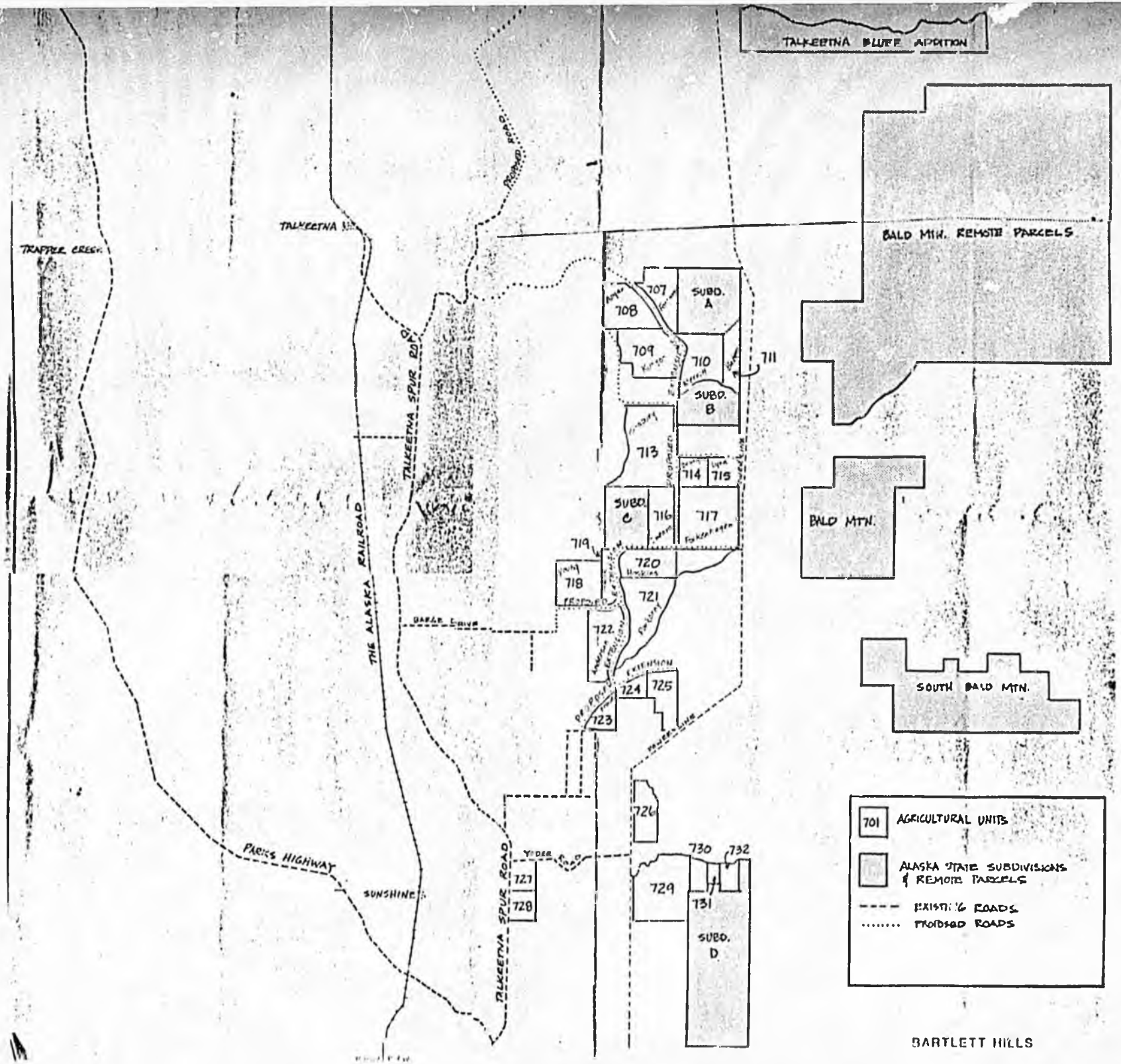
3162 HT HB 237 - HB 287

3162



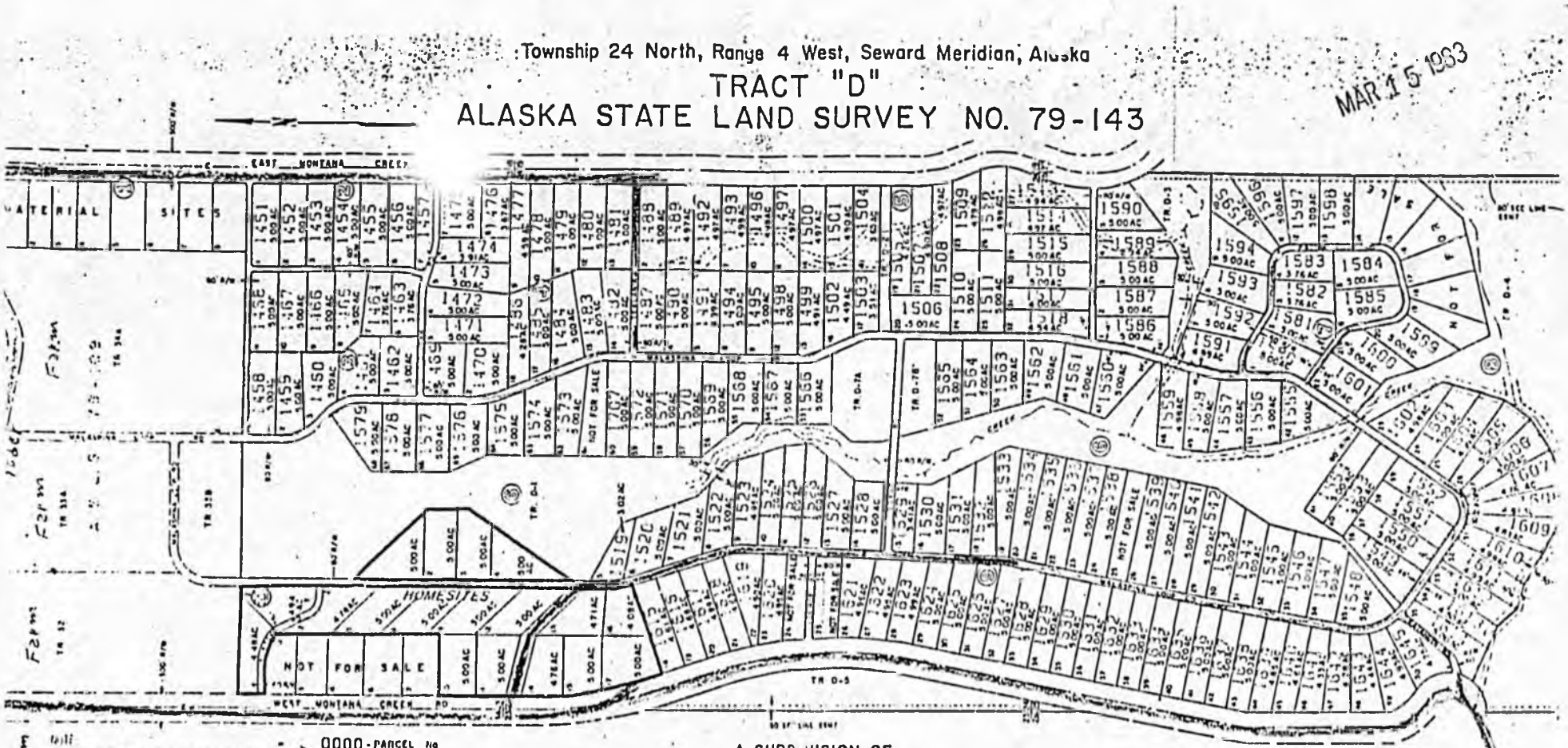
BARTLETT HILLS

7

Township 24 North, Range 4 West, Seward Meridian, Alaska

TRACT "D"
ALASKA STATE LAND SURVEY NO. 79-143

MAR 15 1983



0000 - PARCEL No

A SUBDIVISION OF
TRACTS 34C, 35, 36, 37A, 37B, 38, 39A, 39B, 39C, & 40, ALASKA STATE LAND SURVEY NO. 79-109

BARTLETT HILLS ALASKA SUBDIVISION

MAP NO. 55

FOR VICINITY SEE MAP No 54

NORTH BARTLETT HILLS AGRICULTURAL PROJECT

AT THE PRESENT, THIS IS THE SECOND LARGEST AGRICULTURAL PROJECT IN TH MAT*SU BOROUGH. THE 1979 STATE SALE CONSISTED OF 26 FARM PARCELS TOTALING 7,859 acres. AVERAGE PARCEL SIZE WAS 302 ACRES EACH. THE SALE CONSISTED OF TWO SEPARATE AND DISTINCT AREAS. BOTH AREAS WERE CALLED BARTLETT HILLS. THE SOUTH AREA WAS SOLD WITH EXISTING ROAD ACCESS FROM YODER ROAD. THE NORTH AREA WAS SOLD WITHOUT EXISITING ACCESS. THE NORTHERN FARMS WERE ONE TO EIGHT MILES FROM ANY EXISITING ROADS. THIS REQUEST DEALS ONLY WITH THE NEEDS OF THE NORTHERN AREA OF BARTLETT HILLS AGRICULTURAL PROJECT. IT IS OUR HOPE THAT THE CONCERNS FOR THESE DIFFERANT AREAS WILL BE CONSIDERED AND FUNDED SEPARATELY.

PRIVATELY FINANCED ROAD CONSTRUCTION:

IN THE FALL OF 1980 THE FARMERS TOGETHER WITH A FEW OF THE RECREATIONAL OWNERS COLLECTED VOLUNTARY CONTRIBUTIONS AND CONSTRUCTED 6.5 MILES OF ONE LANE DIRT FARM ACCESS ROADS. AGAIN IN 1982 MORE VOLUNTARY CONTRIBUTIONS WERE COLLECTED AND ALONG WITH ONLY $9,000 (nine thousand dollars) PUBLIC FUNDS We WID THE FIRST TWO MILES TO FORTY FEET PLUS AND IMPROVED OVER THREE MILES OF THE REMAINING ROAD TO ONE LANE GRAVEL. THIS ROAD IS MAINTAINED AND THE SNOW HAS BEEN REMOVED THRU DECEMBER BY THE FARMERS WITHOUT ANY PUBLIC FUNDING. THIS GROUP HAS SHOWN AN INTEREST AND WILLINGNESS TO WORK TOGETHER TO DO WHAT THEY CAN TO HELP THEMSELVES AS MUCH AS THEY ABLE TO.

NORTH BARTLETT HILLS AGRICULTURAL PROJECT

ADDED TRAFFIC AND MAINTAINANCE:

SINCE THE FARMERS PURCHASED THEIR LAND FROM THE STATE IN 1979, THE STATE HAS SOLD THE FOLLOWING TRACTS OF RECREATIONAL LAND ON THIS PRIVATELY CONSTRUCTED AND MAINTAINED ROAD BEING THE NEAREST VEHICLE ACCESS TO THESE TRACTS:

BARTLETT HILLS TRACT A	56 lots
BARTLETT HILLS TRACT B	65 lots
BARTLETT HILLS TRACT C	60 lots
TALKEETNA BLUFFS	80 lots
TALKEETNA BLUFFS ADDITION	59 lots
BALD MOUNTAINS I	218 lots
BALD MOUNTAINS II	103 lots
BALD MOUNTAINS REMOTE (18 sq. mi. of unlimited staking)	
TOTAL OF ADDED OCCASIONAL ROAD USERS	641 lots plus 18 sq miles of remote parcels offered

BARTLETT HILLS TRACTS B AND C ARE IMMEDIATELY ADJACENT TO THIS ROAD AND HAVE BUILT SOME ROADS WITHIN THOSE SUBDIVISIONS. TRACT A AND TALKEETNA BLUFFS ARE SOME DISTANCE FROM THIS ROAD AND MOST ACESS TO THESE TRACTS IS B BY FLOATPLANE OR RIVERBOAT. THE BALD MOUNTAIN OFFERINGS LIE TWO TO THREE MILES EAST OF THE ROAD WITH THIS ROAD BEING THE ONLY PRACTICAL MEANS OF ACCESS.

WITH THIS RECENTLY ESTABLISHED ROAD ACCESS AND THE CHANGE OF LAND OWNERSHIP TO PRIVATE RECREATION , THIS AREA HAS BECOME A POPULAR RECREATIONAL AREA. FISHERMAN ARE ATTRACTED TO LARSON LAKE, BALDY LAKE, BIRCH CREEK, AND ANSWER CREEK. HUNTERS HAVE FOUND THIS AREA TO BE PRODUCTIVE (WAS OPENED TO ANTLERLESS MOOSE THIS SEASON). THIS WINTER A NUMBER OF WEEKEND CROSS COUNTRY SKIERS AND SNOWMOBILERS HAVE ENJOYED WEEKEND GROUP EXCURSIONS INTO THIS SECLUDED BACKCOUNTRY WITH IT'S DEEP ALPINE SNOW, ABUNDANT WILDLIFE, AND SPECTACULAR VIEWS OF MT. MCKINLEY.

NORTH BARTLETT HILLS AGRICULTURAL PROJECT

ESTIMATED ROAD CONSTRUCTION COSTS:

AN AERIAL RECONASANCE ENGINEERING STUDY PREPARED FOR THE MAT-SU BOROUGH IN OCTOBER 1981 BY THE ENGINEERING FIRM OF DOLLERHIDE-DECAMP & BROWN ESTIMATES THE COST OF UPGRADING THIS EXISTING ROAD TO PUBLIC COLLECTOR ROAD STANDARDS AS FOLLOWS:

2.5 miles Question Lake Road (Barge Road) upgrading	$135,600
1.25 miles South Birch Creek Road Upgrading	95,700
4.25 miles Mastadon road upgrading	325,380
Engineering, design, and supervision	205,000
TOTAL COST OF UPGRADING EXISTING ROAD	761,000

Note: Portions of this area lie outside the existing road service area boundaries. Appropriations for those portions must be an line item appropriation.

NOTE: $500,000 has been requested for upgrading of one mile of Yoder Road and three bridge crossings across Montana Creek and its sloughs. This is listed under Local Service Roads.

CONTACT PEOPLE FOR HOMEOWNERS ASSOCIATIONS FOR BARTLETT HILLS PROJECT, BY TRACT

TRACT A

Jim Hale, President
Talkeetna, Alaska 99676

TRACT B

John Davis, Attorney
Wasilla, Alaska 99687

TRACT C

Chuck Griffin, President
4136 San Roberto
Anchorage, Alaska 99504

TRACT D

Betty Ruhle
Box 110102
Anchorage, Alaska 99511

Bartlett Hills property owners and their testimony is set forth in Volume 2 - "Requests of Cities and Others" under the heading "Talkeetna Meeting."

Matanuska-Susitna Borough
BOX B. PALMER. ALASKA 99645 • PHONE 745-4801
DEPARTMENT OF ADMINISTRATION

October 29, 1982

John W. Katz, Commissioner
Department of Natural Resources
Pouch M
Juneau, Alaska 99811

Dear Commissioner Katz:

Re: CHASE AGRICULTURAL SALES

The Matanuska-Susitna Borough objects to any scheme for disposing of agricltural lands in the Matanuska-Susitna Borough where there is no road access or, where the State of Alaska assumes no responsibility for creating access or where there is no substitute for road access.

The State's proposed sale of 6,600 acres of agricultural land north of the Talkeetna River, east of the Alaska Railroad in the Talkeetna area would not make any sense at all unless there was some assurance that the Alaska Railroad could be used as a means of getting clearing and farm equipment to the lands to be developed as farms, materials for operation of farms by means of the railroad such as seed, fertilizer and animals, and a means of loading agricultural crops at a siding off of the Alaska Railroad or through use of the Alaska Railroad to get such crops to the south side of the Talkeetna River.

If you can work out adequate arrangements with the Alaska Railroad, in writing, that would secure the rights of farmers north of the Talkeetna River to access, we would withdraw our objections to a Chase Creek Agricultural Project.

Without provision being made for either road access or arrangements for alternate access through the Alaska Railroad, we believe that any sale of agricultural lands in Chase should be deferred.

We are concerned that a sale of land without access may create the impression that the State of Alaska is accomplishing something in the area of agriculture, when it isn't, and that it will relieve pressure to do something constructive to promote agriculture, such as providing access to agricultural lands.

Bartlett Hills Agriculture Project

To date the State Bartlett Hills Agricultural Project has been a a failure, which can be retrieved only through the State or the Borough seeking and obtaining sufficient funds to provide road access to and through that project. In the past two years no more than 220 acres have

Bartlett Hills Ag Project

been cleared in the 8,000 acre State of Alaska Bartlett Hills Agricultural Project. At this rate it would take 70 years to bring this 8,000 acre project into production. Persons buying farms in that area do not have to begin their farm plan until road access is provided. This type of provision is an open invitation for speculators to bid up the prices of farm land, because they know that they will be under no obligation to engage in farming in the foreseeable future. On Bartlett Hills, a requirement of any agricultural sale should have been that 70% of the Class II and III soils and land to be offered will be in production with say six years from the date of sale.

We believe that the provision of road access to agricultural areas is well within the financial means of the State and that a comparison of costs compared to acreage opened up indicates that the cost benefit relationship is very good.

For example, an investment of approximately a million dollars in Bartlett Hills Agricultural projects, including Yoder Road to the southwest corner of the Bartlett Hills Agricultural Project, a road along the east shore of Montana Creek to the southern end of the Bartlett Hills Agricultural Project and construction of Barge Drive along the middle of the Bartlett Hills Agricultural Project would trigger many farm plans and get a great deal of farm land in production at an early date.

Similarly, construction of a bridge across Moose Creek south of the Petersville Road at an approximate cost of $400,000 would open up about six to eight thousand acres of Class II and III soils between Moose Creek and Kroto Creek and would also provide vehicular access to the recent State subdivision on Amber Lake just south of Moose Creek. As you will recall, the road design within Amber Lake is premised upon vehicular access.

I am enclosing a table which will show how the State of Alaska could increase the agricultural lands in production in this Valley seven fold with a fairly minor investment in agricultural roads, assuming that access is provided to Fish Creek.

We do think that the State has done a very good job in opening up the Point MacKenzie Agricultural Project and providing funds to that project through the funding of a portion of the Point MacKenzie Road and through funding construction of 16.5 miles of farm-to-market roads within the project. We are very proud of having the opportunity to be associated with that project.

And, we are all delighted with newspaper reports that you and Commissioner Ward are proposing that road access into the Fish Creek Agricultural Project be given high priority.

We believe that the Point MacKenzie and Fish Creek Projects are sound precedents for the State to follow and would hope that the planning

CONTACT PEOPLE FOR HOMEOWNERS ASSOCIATIONS FOR BARTLETT HILLS PROJECT, BY TRACT

TRACT A

Jim Hale, President
Talkeetna, Alaska 99676

TRACT B

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Wasilla, Alaska 99687

TRACT C

Chuck Griffin, President
4136 San Roberto
Anchorage, Alaska 99504

TRACT D

Betty Kuhle
Box 110102
Anchorage, Alaska 99511

Bartlett Hills property owners and their testimony is set forth in Volume 2 - "Requests of Cities and Others" under the heading "Talkeetna Meeting."

AGRICULTURAL LANDS IN MATANU..A-SUSITNA BOROUGH AVAILABLE FOR EARLY DEVELOPMENT WITH ACCESS

	Acreages	Percentage Increase	Cumulative
In production now	10,000 acres	150%	
Add Point MacKenzie	15,000 acres	34%	150%
Add Borough 1982 sale	3,400 acres		184%
Total	28,400		
In production plus new lands sold	28,400 acres		
Add Bartlett Hills Agricultural Proj.	8,000 acres	80%	264%
Total	36,400		
In production plus new lands sold	36,400 acres		
Add Fish Creek (MacKenzie #2)	18,000 acres	180%	444%
Total	54,400		
Existing, sold and Fish Creek	54,500 acres		
Add Moose Creek	8,000 acres	80%	524%
Add Deshka Flats	8,000 acres	80%	604%
Add Chulitna Flats	8,000 acres	80%	684%
Total	78,000		

BARTLETT HILLS AGRICULTURE ROAD SYSTEM

AIR PHOTO RECONNAISSANCE

For

MATANUSKA-SUSITNA BOROUGH
ENGINEERING DEPARTMENT
Box B
Palmer, Alaska 99645

By

DOLLERHIDE-DeCAMP-BROWN
ENGINEERING AND SURVEYING CONSULTANTS
P.O. Box 1120
Wasilla, Alaska 99687
Phone 376-3206

BARTLETT HILLS AGRICULTURE
ROAD SYSTEM

AIR PHOTO RECONNAISSANCE

I. PROJECT BACKGROUND

The Bartlett Hills Agriculture project was undertaken by the State of Alaska as a land disposal program designed to promote agricultural development of certain lands. This project comprises several thousand acres of land and is spread in basically a north-south direction for a distance of approximately ten miles. The agriculture parcels are located from the Bartlett Hills on the north to the Montana Creek area on the south; all of which is roughly parallel to and four miles east of the Talkeetna Highway.

In addition to the agricultural land, the State has also developed several small tract (five acres) subdivisions in which parcels have been disposed to the public. These subdivisions are interspersed with the larger agricultural parcels.

None of the above disposal programs provided funds for road construction either within the project areas or for access roads. We are thus beginning to see a demand for roads in this area for both commercial and private uses. The State has platted rights-of-way and road corridors throughout this area and a few property owners are beginning to construct minimal roads for their own access.

II. PROJECT SCOPE

At this time there exists quite a variety of roads and rights-of-way in the project area. There are some access roads that will meet Borough Subdivision Requirements, some that are barely driveable as a one-lane cat trail, and most have no construction at all. There are rights-of-way connecting the agricultural tracts, rights-of-way within the small parcel subdivision and a road corridor three hundred feet wide through which a final right-of-way will be selected. These rights-of-way have various stages of road construction as noted above.

The scope of this project is threefold:

1. Catalog the existing rights-of-way, road construction, and parcels needing access.

2. Analysis of existing conditions and recommendation of routes for road construction after examining alternate routes.
3. Provide cost estimates for the road construction alternatives.

III. EXISTING ROADS AND RIGHTS-OF-WAY

Several roads have been constructed at various locations that provide access to the agriculture and subdivision projects. These roads have mostly been privately constructed and vary considerably as to their quality. The attached map entitled "Bartlett Hills Agriculture Project Road System" shows in detail the road construction and rights-of-way that exist in the area.

The following roads have been constructed:

A. Montana Creek Road. This road begins at the Montana Creek Lodge and generally parallels Montana Creek on the south and ends at the section corner common to Sections 33, 34, 27 and 28, T.24N., R.4W., S.M.. The road length is approximately 3.6 miles. The last 1.5 miles is built to Collector Standards and the initial 2.1 miles almost meets residential standards. This road could be extended 2 miles to the east and would then connect to a State Subdivision, A.S.L.S. 79-143. Part of the Montana Creek Road goes south to access land in Section 3, T.23N., R.4W., S.M.

B. Yoder Road. This road begins at the Parks Highway near the northwest corner of Section 16, T.24N., R.4W., S.M. and continues east across Montana Creek. After crossing Montana Creek, the road continues along the south bank of the south fork of Montana Creek for several miles up into the foothills where it disintegrates into an ATV trail. The first mile of road would meet Access Standards and thereafter it is well below Access Standards. A bridge has been constructed over Montana Creek, but this structure is not adequate in that it washes out periodically. It is built of logs and timber planks and is a minimal structure in terms of a bridge. There are two side channel crossings Yoder Road makes just prior to the bridge and these could be accomplished with adequate culverts. After crossing Montana Creek, Yoder Road provides access to an agriculture tract and the north portion of the State Subdivision, A.S.L.S. 79-143.

C. Moose Meadows Access. This road begins on the ~~Parks~~ TALKEETNA Highway a half mile north of Yoder Road and provides access to Moose Meadows Subdivision. At its terminus it connects to the South Answer Creek Road (not constructed) which provides access to several agriculture tracts. This access to Moose Meadows could provide a loop access to the ~~Parks~~ TALKEETNA Highway near Talkeetna through the South Answer Creek Road, the Mastadon Road Corridor, and the Comsat Road. Road grades here will require some special consideration in there are two 12% to 15% grades. These generally exist over 300 feet in length such that any upgrading would necessitate some substantial cuts and fills.

D. Question Lake Road. This road begins in Section 30, T.25N., R.4W., S.M. at the ~~Parks~~ TALKEETNA Highway and runs 2.5 miles east just north of Question Lake. Question Lake Road exists to Access Standards but does have some serious grade problems that would have to be dealt with in any upgrading work. There are three places with grades in the 10% to 12% range and these grades extend through at least 200 feet of road length. One additional area contains grades in the range of 20% to 25% and this is over a 400 foot length of road. These excessive grades will present some problems in any upgrading, but will not be insurmountable. The Question Lake Road could provide a loop access with the ~~Parks~~ TALKEETNA Highway via the South Birch Creek Road, the Mastadon Road Corridor and the Comsat Road.

E. Mastadon Road Corridor. This 300 foot wide road corridor begins at the Comsat Road near Christianson Lake, on the north, and extends through the Bartlett Hills area to connect to the South Answer Creek Road at its southern terminus. Much of this road has not been constructed. That portion which has been built begins at the South Birch Creek Road and extends some 4.5 miles north to Section 2, T.25N., R.4W., S.M.. This section is generally a one-lane trail that would not meet Access Standards. This corridor provides the main part of any loop system connecting the Talkeetna area with the agriculture tracts to the south.

F. Proposed Anchorage-Fairbanks Power Intertie. The proposed Anchorage-Fairbanks Power Intertie right-of-way is currently planned to traverse this general area. Because this project is still in the planning and design stages, it would be premature to predict the impact of this project on proposed road construction in this area. In our opinion, construction of quality roads into this area could only aid in the future construction of public improvements of any kind.

IV. SOILS AND BORROW SOURCES

The main source of soils information is the Susitna Valley Area Soil Survey published by the Soil Conservation Service and the University of Alaska Institute of Agricultural Sciences. This report contains maps showing the soil types over the entire study area and is therefore an important tool in evaluating the soil conditions.

Generally, the soils in this area are excellent for road construction. About 90% of the existing and proposed road is in the rabideaux (Ra) soils series, which is a gravelly material. Past experience has shown this gravel will meet Borough standards for road material. There will be a few places where less than adequate materials will be encountered but these are relatively insignificant and do not pose any construction problems.

The good quality of materials is further confirmed by examination of cut banks along the existing roadways and by talking with the builder of the few miles of Mastadon Road that was recently constructed. There will be few restrictions on borrow sources as good gravel can be expected along most of the routes. It is anticipated that a good part of the borrow for the roads can be achieved through the balancing of cuts and fills of the road construction. Any additional sources should be readily available.

V. BRIDGE REQUIREMENTS

There are two stream crossings in the study area that require bridge structures. The first and most significant is the crossing of Montana Creek by Yoder Road. A timber structure exists here now but it has had recent problems of washing out and needs to be replaced with a concrete structure. The estimated cost of a bridge structure at this location is $800,000 and this cost has been included in the cost estimates for Yoder Road shown later in this study. It is anticipated a concrete structure would be utilized that would span 75 feet with upstream riprap being required. There are presently two smaller structures just prior to the main channel of Montana Creek and these could be culverted. The second crossing occurs where Mastadon Road crosses Answer Creek. This would be a significantly smaller structure and its estimated cost is $300,000.

It is anticipated that all other water crossings can be made with culverts at relatively minor costs. When considering the various road systems in the study area, it is fortunate there are only two stream crossings involved and their costs are not significant compared to the overall road development.

VI. LOGICAL LOOP ROAD SYSTEMS

As the objective of this reconnaissance has been to consider primary collector access for the Bartlett Hills Agriculture Project, we are only considering major existing access roads and platted rights-of-way that would provide general thoroughfare to the bulk of the agricultural parcels and connection points to the small tract subdivisions in the area. Along with this, evaluation of other factors such

as topography, existing acces road construction, potential major stream crossing structures, Larson Lake access plans and priority based on need have yielded several possible loop road systems into and through the general area. To simplify discussion of these alternatives, the following are the general names and descriptions of the alternates:

"A" ALTERNATIVE

North Mastadon Road - South Birch Creek - Question Lake Loop

Begins on the north at the Bartlett Hills Earth Station Road near Christianson Lake and runs generally east to a point some two miles westerly of Larson Lake along an existing platted right-of-way. The route then runs southerly along a platted right-of-way to South Birch Creek Road, then turns westerly and runs out to the Talkeetna Highway. The southerly portion of this route is constructed to low Access Standards from Section 2, T.15N., R.4W., S.M. back out to the Talkeetna Highway. Total length is approximately 13.5 miles with 8.25 miles of existing constructed access and 5.25 miles without construction.

"B" ALTERNATIVE

Question Lake - South Birch Creek - Mastadon Road - South Answer Creek - Moose Meadows - Benka Lake Loop

Begins on the north at the Talkeetna Highway near Question Lake and runs generally easterly to the Mastadon Road right-of-way; then turns southerly through the Mastadon Road, South Answer Creek Road, and Moose Meadows rights-of-way to a point just northerly of Benka Lake; then runs generally west and south to the Talkeetna Highway near the Sunshine Lakes. The Question Lake, South Birch Creek Road, Moose Meadows and Benka Lake portions of this loop are presently constructed to minimal Access Standards. Total length is approximately 8.75 miles including 6.25 miles to minimal Access Standards and 2.5 miles without construction. Approximately 4.25 miles are included in the "A" Alternative.

"C" ALTERNATIVE

Yoder Road - West Montana Creek Road Right-of-Way - Existing Montana Creek Road Loop

Begins on the north at the Talkeetna Highway near Sunshine Lakes and runs generally east to West Montana Creek Road

Right-of-Way in Tract D of A.S.L.S. 79-143; then turns southerly and runs to the south end of Tract D; then runs generally south and west to the Parks Highway near the Montana Creek Bridge. The Yoder Road portion is constructed to minimal Access Standards and has a major crossing of Montana Creek. The existing Montana Creek Road portion is constructed to varying standards, including some portions that exist to Collector Standards. Total length of this loop is approximately 11.75 miles including 6.75 miles of existing construction and 5 miles without construction. The West Montana Creek Road portion appears to have some clearing in progress.

The two northerly Alternates ("A" and "B"), once completed, would connect in that Question Lake Road and South Birch Creek Road are common to both loops. The southerly Alternate "C" would be an independent loop unless a connection was made between Moose Meadows Subdivision and Yoder Road in the vicinity of Section 10, T.24N., R.4W., S.M.. This connection, at this point in time, does not appear to serve as necessary access to the agricultural or subdivision parcels, thus is considered extraneous to this discussion except to say it is a future alternate if the need arises to connect all three alternate loop systems.

VII. RECOMMENDATIONS

In summary, our recommendations would be as follows:

Phase I - Alternate "A" - Priority 1

Construct Mastadon Road Corridor from the Comsat Road to link up existing access construction from the south to Collector Standard. Improve the existing access road construction to Collector Standard in its entirety out to the Talkeetna Highway. This would accomplish two basic goals:

1. Provide a basic collector that accesses the bulk of the agricultural parcels in the Bartlett Hills Project as well as a connection point for residential systems that will be associated with the small tract subdivisions in the area.

2. Provide a logical "jumping-off" point for access to Matanuska-Susitna Borough land on Larson Lake which would require less construction than a separate road from Talkeetna to Larson Lake.

Phase II - Alternate "B" - Priority 2

Construct Mastadon Road and a portion of South Answer Creek Road southerly from South Birch Creek Road to Moose Meadows Subdivision to Collector Standards. Improve existing construction from Moose Meadows through Benka Lake Subdivision out to the Talkeetna Highway to collector standards.

Phase III - Alternate "C" - Priority 3

Improve existing Yoder Road out to West Montana Creek Road to Collector Standards. This would require a major stream crossing structure and culverts over Montana Creek and its branches.

Phase IV - Alternate "C" - Priority 4

Construct West Montana Creek Road through Tract B, A.S.L.S. 79-145 and westerly to connect with the existing Montana Creek Road to Collector Standard.

Phase V - Alternate "C" - Priority 5

Improve some portions of the existing Montana Creek Road such that its entire length is to Collector Standard.

VIII. COST ESTIMATES

Estimates for the recommended alternatives are shown below. The costs include all construction necessary to bring each alternative to Collector Standards. Note there are some common roads in Loop Alternates "A" and "B" and each loop is estimated as if it were constructed separately. This is done since there is no way of knowing which loop will be built first. Estimates are made for 1982 construction so that construction in later years will require some increases.

Construction Costs:

Alternate Loop "A"

5.25 miles Mastadon (new)	$ 471,240.00
4.25 miles Mastadon (upgrade)	325,380.00
1.25 miles South Birch Creek Rd. (upgrade)	95,700.00
2.5 miles Question Lake Rd. (upgrade)	155,600.00
Engineering Design & Supervision	205,000.00
TOTAL COST	$1,252,920.00

Alternate Loop "B"

2.5 miles Question Lake Rd. (upgrade)	135,600.00
1.25 miles South Birch Creek Rd. (upgrade)	95,700.00
1.5 miles Mastadon Road (new)	154,640.00
1.0 miles South Answer Creek Rd. (new)	89,760.00
2.5 miles Moose Meadows Access	132,000.00
Engineering Design & Supervision	118,000.00
TOTAL ROAD COST	705,700.00
Bridge Structure - Answer Creek	300,000.00
TOTAL COST	$1,005,700.00

Alternate "C"

3 miles [illegible]der Road (upgrade)	138,400.00
2.75 mi. [illegible] W. Montana Creek Rd. (new)	246,840.00
3.75 miles Montana Creek Rd. (upgrade)	82,240.00
2.25 miles Montana Creek Rd. (new)	201,960.00
Engineering Design & Supervision	130,000.00
TOTAL ROAD COST	$779,440.00
Bridge Structure - Montana Creek	300,000.00
TOTAL COST	$1,079,440.00

X. SUMMARY

A reconnaissance project of this scope presents a multitude of variables and possible alternatives. There are some twenty miles of existing roads in the study area that are considered in the various alternatives. These roads have been constructed to varying standards from one-lane trails to Collector Standards.

In examining the existing and potential demand for roads here, it is likely that over a period of, say 15 years, virtually all the rights-of-way in the area will see some road construction. The value in this study will then be the evaluation and recommendation of a priority system that will provide the best access for a given expenditure as funds for construction become available. As noted in our recommendations, we feel the loop system approach is more beneficial than dividing funds between various individual roads on a piecemeal basis. Alternate Loop "A" is recommended because of the large number of parcels it will access and because it will also provide much of the access to Larson Lake (which is the subject of another reconnaissance study). The succeeding order of our recommendations are based on providing access to the greatest number of parcels. It is certainly reasonable to consider other

alternatives and/or priorities depending on the political evaluation of need and changing development patterns.

References:

1. Map of Existing Roads and Rights-of-Way
2. Aerial Photography of October 1981 - General Area

F. R. Dollerhide, P.E.

DOLLERHIDE-DeCAMP-BROWN
P. O. Box 1120
Wasilla, Alaska 99687

HB

238

STATE OF ALASKA
FISCAL NOTE

Revision Date March 16 , 1983

I. REQUEST

Bill/Resolution No.: HB 238
Title: Improvement on Parks Highway
Sponsor: Lacher
Requestor:

II. FISCAL DETAIL

Agency Affected: DOT/PF
Program Category Affected:
BRU, Program of Subprogram(s) Affected:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL OPERATING		0.0	0.0	0.0	0.0	0.0
CAPITAL		20.0	20.0	107.4	1,385.7	0.0
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND		2.0	2.0	10.7	138.6	0.0
FEDERAL FUNDS		18.0	18.0	96.7	1,247.1	0.0
OTHER (Specify Source)						

POSITIONS:

FULL TIME						
PART TIME						
TEMPORARY						

II. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not identified in HB 238

IV. ANALYSIS: See attachment for Analysis.

Prepared by: William R. Snell Phone: 266-1440
Division: Planning & Programming Date: 2/15/83

Approved by Commissioner: Date: 3/15/83
Department: Transportation and Public Facilities

Distribution:
Original to Legislative Finance
Copy to Office of Management and Budget (for Legislature introduced bills)
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Copy to Sponsor
Copy to Requestor (if different from Sponsor)

3/8/83

IV. ANALYSIS

The cost estimates for this project in FY'83 dollars were:

Preliminary engineering	$45,430
Right-of-Way	70,000
Construction	946,463

These costs were assumed to increase at 10% per year through the life of the project.

The preliminary engineering was assumed to take 3 years and was allocated as follows:

FY'84	$20,000
FY'85	20,000
FY'86	14,267

The Right-of-Way acquisition was assumed to be completed in FY'86 for $93,170.

The construction phase was assumed to be initiated and completed in FY'87 for $1,385,716.20.

This project is on a federally designated interstate highway and is assumed to qualify for approximately 90% federal funding. Since this project is a reconstruction of an existing curve, it was assumed that no change would occur in maintenance and operations costs after the project was completed.

HB

248

COMMITTEE REPORT

HOUSE

FINANCE

FURTHER:

(9)

3/11/83

Date: 5-13-83

Mr. Speaker:

The Committee on TRANSPORTATION has had HB 248

An Act making a special appropriation to the Department of Transportation and Public Facilities for construction of a bridge in Eagle River; and providing for an effective date.

under consideration and reports it back as follows:

[ ] do pass [ ] do not pass

[ ] do pass with attached amendments(s)

[X] replace with CS for HB 248 (transportation) [ ] same title [X] new title

and recommends ______

[ ] AND attaches a "Letter of Intent" [ ] New Fiscal Note [ ] Zero Fiscal Note Attached

[ ] reports it back without recommendation

[ ] referred to the ______ Committee

MEMBERS SIGNING DO PASS	MEMBERS HAVING OTHER RECOMMENDATIONS:
[illegible] Do Pass	
[illegible]	
[illegible]	
M.W. Miller Do Pass	
Bette Cato " "	

Bette Cato
CHAIRMAN

H 60

Introduced: 3/11/83
Referred: Transportation
and Finance

Funding Information
General Fund $15,000,000
Other Funds -0-
$15,000,000

IN THE HOUSE BY LISKA

HOUSE BILL NO. 248

IN THE LEGISLATURE OF THE STATE OF ALASKA

THIRTEENTH LEGISLATURE - F ST SESSION

A BILL

For an Act entitled: "An Act making a special appropriation to the Department of Transportation and Public Facilities for construction of a bridge in Eagle River; and providing for an effective date."

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

* Section 1. The sum of ~~$15,000,000~~ 750000 is appropriated from the general fund to the Department of Transportation and Public Facilities for ~~construction~~ Preliminary Engineering and Design, Engineering & Const. of a bridge in Eagle River.

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

* Sec. 3. This Act takes effect July 1, 1983.

Title change

COMMITTEES
Vice Chairman — Judiciary
Vice Chairman — Legislative Regulations Review
Resources
Finance Sub Committee on Labor

Alaska State Legislature

...ife in Session
Pouch V
...tate Capitol
Juneau, Alaska 99811
(907) 465-3733

Home - District 15
Star Route Box 421
Eagle River, Alaska 99577
(907) 688-2526

House of Representatives

John J. Liska

May 10, 1983

TO: Transportation Committee

FROM: John J. Liska - Representative District 15

SUBJECT: Packet Materials - House Bill 248, Eagle River Bridge

Attached are materials for the Committee's reference regarding our Bill making a special appropriation to the Department of Transportation and Public Facilities for construction of a bridge in Eagle River, and providing for an effective date.

1. List of witnesses for Committee conference call, 5-13-83:

Vicki Kenard	Dept. of Transportation
Reilly Snell	Dept. of Transportation
Don Morfield	Dept. of Transportation
Dean Reddick	Dept. of Transportation
Mark Mayo	Dept. of Transportation

This may be a partial list because Reilly Snell indicated he would be asking representatives of the Municipality to participate.

2. Fiscal Notes

   a. Fiscal Detail - Prepared by Margaret E. Holland, Planning and Programming, Central Region.

      Approved by David Haugen, Deputy Commissioner, DOT,PF

   b. Preliminary Construction Cost Estimate - Prepared by B. Fredrickson, 4-27-83

   c. Preliminary Construction Cost Estimate - Prepared by John Dickenson, 1-20-83

d. Preliminary Engineering Cost - supplied by David Haugen, 5-6-83

3. Demographic Background in Support of Need for this Bridge

4. Letters in Support:

   a. Senators Halford and Kelly - District H(A & B)

   b. Chip Dennerlein, Executive Manager, Public Services, Municipality of Anchorage

   c. Jerry O'Conner, Assembyman, Eagle River

   d. David Wachsmuth, President, Eagle River Valley Community Council

   e. Board of Directors, Eaglewood Homeowners Association, Eagle River Valley

   f. General Constituent

5. Maps

   a. Vicinity Map

   b. Proposed Road Improvement Plan, 9-82 Summary Report, Municipality of Anchorage, 6 Year Road Improvement Program (Note: in September 1982, no indication of extension of Eagle River Loop Road)

   c. Roadway Projects, April 1983, Anchorage Accelerated Roadway Program, Municipality of Anchorage.
   (Note: Extension of Eagle River Loop Road included)

MAY 1 1 1983

STATE OF ALASKA

Bill Sheffield, Governor

2d

DEPARTMENT OF TRANSPORTATION
and PUBLIC FACILITIES

DEPUTY COMMISSIONER - CENTRAL REGION

4111 AVIATION AVENUE, POUCH 6900
ANCHORAGE 99502 (TELEX 25-185)
PHONE: 266-1441

May 6, 1983

The Honorable John Liska
Representative
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Representative Liska:

In response to your request regarding the Eagle River Loop Road extension project, the cost for preliminary engineering is estimated to be approximately $750,000.

It is assumed that the preliminary engineering will be accomplished by a consultant. The consultant will be responsible for 1) conducting an environmental study which includes mapping of the site, 2) soils and foundation investigations, and 3) design work.

If our office can be of further assistance please call.

Sincerely,

David W. Haugen
Deputy Commissioner
Central Region

DWH:WRS:MM/ey

cc: Emil Notti, Legislative Assistant
Office of the Governor

(3)

See double school enrollment by 1993

School enrollment in Chugiak - Eagle River will double during the next decade, school superintendent E. E. "Gene" Davis told his audience at Monday's Chamber of Commerce luncheon. To meet that increase, he said the district will need to build a new senior high school in addition to a 20-room addition to Chugiak High School which already is on the drawing boards, a second junior high, and four to seven new elementary schools.

Where those schools will go has not been determined, the superintendent stated. He expects locations to become more definite this fall when a committee completes work on a study of site acquisitions and a list of municipal lands which might be traded for surplus school property. Money is already available for one new elementary site somewhere in this area, he said.

Chugiak - Eagle River will continue as the fastest-growing portion of the Anchorage district, Davis advised. Since 1979, the area's population has grown at a pace four times greater than that of the Anchorage bowl -- a fact he said was not recognized until the middle of 1980.

Since his appointment in June of 1981, the superintendent said the district has recognized the growth here, and "I think we're doing a good job of keeping up."

The new Gruening Junior High will open in the fall, Davis said, even though "we may still have to do some painting at night after classes."

He announced that bids for the new Ravenwood elementary school in Eagle River Valley had just been opened and came in at $1 million below the engineer's estimates.

An addition at Chugiak Elementary has begun and will help that school handle its enrollment next year. It experienced the greatest growth of any school in the district over the past two years, the superintendent noted.

Several smaller projects at individual schools are also scheduled, although Davis said some may have to be cut back because of fund shortages unless the legislature eases its plans for a 30 percent reduction in construction rebates. Action by the municipal assembly to cover part of the shortfall avoided some severe problems, it was pointed out. Although the district expects to receive about $2.2 million less than it had budgeted for.

Of significance to his audience was the superintendent's statement that the design used for the new Ravenwood school here, and for the Oceanview and Klatt Road schools, is to be "a prototype for future elementary schools. It's not practical economic sense to redesign each school, only to make it fit the land. (Adopting one standard design means) we don't have to start from ground zero on each school."

Also of specific interest were enrollment projections which show an increase of 7.1 percent expected in Chugiak - Eagle River next year when 600 more students show up than now attend classes here.

Districtwide, he expects a net gain of 5,000 students in a two-year period.

Projections are made, Davis cautioned, "on the best planning information available." They could be on the mark — or vary considerably in either direction depending on conditions. Some people, he said, predict economic factors which will subtract from the population. Still others see growth rates even larger than at present.

Despite the projections, the district does not plan to build new schools "until we see the students. You probably will see the use of more relocatables" to hold the load until schools are built.

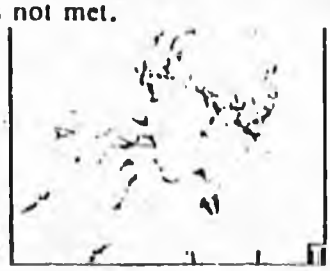
"There are no plans to doubleshift at Homestead," Davis replied in response to a question about overcrowding at that school. Now, he said, 62 percent of families with children in school have two parents working. Doubleshifting would cause problems for families with age spreads from kinde garten to high school which could mean several different daily schedules. "I don't think there are that many babysitters out there," he said, adding that the district "should be responsive to the community" in taking actions with significant social impacts.

Alternatives to doubleshifting, according to Davis, are relocatables or "boundary changes. He indicated he prefers the former.

In answer to a related question, the superintendent said sending sixth grade students to the new junior high in order to ease overcrowding at elementary schools "is not proposed. But I don't think it's a bad option." He said he, too, had heard the idea "as a rumor," but indicated that it was not a specific proposal actually under review at this time.

Davis said the district, under his direction for two years, views Chugiak - Eagle River "as a unique part of the school district," noting that residents take an active interest and have supported local schools.

"We're pleased with the schools, but we intend to do better. Our goal is to improve every year." He invited residents to "tell us" when they feel the goal is not met.



To safeguard against rheumatic fever, consult a doctor when you have a sore throat.

eets Monday

15 Republicans will
ay at 7:30 p.m. in the
Library.
chairman Darlene
aid that a number of
on the agenda, in-
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further information
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WORK

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Valley council views subdivision plans

The rapid multiplying of subdivisions in throughout Eagle River is causing log jams not only within l.ni al departments but in local comm.unity councils as well.

Eagle River Valley Community Council members have been swamped with subdivision requests which they've been asked to consider. Several will be up for review when the council holds its May meeting and elects new officers next Thursday at 7:30 p.m. at Joy Lutheran Church.

Dave Wachsmuth, council president, said that council representatives were to make their third attempt last night (Wednesday) to testify before Planning and Zoning on the proposed Snowbird Hill development. Wachsmuth noted that the development is 19th on 26 cases which were on the commission's agenda three meetings ago. They've only been able to discuss five a night, but council members have been on hand for all, waiting for the Snowbird Hill consideration.

The council is recommending that the 80-acre subdivision of 140 lots on the hillside above Pruess subdivision be redesigned to limit lot sizes to no less than half an acre. Currently, Wachsmuth said, a number of the lots are considerably smaller. Council members met with developer Hugh rt of Anchorage to re e change, but were tol ld not be financially fe

"We are not opposed to development," Wachsmuth emphasized, "but we want to see it done in an orderly fashion, and in conformance with the development that already exists in an area."

Wachsmuth said that it was the consensus of members at the April meeting that "some kind of controls are needed to slow down the amount of development that is taking place."

For example, he said, Eagle River Development was granted a variance which will permit it to develop 140 lots for zero lot line construction. The Brendlewood tract approved last week by the Assembly will create 125 lots, to be developed in three phases.

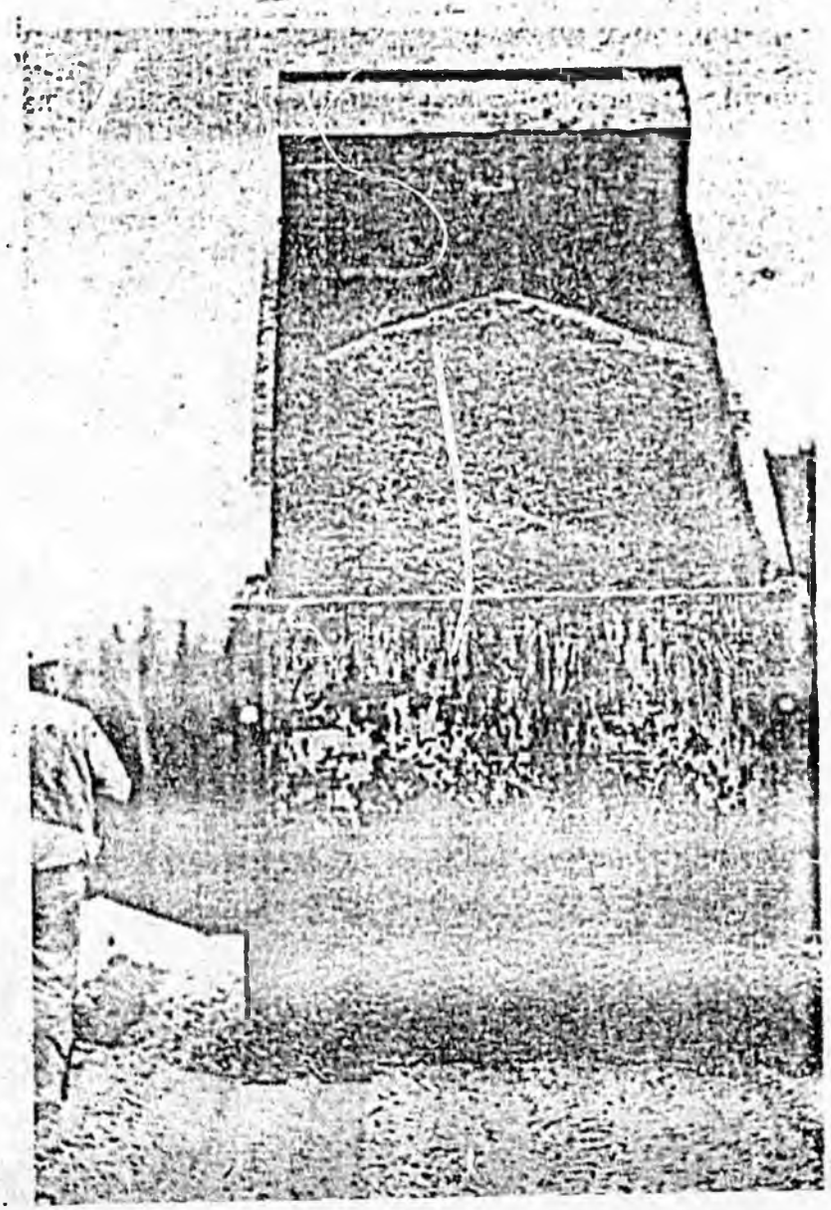
Council members feel the concentrated development of Snowbird Hill is not in keeping with the larger lot construction of the adjoining subdivisions.

They are supportive, however, of another subdivision called Overlook which is proposed for a 60 acre tract at Mile 7. Wachsmuth called it "a nice subdivision", planned by JJJ and K, with 30 lots spread over a 60 acre tract.

Two weeks ago Wachsmuth attended a meeting of the Federation of Community Councils with representatives of the mayor's office, the platting commission and planning and zoning.

"A lot came out of the meeting," Wachsmuth said. "My belief is that the mayor has already taken steps to improve communication between the municipality and community councils. I hope it will continue.

Subdivision proposals will be reviewed at next week's meeting. Nominated for office are Wachsmuth, president; Jay Davies and Marilyn Hill, vice president; Kathy Boetmann, secretary; and Tom Stewart, treasurer.



P&Z turns down plan 5-acre tract rezoning

A controversial request for rezoning a five acre tract on Eagle River Loop Road was denied by the Municipality's Planning and Zoning Commission Saturday by a unanimous vote.

Commission members turned down the request by Joseph Lecorchik to rezone 5.37 acres

ALASKA STATE LEGISLATURE

SENATOR
RICK
HALFORD
SENATE MINORITY LEADER

Permanent Address
P O BOX 66
CHUGIAK, ALASKA 99567
Phone 907 688 2470

While in Juneau
POUCH V
JUNEAU ALASKA 99811
Phone 907 465 4958

SENATE

4

TO: The House Transportation Committee

FROM: Senator Rick Halford
Senator Tim Kelly

RE: HB 248, construction of a bridge in Eagle River

DATE: May 10, 1983

After careful study of the ongoing problems of traffic congestion in the downtown Eagle River area, I have concluded that there are two projects that can be undertaken at this time to alleviate some of the traffic hazards.

The first and immediate project, for which I have requested funding, is engineering and physical correction of the intersection of Eagle River Road and the Old Glenn Highway.

The second, more long-range project, which I feel should be started as soon as possible, is a bridge over Eagle River to funnel the traffic out of Eagle River Valley over to Hiland Road and out the Hiland Road overpass onto the four lanes to Anchorage.

This bridge seems to be the only feasible solution to the long-range problem of getting the existing traffic out of Eagle River Valley, without going into downtown Eagle River. I feel the sooner we fund and build this bridge, the more money we will save the State. As first designed and considered in 1982, the fiscal note was $12,995,000 and in 1983 it is $15,723,950; each year we wait, the price will be higher.

In conclusion, I strongly recommend your support for HB 248.

Rick Halford
Rick Halford

Tim Kelly
Tim Kelly

Municipality of Anchorage

POUCH 6-650
ANCHORAGE, ALASKA 99502-0650
(907) 786-8401

TONY NOWLES,
MAYOR

OFFICE OF PUBLIC SERVICES

April 13, 1983

Rep. John J. Liska
Alaska House of Representatives
Pouch V
Juneau, Alaska 99811

Dear John:

You have requested additional back-up information concerning one alternative for improving access to the Eagle River area, that being the construction of a bridge linking Eagle River with Highland Road. The purpose of this letter is to provide you with the basic information to date. In accordance with funds previously provided by the Legislature, the Municipality has been conducting a study of alternatives to improve access to Eagle River. During this past year, the Eagle River area has been brought within the scope of AMATS planning and the study, when finally completed, will receive review by both the AMATS TEchnical Committee and Policy Committee. The access study is in the final phases of staff analysis and computer modeling. There has not been any review by the Technical and Policy Committees. Moreover, detailed engineering has not been done for several of the system alternatives, including the bridge proposal which you favor. I point this out merely so you understand clearly that a decision to favor one alternative over another at this point simply represents best estimate and judgment of the staff prior to final analysis.

All this considered, the construction of a bridge connecting Eagle River Loop Road with Highland Drive does appear to be the forerunner among other alternatives at this time. The bridge would accomplish a major objective of relieving the pressure and demand on the existing Eagle River interchange. The bridge also appears to make sense from an overall traffic grid perspective in that it links the Eagle River community and fits in well with road systems in both the north and south side of the River. Finally, the bridge avoids the future necessity to expand the Glenn Highway between Eagle River and Highland Drive to a six-lane facility. As you can see, such an expansion might also require expensive bridge reconstruction.

While the bridge appears to be the best alternative at present, it is a high capital solution, and full construction funding is probably premature. Preliminary estimates put the facility at 15 million dollars (estimates provided by DOT/PF). This, however, is a ballpark estimate, and some significant preliminary engineering work needs to be done. I have already requested the State to provide me with an estimate on all costs for design and right-of-way acquisition. It is not premature to provide

engineering monies. In addition to the lack of detailed engineering data, the project would involve right-of-way acquisition, environmental assessments, and detailed engineering work regarding any improvements which might need to be made to Highland Road. With respect to federal funds which might be available, the proposed bridge is not on the federal aid highway system. It could certainly be added to this system. The addition would logically occur as a result of highway classification studies which are being undertaken this year through the AMATS process.

There is a need to make some immediate improvements to relieve pressure on the Eagle River interchange. As you know, last year, Anchorage experienced an extremely active building season. Nearly 48% of the housing starts occurred in the Eagle River area. State DOT/PF estimates that more than one-third of the traffic traveling the Glenn Highway to Anchorage enters the Highway at the one location of the Eagle River interchange. The bridge, even if it is the best alternative for a long-range solution, is a high-cost solution which will take several years to construct. In the interim, I suggest that you and the Municipality get together with the State Department of Transportation to decide whether certain improvements can be made to the Eagle River interchange, such as the construction of an additional off lane and through lane. These options, by the way, also are being considered in our Eagle River access study.

Lastly, you asked whether there were substantial federal funds dedicated to the north Eagle River access which could be reallocated to the proposed bridge project. In addition to the fact that the proposed bridge is currently not a part of the federal aid highway system, the State informs me that federal funds for the north Eagle River access are limited to several hundred thousand dollars at this time for the purpose of continuing preliminary engineering on that project.

In summary, while detailed engineering and research is not complete and while the results of the study have not been reviewed by Technical and Policy Committees in the AMATS process, the bridge does appear to be the most favorable alternative for improving access to Eagle River at this time. In addition, certain interim improvements may need to be made at the existing interchange. Depending upon available funds, it would seem most appropriate to provide funds for improvements to the existing interchange and engineering funds for the bridge should you choose to pursue construction of this facility.

Sincerely,

Chip Dennerlein
Executive Manager, Public Services

cc: Sen. Rick Halford
Sen. Tim Kelly
Rep. Randy Phillips

MSG 83-00007647 PRTY 1 04/12/83 14:07:55 ORIG: LA03 IN= 0004 OUT= 011
FROM: JEAN, ANC LIO TO: POMS, JUNEAU INFO
TARGET: LJHL SUBJ: POMS

4/12/83 JEAN, ANC LIO #7647

TO: REPRESENTATIVE LISKA

FROM: ASSEMBLYMAN JERRY O'CONNER
P.O. BOX C
EAGLE RIVER, AK 99577 (H) 694-9400

APR 12 1983

THE LARGE VOLUME OF TRAFFIC COMING FROM EAGLE RIVER VALLEY MAKES IT IMPERATIVE TO START WORK ON THE EXTENSION OF EAGLE RIVER LOOP ROAD TO THE SOUTH FORK - GLENN HIGHWAY INTERSECTION. THE EAGLE RIVER VALLEY COUNCIL HAS DISCUSSED THIS AT NUMEROUS MEETINGS. AND HAS FORMALLY TAKEN THIS PROJECT TO THE AMATS COMMITTEE.

****

4/12/83 JEAN, ANC LIO, #7679

APR 13 1983

TO: REPRESENTATIVE JOHN LISKA

FROM: DAVID WACHSMUTH
SR BOX 144, EAGLE RIVER 99577 (H) 694-2741 (W) 344-0531

WE NEED AN ALTERNATIVE ROUTE OUT OF EAGLE RIVER. THE ONLY VIABLE ALTERNATIVE THAT THE EAGLE RIVER VALLEY COMMUNITY COUNCIL CONCURS WITH IS THE CONSTRUCTION OF A BRIDGE ACROSS EAGLE RIVER, EXTENDING EAGLE RIVER LOOP ROAD ACROSS THE HIGHLAND DRIVE, THUS CONNECTING UP WITH THE GLENN HIGHWAY. SIGNED...DAVID WACHSMUTH, PRESIDENT OF EAGLE RIVER VALLEY COMMUNITY COUNCIL.

****

EAGLEWOOD HOMEOWNERS ASSOCIATION
EAGLE RIVER, ALASKA 99577

MAY 9 1983

May 3, 1983

TO: Mayor Tony Knowles, Municipality of Anchorage
Mr. John Liska
Mr. Randy Phillips
Mr. Rick Halford
Mr. Tim Kelly

We, the undersigned, the Board of Directors of Eaglewood Subdivision, representing the membership of the Homeowners' Association of 411 families, in accordance with a unanimous vote of approval at the April 21, 1983 Homeowners' meeting, do hereby express our complete support to the construction of a bridge across Eagle River connecting Hiland Road and Eagle River Loop South.

Please take this letter of support in consideration during meetings concerning construction of same bridge. It is our feeling that with the expected continued growth of Eagle River toward Chugach State Park (Eagle River Road continues eight miles beyond Eaglewood Subdivision before it reaches the entrance to Chugach State Park) an alternative route will become a necessity to alleviate congestion and thereby keep the area in a less hazardous condition. It is our fear that with the combination of a new Grammar School and a new Jr. High School, the traffic situation will become virtually impossible on Eagle River Road and that eventually an alternative route will become an absolute necessity. Again, please consider this request, and hopefully give it a positive response.

Sincerely,

James L. Harpring

Judy Bailey

Judy Bailey

David Richardson

Ralph E. Crane

Paula H. Hyatt

Paula H. Hyatt

APR 13 1989

REPRESENTATIVE JOHN LISKA

FROM: BILL LYFORD
P.O. BOX 195
EAGLE RIVER, AK 99577 (H) 694-9227 (W) 694-2225

RE: EAGLE RIVER LOOP ROAD EXTENTION AND BRIDGE ACROSS EAGLE RIVER TO SOUTH FORK.

THIS IS A TOP PRIORITY FOR ALL OF EAGLE RIVER VALLEY. PLEASE SUPPORT THE CONSTRUCTION OF IT.

****

MAY 1 1 1983

STATE OF ALASKA

Bill Sheffield, Governor

DEPARTMENT OF TRANSPORTATION
and PUBLIC FACILITIES

DEPUTY COMMISSIONER - CENTRAL REGION

4111 AVIATION AVENUE, POUCH 6900
ANCHORAGE 99502 (TELEX 25-185)
PHONE: 266-1441

22

May 6, 1983

Bette:
Do you want to consider a
Please fund for $750,000 this year?

The Honorable John Liska
Representative
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Representative Liska:

In response to your request regarding the Eagle River Loop Road extension project, the cost for preliminary engineering is estimated to be approximately $750,000.

It is assumed that the preliminary engineering will be accomplished by a consultant. The consultant will be responsible for 1) conducting an environmental study which includes mapping of the site, 2) soils and foundation investigations, and 3) design work.
? all design? - ready for Construction?

If our office can be of further assistance please call.

Sincerely,

David W. Haugen
Deputy Commissioner
Central Region

DWH:WRS:MM/ey

cc: Emil Notti, Legislative Assistant
Office of the Governor

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

POUCH Z
JUNEAU, ALASKA 99811
PHONE: (907) 465-3900

OFFICE OF THE COMMISSIONER

January 10, 1984

Re: Fiscal Note Transmittal

Distribution

The Department of Transportation and Public Facilities hereby transmits the fiscal note and supporting documentation for the legislation identified below. This transmittal supersedes all previous distributions.

Bill No.: HB 248

Title : "...construct bridge ... Eagle River..."

Sponsor : Liska

Sincerely,

Ed Cronick

Ed Cronick
Legislative Liaison
Department of Transportation
& Public Facilities

DISTRIBUTION:

Legislative Finance
Legislative Sponsor
Requestor - House Transportation
Office of Management and Budget - Lisa Emerson
Impacted Agency(ies) Attn: Legislative Liaison - N.A.
Regional Directors of Administrative Services - J. Merrill
Regional Director P&P - R. Snell

25A-T1LH

STATE OF ALASKA
FISCAL NOTE

Revision Date: 11/30/83

I. REQUEST

Bill/Resolution No.: HB 248
Title: ...construct bridge...Eagle River
Sponsor: Rep. Liska
Requestor: House Transportation
Date of Request: 10/1/83

II. FISCAL DETAIL

Agency Affected: DOT&PF
Program Category Affected: Transportation
BRU, Program or Subprogram(s) Affected: Design & Construction

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL OPERATING			50.0	55.0	60.5	66.5
CAPITAL	305.0	400.0	34,284.0			
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND	305.0	400.0	34,334.0	55.0	60.5	66.5
FEDERAL FUNDS						
OTHER (Specify Source)						
TOTAL	305.0	400.0	34,334.0	55.0	60.5	66.5

POSITIONS:

FULL TIME			1	1	1	1
PART TIME						
TEMPORARY						
TOTAL						

II. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not identified by sponsor of bill

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared by: William R. Snell, Director
Phone: 266-1462
Division: Central Region Planning & Programming
Date: 11/30/83

Approved by Commissioner: David W. Haugen
Date: 11/30/83
Department: Deputy Commissioner, Central Region

Distribution:
Original to Legislative Finance
Copy to Office of Management and Budget (for Legislature introduced bills)
Copy to Department (for Governor introduced bills)
Copy to Sponsor
Copy to Requestor (if different from Sponsor)

9/14/83

FISCAL NOTE FOR HB 248

1. Fiscal Impact on Existing Programs

FY'84 funds were appropriated in Ch 107 SLA 83 page 75 line 16. Funds for FY'85 and FY'86 were not identified in bill. Preliminary Engineering is now underway. The $400,000 shown in FY'85 will be needed to complete preliminary engineering. This amount is now contained in the draft FY'85 CIP.

The Eagle River loop extension is not currently programmed for construction in the FY'84 AMATS TIP or in DOT&PF's draft FY'85 or FY'86 CIP. Construction of this project in FY'86 may delay construction of high priority projects unless additional funding can be secured. DOT&PF will work with the Municipality through the AMATS process to establish the priority of this project relative to other Anchorage projects in the AMATS TIP. DOT&PF's future budget requests will be developed in accordance with this priority ranking.

2. Fiscal Impact on New Programs

Construction of this project in FY'86 may also delay construction of high priority project programmed in the AMATS TIP and DOT&PF FY'86 CIP.

3. Analysis of Cost Estimate

The following cost breakdown was prepared by Central Region Design and Construction. The project includes modification of the Hiland/Glenn Highway Interchange, 2 miles of 40' wide roadway, and a 850' x 50' bridge at Eagle River. This cost estimate updates the January 20, 1982, estimate which underestimated construction and right of way costs. The updated cost estimate is a conceptual estimate and may be 25% higher or 75% lower than the actual construction cost. Further preliminary engineering will yield a more accurate estimate.

Estimated Costs (83 Dollars):

Construction Estimate:		$14,600,000
Construction Administration (12% of 1):		$ 1,752,000
	Subtotal:	$16,352,000
Contingencies (10% of 1):		$ 1,460,000
Construction Total:		$17,812,000
Preliminary Engineering (6% of 1):		$ 876,000
Right of Way		$ 5,070,000
Utilities:	(Assume)	$ 2,000,000
	Project Total	$25,758,000

Project Total (1986 Dollars): $34,283,898
(10% Inflation Factor)

*29 Developed lots at $150,000 each =	$4,350,000
Add 36 Acres undeveloped at $20,000/acre =	720,000
Total	$5,070,000

Previous estimate assumed all necessary right of way was undeveloped and underestimated cost of bridge.

Ongoing operating costs would be $42,000/year. One additional maintenance and Operations position would be added.

STATE OF ALASKA
FISCAL NOTE

Revision Date , 1983

I. REQUEST

Bill/Resolution No.: HB 248
Title: ...construct bridge..Eagle River
Sponsor: Rep. Liska
Requestor: House Transportation

II. FISCAL DETAIL

Agency Affected: DOT&PF
Program Category Affected: Transportation
BRU, Program of Subprogram(s) Affected:

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC						
TOTAL OPERATING						
CAPITAL		15,723.9				
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND		15,723.9				
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Sponsor did not identify source of funds.

IV. ANALYSIS: Attached.

Prepared By: Margaret E. Holland Phone: 266-1499
Division: Planning & Programming, Central Region Date: 4/12/83

Approved by Commissioner: David Haugen, Deputy Commissioner Date: 4/12/83
Department: Transportation & Public Facilities

Distribution:
Original to Legislative Finance
Copy to Office of Management and Budget (for Legislature introduced bills)
Copy to Department (for Governor introduced bills)
Copy to Sponsor
Copy to Requestor (if different from Sponsor)

3/8/83

IV. ANALYSIS: Fiscal Note for HB 248

PRELIMINARY CONSTRUCTION COST ESTIMATE FOR
EAGLE RIVER LOOP ROAD EXTENSION
*(FY 82 Figures)

Total Length: approximately 2 miles

Location and Description: Begin project - Hiland Drive Interchange at Glenn Hwy. End Project - Intersection of Eagle River Loop Road and Eagle River Road. Includes construction of new bridge over Eagle River, approx. 1.5 miles upstream from Glenn Highway.

Required width: 40 feet top (assume)

*Estimated Costs:

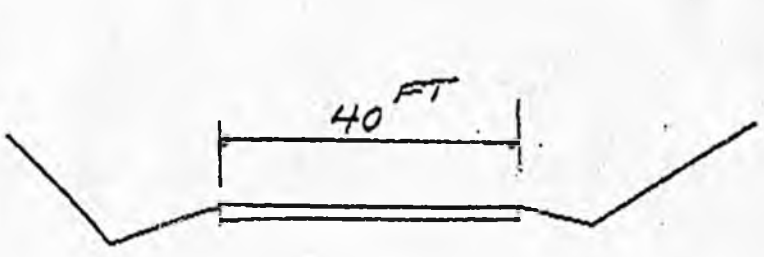
1.	Construction Estimate =	$10,375,000
2.	Construction Administration = (12% of 1)	1,245,000
3.	Subtotal	$11,620,000
4.	Preliminary Engineering (6% of 1)	625,000
5.	Right of Way ($10,000/acre)	500,000
6.	Utilities (assume)	250,000

PROJECT TOTAL = $12,995,000 *(FY '82)

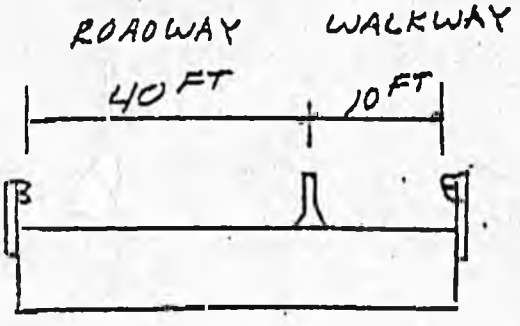
*Fiscal Year 1982 Dollar Figure Inflated 10% each year to Fiscal Year 1984 = $15,723,950

Sheet 2 of 5
Project Name EAGLE RIVER LOOP EXT.
Project Number
Prepared By
Date

TYPICAL SECTION



ROADWAY



BRIDGE

2 MILES ROADWAY AT 2,000,000/MILE = 4,000,000

850' LONG * 50' WIDE BRIDGE AT 150/FT² = 6,375,000

CONSTRUCTION ESTIMATE = 10,375,000

RIGHT OF WAY, 2 MILES * 200' WIDE * 5280/43,560 = 50 AC * 10,000/AC = 500,000

UTILITIES ASSUME 250,000

GENERAL NOTES

1. ROADWAY LENGTHS BASED ON SHORT ROUTE BETWEEN BEGIN AND END OF PROJECT.

2. BRIDGE SITE AT NARROW CANYON DUE SOUTH OF EXISTING EAGLE RIVER LOOP ROAD.

3. OTHER ROUTES AND ALTERNATIVES WILL BE CONSIDERED.

4. IT IS ASSUMED THAT SUFFICIENT TRAFFIC TO JUSTIFY THE PROJECT, WILL REQUIRE A 40' WIDE ROADWAY.

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

4111 AVIATION AVENUE
POUCH 6900
ANCHORAGE, ALASKA 99502
(TELEX 25-185)

Date: 4-27-83
Prepared By: B. Fredrickson
Project Number:

PRELIMINARY CONSTRUCTION COST ESTIMATE FOR:

Project Name: Intersection Improvements - Eagle River

From: Old Glenn Hwy (MP) 0.40 to: Eagle River Rd (MP) 0.00

Total Length: 800 feet

Location and Description: Intersection Improvements at the intersection of Old Glenn Hwy & Eagle River Rd. Adding turning lanes and installing pavement markings

Current ADT: 13700 Design ADT:

Required Width: Actual Width:

Assumed Structural Section H.A.P.: in.

C.A.B.: in.

Borrow: in.

Estimated Costs (Dollars) Based Upon Above Assumptions:

1.	Construction Estimate:	$ 89570
2.	Construction Administration (15 % of 1):	$ 13440
3.	Subtotal:	$ 103010
4.	Contingencies (10 % of 1):	$ 9000
5.	Construction Total:	$ 112,010
6.	Preliminary Engineering (10 % of 1):	$ 9000
7.	Right of Way ($ /Acre):	$
8.	Utilities:	$ 4000
9.	Project Total:	$ 125,010

Sheet ____ of ____

STATE OF ALASKA

APR 13 1983

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

4111 AVIATION AVENUE
POUCH 6900
ANCHORAGE, ALASKA 99502
(TELEX 25-185)

JEFF SCHELBARTH
AMATS COORDINATOR
264-4224

Date: JANUARY 1983
Prepared By: JOHN DICKENSON
Project Number: _____

PRELIMINARY CONSTRUCTION COST ESTIMATE FOR:

Project Name: EAGLE RIVER LOOP ROAD EXTENSION

From: _____ (MP) _____ To: _____ (MP) _____

Total Length: 2 MILES ±

Location and Description: BEGIN PROJECT - HILAND DRIVE INTERCHANGE AT GLENN HWY. END PROJECT - INT OF EAGLE RIVER LOOP ROAD AND EAGLE RIVER ROAD. INCLUDES CONST OF NEW BRIDGE OVER EAGLE RIVER APPROX 1.5 MILES UPSTREAM FROM GLENN HWY.

Current ADT: _____ Design ADT: _____

Required Width: 40 FT TOP (ASSUME) Actual Width: _____

Assumed Structural Section H.A.P.: _____ in.

C.A.B.: _____ in.

Borrow: _____ in.

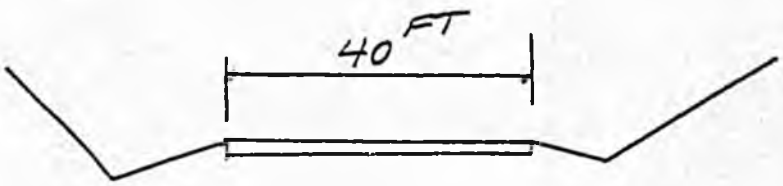
Estimated Costs (1982 Dollars) Based Upon Above Assumptions:

1.	Construction Estimate:	$ 10,375,000
2.	Construction Administration (12 % of 1):	$ 1,245,000
3.	Subtotal:	$ 11,620,000
4.	Contingencies (____ % of 1):	$ _____
5.	Construction Total:	$ _____
6.	Preliminary Engineering (6 % of 1):	$ 625,000
7.	Right of Way ($ 10,000/Acre):	$ 500,000
8.	Utilities: ASSUME	$ 250,000
9.	Project Total:	$ 12,995,000

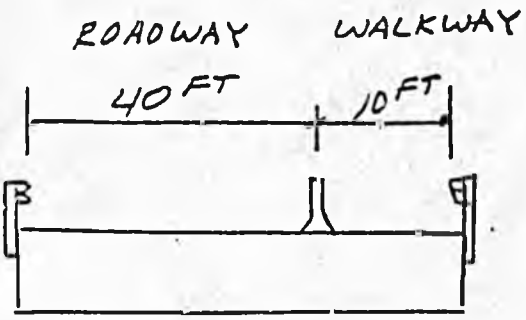
Sheet ____ of ____

Sheet 2 of 5
Project Name EAGLE RIVER LOOP EXT.
Project Number
Prepared By
Date

TYPICAL SECTION



ROADWAY



BRIDGE

2 MILES ROADWAY AT 2,000,000/MILE = 4,000,000

850' LONG * 50' WIDE BRIDGE AT 150/FT² = 6,375,000

CONSTRUCTION ESTIMATE = 10,375,000

RIGHT OF WAY, 2 MILES * 200' WIDE * 5280/43,560 = 50 AC * 10,000/AC = 500,000

UTILITIES ASSUME 250,000

GENERAL NOTES

1. ROADWAY LENGTHS BASED ON SHORT ROUTE BETWEEN BEGIN AND END OF PROJECT.

2. BRIDGE SITE AT NARROW CANYON DUE SOUTH OF EXISTING EAGLE RIVER LOOP ROAD.

3. OTHER ROUTES AND ALTERNATIVES WILL BE CONSIDERED.

4. IT IS ASSUMED THAT SUFFICIENT TRAFFIC TO JUSTIFY THE PROJECT, WILL REQUIRE A 40' WIDE ROADWAY.

DEMOGRAPHIC BACKGROUND
(House Bill 248 - Eagle River Bridge)

Eagle River/Chugiak is one of the fastest growing areas in the entire State of Alaska. The population of this area has nearly doubled since 1981. With this dramatic increase in population, an alternate access to Glenn Hiway is mandatory to ease the drastic traffic problems which are now occuring. What follows are some statistics which illustrate our District's growth and the urgency with which we need a solution to our traffic problems.

1. Population and Dwelling Unit Forecasts by Community Council (See Attached) prepared for the Municipality of Anchorage, by Alaska Transportation Consultants, Inc., Dated August 1982.

   This table shows the projected increases in population and in dwelling units from 1981 to 1988.

   Note: Of the 27,999 population projected for 1988, 39% (or 10,973) will be in Eagle River Valley.

2. New Construction/Building Permits

   a. "Alaska Economic Report", May 1983:

      This issue reports "A residential building glut" in the Anchorage area with 2,315 buidling permits issued by the end of March this year.

   b. John C. Bishop, Municipal Building Official, Municipality of Anchorage:

      It is estimated that approximately 60% of these permits (or 1,389) were for the Eagle River Area.

3. Traffic Counts - Pete Eckland, Department of Transportation (on Loan to the Municipality of Anchorage)

   a. 10,798 cars enter the Glenn Highway Southbound to go on into Anchorage each day.

      While this has recently been made into a 5 lane highway, it narrows to 2 lanes at the intersection where the heavy traffic flow junctions with Eagle River Road.

b. Officer Jim Meehan, Anchorage Police Department, Commuter Watch:

Meehan in May issue of Anchorage Times reports that Eagle River Road merging into Glenn Highway is a traffic hot spot.

In morning rush hour there are up to 50 cars at one time backed up trying to merge onto Glenn Highway.

4. Additional Responses to Horrendous Growth of Eagle River Area

a. Tom Brigham, Director, People Mover indicates that service to Eagle River has had to double to 24 buses a day to handle the growth, and that additional expansion will be required on Eagle River Loop Road and is planned for this fall.

b. Increased population has required an additional person to be moved in to the Health Department Office in Eagle River to help meet the local demand for increased environmental health services.

TABLE 3-4

POPULATION AND DWELLING UNIT FORECASTS BY COMMUNITY COUNCIL

Council	1981 Population	1981 Dwelling Units	1981 Persons/ D.U.	Platted D.U.'s	1988 Add'l D.U.'s	1988 Total Est. D.U.'s	Pct. of Total D.U.'s	1988 Total Est. Populatn
Birchwood	1755	615	2.85	0	200	815	.09	2326
Chugiak	3783	1318	2.87	605	700	2623	.29	7529
Eagle River	4103	1298	3.16	449	522	2269	.25	7172
Eagle River Valley	4684	1442	3.25	1236	700	3378	.37	10973
TOTALS	14325	4673	3.07	2290	2122	9085	1.00	27999

Police put 'eye' in air to watch commuters

by Mary Kaye Ritz
Times Writer

During those hectic morning rush hours, Anchorage drivers are turning to Commuter Watch, KTNX's 60-minute guide of how to get to work without getting buried in a traffic jam.

The program, which began in March, features officer Jim Meehan of the Anchorage Police Department's community relations division.

It is Meehan who pulls out his radio and earphones, props a phone to dispatchers on his shoulder and lets the show go on.

Reports of traffic from the downstairs office of the police department are made from "traffic central," Meehan said. When he is grounded, he calls both Alaska State Trooper and Anchorage Police Department dispatches to check for traffic hazards and tie-ups.

Reports made from the street are called "mobile" reports.

During mobile reports, the officer drives to some of the most notorious intersections and checks congestion. If everyone in line for a certain traffic light can make it through, or if there is a stalled car blocking any a path, he relays that back to the disc jockey.

He also calls dispatchers of both troopers and police as well as other patrollers to check on hazards and accidents.

Occasionally Meehan gets all the way to Merrill Field for take-off before the decision not to fly is made. The report goes on, with the officer on the phone to dispatchers.

Meehan mentioned these examples of traffic hot spots:

- Eagle River Road merging onto the Glenn Highway.
- Dimond Boulevard between Victor Street and Minnesota Drive.
- Tudor Road and Lake Otis Parkway.

The Eagle River Road merge is horrendous in the mornings, Meehan said, with up to 50 cars trying to enter the highway. When the kind Glenn Highway commuter waves you on in front of him, he said, you take a chance should you accept.

Legally, if you are struck by the courteous driver the ticket goes to you for failing to yield the right of way.

Meehan's cohorts, Officer Jim Reimann and Lt. George Novaky, also do the Commuter Watch spots.

Michael Dinneen of The Times

Officer Jim Meehan does a traffic Commuter Watch from 'traffic central'

City eases enforcement of Eagle River land rule

by Ralph Nichols
Times Writer

Municipal officials have backed away from strict enforcement of the comprehensive plan for property development from Eagle River north to Chugiak and Peters Creek, area residents were told at a "town meeting" Monday night.

Only two questions will now be asked about the development of land with unrestricted zoning, public works director Paul Diener told some 50 persons crowded into the Chugiak Senior Citizens Center:

- Does it create a public health or safety hazard?
- Is it compatible with surrounding land uses?

Area residents last month protested the strict enforcement of the comprehensive plan by municipal officials. They complained that persons seeking land-use permits were being restricted to the requirements of the comprehensive plan, despite the fact they were planning to develop land zoned unrestricted.

Their pleas seemed to fall on deaf ears. They were told by building officer John Bishop that the municipality intended only to toughen its enforcement of the comprehensive plan in issuing land-use permits.

But municipal officials decided late last week, at a subsequent meeting with area residents, to back away from strict adherence to the land use plan in the absence of area-wide zoning.

Diener said after Monday's meeting that the problem occurred largely because "we just recently have begun a systematic zoning review here. We're still working the bugs out."

Mayor Tony Knowles said the municipality is negotiating to retain planner Paul Carr as a consultant to help iron out the Eagle River-Chugiak zoning and development problems. Carr, who worked last year with the New Capital Site Planning Commission, helped draft the area's land use plan.

Diener said he thinks these actions "will resolve the immediate problems on land use."

For example, he continued, under the muncipality's new approach to development, "if you want to build an auto shop in a single-family residential development (zoned unrestricted), you'll be turned down.

"But if you want to build a duplex, and there are other multi-family dwellings there, then you'll probably be aproved."

Eagle River-Chuglak residents have scheduled another meeting to clarify their concerns on this issue for 7:30 p.m. Thursday at the CBA Building in Chugiak. These views will be susbmitted to municipal officials at a May 16 meeting.

Knowles told the gathering that the outer limits of the municipality, with both original homesteading and sophisticated zoning, "is trying to do in a few years what it has taken some communities a generation to do."

As declining oil prices impact municipal revenues, he continued, "we have to rely more on ourselves to provide those services we need . . . you are the ones who must decide which services we should have."

Other issues discussed at the meeting included:

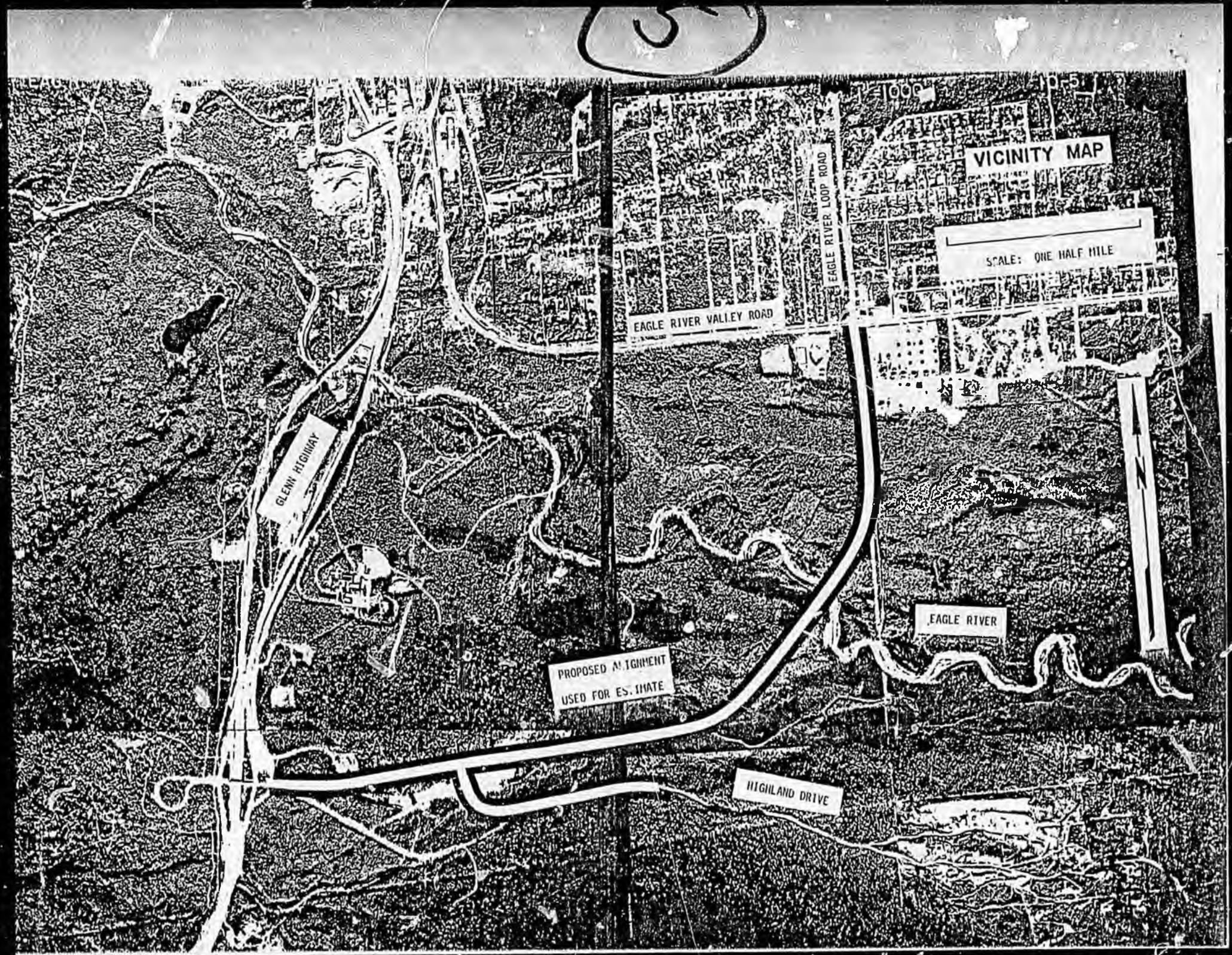
- Improvement of the Eagle River Loop. Assemblyman Gerry O'Connor said that actual expansion of the roadway where it narrows into a bottleneck is probably five to eight years away, and will cost $15-16 million, most of which will come from federal funds.

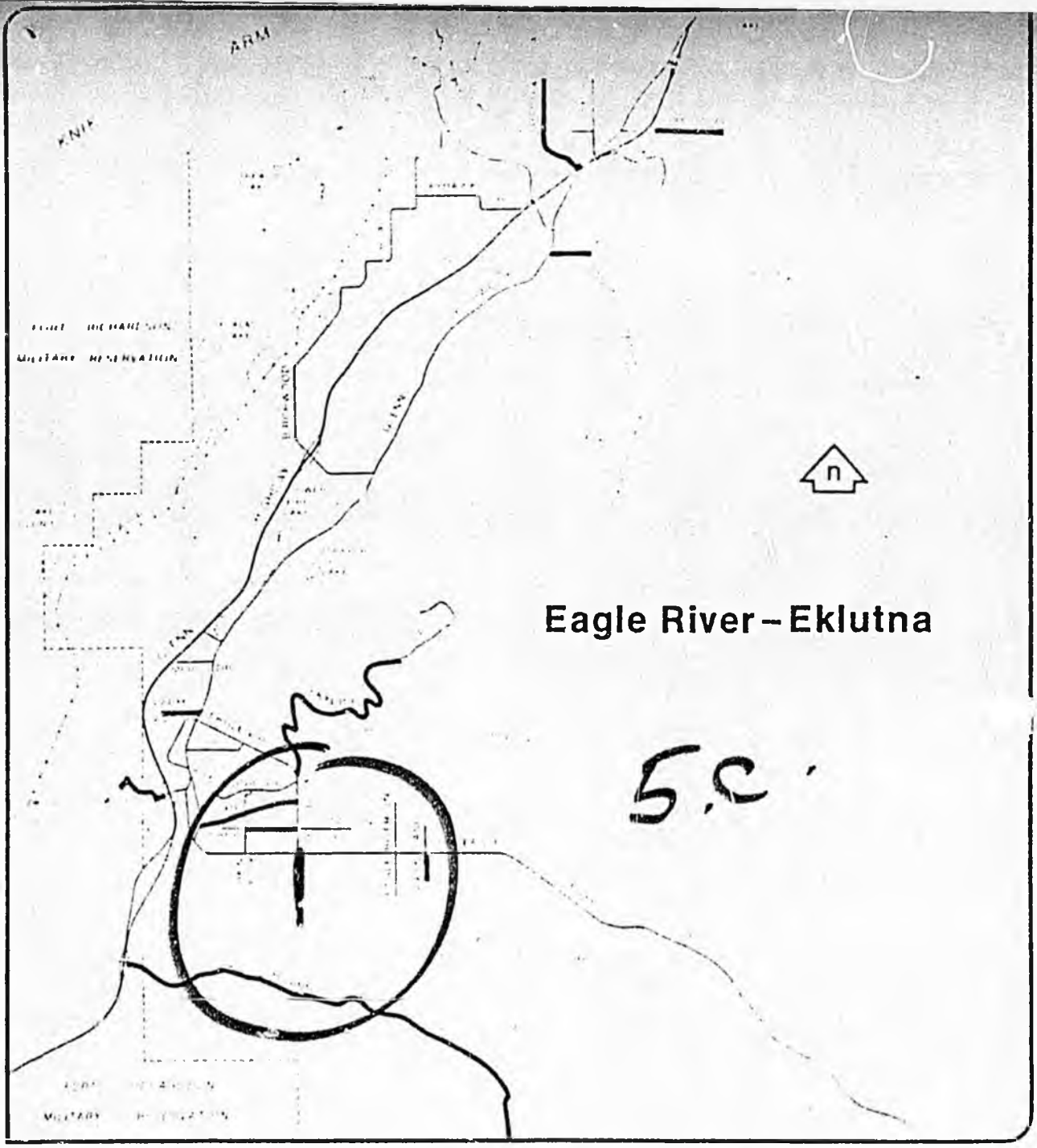
One man suggested that in the meantime, the municipality should lower the speed limit to 35 mph, "and enforce it."

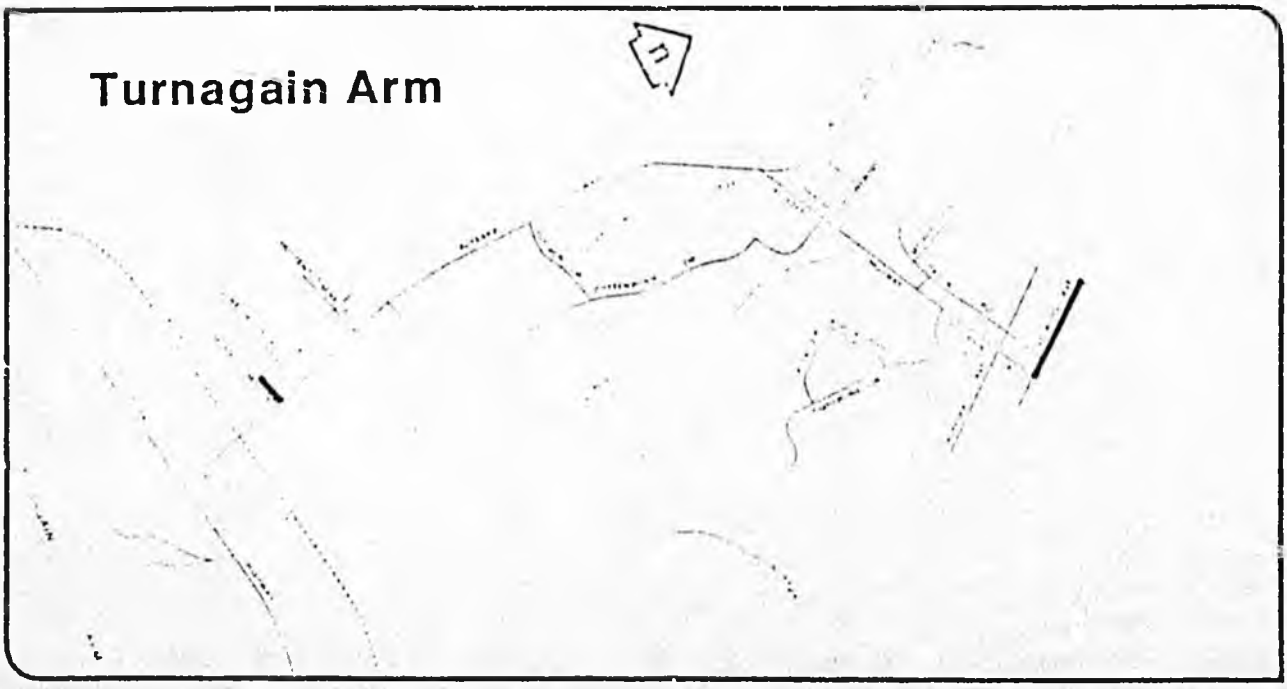
- People Mover director Tom Brigham said service to Eagle River was doubled to 24 buses daily on April 4, and that expanded service on Eagle Loop Road is planned for this fall. 4.a.

There is "no question" that service will eventually be added to Thunderbird Heights and Eklutna Heights, Brigham added. "It's just a matter of when."

- Public health officer Les Buckholz has moved into the municipality's Eagle River health department office (telephone 694-2131) to help meet the local demand for increased environmental health services created by the rapid growth of the area, it was also announced. 4.b.


VICINITY MAP
SCALE: ONE HALF MILE
EAGLE RIVER VALLEY ROAD
EAGLE RIVER LOOP ROAD
GLENN HIGHWAY
EAGLE RIVER
PROPOSED ALIGNMENT
USED FOR ESTIMATE
HIGHLAND DRIVE


Eagle River–Eklutna
5.c


Turnagain Arm

LITTLE MEEKS CREEK
FIRE CREEK
MEADOW CREEK
EAGLE RIVER
SOUTH FORK EAGLE RIVER

5.b.

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

POUCH Z
JUNEAU, ALASKA 99811
PHONE: (907) 465-3900

OFFICE OF THE COMMISSIONER

January 10, 1984

Re: Fiscal Note Transmittal

Distribution

The Department of Transportation and Public Facilities hereby transmits the fiscal note and supporting documentation for the legislation identified below. This transmittal supersedes all previous distributions.

Bill No.: HB 286

Title : "...Special appropriation ... design breakwater at Dog Bay..."

Sponsor : Zharoff

Sincerely,

Ed Cronick

Ed Cronick
Legislative Liaison
Department of Transportation
& Public Facilities

DISTRIBUTION:

Legislative Finance
Legislative Sponsor
[redacted] - House Transportation
Office of Management and Budget - Lisa Emerson
Impacted Agency(ies) Attn: Legislative Liaison - N.A.
Regional Directors of Administrative Services - J. Merrill
Regional Director P&P - R. Snell

25A-T1LH

STATE OF ALASKA
FISCAL NOTE

Revision Date: 11/30/83

I. REQUEST

Bill/Resolution No.: HB 286
Title: Spec App/DOT&PF/Design Breakwater at Dog Bay
Sponsor: Zharoff
Requestor: Transportation & Finance
Date of Request: 10/1/83

II. FISCAL DETAIL

Agency Affected: DOT&PF
Program Category Affected: Transportation
BRU, Program or Subprogram(s) Affected: Design and Construction

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	750.0	21,750.0*	19,972.0*			
* Worst Condition Scenario						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND	750.0	21,750.0*	19,972.0*	-0-	-0-	-0-
FEDERAL FUNDS						
OTHER (Specify Source)						
TOTAL						

POSITIONS:

FULL TIME	-0 -	-0-	-0-	-0-	-0-	-0-
PART TIME						
TEMPORARY						
TOTAL						

II. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not identified by bill sponsor.

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared by: William R. Snell, Director — Phone: 266-1462
Division: Central Region Planning & Programming — Date: 11/30/83

Approved by Commissioner: David W. Haugen — Date: 11/30/83
Department: Deputy Commissioner, Central Region

Distribution:
Original to Legislative Finance
Copy to Office of Management and Budget (for Legislature introduced bills)
Copy to Department (for Governor introduced bills)
Copy to Sponsor
Copy to Requestor (if different from Sponsor)

9/14/83

V. ANALYSIS:

1) Analysis of the fiscal impact on existing programs:

No fiscal impact on existing program is anticipated. The project would be operated and maintained by the community when completed.

2) Analysis of the fiscal impact on new programs or activities:

The expansion of Dog Bay Harbor will facilitate and encourage the increased development of the renewable marine resources throughout the region. Kodiak, the third largest commercial fishing port in the United States, is a world leader in king crab production and ranks among the top four national ports in halibut production. Some 2,000 commercial fishing vessels annually use the small boat basin that has protected moorage for about 200 vessels. Kodiak is also an important cargo port and transshipment center and the channel allows unrestricted access for coastal vessels. This basin and the samll basin at nearby Old Harbor are the only protected basins between Cook Inlet and the Shumagin Islands, so they are important harbors of refuge.

3) Analysis of how the figures in the fiscal note were derived:

The figures are provided by the Buildings and Harbors Section, Design and Construction Division of DOT&PF based on an analysis of March 16, 1983. The Corps of Engineers' Kodiak Harbor Study was a primary source of information. The estimates reflect a $750,000 reduction as a result of a FY'84 appropriation for design.

The cost figures are based on conceptual considerations within an accuracy range of -25% to +75%. A conceptual estimate is based on a design engineer work using existing information without the advantage of a field investigation or a detailed design study. This accounts for the wide range in the degree of accuracy. A detailed design study would be required to increase the accuracy of the project cost estimate and reduce the accuracy range.

Current status of the design project: The present appropriation of $750,000 is being used for preliminary engineering efforts to gather and analyze bathymetric and subsurface soils data. No design work has been undertaken yet. Unused funds from the preliminary engineering effort will be directed toward the design element.

4) Additional information necessary to explain the fiscal note:
Note: $750.0 in design funds was provided in SLA 83 Chapter 107. The original request was for $2,500.0 in design funds. An additional $1,750.0 is needed for adequate design and preliminary engineering work before construction can be effectively employed.

A. Assumptions

The design of the subject project is being viewed as a potential in-house design with the utilization of State materials and geology sections in coordination with outside consultants. Initial estimates propose construction of a 1,900 foot rubble mound breakwater with an entrance channel crossing from Near Island to Grass Island and finally to Gull Island, entirely enclosing Dog Bay. The breakwater would provide year-round protection to Dog Bay from wave and swell action. The following is the design cost breakdown prepared March 16, 1983 by Central Region's Design/Buildings and Harbors.

1.	Aerial photography, mapping and half-tone positive enlargements	$ 35,000.00
2.	Field and office reconnaissance of breakwater and material sites	100,000.00
3.	Geophysical and seismic surveying of material sites	85,000.00
4.	Geotechnical exploration, lab work, core drilling	285,000.00
5.	Bathymetric sounding and bottom contours	86,000.00
6.	Deep water coring, samples and consolidation testing	250,000.00
7.	Model testing and circulation studies, wave hindcasting	206,000.00
8.	Preparation of environmental document	200,000.00
9.	Design: all phases	350,000.00
		$1,597,000.00

The construction scenario could be coupled with the stabilization of Pillar Mountain thus effecting a tremendous cost saving. However, it would not be economically feasible for the same contractor to set up the stabilization effort and the construction of the breakwater at the same time. The production of inner core filler material will occur at Near Island. This condition gives us the best condition scenario and would greatly reduce the cost of the project. Likewise, obtaining the rip-rap material at Near Island will also greatly reduce the cost of the project. Worst case condition scenario would be having to bring the inner core material from Pillar Mountain and the rip-rap material from Anton Larsen Bay Quarry.

The first construction cost estimate is based on the worst condition scenario because the development of material sites on Near Island are unknown with regard to availability, quantity, and quality of the rock. Established sources have known conditions and very likely will be used as alternate site if Near Island proves inadequate.

The following ranges are provided so that all concerned are aware of the great difference in obtaining the material locally on Near Island as compared to alternate sources as indicated above.

1. Near Island, Pillar Mountain and Anton Larsen Bay Material Sources (worst condition scenario)

Material	Quantities (cu.yds.)	Cost/cu.yd.	Total
Armor rock	155,000	$100.00	$15,500,000.00
Inner core	415,000	$50.00	20,750,000.00
		Sub-total	$36,250,000.00
		Mobilization	1,000,000.00
		Design	1,597,000.00
		Contingency 10%	3,625,000.00
		Total	$42,472,000.00

2. Near Island and Pillar Mountain Material Sources
(best condition scenario)

Material	Quantities (cu.yds.)	Cost/cu.yd.	Total
Armor rock	155,000	$50.00	$ 7,750,000.00
Inner core	415,000	$20.00	8,300,000.00
		Sub-total	$16,050,000.00
		Mobilization	1,000,000.00
		Design	1,597,000.00
		Contingency 10%	1,605,000.00
		Total	$20,252,000.00

The design costs are in 1983 dollars and the construction cost estimates are in spring 1984 dollars. No commitment of maintenance or operating funds would be necessary.

5) Program Summary

No new positions are anticipated, nor can any other major expenditure items be identified at this time.

6) Computations

Not applicable.

STATE OF ALASKA
FISCAL NOTE

I. REQUEST
Bill/Resolution No.: HB 286
Title: Spec App/DOT&PF/Design Breakwater at Dog Bay
Sponsor: Zharoff
Requestor: Transportation & Finance

II. FISCAL DETAIL
Agency Affected: DOT&PF
Program Category Affected:
BRU, Program or Subprogram(s) Affected:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
100 PERSONAL SERVICES						
200 TRAVEL						
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400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	2,500.0	20,000.0*	19,972.0*	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

* worst condition scenario

FUNDING: (Thousands of Dollars)

GENERAL FUND	-0-	2,500.0	20,000.0*	19,972.0*	-0-	-0-
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL TIME						
PART TIME						
TEMPORARY						

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not identified.

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared by: William R. Snell Phone: 266-1462
Division: Planning & Programming Date: April 18, 1983

Approved by Commissioner: David W. Haugen Date: April 22, 1983
Department: Deputy Commissioner, Central Region DOT&PF

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3/8/83

IV. ANALYSIS (HB 286)

A. Assumptions

The design of the subject project is being viewed as a potential in-house design with the utilization of State materials and geology sections in coordination with outside consultants. Initial estimates propose construction of a 1,900 foot rubble mound breakwater with an entrance channel crossing from Near Island to Grass Island and finally to Gull Island, entirely enclosing Dog Bay. The breakwater would provide year-round protection to Dog Bay from wave and swell action. The following is the design cost breakdown prepared March 16, 1983 by Central Region's Design/Buildings and Harbors.

1.	Aerial photograpy, mapping and half-tone positive enlargements	$ 35,000.00
2.	Field and office reconnaissance of breakwater and material sites	100,000.00
3.	Geophysical and seismic surveying of material sites	85,000.00
4.	Geotechnical exploration, lab work, core drilling	285,000.00
5.	Bathymetric sounding and bottom contours	86,000.00
6.	Deep water coring, samples and consolidation testing	250,000.00
7.	Model testing and circulation studies, wave hindcasting	206,000.00
8.	Preparation of environmental document	200,000.00
9.	Design: all phases	350,000.00
		$1,597,000.00

The construction scenario could be coupled with the stabilization of Pillar Mountain thus effecting a tremendous cost saving. However, it would not be economically feasible for the same contractor to set up the stabilization effort and the construction of the breakwater at the same time. The production of inner core filler material will occur at Near Island. This condition gives us the best condition scenario and would greatly reduce the cost of the project. Likewise, obtaining the rip-rap material at Near Island will also greatly reduce the cost of the project. Worst case condition scenario would be having to bring the inner core material from Pillar Mountain and the rip-rap material from Anton Larsen Bay Quarry.

The first construction cost estimate is based on the worst condition scenario because the development of material sites on Near Island are unknown with regard to availability, quantity, and quality of the rock. Establised sources have known conditions and very likely will be used as alternate site if Near Island proves inadequate.

The following ranges are provided so that all concerned are aware of the great difference in obtaining the material locally on Near Island as compared to alternate sources as indicated above.

1. Near Island, Pillar Mountain and Anton Larsen Bay Material Sources (worst condition scenario)

Material	Quantities (cu.yds.)	Cost/cu.yd.	Total
Armor rock	155,000	$100.00	$15,500,000.00
Inner core	415,000	$50.00	20,750,000.00
		Sub-total	$36,250,000.00
		Mobilization	1,000,000.00
		Design	1,597,000.00
		Contingency 10%	3,625,000.00
		Total	$42,472,000.00

2. Near Island and Pillar Mountain Material Sources (best condition scenario)

Material	Quantities (cu.yds.)	Cost/cu.yd.	Total
Armor rock	155,000	$50.00	$ 7,750,000.00
Inner core	415,000	$20.00	8,300,000.00
		Sub-total	$16,050,000.00
		Mobilization	1,000,000.00
		Design	1,597,000.00
		Contingency 10%	1,605,000.00
		Total	$20,252,000.00

The design costs are in 1983 dollars and the construction cost estimates are in spring 1984 dollars. No commitment of maintenance or operating funds would be necessary.

B. PROGRAM SUMMARY

No new positions are anticipated, nor can any other major expenditure items be identified at this time.

C. COMPUTATIONS

Not applicable.

D. Economic Impact

Kodiak Island is located in one of the State's best natural fishing grounds. Currently, 15 shore-based commercial processing plants process crab, salmon, shrimp and halibut. Further Development of the bottomfish industry is being explored and the commercial fishing fleet continues to grow.

E. Impact on Local Governments

No information at this time.

F. Attachments

None.

HB

287

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

POUCH Z
JUNEAU, ALASKA 99811
PHONE: (907) 465-3900

OFFICE OF THE COMMISSIONER

January 10, 1984

Re: Fiscal Note Transmittal

Distribution

The Department of Transportation and Public Facilities hereby transmits the fiscal note and supporting documentation for the legislation identified below. This transmittal supersedes all previous distributions.

Bill No.: HB 287

Title : "...Special appropriation ... stabalization of Piller Mountain..."

Sponsor : Zharoff

Sincerely,

Ed Cronick
Legislative Liaison
Department of Transportation
& Public Facilities

DISTRIBUTION:

Legislative Finance
Legislative Sponsor
Requestor - House Transportation
Office of Management and Budget - Lisa Emerson
Impacted Agency(ies) Attn: Legislative Liaison - N.A.
Regional Directors of Administrative Services - J. Merrill
Regional Director P&P - R. Snell

25A-T1LH

STATE OF ALASKA
FISCAL NOTE

Revision Date: 11/30/83

I. REQUEST

Bill/Resolution No.: HB 287
Title: Spec.App/DOT&PF/Stablization of Pillar Mountain
Sponsor: Zharoff
Requestor: Transprtation & Finance
Date of Request: 10/1/83

II. FISCAL DETAIL

Agency Affected: DOT&PF
Program Category Affected: Transportation
BRU, Program or Subprogram(s) Affected: Design and Construction

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	3,410.0	10,706.0	10,706.0	10,706.0	-0-
* Port of Kodiak Development Plan						
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND	-0-	3,410.0	10,706.0	10,706.0	10,706.0	-0-
FEDERAL FUNDS						
OTHER (Specify Source)						
TOTAL						

POSITIONS:

FULL TIME						
PART TIME						
TEMPORARY						
TOTAL						

II. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not identified.

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared by: William R. Snell, Director — Phone: 266-1462
Division: Central Region Planning & Programming — Date: 11/30/83

Approved by Commissioner: David W. Haugen — Date: 11/30/83
Department: Deputy Commissioner, Central Region

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9/14/83

ANALYSIS

1) Analysis of the fiscal impact on existing programs:

No fiscal impact on existing programs is anticipated.

2) Analysis of the fiscal impact on new programs or activities:

The size of the financial cost of this project would postpone the development of several smaller, higher priority projects in the State identified through the capital budget development process.

The City of Kodiak has completed Port Development Plan. The Plan identifies Pillar Mountain stablization as a priority project because of its potential impact on other related port development activities (i.e., permanent breakwater and upland staging areas).

3) Analysis of how the figures in the fiscal note were derived:

The figures in the fiscal note are based on the Port of Kodiak Development Plan, 1982. The design costs are in 1984 dollars and the construction cost estimates are in 1985 dollars.

The degree of accuracy in the funding figures is based on conceptual considerations within a range of -25% to +75% accuracy. A conceptual estimate is based on a design engineer's work using existing information without the advantage of a field investigation or a detailed design study. This accounts for the wide range in the degree of accuracy. A detailed design study would be required to increase the accuracy of the project cost estimate and reduce the accuracy range.

4) Additional information necessary to explain the fiscal note:

A. Assumptions

The Stabilization of Pillar Mountain includes three phases: 1) The preparatory accumulation of data identified by the Pillar Mountain Geotechnical Study Committee for the identification of remedial measures for stabilization; 2) Preliminary engineering and design for the stabilization project; and 3) The stabilization project. Preliminary engineer's estimates contained in the Port of Kodiak Development Plan estimates a project cost of approximately $29,600,000. Specifically, this project would produce an estimated 5,400,000 cubic yards of material through excavation and create 35 acres of critical port upland between piers 2 and 3. Estimating engineering design to require ten percent of the project budget, approximately $2.9 million would be required for the data collection and design. No maintenance or operating funds would be involved once the stabilization was complete.

B. Program Summary

No new positions are anticipated, nor can any other major expenditure items be identified at this time. No commitment or operating funds would be necessary.

C. Computations

See Assumptions.

D. Economic Impact

Rock excavated from the slope during the stabilization can be used to improve the commercial rocking areas along Kodiak waterfront, to create additional developable uplands, and to provide a stockpile of fill for future use.

E. Impact on Local Government

No information at this time.

F. Attachments

1. Excerpts from Port of Kodiak Development Plan.

2. Pillar Mountain Stabilization Status Report.

Peratrovich & Nottingham, Inc.

Kramer, Chin & Mayo, Inc.

Williams-Kuebelbeck & Associates, Inc.

Roy A. Ecklund

Port of Kodiak Development Plan

Pillar Mountain

Located southeast of the City of Kodiak, Pillar Mountain presents substantial limitations and hazards to present and future development. Proximity of the mountain's steep slopes to the waterfront has restricted utilization of important coastal lands and has reduced available staging area for the existing marine facilities. Additionally, the presently active slide area adjacent to City Piers 2 and 3 poses a significant threat to the area. A slope failure and slide involving approximately 4,000,000 cubic yards of rock could produce an extremely damaging splash wave. The resulting damage to persons and property is inestimable.

Fortunately, this potentially hazardous condition can be removed and transformed into the basis for a series of projects which would benefit the entire community. Stabilizing Pillar Mountain is feasible, and the rock excavated from the slope during that work can be used to improve the commercial docking areas along Kodiak's waterfront, to create additional developable uplands, and to provide a stockpile of fill for future use. This project is the recommended first priority of this planning study.

Specifically, the stabilization project would produce an estimated 5,400,000 cubic yards of material through excavation. As part of the stabilization project, 35 acres of critical port upland area can be created by filling between Piers 2 and 3 and along the coast to the entrance of Gibson Cove. This approach allows for disposal of part of the excavated material at no additional cost and provides land adjacent to the port area for container van storage and future construction of an additional cargo dock. Additional projects which may also use Pillar Mountain as a source of inexpensive fill material are the Gull Island breakwater, the Dog Bay waterfront area on Near Island, and Gibson Cove improvements. Each of these projects is discussed later in this chapter.

The stabilization of Pillar Mountain must begin with a staged plan that combines sound engineering and design principles with appropriate construction methods. This work could be accomplished in three years, beginning in 1985 with completion in 1987. Funding for this project should come from the State of Alaska through a Special Emergency Funding Request, a type of funding which can be designated by the state governor in situations where human life is threatened. The Pillar Mountain situation should qualify for special emergency funding due to the present situation which threatens life and property and the fact that slide activity is thought to have been renewed due to construction of the Abbert Highway, a state road.

Much of the potential development recommended in this study would be accomplished most easily and inexpensively by using fill material from Pillar Mountain. Table 27 compares the costs of land and harbor improvements with and without fill from Pillar Mountain to demonstrate the substantial benefits that could be gained from the stabilization project in addition to the advantage of removing a hazard that threatens property and lives. How much the fill will cost depends upon whether Pillar Mountain fill material is available and the distance which fill must be transported for each specific project. Applying the different incremental costs affects the yield and cost/benefit analyses of each project. These analyses are discussed along with the individual project descriptions.

Although Pillar Mountain offers Kodiak a relatively inexpensive souce of fill, it is not so inexpensive as to make those projects requiring fill viable on a cost/benefit basis if the cost of the stabilization project is included. When the cost of stabilizing Pillar Mountain is borne by the state as recommended, the economic

viability of some projects is greatly increased. Pillar Mountain stabilization cannot be justified on a strictly economic basis; however, eliminating the present hazard to life and property would be an important public benefit. Using projections about the effects of a Pillar Mountain failure as a measure, the potential damages from that hazard greatly exceed the cost of stabilization.

Table 27 Pillar Mountain Stabilization and Related Projects Comparative Costs

Project	Fill Produced (cubic yards)	Cost
Pillar Mountain stabilization	5,400,000	$29,600,000

Project	Fill Required (cubic yards)	Cost: With Pillar Mountain Fill	Cost: Without Pillar Mountain Fill
Kodiak development Port fill area (state funding)	4,300,000	$ -0- (included in cost of stabilization project)	$60,200,000
Gull Island breakwater (federal funding)	118,000	12,000,000	20,800,000
Gibson Cove fill area* (private funding)	360,000	1,420,000	1,824,000
Near Island development Dog Bay waterfront area (state funding)	770,000	3,080,000	10,700,000
Total Cost of stabilization	5,548,000**	$16,500,000 +29,600,000 $46,100,000	$93,524,000

*Construction of the Gibson Cove fill area and breakwater need not occur at the time of stabilization.
**The 148,000 cubic yards needed in addition to the fill produced by the stabilization project can be obtained from a stockpile area created on Pillar Mountain.

Department of Transportation and Public Facilities

Central Region Planning & Programming

PILLAR MOUNTAIN STABILIZATION

Status Report

February, 1983

Purpose: The Pillar Mountain Stabilization/Status Report was prepared in response to a request from State Senator Mulcahy.

Background: Pillar Mountain is a 1,300 foot mountain at the southern edge of the city limits of Kodiak, directly above the highway between the city and the airport. The unstable slope of the mountain presents a serious hazard to St. Paul Harbor. The presently active slide area, approximately 1,200 feet high by 1,700 feet long, threatens the Abbert Highway and two city docks with rockfall. A major rock slide in April 1971 followed excavation activities at the toe of the slope and resulted in highway closure for approximately six weeks. Since that time, numerous studies have been conducted by the various governmental units to determine the landslide danger. This report summarizes the available information sources and identifies the various alternatives which have been discussed regarding the mountain. Much of the information is taken from material prepared for the Pillar Mountain Geotechnical Study Committee. The committee was organized by the Borough and City in 1978 to review the problem and recommend an action program.

Issues: Certain issues have been identified relating to the Pillar Mountain stabilization problem. The recently drafted Port of Kodiak Development Plan identifies Pillar Mountain as a serious hazard to St. Paul Harbor, threatening the Abbert Highway and two city docks with rockfall. Specific issues include:

1. Due to the proximity of Pillar Mountain and its steep slopes, coastal development occurring within St. Paul Harbor has been limited to a narrow band of waterfront land.

2. Ground movement has been identified as one cause of cargo dock slippage at City Pier 3. Continued slippage could cause permanent damage to the city docks.

3. Rockfall continues on the Abbert Highway.

4. Massive slope failure could result in a tsunami-like 600-foot splash wave at the base. It is projected the wave would move across the harbor at 100 mi/hour. The height of the landslide-induced wave could reach 87 feet at Near Island and 35 feet approaching the City of Kodiak with run-up approximately equal to the 1964 tsunami.

5. The possibility exists that movement could increase as a result of an earthquake, water saturation of the landslide mass, or other cause.

6. Kodiak's seismic potential is very great given that it sits atop the tectonic plate system where the Continental Plate and the Pacific Plate meet.

Information Sources: Local units of government have invested in numerous studies to determine the landslide danger. A brief chronological history of the list of reports and activities which have occurred follows:

1. Report of Foundation Investigation of Proposed Container Shipping Facility, Kodiak, Dames & Moore, report for the City of Kodiak, December 1971. This report summarizes the results of sub-bottom exploration by seismic surveys and borings which provided information for the siting and design of the container wharf.

2. Consultation & Geotechnical Investigation of Pillar Mountain Slide, Dames & Moore, for Alaska Department of Highways, April 1973.

3. Kodiak Harbor, Alaska, Feasibility Report, Small Boat Harbor Improvement, Corps of Engineers, USAE District, Alaska, May 1975.

4. RM Consultants reoccupy survey points, Spring 1976.

5. Report of Stability Investigation Container Wharf Bulkhead, Converse-Ward-Davis-Dixon Associates, Inc., April 1976. This report contains an epicenter location map, graph of expected recurrence rate versus magnitude, graph of expected number of occurrences versus peak ground acceleration, and a list of instrumentally recorded earthquakes in the area.

5. Aerial photographs dated 30 April 1977, scale 1:100, sheet numbers 30, 36, and 37.

7. Drawing titled: "City of Kodiak Container Shipping Facility," November 1977 (revised November 1978). Identifies new cargo dock slippage to sea at rate of one-inch per year.

8. Map of Mountain, Corps of Engineers, USAE District, Alaska, March 1978.

9. Pillar Mountain Landslide, Kodiak, Alaska, U.S. Geological Survey, "Open File Report" No. 78-217, April 1978. Report evaluated the physical appearance of the mountain, the geology of the slide area and data from a slope indicator. The concern which generated the classification study was that fast moving landslides on oversteepened slopes (about 45°) such as Pillar Mountain have been devastating elsewhere. The report expressed the concern that major ground failure is a distinct possibility. The report recommended a thorough monitoring investigation be initiated over a two to three year period to gauge slippage. USGS estimated the study would cost $900,000. No action was taken.

10. Letter to Reuben Kachadoorian, U.S. Geological Survey, Menlo Park, California, from W.E. Strohm, Jr., USAE Waterways Experiment Station, April 1978.

11. Press release from U.S. Geological Survey, "Landslide Could Endanger Kodiak, Alaska," by Don Kelley, May 1978.

12. Letter to Department of Public Works, Engineering Division, Kodiak, Alaska from Edwin Wald, California, July 1978.

13. Report of Geotechnical Studies Container Wharf Bulkhead, by Converse-Ward-Davis-Dixon, Inc., August 1978. The information in this report consisted of logs of the borings per placement of inclinometer casings in the rockfill and subjacent materials of the container wharf, the records of slope indicator readings, and the surface surveys of movements of the collars of the inclinometer casings.

14. Proposed Geotechnical Investigation Pillar Mountain Slide, Dames & Moore, to the City of Kodiak, October 1978.

15. Memo titled, "Pillar Mountain Instability Problem, Kodiak," Lee McAnerney, Commissioner, Department of Community and Regional Affairs to Jessie Dodson, Special Assistant, Office of the Governor, September 1978. Recommends desirability of inter-departmental discussion of the Pillar Mountain instability problem with participation by the Office of the Governor.

16. Memo titled, "Pillar Mountain Instability Problem, Kodiak," Dennis Dooley, Director, Transportation Planning, DOT/PF, to Lee McAnerney, Commissioner, Department of Community and Regional Affairs, October 1978. Supports legislative action to fund a $60,000 study to determine Pillar Mountain stability.

17. Drawing titled, "Pillar Mountain Slide Area Contour Map, Kodiak, Alaska," by Ron A. Ecklund, November 1978 (revised December 1978). Horizontal location of 35 sectional points.

18. "A Resolution of the Kodiak Island Borough Assembly Creating a Geotechnical Study Committee for the Purpose of Furthering Geotechnical Investigations and Recommendations of the Pillar Mountain Slide Area Problem," Resolution No. 78-76-R, December 1978.

19. Preliminary Report of Pillar Mountain Geotechnical Committee, Pillar Mountain Geotechnical Study Committee, June 1979.

20. Appropriation of $479,000 from State of Alaska through the State Division of Geological and Geotechnical Surveys, monitored by Pillar Mountain Geotechnical Study Committee, June 1979.

21. Evaluation of Ground Survey Program and Surface Movement on Pillar Mountain Slide for City of Kodiak, Kam W. Wong, August 1979.

22. "Offshore Survey," U.S. Geological Survey requested by Geotechnical Study Committee, October 1980. Seafloor deformation was found and interpreted as being related to Pillar Mountain movement.

23. Interim Report on Slope Stability and Possible Remedial Measures, RM Consultants, September 1981.

24. Pillar Mountain Stabilization Bill, introduced by State Representative Zharoff in the amount of $1,000,000, January 1982. Bill died in Finance Committee, February 1982.

Alternatives: The Geotechnical Study Committee, in 1979, considered four possible courses of action regarding the mountain's stabilization. Those alternatives included:

1. Minimal Additional Action

In this approach a minimal slide movement monitoring program would be established, but no additional studies would be undertaken. This type of monitoring program may provide advance warning of additional significant slide movements. However, its ability to predict advance warning of significant slide movements would be limited by the frequency of the observation and by its inability to provide rapid measurements following a rapid slide triggering action such as could conceivably occur as a result of an earthquake. The degree of the hazard presented by a slide would not be significantly altered by the monitoring. This limited monitoring program would not improve the behavior of the slide mass. The actual current hazard level would continue. However, with monitoring, the risk to the people in the community would be somewhat less as warning might be provided for some types of slides. Should remedial action be deemed desirable, then only minimal additional insight into the slide behavior or possible remedial action will have been obtained under this course of action.

2. Remedial Measures Without Additional Studies

In this course of action, remedial measures such as excavation, drainage, or placing buttressing fill could be undertaken without benefit of the results of additional studies. The chief advantages of taking this course of action are that if the work is correctly done, then: 1) it would save the cost of an investigation and, 2) it would eliminate the hazard in the shortest time. However, it is quite possible that a "remedial" excavation in the wrong place could trigger the very slide that is was supposed to prevent. Furthermore, without additional information one cannot judge whether or not enough remedial measures would be either insufficient, overdone, or would increase the hazard.

3. Systematic and Comprehensive Data Collection and Evaluation

A third course of action would be to institute a data collection program and systematically increase information from previous studies to a more comprehensive level. The objective would be to obtain a better understanding of the dynamics of the slide area as well as the reactive behavior of the bay. It is conceivable, although unlikely, that such studies could indicate that the possible development of a rapid deep-seated slide is too remote to be considered a hazard.

The danger of this approach is that the study can become an academic exercise which eventually would lead to a more complete understanding of the slide, but in the meantime, would provide little relief to the community in terms of alleviating the socioeconomic realities now confronting development. Such studies can also lead to the conclusion that further studies would be required to fully understand the slide.

Many of these studies are desirable, but the Geotechnical Committee cautioned that although the outcome of the studies may lead to better understanding, they have the potential of indefinitely maintaining a socioeconomic status quo. Therefore, remedial action is concurrently recommended.

4. Combined Data Collection and a Remedial Program

In this approach it is acknowledged that a potential hazard exists and that the consequences of the possible hazard are such that it may well be necessary to consider remedial measures to minimize or eliminate the hazard. Possible remedial measures include: 1) unloading the top of the slide area; 2) buttressing the base of the slide area; and, 3) improving the surface and sub-surface drainage and thereby reducing the water pressures within the slide mass. It seems possible that the most cost-effective remedial measure would be a combination of unloading the top and buttressing the base in the present slide area and improving drainage within the slide and within adjacent slopes of Pillar Mountain where this measure was found to be desirable.

Preliminary cost estimates and plans are required to determine if these or other remedial measures are viable. Some field data should be obtained to ensure that the plans are reasonable and that the initial cost estimates will not be greatly exceeded during the course of the remedial work. The information required would likely consist of knowledge of the depth of the slide, the shape of the base of the slide, and the hydrologic and structural geologic relationship of the slide mass and the adjacent areas. The data collection investigation in this approach would be limited to those aspects of the slide needed to plan and monitor the remedial measures.

As new data on the slide are obtained, the nature of the hazard and the necessity for remedial measures should continue to be reviewed.

Conclusions: The Pillar Mountain Geotechnical Committee concluded that there was sufficient information available to state that the mountain continues to fail. The data base, however, was insufficient to allow prediction of the magnitude or frequency of failure. Interpretations of the data as it now exists continues to generate a variety of possible consequences and, hence, uncertainty.

The Geotechnical Study Committee concurred that a combined data collection and remedial program was the best course of action and recommended that such a program be implemented as soon as funding could be made available.

The Committee concluded that a major question concerning the shape, and depth of failure must be answered prior to attempts to take remedial steps. The Committee recommended, therefore, that the following studies be initiated to fill data gaps prior to the initiation of remedial action.

1. Preparation of an accurate, large-scale topographic map based on new aerial photography.

2. Preparation of an accurate, large-scale geologic map.

3. Review of existing offshore data not now available to the Committee.

4. a. Continuation and expansion of the Division of Geological and Geophysical Surveys' monitoring system.

   b. Obtain subsurface data and installation of drill hole monitoring devices.

5. Laboratory tests of rocks and other materials.

6. Collection and analysis of existing, and possibly additional seismic data.

7. Collection and analysis of hydrologic data.

The recently completed Port of Kodiak Development Plan has identified the stabilization of Pillar Mountain as a priority project because of the present limitation it poses to port development. Proximity of the mountain's steep slopes to the waterfront has restricted utilization of important coastal lands and has reduced available staging areas for the existing marine facilities. Additionally, the presently active slide area adjacent to City Piers 2 and 3 poses a significant threat to the piers.

The proposed stabilization project would produce an estimated 5,400,000 cubic yards of material through excavation. As part of the stablization project, 35 acres of critical port upland area might be created by filling between Piers 2 and 3 and along the coast to the entrance of Gibson Cove. This approach allows for disposal of part of the excavated material at no additional cost and provides land adjacent to the port area for container van storage and future construction of an additional cargo dock. Additional projects which may also use Pillar Mountain as a source of inexpensive fill material are the Gull Island breakwater, the Dog Bay waterfront area on Near Island, and Gibson Cove improvements.

The advantages of the Pillar Mountain stabilization project include:

1. A hazard which prevents construction of improvements in the immediate port area and threatens human life and property would be removed.

2. Space for over 2,000 linear feet of additional deepwater dock frontage would be created between Piers 2 and 3.

3. Approximately 35 acres of critical port upland area for marine commercial and industrial expansion would be created.

4. Breakwaters to reduce the roll and surge of waves on port facilities could be built.

5. Land to properly access and service the Dog Bay small boat harbor could be created.

6. A reserve stockpile of excess fill material for future use could be made available.

Recommendations: The staff recommendation is to proceed with efforts to stabilize Pillar Mountain. The exact focus of the first phase of this project will be determined by available resources, but should include: 1) the preparatory accumulation of data identified by the Pillar Mountain Geotechnical Study Committee as necessary for the identification of the remedial measures for stabilization, 2) a funding assessment, and 3) securing of funds for the data collection and engineering design phase.

Preliminary engineering projections estimate the Pillar mountain stabilization project will cost approximately $29,600,000. In March, 1981 a state appropriation allocated $1,276,000 for repairs to the Kodiak Highway. The appropriation was authorized to fund emergency repairs for the highway in the area of Pillar Mountain. The project was to use part of the funds to provide an emergency solution to the most critical problem areas ($276,000) and set aside part of the funds until a long range solution could be identified ($1,000,000.) The $1,000,000 set aside for the long-range highway repair project could conceivably be used for the stabilization project. Estimating engineering design to require ten percent of a total budget, approximately $2.9 million would be required for the data collection and design. Consequently, an additional $1.9 million must be secured before initiating the project.

The City of Kodiak is one of ~~Alaska's~~ the Nation's most productive fishing ports and one of Alaska's most important transhipment ports for cargo. Recognizing the significance of the port, it is reasonable that the State of Alaska contribute to the development of the stabilization project. Funds in the amount of $1.9 million should be sought by the City to supplement the currently available $1 million.

STATE OF ALASKA
FISCAL NOTE

I. REQUEST

Bill/Resolution No.: HB 287
Title: Spec App/DOT&PF/Stabilization of Pillar Mountain
Sponsor: Zharoff
Requestor: Transporation & Finance

II. FISCAL DETAIL

Agency Affected: DOT&PF
Program Category Affected:
BRU, Program or Subprogram(s) Affected:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	3,100.0	9,733.0*	9,733.0*	9,733.0*	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

* Port of Kodiak Development Plan

FUNDING: (Thousands of Dollars)

GENERAL FUND	-0-	3,100.0	9,733.0	9,733.0	9,7330.0	-0-
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL TIME						
PART TIME						
TEMPORARY						

II. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not Identified.

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared by: William R. Snell Phone: 266-1462
Division: Planning & Programming Date: April 18, 1983

Approved by Commissioner: David W. Haugen Date: April 22, 1983
Department: Deputy Commissioner, Central Region, DOT&PF

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3/8/83

IV. ANALYSIS

A. Assumptions

The Stabilization of Pillar Mountain includes three phases: 1) The preparatory accumulation of data identified by the Pillar Mountain Geotechnical Study Committee for the identification of remedial measures for stabilization; 2) Preliminary engineering and design for the stabilization project; and 3) The stabilization project. Preliminary engineer's estimates contained in the Port of Kodiak Development Plan estimates a project cost of approximately $29,600,000. Specifically, this project would produce an estimated 5,400,000 cubic yards of material through excavation and create 35 acres of critical port upland between piers 2 and 3. Estimating engineering design to require ten percent of the project budget, approximately $2.9 million would be required for the data collection and design. No maintenance or operating funds would be involved once the stabilization was complete.

B. Program Summary

No new positions are anticipated, nor can any other major expenditure items identified at this time.

C. Computations

See Assumptions.

D. Economic Impact

Rock excavated from the slope during the stabilization can be used to improve the commercial rocking areas along Kodiak waterfront, to create additional developable uplands, and to provide a stockpile of fill for future use.

E. Impact on Local Government

No information at this time.

F. Attachments

1. Excerpts from Port of Kodiak Development Plan.
2. Pillar Mountain Stabilization Status Report.