Due to the extreme unrest in this vicinity caused by high wages being paid at the airbase, no other result could be expected. Closing of the F.E.Co. has hepped the situation somewhat.

Clifford did not finally arrive on the job until the 27th. Edmunds kept him in here to survey the 4th avenue job for a week. I had only a brief chat with him and am unable to pass any judgment on him. Edmunds and Niemi are both skeptical except that they admit he knows engineering. They fear timidity and lack of confidence.

After the 75 went thru the toy bridge at Kings River in a high stage of water, the driver barely escaping with his life, I had them take the driver from here and drive the false work for the steel bridge which will now be used for a crossing. I would have had them trestle to the old railroad bridge as was outlinged in the instructions as the first and most important thing to do, except for the fact that they had robbed the old bridge of materials until it would have required 150 feet of trestle. The driving is very tough and I anticipate trouble from washing out should they have a very high stage of water. They are practically thru with the driving.

The materials for the pile driver finally arrived and the new driver is now in the process of construction at Eska Creek. This bridge should be completed in 15 to 20 days and they will then move to Moose Creek false work. One can drive straight thru on the grade to Sutton now except for the detour across Eska Creek and thru the woods for a few hundred feet.

Bagoy is camped at Moose with the finishing crew and most of the equipment, Johnson is camped at Sutton with no equipment whatever and acting as a super warehouseman, forwarding agent and freight handléer, (Niemis idea). I do not approve until it is proven that Johnson cannot move dirt; if it is so proven he should be given warehouse job at \$ 150 a month or canned. Johnson has been valuable in getting things together and in seeing that other camps were supplied, but to the neglect of the main idea until Niemi became disgusted. Littlejohn is at Kings River doing Ok as usual. The rock crew is at 3% in charge of a foreman who needs a lot of education, but who, I believe, has the capacity to learn after being jacked up a few times.

I'm laying off of actively directing the construction as much as my nature will permit, but cant help going wild once in awhile. I pray to the heavenly father that Clifford will be OK as Niemi has more than he can do, what with Takotna and Army stuff.

WXXX Plane came in with Soberg and a cracked skull last nite; expects to be CK in 3 weeks. So I wired Nash to send Murray over at least temporarily as the thing was in condition so that it could not be left. Have not heard from Nash yet.

My intention is to again reconnoiter Squw Creek at least thorol by pland to avoid the deep dip into Caribou and the horrors of Kack Ass Creek. This would put the road on the Noth side of Squaw

Manufacture in

Creek behind Sheep Mountain.

I'm practically worn out with back packing, siwashing and sleeping in the rain, but this trip will wind it up except for taking them out by the neck and showing them, after first fully explaining it from the map. No doubt they would get a road thru if I sat and did nothing, but I often wonder about that Understand I'm not kicking, I still like it.

I'll be free for a spell here about July 15th and will probab visit Shepard via Fairbanks. Will be glad to go to Nome later if you think I can do any good there. Please advise on this.

\_ Yours very truly,

Hawley Sterling, Asst. Chief Engr. Hon. Ernest Gruening Governor of Alaska Juneau, Alaska

Sir:

It is recommended that an Executive Order be sought setting aside a strip of land 200 feet in width (100 feet on either side of the center line of the roadway) along the route of the Palmer-Richardson Road, now under construction. This road, throughout alsost its entire length, will be constructed upon unreserved public lands. The width of reserve, 200 feet, is greater than usually requested and possibly greater than will be required during initial construction. However, it will provide for gravel pits, camp sites, storage areas, and so forth, and should it later develop that certain sections are desirable for private development the reserve, upon reconsideration, can be reduced to include only such width as is actually required.

The right of way location has not yet been definitely determined; probably will not have been for a year or more. The area is entirely unsurveyed, and the distance is approximately 145 mlles. On this account it is impossible to give a definite description of the area by meter and bounds. Reservations of this nature have, however, been made in Alaska in the past (Executive Order of May 24, 1905 and October 14, 1915). The route begins at Mile 115.8 on the Richardson Highway and extends westerly to right of way of the abandoned Chickaloon Branch of The Alaska Railroad at approximately Mile Post 134.

Respectfully,

Ike P. Taylor Chief Engineer

Office of the Governor of Alaska, Jumeau, Alaska, Jume 11, 1941. To: The Division of Territories and Island Possessions, Department of the Interior, Washington, D. C.

I concur in the above recommendation. It is suggested that and Executive Order be requested creating the reservation above described.

Ernest Gruening Governor of Alaska

Q H ... W

Form 125K (Revised 1936)

## FIGNAL CORPS, UNITED STATES AF Y

## ALASKA COMMUNICATION SYSTEM

## **TELEGRAM**

U. S. GOVERNMENT PRINTING OFFICE

RECEIVED AT

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JUNEAU

REURTEL DATE PALMER RICHARDSON ROAD MILEAGE INDEFINITE AT PRESENT TIME POSSIBLE BETWEEN ALASKA RAILROAD MILE POST THIRTY FOUR AND THIRTY EIGHT

**EDMUNDS** 

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Information requested fund shepard - I filed 13/171-5

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GOVERNOR ERNEST CRUENING

HAVE YOU ANY INFORMATION RE CONSTRUCTION OF HIGHMAY CONNECTING ANCHORAGE WITH RICHARDSON HIGHMAY STOP HAVE RUNDS HERN AUTHORIZED STOP HAS CONSTRUCTION STOP REPLY STOP HAVE TO NOT THOUSE WITH

DEWLIT CO FOURTH ARMY

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Office of the Governor

Contingent Expense

Ty of Alaska 1941 Juneau Alaska June 6 1941

DENITY CO FOURTH ARMY PRESIDIO OF SAN FRANCISCO

FUNDS FOR COMMECTING HIGHWAY APPROPRIATED AND WORK STARTED APRIL FIVE WITH ONE CREW WORKING AT EACH END CHILDRAY ALASKA ROAD COMMISSION HOPES FOR COMPLETION BY FALL OF MINETEEN FORTY TWO STOP ROAD CONSTRUCTION WILL BE PUSHED DURING SUMMER AND NECESSARY BRIDGES WILL BE BUILT THIS WINTER

ERNEST GRUENING GOVERNOR

My



Sec. to Governor

Department of the Interior ALASKA ROAD COMMISSION Anchorage, Alaska

May 22, 1941

Mr. G. H. Skinner, Chief Clerk, A. R. C., Juneau, Alaska.

Dear Mr. Skinner:

Please send the following Land Office plats to this office for use in connection with the survey of the road from Palmer to the Richardson Highway:

Made & 1 6-3-9

		Richardson	~	
			•	to factorial
 T	18N	R2E	T 20N	R5E
	11	R3E	11 11	R6E   Mailed 6-9-41 R8E   bry M.V.
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T	19N	R3E	11	RSE ( ) (M. 1).
	Ħ	R4E		
	11	R5E		

Yours very truly,

Superintendent

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## partment of the Interior ALASKA ROAD COMMISSION Anchorage, Alaska

May 14, 1941

Mr. J. T. Cunningham, Acting General Manager, Alaska Railroad, Anchorage, Alaska.

Dear Mr. Cunningham:

In reference to your letter of May 12th concerning use by the Alaska Road Commission of the abandoned railroad grade between Sutton and Chickaloon as part of the new road to the Richardson Highway.

Your letter was referred to Mr. Ike P. Taylor, Chief Engineer, Alaska Road Commission, Juneau, and he advises that we will use the old railroad grade and sign an agreement with the Alaska Railroad to the effect that if the Railroad at any time in the future finds it necessary to rebuild the railroad between Sutton and Chickaloon, the Alaska Road Commission will vacate the railroad grade and construct a new highway at Road Commission expense.

Mr. Taylor feels that the possibility of your rehabilitating the railroad grade is very remote.

If you have an agreement made up by your Land Department, I will sign it for the Alaska Road Commission.

Yours very truly,

M. C. EDMUNDS, Superintendent



YI' /

MCE:S cc - Juneau

#### Department of the Interior ALASKA ROAD COMMISSION Anchorage, Alaska

May 12, 1941

Mr. Ike P. Taylor, Chief Engineer, A. R. C., Juneau, Alaska.

Dear Mr. Taylor:

I am forwarding a copy of a letter received from Mr. J. T. Cunningham, Acting Manager, Alaska Railroad, with reference to the railroad grade between Sutton and Chickaloon, which we were contemplating using, where practicable, as a location for the road.

Yours very truly,

Superintendent

MCE:S Attach.

1 stone of the state of the sta

Anchorage, Alaska May 12, 1941

Mr. M. C. Edmunds, Superintendent, Alaska Road Commission, Anchorage, Alaska.

Dear Sir:

Reference is made to your letter of May 8th, concerning use by the Road Commission of the old railroad grade between Sutton and Chickaloon, as part of the new road leading from Palmer to Richardson Highway.

Your request was referred to the General Manager and he advises that this old grade may be used by the Road Commission but an agreement must be entered into by the Alaska Road Commission and the Alaska Railroad, to the effect that if the railroad at any time in the future finds it necessary to rebuild the railroad between Sutton and Chickaloon, that the Alaska Road Commission must vacate the railroad grade and construct a new highway at Road Commission expense. He feels doubtful that you can legally do this, and suggests that you abandon the idea of using any part of the railroad grade.

The railroad has no objection to allowing of Alaska Road Commission to use some of the timbers of the old bridges over Granite Creek, King River and Chickaloon River; also, any of the old buildings above Sutton and Chickaloon.

Yours very truly,

(Signed J.T.Cunningham)

J. T. Cunningham, Acting General Manager.



The following report covers the work of a survey party working on the road from Palmer to the Richardson cut-off.

The party was first located at Moose Creek in Railroad 'Outfit Cars'. After sufficient ground had been located the party moved up to Sutton and worked out from there for some time. The 'Outfit Cars' were left at Sutton to be used by carpenters and the survey crew moved camp to Kings River.

The survey party consists of Niemi, Ghiglione, Spach and 4 axemen.

The survey started from the end of the gravelled road about 5 miles north-west of Palmer.

The survey runs through the NW quarter of Sec. 10, SE quarter of Sec. 3, crosses Moose Creek railroad branch approximately 3/4 mile from junction of Main Branch Line, then through middle of Sections 2 and 1, through NW quarter of Sec. 6, T18N, R3W, through SE quarter of Sec. 31, T19N, R3E, through NW quarter of Sec. 32, through SE quarter of Sec. 29, through north half of Sec. 28, joining Railroad near old Sutton washing plant at R.R. Mile 19.1, a distance to this point of 9.1 miles.

The Railroad grade was then followed to Mile 23.5 near Kings River for a distance of 4.4 miles from Sutton. Leaving the R.R. at Mile 23.5 the line crosses Kings River 200 ft. above the R.R. bridge and joins the R.R. grade at 24.2, following it to 24.5. Leaving the R.R. at 24.5 the line follows somewhat along the old Tote Road through the north half of Sec. 21 and the south half of Sec. 15, Tl9N, R4E, joining the R.R. again at Mile 26.2, just inside Sec. 14. Survey practically completed to this point for a total distance of 16.4 from the quarter corner of Sec. 9 and 10, Tl8N, R2E.

The approximate mileages surveyed so far are as follows:

	Road	Railroad
Palmer	00.00	6.5
Moose Creek	7.5	
Railroad Grade - Sutton	14.1	
Kings River	19.3	
Start of Detour above		
Kings River	19.6	24.2
Junction with Railroad	21.4	26.2

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2-TAT/CT

Ince Lines May 12 1941

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Temote stop | Am making silort to secure translamin | 33 | 48 2 rallroad grade with possibility of hering to move later which I believe is very blo sid sidissoq as done as san of malq dita vata of tesd evelled qots eberg Reurad tenth advise railroad we will sign agreement regarding use of railroad

Taylor

MI TAGE

Taylor Juneau Als

Location of road from Palmer to Richardson Highway o o o stop Route using railroad grade appears OK

Edmunds

Original filed 26/293

10/ 104

Mr. M. C. Edmunds Superintendent, A. R. C. Anchorago, Alaska

Mr. R. J. Shepard Superintendent, A. R. C. 13/191-5 Valdez, Alaska

Gentlemen:

With further reference to the survey work on the Palmer-Richardson Highway you are advised that sufficient information is to be gathered so that when work is completed a hard copy map can be made on a scale of 400 feet to the inch as well as a combination map and profile on a scale of 2 miles to the inch.

On the 400 foot map a strip of topography not less than 250 feet each side of center line will be shown. Until such a time as sufficient line is laid down to get the work started and keep all equipment busy it may be necessary to take the topography later but as soon as there is sufficient line, it is believed much better to complete the job as you go along. It is suggested that rough copy of the 400 foot map be made up in the field, at least so far as alignment is concerned, for field use in determining final location. From these field maps the Final 400 foot hard copy can be made during the winter.

A profile of final location, scale 400' horizontal and 40' vertical will be made, showing curve data, gradients, type of clearing, ground conditions, size, location, and types of bridges and culverts, names of stream crossings, etc. This will serve as a progress profile.

From the above data a final combination map and profile, scale 2 miles equals 1 inch, similar to the one by MacDonald for the Steese Highway, will be made and completed shortly after definite final location of the entire route is assured.

As nearly as is practicable in making survey, stationing will be continuous. For all of the work which will be opened up this season the definite location will be stated on the ground after any necessary projection in field. In doing this curves can be put in from tangent offsets for opening up but all B.C.'s and E.C.'s are to be referenced securely so that curves can be run in later by instrument before final graveling.

TRT/CT

For that part of the line which will not be worked on this summer, a close preliminary will be run and, unless time permits, can be projected in the office during the winter.

Very truly yours,

Ike P. Taylor Chief Engineer

HS:JJ

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You may start work Palmor Lella Lake stop Two PRA locating engineers

being sent from here one leaving twenty second other possibly fifteenth stop 33/4/22

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you ment exten to the total extense for employment but meke them no

474/26 Jev sealeory estimited

Sterling

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## 4 - 1 - 41

See correspondence with Edmunds and Taylor on file 26/293 re supplies, etc., for Palmer-Richardson Highway route and establishment of warehouse at Sutton

Ike Taylor Care Ummel Seattle

o o o o o Re Sutton honest opinion is reconnaissance revealed nothing new as map indicates stop Route via Premier Jonesville Eska matter of policy not terrain but probably better serve them later by branch road stop Actually because connection with grade just beyond Sutton can be made via lower route much sooner than upper route appears less justification for warehouse than before stop Anchorage office seems set on Sutton warehouse and I do not wish appear arbitrary in matter stop If decision changed please let me know stop In any case believe most of culverts should go to Anchorage 26/292

Sterling

Original filed 21/292

Dear Sir:

The I have never seen any of the country between Premier and Jonesville, it was a foregone conclusion, as map plainly indicates, that the terrain is much more broken up than that of the route on the high bench close to the railroad as recommended in your wire. As stated in the original reconnaissance report, the object of suggesting the route via Premier and Jonesville was based entirely on giving a daily cutlet from these places and to open up some new country. There was at the time considerable doubt as to whether the additional road should be built in order to afford this outlet. On the route which has now been approved, you may have the additional advantage of using some of the old tote road between Moose Creek and Sutton.

In the light of this change it appears that some serious consideration should now be given to getting onto the railroad grade about 3/8 of a mile east of the Sutton "Y," rather than to swing to the mouth of the canyon of Granite Creek. This decision would be based upon the feasibility of controlling a crossing of Granite Creek with dikes at or near the railroad crossing. I make no pretense of saying whether or not it is feasible but the lower route certainly has some very marked advantages.

Reference is made to Map 602A, of which we have just forwarded you three copies. Assuming you can so locate the road as to get off the bench at 148055' near the "5" in "500" and strike a course slightly south of meast for one mile where, in that distance you would tie into the railroad grade just before reaching the 3 dots representing buildings along the railroad—the following comparison might be made:

From point of beginning to a crossing at the mouth of Granite Creek Canyon and from there to where you would logically tie into the rail-road grade are 4-1/8 miles of road to build, some of which will involve considerable curvature.

From the same beginning point to the same connecting point via the railroad grade is 3% miles with flat grades and easy curves already laid out and only 1 mile of road to build. If it be assumed that the Granite Creek crossing would be the same regardless of location, there is only the cost of dike to consider.

The comparison is then:

-TRT /CT

4-1/8 miles @ \$8,000 .....\$33,000

as against

l mile @ \$8,000 .....\$8,000

23 miles rehabilitated railroad grade @ 1,500 12,125.

This would leave \$21,000, if required to construct any necessary dike, which according to past performance would build 5,000 feet of good dike similar to type used in the Delta country. In addition your road would always be at least one-half mile shorter and you would certainly have better alignment.

No doubt you have seen this possibility. I mention it, knowing it would make a better location if the stream can be handled and I believe it deserves serious consideration on the ground. There is an unlimited amount of dike material close at hand.

Very truly yours,

Hawley Sterling Assistant Chief Engineer

HS: IN

Juneau Alaska March 26 1941

Ike P Taylor c/o J R Ummel Seattle

From Edmunds quote Reurtel Niemi and I made reconnaissance trip from Jonesville to Moose Creek and indications are that on account of rugged terrain broken up country road should go direct from Moose Creek to Sutton crossing Moose Creek near mouth and following high bench on right limit of Matanuska similar to road from Palmer to Moose Creek stop This changes picture entirely and Sutton would be logical distributing place for this area stop In view of this advise whether you still want cold storage warehouse at Sutton eliminated from requisitions advise rush expect to have survey party in field located at Moose Creek by first unquote In view of reconnaissance he is probably right stop Please answer direct

Sterling

Seattle Wn Mar 27 1941

Sterling Juneau

Advised Edmunds construction of storage warehouse Sutton approved o o o o  $\underline{\underline{T}}$ aylor

Originals filed 26/293

Anchorage March 10th, 1941

Mr. Ike P.Taylor Chief Engineer Juneau

00000

We will require a good warehouse at Sutton for at least two years, for the present we are planning on cold storage, but later on we will have to have a place for perishables and a place for at least one man to stay.

If we are to go ahead the sooner the warehouse is built at Sutton, the better.

Another matter that will be coming up is the obtaining of right of way from the end of the Moose Creek road across land which has been homesteaded.

It is not possible to do any figuring on this until a survey has been made so that we know where we want to go, but some of the land in this area is owned by persons who are not now living here, and it is possible, unless we are able to follow section lines fairly closely, that there may be some delay in getting permission to cross some of the homesteads.

Yours very truly

/s/ M. C. Edmunds

Supt.

Mr. M. C. Edmunds Superintendent, A. R. C. Anchorage, Alaska

Dear Sir:

With reference to your letter of February 24, we had already written and are sending in this mail a plan of work on the west end of the proposed new road.

While we expect to be advised of the appropriation having passed at any time, it is possible that such notice might be delayed for another month. However, if we do not receive notice before April 1 it has been planned to have you arrange to start a survey party by that time. It appears reasonably certain that we will eventually get the money but it is not possible to incur very extensive obligations until the appropriation has actually passed. However, it is very desirable that we have a survey party start on that end as soon as weather conditions are at all favorable. The cost of the survey, of course, can be borne by our present appropriation.

Consideration has been given to assigning Ghiglione to this new project and while no definite decision has been made it is very likely that he will be so assigned.

13/65-49

Information we have received so far from the National Park Service indicates at least a probability that the funds for the Park will be greatly reduced. If this is the case I see no reason why Elmer Hosler could not be left in charge.

I would prefer to leave final decision on this, however, until later.

Very truly yours,

Ike P. Taylor Chief Engineer

IFT: IN

FO/ 40.4

Anchorage February 24th, 1941



Mr Ike P. Taylor Chief Engineer Juneau

Dear Sir:

I noticed in our local paper a few days ago an item stating that \$1,000,000. had been included in the estimates submitted to Congress for the construction of the conmecting road between the Anchorage system of roads and the Richardson highway, and assume that the importance of the construction of this road from a military standpoint will ensure congress providing the funds.

So far we have had no discussion concerning the proposed work, of the number of survey parties we should have in the field, controlling points which we may decide upon, such as the crossing of the Chickaloon river in the vicinity of the Alaska Mailroad bridge, whether we are going to make use of the old railroad grade between Sutton or Chickaloon or keep higher up towards the foothills, which I am in favor of, until detailed surveys show the railroad grade practical,

Another possibility, if the work is to be rushed, as I assume it will be, whether it would not be advisable to construct temporary bridges across some of the bridges on the old railroad grade, so that it could be used temporarily in getting crews and materials scattered out ahead and keep communications with advance crews, which would speed up the work considerably.

Again, the question of the survey crews is important, it would seem to me that there is no necessity of keeping Ghiglione at McKinley Park on a small program, and that he could be used to better advantage in charge of surveys and bridge locations, with Spach running instrument on one party.

If the work is to be done in a rush, there is no reason why a survey party could not start out from the Palmer end around the first of April, and, if desired, piledrivers could be moved to places where required at any time.

While you, no doubt, have plans of operations in mind, we would like to be advised of what the tentative outline is, particularly in reverence to Ghiglione, whether it is planned to have him on the new work or keep him at McKinley Park for the summer.

13/D5-49

Yours yery truly

Sun't.

Mr. M. C. Edmunds Superintendent, A. R. C. Anchorage, Alaska

Dear Sir:

Advices have recently been received indicating a favorable possibility of funds for the Richardson Highway-Palmer Road. In view of this and the importance of securing immediate action in the field if and when the definite word is given, it is thought desirable to outline a tentative plan for the beginning of the work.

Route numbers are definitely assigned and mileages from Palmer tentatively placed as follows:  $|3/|-|\otimes$ 

Route 35B - Wasilla-Fishhook-Palmer.

Subhead - 35I - Name changed from Moose Creek Road to √ Palmer-Moose Creek (Palmer Mile 0-Moose Creek Crossing Mile 78)

Route 96B - Name changed from Sutton-Nelchina to Moose Creek-Leila Lake (Moose Creek, Mile 72; Leila Lake, Mile 75). This mileage, for references below is segregated as follows:

Reference is made to Sterling's Recommaissance Report of October 16, 1940. Unless further investigation and survey brings out some serious objections, it appears the logical location between the end of the Moose Creek Road and Chickaloon River (mile 32) should be as outlined. This will be discussed with Niemi when he arrives here.

On this assumption plans should be formulated for immediately (upon advice) establishing camps in the following priority and according

T-TAT /CT

21/2 13/191-2 A

to camp outfit and equipment available:

#### (1) Mile 20% (Kings River):

This camp would house a survey crew, pile driver crew, clearing and grading crew. Before the camp can be established, unless it is done before ice is gone, it will be necessary to put in a temporary bridge over a fork of Granite Creek. The primary object of this camp layout would be to open the area from Sutton to Chickaloon Crossing as a truck road, thus providing easy access by rail and truck to the country beyond Chickaloon River, for supplying survey and construction crews. Any work done on the railroad grade between Sutton and Mile 18 (of road) would, of course, be of a temporary nature.

When the camp is first opened the pile driver crow would drive a skeleton treatle approach to the existing Kings River Bridge; the survey crew would first locate the 25 mile washed out section beginning east of Kings River and then the 25 mile section midway between Kings River and Chickelcon Crossing.

The piledriver crew, after repairing the Kings River Bridge, should build a wars warehouse at Sutton, size about 16x24, on skids so that it could be used later at end of road when connection is made from Moose Creek.

With truck transportation at Casp 20%, after opening up is finished, there is no reason why this camp could not remain and finish the road, except for graveling, between Granite Greek and a point approximately half way between Kings and Chickaloon rivers.

#### (2) End of Moose Creek Hoad, Mile A:

This camp would house a survey crew (temporarily), a clearing and grading crew, and a bridge crew. It is possible, if proper transportation is available up Moose Creek (on the railroad) that the survey crew could establish itself there and board at section house.

The object of this camp would be to construct a passable road from Mile 4 to Mile 5. The bridge crew, awaiting hoist on order, could construct pile driver, gravel traps, do clearing and, if deemed expedient, build temporary bridge over Moose Greek.

### (3) Jonesville, Mile 13%:

This camp would start clearing and grading operations as soon as survey crew had finished from Camp 2 and had enough line laid out, and would remain at Jonesville until a passable truck road had been completed from Nile So to Granite Creek, doing the westerly section first.

age - ∦3 2-27-41

The above set-up of Camps 1, 2 and 3 gives you almost ismediate access to the work in three places from a transportation and
supply standpoint. Until new equipment arrives you would have to fill
out as best you could with all the machines you could gather together.
After the arrival of the new equipment, you would have to reorganize;
it might then be expedient to place an additional camp on the railroad
grade near first creek east of Granite Creek, about Mile 18. At any
rate, you should at that time or shortly after figure on the main camps,
working three shifts each, two of them acting as advance camps and
doing all the clearing, grubbing and moving of yardages with the third
as a finishing up camp doing all the grading and most of the culvert
work.

If and when funds are released the following equipment will be purchased for you; this is additional to that already ordered for your regular work:

- 6 55 h.p. trectors with trailbuilders
- 7 110 h.p. " " "
- 1 #10 P. C., pull type grader
- 1 \$10 motor grader with scarifier
- l 210 em. ft. diesel compressor (no tools)
- l shovel. & yard canacity
- 1 55 h.p. gasoline skid hoist
- 19 dump trucks
- 2 6-wheeled freight trucks
- 2 standard plakups.

Of the above it is anticipated that your two advance camps will be equipped principally with one 55 h.p. tractor and three 110 h.p. tractor, while your grading camp would take one 55 h.p. tractor, one 110 h.p. tractor, one #10 P. C. pull grader, four or five dump trucks and one pickup. Other graders will be provided from those on hand and from some we will get on transfer from CCC. The other three 55 h.p. tractors are contemplated for use with a gravel trap layout, a bridge crew and a compressor crew which may or may not be camped with one of your three main camps.

The shovel and truck equipment and one pickup will make up graveling crew to begin at Mile 4 putting on pit run or at least only screened gravel.

Note that no scrapers are ordered. The plant records show very little use of scraper equipment the past two years. If scrapers, in addition to those you have on hand, are required later, they will be ordered. This may include a carryall or two if survey proves such equipment is warranted. Survey may also develop places where use can be made of the D.D. tractor hoist which has laid idle so long at the Park.

NCE - 44

Due to possibility of shortage of tentage as well as maneuverability of camp outfit, you should consider construction of frame buildings on skids for two of your camps, probably those at Mile 4 and 20%. But unless such buildings are narrow and squat enough to get through the Chickeloon railroad bridge they can not be used beyond that point. Other streams could be forded.

Since many weeks are required to land bridge materials at sites, one of the most important things to consider is the determination of types and lengths of bridges for main crossings. Once the general route to Kings River has been definitely established by recommaissance it is believed the kind and length of bridges wanted for Moose Creek, Eska Creek, Granite Creek, first creek east of Granite, and Kings River can be decided, even before actual survey. Early decision will enable the completion of these bridges before freezeup.

Since there is a bridge over Chickeloon River, the not in a suitable place for thetentative location, it can be used until after survey and new bridge ordered along with those for Hicks and Caribou Creeks and any other streams. The these crossings are of lesser early importance than those on the west and of the read they too should be ordered as soon as possible so that bridge construction can continue through the winter.

Roughly not less than 20 timber single treatle spans from 15 to 21 feet in length will be required on the road. Such timber bridges will all be 20 feet wide and according to latest standard plans. Along with your other first requisitions you should include a carload of lumber with several of these spans. As practically all will be pile driven, posts can be excluded.

With regard to location, as this is an important road it is highly desirable that a careful location be made which will not have to be altered after construction; at least not for a great many years. The location will have a maximum grade of 7 per cent, a maximum curve of 40 degrees and a minimum sight distance of 650 feet. Contrary to our usual procedure in making locations, this does not mean since these limitations are set that they are to be employed as often as possible and used as the easiest means of reaching certain objectives. They should be employed as little as possible and only where necessary. A grade greater then 7 per cent must have prior approval. Slight deviations from items 2 and 3 may be used if absolutely necessary. As an example of the class of alignment desired; the a 10 or even 20 degree curve is not a sharp curve, if a long, easy curve of lesser degree can be used without increasing construction cost, use it. In short, all grades and curves are to be as light as possible without materially increasing distance or cost.

Very truly yours,

HS:IW.

Ike P. Taylor Ghief Engineer

## HEADQUARTERS ALASKA DEFENSE FORCE OFFICE OF THE COMMANDING GENERAL

#### EMMENDDREXEXERBYXANGHDRAGEXKAKAXKA

IN REPLY REFER TO: Fort Richardson, Alaska January 6, 1941.

Alaska Road Commission Juneau, Alaska.

Attention: Mr. Ike P. Taylor, Chief Engineer.

Dear Mr. Taylor:

I appreciate the opportunity, afforded me by your recent letter, of expressing my opinion concerning the proper width of roadway for bridges on the proposed Palmer - Richardson Highway Road.

The new bridges which you will build will be usable for the next fifty or more years. During that period it is reasonable to expect a considerable increase in traffic on the Richardson Highway which might warrant double width roadways. During this same period, however, changes may be expected in the roads in the matter of reducing or eliminating curves. Thus new bridges may be required. Consequently, I feel that bridges of single width roadways would be most appropriate. The only exception to this would be the bridge over the Tanana River, which I believe should accommodate a double width roadway. Where other road approaches are such that there is no likelihood of change, two track bridges would be warranted.

So far as military requirements exist, two track bridges require but little traffic control and are thus preferred but are not a necessity. When only one track bridges exist we would institute rigid traffic control whenever the military necessity therefor arose in connection with heavy troop movements.

Cordially yours,

S. B. BUCKNER, Jr. Brigadier General, U. S. Army, Commanding.

Original letter filed with additional correspondence on File 13/80-24



November 18, 1940

Anchorage, Alaska the Alaska Railroad Col. C. F. Chlash, Ceneral Managor

Dear Colonal Ohlson:

ica illa em .eulev lo ed ylbedduoban illa .1004-"i elmes gress and educer ainst areas a second continuation ent branct quieveb etfaile gaintemes bluons bus route. We are glad to have the sap, scale 1"-5000", regarding data svallable on the Taulina-Chickaloon your letter of Movember 12 furnishing information To ygos a em bebrarroz sad ekumbli . M

12, 1914 to December 31, 1915 as we have a copy of Expossing Commission's report for the period of March -mi medeala edd dfluerad ynintarion as I need these however until location surveys are started.

.ednor alift no bad an atab this report in our files. This, however, was the only

.Actionalist sind ou I eppreciate your essistence in furnishing

'smod Arner Asea

Chief Engineer INE P. Taylor \*our

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## ALASKA ROAD COMMISSION

Anchorage Movember 13th, 1940

Mr Hawley Sterling Ass't Chief Engineer Juneau.

Dear Sir:

In reference to your letter of October 19th, enclosing a letter from Donald MacDonald relative to Alaska Railroad maps and profiles of the Chickaloon- Highway section.

I am enclosing a white print of a railroad location from Tazlina Lake to Chickalcon, on a scale of 1"/ 5000' for your consideration, and upon request, will have prints made of various sections mm made on a scale of 1"/400'.

It was not considered advisable to have prints made on this scale of the whole location, until we have been advised of the ones you may want.

While the map is a work of art, and looks appears to show contours over a large area, it is noted that the map bears the notation that it has been "compiled", and it is suggested that too much reliance must not be placed on areas that are remote from the railroad location.

Mr Taylor will recall, no doubt, that Mr F.D.Browne sent a party to Healy under location engineer Ward to change the line on the North end of the canyon, on a line which he had projected from a contour map, which was found to be fifty feet off on the ground, and impossible to construct.

I am also enclosing a bound copy of the Alaskan Engineering Commission report for the period from March 12-1914, to December 31, 1915 describing the route between Copper Center and Chickaloon, which the railroad would like returned, together with a copy of a letter from Col. Obligon to me, and trust that the map and report will be serviceble to you.

Yours very truly

Enc. Mais letter form. O.F.O.

We know their line - line

part to be the law mare

# CHITED STATES DEPARTMENT OF THE INTERIOR THE ALASKA RAILROAD

Anchorage, Alaska, November 12, 1940.



Mr. M. C. Edmunds, Superintendent, Alaska Road Commission, Anchorage, Alaska.

Dear Sir:

In complisance with your letter of October 24, 1940, attached hereto find two (2) maps, No. M-142, Mp73 - 162, from Tazlina Lake to Chickgloon, scale 1" - 5000'.

Prints of the following maps are also available, if required:

M-141, MP. 75 - 100, scale 1" - 400', Location N. Vault, MP. 100 - 125, scale 1" - 400', " M-145, MP. 125 - 150, scale 1" - 400', " M-144, MP. 150 - 162, scale 1" - 400', "

I am also attaching hereto a bound copy of the Alaskan Engineering Commission Report for the period from March 12, 1914, to December 31, 1915, which describes the route between Copper Center and Chickaloon. I regret that we have no extra copies of this report available, so will appreciate it if you will return this when it has served your purpose.

Your file is returned herewith.

Very truly yours,

"Signed" O P Obleon

O. F. Ohlson, General Manager.

Only Port Spasser

#### Re: Construction of Palmer-Richardson Highway Road.

It is believed if funds for this road are not made available until the beginning of the open season next year that it will not be possible to provide a usable road until the late fall of 1942.

If funds are made available within the next 30 to 60 days it would make it possible to purchase the necessary equipment and lay down supplies such as nonperishable food items, fuel and construction materials at various points along the route before the breakup next spring. As yet no final location has been made for this road altho the general route is reasonably definite. With supplies and materials distributed at advantageous points along the route it would then be possible to move in construction crews and undertake work as soon as survey line was established. This would have the effect of speeding up the work to a considerable extent during the season of 1941 and would give greater as surance of completion of the road by the fall of 1942; in fact, with funds made available soon, it might be possible to provide some sort of a road during the 1941 calendar year, although this is considered questionable.

In regard to cost of maintaining the road for winter travel over the Coast Range to Valdez it is believed that at least two large blower type snow plows would be required to be on duty continuously from about October 15 to April 15, to insure traffic getting thru this section. This equipment might be simply held on hand for use as required in case traffic into Anchorage by other routes was interrupted in which case it is believed the road could be opened within a period of one to two weeks, with this equipment and other equipment which would be available in the Valdez District. The estimated cost of the purchase of two of these large type snow plows is \$30,000. The cost of operation of one such unit is estimated at \$75 per day.

Ike P. Taylor Chief Engineer -161/6

October 19, 1940

Mr. M. C. Edmunds Superintendent, A. R. C. Anchorage, Alaska

Dear Sir:

Attached is a letter from MacDonald relative to railroad maps and profiles of survey of Chickaloon - Highway Section.

The it is not necessary to secure this material at this time it would be worthwhile to investigate and find out just what is available. Most of the proposed location for a road would be distant from the railroad location, but there are sections where the nature of the country brings the two together. These mapped sections would undoubtedly be of value.

Also, if there are any detailed written reports, they would be handy to have. We would be interested in seeing an inventory of this material.

Very truly yours,

Hawley Sterling Assistant Chief Engineer

HS:JJ

P. S. Plesse return MacDonald's letter.

TeenignE leino Ike P. Taylor

Yery truly yours,

on your way north. Best regards mand og nov nenw nov see Liede I dedt feuru I

\*Nearns uotreoot e of considerable value in case funds are used available for ed Ilim eqent sa egniaeoro meenta ta eqem noitautia oala bns eqam fool-604 ent to etairq beortiss ent mori alsido of

We are writing the Anchorage Office to attempt ment showing all the preliminary surveys, in 1913 and 1914. rallroad location, which was published with a House Docu-

which we had any knowledge before making the prip. This consisted only of general topographic maps of the prelimery and the strip map showing topographic maps of the prelimery and the strip map showing topographic maps of the prelimery The same of the sa evallable on the Chickeloon-Richardson Highway route.

Thanks for your letter regarding the date

Dear Mac:

seattle, Wash.

Cambridge Apartments blanodesk blanod . Tk

October 18, 1940

- railroad napy Alaska Read Cammleston OCT 16/940 S. S. also map / will - Jour Frenchard and are bore es per d The as frue - He and E setheration wayso 400 augs y or The The Factory La Zlorg Clear Illanding zuggest a good line propel monther the How muyer -Ship Ship 1 Section The state of the s auty has Com. corned by complete Bucan boy ach wear T. Frey heer all the dop's at Math Starier. ahis luapy Comment Lay her ary e.alk. were long and Lary Lecelace et hare hopen on Jan me John John M. Lake also of rem crossings eden freely 7 13/191-2A Bulalo Ha of vale いからか Kark Rote 2 (1) Hers Keharlem ! The X the met France harry Lingson D USENY Jee M Who y OHIRY 2

Traculty are Esona Exestance but fall warmy mups et are an a camp stolenery ducht that end a DD he drafting office of the The milrered occurry consed Is the left him I the Matanage at Nich ack, the State of The and bluffor the right living. eft limit for and fourse the line would region 2 Vings of the Matamastra . Certainly a highway I thank should be on the night limit all the way been total there is a long birch ridge a few willow back of the Tathera on a find of adjuncte between the Vaclime drungs and the later great the worth, Historief by mentent hum been in there fruit this divide is all good fround and Extracto funca, muit offunto about the middle of the Lake dear to the Hylenry; Lives in their war of once lettel bear top long ago and Twas Too hunt to appreciate the value of 9008 ground to Dan't preace it. Hope their bruggestemouth brotonice value balle will by North-Buserely Miles

Juneau Alaska October 3 1940

Commanding General Ninth Corps Area Presidio of SanFrancisco Calif

After conference with Road Commissioner comma recommend that first priority be given to road connecting Anchorage with Richardson Highway so that in case of emergency two seaports will be available for the supply of both Anchorage and Fairbanks and to facilitate mutual reinforcement of these two garrisons (stop) Estimated cost of this new road is one million five hundred thousand dollars 0 0 0 0 0

Buckner

FAIRBANKS DAILY NEWS-MINER

# Matanuska, Richardson Road Survey

Proposed Highway Between Tazlina and Chickaloon Is Step Nearer

VALDEZ. — Word has been received by the office of the Alaska Road Commission that a preliminary survey of the proposed road from Matanuska to the Richardson highway will be made early in September by Hawley Sterling, assistant chief engineer of the ARC, and Ben Woods, transitman. — These men will start their reconnaisance trip from Tazlina about 10 miles

north of Copper Center and End up at Palmer in the Matanuska Valley.

Valley.

Their route will traverse the Tazlina Nelchina and Matanuska valleys as recommended by the Valdez Chamber of Commerce in a recent report submitted to the Road Commission.

a recent report submitted to the Road Commission.

The Chambers of Commerce in Anchorage and Fairbanks: have also been active in urging the construction of this new road, which aparently is being speeded up at the request of the War Department as a national defense measure. It will afford auto communication between Anchorage, Valdez and Fairbanks and in addition to connecting the new military air bases at Anchorage and Fairbanks by auto will widen the market for Matanuska farmers.

All communities served by the

All communities served by the enlarged central Alaska network of roads hail the announcement of the survey party as the best news they have heard in recent years.

RIDE IN LUXURY Lincoln ZEPHYR CAB

T-161/2T

July 1, 1940

Valdez Chamber of Commerce Valdez, Alaska

Gentlemen:

Attention Mr. D. H. Kelsey, President.

ph

Receipt is acknowledged of your letter of May 16 enclosing a report on a proposed road from Chickeloon to the Richardson Highway via Nelchina.

As you are undoubtedly aware, it will be impossible for the Alaska Road Commission to take any action toward the fonstruction of this project until greatly increased appropriations are available. For the past two years our funds have been sufficient only for minimum maintenance requirements on existing roads and it has not been possible to undertake construction of even much needed short road projects, except in so far as the Territorial Board of Road Commissioners has been able to provide funds.

For your information, this project has been included in our general plan for road development for Alaska and has been submitted to the Department in our regular 6-year program for new construction of Federal projects. However, no funds have yet been appropriated to initiate construction on any of the projects included in this plan, the estimates are submitted annually for the total funds required to cover the first year's requirements of the 6-year plan.

The information from Which your report was compiled is available in this office and was used to prepare the preliminary estimates mentioned above. In view of the information contained in the Alaskan Engineering Commission's report and other information available as to the feasibility of this route, it is not considered necessary at this time to make a preliminary survey as suggested. It is believed our estimates are sufficiently accurate to use as a basis for requesting funds for the project and due to the limited funds available it is not believed desirable to take the necessary funds out of our current program, thus reducing road maintenance to make such a preliminary survey.

Very truly yours,

Ike P. Taylor Chief Engineer

# Valdez Chamber of Commerce

Valdez, Alaska

May 16. 1940

Mr. Ike P. Taylor, Chief Engineer, Alaska Road Commission, Juneau, Alaska.

Dear Sir :

The enclosed report, which is a rough estimate of the cost of constructing a road from the Richardson Highway near Gulkana to Chickaloon via Nelchina section, was prepared by a committee of this Chamber of Commerce.persuant to a request from the Territorial Chamber. The latter body is now working up estimates for a definite plan to link up all of the Central Alaska road systems in one interconnecting system, using the Highway as the trunk road of the network . The plan now is to submit the complete program to you as soon as the Territorial Chamber has assembled and compiled the necessary estimates and maps.

We are handing you this preliminary report on the Matanuska connection at this time with the idea of having you look it over at your convenience and give us your suggestions regarding any changes or additions which in your opinion it would be advisable to include in the Territorial Chamber's final draft. The Chambers in Anchorage, Seward and Fairbanks are also cooperating in working up the data.

What this Chamber is trying to do is to work up a plan that is sufficiently definite and feasible to justify a reconnaissance of the Highway-Chickaloon route by the Road Commission .

Your suggestions will be appreciated.

Very truly yours

D. H. Kelsey

President.

The Valdez Chamber of Commerce, Valdez, Alaska.

#### Gentlemen:

The following is a preliminary report on the feasibility of an automobile highway connecting Richardson Highway at Gulkana with Anchorage via Chickaloon and Matanuska:

#### PURPOSE OF ROAD:

was the first

To develop the country economically.
To connect Anchorage with Valdez, Fairbanks, and Copper River belt.

3. To connect the agricultural districts with the non-agricultural districts.

To develop the coal-bearing district and furnish an economical outlet to the consumers.

5. To gain access to the mineral district known as the Nelchina District.

None of the above subjects will be discussed here as information on them can be easily found in publications by the Agriculture Department and The Bureau of Mines.

#### SOURCE OF INFORMATION:

Since this report is to ascertain whether a preliminary survey is feasible, some pertinent and reliable data must be had as a basis for this report. Therefore, data from the "Report of the Alaskan Engineering Commission" of 1916 to the House of Representatives, Document 610, Part 2, has been used quite freely.

## NAME:

This report will consider the territory from the Richardson Highway to Chickaloon only a distance of 111 miles since there is a roadbed of some sort connecting Chickaloon with Matanuska and Anchorage. The name "Nelchina-T az lina Highway" will be used to designate this particular stretch of the road.

#### TERMINALS AND LENGTH OF ROAD:

This road should connect with the Richardson Highway between Gulkana and Copper Center. Most likely the site chosen will be from three to five miles south of Gulkana. From here, the easterly terminus, the road will follow the north bank of the Razlina River and the Nelchina River, keeping up on the benches; thence to Tahneta Pass - elevation 3007 feet - thence down to the Matanuska Valley to Chickaloon, the other terminus of the road. The length of this road is 111 miles.

#### NATURE OF ROAD:

The stretch from the east terminus to Tahneta Pass as surveyed by the railroad engineers in 1914-15 has a grade of not more than two percent plus or minus. Thus, for an automobile highway, the average grade can be said to be the same with slight variations locally. variations locally.

#### Page 2.

#### NATURE OF ROAD: (Cont.d.)

Beginning from the Richardson Highway, mile 125, the road extends westerly for 23 miles over very flat ground. Westerly from here the ground is more or less rolling and rises to an elevation of 2400 feet at mile 49 from the Richardson Highway.

The next 18 miles slopes downward and then upward slightly to mile 67, which is Tahneta Pass, elevation 3007 feet.

From Tahneta Pass the road grades downward on a two percent average for 10 miles, to a rocky point. This point is 77 miles from the Richardson Highway. The work to here is all of light to medium light in character.

But from mile 77 to mile 91, a distance of 12 miles, rock work is required more or less. It is presumed that much of this can be eliminated by careful routing for the automobile road.

At mile 91 the Matanuska Valley is reached and from here to mile 111, a distance of 20 miles, the work required is of medium to light in character. Chickaloon is at mile 111.

#### METHOD OF ESTIMATING COST OF ROAD:

The railroad commission estimated in 1914-15 that the cost for a railroad from mile post 0.0 to mile 25 to be \$20,000 per mile. Using \$5000 per mile as the basis of cost for this same stretch, for an automobile road, and directly proportioning the cost against the estimated cost of the 1914-15 commission's report, the estimate is made for the cost of the "Nelchina-Tazlina Road."

#### ESTIMATION:

Mile	0.0	to mile	25,	25	miles	T.	\$ 5,000	\$ 125,000.00
11	25	· 11	49,	24	11	11	5,800	139,000.00
11	4.9	17	74.	25	11	11	7,200	180,000.00
**	74	11	91,	17	11	11	19,200	326,000.00
11	91	11	111,	20	17	11	10,000	200,000,00
TOTAL	COS	T OF 11	1 Mi	es			,	970.000.00

The sum of \$870,000.00 is only an approximate estimation and it is the opinion that the sum will approach \$750,000.00. This will give a very good passable road. The figure \$1,000,000.00 can be used as the cost for the Taz lina-Nelchina road to Matanuska and would include all costs for surveys, preliminary and final. A good survey will not cost more than \$20,000.00

It is highly recommended that a preliminary survey be made for this project - the road from Matanuska to the Richardson Highway via Chickaloon.

Respectfully submitted,

JON205 Ey

July 1, 1940

Anchorage Chamber of Commerce Anchorage, Alaska

Gentlemen:

Attention Mr. R. S. Bragaw, Secretary.

Receipt is acknowledged of your latter of June 23 enclosing a petition for the construction of a road connecting Palmer with the Richardson Highway.

As you are undoubtedly aware, it will be impossible for the Alaska Road Commission to take any action toward the construction of this project until greatly increased appropriations are available. For the past two years our funds have been sufficient only for minimum maintenance requirements on existing roads and it has not been possible to undortake construction of even much needed short road projects, except in so far as the Territorial Board of Road Commissioners has been able to provide funds.

For your information, this project has been included in our general plan of road development for Alaska and has been submitted to the Department in our regular 6-year program for new construction of Federal projects. However, no funds have yet been appropriated to initiate construction on any of the projects included in this plan, the estimates are submitted annually for the total funds required to cover the first year's requirements of the 6-year plan

Very truly yours

Ike P. Taylor Chiaf Engineer

IFT: IN CC Mr. Edmunds

# Anchorage Chamber of Commerce - - -

## THE HUB OF INDUSTRY IN ALASKA

ANCHORAGE, ALASKA

June 23, 1940

Ike P Taylor, Chief Engineer, Alaska Road Commission Juneau, Alaska

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Dear Mr. Taylor:

Enclosed herewith is a copy of a report in which this Chamber and the Valdez Chamber of Commerce urge your closest attention and study.

Briefly, we urge a connection between the road systems of the Matanuska Valley and Anchorage and the Richardson Highway. At this time of world upset and ominous threats to our peace it seems especially appropriate that a route to Interior Alaska other than by the single track Alaska Railroad be available. Its peacetime economic value seems also equally obvious.

We hope we are not overstepping our jurisdiction in suggesting such a project and we certaily do not intend to convey any such intention. We shall certainly be happy to know your reaction and will feel greatly indebted if your office sees fit to consider this project that has the hearty endorsement of hundreds of Alaskans.

Sincerely yours.

Thanking you for past kindnesses, we are

ANCHORAGE CHAMBER OF COMMERCE

PS Bragaw, Secy By ne B Jo. . .

# THE MAXAGUERA-COPPER DAVIES HEGIMAY

Report of a Special

Committee

TO THE ANCIENRAGE CHAMBER OF COMMERCE:

as the Matanuska-Copper River Highway is used as being more comprehensive and more descriptive of this road than any of the more local phrases used to designate this project. Your committee to which has been referred the matter of connecting the road systems of Anchorage and the Matanuska Valley with those of the Copper River Valley and particularly what is known as the Richardson Highway, has been greatly aided in compiling this report be the data gathered by the Alaskan Engineering Commission presented in House Document No. 610, Part 2, being a report of said commission having in charge the construction of the Alaska Railroad for the Government, descriptive of the surveys made in 1914, in order to determine the route to be followed by the Alaska Railroad to the interior of Alaska. One of the several survey parties employed (No. 10) made a survey for a railroad from the Matanuska Valley which is substantially the route porposed for this highway which is substantially the route porposed for this highway which is the subject of this re-

way which connects the town of Valdez on the coast with the city of Fairbanks in the Interior of Alaska had already been built and was the main artery, providing access by land to Fairbanks and Interior Alaska and had been used for many years before the construction of the Alaska Railroad. The survey shows that the Railroad reported on connecting the Richardson Highway with Chickaloon in the Matanuska Coal field, would be ill miles in length with a maximum grade of not to exceed two per cent and that the terrain over which the road would be built presented no exceptional obstacles in the way of construction.

At is likely that in constructing a highway along this route considerable distance could be saved without greatly increasing the grade especially on account of the favorable terrain over which the highway would be built.

The Valdez Chamber of Commerce has presented a very accurate report dealing with the engineering features of this construction and in the absence of further field work we can do no better than to incorporate this Valdez report herein and signify our approval of the same. A copy of the Valdez report is attached hereto. We wish here to present the principal factors, which it seems to us, may be urged to justify the building of this road. They may be classified under two headings—one, economic; and two, military.

When the Company

2.ECONOMIC: The connection of the great valley system drained by the Sucitna and Matanuska rivers on the west, with those drained by the Copper River on the east, would be of great economic importance in the development of Alaska. Each of these valleys reaches from the Coast far into the interior of Alaska, sustains a considerable population, each has the resources which have been sufficient to induce the building of a railroad, the Copper River and Rorthwestern. (Closed down for the present due to supposed exhaustion of the ore bodies of the Kennecott Copper Corporation).

a branch line to the coal fields at Chickaloon for the purpose of developing this coal. This railroad from its present terminus at Sutton to Chickaloon, a distance of 13.6 where, has been abandoned and the rails removed. It is assumed that the grade of this abandoned reliroad could be used to connect the eastern portion of the highway with the Alaska Railroad at Sutton. We can see no objection to its use for this purpose and in the event the railroad should ever decide to re-establish this abandoned road it would in no way interfere with the highway here proposed, but would be a benefit by shortening the distance.

oped by the Federal Government with the aid of funds supplied by the territory in the vicinity of Fairbanks and Anchorage. These road systems at present time have no connection and it is impossible to travel by highway from any of the Anchorage roads to Fairbanks or the p cints reached by the roads there. By the connection of these two road systems through the highway here proposed Central Alaska would be provided with a system of trunk roads with considerable extension of lateral spurs reaching into the heart of Alaska for a distance of 400 miles. The necessity of the roads for the development of this great territory with its undeveloped resources should be patent to all and has been the insistent muse and cry of every commercial body of Alaska. The expenditure of funds for this purpose would be of so much more benefit to Alaska than the transplanting of foreign refugees in the Territory that there is no comparison.

The Copper River Valley appears unsuited for agriculture purposes but is highly mineralized, especially by large deposits of copper which are largely undeveloped. The Matanuska Valley has been proven to contain land suitable for agriculture. The Matanusaka Valley is the site of the government-established farm colony at Palmer which is engaged in the production of all kinds of grain and vegetables which has demonstrated the feasibility of farming in Alaska. The connection of this agricultural area with the non-agricultural valley of the Copper Maver and with the large mining district tributary to Fairbanks would afford additional markets for the formers of the Matanuska valley and would be a benefit to the residents of Valdez. Fairbanks and the Copper Maver Valley. The coal of the Matanuska coal fields would also become available in these regions. This highway would afford access to the Nelchina mining district which has been productive of placer gold for many years but where development at the present time is hampered by almost prohibitive transportation costs.

It hardly needs further argument to present the economic importance of this connecting link between the road systems of Central Alaska. In fact, the present development which has taken place in this part of Alaska and upon which the future of this great ferritory of Alaska is largely dependent, revolves around the construction of roads.

2. WILITARY: In view of the present hurried preparations to provide military defenses at Fairbanks and particularly at Anchorage where some \$20,000,000 is proposed to be expended for a main airplane base and defense unit, it is probable that the military value of this proposed road project far overshadows its present example.

which has already bogun, will, we are informed, include both artillery and infantry units. The probable field of activity of these units in the event of war would be greatly expanded by this proposed road connection. In fact, from the military view-point it is almost imperative that the road be built, unless the activities of this army post are to be confined to Anchorage and the immediate vicinity. If there is sufficient reason from a military view-point for the establishment of an army post here, there is abundant reason for the construction of this road in order to provide the army with the opportunity of defending this part of alasks which is the purpose of its establishment.

In conclusion we may say that the construction of this road as a connecting link in the transportation system of Gentral Alaska is an imporative necessity, the only debateable question being as to when this construction shall begin.

Anchorage, Alaska June 5, 1940 athen I Thompson

The S. Bevers

Special Committee of Anchorage Chamber of Commerce

(confor evpy argueties)

Report of A Special Committee

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-on the-TAZLINA - NELCHINA HIGHWAY

As An Adjunct To The Foregoing

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Ohlokaloon and Matanuska. The following is a preliminary report on the formal sea vis Hoherd-son Highway connecting the Higherd-son Highway action of the Michard-son Highway at Gulhana with the Anchorage area vis the

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2. To connect Anchorage with Valdez, Falrbanks, and the Copper Miver belt.
3. To connect the agricultural districts with

the non-egriculturel districts and to develope the consumer. To develope the conting district and turnish an economical outlet to the consumer.

To firth access to the mineral district

**电影**信息

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tions by the Agriculture Department and the Bureau of Mines.

the Michardson Highway to Chickeloon only, a distance of Line male, since there is a readled of some sort con-This report will consider the territory from

particular stretch of read. and continuation of the war atthe of to destinate

# TENNI OR PERMIN OF HOME

Melohan river, keeping up on the benches, thence to Tabe motar nead valley to Chilokeloon, the other termine of the road. dulkana. From there, the easterly terminus, the road to divos nalin svil of serif mori ed like nasodo site and This road should connect with the Richardson Mighway between dulkens and Copper Center, west likely

#### NATURE OF THE ROAD:

The stretch from the east terminus to Tahneta Pass as arveyed by the railroad engineers from 1914-15 has a grade of not more that two per cent plus or minus. Thus, for an automobile highway the average grade can be said to be the same with slight variation locally.

Beginning from the Richardson Highway, Mile 125, the road extends westerly for we wiles over very flat ground. Westerly from here the ground is more or less rolling and rises toom elevation of 2400 feet at Mile 49 from the Richardson Highway.

The next 18 miles slopes downward and then upward slightly to mile 67, which is Tehneta Pasa, elevation 3007 feet. From Tehneta Pasa the road grades downward on a two per cent average for 10 miles to a rocky point. This point is 77 miles from the Richardson Nighway. The work to here is all of light to medium light in character. From Mile 77 to mile 91, a distance of 12 miles, rock work is required more or less. It is presumed that much of this can be eliminated by careful routing of the sutemptile road. At Mile 91 the Matansuka Valley is reached and from here to Mile 111, a distance of 20 miles, the work required is of medium to light in character.

#### METHOD OF RESTRICTION COME:

The relirond commission estimated in 1914-15 that the cost for a rallroad from mile post 0.0 to Mile 25 to be \$20,000 per mile. Using \$5,000 per mile as the basis of cost for this same stretch for an automobile road and directly proportioning the cost against the estimated cost of the 1914-15 commission's report, the estimate is made for the cost of the Nelchins-Taglina Posd.

#### ESPIRATION:

The sum of \$970,000 is only an approximate estimation and it is the opinion of this group that the sum will approach only \$750,000. Therefore, the figure of \$1,000,000 may be safely used as the cost for the Tazlina-Welchina road to Matansuka and would include all surveys, preliminary and final. It is highly recommended that a preliminary survey be made for this project.

Respectfully submitted,

bob Kelsey Clarence Poy

#### ZXZXZXZ

Anchorage



Mr Tom Severs Anchorage Chamber of Commerce.

Dear Sira

In reference to our conversation today concerning a letterwritten by the Valdes Chamber of Commorce regarding roads between Matanuska and the Aichardson Highway and from Matanuska to connect with the system of reads in the Konaf Peninsula.

I am onclosing a map showing and proposed roads, the read between Matanuska and the Richardson Highway, with which it would be connected around mile 123, would be approximately 150 miles long.

This route was surveyed for a possible route for the Alauka Bailroad in the early days, and there are no reasons that I know of why it would not be feasible to construct the read.

A rough estimate of the cost of the 150 miles is \$1,200,000.00- without some sort of survey it would be impossible to figure closely.

and those of the Kenai Feninsula, I am not familiar with this section of the country except from what I have observed from travelling along the classe hailroad, and am not able to give you any definite information concerning a vagon road from these observations, excepting that I believe the cost of this read would be out of all proportion to any benefits that would onsue for a long time to come.

Scaling the distance from a map along the old route masks from magle River to the head of Surn again Arm and back to Hope, gives a distance of about 100 miles certain partions of the route is rocky and precipitous, involving a let of heavy construction which I would guess would cost at leastIJRARIAND \$1,000.000.00 and probably \$1,250.000.00.

I trust this information will serve the purpose for which it is required

Yours very truly

M.C.Edmunds
Sup't.

c.c. Juneau

Wereh 21, 1940

Anchorage, Alaska estinoo . N . A . Tu

ractood assul :

HIRITIANS. the proposed road from Chickeloon to the Richardson I have your letter of March 13 regarding

provided by Congress for any new work for several years. submit estimates for new construction, no funds have been Maited funds made available for our work. While we annually of undertaking construction are very remote due to the stoequorq ent tud Vrotirrel and at transported not rol rafq This project has been included in our general

HALEhway road. of a project of the magnitude of the Chickeloon-Atchardson should be taken care of before we undertake the construction projects serving areas now under development which I feel We have numerous requests for small road

.asergnol ban estimates have to be approved by the Department, the Budget and bus actisary orgressional appropriation and the construction of projects anch as this. As you know, our the wey of suggestions as to how to obtain funds for the I en sorry there is nothing i can offer in

With kindest regards

Yours very truity,

Chief Engineer Ike P. Taylor

- market WI

ANCHORAGE, ALASKA 4. W. COUTTS

MARCH 13. 1940

JUNEAU, ALASKA. MH. IKE TAYLOR

THE JUNIOR CHAMBER OF COMMERCE HERE HAS DEAR SIR-

PROJECT. INTERESTED ITSELF IN THE CHICKALOON ROAD

WE APPRECIATE THE FACT THAT ROAD FUNDS

A.R.C. WOULD DO SOMETHING ABOUT IT IF ARE ABOUT NIL, BUT HAVE AN IDEA THAT THE

LONDS MEBE AVAILABLE.

MONDER IF YOU COULD GIVE US ANY ANGLES

LO MORK ON.

KINDERL BECYBDR



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National Atchives and Records Administration
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654 Weet 3rd Avenue

Anchorage, Alaska 99501-2145

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#### Alaska Roed Commission, Juneau

Mr. M. C. Zimmerman, District Engineer, Anchorage

February 27, 1956

Orief, Survey and Road Design Branch, Readquarters

Glenn Blybwey Cedestral Plats

Under separate cover we are sending you reproducible cloth prints of the 22 Clean Highway Centerline Location plats which we have just filed with the Eureau of Land Management. In addition, we are sending all notes, work sheets, etc., relating to these plats for your files, as follows:

- l set prints of the new plate, on which are recorded the B.L.M. original correction notes, and changes which were made by Matcalf.
- I set prints of the old plats, with D.L.M. sotations of error in red, end various notes and calculations by Metcalf in pencil. These might be of use if you can crack the code. Natualf kept no formal field book notes.
- 2 sots calculations by Motoulf.
- 14 hardcopy preliminary drawings.
- l set original drawings, 1914-55, which should probably be discorded.

F. S. Bexter Chief, Survey and Road Tesign Branch

ect w/plats

MBaxterjvr

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Mr. M. D. Williams, District Engineer, Public Roads Administration, Juneau, Alaska.

Dear Sir:

In compliance with your verbal request the following information on the Glenn Highway is submitted:

The length of new construction involved is 137.50 miles. The end of this working season will see grading completed except for necessary cleanup along high slope sections. Final selected surfacing has been completed on 55 miles; pit run surfacing has been placed over the remainder only as required and in quantity only sufficient to prevent the road from rutting.

Costs to date are estimated to be \$16,730 per mile and it is estimated the completed road will average \$19,500 per mile, including select pit run or crushed rock surfacing throughout.

Very truly yours,

Hawley Sterling, Acting Chief Engineer.

IPT: JJ

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Mr. John G. Evens, Chief, Alaska Section,
Division of Territories & Island Possessions,
Department of the Interior,
Washington 25, D. C.

Dear Mr. Evens:

In accordance with your verbal suggestion there is enclosed herewith a description of the Glenn Highway.

You have been supplied with a copy of Mr. Shepard's report to the Army on the Richardson Highway from Valdez to Rapids. You also have a travelogue covering the Richardson and Steese Highways.

13/90-80

If the above does not give you the information required we will be glad to have any suggestions you wish to make and also to furnish you something along the lines of Mr. Shepard's report covering the Richardson Highway from Rapids to Fairbanks, as well as the Steese Highway.

Very tauly yours,

Hawley Sterling, Acting Chief Engineer.

HE 198

# DESCRIPTION OF THE CLEAN HIGHMAY - 142.5 Miles in Length,

#### Palmer to Richardson Highway.

# GENERAL (Does not apply to first 5 miles out of Palmer).

Average width traveling surface - 98%, 24' minusum. Curveture - sharpest 500 of which there are only three. Grades - Maximum 8%, of which there are only 1,000 feet. Sight Distance - General minimum 600'.

Longest Tangent - 6 miles.

Bridges - 8 of steel, ranging 80 to 200 feet long and 14 feet wide, all H-15 loading. All wood structures are of fir on spruce piles, 20 feet wide, Longest 60 feet.

Gulverts - All of corrugated metal.

Surfacing (this date):

24 miles crushed gravel

per gravel mixed with clay

18} " select pit run

pit mm 20

" , except as required, nothing done. 65

Includes many miles natural gravel.

General direction - east-west - up the right limit of the Matenuska River and down the left side of Nelchina and Tazlina Valleys.

Populations

		12 12/5/5
Polser and vicinity, approximately	40%	1,000
Moose Greek,	ensire	50
Sutton and Jonesville, "	-	70
OSO Mile	code#	12
		. 2
065 Hile	£150	4
<b>98) Mil</b> e		5
001 Mile	aidylt	ĺ
093 Mile	<del>- Hill</del>	
@102 Mile	tipis	2
@128 Mile		Ý
@ Glenallen	-	30
The Control of the Co		

<sup>@</sup> Settled since road was started.

# FITOS O (Dalmero) - 5.

years. Nothing has been done toward improving it to standard of nearly conenciverq bas 6681 at betouniessos absor and and to trag a at salim & cial

The read is from 16 to 20 feet wide and hea meny heart our at hear edf .ebem med and worms tank desore theor betomize

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# Miles 5 - 14 (Surton).

silty soll over gravel, covered with cottonwood, spruce, birch and slders. queb at Trimos and to Teremen Lemens. . Lending to montabling of eherg heorifer benchmed and gambaer vilenit theorifer and to domer the assert of ereate of Mile Mile of the Gr. of Mile The is all new work, the road continuing on the high benches except for

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gravel from borrow pits is used for road surfacing. standall .nege leads foot-for a no beserve at reval egail eling tage leads

# \*2\*22 - 9\*6T SOTEM

isery cottonwood timber with conscional glimpaes of the river. to cillab in order to avoid excavation of rock cillife. This section is through Treaseeon amened it bas due bedasw meed bad notices ent at energ hearlier out To deal or and evode deed Oll of Col molisavele me of eherg &e a mo Ilin -obla out admilo bus trampils beorlist bio edt sevasi boor edt aghtrd revis again and gaiseom raffe deut due moor agaomic a agaomic gaiseag raffa

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WITE 55\*2 - 52\*2\*

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of silty earth overgrown with spruce and cottonwood. In getting off the hill and back to the railroad grade 800 feet of rock work on a 7% grade was necessary.

# Miles 25.5 - 51.2 (Chicksloon River).

Here again the railroad grade is followed, being very similar to section 22.3 to 25.5, in that it lies close to the river with occasional vertical cliffs on the opposite side of the road. River protection has been done in two places.

# Miles 31.2 - 38.7 (Long Lake).

At Mile 31.2 the old reilroad grade follows the course of the Chickeloon River for 12 miles to a terminus at the abendoned town of Chickeloon. This was a flourishing town in 1920 when the Navy spent over a million dollars prospecting for coal. West of this reilroad two miles is an abendoned oil well which was drilled to 1200 feet with no encouraging results. The narrow reilroad grade is passable for automobiles. Castle Mountain presents a striking picture in going to Chickeloon. Mountain sheep are to be found.

The road crosses the Chickaloon Fiver just above its mouth on a 200-foot steel bridge, 40 feet above the river. Immediately after crossing the river at an elevation of 825 feet, the road ascends on a grade up to 8% for 3500 feet, the Matamuska River being at one point/from the road both horizontally and vertically. A burned-over mountainside is then followed on a rolling grade, the river being from one-fourth to one and one-half miles distant and the road elevation reaching 1700 feet before dropping through a narrow pass to Long Lake, elevation 1490. In this section is a total of one mile of rock work. The subgrade throughout is gravel, broken rock or a mixture of earth and broken rock, resulting in an excellent foundation which prevents necessity of much maintenence of road surface. Chickaloon River marks the beginning of a 45-mile scenic section of this road, probably exceeding in scenic value all other Alaska roads.

# Miles 38.7 - 42.8 Purinton Greek - elevation 2110).

After crossing a nervow arm of Long Lake the road at once starts to ascend a steep and rocky hillside above which are precipitous cliffs several numbered feet high. The lake is in full view for ly miles in this 500-foot climb. After passing through a narrow draw, Welnie Lake comes into view. Leaving this lake shore the road follows up the right limit of a narrow valley of Purinton Creek, crossing it at Mile 42.3. Where not burned over, spruce and birch flank the road.

# Miles 42.5 - 44.8.

This section is on a high beach about two miles north of the Matanuska River. The road is on tangent for 2 miles and reaches an elevation of 2500 mear Mile 44, where it affords the first good view of Matanuska Glacier before crossing a narrow stream known as Gascade Greek. A 20-year old burn left occasional spruce and birch trees growing in meadows of tall, wild grass.

## Miles 44.8 - 49.6 Hicks Creek - elevation 1400).

The beginning of this section marks a fast drop from the high bench to the crossing of Hicks Greek, crossed on a 125-foot steel bridge just below the mouth of a 400-foot canyon. The first 25 miles of this section are also the most winding of any part of the road which passes through a group of scattered irregular hills left by glacier action. Winding Greek, hardly noticeable, is crossed at Mile 45, Maddy Greek on a wooden trestle on curve at 47.5 and Packsaddle Greek at 47.7 on a short wooden span. Most of the country has been burned over except for occasional small patches of spruce, but is now growing up with 2 to 6° poplar and some birch.

Shortly after crossing Packsaddle Gulch the road takes to a steep barren rock slide which soon develops into solid rock, making a total of 6500 feet of rock work. At one point in this section the Matenuska is adjacent to the road and 200 feet lower, almost straight down.

# Miles 49.6 - 59.9 (Ceribou Creek - elevation 1800).

Only a few hundred feet after crossing Hicks Greek, the read enters the well defined conyon of Pinochie Greek, only to climb to a flat, narrow bench on its left limit shortly after crossing that little stream on a wooden bridge.

On gaining the elevation of a small pass through the hills clong the stream the road climbs on a 7% grade for 5200 feet to Mile 51.5. This climb is all in rock on a  $50^\circ$  slope.

A remerkable view of Natamuska Glacier is to be had immediately the pass is reached, the road entering into a comparatively flat country (all once burned over), about 12 miles back from the river.

The eastern most 5 miles of this section before reaching the drop off into Caribou Creek develops into sidebill of various slopes with occasional points of rock work. The gladier is within view continuously.

The westerly approach to Caribou Creek Eridge, a turbulent mountain stream boiling out of a canyon which is crossed at its mouth with a 180-foot steel bridge, is largely in solid rock, representing the most expensive piece of work on a per mile basis on the entire road. Although Caribou Creek flows south generally, the crossing is in a short east-west bend at a natural bridge crossing, one foundation resting on solid rock. The crossing is over a mile upstream from the junction of Caribou Creek with the Naturuska.

# Miles 59.9 - 74 (Leila Lake - elevation lake surface 2950).

A mile-long grade, up to 75%, takes the read out of Caribou Creek to the beginning of what is called Mystery Pass, an ancient high channel of the Matanuska.

From this point through the balance of this section the road hugs the slopes of Sheep Hountain approximately one mile back from the Matemuska River, the head-waters of which are reached at Mile 72.

Several streams drain Sheep Mountain, all deep cut into the mountain but only one of which has continued this deep-cutting action through the bench to the river. This one, known as Jackess Gulch, in Mile 65, is crossed on a 60-foot fill over a corrugated metal culvert. The rest of the streams instead of cutting have built up fens of rocky material over the bench, thus forming good road material. Below the strip traversed by the road some of the streams have resumed the cutting action, forming deep gorges before reaching the river.

Beginning at Mile 68 the road ascends rapidly to keep above marshy ground and deep out streams, shortly reaching an elevation over 5200 feet, and from this point on holds above 5000 feet for 17 miles. There is a 5-mile section here in permanent frost, which will require heavy maintenance for several years.

Getting to the easterly end of Sheep Mountain at Mile 75, the road turns in a northerly direction for two miles at the same time dropping to an elevation slightly over 3000 feet. Off to the right is Leila Lake, marking the summit between the Matanuska and Big Nelchina Rivers and known as Talmeta Pass. Leila Lake drains east. Coming out of the comparatively narrow and partly wooded valley of the Matanuska a broad, lake-studded vista is presented to the eye, with the snow-capped Wrangell Mountains 90 miles to the east.

# Mile 74 - Little Welchina River (Mile 90.5, elevation 1850).

The character of the read material seems to change with the view, from good rocky or gravel material to a heavy clay (mostly frozen), usually mixed with a quantity of washed gravel insufficient to be of use as surfacing material.

In this 16 miles, except for three very small creeks, no drainage is crossed, the road keeping up on an unbroken flat-topped ridge with lakes to be seen both right and left. Aside from occasional heavy butted spruce trees the ridge grows only buck brush. All but the last one-half mile of these 16 miles is turnpike section.

At Mile 66 the ridge is necessarily left in order to get down to a crossing of the Little Nelchina River, which comes in from the north and also to skirt a 4000-foot hill lying in the general direction of the road and adjacent to the river. A good view of Nelchina Glacier is seen from Mile 86.

This section, except for frozen Nelchina Hill, should be easily maintained once it has the final gravel surface. The west Hill, 2000 feet, can be expected to slough for several years.

The Little Nelchina is crossed on a 150-foot steel span. Surface water glaciers this stream to a depth of 10 feet during winter months.

# Miles 90.5 - 126.2 (Tulsons Creek, alevation approximately 2000 feet).

This section is pretty much the same in so far as road material and general characteristics of the country are concerned. Exception: in the 4-mile stretch from 95.5 to 99.5 where the road runs through a series of broken low ridges and hills consisting almost entirely of sand and gravel, permitting cheap and easy

resective in places the sand and gravel was permanently from.

The other 21 miles is 90% from aley into which is occasionally mixed a small enound of weshed gravel. Between flat-topped hills and ridges are swemps or samp drains deeply covered with mose. These places were filled by halling,

The section from Mile 100 to Mile 120 is dotted with lakes. Many are close to the road but in looking from an airplace it appears to be a continuous bog of lakes and swamps.

ers deel 81 of cu seem well a found source at the section of the section of the section of the court of the c

The almost continuelly rolling grade of the road is 95% turnpike section, well drained and surfaced and skundd he easily mainteined.

Streems or drains crossed are as follows:

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*nege lests *08
                               196.2 - Thisons Creek
                                 107.5 - Moods Oreck
       ROT WOODER Spen
mega a.Maewi maboom 188
                         -
                                 106.2 - Mendeltell - 2.801
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                            Mile 97.5 - Cladering creek
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The valley of, first, the Melchina River, which empties into Taxinae of 2 to 6 miles. In addition to Welchina Clacier, one has an excellent view of 2 to 6 miles. In addition to Welchina Clacier, one has an excellent view of 25-wile Taxina Lake across which: san be seen Taxina Clacier.

# . (Ceal notrevale - venight medratelf) &. Sal - 2. est collin

Preciselly all of this section is on that table land consisting of either swamp or permanently frozen clay covered with moses not consisting of open swamps are covered with a heavy growth of scrab sprace, preventing thating, open swamps are covered with a heavy growth of scrab sprace, preventing thating,

The road olimbe approximately 200 feet in getting out of Tulsone Valley to to a point near Mile 128. From 128 to the Highmay is a continuous descending grade minning due east. Through con bead can be seen Mt. Drum, Mt. Sanford and Mt. Wrangell.

The Road Commission settlement of Glensllen at Moose Oreek, which is crossed on a 60-foot wooden treatle, is located at Mile LW. Glenslien consists of lerge garage, two warehouses, mess hall, office, blocksmith shop and heating of large and mechanics querters.

#### Present condition of road.

Except for Miles O to 5, which need to be completely rebuilt, the grading is 99% completed.

#### Present condition of road, continued,

The road is passable the year round except for the usual breakup period in the spring.

Though snow at Sheep Mountain and Tahmeta Pass is three to five feet in depth, no great difficulty was experienced last winter in keeping the road open. There are several places where surface water or springs cause glaciering conditions requiring attention.

The trip from Anchorage to the Highway (192 miles) can be made comfortably in eight hours. The only stopping places so far, where food and shelter may be had are at Palmer, Euraka Roadhouse at Mile 80, and at Copper Center, 14 miles south of the junction with the Richardson Highway. Other places will undoubtedly be constructed.

HS:JJ



National Archives and Records Administration Pacific Alaska Region 654 West 3rd Avenue Anchorage, Alaska 89501-2145

Record Group No. 8030

Box No. / Location Box 83 10/6

Additional Information 750 94 Correspondence

STANDARD FORM NO. 64

#### BUREAU OF PUBLIC ROADS

# 610.316 Office Memorandum UNITED STATES GOVERNMENT

:Regional Office, Bureau of Public Roads, TO Juneau, Alaska

July 3, 1957 DATE:

:M. C. Zimmerman District Engineer, Anchorage, Alaska

SUBJECT: Glenn Highway Revisions - Mile 78.3, 92.0 and 94.0

Data on the Glenn Highway revisions, although not entirely complete, are being forwarded on this date for review before it is too late in the season to advertise.

Revisions at Mile 92 and 94 correct only a part of the very poor alignment in approximately 3 miles of road. There is aline change which would eliminate this whole section of poor alignment and grades which would begin at approximately Cascade Creek, go below our 94 Mile Camp, and come back in at Packsaddle Creek. (See attached plats for general location.)

This approximate 3 mile line change was brought to our attention recently by Mr. Earl Grammer and is known of by many old timers in the district and they concur with him. It is recommended by the district that this line change be considered before the above revisions are made.

Mile 78: (North end Chickaloon River Bridge) This grading and drainage project will eliminate a snaking curve prior to the approach fill to the north end of Chickaloon River Bridge. There are only normal construction problems and the contractor has all the material required for the fill within free haul limits. (Free haul is 2,000 feet for Unclassified Excavation on all three revisions.) Waste material is also disposed of within the free haul limit.

Length of Project - 740 feet or 0.14 mile.

Mile 92: This is also a grading and drainage project but with some complications. During our recent materials study there was uncovered soft rock that we believed must be ripped before it can be excavated. It appears as though 75% of the excavation must be handled this way. There is a possibility of soft coal at our grade line which will require excavating and backfilling to 3 feet below grade with select borrow from Mile 94 pit.

It is recommended that clearing, grubbing and stripping be made a subsidiary item to Unclassified Excavation and eliminate an extra set of cross-sections. The cover is light with up to 4 inch Cottonwood and Birch trees, and from 6 to 8 inch Spruce trees mixed in.

TO R.E. A.R.E. ADM. OPER.

We are requesting \$1500 force account for drainage which we do not have complete information to design at this time.

After reviewing the materials report based on test holes just made, the sections and quantities on the revision are not in agreement with this materials report.

Length of Project - 3003 feet or .6 mile.

Mile 94: Like the two previous revisions, 94 Mile is a grading and drainage project which eliminates poor alignment and improves sight distance. There is a drawback to the design which is an 8.2% grade which is above the maximum of 7% for a primary route. It appears the only way of reducing this grade would involve considerable hard rock work at the lower end or very heavy cutting on overall project. Our previously mentioned 3 mile line change would also alleviate this and many other poor grade and alignment problems.

Muddy Creek culvert in the old fill must be retained during construction as this route must be used as a detour. This old culvert has eroded, therefore we are recommending the new installation require paved inverts. (See cross-section and grade of pipe at the end of cross-section roll.) Upon completion of the new fill, the old culvert could be removed and salvaged by contractor as we understand there is a glacial condition at this location in the winter.

There is no overhaul involved in this project with inclusion of a 2000 foot free haul for Unclassified Excavation.

As in Mile 92 revision, we request that all clearing, grubbing and stripping be a subsidiary item to Unclassified Excavation. The clearing is light except at Muddy Creek fill which has some large Spruce and Cottonwoods to 30 inches at the butt.

Length of Project - 2770 feet or .52 miles.

The following is being forwarded under separate cover:

23 Rolls - Cross-sections

1 - 78.3 Mile 🛩

1 - 92.0 Mile

1 - 94.0 Mile

1 Contour Map, Mile 94
2 1/ Plan and Profile on Federal Aid Sheets

1 - 78.3 Mile

2 - 92.0 Mile (Profile on same roll)

1 - 94.0 Mile

2 Rolls - Profile

1 - 94 Mile \digamma

1 - 78.3 Mile =

1 Culvert List for 92 and 94 Mile.

Earthwork Sheets and Engineering Estimate of all three revisions.

Attached are two copies of the Materials Report and two copies of Location Map for line change.

Mr. M. C. Zimmerman, District Engineer, Anchorage

August 9, 1957

F. E. Baxter, Supervising Highway Design Engineer, Juneau

Glem Highway, Section 81

Reference is made to our previous correspondence on this job and the fact that both our offices appear to have original tracings of as-bullt plans for a portion of the project.

Under separate cover I am sending you prints of sheets 26 through 57 of the so-called "as-builts" in our office. Although these are titled "As-Builts", I see no more reason to believe this title than to guess that yours are not the genuine tracings even though they do not carry the title.

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Please compare these prints against your tracings and make any necessary spot field check to help determine which of these sets is genuine and which should be tossed away.

FAT

ca: w/prints

FEBaxter:vr

610.3100,

STANDARD FORM NO. 64

Office Memorandum • United States Government

R. J. DeLaHunt, Chief, Design & Construction Div., Juneau

Attn: F. E. Baxter, Chief, Survey & Road Design DATE: May 27,

FROM : Alaska Road Commission, Anchorage

SUBJECT: Construction Drawings Glenn B-1

Under separate cover we are sending all construction drawings pertaining to subject project. We are also sending all uncompleted as-built drawings.

This was requested by Mr. Baxter by phone, May 25th.

No c.c. a thach (but have packing carbon! carbon!

Supply..

R/E Off..

M. C. Jimmerman District Engineer

STANDARD FORM NO. 64

610.3/0.81

# Office Memorandum UNITED STATES GOVERNMENT

R. J. DeLaHunt, Chief, Design & Construction Div., Juneau

: Attn: F. E. Baxter, Chief, Survey & Road Design DATE:

May 17.

FROM

TO

: Alaska Road Commission, Anchorage

SUBJECT: As-Built Plans Glenn B-1

Under separate cover we are sending 57 of 95 Plan & Profite sheets of as-built plans for Glenn B-1. As has been discussed, these plans incorporate the cadastral alignment and therefore there is some difference in stationing between the construction line and the cadalatroll. line. This requires an adjustment in the profile. It is felt that they are accurate in alignment and accurate enough in profile for most purposes. All available information has been included.

Please advise if the remaining 38 sheets should be held in) Advises suspense pending completion of the Glenn Highway cadastral survey. phone to send

Silkin memory

C.c. retained

FEB/5/31/55

M. CéZimmerman

District Engine er

610.3106

# DEPARTMENT OF THE INTERIOR ALASKA ROAD COMMISSION JUNEAU, ALASKA

ANUMORAGE DISTRICT

1955 WORK ORDER NO. 137

Route 310

Cleam Highway, Sec. B-1

For completion of as-built plans for this section.

DISTRICT DIRECT LABOR . . . . . None

Budgetary Activity - 2f

Appropriation Activity . F

General Ledger Account - 161

Asset Account - 156

Cost Schedule - A

AUTHORIZED: March 7, 1955

An. J. Niemi

Chief Pagincer

# DEPARTMENT OF THE INTERIOR ALASKA ROAD COMMISSION JUNIAU, ALASKA

ANCHORAGE LISTRICT

1953 WORK OFDER NO. 137

Rouse 320

Glorm Highway Section B-1.

For completion of as-built plans for Section P-1, Glenn Highway.

Budgetary Activity - 22

Appropriation Activity - C

General Ledger Account - 161

Asset Account - 156

Cost Schedule - A

AUTHORIZED: January 20, 1954

Wm. J. Niemi Chief Engineer

ce: 5 District

1 Comm. of Roads

1 Chief Engineer

1 Chief, Operations

3 Engineering

1 Program Officer

1 Contracts

1 Administration

A Finance

l Internal Audit

Reproduced at the National Archives and Records Administration-Pacific Alaska Region (Anchorage)

chorage)

Report
on
L.A. Abrasion Test of Quarry Rock
for
Alaska Road Commission - Juneau, Alaska

4 December 1953

DE Lab No. 9823 Field Identification. JRW/257/101P

Test Results				
Crushed Size of Rock  Max 1"	Location Mile Post 19 Glenn	Loss by Abrasion		
10 : <b>1</b>	300' left	20%		
В	500' left	18.6%		

NOTE: Sample consisted of two large rock from different distances out from Mile Post 49.0 Glenn Highway. These were crushed down to a 1" maximum after which the Abrasion Test was made AASHO T-96-49 grading A to obtain the above result.

WCG/cb

W. M. KNOPPE Chief, Testing Section



E. J. White, District Engineer, Anchorage

July 23, 1953

R. J. DeLeHunt, Acting Chief, Engineering Division, Headquerters

1941 Construction Profile - Clean Highway

In reference to your memorandum dated July 8, 1953, we are enclosing herewith two prints of the 1941 Construction Profile of Clenn Highway between present miles 52 to 78.

R. J. DeLaHunt octing Chief, Engineering Division

Enes.

EStortz:es

# Comm. of Rds. UNITED STATES GOVERNMENT Office Memorandum

: Headquarters, Alaska Road Commission, Juneau TO

DATE:

July 8, 1953

Chf. Eagr.. Admin. Oplas. Lingra. Acct.

> E. J. White, District Engineer, Anchorage 690 FROM

Glenn Highway 1941 Construction Profile -

SUBJECT:

Supply Pers.\_

Reference is made to the enclosed letter from Irvin P. Cool Chief Engineer, The Alaska Railroad, requesting two copies of the above subject profile of Glenn Highway.

Our files only include a profile from Chickaloon to approximately Glennallen of the 1941 prints, therefore, at your convenience please forward to this office two prints of the section as requested by Wr. Cook's letter.



# UNITED STATES DEPARTMENT OF THE INTERIOR

### THE ALASKA RAILROAD

ANCHORAGE, ALASKA July 3, 1953

Mr. E. J. White District Engineer Alaska Road Commission Anchorage, Alaska

Subj: 1941 Profile of Glenn Highway -Between Present Miles 52 to 78 Engr. Dept. File 007

Dear Mr. White:

In determining the locations of U.S.C.& G.S. Bench Marks and Triangulation Marks along the Glenn Highway with the aid of the original 1941 Location Map of the highway, it has developed that the location of some of the marks as given in the U.S.C.& G.S. descriptions are based on ends of cuts or ends of fills in the highway.

As an example, the description for triangulation station "MOOSE" reads, in part: "-about 200 feet east of the southwest end of a cut where the highway starts downgrade". These locations cannot be determined satisfactorily from the Location Map alone.

We therefore request two (2) prints of the original 1941 Location Profile from present Mile Posts 52 to 78, showing the adopted grade line. These limits are indicated on the 1941 profile as Miles 5 to 31.

This particular profile is required because the marks were set and descriptions were written in July, 1944, before line changes were made in the original (1942 and 1945) construction, and before black topping was done.

Very truly yours,

Irvin P. Cook Chief Engineer

# 13/19/- 8-

## DEPARTMENT OF THE INTERIOR ALASKA ROAD COMMISSION Juneau, Alaska

ANCHORAGE DISTRICT

1953 WORK ORDER NO. 1129

Routes 511, 310 and 811.1

Bridge Site Surveys

For bridge site surveys for Moose River Bridge, Sterling Highway; Moose Creek, Granite and Cascado Bridges, Glenn Highway and Pass Creek Bridge, Cantwell-Summit Road.

PROCRAMMED AMOUNT ..... \$3,000

District Direct Labor ..... \$500

Budgetary Activity - 3a

Appropriation Activity - A

General Ledger Account - 161

Asset Account - 156

Cost Schedule - A

AUTHORIZED: July 6, 1953

Wm. J. Wiemi Chief Engineer

ce: 5 District

- 1 Comm. of Roads
- 1 Chief Engineer
- 1 Chief, Operations
- 3 Engineering
- 1 Program Officer
- 1 Contracts
- l Administration
- 5 Accounts

## DEPARTMENT OF THE INTERIOR ALASKA ROAD COMMISSION Juneau, Alaska

AND THE TOP

Jupplement No. 1 1952 HOER ORDER NO. 137

Route 310

Glerm Highway, Section B-1

Increase to funds programmed under the original Work Order for construction by contract of Section B-1 of the Glenn Highway.

Change route number on original Work Order to read "310".

Purose	Proy, Authority	Time Cheese	Pres indiantin
W. O. #137 (Contract)	\$2,000	කෝණු කො	\$2,000
Supp. #1 (Increase)	2,000	<u>\$3,000</u> 3,000	3.000 5,000
en e	ORDER OF THE SECTION	W. O. #137	Supplement #1
PROGRAMMED AMOUNT		2,000	3,000
District Direct,		· • • • • • • • • • • • • • • • • • • •	etter entre tate
District Clearing		200	enn stab 685
Heedquarters Clearing.	*************	1,800	3,000
			•

Budgetary Activity - 2f

Funds Available - Appropriation

AUTHORIZED: Cetober 9. 1952

Wm. J. Niemi Chief Engineer

ce: 3 District

l Comm. of Roads

1 Chief Engineer

1 Chief, Operations

1 Office Engineer

1. Contracts

2 Engineering

1 Administration

5 Accounts

W. O. No. 137 - Supp. No. 1

Mr. E. J. White District Engineer Alaska Road Commission Anchorage, Alaska

Dear Mr. White:

It has been noted that on Glenn B-1 there are several dangerous curves not provided with guard rail. Other curves have been overgenerously protected using continuous rail along stretches of tangent between curves and at certain re-entrant curves where there is little danger of a driver crowding the shoulder or skidding over the bank. It is requested that a complete report on guard rail for both Glenn B-1 and B-2 be completed when time permits. The report should contain your recommendations for additional guard rail which should be supplied, giving mile posts and stationing. A recommendation as to type and estimated cost is requested.

No funds are available for additional guard rail at this time and the investigation should not be given priority over construction engineering for road contracts. It is anticipated that funds for this work will be requested and possibly made available for the 1952 season.

Very truly yours,

A. F. Chiglione Chief Engineer

OMT: daw



# UNITED STATES DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION

JUNEAU, ALASKA

September 2, 1949

31



Memorandum

To:

G. M. Tapley, Chief, Engineering Division

From:

T. I. Rivenes

Materials Engineer

Subject:

Comparative Cost Analysis between excavation and

backfill of silt areas and gravel overlay, on Glenn B-1.

The original estimate of the cost of excavation of the detrimental silt layers occuring on the above project was based upon the following figures.

## l. Areas involved:

2.

Sta.	289 + 00 to 311 + 50	2 2501
-		2,250'
11	270 + 00 to 275 + 00	500 <b>'</b>
:1	214 + 00 to 266 + 00	5,200'
	300' in 3 short areas	300 '
	75' in 1 short area	75 '
Sta.	402 + 00 to 412 + 00	1,0001
11	418 + 50 to 421 + 00	250'
11	464 + 50 to 471 + 00	6501
11	476 + 00 to 478 + 00	2001
!!	480 + 00 to 482 + 50	2501
11	488 + 00 to 493 + 00	500 <b>'</b>
11	586 + 00 to 590 + 00	400 <b>ι</b>
11	595 ≠ 00 to 599 <b>+</b> 00	400 1
11	600 + 50 to 629 + 00	2,8501
		14,825'
Width	n of excavation	321

The width of excavation was based upon average section in place, figured to average 4' wider at ditch bottom than the newly

3. Depth of excavation (average)

/ Som

designed section.

Backfill figured to equal excavation to 32' width, with 20% extra to care for compaction.

Overhaul figured on average haul based upon location of available borrow pits.

Calculations are as follows:

Excavation. -

 $\frac{14825 \times 32 \times 3}{27} = 52,711$  c.y.

Select Borrow Backfill:

52,711 + 20% = 65,000 c.y.

Overhaul. - c.y. mile:

1 mi. average per yd. 65,000 c.y. mile

Cost estimate based on bid prices is as follows:

Excavation. -

52,711 x 1.20 = \$ 63,253.00

Select Borrow:

 $65,000 \times 1.10 = 71,500.00$ 

Overhaul:

65,000 x 0.40 <u>26,000.00</u>

Total \$160,753.00

A comparative estimate of the cost for a uniform 3' overlay of select borrow on the existing roadway would be based upon the following figures:

1. Length of roadway 14,825'

2. Average width of overlay 3:1 37'

3. Depth of overlay 3

Average width of overlay includes 3' fill for 28' + shoulder borrow on a 3:1 slope to an average 3' depth for 9' total width in both shoulders.

Calculations are as follows:

Select Borrow  $14,825 \times 37 \times 3 = 60,947 + 20\% = 73,000 \text{ c.y.}$ 

27

Overhaul (on same basis as above) 73,000 c.y.

## Cost estimate based on bid prices. Select Borrow

 $73,000 \times 1.10$ \$80,300.00

Overhaul

 $73,000 \times 0.40$ 29,200.00

\$109,500.00

Therefore, there is an apparent difference in estimated costs of \$51,253.00, with the 3' overlay being the most economical. However, the important point to consider between the 2 sections is that the excavation and backfill section is drained, and the overlay section has to have an expensive drainage system constructed to assure comparable all-season stability. Increased pipe costs, and the huge yardage of excavation required to provide outlet ditches to the Matanuska River (400' to 2,500' in length), would certainly be considerably more than the difference that the above calculations show. Therefore, it can be assumed that positive stability has been assured in the areas that have been excavated and backfilled, and at a lower figure than an overlay plus necessary drainage would cost.

T. I. Rivenes

Materials Engineer

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