

January 19, 1932

Hans Liebmann, Gust Wagner et al
Bettles, Alaska

Gentlemen:

Receipt is acknowledged of your petition requesting that a winter trail be cut from Bettles to Wild River. In order for us to give consideration to this work it is desired that we be informed more fully as to the route that you desire and the present condition of the trail.

From our records it appears that a trail from Bettles to the mouth of Wild River and up Wild River to Spring Creek has been travelled for some time. A cabin was constructed at Mile 17 from Bettles a number of years ago. Our records also show that the trail was brushed out 21 miles from Bettles in 1927 and that since then cabins were constructed at Mile 30 and Mile 40 and more recently at Mile 8 and Mile 45.

In your petition no mention is made of the above work that has been done by the Road Commission and in order for us to understand just where the work you desire hooks on to the above listed work, it is requested that you send us a fuller report on the condition of the trail on which work was done and just what work it is that you desire.

Your letter should be in such detail that we can be able to determine just where the route you propose to cut out is located. Your request will receive further consideration upon receipt of your reply.

Very truly yours,

ALASKA ROAD COMMISSION

By

L. E. Atkins
Engineer Officer

LEA:GW

13/102-10

WAR DEPARTMENT
BOARD OF ROAD COMMISSIONERS FOR ALASKA
JUNEAU, ALASKA

Fairbanks, Alaska.
November 23, 1927.

Major Malcolm Elliot, Pres.
Juneau, Alaska.

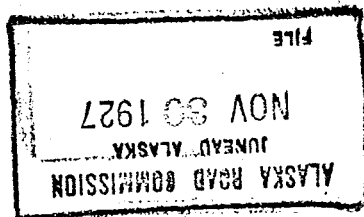
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to cover
B.P.M.
g*

Dear Sir:

An allotment of \$ 900 was made and funds expended on Route 29D, WILD RIVER TRAIL, - 57 miles trail, (see page 25 my 1927 Annual Report), and it was believed at the time that that amount of money would rehabilitate this trail.

A letter has just been received from the foreman in charge of the work stating that only the first 21 miles was completed and that judging from the nature of the country beyond the 21 mile point that \$ 1200 additional will be required next year to complete the work.

I would like to have this added to my list of recommendations for next years work.



Yours very truly,

Hawley W. Sterling
Hawley W. Sterling, Supt.

12/10/27-10

RUS ~~*Hawley*~~ *STI*
~~*Hawley*~~

WAR DEPARTMENT
ALASKA ROAD COMMISSION
JUNEAU, ALASKA

D gm
DISTRICT OFFICE
FAIRBANKS, ALASKA
April 22, 1927.

Major Lunsford E. Oliver, Engr. Officer,
Juneau, Alaska.

Dear Sir:

From information secured by Frank Nash on his recent trip to the Koyukuk and from other sources, I have the following to report on the Wild River trail:

Wild River is a fork of the Koyukuk River on its right limit. It flows almost due south emptying into the Koyukuk approximately 20 miles north of Bettles. Over \$ 300,000 has been taken out of Wild River since it was first struck over 25 years ago.

The trail up Wild River was cut by miners years ago. It is 57 miles long and leads from Bettles up the right limit of the Koyukuk until striking Wild River where it follows up the valley of this river.

This season there will be four outfits working on the river; three open cut outfits and one small hydraulic plant. A total of 17 men will be employed. The plants are located on Rye Creek at mile 49, Jay Creek at Mile 51, Lake Creek at Mile 54 and Spring Creek at Mile 57.

The winter trail is now pretty well grown up with brush. The Alaska Road Commission, to my knowledge, has never spent any money on this trail aside from constructing a cabin at Mile 17. A small expenditure for maintenance on this trail would be of considerable benefit. Also two more cabins are needed, one at Mile 30, the other at Mile 40. Martin Josephson who is working at Mile 57, offers to build the cabins for \$ 200 each, - a 14 by 14 gabled roof cabin with window, door and bunk, which is a very reasonable figure in that part of the country and would mean, in reality, that he would actually put up about the same amount in labor. It is my opinion that such a cabin in the Koyukuk cannot be built for less than \$ 400 or \$ 500.

I recommend that the above work be done.

Yours very truly,

Hawley W. Sterling
Hawley W. Sterling, Supt.

BUREAU OF PUBLIC ROADS

620
+ Design 12-1

Mr. Harold Allen, Chief

May 28, 1958

Division of Physical Research, Washington, D.C.

E. H. Swick, Regional Engineer

Juneau, Alaska

Aerial photographic analysis of sand-gravel deposits,
Chena Hot Springs Road

Please refer to your memorandum dated May 1, 1958,
which accompanied an aerial photographic analysis of sand-
gravel deposits, Chena Hot Springs Road.

Field investigations have now been partially made
and the Fairbanks Division reports that gravel of the
A-1-a and A-1-b variety was exposed under comparatively
light overburden at a number of the places indicated by
your report. The findings have been so good that we feel
that more gravel will be uncovered as we progress towards
Chena Hot Springs.

AK
WSK

BYD

AK
EHS

WSKlockenteger:ih

BUREAU OF PUBLIC ROADS

620
+ Design 1251
72

Mr. H. W. Johansen, Division Engineer,
Fairbanks

May 16, 1958

W. S. Klockenteger, Materials Engineer,
Juneau

Aerial Photographic Analysis of Sand-Gravel Deposits
Chena Hot Springs Road

Please refer to my memorandum dated May 14, 1957.

Will you please submit to Headquarters a brief report regarding your findings of sand and gravel for the Chena Hot Springs Road. Please indicate how much the Aerial Photographic Analysis furnished by the Washington Division of Physical Research assisted.

WSK

WSKlockenteger:psj

46-6201

Bureau of Public Roads, Juneau, Alaska

Mr. Harold Allen, Chief, Division of
Physical Research, Washington, D. C.

May 14, 1957

Mr. E. H. Swick, Regional Engineer, Juneau, Alaska

Aerial Photographic Analysis of Sand-Gravel Deposits,
Chena Hot Springs Road

Thank you for your recommendations and report on
the above subject. We are sending your analysis to the
Fairbanks District where directions for field investi-
gation will be given.

WSK

An evaluation of the specific sites selected by
you in your analysis shall be sent after field investi-
gations have been completed.

RJD

EHS

WSKlockenteger:vr

665.650

Bureau of Public Roads, Juneau

Mr. H. W. Johansen, District Engineer,
Fairbanks

May 14, 1957

W. S. Klockenteger, Materials Engineer, Juneau

Aerial Photographic Analysis of Sand-Gravel Deposits
Chena Hot Springs Road

We are sending you a report, aerial photographs and maps, along with a copy of the memorandum from Harold Allen, Chief, Division of Physical Research, Washington, D. C.

You will note, in the last paragraph of the memorandum, that a report is requested on the field investigations. Please submit your findings to Headquarters so that a copy can be sent to Washington.

W.S.K

Encls.-

[Handwritten signature]
EJD

WSKlockenteger:vr

Office Memorandum • UNITED STATES GOVERNMENT

663
MAY 1 1957

AIR MAIL

TO : Mr. E. H. Swick, Regional Engineer
Juneau, Alaska

DATE: May 1, 1957

FROM : Harold Allen, Chief, Division of Physical Research
Washington, D. C.

SUBJECT: Aerial photographic analysis of sand-gravel deposits, Chena Hot Springs Road

In accordance with a memorandum request from Mr. Ghiglione to Mr. W. T. Pryor, dated January 31, 1957, we have prepared the attached report entitled "Sand and Gravel Deposits Adjacent to the Chena River Section of the Chena Hot Springs Road, Alaska." The topographic maps, overlays, and aerial photographs, to which reference is made in the report, are being sent to you by air parcel post.

The aerial photographs used in this study were obtained for us by the Aerial Surveys Branch.

In general, our analysis conformed to the requirements of the contract statement your office sent Mr. Pryor. However, we are unable to estimate the depth of overburden over granular material at any specific location, although our report states the predicted range in thickness of overburden for each geologic unit.

For each of three geologic units, we have indicated areas in which the initial search for gravelly material should be made. However, the selected spots may not be the most suitable for development as sources of sand and gravel. The personnel of our Soils Branch have not had experience in analysis of aerial photographs of Alaska, hence, may not have recognized some of the clues to sand and gravel deposits. For example, the type of forest growth in the Chena area may be a clue to gravelly material but has not been evaluated.

We would like you to send us a report of field investigations made as a result of our suggestions. We would appreciate an evaluation of the 21 specific sites selected in our analysis, as well as information regarding additional sites that are explored. Such information will be of value in aerial photographic analysis of other areas.

The time that our personnel have spent on this study will be charged to Federal-aid materials supervision.

Attach. *K*

Copy on 620 Chena Hot Springs

Comm. R.	
Chf. Engr.	<i>NAH</i>
Admin.	
Opns.	
D. & C.	
B. & F. Off.	
Road Br.	<i>MB</i>
Bridge Br.	
Contracts	
Program Off.	
Pers.	
Supply	
R/E Off.	
Safety	
M. & B.	

SAND AND GRAVEL DEPOSITS ADJACENT TO THE CHENA RIVER
SECTION OF THE CHENA HOT SPRINGS ROAD, ALASKA

Sand and gravel deposits occur along the Chena River adjacent to the Chena Hot Springs Road, Alaska. Quartzite schist is the dominant bedrock underlying the upstream areas and is resistant to weathering, hence, the largest proportion of gravel consists of this rock, with lesser proportions of quartz-mica schist, carbonaceous schist, vein quartz and some granite. The coarse materials occur as more or less flat angular pieces only slightly water-worn. Some pieces exceed one foot in diameter.

The six geologic units that have been mapped in the Chena area are: (1) floodplain deposits, (2) low terrace deposits, (3) Chena River sand terrace deposits, (4) alluvial fan and creek valley silt deposits, (5) bedrock bluffs, and (6) upland silt. Only the first three units are probable sources of gravel.

Floodplain deposits (marked "FP" on aerial photographs and topographic map) consist of 1 to 20 feet of alluvial silt over thick deposits of complexly interbedded and lenticular gravel, sand, and minor amounts of silt and peat. Beneath the river beds and abandoned channels permafrost is absent or thin but elsewhere may occur from 2 to 10 feet below the ground surface and have a great thickness. Shallow, easily worked sand and gravel are probably abundant in the channel of the Chena River.

Low terrace deposits (marked "LT" on the aerial photographs and topographic map) are low, alluvial terraces bordering the floodplains. A poorly drained, partly muskeg-covered mantle of silt ranging from 5 to 25 feet in thickness overlies the same type of sand and gravel deposits as occur in the floodplain. Parts of the low terraces may be subject to river flooding at widely spaced intervals of time. Locally, the soil conditions may be too soft for heavy equipment in summer operations. Permafrost is probably more continuous laterally than in the floodplain.

Chena River sand terrace deposits (marked "ST" on the aerial photographs and topographic map) have a relatively level ground surface 20 to 50 feet above the river and are not subject to flooding. The surface soil is a sandy silt which grades into a sand, and the sand is probably underlain by gravelly material at a depth greater than 6 feet. The northerly portion of the terrace probably has a thicker blanket of silt than the portion closer the Chena River; the silt has been derived, in part, from the upland and the adjacent alluvial fan and creek valley deposits, on which some sections of the Chena Hot Springs Road are to be located.

Figure 1 shows that each of the three sand-gravel geologic units occurs in some places within the one-half mile strip on the south side of the proposed highway location, and more extensive areas of all three units occur within one mile of the route. Complete field exploration of all the delineated areas of these geologic units within one mile of the proposed route would require considerable time and effort. Therefore,

some selected spots for field investigation have been indicated on the aerial photographs and the overlay strip (figure 2). These spots have been identified in table 1, and cross-referenced to sections on the topographic map by means of the overlay (figure 3).

If field exploration proves the spot locations to contain suitable gravel, the exploration should be expanded to adjacent areas. If the material at the selected spots is unsuitable, other areas (some at greater distance from the proposed route) should be explored.

*Check:
We should
investigate
this possibility
WSP*

The use of electrical resistivity equipment in both the initial and expanded investigations will be advantageous, particularly in determining the thickness of the silt overburden.

The covering of silt and vegetation obscures the underlying sand-gravel deposits, and the scale of the aerial photographs is small so the study of the aerial photographs does not permit estimates of depth to the gravelly material.

Information regarding the composition of the materials and distribution and characteristics of the geologic units has been obtained from the several bulletins of the U. S. Geological Survey described in the accompanying list of references. Reference 1 is the primary source of the information regarding the specific geologic units.

Normal sampling and testing procedures should be used to determine the adequacy and quality of the materials before using them in road construction.

Table 1.--Suggested spots for initial field exploration
for sand and gravel

Identi- fication	1/ : Photograph : No.	Location : Township and: : range	: Section	2/ : Type of: : deposit:	Remarks
1	: 86 VV	TLN, R4E	32	ST	:Examine cut banks of stream to :determine whether gravel is :exposed and depth of overburden.
2	: 86 VV	T1S, R4E	5	ST	:Steep scarp of terrace, about :1½ miles from route. To be :explored only if suitable :sources closer to proposed :route are not found.
3	: 86 VV	T1N, R4E	33	ST	:Possible point bar, formed :when river was depositing :terrace material.
4	: 86 VV	T1N, R4E	30	ST	:May be considerable silt over- :burden on granular material :in the ridge.
5	: 86 VV	T1N, R4E	30	ST	:Examine steep scarp of terrace.
6	: 86 VV	T1N, R4E	30 & 31	ST	: Do.
7	: 86 VV	T1N, R4E	30 & 31	LT	:Possible point bar, formed when :river was depositing terrace :material
8 and 9	: 84 VV	T1N, R5E	28 & 29	LT	:Point bar deposit. Also examine :cut bank at north side of :channel scar. Low terrace de- :posits in this area have been :partly covered by wash material :from tributary stream.
10	: 84 VV	T1N, R5E	27	FP	:Point bars. Also examine cut
11 and 12	: 84 VV	T1N, R5E	22	FP	:bank on opposite side of channel :scar.
13, 14 & 15	: 84 VV	T1N, R5E	26	FP	: Do.
16 & 17	: 84 VV	T1N, R5E	24	FP	: Do.
18	: 81 VV	T1N, R5E	19	FP & LT	: Do.
19	: 81 VV	T1N, R5E	19	FP	: Do.
20	: 81 VV	T1N, R6E	21	FP	: Do.
21	: 81 VV	T1N, R6E	23	FP & LT	:Examine cut bank of stream.

Table 1. (Cont'd)

1/ Identification numbers are shown on indicated photograph numbers and in figure 2.

2/ ST - Chena River sand terrace deposit
LT - Low terrace deposits
FP - Floodplain deposits

Table 2.--Explanation of figures

- Figure 1. - U.S.G.S. topographic maps Fairbanks (D-1) and Big Delta (D-6), Alaska. (Location of proposed Chena Hot Springs route, section boundaries and geologic units have been outlined on the maps).
- Figure 2. - Overlay of strip of aerial photographs. (Shows geologic boundaries and suggested areas for initial field exploration. Same geologic unit boundaries and spot locations are shown on specific aerial photographs).
- Figure 3. - Index of aerial photographs along Chena Hot Springs Road. (Overlay of topographic maps D-1 and D-6, showing proposed route and section numbers).

List of U. S. Geological Survey References,
Chena Hot Springs Road, Alaska

1. Preliminary Geologic Evaluation of the Chena Area, Alaska, by J. R. Williams. Reports - open file series No. 333, 1954. (Released to "open files" on June 30, 1955. Available at Geological Survey Office, 117 Federal Building, Juneau).
2. A Geologic Reconnaissance of the Fairbanks Quadrangle, Alaska, by L. M. Prindle. Bulletin 525, 1913.
3. A Geologic Reconnaissance of the Circle Quadrangle, Alaska, by L. M. Prindle. Bulletin 538, 1913.
4. The Yukon-Tanana Region, Alaska, by J. B. Mertie, Jr., Bulletin 872, 1937.
5. Geology of the Alaska Railroad Region, by S. R. Capps. Bulletin 907, 1940.
6. Effect of Permafrost on Cultivated Fields. Fairbanks Area, Alaska, by T. L. Pewe. Bulletin 989 F, 1954.

UNITED STATES
DEPARTMENT OF THE INTERIOR
ALASKA ROAD COMMISSION

CROSS REFERENCE SHEET

620. Chena Hot Springs
(CODE NUMBER AND TITLE)

Feb. 7, 1957
(DATE OF CORRESPONDENCE)

TO A. F. Ghiglione

FROM ~~PBS Teletype Center, Seattle Wash.~~ *Barnett, D.C.*

SUBJECT _____

SYNOPSIS: WIRE re Aerial Photo Analysis for Chena Hot Springs -

Work will be undertaken here.

* * * *

ORIGINAL FILED 710. Chena Hot Springs

UNITED STATES
DEPARTMENT OF THE INTERIOR
ALASKA ROAD COMMISSION

CROSS REFERENCE SHEET

620.
(CODE NUMBER AND TITLE)

January 31, 1957
(DATE OF CORRESPONDENCE)

TO W. T. Pryor, DC

FROM A. F. Ghiglione

SUBJECT Aerial Photo Analysis - Chena Hot Springs Road

SYNOPSIS: * * * * We wish to supplement our field investigations in the subject area with an aerial photo analysis for the purpose of locating sand and gravel deposits which are suitable for use as road building materials.

To obtain this information, we are now ready to issue an invitation to bid on a supply contract.

* * * *

ORIGINAL FILED 710. Aerial Photo - Chena Hot Springs

620.
X665
R.

Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. R. J. DeLaHunt, Chief, Design & Construction
Juneau, Alaska

DATE: January 21, 1957

FROM : H. W. Johansen, District Engineer
Fairbanks, Alaska

H.W.J.

SUBJECT: Material Investigations - Chena Hot Springs Road

Comm. R.	
Chf. Engr.	
Admin.	
Ops.	
Eng. Br.	
B. & F. Off.	
Road Br.	
Bridge Br.	
Contracts	
Program Off.	
Finance	
Pers.	
Shop	
Safety	
M. & N.	

Reference is made to previous correspondence relative to the possibility of obtaining assistance from D. J. Belcher & Associates in locating possible sources of borrow along this route.

The route for this road is pretty well established and while we believe we have unlimited quantities of rock borrow (talus) along the rock slopes on the upper limits of the route, we do know that suitable borrow may be difficult to locate along certain sections. Our primary interest in the interpretation on the aerial photographs is to locate suitable borrow deposits not too distant from the proposed alignment.

*C.C. retained
FEB 26/57*

Attached are two U.S.G.S. Quadrangle Maps that have been marked to indicate the proposed alignment, the present borrow pit locations and the approximate area beyond which we believe a study of aerial photographs would be of little value to us. The borrow pits have been located in most cases from a study of aerial photographs and from study of the topography as shown on U. S. G. S. Maps. Some information was obtained from the original survey notes also. Obtaining withdrawal authority ahead of field investigation, we thought to be necessary because homesteaders were getting into the Interior ahead of our survey and pit investigation.

You will note that we have indicated approximately 20 miles of the route for study. We have limited the width of the study as indicated because of topography and economical haul distances. Should this limited area not meet with the requirements of the contract arrangements, changes may be made by your office.

Attachments

Proposed contract set up and sent to Washington for review

[Signature]

UNITED STATES DEPARTMENT OF THE INTERIOR
ALASKA ROAD COMMISSION

ROUTINE SLIP

TO—	NAME	ADDRESS
1.	<i>Mr. Klockentger</i>	<i>Simpson</i>
2.		
3.		
4.		

FOR—

- | | |
|---|---|
| <input type="checkbox"/> Approval | <input type="checkbox"/> Necessary action |
| <input type="checkbox"/> As requested | <input type="checkbox"/> Note and return |
| <input type="checkbox"/> Correction | <input type="checkbox"/> Recommendation |
| <input type="checkbox"/> Filing | <input type="checkbox"/> See me |
| <input type="checkbox"/> Handle directly | <input type="checkbox"/> Signature |
| <input type="checkbox"/> Immediate action | <input type="checkbox"/> Your comment |
| <input type="checkbox"/> Initials | <input type="checkbox"/> Your information |

FROM

DATE

Remarks:

Am sending entire file so you can get up to date on this proposed study. Please follow up on WSN's question on material study

ARC Form 158
May 1956

(Existing stock may be used) INTERIOR—Totem Press, Juneau

UNITED STATES DEPARTMENT OF THE INTERIOR
ALASKA ROAD COMMISSION

ROUTINE SLIP

TO—	NAME	ADDRESS
1.	<i>RJD</i>	<i>WSK</i>
2.		
3.		
4.		

FOR—

- | | |
|---|---|
| <input type="checkbox"/> Approval | <input type="checkbox"/> Necessary action |
| <input type="checkbox"/> As requested | <input type="checkbox"/> Note and return |
| <input type="checkbox"/> Correction | <input type="checkbox"/> Recommendation |
| <input type="checkbox"/> Filing | <input type="checkbox"/> See me |
| <input type="checkbox"/> Handle directly | <input type="checkbox"/> Signature |
| <input type="checkbox"/> Immediate action | <input type="checkbox"/> Your comment |
| <input type="checkbox"/> Initials | <input type="checkbox"/> Your information |

FROM

DATE

Remarks:

Would like to know what has been done on materials studies to date on the whole project.

ARC Form 158
May 1956

(Existing stock may be used) INTERIOR—Totem Press, Juneau

BUREAU OF PUBLIC ROADS

Mr. Wm. J. Niemi, Highway Engineer

December 12, 1956

Wm. S. Klockenteger, Materials Engineer

Materials work on the Chena Hot Springs Road (1956 Construction Season)

The Fairbanks District materials department spent almost a month looking for suitable material to use for fill and topping on the Chena Hot Springs Road. A dozer type tractor and an auger was used for prospecting but neither was very successful because the ground was wet and swampy. Most of the later prospecting was done with pick and shovel.

One possible source of material (rock) was located north of the Chena Hot Springs Road (indicated on attached Geological Survey Map, Fairbanks D-1, Alaska by a cross and a rectangle) but the access road would be one mile long over poor terrain. No other material was found.

It is felt that any guidance D. J. Belcher and associates might give in the location of building material in the marked area indicated on the above mentioned map would probably cause a saving to the Government. The money we have spent to date has netted us very little.

There are three aerial survey grids over the area indicated as follows:

M526	photos 87-90 inclusive
M839	photos 50-53 inclusive
M518	photos 02-04 inclusive

cc: Fairbanks

WSKlockenteger:ah

Office Memorandum • UNITED STATES GOVERNMENT

DEPARTMENT OF COMMERCE, BUREAU OF PUBLIC ROADS, DIVISION TEN, Fairbanks, Alaska

TO : A. F. Chiglione, Acting Division Engineer,
Juneau

DATE: November 23, 1956

FROM : H. W. Johansen, District Engineer, Fairbanks

SUBJECT: Aerial Survey - Chena Hot Springs Road, Work Order #3210

Reference is made to your memorandum of November 13, wherein you discussed the possibility of aerial surveys of the Livengood-Eureka project and the subject Chena Hot Springs project. You agreed that with the ground reconnaissance work we have completed for the last eleven miles of the Livengood-Eureka project, that aerial information would be of little value, but there was a possibility of aerial data providing us with alignment information that could only be obtained by ground work by our field forces.

Upon consideration, it is our opinion that it is doubtful if even the Chena Hot Springs location would be benefited from study of aerial photographs. It must be taken into consideration that much of the remainder of the project is considered to be of more favorable road building terrain, where the choice of route is limited to a hill slope where alignment can be shifted only from a few feet to perhaps 300 feet at the most. There can be no great amount of alignment change from the original pioneer survey route, which survey leads us to believe the best possible route has already been established with the exception perhaps of the occasional shifting of the route to comply with recommendations obtained from our contemplated soils survey.

However, we are of the opinion that much benefit would result if D. J. Belcher and Associates were able to locate rock borrow and/or gravel for surfacing from a study of aerial photographs. Perhaps this would be a means of eliminating to some extent, the expensive exploration work that we find necessary in order to locate suitable material in some areas. We recommend that study be made to locate gravel or rock just in advance of last season's construction where wet, marshy ground must be crossed.

The enclosed U.S.G.S. map of the region has been marked to indicate the area that we would suggest be submitted for study and possible location of sources of borrow.

H. W. Johansen
H. W. Johansen
District Engineer

Comm. R.
Chf. Eng.
Admin.
Ops.
D. & C.
B. & F. Off.
Road Br.
Bridge Br.
Contracts.
Program Off.
Finance.
Pers.
Supply.
R/E Off.
Safety.
M. & R.

Enclosure

BUREAU OF PUBLIC ROADS

620
Johnston

Mr. H. W. Johansen, Highway Engineer, Fairbanks

November 13, 1956

A. F. Ghiglione, Acting Division Engineer
Juneau, Alaska

Aerial Survey - Livengood-Bureka Project, Work Order 3171
Chena Hot Springs Road, Work Order 3210

After reviewing your memorandum of November 5 regarding the possibility of aerial survey of the Livengood-Bureka project, we are in agreement that nothing would be added to the value of the last 11 miles of location by performing an aerial survey of this section of the road. We have received your marked U.S.G.S. maps showing this project for its entire length from Livengood to Bureka, and appreciate your prompt reply.

We are interested in your suggestion that the Chena Hot Springs road would possibly be a good first project for this type of aerial survey, inasmuch as road building material is at a premium on this route. Please locate the present and proposed routes from the Steese Highway to Chena Hot Springs in the same manner as you did for the Livengood-Bureka route. The existing locations could be shown with a solid line and your best idea of the proposed location could be shown by a dashed line.

It may well be that this data could be sent to D. J. Belcher and Associates for an estimate of the cost of a proposed aerial survey. As stated in our previous memorandum, this survey should provide us with the most desirable route, taking into account the type of ground traversed, the material encountered, sources of borrow and the clearing and drainage problems which will be encountered. As before, this company would do no field work under this type of contract.

RJDeLaHunt/bf

Copy sent to Livengood - Bureka

By [Signature] Chief, Design & Construction

DEPARTMENT OF COMMERCE, BUREAU OF PUBLIC ROADS, DIVISION TEN, Fairbanks, Alaska
Chief, Design & Construction, Juneau

November 5, 1956

District Engineer, Fairbanks

Livengood-Eureka Project - Work Order 3171 - Route 731

Reference is made to your memorandum of October 31, 1956, on the above project.

Mr. Dunham has put some of the office force to work plotting the line as located and as proposed from Livengood to Eureka. The line will be plotted on U.S.G.S. quadrangle maps as requested and will be forwarded to you as soon as complete.

I have discussed the location of the last eleven miles of this route into Eureka with Allyn Brown. He reports that the terrain and the location of Eureka, with reference to the end of survey 1956, pretty well defines the route that will have to be followed. Brown has made a detailed reconnaissance of these last eleven miles studying materials, drainage, alignment and grade and has the possible line pretty well located. The material along this last eleven miles is good consisting of decomposed rock fragments with enough fines to provide binder. The location of borrow is no problem since it is available in any hillside along the route. It is the belief of the District that any work performed on these last eleven miles by D. J. Belcher & Associates, Inc., of Ithaca, New York, would add nothing of value to this location.

The services of D. J. Belcher & Associates, Inc. would be most advantageous if completed prior to the detailed foot reconnaissance. The answers provided from their studies would be most helpful in locating a route in an area such as the Chena River Valley in which road building material is at a premium. If the survey work to extend route U.S. 97 West from Eureka is to be preformed in the near future, we would suggest that this firm be engaged to study the terrain between Eureka and Roughtop Mountain to the West and then down Stevens Creek in a Northwesterly direction to the Yukon.

orig. 620. Livengood-Eureka

H. W. Johansen
District Engineer

NOV 10 1956

WAR DEPARTMENT

BOARD OF ROAD COMMISSIONERS FOR ALASKA

Fairbanks ~~XXXXXX~~ JUNEAU ALASKA

March 24, 1927

Majer Lunsford E. Oliver,
Engineer Officer, A.R.C.,
Juneau, Alaska.

Dear Sir:

Sterling's wire to me from Juneau dated March 22 22nd requested I write you full particulars regarding needs of proposed trams at Henshaw Creeks, miles 134 & 135 respectively, on the Tanana-Bettles mail trail.

This stream has two branches where the trail crosses and they are about a mile apart. Each branch is approximately 120' wide and the banks are from 6 to 12 feet high. These branches converge at a point about a mile below where the trail crosses but there the banks are too high to be a good crossing. As far as myself and Nash could see the present crossing ^{one} ~~is~~ as good as can be found.

These streams are swift and carry warm currents which make them overflow badly at times, also they open up and they are deep. When I went over one channel last year I had to jump across an open channel 4 feet wide, several days later it was 20 feet wide. Several times teams have had to turn back to Alatna or Bettles on account of not having grub and dog feed to last until the crossings become safe. A man alone which is generally the case is liable to take too long a chance and loose not only a limb but even his life. The crossings are no doubt extremely dangerous at times and one never knows when they are going to be safe.

Bridges would be too expensive to put in and maintain for so small amount of travel. Several people familiar with travel conditions have suggested cable trams here to be used in case of emergency and I think the idea a good one. In a pinch a man could get his dogs and load over by making several trips, he could trail his empty sled from the tram. This would be slow but it would be safe. The observations made by Nash this winter bear me out in everything I have said.

It will take two 150' spans similar to those now in use in the Koyukuk and Chandler Districts. The plans now in the office could be greatly improved, both the car and the cableway. I made some suggestions that I noted in red pencil on a plan that Sterling took to Juneau, he said he would see that they were carried out in drafting a new plan.

In case this project is approved the material could be landed at ~~xxxxxx~~ Alatna some time this summer then hauled a distance of 14 miles to location by dog team. The cost of freighting from Alatna and erecting would not be over \$500 if let by contract. Nash put ~~xxxxxx~~ out ~~xxxxxx~~ proposals while there, only one has come in so far but I am fairly certain there will be others. I took the liberty to open this one and the bid was \$500

Altogether I think the project a worthy one.

Very truly yours

H. G. Haslem
H. G. Haslem
Asst. Supt.

ALASKA ROAD COMMISSION
JUNEAU ALASKA
MAR 21 1927
FILE

0302

13/102-9

INTERIOR
~~WAR~~ DEPARTMENT
ALASKA ROAD COMMISSION
JUNEAU, ALASKA

DISTRICT OFFICE
FAIRBANKS, ALASKA

March 2, 1937.

Alaska Road Commission,
Juneau, Alaska.

Gentlemen;

Reference petition from residents Wild River Section and your letter of February 24, to Mr. Hans Leichman.

As you state it was the intention to place stoves in those cabins several years ago. We ~~were~~ all set to do this but could get no one up there to advise, as to where to deliver the stoves or as to whether or not any one interested would be willing to place the stoves in the various cabins. If Mr. Leichman or any other reliable interested party will co-operate with us in this matter the stoves and pipe will be sent in when possible.

In regard to the trail work, in 1934 this trail was recleared to mile 24, which means that there is probably 33 miles of this trail that needs going over, which should not cost more than \$200.00, if performed by men living in that section.

Upon receipt of the necessary information this matter will be attended to.

very truly yours

Frank Nash

Frank Nash
Supt.

13/102-10

February 24, 1937

Mr. Hans Leichman
Bettles, Alaska

Dear Sir:

Receipt is acknowledged of letter signed by yourself and others with regard to shelter cabins and trail improvement on the Wild River Trail.

It was the intention to provide stoves for these cabins several years ago and I am not informed as to why this was not done. Instructions will be issued to the Fairbanks District to make an effort to provide you with stoves. Due to the inaccessibility of your location it is requested that you advise Mr. Frank Nash, Fairbanks Superintendent of the Alaska Road Commission, Fairbanks, Alaska, at what point you desire the stoves delivered and whether or not you would be willing to place them in the cabins.

It is requested that you also advise Mr. Nash the amount of trail work required with an estimate of the cost.

With regard to the new shelter cabin--this matter will be referred to the Territorial Highway Engineer together with other shelter cabin recommendations. The amount of new shelter cabin work that can be done is dependent entirely upon the amount of funds to be provided by the Legislature, which is now in session.

Very truly yours,

Ike P. Taylor,
Chief Engineer.

CC Nash with copy of Leichman's letter:

Petition similar to the one enclosed was received from the Wild River district three years ago but the record does not indicate that you were advised at that time of the request for these stoves. Possibly we are in error. In any case, if any of the signers of the petition are willing to place the stoves it is requested that you furnish them.

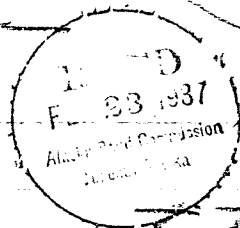
Also, if any of these men are dependable and only a few hundred dollars are required for trail work, it is requested that you arrange to have the work done. No doubt the amount needed for trail work is less than the amount that would be required to send someone in to check up on it.

IPT:IW

CC Mr. Hesse

B-tiles Alaska
Jan 15th 1937

Alaska Road Commission
Juneau



The undersigned Request that
a sufficient ^{sum} be allotted to
complete trail to Wild Lake
also to build a new cabin at
Bear Creek to replace shelter
cabin which has fallen down
and One Hundred Dollars be
allowed for repairs and maintenance
on shelter cabins already built
two cabins are still without
stores they were built in 1930
this work is badly needed We hope
you can make this allotment
this coming year 1937

Hans Leichman
Fred E Clark
E. J. Johnson
C. M. Kenoweth Wife +
Sammy Hope & Wife
Nedolph L. Johnson
Paul Peter

James Murphy
G. T. Smith & Wife
Minard Cold
L. D. McKee & Wife
Mary McKee
Jos. F. Smith & Wife

INTERIOR ~~DEPT~~ DEPARTMENT

ALASKA ROAD COMMISSION

JUNEAU, ALASKA

January 9, 1934

Mr. Frank R. Smith
Bettles, Alaska

Dear Sir:

Receipt is acknowledged of petition signed by yourself and others requesting that two stoves be placed in shelter cabins at Miles 10 and 45 on the Wild River Trail and brushing out the trail.

You are advised that construction and maintenance of shelter cabins is performed with Territorial funds and the placing of these two stoves will be included in a list of necessary shelter cabin work for the coming season. The improvements of the trail will be given consideration in preparing our next years road and trail program as it is believed very probable that some work can be done.

Very truly yours,

Ike P. Taylor
Ike P. Taylor
Chief Engineer

No Stoves yet 1927

January 9, 1934

Mr. Frank Nash
Superintendent A. P. C.
Fairbanks, Alaska

Dear Sir:

Enclosed herewith is a copy of a petition from
resident in the Wild River District and a copy of our letter
thereto.

It is believed that some improvements on this trail
may properly be included in your trail program for the coming year.

If your shelter cabin allotment will permit, it is
requested that you arrange to have these two stoves placed. Pro-
bably arrangements can be made through Mr. Smith, the first signer
on the petition.

Very truly yours,

Ike P. Taylor
Chief Engineer

IPT:MF
CC Hesse
Encl. 2

13/102-10



January 9, 1934

Mr. Frank E. Smith
Bettles, Alaska

Dear Sir:

Receipt is acknowledged of petition signed by yourself and others requesting that two stoves be placed in shelter cabins at Miles 10 and 45 on the Wild River Trail and brushing out the trail.

You are advised that construction and maintenance of shelter cabins is performed with Territorial funds and the placing of these two stoves will be included in a list of necessary shelter cabin work for the coming season. The improvements of the trail will be given consideration in preparing our next years road and trail program as it is believed very probable that some work can be done.

Very truly yours,

Ike P. Taylor
Chief Engineer

IFT: MJ
CC Nash
CC House



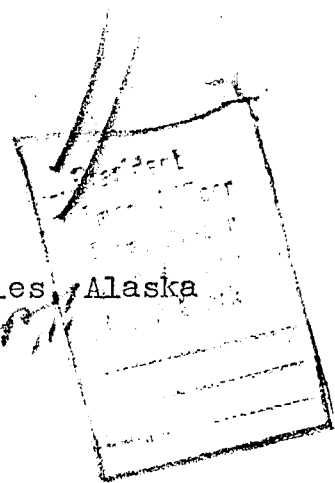
Barrow Alaska
Dec 15 1933

Alaska Road Commission
Juneau Alaska

The undersigned Residents of Weld River
Koyukuk District - Respectfully request
that two stores be furnished for Cabin
Route in 1930. at Mile 10 and 45 -
There are no stores in these cabins
we also request that the sum of
Twenty Five Hundred (\$2,500) be expended
cutting out the trail and making it
passable. it is almost impossible
to follow it in the conditions it is
now in.

Frank H. Smith
Mary Smith
Lewis Beck
Sam Hope and Wife
Mrs. Jas. F. Smith
Jos. F. Smith
Jack Dodd

James Murphy
Hans Leichner
Ben A. Sain
Pete's Alexander
James Alexander
Paul Alexander



Bettles, Alaska

To the Alaska Road Commission
Juneau, Alaska

Gentlemen:

We, the undersigned, residents of Bettles and miners operating on Wild River and contiguous mining creeks, hereby petition your Commission to aid us in cutting a Winter Trail from Bettles to Wild River, a distance of approximately fifty miles, and in this connection we desire to state that we have ourselves cut a Winter Trail a distance of fifteen miles from the town of Bettles. We request that a man be sent in here this Winter for the purpose of establishing this Trail and determining the necessity therefor to the residents of this section. Gold is being produced on Wild River and on contiguous creeks and such assistance on your part will aid us in developing the mining in this section more rapidly.

Thanking you for your favorable consideration of this request, we are

Respectfully yours,

Arno Lieberman

Alexander Peter

Gust Wagner

Sam Hope

Jos. W. Smith

R. H. Crary

Frank H. Smith

Ludwig Hope

Jack Dodde

Baro F. Lin

AM

Paul B. Frank

Mary E. Smith