## UNITED STATES

DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION Nome, Alaska, Juneau, Alaska January 19, 1546

Annual Report of Work Accomplished, Nome, District, 1945.

To: Alaska Road Commission, Juneau, Alaska.

PRESENT ASSESSED NAME OF PARTY ASSESSED ASSESSED

## Route 8, Nome-Council.

Winter maintenance of first two miles to Beam Station by C.A.A. Final snow removal by A.R.C.

Snow Removal: Early, May 10, in cooperation with and by request of A.C.S., 16 miles. (D8 Caterpillar tractor and dozer contributed by A.C.S.).

Road washout at Peluk creek, Mile 1.5, necessitating a temporary bridge until culverts could be opened. Excessive glaciering in this area and at Hastings creek. Gravel fill with machine, to replace washed out material and for raising existing road grade at Peluk creek, 168 cu. yds.

Ferry: At Safety, in operation from June 1 to October 20.
At Bonanza, " " June 7 to October 26.

Gravel Haul: By machine, 1270 cu. yds.

By hand, 110 cu. yds. at approach to Bonanza ferry and on sandy spots for 1-1/4 miles west of ferry.

Maintenance: By motor grader, 97 miles, Mile 0 to 21.

Some freighting was done by miners between East Fork and Council, and maintenance work was done by those using the road at no cost to A.R.C.

End of season: Culverts cleaned and missing culvert markers replaced, also stakes along road for snow removal - Mile 1 to 12.

## Route 8D, Council-Ophir.

Inspection 8/17/45. Condition of road very poor and no arrangements had been made for maintenance. An attempt was made to remedy this condition by sending two dump trucks and one tractor with dozer on September 7. This equipment to be left there for future use.

Mile 1 & 2: Road widened, grade raised and surface graveled. Gravel haul: Machine (trap), 1200 cu. yds. Culverts, repaired, 1.

Installed, 3 - 20" by 15. (110 gal. steel drums used). Ditches: Cleaned and widened.

N.B. Equipment did not last as anticipated. Broke down and major repairs needed. Two rebuilt motors and one more dump truck to be delivered in time for maintenance operations in 1946. Five dredges expected to be working during the coming season.

20/18

## SUMMARY OF SUB-PROJECTS

## NOME DISTRICT

1946.

200

	1 740 •				•	
			Sled		Total	
•		Road.	Road.	Trails	Miles.	
_			***************************************	***************************************		
8	Nome-Council	65.0	18.5		83.5	
8D	Council-Ophir Creek	12.0			12.0	
8H	Casa de Paga	20.0		***	20.0	
8J	Shovel Creek Nome-Bessie Bessie-Snake River	5.0			5.0	
13A	Nome-Bessie	3.2			3.2	
13B	Bessie-Snake River	20.8			20.8	
13BA	Snake River-Monument	3.0			3.0	
13C	Nome-Bessie Bessie-Snake River Snake River-Monument Bessie-Sunset Creek	12.0			12.0	
13F	Nome-Osborne	10.2			10.2	
13K	Bessie-Buster	7.3			7.3	
18	Kaltag-Nome		m ~ ~ ~ ~	280.ŭ	280.0	
18A	Bonanza-Kotzebue			240.0	240.0	
18B	Golovin-Council			35.0	35.0	
18J	Spruce Creek	1.5			1.5	
21	Unalakleet-St. Michael			68.0	68.0	
25°C	Nome-Wireless	•2			.2	
25D	Mouth of Center Creek	2.8			2.8	
25DA	Little Creek Branch	2.2			2.2	
25E	Submarine-Paystreak	3.0			3.0	
26	Candle-Candle Creek	7.3.			7.3	
-/-	(Includes 26G; Candle Radio Road .3)		•			
26c	Candle-Kiwalik		18.0		18.0	
27	Deering-Inmachuk	25.0			25.0	
28A	Nome-Serpentine Hostprings			148.0	148.0	
41	Kiana-Klery Creek		6.0	6.0	12.0	
41A	Kotzebue-Shungnak			200.0	200.0	
41AA	Kotzebue-Selawik-Shungnak			131.0	13100	
41B	Kotzebue-Point Barrow			517.0	517.0	
41F	Kotzebue-Noatak			125.0	125.0	
42	St. Michael-Kotlik			63.0	63.0	
42A	Ungalik River		-7*0		7.0	
62	Dime Creek		9.0		9.0	
62A	Haycock-Bear Creek		22.0		22.0	
67	Nome-Teller			83.0	83.0	
67A	Teller-Cape Prince of Wales	" Made agric page and		67.0	67.0	
67B	Teller-Blue Stone	15.5	12.5		18.0	
67c	Teller-Pilgrim Hot Springs			48.0	48.0	
67D	Teller-American River			35.0	35.0	
67J	Tin City-Goodwin	5.0			5.0	

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## Summary of Sub-Projects, Nome District, 1945.

	·	Road.	Sled Road.	Trail.	Total Miles.
68	********* Flagging Trails				/
73	Marshall Road	4.0			~0
73A	Kotlik-Marshall			148.0	<b>山</b> 48.0
73B	Stuyahok	407 IND 405 WE 100	9.5		9.5
73C	Old Hamilton-Scammon Bay			89.0	89.0
89A	Seward Peninsula Tram Road	80.2			80.2
89AB	Bunker Hill-Kougarok	40.5			40.5
890	Iron Creek-American Creek		12.0		12.0
89D	Iron Creek Road		7.5		7.5
	Total:	345.7	112.0	2283.0	2740.7



# UNITED STATES DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION

JUNEAU, ALASKA

Nome, Alaska, February 28, 1947

Subject:

Annual Report of Operations, Nome, District, 1946.

To:

Alaska Road Commission, Juneau.

Alaska.

Route 8; Nome - Council.

Winter maintenance of first 2 miles to beam station by C.A.A. Final snow removal by Army.

Snow Removal started May 13 in cooperation with Army and A.C.S. Army equipment used exclusively mile 0 to 16. Total snow removal, 16 miles.

Read washout at Peluk Creek, necessitating temporary bridge. Thawed culverts, to offset this condition, but to no avail. Excessive glaciering in this area.

Ferries: Safety ferry operated from June 1 to October 24; and Bonanza ferry from June 15 to October 24.

Gravel Operations: Between mile 5.5 and 8 road width increased by 4 feet plus graveling surface. Gravel hauled, 2,890 cu. yds. Graded road at Sand Spit, mile 29.5 to 31, in vicinity Bonanza ferry. Gravel hauled, 1,170 cu. yds. Graded road between mile 18 and 26. Gravel hauled 1,945 cu. yds. Graded road in mile 16. Gravel hauled 300 cu. yds.

Widening Road: Road widened approximately 10 feet around Cape Nome, mile 12. Completed  $\frac{1}{2}$  mile. Material moved with dezers, 4,000 cu. yds., approximately.

Peluk Creek Bridge: Fill for approaches, with dozers, 1,800 cu. yds; with trucks, 240 cu. yds.

Timber Bridgo, new: Feluk Creek, mile 1.25; length 15 feet, width 16 geet.

Bridges repaired: Derby Creek, mile 6 and Lake Creek bridge between mile 32 and 33.

20/190

## Route 8; Nome - Council, continued.

Metal Culverts, new: Between mile 35 and 41, 4 - 15" X 20'; mile 13, 1 - 12" X 25'; mile 1.75, 1 - 48" X 24'; total 129 feet.

Metal Culverts Extended: Between mile 4 and 9, 47' of 12"; 131' of 15"; total 178 feet.

Storm Damage: Leavy rain periods, Aug. 8-9, 24-26. Washouts repaired mile 32 to 39; with dozers, 3,000 cu. yds., approximately; with trucks, 300 cu. yds., approximately.

Graded road with dozers: Big Hurrah Creek, 3 miles; Solomon River, above East Fork, 5 miles.

Storm periods, alond coast: Oct. 25-28; Nov. 15-16; damage repaired between Nome and mile 2.5. Sand and driftwood removed with dozer, 1.5 miles; washouts repaired with dozers, 500 cu. yds., approx. All culverts and small bridges, which were blocked with sand and driftwood, were opened. Small timber bridge, mile 1.75 near Healy cabin was destroyed. It was replaced with 48" X 24' metal culvert. Ferry cable at Safety pulled a deadman and dropped into channel. New deadman installed and cable recovered and replaced on towers. Safety ferry, which had been pulled out for the winter, floated off the ways, but grounded undamaged inside lagoon. It has been leveled up with blocking and will be recovered in the spring of 1947.

Maintenance, Road: Between mile 0 and 41; total 73 miles.

End of Season: All culverts and bridges checked and cleaned. Stakes replaced for future snow removal mile 1 to 12.

N.B. Considerable traffic between mile 0 and 20 by Army and A.C.S., also as far as mile 41 by mine operators, and others. No report of any freight hauled to Council, except which was done over winter trail.

## Route 8D; Council - Ophir.

General maintenance from July 19 to Sept. 20.

Grading read, mile 0 to 3; gravel hauled 1,112 cu. yds. Ditching, mile 0 to 3; 2,000 feet, 150 cu. yds. Sloping with dezer, 500 feet, 480 cu. yds. Maintenance, Road; Tractor and pull grader, mile 0 to 3, total 11 miles.

N.B. Equipment in poor condition; excessive repairs required.

Route 8H; Casa de Paga.

No work dene. Necessary to be done, as stated in 1944 report.

# 20/190

# UNITED STATES DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION

JUNEAU, ALASKA

Neme, Alaska, February 28, 1947

Alaska Road Commission, Juneau, Alaska.



Gentlemen:

Following is proposed work program for 1947.

Route 8. Maintenance Mile 0 to 45.

Surface and widen mile 1 to 5.5 and 8 to 13.

New bridge 40' long and 16' wide at Hastings Creek.

Relocation and construction of road at Hastings Creek
in cooperation with Army and Signal Corps to connect with new bridge.

Lenghtening existing culverts mile 1 to 4 and 9 tl 13 and
additional new culverts mile 1 to 13.

Surfacing where necessary mile 13 to 31.5.

Ditching where necessary mile 1 to 13. Install arch culverts
at Martin, Derby and Cunningham Creeks, plus relocations.
Route 8D. Maintenance and improvement in cooperation with miners.

Route 13A. Maintenance mile 0 to 3. Replace bridge at mile 1.5 with arch culvert (elephant hut material).

Route 13B. Maintenance mile 0 to 20.

Replace some old, and install additional culverts.

Ditching and surfacing where necessary.

Have had considerable trouble with four small bridges on this route. Would recommend replacement and relocation of road where necessary, or fill, to give more clearance. Four bridges average 10' long and 16' wide needed.

Route 13F. Maintenance mile 0 to 9. Replace bridge at mile 1 with arch culvert.

Maintenance mile 0 to 11. Ditching where necessary mile 0 to 6. Resurfacing and widening mile 5 to 7. Additional new culverts mile 0 to 3.

Route 26. Maintenance and improvement in cooperation with miners.

## **HARRINE**



ALASKA ROAD COMMISSION

Juneau

DATE Jan. 14, 1948 FILE NO.

Annual Report - 1947 - Nome District.

Route 8.

Snow Removal: April 8,9 and 17, in co-operation with C.A.A. from mile 0 to C.A.A. Transmitter site, total, 3 miles. May 20 to 26, opening road mile 2 to 16,; removing drifts, total, 16,000'. Road opened to traffic May 28.

Sanded and opened channel of bridges between mile 6 and 11.

Bridge at Peluk creek and 36" culvert at mile 1.75 worked satisfactorily

and did not wash out during spring break-up.

Widening road (improvement): mile 12 to 13 around Cape Nome bluff, average width widened 10t, road width now 20t average. Completed. Material moved with tractor and dozer, 2,100 c. y. Slides removed with dozer and 1 yd shovel, about 300 c.y.

Forries: Inspection trip April 17 to Safety to check on condition before sonding men and equipment to recover ferry. April 10 to 12 Safety ferry recovered and returned from its location 3 miles north of Sufety where it had been washed during the November 1946 storm. Also slight damage to ferry repaired. West tower repaired and new cable installed to replace old one that had broken loose and had snagged in lagoon and could not be salvaged. Safety ferry in operation from June 27 to Cetober 22. Bonanza ferry in operation June 27 to October 27. Bonanza ferry had been damaged by storm and was repaired prior to operating.

Gravel operations: Surfacing mile 12 to 13, 2,650 c.y. Spot graveling mile 2 to 12 and 13 to 16, 5000 c.y. Pea gravel and sod, mile 16 to 32, 2000 c.y. Matting placed on grade in vicinity of ferries; Safety, 400', Bonanza, 1,200'.

Ditching by hand, mile 33 to 34, 3,000', 112 c.y. Ditching with pull grader, mile 11.5 to 16, 23,000', 1,200 c.y. Culverts, new, metal: Between mile 1.5 and 3, 2-18", total 48.

Between mile 4 and 13, 2-30", total 46',

2-24" total 441,

2-18" total 421.

10-15", total 2101. 7-12".

total 160'. Between mile 33 & \$2, 10-12", total 160'.

total 44'.

2-24", Timber culverts installed 11 19 total 201.

Total metal culvert installed, 754'. Total wood culverts installed, 20'.

Timber bridge repaired: 1 unit, mile 10.5, Hastings creek.

Small timber bridges replaced: With 30" culverts and fill made with dozer,

mile 6, 1 unit; mile 8, 1 unit; fill with dozer, 180 c.y.

Maintenance: Tractor and pull grader, mile 12 to 20 and mile 32 to 42,

total, 18 miles. Motor graders mile 0 to 43, total, 151 miles.

Storm damage repairs: At request and in co-operation with C.A.A., so that water, oil and supplies could be transported to C. T. site, as winter trail was unusable, it was imperative that road be opened. Work started May 16 and continued until May 29, when road was made passable. Mile 0 to 1, within City limits had to be cleared of debris and re-surfaced, the City co-operating by furnishing E7 tractor and dozer and additional trucks, including operators.

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## ALASKA ROAD COMMISSION

Alaska Press Character DATE Jam. 14, 1947

Alaska Press Character DATE Jam. 14, 1947

Insant, Alaska File No.

Suspense—

Juneau

DISTRICT

REFERENCE Anraiel Report, continued.

A percentage of the cost of A.R.C. labor reimbursable by City. C.A.A. also co-operated by furnishing two dump trucks with drivers and a 12' motor grader, operator furnished by A.R.C.

Gravel hauled mile 0 to 2; A.R.C., 1,600 c.y.; C.A.A., 600 c.y.; City of Nome, mile 0 to 1, 300 c.y.; total 2,500 c.y.

Fill replaced between mile 1 and 2 with D8 dozer, 1,900 c.7.

Metal culverts installed for City (reimbursable); 1-12" X 26', 1-18" X 20', 1-13" X 22'; total. 68'.

Culverts installed for A.R.C., mile 2; 1-18" X 26', mile 3, 1-18" X 22', total 48' (included in new culvert item).

Deck replaced on Hastings creek bridge.

Washout at mile 16.5, length 1,500', fill with dezer, 2,500 c.y.

Debris cleaned off road between miles 18 and 32, spotted, totalling 2 miles.

Telephone line repaired between Solomon and Safety for convenience of ferry operators, reimbursable by Territory.

N.B. Due to shortage of equipment, repair and maintenance work was completed on all 13 routes before starting on route 8. This work was completed June 18 and crew moved to Hastings creek June 19. Road to Solomon was passable for heavy trucks, with front wheel drives, about August 4, and for lighter vehicles September 20, at which time repairs had been completed. A.R.C. 30 Caterpillar Tractor was left at mile 16.5 to \*\*\*\*
assist trucks in getting through this washed out area.

Misc.: Branch road to Silver's mine graded with dozer, 2 miles, approximately, and bridge built crossing Quigley's ditch, 20' long. Interested parties satisfied. Some hauling of oil had been done from Solomon to Council by mine operators. Trail reported fair as far as head of Fox river. No work done by A.R.C. from mile 43 to council.

End of season: Culverts checked and cleaned. Markers replaced at culverts and bridges, mile 1 to 13.

Route 8D. No work done by A.R.C. Repair work on road by local mine operators, using A.R.C. equipment.

Route 8H. No work done by A.R.C.. Road used by mine operators and evidently passable.

Route 13A. Snow removal, May 5, mile 0 to 3, drifting areas, total 1 mile. Culverts thawed at 1 mile (City air field).

Maintenance: Motor grader, total 34 miles.

Road widened at Satellite field, 150' in length, 85 c.y.

End of Edason: Culverts checked and markers replaced at culverts and bridges.

ALASKA ROAD COMMISSION

JAN SC 1018 DATE Jan. 14, 1948

Juneau

. DISTRICT

REFERENCE— Proposed 1948 Field Program - Nome District.

Route 8. General maintenance and improvement, mile 0 to 45.

Mile 3.5; raise grade of road twelve inches for distance of about 1,500. Grade tundra piled along this section, to eliminate in part, drifting snow.

Replace fill for 500. at east approach of Nome river bridge.

Paint Nome river bridge.

Replacement of bridge at Cunningham creek with arch culvert (Elephant hut material). Also relocation of same to eliminate dangerous curves and excessive drifting snow.

Relocation and new 40' bridge at Hastings creek; install as proposed in 1947 program.

Install new culverts mile 11 to 13 and 32 to 43, where needed. Ditching where needed mile 11 to 12 and 32 to 43. Check mile posts and replace where needed. Extension of road from mouth of East Fork, mile 45, to council.

Route 8D. Maintenance in co-operation with miners. Bridge over Ophir creek to be built (Territorial allotment of \$1,500).

Route 13A. General maintenance mile 0 to 3. #Replace bridge at Mile 2.5, Bourbon creek, with arch culvert (Elephant hut material).

Route 13B. General maintenance mile 0 to 20.

Spring break-up repair: gravel, ditching and culverts where needed.

Improvement: Replacement and relocation of 4 small bridges, as proposed in 1947 program. However, only to be done if additional equipment will be available for a second crew.

- Route 13F. General maintenance mile 0 to 9.

  Spring break-up repair: ditching and culverts where needed.
- Route 13K.

  General maintenance mile 0 to 11.

  Side hill ditching mile 5 to 7 as soon as Army is out of Area.

  Spring break-up repair: ditching and gravel where necessary.

  Gravel surfacing mile 5 to 7.5, only if equipment is available

Route 26. Maintenance and improvement in cooperation with miners.

Route 27. Ceneral maintenance and improvement mile 0 to 25. Completion of 3,000 of relocated road (mile 0 to 1) using old wagon road location. Bridge over Smith creek, much longer span than anticipated due to soft creek bottom.

#### ALASKA ROAD COMMISSION.

Juneau

DATE Jan. 14, 1943 FILE NO.

SUSPENSE

REFERENCE Additional information reference 1948 work program.

Route 8. Extension of road from mouth of East fork, mile 45 to Council, mile 55.

In view of the fact that there were no storms this fall the road from Nome to Solomon should be in fair shape for next season except for general maintenance. This should enable us to spend enough time on this extension to make it passable for the freighting which the mining operators in Council intend doing. According to reports received this section is in fair condition up to the corduroy crossing the flats into Council and which is impassable. A survey early in the season should give us the answer as to what can be done.

If the proposed progrem is satisfactory, Route S allotment should be enough to cover this extra work. However, an additional \$10,000 might be necessary to take care of the cost of establishing a base camp and for transportation of heavy equipment to site, as Solomon ferry is inadequate.

Route 13. On the assumption that no new equipment will be available it is proposed that the same as used in 1947 be followed in putting the 13 routes in shape first and then concentrating on route 8 with the equipment on hand, which is enough for only one crew.

# See Proposed 1948 Field Program. The reason these items were not completed during 1947 was that the R. R. crew quit as soon as they arrived in town and we were forced to use the trestle crew and what men were left of route 8 maintenance crew for rehabilitation of the tram from Nome to Little Creek, which was our primary consideration.

John D. Hudert,

Superintendent.

# INTEROFFICE CORRESPONDENCE ALASKA ROAD COMMISSION

DATE January 14, 1949 FILE NO. SUSPENSE-

. Juneau . . . . DISTRICT

1245

REFERENCE - Annual Report - 1949 - Nome District:

Route 8 Nome - Council - Mile 0 to 77

General Maintenance and Improvement.

Snow Removal: May 12 to 19th, Mile 0 to 13, plus two miles to Alaska
Communication System receiver station in cooperation with
ACS and CAA. Total snow removal 15 miles. Sanded ice and
snow of bridges mile 4 to 11.

Maintenance Road: With motor graders mile 0 to 17. Total for season 87 miles.

With tractor and pull grader mile 33 to 72. Total for season 86 miles.

With tractor and maintainer mile 17 to 22. Total for season 5 miles.

Ditching:

With tractor and pull grader as follows:
Mile 1 to 13, total ditching 10 miles 1955 c.y.
Mile 36 to 41, total ditching 3 miles 550 c.y.
Mile 41 to 45, total ditching 4 miles 770 c.y.
Mile 50 to 53, total ditching 3 miles 1560 c.y.
Combined totals 20 3840 c.y.

With motor grader:
Mile 11 to 13, total ditching 12 miles 300 c.y.

Fill (Relocations): With tractor and dozer. Mile 8, 2060 c.y.

Mile 37, 2160 с.у. Mile 37, 340 с.у. Mile 42, 600 с.у. Mile 43, 2600 с.у. Mile 44, 5500 с.у. Mile 44, 5500 с.у.

Mile 45, 925 c.y.
Total 14,530 c.y.

Removing Dirt Slide: Mile 12, Cape Nome Bluff, with tractor and dozer 350 c.y.

Metal Culverts, New: Mile 3, 3 - 12" x 20' - 60' Mile 52, 1 - 12" x 20' - 20' Mile 12, 2 - 12" x 20' - 40' Mile 37, 1 - 12" x 20' - 20' Mile 41, 2 - 12" x 18' - 36'

# INTEROFFICE CORRESPONDENCE ALASKA ROAD COMMISSION

FILE NO.

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eference Annual Report (Cont'd.)

#### Metal Culverts, New continued Mile 42, 1 - 12" x 20 ' 201 Mile 43, 1 - 12" x 18' 18' Mile 43, 1 - 12" x 20' 201 Mile 44, 1 - 12" x 20' 201 Mile 44, 2 - 12" x 18' 361 Mile 71, 1 - 12" x 18' Mile 72, 1 -12" x 18' 181 181 Total Units 17, Total 3261

## Metal Culverts:

-1555 ONE

San San April

47.03

Mile 42, 2 - 15" x 18' - 36' Mile 72, 1 - 24" x 18! - 18! Mile 44, 2 - 15" x 201 -401 Mile 71, 1 - 15" x 18' - 18' Total Units 5, Total 941 Total Units 1 18. Mile 42, 1 - 18" x 22' - 22' Mile 37, 1 - 48" x 30° - 301 Mile 37, 1 - 18" x 26' - 26" Mile 38, 1 - 48" x 22 - 221 Mile 43, 1 - 18" x 24: - 24: Mile 72, 1 -  $48" \times 18$ - 18' Mile 44, 1 - 18" x 6' - 6' Mile 44, 2 - 18" x 20' - 40' Total Units 6 Total 118: Total Units 3 Total 701

Total No. of units 32, Total L.F. 626

Metal Culverts, repaired:

Mile 34 - 2 units

Mile 41 - 1 unit

M le 43 - 3 units

Mile 45 - 1 unit

Total 7 units

Ferries: Solomon - June 13 to October 21.
Safety - " 20 to " 21.

Timber Bridges, repaired: Hastings Creek, Mile 11, deck replaced 28. Solomon River, Mile 41, east approach 40.

Timber Bridges, replaced: Mile 8, Cunningham Creek 26' Bridge, with Arch Culvert (Elephant Hut), Length 40', width 10', height 6'.

# INTEROFFICE CORRESPONDENCE ALASKA ROAD COMMISSION

DATE
FILE NO.
SUSPENSE

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REFERENCE Annual Report 1949 (Cont'd)

Surfacing: Mile 12 to 17, Gravel Hauled, 1650 c.y.

Mile 34 to 41, Gravel Hauled, 2355 c.y.

Mile 41 to 45, Gravel Hauled, 5931 c.y.

Mile 12 Gravel Hauled, 780 c.y.

Mile 3 and 4, Gravel Hauled, 1005 c.y.

Mile 45 Gravel Hauled, 690 c.y.

Total 12,311 c.y.

Read Repair: Gravel fill, Mile 71 to 72, gravel hauled 5555 c.y.

Spot Grading: Mile 17 to 27, Dirt Hauled, 195c.y.

New Mile Posts: Placed mile 0 to 17.

End of Season: Markers checked and replaced at bridges and culverts, culverts cleaned and checked.

Miscellaneous: April 15, three quonsets moved to mouth of East Fork, Mile 48, for maintenance camp.

Heavy equipment moved by barge from Nome to Solomon on July 19th and returned to Nome by barge October 6th.

Facilities maintained in field for minor repairs to equipment. Camp prepared at Mile 48, July 16 to 19. Temporary tent camp at Mile 71.7 in September.

N.B. Mileage checked from end of gravel placed this season to Council, 4 miles, making a total of 77 miles from Nome to Council. (Gravel extends across flats from Council end 1 mile, leaving three more miles to build).

Route 8D: Council - Ophir, road passable, No work done by ARC or miners.

Route 8H: Casa-de-Paga:

Maintenance Road: Tractor and pull grader, Mile O to 7, Total 7 miles. Improvements: Mile 3, total 3/4 mile. Side hill construction with dozer, 7,000 c.y.

Route 13A Nome - Bessie:

General Maintenance and improvements. Mile 0 to 4.7.

Winter maintenance: Road kept open as far as city airfield in cooperation with local flyers.

Snow Removal: May 16th to 18th. Mile 0 to 4.7 in cooperation with USSR Mining Company. Total 4.7 miles (3)

# UNITED STATES DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION

JUNEAU, ALASKA Nome District

December 22, 1949

IPT AFG CMT

Col. N

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

Subject: Proposed 1950 Field Program. (Nome District)

Dear Mr. Taylor:

### Maintenance Program

## Route 8: Nome-Council and Branches

General maintenance between mile 0 and 72 inclusive. Includes spring snow removal mile 0 to 15 in cooperation with A.C.S., C.A.A. and Nome sea wall contractor and mile 35 to 45 in cooperation with Solomon miners; grading with motor graders between mile 0 and 19 and between mile 35 and 45, with tractor and maintainer between mile 19 and 35; cleaning of ditches and culverts; repair of culverts and ditches; cleaning and painting of Nome River Bridge, mile 4; resurfacing where needed between mile 0 and 14 in cooperation with Nome sea wall contractor.

Additional work may have to be done at Hastings Creek, mile  $10\frac{1}{2}$ , to eliminate hazards caused by glaciering which tend to hinder the operations of the sea wall contractor. Included in this work would be the replacement of two small bridges with larger structures (timber) with connecting fill of  $10^{1}$  maximum. As this work would have to be done mainly for the benefit of the contractor, it is anticipated that it will be done with the active cooperation of the contractor and possibly on an improvement basis.

It is anticipated that maintenance will have to be done between mile 45 and 73 and will be done by maintenance crew operating periodically out of Solomon or East Fork camp. This will eliminate using any portion of the crew working on the Council end.

Extensive repairs will have to be made to the east approach of the Solomon River Bridge, mile 43, to make it safe for heavy traffic.

Further work will be required at mile  $17\frac{1}{2}$ , to raise fill about 1' higher and to place rock on the lagoon side in order to protect it from going out with every small storm. Any extensive operation would be prohibitive and, even if done, it is doubtful if it would hold during a severe fall storm.

Due to the excessive wet weather of last season, several soft and middy areas were noticeable. It is planned to stabilize this condition by the placing of pea gravel obtained locally. Areas in question are between mile 19 and 34.

Maintenance will also include the removal of slides at Cape Nome Bluff, mile 14, and the placing of mile posts and necessary traffic signs.

## Route 8D: Council-Ophir Creek (12 miles)

General maintenance in cooperation with miners. To be done when Council end of Route 8 is completed.

## Route 8H: Casa De Paga

General maintenance from mile 0 to 7 in cooperation with miners. Includes spring snow removal, repair of washouts and grading with tractor and pull grader.

## Route 13A: Nome-Bessie (4.5 miles) General maintenance only.

## Route 13B: Bessie-Snake River (20.5 miles)

General maintenance includes: spring snow removal to Mile 19 in cooperation with U.S.S.R.&M. Co., repair of spring washouts, gravel resurfacing where needed, repair and replacement of culverts, brush clearing, cleaning of ditches, repair of small bridges, surface maintenance with motor graders, mile posts to be checked and placed.

#### Route 13C: Bessie-Sunset

General maintenance mile 0 to 6.6 includes: spring snow removal to enable access to Snake River Bridge for purpose of blasting ice jams occuring during spring breakup, repair and replacement of culverts, ditching, clearing brush, repair of washouts, gravel resurfacing where needed, construction of dyke at mile 1 to control glaciering from Anvil Creek; surface maintenance with motor graders.

#### Route 13F: Bessie-Osborne

General maintenance includes: spring snow removal in cooperation with U.S.S.R.&M. Co. for their ditch operations, ditching, repair and replacement of culverts, brush clearing, repair of spring washouts, repair of small bridges, resurfacing where needed, surface maintenance with motor graders.

## Route 13K: Bessie-Buster and Branch (11 miles)

General maintenance includes: spring snow removal in cooperation with ditch operations of U.S.S.R.&M. Co., repair of washouts, repair and replacement of culverts, small bridge repairs, cleaning of ditches, brush clearing, setting of mile posts and traffic signs, surface maintenance with motor graders.

#### Route 13M: Nome Depot

Routine maintenance only.

Route 25C: Nome Wireless ( 1/4 mile)

General maintenance includes: spring snow removal in cooperation with A.C.S., spring breakup repairs, surface grading with motor grader.

Route 25D: Mouth of Center Creek (2 3/4 miles)
Little Creek Branch (2.0 ")

Winter maintenance by A.R.C. forces, as it will be used as access road from Nome to new Nome Depot at  $S_a$ tellite Field area, includes: snow removal using DS tractor and dozer and rotary plow borrowed from C.A.A., placing of snow markers on north east side of road. Further study to be made of snow conditions to determine the necessity of snow fences.

General maintenance includes: ditching, surface grading with motor graders.

Route 25L: Nome City Field

General maintenance includes: spot gravelling of holes and surface grading with motor graders.

Route 26: Candle-Candle Creek

General maintenance in cooperation with miners. Work performed by Havenstrite Mining Company with funds forthcoming directly from the Territorial Highway Engineers office at Juneau.

Route 27: Deering-Inmachuk (25 miles)

General maintenance includes: spring snow removal in cooperation with miners, repair of small bridges, repair and replacement of culverts, repair of washouts, ditching, brush clearing, gravel resurfacing which is badly needed in several areas and surface grading with truck and pull grader.

Considerable use is being made of this road to mile 21 by local miners and the need of adequate maintenance is immediate. Previously, very little has been accomplished due to local labor conditions, especially the lack of proper supervision and the lack of enough good equipment. It is recommended that a foreman be sent from Nome headquarters to supervise and do the work using local labor.

The equipment at Deering comprised of Ford Dump Truck, A.R.C. No.688, model BB, Ser. No. 5233955 and Chevrolet Dump Truck, A.R.C. No.717, Model QB, Ser. No. 6QB065572 is in very poor shape and very inadequate to cope with the necessary work to be done. In addition all loading of trucks is done by hand. As far as can be ascertained no suitable equipment is available for rent, so it is further recommended that Chevrolet Dump Truck (A.R.C. No.1416, Ser. No.21YR05-0519, condition fair) now in Candle and not being used be transferred to Deering. To facilitate loading of trucks using gravel trap with tractor and dozer it might be advisable to transfer the D6 Caterpillar tractor w/dozer, A.R.C. No.730, from Nome.

With proper supervision and equipment it is estimated that the road could be put in first class condition in six weeks to two months time, or with the funds allotted for the purpose.

## Route 67B: Teller-Bluestone (15 miles)

General maintenance includes: spring snow removal in cooperation with miners, cleaning and repair of culverts and ditches, repair of washouts, resurfacing where needed and surface grading with truck and pull grader.

Conditions existing at Deering are pretty much the same at Teller and it is recommended that the foreman, after completion of the work at Deering, be transferred to Teller to supervise operations in like manner over a period of 2 months.

Mile 14 and 15 have never been completed and never will be under the present set up of only one truck and hand loading. It might be advisable to send another dump truck, preferably Chevrolet dump, A.R.C. No.1414, and the 40 Caterpillar tractor w/dozer, A.R.C. No.699, to Teller in order to complete the necessary work on mile 14 and 15. No additional dump trucks are available for rent and it is impossible to rent a tractor at our convenience.

Route 68:- Flagging trails. Approximately 200 miles.

## Route 89A: Seward Peninsula Tram

General maintenance mile 0 to  $80\frac{\pi}{4}$  includes: soring snow removal between mile 0 and 30 in cooperation with U.S.S.R.&M. Company for supplying the needs of their ditch camps and with local miners for earlier operation of their mining endeavors, repair and raising of track, renewal of ties, cleaning and repair of culverts and ditches, brush clearing along right of way especially on curves to give better sight distance, burning of grass on tracks, dyke protection at mile 21, 22 and 27; continuation of channel work for protection of bridge at Sherrette Creek, mile  $56\frac{1}{2}$ ; painting of Nome River Bridge (mile 14) and Sherrette Creek Bridge (mile  $56\frac{1}{2}$ ) and repair of crew cars at begining of season.

#### Route 89AB: Bunker Hill-Kougarok and Branches

General maintenance mile 0 to 40.75 includes: snow removal in spring, repair of washouts, resurfacing where needed mile 0 to 18, cleaning and repair of culverts and ditches, repair to bridges, maintenance of ferry at Bunker-Hill, raising gradeand lengthening ramp at ferry landing, continuation of surfacing mile 18 to 40.75 and continuation of the repair and painting of buildings at Quartz Creek camp.

## Reconstruction and Improvement of Existing Roads

### Route 8: Nome-Council

1. Relocation and construction of road to C.A.A. Transmitter Site.

In cooperation with C.A.A. for winter hauling of fuel and water
from Nome to Transmitter Site and maintenance of their proposed transmission line. This involves approximately 2½ miles of new road extending
from north end of Stedman Avenue thence north east to Transmitter Site.

mission line. This involves approximately  $2\frac{1}{2}$  miles of new road extending from north end of Stedman Avenue thence north east to Transmitter Site. Cooperation was requested in a letter from Joseph E. Walsh, Nome Station Manager, as of March 10, 1949 (copy herewith), but was held in abeyance because of previous program commitments.

A survey has been completed and as soon as information is plotted it will be forwarded to the Juneau office for consideration. The proposed road is in keeping with the future plans of the Nome District for construction in the event that the existing road mile 0 to 3 is washed out beyond repair from the Bering Sea storms. This road could be constructed as far as the Transmitter Site and then extended to the Nome River Bridge, mile 4, as planned and when the need arises.

2. Hastings Creek, Mile 101, Improvement.

Involves relocation and replacement of either one forty foot bridge or two twenty foot bridges, of timber construction, with a connecting fill of 10', length approximately 1000'. Additional information has been obtained by survey crew and will be available as soon as plotted. If constructed this would eliminate the problems of glaciering, excessive snow removal and fall flood conditions that hinder early spring maintenance and also the operations of the Nome sea wall contractor.

In discussion with Mr. Gerard, supervisor for the contractor, and in as much as it is to their advantage active cooperation has been promised to complete the project.

3. Mile 17½

Raising of fill about 2' for 2000' and possible rip rapping - especially on lagcon side to eliminate washout and erosion from small storms that occur during the summer months. The cost of adequate protection from the severe storms usually experienced during the fall would be prohibitive, but is is recommended that the above work be done to eliminate the necessity of replacing of fill every time a small storm; occurs as was experienced during the past season.

#### Route 13A:- Nome-Bessie

In cooperation with Nome water supply vendors and bush pilots using Nome City Field, it is recommended that grade of road from mile 0.4 to 1.0 be raised 2' to eliminate some of the excessive snow removal encountered by Nome City forces and water supply vendors during winter maintenance.

This also involves replacement of 20' bridge at Dry Creek, mile 0.5, to correspond to new elevation of road. This is advisable for during glaciering years present bridge is not adequate to take spring run off and is also a traffic hazard due to it's narrow width.

#### Route 13F: Bessie-Osborne

Replacement of bridge at Dry Creek, mile 1.0, which is in very poor condition and inadequate because of extreme glaciering conditions that exist. A 16' timber bridge would be sufficient with increased 2' elevation and the extension and raising of fill approaches involving length of about 500'.

Considerable use is made of this road by the public and an effort should be made to improve it. During spring break up and rainy seasons the road is almost impassable because of mud. To improve conditions it would be necessary to resurface about 4 miles between mile 0 and 5.7, and to improve drainage conditions by ditching and the placement of new culverts.

#### Route 13K: Bessie-Buster

One of the most used roads in the District and in need of improvement for the first four miles. Several relocations are necessary to eliminate bad curves, road width increased to 20', ditching and new culverts required, extension of existing culverts and resurfacing. It is also recommended to eliminate timber bridge at Joe's Gulch, mile 4.0, replacing with culverts and fill and to flatten curve at this point which is definitely too sharp and is a decided hazard.

#### Route 13M: New Nome Depot

Completion of new depot at Satellite Field area involves: grading of tailings to limits of property, grading of area for use as material yard, construction of all loading platform using salvage material, replacement of railroad siding to a more advantageous spot and construction of an additional siding for flat car and crew car storage, setting up of building using a 24 x 60 Quonset at end of main siding for R.R. equipment storage, setting up of surplus building for use as blacksmith shop, exterior painting of all permanent buildings upon completion of all repair; installation of water pumping station and fire mains with proper precautions for winter use, installation of water lines for summer water supply connecting up with main line of Moonlight water supply, installation of gas and oil storage tanks plus setting up of surplus building for pump house

It is anticipated to start the above program, except for placing water mains, about the first of May and should be completed about the first of June, so as not to interfere with the summer work season.

## Nome Local Roads: Location Surveys

It is recommended that surveys of local roads be continued so that an accurate map can be made of the road system in the Nome District. Besides giving control of the area information compiled would be invaluable for future planning in regards to improvement and extensions.

It is recommended, especially, that Route 3 location survey be continued to Council so that relocations could be planned and laid out ahead of time; thus eliminating the possibility of unnecessary work and ensuring relocations of a more permanent nature.

Nome-Council Road: Extension to Council, completion of line changes started last season and any further improvements that can be made.

Extension and completion of Council road mile 73.9 to mile 77.0. Completion of line changes started last season mile 46.7 to 48.7, mile 54 to 55.6, mile 57.4 to 58.8 and mile 69.5 to 71.0.

It is anticipated that further relocations can be made between these points to eliminate excessive fording of the East Fork and Fox Rivers and, in part, excessive snow conditions that exist in these areas.

Yours truly,

John D. Hudert

District Engineer

## Francia as of Parch 1. 1990

## MOST DISTRICT

## Sonosa 1950

Subproject		November 1	7.C. 19M	11014	
<b>3</b>	Jano-Jamall & Grandes, Gaintenance	33,750		16,000	
8	Jone-Council & Branches, Reconstruction	70,000		33,000	
134	Some Sepot	25,000		7,000	
19, 25	Hase focal Roads	31,000		15,000	
27	Boring-Insachd	20,000		8,000	
677B	Tollor-Sluestone	10,250		5,500	
68	Trails	2,000		1,200	
394	Severd Fonincula Tres	36,000		19,000	2
89 AB	Dunber H111 - Kongarck	32,000		17,000 8	
	Total	250,000	93,300035,000	\$121,700	

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# UNITED STATES DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION
JUNEAU, ALASKA

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## Progress as of March 1. 1950

## NUMB DISTRICT

## Sesson 1950

Subproject Number	- Neme	Frogress	<u>1.3.</u> <u>12M</u>	<u>Mold</u>	
8	Nome-Council & Branches, Maintenance	33,750		16,000	
8	Nome-Council & Branches, Reconstruction	70,000		33,000	
13 M	Name Depot	15,000		7,000	
13, 25	None Local Roads	31,000		15,000	
27	Decring-Invachal:	20,000		8,000	
67B	Teller-Blusstone	10,250		5,500	00
68	Trails	2,000		1,200	- L
89A	Severd Peninsula Tram	36,000		19,000	<i>j</i>
89 AB	Bunker Hill - Kougarok	32,000		17,000	
	Total	250,000	\$93,300 \$35,000	\$121,700	

# UNITED STATES DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION

JUNEAU, ALASKA Nome District

January 16, 1950

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

Subject: Annual Report - Year 1949

Dear Mr. Taylor:

## General Maintenance

## Route 8: Nome-Council

During the winter of 1943-49, the depth of snow was considerably more than in previous years, with strong prevailing north east winds causing excessive drifting, which necessitated much more snow removal than in previous years. According to U.S. Weather Bureau statistics the total snow fall for the year was 280.6" and the amount of snow on the ground in March was a maximum of 74". This would be considered a record as compared to the maximum on the ground in March 1932 of 47".

The work season started with snow removal, mile 0 to 16.5 including two miles of side road to A.C.S. installation on May 16 and concluded on June 3. Total snow removal in the area was 18.5 miles. Equipment used in this operation were two D8 Caterpillar tractors W/L dozers, the use of one donated by A.C.S.

During the period of the spring break up when snow is soft and wet it is impossible for A.C.S. and C.A.A. to use their snow going equipment as a means of transportation to their respective receiver sites of Cape Nome Bluff. The lack of transportation facilities could cause serious complications in an emergency such as a break down of generator or receiving equipment, injury to personnel or possible shortage of food and fuel if break up is prolonged; so in respect to the public welfare and in cooperation with the agencies involved early opening of this road is considered justified.

Continued cold weather during the spring break up hindered operations due to slow frost reactions. Numerous soft areas occured and in order to maintain traffic considerable gravel had to be hauled and placed between mile 1 and 13. The longest stretch gravel was mile 11 to 13, a total of two miles.

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Drainage conditions were improved by the cleaning of ditches, extension of culverts and the placement of additional culverts. At mile 2, culverts were cleared of glacier ice using steam.

Small slides between mile 13 and 15 were removed after the spring break up, which operation was repeated on several occasions during the season. Caused by almost continuous rainy weather.

Due to continuous heavy hauling mamerous sand spots occured in the road grade between mile 18 and 24 on the spit. These areas were stabilized by covering with a layer of clay obtained from the only source at mile 15 and then covered with a light layer of pea gravel obtained locally. Continuous rain aggravated this condition as well as causing mud areas between mile 24 and 29. In most cases this mud condition was eliminated by placing 3" or 4" of pea gravel as a stabilizing agent. After these operations were performed, the surface was then graded with a D6 tractor and maintainer.

Maintenance work was interrupted by the storm of August tenth which did considerable damage to the road at mile  $17\frac{1}{2}$ , washing out about  $1000^{\circ}$ . Road was replaced in seven days, during which time traffic was maintained by using the beach, aided by a D6 Cateroillar tractor. At this point about  $100^{\circ}$  of beach separates the water line from the road. In fact the road is now part of the beach. In making repairs just enough fill was placed to maintain traffic, but a raise in grade of about 2' is planned for next season to eliminate, at least, washouts during slight storms.

Minor repairs were made to section of road from mile 35 to 48, which were adequate to keep road in fair shape for most of the season. More extensive repairs were made by the crew that had been working on the Council end on their return to Nome at the end of the season. Inspection after this was done showed a decided improvement and should put the road in good shape for next season.

Routine maintenance of road surface was done often enough with motor graders to assure a satisfactory condition and despite the continuous wet weather.

Condition of road between mile  $18\frac{1}{2}$  and 34 was decidedly rough until repairs were made and surface graded with tractor and maintainer. During latter part of season condition of road was good enough for all kinds of traffic including passenger cars.

Ferry service was resumed at Safety, mile 21, on June 21st and at Solomon on June 20th. Old ferry was used at Solomon until June 28, at which time it was replaced by converted Army steel barge. Conversion of this steel barge entailed considerable work such as: cleaning inside and outside, repair of leaks, removal of obstacles on deck and the placing of timber decking, rails, ramps and hoist and cables for ramps.

Ferries were in constant service all season, except for minor difficulties, and use of these facilities which was much more than previous years was greatly appreciated both by the public and mining operators. Service discontinued as of November 2, 1949.

For the benefit and safety of the public, 360' of guard rail construction was completed on the Nome River Bridge mile 4. Guard rails were attached to bridge by welding brackets on girders, using 2" x 8" timber as rails.

## Snow Removal: Total 18.5 miles

Maintenance Road: With motor grader - Total 108 miles
With tractor & pull grader- Total 62 miles
With tractor & maintainer - Total 24 miles

## Repair of Road Surfacing:

Gravel hauled, mile 1 to 13 - 3439 c.y.

" " " 33 to 47 - 1308 c.y.

Clay " " 18½ to 23 - 569 c.y.

Pea Gravel " " 18½ to 25 - 562 c.y.

Storm damage, clay & rock " " 17½ - 750 c.y.

## Metal Culverts - New Installed:

Mile 8 - 1-15"x20'

" 9 - 1-15"x20'

" 10 - 1-15"x20'

" 10.8- 1-12"x20'

" 10.9- 2-12"x20'

" 11.1- 1-15"x20'

" 11.5- 1-24"x20'

" 13 - 1-15"x20'

## Metal Culverts - Extended

Total Units - 6 Total L.F. - 36

## Route 8: Nome-Council (Mile 47 to 77)

#### Construction and Improvement

As soon as weather would permit crew was established at East Fork camp at mile 47, on July 5, and operated out of this camp until July 21.

Snow removal was started on July 11, at mile 55, and was completed to mile 59 by July 19. Drifted areas that were removed totaled about 8000', ranging in depth from 2' to 15'. It was necessary to open the road as quickly as possible so that base of operations could be transferred to mile 71 where the most important phase of the work was. This move was made on July 21 and a tent camp for 18 men established, using the location and tent frames of the previous season.

Unfortunately, umusual high water during the spring break up had washed away most of the tent frames and skids. All, except one, were recovered down stream intact and returned to location

Work was continued on closing the gap between mile 72.0 and Council mile 77. Cold, wet weather retarded frost action. Consequently road bed never did dry up which made slow going. This delayed frost action together with the excessive wet weather encountered during most of the season hindered operations exceedingly and progress made was slow and tedious.

Because of above conditions the fill placed to mile 72 last season would not hold up under constant traffic and resurfacing was done continually using gravel from Fox River. Borrow pits at mile 71.5 and 72.0 which were composed of schist and clay could not be used because of the wet weather. This necessitated using gravel from Fox River, in the vicinity of mile 71. Gravel was obtained from river bars and had to be stock piled with TD-18 tractor w/dozer to make material available for 15B shovel and trucks.

The flats extending from Fox River to Council is nothing but four miles of seemingly bottomless swamp that is almost impassable during the summer months and especially so when a wet season is encountered.

The old road across the flats was originally corduroyed with old RR ties, topped with a layer of gravel and proved adequate until heavy freighting equipment caused breaks and uneven settlement. A great portion of this old road was intact, although settled out of sight, and was about the only place where we could get a refusal. Therefore this location is being followed and enough gravel placed to get through on maintaining an average width of about 14. Gravel turnouts were maintained where practicable, but timber ramps were used later to save time and material. Up to August 30, the road was complete as far as mile 73.5

On August 30, work was suspended because of lack of funds. Trucks and some personnel were returned to Nome as per instructions, but camp was still maintained pending further Juneau action. Public opinion was aroused, especially the Council miners, and because of this and the justification of carrying on the project work was resumed on September 5th.

The shut down was costly because of loss of about the only good weather we had. However, it is doubtful if it would have affected the outcome, for as work resumed so did the bad weather and after a decided struggle and realizing that it would be impossible to close the gap of even 1.2 miles to Bear Creek, on September 16, crew reversed operations and started working back toward Nome. As it stands the road across the Council flats is completed as far as mile 73.9, leaving 3.1 miles to get to Council.

Despite the fact that considerable work has to be done between mile 73.9 and 47, it was also imperative and about time anyway to be moving back before being caught by snow and freezing which usually occurs around the 1st of October.

Drainage conditions were improved by ditching both by hand and pull grader and the installment of new metal culverts.

Extensive repairs were made to existing locations and road grades. The following relocations were opened up, and although not complete as to

drainage and surfacing, are passable. Work was done with L dozers and graded with a pull grader, involved side hill construction in most instances, and material encountered seemed to be very good: Relocations mile 46.7 to mile 48.7 total of two miles; mile 54.0 to 55.6, total 1.6 miles; mile 57.4 to 58.8, total 1.4 miles and mile 69.5 to 71.0, total 1.5 miles.

Starting in August freight was hauled from Solomon to mile 71.5 where it was stored for freighting after the freeze up or early spring. Evidence of some freighting being done to Council after freeze up was visible on inspection trip October 6.

Freighting from Solomon continued until October 11, after which travel would have been impossible with trucks due to over flow and glaciering in Fox River.

Season's work on the Solomon-Scuncil end terminated on September 30th.

Snow Removal: Total 8000'

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Gravel Hauled and Placed, involving 1.9 mile extension of road and resurfacing of 1.0 mile: 10,550 c.y.

## Metal Culverts Installed, New:

		1-13"x18"-20"	Mile 59 - 1-13"x13"-20'
11	46 -	1-13"x18"-20'	" 71 - 3-18"x20'
Ħ	56 -	1-15"x18'	" 73 - 1-36"x22"
11	57 -	1-13"x18"-13'	" 73.5 - 1-13"x18"-20'
11	58 -	3-13"x18"-201	" 73.7 - 1-36"x24"

Total Units 14 Total length 282'

Relocations: Mile 46.7 to 48.7 - Total 2.0 mile.

Cut with dozer 6450 c.y. - Fill with dozer 3300 c.y.

Mile 54.0 to 55.6 - Total 1.6 miles. Cut with dozers - 14,200 c.y.

Mile 57.4 to 58.8 - Total 1.4 miles Cut with dozers - 3200 c.y.

Mile 69.5 to 71.0 Cut. with dozers - 12,800 c.y.

## Notes of Interest:

Communications were maintained by radio and were for the most part successful. A 25 KW portable set, battery operated, was used with call letters KVZH-2 using a frequency of 5195.

Freight service was maintained between Nome and camps with fuel with as the main commodity. An average of 2 trips weekly was the schedule, using a G.M.C.  $6 \times 6$  flat bed.

Considerable improvement work had been done by the Nome sea wall contractor prior to his hauling of rock to Nome from Quarry at mile 13½ (Cape Nome Bluff). Numerous turnouts were added facilitating passing of trucks; bridge reinforced at Golden Gate Creek, mile 12½, fill placed between and to elevation of decks of bridges at Hastings Creek and surfacing where needed. Hauling of rock started about the first part of November and has been almost continuous up to Jamuary 1, 1950.

Except for slight settlement road bed is in good shape and as yet no bad effects are noticeable on Nome River Bridge.

## Route & Survey: Mome-Solomon

On August 1, 1949, the Nome-Solomon survey, Route 3, was at a point two miles from the begining of the project and was completed on August 27, 1949; tying into the previous survey made from Nome to the Nome River bridge during the month of June 1949.

The project started with Station 0/00.00 at a point just North of Penny Creek (about six miles North of Solomon) and ended at Station 1815/89.5 at the Nome River bridge, a total length of 34.392 miles, including distances over rivers to be spanned by bridges.

The previous survey from Nome to the Nome River bridge was 4.186 miles, making a total survey length between Nome and Solomon of 38.578 miles.

The route 8 project in general followed a course approximately five miles North of the coast line, and was entirely in open country, thereby permitting a rapid completion of the project since there were no obstacles of terrain to retard progress such as are usually encountered in broken and wooded country. Brush was encountered in a few spots, and especially in the vicinity of rivers and creeks; however, it caused no noticeable delay as the dozer-tractor was utilized for clearing sufficiently to run the survey line through.

The ground throughout is tundra with frost encountered at depths varying from one foot to several feet and the soil varried from a soft, swamp-like material to a firm gravel, and in a few instances was composed of broken shale in pieces up to two feet in diameter. Almost throughout the project gravel could be found under the tundra. There are, of course, many places where the ground is soft, and will require 100% fill. All creeks and rivers have gravel bottoms.

The party of eight, including a tractor operator and cook, were housed in two wannigans. One serving as a kitchen and sleeping two men while the other served as sleeping quarters for six men.

Sufficient stove oil, fuel oil, lubricants, laths (used for stakes), hubs and other supplies were taken with the survey party and carried on a go-devil sled. Canned foods, sugar, flour and other foodstuffs were carried on a rack built on top of the kitchen wannigan. Fresh meat and vegetables

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were supplied weekly by having them dropped from an airplane; an arrangement that served very satisfactorily. Radio communication was maintained-daily-weather and atmospheric conditions permitting between Road Commission head-quarters in Nome and the camps.

Route 8: Nome-Council (Location Survey - Existing Roads)

On Tuesday June 7, 1949 a traverse of the existing road was begun starting at the intersection of Front and Steadman streets in the city of Nome. This survey was completed as far as mile 10 when the party was required for other work, i.e. the location of the new Nome depot at Moonlight Springs and the Golovin-White Mountain and Solomon-Nome surveys. The party returned to the Route 8 Survey on Monday August 28, 1949 and continued the survey to station 2165/85.2. This station coincides with Station 0/00 of the Solomon Nome survey.

The party operated out of Nome until mile 28 was reached and from that time until termination of the survey were based at the Solomon road house at mile 35.

The existing road was found to be in fair condition as far as mile  $17\frac{1}{2}$  where the center of the road is only 100' from the beach line and scarcely 10' above mean high water level. Wave action during storms has washed this section out several times. From  $17\frac{1}{2}$  mile to mile 35 at Solomon the road is on sandy soil and very soft in wet weather. From mile 35 to mile 40 where the survey was terminated the road was in fair condition.

Bench marks were established and angle points referenced for the purpose of possible future relocation.

The survey was terminated and the party disbanded on September 26, 1949, upon the temporary transfer to the Fairbanks district of Wilson, Templeton and Boucher.

#### Route 8D: Council-Ophir

Road was passable although no maintenance work was done by A.R.C. forces or by miners.

## Route 8H: Casa-de-Paga

Road surface maintained by tractor and pull grader, mile 0 to 7, making a total of 7 miles. No further work was necessary, as road remained passable during season, for the little use that was made of it by miners.

## Route 13A: Nome-Bessie

Snow removal was started on May 16 and completed May 21, from mile 0 to 4.5, making a total of 4.5 miles. Serious drifting areas are encountered on this route caused by large buildings located on the east side of road.

Additional work was done at Bourbon Creek, mile 2, completing grade over 6' arch culvert placed last season; gravel hauled and placed totaled 260 c.y.



# UNITED STATES DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION
JUNEAU, ALASKA

Nome District

December 22, 1950

Mr. A. F. Chiglione Chief Engineer Alaska Road Commission Juneau, Alaska

Subject: Proposed 1951 Field Program (Nome District).

Dear Mr. Ghiglione:

## Route 8: Nome-Council and Branches

General maintenance between mile 0 and 77 inclusive. Includes spring snow removal mile 0 to 15 in cooperation and conjunction with ACS and CAA and between mile 35 and 45 in cooperation with Solomon miners. Maintenance with motor graders between mile 0 and 19 and between mile 34 and 45; with tractor and maintainer from mile 19 to 34; with tractor and pull grader between mile 45 and 77; cleaning and repair of culverte and ditches; spot gravelling or resurfacing where needed between mile 0 and 45.

Due to sea wall operations the painting of the Nome River bridge could not be done. Now that the sea wall is complete it is planned to complete the operation this season.

If funds and time will allow it is planned to improve the location of road at Hastings Creek, mile  $10\frac{1}{2}$ . Considerable damage is caused at this location by flood condition during the spring break up because of the excessive glaciering that occurs. Fall Bering Sea storms also cause considerable damage by washing out fill. On occasion when the road was out these conditions have interfered with the operations of CAA and AGS at Cape Nome.

It is anticipated that maintenance of road from mile 0 to 60 will be performed by maintenance crew operating out of Nome and when occasion demands from Solomon and East Fork camp. What little maintenance is necessary from mile 60 to 77 can be performed by reconstruction crew operating out of camp at mile 62.

Fall storms of 1950 from the Bering Sea have caused considerable damage at various points between mile 17 and 34. It is anticipated to repair this damage during the course of general maintenance operations.

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Removal of slides at Cape Nome Bluff between mile 14 and 15 is anticipated and will be done.

For the protection of the travelling public warning signs will be placed at all danger spots and mile posts from mile 17 to 77 will be placed if funds and time will allow.

At end of season culverts and bridges will be checked and markers replaced where necessary, this also includes the placing of snow markers for spring snow removal.

Branches 8D Council-Ophir Creek (12 miles). Route 8H Casa De Paga 7 miles and Hurrah Greek 3 miles will be maintained, and includes grading with dozer and maintenance with tractor and pull grader. Snow removal in spring is held to a minimum. This work is done in cooperation with the local miners.

## Route 13A: Nome-Bessie (4.5 miles)

General maintenance: to include maintenance with motor graders, cleaning of culverts, brush cutting along road, placing of mile posts and directional signs.

Additional work is anticipated, if funds will allow, to raise grade of road where needed in view of using this road for access road to Depot. The purpose will be to eliminate excessive snow removal during winter maintenance operations. Drifting conditions will be under observation this winter for the placing of snow fences, if decided feasible for control, at end of work season. It is anticipated that dredge operation will have progressed far enough for the replacement of the road at mile 3, which replacement will be accomplished by the U.S.S.R.& M. Company.

Included in winter maintenance will be the placing of snow markers at intervals on edge of road as well as at all bridges. Keeping this road open through the winter will also be in cooperation with the bush pilots as it gives access to the city air field.

## Route 13B: Bessie-Snake River (20.5 miles)

General maintenance includes: spring snow removal to mile 19 in cooperation with U.S.S.R.& M. Company, repair of spring washouts, gravel resurfacing where needed, repair and replacement of culverts, brush clearing, cleaning of ditches, road maintenance with motor graders and the placing of mile posts, warning and directional signs. At end of season culverts and bridges checked and snow markers replaced where needed, for spring snow removal.

#### Route 130: Bessie-Sunset

General maintenance (6.6 miles) includes spring snow removal to give access to Snake River bridge for purpose of blasting ice jams occuring during spring break up, repair and replacement of culverts, ditching, clearing brush, repair of washouts, gravel resurfacing from mile 1 to 5 (if time and funds will allow), surface maintenance with motor graders, placing of mile posts and directional signs.

At end of season replacing of snow markers where needed and checking culverts.

## Route 13K: Bessie-Buster and Branch (11 miles)

General maintenance includes: spring snow removal in cooperation with U.S.S.R.& M. Company, repair of washouts, repair and cleaning of culverts, brush clearing, replacement of 2 timber bridges as repairs would not be sufficient. Locations are 16' bridge at Dry Creek, at mile 1.0 and 20' bridge at Joe's Gulch, mile 4.5, which will also include relocation to eliminate dangerous curve condition requiring 100' of fill approaches.

Necessary maintenance with motor graders will be done during season to assure a smooth road surface. At end of season culverts will be checked and snow markers replaced where necessary for following spring snow removal.

## Route 13M: Nome Depot

All improvements and maintenance to be included in the regular program allotment.

It is anticipated to make the following improvements, starting about May 1, and finishing prior to or on June 1: Construction of storm shed on north end of equipment storage cowan #6; concrete platform for 30' KD building to be moved in from old Hospital Area and to be used for gasoline, diesel dispensing and lub oil and grease storage; completion of Round House, using 2-16'x36' Quensets connected, for storage of RR locomotive and speeders; moving and setting up cold storage facilities, using complete unit to be acquired from Army Air Force Base. (Negotiations are in progress and it is anticipated that authorization will be received prior to May 1, 1951).

As authorized by Col. John R. Noyes, it is anticipated to set up a water supply in shop building for fire protection and the installation of about 6 flood lights (using salvage material), strategically placed, for protection of the Nome Depot area; continuance and completion of exterior of building for protection against weather conditions and to improve appearances.

Present storage facilities for storage of gasoline and fuel oil is very inadequate and it is anticipated to improve this condition as soon as the necessary storage tanks can be obtained from Pt. Spencer.

Included in general maintenance items will be the necessary winter maintenance, minor repairs and up keep of all buildings and utilities and the provision of a watchman's services.

## Route 250: Nome Wireless (1/4 mile)

General maintenance includes: spring snow removal, spring break up repairs and surface grading with motor grader. All work is done in cooperation with ACS.

## Route 25D: Center Creek Road and Branches

General maintenance includes: surface maintenance with motor graders, cleaning of culverts and bridge, cleaning of ditches and the regrading of slopes adjacent to road to eliminate some of the drifting snow conditions. It is not known at this time what the intentions of CAA and Air Force are in regards to keeping this road open during the winter months next season as an access road to their tank farm at Satellite Field, and no provisions are being made at this time.

As 13A - Nome Bessie road is to be used as the access road to the Home Depot, it is possible for the route to be used by CAA and Air Force to have access to their tank farm, through the cooperation of ARC in extending their operations from the Depot to the tank farm area. Distance is somewhat longer but does not exceed 1 mile.

## Route 25L: Nome City Field

It has been the policy of the Road Commission in cooperation with local bush pilots and air transportation companies to cooperate with them in maintaining the city air field. In agreement and at the request of the Asuonautics Board of Alaska, emergency work to keep the field open is done by ARC on a reimbursement basis. As requested all work of this nature will be compiled and forwarded to ARC Headquarters, Juneau, Alaska on or before May 1 of each year. This will also pertain to other air fields when this condition arises.

## Route 26: Candle-Candle Creek

General maintenance in cooperation with miners. Work performed by Havenstrite Mining Company with funds forthcoming directly from the Territorial Highway Engineer at Juneau. To aid in this maintenance, ARC has provided one 1 ton dump truck and a 10' pull grader.

## Route 27: Deering-Inmachuk (25 miles)

It is not anticipated to start this project before or until July 2, at which time it is possible to work on the road. It is planned to continue on with the work started last season of resurfacing the road in it's entirety. Enough equipment is available now and with supervision provided from Home Headquarters it should be possible to complete the project as planned.

General maintenance will also be carried on and includes surface grading and ditching with tractor and pull grader, cleaning and repairing bridges and culverts, clearing brush along right of way, repair of washouts caused by spring break up. Snow removal should not be necessary.

## Route 67B: Teller-Bluestone

It is planned to continue the work of surfacing with gravel mile 14 and 15. Enough equipment is now available and with supervision provided from Nome Headquarters this project should be completed.

General maintenance will also be carried on and includes: spring snow removal, repair of washouts caused during spring break up, Cleaning and repair of culverts and bridges, maintenance of road and ditching with

tractor and pull grader and spot gravelling where needed.

## Route 68: Plagging trails

The amount of trails staked amounts to 200 miles approximately. This is considered a public service and is in cooperation with residents of outlying areas and villages and in their hunting and fishing endeavors.

## Route 89A: Seward Peninsula R.R. (801 miles)

General maintenance only: includes spring snow removal (minimum) between mile 0 and 30 in cooperation with local miners and the U.S.S.R.& M. Company in supplying the needs of their mining camps and ditch camps respectively, repair and raising of track, renewal of ties, repair and cleaning of ditches and culverts, brush clearing along right of way, burning of grass on tracks using weed burner mounted on flat car. It is also planned to paint the three steel bridges located at Nome River - mile 14, Iron Creek - mile 52½, Sherrette Creek - mile 567.

## Route 89AB: Bunker Hill-Kougarok (40-3/4 miles) and Branches (34 miles approximate)

General main enance includes: repair of equipment prior to work season, snow removal only where necessary in spring, cleaning and repair of culverts and ditches, maintenance of ferry at Kusitrine River, Bunker Hill, spot gravelling where needed between mile 0 and 18 and on branch reads, repair of washouts, repair and painting of North Fork bridge, painting of Kougarok River bridge, placing of additional good gravel for surfacing between mile 18 and 36. If time and funds will allow, after gravelling operations are completed, much needed repairs and painting will be done on camp buildings designated as permanent.

## Route 8: Nome-Council (Reconstruction & Improvement)

Based on program allotment recommendations and in view of type work involved, crew will be about 1/2 of that used last season, consisting of 1 foreman and 9 men.

Work of relocation will be continued, consentrating in the Fox River area, between mile 60 and 71. The main purpose of relocation is to give a more permanent road bed and at the same time eliminate the fording of Fox River as much as possible. If this work is completed in time and funds are available, this operation will be continued in the East Fork area between mile 48 and 60.

Section from mile 57 to 77 will be maintained periodically by reconstruction crew and charged against Route 8 Maintenance.

## Route 89AB: Bunker Hill-Taylor (Reconstruction & Improvement)

It is planned to use maintenance crew as soon as possible in the beginning of the season, concentrating efforts between mile 36 and 40-3/4, grading and placing fill for subgrade and gravel surfacing. This is a continuation of the work of last season and will be carried to completion. This work, in conjunction with maintenance operations before and after, should put this road in good shape all the way through and passable for all types of vehicles between Bunker Hill and Taylor.

## Route 8: Nome-Solomon (New Construction)

If approved, work on this project would start as soon as practicable in the spring. Tentative plan, subject to approval, would be to set up camp facilities for about 80 men. To utilize equipment to the fullest extent besides eliminating the purchase of an excessive amount of equipment, it is suggested that two 8 hour shifts of 40 men each be given consideration.

Work will include completion of survey work for construction, construction of tote-road, used later as part of the new road, as access road to construction camp; placement of all drainage structures, such as culverts and small timber bridges, and placement of subgrade as far as possible. If funds will allow the construction of at least one major bridge should be considered, preferably over the Flambeau River.

Above planning is general and detail planning will be necessary before start of project.

Following are the recommended dates for seasonal operations on the warious projects:

Route 8 Maintenance - Between May 15, and October 31, 1951.

- 8 Reconstruction July 2 to September 30, 1951.
- \* 13s & 25s, Maintenance Between May 15 and October 13, 1951.
- 27 Deering July 2 to September 23, 1951.
- 67B Teller Between July 1 and October 1, 1951.
- \* 89A Tram July 11 to October 1, 1951
- 89AB Kougarok, Maintenance Between May 14 and October 1, 1951.
- " 89AB " , Reconstruction Between June 1 and August 1, 1951.
- \* 68 Flagging Trails Between Movember 1 and December 31, 1951.

Route 8 Nome-Solomon Construction - May 1 to November 1, 1951.

Yours truly,

J.D. Hudert District Engineer



#### UNITED STATES DEPARTMENT OF THE INTERIOR



ALASKA ROAD COMMISSION JUNEAU, ALASKA Nome District

February 8, 1951

Mr. A. F. Ghiglione Chief Engineer Alaska Road Commission Juneau, Alaska

Subject: Annual Report - Year 1950

Dear Mr. Ghiglione:

The following is the annual report applicable to the Nome District for the year 1950:

General Maintenance - Mile 0 to 46

#### Route 8: Nome-Council

Heavy snow fall and drifting snow during the month of January called a halt to the operations of Manson & Osberg, Nome sea wall contractor. This involved the road from Nome, mile 0, to their quarry site at mile 14. An attempt was made by the contractor to reopen the road using D8 tractors without success, due not only to the amount of snow, but also to recurring strong winds that caused drifting almost as soon as snow was removed.

Upon request by Mr. Gerard, contractor's representative, and the people of Nome the Juneau Headquarters authorized Nome District to cooperate in snow removal operations during the month of February, which however was not feasible or practical due to recurring blizzards. After the 9th of April weather conditions changed for the better giving rise to the hope of an early spring. This was short lived for cold weather set in again about the 29th retarding the thaw. The sea wall contractor took advantage of the good weather and started snow removal on the 10th and completed the operation to mile 13 by the 21st. This was done with contractor's forces only, with the understanding that any future snow removal would be done by ARC forces.

In cooperation with ACS and CAA to open transportation facilities to their respective receiver sites, ARC forces started snow removal operations on the 27th of April continuing at mile 13 where the contractor left off. Considerable glacier ice was encountered on the road between mile  $13\frac{1}{2}$  and  $14\frac{1}{2}$  and was partly removed by blasting with dynamite. Snow removal operations were concluded by May 5 with a total of 4 miles completed.

Road was closed to the public, except in emergency, because of the soft condition and repairs being carried on by the contractor.

Actually the spring run off did not occur until May 15 and did not reach serious proportions due to cold weather at night. In cooperation with contractor several small culverts were thawed by ARC forces. No serious washouts occured except at Hastings Creek mile 11, due to stream glaciering in this area, but was soon checked and repaired by contractor's forces with little loss of time.

Contractor limited his operations to spot gravelling the road between mile 1 and  $13\frac{1}{2}$ . Beach gravel was used for this purpose and was the only material available as all other borrow pits were still frozen. This material worked out satisfactorily mixing with the existing mud and gravel and drying to a reasonably good surface. By May 9 the sea wall contractor started hauling light loads of rock from quarry to Nome.

Condition of road was still soft due to frost and necessitated almost constant repair by contractor's forces. It was also necessary to maintain the surface constantly with a motor grader. In view of the contractor performing so much of the maintenance they were allowed the use of an ARC Caterpillar #10 motor grader, No. 718, assuming full responsibility for it's operation. By the end of May road was sufficiently dry to allow the hauling of capacity loads. For hauling rock contractor used 10 ton Ford V8 with tandem drive. Average gross weight of vehicle and load amounted to about 45,000# or  $22\frac{1}{2}$  ton.

Steel bridge - mile 4, over Nome River, stood up well under the pounding. However, all precautions were taken and a 10 mile speed limit placed on the bridge. To protect the public and the contractor no fishing was allowed from the bridge during truck travel. By the end of May travel was opened as far as Safety mile 21, to the public with the request that extreme caution be used especially during the operations of the contractor.

During the month of June small mud slides occured at Cape Nome Bluff between mile  $13\frac{1}{2}$  and  $14\frac{1}{2}$  and were removed with an Adams #512 motor grader. Thawing action causes this condition each spring and has never been serious enough to close the road off entirely. Eventually a natural slope will be formed from this continuous action.

General maintenance was continued with the cleaning of culverts and ditches between mile  $13\frac{1}{2}$  and 15 and maintenance of road with motor graders between mile  $13\frac{1}{2}$  and 18. Maintenance beyond this point to mile 34 on the spit is not feasible with motor graders due to sod and sand conditions.

On June 16th, as soon as danger from ice at Safety was past, both Safety and Solomon ferries were placed in operation and continued throughout the season with interrupted service only during several Bering Sea storms. Use of ferries was more than normal and this can be explained

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as follows: The 30th Engineer Base Topographic Battalion, Corp of Engineers, under the able command of Major Slater, set up a base camp of 150 men at mile 39 at Solomon for survey operations in the Solomon and Council areas. Material, provisions, equipment and personnel were transported from Nome and involved about a 12 day operation besides continued servicing during the season until completion September 15th. In cooperation, 24 hour ferry service was maintained, ARC personnel being augmented by Army personnel for the additional hours of operation. Mining operations and ARC operations, both maintenance and reconstruction, also contributed their share. Number of vehicles using the ferries during the season amounted to 867 and persons 2763.

Ferry service was maintained in spite of ice and storm conditions until all freighting of material and supplies delivered to Nome on the last Alaska Steamship boat of the season had been accomplished to Solomon. Solomon ferry terminated on October 28 and Safety ferry on October 31, two days later, due to ice conditions and extremely low water.

During the month of July continuous dry warm weather and unusual heavy traffic caused disintegration of the travelled way between Safety ferry and the Solomon ferry, so badly that it was almost impassable for even 4x4 vehicles. In some cases a new route was started parallel to the existing one, but after several days this was also in bad shape so that at present there are several routes on the spit. Immediate repairs could not be undertaken due to the lack of the Quickway, pneumatic tired shovel, which had broken down at an earlier date necessitating repair parts from Seattle. This delayed maintenance repairs which did not start until the end of July.

yd. A Northwest 1/2/shovel was borrowed from the Army with the understanding that it would not be moved from the vicinity of the Base and consequently could only be used on Nome Locals, Routes 13 and 25.

In explanation, the section of road on the spit between ferries, mile 21 and 34 is very difficult to improve or retain. The reason is the lack of suitable material for stabilizing or covering the sand condition that prevails. Suitable material can only be obtained from borrow clay pit at mile 15 or borrow gravel pit at mile 36 or 38. Either way involves a long haul and the use of the ferries which is a very slow and costly operation. Seasonally, sections have been stabilized with clay or gravel only to be washed out by Bering Sea storms in the fall so that it is very evident that anything that is accomplished is of a temporary or seasonal nature.

As stated maintenance repairs were started at the end of July and continued until September 10 at which time work was concluded in order to keep within the project allotment. Maintenance included raising of fill at mile  $17\frac{1}{2}$  to eliminate small Bering Sea storms from washing out the road. Heavy rock and clay was hauled from borrow pit at mile 15 for base course and then surfaced with a light layer of pea

gravel obtained in the vicinity. Upon completion sand was then dozed up from the beach to the surface edge of the road, on an even slope so that high water and waves would roll over it without washing it out. This was just a follow through of the natural action that was taking place for the sea was forming a natural beach up and over the road. Area involved 2000! \( \frac{1}{2} \).

Foreman Mel Jolliffe and crew of 8 men were responsible for maintenance work accomplished and by end of August a decided improvement had been made between mile 17 and 34, especially noticeable between mile 21 and 34 which had been in such bad shape. Holes were filled with clay and sod, gravel was hauled from borrow pit at mile 36 to cover the worst sand areas and pea gravel obtained along the road was placed in the muddy areas to stabilize this condition. Grade was maintained with tractor and maintainer on several occasions between mile 17 and 34 and helped the riding surface considerably. Resurfacing operations were carried as far as mile 38, using gravel from borrow pits at mile 36 and 38.

While operating in the vicinity of Solomon, maintenance crew boarded at Pete Curran's Road House, mile 35, which was not only conveniently located but also eliminated the trouble and expense of setting up another camp.

A 1000' relocation was made at mile 36 to eliminate an old bridge and dangerous curves. Cut and fill was made with tractor and dozer amounting to 2000 c.y.  $\neq$  and the installation of a 36"x30' culvert.

A severe ice storm occuring during the month of January had knocked down a good portion of the telephone line between Safety and Solomon ferries. Lack of this service was a distinct handicap in the operation of the ferries and replacement was a necessity, consequently work of putting the line back into service was undertaken by the maintenance crew and completed before the end of August. Twice, wire had been strung across the Safety channel but tension was too great and it would not support it's own weight. Not enough of the special steel wire used originally could be salvaged to make the crossing so we had to be satisfied with the service starting on the east side of Safety. Considerable work was involved in this operation for it meant setting poles, salvaging of wire and insulators from unused line between Safety and mile 15 and the replacing of the wire on the poles.

Moving of crew back to Nome that was to have been completed by September 10 was delayed by the occurence of a Bering Sea storm on September 9 and 10, which prohibited the use of the ferries especially at Safety. The storm was also accompanied by heavy rain and caused several washouts between mile 36 and 39. While waiting for ferry service to resume, crew made the necessary repairs to enable the continuation of travel.

As usual about 600! of road had been partly washed out at mile 172 and repairs were necessary for continued use, before equipment returned to Nome. Rock and clay was hauled from pit at mile 15.

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In the course of operations during the month of September surface was maintained from mile 0 to 18 on two occasions with motor graders, from mile 18 to 34 on two occasions, with tractor and maintainer and from mile 34 to 42 on one occasion, with tractor and pull grader.

In cooperation with local miners, branch roads were graded with tractor and dozer - Big Hurrah Creek, 3 miles and Casa De Paga, 8 miles. This was the only maintenance necessary as mining operations in these areas were at a minimum and use was only occasional.

Storm damage occurring during the end of September was repaired by tractor and dozer enroute to construction job at the Council end.

Another storm period extending from October 13 to 21 delayed the unloading of the Alaska Steamship Square Sinnet, which made it necessary to maintain ferry service longer than anticipated or deemed safe. This storm caused some damage at east approach of Nome River bridge mile 4, at Hastings Creek mile 11 and at mile  $17\frac{1}{2}$ . The contractor assumed the responsibility and repaired the damage at mile 4 and 11.

Considerable damage had been done at mile  $17\frac{1}{3}$  with almost the entire length of 2000' partly washed out badly enough to close road. It was necessary to repair this damage and to make the road at least passable to permit the hauling of freight from the last boat at Nome to Solomon.

This was not the last of the Bering Sea storms for another hit and lasted from November 6 to 10. Slight damage occured at mile 4 and 11 and repairs were made by the sea wall contractor in order to continue his operations. According to reports from reliable sources both ferries at Safety and Solomon were safe, slight damage was caused at several points between mile 21 and 34 and as expected entire 2000' of road at mile  $17\frac{1}{2}$  was badly washed out and will have to be replaced during next seasons operations.

The Nome sea wall stood up well under the pounding of heavy seas during these storms and certainly eliminated any damage to water front property. Wall was completed by November 30.

At end of season, between mile 1 and 15, culverts were cleaned and staked, bridges and drifting areas staked in preparation for snow removal next season.

#### Work Accomplished:

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Snow Removal - Total 5 miles

Metal culverts installed, Mile 36 - 1-36"x30'

" 13 - 1-15"x22'

Maintenance with motor grader - Total 40½ miles

" " tractor/maintainer - Total 74 miles

" " /pull grader- " 14 miles

" " /dozer - " 11 miles
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Cut and fill w/dozers - 4320 c.y.
Clay and rock, hauled and placed - 1025 c.y.
Sod hauled - 300 c.y.
Gravel hauled - 8016 c.y.

Bridge repairs - minor. Mile 11, timber bridge 201.

#### Route 8: Nome-Council

250

Reconstruction and Improvement - Mile 46 to 76.5

Operations started on this project with the transportation of

heavy equipment to construction camp site at mile 71. Enroute, necessary repairs were made between mile 35 and 46 to washouts occurring during the spring break up.

Temporarily, a small crew stayed at maintenance camp at East Fork, mile 47.5, until repairs were completed to Bucyrus 15B shovel and glacier ice in East Fork had melted enough for crew and equipment to proceed to mile 71. In the interim, a relocation mile 46.5 to 47.5, a continuation and improvement of the relocation done last season as far as mile 48.7 was completed. The reason for this additional relocation was to detour around the excessive drifting and glaciering that prevails at the mouth of East Fork.

Cut and fill was made with tractor and dozer for the most part and gravel surfacing placed with carryall and with shovel and truck, on completion of shovel repair. No culverts had been installed last season on new relocations and this was done at this time. On completion of relocation crew continued to 71 mile camp, repairing washouts and surfacing with tractor w/carryall as they went along.

By the 19th of July, camp mile 71 was established and operations began immediately on continuation of the road across the Council flats, mile 73.9 to 76.5, distance of 2.6 miles (estimated distance had been 3.1 miles). Several slight washouts had to be repaired, but otherwise road from mile 71 to 73.9 was in good shape. Maintenance of road was completed between mile 46 and 71 with tractor and carryall and pull grader to facilitate the hauling of freight for ARC camp and operations.

In prospecting for better borrow, Foreman Crosby was fortunate in locating one at mile 71 just south of the construction camp. Material consisted mostly of shale easily broken up and dozed. Later dynamite was used to break up the rock for easier handling. It made splendid fill and despite long haul road was soon completed as far as Bear Creek mile 75. As material from borrow pit, mile 71, was very course it was used for subgrade only and surfaced later with gravel from Bear Creek. In exceptionally bad areas beyond Bear Creek course material from 71 was used, but when fair going was encountered creek gravel was used entirely.

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Weather remained perfect for most of season, being dry and warm and was a factor decidedly in our favor.

In most cases the existing corduroy was followed except from mile 74.5 to 74.9 where it was so badly torn up that very little was intact and area was extremely wet and soft. Road was shifted on an average of 50', east and parallel, sacrificing alighnment for better ground for it was important to get the road through regardless.

Bear Creek had been reached by August 16 and equipment then moved, after all bad fills had been made, for a shorter haul.

During the course of construction corduroy, using spruce and cottonwood, was placed in areas where existing corduroy had broken through and was instrumental in cutting down the amount of gravel for fill. In most cases ditching was kept to a minimum as it was not practical to disturb the tundra, which might cause thawing action and settlement. Therefore, it was done by hand when necessary to drain away from fills. Metal culverts of varying dimensions were all installed to improve drainage conditions.

Bridge over slough, mile 76, was rebuilt. It was of timber construction 12' wide and 24' long. Slough was deepened 3' by blasting out of point 300' east of bridge. This lowered water 3' at bridge and also drained a considerable area in the vicinity.

Enough gravel had been placed by September 21 to enable freight to be hauled all the way to the bank of the Niukluk River and actually was hauled at this time by Feter Curran Jr. for the Council miners. Shovel was moved to new borrow pit at the Niukluk River in order to lessen haul as it was necessary to build up the grade for the last mile. Additional gravel was also placed for surfacing and upon completion was graded with motor grader.

At end of September operations were transferred to mile 71, for continuation of work on relocation mile 69.5 to 71.0. Work completed was as follows: ditching and grading subgrade with tractor and pull grader 1.5 miles, gravel hauled for surfacing of mile 70.9 and the installation of a 48" culvert plus several smaller culverts.

At end of season preparations were made for breaking camp at mile 71. Several tent frames were left at this location for maintenance operations next season. The balance was moved back to mile 62 for probable use during next seasons reconstruction program. All camp supplies and equipment were moved back to Nome. Some delay was experienced in getting the heavy equipment back due to low water at Safety ferry.

On the return to Nome a new culvert was installed, 36"x30' at Skookum gulch mile 58, and final grading of road was accomplished with tractor and pull grader mile 71 to 48. This placed the road from

mile 35 to 76.5 in excellent shape and allowed completion of all freight haul from Solomon to Council. It was necessary to close operations by October 8 as allotted funds were all used up, but it was gratifying to note that Barney Crosby, foreman, was willing to donate his leave time if necessary, in order to complete grading the road all the way through.

During the season an emergency landing field was constructed on a gravel bar in Fox River just south of camp, mile 71. Very little grading was necessary and a field as close to camp proved very convenient on several occasions. Field is approximately 100'x800' and should be considered only temporary, unless graded every year after the spring break up.

Radio communication was maintained during the season with fair success only. Atmosphere conditions were evidently the contributing cause.

#### Work Accomplished:

-35-44

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(A) Relocations & Improvement between mile 46.0 and 71. 1. Metal culverts, new, installed. 12 units - 298 L.F.

Metal culverts, new, installed. 12 units - 290 L.F.

Mile 46.5, 1-13"x22' Mile 55.5, 1-36"x28'

" 46.7, 1-13"x24' " 58.0, 1-36"x30'

" 47.1, 1-18"x22' " 69.5, 1-48"x30'

" 47.3, I-18"x22' " 70.0, 2-16"x24'

" 47.5, 1-24"x24' " 71.0, 2-13"x24'

- 2. Ditching w/tractor and pull grader 1.5 miles Total
- 3. Cut and fill with dozers Total 9065 c.y.
- 4. Rock hauled and placed "213 c.y.
- 5. Cut and fill w/carryall " 160 c.y.
- 6. Gravel, hauled and placed w/carryall " 1600 c.y.
- 7. Gravel, truck and shovel " 1615 c.y.
- 8. Maintenance road w/tractor and pull grader Total 73 miles
- (B) Reconstruction mile 71 to 76.5

(Actual length of road constructed 14,702' or 2.6 miles)

- 1. Gravel hauled and placed, including turn outs, subgrade and surfacing Total 22,197 c.y.
- 2. Corduroy placed

460 L.F.

3. Ditching by hand

" 5000 L.F.

4. Maintenance with motor grader during gravel operations

264 miles

- 5. Bridge rebuilt, mile 76 timber 12' wide, 24' long
- 6. Rock (Bear Creek crossing)- 60 c.y.
- 7. Metal culverts, new, installed. 9 units 216 L.F.

Between mile 74.6 & 76.7

1-48"x26' 1-12"x24'
3-24"x24' 1-26"x22'
1-16"x24' 2-18"x24'

#### Route 8D - Council - Ophir

Road was passable although no maintenance work was done by ARC. Very little use is made of this road due to limited mining operations.

#### Route 8H - Casa De Paga

Considered a branch of Route 8. Road made passable mile 0 to 7 with tractor and dozer. Mining operations are almost negligible and very little use was made of the road during the season. An effort was made to relocate the road by grading an old railroad grade in order to eliminate a bad stretch of corduroy on top of the hill at mile 7. It was found, however, that ground was to soft and could not be graded with tractor and dozer. Time did not allow any further prospecting so bad stretch of corduroy was gravelled and will hold temporarily.

#### Route 13A - Nome - Bessie

This road is considered an access road to the city airfield and in cooperation with local bush pilots and air transportation companies, was maintained during the winter months of January through March. At request of Nome businessmen and authorization from Juneau Headquarters, winter maintenance activities were extended as far as the red hangar, mile 2.4.

During the month of November ice conditions prevailed making travel very dangerous. Sand could not be obtained, being frozen, so D8 tractors were used to roughen the surface and proved satisfactory. Winter maintenance was to January 1 with very little having to be done in regards to snow removal.

Seasonal operations started off on May 10 with removal of snow for the balance of the road to mile 4.2. Road bed was very soft and was closed to the public until May 16 when it was sufficiently dry for all traffic. Slight washouts occurred at mile 1 opposite city field during spring run off. This was partly due to lack of a culvert and to eliminate a recurrence, a culvert was installed later in the season. Gravel was placed in washouts.

Due to U.S.S.R. & M. Company dredging operations at mile 3, it was necessary to maintain a detour of about 0.5 of a mile. This was originally put in by the Company but was considered dangerous by ARC District Engineer and consequently changed. Very little extra work was necessary. Periodic maintenance with motor graders was necessary during the season due to heavy traffic especially mile 0.5 to 2.

At end of season culverts and bridges were cleaned and staked in preparation for snow removal operations next spring and probable winter maintenance.

#### Work Accomplished

Culvert, metal, installed. Mile 1.5 - 1-24"  $\times$  36' Gravel hauled and placed - 65 c.y.



## UNITED STATES DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION

Fairbanks, Alaska.

November 28, 1951

Mr. Wm. J. Niemi Chief Engineer Alaska Road Commission Juneau, Alaska

Dear Mr. Niemi:

Your letter of November 8, 1951, outlining the general program and the anticipated funds for the season of 1952 has been the basis for the forthcoming recommendations. The distribution of funds for maintenance of the individual routes as listed has been accomplished with the assistance of my successor, Mr. M. C. Zimmerman. The other features of these recommendations and the outline of the plan of operations are the result of discussions with the members of the engineering, supervisory and administrative staffs of this District.

#### I. MAINTENANCE

A. ROADS AND DEPOTS

#### THROUGH ROADS.

Route 130 - Richardson Highway - 135.6 miles
Route 131 - Ladd Field Spur - 0.4 "

The maintenance of the Richardson Highway will continue to be a most expensive operation until all sections are thoroughly stabilized. Near Harding Lake, Birch Lake, across the Shaw Creek flats and from the Tanana River to Big Delta, a considerable amount of reconstruction will be required to repair the roads where it has subsided and/or heaved. Along the Tanana River from Canyon Creek to Shaw Creek, there are several sections where the downhill slove continues to seek its own angle of revose with the result of settlement in the roadway surface. It is noted recently that long longitudinal cracks are appearing in several sections in the mountainous portions of the Richardson Highway. While a portion of the road will be under constfuction next year, some maintenance will be required from Big Delta Junction to Black Rapids, particularly the opening up in the springtime and the continued surface planing throughout the summer. A great deal more snow removal and better maintenance will be required throughout the Richardson Highway as time progresses as the public will demand safer highways. This demand will result in a great deal more surface planing during the winter time and even though we have several pieces of equipment to accomplish this work, it will require considerable money to finance the demands.

(5) Chf. Engr.

(4) Admin. 2.

(2) Op'ns. A.

(3) Engrg. 75!

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Mr. Niemi

It is recommended that a program of patching the damaged sections of the Richardson Highway be instituted in the early spring, and all sections now with uneven riding surface be either relaid, or torn up and a new cake applied. It is anticipated that this will require approximately four and one half miles of paying. Personnel necessary to accomplish this work would be housed at Fairbanks, Silver Fox, Big Delta Junction and Donnelly Dome camps. Summer maintenance would require approximately eighteen people including the patching crew.

Winter Maintenance - \$79,500.00

Summer Maintenance - \$82,000.00

Total: - \$161.500.00

#### Route 230 - Alaska Highway - 203 Miles

The Alaska Highway will require considerable shoulder stabilization from Sears Creek toward Tok. A continued program of relaying the inverted penetration paving surface and increasing amount of surface planing both summer and winter will be required. While Alaska Section "A" will be in the process of construction next summer, a considerable amount of maintenance work will be required regardless. A definite program of brush-cutting must be instituted along this route. Some few places culverts should be installed to handle the drainage. Running plank on several of the bridges, specifically the Tanana, Tok, Johnson River, Chief Creek, Yerrick Creek and Bear Creek must be installed. In the sections beyond Gardiner Creek toward the Canadian border, there should be some waring material applied to the roadway as this section is becoming increasingly the worst spot in the Fairbanks District.

Personnel required for this maintenance and reconstruction will total approximately 15 people stationed at Johnson River, Tok and Gardiner Creek.

Winter Maintenance - \$115,000.00

Summer Maintenance - \$100,000.00

Total:

#### Route 330 - Glenn Highway - 33.5 miles

Normal surface planing and snow removal will be the principal requirements of this route since forces of the Alaska Road Commission will be in the process of surfacing sections of this highway throughout the summer. You will note this mileage only includes that section from Tok Junction to Little Tok River Bridge, and does not include the section from Little Tok River to the Mentasta Cut-Off.

Winter snow removal and spring opening of drainage structures will require some additional expenditures but not more than is allowed herein. Personnel will be four people stationed at Tok.

Winter Maintenance - \$19,000.00

Summer Maintenance - \$6,000.00

Total:

\$25,000.00

\$215,000.00

Mr. Niemi

#### Route 630 - Steese Highway (To North Camo) - 1.5 Miles

Snow removal in the winter together with some shoulder maintenance, culvert cleanout, brush cutting, etc., will be accomplished on this route. The paving is withstanding traffic very well, and does not require any appreciable amount of maintenance.

Winter Maintenance - \$2000.00

Summer Maintenance -

\$1000.00

Total:

\$3000.00

#### Route 630 ASteese Highway (To University) - 4 Miles

The same maintenance service applied to Route 630 will be applied to this route. However, near the University some ditching work will be required as well as several signs. It is entirely possible that before the summer is over a small amount of seal-coating will be necessary, but this is not anticipated unless it is a very wet season. For both Routes 630 and 632, approximately three people stationed at Fairbanks will be required to accomplish all the maintenance.

Winter Maintenance - \$4500.00

Summer Maintenance -

\$2500.00

Total:

\$7000.00

#### International Airport Road (CAA Road) - 4.5 Miles

This road does not have a route number, but is a portion of the Fairbanks District maintenance by directive from the Commissioner of Roads. The Territory of Alaska received this section of the road from the CAA, and has supplied the funds required to maintain it. A continued program of snow removal and surface maintenance in the winter as well as shoulder rehabilitation, drainage structure maintenance, brush cutting, signs, etc., will be required. There is listed under the heading of II, Reconstruction, a recommendation that this road be sealed.

Winter Maintenance - \$1500.00

Summer Maintenance -

\$1500.00

Total:

\$3000.00

These funds will be forthcoming from the Territory of Alaska, and are not a portion of the funds received from the Congress for the maintenance of roads in Alaska for the Fairbanks District.

#### DEPOTS

#### Fairbanks Depot - Route 301

Within the Fairbanks Depot, certain improvements should be made. Included therein should be additional warm storage space for winter-used equipment. The large warehouse now in the lower yard should be moved to the Depot yard and installed therein. This building should be sealed

? Angli

Mr. Niemi November 28, 1951

and utilized as a warm storage building for small equipment so that the larger buildings within the Devot can take the larger pieces of equipment. Personnel required will be two.

Winter Maintenance - \$5000.00

Summer Maintenance - \$5000.00

Total: \$10,000.00

#### Tok Depot - Route 302

A majority of the long required reconstruction of the Tok Devot was accomplished this past year. A few more things should be done but they are of a minor nature. Particularly, I refer to a new floor within the office building in the section devoted to the office at Tok. The office and latrine within this building should be refloored. The doors of the main show should be rebuilt and patched. Before the season is out, it is very possible that a portion of the sewage disposal system will require rehabilitation. The personnel required will be two.

Winter Maintenance - \$5000.00

Summer Maintenance - \$5000.00

Total: \$10,000.00

#### Fairbanks Apartments - Route 311

This duplex house requires some maintenance work principally repainting the exterior doors, insulating around the windows and a lawn should be planted in the area that has already received peat moss. A few shrubs can very readily be planted in this yard, and it would help the beauty of the layout as a whole. Actually, there is considerable work to be done at some later date to insulate this building properly but it is not believed necessary at this time since a little sealing around the windows and sills has stopped a majority of the air leaks.

Winter Maintenance - \$750.00°

Summer Maintenance - \$750.00

Total: \$1500.00

#### FEEDER ROADS

#### Northway Feeder - Route 231 - 6 Miles

This route from the Alaska Highway to Northway Military Installation will require summer surface maintenance, and winter maintenance as well as the application of a small amount of surfacing. This route is not in good khape at the moment, but it is believed a small amount of maintenance work with a shovel and truck for a couple days will improve the

November 28, 1951

Mr. Niemi

route considerably.

Winter Maintenance - \$ 800.00

Summer Maintenance -

\$1200.00

Total:

\$2000.00

#### Taylor Highway - Route 331 - 158 Miles

The maintenance of the Taylor Highway has been very meager in the past, and it will require this next season a great deal of maintenance work. Those sections that have subsidence and/or heaving will require ballast and surfacing, but this will be done under construction. Maintenance will principally be recutting ditches, brush removal, opening up drainage structures, painting the several steel bridges and a continued program of surfacing in the roadway surface. Personnel required will be five stationed at Tok and West Fork.

Winter Maintenance - \$ 5000.00

Summer Maintenance -

\$40,000.00

Total:

\$45.000.00

Steese Highway - Route 631 - 160.1 miles

633 - University to Ester - 5.5 miles

634 - Central to Circle Hot Springs - 18.0 miles

Normal summer maintenance which includes surface blading, roadway ditching, waterway maintenance, signing, brush cutting, etc., as well as the winter maintenance which will include snow removal and surface planing from North Camp to Chatanika will be required on this route. Considerable surface maintenance will be required in the section from Chatanika River to Faith Creek and from Faith Creek to Central. Personnel required will be three at Fairbanks, two at Chatanika, three at  $32\frac{1}{2}$  mile and five at Central.

Winter Maintenance - \$65,000.00

Summer Maintenance -

\$90.000.00

Total:

\$155,000.00

#### Elliott Highway - Route 731 - 71 Miles

The maintenance of the Elliott Highway from Fox to Livengood will require normal summer surface planing at an accelerated rate together with ditching, brush cutting signing, waterway maintenance, bridge maintenance, etc. If possible, it is anticipated, we will paint the Chatanika and Tolovana River bridges this next season but it is not entirely definite that time will allow for this painting. Personnel required will be two at Fairbanks and three at Livengood.

Winter Maintenance - \$ 5000.00

Summer Maintenance - 330,000.00

Total:

\$35,000.00

Mr. Niemi

#### Manley Hot Springs-Eureka - Route 732 - 25.7 Miles

A continued program of rehabilitation on this road by maintenance forces will require some surface planing, placing of some surfacing, brush cutting, signs, waterway maintenance, bridge maintenance, ditching and through some sections it will be necessary to widen the clearning to allow the sun to hit the road, and dry it out somewhat. Now the high brush has encroached the roadway, and it is very difficult to maintain these wet frozen sections. Personnel required will be four at Manley Hot Springs.

Winter Maintenance - None
Summer Maintenance - \$35,000.00
Total:

\$25,000.00

#### Ruby-Long-Poorman - Route 031.1 - 56.5 Miles

Continued summer surface maintenance such as ditching, brush cutting, waterway maintenance, bridge maintenance together with some surfacing will be required on this route. During the past summer, certain improvements were made which have been reflected in a decrease of funds to maintain this route. Personnel required will be four. Under II, Reconstruction and Improvement, there is a recommendation for funds for the construction of four bridges on this route next season.

Winter Maintenance - None
Summer Maintenance - \$25,000.00
Total:

\$25,000.00

#### LOCAL ROADS

war ing

Route	130.1	Cushman Street Extension	-		0.5
11	130.1	West Fairbanks	-		3.1
Ħ	130.2	Badger Farm Roads	-		20.1
II	130.3	Old Richardson Highway	_		14.5
11	130.4	Lake Harding Branch	-		1.7
Ħ	130.5	Richardson Highway-Democr	rat	_	4.0

This system of roads forms a network of the Tanana Valley within the immediate vicinity of Fairbanks and requires maintenance throughout the year, both summer maintenance and winter surface planing. During the past summer, certain work was accomplished that has reduced the cost of maintenance. However, the increasing demand of utility for these roads requires a higher standard of maintenance. This whole system will require frequent surface planing during the summer and secondary snow removal during the winter. Personnel required will be three stationed at Fairbanks.

Winter Maintenance - \$18,000.00 Summer Maintenance - \$12,000.00 Total: \$30,000.00 XXXXXX NOME,

COPY

January 4, 1952

1952

Mr. Wm. J. Niemi Chief Engineer Alaska Road Commission Juneau, Alaska

Subject: Proposed 1952 Field Program

Dear Mr. Niemi:

Enclosed is the proposed 1952 field program for the Nome District:

	Section	Page
I.	Maintenance	1-4
II.	Reconstruction  a. Major Projects - Through Roads  b. Minor Projects - Feeder and  Local Roads	None 5
III.	New Construction a. Major Projects b. Farm & Industrial Roads	None 6
IV.	Plans & Surveys	7
V.	Equipment	ARC-49 (Revised)

Very truly yours,

John M. Cooley District Engineer

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#### Section 1 - Maintenance

A. 1. Route 040

#### Trail Flagging

About 200 miles

- 2. Funds recommended are for the flagging of winter trails in the outlying areas for the fishing and hunting endeavors of various villages.
- 3. a. Summer Maintenance None
  - b. Winter Maintenance \$1500.00
- B. 1. Route 041

#### Nome-Council

78.0 miles

Funds recommended are for the general maintenance of this route. With these funds it is planned that the section between 14 and 15 mile, Cape Nome Bluff, will be widened and the material from the Cape hauled to  $17\frac{1}{2}$  mile for road repairs there.

In July of 1951, the third time that 17 mile was repaired from storm damages, Cape Nome material was used to repair this damage and proved to be very good. I believe we had stronger storms afterward and this section was not damaged. So it is planned to straighten and build 17 mile section and also widen the Cape which has narrowed a bit.

It is planned that the remainder of the section between Safety Ferry and Solomon Ferry, a distance of 7 miles, will be surfaced with river gravel from the Solomon River. The two old bridges at Hastings Creek, 10½ mile, will be removed and elephant huts put in their place. Also it is planned to repair the other wooden bridges on this route.

The crew for these projects will be the local crew which will consist of five to fifteen men. The major equipment will be a 22B shovel, two D-8 dozers, one motor patrol and six or seven dump trucks. It is planned that the crew will work about seven or eight weeks.

- a. Summer Maintenance \$23,500.00
- b. Winter Maintenance None
- C. 1. Route 042

Nome-Bessie

3.2 miles

- 2. Funds recommended are for the general winter and summer maintenance as required.
- 3. a. Summer Maintenance \$1200.00
  - B. Winter Maintenance \$ 800.00

&
Railroad
Peninsula
Seward
Route 043
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),2 miles

- Funds recommended are for the general maintenance of the rallroad from Nome to Bunker Hill and to paint the three steel bridges. Nome River 14 mile; Iron Greek 52 mile; Sherrette a crew of six men will It is planned that work about ten weeks. 564 mile. Creek 2
- Summer Maintenance \$8000.00 Winter Maintenance None ದೆ 'ರ

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### Route 043 (Alternate) H Ä

Seward Peninsula Railroad

30 miles

- It is planned that a crew Funds recommended are for the general maintenance of railroad from Nome to about 30 mile. It is planned that a of six men will work about flve weeks. o,
- Summer Maintenance \$4000.00 Winter Maintenance None

3

# Route 040.2 H 田

Deering-Immachuk

25.0 miles

Funds recommended are for the general maintenance of this route. A crew of flive men will work for a period of about eight weeks. Major equipment will be a D-6 w/dozer, two trucks and pull grader.

Summer Maintenance - \$6000.00 Winter Maintenance - None

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## Route 040.3 H Ē

Teller-Bluestone

15.5 mlles

- Funds recommended are for the general maintenance of this route. A crew of five men will work for a period of about eight weeks. Major equipment will be a D-40 w/dozer, two trucks and a pull grader.
- Summer Maintenance \$6000.00 Winter Maintenance None . . . 3

## Route 041.1 H Ġ.

Council Onlir Creek Casa De Paga Road Shovel Creek Road

12.0 miles 20.0 miles 5.0 miles

- d general maintenance these roads such as summer grading with a motor patrol Funds recommended are for the ď
- Summer Maintenance \$1500.00 Winter Maintenance None g ,2° 6

- Funds recommended are for the general maintenance of this route and the painting of the North Fork Bridge and the Kougarok River Bridge. This route was put in good condition from Bunker Hill to Taylor last season and for the amount of travel it received last season it will only require general maintenance this coming season. A crew of five men will work about thirteen weeks. The major equipment of which (all) or part will be used are a 15B shovel, motor patrol, TD-18 w/dozer, five trucks and two pull graders.
- 3. a. Summer Maintenance \$9500.00 b. Winter Maintenance - None

I.	1.	Route 042.1 & 042.2	Nome-Wireless	0.2	miles	3
			Bessie-Snake River	20.3	Ħ	
			Snake River-Monument	3.0	11	Not Maintained
			Bessie-Sunset Creek	12.0	TT .	
			Nome-Osborne	8.3	11	
			Spruce Creek Road	1.2	12	Not Maintained
			Center Creek Road	2.8	Ħ	,
			Little Creek Road	2.2	#	
			Submarine_Paystreak	3.0	19	Maintained by

2. Funds recommended are for the general maintenance of these routes. It is planned that the bridges will be repaired and additional culverts be installed where needed.

It is also suggested that with these funds we be allowed to extend the Bessie-Buster Road beyond Dexter up the Nome River to the railroad bridge over Nome River. This extension would allow the people of Nome to build additional summer homes on the Nome River and also would allow us to abandon the railroad from Nome to Nome River Bridge, about 12 miles of track.

It is planned to continue the improvements on the Snake River road by surfacing the bad sections. The same crew and equipment used no Route CAI, Nome-Council, will be used on these routes.

3. a. Summer Maintenance - \$10,000.00 b. Winter Maintenance - 2,000.00

#### FUNDS FOR MAINTENANCE SEASON 1952

	Route	Total	Summer Maintenance	Winter <u>Maintenance</u>	L.& M.	J.P.
A.	040	* *************************************		\$1,500.00		
В.	041		\$23,500.00			
C.	042		1,200.00	800.00		
D.	043		8,000.00 or			
D.(Alternate	•)		4,000.00	•		
E.	040.2		6,000.00			
F.	040.3		6,000.00			
G.	041.1		1.,500.00			
$H_{ullet}$	043.1		9,500.00	,		
I.	042.1 & 042.2		10,000.00	2,000.00	**	***
	TOTALS	\$200,000.00	\$65,700.00	\$4,300.00	\$74,000.00	\$56,000.00

## SECTION II - Reconstruction b. Minor Projects (Feeder & Local Roads)

#### A. 1. Route 041

Nome-Council

78 miles survolved

- 2. Funds recommended are for the continuation of relocating of the section of road down the river bottom of Fox River to the hill-side. Also to improve other sections that are in poor location if time and funds permit. The crew to be composed of nine men and to work about eleven weeks. Major equipment to be used 10B shovel, three D-2, one- 12 yd. carryall, three dump trucks and one mator patrol.
- 3. Funds \$15,000.00

#### FUNDS FOR RECONSTRUCTION

SEASON 1952

A. Route 041 Nome-Council \$40,000.00 \$15,000.00 \$10,000.00 \$1500.00

#### Section III - New Construction

#### A. 1. Route 040.3

Lost River

(?) Miles

2. The amount of funds required for the anticipated road construction for this operation in connection with the tin development at Lost River cannot be recommended at this time as it is not known what amount of road will be required. No information whatsoever regarding this project has been received at this office.

At the present time a 15B shovel, one dump truck and a small pull grader have been moved to Lost River. It is anticipated that additional equipment will have to be moved there for construction when information is received as to the amount of road required.

3. Funds - (?)

#### B. 1. Route 401

Name Depot

Personnel Housing

- 2. It is requested that we be allowed to convert parts of two of our KD building into three additional apartments for key personnel. It is suggested that the KD building in Nome proper be brought to the depot area, this building together with building 418 to be remodeled into three apartments.
- 3. Funds Total Field L&M J. P. \$15,000.00 \$6,000.00 \$2,000.00 \$7,000.00

#### FUNDS FOR NEW CONSTRUCTION SEASON 1952

			Total.	<u>Field</u>	L & M	JaPa
A.	Route 040.3	Lost River	<b>?</b>	7	?	?
B.	Route 401	Nome Depot	\$1.500.00	\$6000.00	\$2000.00	\$7000.00
		TOTAL	\$1,500.004	\$6000.004	\$2000.00/	\$7000.004

#### Section IV - Plans & Surveys

At this time no surveys are planned unless the road is constructed at Lost River.

#### Section V - Equipment

- 1. See attached ARC-49 (Revised) "Assignment of Equipment", for major equipment.
- 2. It is recommended that three (3) 10 cu. yds. TS300 La Plant Choates Motor Scrapers or similar turnapulls be purchased if there is to be new construction of road from Lost River to Teller Mission. This equipment would be used for graveling the spit section of this road.
- 3. Attached copies of ARC-49 (Revised) " Assignment of Equipment".



## UNITED STATES DEPARTMENT OF THE INTERIOR

ALASKA ROAD COMMISSION

NOME ALASKA

13 October 1952

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TO

William J. Niemi, Chief Engineer

FROM

John M. Cooley, District Engineer

SUBJECT: ARC Order No. 40, Supplement #1 dated 11 August 1952.

Enclosed please find a marked copy of ARC Order No. 40, Supplement #1 with the mileage changes marked, also a sketch-of the Nome Local Road System.

By comparing the sketch of the Nome Local Road System with an old ARC map, you can see how the roads have changed location during the past. The actual mileage on some have not changed on record as they have in the field. The beginning of the mileage is from the Nome. Post Office and some routes started from there and then branched but the mileage used on both has included the section from the Post Office to the branch.

I would like to have some routes and names changed if possible.

The Route 042 Nome-Bessie is a separate work order 42 and a very short road in comparison to the other local roads which are all under work order 45. When the Nome-Bessie was originally built it ran from Nome to Bessie Bench, which is now the location of #5 dredge, at the present time it is now just a start on the route to the Dexter Area and possibly in the future to the Kougarok Area.

At the present the Bessie-Buster Road crosses the Nome River at Dexter and another road up Nome River which has no name and is 2.9 miles long. At the present the Bessie-Buster, 042.1, after it crosses Nome River is only used for about  $1\frac{1}{2}$  miles yet it is possible to drive beyond for about 10 miles with a 4 X 4.

I would like to see the Routes Nome-Bessie 042, Bessie-Buster 042.1 and the 2.9 miles up Nome River changed as follows.

Combine Nome-Bessie 042, Bessie-Buster 042.1 as far as Dexter and the 2.9 miles up Nome River to be one Reute 042 and be named Nome-Kougarok. This route would then be 11.9 miles in length at the present and would increase in length when extended to Nome River railroad bridge and then up the Tramway. The section up Buster Creek would remain the Buster Road, 042.1.

Jan A

#### Page 2

Subject: ARC Order No. 40, Supplement #1 dated 11 August 1952.

With the above changes I would then like to use the two work orders 42 and 45 as follows: W.O. 42 to cover maintenance on Nome-Kougarok, Buster Road, and Osborne Road; W.O. 45 for maintenance on all other local roads.





