

September 7, 1950

To : Mr. G. W. Mayo, Acting Chief, Western Headquarters,
San Francisco, California.

From : Hugh A. Stoddart, Division Engineer, Juneau, Alaska.

Subject: Confidential Monthly Report for August 1950 for Division Ten.

About the beginning of the month the rainy period which began in late July ended and good weather began which continued throughout the month. The generally favorable conditions permitted good progress to be made on construction and several major projects were completed, including the three C. F. Lytle Company and Green Construction Company contracts on the Turnagain Arm for Sections C, D, E and F1, and the S. Birch and Sons and Morrison-Knudsen Company contract for Section B of the Richardson Highway and virtual completion of Section A of the Glenn Highway. With the completion of Section A of the Richardson Highway in July the original program of four projects for surfacing on Interior roads is now complete.

The slow progress previously noted on the Read and Martin contract in Ketchikan continues and while the contractor will overrun the completion date by a substantial period it seems probable that the work will be substantially completed in this calendar year.

Contracts were awarded for painting of three bridges; the Juneau-Douglas and Lawson Creek bridges, Project 31, and the Salmon River bridge, Project 18. Work was begun on the Juneau bridges late in the month but the work was temporarily shut down as a result of heavy rain storms. After several days the contractor decided to shut the work down as he concluded that the rainy season had set in for the winter.

Reconstruction grading on Kenai River Highway Project 5-B2 was readvertised. Bids were opened on August 23 with the low bidder, C. F. Lytle Company and Green Construction Company, submitting a bid in the amount of \$459,695. Inasmuch as the low bid was very close to the revised Engineer's Estimate, it was recommended for award and notification was received before the end of the month from Washington that the low bid was accepted. The contractor plans to prosecute the work vigorously and complete all the clearing and a substantial amount of the grading this season.

Mr. Mayo

-2-

September 7, 1950

The field party working on the Copper River location survey has made good progress and has completed about forty-five percent of the work with completion expected about November 1. Work is being carried on under severe conditions of which the furnishing of camp supplies and transportation to the work is the most difficult to overcome. With high water and warm weather the current in the river is about ten miles per hour and as it carries a large number of small icebergs from the Childs Glacier it requires skillful operation of the river boats. There are known to be a large number of Alaska brown bear and grizzlies in the area, attracted by the fish in the streams, but so far they have not caused any actual difficulty or interference with the work.

The Seward to Mile 58 location survey has been carried on throughout the month with good progress noted and is now complete from Mile 38 to Mile 58. This survey also should be finished about November 1.

Although the general appropriation bill has not been passed, authorization was received to advertise Section A of the Alaska Highway. Bids will be opened in the Division office on September 20. The contract for improvement of Section A includes reinforcement of the base on intermittent sections at the west end of Section B with the $1\frac{1}{2}$ inch plant mix to be carried continuously over both the surface treatment and the newly reinforced sections. The reinforcement will correct the only weaknesses which have become evident on the entire mileage of the first four projects to be completed.

Contrary to the agreement previously reached with the Road Commission, that Section H of the Richardson Highway would be supervised by the Bureau of Public Roads, the Road Commission decided it would supervise this project with its own forces and the work was advertised for bid opening on September 21.

The Road Commission, having re-examined its budget, requested the Bureau to advance the completion of the design for Section C of the Richardson Highway, which extends from Big Delta to Black Rapids, to permit advertising and contracting of the work this fall if possible. Accordingly, the project will be advertised about October 2 with bid opening to be scheduled for the first week in November.

Further study was continued on Section C of the Alaska Highway, of material sources and subgrade conditions, looking toward completion of the design during the coming winter. It is now apparent that while the existing roadway has an untreated gravel surface, satisfactorily carrying existing light traffic, that it will be necessary to provide general reinforcement of the base to insure satisfactory performance of the proposed bituminous surfacing. A larger investment in roadway surface will presumably justify more extensive alignment and improvements than had previously been considered justifiable.

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To sum up, there remains on the Richardson Highway 140 miles of reconstruction and on the Tok Out-Off about thirty miles of reconstruction, indicating that the completion of these portions of the system to dustless surface type will not be completed until long after the expiration of the original three-year construction period planned in 1948.

A proposal to add a distillation plant to the tank farms operated by the Road Commission to produce asphaltic cement of perhaps 150 to 200 penetration from the RC-3 that can be delivered by oceangoing tanker has been under consideration. The operation was discussed with contractors interested in the work both from the road construction angle and as possible operators of the plants but it has been concluded that the cost of operation, estimated to be \$20 per ton of asphaltic cement produced, exceeds the value of the benefits which may be derived and accordingly the proposal has been eliminated from further consideration, at least in the near future.

It is understood that funds have been requested to finance maintenance on the bridges on the Seward branch of the Alaska Railroad for the next two winters with the understanding that an adequate road will be constructed by that time. This information is of importance in our design for the Seward to Mile 58 section since we are now assuming that no value can be attached to elimination of existing railroad grade crossings. As noted previously, the Department of Interior will attempt to secure funds for the work in the appropriation requested for the Road Commission.

Enclosures: Narrative Report by District Engineer French
Narrative Report by District Engineer Wyller
Graph showing progress on major projects

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MONTHLY REPORT
ON
ACTIVITIES IN THE JUNEAU DISTRICT, DIVISION TEN
FOR THE MONTH OF AUGUST 1950

The weather during the month of August was generally favorable for construction and maintenance, although the last week was quite wet and stormy. Progress on Projects 1-B7,G3 and 1-D6,E4, the only two active construction projects in the District, improved somewhat during the month. Project 1-B7,G3 is now about 85% complete. All excavation is completed except for some cleanup, and the placing of select borrow cushion has been started. The Bridge across Wards Creek is substantially completed, the only work remaining to be done is the pouring of curbs and the erection of guard rails.

Work on Project 1-D6,E4 is now in full swing. There is still a possibility that these projects may be completed this season.

The work on the Copper River Location Survey is progressing satisfactorily. It is expected that this work will be completed about November First.

The Post Construction Project on Routes 4 and 32 at Cordova was continued during the month and is progressing satisfactorily. It is expected that this project will be completed by the end of October.

Mr. Paul B. Groven, who had been Resident Engineer in the Juneau area this season resigned on August 5th and returned to Minneapolis where he accepted a City Civil Service position. The District regrets losing the services of Mr. Groven who proved himself to be a capable, pleasant and cooperative employee. The survey party in the vicinity of Juneau has, since Mr. Groven's departure, been directed by Mr. James R. Davis, GS-6. The party has been engaged in miscellaneous survey work in connection with Rights of Way on Project 2-D4,F6, monumentation and marking of center striping of the paved section of Glacier Highway between Juneau and the Juneau Airport. For two weeks Mr. Davis and two of his men were loaned to the design section of the Division Office.

The Bridge across the outlet of Auk Lake, which has been scheduled to be replaced by a triple 6 x 6 concrete culvert, under Project 2-D4, P6, was subject to partial collapse the first part of the month. Examination of the structure, which has been repaired again and again over the last 8 years by addition of false bents, false caps, false stringers, etc., revealed that the condition was dangerous to any traffic except the very lightest types of cars and trucks. Since the structure was longer than is needed for the required waterway, several spans were eliminated and filled in with gravel. On the remaining spans, all old bents were replaced and new stringers added, so it is believed that the structure is safe for ordinary traffic for another year. This is, however, the last time the structure can be repaired. If Project 2-D4, P6 should not materialize within the next year, it is our belief that it will be necessary to construct a new bridge on the present site during the next construction season. In case it is necessary to rebuild on the present site, the work done this year may be incorporated into the reconstruction.

The contract let to McKinley Electric, Inc., for the rewiring of the Douglas Bridge was started during the month and is progressing in a satisfactory manner. It is expected that the work on this contract will be completed by the middle of September.

The contract for painting the Douglas Bridge and the Lawson Creek Bridge on Route 31 was initiated the last of the month. Mr. Runnels, one of the principal contractors, arrived in Juneau on August 29th with a full crew and equipment. The sand blasting required on the contract has been sublet to Bergman and Lindgren of Anchorage, Alaska, and preparatory work, such as obtaining the sand, screening and drying it, has been done. The contractor expects to have this project completed in about four weeks, provided weather permits. It is doubtful if we will have sufficient good weather this fall to complete the work, and it is expected that the project will have to be completed next spring.

The project providing for painting of the Salmon River Bridge at Hyder, which has been let to Antonsen Painting Company, will not be opened before next spring, due to the lateness of the season, and the rainy weather which may be expected to generally prevail from now on.

The maintenance in August in the District otherwise was routine. The painting program which was delayed during the month of July because of unfavorable weather was resumed during the warm, dry spell in August. The painting of traffic center stripe on the paved section of the Glacier Highway between Juneau and the Juneau Airport was started the last day of the month.



CHR F WYLLER
District Engineer

August 31, 1950

BUREAU OF PUBLIC ROADS
Division 10
Seward District

NARRATIVE REPORT FOR

AUGUST 1950

TURNAGAIN ARM PROJECTS

Sections C&D, E and F-1
Mile 58 to Peterson Creek

Excellent progress continued during August, and these three projects, which are under contract to Lytle and Green, are completed in substantial accordance with the plans and specifications. All work throughout presents a very good appearance, and riding qualities are excellent considering the fact that surfacing consists only of selected material. Dry weather during August accelerated the work, but the dry condition of the surface resulted in considerable dust and roughness during most of the month. Rain during the last week of August retarded progress on the final finishing.

Section F-2
Peterson Creek to Indian

Progress south of Girdwood was retarded to some extent during August by breakdowns of the $3\frac{1}{2}$ c.y. Lima shovel that has been working in the borrow pit at Peterson Creek. The road from Girdwood to the south end of the project is in a travelable condition, but not all borrow has been placed. All rock cuts are substantially completed. Some rock remains in the cuts, particularly along the ditch line. Borrow should be completed on this section early in September if the Lima shovel can be kept in continuous operation. Every effort is being made to get the contractor to complete all work south of Girdwood this year so this section can be accepted for traffic. Opening of the road across the Ingram Creek Summit and south of Girdwood during the past month has greatly facilitated access to the entire Turnagain Arm project.

Progress north of Girdwood during the past month has been better than at any time since work on this project began. A pioneer road has been pushed ahead to Station 1630, which is near the railroad quarry at Bird Point. The work ahead of 1630 is not considered to be as difficult as that between 1400 and 1630, where the road is on the sidehill above the railroad. Most of the roadway prism material has been moved to Station 1565, the point reached by the $2\frac{1}{2}$ c.y. shovel.

Two tractors and scrapers are working in the cut north of Bird Creek, and the Bird Creek approach fills may be completed early enough for the bridge contractor to complete his work this year. Work on the four treated timber bridges started during August. Piling have been driven for two of these bridges, and part of the concrete stringers have been poured.

It is very doubtful if the contractor will be able to complete this project by the extended completion date of June 30, 1951. Progress has been reported unsatisfactory and the contractor so notified. No additional equipment or personnel have been placed on the job in an effort to improve progress.

Mr. Killewich has been placed in charge of all work at Girdwood, and Mr. Neeley has resumed his duties with the Division Office.

Section F-3 (Bridges on F-2 Section)

Peterson, Kern and Glacier Creek bridges, including painting, are substantially complete. Kern Creek and Glacier River bridges are in service. Indian Creek Bridge is substantially complete except painting.

At Bird Creek, footings have been completed for both piers, and forms for piers are being constructed. No work can be done on abutments until completion of the approach fills. The grading contractor is working on the north approach fill. Completion of this bridge and this entire contract this year can be accomplished if the grading contractor completes the approach fills without further delay.

This contract provided for an extension of time if the grading contractor did not complete approach fills by July 1, 1950. Under this provision the contractor is now entitled to an extension of time which will begin June 1, 1951. The duration of the extension cannot be determined until the approach fills are complete.

Section G - Indian to Potter

Grading and bridge work are active by contractors, under supervision of the Alaska Railroad. Some ballast has been placed between Indian and Rainbow. Considerable grading work remains between Indian and Potter before ballast, ties and steel can be placed. It appears doubtful if the railroad section will be completed by September 1, 1950, or if the new highway on the old railroad can be opened for one way traffic by November 1, 1950, as provided in the contract.

GLENN HIGHWAY

Sec. A - Anchorage to Palmer (48 miles including 8 miles through Ft. Richardson)

Seal coat and cover aggregate were completed during August. All contract work has now been completed in substantial accordance with the plans and specifications. The work presents a very good appearance, and riding qualities of the finished pavement are excellent. Traffic through the Ft. Richardson section is quite heavy; and overloaded trucks, loaded Tourna-wagons and other excessively heavy loads are frequent. Due to the high urgency of the large military construction program in the part of Ft. Richardson crossed by this project, the feasibility of limiting loads appears remote. Future experience with this section may indicate a heavier pavement is justifiable.

Sections B-1, B-2 and B-3

This work is being handled by the Alaska Road Commission. A representative of this office drove through the work on August 10, at which time it appeared that progress was good on Section B-1, but was lagging somewhat on Sections B-2 and B-3.

Approximately 25 miles of work had been opened up on Section B-3, with 10 miles paved; no work had been done on Section B-2; and 30 miles of pavement had been completed on Section B-1. This section may be completed this year if favorable weather prevails during September.

RICHARDSON HIGHWAY

Section A - Fairbanks to Harding Lake (44 Miles)

The entire project has been satisfactorily completed and accepted. The project presents a very good appearance. Seal coat and cover aggregate have been uniformly placed, and a minimum of black streaks and variation in texture has resulted. Some minor settlements have occurred due to differential thawing of permanently frozen ground under the fills, but riding qualities have not been seriously impaired. In some cases it was necessary to reseal short sections that suffered damage from heavy rains occurring on freshly placed seal coat. Most of the engineering crew that was on this project has been moved to the Alaska "A" project, and is doing preliminary staking work.

Section B - Harding Lake to Big Delta Junction (53.1 miles)

Excellent progress was made on this project in August, and all work is substantially complete except seal coat. It is expected that seal coat will be completed by September 15. Indicative of progress on this project this year is the fact that the July progress payment was approximately \$418,000. Considerable settlement on this project occurred on a section about half a mile long where a line change was made and a fill constructed on frozen ground last year. The distortion and settlement was corrected by applying additional plant mix and spreading with a motor patrol to take out the unevenness caused by differential settlement.

Section C - Big Delta Junction to Rapids (40 miles)

The location survey and field plans have been completed. The project is being designed in the Division Office at the present time, with the thought of advertising the work this Fall.

ALASKA HIGHWAY

Section A - Big Delta to Johnson River (48 miles)

This project is advertised and bids will be received in Juneau on September 20. Most of the engineering personnel used on the Richardson "A" project have been transferred to Johnson River and are doing the preliminary staking. There is little likelihood that the successful bidder will do any construction work on this project before the Spring of 1951.

KENAI RIVER HIGHWAY

Section 5-B2, Kenai River Highway from Moose Pass Highway Junction at Mile 38 to Mile 41, and from Mile 47 to Mile 50 (5½ miles)

The project was readvertised on August 7, and bids were received August 23. Lytle and Green submitted the low bid of \$459,695. The Division Office has recommended award to the low bidders. They have all equipment required for the project available from the Turnagain Arm C & D projects which are being completed. They plan to move camp to the project and begin clearing operations in the near future. Clearing and grubbing are already staked, and L line P.I.'s are set and referenced.

SEWARD HIGHWAY

Section 3-E3, I4 - Snow River Bridge

Progress is slow, but the contractor should have ample time to complete the work within the time limit. The concrete caps have been poured on the pier and on abutment No. 2. Abutment No. 1 has been partly poured. Clearing is complete. All bridge material is at the site or in Seward.

Location Survey from Mile 12 to Mile 58

The location party has been moved from Mile 58 to Mile 20, and will complete the survey from the Mile 20 camp. All line, levels and cross sections have been completed from Mile 38 to Mile 58. Line has been run from Moose Pass to Mile 38, and levels and cross sections are being taken. Line is being run from Mile 12 toward Moose Pass. The first line to be run in this area will follow generally the existing road from Mile 12 to Mile 14, then cross Snow River above the railroad bridge and follow above the railroad to Mile 18, where it will tie back to the present road. Alternate lines are under consideration.

GENERAL

Maintenance work in August consisted chiefly of hauling selected borrow material to reinforce the road surface between Moose Pass and Mile 38 and on the Cooper Landing road. Weather during the first three weeks of the month was dry and the road became quite dusty. Rain since about August 20 has enabled effective blading and shaping.

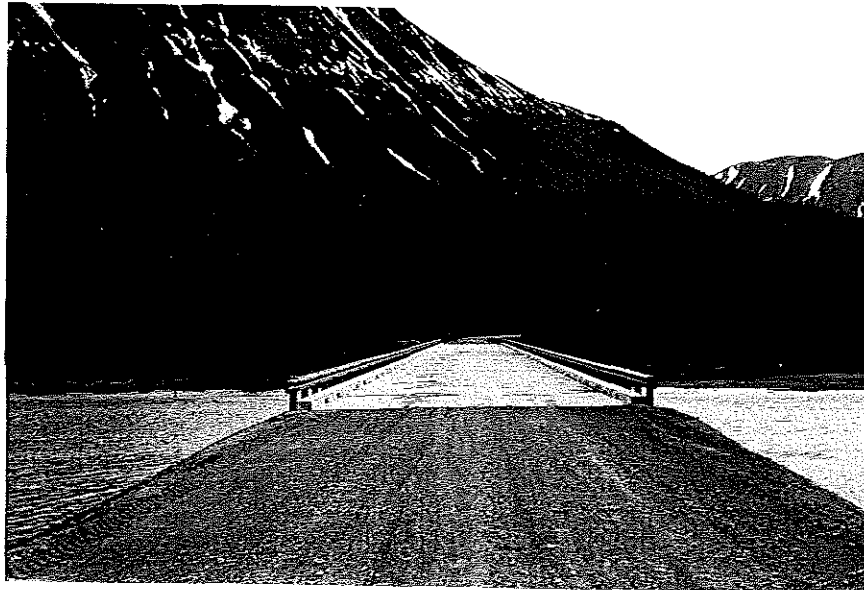
Present plans contemplate operating one snow plow out of Portage this winter if it is necessary to keep the Mile 58 to Portage section open during the winter. Sufficient favorable weather cannot be expected to construct a permanent maintenance camp at Silver Tip this year.

Photographs and a progress chart for the Turnagain Arm work are enclosed. No progress chart is included for the Glenn and Richardson Highways as all active construction work is practically complete.



61-94-91

EHC-690 Kenai River Highway, 5-B1, Coopers Landing Bridge.
View west from sta. 630. Shows completed grade. The country
in the background is traversed by the Daves Creek-Quartz Creek
Survey.



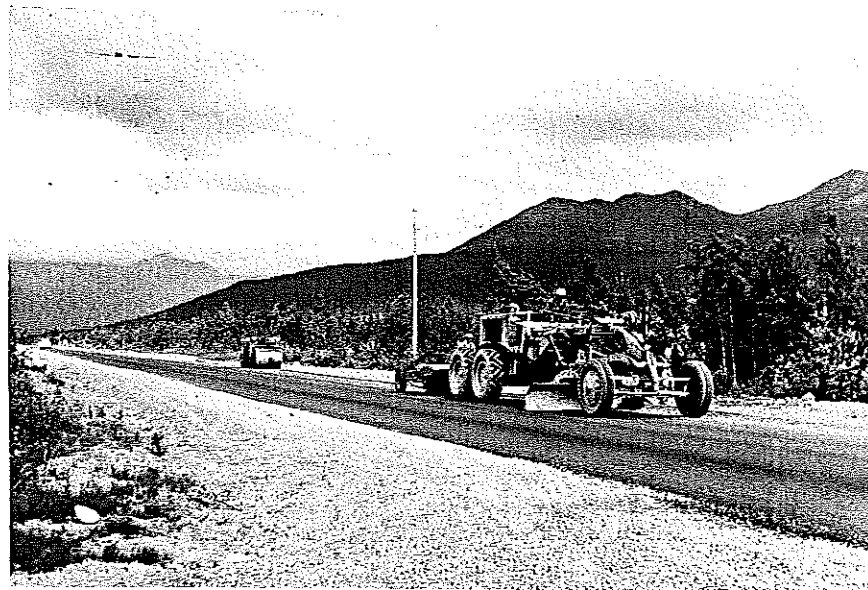
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EHC-688 Kenai River Highway 5-B1, Coopers Landing Bridge.
View of completed bridge from north end of bridge. Substructure
is treated timber; deck is reinforced concrete poured on precast
stringers.



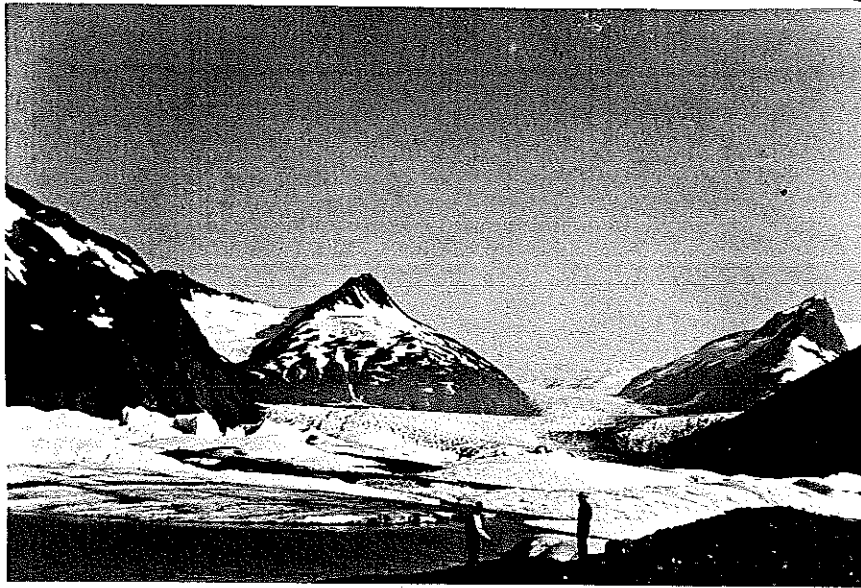
61-94-93

BHC-686 Seward Highway Maintenance. Shows maintenance employees painting Snow River Bridge at Mile 18.



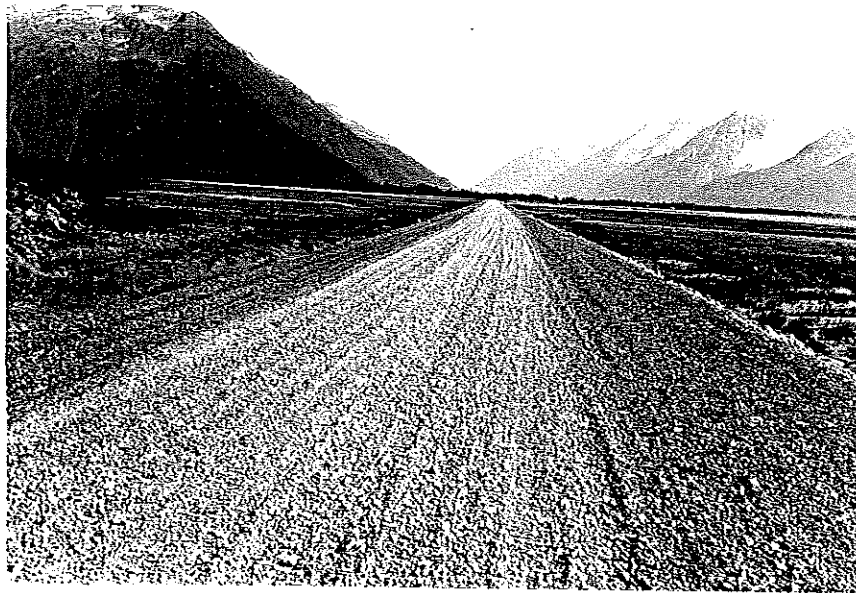
61-94-94

JER-782 Glenn Highway Sec. A. View of motor patrol power broom and roller spreading and compacting shoulder material after paving has been completed. One end of the grader bit is cut out with a torch to leave the loose shoulder material about 1" high. A few passes with the roller compacts shoulder material and leaves finished compacted shoulder surface level with top of paving.



61-94-95

BMF-820 View of icebergs in lake at the foot of Portage Glacier. Railroad goes through tunnel in mountain on left to Whittier at far end of tunnel. Any road to Whittier would tunnel this mountain or go around the steep rocky sidehill above glacier.



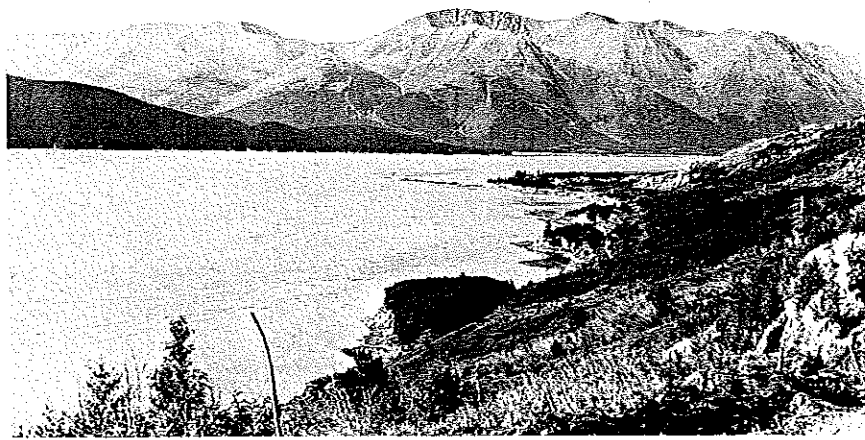
61-94-96

BMF-818 Turnagain Arm Sec. F-1. View of fill across Turnagain Arm tide flats. Looking toward Portage at the head of Turnagain Arm. Portage Glacier in center background.



61-94-97

BMP-523 Turnagain Arm Sec. D. View south toward Mile 58 from a point north of Tin Can Creek which crosses road in the background.



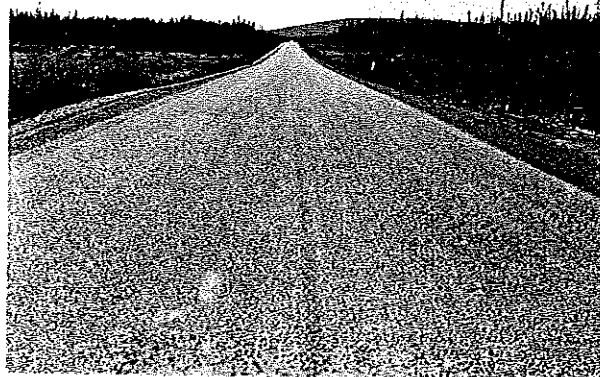
61-94-98

BMP-525 Turnagain Arm Sec. F-2. View of Turnagain Arm from point on new location north of Birdwood. Bird Point juts into Arm in the background. Note tidal currents caused by fast ebb.



61-94-99

EHC-810 Richardson Highway Sec. A. Shows completed paving about 31 miles south of Fairbanks with seal coat and cover aggregate in place.



61-94-100

EHC-814 Richardson Highway Sec. B. Shows completed paving about 92 miles south of Fairbanks with seal coat and cover aggregate in place.

September 8, 1950

To : Mr. A. C. Clark, Deputy Commissioner, Washington, D. C.
From : Hugh A. Stoddart, Division Engineer, Juneau, Alaska
Subject: Excerpts from Confidential Monthly Report for August 1950
for Division Ten

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