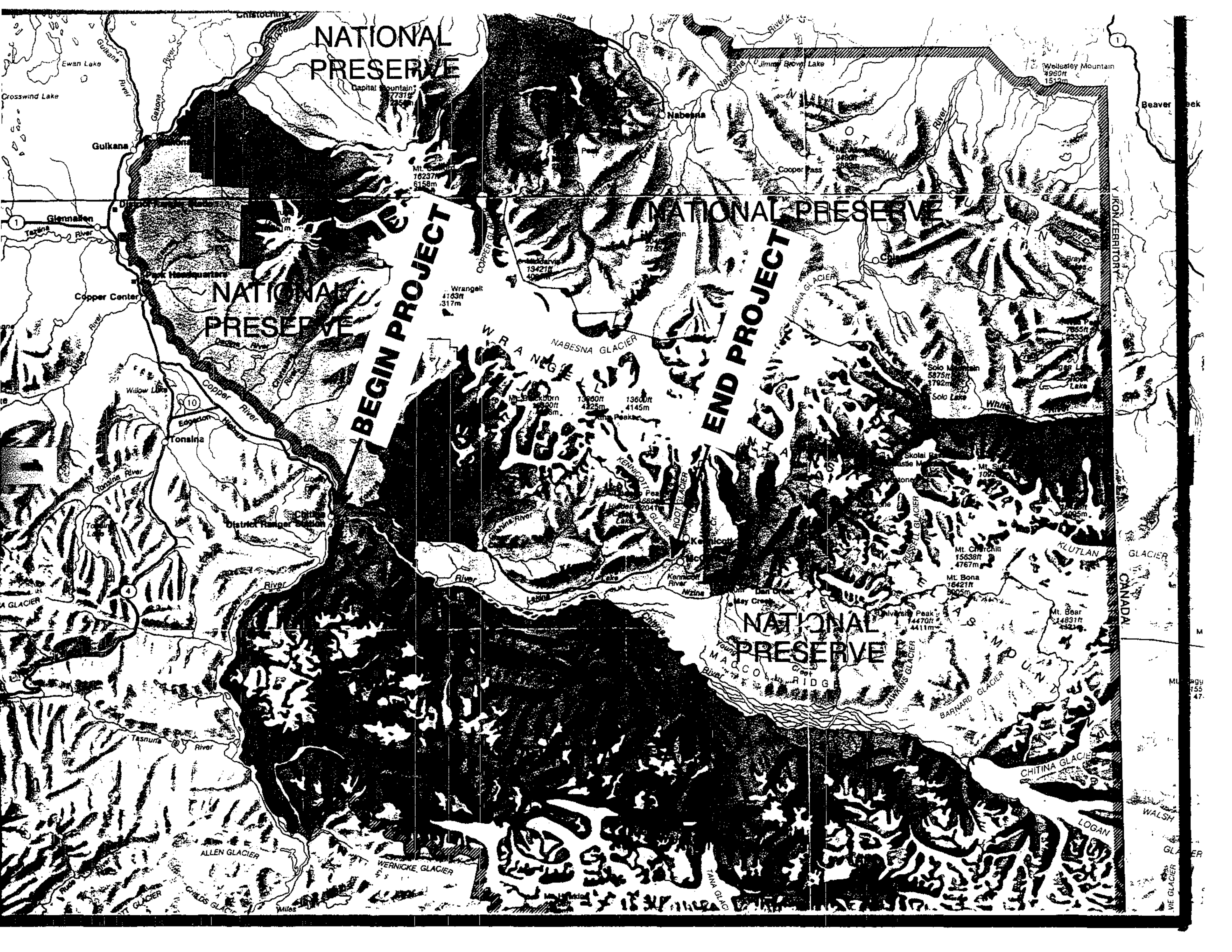
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INTRODUCTION

The Department of Transportation & Public Facilities for the State of Alaska is planning long range improvements to the Chitina-McCarthy Road. The study begins in the town of Chitina on the west bank of the Copper River and ends at the town of McCarthy approximately 60 miles to the east. The highway generally follows the old grade and alignment of the Copper River and Northwestern Railroad.

The Copper River and Northwestern Railroad was constructed between the years 1908 and 1911. The railroad operated for nearly 30 years transporting copper ore from the Kennecott mine to port facilities at Cordova. In 1938 the mining operation was terminated due to falling copper prices and the railroad was abandoned. Almost immediately efforts were started by citizens groups in Cordova, Chitina, and McCarthy to convert the railroad embankment into a useable road. In 1940 the Alaska Road Commission assumed the maintenance of the 60 miles of abandoned railroad between Chitina and McCarthy.

In the early 1950's the Bureau of Public Roads surveyed a route generally following the railroad alignment. The intent was to reconstruct the embankment and decaying structures, however, no construction took place.

It was not until 1962 that the Alaska Department of Highways awarded a maintenance contract for removal of the rails and ties from the railroad bed. Under the same contract placement of culverts and grading of the road

bed was also undertaken. Upon completion of the contract the road could be safely driven from the east bank of the Copper River to the Kennicott River near McCarthy. The only obstacle for completion of the road was a bridge across the Copper River.

In 1966 the State received authority to proceed with the design of a bridge across the Copper River. The bridge was completed and dedicated on August 27, 1971. Since the opening of the road the Department of Transportation & Public Facilities has gradually upgraded the road bed through maintenance operations but funds for such operations are always inadequate for major improvements such as culverts and the driving surface. Historically, maintenance costs have been reduced after improvement to a section of roadway are completed.

Purpose

The purpose of this Reconnaissance Study is to present and discuss the available alternatives for upgrading the existing road and to recommend a standard of improvement that will provide adequate safety and convenience for the traveling public. Environmental factors such as impacts to noise and air quality, right-of-way, wetlands, and visual aesthetics as well as soil conditions and maintenance problems were considered.

Study Area

The Chitina-McCarthy area lies in southcentral Alaska and can be reached via the Richardson and Edgerton Highways. The McCarthy Road lies entirely within the Wrangell-St. Elias National Park and Preserve. Three major mountain ranges meet in the park: The Wrangells to the north, the Chugach Mountains along the southern boundary, and the St. Elias along the Alaska-Canada border to the east. The McCarthy Road and Chitina valley are surrounded by magnificent mountain peaks and glaciers which add to the experience of travelling to McCarthy and the historic Kennecott mining area.

The McCarthy Road follows the upland terraces above the Chitina River from the Copper River to the Kennicott Glacier near the community of McCarthy. The road gradually climbs from an elevation of approximately 500 feet at Chitina to near 1500 feet at McCarthy. The Chitina Glacier carved the valley, creating the numerous shallow lake depressions and deposited the moraines and various materials which are the basis for the present variable patterns of soils and vegetation.

Importance

The McCarthy Road is used by a variety of travelers including local residents, recreational property owners, miners, tourists, and park visitors. It is the only road serving the southern area of the park. The primary destination is the McCarthy-Kennecott area at the end of the road

but as the park develops it will also become a "destination" thus increasing use of the road and associated turnouts and scenic viewing spots. The primary concern of any agency charged with the responsibility of overseeing a public property such as the McCarthy road is safety. Also of concern are maintenance costs and traveler comfort. The improvements proposed by this study are made with these considerations in mind and the recommendations found at the end of the report reflect the overall needs of the traveling public.

Because the McCarthy Road follows the abandoned CR & NW railroad alignment the route itself is of historic significance. For the most part the horizontal alignment of the railroad grade can be brought up to acceptable standards for use by automobiles without major changes in the location of the road. The one major exception would be the first 2 miles east of the Copper River which requires an alignment shift for both safety and maintenance considerations.

Alternatives

The following alternatives were analyzed:

1) No build
2) Upgrading the existing facility with minor realignments (dashed line on mosaics)
3) Major realignment (solid line on mosaics)

No Build Alternative

Adoption of the "no build" alternative would mean continued use of the existing facility. Maintenance efforts would continue, but probably only at the level currently in effect. Winter maintenance and improvements to the driving surface would not be possible without increased funding through the State legislature. Primary reasons for adopting the "no build" alternative would be to preclude project impacts and construction costs.

Upgrading the Existing Facility with Minor Realignments

Upgrading the existing facility would primarily involve following the existing grade and alignment within the existing right-of-way. One major exception would be the first two miles along the Kotsina bluff. This segment should be realigned to the south of the existing roadway to avoid the slides and steep sidehill cut currently encountered. A few minor realignments would also be required to alleviate steep grades or foundation problems but most could be accomplished within the existing right-of-way. Other project improvements should involve culvert and bridge upgrading, roadside brush removal, raising the existing grade above the surrounding ground, and providing a crushed aggregate driving surface. With minor realignments this alternative will meet a 40 mile per hour design standard.

Major Realignment

The solid line on the mosaic sheets indicates areas of suggested realignments that offer improvements for foundations or horizontal geometrics. These realignments would require new right-of-way and would cause greater environmental impacts than upgrading the existing facility. If the road were to be brought up to a 50 mile per hour standard these major realignments would likely be necessary.

Other Alternatives

Federal Aid Safety Project: The McCarthy Road is a Federal Aid Secondary route and is eligible for Federal Highway safety funding. This type of funding is very limited. Safety project funding is allocated on the basis of traffic volumes and facility type. The low traffic volumes associated with the McCarthy Road will make it difficult for this road to compete for safety funds with the high volume roads in the State.

Construct a railroad: This alternative would require a complete reconstruction of the old railroad grade, construction of at least 3 major bridges (including crossing the Copper River) and construction of numerous trestles. The cost would be much greater than that required for upgrading the road for use by automobiles. A railroad project is not eligible for Federal Highway funding. This is not a viable alternative, considering the type of use this transportation corridor receives.

ROADWAY REQUIREMENTS

The existing roadway through the project area for the most part follows the Copper River and Northwestern Railroad alignment. The grades required to operate a railroad are usually no steeper than 1 or 2 percent and as such provide a very good vertical alignment for a highway. The deep gullies were crossed, by the railroad, using wooden trestles to avoid the steep grades that would otherwise be necessary to traverse these areas. Constructing bridges across these gullies for highway use is not practical nor is it necessary. Most of the streams can be handled with culverts and acceptable grades are possible without excessively high fills.

The existing roadway width averages 12 to 16 feet with short stretches barely wide enough for 2 vehicles to pass. From the "Park Road Standards", the minimum roadway width for a road with a 20 year projected average daily traffic of 75 is 20 feet. The Transportation Research Board Special Report 214 "Designing Safer Roads" recommends a minimum width of 24 feet. The American Association of State Highway and Transportaton Officials (AASHTO), Policy on Geometric Design of Highways and Streets, 1984 Edition, requires a width of 24 feet (20′ traveled way with 2′ shoulders).

The horizontal alignment of the existing road, for the most part, falls within the requirements of a 40 mph design. The maximum degree of curvature for a 40 mph design is 11° 15′ (510 ft. radius).

Traffic Data

Highway design is generally based on a useful roadway life of 20 years. The average daily traffic (ADT) used to determine design criteria for a particular road is derived by projecting current traffic counts 20 years into the future.

The current ADT for the McCarthy Road is 125 at the Copper River bridge and 25 at the Chokosna River. The projected annual ADT for the road is 75. If the land use in the area should change dramatically in the future, i.e., major park development or increased use by private land owners, this projected ADT would increase.

The following design criteria is based on an ADT of 75. The design criteria was taken from the 1984 edition of "Park Road Standards" published by the National Park Service. The criteria presented in the Park Road Standards was adapted primarily from policies established by the American Association of State Highway and Transportation Officials (AASHTO).

Design Criteria

The functional classification of the McCarthy Road most closely fits that of a Class I road which is defined as a "Principal Park Road/Rural Parkway."

The first consideration in determining a design speed for a particular road is the type of terrain crossed. The McCarthy Road crosses a mixture of flat and rolling terrain with the majority being flat.

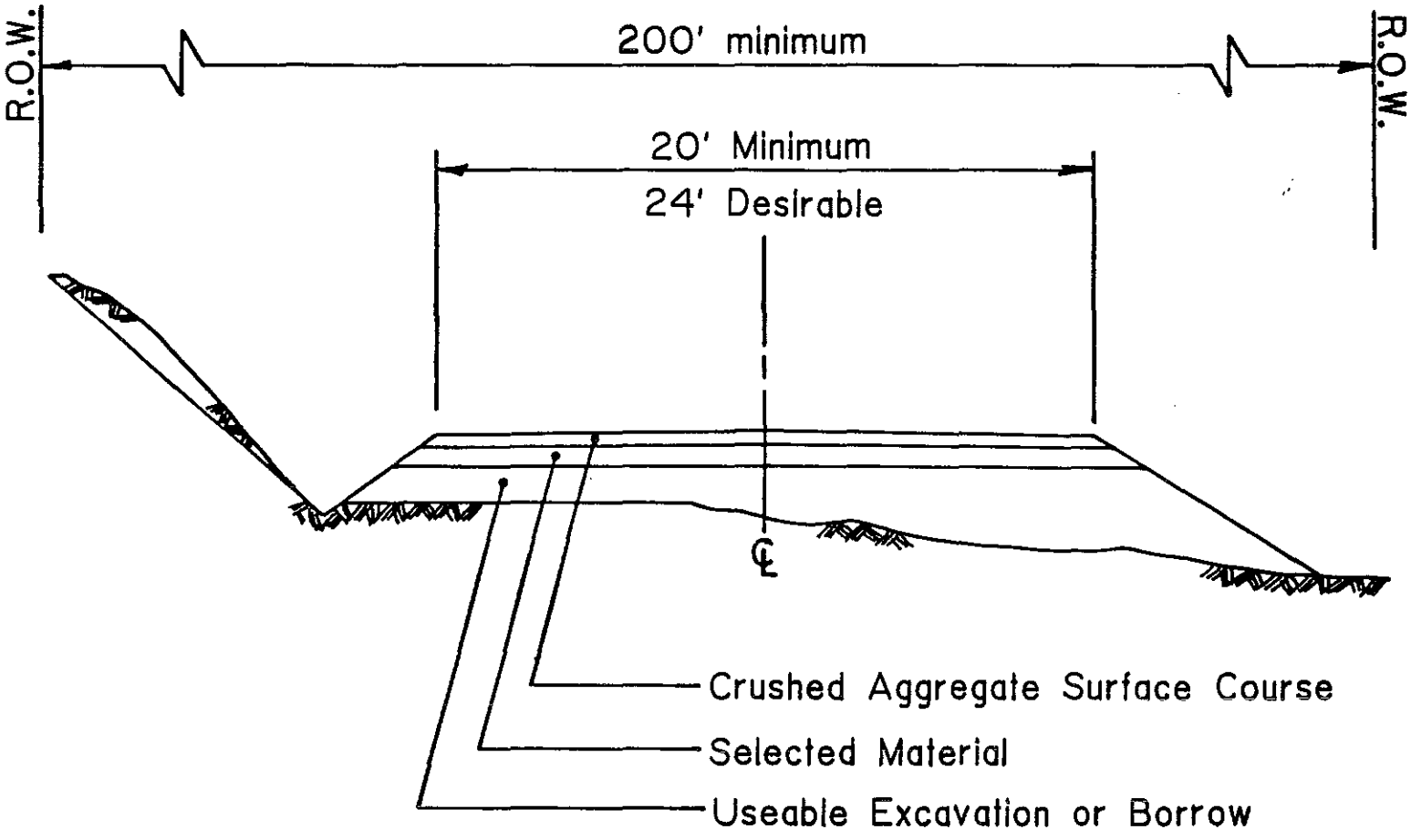
Using the projected ADT of 75 and a terrain type of "flat" the following design standards apply:

Design Speed	40 mph
Grades	7% maximum
Degree of Curvature	11° 15′ maximum
Passing Sight Distance	730 feet
Stopping Sight Distance	325 feet
Roadway Width	20 feet minimum
	24 feet desirable

The posted speed of a road is usually lower than the design speed. If it is not feasible to construct a short section of roadway to the recommended design speed that section should be "signed down" to a lower speed as appropriate.

Right-of-Way

The existing right-of-way width of the McCarthy Road is at least 200 feet total. In areas where realignments are necessary this width should be maintained as a minimum. If a large cut or fill is required a short section of right-of-way in excess of 200′ may be required.



TYPICAL SECTION
(40 mph Design)

Along with the National Park Service, lands adjacent to the right-of-way fall under a variety of ownerships including the AHTNA Regional Corporation, Chitina Village Corporation, the University of Alaska, the State of Alaska, and private holdings. The private holdings along the McCarthy Road are found primarily between Chitina and Strelna, in the Long Lake area and from milepost 54 to McCarthy.

Right-of-way management includes not only road design and alignment but also roadside maintenance. Roadside maintenance involves constructing and maintaining bridges, culverts, and drainage ditches, utilization of material sources, roadside tree and brush management, and providing a clear zone for errant vehicles. Controlling roadside brush is the most visually sensitive maintenance practice. Brush clearing is necessary to provide site distance for motorists and to allow unimpeded travel width for vehicle passage. Vista clearing at sites of interest to travelers and scenic overlooks are also part of good right-of-way management. Providing a vegetation screen between the roadway and material sources or other roadside disturbances is also a responsibility of those charged with right-of-way management.

Foundations and Materials

The entire project is located in the Chitina valley and lies between the southern flank of the Wrangell Mountains and the Chitina River. The physiography of the area represents glaciation and glacier related erosion.

The Chitina Glacier was the major glacier responsible for carving out the topography of the valley.

The Chitina valley follows a northwest direction to merge with the Copper River basin. The Chitina River, traversing the entire length of the valley, drains all the ice fields from the south side of the Wrangell Mountains and from the North side of the Chugach Mountains. A network of glacier fed streams and rivers empty into the Chitina before draining into the Copper River.

In general, the geology of the Chitina valley reflects its creation and alteration by glacial action. Most of the soils are ground moraine deposits or ice contact deposits (sands and gravels) with a few areas of alluvial sands and gravels, such as the Kotsina River flats, around Strelna Creek, the Chokosna River, Lakina River, and across the Kennicott River flats. From the Gilahina River to near the Lakina River the road crosses a series of alluvial fans. Bedrock is exposed in some of the ridges along the route. Permafrost is present throughout much of the valley, especially in the silty sods.

Before any realignment or major reconstruction is undertaken along the McCarthy Road a thorough field investigation, including core drilling, will be conducted by Department of Transportation & Public Facilities geologists and materials engineers. Information obtained will be used in making geotechnical recommendations for the design of the project.

Some of the problems anticipated to require solutions include: perennially frozen foundation materials, side hill cuts and large fills, useability of excavated material and location of borrow sources.

Sites that are permitted to the State as sources of borrow material are scarce throughout the project. Additional material sources will be necessary for continued maintenance and/or construction of the roadway. The alluvial materials found in the river flood plains along the route such as the Kotsina, Lakina, and Kennicott would provide good material with the least amount of aesthetic disturbance.

Maintenance

The McCarthy Road is maintained by the State of Alaska Department of Transportation & Public Facilities maintenance personnel from the Chitina Maintenance Station. Drainage problems, roadside brush control, and the lack of adequate surface course material as well as the remote nature of the road all contribute to the costs of maintaining this road. An additional problem encountered with the McCarthy Road is the continuous surfacing of railroad spikes during blading operations.

Any new roadway design should address winter maintenance problems such as drifting snow and hillside icing. A field review of the route should be planned with local maintenance personnel.

ROUTE DESCRIPTION

The McCarthy Road follows the basic alignment used by the Copper River and Northwestern Railroad. The vertical alignment (grade) is, for the most part, also the same as that used by the railroad.

The photo mosaic sheets on the following pages were made from September 1985 aerial photography. The existing roadway shows as a narrow, light band across the middle of each sheet. A dashed line follows the existing alignment for most of the route. The few short segments where the dashed line does not remain on the existing roadway are areas suggested for realignment for safety improvements.

The solid line visible on the mosaics depicts the alignment that was recommended in a 1966 Reconnaissance Report produced by the Valdez District for the State of Alaska Department of Highways (now DOT&PF). This report is available for inspection at the Fairbanks office of DOT&PF, 2301 Peger Road, Fairbanks, Alaska. This alignment was also surveyed and in many areas the brushed survey line is still visible today. In most cases the realignments indicated in the 1966 report are not being recommended in the new study.

The mileposts (MP) shown on the existing roadway begin at the Copper River (MP 0) and end at the Kennicott River (MP 58). These mileposts coincide with the McCarthy Road Milepost Log furnished by the National Park Service.

These mileposts are used as reference points in the following discussion even though they may not agree precisely with mileposts that exist on the ground.

The photo mosaic sheets should be folded out for reference while reading the description of the project.

Chitina to the Copper River

Although this 1-1/4 mile section of roadway is outside the limits of the original scope of the project it is included in this Reconnaissance Report since it is in fact the beginning of the McCarthy Road. The first one thousand feet of the road passes through the narrow, one lane, steep sided cut that was made by the CR & NW Railroad. While this short segment does not meet recommended standards for a two lane road it probably should be preserved as is. This narrow cut affords a memorable "entrance" into the Chitina-McCarthy Road area. If traffic volumes reach a point in the future that require a wider road this rock cut could be widened to accommodate 2 lanes but careful design and construction procedures should be followed so as not to destroy this unique section of roadway.

The next 0.9 mile stretch descends gradually along the east side of a ridge from the "cut" to the Copper River bridge. This section is 20-24' wide and with minimal horizontal and vertical realignment can easily meet the 40 mph design standards.

During the dipnetting season this segment of road incurs much heavier traffic volumes than normal due to numerous trips back and forth between Chitina and the river.

The Copper River bridge was completed in 1971. It is a steel plate girder structure with a reinforced concrete deck. The bridge is 1,378 feet long and is 30 feet wide. It is in good condition and no improvements are required.

Copper River to Kuskulana River

This segment begins at milepost 0 which is at the east end of the Copper River bridge. From mile 0 to approximate mile 1.5 the existing road climbs along the steep bluff of the Kotsina River flood plain on a 3% grade. This section of road is narrow, unstable, and a continuous maintenance problem. A number of short segments are sliding downhill. The material encountered along this bluff is primarily silt and sandy gravel over top of volcanic rubble and is covered with spruce and cottonwood. To improve the substandard curves and width would require a number of large cuts or sliver fills which would only lead to the same slide problems that exist now.

Two alternatives exist for this area. The first is shown on mosaic number 1 as the dashed line which departs the existing road approximately 1/4 mile east of the bridge and climbs on an 8% grade to the south of the bluff rejoining the existing road near milepost 2. Some of the material

encountered in the excavation along this alignment may be usable for fill embankment in the approach to the hill from mile 0.1 to mile 0.3. If additional material is required the Kotsina River flood plain would be a good source of borrow. A field investigation by geologists and materials engineers should be made before a final alignment is selected.

The second alternative would be to swing to the north after crossing the bridge and construct the road on the southerly edge of the Kotsina River flood plain rejoining the existing road near milepost 1.5. The problem with this route is climbing the bluff at mile 1.3. The elevation difference from the flood plain to the top of the bluff is at least 200 feet which would require a very substantial cut and fill transition. The roadway on the flood plain would also require a large quantity of riprap to protect it from Kotsina River flooding.

The 1966 Reconnaissance Report recommends a continuation of the realignment, shown as a solid line on mosaic 2, crossing the existing road at MP 1.8 and rejoining at MP 7.4. This realignment would shorten the route by nearly 3/4 of a mile and would bypass a section of road that winds along the Chitina River bluff with a number of sharp curves.

The existing road from MP 2 to MP 7 follows a winding route along the Chitina River bluff. For the most part the curves encountered in this stretch are within the 40 mph design standard.

The dashed line on mosaic 2 recommends a few minor realignments to bring the entire road up to standard. The realignments at MP 2.5 and MP 3 are necessary to meet the minimum tangent length between curves. The realignment from MP 3.8 to MP 4.2 is required to remove the sharp curve and slide area at MP 4. This realignment would require cutting into the hillside to form a solid bench for the roadbed to alleviate the sliding problem that exists now. A portion of the existing roadway could be utilized as a scenic overlook.

From MP 4.2 to MP 15 the existing alignment for the most part meets the 40 mph design standard. The stretch from MP 9 to MP 11 will require a small realignment to make the curves flow smoothly but this can be accomplished within the existing right-of-way and with minimal disturbance to the surrounding terrain. Because this two mile segment winds through a number of small lakes and ponds a field investigation by materials engineers is required before final recommendations are made on alignment and type of embankment construction.

From MP 15.3 to MP 15.7 the existing road follows a substandard alignment up to the north end of the Kuskulana River bridge. The dashed line shown on mosaic 4 meets the 40 mph requirement but would require a side hill cut to alleviate the sharp curves on the existing road. The road in this short segment is in a side hill bench situation and the realignment would require cutting further into the hillside. The existing roadway at MP 15.5 could be utilized as a scenic viewpoint for the Kuskulana canyon and bridge.

The 1966 Reconnaissance Report recommends shifting the roadway to the north of the ridge top from MP 15.1 to the bridge. This alignment would require a full cut but in turn would avoid the side hill situation encountered on the alternative discussed above. A thorough soils investigation would need to be undertaken for this alternative.

The Kuskulana River bridge at MP 15.8 received major improvements to the approach trestle and the driving surface in 1988 and does not require further upgrading. It has a 15' treated glulam deck with metal bridge rail.

The segment of the McCarthy Road from the Copper River to the Kuskulana River does not cross any major streams except Strelna Creek. There are no bridges in this stretch. Strelna Creek is crossed with a 96" culvert and does not require further improvement. This 16 mile stretch of roadway will require a careful investigation of drainage problems by design and maintenance personnel to determine culvert sizes and locations.

Kuskulana River to Gilahina River

This segment of the McCarthy Road begins at the east end of the Kuskulana River bridge near MP 16 and ends at the Gilahina River near MP 28. Fold out mosaic 4 to begin this segment.

The existing road from MP 15.8 to MP 17.3 winds along the base of a number of small ridges. This alignment falls within acceptable standards for a 40

mph design although some of the areas crossed between ridges do not afford favorable drainage or soils conditions. At MP 17.1 the road passes through a rock cut which will require widening into the hill to bring the roadway within standards.

From MP 18 to MP 20.5 the road passes through the Chakitna Slough area. The alignment meets the 40 mph standard although at MP 19.8 there is a 11° curve which could be shifted to the right to move out of a small pond. Past soils investigations in the area indicate that under a layer of peat the soils are predominately gravel. The railroad bed shows signs of good soil stability which would indicate that the roadway can be upgraded to an acceptable width with minimal subsurface efforts.

From MP 21 to MP 25 the existing alignment will meet the 40 mph standard with only minor adjustments to smooth some of the curves. At MP 23.6 the road passes close to the west end of Chokosna Lake. A careful soils investigation of the area near the lake should be made before upgrading the roadway but it does not appear that a realignment would afford any better conditions than that found under the existing alignment.

At MP 25.6 the road crosses the Chokosna River. The Chokosna River bridge is a 103 foot long 20 foot wide steel pony truss. When funding becomes available for roadway improvements the bridge should also be included as part of the project.

From MP 25.7 to MP 27.4 the road winds along a low ridge near the Chokosna River. The existing alignment is within acceptable standards except at MP 26.2 and 26.7 where minor realignments are necessary to provide adequate tangent distance between curves.

At MP 27.4 the road turns sharply to the left and descends to the Gilahina River at MP 27.7. The road crosses the Gilahina River on a 43 foot long, 12 foot wide timber stringer bridge. The roadway between MP 27.4 and 28.2 does not meet the criteria for a 40 mph road but with minimal realignment could be brought up to standard. The 14^{o} curve shown on mosaic 6 is as flat a curve possible without shifting the roadway a considerable distance downstream. The embankment height at the river would need to be approximately 10 feet in order to keep the grade at 7% climbing out of the river bottom. A new bridge should be constructed at this crossing.

The large railroad trestle to the north of the road at MP 27.7 is one of the major historic attractions along the road. As such, provisions should be made for tourist parking and viewing in this area.

Between the Kuskulana River and the Gilahina River the 1966 Reconnaissance Report describes a number of major realignments as shown by the solid line on mosaics 4, 5, and 6. Generally the realignments are suggested in an attempt to relocate the roadway over better foundation conditions. Before any of these realignments are considered an in depth study of the foundation under the existing road should be conducted.

Gilahina River to Lakina River

This segment extends from the Gilahina River near MP 28 to the Lakina River near MP 43. The existing alignment, with a few minor realignments, meets the 40 mph design standard. The 11° curve at MP 40 near Crystal Lake should be flattened to 6° 45′ since it is the only sharp curve for many miles in each direction. Also, the stretch from MP 41 to MP 43 will require some minor realignments to alleviate the short substandard curves along the bluff above the Lakina River.

From MP 30 to MP 35 the road crosses an area of mud flows. These mud flows were a maintenance problem to the railroad. There is nothing to indicate that they will ever become stable enough to not be an ongoing maintenance problem on the roadway.

Foundations through the entire section from the Gilahina River to the Lakina River need to be carefully evaluated by geologists and soils engineers before any improvements are made to the existing road.

The 1966 Reconnaissance Report recommends a number of realignments along this section of the McCarthy Road. The most sweeping change is from MP 30 to MP 35 where a realignment curves to the south near Tooth Lake climbs onto a small ridge and continues for nearly 4 miles, passing to the south of Moose Lake, rejoining the existing road near MP 35. This realignment avoids the mud flows mentioned above and places the roadway on a more stable base.

A realignment is also shown around the north side of Crystal Lake to move the roadway away from the privately owned airstrip at MP 40.5. At one time there were plans to extend the airstrip to the east.

The realignment from MP 42 to MP 43 would move the road out of the side hill cut above the Lakina River and alleviate the glaciering problem encountered on the existing alignment.

The Lakina River bridge is a 203 foot long, 13 foot wide steel through truss structure. This one lane bridge should be included for replacement when funds become available to improve the roadway.

Lakina River to McCarthy

This section of road extends from the Lakina River near MP 43 to the Kennicott River near MP 58. Fold out sheets 8, 9, 10, and 11 should be used to follow this segment.

From MP 43.2 to MP 44.2 the road passes through an area of privately owned property. An airstrip is located adjacent to the roadway from MP 43.6 to MP 44. The road crosses Salmon Creek near MP 44.1.

The existing road along Long Lake follows a series of curves next to the lake. With some minor curve flattening these curves could be brought up to the 40 mph standard. This section extends from MP 44.1 to MP 46.8. Although the roadway alignment can be brought within acceptable standards a

major problem exists with glaciering through this entire side hill section. If the road is to be considered for year around use this problem will require correcting. A large fill would be required at MP 46.6 to correct the steep grades crossing a gulley.

Two alternatives are shown on mosaics 8 and 9 that would bypass Long Lake. The solid line to the north of the lake makes best use of the existing topography and soil conditions in the area. This realignment ascends the ridge north of the lake and follows the ridge top, rejoining the existing road near MP 48.3. The other alternative swings to the south of Long Lake and rejoins the existing road at MP 49. This alignment, while avoiding the problems encountered along the lake, crosses an area of low ground and poor soils conditions.

With a few minor realignments the existing road between MP 49 and MP 54.8 will meet the 40 mph standard. The soils and drainage problems through this area need to be reviewed before any reconstruction takes place.

From MP 54.8 to MP 57.3 the existing road winds along a steep hill side with a number of substandard curves. The dashed line shown on mosaic 11 would bring the alignment up to the 40 mph standard but benching into the steep side hill will not be easy. Sliver cuts and fills will be hard to avoid and the stability of the road may be difficult to preserve. A number of small drainages are crossed in this segment.

The realignment beginning near MP 54.8 drops down off of the hill side and follows along the base of the hill. This realignment would place the roadway on more stable ground but would involve crossing a number of private land holdings in the Fireweed Mountain Subdivision area. This realignment would rejoin the existing road near MP 58.

From MP 57.3 to the end of the road at MP 58 the existing road crosses the flood plain of the Kennicott River. A parking area with restrooms and garbage cans was constructed at MP 58. Any road reconstruction should include expansion of this parking area and facilities to accommodate the growing demand on this site. The Kennicott River is crossed at this point using hand operated trams.

Crossing the Kennicott River to the McCarthy-Kennecott area is a subject that needs to be addressed with careful thought and planning. The options that draw the most favorable response at this time are to retain the hand operated trams in their present form or to construct a foot bridge.

Beyond McCarthy

The road from McCarthy to Kennecott is maintained by DOT&PF. It is adequate for current conditions but if the traffic should increase in the future this segment of road should be considered for improvements. It is approximately 4-1/2 miles from McCarthy to Kennecott.

A road also runs in a southeasterly direction from McCarthy to May Creek and Dan Creek. It is approximately 12 miles to May Creek Camp and another 7 miles to Dan Creek Camp. If access to these areas is considered in the future, crossing the Kennicott River with a bridge, approximately 1/2 mile upstream from its confluence with the Nizina River appears to be a viable alternative to crossing near McCarthy. Crossing the river at this point would require approximately 6 miles of new road to connect the McCarthy Road near mile point 55 with the Dan Creek Road near mile point 3.

The roads from McCarthy to Kennecott and from McCarthy to Dan Creek are not on the Federal Aid System and would not be eligible for federal funding.

COST ESTIMATE

The following estimates are presented for comparison of the different alternatives. These estimates are based on 1989 dollars. They assume the reasonable availability of material sources throughout the project limits. Excessively long hauls of borrow and surface material would increase these figures.

Upgrade the existing alignment to 40 mph standard:

(20′ roadway)	Design & Construction	=	$ 15 million
	Right-of-Way	=	0.1 million
(24′ roadway)	Design & Construction	=	$ 17 million
RECOMMENDED WIDTH	Right-of-Way	=	0.1 million

Upgrade along the suggested major realignments to 50 mph standard:

(28′ roadway)	Design & Construction	=	$ 45 million
	Right-of-Way	=	0.5 million

Replace 3 bridges (Chokosna, Gilahina, and Lakina) = $ 2 million

ENVIRONMENTAL CONSIDERATIONS

A draft EIS for the realignment project proposed in 1966, was approved for circulation on September 10, 1973. No final EIS was ever issued. The environmental process would have to be redone for the following reasons:

1) Changes in the purpose and need of the project.
2) Changes in land status.
3) Changes in State and Federal regulations.
4) Changes in the project scope.

The improvements recommended in this report are very minor in the regional transportation context and a full environmental impact statement may not be necessary.

RECOMMENDATIONS

The recommendation of this Reconnaissance Study is to "Upgrade the Existing Facility with Minor Realignments" (alternative 2). This alternative is depicted on the mosaic sheets with a dashed line. A 40 mph design standard should be followed with a 24 foot roadway width.

APPENDIX

- Traffic Projections
- Kennicott River Footbridges Estimate
- Park Service Road Log
- Public Input

MEMORANDUM

State of Alaska
Department of Transportation & Public Facilities

TO: Steve Sisk
Chief of Design
Northern Region

DATE: June 1, 1987

FILE NO: 300/100td

TELEPHONE NO: 474-2437

FROM: Beverly Nice Fantazzi
Manager of Traffic Data & Forecasting
Northern Region

SUBJECT: Rural Traffic Projections

Traffic Projections for McCarthy Road:

Currently the 1986 ADT is 25 and has not changed since 1976. Both the Interior and SIRTS Studies did not make any traffic projections because of the uncertainty of future land use in the Wrangall-St. Elias National Park and Preserve. With the information we have, a 2010 projection would not exceed 75.

If you have any questions, please feel free to call.

BNF/cv
Attachments

cc: Jonathan Widdis, Manager-CIP Planning, Northern Region

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NORTHERN REGION, REGIONAL DIRECTOR

STEVE COWPER, GOVERNOR

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5316
PHONE: (907) 451-2210

April 7, 1989

Re: Footbridge at McCarthy
Log #89-140

The Honorable Jalmar Kerttula
Alaska State Senator
P.O. Box V
Juneau, Alaska 99811

Dear Senator Kerttula:

Paula Terrel has requested that we provide a cost estimate to replace the two tramways at McCarthy with footbridges.

We estimate this project could be completed for $1,400,000, including design and construction inspection. This estimate is based on an eight foot wide bridge. The opening could be controlled with bollards to allow only foot traffic or to allow three or four wheelers. In an emergency this bridge could accommodate a car or light pickup.

Sincerely,

John Horn, P.E.
Acting Regional Director

RRP/kk

cc: Mark S. Hickey, Commissioner
Catherine McHugh, Legislative Liaison, Headquarters
John D. Martin, P.E., Chief of Planning & Research, Northern Region

Locations and Descriptions

STARTS ON VALDEZ C-2 QUAD

Odometer Reading	Side of Road	Description
00.00	S	Starting point at the east side of the Chitina Bridge (Valdez C-2).
00.10	N	Gravel road to mouth of Kotsina River.
00.20	S	Camping area.
00.30	S	Trail(possibly for 3-wheelers).

CONTINUES ON VALDEZ C-1 QUAD

01.45	N	Parking lot and cabin.
01.55	N	Pullout.
01.60	N	Pullout and possible trail.
02.00	N	Two-track vehicle trail.
03.60	S	Scenic overlook of Chitina River.
03.65	S	Scenic overlook of Chitina River.
03.95	S	Scenic overlook of Chitina River.
08.35	S	Private access road.
08.40	S	Private access road.
08.40	N	Airstrip entrance.
08.50	N	Vegetated road, probably to airstrip.
08.70	N	Camping area.
08.75	N	Two-track vehicle trail.
09.20	S	Trail.
09.25	S	Access to trailer.
09.30	S	Access to tent camp, trail probably continues beyond camp.
09.45	S	Road to Silver Lake.
10.00	S	New Road.
10.05	S	Private Road.
10.10	N	Pullout: possible woodcutting area.
10.90	S	Nelson's Lakeside Campground and road.
11.55	S	Pullout.
13.10	N	Turnoff to the Kotsina and Kuskulana Rivers.
13.35	N	Pullout and camping area.
13.40	B	Private Roads to houses and trailers.
13.45	B	Private Roads to houses.
13.45	B	Strelna Creek.
13.50	N	Road access to Strelna.
13.55	R	Road to gravel pit.
14.70	S	Pullout.

CONTINUES ON VALDEZ B-1

15.50	S	Viewpoint of Kuskulana Bridge.
15.60	S	Viewpoint of Kuskulana Bridge.
15.80	N	Pullout.
15.80	B	Bridge over Kuskulana River

DESIGN CHIEF
Olmstead
Urbach
Venusti
Platzke
Traffic/Safety Engr.
Location/R conn.
CONSTRUCTION
Tinker
TECHNICAL SERVICES
RIGHT OF WAY
PROJECT CONTROL
VALDEZ Residency
NOME Residency
Return Stsk

Trail Inventory from NPS — McCarthy Rd. They have lots of detailed data

Mile	Side	Description
16.00	S	Gravel pit and faint road to SW (trail #334).
20.05	N	Cat tracks on map
22.20	B	Pullouts.
22.35	N	Chokosna Creek Trailheads.
23.40	N	Cleared swath.
24.10	N	Pullout.
24.80	N	Pullout.
25.30	N	Old roadbed, access to Chokosna Lake.
25.40	N	Burnt out cabins and trail to gravel pit.
	S	Landing strip.
25.55	B	Chokosna creek.
25.60	N	Access to cabins and perhaps a trail heading north.
26.90	N	Trailhead.
27.35	N	Pullout.
27.45	N	Railroad access road
27.65	N	Access to Gilahina River, camping area.
	S	Access trail.
27.70	B	Gilahina River.
27.75	N	Trail.
28.25	B	Pullouts.
28.45	N	Foot trail.
29.85	N	Pullout & campsite.
30.20	S	Mechanized vehicle trail.
30.65	S	Trail.
31.20	N	Pullout.
31.40	N	Pullout & camping area.
31.80	S	Gravel pit.
	N	Pullout & camping area.
31.90	N	Gravel pit.
32.50	N	Pullout, trailhead.

CONTINUES ON McCARTHY B-7

33.60	S	Campsite & Trail.
34.10	S	Moose Lake Viewpoint & Campsite.
35.15	N	Abondaned Cabin.
35.20	N	Trail into clearing.
36.85	N	Road.
37.60	N	Camp road.
38.25	N	Survey line.
39.00	B	Tributary creek to Crystal Creek.
39.10	S	Unimproved campsite & trail.
39.40	N	Ruth Lake.
40.00	N	Trail to cabin.
40.05	B	Crystal Creek.
40.10	N	Posted road.
40.20	N	Crystal Lake Subdivision.
40.25	S	Gravel pit & overgrown trailhead.
40.30	N	Foottrail to Crystal Lake.

Mile	Side	Description
40.35	S	Crystal Lake Airstrip.
40.40	S	Trail to Lakina Lake.
40.50	N	Access to Crystal Lake & camping area.
41.05	S	Access to forest harvest area.
42.05	S	Pullout & gravel pit.
42.20	S	Trail.
42.75	S	Pullout.
42.80	B	Lakina River.
42.90	S	Access to private property, (house, etc.)
	N	River access trail.
43.15	S	Timber access trail.
43.20	N	Access to river and private dwelling.
43.50	B	Access to private dwelling & airstrip.
43.70	S	Access to private dwelling.
	N	Access to private dwelling, Coolins.
43.90	B	Access to dwellings.
44.00	S	Overgrown trail.
44.10	N	Access to dwellings & western end of Long Lake.
44.55	N	Campsite on Long Lake.

CONTINUES ON McCARTHY B-6

46.60	N	Pullout.
46.65	B	Unnamed Creek.
46.85	S	Access to unfinished dwelling.
48.55	S	Pullout & viewpoint.
49.20	S	Access to private dwelling.
49.60	N	Campsite.
49.95	N	Campsite.
50.70	N	Gravel pit & access to Univ. of Alaska lands.
51.60	N	Campsite & paralleling trail.
52.00	N	Shortcut to paralleling trail.
52.15	B	Tractor Creek.
52.20	S	Gravel pit & trail.
52.30	B	Trails.
54.10	S	Access to campsite.
54.85	N	Pullout.
	S	Road.
54.95	N	Campsite.
54.95	B	Swift Creek.
55.00	S	Trail.
55.15	N	Trail.
55.25	N	Trail.
57.30	N	Road.
	S	Trail.
57.50	S	Road.
57.65	S	CJ's Store.
57.75	S	Campsite.
58.05	End	Parking Lot, Chitina River Overview. & Tram.

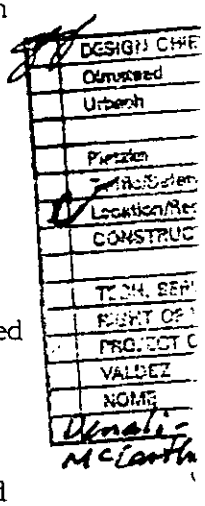
McCarthy Community
McCarthy via Glennallen, AK 99588

September 20, 1988

Steven C. Sisk
DOT & PF-Northern Region
2301 Peger Road
Fairbanks, AK 99701

George Levasseur
DOT & PF-District Office
P.O. Box 507
Valdez, AK 99686

George Hermann
DOT & PF-Tazlina Station
Glennallen, AK 99588



Gentlemen:

We understand that you are in the process of developing a reconnaissance report for the McCarthy Road, which will guide future construction and upgrading decisions. We would like to take this opportunity to restate our views regarding access to our community, so that your department can give them appropriate consideration as you proceed with your work.

1. First, we'd like to express our appreciation for what the Department has done on the road over this past year -- foremost for the beautiful reconstruction of the Kuskalana Bridge, but also for grading and maintenance between Chitina and McCarthy and for the much-needed brushing and grading of the road from McCarthy to Kennicott. Thank you.

2. Increasingly, we are finding that people come from all over the world to visit the McCarthy area, and that one aspect of their visit that they especially enjoy is the calm, quiet setting created by pedestrian access across the Kennicott River. We feel that maintaining this situation is important personally for us as residents as well as for these visitors. We will appreciate your help in planning over the long term for continued safe and adequate pedestrian-only crossing of the Kennicott.

This summer we observed that the Kennicott trams are beginning to reach their capacity with increased traffic. We'd be grateful for your help in designing and installing a footbridge as a permanent solution. Our suggestion is that the bridge be limited to non-motorized use, and that the tram continue to serve for transportation of freight.

(It appears that soon -- perhaps next summer -- the river will finish cutting through the ice-cored moraine at the head of the island separating the two channels, probably sending the entire water flow through the west channel. In this event, only one footbridge/tram will be needed.)

3. We feel that upgrading of the road should be limited to the minimum necessary for safety. Safety, of course, is an important concern for us all. But by keeping the design speed low, modifications to the existing curves, grades and roadway cross-section can be minimized, and visitors can be encourage to appreciate the drive by traveling at a slow pace.

As a long-term objective for reconstruction, we suggest you consider the AASHTO standard of two lanes, 8-foot lane width and one foot

shoulder, as presented in "Park Road Standards," adopted by the National Park Service in 1984. An appropriate design speed for most of the road could be 35 mph, with lower speeds posted at some curves.

4. We appreciate good maintenance of the road on a seasonal basis. It is also helpful to have the road opened at some point during the late winter so that hauling can be done over the Kennicott ice . At the same time, we feel it is unnecessary and undesirable to keep the road open through the winter.

5. Located in one of the most spectacular parts of Alaska, and in the largest national park in the nation, the McCarthy road deserves the care that will make it an especially beautiful drive. Hand brushing (especially between the Gilahina River and McCarthy), attention to design of turnouts and signing, and the use of professional landscape architect services in design and maintenance are appropriate.

We look forward to a continuing positive dialogue with the Department of Transportation and Public Facilities and, as residents familiar with the local conditions, will assist you any way we can. We appreciate your attention to our concerns.

Sincerely,

cc: Senator Jay Kertulla
Representative Bette Cato
Park Superintendent Richard Martin

Benjamin A. Shaine
James Miller
Jeannie Miller
Howard Mozen
Jennifer Carroll
Anthony J. Zak
Gary Green
Chris Richards

Marci K. Thurston
Robert L. Engelbach
Loy Green
Nancy Green
[illegible]
Edward R. LaChapelle
Bob Jacobs
M. J. Jacobs
E.W. Underwood

(The first page of this letter was retyped only to modify addresses.)

Return to:

State of Alaska
Department of Transportation
and Public Facilties
Environmental Section
2301 Peger Road
Fairbanks, Alaska 99709

MCCARTHY ROAD
USAGE QUESTIONNAIRE

The following questions are to help the Alaska Department of Transportation and Public Facilities determine who is using the McCarthy Road and what type of road service they would like to see.

Name _____

Address _____

_____

Do you Own?_____ or Rent? _____ property that is accessed via the McCarthy Road?

Is your property your Permanent residence? _____, Part-Time residence? __ a Mining Claim? _____ or Recreational property?_____

How many trips per week? _____ Or per year? _____ do you make?

How many vehicles do you have? _____

What type of vehicles do you drive on the McCarthy Road? _____

At what Milepost on the McCarthy Road is your property access?_____

Are you satisfied with the existing road condition? Yes _____ No _____

If you are not happy with the existing condition, what changes would you like to see? _____

_____

_____

Are you satisfied with the existing level of maintenance on the McCarthy Road? Yes _____ or No _____

If you are not satisfied with the maintenance, what other activities would you like to see (or not see)?_____

_____

_____

Other comments on the highway. _____

_____

_____

Use the back side of this paper if you need to.

Road Usage Questionnaire Summary

Approximately 120 questionnaires were mailed on August 10, 1989. A self-addressed, stamped envelope was included with each mailing. Approximately 55 completed questionnaires were returned.

A breakdown of the responses to the questions follows:

Permanent Resident	-	16
Part Time Resident	-	8
Recreational Property	-	27
Mining Claim	-	0
Other	-	4

Satisfied with existing condition	-	Yes	32
	-	No	21

Satisfied with existing maintenance level	-	Yes	32
		No	20

It is not possible to include all of the comments received, but a few of the points made most often were:

- Cut the brush for sight distance safety
- Do not construct bridge across the Kennicott at McCarthy
- Blade the road more often
- Leave it like it is

United States Department of the Interior
NATIONAL PARK SERVICE
Wrangell-St. Elias National Park / Preserve
P.O. Box 29
Glennallen, Alaska 99588

IN REPLY REFER TO:

A44

August 18, 1989

Mr. Mike Tinker
State of Alaska
Department of Transportation
and Public Facilities
Environmental Section
2301 Peger Road
Fairbanks, Alaska 99709-6394

Dear Mr. Tinker,

Thank you for the opportunity to comment on the McCarthy Road Usage Questionnaire. Since the majority of the questions do not pertain to us, we will respond in general to the overall issue.

First and foremost, the National Park Service considers the McCarthy Road to be a vital visitor access link to the interior of the park especially to the communities of McCarthy and Kennecott. We are naturally concerned and interested in the maintenance of the road. We have received numerous visitor comments as to the condition of the road both positive and negative this past summer. Our responses and recommendations to the questionnaire are as follows:

1. Consideration of any upgrades to the McCarthy road be consistent with National Park Service Park Road Standards which Mr. Steve Sisk should have.

2. Consistent maintenance throughout the summer or at regular intervals to eliminate road "washboard" and other physical road hazards.

3. Reconstruction of the road base to include additional base material to eliminate soft spots, old railroad ties, spikes, etc. which surface each time road maintenance occurs. We additionally are concerned as to source of material along the road to eliminate roadside "pits" and for the scenic vistas and aesthetics qualities along the road.

4. Improvements for road drainage by the installation of culverts and ditching where and when needed.

5. Straightening out dangerous curves and improving line of sight through clearing and brushing.

6. Consultation with the NPS to develop "wayside" areas along the roads for some additional interpretative exhibits/signs.

Overall, we are very pleased with the efforts the DOT&PF have done in the past concerning road maintenance. We are interested in the responses you receive from the questionnaire and look forward to attending the public meeting in September regarding this matter.

Sincerely,

Richard H. Martin
Superintendent

MEETING

MCCARTHY ROAD

The Alaska Department of Transportation and Public Facilities (ADOT&PF) will be holding two meetings on September 20, 1989 to discuss their plans for the McCarthy Road.

Date	Meeting Location	Meeting Time
September 20, 1989	McCarthy, Alaska	1:00 p.m.
September 20, 1989	Chitina Village Council Hall	7:00 p.m.

For further details you may contact Danny Johnson, Project Manager, in Fairbanks at (907) 451-2293.

If you cannot attend and would like information on the McCarthy Road or would like to comment, please write to:

Danny Johnson, Project Manager
Location Section
Department of Transportation
and Public Facilities
2301 Peger Road
Fairbanks, Alaska 99709-5316

MEMORANDUM

State of Alaska
Department of Transportation and Public Facilities

To: Stephen C. Sisk, P.E.
Director, Design & Construction
Northern Region

Date: October 6, 1989

File No: 60550

Telephone No: 451-2293

From: Danny Johnson & Kirk Hebard
Location/Reconnaissance
Northern Region

Subject: McCarthy Road
Public Meetings

On September 20, 1989 we held public meetings to discuss the Draft Reconnaissance Study for McCarthy Road. We met with the McCarthy residents at 1:00 p.m. and with Chitina area residents at 7:00 p.m. We compiled a list of property owners in the McCarthy Road area and mailed out about 120 notices of the meetings. Sixteen McCarthy area residents attended the meeting in McCarthy along with personnel from the Wrangell-St. Elias National Park and the Tazlina Maintenance Station. Nine residents attended the meeting in Chitina. The Park Service personnel also attended the Chitina meeting.

We also mailed a road usage questionnaire in August using the property owner mailing list. Approximately 50 completed questionnaires were returned. A majority of the respondents desired a continuing maintenance effort, roadside brush cutting, and the retention of "foot access only" to McCarthy.

Both meetings began with a brief explanation of the purpose of the Reconnaissance Study. It was also explained that the McCarthy Road was not currently in the 6 year plan for funding highway projects and that this study does not get us to a final decision on roadway improvements. The study would be used by Department of Transportation & Public Facilities (DOT&PF) planners to program future projects. It was pointed out that the McCarthy Road is a Federal Aid secondary highway and is thus eligible for federal funding for reconstruction but that maintenance efforts were the responsibility of the State.

The meeting was open to questions and discussion and nearly everyone in attendance participated.

McCarthy Meeting

A brief summary of the concerns and feelings follows:

- Question the need for 24' width.
- Question the traffic projections (too low!)
- What improvements will occur if no funding is available within 6 years?
- Need speed limit signs along road now.
- Where are material sources (Park Service response - It is up to DOT&PF to locate them then get approval from the National Park Service. They will treat it like a mining operation).
- Need electromagnet to pick up spikes (George Herrman said they use one now but it does not work very well on the uneven surface).
- The National Park Service has foot bridge design available if we need it.

- How much right-of-way is required if we realign? (Answer - 200' minimum)
- Parking lot at Kennicott River - what can be done? (George Herrman says DOT&PF is waiting for the National Park Service and Department of Natural Resources to "chip in"). National Park Service does not own any land at end of road.
- Brushing contract - the State needs to enforce removal of slash. George said contractor will haul to an area out of sight.
- Winter Maintenance - George said the road is opened by request if Fairbanks allows it. Opened in spring for breakup. They try to not let more than 2' of snow build up.
- Residents would like for DOT&PF to send message to McCarthy before opening road (so they can plan accordingly).
- Russell Galipeau, of the National Park Service, says wayside exhibits and turnouts will help in speed control and passing.
- How long would traffic be delayed during construction? (Answer - 30-60 minutes)
- Residents would support 20' width but not 24'.
- How wide is the road at Strelna?
- Can we get Federal funds for safety projects?
- Could we replace the road with a railroad? Discuss in alternatives.
- What is the time frame for completing an Environmental Impact Statement?
- National Park Service is sticking to the "minimum width" (Galipeau)
- National Park Service says the right-of-way belongs to the State. The National Park Service can comment but not control.
- Residents would like the National Park Service to support 20' width.
- Nebesna Road and McCarthy Road are different in that people came to Nebesna after the road was built.
- Keep road on existing right-of-way.
- George says liability is a DOT&PF concern.
- George says the current level of maintenance is funded now. The residents need to go to the legislature to get additional funding.
- Road needs to be wider for safety (resident).
- Keep balance of mystique and improvement.
- Where is pressure coming from to improve the road?
- Need support from National Park Service and residents to get McCarthy Road on 6 year plan.
- Please put a summary of questionnaire comments in the final report.

Chitina Meeting

- Danny gave the same introduction as in McCarthy.
- Which side of road is the Kotsina Bluff realignment? (Answer - we recommend moving south).
- Fix "kink" at 4 mile.
- Raise road and cut brush.
- Jack (from Strelna) says the road needs 25 mph speed limit.
- Need speed limit signs in Chitina.
- Why not go up Kotsina floodplain and up bluff? (Answer - might be possible but would require large fill and a lot of riprap).
- A lot of Chitina and Kenny Lake people go in as far as Silver Lake.
- About 35 people reside full time between MP 10 and Strelna plus recreation users add another 15 or so.

- Green Butte Claim mining proposal being reviewed by the National Park Service. They would need to cross Kennicott River and McCarthy Creek. Do not need bridge, will ford river. Could add 3 trucks per day on road.
- Bear Bros. mining in Kotsina area (Iron Butte).
- Pave McCarthy Road from Chitina to the Copper River Bridge (crosses slide area).

There was general agreement that people did not want to see a bridge across the Kennicott River at McCarthy and that any roadway improvements should be to minimal standards.

We left 3 copies of the draft Reconnaissance Study in McCarthy, 3 in Chitina, 1 with George Herrman, and 1 with the National Park Service. We asked for comments within a month.

The following recommendations for McCarthy Road improvements were presented:

- A 40 mph design speed.
- The "desirable width of 24' should be utilized.
- Follow the existing alignment except along the Kotsina Bluff. We recommend moving to the south of the bluff. There are a few other areas requiring short realignments to maintain a 40 mph design.

djh

cc: Mike Tinker, Environmental Coordinator, Northern Region
Gary Tyndall, Review Engineer, Northern Region
Jonathan Widdis, Manager, CIP Planning, Northern Region

60550/60550001.MMO/C

A L A S K A H E R I T A G E T O U R S

P.O. BOX 210691 • ANCHORAGE, ALASKA 99521 • TEL. (907) 696-8687 • FAX (907) 696-2452

November 13, 1989

Mr. Mike Tinker
Regional Coordinator
Dept. of Transportation
2301 Pegar Road
Fairbanks, AK 99709

Dear Mr. Tinker:

During our last tour to Kennicott, in the Wrangell/St. Elais Park, I talked to Ben Shaine and he suggested that I write to you with some input on our tours.

We have been offering tours to the area for the past 3 years for senior groups and anyone else that wants to go. What makes Kennicott and McCarthy so sellable is the fact that it is a remote location, plus the fun of the pully trams at Kennicott River. We have had no problem what so ever with the senior, or even handicapped, for that matter, being able to use the pully trams. Everyone thinks it's great fun and since we tell everyone what to expect before they sign up, it is no great surprise. The road improvements have been great this pass year and I would hope that the grading could be increase to help keep the road smooth more often. I have heard that there is to be some brush clearing before next summer. I hope that it is not going to be stripped back to far. That would take away from the over-all feeling that one is entering a remote area.

I have also heard there are plans for a foot bridge at Kennicott River. I feel that the shear numbers of people will one day warrant the need of such a bridge. I hope that day is a long way off. I think a very unique part of Alaska will be lost when we can no longer use the pully trams.

Sincerely,

Glenn Williams, President

cc:file

MEMORANDUM

State of Alaska

Department of Transportation and Public Facilities

To: Ron Tanner
Traffic-Safety Engineer
Northern Region

Date: October 10, 1989

File No: 60550

Telephone No: 451-5392

From: Kirk Hebard
Asst. Reconnaissance Engineer
Northern Region

Subject: McCarthy Road
Speed Limit

On September 20, 1989 we held public meetings in McCarthy and Chitina to discuss the McCarthy Road draft Reconnaissance Study. We explained that there was no funding in the 6-year plan for upgrading the McCarthy Road and that any improvements to the road would have to come through maintenance funds. A number of people felt that speed limit signs along the road were necessary now and asked that we pass this concern along to the appropriate department.

In addition to a general speed limit for the entire road there are three areas that were mentioned as needing speed limit signs; Silver Lake (C.D.S. MP 44 ±), Strelna (MP 48 ±), and Lakina River/Long Lake (MP 78 ±).

It was pointed out that enforcement is a problem with remote area speed limits but the residents felt that signs were better than nothing.

djh

60550\60550002.MMO/C

Public Meeting at McCarthy 9-20-89

McCarthy Road

Name	Address
Russell Galipeau	Wrangell-St. Elias NP, P.O. Box 29 Glennallen AK
Frank Fiala	" " " "
Danny [illegible]	OUT OF [illegible]
Tom McClain	Fredericksburg, VA
Geo. Heuvman	taz maint Box 7, Glennallen
Larry Ferguson	" " Chitina
Ed LaChapelle	McCarthy Resident
Gary Green	McCarthy Resident
Mike Treesh	McCarthy Resident
Jeannie Miller	McCarthy Resident
James Miller	McCarthy Resident
Thomas Bursch	McCarthy, AK
Bob Jacobs	McCarthy AK
Phil Collins	Long Lake
Catie Bursch	McCarthy, AK.
Nancy Green	McCarthy AK.
Gary Hickling	McCarthy AK 99588
Betty Hickling	McCarthy AK 99588
Tim Mischel	Kennicott
Chris Richards	Kennicott, AK 99588
Lon Green	McCarthy AK - 99588
Kirk Olsen	" "
Corky Hebard	DOTPF

Public Meeting at Chitina 9-20-89

McCarthy Rd.

Name	Address
Al Roy	SR-274 Henry Lake 99573
Adina Knutson	Box 26 Chitina 99566
J. Coats (Box 74)	Mile 15 McCarthy RD
Margaret Estabilida	
John Billum Jr.,	Chitina (Box 11)
Gene Coppedge	mil 11 McCarthy Rd. (Box 28)
Viola Billum	
Frank Billum	(Box 41 Chitina)
Art Koeninger	Box 22 Chitina AK 99566
Corky Hebert	DOTPF
Danny Johnson	DOTPF
Russell Golipeau	Wrangell-St Elia. Nat. Park
Frank Fiala	" " " "