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LETTER OF INTENT

HB 177

The sum of \$8,000,000 is appropriated from the general fund to the Department of Transportation and Public Facilities for resurfacing of the highway from the Arctic Ocean to the Yukon River, beginning at mile 360 (adjacent to the Deadhorse Airport) to approximately mile 238 (Antigun River Bridge crossing). The scope of the project shall include the restoration of the highway to the original 28' design width, culvert replacements, and a 6" lift of gravel.

Funding Information
General Fund \$8,000,000
Other Funds -0-
\$8,000,000

Introduced: 2/18/81
Referred: Transportation and
Finance

BY SMITH, ROGERS, BROWN,
BARNES, BETTISWORTH,
FANNING AND RANDOLPH

1 IN THE HOUSE

2 HOUSE BILL NO. 177

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TWELFTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation to the Depart-
7 ment of Transportation and Public Facilities for the
8 resurfacing of the highway from the Yukon River to the
9 Arctic Ocean; and providing for an effective date.

10 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

11 * Section 1. The sum of \$8,000,000 is appropriated from the general fund
12 to the Department of Transportation and Public Facilities for resurfacing
13 *The most severely damaged of* necessary to bring the highway from the Yukon River to the Arctic Ocean [up]
14 [to secondary road standards.]

15 * Sec. 2. The appropriation made by this Act is for a capital project
16 and is subject to AS 37.25.020.

17 * Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-
18 070(c).

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED
AS A UNIT IN THE ORIGINAL DOCUMENT

NORTH SLOPE HAUL ROAD -
STATUS OF ROAD CONDITIONS, 1980

Prepared for:
ARCO OIL AND GAS COMPANY

By:
TETRA TECH, INC.
September, 1980

TETRA
TECH

HISTORY OF THE HAUL ROAD

The North Slope Haul Road was built from the existing state highway system near Livengood to Deadhorse in 1973 and 1974. The Haul Road was constructed by the Alyeska Pipeline Service Company under an agreement with the State of Alaska, whereby Alyeska built the road as a subcontractor to the State, but retained control and responsibility of maintenance until the State accepted control of completed portions of the road. In 1975, the State of Alaska completed the Haul Road bridge across the Yukon River. Because this bridge also serves to carry the Trans Alaska Pipeline across the river, the State was reimbursed by Alyeska for a portion of the construction costs.

The State accepted control of the 55 mile stretch of roadway from near Livengood to the south bank of the Yukon River in 1974, and was reimbursed by Alyeska for maintaining the road until completion of the pipeline in 1977. The State accepted the remaining 360 mile stretch of roadway from the north side of the Yukon River to Deadhorse on October 15, 1978. As part of the agreement between the State of Alaska and the Alyeska Service Company by which the State took control of the Haul Road (amended June 17, 1977), the following items were agreed upon:

1. That Alyeska was not required to place a six inch layer of surface course material required

to bring the roadway to secondary road standards. However, Alyeska was to screen and stockpile 480,000 cubic yards of surface course type material to be used by the State for highway maintenance and/or improvement, and by Alyeska for Haul Road and pipeline maintenance.

2. That Alyeska was not required to replace the substandard bridge at Marion Creek or replace the culverts at Douglas Creek with a proper bridge, but Alyeska would reimburse the state for actual construction costs of those bridges up to a total of \$476,000.

The State of Alaska has since maintained the Haul Road employing a combination of private contractors, used primarily in the middle and northern sections of the road, and State Department of Transportation and Public Facilities personnel and equipment. Access to the Haul Road north of the Yukon River has been limited to official, commercial and industrial traffic since its construction.

APPROACH

Three tasks were identified in the program plan for the Haul Road condition study. These include initial data and information gathering, the field investigation program and report presentation.

The data gathering effort included interviews with persons associated with construction, maintenance and present use of the Haul Road. Mr. James Stover, Materials Support Supervisor, and Mr. Tom Edmunds, Transportation Coordinator, of ARCO Oil and Gas Company were interviewed to determine areas of particular concern to the oil industry and specific problems with the road.

Alyeska personnel interviewed include Mr. Ron Merritt, Pipeline Superintendent, Mr. James Pulis, Manager of Pipeline Projects, Mr. Eldon Johnson, and Mr. James Harley. Information obtained was background material on the history, maintenance and original design standards, and as-built drawings of the entire Haul Road. Additionally, Alyeska officials made available an informal study of Haul Road conditions conducted by Alyeska personnel. Mr. Steve Matthews, Superintendent of Maintenance of the Haul Road for the State Department of Transportation and Public Facilities, provided information on maintenance practices and future plans for upgrading the road. Various members of the trucking industry supplied general information on the condition of the road at various times of the year;

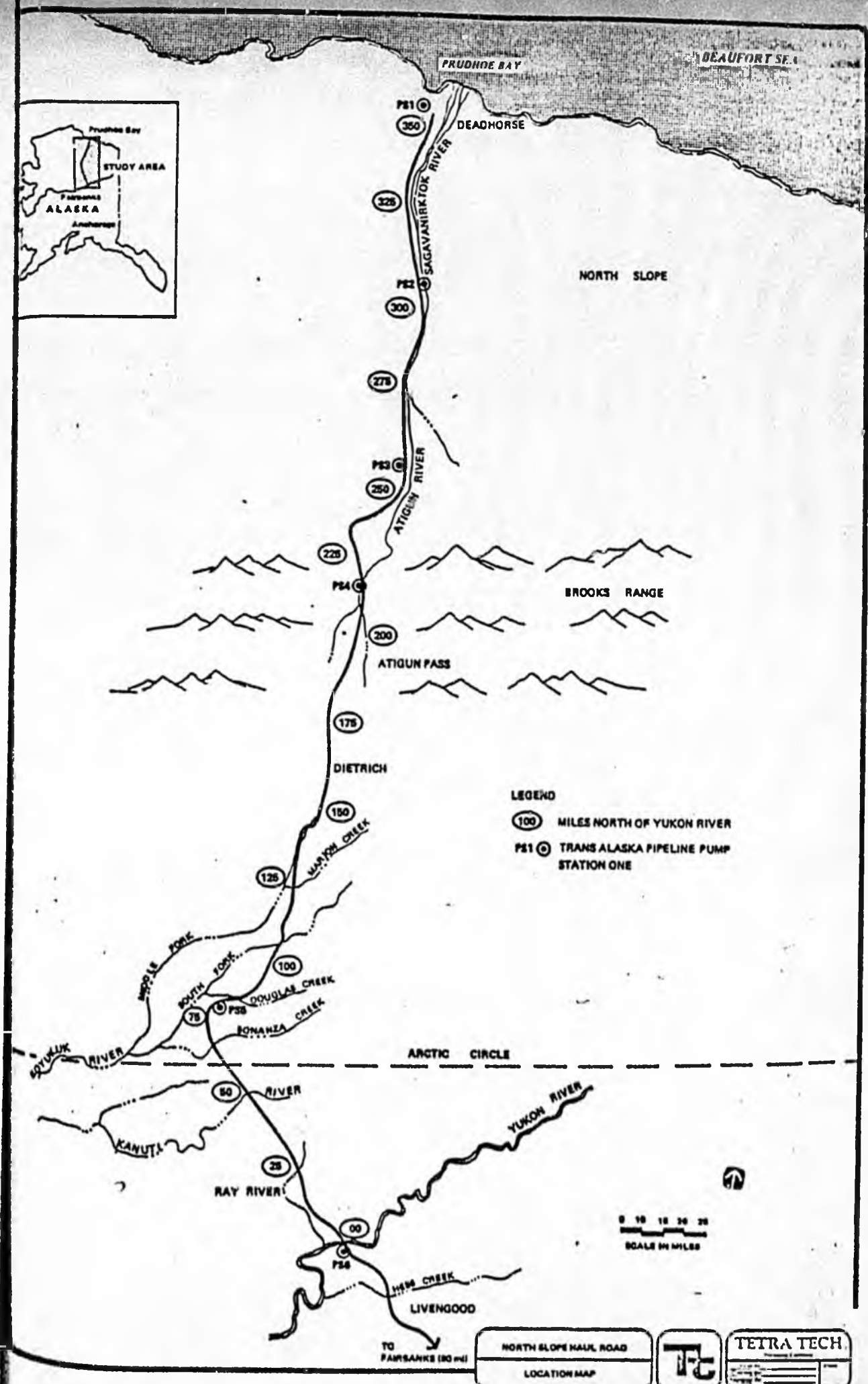
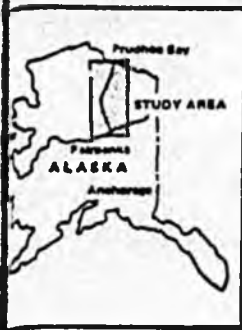
descriptions of vehicle and tire damage; and reports of delays due to road closures. Persons associated with the trucking industry who were interviewed are Mr. Ben Hoisington, Operations Manager for Totem Ocean Trailer Express, Inc.; Mr. Ralph Durante, Dispatcher for Sourdough Express, Inc.; Mr. Bob Brown, Driver for Gold Streak Freight Lines, Inc.,; and Mr. Leroy Rogers, Dispatcher for Weaver Brothers, Inc. Information gathered in May of 1980 from the trucking industry by Alyeska for their Haul Road report was also examined.

The field investigation was carried out by Mr. Jim Swing, Senior Civil Engineer, and Mr. Dan Behnke, Staff Engineer of Tetra Tech, Inc. Both drove the southern section of the road from Livengood to Dietrich, approximately 215 miles. Mr. Behnke then flew to Deadhorse and inspected the northern section of the road from Prudhoe Bay to Alyeska Pump Station Four, approximately 160 miles. Measurements of roadway and bridge widths, roadway embankment heights and material sizes, as well as visual examinations of unsafe conditions, were made. Substandard roadway and bridge conditions were noted and photographed for report presentation.

The report is a written and photographic documentation of the Haul Road conditions observed during the September, 1980 investigation, supplemented with descriptions and photographs of seasonal conditions and problems on the

road during other times of the year. The report is organized into specific types of roadway and bridge problems, with each written section accompanied by photographs showing examples of the problems discussed.

Wherever possible, locations of bridges and photographic subjects are referenced by mileage from the Yukon River Bridge, and notable locations along the Haul Road are shown on the location map on the following page.



LEGEND

(100) MILES NORTH OF YUKON RIVER

PS1 (C) TRANS ALASKA PIPELINE PUMP STATION ONE



NORTH SLOPE HAUL ROAD		TETRA TECH <small>INCORPORATED</small> <small>10000 W. NORTH AVENUE, SUITE 100, DENVER, CO 80231</small> <small>TEL: 303.751.1000</small> <small>FAX: 303.751.1001</small> <small>WWW.TETRA-TECH.COM</small>
LOCATION MAP		

4. Substandard Roadway

a. Northern Section:

The northern section of the Haul Road, from pump Station Four north to Deadhorse, is built, for the most part, on tundra which overlays ice-rich permafrost. The road was originally designed for a minimum fill depth of five feet, to prevent thaw degradation of the permafrost, but it was found during the September, 1980, investigation, that the actual average depth of fill is approximately four feet above the tundra. Four feet of gravel covering the tundra is a commonly accepted minimum depth of fill for roadways or construction pads required to prevent permafrost thaw, but it does not include a factor of safety to account for settlement or sinking of material into the tundra, removal of surface material by grading, or possible thin spots in the fill. If the permafrost below the roadway is allowed to thaw, severe frost heaves will develop, the fill will settle, and eventually the roadway will sink into the tundra. In order to prevent thaw degradation of the permafrost, which will create the necessity of continued repair of frost heaves, the fill should be brought up to design grade, or at the very least an additional six inch lift of surface material applied, as discussed in the following section.

b. Inadequate Surface Course:

The design surface course of the Haul Road was generally intended to be a mixture of various sized materials ranging from fine sands up to three quarter of an inch rock. It was designed to provide a smooth driving surface that will hold together under heavy use, stay firm in wet weather, be easily maintained, and contain a minimum of very fine materials which might create a problem with dust in dry weather. Prior to turning the Haul Road over to the control of the State, and as part of the agreement between Alyeska and the State, Alyeska was released from spreading a six inch layer of surface course material, as required by secondary road standards.

The Haul Road presently suffers from a variety of problems due to the lack of a proper surface course and the problems will become worse with time unless remedial action is taken.

The southern section of the road, south of Dietrich, was in good driving condition at the time of the September examination. This is attributed to good maintenance by the State and an unusually long period of dry weather. During other times of the year, particularly in the spring break-up period and after prolonged rain, sections of the road develop extensive potholes and washboard due to the lack of proper surface materials. Other sections, which have an excellent driving surface when dry, become slippery and

soft when wet, because of the high clay content in the surface material. These conditions are both unsafe and expensive to maintain, since the roadway requires constant work to keep it in proper driving condition.

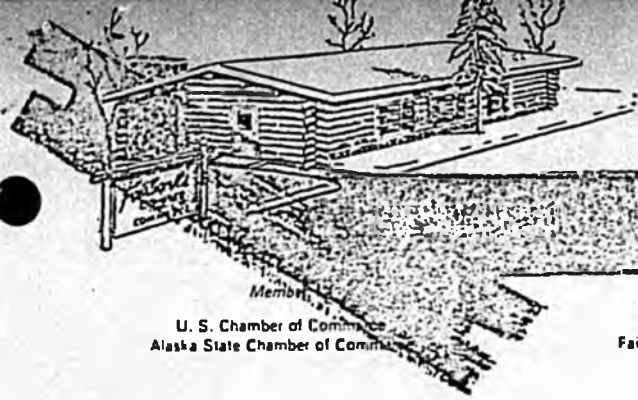
The northern section of the Haul Road is generally regarded as being the worst section of the road during all times of the year and all driving conditions. The original surface material ranged from very fine sands and clays to rocks two inches in diameter and larger. The material is adequate for the road embankment; however, the combination of heavy traffic and the almost constant wind of the North Slope have caused the finer materials to be blown off the roadway. This has left the large rocks on the surface of the road, which is extremely damaging to vehicles. Since the large materials are not suitable as roadway surface, normal maintenance procedures grade the rocks onto the shoulder of the road. This has two harmful effects on the permafrost along the roadway. The first is that this procedure will gradually decrease the thickness of the road fill, causing an increase in the amount of permafrost melt below the roadway. Secondly, some of this material is graded off the shoulder slope of the road into a low berm on the tundra alongside the roadway during normal shoulder maintenance. This causes the area of tundra affected by the roadway to increase, destroying more of the tundra and allowing the permafrost alongside the road

to melt. If not corrected, the continued widening of the roadway could also eventually threaten the natural gas fuel line, which runs alongside the Haul Road from Prudhoe Bay to Pump Station Four. The gas line is buried about 12 feet from the roadway over much of the northern section, and while it is not presently in danger, the roadway is now two or three feet closer to the pipeline in a few places than it was originally.

A proper surface course, consisting of a six inch lift of suitably graded material, would substantially decrease the problems of washboarding and potholes, thereby decreasing the amount of maintenance required to keep the road in good driving condition. The surface course would also solve the problems associated with the large material on the roadway in the northern section of the road, including damage to vehicles, grading of large material onto the tundra, and roadway widening.

Photographs No. 23 through No. 30 illustrate problems associated with the substandard surface course.

**PLEASE NOTE: THE PRECEDING PAGES WERE TREATED
AS A UNIT IN THE ORIGINAL DOCUMENT.**



Greater Fairbanks

CHAMBER OF COMMERCE

U. S. Chamber of Commerce
Alaska State Chamber of Commerce

In Association With:

Fairbanks Visitor & Convention Bureau
Fairbanks Industrial Development Corporation

(907) 452-1105 550 First Avenue

FAIRBANKS
ALASKA 99701

A RESOLUTION SUPPORTING HB 177

WHEREAS, the Dalton Highway, also known as the haul road, is a transportation link to the North Slope oil and gas fields; and

WHEREAS, it provides access to the Alyeska pipeline for service and emergency response, and

WHEREAS, it provides an impetus for mineral exploration along its route; and

WHEREAS, the commercial use of this highway is of a major economic benefit to Fairbanks and Alaska; and

WHEREAS, the alternatives to the commercial use of this highway would bypass Fairbanks and to a large extent Alaska as a state; and

WHEREAS, the state is obligated to keep this highway open for Alyeska even if it does not receive major commercial traffic; and

WHEREAS, users of this highway have called attention to its deplorable condition; and

WHEREAS, at least two independent engineering reports confirm this condition; and

WHEREAS, a stated goal and objective of Alaska DOT/PF is to "provide a transportation infrastructure for industry and commerce with real growth potential;" and

WHEREAS, the primary users of the Dalton Highway are petroleum industry related and have undoubtedly demonstrated their economic value to the entire state; and

WHEREAS, in the immediate future, this highway must accomodate gasline construction water flood activities, gas conditioning plant construction, plus traffic to haul approximately 18 additional drilling rigs to the North Slope each of which could generate approximately 1000 trips,



NOW THEREFORE BE IT RESOLVED that the New Greater Fairbanks Chamber of Commerce supports the basic provisions of HB 177. According to the State of Alaska Department of Transportation the projected cost to accomplish the provisions of this bill are approximately 27 million dollars. We strongly urge that this action be scheduled and completed prior to the scheduled start-up of the projected gas line construction.

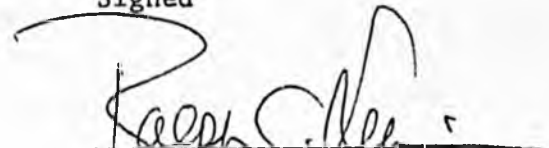
Signed this 3 day of February, 1981.

Attest



Ron Davis
President

Signed



Ralph Seekins
Chairman of the Board



PO Box 1410
Fairbanks, Alaska 99701
(907) 452-5131
Telex 0003435

March 5, 1981

AIC/FAI-2337

Rep. Bette Cato, Transportation Chair
and Members of the Transportation Committee
Pouch V
Juneau, AK 99811

Subject: H.B. 177
Special Appropriation to the Department of Transportation to
Resurface the Highway from the Yukon River to the Arctic Ocean

Dear Representative Cato and Transportation Committee Members:

In response to several conversations concerning Alaska International Construction's activity and association with the North Slope Haul Road, we offer the following for your perusal.

In October of 1978 Alaska International Construction, Inc., through competitive bidding, began maintenance of the what was then deemed the North Slope Haul Road beginning at a point adjacent to Pump Station No. 4 and going north to the Haul Road's terminus at Crazy Horse Camp up on the North Slope. Prior to AIC's maintenance work under that particular contract issued by the Department of Transportation, they had been involved in Haul Road maintenance directly for Alyeska Pipeline Service Company on a contractual basis beginning sometime in 1976. Alyeska's "standard of maintenance" would probably be more properly termed "continuing reconstruction and maintenance" of the Haul Road. Comparatively, the DOT maintenance project was a more typical grading and snow removal contract experienced by contractors in other parts of the State on secondary road systems.

Historically, Alyeska had re-prepared the road surface each year using a mixing technique accomplished by ripping the road surface 18 to 20 inches with a D-8 ripper, regrading, watering and recompacting thereby bringing as many fines as possible to the road surface and re-establishing a smooth surface that could be traveled at speeds of 60 to 70 mph. Unfortunately that technique has a diminishing character in that only a given amount of fines existed in the roadbed and now, at least from

Rep. Bette Cato, Transportation Chair
and Members of the Transportation Committee
March 5, 1981
Page Two

Pump Station No. 4 North, the roadbed and surfaces are lacking in fines, thereby causing a rough, cobbled surface to be driven upon. As the maintenance contractor for that north portion, AIC began receiving criticism from truck drivers and subsequently the Department of Transportation maintenance group because of the rough condition of the road in several places between Pump Station No. 4 and the terminus at Crazy Horse. In an effort to determine the cause of the bad reports we enlisted an independent engineer to survey the road during the Winter of 1979-80. He reported that snow removal was adequate but that in several places road surface conditions were very rough causing typical traffic to reduce speed from 60 mph to 35 to 40 mph. Additionally, south of Franklin Bluffs Camp and north of the "ice cut" little snow had fallen and no help was afforded from a snowpack which normally would be created by that time of the year. In the Summer of 1980 after a three month period of maintenance by State maintenance group employees, AIC again contracted with an independent engineer, Mr. Anson L. Renshaw, to spend approximately three weeks on the farthest most 100 miles of the Haul Road and report back on a foot-by-foot basis as to the condition of the road. Additionally we researched the design of the road by Michael Baker and Associates, a contractor to Alyeska Pipeline Service Company, and reconciled why crushed material which had been manufactured during the construction of the Pipeline had never been placed on the roadbed to prepare a final wear surface for the road. Our findings indicated that in many instances on the north end the road had never been brought up to design levels, in some places as much as lacking two feet, and subsequently the crushed D-1 material was not placed in a final lift to prepare a smooth surface as per the design. No criticism is intended for the reasons indicated that both the State and Federal governments (primarily the State though) requested that gravel used in construction of the road be minimized because of the apparent lack of maintenance material that would be left for years subsequent to completion of the road. While the reasoning sounds good initially it has caused a substantial deterioration of the Haul Road, at least on the north end.

Mr. Renshaw's report (a copy of which has been provided to Representative Sally Smith) indicates that there are a number of problems with the Haul Rd. as it exists today at the north end, and even to the untrained eye, one is made aware that remedial construction is necessary immediately in order to defer any further deterioration. No insulation was used in the preparation of the road and therefore a thaw bulb is being created underneath

Rep. Bette Cato, Transportation Chair
and Members of the Transportation Committee
March 5, 1981
Page Three

the road (not unexpected). Subsequently the crown on the road is being lost to this sag, and being accentuated due to the fact that the road crown has been bladed off in an attempt to get rid of exposed cobbles and cause a smooth road surface for Haul Road traffic. The result of this thawing process is the sagging of many of the culverts some of which now are approaching a level of usefulness equivalent to zero. The Road is quite wide in many areas now, again primarily from an attempt to maintain a smooth road surface by continuing to eat into the roadbed and push away the cobbles exposing more fines which subsequently are blown away due to continuing prevailing winds from either the west or the east which deposit the fines several hundred yards to the right or left of the Road on the tundra.

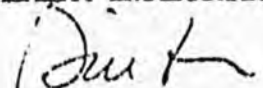
A number of reconstruction objectives are needed immediately on the north end of the Haul Road, and in our opinion, are justified in that each year that road use goes by without these reconstruction expenditures, inflation and further degradation of the Road produce almost a geometric spiral in repair costs at a future date. On a broad brush approach our recommendations would be that the road surface be brought up to grade with the addition of common material from designated State material sites and then be finished with D-1. Additionally, because of the prevailing wind problems that exist north of the Range, it is vitally necessary that some surface system that would contain the fine material necessary to maintain a good road surface be included in the project concurrent with road reconstruction. If this surface preparation is not applied then in several years the State will be faced with the same problem they are now, primarily one of grading the surface of the road often in an attempt to find additional fines to make a smooth surface so that traffic can pass at the rate it expects to (55 to 60 mph).

Culvert reconstruction will also have to be a necessary element of the road reconstruction process and a re-design in several areas to protect against thaw bulb creation and subsequent sagging must be incorporated. Bridge reconstruction apparently is necessary in areas south of Pump Station No. 4. However, Alaska International Construction, Inc. does not have the intimate knowledge of that road system such as it has on the North section about which we have been speaking.

Representative Smith's proposed Resolution of utilizing \$3 million dollars to upgrade the Haul Road is at least a start in solving a serious problem that concerns the umbilical to the transportation system that serves the industry that provides the very sustenance of economic life to the state.

Very truly yours,

ALASKA INTERNATIONAL CONSTRUCTION, INC.


William D. Fowler
President

TELEGRAM

ALASCOM, INC.
PHONE: 585-6442
JUNEAU, AK 99802

#

02067 ANCHORAGE AK 68 03-05 1106A AST

MAR 5 PM 1 34

PMS REPRESENTATIVE SARAH SMITH

451

JUNEAU AK

FROM JOHN ORCHARD, OPERATIONS MANAGER FOR FOUR STAR TERMINALS
INCORPORATED, ANCHORAGE.

AS A COMMON CARRIER DOING AN EXCESS OF FOUR MILLION DOLLARS
WORTH OF LINE HAUL WORK IN 1980, 85 PERCENT OF WHICH WENT TO
PRUDHOE BAY, WE WHOLEHEARTEDLY SUPPORT YOUR HOUSE BILL NBR 177
TO PROVIDE RESURFACING MONIES FOR THE HAUL ROAD. WE DO NOT
FEEL THAT EIGHT MILLION DOLLARS WILL COVER THE COST, HOWEVER,
THIS IS A GOOD START.

JOHN ORCHARD

FOUR STAR TERMINALS INC.

TELEGRAM

ALASCOM, INC.
PHONE: 586-6442
JUNEAU, AK 99802

02041 ANCHORAGE ALASKA 37 03-04 1100A AST

PMS REPRESENTATIVE SALLY SMITH

313

JUNEAU AK

WE AT KODIAK OIL FIELD HAULERS TOTALLY SUPPORT YOUR EFFORTS ON
HB177 AND WOULD RECOMMEND YOU CONSIDER SUBSTANTIALLY UPING THE
APPROPRIATION IN LIGHT OF THE DETERIORATING CONDITION OF THE
ROAD. CORDIALLY YOURS,

SMOKEY NORTON, KODIAK OIL FIELD HAULERS INC

PO BOX 10549 ANCHORAGE AK 99511

3/11/84 4 PM 1 35

TELEGRAM

ALASCOM, INC.
PHONE: 586-6442
JUNEAU, AK 99802

#

02044 ANCHORAGE ALASKA 45 03-04 1204P AST

PMS HONORABLE REP SARAH SMITH

JUNEAU

345

RE HB 177

YOUR EFFORTS TO GET THIS BILL PASSED WILL BE AN ECONOMIC BENEFIT
TO ALL OF ALASKA HOWEVER I FEEL THAT WE SHOULD RESURFACE ALL OF
THE HAUL ROAD AND THAT THE MORE REALISTIC FIGURE OF 20 MILLION
DOLLARS IS NEEDED. SINCERELY,

SYDNEY R CAMPBELL

PRESIDENT DRILLING MUD HAULERS INC

3/11/84 4 PM 2 30

~~Notes~~

383

Sally Smith -

Liability -

T.J. Throthson - reg. director Trucking Assoc -
400+ Trucks -

dedicated funds ??

or G.F.

Permit - cost?

330,000 of Alaskan carriers.

duration of permit

oversize - per 30 days - \$25

John Bates D. Com Planning DOT -

4.3 m m furnish front road camps -

4.9 - replacing culverts / bridges

6 m - Gov's city budget - spot repair -

material available ??

qualify for

depth of material ??

Feb funding -

dust control - budget Amendment

June 1st supplemental -

March 6, 1981

Transportation
Committee

North Slope Haul Rd.

● Rep. Sally Smith, Prime Sponsor, HB 177

Special Appropriation for North Slope Haul road

● first $\frac{1}{2}$, approximately to Dietrich
would be open to the public

$\frac{2}{3}$ is in worse condition

anticipate the public to sue the state

● road is 383 miles long

● Ms. T J Trasher, Manager, Truckers Association
450 trucking & allied in state;

136 miles northernmost section needs
major repairs;

10,000 vehicles - mostly commercial
transportation use the road

need to have the road brought up
to secondary road standard

2/6/81

John Bates, DOTPF

6 million for spot repair -
also repair guard rails

"fines" not completely dried out;
use of the road prior to
completely finished -
dust control
sewer pick up
litter pick up } \$1 million

Speed limit 45 miles/hr.

Rep. Bob Bettisworth

secondary road standards -
6-inch topping of the road
gravel

John Adams, Executive Director,
Environmental group from
Fairbanks

against opening the haul road
to unrestricted use

public safety + environmental
concern satisfied - a compromise
position;

3/5/81

HB 177

(3)

Jeannie Klein - Associated General
Contractors

Jim Swing - Tetra-Tech

preparat survey for ARCO

high speed of trucks

dust

certain bridges have 6% grade

no public input obtained
in their study;

only talked with ARCO +
Alyeska people

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DEPUTY COMMISSIONER — PLANNING AND RESEARCH

JAY S. HAMMOND, GOVERNOR

(907) 485-3800

POUCH Z
JUNEAU, ALASKA 99811

March 4, 1981

Honorable Sally Smith
Alaska State Representative
Pouch V
Juneau, Alaska 99811

Dear Representative Smith:

Approximately two weeks ago the subject request was made by one of your staff to our office of Planning and Programming in Fairbanks.

While in the process of obtaining this information, a fiscal note request was made concerning the same subject of upgrading and resurfacing the Haul Road to bring it up to secondary standards.

Rather than duplicate the effort, and in an attempt to avoid generating conflicting cost data or project descriptions, it was decided to wait until this more in-depth information was available.

The Governor's budget request contains \$6 million to perform spot resurfacing of the north end of the Haul Road which at this time is considered to be the area needing surface repair the most. The \$26,605,000 is an estimate to resurface the entire roadway which was not considered to be needed at this time but was planned to be programmed as needed.

Please find enclosed a copy of the previously referenced fiscal note. I hope this will give you the information you desired in relationship to the original request. If not, please contact me and I will endeavor to provide you with the necessary information.

Sincerely,



John Bates
Deputy Commissioner

HAUL ROAD RESURFACING

Assuming the entire road would be reconditioning to level, crown and spread the remaining original surface course to a width that will accommodate a 6" crushed aggregate base and still result in the existing 28' width.

Therefore, the following estimate represents a resurfacing of the facility with customary accoutrement. The estimate is made based on current prices with an allowance for the "North Slope" factor, as no recent bid activity in this area is available for an estimate basis. It would be well to note that each inch of surfacing course represents \$3,500,000, and that 6" is the normal application and not necessarily the required application.

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

REQUEST

Bill/Resolution No. H. B. 177

Title Special Appro. to DOT/PF for Resurfacing Highway, Yukon River to Arctic Ocean

Requested by Rep. Smith, et al

Date 2/20/81

FISCAL DETAIL

Agency Affected DOT/PF

Program Category Affected Highway Design & Construction

U, Program, or Subprogram(s) Affected _____

(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY81	FY82	FY83	FY84	FY85	FY86
PERSONAL SERVICES		205.0				
TRAVEL						
CONTRACTUAL		26,400.0				
COMMODITIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS, ETC.						
TOTAL		26,605.0				

FUNDING (Thousands of Dollars)

GENERAL FUND		26,605.0				
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

See attached assumptions and qualifications.

DATE 2/26/81

PREPARED BY Dave Truax

AGENCY Division of Planning & Programming

PHONE 479-4284

Original: Legislative Finance

Budget and Management

Prime Sponsor (First Legislator Named)

001 (Rev. 12/80)

ROAD AND HIGHWAY NEEDS IN INTERIOR ALASKA

BY THE TRANSPORTATION
COMMITTEE



For
THE GREATER FAIRBANKS
CHAMBER OF COMMERCE

JANUARY 1981

The Greater Fairbanks Chamber of Commerce has prioritized these needs. First, and foremost on this list is the North Slope Highway. The North Slope Highway, beginning at Fairbanks and terminating at Prudhoe Bay, is without exception, the most important highway to our state's economic well-being at the present time and for the foreseeable future.

This highway was constructed to secondary standards for the citizens of Alaska at the request of the Alaskan government. Part of this agreement include the obligation of the state to provide maintenance on this road without charge to Alyeska. Federal funds were also utilized in the construction of this road, thus legally making it a public highway.

This highway is the only overland link with the North Slope in Alaska and consequently, it is a major hauling route. Maintenance costs are high but, unless the road is paved they can be expected to go higher. Currently, over 100 trucks use the road daily. According to a study completed by the United States Comptroller General's Office, using data furnished by highway officials, one loaded truck weighing 85,000 pounds requires the same maintenance effort as 9,600 automobiles. Assuming half the trucks using this road are loaded, a maintenance effort to serve 500,000 autos is required.

The North Slope Highway can be divided into four separate sections for improvement purposes.

Fairbanks to Snowshoe Pass

This section of roadway has been reconstructed and paved. No need has been identified for this section.

Snowshoe Pass to TAP's Road Intersection

This section of roadway has just been reconstructed to achieve adequate alignment and grade. This section was constructed from Birch Creek Schist, a material that readily breaks down under heavy traffic. Presently, there is no base or traveling course on this road as the DOT/PF realized that putting such a course on would be fruitless as it would soon be lost under heavy

traffic. This is a serious matter, since the road as constructed, will not hold up under the current use it is receiving for even a few years. This section can best be protected by paving; however, it will take at least three inches of pavement to withstand the anticipated traffic.

Presently, DOT/PF has scheduled paving for this section after completion of the gas pipeline. It is feared that such a delay will result in this newly constructed section being lost during the gas line construction. The DOT/PF experienced a similar situation during the Alyeska effort when the newly constructed Elliot Highway to Snowshoe Pass was lost and had to be reconstructed and paved at a cost comparable to the original construction cost.

If the road way were paved prior to the gas line effort, the road would be similar to other paved roads within the state, provide an operational savings to truckers, protect the current investment in a new highway and increase safety on that road.

TAPs Road Intersection to the Yukon River Bridge

This section was built by the oil company prior to the Alyeska effort. It was built to secondary standards and is currently open to public use. For safety convenience and lower maintenance cost, this section is recommended for paving. This paving should extend a mile or so beyond the Yukon River Bridge. Presently, bridge maintenance is extra high as trucks drop mud and dirt into the contraction joints. Paving beyond the bridge for a mile or so would help alleviate this problem.

Yukon River Bridge to Prudhoe Bay

This section was turned over to the state in good condition. Since that time, it has deteriorated to the point that truckers get only eight to ten trips per set of tires. This is due to the loss of traveling course through heavy traffic, wind and improper maintenance practices. It now needs a new traveling course.

CONSEQUENCES OF NO IMPROVEMENT

Maintenance cost will go even higher than the \$27,000 per mile per year now necessary although not being spent. Rough and dusty roads will unnecessarily endanger users of this road whether public or commercial. Deterioration of this road will accelerate, damage to equipment will increase as well. Commercial use of the highway will decrease as oil field operators will find alternative routes such as increase sealifts or using the McKenzie River through Canada, either way, by-passing Alaska and Fairbanks. The state will still be required to maintain this road because of the agreement with Alyeska.

ESTIMATED COST

Pave from Wickersham Dome to Livengood (TAPS Road)	\$10,300,000
Pave from Livengood to the other side of the Yukon River Bridge	11,400,000
Shape and place crush gravel surface on remainder of road to Prudhoe Bay	<u>22,000,000</u>
Total	\$43,700,000

Cost of Paving in 1986

Present worth of Capital Investment*	\$39,300,000
Present worth of estimated maintenance cost for unpaved road through 1986	<u>5,800,000</u>
Total	\$45,100,000

Cost of Paving in 1981

Present worth of capital investment	\$21,700,000
Present worth of estimated maintenance cost for paved road through 1986	<u>1,600,000</u>
Total	\$23,300,000

Savings to taxpayer $\$45,100,000 - \$23,300,000 = \$21,800,000$

*The reason for the higher paving cost under the 1986 paving scenario is the necessity for reconstruction of major portions of this road destroyed during the gas pipeline effort.

Introduction

Part I Summary and General
Background

**AN INSPECTION OF THE NORTHERLY ONE-THIRD
OF THE NORTH SLOPE HAUL ROAD
M.S. 119-4 TO DEADHORSE AIRPORT**

- 1. Composition of surface gravel
- 2. Grades, dips and curbs
- 3. Subsidence due to frost

Other General Considerations
Performed for

- a. Loss of binder
- b. Super-elevated
- c. **Frank Moolin & Associates, Inc.**
(An Alaska International Industries Company)
- d. Sealing of road ends
- e. Width
- f. Slope

General Recommendations

Part II Road Inspection Log

- Explanation
- 1. Mile 21.1
- 2. Mile 27.1
- 3. Mile 30.0
- 4. Mile 32.5
- 5. Mile 35.0

by

Anson L. Renshaw, Jr., P.E.
Consulting Engineer
1850 Wickersham Dr.
Anchorage, Alaska 99507

Part III Recommendations

- 1. Roadbed inspection
- 2. Listing of special maintenance locations
- 3. Culverts
- 4. Culvert Siphon Tabulation
- 5. Explanation
- 6. **September 1980**
- 7. New Signs
- 8. Recommended New Culvert In
- 9. Ditches
- 10. Pile-Drive
- 11. Listing of Road
- 12. Signs
- 13. Disturbances to Roadbed
- 14. Listing of Special

Appendix A Photographs

Appendix B Maps



I. INTRODUCTION

This report was commissioned as an independent inspection of the condition of the northerly one-third of the North Slope Haul Road between 119-4 and the Deadhorse Airport.

Alaska International Construction Company had been awarded a maintenance contract by the State of Alaska with an effective assumption date of October 1, 1980. Frank Moolin & Associates had been requested to document the existing condition of this road segment prior to the assumption date. However, due to its sister company status within the Alaska International Industries group of companies, it was deemed appropriate to engage an independent consulting engineer to perform the inspection and to document the conditions. Consequently, Anson L. Renshaw, Jr., P.E., was engaged for this work with Frank Moolin & Associates providing the general objectives for the work and support services during the field inspection and for report preparation. All observations made and the conclusions reached are therefor solely those of the consultant.

The field inspection work was performed during the period of September 8 through September 14, 1980. During this time weather was excellent. Freeze-up had not yet occurred and all areas were free of snow cover.

The Report is organized in three major divisions:

Part I contains a summary of observations with general maintenance recommendations relative to the day by day use of the road.

Part II is the field log of the inspection indexed to road mileage, special problems encountered and to photographic documentation.

Part III is a detailed classification of the special problems requiring maintenance attention, reconstruction or monitoring.

Additionally, two Appendices are included. The first consists of the photographs with appropriate explanatory statements and mileage locations. The second consists of a series of U.S. Geological Survey topographic quadrangle maps, scale 1:63, 360, on which have been added whole mileage points in conformance with the other data.

intenance, the character and condition of road surface and to construction, for example, the road is not well maintained and is affected by ruts and ripples, but there are no potholes or other defects. Also, the road is usually not related to surface conditions.

PART I

SUMMARY AND GENERAL RECOMMENDATIONS

The field inspection (see Part II) was conducted during the period of September 8th through 14th, 1980, and proceeded south to north. The selection of this direction of progress was based primarily upon three considerations: the established Paul Road mileage, though generally not posted, increased in that direction; for photography purposes lighting would be from behind; and snow-fall could occur at any time, particularly at higher elevations along the southerly portions of the road segment. Weather conditions remained excellent during the course of the inspection with mild temperatures (above freezing) and no snow-fall. Drainage was unhampered by freezing. By the time the vicinity of Deadhorse was reached the dense fog cover which had plagued the airport for days had dissipated and nearly all of the work therefor completed in bright sunlight.

During the course of the inspection the State had at least three graders at work on various sections of the road readying the driving surface for winter and performing general maintenance blading. This afforded an opportunity to see the conduct of their work and the problems they were encountering.

Although it had been intended that particular attention be devoted to the roadway surface conditions, it was obvious that numerous other problems relating to drainage and embankment stability should also be addressed. Since the condition of the culverts were in large measure symptomatic of these other problems, existing and probable, the decision was made from the outset to carefully inspect each culvert. Consequently, due to the numerous culverts encountered, and the frequency of occurrence in certain areas, the information as to other subjects in the Log (Part II) appears overwhelmed by culvert detail.

Posted traffic speed for the Haul Road is 45 miles per hour. Along much of the southerly half of the road segment truck speeds are in large part dictated by grades (these have been relatively termed "flat", "low", "moderately low", "Moderately steep", "steep" and "very steep" in the Field Log); the maximum being about 12%. Otherwise vehicle speed is a function of the road surface, its maintenance, the character and gradation of gravel utilized in its construction, surface width, local hazards, and localized subsidence depressions. Also, to a minor extent, speed is affected by signs and markers, but these generally are present to warn of major hills, intersecting traffic operations or temporary hazards, and usually are not related to surface conditions.

It was observed that even along stretches of virtually flat grade, and only hours or a few days after maintenance grading, the speed at which truck traffic was moving (and which the writer experienced as a safe and reasonable speed for a light vehicle) was between 30 and 40 mph rather than the posted 45. The reasons for this are several and which are not wholly specific in the Field Log. As general considerations affecting vehicle speed are the following factors:

Factors Limiting the Speed of Road Utilization

1. Composition of road surfacing gravels. By visual inspection the size gradation of gravels forming the compacted road surface (as opposed to loose surface gravels) were seen to generally vary as follows:

- 251.1 mi. to 252.4 mi. - 2 inch minus
- 252.4 mi. to 254.5 mi. - gradually increases from 2-inch minus to 4-inch minus, and with random cobbles increasing to 8-inch.
- 254.5 mi. to 257.5 mi. - increases from 4-inch minus to 5-inch minus.
- 257.6 mi. to 268.6 mi. - 5 to 6-inch minus with random cobbles to 8 and 10 inch.
- 268.6 mi. to 273.1 mi. - gradual increase to about 8-inch minus, then gradually decreasing to 4-inch minus.
- 273.1 mi. to 277.6 mi. - 4-inch minus with cobbles to 6-inch.
- 277.6 mi. to 279.65 mi. - 4-inch minus increasing to 5-inch minus with 8-inch cobbles
- 279.65 mi. to 297.6 mi. - primarily 6-inch minus, but also zones of 5-inch minus.
- 297.6 mi. - fairly clean-cut transition to 2-inch minus.
- 297.6 mi. to 299.0 mi. - 2-inch minus with random 4-inch cobbles.
- 299.0 mi. to 300.4 mi. - gradually increases from 2-inch minus to 3-inch minus at 299.9 and then decreases to 1-inch minus.
- 300.4 mi. to 302.8 mi. - gradually increases from 1-inch minus to 4-inch minus with an accompanying increase in cobble size.
- 302.8 mi. to 303.2 mi. - increases from 4-inch minus to 6-inch minus.
- 303.2 mi. to 305.3 mi. - 6-inch minus
- 305.3 mi. to 322.8 mi. - gradually decreases from 6-inch minus to 5-inch minus at 310.55 with larger cobbles; to 4-inch minus at 315.0 and then to 2-inch minus.
- 324.3 mi. to 336.2 mi. - 3-inch minus
- 336.2 mi. to 344.9 mi. - 2 and 3-inch minus
- 344.9 mi. to 358.4 mi. - 2-inch minus

These size ranges are of importance in several respects. It was noted that generally a grader will not readily dislodge an imbedded cobble greater than about 4-inches in size. Rather, the blade has a tendency to ride over such a rock leaving a small ridge angled transverse to the road alignment. Both the ridge and the rock therefor contribute to surface roughness. There is of course, an exception. Several areas were noted where, although 5-inch minus and larger materials were utilized, the larger rocks were platy (small in one dimension) and, though showing in the surface, did not cause roughness due to flatness parallel to the road surface.

The opposite extreme is found between 297.6 mi. and about 303 mi. Here the material source was a decomposed pebble conglomerate of relatively consistent size range and particular roundness. By soil classification, it would appear to be between a poorly sorted fine gravel and a poorly sorted gravelly coarse sand. The material does not readily pack and is very susceptible to wash boarding on uphill driving lanes and particularly where trucks change gears along a slope.

With the exception of the situation addressed in the preceding paragraph, all other gravels appear to have been obtained from deposits of alluvial derived gravels, and which are reasonably well sorted. Certain road segments, particularly along the rivers are of excellent gradation and maximum size range for road surfaces. These segments are 251.1 mi. to about 255 mi., 273 mi. to 278 mi. and 315 mi. to 358.4 mi. The roughness of these segments are due primarily to other reasons.

2. Grades, Crown and Potholes Overall, the largest single maintenance problem, limiting traffic speed, has resulted from loss of crown. This appears to be due to settlement of the road embankment; likely resulting from minor subsidence of the prism differentially into the underlying soil. This distortion is reflected consistently in many of the culverts which show grade distortions concave upward and the end inverts of which are often inset below natural surface elevations. This fact is demonstrated by two sequences of photographs B-8 and B-9 at 267.6 mi. and I-19 at 355.45 mi. (See Appendix A).

In driving the road it is readily noted that (exclusive of imbedded cobbles and washboarding) the smoother road surfaces are on grades exceeding about 2 percent. These grades readily permit the drainage of precipitation without contributing to the formation of potholes. On stretches of road with relatively flat alignment grades it is the transverse slope, or "crown" which controls drainage. Usually a crown will be set at 2% either side of centerline and which, by experience, is the minimal optimum for accomplishing drainage without adversely affecting traffic utilization. Where the crown grade is low or non-existent the water is retained at or near the surface and quickly contributes to the formation of potholes under the traffic useage. Once established such a pothole (or adjacent series) become almost impossible to repair particularly when precipitation and heavy traffic are continuing.

This potholing due to the loss of crown is a persistent and wide-spread problem, although intermittent, regardless of topography (except for grades exceeding 2%) and irrespective of the size range or classification of the materials from which the road is constructed. Even in hilly areas potholing is seen at the valley bottoms where alignment grades approach zero.

In observing the State maintenance efforts it was noted that routine blading failed to remove most of the potholes (no criticism intended). Rather, loose gravel would be deposited in the holes and the road would appear smooth. However, after a few passes by heavily loaded trucks at normal driving speeds the same holes would again be readily evident. Where extra effort was made on a spot basis to cure the problem only a short term solution would result; rather than reshaping for crown the graders in removing the holes would aggravate the lack of crown and in certain locations have even caused transverse depressions - this solution to the problem can only last until the next rainfall, or at best the next thaw after a snowfall.

A number of the photographs depict this loss of crown problem and the results of blading to correct potholing. These are scattered throughout the entire group of photos just as the problem is intermittently scattered along the entire road length.

3. Subsidence due to ice-melt. A third major problem limiting traffic utilization speeds by affecting the regularity of the road surface is that of isolated or repeated dips apparently caused by the melting of ice-wedges. Largely this problem is confined to hilly areas, although it is also noted where the roadway crosses broad alluvial fans lacking in definitive drainage channels. Sketch #2 in Part III of the report attempts to diagram the assumed conditions contributing to this problem. Basically it is believed that polygonal ice-wedge boundaries may be present without specific surface expression, and which, due to a combination of heat transfer through deficient embankment depths and retarded surface drainage, are deteriorating. The result of this degradation is a more or less linear depression crossing the road, in whole or in part, at various angles and with various degrees of localized subsidence severity.

This problem is particularly acute along side hills where the uphill portion of the embankment prism may be less than about 5-feet, and where drainage is retarded. Another common location is at or near the crest of hills where design sign distance appears to have resulted in deficient embankment thickness. Dips at these summits have developed irrespective of adequate drainage.

This particular problem is likely a continuing and possibly accelerating condition, and which if not addressed soon may, in certain areas, result in very major and very difficult structural failures of the roadbed. It is seen as being related to several ice-melt subsidence problems of a specific nature addressed individually in Part III.

Other General Considerations

a) Loss of binder in surface gravels. While this is indeed a problem; it is not, in the writer's opinion, one of major importance. Where it is considered most apparent by others, in the area between 297.6 mi. and about 303 mi., it is doubtful that adequate binder ever existed due to the inherent characteristics of that embankment material. The remedies recommended for the solution to other problems would likely also solve this problem.

b) Superelevation. No problems were noted in this regard. Even though the subsidence causing loss of crown has undoubtedly affected design superelevations, the slopes are in fact largely self-maintaining by the truck traffic. The tendency for the truckers to occupy the inside lane when rounding a curve results in surface materials being constantly shifted toward the outside of the curve thereby maintaining the cross-slope.

c) Reduced road width. Generally along the southerly half of the road segment the shoulder to shoulder width is 34 to 36 feet. Throughout the northerly half it seems to vary between 40 and 45 feet with 42 a good average. Three causes of road width narrowing were noted each of which are due to localized problems. These are:

- 1) slumping and sloughing at culverts - these are addressed individually in Part III.
- 2) wash-out of shoulders and foreslopes due to lateral grader berms along the shoulders. Such berms are to be avoided as they concentrate runoff and invariably result in washes at the bottom of hills where water accumulates and then tops the berm. The finer grained soils are particularly susceptible to such washouts.
- 3) Apparent subsidence of uphill foreslopes and shoulders due to the localized melt degradation of ice-rich soils. This has been addressed in part previously ("subsidence due to ice-melt") and is addressed at specific locations of particular concern in Part III. Though localized, it is a very serious problem and one which may unfortunately be accelerating.

A further consideration with respect to roadway widths is that of soft shoulders. Particular caution in this regard must be exercised where the finer grained gravels have been utilized for embankment construction and where foreslopes are at or near the angle of repose (297.6 mi. to 303 mi.).

d) Culverts. Culvert problems are addressed individually in Part III. However, overall, and with few exceptions, a thorough cleaning job is overdue. At many culverts flow is obstructed by gravel accumulations at one or both ends. A number of them have appreciable gravel and cobbles scattered along the inverts sufficient to limit flow capacity. Several are entirely plugged and have

resulted in impoundments. One was seen with a plastic bucket lodged inside and another has a 2 x 2 survey stake driven entirely through it which could result in obstruction. It is imperative that a comprehensive cleaning program be undertaken at the earliest possible date. Because of the sensitive ice-rich soils in many areas, impoundments resulting from culvert obstructions could have disastrous consequences.

e) Pulling of Foreslopes. This maintenance requirement is partially impractical for this segment of the Haul Road. Where relatively coarse gravels have been used for construction (plus 4-inch) a large proportion of the oversize has gradually been worked out of the surface and now litters the foreslopes and embankment toes. In other areas it is obvious that a very coarse gravel was separately placed along the embankment edges for the purposes of widening the roadway as well as for erosion protection. The requirement, if enforced, would have a tendency to place cobbles on the driving surface and could constitute a hazard to safe vehicle operations. The practice should therefore be confined to select areas where relatively small sized gravels predominate.

Only one area was seen where the state was pulling the fore-slope and this apparently was abandoned after several miles due to cobbles introduced onto the road bed.

f) Debris. Though not necessarily related to vehicle speed, a quantity of debris is accumulating along the roadway. Most consist of ruined truck tires (or portions thereof) but other materials are also present. These range from whole sections of pickup frames to sheet plastic, timber, buckets, hard hats, beer and juice cans, assorted nuts and bolts, pipe, metal brackets, etc., and at least one gray plastic laundry hamper.

g) Glaciering. No areas were seen where glaciering should normally be a problem to the driving surface. However, if several obstructed culverts are not cleaned drainage could occur across the road during a thaw, and with consequent glaciering.

General Recommendations

a) The two major causes of lowered vehicle speed utilization (loss of crown and excessive gravel size) in addition to the relative minor and variable problem of loss of binder, may be combined essentially as a single problem for all areas of less than about 2% alignment grade and/or greater than 4-inch minus surfacing material:

- 1) pull the upper four feet of all foreslopes onto the road surface
- 2) scarify the upper 6-inches of the roadway surface.
- 3) rake-out all plus 3-inch size cobbles
- 4) reset the transverse crown grade of 2%
- 5) mechanically recompact the new surface.

The screened oversize may then be utilized for erosion protection rip-rap or continuously crushed to minus 3-inch and recombined with the regarded surface materials; preferably the latter as rounded rocks make inferior rip-rap.

b) For the segment from mile 297.6 through about mile 303, including alignment grades of less than 2%, serious consideration should be given to the use of oil as a binding agent. Such an oil should be applied in proper proportion to facilitate compaction while not causing such a smooth surface as to constitute a winter-time hazard on the steeper grades.

c) For those segments susceptible to or demonstrating the development of dips due to ice apparent ice-wedge melting, immediate consideration should be given to increasing the minimum thickness of embankment to 6-feet. Particularly this should be done at the crest of hills and along side hill alignments. Concurrently, steps must be taken to relieve drainage obstructions in these apparent ice-rich soils areas and avoid any non-natural impoundments.

d) For longer term considerations a detailed engineering evaluation of the apparent ice-rich soils should be undertaken to adequately develop a knowledge of the mechanics of degradation appearing and how to cope with it in the future. The writer has a very serious concern that an irreversible process may now be underway at an accelerating rate which seriously endangers the structural integrity of major road segments and the adjacent existing natural gas pipeline.

e) As explained previously, it is imperative that an immediate and comprehensive culvert cleaning program be accomplished prior to freeze-up. Additionally, and in conjunction all thaw pipes should be checked and winterized. At least one end cap was noted to be missing.

FISCAL NOTE

I. REQUEST

Bill/Resolution No. H.B. 177

Title Special Appro. to DOT/PF for resurfacing Highway, Yukon River to Arctic Ocean

Requested by Rep. Smith, et al

Date 2/20/81

II. FISCAL DETAIL

Agency Affected DOT/PF

Program Category Affected Highway Design & Construction

BRU, Program, or Subprogram(s) Affected _____

(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL						

FUNDING (Thousands of Dollars)

GENERAL FUND		8,000,000				
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

IV. DATE 2/26/81

PREPARED BY Dave True

AGENCY Planning & Programming, DOT/PF, Interior Region

PHONE 479-4281

Original: Legislative Finance

cc: Budget and Management

Prime Sponsor (First Legislator Named)

FISCAL NOTE

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600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL						

FUNDING (Thousands of Dollars)

GENERAL FUND		8,000.000				
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

V. DATE 2/26/81

PREPARED BY Dave Treax

AGENCY Planning & Programming, DOT/PF, Interior Region

PHONE 473-4281

Original: Legislative Finance
 cc: Budget and Management
 Prime Sponsor (First Legislator Named)

HOUSE JOURNAL

LETTER OF INTENT

HB 177 am

DALTON HIGHWAY

FY '82 REPAIR WORK

It is the intent of the House of Representatives that appropriations for the Dalton Highway for FY 82 be used in conjunction with each other. House Bill 177 am appropriates the sum of \$8,000,000 for FY 82. It is the House's understanding that last year the legislature approved \$2.6 million in General Obligation Bonds for culvert repair along the Dalton Highway (highway from the Yukon River bridge to the Arctic Ocean, AS 19.40). Further, that this money is available for FY 82, and the Governor in his FY 82 budget has requested \$6 million for repairs to the Dalton Highway.

The House of Representatives intends that the \$8 million appropriation to DOT/PF be used for road repairs along the existing highway. This repair work is to include a six-inch lift and crown of crushed base. The worst areas shall be completed first.

If the \$6 million dollar Governor's request is appropriated, the House of Representatives intends it should be spent to complete road repairs from Antigon north along the existing highway. This work shall include a six-inch lift and crown of crushed base. The worst areas shall be completed first.

The House of Representatives recognizes the need for certain culvert repairs and understands that a \$2.6 million General Obligation bond established by Ch 118 SIA 80 to the Department of Transportation and Public Facilities for the Dalton Highway culvert repairs has not yet been spent. It is the intent of the House that the appropriation be used in FY 82 to repair the following culverts:

- Milke Creek
- Arthur Creek
- Stout Creek
- Spoiled Creek
- Char Creek
- Climb Creek
- Terry Creek
- Oksrukyik Creek
- Polygon Creek
- Sylvia Creek
- Nina Creek
- Sten Creek

If the \$2.6 million does not meet the cost for all of the above culvert repairs, any additional monies needed shall be drawn from the Governor's requested \$6 million Dalton Highway appropriation if that appropriation is adopted.

Chairman, Transportation Committee

COMMITTEE REPORT

HOUSE

2/18/81

FURTHER: FINANCE

(7)

Date: March 26, 1981

Mr. Speaker:

The Committee on TRANSPORTATION has had HB 177
"An Act making a special appropriation to the Department of Transportation and Public Facilities for the resurfacing of the highway from the Yukon River to the Arctic Ocean; and providing for an effective date."

under consideration and (a majority of the committee) (~~the-committee~~) reports it back with the following recommendations:

- do pass do not pass
- do pass with attached amendments(s) same title
- replace with CS for _____ new title
- and recommends _____
- AND attaches a "Letter of Intent" New Fiscal Note
- reports it back without recommendation
- referred to the Finance Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

CHAIRMAN

Funding Information
General Fund \$8,000,000
Other Funds -0-
\$8,000,000

Introduced: 2/18/81
Referred: Transportation and
Finance

BY SMITH, ROGERS, BROWN,
BARNES, BETTISWORTH,
FANNING AND RANDOLPH

1 IN THE HOUSE

2 HOUSE BILL NO. 177

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TWELFTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation to the Depart-
7 ment of Transportation and Public Facilities for the
8 resurfacing of the highway from the Yukon River to the
9 Arctic Ocean; and providing for an effective date.

10 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

11 * Section 1. The sum of \$8,000,000 is appropriated from the general fund
12 to the Department of Transportation and Public Facilities for resurfacing
13 ~~necessary to bring~~ the highway from the Yukon River to the Arctic Ocean ~~up~~
14 ~~to secondary road standards.~~

15 * Sec. 2. The appropriation made by this Act is for a capital project
16 and is subject to AS 37.25.020.

17 * Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-
18 070(c).

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LETTER OF INTENT

300

HB 177

The sum of \$8,000,000 is appropriated from the general fund to the Department of Transportation and Public Facilities for resurfacing of the highway from the Arctic, Ocean to the Yukon River, beginning at mile 360 (adjacent to the Deadhorse Airport) to approximately mile 238 (Antigon River Bridge crossing). ~~The~~ The scope of the project shall include the restoration of the highway to the original 28' design width, culvert replacements, and a 6" lift of gravel.

*culverts from
Adams
listing in journal*

ALASKA STATE LEGISLATURE



HOUSE OF REPRESENTATIVES

REPRESENTATIVE SALLY SMITH • 321 CHURCH STREET • FAIRBANKS, ALASKA 99701 • IN JUNEAU: POUCH V • JUNEAU, ALASKA 99811

February 15, 1981

FEB 17 1981

Mr. & Mrs. Byron W. Haley
1002 Pioneer Road
Fairbanks, Alaska 99701

Dear Mr. & Mrs. Haley:

Thank you for your message supporting House Bill 45 and expressing your views on a proposed disposal of 588 acres in the Goodpaster River area. The land selection and classification is still open for public hearings and input.

As a member of the Resources Committee, I am always interested in views concerning the lands disposal issue. Because this is such an emotional issue, it is impossible to meet everyone's needs. Still, we are looking at current legislation in hopes of making some improvements.

A copy of your letter regarding HB 45 has been sent to Representative Bette Cato, Transportation Chair. If you have additional comments you wish to submit regarding this legislation, I urge you to direct them to Rep. Cato or Senator Bill Ray, Senate Transportation Chair.

I will keep your comments on file to be considered when the issue comes to the floor of the House.

Sincerely,

A handwritten signature in cursive script that reads "Sally".

Sally Smith
Alaska State Representative

cc: Rep. Cato
Sen. Ray

Mr. & Mrs. Byron W. Haley
1002 Pioneer Road
Fairbanks, Alaska 99701

February 8, 1981

Rep. Sally Smith
Pouch V, State Capitol
Juneau, Alaska 99811

Dear Sally:

We read in the Daily News-Miner of February 6, 1981 that the Senators from Fairbanks have filed a new haul road bill S.B. 135. We support the opening of the haul road but favor the House Bill H.B. 45 filed by Rep. Ken Fanning earlier in the House. Most of the land along the haul road is Federal land and the legislature should not be making any regulation on this land the B.L.M. is now making regulation for Off-Road Vehicles in this area. The Legislature should not close this area to the use of firearms or Off-Road Vehicles. We have been apposed to the closure of the haul road area to hunting and fishing and the use of firearms ever since the road was built. We believe the Boards of Fish and Game should handle the opening and closing of this area for hunting and fishing and not the legislature. This also should be the same for any state land that may be in this area or any other part of the state should the same things come up. The Board of Game already has this area closed to hunting with a firearms. The closing of any land in the State of Alaska to hunting and fishing should be done by the Boards of Fish and Game for them to properly manage the fish and game of the State of Alaska

Sincerely
207 - Mrs. Byron W. Haley
Mr. & Mrs. Byron W. Haley

Mr. & Mrs. Byron W. Haley
1002 Pioneer Road
Fairbanks, Alaska 99701

February 8, 1981

Rep. Sally Smith
Pouch V, State Capitol
Juneau, Alaska 99811

Dear Sally:

This letter is in regard to the remote land disposal by the Northcentral Land District which is being prepared now and will be offered to the public in 1983.

At a meeting Wed. Feb. 4, 1981 at 7 pm in the Fairbanks Land Office we were informed of a proposed disposal of 588 acres by subdivision on the Goodpaster River. (near Big Delta) We are very much against this proposed disposal. By making a subdivision on this river will spoil one of the prettiest rivers in Alaska.

This river should be study to see what effect any more cabins would have on it and what effects they would have on the Fish and Game in this area before it is opened to any more cabin sites.

We have a patented cabin site of five acres, U.S. Survey No. 4245 Fairbanks Recording Office Book 136 Page 280, in the middle of this proposed subdivision. Are cabin is forty miles from the mouth of the Goodpaster River and was patented in 1965 and can only be reached by boat in the summer and snowmachine in the winter. We built are cabin so as it would be in a remote area and would not have a lot of other cabins around us. We would like to see this river closed to any more cabin sites as there are enough cabins on the river now. This may be selfish but we would like to keep this river as it is now and not add any more cabins which could destroy the river.

If this can not be done and the Land Division has to open up some cabin sites then they should be opened up all along the river and not just in one place as a subdivision and they should be no lager than five acres and should be at least one half mile apart on both sides of the river in a checker board fashion and limit it to only a few to start with. There should also be a public hearing on this disposal with all property owners notified by letter where and when the meeting would take place. There may have to be two meeting one in Big Delta and one in Fairbanks so that all property owners would be able to attend one of the meeting.

The meeting of Feb. 4, 1981 was not very well advertised in fact the Goodpaster River proposed subdivision was not even mention in the advertisement in the Daily News-Miner of Feb. 3, 1981 and we only found out about it when I was checking on a nother matter at the Fairbanks Land Office the day of the meeting. Any remote river or lake in the State of Alaska that has patented property or if the owners should be notified by a letter of any land action that will take place in or around there area so they could comment on the land action that would take place.

Respectfully
Mr. & Mrs. Byron W. Haley
Mr. & Mrs. Byron W. Haley

Copies of this letter have been sent to the following:

Commissioner Robert E. LeResche
Dept. of Natural Resources
Pouch M
Juneau, Alaska 99811

Mo Mathews Director
Division of Research and Development
323 East 4th.
Anchorage, Alaska 99501

Theodore G. Smith Director
Division of Forest, Land and Water Management
323 East 4th.
Anchorage, Alaska 99501

William H. Copeland Manager
Northcentral Land District
4420 Airport Way
Fairbanks, Alaska 99701

Chris Guinn
Northcentral Land District
4420 Airport Way
Fairbanks, Alaska 99701

Rep. Pappy Moss
Pouch V
Juneau, Alaska 99811

and all Fairbanks Senators and Representatives

WHILE IN SESSION:
POUCH V
JUNEAU, ALASKA 99811
(907) 465-4925

HOME:
BOX K - COLLEGE
FAIRBANKS, ALASKA 99708
(907) 456-2037

REPRESENTATIVE
BRIAN ROGERS
Alaska State Legislature

MAR 10 1981

9 March 1981

Tom Owen
3747 Erickson
P.O. Box 770
Fairbanks, Alaska 99701

Dear ~~Mr. Owen,~~

Thank you for your telegrams regarding SB 34, the appropriation for the Fairbanks International Airport and HB 47, for re-surfacing the haul road from the Yukon River to the Arctic Ocean.

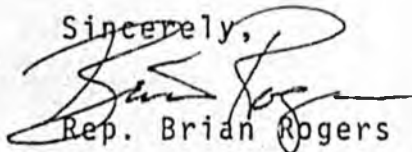
SB 34 was heard last week in the Senate Transportation Committee. It was held over to be heard again this week. There is no opposition to the bill, the time has been taken up primarily to allow everyone who wants to speak in favor of the bill to have a chance to testify. I anticipate this bill moving out of committee shortly.

HB 177 is still in the House Transportation Committee where it probably will be replaced by a Committee substitute sometime this week. There is no serious opposition to this bill, only some concern that the money invested produces good road work and that provisions are made to clarify the state's responsibility and liability for maintenance.

In any case, I will see that copies of your messages are given to the appropriate committees for backup remarks on the bills.

I appreciate your time and your suggestions. Thanks again.

Sincerely,


Rep. Brian Rogers

CC: Senate Transportation Committee
House Transportation Committee

BR/vb

MSG 81-00006993 PRY 1 03/05/81 12:58:21 ORIG: LF00 IN= 0006 OUT= 0048
FROM: ANNIE IN FAIRBANKS TO: JUNEAU INFO
TARGET: LJH2 SUBJ: POM - PLEASE DELIVER RIGHT AWAY PAGE 0001

TO: SENATE TRANSPORTATION COMM. SENS. RAY, GILMAN, DANKWORTH, KERTTUAL,
SACKETT AND REPS. BETTISWORTH, BROWN, FANNING, RANDOLPH, ROGERS, AND
SMITH AND SENS. BENNETT, FAHRENKAMP, AND FARR

FROM: TOM OWEN, 3747 ERICKSON, FAIRBANKS 99701 PHONE 479-2461 OR 452-8101
P. O. BOX 770, FAIRBANKS

I FULLY SUPPORT PROVISIONS OF SB34 AND URGE APPROPRIATIONS BE APPROVED
IMMEDIATELY SO CONSTRUCTION CAN START THIS SEASON. THESE FACILITIES ARE
NEEDED ASAP. I LIVE CLOSE TO THE AIRPORT AND NOISE IS NOT A PROBLEM.

(THIS MESSAGE NEEDS TO BE DELIVERED TO SENATE TRANSPORTATION COMM. WHO IS
HAVING A MEETING 3/5/81 IN BUTROVICH ROOM 1:30)

MSG 81-00007024 PRTY 1 03/05/81 15:26:35 ORIG: LF00 IN= 0008 OUT= 0061
FROM: MAXINE TO: JUND INFO
TARGET: LJH2 SUBJ: POM PAGE 0001

TO: HOUSE TRANS. CMTE
SEN. BENNETT; PARR, FAHRENKAMP
REP. BETTISWORTH, BROWN, FANNING, RANDOLPH, ROGERS, SMITH

FR: TOM OWEN, 3747 ERICKSON, FAIRBANKS 99701 PH. 479-2461

RE: HB 177

I STRONGLY SUPPORT HB 177. THIS PROJECT SHOULD HAVE BEEN DONE SEVERAL YEARS AGO. FUNDING SHOULD COME FROM STATEWIDE FUNDS, NOT JUST FAIRBANKS AREA. IT COULD BE ACCOMPLISHED OVER TWO SEASONS BUT STARTED THIS YEAR. THIS ROAD GENERATES A LOT OF REVENUE AND RESURFACING SHOULD BE COMPLETED PRIOR TO GASLINE CONSTRUCTION.

FRX/LIO/MW

*Resurfacing
to Jundson to Arctic*

*came up
Thursday 5/13*